
AUTOMATION XQ R 2024

TITAN XQ R

PHOENIX XQ R

PHOENIX 355 ROB



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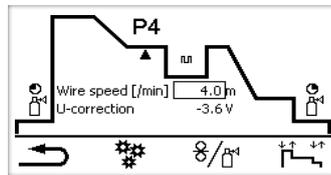
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Control Expert XQ R 2.0 Description



- Welding program sequence**
 Simple adjustment of all welding parameters in the program sequence



- JOB window**
 Simple JOB selection for characteristics via click wheel
- Welding parameter**
 Display of the effective arc power for the simple calculation of energy per unit length
- Quick switching between MIG/MAG processes**
 The optimum for each welding task
- WPQR welding data assistant**
 Exact calculation of heat input and energy per unit length
- Language selection**
 Pre-configured languages for the user menu:



all in

No extra charge
All processes included in the machine



rootArc XQ
rootArc puls XQ

Perfect root welding, perfect gap bridging



coldArc XQ
coldArc puls XQ

Heat-reduced for thin sheet welding



forceArc XQ
forceArc puls XQ

Heat-reduced, directionally stable high-performance arc with deep penetration



wiredArc XQ
wiredArc puls XQ

Heat-reduced, directionally stable high-performance arc with penetration stabiliser for changing stick-out



Positionweld

For simple and perfect positional welding



superPuls

Enables process combinations for positional welding



Standard XQ
Pulse XQ

Standard and pulsed arc

Expert 2.0 XQ R control Functions



- Optimised for automated applications
- Expert 2.0 XQ Rob control with intuitive user guidance on LCD display and plain text display of all welding parameters and functions
- USB connection
- Easy switching of welding procedures at the press of a button, e.g. from forceArc/forceArc puls to rootArc/rootArc puls or standard/pulse
- Setting of all parameters in program sequence
- Administration of access rights for different control operating levels using the Xbutton
- Wire feed speed specifications
- Arc length correction
- Adjusting the arc dynamics (choke effect) from soft to hard
- Standby function (save energy at the press of a button)
- Kilowatt display for calculating the energy per unit length
- Effective arc power for calculating the energy per unit length
- Electronic gas setting with control and monitoring of gas quantity (option)

Operation mode	Synergic operation MIG/MAG MIG/MAG pulse TIG lift arc MMA rootArc® XQ rootArc® puls XQ coldArc® XQ coldArc® puls XQ
Welding process	forceArc® XQ forceArc® puls XQ wiredArc XQ wiredArc puls XQ acArc puls (Titan XQ AC puls only) Positionweld Superpuls Gouging
Operating modes	Non-latched Special non-latched Resistance spot welding Welding current Welding voltage Wire feed speed JOB number Program number Error code Effective arc power Motor current Kilowatt indicator
Freely adjustable programs per JOB	15
Number of JOBS	335, depending on power source
Functions	Wire burn-back Wire creep Gas pre-flow time Gas post-flow time Hotstart
MMA functions	Arcforce Antistick

Different systems, different advantages

With machines from the XQ R series, you can explore all options – including with welding torches. You can choose between the standard or hollow-shaft solution, as well as gas or water cooling. You can even choose a drum feed. Welding torches with various neck bend angles or a swan neck, collision sensors, wire feeders and other welding accessories complete the system.

Phoenix XQ R puls decompact modular



M Drive 4 Rob 5 XQ R robot wire feeder



M Drive 4 Rob 5 HW XQ R robot wire feeder



Titan / Phoenix XQ R puls



EWM robot welding torch RMT RSA

Gas- or water-cooled



Hose package

- Push-button for gas test
- Push-button for wire inching and reverse inching

EWM RMT torch neck with crown nut

- Gas- or water-cooled
- Various bend angles or swan neck
- With gas nozzle sensor

Torch holder

- Various configurations

EWM RSA collision sensor

- Protects the robot against damage
- High reset precision

EWM hollow-shaft robot welding torch RMT RSA HW

Gas- or water-cooled



EWM hollow-wrist collision sensor RSA HW

- Gas- or water-cooled

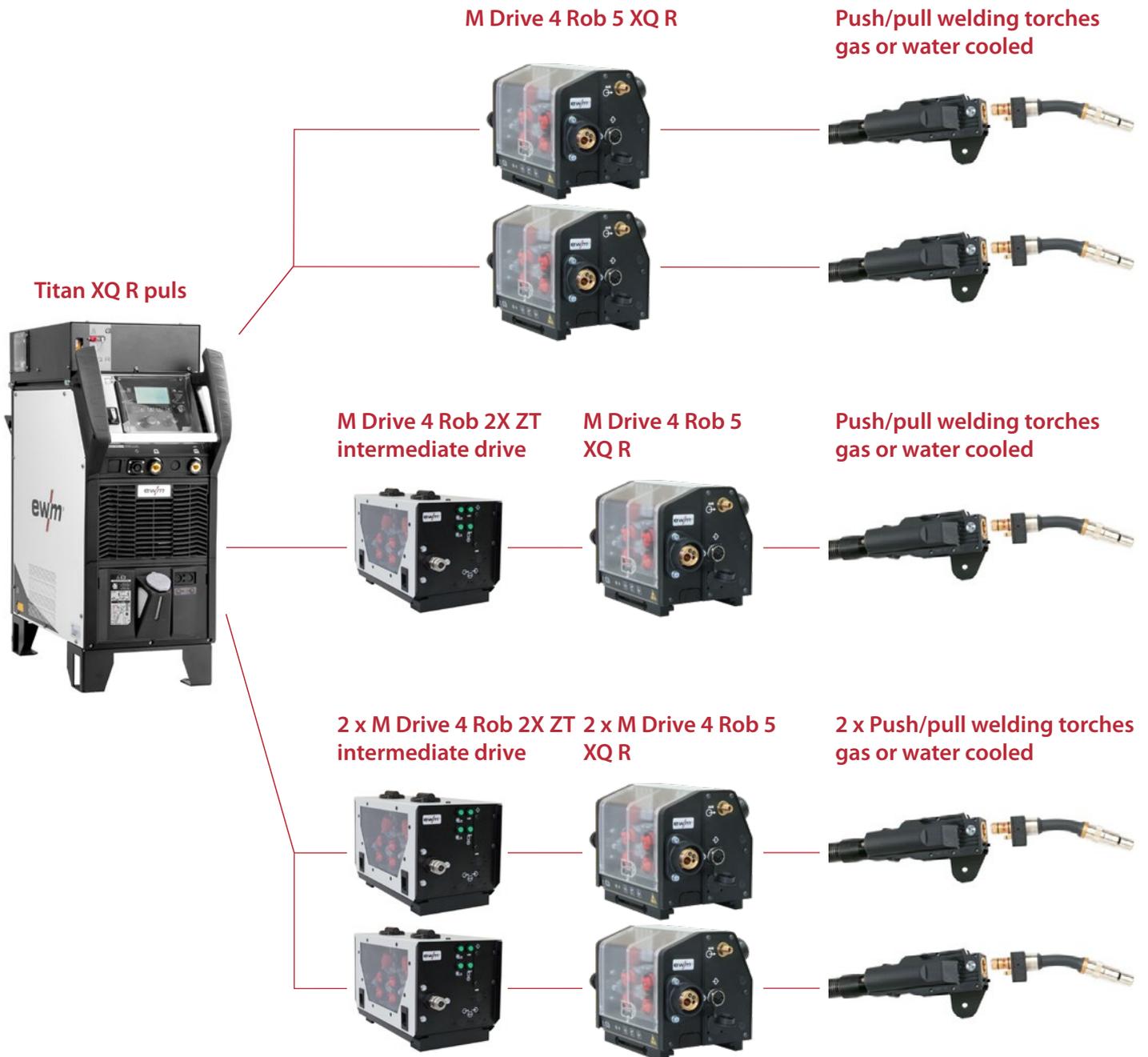
Standard gas nozzle sensor

EWM RMT torch neck with quick connect coupling

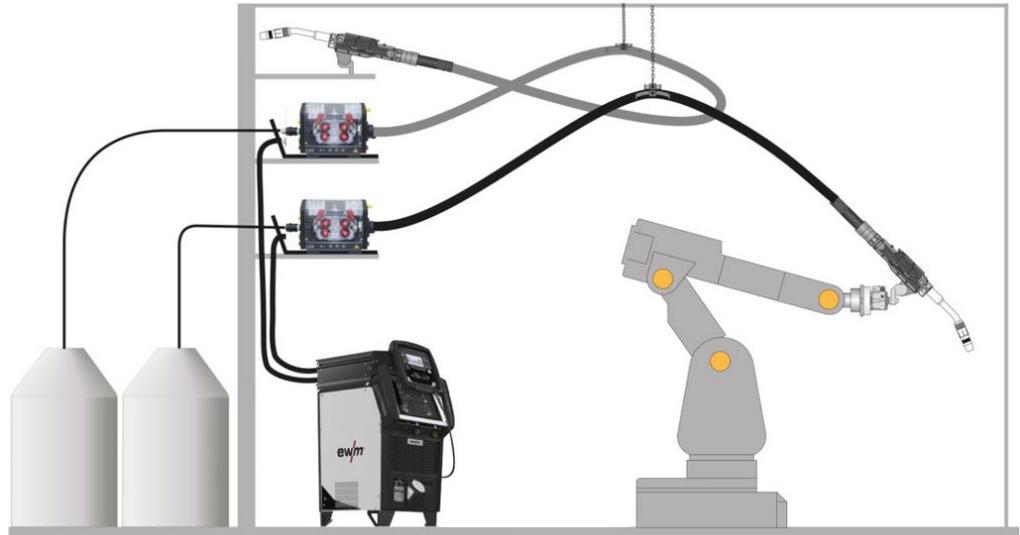
- Gas- or water-cooled
- Various bend angles or swan neck

The right solution for your application

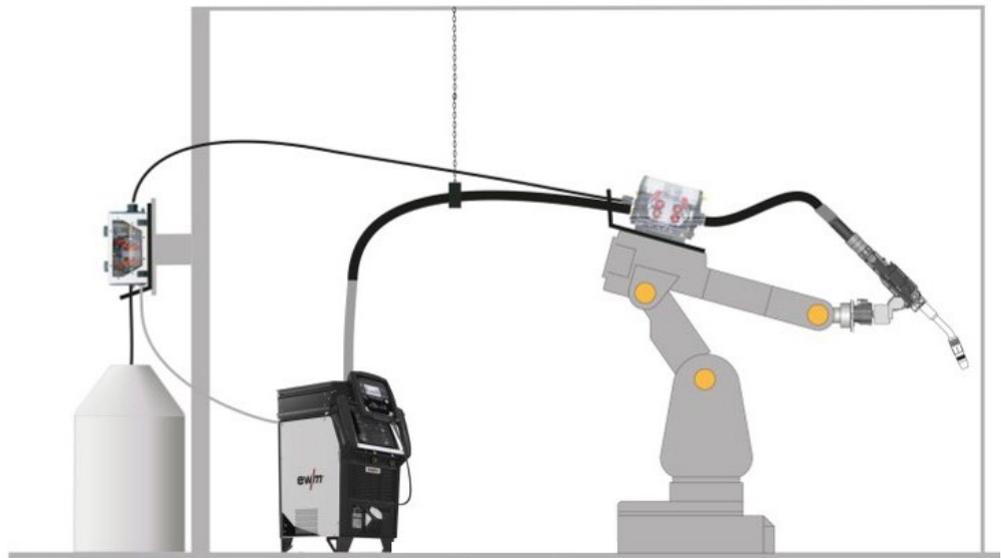
In addition to the standard variants with just one drive, you can also use a drum feed or an intermediate drive. Up to three drives in series can be used in combination with a push/pull welding torch. Plus, you can also use two welding torches in turn with the welding machine when you use a welding torch changing system. Here at EWM we have the right components for your application. So, you can complete your automated welding task perfectly.



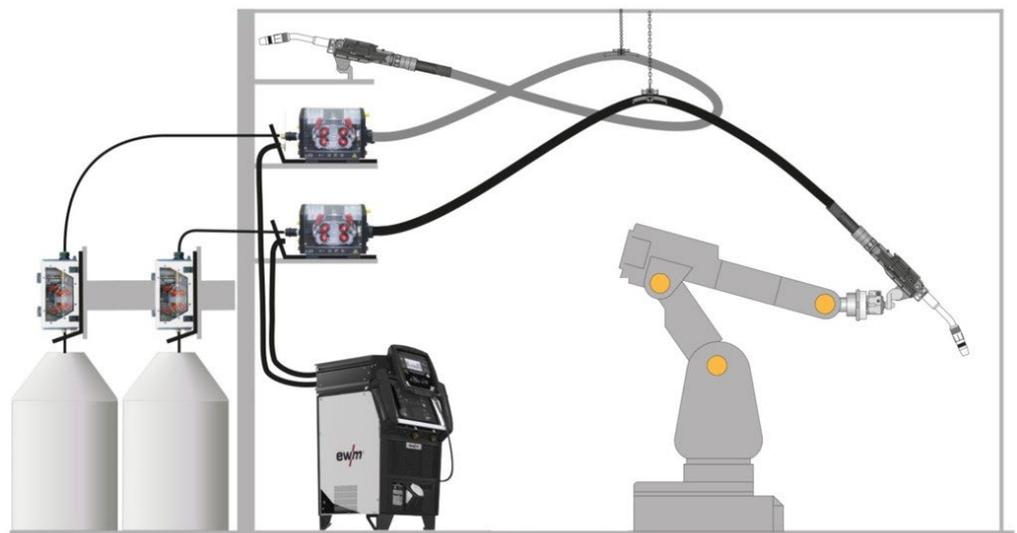
Wire feeder changing system



Wire feeder system with intermediate drive – e.g. drum feed



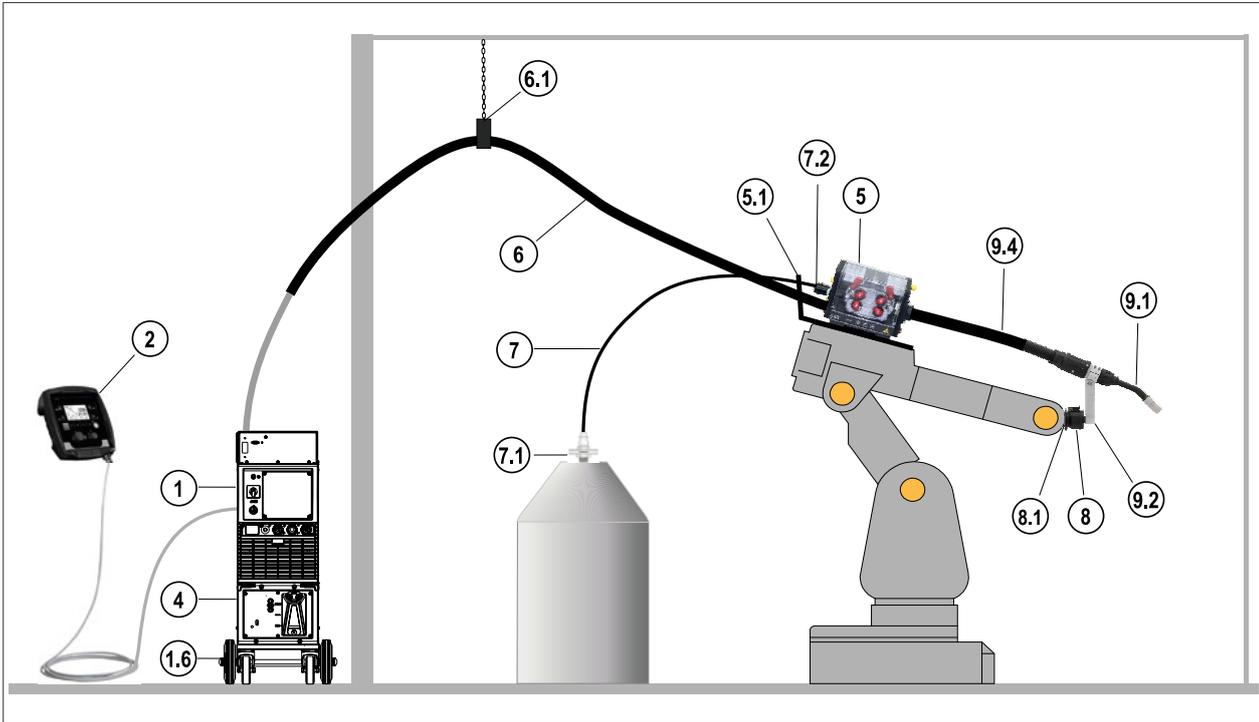
Wire feeder changing system with intermediate drive – e.g. drum feed



Example configurations

Phoenix XQ R conventional modular welding robot systems, water-cooled

Phoenix XQ R 405 puls RC conventional welding robot system



- Phoenix XQ R 405 puls
- With RC XQ Expert 2.0 Rob operating panel
- No front control
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on an ABB IRB 1600-6 / 1.45

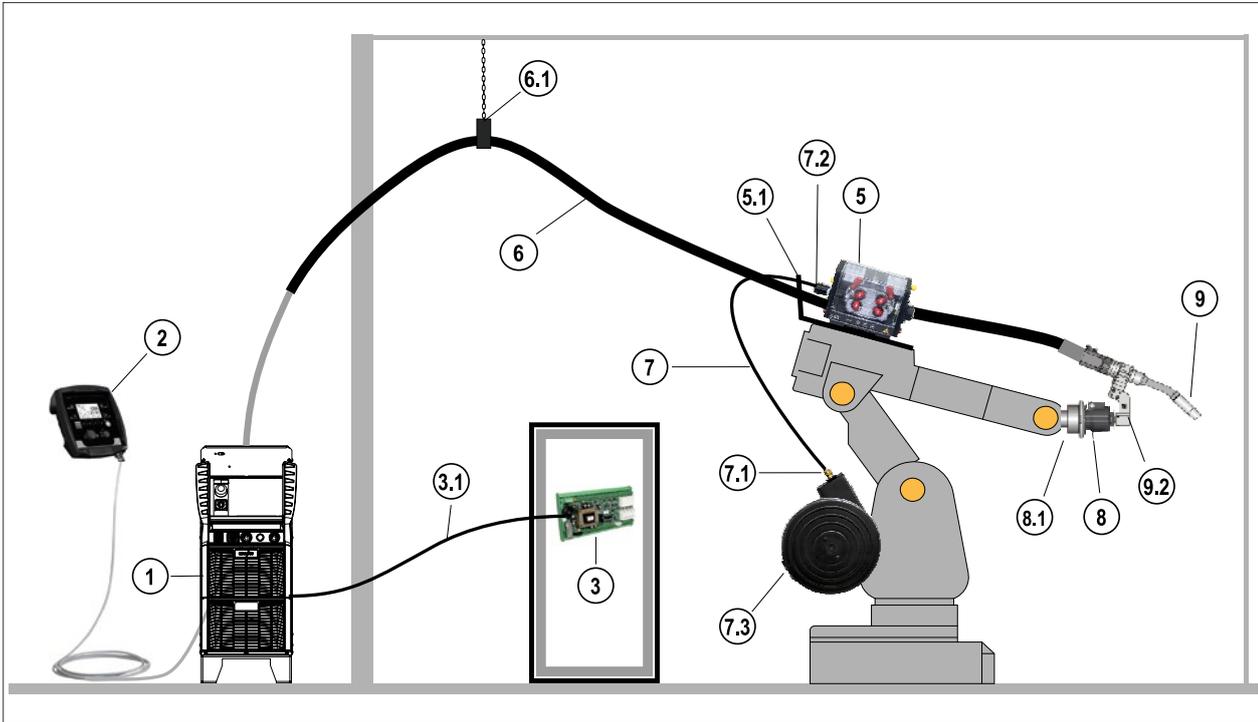
Item	Type	Designation	Item no.
1	Phoenix XQ R 405 puls	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, modular	090-005705-00000
1.01	OW MCord 4 mm ² 5m	Mains connection lead, 5 m	092-004121-00000
1.01	OW Cover	No control	092-004322-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EthernetIP	EthernetIP industrial bus interface	092-004560-00000
1.01	OW E-STOP	Standard relay	092-004569-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Prereg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.6	Trolley 53	Transport cart (4 wheels) for moving a power source and a cooling unit	090-008638-00000
2	RC XQ Expert 2.0 Rob 5 m	Control panel	090-008839-00005
4	Cool XQ R 55 U40	Cooling unit for robot welding machines, Multivolt-compatible	090-008865-00502
4.1	KF 23E-5	Coolant up to -10 °C (14 °F), 5 l	094-000530-00005
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.1	MONTAGE CONSOLE ABB IRB 1600	Mounting console for wire feed unit	092-002562-00000
5.2	ON COOL W ROB 5 XR	Retrofit option, water cooling, Rob 5	092-003140-00000
5.2	OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-003142-00001
6	70QMM WRS 23 POL XR 6M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	092-003114-01306
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7	WIRE LEAD 6,5M	Wire guide	094-018283-00000
7.1	CONNECTOR BARREL WIRE LEAD	Connection for large spool/drum	094-018277-00000
7.2	CONNECTOR DRIVE ROB5 XR WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-003143-00000
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8.1	FL ISO 9409-1-A40 AL	Intermediate flange, aluminium	094-010198-00000
9.1	RMT351W 22,5°	RMT 22.5° torch neck	094-028026-00000
9.2	TH RMT 0°-22,5° L=167 mm	Torch holder, adjustable	094-025140-00000
9.4	SP RMT W KON 110CM EZA	Hose package, water cooled	094-525221-01110
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Conventional welding robot systems Titan XQ R, gas cooled

Titan XQ R 350 RC conventional welding robot system



- Titan XQ R 350
- With RC XQ Expert 2.0 Rob operating panel
- No front control
- Gas-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on a Kuka KR 6 R1840-2

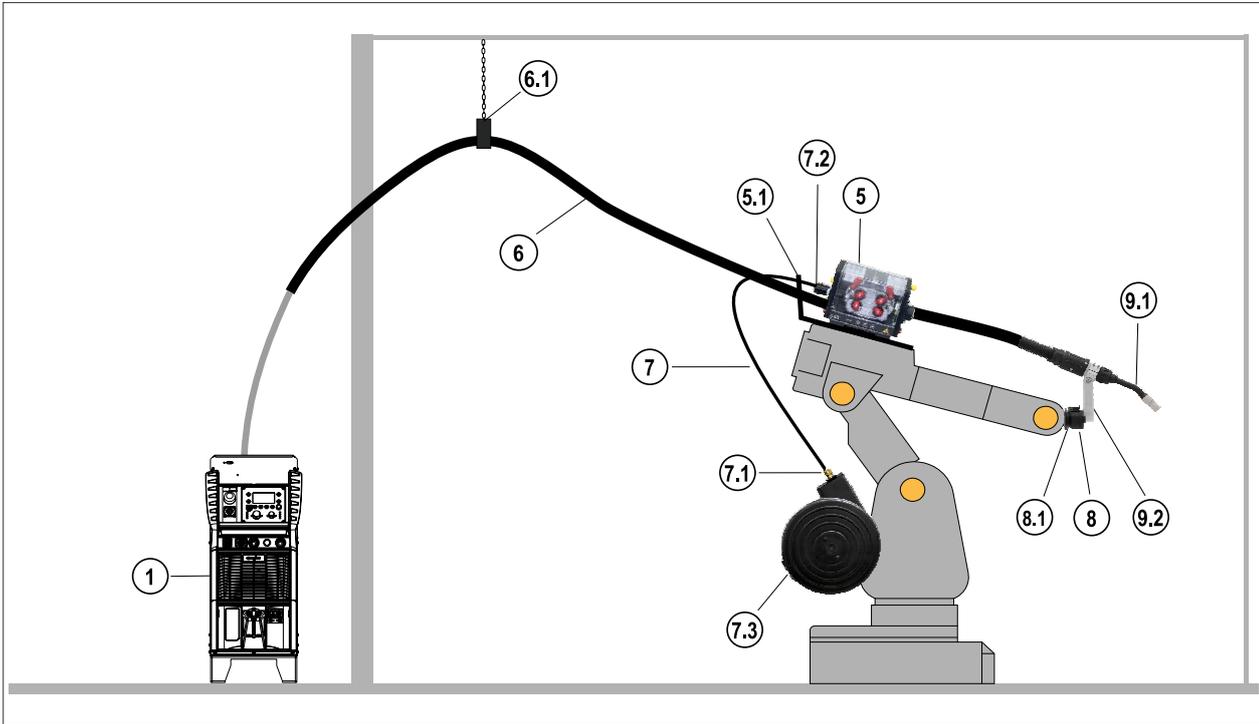
Item	Type	Designation	Item no.
1	Titan XQ R 350 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005710-00000
1.01	OW F06G	Gas cooling	092-003305-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Cover	No control	092-003306-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.8	RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
2	RC XQ Expert 2.0 Rob 10 m	Control panel	090-008839-00010
3	MIG BUSINT4.0 EtherCAT EV	EtherCAT industrial bus interface, external, potential-free power supply	090-908317-10000
3.1	FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
6	70QMM GRS 23 POL XR 8M	Robot intermediate hose package, gas cooled, ribbed/standard hose, 23-pole	092-003114-00308
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7	WIRE CONDUIT 1,8M	Wire guide	094-011515-00004
7.1	CONNECTOR DV-CAB WIRE CONDUIT	DV-CAB connection	092-007741-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
7.3	WSH KUKA KR6 R1840-2 ARC HW	Wire spool holder, robots	092-004200-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8.1	ZF CAT D=31,5mm D=20	Intermediate flange, plastic	094-022421-00000
9	MTR360G 22 1.2mm 1.15m	MIG/MAG welding torch, gas-cooled	094-500033-00000
9.2	HS COMP A22	Holder, rigid, compl., EWM RT 22	094-011656-00500
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Conventional welding robot systems Titan XQ R, water cooled

Titan XQ R 400 AC/DC conventional welding robot system optimised for aluminium welding



- Titan XQ R 400 AC/DC
- With Expert 2.0 XQ front control
- With optional gas setting
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on a Kuka KR 10 R1440-2

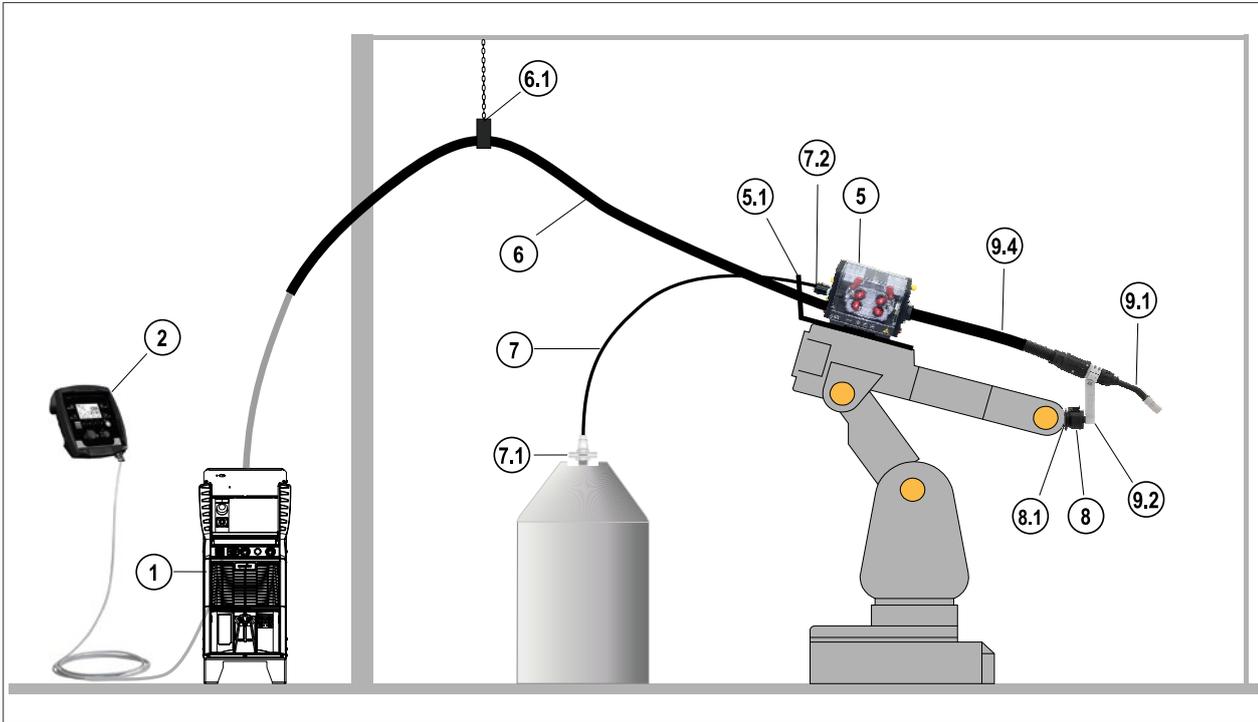
Item	Type	Designation	Item no.
1	TITAN XQ R 400 PULS AC/DC D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005718-00000
1.01	OW 380-400V	Mains voltage 380–400 V !-cannot be modified retrospectively-!	092-004116-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-003850-00000
1.01	OW DGC F.06 R DV1	Gas control for a connected wire feeder	092-003846-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EtherCAT	ETHERCAT industrial bus interface	092-004612-00000
1.01	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Maxex AR/MIX 200bar 30m ³ G1/4"	Pressure regulator "Maxex"	096-000000-00000
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.01	OW ECS ROB 5 XQ R	Built-in EWM Euro torch connector for ROB 5	092-004666-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
5.2	AL 4R 1.2 MM/0.045 INCH RED/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00012
6	70QMM WRS 23 POL XR 5M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	092-003114-01305
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7	WIRE LEAD SOFT 1,5M	Wire guide	094-020383-00000
7.1	CONNECTOR DV-CAB WIRE LEAD	DV-CAB connection	092-007931-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-004669-00000
7.3	WSH KUKA KR6 R1840-2 ARC HW	Wire spool holder, robots	092-004200-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8.1	ZF CAT D=31,5mm D=20	Intermediate flange, aluminium	094-022420-00000
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	094-025074-00001
9.2	TH RMT 0°-22,5° L=167 mm	Torch holder, adjustable	094-025140-00000
9.4	SP RMT W KON 99CM EZA	Hose package, water cooled	094-525221-00099
10.02	CTAL E-Cu M9 x 35mm Ø 1.2mm	Contact tip, aluminium welding	094-013546-00001
-	ON ECS 0,8-1,2AL XR	Welding torch conversion kit from Euro torch connector to ECS torch connector, ECS Rob 5	092-003215-00000
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Conventional welding robot systems Titan XQ R, water cooled

Titan XQ R 500 RC conventional welding robot system



- Titan XQ R 500
- With RC XQ Expert 2.0 Rob operating panel
- No front control
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on a Kuka KR6 R1820

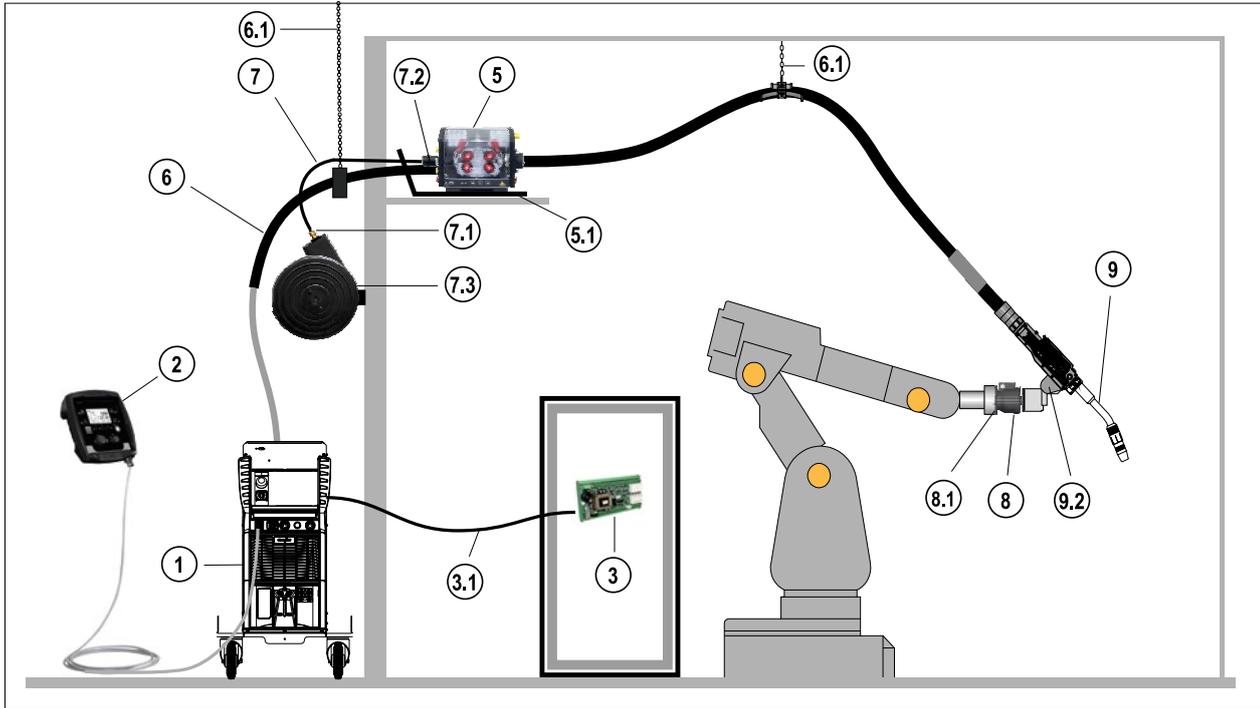
Item	Type	Designation	Item no.
1	Titan XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005712-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Cover	No control	092-003306-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EtherCAT	ETHERCAT industrial bus interface	092-004612-00000
1.01	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
1.01	BUSINT XQ 4.0 OW ST	Option for industrial bus interface Support for seam tracking	092-004616-00000
1.2	WK95/CL 5m	Workpiece lead with cable lug	092-001990-00005
1.3	Prereg Ar/CO ₂ 230bar 30l D	Pressure regulator with manometer	394-008488-10030
2	RC XQ Expert 2.0 Rob 10 m	Control panel	090-008839-00010
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.01	OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-004661-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
6	95QMM WRS 23 POL XR 6M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	092-003114-11306
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7	WIRE LEAD 6,5M	Wire guide	094-018283-00000
7.1	CONNECTOR BARREL WIRE LEAD	Connection for large spool/drum	094-018277-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-004669-00000
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8.1	FL ISO 9409-1-A31,5 AL	Intermediate flange, aluminium	094-016556-00000
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	094-025074-00001
9.2	TH RMT 0°-22,5° L=167 mm	Torch holder, adjustable	094-025140-00000
9.4	SP RMT W KON 120CM EZA	Hose package, water-cooled, with blow-out function	094-525221-01120
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Conventional welding robot systems Titan XQ R, water cooled

Titan XQ R 500 RC conventional welding robot system in push/pull design



- Titan XQ R 500
- With RC XQ Expert 2.0 Rob operating panel
- No front control
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on a Hyundai HA006B

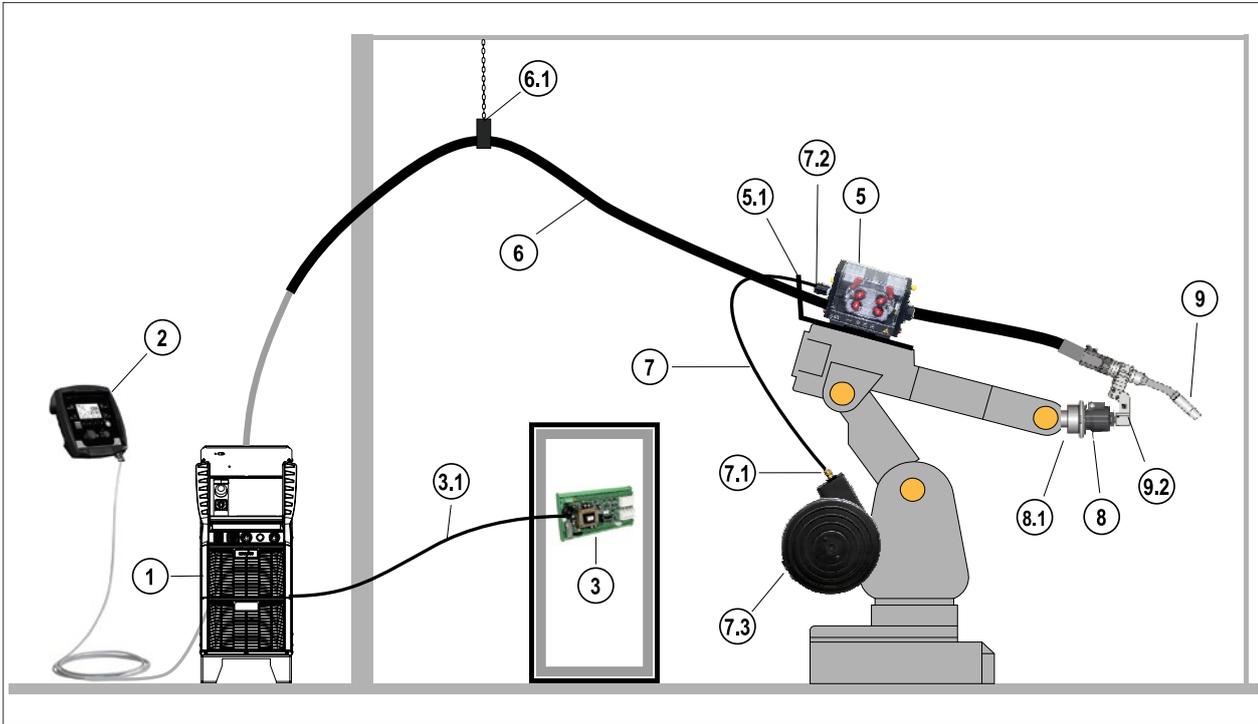
Item	Type	Designation	Item no.
1	Titan XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005712-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06RS	Wheel kit with narrow gauge without gas cylinder bracket	092-003318-00000
1.01	OW Cover	No control	092-003306-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.2	WK95/CL 5m	Workpiece lead with cable lug	092-001990-00005
1.3	Prereg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.8	RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
2	RC XQ Expert 2.0 Rob 10 m	Control panel	090-008839-00010
3	MIG BUSINT4.0 PROFINET EV	PROFINET industrial bus interface, external, potential-free power supply	090-908315-10000
3.1	FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
6	95QMM WRS 23 POL XR 6M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	092-003114-11306
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
6.1	ON ZWIPA-CONNECTION	Retrofit option, third-party intermediate hose package, strain relief	094-007890-00000
7	WIRE CONDUIT 1,8M	Wire guide	094-011515-00004
7.1	CONNECTOR DV-CAB WIRE CONDUIT	DV-CAB connection	092-007741-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
7.3	DV-CAP WALL	Wall holder for wire spools, including pin and accessories	092-001985-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8.1	ZF Hyundai HA006B	Intermediate flange, plastic	394-006124-00000
9	MTR500W PP 22°, 3.20m	MIG/MAG welding torch, push/pull, water-cooled	094-500073-00000
9.2	STANHOL	Standard holder	094-010162-00500
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Conventional welding robot systems Phoenix XQ R, gas cooled

Phoenix XQ R 400 RC conventional welding robot system



- Phoenix XQ R 400
- With RC XQ Expert 2.0 Rob operating panel
- No front control
- Gas-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on a Kuka KR 8 R2010-2

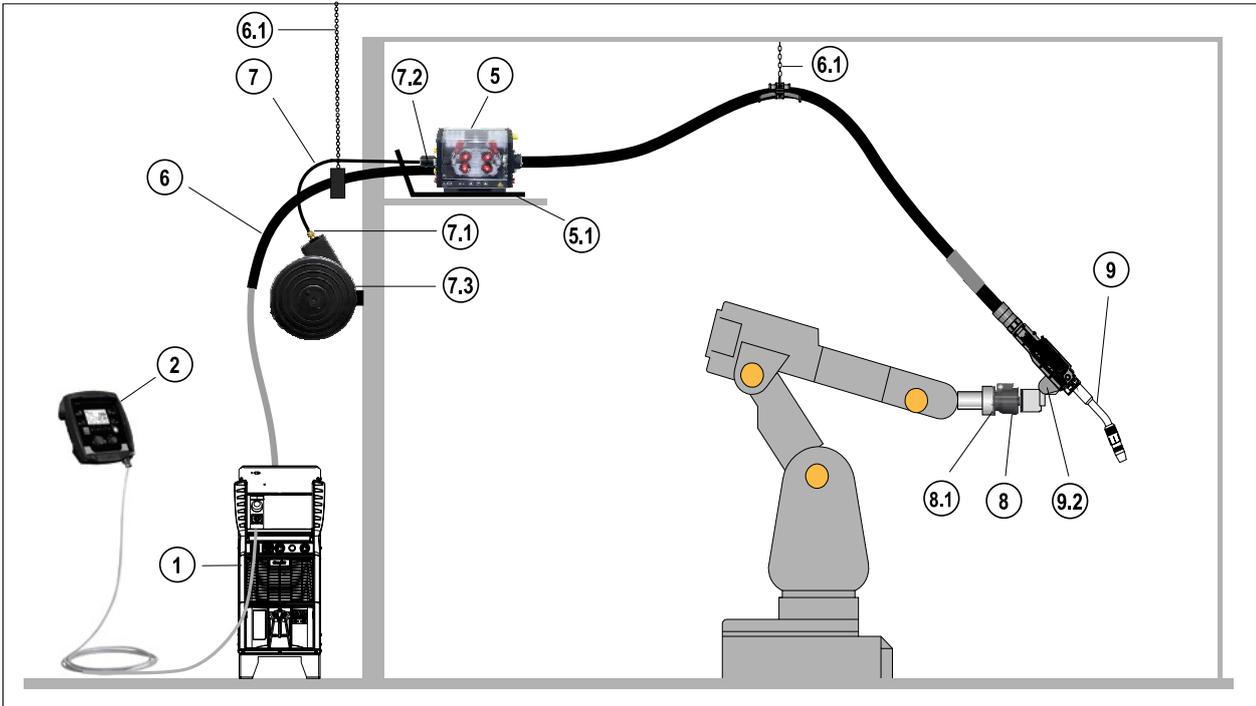
Item	Type	Designation	Item no.
1	Phoenix XQ R 400 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005715-00000
1.01	OW F06G	Gas cooling	092-003305-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Cover	No control	092-003306-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.8	RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
2	RC XQ Expert 2.0 Rob 10 m	Control panel	090-008839-00010
3	MIG BUSINT4.0 EtherCAT EV	EtherCAT industrial bus interface, external, potential-free power supply	090-908317-10000
3.1	FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
6	70QMM GRS 23 POL XR 10M	Robot intermediate hose package, gas cooled, ribbed/standard hose, 23-pole	092-003114-00310
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7	WIRE CONDUIT 1,8M	Wire guide	094-011515-00004
7.1	CONNECTOR DV-CAB WIRE CONDUIT	DV-CAB connection	092-007741-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
7.3	WSH KUKA KR6 R1840-2 ARC HW	Wire spool holder, robots	092-004200-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8.1	ZF ISO 9409-1-A50	Intermediate flange, plastic	094-016554-00000
9	MTR360G 22 1.2mm 1.15m	MIG/MAG welding torch, gas-cooled	094-500033-00000
9.2	HS COMP A22	Holder, rigid, compl., EWM RT 22	094-011656-00500
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
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Example configurations

Conventional welding robot systems Phoenix XQ R, water cooled

Phoenix XQ R 500 RC conventional welding robot system, optimised for aluminium welding in push/pull design and with an optional ECS Euro torch connector



- Phoenix XQ R 500
- With RC XQ Expert 2.0 Rob operating panel
- No front control
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on a Kuka KR 10 R1440-2
- With optional ECS torch connector

This welding system with a push/pull robot welding torch and ECS torch connector is optimised for applications using soft filler wire, e.g. aluminium. Users can increase the process reliability by adding further options, such as digital gas setting. Typical areas of application include e.g. automated applications in mechanical engineering and automotive, vehicle, container and equipment construction.

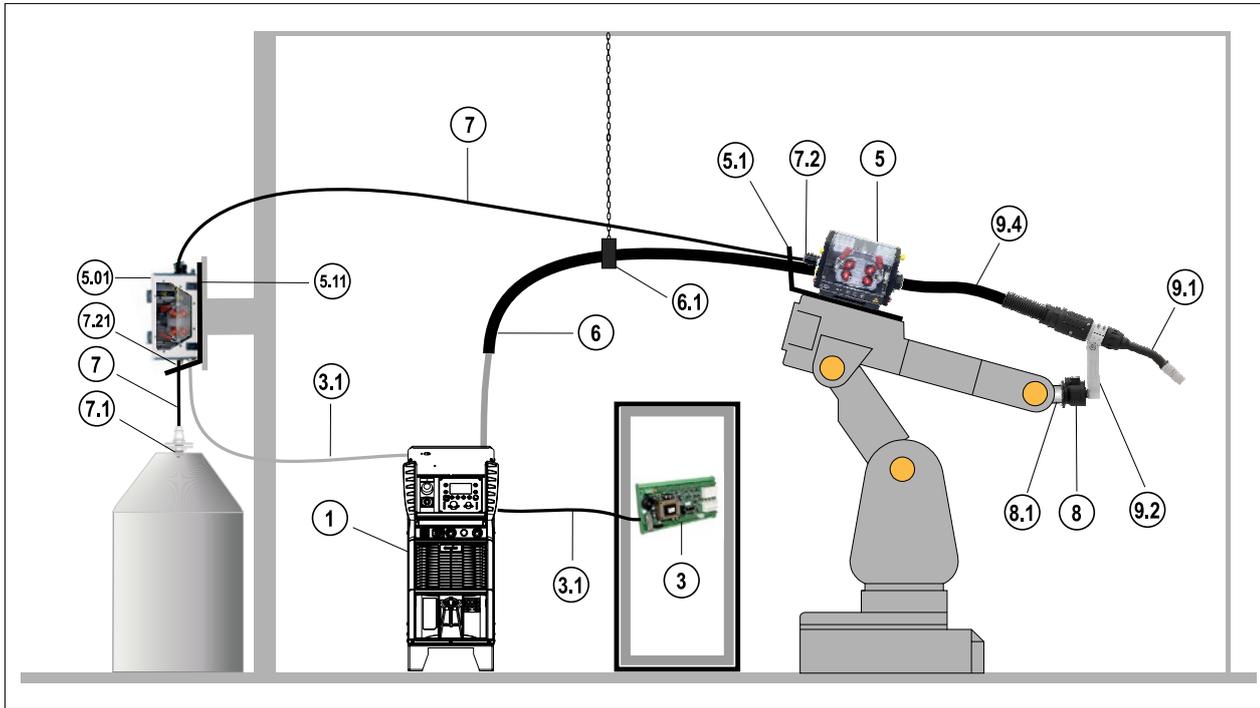
Item	Type	Designation	Item no.
1	Phoenix XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005716-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Cover	No control	092-003306-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EtherCAT	ETHERCAT industrial bus interface	092-004612-00000
1.01	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
1.2	WK95/CL 5m	Workpiece lead with cable lug	092-001990-00005
1.3	Optimator AR/MIX 200bar 20l G1/4"	Pressure regulator with flow meter	094-011839-00000
2	RC XQ Expert 2.0 Rob 10 m	Control panel	090-008839-00010
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.01	OW ECS ROB 5 XQ R	Built-in EWM Euro torch connector for ROB 5	092-004666-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
5.2	AL 4R 1.2 MM/0.045 INCH RED/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00012
6	95QMM WRS 23 POL XR 6M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	092-003114-11306
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
6.1	ON ZWIPA-CONNECTION	Retrofit option, third-party intermediate hose package, strain relief	094-007890-00000
7	WIRE LEAD SOFT	Wire guide, material sold by the metre	094-020382-00000
7.1	CONNECTOR DV-CAB WIRE LEAD	DV-CAB connection	092-007931-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-004669-00000
7.3	DV-CAP WALL	Wall holder for wire spools, including pin and accessories	092-001985-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
7.5	CONNECTOR WIRE LEAD SOFT	End piece wire guide for material sold by the metre	094-020381-00000
7.5	CONNECTOR WIRE LEAD SOFT	End piece wire guide for material sold by the metre	094-020381-00000
7.6	UEDFS WLS 2,5x4,5mm 150mm	Transition liner for soft wire lead	094-020380-00000
7.6	UEDFS WLS 2,5x4,5mm 150mm	Transition liner for soft wire lead	094-020380-00000
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8.1	ZF CAT D=31,5mm D=20	Intermediate flange, aluminium	094-022420-00000
9	MTR500W PP 22°, 3.20m	MIG/MAG welding torch, push/pull, water-cooled	094-500073-00000
9.2	STANHOL	Standard holder	094-010162-00500
10.07	NLB AL 195mm 1.2-1.6mm ROB TS	Brass liner for aluminium, 0°/22°	094-016526-00000
10.08	WFROLL AL 1.2	Drive roll for aluminium (U-groove)	094-010188-00000
-	ON ECS 0,8-1,2AL XR	Welding torch conversion kit from Euro torch connector to ECS torch connector, ECS Rob 5	092-003215-00000
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ Two units are required from position 7.5 and 7.6!
- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Conventional welding robot systems Phoenix XQ R, water cooled

Phoenix XQ R 500 conventional welding robot system with intermediate drive



- Phoenix XQ R 500
- With Expert 2.0 XQ front control
- With intermediate drive
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on a Yaskawa HP20

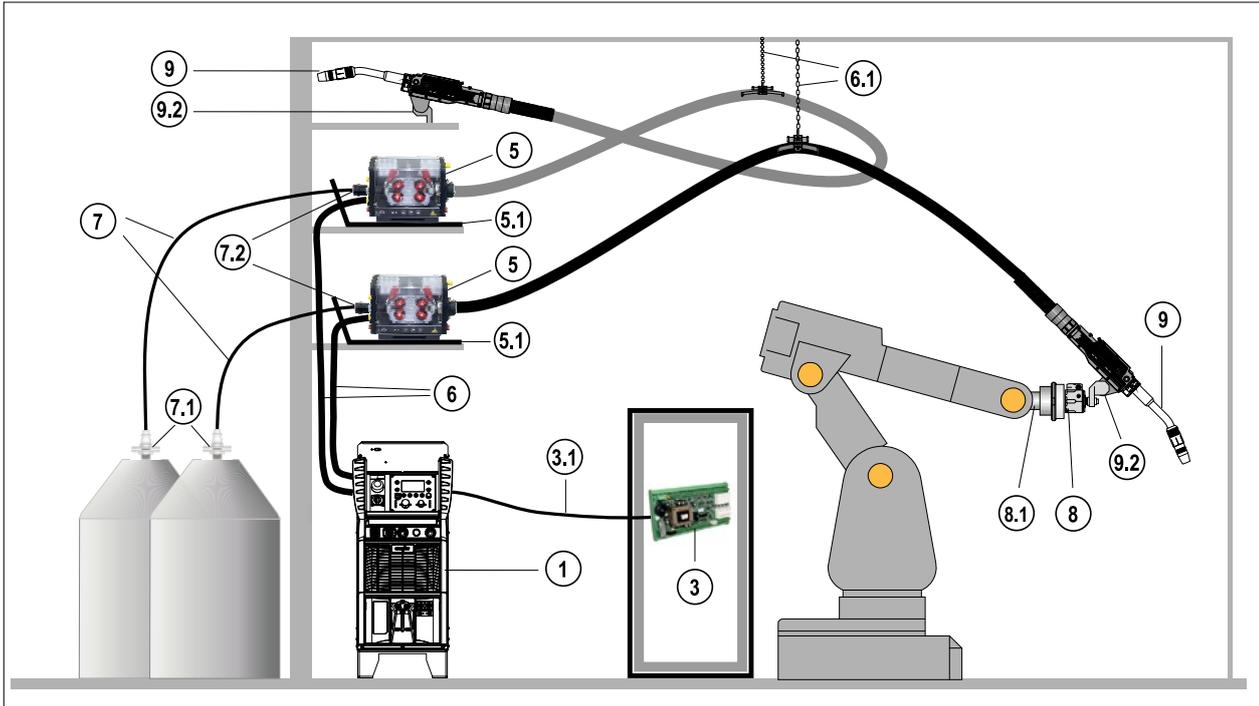
Item	Type	Designation	Item no.
1	Phoenix XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005716-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-003850-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.2	WK95/CL 5m	Workpiece lead with cable lug	092-001990-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.8	RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
3	RINT X12 STANDARD	Standard robot interface	090-008291-00000
3.1	FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
3.1	FRV 7POL 10m	Digital 7-pole cable	092-000201-00000
3.2	KB MOTOMAN-RINT X12	Cable harness for RINT X12 connection to Motoman XRC/NX-100/DX-100/DX-200	094-012212-00003
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.01	M drive 4 Rob 2X ZT	Intermediate drive for automated applications	090-005480-00502
5.01	OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-004661-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
5.11	MONTAGE CONSOLE ROB 2 UNIVERSAL	Mounting console for wire feed unit	092-001746-00000
6	95QMM WRS 23 POL XR 6M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	092-003114-11306
6.1	ON ZWIPIA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7	WIRE CONDUIT 1,8M	Wire guide	094-011515-00004
7	WIRE CONDUIT 8M	Wire guide	094-011515-00002
7.1	CONNECTOR BARREL	Quick connect coupling for large spool / drum connection	094-011517-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
7.21	CONNECTOR DRIVE ROB2 WIRE CONDUIT	Connection set for wire feed ROB 2 Wire Conduit	092-008205-00000
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8.1	FL ISO 9409-1-A40 AL	Intermediate flange, aluminium	094-010198-00000
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	094-025074-00001
9.2	TH RMT 0°-22,5° L=167 mm	Torch holder, adjustable	094-025140-00000
9.4	SP RMT W KON 120CM EZA	Hose package, water-cooled, with blow-out function	094-525221-01120
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Conventional welding robot systems Phoenix XQ R, water cooled

Phoenix XQ R 500 conventional welding robot system with wire feeder switching



- Phoenix XQ R 500
- With Expert 2.0 XQ front control
- Two wire feeders
- Two push/pull welding torches
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on a Kuka KR 16 R2010-2

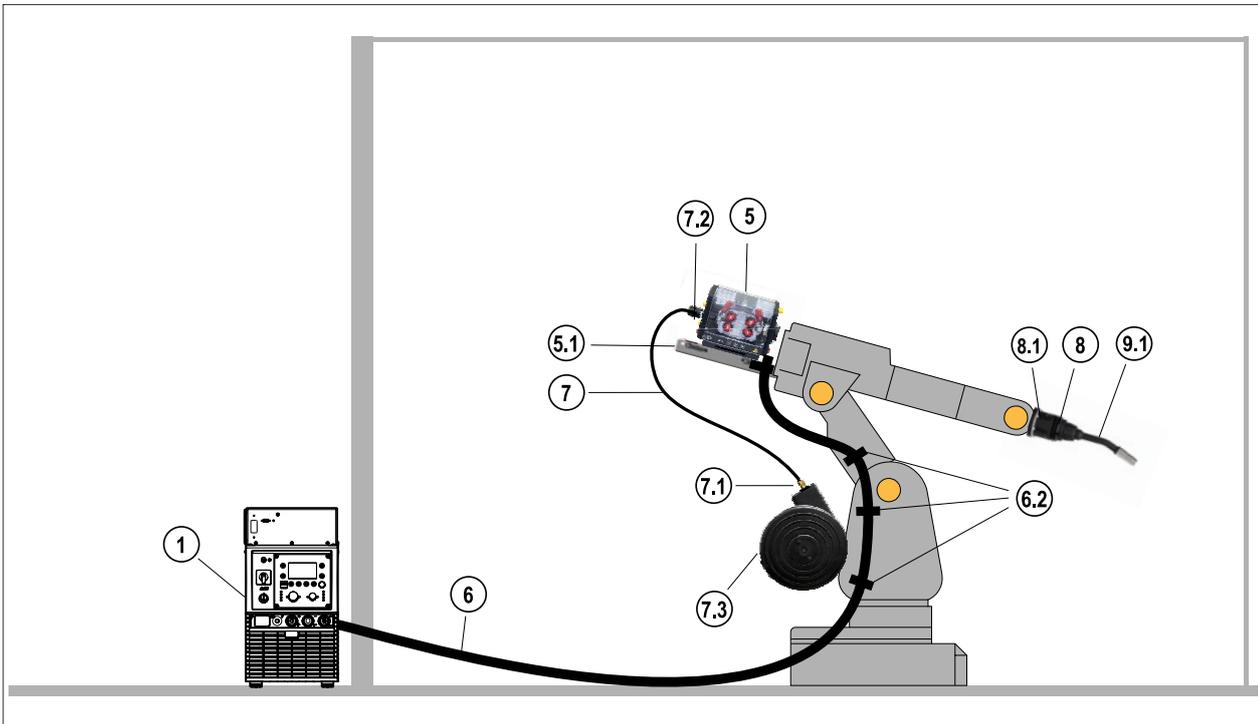
Item	Type	Designation	Item no.
1	Phoenix XQ R 500 puls	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005686-00000
1.01	OW 2 Rob DV	Connection for second wire feeder	092-004603-00000
1.01	OW F06WRF	Water cooling with boosted pump	092-003304-00000
1.01	OW F06P 2DV	Pallet base for two wire feeders*	092-003760-00000
1.01	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-003850-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.2	WK95/CL 5m	Workpiece lead with cable lug	092-001990-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.8	RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
3	MIG BUSINT4.0 EtherCAT EV	EtherCAT industrial bus interface, external, potential-free power supply	090-908317-10000
3.1	FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XR LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.01	OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-004661-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
5.2	OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-004661-00000
5.2	OW COOL W ROB 5 XR	Factory-fit water cooling Rob 5 option	092-004664-00000
6	95QMM WRS 23 POL XR 5M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	092-003114-11305
6	95QMM WRS 23 POL XR 5M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	092-003114-11305
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7	WIRE CONDUIT 2M	Wire guide	094-011515-00006
7	WIRE CONDUIT 2M	Wire guide	094-011515-00006
7.1	CONNECTOR BARREL	Connection for large spool/drum	094-011517-00000
7.1	CONNECTOR BARREL	Quick connect coupling for large spool / drum connection	094-011517-00000
7.2	CONNECTOR DRIVE ROB5 XR WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8	RSA MEDIUM PLUS	Collision sensor	094-023605-00000
8.1	ZF CAT ISO 9409-1-A50	Intermediate flange, aluminium	094-010150-00000
9	MTR500W PP 22°, 4.20m	MIG/MAG welding torch, push/pull, water-cooled	094-500073-00001
9	MTR500W PP 22°, 4.20m	MIG/MAG welding torch, push/pull, water-cooled	094-500073-00001
9.2	STANHOL	Standard holder	094-010162-00500
9.2	STANHOL	Standard holder	094-010162-00500
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Phoenix XQ R hollow-wrist robot systems, modular, gas-cooled

Phoenix XQ R 355 puls hollow-wrist robot system with Expert 2.0 XQ



- Phoenix XQ R 355 puls
- With Expert 2.0 XQ front control
- Gas-cooled
- M Drive 4 Rob 5 HW XQ R LI wire feeder
- As demonstrated on a Kuka KR 6 R1440-2 arc HWE

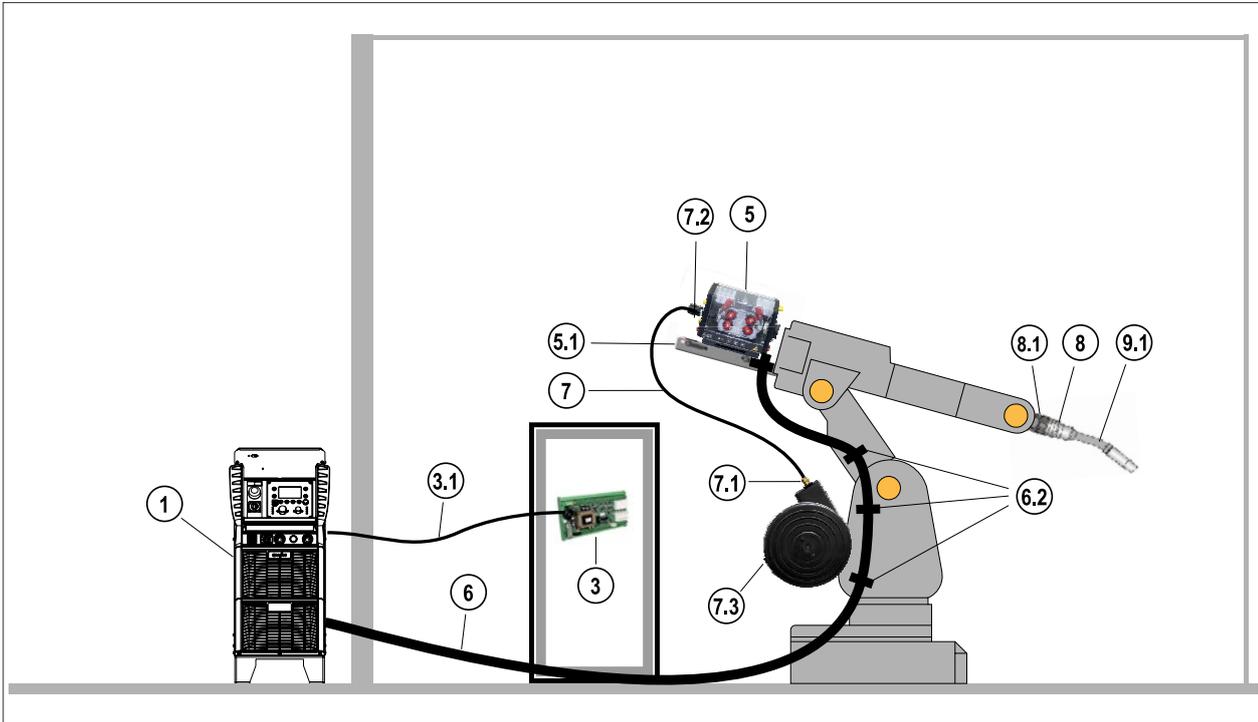
Item	Type	Designation	Item no.
1	Phoenix XQ R 355 puls	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, modular	090-005704-00000
1.01	OW MCord 4 mm ² 5m	Mains connection lead, 5 m	092-004121-00000
1.01	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-004550-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EtherCAT	ETHERCAT industrial bus interface	092-004562-00000
1.01	OW E-STOP	Standard relay	092-004569-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
5	M drive 4 Rob 5 HW XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with hollow wrist robots	090-005724-00000
5.1	MONTAGE CONSOLE ROB5 XR HW	Robotic assembly console for ROB 5 wire feeder	092-004394-00000
5.2	OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-003142-00001
6	70QMM GR 23 POL XR 5M	Robot intermediate hose package, gas-cooled, ribbed hose, 23-pole	092-003114-00205
6.2	MONTAGE SET ZWIPA KUKA KR 6 R1840-2 arc HW	Fastening set for intermediate hose package on robot	092-004199-00000
7	WIRE CONDUIT 1,8M	Wire guide	094-011515-00004
7.1	CONNECTOR DV-CAB WIRE CONDUIT	DV-CAB connection	092-007741-00000
7.2	CONNECTOR DRIVE ROB5 XR WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-003144-00000
7.3	WSH KUKA KR16	Wire spool holder, robots	092-003263-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8	RSA HW W SOFT	Collision sensor	090-005655-00000
8.1	ZF RSA HW LK=58MM (11XM4)	Intermediate flange, aluminium	094-028447-00000
9.1	RMT301G 22,5°	RMT 22.5° torch neck	094-029639-00000
9.4	SP RMT G HW 100CM EZA	Hose package for hollow-wrist robots, gas-cooled, with airblast function	094-529642-01100
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Hollow wrist robot systems Titan XQ R, gas cooled

Titan XQ R 350 hollow wrist robot system with optional Expert 2.0 LAN gateway



- Titan XQ R 350
- With Expert 2.0 XQ front control
- With optional Expert 2.0 LAN gateway
- Gas-cooled
- M Drive 4 Rob 5 HW XQ R LI wire feeder
- As demonstrated on a Yaskawa MA2010

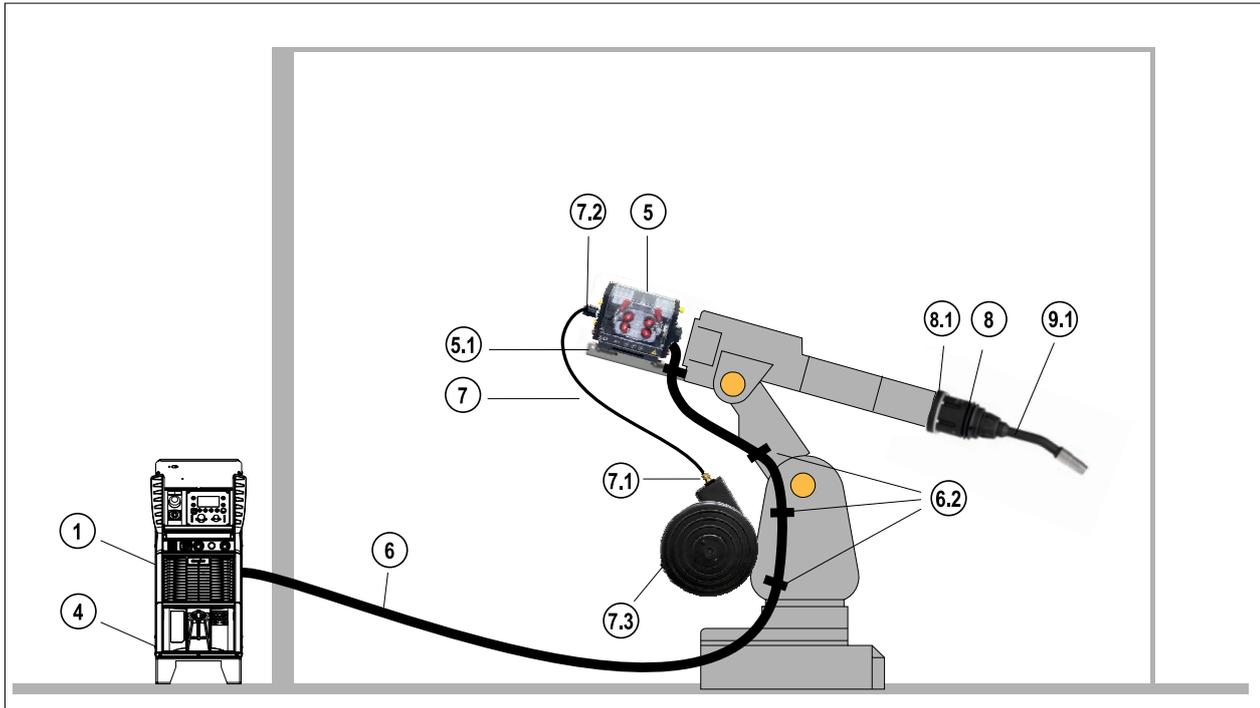
Item	Type	Designation	Item no.
1	Titan XQ R 350 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005710-00000
1.01	OW F06G	Gas cooling	092-003305-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Expert XQ R 2.0 LG	Expert XQ R 2.0 with LAN gateway	092-003851-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.8	RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
3	RINT X12 STANDARD	Standard robot interface	090-008291-00000
3.1	FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
3.2	KB MOTOMAN-RINT X12	Cable harness for RINT X12 connection to Motoman XRC/NX-100/DX-100/DX-200	094-012212-00003
5	M drive 4 Rob 5 HW XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with hollow wrist robots	090-005724-00000
5.1	MONTAGE CONSOLE ROB5 XR YASKAWA MA2010	Robotic assembly console for ROB 5 wire feeder	092-003209-00000
6	70QMM GR 23 POL XR 5M	Robot intermediate hose package, gas-cooled, ribbed hose, 23-pole	092-003114-00205
6.2	MONTAGE SET ZWIPA MA2010	Fastening set for intermediate hose package on robot	092-002880-00000
7	WIRE CONDUIT 1,8M	Wire guide	094-011515-00004
7.1	CONNECTOR DV-CAB WIRE CONDUIT	DV-CAB connection	092-007741-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
7.3	WSH YASKAWA MA2010	Wire spool holder, robots	092-003210-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8	iCAT A	Collision sensor	094-012718-00000
8.1	ZF ICAT D=56.0MM D=62	Intermediate flange, MOTOMAN	094-021590-00000
9.1	RTN 500G 22DG	Torch neck EWM RT 22°	094-011260-00500
9.4	SP G MOTOMAN MA2010	Hose package, gas-cooled, for hollow wrist robot	094-022773-00000
10.01	GN MP 500 A 16/28 0mm	Gas nozzle, conical	094-011263-00000
10.02	CT M8 CUCRZR AG 1.2/30mm	CuCrZr contact tip, silver plated	094-011272-00000
10.04	LST EWM RT 360 2 m Ø 0.8-1.2mm	Steel liner, steel, black	094-011667-00500
10.05	RCTH 500 M8 ROB TS W	Contact tip holder	094-011276-00500
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Hollow wrist robot systems Titan XQ R, water cooled

Titan XQ R 400 hollow wrist robot system with gas-setting option



- Titan XQ R 400
- With Expert 2.0 XQ front control
- With optional gas setting
- Water-cooled
- M Drive 4 Rob 5 HW XQ R LI wire feeder
- As demonstrated on a Fanuc ArcMate 100iC

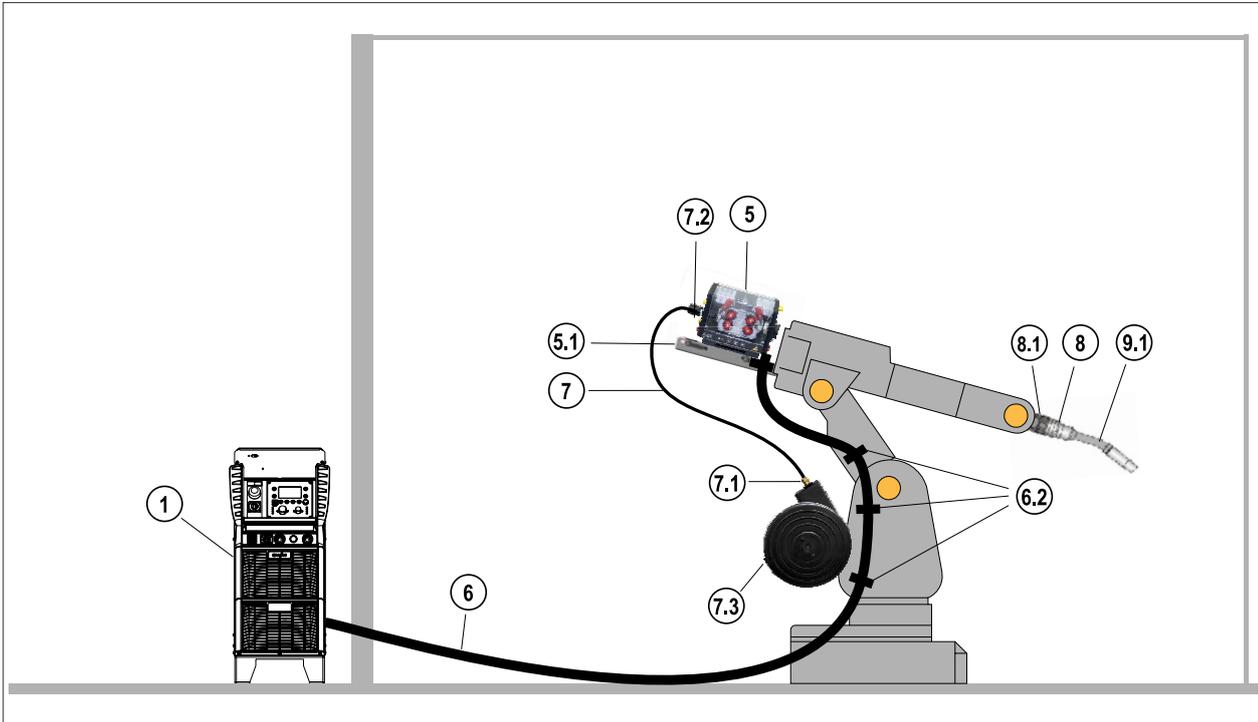
Item	Type	Designation	Item no.
1	Titan XQ R 400 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005711-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-003850-00000
1.01	OW DGC F.06 R DV1	Gas control for a connected wire feeder	092-003846-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EthernetIP	EthernetIP industrial bus interface	092-004610-00000
1.01	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Maxex AR/MIX 200bar 30m ³ G1/4"	Pressure regulator "Maxex"	096-000000-00000
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 HW XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with hollow wrist robots	090-005724-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.1	MONTAGE CONSOLE ROB5 XR FANUC ArcMate 100iC	Robotic assembly console for ROB 5 wire feeder	092-003208-00001
6	70QMM WR 23 POL XR 5M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	092-003114-01205
6.2	MONTAGE SET ZWIPIA FANUC ArcMate 100iC	Fastening set for intermediate hose package on robot	092-002567-00000
7	WIRE CONDUIT 1,8M	Wire guide	094-011515-00004
7.1	CONNECTOR DV-CAB WIRE CONDUIT	DV-CAB connection	092-007741-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
7.3	WSH FANUC ARC Mate 100iC	Wire spool holder, robots	092-002559-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8	RSA HW W SOFT	Collision sensor	090-005655-00000
8.1	ZF RSA HW LK=56MM (8XM4)	Intermediate flange, plastic	094-025491-00000
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	094-025074-00001
9.4	SP RMT W HW 097CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	094-527019-01097
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations

Hollow wrist robot systems Phoenix XQ R, gas cooled

Phoenix XQ R 350 hollow wrist robot system with increased sensor voltage option



- Phoenix XQ R 350
- With Expert 2.0 XQ front control
- Optionally with increased sensor voltage
- Gas-cooled
- M Drive 4 Rob 5 HW XQ R LI wire feeder
- As demonstrated on a Kuka KR5 Arc HW

Item	Type	Designation	Item no.
1	Phoenix XQ R 350 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005714-00000
1.01	OW F06G	Gas cooling	092-003305-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-003850-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EtherCAT	ETHERCAT industrial bus interface	092-004612-00000
1.01	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
1.01	OW 60V Sensor Voltage Busint XQ 4.0	Increased sensor voltage 60 volts	092-004620-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
5.1	MONTAGE CONSOLE ROB5 XR KUKA KR5 ARC HW	Robotic assembly console for ROB 5 wire feeder	092-003238-00000
6	70QMM GR 23 POL XR 5M	Robot intermediate hose package, gas-cooled, ribbed hose, 23-pole	092-003114-00205
6.2	MONTAGE SET ZWIPA KUKA KR5 ARC HW	Fastening set for intermediate hose package on robot	092-002510-00000
7	WIRE CONDUIT 1,8M	Wire guide	094-011515-00004
7.1	CONNECTOR DV-CAB WIRE CONDUIT	DV-CAB connection	092-007741-00000
7.2	CONNECTOR DRIVE ROB5 XR WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
7.3	WSH universal	Wire spool holder, robots	092-002558-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8	iCAT A	Collision sensor	094-012718-00000
8.1	FLANGE KUKA	KUKA KR5/KR6/KR8/KR16 L8 intermediate flange	094-013316-00000
9.1	RTN 500G 22DG	Torch neck EWM RT 22°	094-011260-00500
9.4	SP ABB/KUKA HW G 1,03M	Hose package, water-cooled, for hollow wrist robot	094-019866-00000
10.01	GN MP 500 A 16/28 0mm	Gas nozzle, conical	094-011263-00000
10.02	CT M8 CUCRZR AG 1.2/30mm	CuCrZr contact tip, silver plated	094-011272-00000
10.04	LST EWM RT 360 2 m Ø 0.8-1.2mm	Steel liner, steel, black	094-011667-00500
10.05	RCTH 500 M8 ROB TS W	Contact tip holder	094-011276-00500
5	M drive 4 Rob 5 HW XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with hollow wrist robots	090-005724-00000

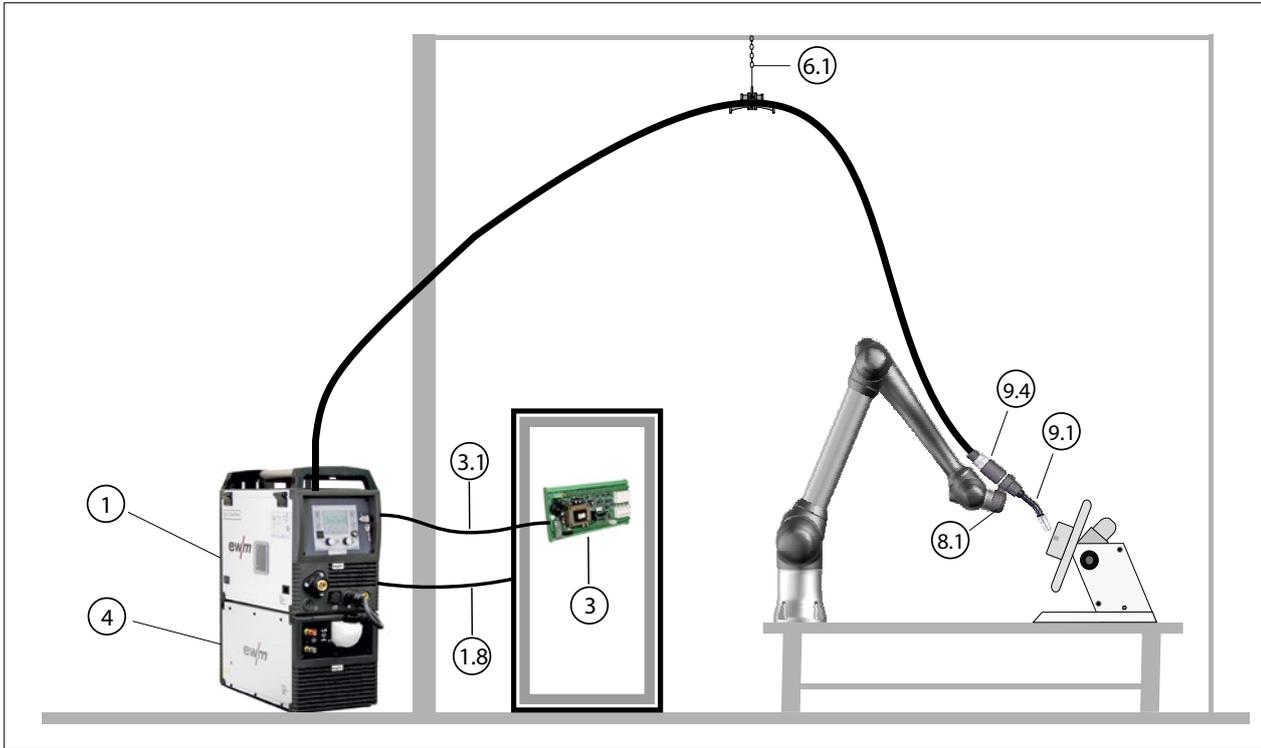
- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Item	Type	Designation	Item no.
1	Phoenix XQ R 400 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005715-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-003850-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EthernetIP	EthernetIP industrial bus interface	092-004610-00000
1.01	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Prereg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 HW XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with hollow wrist robots	090-005724-00000
5.01	OW PRESSURE SWITCH ROB 5 XQ R	Factory-fit option: Gas pressure sensor, Rob 5	092-004663-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.1	MONTAGE CONSOLE ROB5 XR YASKAWA MA2010	Robotic assembly console for ROB 5 wire feeder	092-003209-00000
6	70QMM WR 23 POL XR 5M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	092-003114-01205
6.2	MONTAGE SET ZWIPA MOTO-MAN AR2010, AR1730	Fastening set for intermediate hose package on robot	092-004135-00000
7	WIRE CONDUIT 8M	Wire guide	094-011515-00002
7.1	CONNECTOR BARREL	Quick connect coupling for large spool / drum connection	094-011517-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
8	RSA HW W SOFT	Collision sensor	090-005655-00000
8.1	ZF RSA HW LK=56MM (8XM4)	Intermediate flange, plastic	094-025491-00000
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	094-025074-00001
9.4	SP RMT W HW 160CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	094-527019-01160
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters

Example configurations Cobot welding robot systems

Phoenix 355 cobot welding robot system



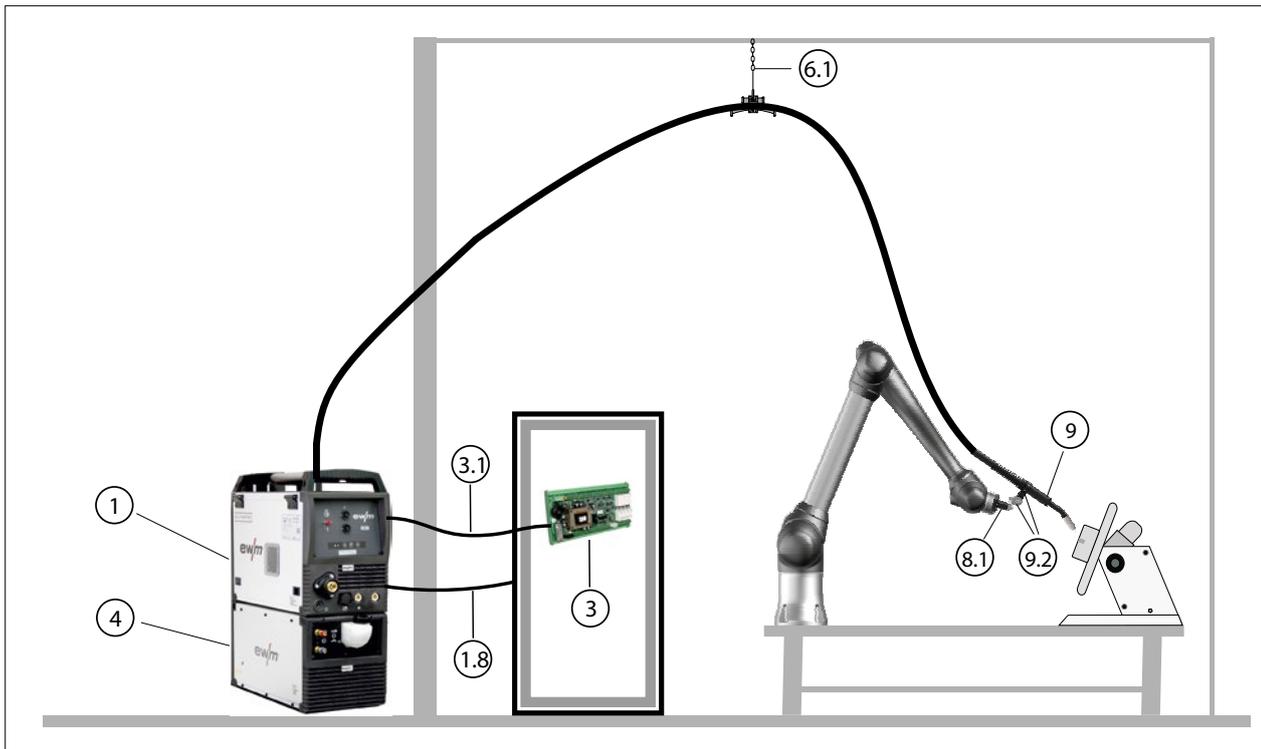
- With Expert 2.0 front control
- Water-cooled
- With EWM eFeed wire feeder
- With external BUSINTX11 Modbus interface
- With RMT cobot welding torch
- As demonstrated on a cobot welding robot application
- Phoenix 355 Expert 2.0 puls MM TKM Rob

Item	Type	Designation	Item no.
1	Phoenix 355 Expert 2.0 puls MM TKM Rob	Multiprocess MIG/MAG pulse welding machine with MULTIMATRIX technology, compact, portable, modular, Expert 2.0 control	090-505445-04843
1.1	OW CEE 16A/400V	Mains plug, assembled	092-008214-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.5	GH 2x1/4" 5m	Gas hose	094-000010-00005
1.8	RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
3	BUSINT X11 MODBUS TCP	MODBUS industrial bus interface	090-008695-00000
3.1	FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
4	Cool 55 C U40	Cooling unit for compact, modular welding machines	090-008866-00502
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
6.1	ON ZWIPA-CONNECTION	Retrofit option, third-party intermediate hose package, strain relief	094-007890-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8.1	TH1 NOCOAX 45°	Torch holder	094-026863-00000
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	094-025074-00001
9.4	SP RMT W C KON 400CM EZA	Co-bot hose package, water cooled	094-026998-01400
10.01	GN TR 23 66mm Ø 17mm	Gas nozzle	094-014180-00001
10.02	CT M9 CuCrZr 1.0mm	Contact tip	094-013530-00001
10.04	LSTC 2.0mm x 4.6mm 4.5m	Steel liner, insulated	094-014223-00501
10.05	CTH M9X32MM CUCRZR RMTW	Contact tip holder	094-025209-00000
10.12	GV DA20,2MM DI14,5MM L=22MM	Gas diffusers	094-028487-00000
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters
- ▶ You can find information about external interface variants in the Accessories chapter

Example configurations Cobot welding robot systems

Phoenix 355 RC cobot welding robot system



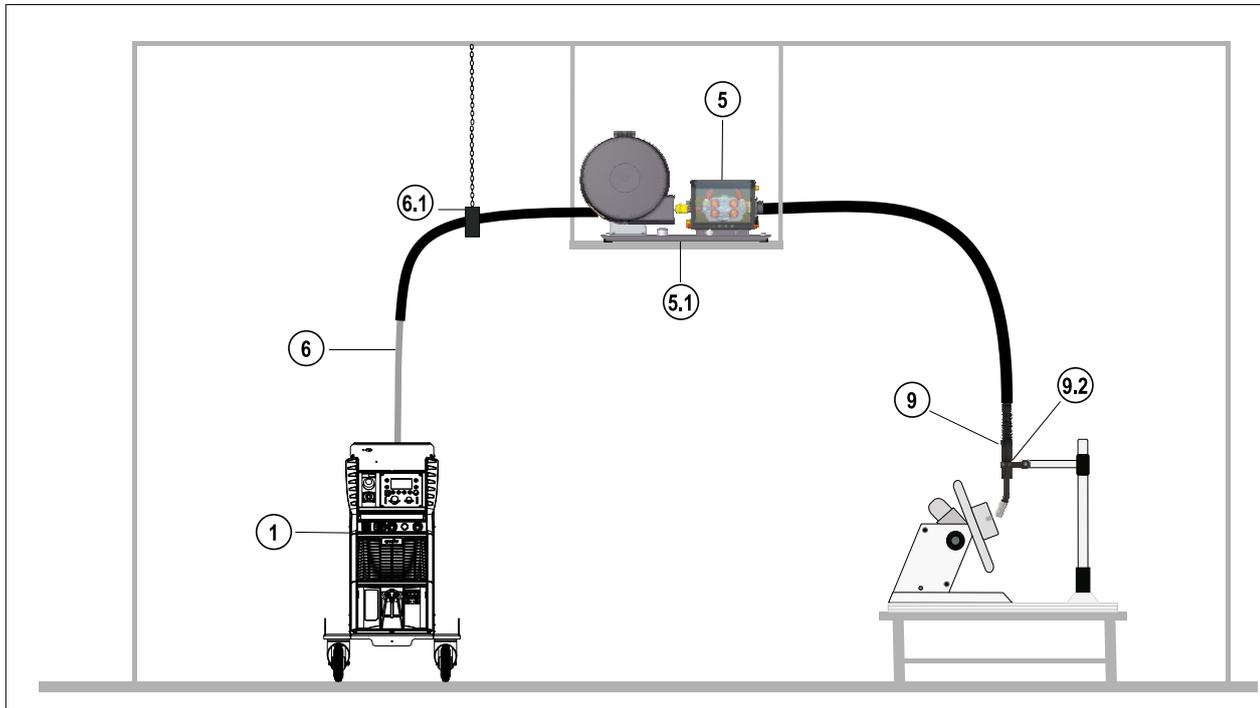
- No front control
- Water-cooled
- With EWM eFeed wire feeder
- With external BUSINTX11 Modbus interface
- With AMT automated welding torch
- As demonstrated on a cobot welding robot application
- Phoenix 355 puls MM RC TKM Rob

Item	Type	Designation	Item no.
1	Phoenix 355 puls MM RC TKM Rob	Multiprocess MIG/MAG pulse welding machine with MULTIMATRIX technology, compact, portable, modular, without front control	090-505502-04752
1.1	OW CEE 16A/400V	Mains plug, assembled	092-008214-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.5	GH 2x1/4" 5m	Gas hose	094-000010-00005
1.8	RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
3	BUSINT X11 MODBUS TCP	MODBUS industrial bus interface	090-008695-00000
3.1	FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
4	Cool 55 C U40	Cooling unit for compact, modular welding machines	090-008866-00502
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
6.1	ON ZWIPA-CONNECTION	Retrofit option, third-party intermediate hose package, strain relief	094-007890-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8.1	AF2	Adapter flange	094-027802-00000
9	AMT451W 22° 3m M9	Automated MIG/MAG welding torch, water-cooled	094-500066-00000
9.2	HL CAT3 PRO CR STD	Standard holder	094-012839-00000
9.2	TH AMT	Torch holder suitable for AMT torches	092-019400-00000
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters
- ▶ You can find information about external interface variants in the Accessories chapter

Example configurations Mechanised welding systems

Phoenix XQ R 500 mechanised welding systems



- Phoenix XQ R 500
- With Expert 2.0 XQ front control
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- Wire spool support for Rob
- As demonstrated on a simple mechanical application

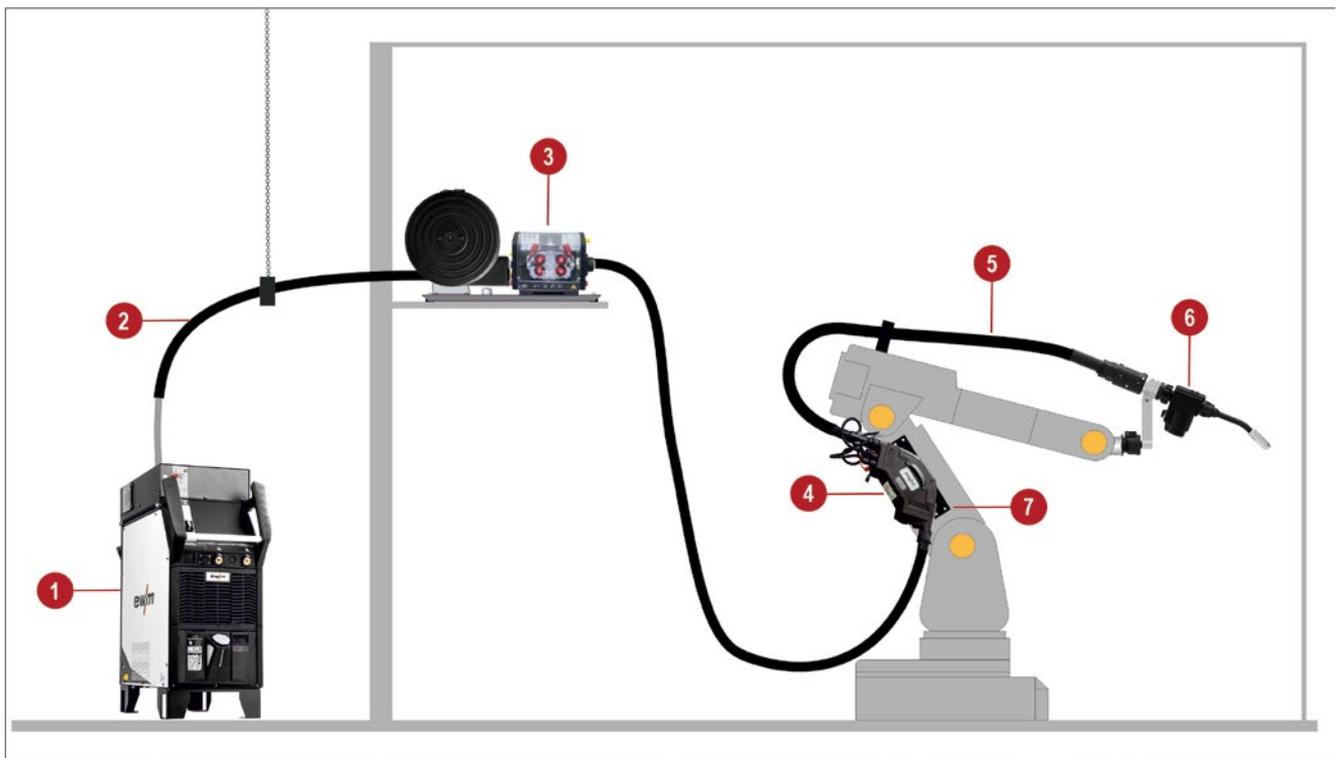
Item	Type	Designation	Item no.
1	Phoenix XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005716-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06RS	Wheel kit with narrow gauge without gas cylinder bracket	092-003318-00000
1.01	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-003850-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.2	WK95/CL 5m	Workpiece lead with cable lug	092-001990-00005
1.3	Prereg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
1.8	RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.1	ON DV CAP ROB LI	Rob wire spool support, left	092-003217-00000
6	95QMM WRS 23 POL XR 6M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	092-003114-11306
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
9	AMT551W 22° 1.5m M9	Automated MIG/MAG welding torch, water-cooled	094-500070-00015
9.2	TH AMT	Torch holder suitable for AMT torches	092-019400-00000
-	PC300 XQ Set	PC300 XQ welding parameter software set, including CMSTICK, cable and SECINT X10 USB interface	090-008777-00000

- ▶ The power source must be configured in line with the area of use and necessary degree of automation.
- ▶ The application examples shown here are possible with both the Phoenix XQ R and Titan XQ R machines.
- ▶ Image for conceptual purposes. Not all listed items are shown.
- ▶ For more accessories, options and machine variants please refer to the individual chapters



EWM React welding system

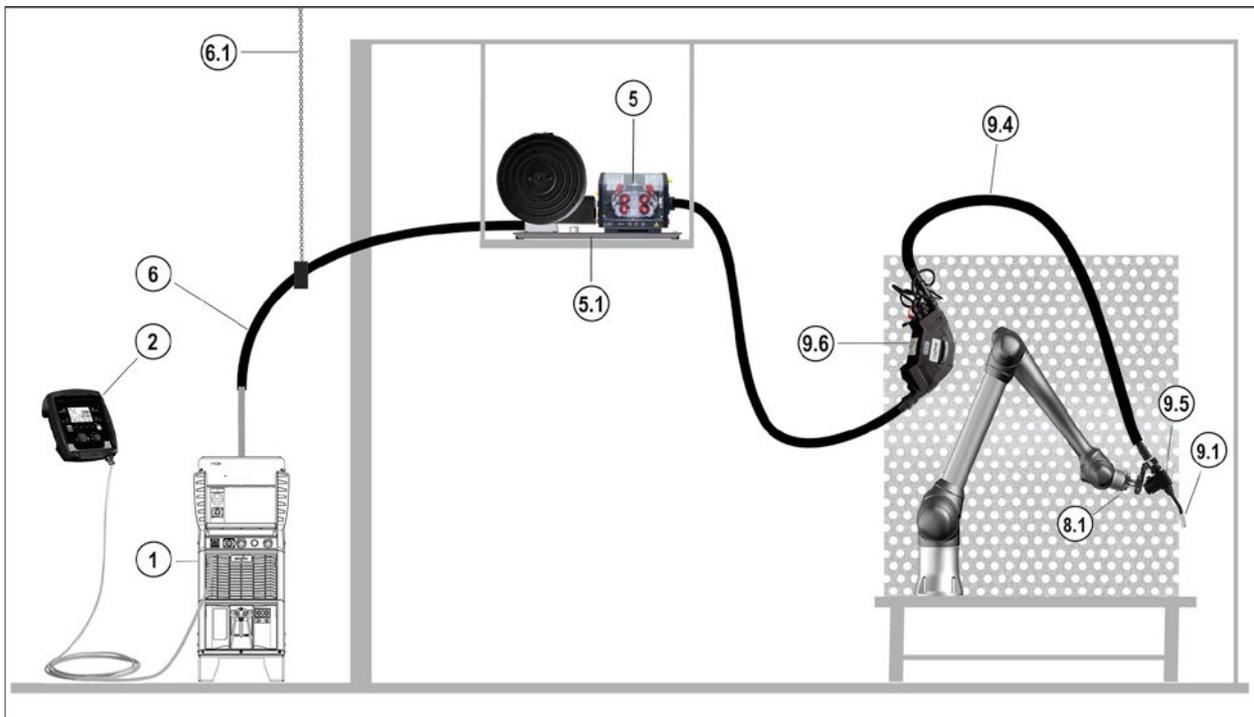
System overview



- 1 Titan XQ R power source with PUSH/PULL option
 - 2 Intermediate hose package
 - 3 M drive 4 Rob 5 XQ R wire feeder with ASM EWM torchDrive option
 - 4 Wire buffer
 - 5 Torch hose package
 - 6 RMT robot welding torch with wire drive unit
 - 7 Mounting kit for attaching the wire buffer to the robot (depends on robot type)
- Starter kits/replacement parts set for wire buffer and wire drive (dependent on wire diameter)

EWM React welding system Example configurations

EWM React welding system cobot, Titan XQ R 500

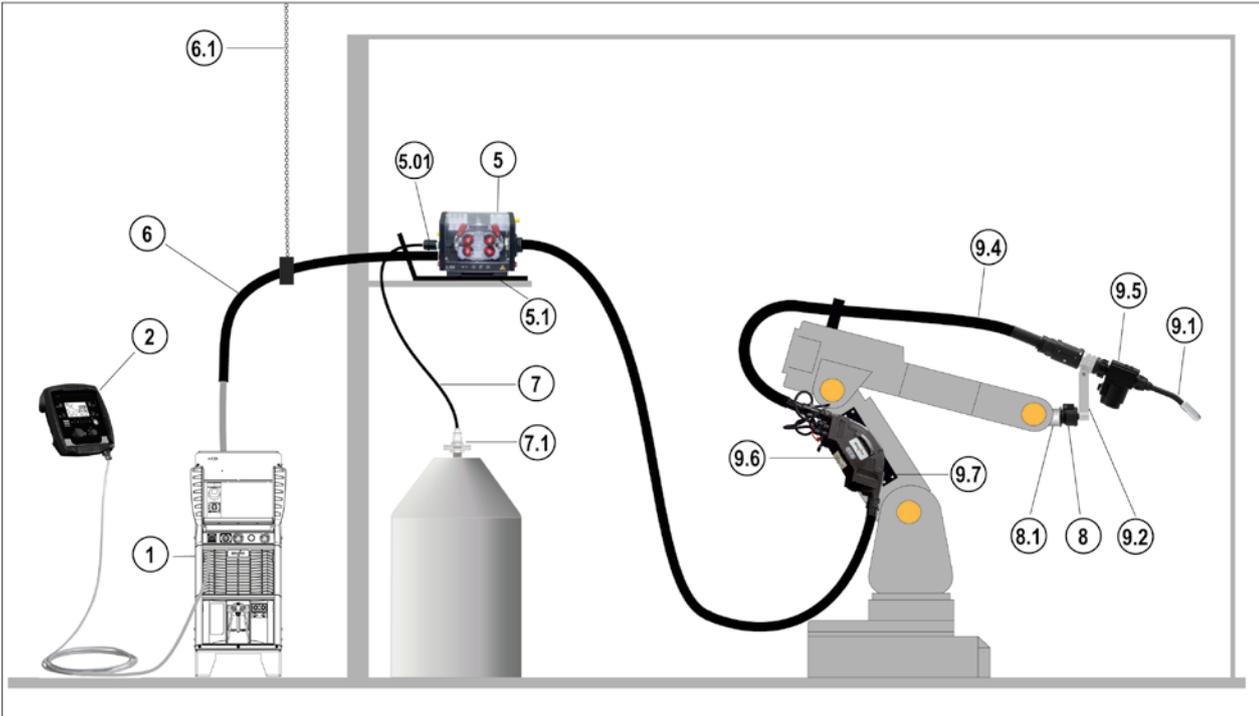


- Titan XQ R 500
- With RC XQ Expert 2.0 Rob operating panel
- No front control
- Water-cooled
- M Drive 4 Rob 5 XQ R RE wire feeder
- As demonstrated on a Fanuc CRX cobot

Item	Type	Designation	Item no.
1	Titan XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005712-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Cover	No control	092-003306-00000
1.01	OW Push/Pull	Connection for second wire feeder or push/push welding torch	092-004602-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EthernetIP	EthernetIP industrial bus interface	092-004610-00000
1.01	BUSINT XQ 4.0 NO OW	No option for industrial bus interface	092-004614-00000
1.01	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
1.01	OW E-STOP Adv.	Safety relay	092-004570-00000
1.01	OW EWM React LC	EWM React licence	092-004712-00000
1.2	WK95/CL 5m	Workpiece lead with cable lug	092-001990-00005
1.3	Prorog Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
2	RC XQ Expert 2.0 Rob 10 m	Control panel	090-008839-00010
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XQ R RE	Wire feeder for automated applications, opens on right, gas-cooled, Euro torch connector, for use with conventional robots	090-005723-00000
5.01	OW PRESSURE SWITCH ROB 5 XQ R	Factory-fit option: Gas pressure sensor, Rob 5	092-004663-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.01	IG (STANDARD)	Inlet guide	092-004668-00000
5.01	OW ASM EWM torchDrive RE	Connection capability for second wire drive unit	092-004683-00000
5.1	ON DV CAP ROB RE	Rob wire spool support, right	092-003484-00000
6	95QMM WR 2 23POL XR 3M	Robot intermediate hose package, water-cooled, ribbed hose, 2 x 23-pole	092-004294-11203
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7.4	AK300	Wire spool adapter B300	094-001803-00001
8.1	AF2	Adapter flange	094-027802-00000
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	094-025074-00001
9.2	TH RMT 0°-22,5° L=199 mm	Torch holder, adjustable	094-028948-00000
9.4	SP RMT W KON P-P 400CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11400
9.5	WDU C W ROB	Wire drive unit	090-027883-00000
9.6	WB 4M EZA	Wire buffer	094-029930-00004
9.7	MONTAGE SET WB	Mounting kit for wire buffer on robots, depending on robot type	092-S04591-00XXX
10.01	GN TR 23 66mm Ø 17mm	Gas nozzle	094-014180-00001
10.02	CT CuCrZr M9 x 35mm Ø 1.2mm	Contact tip	094-013531-00001
10.05	CTH M9X32MM CUCRZR RMTW	Contact tip holder	094-025209-00000
10.07	18,5 mm x 2,4 mm	O-ring for gas nozzle holder	094-022875-00000
10.12	GV DA20,2MM DI14,5MM L=22MM	Gas diffusers	094-028487-00000
-	PRL RMT551W	Testing and straightening gauge for robot welding torches	094-025651-00000
-	ZS M9 SO=15MM	Centring piece	094-026854-00001
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

EWM React welding system Example configurations

EWM React welding system on a conventional robot, Titan XQ R 400

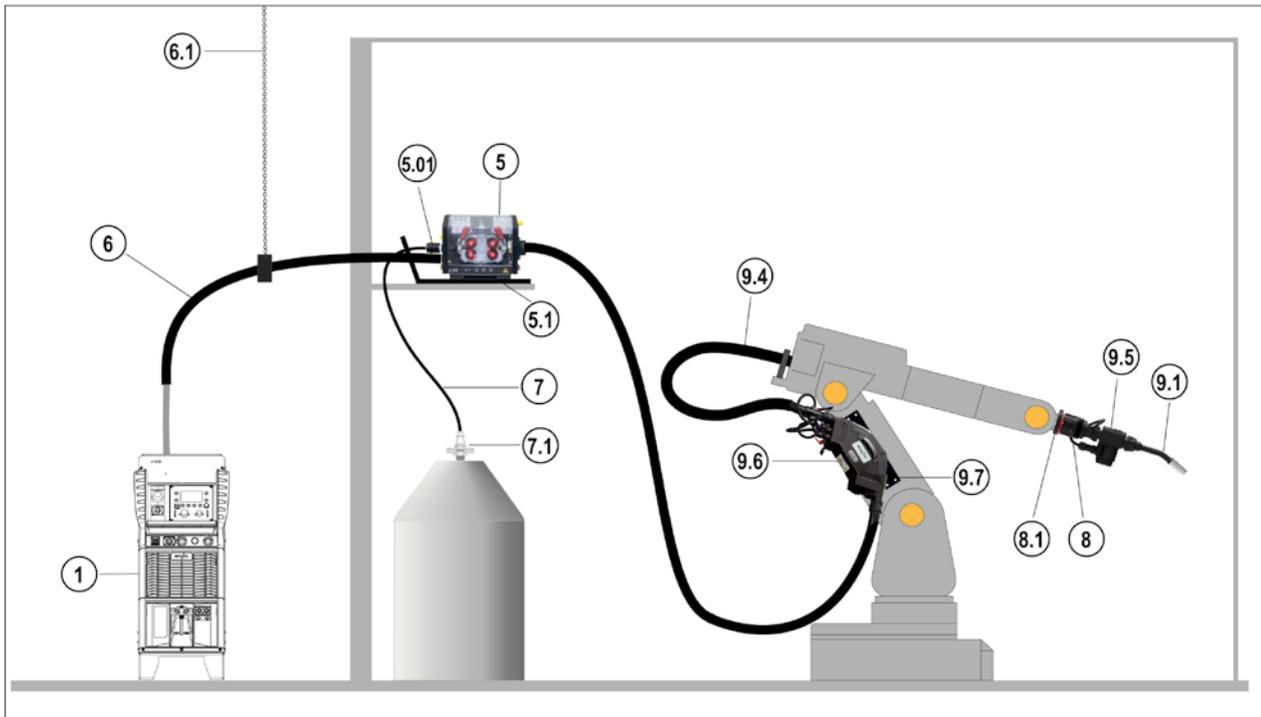


- Titan XQ R 400
- With RC XQ Expert 2.0 Rob operating panel
- No front control
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on a KUKA KR6 R1820

Item	Type	Designation	Item no.
1	Titan XQ R 400 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005711-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Cover	No control	092-003306-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW Push/Pull	Connection for second wire feeder or push/push welding torch	092-004602-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 Profinet	PROFINET industrial bus interface	092-004611-00000
1.01	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
1.01	BUSINT XQ 4.0 OW ST	Option for industrial bus interface Support for seam tracking	092-004616-00000
1.01	OW E-STOP	Standard relay	092-004569-00000
1.01	OW EWM React LC	EWM React licence	092-004712-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030
2	RC XQ Expert 2.0 Rob 10 m	Control panel	090-008839-00010
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.01	OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-004661-00000
5.01	OW NPRESSURE SWITCH ROB 5 XQ R	Without gas pressure sensor Rob 5	092-004662-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.01	OW ASM EWM torchDrive LI	Connection capability for second wire drive unit	092-004681-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
6	70QMM WR 2 23POL XR 6M	Robot intermediate hose package, water-cooled, ribbed hose, 2 x 23-pole	092-004294-01206
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7	WIRE LEAD SOFT	Wire guide, material sold by the metre	094-020382-00000
7.1	CONNECTOR BARREL WIRE LEAD	Connection for large spool/drum	094-018277-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-004669-00000
7.5	CONNECTOR WIRE LEAD SOFT	End piece wire guide for material sold by the metre	094-020381-00000
8	RSA STRONG	Collision sensor	094-020727-00000
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	094-025074-00001
9.2	TH RMT 0°-22,5° L=199 mm	Torch holder, adjustable	094-028948-00000
9.4	SP RMT W KON P-P 160CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11160
9.5	WDU C W ROB	Wire drive unit	090-027883-00000
9.6	WB 5M EZA	Wire buffer	094-029930-00005
9.7	MONTAGE SET WB	Mounting kit for wire buffer on robots, depending on robot type	092-504591-00XXX
10.01	GN TR 23 66mm Ø 17mm	Gas nozzle	094-014180-00001
10.02	CT M9 CuCrZr 1.0mm	Contact tip	094-013530-00001
10.05	CTH M9X32MM CUCRZR RMTW	Contact tip holder	094-025209-00000
10.07	18,5 mm x 2,4 mm	O-ring for gas nozzle holder	094-022875-00000
10.12	GV DA20,2MM DI14,5MM L=22MM	Gas diffusers	094-028487-00000
-	PRL RMT551W	Testing and straightening gauge for robot welding torches	094-025651-00000
-	ZS M9 SO=15MM	Centring piece	094-026854-00001
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

EWM React welding system Example configurations

EWM React welding system on the hollow wrist robot, Titan XQ R 350



- Titan XQ R 350
- With Expert 2.0 XQ front control
- Water-cooled
- M Drive 4 ROB 5 XQ R LI wire feeder
- As demonstrated on an ABB IRB 1600iD

Item	Type	Designation	Item no.
1	Titan XQ R 350 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005710-00000
1.01	OW F06W	Water cooling	092-003303-00000
1.01	OW F06P	Pallet base	092-003319-00000
1.01	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-003850-00000
1.01	OW DGC F.06 R DV1	Gas control for a connected wire feeder	092-004604-00000
1.01	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
1.01	OW Push/Pull	Connection for second wire feeder or push/push welding torch	092-004602-00000
1.01	OW CEE 32A	Mains plug, assembled	092-008215-00000
1.01	OW BUSINT XQ 4.0 EtherCAT	ETHERCAT industrial bus interface	092-004612-00000
1.01	BUSINT XQ 4.0 NO OW	No option for industrial bus interface	092-004614-00000
1.01	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
1.01	OW E-STOP	Standard relay	092-004569-00000
1.01	OW EWM React LC	EWM React licence	092-004712-00000
1.2	WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
1.3	Maxex AR/MIX 200bar 30m ³ G1/4"	Pressure regulator "Maxex"	096-000000-00000
4.1	blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
5	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
5.01	OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-004661-00000
5.01	OW NPRESSURE SWITCH ROB 5 XQ R	Without gas pressure sensor Rob 5	092-004662-00000
5.01	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
5.01	OW ASM EWM torchDrive LI	Connection capability for second wire drive unit	092-004681-00000
5.1	MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000
5.2	AL 4R 1.2 MM/0.045 INCH RED/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00012
6	70QMM WR 2 23POL XR 5M	Robot intermediate hose package, water-cooled, ribbed hose, 2 x 23-pole	092-004294-01205
6.1	ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000
7	WIRE LEAD SOFT	Wire guide, material sold by the metre	094-020382-00000
7.1	CONNECTOR BARREL WIRE LEAD	Connection for large spool/drum	094-018277-00000
7.2	CONNECTOR DRIVE ROB5 XQ R WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-004669-00000
7.5	CONNECTOR WIRE LEAD SOFT	End piece wire guide for material sold by the metre	094-020381-00000
7.6	UEDFS WLS 2,5x4,5mm 150mm	Transition liner for soft wire lead	094-020380-00000
8	RSA HW W STRONG	Collision sensor	090-005657-00000
8.1	ZF RSA HW ALU LK=80 (6XM6)	Intermediate flange, aluminium	094-027676-00000
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	094-025074-00001
9.4	SP RMT W HW P-P 200CM Euro torch connector	Torch hose package, water-cooled, for hollow wrist robots	094-527770-11200
9.5	WDU C W ROB	Wire drive unit	090-027883-00000
9.6	WB 3M EZA	Wire buffer	094-029930-00003
9.7	MONTAGE SET WB	Mounting kit for wire buffer on robots, depending on robot type	092-504591-00XXX
10.01	GN TR 23 66mm Ø 17mm	Gas nozzle	094-014180-00001
10.02	CT CuCrZr M9 x 35mm Ø 1.2mm	Contact tip	094-013531-00001
10.05	CTH M9X32MM CUCRZR RMTW	Contact tip holder	094-025209-00000
10.07	18,5 mm x 2,4 mm	O-ring for gas nozzle holder	094-022875-00000
10.12	GV DA20,2MM DI14,5MM L=22MM	Gas diffusers	094-028487-00000
-	EZH SP RMT W HW	Retraction aid for hollow wrist hose package	094-027954-00000
-	PRL RMT551W	Testing and straightening gauge for robot welding torches	094-025651-00000
-	SR CW W D66MM X 40MM	Protective ring	094-027653-00000
-	ZS M9 SO=15MM	Centring piece	094-026854-00001
-	Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

EWM React welding system

System components

WB X m



- Wire buffer with hose package
- Serves as a buffer between wire feeder and robot welding torch to compensate for the active wire movement at the welding torch (wire length adjustment)

Type	Designation	Item no.
WB 0,5M EZA	Wire buffer	094-029930-00500
WB 1M EZA	Wire buffer	094-029930-00001
WB 1,5M EZA	Wire buffer	094-029930-00015
WB 2M EZA	Wire buffer	094-029930-00002
WB 3M EZA	Wire buffer	094-029930-00003
WB 4M EZA	Wire buffer	094-029930-00004
WB 5M EZA	Wire buffer	094-029930-00005
WB 6M EZA	Wire buffer	094-029930-00006

WDU C W ROB



- Wire feeder robot welding torch
- Highly dynamic motor for reversing wire movement

Type	Designation	Item no.
WDU C W ROB	Wire drive unit	090-027883-00000

SP RMT W KON P-P

- Torch hose package for conventional robots



Type	Designation	Item no.
SP RMT W KON P-P 75CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11075
SP RMT W KON P-P 160CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11160
SP RMT W KON P-P 180CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11180
SP RMT W KON P-P 200CM Euro torch connector	Torch hose package, water-cooled, for conventional robots	094-528926-11200
SP RMT W KON P-P 220CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11220
SP RMT W KON P-P 240CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11240
SP RMT W KON P-P 260CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11260
SP RMT W KON P-P 280CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11280
SP RMT W KON P-P 300CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11300
SP RMT W KON P-P 400CM EZA	Torch hose package, water-cooled, for conventional robots	094-528926-11400

SP RMT W HW P-P

- Torch hose package for hollow wrist robots



Type	Designation	Item no.
SP RMT W HW P-P 160CM EZA	Torch hose package, water-cooled, for hollow wrist robots	094-527770-11160
SP RMT W HW P-P 180CM EZA	Torch hose package, water-cooled, for hollow wrist robots	094-527770-11180
SP RMT W HW P-P 200CM Euro torch connector	Torch hose package, water-cooled, for hollow wrist robots	094-527770-11200
SP RMT W HW P-P 220CM EZA	Torch hose package, water-cooled, for hollow wrist robots	094-527770-11220
SP RMT W HW P-P 240CM EZA	Torch hose package, water-cooled, for hollow wrist robots	094-527770-11240
SP RMT W HW P-P 260CM EZA	Torch hose package, water-cooled, for hollow wrist robots	094-527770-11260

EWM React welding system

System components

-MONTAGE SET-



- Mounting kit for mounting the wire buffer on the robot
- Set contains a holder for the wire buffer and hose package holders, depending on the robot type

Type	Designation	Item no.
MONTAGE SET WB ABB IRB 1600-6/1.45	Mounting kit for wire buffer on robots	092-004784-00000
MONTAGE SET WB ABB IRB 1660ID-6/1.55	Mounting kit for wire buffer on robots	092-004782-00000
MONTAGE SET WB ABB IRB 2600iD-15/1.85	Mounting kit for wire buffer on robots	092-004793-00000
MONTAGE SET WB Fanuc ArcMate 100iC	Mounting kit for wire buffer on robots	092-004641-00000
MONTAGE SET WB Fanuc ArcMate 100iD	Mounting kit for wire buffer on robots	092-004631-00000
MONTAGE SET WB FANUC ArcMate 100iD 8L	Mounting kit for wire buffer on robots	092-004792-00000
MONTAGE SET WB Fanuc ArcMate 120iD	Mounting kit for wire buffer on robots	092-004642-00000
MONTAGE SET WB KUKA KR 10 R1420HP	Mounting kit for wire buffer on robots	092-004655-00000
MONTAGE SET WB KUKA KR 120 R3100-2	Mounting kit for wire buffer on robots	092-004591-00000
MONTAGE SET WB KUKA KR 16 R2010-2	Mounting kit for wire buffer on robots	092-004783-00000
MONTAGE SET WB KUKA KR 6 R1440-2 arc HW E	Mounting kit for wire buffer on robots	092-004791-00000
MONTAGE SET WB KUKA KR 8 R2100-2 ARC HW	Mounting kit for wire buffer on robots	092-004787-00000
MONTAGE SET WB KUKA KR 6 R2100-2 ARC HW E	Mounting kit for wire buffer on robots	092-004790-00000
MONTAGE SET WB KUKA KR 8 R1440-2 ARC HW	Mounting kit for wire buffer on robots	092-004789-00000
MONTAGE SET WB MOTO-MAN MA1440	Mounting kit for wire buffer on robots	092-004640-00000
MONTAGE SET WB OTC FD V6L	Mounting kit for wire buffer on robots	092-004643-00000
MONTAGE SET WB YASKAWA AR1440	Mounting kit for wire buffer on robots	092-004788-00000
MONTAGE SET WB YASKAWA AR2010	Mounting kit for wire buffer on robots	092-004785-00000
MONTAGE SET WB YASKAWA AR3120	Mounting kit for wire buffer on robots	092-004786-00000

EWM React welding system

Accessories

Sets for wire feeder

Type	Designation	Item no.
Tool kit drive	Tool kit for mounting wire feeder	092-004740-00000

Type	Designation	Item no.
Drive Kit Ø 0.8 mm	Equipment kit for wire feeder	092-004741-00000
Drive Kit Ø 0.9 mm	Equipment kit for wire feeder	092-004742-00000
Drive Kit Ø 1.0 mm	Equipment kit for wire feeder	092-004743-00000
Drive Kit Ø 1.2 mm	Equipment kit for wire feeder	092-004744-00000
Drive Kit Ø 1.6 mm	Equipment kit for wire feeder	092-004745-00000

Wire feeder replacement parts sets

Type	Designation	Item no.
RA Kit	Mounting kit for wire spool	092-004747-00000

Type	Designation	Item no.
VTS OR	O-ring kit	092-004746-00000

Wire buffer replacement parts sets

Type	Designation	Item no.
CL-PTFE 2.7mm x 4.7mm, 375mm	Wire buffer liner	092-004771-00000
CL-PTFE+Add 2.7mm x 4.7mm, 375mm	Wire buffer liner	092-004772-00000

Type	Designation	Item no.
SET WIRE GUIDE WB	Wire guide bush kit	092-004770-00000

Replacement parts sets for wire guide hose package and wire storage hose package

Type	Designation	Item no.
SET WB HP 2,0/4,0	Hose package replacement parts set	092-004773-00000
SET WB HP 2,4/4,7	Hose package replacement parts set	092-004774-00000

Type	Designation	Item no.
Tool kit WIRE GUIDE	Wire guide hose package tool kit	092-004775-00000

Phoenix XQ R modular machine description

Front view

Phoenix XQ R puls power source – a decompact inverter welding machine with greatly improved XQ welding processes. A modular casing concept for automated welding.



LED info panel for, among other things:

- Error display during and after initialisation
- Information on operational readiness

1 PC interface for Analyzer software

4 Inverter technology

- High efficiency
- High duty cycle
- Standby function
- Dust-protected electronics
- Upper lid for easy access to optional internal BUSINT XQ 4.0

5 Robot interface

6 Available controls:

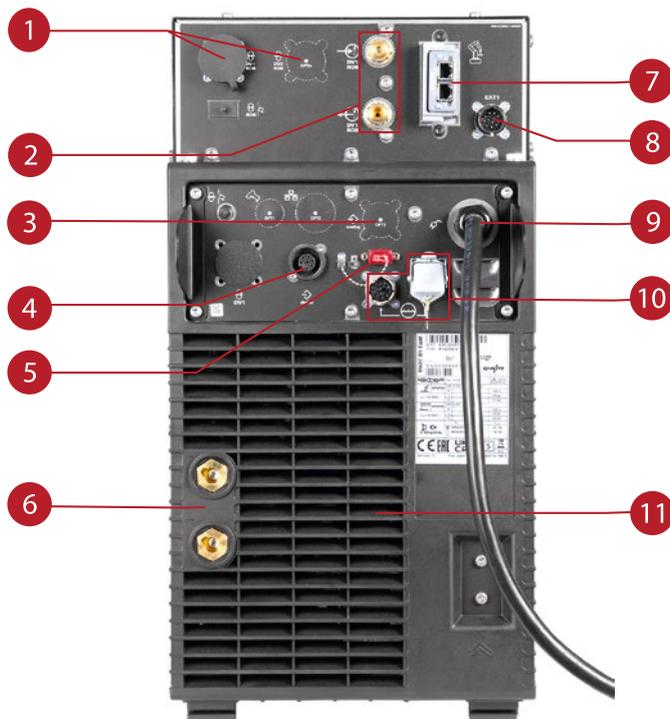
- No front control
- With Expert XQ R 2.0 Rob
- With Expert XQ R 2.0 Rob with LAN or WiFi function

7 Modular casing design

- Choice of gas- or water-cooled operation with cooling unit
- Pallet base or mobile on a Trolley

Phoenix XQ R modular machine description

Rear view



1 Connecting the wire feeder

- Connection sockets for wire feeder and push/push welding torch (optional)

2 Gas connection

- Digital gas regulation (optional)

3 19-pole interface for automated welding

4 Connection sockets, 7-pole, e.g. for interface, external ewm Xnet LAN/ WiFi gateway, intermediate drive

5 PC interface for PC300 software

6 Load connections +/-

7 Integrated interface connections (optional)

- BUSINT XQ 4.0

8 12-pole connection socket

- Signal input/output (e.g. emergency stop)

9 Mains cable

10 Protective dust filter

- Connections for cooling unit

MIG/MAG robot welding machines

Technical data Phoenix XQ R 355, 405 puls, decompact modular

XQ - Process

all in

- / Standard
- / Pulse
- / rootArc® puls XQ
- / rootArc® XQ
- / forceArc® puls XQ
- / forceArc® XQ
- / Positionweld for aluminium
- / Superpuls
- / TIG
- / MMA
- / Gouging



- MIG/MAG robot pulse welding machine, multiprocess, including all characteristics and welding processes, modular
- Small, lightweight and compact, can be integrated into any automation solution – with high output
- Available without¹ or with² front control
- ¹ Set up on external operating panel or notebook with PC300.NET software or
- ² set up on Expert 2.0 XQ control with intuitive user guidance via LCD and plain text display for all welding parameters and functions
- No need to purchase additional characteristics – all characteristics for this machine type are included in the scope of delivery ex works
- With innovative EWM Synergic characteristics: rootArc® XQ / rootArc® puls XQ, forceArc® XQ / forceArc® puls XQ, pulse / superPuls and Positionweld for aluminium
- Synergic characteristics for MIG/MAG standard or pulsed welding for steel/CrNi/ aluminium
- Ready to connect an M Drive 4 ROB 5 LI/RE wire feeder
- 19-pole interface for automated welding for simple applications (optional)
- Optional RINT X12 interface, BUSINT 4.0 interface
- Parameters adjustable via interfaces: 510 JOBS each with 15 programs in program mode; wire feed speed, arc length correction and arc dynamics in control signal operation
- Optimised for automated and mechanised applications in the manufacture of machinery, cars, vehicles, containers, equipment and ships
- LED information field: Display for operating status during and after initialization
- Gas or water cooled with cooling unit
- Cooling unit with centrifugal pump, flow and temperature monitoring, can also be used externally next to the power source
- Sensor voltage ex works 18 V
- Earth fault monitoring (PE protection)
- IP23 spray water protected
- Optional network connectivity with ewm Xnet quality management software via LAN or WiFi gateway
- PC interface for PC300 XQ software
- Can be individually configured to meet your requirements

OW Cover



OW Expert XQ R 2.0



Version	Phoenix XQ R 355 puls	Phoenix XQ R 405 puls
Setting range for welding current	5A - 350A	5A - 400A
Duty cycle 40°C, 100%	350A	350A
Duty cycle 40°C, 60%	-	400A
Open circuit voltage	82 V	
Mains voltage (ex works)	3 x 400 V (- 25 % - + 20 %)*	
Mains voltage (possible)	3 x 480 V (- 25 % - + 15 %)	
Mains frequency	50 Hz / 60 Hz	
Recommended generator power	18.8 kVA	23.2 kVA
Efficiency	89 %	
Power consumption Pi	32 W	
Protection classification	IP23	
Test mark	CE ENEC S	
EMC class	A	
Dimensions (L x B x H)	625 mm x 298 mm x 580 mm 24.6 inch x 11.7 inch x 22.8 inch	
Weight	45.8 kg 101 lbs	
Standards	IEC 60974-1 and -10 CL.A	

* The mains voltage can be adapted by connecting a plug with a different operating voltage. The voltage may only be adjusted by a qualified electrician in accordance with the respective national legislation and regulations.

Type	Designation	Item no.
Phoenix XQ R 355 puls	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, modular	090-005704-00000
Phoenix XQ R 405 puls	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, modular	090-005705-00000

► These item numbers only contain the basic versions. Configuration options can be found in the configuration table below.

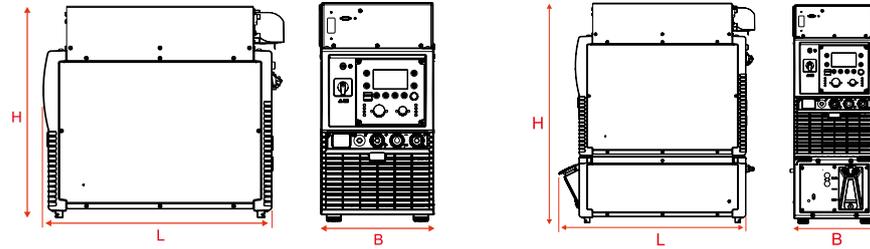
MIG/MAG robot welding machines

Overview of weights and dimensions for modular XQ R machines

Weight and dimensions overview

Power source

Power source, cooling unit

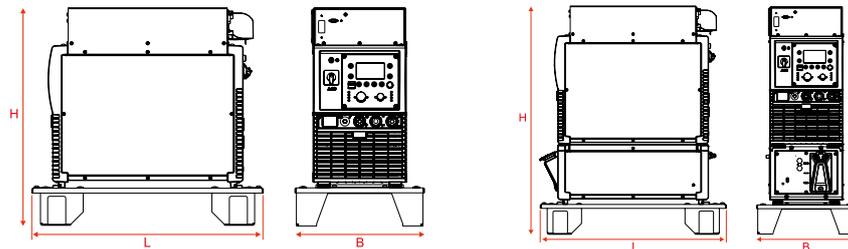


Dimensions (L x B x H)	mm	inch	mm	inch
H	580	22,8	827	32,5
B	298	11,7	298	11,7
L	625	24,6	665	26,2
Weight*	kg	lb	kg	lb
	45,8	101	64,8	142,9

*All weight specifications refer to machines with 5 m (16.4 ft.) mains cable. Machines with longer mains cables have higher weights. 10 m (32.8 ft.) = +2,5 kg (5.5 lb.) 15 m (49.2 ft.) = +5,0 kg (11.0 lb.)

Power source, pallet base

Power source, cooling unit, pallet base

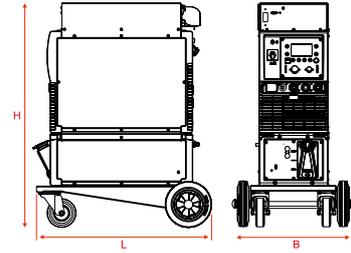
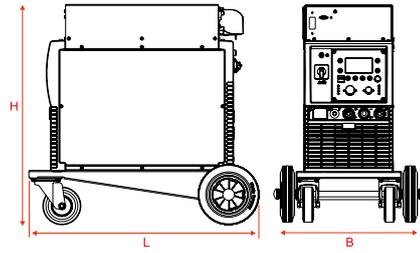


Dimensions (L x B x H)	mm	inch	mm	inch
H	694	27,3	941	37
B	385	15,2	385	15,2
L	705	27,8	705	27,8
Weight*	kg	lb	kg	lb
	57,8	127,5	76,8	169,4

*All weight specifications refer to machines with 5 m (16.4 ft.) mains cable. Machines with longer mains cables have higher weights. 10 m (32.8 ft.) = +2,5 kg (5.5 lb.) 15 m (49.2 ft.) = +5,0 kg (11.0 lb.)

Power source, transport cart

Power source, cooling unit, transport cart



Dimensions (L x B x H)	mm	inch	mm	inch
H	780	30,7	1027	40,4
B	527	21,1	527	21,1
L	757	29,8	757	29,8
Weight*	kg	lb	kg	lb
	58,3	128	77,3	170

*All weight specifications refer to machines with 5 m (16.4 ft.) mains cable. Machines with longer mains cables have higher weights. 10 m (32.8 ft.) = +2,5 kg (5.5 lb.) 15 m (49.2 ft.) = +5,0 kg (11.0 lb.)

MIG/MAG robot welding machines

Phoenix XQ R puls decompact modular accessories

Cool XQ R 55 U40



- Cooling unit for robot welding machines
- Flow monitor featured as standard: Protects welding torches from overheating and damage caused by low coolant flow
- Temperature-monitored coolant – protects the welding torch from overheating through hot coolant water
- Accessible filling nozzle with easy-to-read filling level indicator (MIN/MAX scale)
- Multivolt-compatible: Suitable for operation with mains voltages of 380 V to 400 V and 440 V to 480 V
- Optional water filter
- Temperature- and speed-controlled cooling fan – reduced contamination and less noise emissions as fan only runs when needed
- Coolant connections at rear
- Powerful pump, temperature-controlled fan

Type	Designation	Item no.
Cool XQ R 55 U40	Cooling unit for robot welding machines, Multivolt-compatible	090-008865-00502

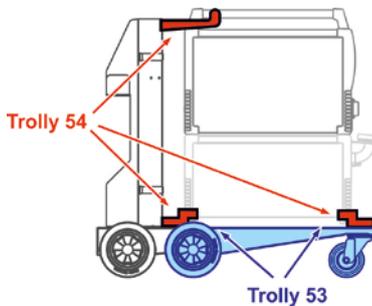
Trolley 53



- Transport cart (4 wheels) for moving a power source and a cooling unit
- Saves space
- Ideal for use on a gas ring line
- Solid, stable design

Type	Designation	Item no.
Trolley 53	Transport cart (4 wheels) for moving a power source and a cooling unit	090-008638-00000

ON TG.03/04 MS TR.20/21



- Mounting set for fastening on the transport cart
- Required for safe assembly of welding machine or cooling unit

Type	Designation	Item no.
ON TG.03/04 MS TR.20/21	Mounting set for fastening on the transport cart	092-004392-00000

ON PALETTE XX5



- Transport pallet for power source and an additional module
- Solid, stable design
- Suitable for use with forklifts

Type	Designation	Item no.
ON PALETTE XX5	Transport pallet for power source and add-on module	092-004639-00000

Configuration for Phoenix XQ R 355, 405 puls modular

Selection	Type	Designation	Item no.
Basic version Phoenix XQ R			
<input type="radio"/>	Phoenix XQ R 355 puls	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, modular	090-005704-00000
<input type="radio"/>	Phoenix XQ R 405 puls	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, modular	090-005705-00000
Control			
<input type="radio"/>	OW Cover	No control	092-004322-00000
<input type="radio"/>	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-004550-00000
<input type="radio"/>	OW Expert XQ R 2.0 LG	Expert XQ R 2.0 with LAN gateway	092-004551-00000
<input type="radio"/>	OW Expert XQ R 2.0 WLG	Expert XQ R 2.0 with LAN/WiFi gateway	092-004552-00000
Gas control			
<input type="radio"/>	OW DGC TG.04 R DV1	Gas control for a connected wire feeder	092-004555-00000
Interfaces			
<input type="radio"/>	OW PP	Connection for EWM PP welding torch	092-004554-00000
Mains connection lead			
<input type="radio"/>	OW MCord 4 mm ² 5m	Mains connection lead, 5 m	092-004121-00000
<input type="radio"/>	OW MCord 4 mm ² 10m	Mains connection lead, 10 m	092-004122-00000
<input type="radio"/>	OW MCord 4 mm ² 15m	Mains connection lead, 15 m	092-004123-00000
Mains plug			
<input type="radio"/>	OW CEE 32A	Mains plug, assembled	092-008215-00000
Industrial bus interface power supply			
<input type="radio"/>	OW NBUS	No preparation for industrial bus interface	092-004556-00000
<input type="radio"/>	BUSINT XQ 4.0 NO EV	Preparation for industrial bus interface	092-004566-00000
<input type="radio"/>	BUSINT XQ 4.0 OW external voltage	Preparation for industrial bus interface with external potential-free power supply	092-004567-00000
Bus interface			
<input type="radio"/>	OW NO HMS MODUL	Preparation for fieldbus module without industrial bus interface	092-004571-00000
<input type="radio"/>	OW BUSINT XQ 4.0 CAN DeviceNet	CAN DeviceNet industrial bus interface	092-004557-00000
<input type="radio"/>	OW BUSINT XQ 4.0 CANopen	CANOpen industrial bus interface	092-004558-00000
<input type="radio"/>	OW BUSINT XQ 4.0 EtherCAT	ETHERCAT industrial bus interface	092-004562-00000
<input type="radio"/>	OW BUSINT XQ 4.0 EthernetIP	EthernetIP industrial bus interface	092-004560-00000
<input type="radio"/>	OW BUSINT XQ 4.0 MODBUS	MODBUS industrial bus interface	092-004563-00000
<input type="radio"/>	OW BUSINT XQ 4.0 Profibus	PROFIBUS industrial bus interface	092-004559-00000
<input type="radio"/>	OW BUSINT XQ 4.0 Profinet	PROFINET industrial bus interface	092-004561-00000
BUSINT XQ 4.0 options - software			
<input type="radio"/>	OW NBUS SW	Software for standard applications	092-004564-00000
<input type="radio"/>	BUSINT XQ 4.0 OW ST	Software option: Support for seam tracking	092-004565-00000
Sensor voltage			
<input type="radio"/>	OW 60V Sensor Voltage	Increased sensor voltage 60 volts	092-004568-00000
Interface for automated welding			
<input type="radio"/>	OW AIF XQ R TG04	19-pole interface for automated welding	092-004553-00000
Emergency stop			
<input type="radio"/>	OW E-STOP	Standard relay	092-004569-00000
<input type="radio"/>	OW E-STOP Adv.	Safety relay	092-004570-00000

Machine description for XQ R welding machines demodular

Front view

The Titan XQ R puls and Phoenix XQ R puls are further developments of the Phoenix puls and alpha Q puls for automated welding.

They feature the new RCC inverter technology (Titan) as well as significantly improved XQ welding processes and are available as gas or water-cooled options. The machines are also suitable for welding torch changing systems. They cover long distances with up to three drives in series depending on the version.

Perfect weld seams are thereby pre-programmed for all materials and material thicknesses.



Robot interface

- Available controls:
- No front control
- With Expert XQ R 2.0 Rob
- With Expert XQ R 2.0 Rob with LAN or WiFi function
- Error display during and after initialisation
- Information on operational readiness

1 PC interface for Analyzer software

4 Inverter technology

- High efficiency
- High duty cycle
- Standby function
- Dust-protected electronics

5 Upper lid for easy access to optional internal RINT X12 or BUSINT XQ 4.0

7 LED status bar for

- Ready for operation
- Fault
- Welding operation

8 Connection socket, 7-pole, for items such as

- Panel RC XQ Expert 2.0 Rob
- External ewm Xnet LAN/WiFi gateway

9 Available versions

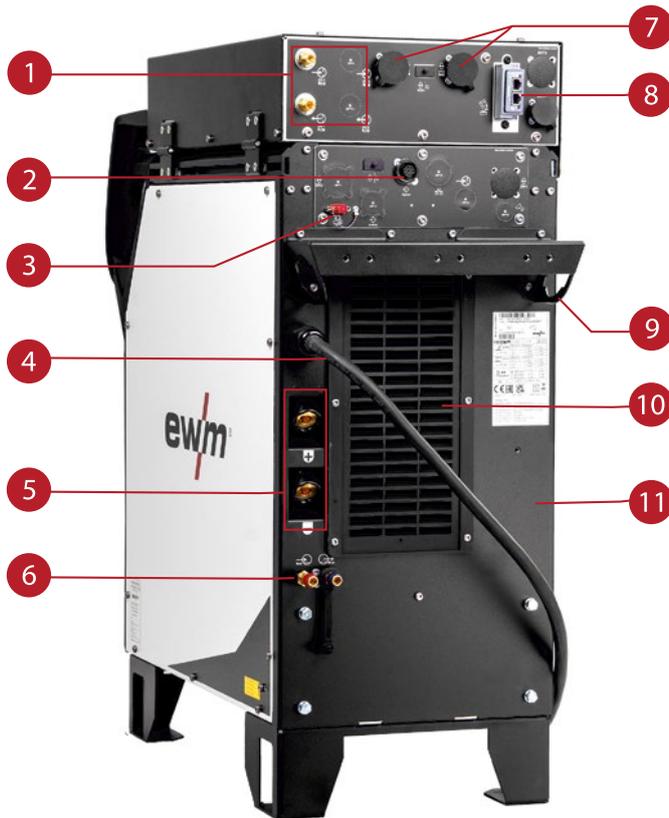
- Gas-cooled
- Water-cooled
- Water-cooled with reinforced pump

10 Floor assembly

- Pallet or wheel kit

Machine description for XQ R welding machines demodular

Rear view



PC interface for PC300.NET software

- 1 Gas connections**
 - Digital gas regulation (optional)
- 2 Connection socket 7-pole**
 - e.g. for interface, external ewm Xnet LAN/WiFi gateway, intermediate drive
- 4 Mains cable**
- 5 Load connections +/-**
 - + For intermediate hose package/wire feeder
 - - For workpiece lead
- 6 Connections for water cooling**
- 7 Connecting the wire feeder**
 - Connection sockets for up to two wire feeders
- 8 Integrated interface (optional)**
 - BUSINT XQ 4.0 or RINT X12
- 9 Strain relief for intermediate hose package**
- 10 Protective dust filter**
- 11 Space for installing split box (optional)**
 - Connection for double wire feed systems, required for wire feeder switching option

Machine description for XQ R welding machines demodular Options

Overview of the possible power source options for the XQ R series.

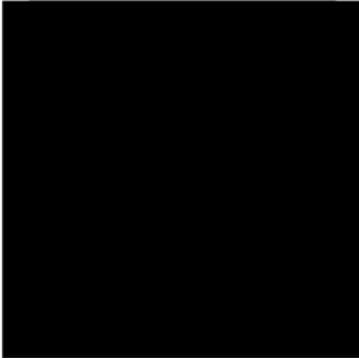
-OW ASM 2 DV-



Factory-fit option: Connection capability for two wire feeders

- Change welding tasks with no set-up time in combination with a tool changing system, for example
- Effortless switching between two different wires and shielding gases, e.g. for welding solid wires and flux cored wires

-OW Cover-



Factory-fit option: Power source without built-in control

- Parameters are set using the RC XQ panel or the PC300 software, for example

-OW Expert XQR 2.0-



Factory-fit option: Power source with Expert XQ R 2.0 control

- Extensive range of control and setting options
- Plain text display for welding parameters and functions
- WPQR welding data assistant
- USB interface
- Xbutton
- 16 pre-installed languages

-OW Expert XQR 2.0 LG/WLG-



Factory-fit option: Expert XQ R 2.0 with LAN or LAN/Wi-Fi gateway

- Expert XQ R 2.0 LG with integrated LAN gateway
- Expert XQ R 2.0 WLG with integrated LAN/Wi-Fi gateway
- Network connection with ewm Xnet

-OW DGC F.06-



Factory-fit option: Digital gas control

- Reduced gas consumption thanks to optimally specified values in the JOB
- Constant gas flow rate thanks to electronic adjustment → increase in weld seam quality
- Nominal and actual value display of the gas flow rate in l/min on the front control or the RC XQ panel
- Warnings signal degradation of the gas supply
- The shielding gas is automatically taken into account via JOB selection
- No gas blast with turbulence when igniting the arc, as the electrical valve opens and closes gently

-OW RINTX12 / BUSINT XQ 4.0-



Factory-fit option: Power source with built-in interface

- RINTX12 or BUSINT XQ 4.0 installed, wired and preconfigured
- Profiles for Profibus, DeviceNet, EtherNet IP, Profinet, EtherCAT and Modbus, among others
- Software/hardware options for wire feeder switching, seam tracking and ext. voltage supply, among other things

-OW Sensor Voltage-



Factory-fit option: increased sensor voltage

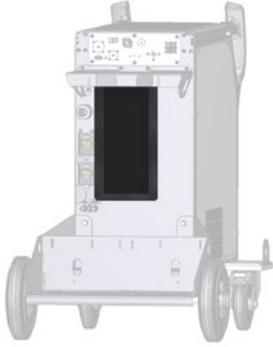
- Improved locating of seams/components thanks to switchable 60 V sensor voltage
- Helpful when working with dirty or scaled materials
- Ability to search via wire or gas nozzle (depending on torch equipment)

-ON PS A.06 + DV CAP ROB-



Retrofitting option: Wire feeder support panel

-ON Filter F.06-



Retrofitting option: Dust filter

- Dust filter for the welding machine and cooling unit
- Protects welding machine from external contamination
- Can be assembled and disassembled without tools for cleaning
- Permanently secured fasteners
- Easy to clean

-ON EWM React LC1-



Retrofitting option: EWM React

- Licence for the EWM React welding process

Optimum welding results

The right EWM welding process for your application

acArc puls XQ – Ideal for welding thin aluminium sheets

rootArc® XQ / rootArc® puls XQ – Perfect root welding, easy-to-execute filler and final passes

coldArc® XQ/coldArc® pulsXQ – heat-minimised arc for thin metal sheet welding

forceArc® XQ / forceArc® puls XQ – Powerful high-performance arc with deep penetration

wiredArc XQ / wiredArc puls XQ – Powerful high-performance arc with penetration independent of stick-out thanks to dynamic wire control (penetration stabilisation)

Standard – Perfect short and spray arcs

Pulse – Low-spatter pulsed arc

Positionweld – Simple positional welding without the “Christmas tree” technique

superPuls – heat-reduced interval welding between two operating points: High-current and low-current phases freely adjustable (control dependent)

XQ - Process

all in

Titan XQ R puls

High-performance inverter

RCC power module for substantially improved welding characteristics

Highly dynamic forceArc power module

Pulsed arc module for virtually spatter-free seams

Phoenix XQ R puls

High-performance inverter

Highly dynamic forceArc power module

Phoenix puls with additional pulsed arc module for virtually spatter-free seams

XQ processes	Titan XQ R	Titan XQ R AC puls	Phoenix XQ R
Standard	✓	✓	✓
Pulse	✓	✓	✓
rootArc® puls XQ	✓	✓	✓
rootArc® XQ	✓	✓	✓
coldArc® puls XQ	✓	✓	×
coldArc® XQ	✓	✓	×
forceArc® puls XQ	✓	✓	✓
forceArc® XQ	✓	✓	✓
wiredArc puls XQ	✓	✓	×
wiredArc XQ	✓	✓	×
Positionweld	✓	✓	×
Superpuls	✓	✓	✓
TIG	✓	✓	✓
MMA	✓	✓	✓
Gouging	✓	✓	✓
acArc puls XQ	×	✓	×
Positionweld for aluminium	×	×	✓

MIG/MAG robot welding machines

Technical data Titan XQ R 350, 400, 500, 600 puls decompact demodular

XQ - Process

all in

- / Standard
- / Pulse
- / rootArc® puls XQ
- / rootArc® XQ
- / coldArc® puls XQ
- / coldArc® XQ
- / forceArc® puls XQ
- / forceArc® XQ
- / wiredArc puls XQ
- / wiredArc XQ
- / Positionweld
- / Superpuls
- / TIG
- / MMA
- / Gouging



- MIG/MAG robot pulse welding machine, multiprocess, including all characteristics and welding processes, demodular
- Available without¹ or with² front control
- ¹ Set up on external operating panel or notebook with PC300.NET software or
- ² set up on Expert 2.0 XQ control with intuitive user guidance via LCD and plain text display for all welding parameters and functions
- Perfect MIG/MAG weld properties thanks to patented Rapid Current Control technology (RCC)
- With innovative EWM Synergic characteristics rootArc® XQ/rootArc® puls XQ, coldArc® XQ/coldArc® puls XQ, forceArc® XQ/forceArc® puls XQ, wiredArc XQ/wiredArc puls XQ, pulse/superPuls and Positionweld
- Synergic characteristics for MIG/MAG standard or pulsed welding for steel/CrNi/aluminium
- Ready to connect an M Drive 4 ROB 5 LI/RE wire feeder
- Ready to connect a media separation box F Drive Rob 5 LI/RE for frontDrive robot welding torches (on request)
- Standard-series interface for automated welding for simple applications
- Optional RINT X12 interfaces, BUSINT XQ 4.0 industrial bus interface, ewm Xnet quality management software
- Parameters adjustable via interfaces: 510 JOBS each with 15 programs in program mode; wire feed speed, arc length correction and arc dynamics in control signal operation
- Optimised for automated and mechanised applications in the manufacture of machinery, cars, vehicles, containers, equipment and ships
- LED information bar: Indicates the current operating status
- Available as gas or water-cooled option
- Earth fault monitoring (PE protection)
- IP23 spray water protected
- Optional network connectivity with ewm Xnet software via LAN or WiFi gateway
- PC interface for PC300 XQ software
- Can be individually configured to meet your requirements

OW Cover



OW Expert XQ R 2.0



Version	Titan XQ R 350 puls D	Titan XQ R 400 puls D	Titan XQ R 500 puls D	Titan XQ R 600 puls D
Setting range for welding current	5A - 350A	5A - 400A	5A - 500A	5A - 600A
Duty cycle 40°C, 100%	350A	370A	470A	470A
Duty cycle 40°C, 80%	-	400A	500A	-
Duty cycle 40°C, 60%		-		550A
Duty cycle 40°C, 40%		-		600A
Open circuit voltage	82 V			
Mains voltage (ex works)	3 x 400 V (- 25 % - + 20 %)*			
Mains voltage (possible)	3 x 460 V (- 25 % - + 15 %) 3 x 500 V (- 25 % - + 10 %)			
Mains frequency	50 Hz / 60 Hz			
Recommended generator power	20.8 kVA	25.1 kVA	35.1 kVA	47.1 kVA
Efficiency	88 %			
Protection classification	IP23			
Test mark				
EMC class	A			
Dimensions (L x B x H)	807 mm x 400 mm x 849 mm 31.8 inch x 15.7 inch x 33.4 inch			
Weight	90 kg 198.4 lbs			
Standards	IEC 60974-1 and -10 CL.A			

* The mains voltage can be adapted by connecting a plug with a different operating voltage. The voltage may only be adjusted by a qualified electrician in accordance with the respective national legislation and regulations.

Type	Designation	Item no.
Titan XQ R 350 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005710-00000
Titan XQ R 400 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005711-00000
Titan XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005712-00000
Titan XQ R 600 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005713-00000

► These item numbers only contain the basic versions. Configuration options can be found in the configuration table below.

Titan XQ R 400 AC puls acArc puls XQ for aluminium welding

In the Titan XQ R 400 AC puls, the AC welding process acArc puls XQ and all DC welding processes are included in the machine at no extra charge. In this way, EWM is revolutionising MIG-AC aluminium welding. The Titan XQ R 400 AC puls is fitted with Expert 2.0 XQ Rob control and water cooling. Thanks to the

many options and extensive accessories, every user can adapt the machine to themselves and their area of application. Only these things remain the same: optimum quality, a high duty cycle and consequently long service life, excellent welding characteristics and intuitive operation.

all in

All AC and established DC MIG/MAG processes are included in the machine at no extra charge!

With RCC inverter technology, the welding characteristics of the Titan XQ R puls have been significantly improved for all welding processes.

acArc puls XQ – Ideal for welding thin aluminium sheets

rootArc® XQ / rootArc® puls XQ – Perfect root welding, easy-to-execute filler and final passes

coldArc® XQ / coldArc® XQ puls – Heat-minimised arc for thin metal sheet welding

forceArc® XQ / forceArc® puls XQ – Powerful high-performance arc with deep penetration

wiredArc XQ / wiredArc puls XQ – Powerful high-performance arc with penetration independent of stick-out thanks to dynamic wire control (penetration stabilisation)

Positionweld – Simple positional welding without the “Christmas tree” technique

Pulse XQ and Standard XQ

TIG and MMA welding, gouging

Advantages

- Perfect aluminium welding, even with thin sheets
- Very good ignition characteristics
- Excellent air gap bridging, even with automated applications
- Minimised heat input
- Faster welding speed
- Simple and safe manipulation of the arc for manual and automated welding
- Well-suited to additive welding with aluminium (3D welding)
- Clean weld seams due to heavily reduced magnesium oxide
- Lower welding fume emissions
- Fast digital current regulation with EWM RCC inverter technology (Rapid Current Control)

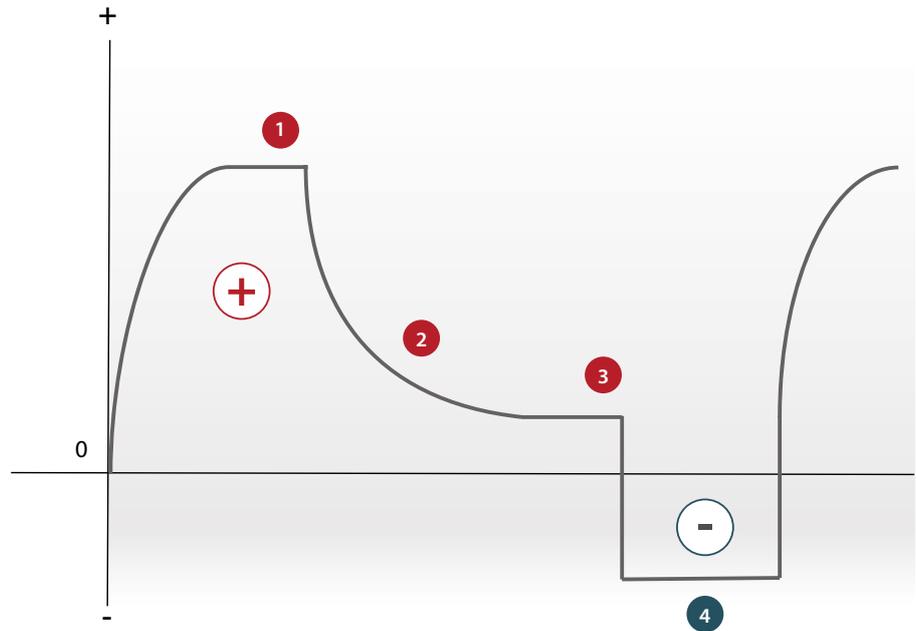


With the AC alternating current welding process of the Titan XQ R 400 AC puls, MIG aluminium welding is even easier in both manual and automated sectors. Create clean weld seams on even the thinnest metal sheets without traces of smoulder with MIG-AC, even when using AlMg alloys.

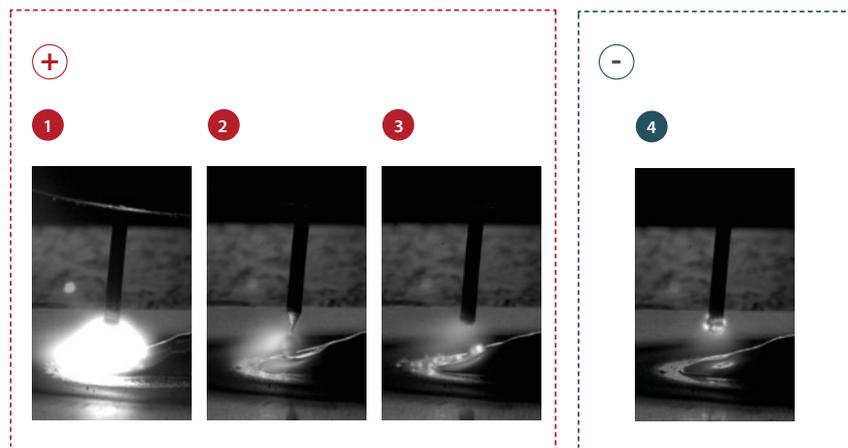
With the acArc puls XQ, the polarity switches between positive (pulse) and negative during the process, with the heat shifting from the material to the welding consumable. This process bridges air gaps effectively and reduces welding fume emissions.



AC pulsed arc



(+) Positive phase/(-) Negative phase



- 1) Droplet formation in the pulse phase
- 2) Droplet detachment after the pulse phase
- 3) Fundamental current phase
- 4) Cleaning and warm-up of the wire in the negative phase

MIG/MAG robot welding machines

Technical data Titan XQ R 400 puls AC/DC decompact demodular

XQ - Process

all in

- / Standard
- / Pulse
- / acArc puls XQ
- / rootArc® puls XQ
- / rootArc® XQ
- / coldArc® puls XQ
- / coldArc® XQ
- / forceArc® puls XQ
- / forceArc® XQ
- / wiredArc puls XQ
- / wiredArc XQ
- / Positionweld
- / Superpuls
- / TIG
- / MMA
- / Gouging



- MIG/MAG robot pulse welding machine, multiprocess, including all characteristics and welding processes, demodular
- Available without¹ or with² front control
- ¹ Set up on external operating panel or notebook with PC300.NET software or
- ² set up on Expert 2.0 XQ control with intuitive user guidance via LCD and plain text display for all welding parameters and functions
- Perfect MIG/MAG weld properties thanks to patented Rapid Current Control technology (RCC)
- No need to purchase additional characteristics – all characteristics for this machine type are included in the scope of delivery ex works
- With all AC and established DC MIG/MAG characteristics: acArc puls XQ, rootArc® XQ/rootArc® puls XQ, coldArc® XQ/coldArc® puls XQ, forceArc® XQ/forceArc® puls XQ, wiredArc XQ/wiredArc puls XQ, pulse/superPuls and Positionweld
- Synergic characteristics for MIG/MAG standard or pulsed welding for steel/CrNi/aluminium
- Ready to connect an M Drive 4 ROB 5 LI/RE wire feeder
- Ready to connect a media separation box F Drive Rob 5 LI/RE for frontDrive robot welding torches (on request)
- Standard-series interface for automated welding for simple applications
- Optional RINT X12 interfaces, BUSINT XQ 4.0 industrial bus interface, ewm Xnet quality management software
- Parameters adjustable via interfaces: 510 JOBs each with 15 programs in program mode; wire feed speed, arc length correction and arc dynamics in control signal operation
- Optimised for automated and mechanised applications in the manufacture of machinery, cars, vehicles, containers, equipment and ships
- LED information bar: Indicates the current operating status
- Available as gas or water-cooled option
- Earth fault monitoring (PE protection)
- IP23 spray water protected
- Optional network connectivity with ewm Xnet software via LAN or WiFi gateway
- PC interface for PC300 XQ software
- Can be individually configured to meet your requirements

OW Cover



OW Expert XQ R 2.0



Version	TITAN XQ R 400 PULS AC/DC D
Setting range for welding current	5A - 400A
Duty cycle 40°C, 100%	370A
Duty cycle 40°C, 80%	400A
Open circuit voltage	82 V
Mains voltage (ex works)	3 x 400 V (- 25 % - + 20 %)*
Mains frequency	50 Hz / 60 Hz
Recommended generator power	25.1 kVA
Efficiency	88 %
Protection classification	IP23
Test mark	CE UK ENE S
EMC class	A
Dimensions (L x B x H)	807 mm x 400 mm x 849 mm 31.8 inch x 15.7 inch x 33.4 inch
Weight	90 kg 198.4 lbs
Standards	IEC 60974-1 and -10 CL.A

Type	Designation	Item no.
TITAN XQ R 400 PULS AC/DC D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005718-00000

► These item numbers only contain the basic versions. Configuration options can be found in the configuration table below.

MIG/MAG robot welding machines

Technical data for Phoenix XQ R 350, 400, 500, 600 puls decompact demodular

XQ - Process

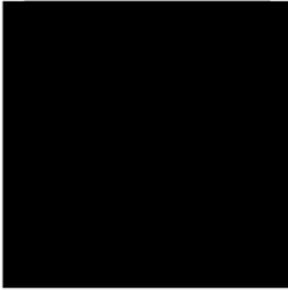
all in

- / Standard
- / Pulse
- / rootArc® puls XQ
- / rootArc® XQ
- / forceArc® puls XQ
- / forceArc® XQ
- / Positionweld for aluminium
- / Superpuls
- / TIG
- / MMA
- / Gouging



- MIG/MAG robot pulse welding machine, multiprocess, including all characteristics and welding processes, demodular
- Available without¹ or with² front control
- ¹ Set up on external operating panel or notebook with PC300.NET software or
- ² set up on Expert 2.0 XQ control with intuitive user guidance via LCD and plain text display for all welding parameters and functions
- With innovative EWM Synergic characteristics: rootArc® XQ / rootArc® puls XQ, forceArc® XQ / forceArc® puls XQ, pulse / superPuls and Positionweld for aluminium
- Synergic characteristics for MIG/MAG standard or pulsed welding for steel/CrNi/aluminium
- Ready to connect an M Drive 4 ROB 5 LI/RE wire feeder
- Ready to connect a media separation box F Drive Rob 5 LI/RE for frontDrive robot welding torches (on request)
- Standard-series interface for automated welding for simple applications
- Optional RINT X12 interfaces, BUSINT XQ 4.0 industrial bus interface, ewm Xnet quality management software
- Parameters adjustable via interfaces: 510 JOBS each with 15 programs in program mode; wire feed speed, arc length correction and arc dynamics in control signal operation
- Optimised for automated and mechanised applications in the manufacture of machinery, cars, vehicles, containers, equipment and ships
- LED information bar: Indicates the current operating status
- Available as gas or water-cooled option
- Earth fault monitoring (PE protection)
- IP23 spray water protected
- Optional network connectivity with ewm Xnet software via LAN or WiFi gateway
- PC interface for PC300 XQ software
- Can be individually configured to meet your requirements

OW Cover



OW Expert XQ R 2.0



Version	Phoenix XQ R 350 puls	Phoenix XQ R 400 puls	Phoenix XQ R 500 puls	Phoenix XQ R 600 puls
Setting range for welding current	5A - 350A	5A - 400A	5A - 500A	5A - 600A
Duty cycle 40°C, 100%	350A	370A	470A	470A
Duty cycle 40°C, 80%	-	400A	500A	-
Duty cycle 40°C, 60%		-		550A
Duty cycle 40°C, 40%		-		600A
Open circuit voltage	82 V			
Mains voltage (ex works)	3 x 400 V (- 25 % - + 20 %)*			
Mains voltage (possible)	3 x 460 V (- 25 % - + 15 %) 3 x 500 V (- 25 % - + 10 %)			
Mains frequency	50 Hz / 60 Hz			
Recommended generator power	18.8 kVA	23.2 kVA	33.2 kVA	45 kVA
Efficiency	90 %			
Protection classification	IP23			
Test mark	CE ENEC S			
EMC class	A			
Dimensions (L x B x H)	807 mm x 400 mm x 849 mm 31.8 inch x 15.7 inch x 33.4 inch			
Weight	87 kg 191.8 lbs			
Standards	IEC 60974-1 and -10 CL.A			

* The mains voltage can be adapted by connecting a plug with a different operating voltage. The voltage may only be adjusted by a qualified electrician in accordance with the respective national legislation and regulations.

Type	Designation	Item no.
Phoenix XQ R 350 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005714-00000
Phoenix XQ R 400 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005715-00000
Phoenix XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005716-00000
Phoenix XQ R 600 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005717-00000

► These item numbers only contain the basic versions. Configuration options can be found in the configuration table below.

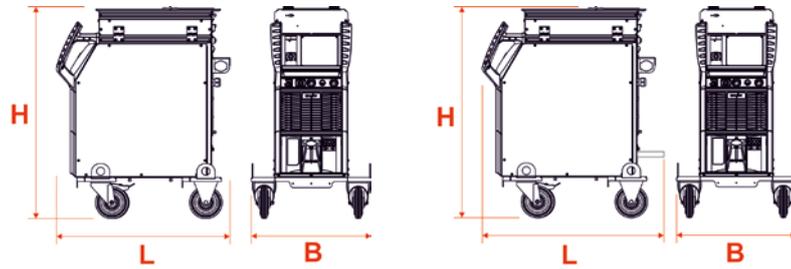
MIG/MAG robot welding machines

Overview of weights and dimensions for demodular XQ R machines

Weight and dimensions overview

with wheel kit / 1 wire feeder

with wheel kit / 2 wire feeders



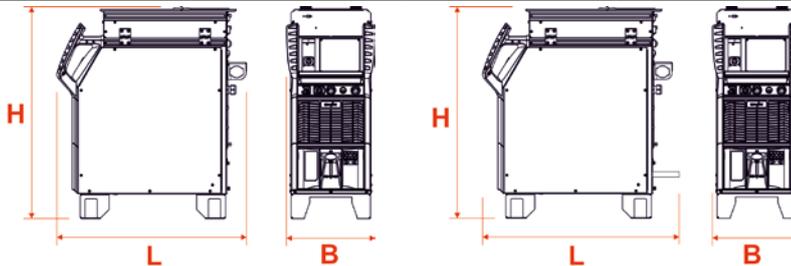
Dimensions (L x B x H)	mm	inch	mm	inch
H	1051	41,4	1051	41,4
B	590	23,2	590	23,2
L	854	33,6	882	34,7
Weight*	kg	lb	kg	lb
Gas cooled	112,7	248,5	111,9	246,7
Water cooled	127,3	280,6	126,5	278,9
Water cooled with reinforced pump	131,3	289,5	130,5	287,7

*All weight specifications refer to machines with 5 m (16.4 ft.) mains cable. Machines with longer mains cables have higher weights. 10 m (32.8 ft.) = +2,5 kg (5.5 lb.) 15 m (49.2 ft.) = +5,0 kg (11.0 lb.)

Weight and dimensions overview

Pallet base / 1 wire feeder

Pallet base / 2 wire feeders



Dimensions (L x B x H)	mm	inch	mm	inch
H	956	37,6	956	37,6
B	400	15,7	400	15,7
L	854	33,6	882	34,7
Weight*	kg	lb	kg	lb
Gas cooled	97,5	214,95	97,5	214,95
Water cooled	112,1	247,1	112,1	247,1
Water cooled with reinforced pump	116,1	255,95	116,1	255,95

*All weight specifications refer to machines with 5 m (16.4 ft.) mains cable. Machines with longer mains cables have higher weights. 10 m (32.8 ft.) = +2,5 kg (5.5 lb.) 15 m (49.2 ft.) = +5,0 kg (11.0 lb.)

Panel/remote control

-RC XQ Expert 2.0 Rob-



- Operating panel for setting welding parameters for RC power sources without front control
- Economical solution: Operating panel required for programming only, not for operation
- Can also be used as an additional actuation module on power sources with front control
- Welding current (amp), arc correction (volt) and arc dynamics (soft/hard) directly adjustable using two rotary knobs
- Expert 2.0 control with intuitive user guidance via LCD panel and plain text display of all welding parameters and functions
- Simple JOB selection (welding procedure, material, gas, wire dia.) using click wheel
- Easy switching of welding procedures at the press of a button, e.g. acArc puls XQ/rootArc XQ/rootArc puls XQ, coldArc XQ/coldArc puls XQ, forceArc XQ/forceArc puls XQ, wiredArc XQ/wiredArc puls XQ, pulse/superPuls and Positionweld
- Setting of all parameters in program sequence
- Special non-latched and special latched with adjustable start and end crater program
- Administration of access rights for different control operating levels using the Xbutton (Xbutton not included – please select under 'Accessories')
- Individually configurable programs for each welding task (JOB)
- Spot welding/tack function (spotArc/spotmatic)
- Save electricity through standby function
- With pre-fitted connection cable

Type	Designation	Item no.
RC XQ Expert 2.0 Rob 2 m	Control panel	090-008839-00002
RC XQ Expert 2.0 Rob 5 m	Control panel	090-008839-00005
RC XQ Expert 2.0 Rob 10 m	Control panel	090-008839-00010
RC XQ Expert 2.0 Rob 15 m	Control panel	090-008839-00015
RC XQ Expert 2.0 Rob 20 m	Control panel	090-008839-00020

Panel/remote control Accessories

-FRV-25 7POL-



- 7-pole connection cable, suitable for installation in drag chains

Type	Designation	Cable length	Item no.
FRV-25 7POL 10m	Connection cable, 7-pole	10 m	092-003417-00010
FRV-25 7POL 15m	Connection cable, 7-pole	15 m	092-003417-00015
FRV-25 7POL 20m	Connection cable, 7-pole	20 m	092-003417-00020
FRV-25 7POL 25m	Connection cable, 7-pole	25 m	092-003417-00025
FRV-25 7POL 30m	Connection cable, 7-pole	30 m	092-003417-00030

► Connection and extension cable for external LAN and WiFi gateway, panel, remote control

Digital 7-pole cable



- Digital 7-pole cable
- Extension for 7-pole remote control with permanently installed cable
- Connection cable for remote control and gateway without permanently installed cable

Type	Designation	Cable length	Item no.
FRV 7POL 0.5m	Digital 7-pole cable	0.5 m	092-000201-00004
FRV 7POL 1m	Digital 7-pole cable	1 m	092-000201-00002
FRV 7POL 5m	Digital 7-pole cable	5 m	092-000201-00003
FRV 7POL 10m	Digital 7-pole cable	10 m	092-000201-00000
FRV 7POL 15m	Digital 7-pole cable	15 m	092-000201-00005
FRV 7POL 20m	Digital 7-pole cable	20 m	092-000201-00001
FRV 7POL 25m	Digital 7-pole cable	25 m	092-000201-00007

MIG/MAG robot welding machines

Titan / Phoenix XQ R accessories

-SPLITTER 4x 7POL-



- Distributor box to add to the available 7-pole interfaces on the welding machine

Type	Designation	Item no.
SPLITTER 4x 7POL	System bus distributor box, SCO	090-S08290-01942
Splitter 2x 7POL	System bus distributor box, SCO	090-S08290-05018
Splitter 2x 7POL	Distributor box to add to the available 7-pole interfaces on the welding machine	090-008302-00000

-RA10 19POL 1x 10M-



Type	Designation	Item no.
RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
RA10 19POL 1x 10M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00010
RA15 19POL 1x 15M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00015
RA20 19POL 1x 20M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00020
RA25 19POL 1x 25M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00025

-WK70QMM-



Type	Designation	Item no.
WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
WK70/CL 10m	Workpiece lead with cable lug	092-002078-00010

-WK95QMM Z-



Type	Designation	Item no.
WK95/CL 5m	Workpiece lead with cable lug	092-001990-00005
WK95/CL 10m	Workpiece lead with cable lug	092-001990-00010

MIG/MAG robot welding machines

Titan / Phoenix XQ R accessories

Optimator



- Two stage, high precision pressure regulator with float type meter for flow measurement
- Second stage guarantees a constant volume discharge over the whole pressure process

Type	Designation	Item no.
Optimator AR/MIX 200bar 20l G1/4"	Pressure regulator with flow meter	094-011839-00000
Optimator AR/MIX 200 bar, W21,8 G1/4" 30l	Pressure regulator with flow meter	096-000220-00000
Optimator AR/H2 200bar 20l G3/8"L	Pressure regulator with flow meter	094-011841-00000

-DM 842 Ar/CO2 230bar D-



- Manufactured in accordance with ISO 2503
- Maximum primary pressure of 230 bar
- Single-stage
- Infinite and highly accurate adjustment
- Safety manometer with pressure meter or flow meter (bar/psi or litres per minute)
- With cut-off valve

Type	Designation	Item no.
DM 842 Ar/CO2 230bar 15l D	Pressure regulator with manometer	394-002910-00015
DM 842 Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-002910-00030

-DM 801 Ar/CO2 230bar UK-



- Manufactured in accordance with ISO 2503
- Maximum primary pressure of 230 bar
- Single-stage
- Infinite and highly accurate adjustment
- Safety manometer with pressure meter or flow meter (bar/psi or litres per minute)

Type	Designation	Item no.
DM 801 Ar/CO2 230bar 15l UK	Pressure regulator with manometer	394-002911-00015
DM 801 Ar/CO2 230bar 30l UK	Pressure regulator with manometer	394-002911-00030

Proreg Ar/CO2 230bar



- Manufactured in accordance with ISO 2503
- Maximum primary pressure of 230 bar
- Single-stage
- Infinite and highly accurate adjustment
- Safety manometer with pressure meter or flow meter (bar/psi or litres per minute)
- With cut-off valve

Type	Designation	Item no.
Proreg Ar/CO2 230bar 15l D	Pressure regulator with manometer	394-008488-10015
Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030

Maxex AR/MIX



- Single-stage pressure regulator for measuring pressure
- Controller in front of gas metering units, for example

Type	Designation	Item no.
Maxex AR/MIX 200bar 30m ³ G1/4"	Pressure regulator "Maxex"	096-000000-00000

-ON AL D13/27-



Type	Designation	Item no.
ON AL D13/27	Cap for load sockets	092-003282-00000

-5POLE/CEE/32A/M-



- Mains plug

Type	Designation	Item no.
32A 5POLE/CEE	Mains plug	094-000207-00000

► Suitable for all machines with a welding current of 350 A and above (except compact Phoenix 355, compact Taurus 355 and Picomig 355)

MIG/MAG robot welding machines Titan / Phoenix XQ R accessories

-ON PS A.06 + DV CAP ROB-



- Traverse for secure mounting of the wire feeder M drive 4 Rob 5 incl. wire spool holder on a Titan XQ R / Phoenix XQ R power source

Type	Designation	Item no.
ON PS A.06 + DV CAP ROB	Cross arm for housing a wire feeder with spool holder	092-004698-00000

ON Filter F.06



- Dirt filter for the welding machine and cooling unit
- Protects welding machine from extreme contamination
- Can be assembled and disassembled without tools for cleaning
- Permanently secured fasteners
- Easy to clean

Type	Designation	Item no.
ON Filter F.06	Dirt filter for air inlet	092-003337-00000

-ON EWM React LC1-



- License to retrofit the EWM React welding process

Type	Designation	Item no.
ON EWM React LC1	EWM React licence	092-004711-00000



Titan XQ R / Phoenix XQ R configuration

Selection	Type	Designation	Item no.
Basic version Titan XQ R			
<input type="radio"/>	Titan XQ R 350 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005710-00000
<input type="radio"/>	Titan XQ R 400 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005711-00000
<input type="radio"/>	Titan XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005712-00000
<input type="radio"/>	Titan XQ R 600 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005713-00000
Basic version Phoenix XQ R			
<input type="radio"/>	Phoenix XQ R 350 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005714-00000
<input type="radio"/>	Phoenix XQ R 400 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005715-00000
<input type="radio"/>	Phoenix XQ R 500 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005716-00000
<input type="radio"/>	Phoenix XQ R 600 puls D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005717-00000
Basic version Titan XQ R AC puls			
<input type="radio"/>	TITAN XQ R 400 PULS AC/DC D	Multiprocess MIG/MAG pulse welding machine with all characteristics and welding processes included, decompact, demodular	090-005718-00000
Equipped for second wire feeder			
<input type="radio"/>	OW 2 Rob DV	Connection for second wire feeder	092-004603-00000
<input type="radio"/>	OW Push/Pull	Connection for second wire feeder or push/push welding torch	092-004602-00000
Torch cooling			
<input type="radio"/>	OW F06W	Water cooling	092-003303-00000
<input type="radio"/>	OW F06WRF	Water cooling with boosted pump	092-003304-00000
<input type="radio"/>	OW F06G	Gas cooling	092-003305-00000
Base assembly/gas cylinder bracket			
<input type="radio"/>	OW F06RS	Wheel kit with narrow gauge without gas cylinder bracket	092-003318-00000
<input type="radio"/>	OW F06P	Pallet base	092-003319-00000
<input type="radio"/>	OW F06P 2DV	Pallet base for two wire feeders*	092-003760-00000
<input type="radio"/>	OW F06RS 2DV	Wheel kit with narrow gauge for two wire feeders, without gas cylinder bracket	092-003761-00000
Control			
<input type="radio"/>	OW Cover	No control	092-003306-00000
<input type="radio"/>	OW Expert XQ R 2.0	Expert XQ R 2.0 control	092-003850-00000
<input type="radio"/>	OW Expert XQ R 2.0 LG	Expert XQ R 2.0 with LAN gateway	092-003851-00000
<input type="radio"/>	OW Expert XQ R 2.0 WLG	Expert XQ R 2.0 with LAN/WiFi gateway	092-003852-00000
Gas control			
<input type="radio"/>	OW NDGC F.06 R	No gas control	092-003845-00000
<input type="radio"/>	OW DGC F.06 R DV1	Gas control for a connected wire feeder	092-004604-00000
<input type="radio"/>	OW DGC F.06 R DV2	Gas control for two connected wire feeders	092-004605-00000
Mains connection lead			
<input type="radio"/>	OW MCord 6 mm ² 5m	Mains connection lead, 5 m	092-003349-00000
<input type="radio"/>	OW MCord 6 mm ² 10m	Mains connection lead, 10 m	092-003350-00000
<input type="radio"/>	OW MCord 6 mm ² 15m	Mains connection lead, 15 m	092-003351-00000
Mains plug			
<input type="radio"/>	OW CEE 32A	Mains plug, assembled	092-008215-00000

Bus interface			
<input type="radio"/>	OW NBUS	No industrial bus interface	092-004606-00000
<input type="radio"/>	OW BUSINT XQ 4.0 CAN DeviceNet	CAN DeviceNet industrial bus interface	092-004607-00000
<input type="radio"/>	OW BUSINT XQ 4.0 CANopen	CANOpen industrial bus interface	092-004608-00000
<input type="radio"/>	OW BUSINT XQ 4.0 EtherCAT	ETHERCAT industrial bus interface	092-004612-00000
<input type="radio"/>	OW BUSINT XQ 4.0 EthernetIP	EthernetIP industrial bus interface	092-004610-00000
<input type="radio"/>	OW BUSINT XQ 4.0 MODBUS	MODBUS industrial bus interface	092-004613-00000
<input type="radio"/>	OW BUSINT XQ 4.0 Profibus	PROFIBUS industrial bus interface	092-004609-00000
<input type="radio"/>	OW BUSINT XQ 4.0 Profinet	PROFINET industrial bus interface	092-004611-00000
<input type="radio"/>	OW RINTX12 internal	RINTX12 robot interface	092-003869-00000
BUSINT XQ 4.0 options			
<input type="radio"/>	BUSINT XQ 4.0 NO OW	No option for industrial bus interface	092-004614-00000
<input type="radio"/>	BUSINT XQ 4.0 NO EV	No external power supply for industrial bus interface	092-004618-00000
<input type="radio"/>	BUSINT XQ 4.0 OW external voltage	External, potential-free power supply for industrial bus interface	092-004619-00000
<input type="radio"/>	BUSINT XQ 4.0 OW ST	Option for industrial bus interface Support for seam tracking	092-004616-00000
<input type="radio"/>	BUSINT XQ 4.0 OW DV Switch	Option for industrial bus interface Switching between two wire feeders	092-004615-00000
<input type="radio"/>	BUSINT XQ 4.0 OW DV Switch/ST	Option for industrial bus interface Switching between two wire feeders and weld seam tracking	092-004617-00000
RINT X12 options			
<input type="radio"/>	RINTX12 NO OW	No option for robot interface	092-003883-00000
<input type="radio"/>	RINTX12 OW DV Switch	Option for robot interface: Switching between two wire feeders	092-003884-00000
Sensor voltage			
<input type="radio"/>	OW 60V Sensor Voltage Busint XQ 4.0	Increased sensor voltage 60 volts	092-004620-00000
Emergency stop			
<input type="radio"/>	OW E-STOP	Standard relay	092-004569-00000
<input type="radio"/>	OW E-STOP Adv.	Safety relay	092-004570-00000
Licences			
<input type="radio"/>	OW EWM React LC	EWM React licence	092-004712-00000

Machine description

Front view

Phoenix 355 ROB power source – compact inverter welding machine with built-in wire feeder mechanism and modular casing design



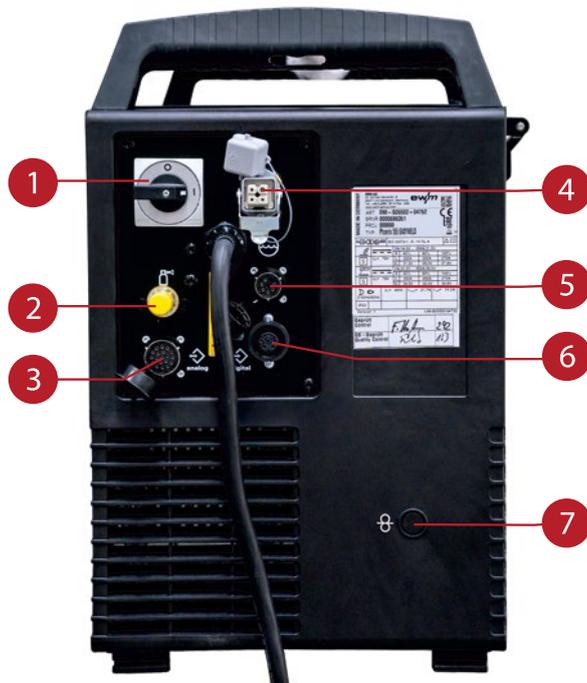
- 1 With or without welding machine control**
- 2 PC interface for PC300 XQ software**
- 3 Push-button for**
 - Wire inching
 - Wire return
 - Gas test
- 4 Euro torch connector**
- 5 Connection socket, 7-pole, for items such as**
 - R50 ROB remote control
 - RCX Expert 2 ROB panel
 - External Xnet LAN/WiFi gateway
- 6 Torch connection socket, 19-pole, for analogue control signals such as a collision sensor or push/pull torch drive**
- 7 Modular casing design**
 - Choice of gas- or water-cooled operation with cooling unit
 - Portable or mobile on a Trolley



Easier to operate using Expert 2.0 ROB

Machine description

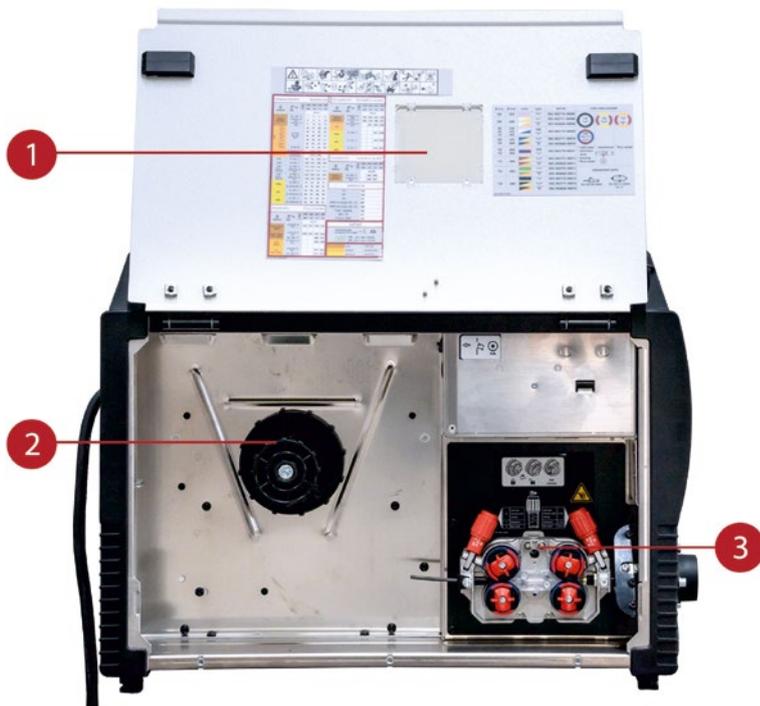
Rear view



- 1 Main switch
- 2 G1/4 connection for gas hose
- 3 19-pole interface for automated welding
- 4 4-pole connection socket for voltage supply to the cooling unit
- 5 8-pole connection socket, cooling unit monitoring
- 6 7-pole connection socket, for e.g. RINTX12 or BUSINT X11 interface
- 7 Optional connection capability for drum feeding

Machine description

Side view



1 Inspection window for checking the drive unit

2 Holder for D200/300 wire spool diameter

- Easy to replace wire
- D200 (5-kg wire spool) and B300 (15-kg wire basket spool) possible using an adapter

3 Integrated eFeed wire feeding – precise and practical

- Four driven wire feed rolls
- Automatic wire inching saves time
- Easy, tool-free roll change
- Captive roll fasteners

Rob Expert 2.0 control

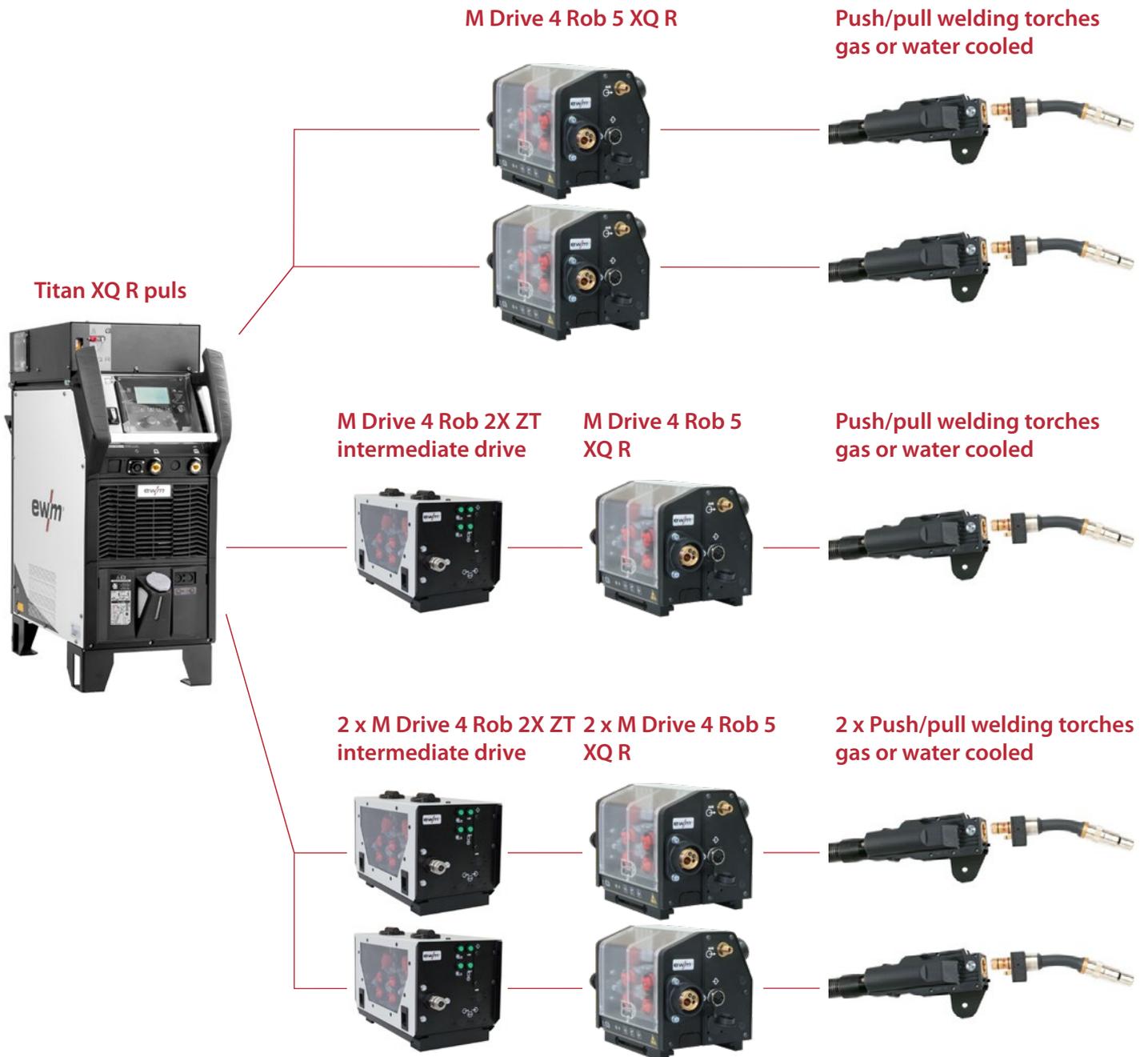


- Optimised for automated applications
- Expert 2.0 control with intuitive user guidance on LCD panel and plain text display of all welding parameters and functions
- USB connection
- Easy switching of welding processes at the press of a button, e.g. from forceArc/forceArc puls to rootArc/rootArc puls or standard/pulse
- Setting of all parameters in program sequence
- Administration of access rights for different control operating levels using the Xbutton
- Wire feed speed specifications
- Arc length correction
- Adjusting the arc dynamics (choke effect) from soft to hard
- Standby function (save energy at the press of a button)
- Kilowatt display for calculating the energy per unit length
- Effective arc power for calculating the energy per unit length
- Electronic gas setting with control and monitoring of gas quantity (option)

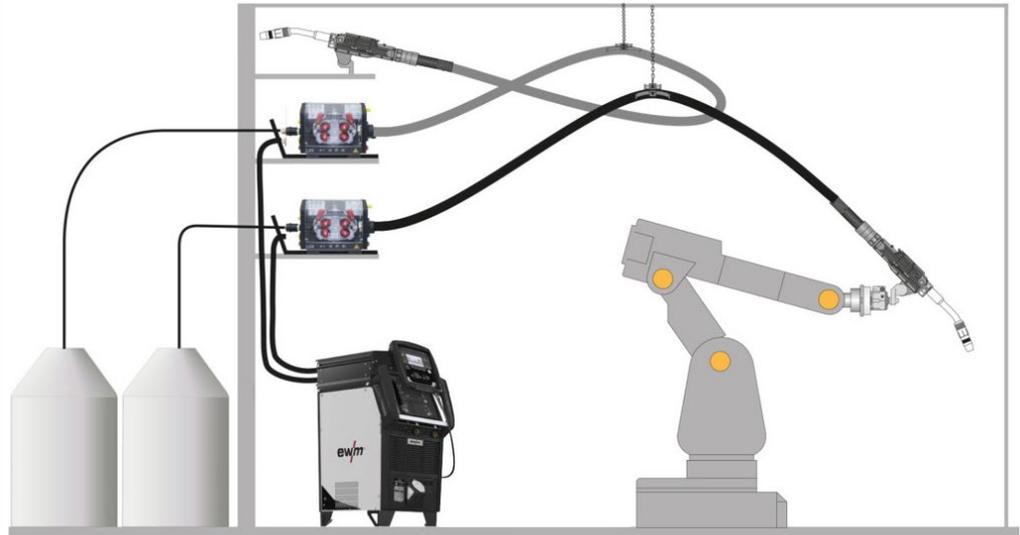
Operation mode	Synergic operation
Welding process	MIG/MAG
	MIG/MAG pulse
	TIG lift arc
	MMA
	forceArc®
	forceArc puls®
	rootArc®
	rootArc puls®
	Superpuls
	Gouging
Operating modes	Non-latched
	Special non-latched
	Resistance spot welding
Parameters in display	Welding current
	Welding voltage
	Wire feed speed
	JOB number
	Program number
	Error code
	Effective arc power
	Motor current
	Kilowatt indicator
Freely adjustable programs per JOB	15
Number of JOBS	335, depending on power source
MMA functions	Hotstart
	Arcforce
	Antistick
Functions	Wire burn-back
	Wire creep
	Gas pre-flow time
	Gas post-flow time

The right solution for your application

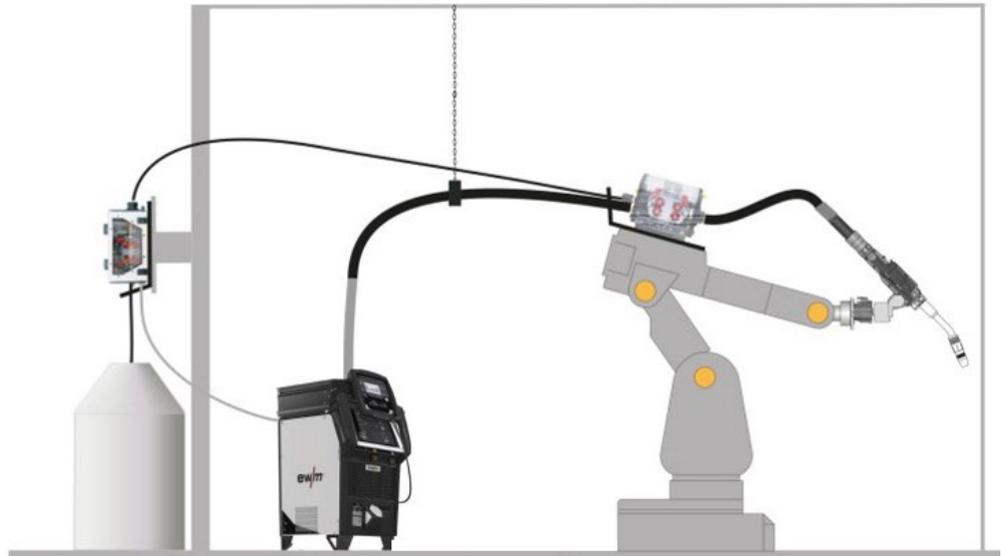
In addition to the standard variants with just one drive, you can also use a drum feed or an intermediate drive. Up to three drives in series can be used in combination with a push/pull welding torch. Plus, you can also use two welding torches in turn with the welding machine when you use a welding torch changing system. Here at EWM we have the right components for your application. So, you can complete your automated welding task perfectly.



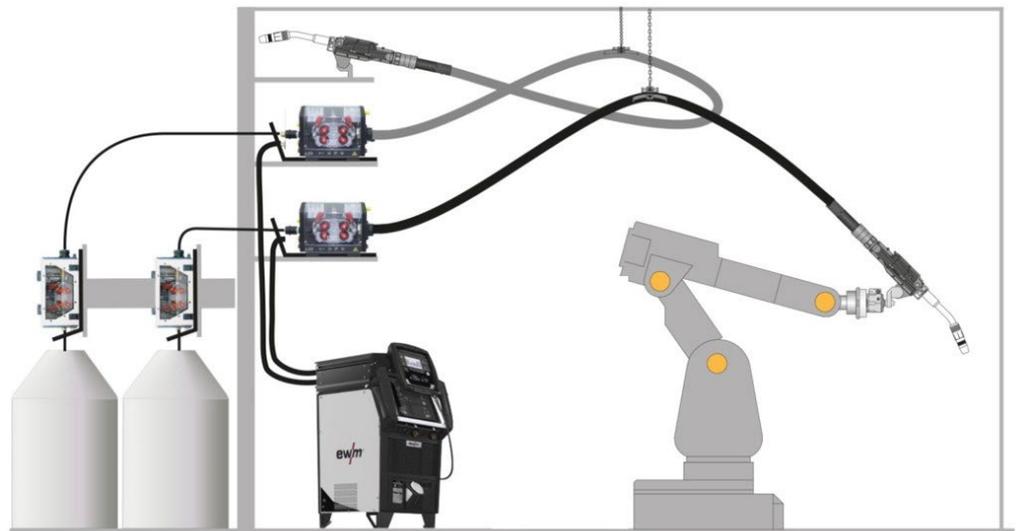
Wire feeder changing system



Wire feeder system with intermediate drive – e.g. drum feed



Wire feeder changing system with intermediate drive – e.g. drum feed



MIG/MAG robot welding machines

Technical data Phoenix 355 RC

- / rootArc®
- / rootArc puls®
- / forceArc®
- / forceArc puls®
- / Pulse
- / Superpuls



- Multiprocess MIG/MAG pulse welding machine without front control
- Compact inverter welding machine with integrated wire feed mechanism
- Set up on external operating panel or notebook with PC300.NET software
- Push/pull capability when used with EWM MTR242W PP and MTR500W PP welding torches
- Equipped at no extra charge with EWM Synergic characteristics for forceArc, forceArc puls, rootArc, rootArc puls and superPuls
- Equipped at no extra charge with Synergic characteristics for GMAW welding of steel/CrNi/aluminium
- Standard-series 19-pole interface for automated welding, for e.g. (Start/stop, current flows, emergency stop)
- Optional RINT X12 interface, BUSINT X11 industrial bus interface, PCINT X10 documentation interface (+ QDOC 9000 V2.0 software) and ewm Xnet quality management software
- Parameters adjustable via interfaces: 510 JOBS each with 15 programs in program mode; wire feed speed, arc length correction and arc dynamics in control signal operation
- RINT X12 and BUSINT X11 for installation in external electrical enclosure
- Optimised for automated applications: Unique second generation digital system for reproducible welding results of the highest possible quality, easy to integrate into automated systems
- Automated and mechanised applications in the production of machinery, cars, vehicles, containers, equipment and ships
- Gas cooled or optionally water cooled with cool 50 U40 cooling unit
- Shown in combination with Trolley 55-5 and cool50 U40
- High-precision, powerful EWM eFeed 4-roll wire feed mechanism for secure feeding of all solid and flux cored wires
- Equipped with 1.0–1.2 mm UNI rolls for low to high-alloy steel
- Wire spool diameter up to 300 mm/D300, 200 mm/D200 possible with adapter
- Energy-saving thanks to high efficiency and standby function
- Insulated wire space
- Can be optionally connected to LAN or WiFi, ewm Xnet compatible
- PC interface for PC300 XQ software
- 5 m mains supply lead

RC



Setting range for welding current	5A - 350A
Duty cycle 40°C, 100%	270A
Duty cycle 40°C, 60%	300A
Duty cycle 40°C, 40%	350A
Open circuit voltage	79 V
Mains voltage	3 x 400 V (- 25 % - + 20 %)
Mains frequency	50 Hz / 60 Hz
Recommended generator power	18.8 kVA
Wire feed speed	0.5 m/min - 25 m/min 19.685 ipm - 984.253 ipm
Factory-installed roll equipment	1,0-1,2 mm UNI ()
Spool diameter	D200/D300
Torch connection	Euro torch connector
Protection classification	IP23
Test mark	CE UK ENEC S
EMC class	A
Dimensions (L x B x H)	636 mm x 298 mm x 482 mm
Weight	37.5 kg 82.7 lbs
Standards	IEC 60974-1, -5 and -10 CL.A

Type	Designation	Item no.
Phoenix 355 puls MM RC TKM Rob	Multiprocess MIG/MAG pulse welding machine with MULTIMATRIX technology, compact, portable, modular, without front control	090-S05502-04752

MIG/MAG robot welding machines

Phoenix 355 Expert 2.0 Rob technical data

- / rootArc®
- / rootArc puls®
- / forceArc®
- / forceArc puls®
- / Pulse
- / Superpuls



- Multiprocess MIG/MAG pulse welding machine with front control
- Compact inverter welding machine with integrated wire feed mechanism
- Set up on front control or notebook with PC300. NET software
- Expert 2.0 control with intuitive user guidance via LCD panel and plain text display of all welding parameters and functions
- Push/pull capability when used with EWM MTR242W PP and MTR500W PP welding torches
- Equipped at no extra charge with EWM Synergic characteristics for forceArc, forceArc puls, rootArc, rootArc puls and superPuls
- Equipped at no extra charge with Synergic characteristics for GMAW welding of steel/CrNi/aluminium
- Standard-series 19-pole interface for automated welding, for e.g. (Start/stop, current flows, emergency stop)
- Optional RINT X12 interface, BUSINT X11 industrial bus interface, PCINT X10 documentation interface (+ QDOC 9000 V2.0 software) and ewm Xnet quality management software
- Parameters adjustable via interfaces: 510 JOBS each with 15 programs in program mode; wire feed speed, arc length correction and arc dynamics in control signal operation
- RINT X12 and BUSINT X11 for installation in external electrical enclosure
- Optimised for automated applications: Unique second generation digital system for reproducible welding results of the highest possible quality, easy to integrate into automated systems
- Automated and mechanised applications in the production of machinery, cars, vehicles, containers, equipment and ships
- Gas cooled or optionally water cooled with cool 50 U40 cooling unit
- Shown in combination with Trolley 55-5 and cool50 U40
- High-precision, powerful EWM eFeed 4-roll wire feed mechanism for secure feeding of all solid and flux cored wires
- Equipped with 1.0–1.2 mm UNI rolls for low to high-alloy steel
- Wire spool diameter up to 300 mm/D300, 200 mm/D200 possible with adapter
- Energy-saving thanks to high efficiency and standby function
- Insulated wire space
- Can be optionally connected to LAN or WiFi, ewm Xnet compatible
- PC interface for PC300 XQ software
- 5 m mains supply lead

Expert 2.0 ROB



Setting range for welding current	5A - 350A
Duty cycle , 100%	270A
Duty cycle , 60%	300A
Duty cycle , 40%	350A
Open circuit voltage	79 V
Mains voltage	3 x 400 V (- 25 % - + 20 %)
Mains frequency	50 Hz / 60 Hz
Recommended generator power	18.8 kVA
Factory-installed roll equipment	1,0-1,2 mm UNI ()
Spool diameter	D200/D300
Torch connection	Euro torch connector
Protection classification	IP23
Test mark	CE UK S
EMC class	A
Dimensions (L x B x H)	636 mm x 298 mm x 482 mm
Weight	36.8 kg 81.1 lbs
Standards	IEC 60974-1, -5 and -10 CL.A

Type	Designation	Item no.
Phoenix 355 Expert 2.0 puls MM TKM Rob	Multiprocess MIG/MAG pulse welding machine with MULTIMATRIX technology, compact, portable, modular, Expert 2.0 control	090-S05445-04843

MIG/MAG robot welding machines

Phoenix 355 accessories

-RCX EXPERT 2.0 ROB-



- Operating panel for setting welding parameters for RC power sources without front control
- Can also be used as an additional actuation module on power sources with front control
- Intuitive user guidance via LCD and plain text display of all welding parameters and functions
- Program mode using 15 programs per JOB
- Economical solution: Operating panel required for programming only, not for operation
- Wire feed speed (m/min.), arc correction (volt) and arc dynamics (soft/hard) directly adjustable using two rotary knobs
- Easy to set and change parameters using the click wheel rotary transducer
- Easy switching of welding procedures at the press of a button, e.g. from forceArc/forceArc puls to rootArc/rootArc puls or coldArc/coldArc puls or standard/pulse
- Setting of all parameters in program sequence
- Easy offline data transfer via USB connection
- Xbutton for hierarchised access authorisation

Type	Designation	Item no.
RCX Expert 2.0 Rob 2m	Control panel	090-008809-00002
RCX Expert 2.0 Rob 5m	Control panel	090-008809-00005
RCX Expert 2.0 Rob 10m	Control panel	090-008809-00010
RCX Expert 2.0 Rob 15m	Control panel	090-008809-00015

-FRV-25 7POL-



- 7-pole connection cable, suitable for installation in drag chains

Type	Designation	Item no.
FRV-25 7POL 10m	Connection cable, 7-pole	092-003417-00010
FRV-25 7POL 15m	Connection cable, 7-pole	092-003417-00015
FRV-25 7POL 20m	Connection cable, 7-pole	092-003417-00020
FRV-25 7POL 25m	Connection cable, 7-pole	092-003417-00025
FRV-25 7POL 30m	Connection cable, 7-pole	092-003417-00030

► Connection and extension cable for external LAN and WiFi gateway, panel, remote control

Digital 7-pole cable



- Digital 7-pole cable
- Extension for 7-pole remote control with permanently installed cable
- Connection cable for remote control and gateway without permanently installed cable

Type	Designation	Item no.
FRV 7POL 0.5m	Digital 7-pole cable	092-000201-00004
FRV 7POL 1m	Digital 7-pole cable	092-000201-00002
FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
FRV 7POL 10m	Digital 7-pole cable	092-000201-00000
FRV 7POL 15m	Digital 7-pole cable	092-000201-00005
FRV 7POL 20m	Digital 7-pole cable	092-000201-00001
FRV 7POL 25m	Digital 7-pole cable	092-000201-00007

Cool 55 C U40



- Cooling unit for compact, modular welding machines
- Can be used with water-cooled welding torches
- Front connections
- External coolant water filling nozzle with filling level indicator
- Optional water filter
- Modular design, tool-free installation
- Excellent torch cooling and therefore cost savings on consumables thanks to the high-performance centrifugal pump

We recommend using a cooling unit with a reinforced pump for an overall hose package length of 30 m and above or for machines with an additional miniDrive of 20 m and above.

Type	Designation	Item no.
Cool 55 C U40	Cooling unit for compact, modular welding machines	090-008866-00502

Cool 55 C U42



- Cooling unit with boosted pump for compact, modular welding machines
- Can be used with water-cooled welding torches
- Front connections
- External coolant water filling nozzle with filling level indicator
- Optional water filter
- Modular design, tool-free installation
- Excellent torch cooling and therefore cost savings on consumables thanks to the high-performance centrifugal pump

We recommend using a cooling unit with a reinforced pump for an overall hose package length of 30 m and above or for machines with an additional miniDrive of 20 m and above.

Type	Designation	Item no.
Cool 55 C U42	Cooling unit with boosted pump for compact, modular welding machines	090-008867-00502

MIG/MAG robot welding machines

Phoenix 355 accessories

Trolley 55-5



- Transport cart (four wheels) for moving a power source, cooling unit or a tool box and one shielding gas cylinder 50 l (300 bar)
- up to 50 l (300 bar)
- Solid, stable design

Type	Designation	Item no.
Trolley 55-5	Transport cart (four wheels) for moving a power source, cooling unit or a tool box and one shielding gas cylinder	090-008632-00000
Trolley 55-5 TM	Transport cart (four wheels) for moving a power source, cooling unit or a tool box and one shielding gas cylinder, partially assembled	090-008632-00001

Trolley 55-6



- Four rolls
- For transporting a power source, a cooling unit and one or two shielding gas cylinders
- Crane-liftable using four fixing points as standard
- Supplied with roll brakes
- Solid, stable design

Type	Designation	Item no.
Trolley 55-6	Transport cart (four wheels) for moving a power source, cooling unit or a tool box and one shielding gas cylinder	090-008825-00000
Trolley 55-6 DF	Transport cart (four wheels) for moving a power source, cooling unit or a tool box and two shielding gas cylinders	090-008826-00000

ON Filter TG.0003



- Comprised of two filter units

Type	Designation	Item no.
ON Filter TG.0003	Dirt filter for air inlet	092-002662-00000

ON D Barrel TG.0003



Type	Designation	Item no.
ON D Barrel TG.0003	Wire guide Rolliner for drum feed	092-007929-00000

ON WAK TG.03/TG.04/TG.09/K.02



- Wheel set – facilitates work at frequently changing welding sites

Type	Designation	Item no.
ON WAK TG.03/TG.04/ TG.09/K.02	Wheel assembly kit	092-001356-00000

ON Case



- All tools and replacement parts always to hand.

Type	Designation	Item no.
ON Case	Tool box for mounting to transport cart Trolley 55-5/Trolley 55-6/Trolley 53/Trolley 54/Trolley XQ 55-5	092-002899-00000

► Only available in conjunction with Trolley 55-5 without an additional cooling unit
In conjunction with Trolley 55-6, if using a cooling unit, the option "ON Extender" must also be ordered

MIG/MAG robot welding machines Phoenix 355 accessories

-SPLITTER 4x 7POL-



- Distributor box to add to the available 7-pole interfaces on the welding machine

Type	Designation	Item no.
SPLITTER 4x 7POL	System bus distributor box, SCO	090-508290-01942
Splitter 2x 7POL	System bus distributor box, SCO	090-508290-05018
Splitter 2x 7POL	Distributor box to add to the available 7-pole interfaces on the welding machine	090-008302-00000

-RA10 19POL 1x 10M-



Type	Designation	Item no.
RA5 19POL 1x 5M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00005
RA10 19POL 1x 10M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00010
RA15 19POL 1x 15M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00015
RA20 19POL 1x 20M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00020
RA25 19POL 1x 25M	Connection cable, 19-pole, one-sided wire end ferrules	092-001569-00025

-WK70QMM-



Type	Designation	Item no.
WK70/CL 5m	Workpiece lead with cable lug	092-002078-00005
WK70/CL 10m	Workpiece lead with cable lug	092-002078-00010

Optimator



- Two stage, high precision pressure regulator with float type meter for flow measurement
- Second stage guarantees a constant volume discharge over the whole pressure process

Type	Designation	Item no.
Optimator AR/MIX 200bar 20l G1/4"	Pressure regulator with flow meter	094-011839-00000
Optimator AR/MIX 200 bar, W21,8 G1/4" 30l	Pressure regulator with flow meter	096-000220-00000
Optimator AR/H2 200bar 20l G3/8"L	Pressure regulator with flow meter	094-011841-00000

-DM 842 Ar/CO2 230bar D-



- Manufactured in accordance with ISO 2503
- Maximum primary pressure of 230 bar
- Single-stage
- Infinite and highly accurate adjustment
- Safety manometer with pressure meter or flow meter (bar/psi or litres per minute)
- With cut-off valve

Type	Designation	Item no.
DM 842 Ar/CO2 230bar 15l D	Pressure regulator with manometer	394-002910-00015
DM 842 Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-002910-00030

-DM 801 Ar/CO2 230bar UK-



- Manufactured in accordance with ISO 2503
- Maximum primary pressure of 230 bar
- Single-stage
- Infinite and highly accurate adjustment
- Safety manometer with pressure meter or flow meter (bar/psi or litres per minute)

Type	Designation	Item no.
DM 801 Ar/CO2 230bar 15l UK	Pressure regulator with manometer	394-002911-00015
DM 801 Ar/CO2 230bar 30l UK	Pressure regulator with manometer	394-002911-00030

Proreg Ar/CO2 230bar



- Manufactured in accordance with ISO 2503
- Maximum primary pressure of 230 bar
- Single-stage
- Infinite and highly accurate adjustment
- Safety manometer with pressure meter or flow meter (bar/psi or litres per minute)
- With cut-off valve

Type	Designation	Item no.
Proreg Ar/CO2 230bar 15l D	Pressure regulator with manometer	394-008488-10015
Proreg Ar/CO2 230bar 30l D	Pressure regulator with manometer	394-008488-10030

-ON AL D13/27-



Type	Designation	Item no.
ON AL D13/27	Cap for load sockets	092-003282-00000

MIG/MAG robot welding machines

Phoenix 355 accessories

-5POLE/CEE/16A/M-



- Mains plug

Type	Designation	Item no.
16A 5POLE/CEE	Mains plug	094-000712-00000

-OW CEE16A-



- Mains plug, factory fitting (no retrofitting)

Type	Designation	Item no.
OW CEE 16A/400V	Mains plug, assembled	092-008214-00000

Automation of manual systems with AnyRobInt XQ adapter box

For demodular XQ welding machines, the box is attached using the flexFit casing system. For modular XQ welding machines, two securing hooks are required for attachment to the carrying handle.

Demodular XQ welding machines



Modular XQ welding machines



092-004246-00000



Automation of manual systems

AnyRobInt XQ set

-AnyRobInt XQ set-



- Interface for the later integration of manual MIG/MAG XQ welding machines in applications with cobots
- Easy to adapt and can be retrofitted later
- Voltage supply via power source
- Integrated emergency stop software
- As standard, ready for operation with a power source with two wire feeders
- Enables the use of a wire feeder for robots (M drive 4 Rob 5) with manual power sources, including all functions for robot welding torches
- Integrated interface for connection to digital fieldbus systems (fieldbus type is selectable)
- Compatible with all modular, demodular, compact and decompact MIG/MAG XQ welding machines
- Set includes RC XQ Expert 2.0 Rob operating panel

Test mark	CE EAC
Dimensions (L x B x H)	416.5 mm x 184 mm x 421.5 mm 16.39 inch x 7.24 inch x 16.59 inch
Weight	ca. 8.5 kg ca. 18.74 lbs

Type	Designation	Item no.
Set AnyRobInt XQ DGC ETHERNET IP	Set with adapter box for the automation of manual systems with digital gas control and RC XQ Expert 2.0 Rob 5 m operating panel	091-004447-00000
Set AnyRobInt XQ DGC MODBUS	Set with adapter box for the automation of manual systems with digital gas control and RC XQ Expert 2.0 Rob 5 m operating panel	091-004448-00000
Set AnyRobInt XQ DGC ETHERCAT	Set with adapter box for the automation of manual systems with digital gas control and RC XQ Expert 2.0 Rob 5 m operating panel	091-004449-00000
Set AnyRobInt XQ DGC PROFINET	Set with adapter box for the automation of manual systems with digital gas control and RC XQ Expert 2.0 Rob 5 m operating panel	091-004450-00000
Set AnyRobInt XQ ETHERNET IP	Set with adapter box for the automation of manual systems with RC XQ Expert 2.0 Rob 5 m operating panel	091-004487-00000
Set AnyRobInt XQ MODBUS	Set with adapter box for the automation of manual systems with RC XQ Expert 2.0 Rob 5 m operating panel	091-004488-00000
Set AnyRobInt XQ ETHERCAT	Set with adapter box for the automation of manual systems with RC XQ Expert 2.0 Rob 5 m operating panel	091-004489-00000
Set AnyRobInt XQ PROFINET	Set with adapter box for the automation of manual systems with RC XQ Expert 2.0 Rob 5 m operating panel	091-004490-00000

Overview of adapter box functions

	Gas control (DGC)	ETHERNET IP	MODBUS	ETHERCAT	PROFINET
091-004447-00000	x	x			
091-004448-00000	x		x		
091-004449-00000	x			x	
091-004450-00000	x				x
091-004487-00000	-	x			
091-004488-00000	-		x		
091-004489-00000	-			x	
091-004490-00000	-				x

-ON MS AnyRob XQ-



- Securing hook for attachment to modular MIG/MAG machines

Type	Designation	Item no.
ON MS AnyRobInt XQ	Securing hook assembly set for AnyRobInt XQ for modular welding machines	092-004246-00000



SmoothTool

-EWM CAP Smoothtool Set-



- An uncomplicated and fully equipped CAP solution, allowing a wide range of welding tasks to be handled by the cobot
- User-friendly operating panel: no programming knowledge required
- Create welding tasks quickly and easily using the teaching flange on the robot
- Optimal integration of your EWM XQ power source into the UR control
- Compatible with the UR E-series and CB-series
- 3D visualisation of the weld seams and programs
- Offset welding, multi-layer welding and stitch welding possible
- Expanded angle system
- Various forms of weaving
- Set contents: Teaching flange for connection to the cobot, software and one licence dongle

Type	Designation	Item no.
EWM CAP Smoothtool Set	Set with EWM CAP welding software, programming flange and licence dongle	398-016969-00000

Xnet LAN Gateway



- Xnet LAN gateway

Range of functions:

- Connecting welding machines without integrated Xnet components to an Xnet system (for all EWM machines with integrated 7-pole interface)
- Data transfer via network cable
- USB interface for data recording and data transfer
- Connection of a barcode scanner possible
- Registration option via Xbutton
- Digital display with click wheel operation

The following information is shown on the display:

- network status, network configuration, nominal/actual welding parameters, JOB information, Xnet monitoring of the welding parameters in real time, WPQR welding data assistant, component information, errors and warnings in the system

For using it, an Xnet-machine licence is required

Dimensions (L x B x H)	420 mm x 235 mm x 115 mm
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Test mark CE UK

Type	Designation	Item no.
Xnet LAN Gateway	LAN gateway in external housing	090-008833-00502

Xnet WiFi Gateway



- Xnet WiFi gateway

Range of functions:

- Connecting welding machines without integrated Xnet components to an Xnet system (for all EWM machines with integrated 7-pole interface)
- Data transfer via WiFi or network cable
- USB interface for data recording and data transfer
- Connection of a barcode scanner possible
- Registration option via Xbutton
- Digital display with click wheel operation

The following information is shown on the display:

- network status, network configuration, nominal/actual welding parameters, JOB information, Xnet monitoring of the welding parameters in real time, WPQR welding data assistant, component information, errors and warnings in the system

For using it, an Xnet-machine licence is required

Dimensions (L x B x H)	420 mm x 235 mm x 115 mm
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Test mark CE UK

Type	Designation	Item no.
Xnet WiFi Gateway	WiFi gateway in external casing	090-008834-00502

Scanner



- Scanner
- For component management in conjunction with Xnet software
- Scan QR codes and barcodes
- Scan codes from an LCD screen
- When connecting to welding machines with integrated Xnet gateway, the optional OW 8-pole scanner is required on the machine side

Type	Designation	Item no.
SCAN BC 8Pol	Scanner	090-008823-00000

Gateways Accessories

-FRV-25 7POL-



- 7-pole connection cable, suitable for installation in drag chains

Type	Designation	Cable length	Item no.
FRV-25 7POL 10m	Connection cable, 7-pole	10 m	092-003417-00010
FRV-25 7POL 15m	Connection cable, 7-pole	15 m	092-003417-00015
FRV-25 7POL 20m	Connection cable, 7-pole	20 m	092-003417-00020
FRV-25 7POL 25m	Connection cable, 7-pole	25 m	092-003417-00025
FRV-25 7POL 30m	Connection cable, 7-pole	30 m	092-003417-00030

Digital 7-pole cable



- Digital 7-pole cable
- Extension for 7-pole remote control with permanently installed cable
- Connection cable for remote control and gateway without permanently installed cable

Type	Designation	Cable length	Item no.
FRV 7POL 0.5m	Digital 7-pole cable	0.5 m	092-000201-00004
FRV 7POL 1m	Digital 7-pole cable	1 m	092-000201-00002
FRV 7POL 5m	Digital 7-pole cable	5 m	092-000201-00003
FRV 7POL 10m	Digital 7-pole cable	10 m	092-000201-00000
FRV 7POL 15m	Digital 7-pole cable	15 m	092-000201-00005
FRV 7POL 20m	Digital 7-pole cable	20 m	092-000201-00001
FRV 7POL 25m	Digital 7-pole cable	25 m	092-000201-00007

Wire feeder description

M drive 4 Rob 5 XQ R – front view

The new robot wire feeder is lightweight, weighing in at just 5.5 kg without any extras. It is also available in two versions for clockwise and anti-clockwise operation. Contrary to previous wire feeders, there is no built-in motor control but it is available with media connections on the front or back. The standard version with rear media connections is mainly used for assembly on the third robot axis.

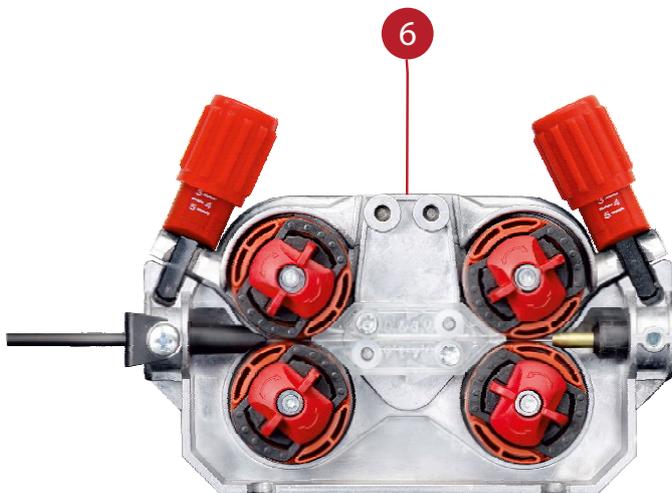
The HW model with media connections on the front is used for hollow wrist robots. The standard version can also be used for hollow wrist robots if necessary, depending on the type of robot. Furthermore, the new M drive 4 ROB 5 is characterised by its easy handling and assembly.



- 1 Acrylic glass hood for checking the drive unit**
- 2 4-roll eFeed drive for the highest demands**
- 3 Optional connection sets for different wire guides**
- 4 Push-button for**
 - Wire inching
 - Wire return
 - Gas test
- 5 Stable, insulated mounting rails**
- 6 Optional blow-out function for cleaning the torch**
- 7 Torch connection socket, 19-pole, for analogue control signals such as a collision sensor or push/pull torch drive**
- 8 Euro torch connector (optional Dinse connector and EWM ECS connectors)**
- 9 Optional quick connect coupling for coolant feed and return**

Wire feeder description

M drive 4 Rob 5 XQ R – rear view



1 Secure fixed connection with a cover for the load cable

2 G1/4 connection for gas hose

3 G1/4 connection for blow-out (optional)

4 Optional connection sets for different wire guides

5 Connection socket, 23-pole for intermediate hose package

6 EWM's own innovative eFeed wire feeder

- 4-roll drive (quadruple meshing)
- Fully-automated wire inching until the wire comes into contact with the workpiece
- Captive roll fasteners
- Tool-free roll change
- Drive roll sets, each with four wire feed rolls, colour-coded for various wire diameters and groove shapes
- Conversion kits no longer needed
- Exchange rolls in just three steps – instantly, without tools and with captive parts
- Adjustable contact pressure

Wire feeder description

M drive 4 Rob 2X ZT eFeed – front view

Can be universally used as an additional drive unit for robot power sources. For wire feeding when there are large distances between the spool/drum and welding torch



1 Inspection window for checking the drive unit

2 4-roll eFeed drive for the highest demands

3 Push-button for

- Wire inching
- Wire return
- Gas test
- Blow out

4 Stable, insulated mounting rails

Wire feeder description

M drive 4 Rob 2X ZT eFeed – rear view



- 1** Connection socket, 7-pole (digital), for connecting the control cable to the power source
- 2** Optional connection sets for different wire guides

MIG/MAG wire feeders

Technical data M drive 4 Rob 5 XQ R



- MIG/MAG robot wire feeder, lightweight version
- For use on Titan XQ R and Phoenix XQ R robot power sources and the Taurus, Phoenix and alpha Q from the XR series
- Available in two versions for clockwise and anti-clockwise operation.
- Secure power connection for intermediate hose package thanks to screw-in connection
- Media connections on the back for use on most standard robots
- Push/pull capability when used with EWM MTR242W PP and MTR500W PP welding torches
- Standard 19-pole connection socket for signal exchange, e.g. collision protection
- 4-roll drive in metal construction with large 37-mm rolls, ex works for 1.0/1.2-mm steel wires
- Separate push-buttons on the side for wire inching/reverse inching and gas test
- With inspection window for checking the wire feeder
- Especially light, for gas-cooled systems, optional retrofitting for water-cooled systems
- Compact machine for simple mounting on the robot
- High level of process security thanks to the control, regulation and monitoring of all process data via a central, digital bus system
- Operating status signal light
- Double ball bearings per axle
- Tool-free roll change, permanently secured roll fasteners
- Adjustable contact pressure for each roll pair
- Rolls colour-coded for wire diameter and material
- Mounting console with strain relief for installation on the robot (optional)
- Water connection by means of quick connect coupling (optional)
- Gas pressure sensor (optional)
- Welding torch blow-out function (optional)
- Connection sets for Wire Lead, Wire Lead Soft, Wire Conduit, Masterliner, Rolliner and Maxiglide wire feeds (optional)
- Wire spool support (optional)
- Built-in Dinse connector (optional)
- Built-in ESC Euro torch connector (optional)

Duty cycle 40°C, 100%	430A
Duty cycle 40°C, 60%	550A
Wire feed speed	0.5 m/min - 25 m/min 19.68 ipm - 984253 ipm
Wire-feed speed increments	0.1 m/min
Factory-installed roll equipment	1,0-1,2 mm UNI (Steel)
Torch connection	Euro torch connector
Test mark	
Dimensions (L x B x H)	271 mm x 179 mm x 212 mm 10.7 inch x 7 inch x 8.3 inch
Weight	5.8 kg 12.8 lbs
Standards	IEC 60974-1, -5 and -10 CL.A

Type	Designation	Item no.
M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
M drive 4 Rob 5 XQ R RE	Wire feeder for automated applications, opens on right, gas-cooled, Euro torch connector, for use with conventional robots	090-005723-00000

MIG/MAG wire feeders

Technical data M drive 4 Rob 5 HW XQ R



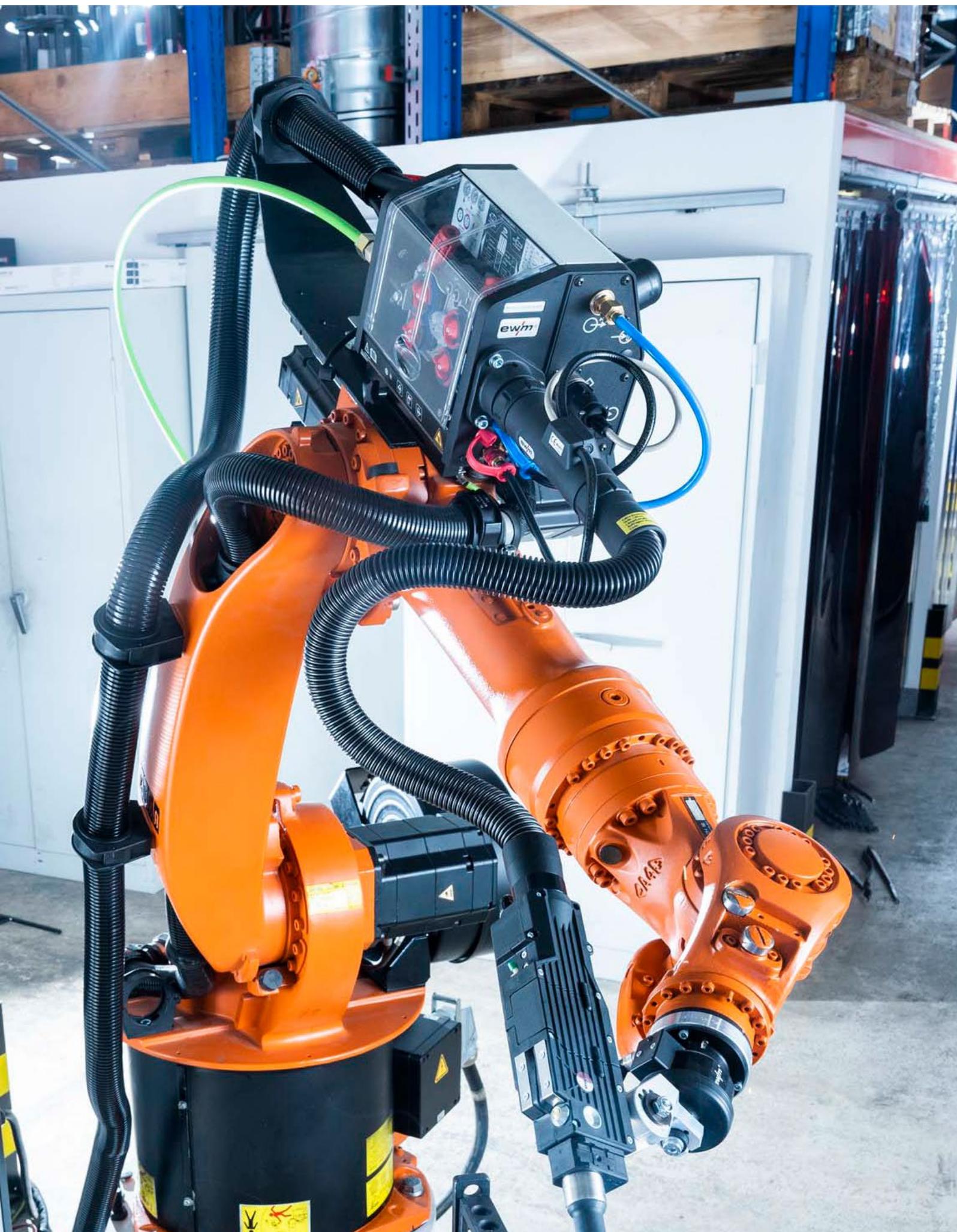
- MIG/MAG robot wire feeder, lightweight version
- For use on Titan XQ R and Phoenix XQ R robot power sources and the Taurus, Phoenix and alpha Q from the XR series
- Available in two versions for clockwise and anti-clockwise operation.
- Secure power connection for intermediate hose package thanks to screw-in connection
- Media connections on the front for use on most hollow wrist robots
- Version opening to the left largely for use on hollow wrist robots; please take into account the robot-specific mounting consoles
- Push/pull capability when used with EWM MTR242W PP and MTR500W PP welding torches
- Standard 19-pole connection socket for signal exchange, e.g. collision protection
- 4-roll drive in metal construction with large 37-mm rolls, ex works for 1.0/1.2-mm steel wires
- Separate push-buttons on the side for wire inching/reverse inching and gas test
- With inspection window for checking the wire feeder
- Especially light, for gas-cooled systems, optional retrofitting for water-cooled systems
- Compact machine for simple mounting on the hollow wrist robot
- High level of process security thanks to the control, regulation and monitoring of all process data via a central, digital bus system
- Operating status signal light
- Double ball bearings per axle
- Tool-free roll change, permanently secured roll fasteners
- Adjustable contact pressure for each roll pair
- Rolls colour-coded for wire diameter and material
- Mounting console with strain relief for installation on the robot (optional)
- Water connection by means of quick connect coupling (optional)
- Gas pressure sensor (optional)
- Welding torch blow-out function (optional)
- Connection sets for Wire Lead, Wire Lead Soft, Wire Conduit, Masterliner, Rolliner and Maxiglide wire feeds (optional)
- Wire spool support (optional)
- Built-in Dinse connector (optional)
- Built-in ESC Euro torch connector (optional)

Duty cycle 40°C, 100%	430A
Duty cycle 40°C, 60%	550A
Wire feed speed	0.5 m/min - 25 m/min 19.68 ipm - 984.253 ipm
Wire-feed speed increments	0.1 m/min
Factory-installed roll equipment	1,2 mm (Steel)
Torch connection	Euro torch connector
Protection classification	IP20
Test mark	  
Dimensions (L x B x H)	271 mm x 179 mm x 212 mm 10.7 inch x 7 inch x 8.3 inch
Weight	5.8 kg 12.8 lbs
Standards	IEC 60974-1, -5 and -10 CL.A

Type	Designation	Item no.
M drive 4 Rob 5 HW XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with hollow wrist robots	090-005724-00000
M drive 4 Rob 5 HW XQ R RE	Wire feeder for automated applications, opens on right, gas-cooled, Euro torch connector, for use with hollow wrist robots	090-005725-00000

MIG/MAG wire feeders M drive 4 Rob 5 configuration

Selection	Type	Designation	Item no.
<input type="radio"/>	OW NASM EWM torchDrive LI	Without connection capability for second wire drive unit	092-004680-00000
<input type="radio"/>	OW ASM EWM torchDrive LI	Connection capability for second wire drive unit	092-004681-00000
<input type="radio"/>	OW NASM EWM torchDrive RE	Without connection capability for second wire drive unit	092-004682-00000
<input type="radio"/>	OW ASM EWM torchDrive RE	Connection capability for second wire drive unit	092-004683-00000
Basic version M drive 4 Rob 5			
<input type="radio"/>	M drive 4 Rob 5 XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with conventional robots	090-005722-00000
<input type="radio"/>	M drive 4 Rob 5 XQ R RE	Wire feeder for automated applications, opens on right, gas-cooled, Euro torch connector, for use with conventional robots	090-005723-00000
<input type="radio"/>	M drive 4 Rob 5 HW XQ R LI	Wire feeder for automated applications, opens on left, gas-cooled, Euro torch connector, for use with hollow wrist robots	090-005724-00000
<input type="radio"/>	M drive 4 Rob 5 HW XQ R RE	Wire feeder for automated applications, opens on right, gas-cooled, Euro torch connector, for use with hollow wrist robots	090-005725-00000
Options for wire feeders			
<input type="radio"/>	OW NBLOW OUT ROB 5 XQ R	Without welding torch blow-out Rob 5	092-004660-00000
<input type="radio"/>	OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-004661-00000
<input type="radio"/>	OW NPRESSURE SWITCH ROB 5 XQ R	Without gas pressure sensor Rob 5	092-004662-00000
<input type="radio"/>	OW PRESSURE SWITCH ROB 5 XQ R	Factory-fit option: Gas pressure sensor, Rob 5	092-004663-00000
Torch cooling			
<input type="radio"/>	OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000
Torch connection			
<input type="radio"/>	EZA (STANDARD)	Euro torch connector	092-004665-00000
<input type="radio"/>	OW ECS ROB 5 XQ R	Built-in EWM Euro torch connector for ROB 5	092-004666-00000
<input type="radio"/>	OW DZA ROB 5 XQ R	Dinse connector	092-004667-00000
Connection sets for wire feeds			
<input type="radio"/>	IG (STANDARD)	Inlet guide	092-004668-00000
<input type="radio"/>	CONNECTOR DRIVE ROB5 XQ R WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-004669-00000
<input type="radio"/>	CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
<input type="radio"/>	CONNECTOR DRIVE ROB5 XQ R MASTERLINER	Connection set for Masterliner wire feed to Rob 5	092-004671-00000
<input type="radio"/>	CONNECTOR DRIVE ROB5 XQ R ROLLINER	Connection set for wire feed Rolliner to Rob 5	092-004672-00000
<input type="radio"/>	CONNECTOR DRIVE ROB5 XQ R MAXIGLIDE	Connection set for Maxiglide wire feed to Rob 5	092-004673-00000
Options for retrofitting			
<input type="radio"/>	ON DV CAP ROB LI	Rob wire spool support, left	092-003217-00000
<input type="radio"/>	ON DV CAP ROB RE	Rob wire spool support, right	092-003484-00000



MIG/MAG wire feeders

Technical data M drive 4 Rob 2X ZT eFeed



- MIG/MAG robot wire feed unit, intermediate wire feeder
- For use on Titan XQ R and Phoenix XQ R robot power sources, as well as the Taurus, Phoenix and alpha Q of the XR series in conjunction with M drive 4 Rob 5 or F drive Rob 5
- Version opening to the left available
- For wire feeding when there are large distances between spool/drum and welding torch
- Reproducible wire feed speed thanks to fully digital control with incremental transducer, adjustable in increments of 0.1 m/min
- 4-roll drive in metal construction with large 37-mm rolls, ex works for 1.0/1.2-mm steel wires
- Separate buttons on the front for wire return/inching and gas test
- Tool-free roller changing, captive screws
- With inspection window for checking the wire feeder
- Control using a digital incremental transducer
- Compact machine for simple mounting on or near the robot
- High level of process security thanks to the control, regulation and monitoring of all process data via a central, digital bus system
- Double ball bearings per axle
- Tool-free roll change, permanently secured roll fasteners
- Adjustable contact pressure for each roll pair
- Rolls colour-coded for wire diameter and material
- Mounting console with strain relief for mounting (optional)
- Connection sets for Wire Lead, Wire Lead Soft, Wire Conduit, Masterliner, Rolliner wire feeds (optional)

Wire feed speed	0.5 m/min - 24 m/min 19.68 ipm - 944.88 ipm
Wire-feed speed increments	0.1 m/min
Factory-installed roll equipment	1,0-1,2 mm UNI (Steel)
Protection classification	IP23
Test mark	CE ENEC
EMC class	A
Dimensions (L x B x H)	407 mm x 201 mm x 229 mm
Weight	9.8 kg
Standards	IEC 60974-1, -5 and -10 CL.A

Type	Designation	Item no.
M drive 4 Rob 2X ZT	Intermediate drive for automated applications	090-005480-00502

► Please specify the wire guide used when ordering!

MIG/MAG wire feeders

M drive 4 Rob 2X ZT configuration

Selection	Type	Designation	Item no.
Accessories			
<input type="radio"/>	OW CONNECTOR DRIVE ROB 2X ZT WIRE LEAD	Wire exit connection for Wire Lead wire feed to ROB 2X ZT	092-004400-00000
<input type="radio"/>	OW CONNECTOR DRIVE ROB 2X ZT WIRE CONDUIT	Wire exit connection for Wire Conduit wire feed to ROB 2X ZT	092-004401-00000
<input type="radio"/>	OW CONNECTOR DRIVE ROB 2X ZT MASTERLINER	Wire exit connection for Masterliner wire feed to ROB 2X ZT	092-004402-00000
<input type="radio"/>	OW CONNECTOR DRIVE ROB 2X ZT ROLLINER	Wire exit connection for Rolliner wire feed to ROB 2X ZT	092-004403-00000
<input type="radio"/>	OW CONNECTOR DRIVE ROB 2 X ZT MAXIGLIDE	Wire exit connection for Maxiglide wire feed to ROB 2X ZT	092-004404-00000
<input type="radio"/>	CONNECTOR DRIVE ROB 2 MAXIGLIDE	Connection set for Maxiglide wire feed to ROB 2	092-004405-00000
<input type="radio"/>	CONNECTOR DRIVE ROB2 WIRE LEAD	Connection set for Wire Lead wire feed to ROB 2	092-007913-00000
<input type="radio"/>	CONNECTOR DRIVE ROB 2 Masterliner	Connection set for Masterliner wire feed to ROB 2	092-003639-00000
<input type="radio"/>	CONNECTOR DRIVE ROB2 ROLLINER	Connection set for Rolliner wire feed to ROB 2	092-007917-00000
<input type="radio"/>	CONNECTOR DRIVE ROB2 WIRE CONDUIT	Connection set for wire feed ROB 2 Wire Conduit	092-008205-00000
<input type="radio"/>	FR165/L=159MM/ID=4,4/AD=5,0MM	Guide tube	094-006050-00000
<input type="radio"/>	CAPTUB L=168 mm; Ø ≤ 1,6 mm	Capillary tube	094-011951-00000
Basic version M drive 4 Rob 2X ZT			
<input type="radio"/>	M drive 4 Rob 2X ZT	Intermediate drive for automated applications	090-005480-00502

Options for retrofitting

Selection	Type	Designation	Item no.
<input type="radio"/>	ON DV CAP ROB LI	Rob wire spool support, left	092-003217-00000
<input type="radio"/>	MONTAGE CONSOLE ROB 2 UNIVERSAL	Mounting console for wire feed unit	092-001746-00000

MIG/MAG wire feeders MEDIA BOX XR technical data



- Media separation box XR
- For use on robot intermediate hose packages from the XR series (092-003114-XXXXX)
- Connects two intermediate hose packages at joints
- Compact machine for easy installation

Duty cycle 40°C, 100%	470A
Duty cycle 40°C, 40%	600A
Test mark	CE
Dimensions (L x B x H)	325 mm x 145 mm x 235 mm
Weight	3.03 kg
Standards	IEC 60974-1 and -10 CL.A

Type	Designation	Item no.
MEDIA BOX XR	Media separation box XR	090-S00000-04702

MIG/MAG wire feeders

Options

OW PRESSURE SWITCH ROB 5 XQ R



- Ex works option: Gas pressure sensor for ROB 5
- Increased process reliability because the gas pressure is checked before welding
- The wire feeder features a gas valve with upstream pressure monitoring for this purpose

Type	Designation	Item no.
OW PRESSURE SWITCH ROB 5 XQ R	Factory-fit option: Gas pressure sensor, Rob 5	092-004663-00000

OW BLOW OUT ROB 5 XQ R



- Ex works option: Welding torch blow-out for ROB 5
- Built-in blow-out valve for torch cleaning
- Easy actuation using the interface
- High-end valve with a large air outlet and operating pressure up to 10 bar

Type	Designation	Item no.
OW BLOW OUT ROB 5 XQ R	Factory-fit option: Welding torch, blow out, Rob 5	092-004661-00000

OW ECS ROB 5 XQ R



- Ex works option: Built-in EWM Euro torch connector for ROB 5
- Optimised wire guiding up to directly in front of the drive rolls
- Perfect for applications with soft wire filler materials, e.g. aluminium
- Retrofitting of ECS connection required on the torch side

Type	Designation	Item no.
OW ECS ROB 5 XQ R	Built-in EWM Euro torch connector for ROB 5	092-004666-00000

OW DZA ROB 5 XQ R



Type	Designation	Item no.
OW DZA ROB 5 XQ R	Dinse connector	092-004667-00000

OW COOL W ROB 5 XQ R



- Retrofitting option: Water cooling for ROB 5
- With this retrofitting option, the wire feeder can be equipped with water cooling

Type	Designation	Item no.
OW COOL W ROB 5 XQ R	Factory-fit water cooling Rob 5 option	092-004664-00000

MIG/MAG wire feeders

Options

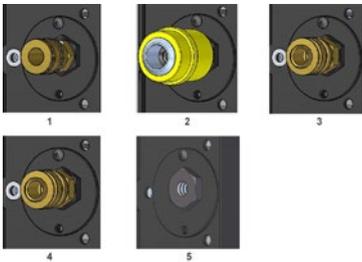
ON DV CAP ROB LI



- Retrofitting option: Wire spool support for ROB 5
- The wire spool holder makes the wire feeder perfect for mechanised applications
- The wire feeder and wire spool holder are tightly screwed together
- Left and right versions available
- Left version suitable for M drive 4 Rob 3X LI, M drive 4 Rob 5 XR LI, M drive 4 Rob 2X, M drive 4 Rob 2X MF, tigSpeed drive 4 Rob, M drive 4 Rob 5 XQ R LI
- Right version suitable for M drive 4 Rob 3X RE, M drive 4 Rob 5 XR RE, M drive 4 Rob 5 XQ R RE

Type	Designation	Item no.
ON DV CAP ROB LI	Rob wire spool support, left	092-003217-00000
ON DV CAP ROB RE	Rob wire spool support, right	092-003484-00000

CONNECTOR DRIVE ROB5 XQ R WIRE LEAD



- Connection sets for wire feeds to ROB 5
- Wire feed connection:
 1. Wire Lead
 2. Wire Conduit
 3. Masterliner
 4. Rolliner
 5. Maxiglide

Type	Designation	Item no.
CONNECTOR DRIVE ROB5 XQ R WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-004669-00000
CONNECTOR DRIVE ROB5 XQ R WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-004670-00000
CONNECTOR DRIVE ROB5 XQ R MASTERLINER	Connection set for Masterliner wire feed to Rob 5	092-004671-00000
CONNECTOR DRIVE ROB5 XQ R ROLLINER	Connection set for wire feed Rolliner to Rob 5	092-004672-00000
CONNECTOR DRIVE ROB5 XQ R MAXIGLIDE	Connection set for Maxiglide wire feed to Rob 5	092-004673-00000

OW ASM EWM torchDrive LI



Type	Designation	Item no.
OW ASM EWM torchDrive LI	Connection capability for second wire drive unit	092-004681-00000
OW ASM EWM torchDrive RE	Connection capability for second wire drive unit	092-004683-00000

Wire feeder drive rolls eFeed



- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	0.8 mm		
Colour code	white	white/yellow	White/orange
Groove shape	V-groove	U-groove	V-groove/knurl

Type	Designation	Item no.
FE 4R 0.8 MM/0.03 INCH WHITE	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00008
AL 4R 0.8 MM/0.03 INCH WHITE/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00008
FUEL 4R 0.8 MM/0.03 INCH WHITE/ORANGE	Drive roll set, 37 mm, 4 rolls, V-groove/knurl for flux cored wire	092-002848-00008

► Four roll set



- Universal rolls for wire diameter 0.8 mm–1.0 mm
- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	0.8 mm - 1 mm		
Colour code	white/blue		
Groove shape	V-groove		

Type	Designation	Item no.
FE 4R 0.8-1.0MM / 0.03-0.04 INCH BLUE/WHITE	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00009

► Four roll set

Drive roll set



- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	0.9 mm - 1 mm		
Colour code	Blue	blue/yellow	Blue/orange
Groove shape	V-groove	U-groove	V-groove/knurl

Type	Designation	Item no.
FE 4R 1.0 MM/0.04 INCH BLUE	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00010
AL 4R 1.0 MM/0.04 INCH BLUE/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00010
FUEL 4R 1.0 MM/0.04 INCH BLUE/ORANGE	Drive roll set, 37 mm, 4 rolls, V-groove/knurl for flux cored wire	092-002848-00010

► Four roll set

Drive roll set



- Drive roll set, V-groove for steel, stainless steel and brazing
- Universal rolls for wire diameter 1.0 mm–1.2 mm

Wire Ø	1 mm - 1.2 mm		
Colour code	Blue/Red		
Groove shape	V-groove		

Type	Designation	Item no.
FE 4R 1.0-1.2MM / 0.04-0.045 INCH BLUE/RED	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00011

► Four roll set

Wire feeder drive rolls eFeed

Drive roll set



- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	1.2 mm		
Colour code	red/yellow	Red/orange	
Groove shape	U-groove	V-groove/knurl	

Type	Designation	Item no.
AL 4R 1.2 MM/0.045 INCH RED/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00012
FUEL 4R 1.2 MM/0.045 INCH RED/ORANGE	Drive roll set, 37 mm, 4 rolls, V-groove/knurlled for flux cored wire	092-002848-00012

► Four roll set

Drive roll set



- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	1.4 mm		
Colour code	Green	green/yellow	Green/orange
Groove shape	V-groove	U-groove	V-groove/knurl

Type	Designation	Item no.
FE 4R 1.4 MM/0.052 INCH GREEN	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00014
AL 4R 1,4MM/0.052 INCH GREEN/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00014
FUEL 4R 1.4 MM/0.052 INCH GREEN/ORANGE	Drive roll set, 37 mm, 4 rolls, V-groove/knurlled for flux cored wire	092-002848-00014

► Four roll set

Drive roll set



- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	1.6 mm		
Colour code	Black	black/yellow	Black/orange
Groove shape	V-groove	U-groove	V-groove/knurl

Type	Designation	Item no.
FE 4R 1.6 MM/0.06 INCH BLACK	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00016
AL 4R 1.6 MM/0.06 INCH BLACK/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00016
FUEL 4R 1.6 MM/0.06 INCH BLACK/ORANGE	Drive roll set, 37 mm, 4 rolls, V-groove/knurlled for flux cored wire	092-002848-00016

► Four roll set

Drive roll set



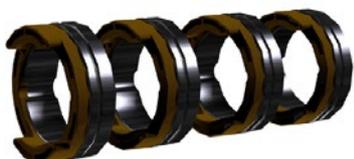
- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	2 mm		
Colour code	Grey	Grey/yellow	Grey/orange
Groove shape	V-groove	U-groove	V-groove/ knurl

Type	Designation	Item no.
FE 4R 2.0 MM/0.08 INCH GREY	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00020
AL 4R 2.0 MM/0.08 INCH GREY/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00020
FUEL 4R 2.0 MM/0.08 INCH GREY/ORANGE	Drive roll set, 37 mm, 4 rolls, V-groove/knurled for flux cored wire	092-002848-00020
ON SET WF 2,0-3,2mm eFeed	Wire feed set for rolls with diameters greater than 1.6 mm	092-019404-00000

- ▶ For using rolls with a diameter of more than 1.6 mm, the SET WF 2.0–3.2 mm eFeed (092-019404-00000) option is necessary!
- ▶ Four roll set

Drive roll set



- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	2.4 mm		
Colour code	Brown	Brown/yellow	Brown/orange
Groove shape	V-groove	U-groove	V-groove/ knurl

Type	Designation	Item no.
FE 4R 2.4 MM/0.095 INCH BROWN	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00024
AL 4R 2.4 MM/0.095 INCH BROWN/YELLOW	Drive roll set, 37 mm, 4 rollers, U-groove for aluminium	092-002771-00024
FUEL 4R 2.4 MM/0.095 INCH BROWN/ORANGE	Drive roll set, 37 mm, 4 rolls, V-groove/knurled for flux cored wire	092-002848-00024
ON SET WF 2,0-3,2mm eFeed	Wire feed set for rolls with diameters greater than 1.6 mm	092-019404-00000

- ▶ For using rolls with a diameter of more than 1.6 mm, the SET WF 2.0–3.2 mm eFeed (092-019404-00000) option is necessary!
- ▶ Four roll set

Drive roll set



- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	2.8 mm		
Colour code	Light green	light green/orange	
Groove shape	V-groove	V-groove/knurl	

Type	Designation	Item no.
FE 4R 2.8 MM/0.11 INCH LIGHT GREEN	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00028
FUEL 4R 2.8 MM/0.11 INCH LIGHT GREEN/ORANGE	Drive roll set, 37 mm, 4 rolls, V-groove/knurled for flux cored wire	092-002848-00028
ON SET WF 2,0-3,2mm eFeed	Wire feed set for rolls with diameters greater than 1.6 mm	092-019404-00000

- ▶ For using rolls with a diameter of more than 1.6 mm, the SET WF 2.0–3.2 mm eFeed (092-019404-00000) option is necessary!
- ▶ Four roll set

Wire feeder drive rolls eFeed

Drive roll set



- Drive roll set, V-groove for steel, stainless steel and brazing

Wire Ø	3.2 mm
Colour code	Violet
Groove shape	V-groove

Type	Designation	Item no.
FE 4R 3.2 MM/0.12 INCH VIOLET	Drive roll set, 37 mm, 4 rolls, V-groove for steel, stainless steel, nickel and copper alloys	092-002770-00032
ON SET WF 2,0-3,2mm eFeed	Wire feed set for rolls with diameters greater than 1.6 mm	092-019404-00000

- ▶ For using rolls with a diameter of more than 1.6 mm, the SET WF 2.0–3.2 mm eFeed (092-019404-00000) option is necessary!
- ▶ Four roll set

-DV X-

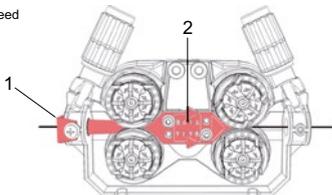


- You will find further information in the operating instructions.
- Contact our EWM Service Hotline on +49 2680 181-290 or send an email to service@ewm-group.com if you have any questions.
- Wire feed roll support consumables set for eFeed
- Includes 4 clamping adapters and all necessary add-ons.

Type	Designation	Item no.
DV X	Wire feed roll mount set	092-002960-E0000

Wire guide set

eFeed

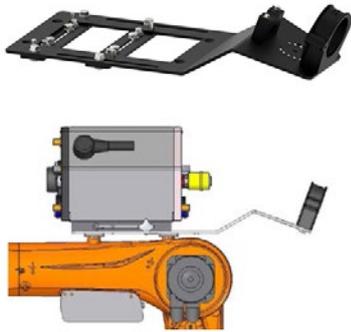


Version	Inlet guide set	Wire feed set for rolls up to 1.6 mm in diameter

Type	Designation	Item no.
SET IG 4x4 1.6mm BL	Inlet guide set	092-002780-00000
SET WF 1,6mm eFeed	Wire feed set for rolls up to 1.6 mm in diameter	092-002774-00000
ON SET WF 2,0-3,2mm eFeed	Wire feed set for rolls with diameters greater than 1.6 mm	092-019404-00000

Mounting consoles Conventional

-MONTAGE CONSOLE ROB5 XR
STANDARD-



- Console that makes installation onto the robot easy, includes strain relief for the intermediate hose package
- The console is suitable for almost all standard robots thanks to its intelligent design
- The length and width mounting can be adapted to the respective robot
- Console for mounting M drive 4 ROB 5, F drive ROB 5, left or right versions
- For mounting on the robot axis
- Fits on the 3rd robot axis
- Insulated assembly

Type	Designation	Item no.
MONTAGE CONSOLE ROB5 XR UNIVERSAL	Universal mounting console for ROB 5 wire feeder on the 3rd robot axis	092-003147-00000

► Other robot-specific mounting consoles available on request!

Mounting consoles Conventional

-MONTAGE CONSOLE ROB3/ROB5 2 DV-



- Console for simple mounting on robot, with strain relief for intermediate hose package
- Fastening holes (drill pattern) for different robot types already available
- Console for mounting two drive 4 ROB 3 units or ROB 5, one left version and one right version
- For mounting on the robot axis
- Insulated assembly

Type	Designation	Item no.
MONTAGE CONSOLE ROB3/ ROB5 2 DV	Assembly console for two wire feed units on robot	092-002406-00000

► Other robot-specific mounting consoles available on request!

-ON HPP ROB5 XR-

Type	Designation	Item no.
ON HPP ROB5 XR	Hose package stabilisation for Rob 5 univer- sal mounting console	092-003218-00000

Overview of consoles and wire feeders for standard robots

Robot manufacturer	Robot types	Load	Wire feeder	Item number
ABB	IRB 1600-6/1.2	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-002562-00000
ABB	IRB 1600-10/1.2	10 kg	M drive 4 Rob 5 XQ R LI/RE	092-002562-00000
ABB	IRB 1600-6/1.45	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-002562-00000
ABB	IRB 1600-10/1.45	10 kg	M drive 4 Rob 5 XQ R LI/RE	092-002562-00000
ABB	IRB 2600-10/1.85	10 kg	M drive 4 Rob 5 XQ R LI/RE	092-003232-00000
ABB	IRB 2600-12/1.65	12 kg	M drive 4 Rob 5 XQ R LI/RE	092-003232-00000
ABB	IRB 2600-12/1.85	12 kg	M drive 4 Rob 5 XQ R LI/RE	092-003232-00000
ABB	IRB 2600-20/1.65	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003232-00000
ABB	IRB 4600-20/2.5	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003228-00000
ABB	IRB 4600-40/2.55	40 kg	M drive 4 Rob 5 XQ R LI/RE	092-003228-00000
ABB	IRB 4600-45/2.05	45 kg	M drive 4 Rob 5 XQ R LI/RE	092-003228-00000
ABB	IRB 4600-60/2.05	60 kg	M drive 4 Rob 5 XQ R LI/RE	092-003228-00000
ABB	IRB 1410	5 kg	M drive 4 Rob 5 XQ R LI/RE	092-003227-00000
ABB	IRB 2400L	7 kg	M drive 4 Rob 5 XQ R LI/RE	On request
ABB	IRB 2400/10	10 kg	M drive 4 Rob 5 XQ R LI/RE	092-003227-00000
ABB	IRB 2400/16	16 kg	M drive 4 Rob 5 XQ R LI/RE	092-003227-00000
COMAU	NS-12-1.85	12 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
COMAU	NS-16-1.65	16 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
COMAU	NJ-16-3.1	16 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
COMAU	NJ-40-2.5	40 kg	M drive 4 Rob 5 XQ R LI/RE	On request
COMAU	NJ-60-2.2	60 kg	M drive 4 Rob 5 XQ R LI/RE	On request
COMAU	RACER 999	7 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
FANUC	ARC Mate 50iD	7 kg	*	*
FANUC	ARC Mate 50iD/7L	7 kg	*	*
FANUC	ARC Mate 0iB	3 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
FANUC	ARC Mate 100iB	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
FANUC	M-710iC/20L	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
FANUC	R-2000iA		M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
Hyundai	HA006B	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KAWASAKI	RA005L	5 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KAWASAKI	RA006L	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KAWASAKI	RA010L	10 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KAWASAKI	RA010N	10 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KAWASAKI	RA020N	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KAWASAKI	RS020N	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 6 R1820	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 6 R1820 HP	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 6 R1840-2	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 8 R1620	8 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 8 R1620 HP	8 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 8 R1640-2	8 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 8 R2010-2	8 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 10 R1420	10 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 10 R1420 HP	10 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 10 R1440-2	10 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 12 R1810-2	12 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 16 R1610-2	16 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 16 R2010-2	16 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 20 R1810-2	20 kg	M drive 4 Rob 5 XQ R LI/RE	On request
KUKA	KR 20 R3100	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-S04023-04913
KUKA	KR 22 R1610-2	22 kg	M drive 4 Rob 5 XQ R LI/RE	On request
KUKA	KR 5	5 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 16	16 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000

Robot manufacturer	Robot types	Load	Wire feeder	Item number
KUKA	KR 16-2	16 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 30 L16	16 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
KUKA	KR 50 R2500	50 kg	M drive 4 Rob 5 XQ R LI/RE	092-004384-00000
KUKA	KR 90 R3100 extra	90 kg	M drive 4 Rob 5 XQ R LI/RE	092-004023-00000
Motoman	AR700	8 kg	M drive 4 Rob 5 XQ R LI/RE	**
Motoman	AR900	7 kg	M drive 4 Rob 5 XQ R LI/RE	**
Motoman	MC2000II	50 kg	M drive 4 Rob 5 XQ R LI/RE	On request
Motoman	K6-C	6 kg	M drive 4 Rob 5 XQ R LI/RE	On request
Motoman	HP20	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
Motoman	HP20D-6	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
Motoman	HP20D	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
Motoman	HP20RD	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
Motoman	HP20F	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
Motoman	HP20D-CR7	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
Motoman	UP20	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003147-00000
Motoman	MH5	5 kg	M drive 4 Rob 5 XQ R LI/RE	*
Motoman	MH5L	5 kg	M drive 4 Rob 5 XQ R LI/RE	*
Motoman	MH6	6 kg	M drive 4 Rob 5 XQ R LI/RE	**
Motoman	MH6-10	10 kg	M drive 4 Rob 5 XQ R LI/RE	**
Motoman	MH6S	6 kg	M drive 4 Rob 5 XQ R LI/RE	**
Motoman	MH6S-10	10 kg	M drive 4 Rob 5 XQ R LI/RE	**
Motoman	MH50	50 kg	M drive 4 Rob 5 XQ R LI/RE	092-003244-00000
Motoman	MH50-20	20 kg	M drive 4 Rob 5 XQ R LI/RE	092-003244-00000
Motoman	MH50-35	35 kg	M drive 4 Rob 5 XQ R LI/RE	092-003244-00000
REIS	RV10-6	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-003245-00000
REIS	RV20-6	6 kg	M drive 4 Rob 5 XQ R LI/RE	092-003245-00000
REIS	RV20-16	16 kg	M drive 4 Rob 5 XQ R LI/RE	092-003245-00000
UNIVERSAL ROBOTS	UR5e	5 kg	*	*
UNIVERSAL ROBOTS	UR10e	10 kg	*	*
UNIVERSAL ROBOTS	UR16e	16 kg	*	*

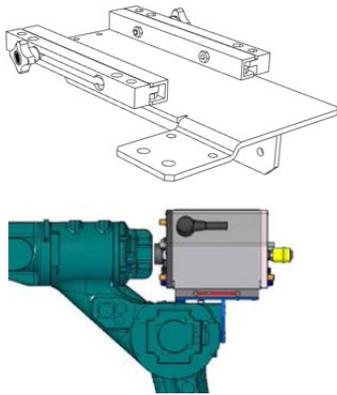
*Robot too small or poor mounting options for connecting a wire feeder! Console and wire feeder should be placed near the robot. Alternatively, use the external ON DV CAP ROB wire spool support.

**Robot potentially too small or poor mounting options for connecting a wire feeder! Testing required depending on the wire feeder, or use an ON DV CAP ROB external wire spool support.

Consoles for standard robots may need to be amended, expanded or used with additional adapter plates on-site.

Mounting consoles

Hollow wrist



- Mounting console for hollow wrist robot
- Console that makes installation behind the robot axis easy, includes strain relief for the intermediate hose package
- Easy, optimal wire feeder positioning thanks to insulated sliding rails
- The wire feeder can be installed without tools using star grips
- The wire feeder can be easily pushed back to facilitate exchanging the welding torch or liner
- The wire feeder is also secured with limit using a groove
- Insulated assembly

H

- ▶ An overview of consoles for hollow wrist robots can be found on the next pages.
- ▶ Other robot-specific mounting consoles available on request!

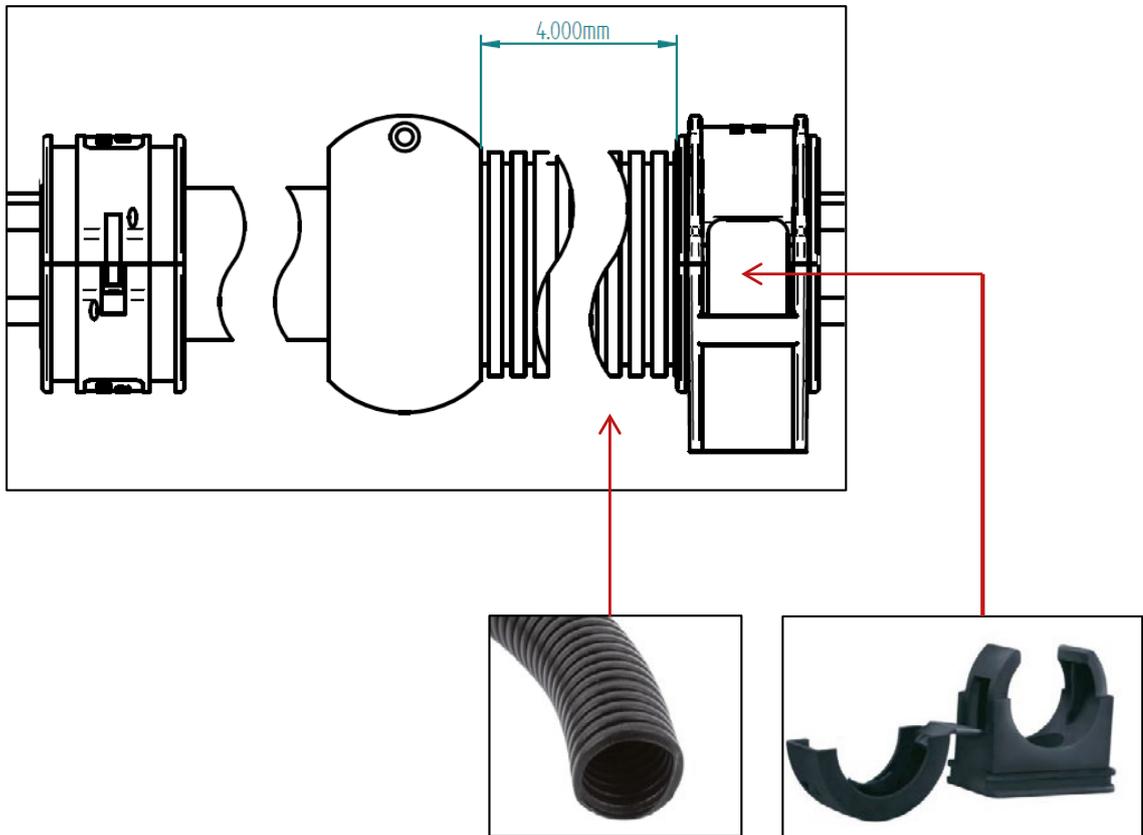
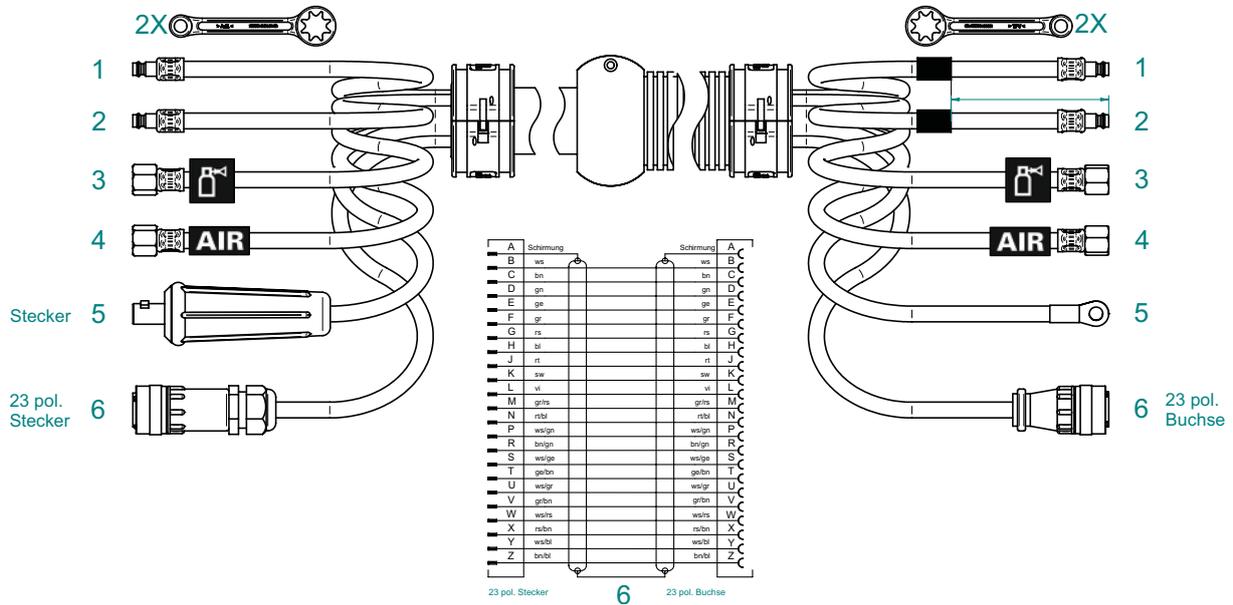
Overview of consoles and wire feeders for hollow wrist robots

Robot manufacturer	Robot types	Load	Wire feeder	Item number
ABB	IRB 1600ID	4 kg	M drive 4 Rob 5 HW XQ R LI	092-003230-00000
ABB	IRB 1620ID		M drive 4 Rob 5 HW XQ R LI	092-003229-00000
ABB	IRB 1660ID-4/1.55	4 kg	M drive 4 Rob 5 HW XQ R LI	092-003230-00000
ABB	IRB 1660ID-6/1.55	6 kg	M drive 4 Rob 5 HW XQ R LI	092-003230-00000
ABB	IRB 2600ID-8/2.0	8 kg	M drive 4 Rob 5 HW XQ R LI	092-003231-00000
ABB	IRB 2600ID-15/1.85	15 kg	M drive 4 Rob 5 HW XQ R LI	092-003231-00000
ABB	IRB 1520ID-4/1.5	4 kg	M drive 4 Rob 5 HW XQ R LI	092-003229-00000
COMAU	Arc4-5-1.95	5 kg	On request	On request
COMAU	SMART5	5 kg	M drive 4 Rob 5 HW XQ R LI	092-003233-00000
FANUC	ARC Mate 100iC/6L	7 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	ARC Mate 100iC/7L	7 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	ARC Mate 100iC/8L	8 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	ARC Mate 100iC/10L	10 kg	On request	On request
FANUC	ARC Mate 100iC/10S	10 kg	M drive 4 Rob 5 HW XQ R LI	092-003438-00000
FANUC	ARC Mate 100iC/12	12 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	ARC Mate 100iC/12S	12 kg	M drive 4 Rob 5 HW XQ R LI	092-003235-00000
FANUC	ARC Mate 100iD	12 kg	M drive 4 Rob 5 HW XQ R LI	092-003745-00000
FANUC	ARC Mate 100iD/8L	8 kg	M drive 4 Rob 5 HW XQ R LI	092-003745-00000
FANUC	ARC Mate 100iD/10L	10 kg	M drive 4 Rob 5 HW XQ R LI	092-003745-00000
FANUC	ARC Mate 120iC	20 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	ARC Mate 120iC/10L	12 kg	M drive 4 Rob 5 HW XQ R LI	092-003745-00000
FANUC	ARC Mate 120iC/12L	12 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	ARC Mate 120iD	25 kg	M drive 4 Rob 5 HW XQ R LI	092-003745-00000
FANUC	ARC Mate 120iD/12L	12 kg	M drive 4 Rob 5 HW XQ R LI	092-003745-00000
FANUC	ARC Mate 100iC	10 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	M-10ia/6L	7 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	M-10iA/7L	7 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	M-20iA/12L	12 kg	M drive 4 Rob 5 HW XQ R LI	092-003208-00001
FANUC	M-710iC/12L	20 kg	M drive 4 Rob 5 HW XQ R RE	092-003234-00000
Kawasaki	BA006L	6 kg	M drive 4 Rob 5 HW XQ R LI	092-003991-00000
Kawasaki	BA006N	6 kg	M drive 4 Rob 5 HW XQ R LI	092-003991-00000
Kawasaki	BA013L	13 kg	M drive 4 Rob 5 HW XQ R LI	092-004780-00000
KUKA	KR 6 R1440-2 arc HW E	6 kg	M drive 4 Rob 5 HW XQ R LI	092-004394-00000
KUKA	KR 6 R1820 arc HW	6 kg	M drive 4 Rob 5 HW XQ R LI	092-003241-00000
KUKA	KR 6 R1840-2 arc HW	6 kg	M drive 4 Rob 5 HW XQ R LI	092-003241-00000
KUKA	KR 6 R2100-2 arc HW E	6 kg	M drive 4 Rob 5 HW XQ R LI	092-004394-00000
KUKA	KR 8 R1420 arc HW	8 kg	M drive 4 Rob 5 HW XQ R LI	092-003241-00000
KUKA	KR 8 R1440-2 arc HW	8 kg	M drive 4 Rob 5 HW XQ R LI	092-003241-00000
KUKA	KR 8 R1620 arc HW	8 kg	M drive 4 Rob 5 HW XQ R LI	092-003856-00000
KUKA	KR 8 R1640-2 arc HW	8 kg	M drive 4 Rob 5 HW XQ R LI	092-003241-00000
KUKA	KR 8 R2100 arc HW	8 kg	M drive 4 Rob 5 HW XQ R LI	092-003856-00000
KUKA	KR 5 arc HW	5 kg	M drive 4 Rob 5 HW XQ R LI	092-003238-00000
KUKA	KR 8 R2100-2 arc HW	8 kg	M drive 4 Rob 5 HW XQ R LI	092-003856-00000
KUKA	KR 16 arc HW	16 kg	M drive 4 Rob 5 HW XQ R LI	092-004297-00000
KUKA	KR 16 L8 arc HW	8 kg	M drive 4 Rob 5 HW XQ R LI	092-004297-00000
Motoman	AR1440	12 kg	M drive 4 Rob 5 HW XQ R LI	092-003209-00000
Motoman	AR1730	25 kg	M drive 4 Rob 5 HW XQ R LI	092-003209-00000
Motoman	AR2010	12 kg	M drive 4 Rob 5 HW XQ R LI	092-003209-00000
Motoman	AR3120	20 kg	M drive 4 Rob 5 HW XQ R LI	092-004029-00000
Motoman	MA1440	6 kg	M drive 4 Rob 5 HW XQ R LI	092-003209-00000
Motoman	EA1400	3 kg	M drive 4 Rob 5 HW XQ R LI	092-003242-00000
Motoman	EA1800N	15 kg	M drive 4 Rob 5 HW XQ R LI	On request
Motoman	EA1900	3 kg	M drive 4 Rob 5 HW XQ R LI	092-S03209-04625

Motoman	MA1400	3 kg	M drive 4 Rob 5 HW XQ R LI	092-003242-00000
Motoman	MA1550	3 kg	M drive 4 Rob 5 HW XQ R LI	092-003242-00000
Motoman	MA1800	15 kg	M drive 4 Rob 5 HW XQ R LI	092-003243-00000
Motoman	MA1900	3 kg	M drive 4 Rob 5 HW XQ R LI	092-003243-00000
Motoman	MA2010	10 kg	M drive 4 Rob 5 HW XQ R LI	092-003209-00000
Motoman	VA1400	3 kg	M drive 4 Rob 5 HW XQ R LI	092-003242-00000
Motoman	SSA2000	3 kg	M drive 4 Rob 5 HW XQ R LI	On request
Motoman	MH24	24 kg	M drive 4 Rob 5 HW XQ R LI	092-003209-00000
REIS	RV20-6HW	6 kg	On request	On request

Intermediate hose packages

Contrary to the previous versions, the new intermediate hose packages have a 23-pole Burndy plug that can be used to connect wire feeders and power sources. Another difference is the two-part outer hose (corrugated hose and standard protective hose). The length of the corrugated hose protection is always 4 m. The intermediate hose package can be installed easily by clipping it to the console, robot and power source. The intermediate hose packages are also available as complete corrugated hose versions or without the respective protective hose.



Item numbers and calculation of prices for robot intermediate hose packages of the XR series

An item code is needed to order robot intermediate hose packages. It forms the final five digits of the item number and corresponds to the configuration of the hose package. The basic price refers to a hose package length of 1 metre. The maximum length of the hose package is 20 metres.

Codes for robot intermediate hose packages

Basic item number: 092-003114-**ABCDD**

Position in item number	Code	Designation	Additional charges	Surcharge per metre 2 m or longer
A	0	70 mm ²	-	-
	1	95 mm ²	€X	€X
B	0	Gas-cooled	-	-
	1	Water-cooled	€X	€X
C	0	No protective hose	-	-
	2	Ribbed protective hose	€X	€X
	3	4 m ribbed protective hose Remaining length is standard protective hose	€X	€X
DD	01–20 m	Indication of length (1 m included in basic price) Intermediate hose package of 2 m or longer		€X

All intermediate hose packages include a 23-pole control cable.

Sample calculations:

95 mm² intermediate hose package, water-cooled, 4 m ribbed protective hose + 6 m standard protective hose, 10 m

Position in item number	Code	Designation	Additional charges	Surcharge per metre 2 m or longer
A	1	95 mm ²	€X	€X
B	1	Water-cooled	€X	€X
C	3	4 m ribbed protective hose	€X	€X
		Remaining length is standard protective hose		
DD	10	10 m length	€X	€X
Total surcharges				€X
Basic price				€X
092-003114- 1 1 3 10		Total price		€X

70 mm² intermediate hose package, gas-cooled, 5 m ribbed protective hose, 5 m

Position in item number	Code	Designation	Additional charges	Surcharge per metre 2 m or longer
A	0	70 mm ²	-	-
B	0	Gas-cooled	-	-
C	2	5 m ribbed protective hose	€X	€X
DD	05	5 m length	€X	€X
Total surcharges				€X
Basic price				€X
092-003114- 0 0 2 05		Total price		€X

If a continuous ribbed protective hose package is required, the code for position C is always 2.

Intermediate hose packages

-70QMM GRS 13 POL XR-



- The gas hoses are diffusion-proof according to EN 559
- Highly flexible and durable
- Intermediate hose package, 23-pole
- 4-m ribbed protective hose, remaining length is standard protective hose
- Secure load connection on the wire feeder thanks to the screw connection
- Resistant to even high lateral and torsion forces

Type	Designation	Length	Item no.
70QMM GRS 23 POL XR 6M	Robot intermediate hose package, gas cooled, ribbed/standard hose, 23-pole	6m	092-003114-00306
70QMM GRS 23 POL XR 8M	Robot intermediate hose package, gas cooled, ribbed/standard hose, 23-pole	8m	092-003114-00308
70QMM GRS 23 POL XR 10M	Robot intermediate hose package, gas cooled, ribbed/standard hose, 23-pole	10m	092-003114-00310

-70QMM WRS 23 POL XR-



- The gas hoses are diffusion-proof according to EN 559
- Highly flexible and durable
- Intermediate hose package, 23-pole
- 4-m ribbed protective hose, remaining length is standard protective hose
- Secure load connection on the wire feeder thanks to the screw connection
- Resistant to even high lateral and torsion forces

Type	Designation	Length	Item no.
70QMM WRS 23 POL XR 5M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	5m	092-003114-01305
70QMM WRS 23 POL XR 6M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	6m	092-003114-01306
70QMM WRS 23 POL XR 7M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	7m	092-003114-01307
70QMM WRS 23 POL XR 8M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	8m	092-003114-01308
70QMM WRS 23 POL XR 10M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	10m	092-003114-01310
70QMM WRS 23 POL XR 15M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	15m	092-003114-01315
70QMM WRS 23 POL XR 20M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	20m	092-003114-01320

-95QMM WRS 13 POL XR-



- The gas hoses are diffusion-proof according to EN 559
- Highly flexible and durable
- Intermediate hose package, 23-pole
- 4-m ribbed protective hose, remaining length is standard protective hose
- Secure load connection on the wire feeder thanks to the screw connection
- Resistant to even high lateral and torsion forces

Type	Designation	Length	Item no.
95QMM WRS 23 POL XR 5M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	5m	092-003114-11305
95QMM WRS 23 POL XR 6M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	6m	092-003114-11306
95QMM WRS 23 POL XR 8M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	8m	092-003114-11308
95QMM WRS 23 POL XR 10M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	10m	092-003114-11310
95QMM WRS 23 POL XR 11M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	11m	092-003114-11311
95QMM WRS 23 POL XR 12M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	12m	092-003114-11312
95QMM WRS 23 POL XR 15M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	15m	092-003114-11315
95QMM WRS 23 POL XR 20M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	20m	092-003114-11320
95QMM WRS 23 POL XR 25M	Robot intermediate hose package, water cooled, ribbed/standard hose, 23-pole	25m	092-003114-11325

-70QMM GR 23 POL XR-



- The gas hoses are diffusion-proof according to EN 559
- Highly flexible and durable
- Intermediate hose package, 23-pole
- Ribbed protective hose
- Secure load connection on the wire feeder thanks to the screw connection
- Resistant to even high lateral and torsion forces

Type	Designation	Length	Item no.
70QMM GR 23 POL XR 2M	Robot intermediate hose package, gas-cooled, ribbed hose, 23-pole	2m	092-003114-00202
70QMM GR 23 POL XR 3M	Robot intermediate hose package, gas-cooled, ribbed hose, 23-pole	3m	092-003114-00203
70QMM GR 23 POL XR 4M	Robot intermediate hose package, gas-cooled, ribbed hose, 23-pole	4m	092-003114-00204
70QMM GR 23 POL XR 5M	Robot intermediate hose package, gas-cooled, ribbed hose, 23-pole	5m	092-003114-00205
70QMM GR 23 POL XR 7M	Robot intermediate hose package, gas-cooled, ribbed hose, 23-pole	7m	092-003114-00207
70QMM GR 23 POL XR 10M	Robot intermediate hose package, gas-cooled, ribbed hose, 23-pole	10m	092-003114-00210

Intermediate hose packages

-70QMM WR 23 POL XR-



- The gas hoses are diffusion-proof according to EN 559
- Highly flexible and durable
- Intermediate hose package, 23-pole
- Ribbed protective hose
- Secure load connection on the wire feeder thanks to the screw connection
- Resistant to even high lateral and torsion forces

Type	Designation	Length	Item no.
70QMM WR 23 POL XR 2M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	2m	092-003114-01202
70QMM WR 23 POL XR 3M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	3m	092-003114-01203
70QMM WR 23 POL XR 4M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	4m	092-003114-01204
70QMM WR 23 POL XR 5M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	5m	092-003114-01205
70QMM WR 23 POL XR 7M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	7m	092-003114-01207
70QMM WR 23 POL XR 8M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	8m	092-003114-01208
70QMM WR 23 POL XR 10M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	10m	092-003114-01210
70QMM WR 23 POL XR 13M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	13m	092-003114-01213
70QMM WR 23 POL XR 15M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	15m	092-003114-01215
70QMM WR 23 POL XR 20M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	20m	092-003114-01220

-95QMM WR 23 POL XR-



- The gas hoses are diffusion-proof according to EN 559
- Highly flexible and durable
- Intermediate hose package, 23-pole
- Ribbed protective hose
- Secure load connection on the wire feeder thanks to the screw connection
- Resistant to even high lateral and torsion forces

Type	Designation	Length	Item no.
95QMM WR 23 POL XR 2M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	2m	092-003114-11202
95QMM WR 23 POL XR 3M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	3m	092-003114-11203
95QMM WR 23 POL XR 4M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	4m	092-003114-11204
95QMM WR 23 POL XR 5M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	5m	092-003114-11205
95QMM WR 23 POL XR 6M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	6m	092-003114-11206
95QMM WR 23 POL XR 7M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	7m	092-003114-11207
95QMM WR 23 POL XR 8M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	8m	092-003114-11208
95QMM WR 23 POL XR 9M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	9m	092-003114-11209
95QMM WR 23 POL XR 10M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	10m	092-003114-11210
95QMM WR 23 POL XR 12M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	12m	092-003114-11212
95QMM WR 23 POL XR 13M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	13m	092-003114-11213
95QMM WR 23 POL XR 15M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	15m	092-003114-11215
95QMM WR 23 POL XR 20M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	20m	092-003114-11220
95QMM WR 23 POL XR 25M	Robot intermediate hose package, water-cooled, ribbed hose, 23-pole	25m	092-003114-11225

-95QMM WOS 23 POL XR-



- The gas hoses are diffusion-proof according to EN 559
- Highly flexible and durable
- Intermediate hose package, 23-pole
- Without protective hose
- Secure load connection on the wire feeder thanks to the screw connection
- Resistant to even high lateral and torsion forces

Type	Designation	Length	Item no.
95QMM WOS 23 POL XR 6M	Robot intermediate hose package, water-cooled, without protective hose, 23-pole	6m	092-003114-11006
95QMM WOS 23 POL XR 7M	Robot intermediate hose package, water-cooled, without protective hose, 23-pole	7m	092-003114-11007
95QMM WOS 23 POL XR 9M	Robot intermediate hose package, water-cooled, without protective hose, 23-pole	9m	092-003114-11009
95QMM WOS 23 POL XR 10M	Robot intermediate hose package, water-cooled, without protective hose, 23-pole	10m	092-003114-11010
95QMM WOS 23 POL XR 12M	Robot intermediate hose package, water-cooled, without protective hose, 23-pole	12m	092-003114-11012
95QMM WOS 23 POL XR 14M	Robot intermediate hose package, water-cooled, without protective hose, 23-pole	14m	092-003114-11014
95QMM WOS 23 POL XR 20M	Robot intermediate hose package, water-cooled, without protective hose, 23-pole	20m	092-003114-11020

Intermediate hose packages

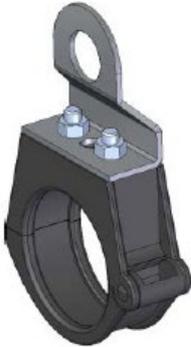
Accessories

-ON ZWIPA-CONNECTION-



Type	Designation	Item no.
ON ZWIPA-CONNECTION	Retrofit option, third-party intermediate hose package, strain relief	094-007890-00000

-ON ZWIPA CONNECTION XR-



Type	Designation	Item no.
ON ZWIPA CONNECTION XR	Holder for XR robot intermediate hose package as a retrofitting option	092-003219-00000

-GH 2x1/4 XR-



Type	Designation	Item no.
GH 2x1/4 XR 3m	G1/4 IG/AG gas hose, extension for XR robot intermediate hose package	092-003220-00000
GH 2x1/4 XR 5m	G1/4 IG/AG gas hose, extension for XR robot intermediate hose package	092-003220-00001
GH 2x1/4 XR 10m	G1/4 IG/AG gas hose, extension for XR robot intermediate hose package	092-003220-00002

-LS KV D=60MM-



Type	Designation	Item no.
LSH, 60 mm	Leather protective hose	094-020777-00000

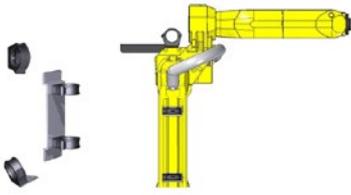
► Minimum order quantity: 5 m

Intermediate hose packages

Spare parts

Type	Designation	Item no.
25X0,25DP/ ÖLFLEX-ROBOT/11,1MM	Cables	094-008970-00000
TB CuZn G1/4x6mm	Hose nipples	094-000999-00000
23POLE/M/PLUG	Cable connector	094-007440-00000
UTG18ST	Strain relief	094-012884-10000
SM20M1TK6 0.35-0.50QMM	Pin contact	024-000433-00000
UTG618 23SN	Cable plug, socket contact, 23-pole, crown nut	094-007448-00000
23POLE/STRAIN RELIEF	Protective cap with strain relief	094-007442-00000
SC20M1TK6 0.35-0.50QMM	Socket contact	024-000434-00000
G DI6X3 R	Fabric hose, red	094-025909-00000
G DI6X3 B	Fabric hose, blue	094-025910-00000
13,0MM ID=13,0MM/ LÄNGE=17MM/D=	Hose sleeve	094-011497-00000
SK104,5x25x15	Protective cap	094-012079-00000
6MM/L=32MM/D=9MM	Hose nipple	094-002068-00000
APH N/AR/CO2 4,0X3,5MM	Argon hose	094-011496-00000
G1/4"R SW 17 Ø9,5mm	Crown nuts	094-000044-00000
G1/4"X3,5-DIN8542/MS58/ LW3,5MM	Connecting nipple	094-000045-00000
SH DI=11,5X17	Hose sleeve	094-018488-00000

Assembly sets



INTERMEDIATE HOSE PACKAGE MOUNTING KIT

- Kits to mount intermediate hose packages onto robots
- Versions for other robot types available upon request.

Robot manufacturer	Robot types	Version	Load	Item number
ABB	IRB 1600-6/1.2	Standard	6 kg	On request
ABB	IRB 1600-10/1.2	Standard	10 kg	On request
ABB	IRB 1600-6/1.45	Standard	6 kg	On request
ABB	IRB 1600-10/1.45	Standard	10 kg	On request
ABB	IRB 2600-10/1.85	Standard	10 kg	On request
ABB	IRB 2600-12/1.65	Standard	12 kg	On request
ABB	IRB 2600-12/1.85	Standard	12 kg	On request
ABB	IRB 2600-20/1.65	Standard	20 kg	On request
ABB	IRB 4600-20/2.5	Standard	20 kg	On request
ABB	IRB 4600-40/2.55	Standard	40 kg	On request
ABB	IRB 4600-45/2.05	Standard	45 kg	On request
ABB	IRB 4600-60/2.05	Standard	60 kg	On request
ABB	IRB 1410	Standard	5 kg	On request
ABB	IRB 2400L	Standard	7 kg	On request
ABB	IRB 2400/10	Standard	10 kg	On request
ABB	IRB 2400/16	Standard	16 kg	On request
ABB	IRB 1600ID	Hollow wrist	4 kg	092-002569-00000
ABB	IRB 1620ID	Hollow wrist		On request
ABB	IRB 1660ID-4/1.55	Hollow wrist	4 kg	092-004115-00000
ABB	IRB 1660ID-6/1.55	Hollow wrist	6 kg	092-004115-00000
ABB	IRB 2600ID-8/2.0	Hollow wrist	8 kg	092-003056-00000
ABB	IRB 2600ID-15/1.85	Hollow wrist	15 kg	092-003056-00000
ABB	IRB 1520ID-4/1.5	Hollow wrist	4 kg	092-007910-00000
COMAU	NS-12-1.85	Standard	12 kg	On request
COMAU	NS-16-1.65	Standard	16 kg	On request
COMAU	NJ-16-3.1	Standard	16 kg	On request
COMAU	NJ-40-2.5	Standard	40 kg	On request
COMAU	NJ-60-2.2	Standard	60 kg	On request
COMAU	RACER 999	Standard	7 kg	On request
COMAU	Arc4-5-1.95	Hollow wrist	5 kg	On request
COMAU	SMART5 ARC4	Hollow wrist	5 kg	092-003072-00000
FANUC	ARC Mate 50iD	Standard	7 kg	On request
FANUC	ARC Mate 50iD/7L	Standard	7 kg	On request
FANUC	ARC Mate 0iB	Standard	3 kg	On request
FANUC	ARC Mate 100iB	Standard	6 kg	On request
FANUC	M-710iC/20L	Standard	20 kg	092-003246-00000
FANUC	R-2000iA	Standard		On request
FANUC	ARC Mate 100iC/6L	Hollow wrist	7 kg	092-002567-00000
FANUC	ARC Mate 100iC/7L	Hollow wrist	7 kg	On request
FANUC	ARC Mate 100iC/8L	Hollow wrist	8 kg	092-008775-00000
FANUC	ARC Mate 100iC/10L	Hollow wrist	10 kg	On request
FANUC	ARC Mate 100iC/10S	Hollow wrist	10 kg	092-003439-00000
FANUC	ARC Mate 100iC/12	Hollow wrist	12 kg	092-002567-00000
FANUC	ARC Mate 100iC/12S	Hollow wrist	12 kg	092-003247-00000
FANUC	ARC Mate 100iD	Hollow wrist	12 kg	092-003841-00000
FANUC	ARC Mate 100iD/8L	Hollow wrist	8 kg	092-003841-00000
FANUC	ARC Mate 100iD/10L	Hollow wrist	10 kg	092-003841-00000
FANUC	ARC Mate 120iC	Hollow wrist	20 kg	092-002581-00000
FANUC	ARC Mate 120iC/10L	Hollow wrist	12 kg	On request

FANUC	ARC Mate 120iC/12L	Hollow wrist	12 kg	092-002581-00000
FANUC	ARC Mate 120iD	Hollow wrist	25 kg	092-003841-00000
FANUC	ARC Mate 120iD/12L	Hollow wrist	12 kg	092-003841-00000
FANUC	ARC Mate 100iC	Hollow wrist	10 kg	092-002567-00000
FANUC	M-10iA/6L	Hollow wrist	7 kg	092-002567-00000
FANUC	M-10iA/7L	Hollow wrist	7 kg	092-002567-00000
FANUC	M-20iA/12L	Hollow wrist	12 kg	092-002581-00000
FANUC	M-710iC/12L	Hollow wrist	20 kg	092-S03246-04771
Hyundai	HA006B	Standard	6 kg	On request
Hyundai	HH010L	Standard	10 kg	092-S00000-04866
Kawasaki	RA005L	Standard	5 kg	On request
Kawasaki	RA006L	Standard	6 kg	On request
Kawasaki	RA010L	Standard	10 kg	092-004427-00000
Kawasaki	RA010N	Standard	10 kg	On request
Kawasaki	RA020N	Standard	20 kg	On request
Kawasaki	RS020N	Standard	20 kg	On request
Kawasaki	BA006L	Hollow wrist	6 kg	092-008787-00000
Kawasaki	BA006N	Hollow wrist	6 kg	092-008787-00000
Kawasaki	BA013L	Hollow wrist	13 kg	092-004781-00000
KUKA	KR 6 R1820	Standard	6 kg	On request
KUKA	KR 6 R1820 HP	Standard	6 kg	On request
KUKA	KR 6 R1840-2	Standard	6 kg	092-004199-00000
KUKA	KR 8 R1620	Standard	8 kg	On request
KUKA	KR 8 R1620 HP	Standard	8 kg	On request
KUKA	KR 8 R2010-2	Standard	8 kg	092-003910-00000
KUKA	KR 10 R1420	Standard	10 kg	092-003248-00000
KUKA	KR 10 R1420 HP	Standard	10 kg	092-003248-00000
KUKA	KR 10 R1440-2	Standard	10 kg	092-004199-00000
KUKA	KR 12 R1810-2	Standard	12 kg	On request
KUKA	KR 16 R1610-2	Standard	16 kg	On request
KUKA	KR 16 R2010-2	Standard	16 kg	092-003910-00000
KUKA	KR 20 R1810-2	Standard	20 kg	On request
KUKA	KR 20 R3100	Standard	20 kg	092-004022-00000
KUKA	KR 22 R1610-2	Standard	22 kg	On request
KUKA	KR 5	Standard	5 kg	On request
KUKA	KR 16	Standard	16 kg	On request
KUKA	KR 16-2	Standard	16 kg	On request
KUKA	KR 30 L16	Standard	16 kg	On request
KUKA	KR 50 R2500	Standard	50 kg	On request
KUKA	KR 90 R3100 extra	Standard	90 kg	092-004022-00000
KUKA	KR 120 R3100-2	Standard	120 kg	On request
KUKA	KR 6 R1440-2 arc HW E	Hollow wrist	6 kg	092-004199-00000
KUKA	KR 6 R1820 arc HW	Hollow wrist	6 kg	092-003248-00000
KUKA	KR 6 R1840-2 arc HW	Hollow wrist	6 kg	092-004199-00000
KUKA	KR 6 R2100-2 arc HW E	Hollow wrist	6 kg	092-004199-00000
KUKA	KR 8 R1420 arc HW	Hollow wrist	8 kg	092-003248-00000
KUKA	KR 8 R1440-2 arc HW	Hollow wrist	8 kg	092-004199-00000
KUKA	KR 8 R1620 arc HW	Hollow wrist	8 kg	092-003263-00000
KUKA	KR 8 R1640-2 arc HW	Hollow wrist	8 kg	092-004199-00000
KUKA	KR 8 R2100 arc HW	Hollow wrist	8 kg	092-003910-00000
KUKA	KR 5 arc HW	Hollow wrist	5 kg	092-002510-00000
KUKA	KR 8 R2100-2 arc HW	Hollow wrist	8 kg	On request
KUKA	KR 16 arc HW	Hollow wrist	16 kg	092-004296-00000
KUKA	KR 16 L8 arc HW	Hollow wrist	8 kg	092-004296-00000
Motoman	AR700	Standard	8 kg	On request
Motoman	AR900	Standard	7 kg	On request
Motoman	MC2000II	Standard	50 kg	On request

Robot manufacturer	Robot types	Version	Load	Item number
Motoman	K6-C	Standard	6 kg	On request
Motoman	HP20	Standard	20 kg	On request
Motoman	HP20D-6	Standard	6 kg	On request
Motoman	HP20D	Standard	20 kg	On request
Motoman	HP20RD	Standard	20 kg	On request
Motoman	HP20F	Standard	20 kg	On request
Motoman	HP20D-CR7	Standard	20 kg	On request
Motoman	UP20	Standard	20 kg	092-003452-00000
Motoman	MH5	Standard	5 kg	On request
Motoman	MH5L	Standard	5 kg	On request
Motoman	MH6	Standard	6 kg	On request
Motoman	MH6-10	Standard	10 kg	On request
Motoman	MH6S	Standard	6 kg	On request
Motoman	MH6S-10	Standard	10 kg	On request
Motoman	MH50	Standard	50 kg	092-003378-00000
Motoman	MH50-20	Standard	20 kg	092-003378-00000
Motoman	MH50-35	Standard	35 kg	092-003378-00000
Motoman	AR1440	Hollow wrist	12 kg	092-003858-00000
Motoman	AR1730	Hollow wrist	25 kg	092-004135-00000
Motoman	AR2010	Hollow wrist	12 kg	092-004135-00000
Motoman	AR3120	Hollow wrist	20 kg	092-004028-00000
Motoman	MA1440	Hollow wrist	6 kg	092-002879-00000
Motoman	EA1400	Hollow wrist	3 kg	092-002566-00000
Motoman	EA1800N	Hollow wrist	15 kg	092-002564-00000
Motoman	EA1900	Hollow wrist	3 kg	092-002564-00000
Motoman	MA1400	Hollow wrist	3 kg	092-002566-00000
Motoman	MA1550	Hollow wrist	3 kg	092-002566-00000
Motoman	MA1800	Hollow wrist	15 kg	092-002564-00000
Motoman	MA1900	Hollow wrist	3 kg	092-002564-00000
Motoman	MA2010	Hollow wrist	10 kg	092-002880-00000
Motoman	VA1400	Hollow wrist	3 kg	092-003250-00000
Motoman	SSA2000	Hollow wrist	3 kg	092-002566-00000
Motoman	MH24	Hollow wrist	24 kg	092-003249-00000
REIS	RV10-6	Standard	6 kg	On request
REIS	RV20-6	Standard	6 kg	On request
REIS	RV20-16	Standard	16 kg	On request
REIS	RV20-6HW	Hollow wrist	6 kg	092-S00000-03851
UNIVERSAL ROBOTS	URe	Cobot	5 kg	*
UNIVERSAL ROBOTS	UR10e	Cobot	10 kg	*
UNIVERSAL ROBOTS	UR16e	Cobot	16 kg	*

*Robot too small or poor fastening capability for the mounting kit!

Wire spool holders

-DV-CAP WALL-



- Wall holder for D300 wire spools
- Consists of casing, pin, wire guide connection and mounting accessories

Type	Designation	Item no.
DV-CAP WALL	Wall holder for wire spools, including pin and accessories	092-001985-00000

► The wire feed connection sets are not included in the supply package and must be ordered separately.

-ON DV CAP ROB5 XR-



- Retrofitting option: Wire spool support for ROB 5
- The wire spool holder makes the wire feeder perfect for mechanised applications
- The wire feeder and wire spool holder are tightly screwed together
- Left and right versions available
- Left version suitable for M drive 4 Rob 3X LI, M drive 4 Rob 5 XR LI, M drive 4 Rob 2X, M drive 4 Rob 2X MF, tigSpeed drive 4 Rob, M drive 4 Rob 5 XQ R LI
- Right version suitable for M drive 4 Rob 3X RE, M drive 4 Rob 5 XR RE, M drive 4 Rob 5 XQ R RE

Type	Designation	Item no.
ON DV CAP ROB LI	Rob wire spool support, left	092-003217-00000
ON DV CAP ROB RE	Rob wire spool support, right	092-003484-00000

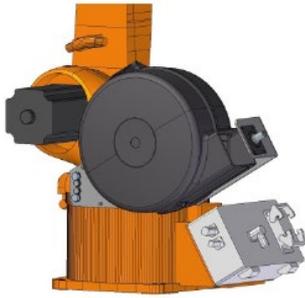
AK300



- Wire spool adapter for use with a wire basket spool (B 300)

Type	Designation	Item no.
AK300	Wire spool adapter B300	094-001803-00001

Wire spool holders



- Wire spool holder for fixing to robot
- For D300 wire spools
- Consists of bracket, cover, pin and assembly material
- Versions for other robot types available on request
- The wire feed connection sets are not included in the supply package and must be ordered separately

Overview of wire spool holders | robot-specific

Robot manufacturer	Robot types	Item number	Type
ABB	IRB 1600-6/1.2	092-002558-00000	Conventional
ABB	IRB 1600-10/1.2	092-002558-00000	Conventional
ABB	IRB 1600-6/1.45	092-002558-00000	Conventional
ABB	IRB 1600-10/1.45	092-002558-00000	Conventional
ABB	IRB 2600-10/1.85	092-003253-00000	Conventional
ABB	IRB 2600-12/1.65	092-003253-00000	Conventional
ABB	IRB 2600-12/1.85	092-003253-00000	Conventional
ABB	IRB 2600-20/1.65	092-003253-00000	Conventional
ABB	IRB 4600-20/2.5	092-003254-00000	Conventional
ABB	IRB 4600-40/2.55	092-003254-00000	Conventional
ABB	IRB 4600-45/2.05	092-003254-00000	Conventional
ABB	IRB 4600-60/2.05	092-003254-00000	Conventional
ABB	IRB 1410	092-003251-00000	Conventional
ABB	IRB 2400L	On request	Conventional
ABB	IRB 2400/10	092-003252-00000	Conventional
ABB	IRB 2400/16	092-003252-00000	Conventional
ABB	IRB 1600iD	092-002558-00000	Hollow wrist
ABB	IRB 1620iD	092-003255-00000	Hollow wrist
ABB	IRB 1660iD-4/1.55	092-002558-00000	Hollow wrist
ABB	IRB 1660iD-6/1.55	092-002558-00000	Hollow wrist
ABB	IRB 2600iD-8/2.0	*	Hollow wrist
ABB	IRB 2600iD-15/1.85	*	Hollow wrist
ABB	IRB 1520iD-4/1.5	092-003255-00000	Hollow wrist
COMAU	NS-12-1.85	On request	Conventional
COMAU	NS-16-1.65	On request	Conventional
COMAU	NJ-16-3.1	On request	Conventional
COMAU	NJ-40-2.5	On request	Conventional
COMAU	NJ-60-2.2	On request	Conventional
COMAU	RACER 999	092-003256-00000	Conventional
COMAU	Arc4-5-1.95	On request	Hollow wrist
COMAU	SMART5 ARC4	092-003257-00000	Hollow wrist
FANUC	ARC Mate 50iD	*	Conventional
FANUC	ARC Mate 50iD/7L	*	Conventional
FANUC	ARC Mate 0iB	*	Conventional
FANUC	ARC Mate 100iB	On request	Conventional
FANUC	M-710iC/20L	092-003259-00000	Conventional
FANUC	R-2000iA	092-003258-00000	Conventional
FANUC	ARC Mate 100iC/6L	On request	Hollow wrist
FANUC	ARC Mate 100iC/7L	On request	Hollow wrist
FANUC	ARC Mate 100iC/8L	092-002559-00000	Hollow wrist
FANUC	ARC Mate 100iC/10L	On request	Hollow wrist
FANUC	ARC Mate 100iC/10S	092-002559-00000	Hollow wrist

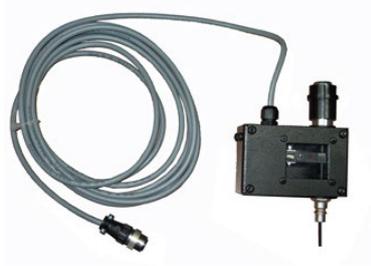
FANUC	ARC Mate 100iC/12	092-002559-00000	Hollow wrist
FANUC	ARC Mate 100iC/12S	On request	Hollow wrist
FANUC	ARC Mate 100iD	*	Hollow wrist
FANUC	ARC Mate 100iD/8L	On request	Hollow wrist
FANUC	ARC Mate 100iD/10L	On request	Hollow wrist
FANUC	ARC Mate 120iC	092-002580-00000	Hollow wrist
FANUC	ARC Mate 120iC/10L	092-002580-00000	Hollow wrist
FANUC	ARC Mate 120iC/12L	092-002580-00000	Hollow wrist
FANUC	ARC Mate 120iD	On request	Hollow wrist
FANUC	ARC Mate 120iD/12L	On request	Hollow wrist
FANUC	ARC Mate 100iC	092-002559-00000	Hollow wrist
FANUC	M-10iA/6L	092-002559-00000	Hollow wrist
FANUC	M-10iA/7L	092-002559-00000	Hollow wrist
FANUC	M-20iA/12L	On request	Hollow wrist
FANUC	M-710iC/12L	092-003259-00000	Hollow wrist
Hyundai	HA006B	On request	Conventional
Kawasaki	RA005L	On request	Conventional
Kawasaki	RA006L	On request	Conventional
Kawasaki	RA010L	092-003261-00000	Conventional
Kawasaki	RA010N	On request	Conventional
Kawasaki	RA020N	On request	Conventional
Kawasaki	RS020N	On request	Conventional
Kawasaki	BA006L	092-003992-00000	Hollow wrist
Kawasaki	BA006N	092-003992-00000	Hollow wrist
KUKA	KR 6 R1820	On request	Conventional
KUKA	KR 6 R1840-2	092-004200-00000	Conventional
KUKA	KR 6 R1820 HP	092-003263-00000	Conventional
KUKA	KR 8 R1620	On request	Conventional
KUKA	KR 8 R1620 HP	092-003263-00000	Conventional
KUKA	KR 8 R2010-2	092-004200-00000	Conventional
KUKA	KR 10 R1420	On request	Conventional
KUKA	KR 10 R1420 HP	092-003263-00000	Conventional
KUKA	KR 10 R1440-2	092-004200-00000	Conventional
KUKA	KR 12 R1810-2	On request	Conventional
KUKA	KR 16 R1610-2	On request	Conventional
KUKA	KR 16 R2010-2	092-004200-00000	Conventional
KUKA	KR 20 R1810-2	On request	Conventional
KUKA	KR 20 R3100	On request	Conventional
KUKA	KR 22 R1610-2	On request	Conventional
KUKA	KR 5	On request	Conventional
KUKA	KR 16	On request	Conventional
KUKA	KR 16-2	On request	Conventional
KUKA	KR 30 L16	092-003262-00000	Conventional
KUKA	KR 50 R2500	092-004047-00000	Conventional
KUKA	KR 90 R3100 extra	On request	Conventional
KUKA	KR 120 R3100-2	092-004047-00000	Conventional
KUKA	KR 240 R2700 prime	092-S00000-04869	Conventional
KUKA	KR 6 R1440-2 arc HW E	092-003263-00000	Hollow wrist
KUKA	KR 6 R1820 arc HW	092-003263-00000	Hollow wrist
KUKA	KR 6 R1840-2 arc HW	092-004200-00000	Hollow wrist
KUKA	KR 6 R2100-2 arc HW E	092-003263-00000	Hollow wrist
KUKA	KR 8 R1420 arc HW	092-003263-00000	Hollow wrist
KUKA	KR 8 R1440-2 arc HW	092-004200-00000	Hollow wrist
KUKA	KR 8 R1620 arc HW	092-003263-00000	Hollow wrist
KUKA	KR 8 R1640-2 arc HW	092-004200-00000	Hollow wrist
KUKA	KR 8 R2100 arc HW	092-003263-00000	Hollow wrist
KUKA	KR 5 arc HW	092-002558-00000	Hollow wrist
KUKA	KR 8 R2100-2 arc HW	On request	Hollow wrist

Robot manufacturer	Robot types	Item number	Type
KUKA	KR 16 arc HW	092-003207-00000	Hollow wrist
KUKA	KR 16 L8 arc HW	092-003207-00000	Hollow wrist
Motoman	AR700	*	Conventional
Motoman	AR900	On request	Conventional
Motoman	MC2000II	On request	Conventional
Motoman	K6-C	On request	Conventional
Motoman	HP20	092-001250-00000	Conventional
Motoman	HP20D-6	092-001250-00000	Conventional
Motoman	HP20D	092-001250-00000	Conventional
Motoman	HP20RD	092-001250-00000	Conventional
Motoman	HP20F	092-001250-00000	Conventional
Motoman	HP20D-CR7	092-001250-00000	Conventional
Motoman	UP20	On request	Conventional
Motoman	MH5	*	Conventional
Motoman	MH5L	*	Conventional
Motoman	MH6	*	Conventional
Motoman	MH6-10	*	Conventional
Motoman	MH6S	*	Conventional
Motoman	MH6S-10	*	Conventional
Motoman	MH50	092-001250-00000	Conventional
Motoman	MH50-20	092-001250-00000	Conventional
Motoman	MH50-35	092-001250-00000	Conventional
Motoman	AR1440	092-003210-00000	Hollow wrist
Motoman	AR1730	092-003210-00000	Hollow wrist
Motoman	AR2010	092-003210-00000	Hollow wrist
Motoman	AR3120	092-004027-00000	Hollow wrist
Motoman	MA1440	092-003210-00000	Hollow wrist
Motoman	EA1400	092-002558-00000	Hollow wrist
Motoman	EA1800N	On request	Hollow wrist
Motoman	EA1900	092-001250-00000	Hollow wrist
Motoman	MA1400	092-002558-00000	Hollow wrist
Motoman	MA1550	092-002558-00000	Hollow wrist
Motoman	MA1800	092-001250-00000	Hollow wrist
Motoman	MA1900	092-001250-00000	Hollow wrist
Motoman	MA2010	092-003210-00000	Hollow wrist
Motoman	VA1400	On request	Hollow wrist
Motoman	SSA2000	092-002558-00000	Hollow wrist
Motoman	MH24	092-003265-00000	Hollow wrist
REIS	RV10-6	092-003266-00000	Conventional
REIS	RV20-6	092-003266-00000	Conventional
REIS	RV20-16	On request	Conventional
REIS	RV20-6HW	092-003266-00000	Hollow wrist
UNIVERSAL ROBOTS	URe	*	Cobot
UNIVERSAL ROBOTS	UR10e	*	Cobot
UNIVERSAL ROBOTS	UR16e	*	Cobot

*Robot too small or poor fastening capability for the wire spool holder. If necessary, use an external DV CAP Wall holder or ON DV CAP ROB wire spool support!

Wire end sensor

-ON SENSOR WIRE END XR-



- Wire end sensor
- For mounting between the wire drum and wire feed
- The sensitivity setting can be easily adjusted using the potentiometer
- LED display
- Includes 5-m cable for connection to BUSINTX11 ATCASE with optional connection capability for wire end sensor

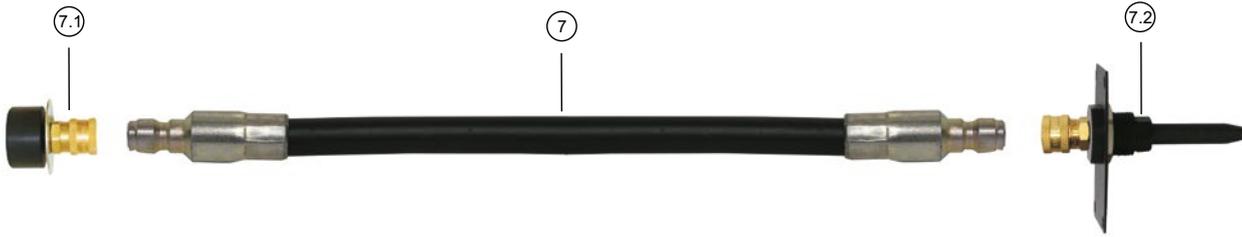
Type	Designation	Item no.
ON SENSOR WIRE END XR	Wire end sensor to connect to BUSINTX11 with OW WS option	092-003216-00000
ON SENSOR WIRE END WLS	Wire end sensor	092-S01190-03413
ON SENSOR WIRE END	Wire end sensor	092-S01190-03414
ON SENSOR WIRE END WCON	Wire end sensor	092-S01190-04365
ON SENSOR WIRE END	Wire end sensor	092-S01190-04862
ON SENSOR WIRE LEAD PRO	Wire end sensor	092-S01190-05002
OW WS BUSINTX11 ATCASE XR	Wire end sensor connection capability for BUSINTX11 ATCASE	092-003214-00001

► Please specify the wire feed used (e.g. Wire Lead, Wire Conduit) when ordering!

Can only be used in conjunction with option 092-003214-00001 and the ATCASE interface on XR power sources.

For Titan XQ R and Phoenix XQ R power sources on request.

Wire feeds Wire Lead



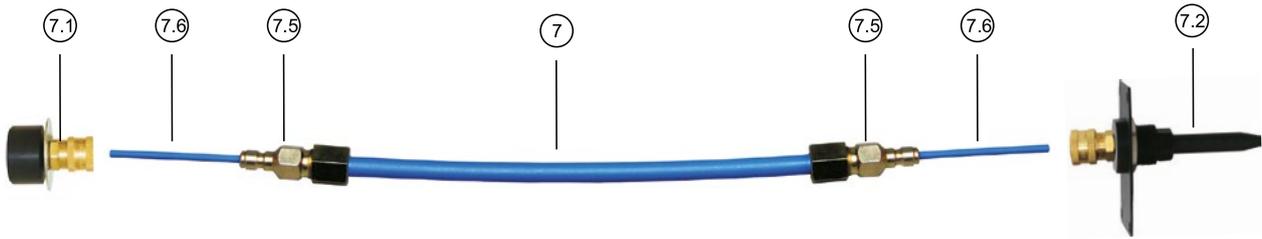
- Wire lead
- For steel wire, round wires
- Outside dia.: 13 mm
- Wire dia. up to 1.6 mm

Item	Type	Designation	Item no.
7	WIRE LEAD 1,5M	Wire guide	094-018280-00000
7	WIRE LEAD 3M	Wire guide	094-018281-00000
7	WIRE LEAD 5M	Wire guide	094-018282-00000
7	WIRE LEAD 6,5M	Wire guide	094-018283-00000
7	WIRE LEAD 8M	Wire guide	094-018284-00000
7	WIRE LEAD 10M	Wire guide	094-018285-00000
7	WIRE LEAD PRO	Wire guide, material sold by the metre	094-018279-00001
7.1	CONNECTOR BARREL WIRE LEAD	Connection for large spool/drum	094-018277-00000
7.1	CONNECTOR DV-CAB WIRE LEAD	DV-CAB connection	092-007931-00000
7.2	CONNECTOR DRIVE ROB2 WIRE LEAD	Connection set for Wire Lead wire feed to ROB 2	092-007913-00000
7.2	CONNECTOR DRIVE ROB5 XR WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-003143-00000
-	CONNECTOR WIRE LEAD PRO	End piece wire guide for material sold by the metre	094-018278-00000

► Two Connector Wire Lead Pro units are needed!

Wire feeds

Wire Lead Soft

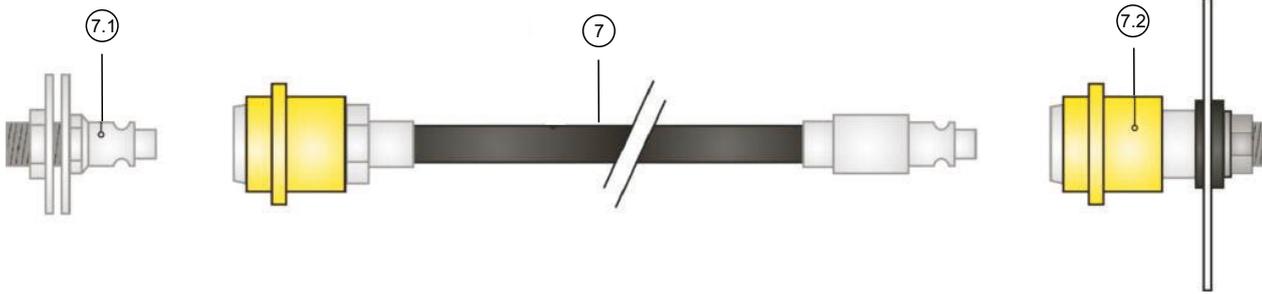


- Soft wire lead
- For aluminium and stainless steel wire, round wires
- Outside dia.: 12 mm
- Wire dia. up to 1.6 mm

Item	Type	Designation	Item no.
7	WIRE LEAD SOFT 1,5M	Wire guide	094-020383-00000
7	WIRE LEAD SOFT 3M	Wire guide	094-020383-00001
7	WIRE LEAD SOFT 5M	Wire guide	094-020383-00002
7	WIRE LEAD SOFT 6,5M	Wire guide	094-020383-00003
7	WIRE LEAD SOFT 8M	Wire guide	094-020383-00004
7	WIRE LEAD SOFT 10M	Wire guide	094-020383-00005
7	WIRE LEAD SOFT 12M	Wire guide	094-020383-00006
7	WIRE LEAD SOFT	Wire guide, material sold by the metre	094-020382-00000
7.1	CONNECTOR BARREL WIRE LEAD	Connection for large spool/drum	094-018277-00000
7.1	CONNECTOR DV-CAB WIRE LEAD	DV-CAB connection	092-007931-00000
7.2	CONNECTOR DRIVE ROB5 XR WIRE LEAD	Connection set for WIRE LEAD wire feed, WIRE LEAD SOFT to Rob 5	092-003143-00000
7.5	CONNECTOR WIRE LEAD SOFT	End piece wire guide for material sold by the metre	094-020381-00000
7.6	UEDFS WLS 2,5x4,5mm 150mm	Transition liner for soft wire lead	094-020380-00000

► Two units are required from position 7.5 and 7.6!

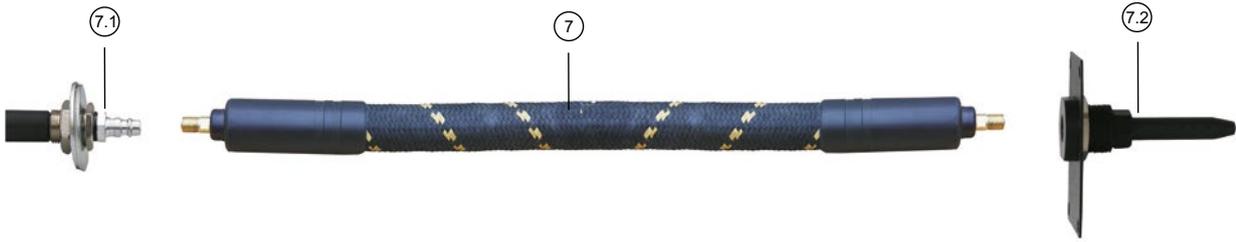
Wire feeds Wire Conduit



- Wire conduit
- Rugged design
- For steel wire, round wires
- Outside dia.: 16 mm
- Wire dia. up to 1.6 mm

Item	Type	Designation	Item no.
7	WIRE CONDUIT 1,8M	Wire guide	094-011515-00004
7	WIRE CONDUIT 2M	Wire guide	094-011515-00006
7	WIRE CONDUIT 3M	Wire guide	094-011515-00000
7	WIRE CONDUIT 3,5M	Wire guide	094-011515-00005
7	WIRE CONDUIT 4,5M	Wire guide	094-011515-00001
7	WIRE CONDUIT 8M	Wire guide	094-011515-00002
7	WIRE CONDUIT 10M	Wire guide	094-011515-00007
7	WIRE CONDUIT 12M	Wire guide	094-011515-00003
7.1	CONNECTOR DV-CAB WIRE CONDUIT	DV-CAB connection	092-007741-00000
7.1	CONNECTOR BARREL	Quick connect coupling for large spool / drum connection	094-011517-00000
7.2	CONNECTOR DRIVE ROB5 XR WIRE CONDUIT	Connection set for Wire feed Wire Conduit to Rob 5	092-003144-00000
7.21	CONNECTOR DRIVE ROB2 WIRE CONDUIT	Connection set for wire feed ROB 2 Wire Conduit	092-008205-00000

Wire feeds Masterliner HD

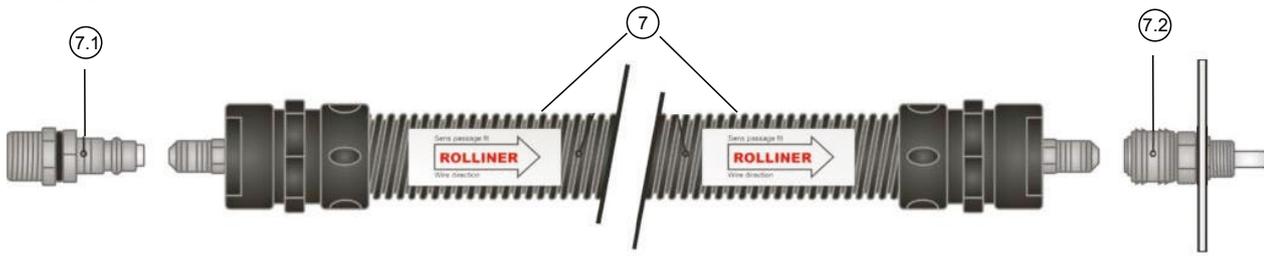


- Masterliner HW
- For all material types, round wires
- Outside dia.: 30 mm
- Wire dia. up to 1.2 mm
- Weight: Approx. 400 g/m

Item	Type	Designation	Item no.
7	Masterliner HD 5m	Wire guide	094-025510-00005
7	Masterliner HD 6m	Wire guide	094-025510-00006
7	Masterliner HD 8m	Wire guide	094-025510-00008
7	Masterliner HD 10m	Wire guide	094-025510-00010
7	Masterliner HD 15m	Wire guide	094-025510-00015
7.1	Masterliner Connector DV-CAP	DV-CAB connection	092-003638-00000
7.1	Masterliner Connector Barrel	Connection for large spool/drum	092-003643-00000
7.2	CONNECTOR DRIVE ROB5 XR MASTERLINER	Connection set for Masterliner wire feed to Rob 5	092-003145-00000
7.2	CONNECTOR DRIVE ROB 2 Masterliner	Connection set for Masterliner wire feed to ROB 2	092-003639-00000

► Other lengths available on request

Wire feeds Rolliner

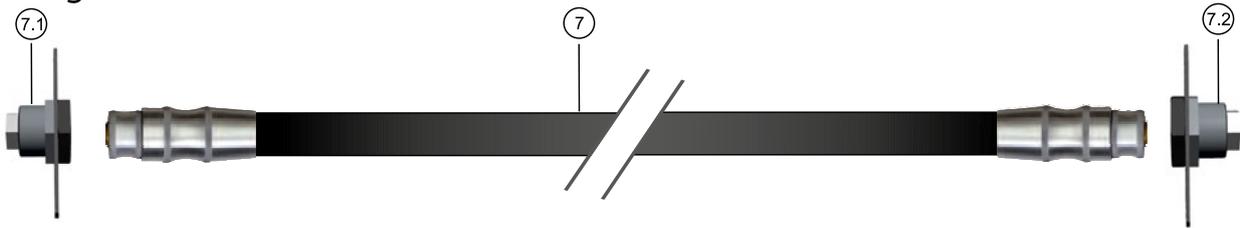


- Rolliner
- For all material types, round wires
- Outside Ø: 43 mm
- Wire Ø up to 4.0 mm
- Weight: approx. 500 g/m

Item	Type	Designation	Item no.
7	ROLLINER 3,5M	Wire guide with plastic rolls	092-002575-00005
7	ROLLINER 5M	Wire guide with plastic rolls	092-002575-00000
7	ROLLINER 6M	Wire guide with plastic rolls	092-002575-00007
7	ROLLINER 8M	Wire guide with plastic rolls	092-002575-00006
7	ROLLINER 10M	Wire guide with plastic rolls	092-002575-00001
7	ROLLINER 15M	Wire guide with plastic rolls	092-002575-00002
7	ROLLINER 20M	Wire guide with plastic rolls	092-002575-00003
7	ROLLINER 25M	Wire guide with plastic rolls	092-002575-00004
7.1	ROLLINER CONNECTOR DV-CAB	DV-CAB connection	092-007930-00000
7.1	ROLLINER CONNECTOR BARREL	Connection for large spool/drum	094-014623-00000
7.2	CONNECTOR DRIVE ROB5 XR ROLLINER	Connection set for wire feed Rolliner to Rob 5	092-003146-00000
7.2	CONNECTOR DRIVE ROB2 ROLLINER	Connection set for Rolliner wire feed to ROB 2	092-007917-00000

► Other lengths available on request

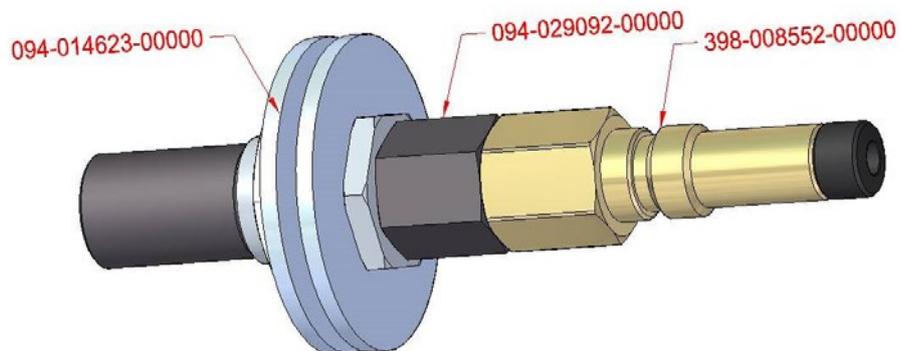
Wire feeds Maxiglide



- Maxiglide
- For all material types, round wires
- Outside Ø: 35 mm
- Wire Ø: up to 4 mm
- Weight: approx. 600 g/m

Item	Type	Designation	Item no.
7	MAXIGLIDE PA	Wire guide, material sold by the metre	398-008549-00000
7.1	CONNECTOR DV-CAB MAXIGLIDE	DV-CAB connection	092-004214-00000
7.1	ROLLINER CONNECTOR BARREL	Connection for large spool/drum	094-014623-00000
7.2	CONNECTOR DRIVE ROB5 XR MAXIGLIDE	Connection set for Maxiglide wire feed to Rob 5	092-004213-00000
7.2	CONNECTOR DRIVE ROB 2 MAXIGLIDE	Connection set for Maxiglide wire feed to ROB 2	092-004405-00000
-	MAXIGLIDE ADAPTER G1/4 AG M10X1 IG	Adapters	094-029092-00000
-	MAXIGLIDE S-E	Maxiglide quick connect coupling	398-008550-00000
-	MAXIGLIDE ADAPTER I M10x1	Internal thread adapter	398-008551-00000
-	MAXIGLIDE ADAPTER A M10x1	External thread adapter	398-008552-00000

► Items 094-014623-00000, 094-029092-00000, 398-008552-00000 are required for connecting to a large spool or drum!



RMT RSA robot torch hose packages

Item numbers and prices for torch hose packages from the water-cooled RMT series

An item code is needed to order torch hose packages. It forms the A, BB and CCC parts of the item number and corresponds to the configuration of the hose package. The basic price refers to a hose package length of 100 cm.

Codes for robot torch hose packages

Basic item number: 094-**A25221-BBCCC**

Basic price (length 100 cm): 094-525221-00100

Hose package +25cm: 092-004193-00000

Blow-out function: 092-004194-00000

Wire brake: 092-004195-00000

Position in item no.	Code	Designation
A (1-9)	0	Reserve
	1	Reserve
	2	Reserve
	3	Reserve
	4	Reserve
	5	ROB 5
B (00-99)	00	Standard
	01	Blow-out function
	02	Wire brake
	03	Reserve
	04	Blow-out function + wire brake
	05	Reserve
C (1-999)	1-999	Indication of length in cm (100 cm included in basic price)
		Surcharge per 25 cm from 100 cm length:

► All torch hose packages include a 19-pole control cable.

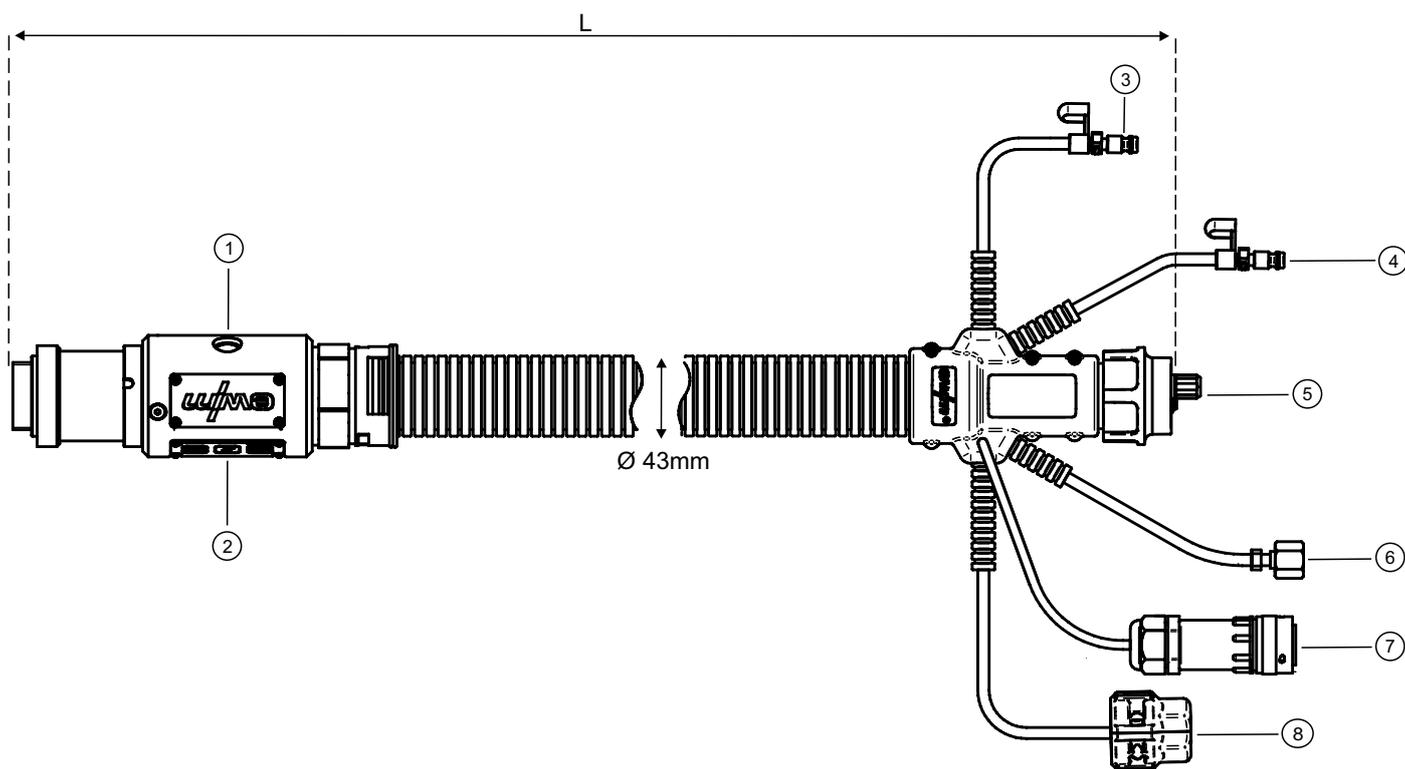
Sample calculations:

ROB 5 torch hose package, blow-out function, 100 cm

Position in item no.	Code	Designation
A	5	ROB 5
B	01	Blow-out function
C	100	100 cm
		Additional charges, total surcharges
		Basic price
094- 5 25221- 01 100		Total price

ROB 5 torch hose package, blow-out function, wire brake, 150 cm

Position in item no.	Code	Designation
A	5	ROB 5
B	04	Blow-out function + wire brake
C	150	150 cm
		Total surcharges
		Basic price
094- 5 25221- 04 150		Total price



1	Helix cable connection for collision sensor RSA
2	Push-buttons for wire inching, wire return and gas test + 3 freely assignable function push-buttons (only at RMT CT Cobot)
3	Water supply line
4	Water return
5	Euro torch connector
6	Compressed air connection for wire brake (Option)
7	Connector plug 19 pole for wire feeder
8	Connection torch blow-out function (Option)

RMT RSA HW robot torch hose packages

Item numbers and prices for hollow wrist torch hose packages from the water-cooled RMT series

An item code is needed to order torch hose packages. It forms the A, BB and CCC parts of the item number and corresponds to the configuration of the hose package. The basic price refers to a hose package length of 100 cm.

Codes for robot torch hose packages

Basic item number: 094-**A27019-BBCCC**

Basic price (length 100 cm): 094-527019-00100

Hose package +25cm: 092-004457-00000

Blow-out function: 092-004194-00000

Wire brake: 092-004195-00000

Position in item no.	Code	Designation
A (1-9)	0	Reserve
	1	Reserve
	2	Reserve
	3	Reserve
	4	Reserve
	5	ROB 5
B (00-99)	00	Standard
	01	Blow-out function
	02	Wire brake
	03	Reserve
	04	Blow-out function + wire brake
	05	Reserve
C (1-999)	1-999	Indication of length in cm (100 cm included in basic price)
		Surcharge per 25 cm from 100 cm length:

► All torch hose packages include a 19-pole control cable.

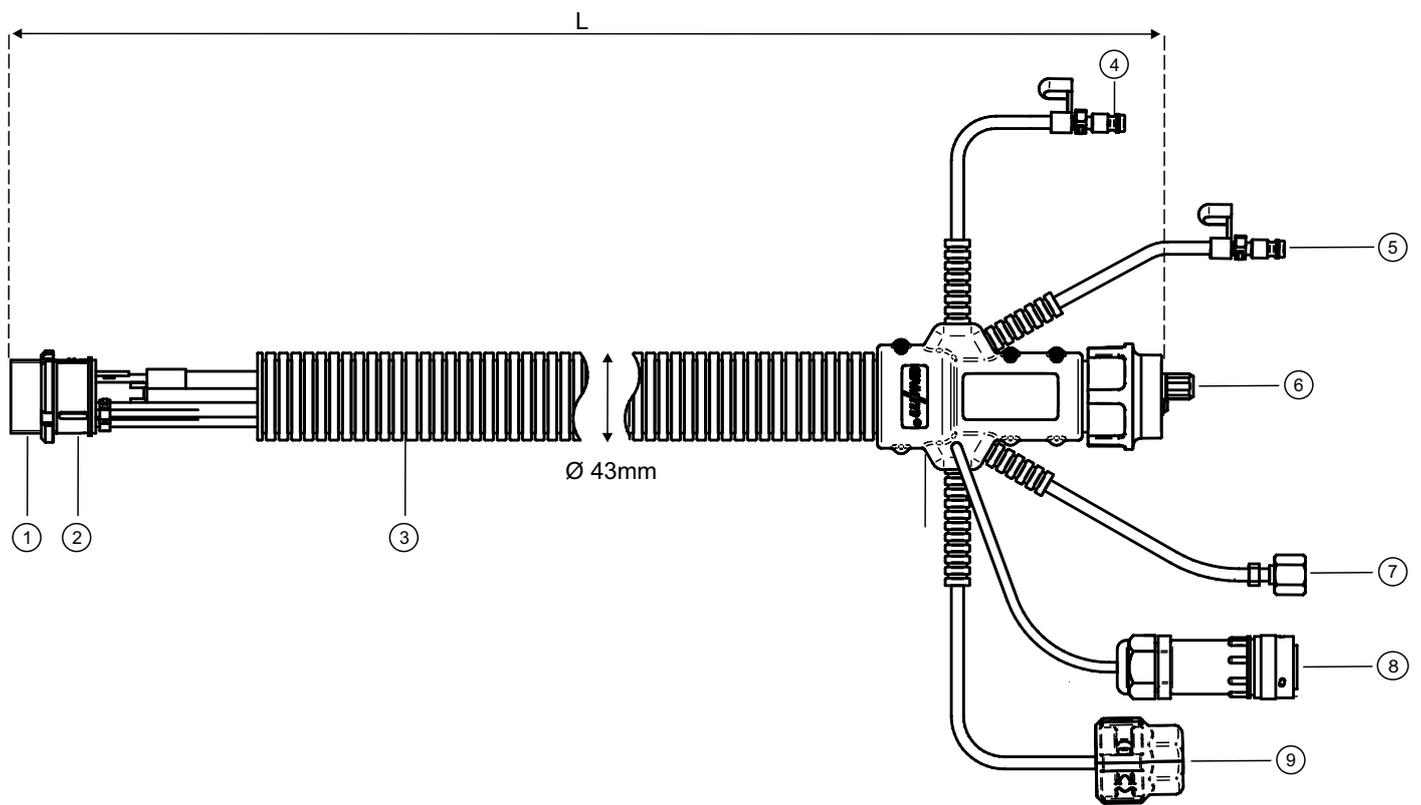
Sample calculations:

ROB 5 torch hose package, blow-out function, 100 cm

Position in item no.	Code	Designation
A	5	ROB 5
B	01	Blow-out function
C	100	100 cm
		Additional charges, total surcharges
		Basic price
094- 5 27019- 01 100		Total price

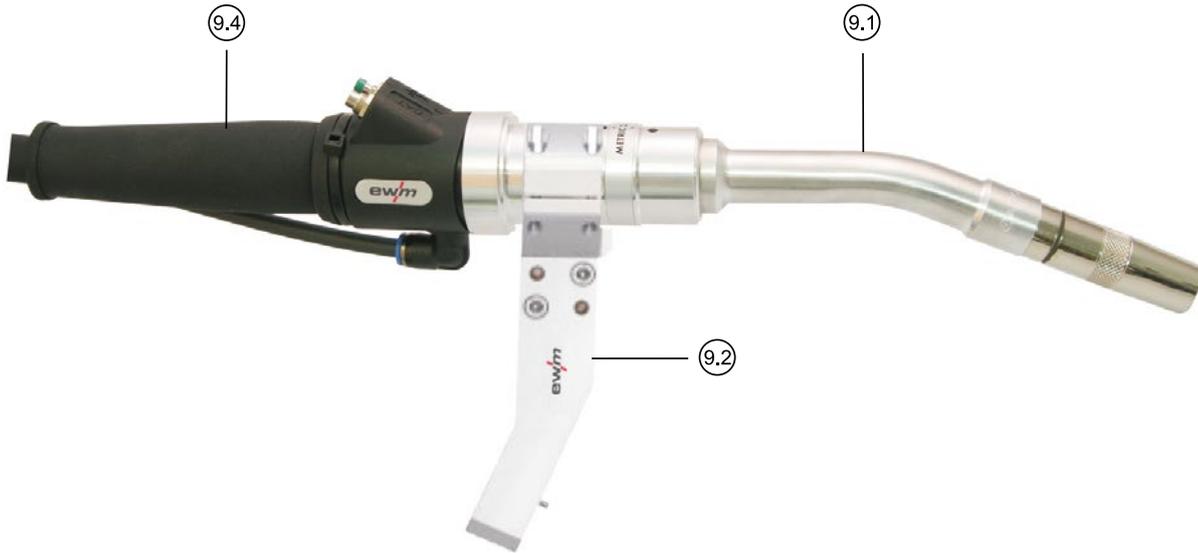
ROB 5 torch hose package, standard, 150 cm

Position in item no.	Code	Designation
A	5	ROB 5
B	00	Standard
C	150	150 cm
		Additional charges, total surcharges
		Basic price
094- 5 27019- 00 150		Total price



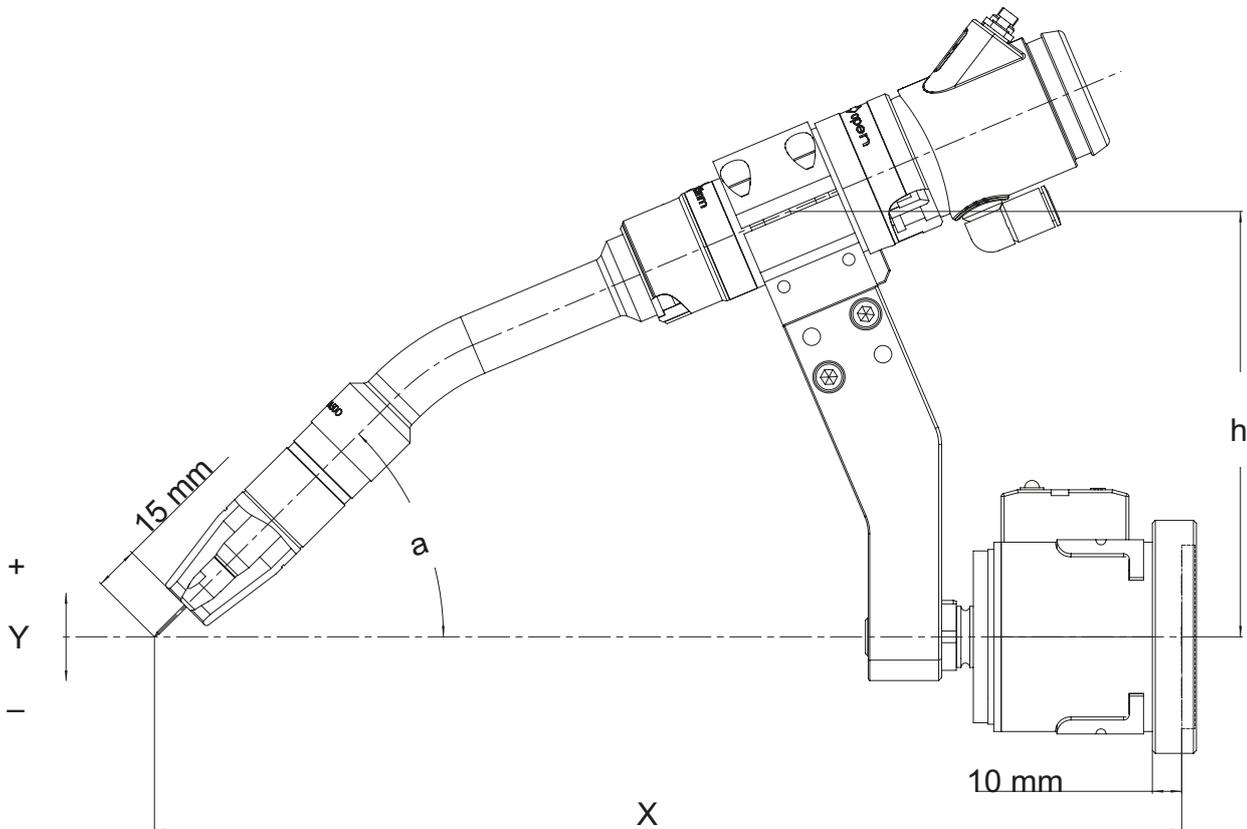
1	Connection suitable for RMT-hollow wrist torches
2	Water stop for coolant
3	Protective hose, flexible
4	Water supply line
5	Water return
6	Euro torch connector
7	Compressed air connection for wire brake (Option)
8	Connector plug 19 pole for wire feeder
9	Connection torch blow-out function (Option)

MIG/MAG robot welding torches MTR360G



- MIG/MAG robot welding torch, gas cooled
- Maximum TCP security
- Modular construction
- Quick-change torch neck
- Standard equipment: 14 mm gas nozzle, 1.2 mm steel contact tip, 22° torch neck, 1.15 m hose package

Duty cycle, CO2	360 A / 100 %
Duty cycle, M21	290 A / 100 %
Wire Ø	0.8 mm - 1.4 mm
Connection	Euro torch connector

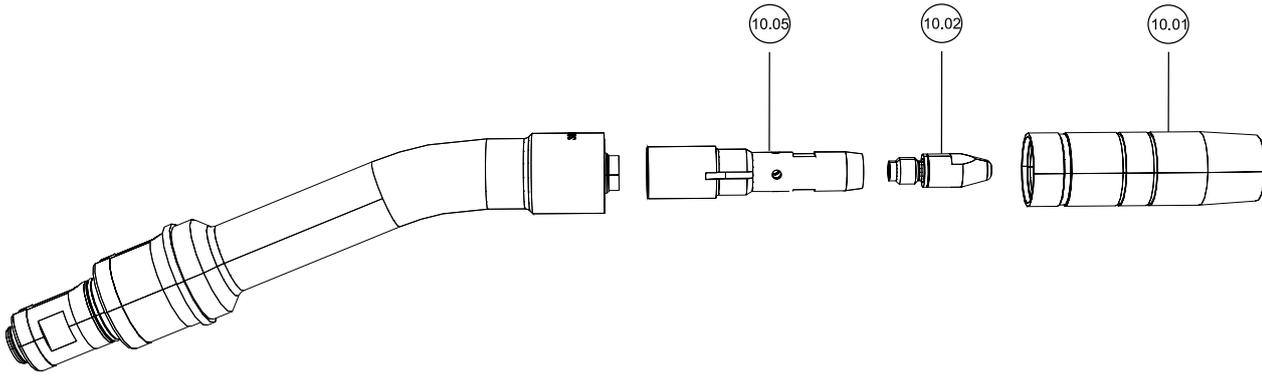


angle	X	Y	h	a
22°	350	0	146	45°
45°	350	0	107	45°

Item	Type	Designation	Length	Item no.
9	MTR360G 22 1.2mm 1.15m	MIG/MAG welding torch, gas-cooled	-	094-500033-00000
9.1	RTN 360G 22DG	Torch neck EWM RT 22°	-	094-010139-00000
9.1	RTN 360G 45DG	Torch neck EWM RT 45°	-	094-010148-00500
9.2	HS COMP A22	Holder, rigid, compl., EWM RT 22	-	094-011656-00500
9.2	HS MIG ROB S45	Holder, rigid, compl., EWM RT 45	-	094-011658-00000
9.2	RTM interlock/SH compl. for VTS/EWM RT	RTM interlock/SH compl. for VTS/EWM RT	-	094-016500-00000
9.4	TBROB ECO 0.9m	RT A ECO hose package	0.9m	094-016492-00507
9.4	TBROB ECO 1.15m	RT A ECO hose package	1.15m	094-016492-00500
9.4	TBROB ECO 1.20m	RT A ECO hose package	1.2m	094-016492-00501
9.4	TBROB ECO 1.30m	RT A ECO hose package	1.3m	094-016492-00502
9.4	TBROB ECO 1.45m	RT A ECO hose package	1.45m	094-016492-00503
9.4	TBROB ECO 1.60m	RT A ECO hose package	1.6m	094-016492-00504
9.4	TBROB ECO 2.15m	RT A ECO hose package	2.15m	094-016492-00505
9.4	TBROB ECO 3.15m	RT A ECO hose package	3.15m	094-016492-00506

► Order welding torch fully equipped. Replacement parts and equipment parts are not part of the scope of supply and must be ordered based on the specific application!

► More hose package lengths, torch neck angles and replacement parts on request!



Item	Designation	Stick-out/ Recess	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, conical	0mm	14 mm			68mm		094-010142-00500
10.01	Gas nozzle, conical	0mm	16 mm			68mm		094-010566-00500
10.02	CuCrZr contact tip, silver plated			0.8 mm	M6	28mm	CuCrZr, silver-plated	094-010468-00000
10.02	CuCrZr contact tip, silver plated			0.9 mm	M6	28mm	CuCrZr, silver-plated	094-010469-00000
10.02	CuCrZr contact tip, silver plated			1 mm	M6	28mm	CuCrZr, silver-plated	094-010470-00000
10.02	CuCrZr contact tip, silver plated			1.2 mm	M6	28mm	CuCrZr, silver-plated	094-016488-00000
10.02	CuCrZr contact tip, silver plated			1.4 mm	M6	28mm	CuCrZr, silver-plated	094-010471-00000
10.05	Contact tip holder				M6			094-010143-00500

Steel liners

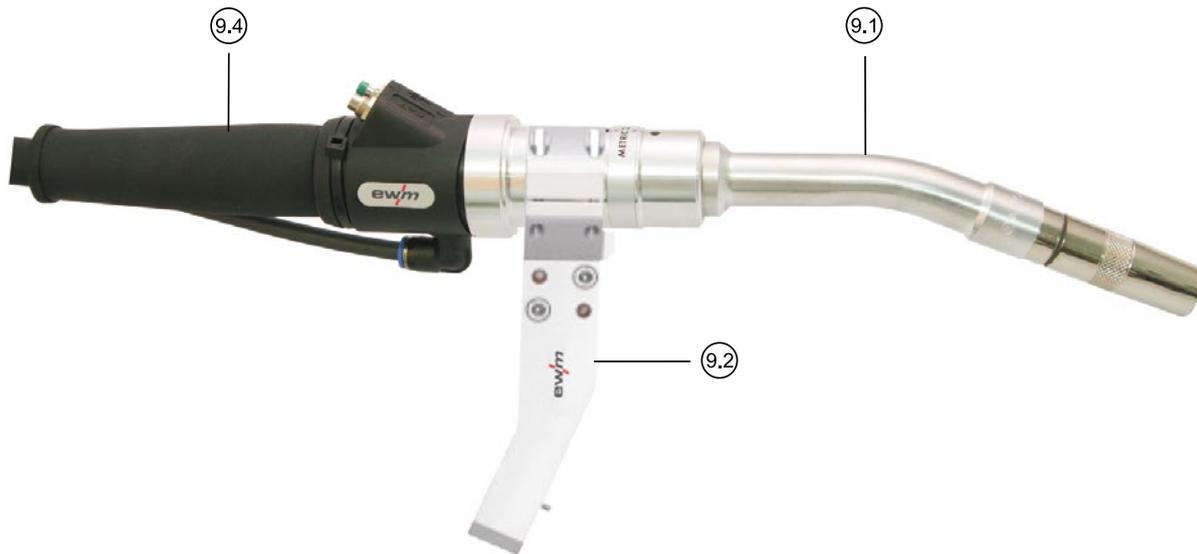
Item	Designation	Wire Ø	Length	Item no.
10.04	Steel liner		10m	394-008142-00000
10.04	Steel liner, steel, black	0.8 mm - 1.2 mm	2m	094-011667-00500
10.04	Steel liner, steel, black	0.8 mm - 1.2 mm	3.15m	094-016493-00500

Options/accessories

Designation	Item no.
Adjusting device for 0°, 22°, 45°	094-010152-00000

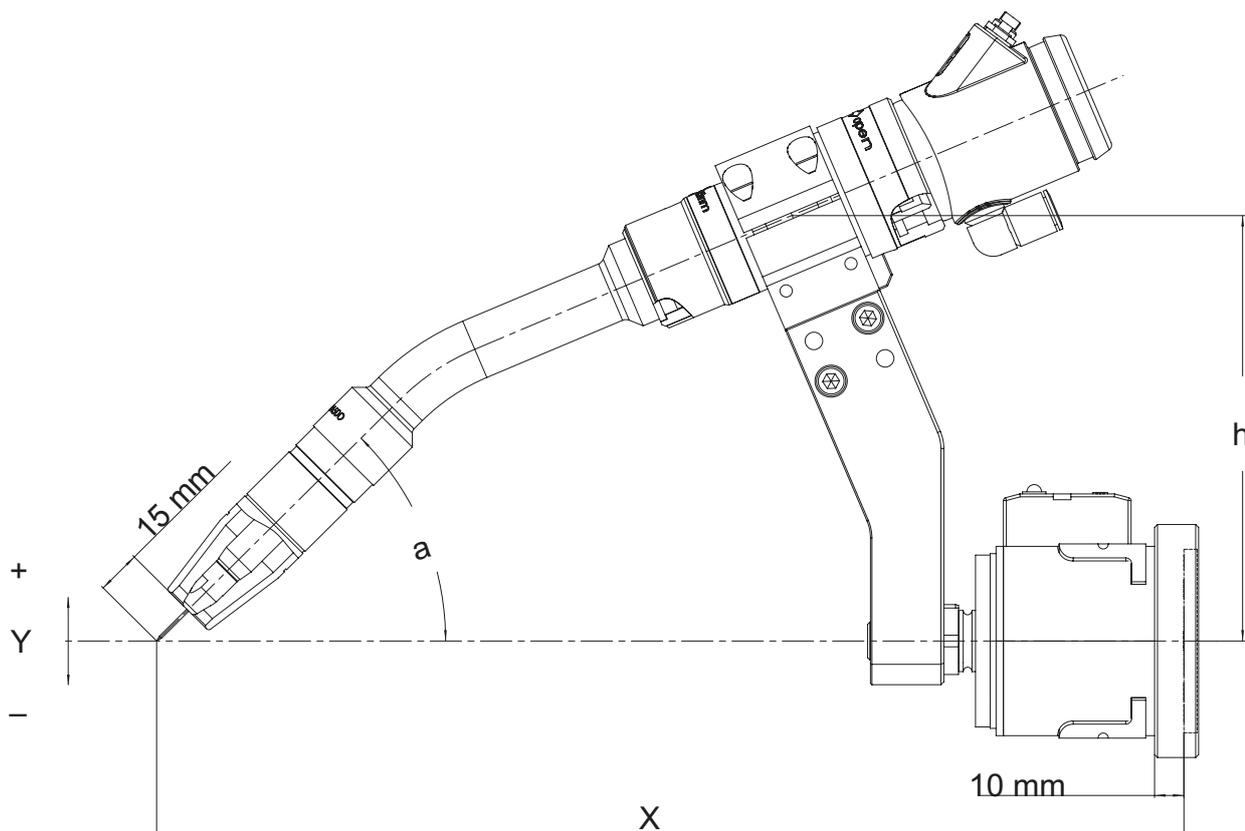
MIG/MAG robot welding torches

MTR500G



- MIG/MAG robot welding torch, gas cooled
- Maximum TCP security
- Modular construction
- Quick-change torch neck

Duty cycle, CO2	500 A / 100 %
Duty cycle, M21	400 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector



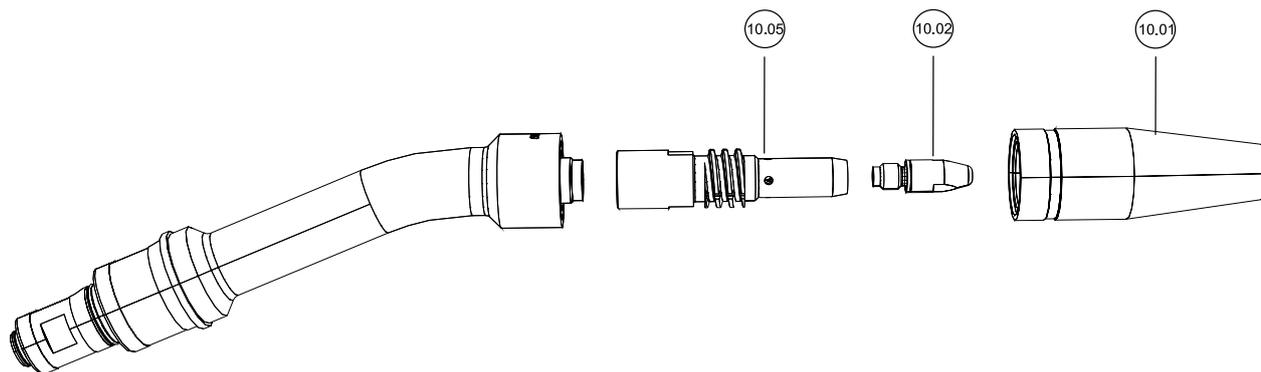
angle	X	Y	h	a
22°	350	0	146	45°
45°	350	0	107	45°

Item	Type	Designation	Length	Item no.
9.1	RTN 500G 22DG	Torch neck EWM RT 22°	-	094-011260-00500
9.1	RTN 500G 45DG	Torch neck EWM RT 45°	-	094-011262-00500
9.2	HS COMP A22	Holder, rigid, compl., EWM RT 22	-	094-011656-00500
9.2	HS MIG ROB S45	Holder, rigid, compl., EWM RT 45	-	094-011658-00000
9.2	RTM interlock/SH compl. for VTS/EWM RT	RTM interlock/SH compl. for VTS/EWM RT	-	094-016500-00000
9.4	TBROB ECO 0.9m	RT A ECO hose package	0.9m	094-016492-00507
9.4	TBROB ECO 1.15m	RT A ECO hose package	1.15m	094-016492-00500
9.4	TBROB ECO 1.20m	RT A ECO hose package	1.2m	094-016492-00501
9.4	TBROB ECO 1.30m	RT A ECO hose package	1.3m	094-016492-00502
9.4	TBROB ECO 1.45m	RT A ECO hose package	1.45m	094-016492-00503
9.4	TBROB ECO 1.60m	RT A ECO hose package	1.6m	094-016492-00504
9.4	TBROB ECO 2.15m	RT A ECO hose package	2.15m	094-016492-00505
9.4	TBROB ECO 3.15m	RT A ECO hose package	3.15m	094-016492-00506

► Order welding torch fully equipped. Replacement parts and equipment parts are not part of the scope of supply and must be ordered based on the specific application!

► More hose package lengths, torch neck angles and replacement parts on request!

Consumables/Accessories



Item	Designation	Stick-out/ Recess	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, conical	±0mm	16 mm			75mm		094-016487-00000
10.02	CuCrZr contact tip, silver plated			0.8 mm	M8	30mm	CuCrZr, silver-plated	094-011269-00000
10.02	CuCrZr contact tip, silver plated			0.9 mm	M8	30mm	CuCrZr, silver-plated	094-011270-00000
10.02	CuCrZr contact tip, silver plated			1 mm	M8	30mm	CuCrZr, silver-plated	094-011271-00000
10.02	CuCrZr contact tip, silver plated			1.2 mm	M8	30mm	CuCrZr, silver-plated	094-011272-00000
10.02	CuCrZr contact tip, silver plated			1.4 mm	M8	30mm	CuCrZr, silver-plated	094-011273-00000
10.02	CuCrZr contact tip, silver plated			1.6 mm	M8	30mm	CuCrZr, silver-plated	094-011274-00000
10.05	Contact tip holder				M8	70mm		094-011276-00500

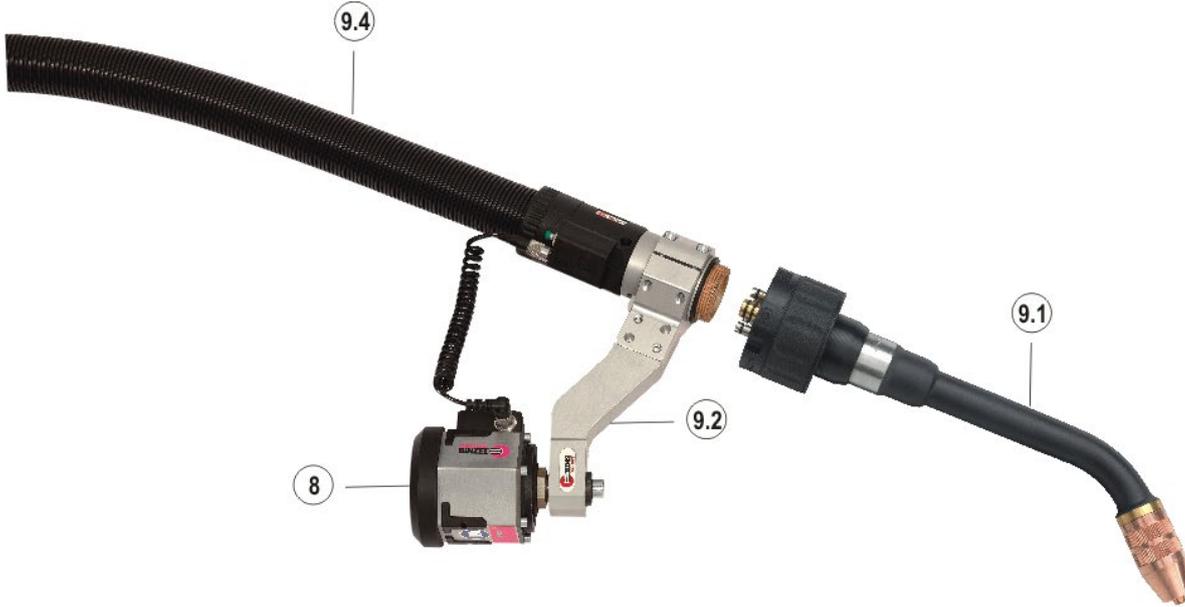
Steel liners

Item	Designation	Wire Ø	Length	Item no.
10.04	Steel liner		10m	394-008142-00000
10.04	Steel liner, steel, black	0.8 mm - 1.2 mm	2m	094-011667-00500
10.04	Steel liner, steel, black	0.8 mm - 1.2 mm	3.15m	094-016493-00500

Options/accessories

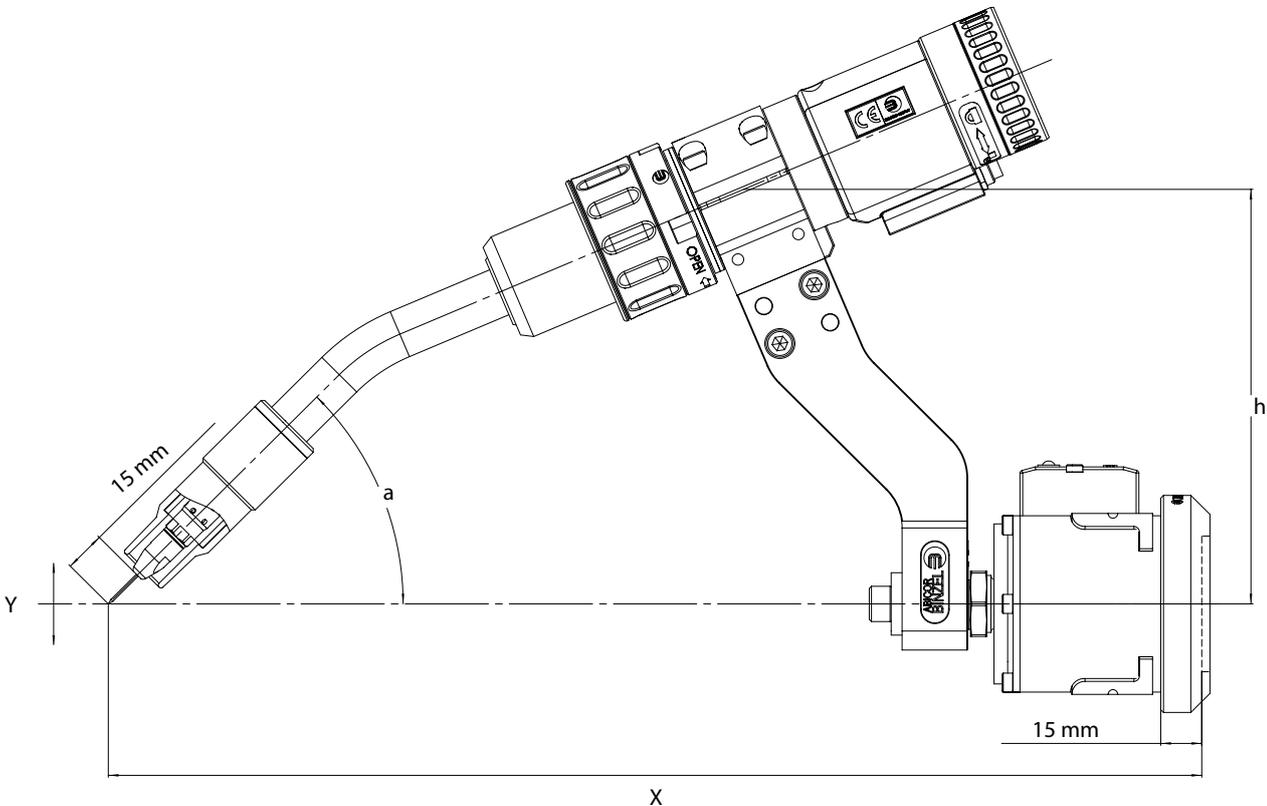
Designation	Item no.
Adjusting device for 0°, 22°, 45°	094-010152-00000

MIG/MAG robot welding torches MTR300W



- MIG/MAG robot welding torch, water cooled
- Maximum TCP security
- Modular construction
- Quick-change torch neck
- Non-return valves for coolant
- One-piece liner

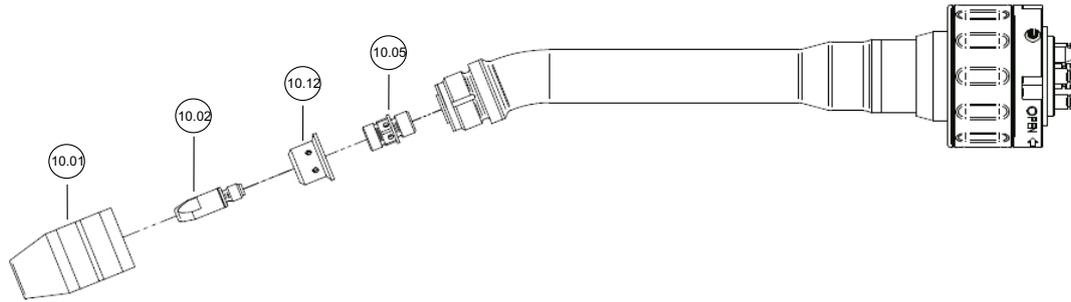
Duty cycle, CO2	330 A / 100 %
Duty cycle, M21	300 A / 100 %
Wire Ø	0.8 mm - 1.2 mm
Connection	Euro torch connector
Bend angle torch neck	22° 45°



Types	X	Y	h	a
22°	400	0	149	45°
45°	400	0	90	50°

Item	Type	Designation	Length	Item no.
8	CAT3 PRO TR XL	Collision sensor		394-008605-00000
9.1	BH ROB 300W 22° x279 y30	Torch neck with gas nozzle sensor, 22°	-	094-022442-00000
9.1	BH ROB 300W 22° x279 y30	Torch neck, 22°	-	094-022441-00000
9.1	BH ROB 300W 45° x260 y65	Torch neck with gas nozzle sensor, 45°	-	094-022443-00000
9.1	BH ROB 300W 45° x260 y65	Torch neck, 45°	-	094-022431-00000
9.2	H ROB 300W 22° CAT2-HL	Rigid holder for torch neck, 22°	-	094-022448-00000
9.2	H ROB 300W 45° CAT2-HL	Rigid holder for torch neck, 45°	-	094-022449-00000
9.2	HL CAT3 PRO TR STD	Standard holder		094-024721-00000
9.4	SP ROB W 1,10m	Hose package, water-cooled up to 400 A	1.1m	094-022454-00000
9.4	SP ROB W 2,15m	Hose package, water-cooled up to 400 A	2.15m	094-022454-00505
9.4	SP ROB W 5m	Hose package, water-cooled up to 400 A	5m	094-022454-00005

- ▶ Order welding torch fully equipped. Replacement parts and equipment parts are not part of the scope of supply and must be ordered based on the specific application!
- ▶ More hose package lengths, torch neck angles and replacement parts on request!



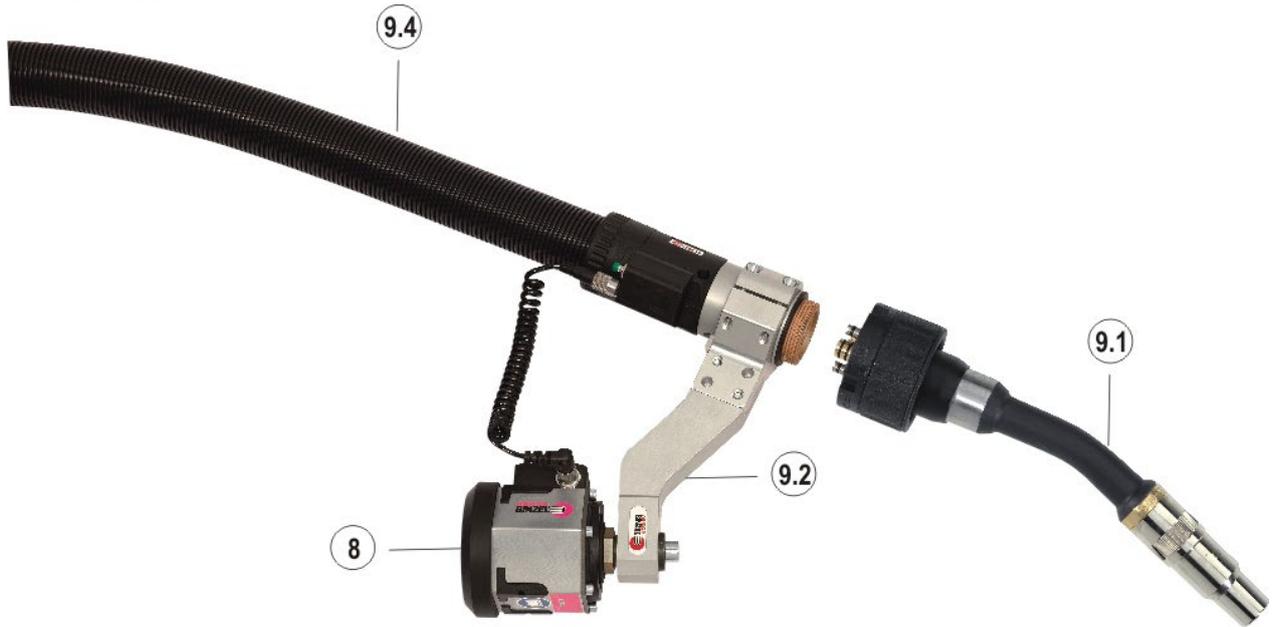
Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, conical	13 mm			44.5mm		094-020913-00000
10.01	Gas nozzle, conical	13 mm			48.5mm		094-022432-00000
10.01	Gas nozzle, conical	15.5 mm			44.5mm		394-001924-00000
10.02	Contact tip		0.8 mm	M6	28mm	CuCrZr	094-005407-00000
10.02	Contact tip		0.9 mm	M6	28mm	CuCrZr	094-005408-00000
10.02	Contact tip		1 mm	M6	28mm	CuCrZr	094-003339-00000
10.02	Contact tip		1.2 mm	M6	28mm	CuCrZr	094-005224-00000
10.05	Contact tip holder M6			M6	19mm	Copper	094-020914-00000
10.12	Gas diffuser standard			M10	13mm		094-020915-00000
10.12	Gas diffuser ceramic			M10	13mm		094-022453-00000

Steel liners

Item	Designation	Wire Ø	Length	Item no.
10.04	Steel liner, steel, black	0.8 mm - 1.2 mm	2m	094-011667-00500
10.04	Combined steel liner, aluminium	0.8 mm - 1.2 mm	2.4m	094-013325-00000

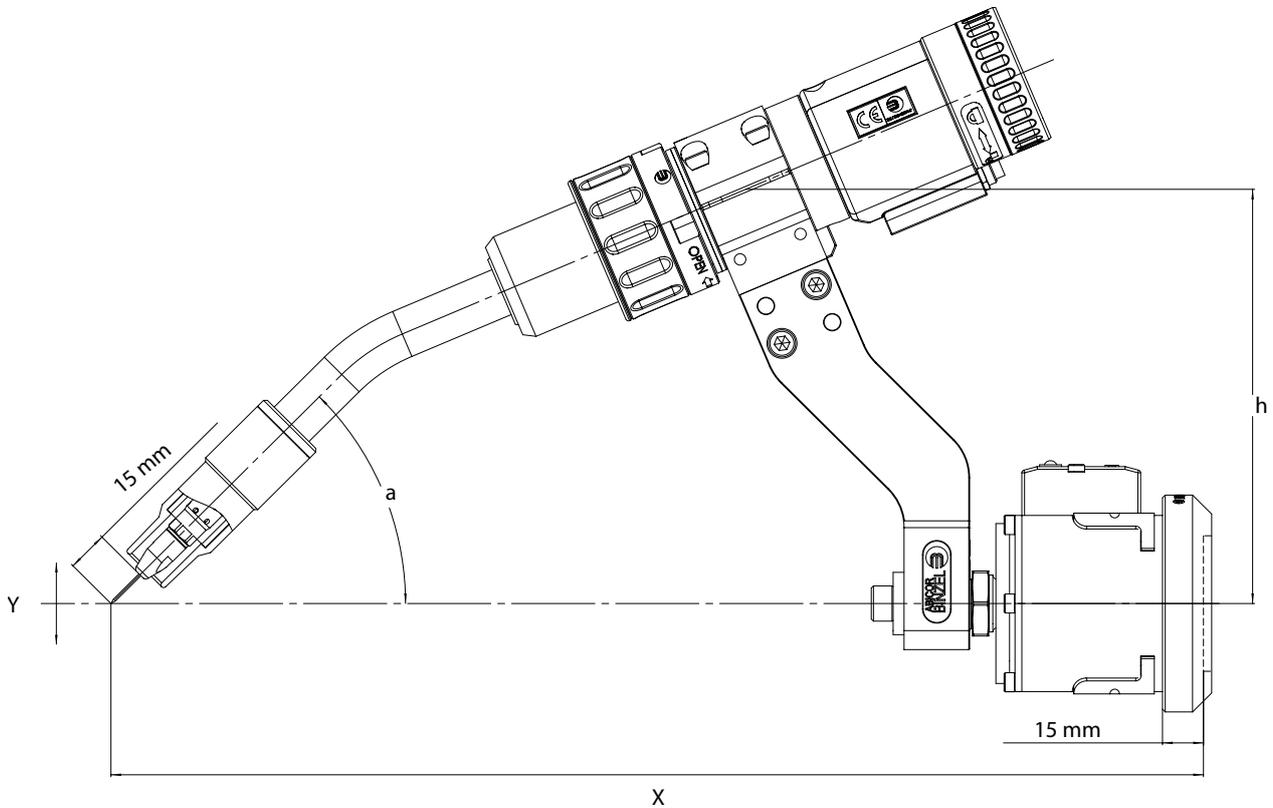
MIG/MAG robot welding torches

MTR505W



- MIG/MAG robot welding torch, water cooled
- Maximum TCP security
- Modular construction
- Quick-change torch neck
- Non-return valves for coolant
- One-piece liner

Duty cycle, CO2	550 A / 100 %
Duty cycle, M21	500 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector

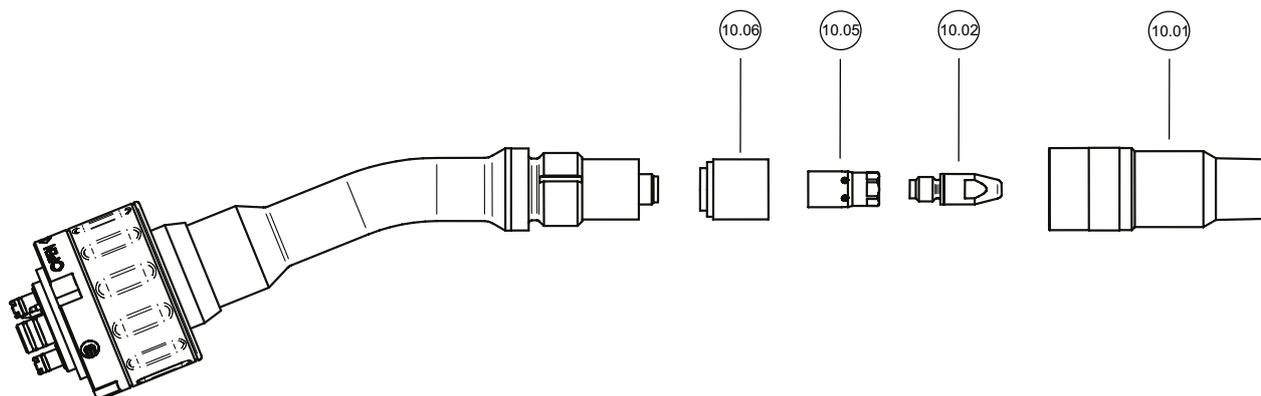


Types	X	Y	h	a
22°	400	0	153	45°
35°	400	0	125	45°
45°	400	0	126	50°

Item	Type	Designation	Length	Item no.
8	CAT3 PRO TR XL	Collision sensor		394-008605-00000
9.1	BH ROB 500W 22° x242 y50	Torch neck, 22°	-	094-019839-00000
9.1	BH ROB 500W 35° x227 y81	Torch neck, 35°	-	394-000502-00000
9.1	BH ROB 500W 45° x211 y105	Torch neck, 45°	-	094-022444-00000
9.1	TN RTN500W 22°	Torch neck with gas nozzle sensor, 22°	-	094-012936-00000
9.1	TN RTN500W 35°	Torch neck with gas nozzle sensor, 35°	-	094-012937-00000
9.1	TN RTN500W 45°	Torch neck with gas nozzle sensor, 45°	-	094-012716-00000
9.2	H ROB 500W 22° CAT2-HL	Rigid holder for torch neck, 22°	-	094-022450-00000
9.2	H ROB 500W 35° CAT2-HL	Rigid holder for torch neck, 35°	-	094-022451-00000
9.2	H ROB 500W 45° CAT2-HL	Rigid holder for torch neck, 45°	-	094-022452-00000
9.2	HL CAT3 PRO TR STD	Standard holder		094-024721-00000
9.4	SP ROB W 1,10m	Hose package, water-cooled up to 400 A	1.1m	094-022440-00000
9.4	SP ROB W 1,10m	Hose package, water-cooled up to 400 A	1.1m	094-022454-00000
9.4	SP ROB W 2,15m	Hose package, water-cooled up to 400 A	2.15m	094-022454-00505
9.4	SP ROB W 5m	Hose package, water-cooled up to 400 A	5m	094-022454-00005

- Order welding torch fully equipped. Replacement parts and equipment parts are not part of the scope of supply and must be ordered based on the specific application!
- More hose package lengths, torch neck angles and replacement parts on request!

Consumables/Accessories



Item	Designation	Stickout/ Recess	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, bottle shape	-1.1mm	13 mm			75.5mm		094-010221-00000
10.01	Gas nozzle, bottle shape	-2.6mm	13 mm			77mm		094-022446-00000
10.01	Gas nozzle, bottle shape	+2.4mm	15.5 mm			72mm		094-010222-00000
10.01	Gas nozzle, conical	+1.9mm	15.5 mm			72.5mm		094-010220-00500
10.01	Gas nozzle, conical	-1.1mm	15.5 mm			75.5mm		094-010219-00000
10.01	Gas nozzle, bottle shape	-1.1mm	15.5 mm			75.5mm		094-018003-00000
10.01	Gas nozzle, bottle shape	-2.6mm	15.5 mm			77mm		094-009895-00000
10.02	Contact tip			0.8 mm	M6	28mm	CuCrZr	094-005407-00000
10.02	Contact tip			0.8 mm	M8	30mm	CuCrZr	094-005409-00000
10.02	Contact tip			0.9 mm	M6	28mm	CuCrZr	094-005408-00000
10.02	Contact tip			0.9 mm	M8	30mm	CuCrZr	094-005410-00000
10.02	Contact tip			1 mm	M6	28mm	CuCrZr	094-003339-00000
10.02	Contact tip			1 mm	M8	30mm	CuCrZr	094-005225-00000
10.02	Contact tip			1.2 mm	M6	28mm	CuCrZr	094-005224-00000
10.02	Contact tip			1.2 mm	M8	30mm	CuCrZr	094-004207-00000
10.02	Contact tip			1.4 mm	M8	30mm	CuCrZr	094-005411-00000
10.02	Contact tip			1.6 mm	M8	30mm	CuCrZr	094-005412-00000
10.05	Contact tip holder				M8	23.2mm		094-009896-00500
10.05	Contact tip holder				M8	23.2mm	Copper	094-010891-00000
10.05	Contact tip holder				M6	23.2mm	Copper	094-010892-00000
10.05	Contact tip holder				M6	23.2mm	Brass	094-022445-00000
10.06	Splash protection, standard, short					11.4mm		094-020106-00000
10.06	Spatter protection, standard				M18	21mm		094-009897-00000
10.06	Spatter protection, high-temperature-resistant					21mm		094-013862-00000
10.12	Gas diffuser standard					17mm		094-019840-00000

Steel liners

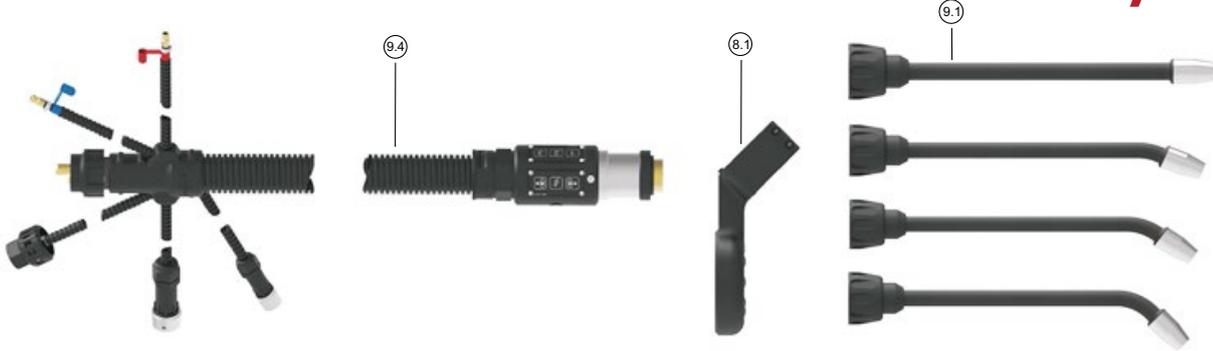
Item	Designation	Wire Ø	Length	Item no.
10.04	Steel liner, steel, black	0.8 mm - 1.2 mm	2m	094-011667-00500
10.04	Combined steel liner, aluminium	0.8 mm - 1.2 mm	2.4m	094-013325-00000
10.04	Liner, steel, white	1.4 mm - 1.6 mm	2.15m	094-011668-00000
10.04	Combined steel liner, aluminium	1.4 mm - 1.6 mm	2.4m	094-022447-00000

Options/accessories

Designation	Item no.
Adjusting device	394-008143-00000

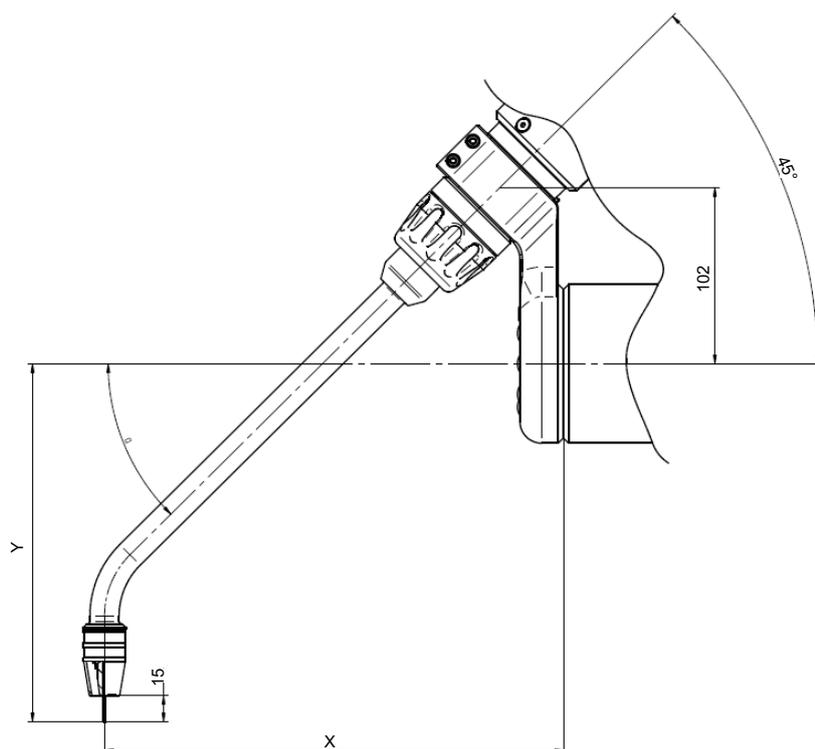
MIG/MAG robot welding torches RMT301W cobot

Made by
ewm[®]



- MIG/MAG robot welding torch, water cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- Water stop for coolant
- One-piece liner
- Push-button for wire inching, wire return, gas test
- RMT W CT + three freely assignable function buttons
- Suitable for compact Phoenix 355 puls Rob welding machine

Duty cycle, CO2	330 A / 100 %
Duty cycle, M21	290 A / 100 %
Duty cycle, M21 pulse	250 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector
Test mark	CE sign

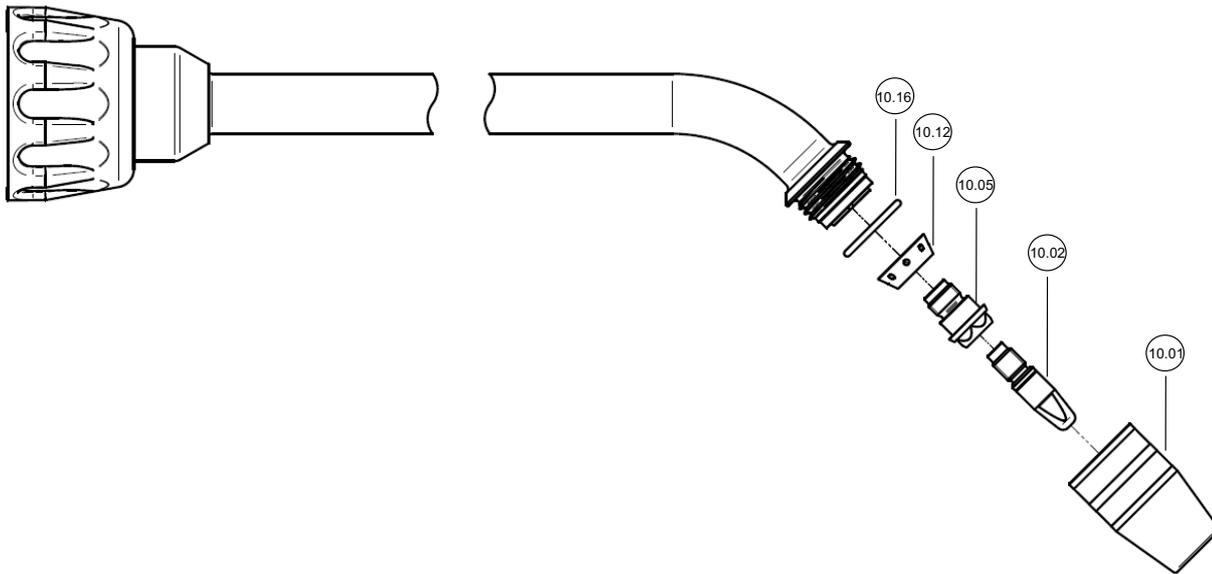


Types	X in mm	Y in mm	a in °
0°	320,5	182	45
22,5°	297,5	197,5	67,5
35°	281	203,5	80
45°	264	207,5	90

Item	Type	Designation	Length	Item no.
8.1	TH1 NOCOAX 45°	Torch holder		094-026863-00000
8.1	TH FLEX			094-026995-00000
8.1	AF1	Adapter flange		094-027183-00000
9.1	RMT301WL 0° X=359 Y=0	RMT 0° torch neck	-	094-027909-00000
9.1	RMT301WL 22,5° X=354 Y=27,5	RMT 22.5° torch neck	-	094-027114-00000
9.1	RMT301WL 35° X=346 Y=44	RMT 35° torch neck	-	094-027115-00000
9.1	RMT301WL 45° X=337,5 Y=58	RMT 45° torch neck	-	094-026981-00000
9.4	SP RMT W C KON 300CM EZA	Co-bot hose package, water cooled	3m	094-026998-01300
9.4	SP RMT W C KON 400CM EZA	Co-bot hose package, water cooled	4m	094-026998-01400
9.4	SP RMT W C KON 500CM EZA	Co-bot hose package, water cooled	5m	094-026998-01500
9.4	SP RMT W CT KON 300CM EZA	Teach co-bot hose package, water cooled	3m	094-026988-01300
9.4	SP RMT W CT KON 400CM EZA	Teach co-bot hose package, water cooled	4m	094-026988-01400
9.4	SP RMT W CT KON 500CM EZA	Teach co-bot hose package, water cooled	5m	094-026988-01500

► Order equipment for torch neck!

► More hose package lengths, torch neck versions and co-bot-specific adapter flanges upon request!



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle	24 mm			37.8mm		094-024876-00000
10.02	Contact tip		0.8 mm	M7	30mm	CuCrZr	094-013535-00001
10.02	Contact tip		0.9 mm	M7	30mm	CuCrZr	094-013536-00001
10.02	Contact tip		1 mm	M7	30mm	CuCrZr	094-013537-00001
10.02	Contact tip		1.2 mm	M7	30mm	CuCrZr	094-013538-00001
10.05	Contact tip holder				18mm		094-024877-00000
10.12	Gas diffusers						094-024875-00000
10.16	O-ring						094-024874-00000
-	O-ring for Euro torch connector						094-013967-00000
-	Torch key						094-016038-00001
-	Special hook spanner						094-027163-00003
-	Centring piece				15mm		094-026853-00001

► More consumables and spare parts upon request!

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Polyamid	094-013076-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Polyamid	094-013077-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Polyamid	094-013565-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501

RMT brass liners without wire brake

Item	Designation	Length	Item no.
10.07	Brass liner RMT 301W SH	330mm	094-026964-00000

RMT brass liners with wire brake

Item	Designation	Length	Item no.
10.07	Brass liners wire brake	300mm	094-025560-00000
10.07	Brass liners wire brake	450mm	094-028251-00000

RMT plastic liners with wire brake

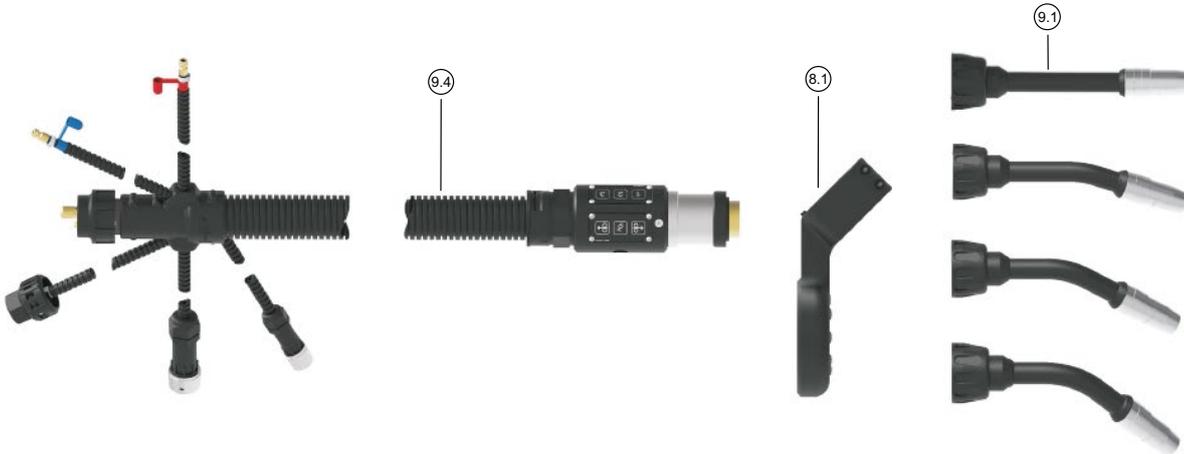
Item	Designation	Length	Item no.
10.03	Plastic liners wire brake	300mm	094-027875-00000

Options/accessories

Item	Designation	Item no.
-	Testing and straightening gauge for robot welding torches	094-027651-00000

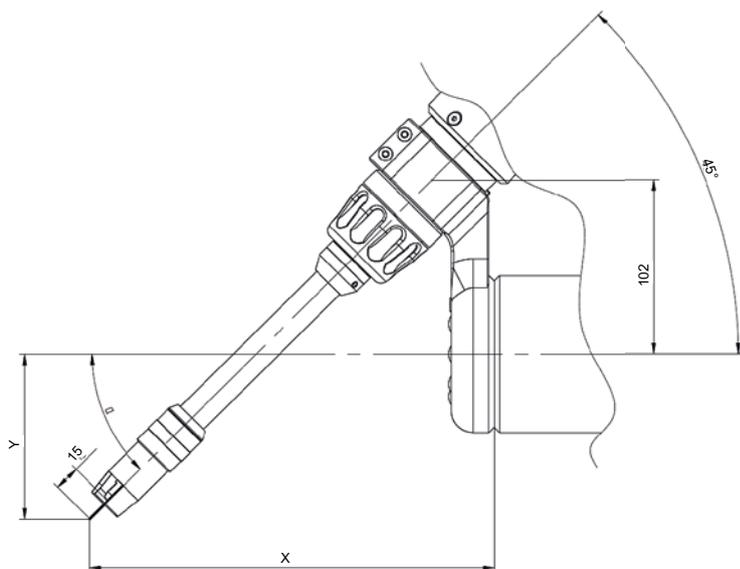
MIG/MAG robot welding torches RMT551W cobot

Made by
ewm[®]



- MIG/MAG robot welding torch, water cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- Water stop for coolant
- One-piece liner
- Push-button for wire inching, wire return, gas test
- RMT W CT + three freely assignable function buttons
- Suitable for compact Phoenix 355 puls Rob welding machine

Duty cycle, CO2	650 A / 100 %
Duty cycle, M21	550 A / 100 %
Duty cycle, M21 pulse	500 A / 100 %
Wire Ø	0.8 mm - 1.2 mm
Connection	Euro torch connector
Test mark	CE sign

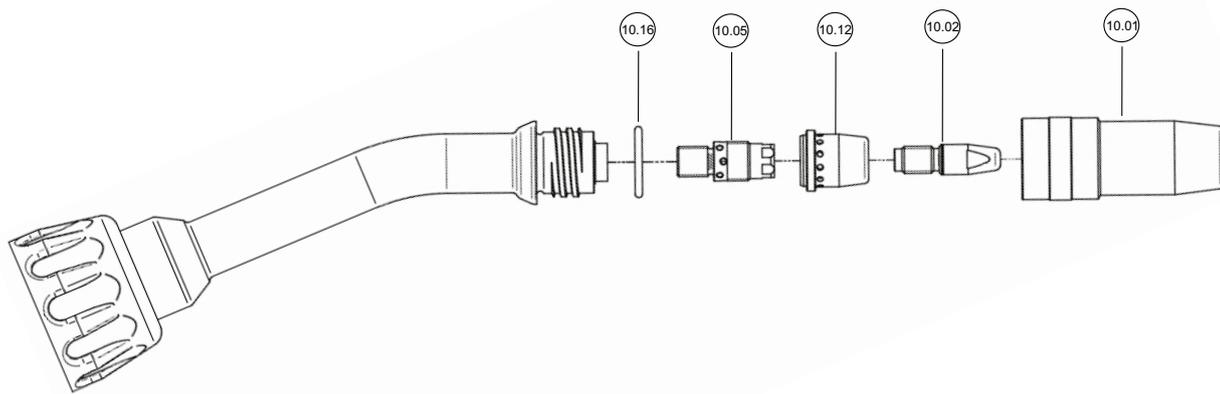


Types	X in mm	Y in mm	a in °
0° W	235,5	97	45
22,5° W	196	123,5	67,5
35° W	162	136,5	80
45° W	137,5	140,5	90
22,5° WL	265,5	192	67,5
35° WL	235	206	80
45° WL	208	211	90

Item	Type	Designation	Length	Item no.
8.1	TH1 NOCOAX 45°	Torch holder		094-026863-00000
8.1	TH FLEX			094-026995-00000
8.1	AF1	Adapter flange		094-027183-00000
9.1	RMT551W 0° X239,3 Y0	RMT 0° torch neck	-	094-025531-00001
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	-	094-025074-00001
9.1	RMT551W 35° X215,4 Y80	RMT 35° torch neck	-	094-025075-00001
9.1	RMT551W 45° X200,9 Y100	RMT 45° torch neck	-	094-025076-00001
9.1	RMT551WL 0° X339,5 Y0	RMT 0° torch neck	-	094-027680-00000
9.1	RMT551WL 22,5° X330,4 Y46,5	RMT 22.5° torch neck	-	094-026635-00001
9.1	RMT551WL 35° X315,4 Y80	RMT 35° torch neck	-	094-026636-00001
9.1	RMT551WL 45° X300,9 Y100	RMT 45° torch neck	-	094-026637-00001
9.4	SP RMT W C KON 300CM EZA	Co-bot hose package, water cooled	3m	094-026998-01300
9.4	SP RMT W C KON 400CM EZA	Co-bot hose package, water cooled	4m	094-026998-01400
9.4	SP RMT W C KON 500CM EZA	Co-bot hose package, water cooled	5m	094-026998-01500
9.4	SP RMT W CT KON 300CM EZA	Teach co-bot hose package, water cooled	3m	094-026988-01300
9.4	SP RMT W CT KON 400CM EZA	Teach co-bot hose package, water cooled	4m	094-026988-01400
9.4	SP RMT W CT KON 500CM EZA	Teach co-bot hose package, water cooled	5m	094-026988-01500

► Order equipment for torch neck!

► More hose package lengths, torch neck versions and co-bot-specific adapter flanges upon request!



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle	15 mm			63mm		094-014177-00001
10.01	Gas nozzle	15 mm			66mm		094-014178-00001
10.01	Gas nozzle	17 mm			63mm		094-014179-00001
10.01	Gas nozzle	17 mm			66mm		094-014180-00001
10.01	Gas nozzle	19 mm			63mm		094-014181-00001
10.01	Gas nozzle	19 mm			66mm		094-014182-00001
10.02	Contact tip		0.8 mm	M9	35mm	CuCrZr	094-013528-00001
10.02	Contact tip, aluminium welding		0.8 mm	M9	35mm	E-Cu	094-013543-00001
10.02	Contact tip		0.9 mm	M9	35mm	CuCrZr	094-013529-00001
10.02	Contact tip, aluminium welding		0.9 mm	M9	35mm	E-Cu	094-013544-00001
10.02	Contact tip		1 mm	M9	35mm	CuCrZr	094-013530-00001
10.02	Contact tip, aluminium welding		1 mm	M9	35mm	E-Cu	094-013545-00001
10.02	Forced-contact contact tip		1 mm	M9	35mm	CuCrZr	094-017007-00001
10.02	Contact tip		1.2 mm	M9	35mm	CuCrZr	094-013531-00001
10.02	Contact tip, aluminium welding		1.2 mm	M9	35mm	E-Cu	094-013546-00001
10.02	Forced-contact contact tip		1.2 mm	M9	35mm	CuCrZr	094-016159-00001
10.02	Contact tip		1.4 mm	M9	35mm	CuCrZr	094-013532-00001
10.02	Contact tip, aluminium welding		1.4 mm	M9	35mm	E-Cu	094-013547-00001
10.02	Contact tip		1.6 mm	M9	35mm	CuCrZr	094-013533-00001
10.02	Contact tip, aluminium welding		1.6 mm	M9	35mm	E-Cu	094-013548-00001
10.02	Forced-contact contact tip		1.6 mm	M9	35mm	CuCrZr	094-025533-00000
10.02	Contact tip		2 mm	M9	35mm	CuCrZr	094-013534-00001
10.02	Contact tip, aluminium welding		2 mm	M9	35mm	E-Cu	094-013549-00001
10.05	Contact tip holder						094-025209-00000
10.05	Contact tip holder						094-025338-00000
10.12	Gas diffusers						094-028487-00000
10.16	O-ring for gas nozzle holder						094-022875-00000
-	Testing and straightening gauge for robot welding torches						094-026770-00000
-	O-ring for Euro torch connector						094-013967-00000
-	Torch key						094-016038-00001
-	Special hook spanner						094-027163-00003
-	Centring piece				15mm		094-026854-00001

► More consumables and spare parts upon request!

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Polyamid	094-013076-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Polyamid	094-013077-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Polyamid	094-013565-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	3.6m	094-013662-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	4.6m	094-013663-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	5.6m	094-013664-00502

RMT brass liners without wire brake

Item	Designation	Length	Item no.
10.07	Brass liner RMT 301W SH	330mm	094-026964-00000

RMT brass liners with wire brake

Item	Designation	Length	Item no.
10.07	Brass liners wire brake	300mm	094-025560-00000
10.07	Brass liners wire brake	450mm	094-028251-00000

RMT plastic liners with wire brake

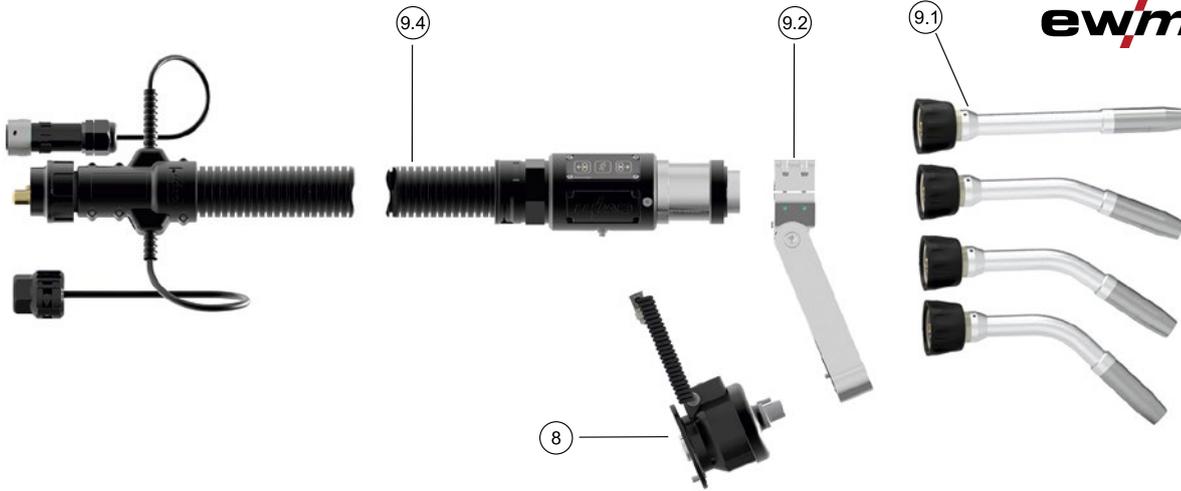
Item	Designation	Length	Item no.
10.03	Plastic liners wire brake	300mm	094-027875-00000

Options/accessories

Item	Designation	Item no.
-	Testing and straightening gauge for robot welding torches	094-027651-00000

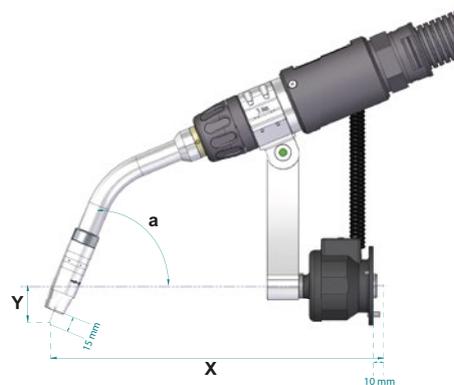
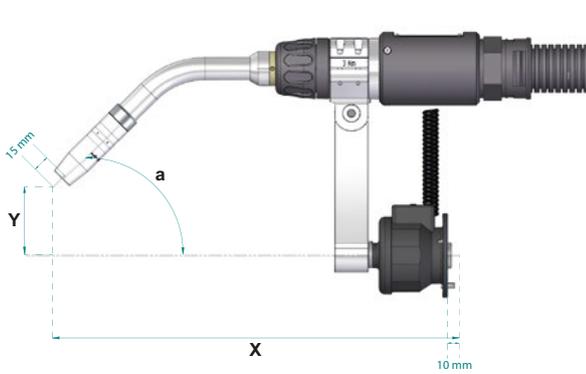
MIG/MAG robot welding torches RMT301G RSA

Made by
ewm[®]



- MIG/MAG robot welding torch, gas cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- One-piece liner
- Push buttons for wire inching, wire return, gas test (function dependent on wire feeder)
- Suitable for M drive 4 Rob 5

Duty cycle, CO₂	320 A / 100 %
Duty cycle, M21	270 A / 100 %
Duty cycle, M21 pulse	220 A / 100 %
Wire Ø	0.8 mm - 1.2 mm



Types	X in mm	Y in mm	a in °	Radius in mm
0°	403,1	167	0	70
22,5°	393,6	117,1	22,5	
35°	378,6	85,1	35	
45°	362	60,5	45	

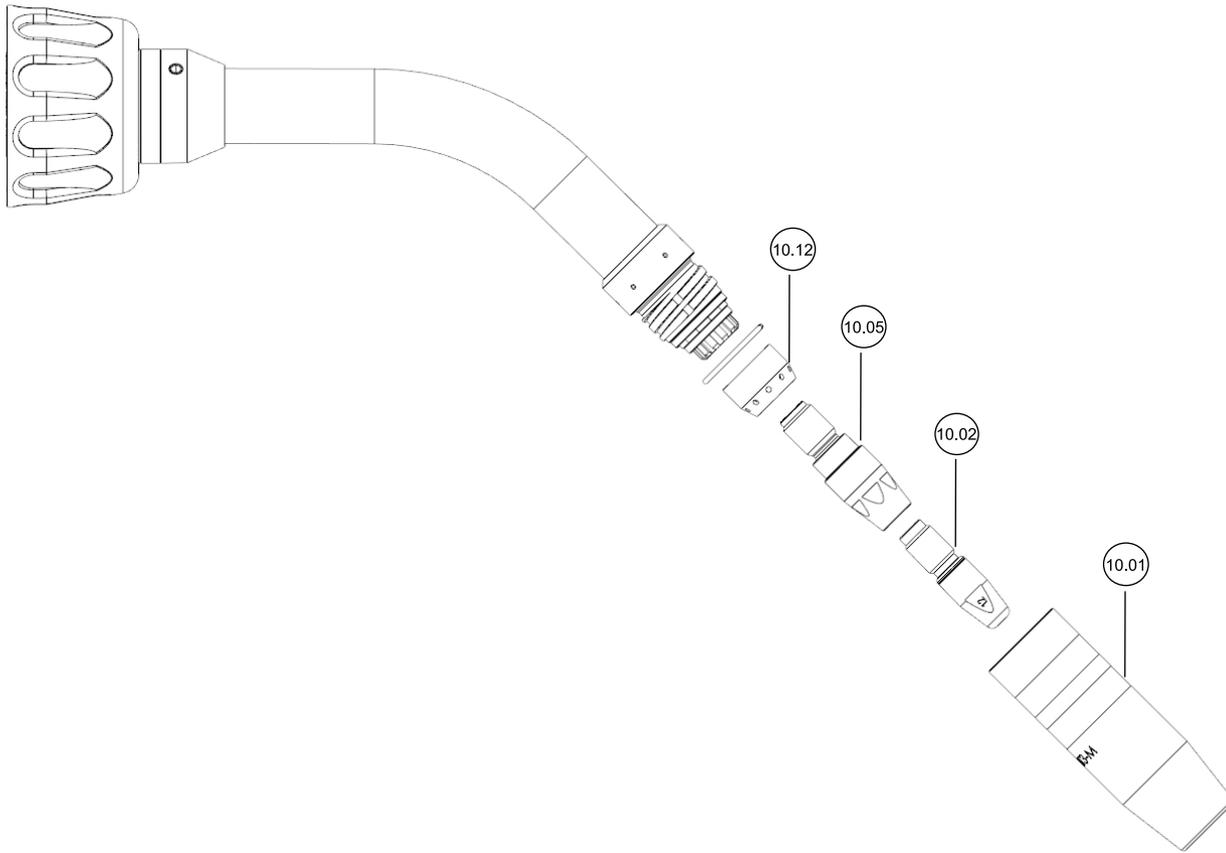
Types	X in mm	Y in mm	a in °	Radius in mm
0°	395,1	46,7	22,5	70
22,5°	367,2	4,3	45	
35°	341,1	-19,6	57,5	
45°	316,4	-35,9	67,5	

Item	Type	Designation	Length	Item no.
8	RSA MEDIUM PLUS	Collision sensor		094-023605-00000
9.1	RMT301G 0°	RMT 0° torch neck	-	094-029870-00000
9.1	RMT301G 22,5°	RMT 22.5° torch neck	-	094-029639-00000
9.1	RMT301G 35°	RMT 35° torch neck	-	094-029640-00000
9.1	RMT301G 45°	RMT 45° torch neck	-	094-029641-00000
9.2	TH RMT 0°-22,5° L=167 mm	Torch holder, adjustable	-	094-025140-00000
9.2	TH RMT 0°-22,5° L=199 mm	Torch holder, adjustable	-	094-028948-00000

► Order equipment for torch neck!

► Example configuration - the welding torch must be put together using the configurator.

Consumables/Accessories



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle	13 mm			71mm		094-013105-00001
10.01	Gas nozzle, short	15 mm			65mm		094-019821-00001
10.01	Gas nozzle	15 mm			71mm		094-013106-00001
10.01	Gas nozzle, short	18 mm			65mm		094-019822-00001
10.01	Gas nozzle	18 mm			71mm		094-013107-00001
10.02	Contact tip		0.8 mm	M9	35mm	CuCrZr	094-013528-00001
10.02	Contact tip		0.9 mm	M9	35mm	CuCrZr	094-013529-00001
10.02	Contact tip		1 mm	M9	35mm	CuCrZr	094-013530-00001
10.02	Contact tip		1.2 mm	M9	35mm	CuCrZr	094-013531-00001
10.05	Contact tip holder						094-029682-00001
10.12	Gas diffusers						094-029681-00000
-	Multi-functional key for robot welding torch						094-028741-00000
-	Centring piece				15mm		094-026854-00001

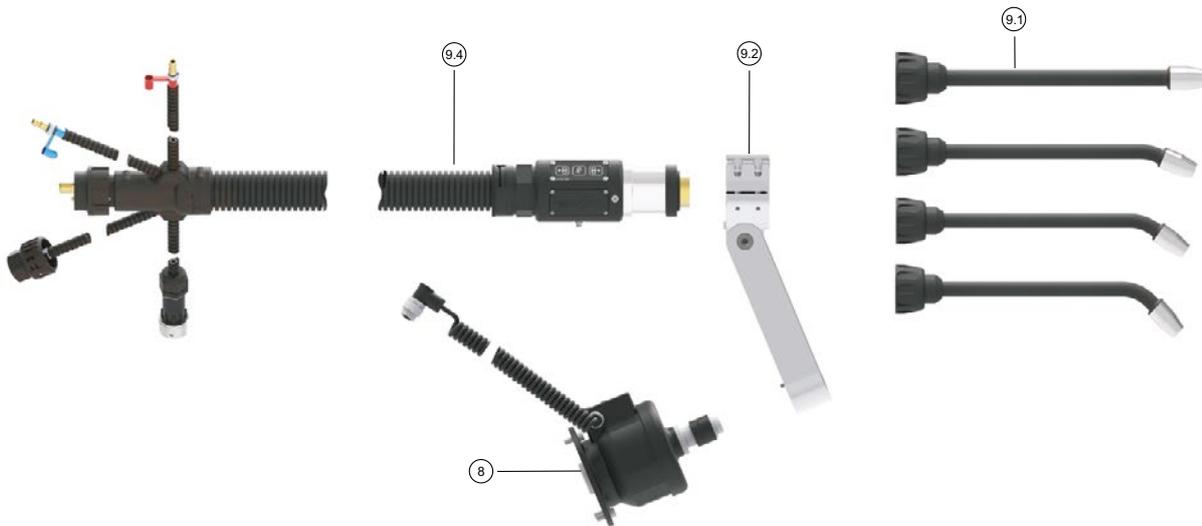
► More consumables and spare parts upon request!

Options/accessories

Item	Designation	Item no.
-	Testing and straightening gauge for robot welding torches	094-029950-00000

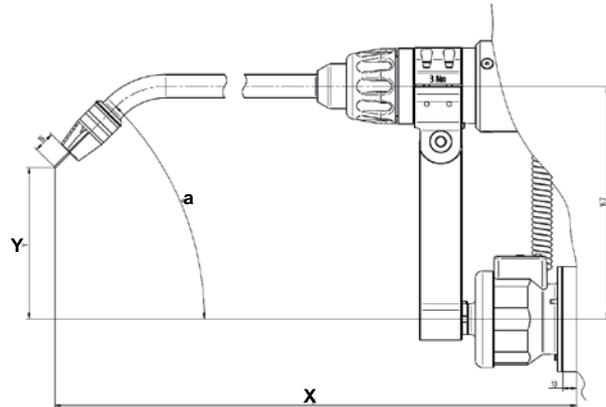
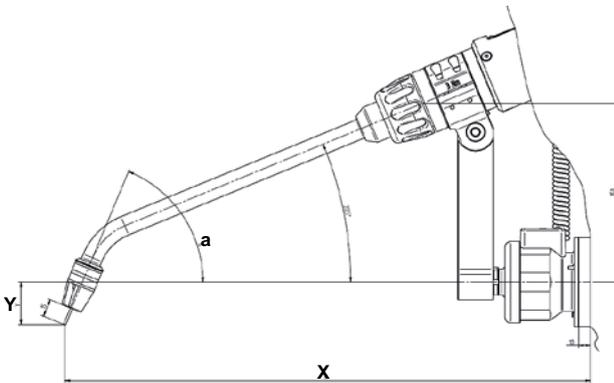
MIG/MAG robot welding torches

RMT301W RSA



- MIG/MAG robot welding torch, water cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- Water stop for coolant
- One-piece liner
- Push-buttons for wire inching, wire return, gas test (function dependent on wire feeder)
- Suitable for M drive 4 Rob 2, 3, 5

Duty cycle, CO2	330 A / 100 %
Duty cycle, M21	290 A / 100 %
Duty cycle, M21 pulse	250 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector
Test mark	CE sign



Types	X in mm	Y in mm	a in °	Radius in mm
0° WL	486	+8,5	22,5	50
22,5° WL	469	-14	45	
35° WL	456	-27	57,5	
45° WL	442	-36	67,5	

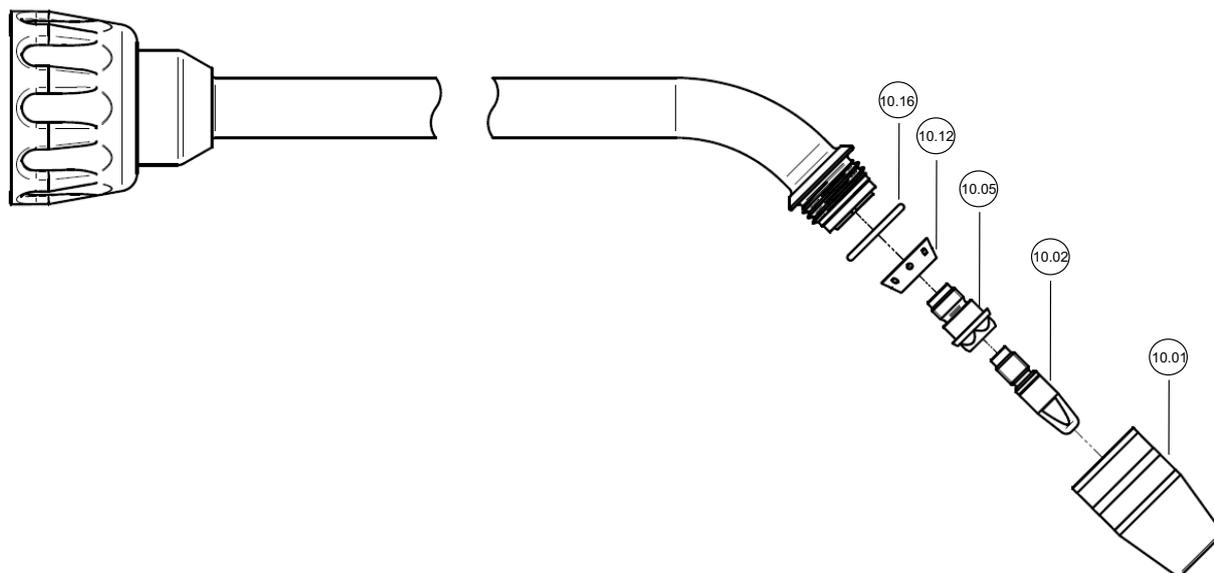
Types	X in mm	Y in mm	a in °	Radius in mm
0° WL	502	+167	0	50
22,5° WL	495	+139	22,5	
35° WL	487	+122,5	35	
45° WL	478	+108,5	45	

Item	Type	Designation	Length	Item no.
8	RSA MEDIUM PLUS	Collision sensor		094-023605-00000
9.1	RMT301WL 0° X=359 Y=0	RMT 0° torch neck	-	094-027909-00000
9.1	RMT301WL 22,5° X=354 Y=27,5	RMT 22.5° torch neck	-	094-027114-00000
9.1	RMT301WL 35° X=346 Y=44	RMT 35° torch neck	-	094-027115-00000
9.1	RMT301WL 45° X=337,5 Y=58	RMT 45° torch neck	-	094-026981-00000
9.2	TH RMT 0°-22,5° L=167 mm	Torch holder, adjustable	-	094-025140-00000
9.2	TH RMT 0°-22,5° L=199 mm	Torch holder, adjustable	-	094-028948-00000
9.4	SP RMT W KON 100CM EZA	Hose package, water-cooled, with blow-out function	1m	094-525221-01100
9.4	SP RMT W KON 150CM EZA	Hose package, water-cooled, with blow-out function	1.5m	094-525221-01150
9.4	SP RMT W KON 200CM EZA	Hose package, water-cooled, with blow-out function	2m	094-525221-01200
9.4	SP RMT W KON 300CM EZA	Hose package, water-cooled, with blow-out function	3m	094-525221-01300
9.4	SP RMT W KON 400CM EZA	Hose package, water-cooled, with blow-out function	4m	094-525221-01400
9.4	SP RMT W KON 125CM EZA	Hose package, water-cooled, with blow-out function and wire brake	1.25m	094-525221-04125
9.4	SP RMT W KON 150CM EZA	Hose package, water-cooled, with blow-out function and wire brake	1.5m	094-525221-04150

► More hose package lengths and torch neck versions upon request!

► Order equipment for torch neck!

Consumables/Accessories



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle	24 mm			37.8mm		094-024876-00000
10.02	Contact tip		0.8 mm	M7	30mm	CuCrZr	094-013535-00001
10.02	Contact tip		0.9 mm	M7	30mm	CuCrZr	094-013536-00001
10.02	Contact tip		1 mm	M7	30mm	CuCrZr	094-013537-00001
10.02	Contact tip		1.2 mm	M7	30mm	CuCrZr	094-013538-00001
10.05	Contact tip holder				18mm		094-024877-00000
10.12	Gas diffusers						094-024875-00000
10.16	O-ring						094-024874-00000
-	O-ring for Euro torch connector						094-013967-00000
-	Torch key						094-016038-00001
-	Special hook spanner						094-027163-00003
-	Centring piece				15mm		094-026853-00001

► More consumables and spare parts upon request!

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Polyamid	094-013076-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Polyamid	094-013077-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Polyamid	094-013565-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501

RMT brass liners without wire brake

Item	Designation	Length	Item no.
10.07	Brass liner RMT 301W SH	330mm	094-026964-00000

RMT brass liners with wire brake

Item	Designation	Length	Item no.
10.07	Brass liners wire brake	300mm	094-025560-00000
10.07	Brass liners wire brake	450mm	094-028251-00000

RMT plastic liners with wire brake

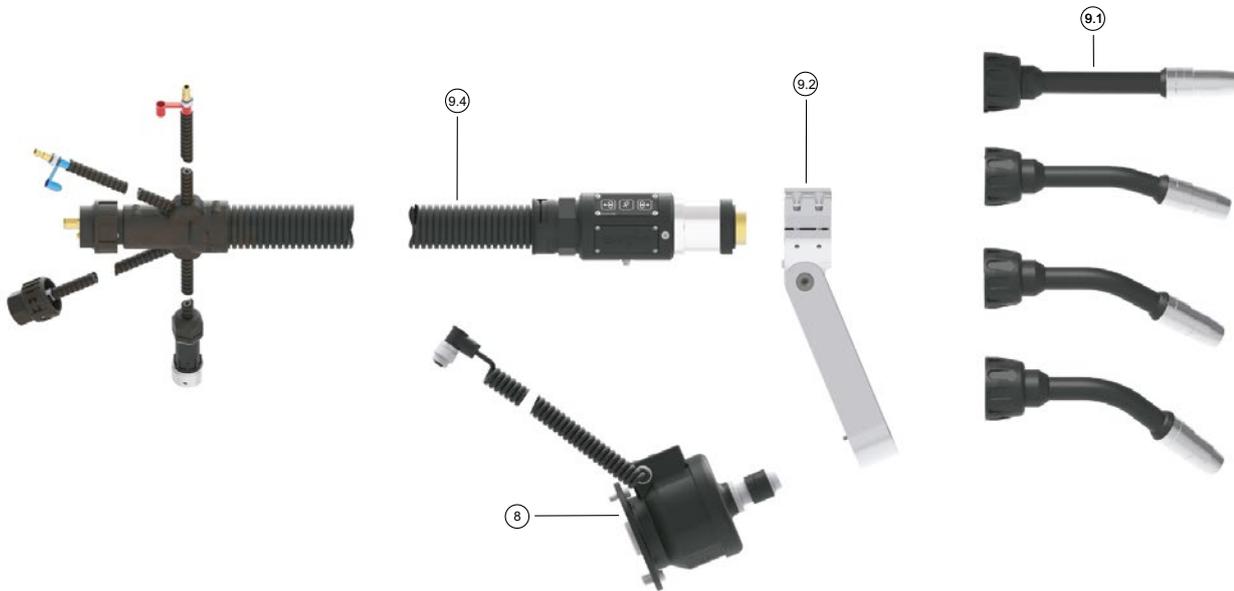
Item	Designation	Length	Item no.
10.03	Plastic liners wire brake	300mm	094-027875-00000

Options/accessories

Item	Designation	Item no.
-	Testing and straightening gauge for robot welding torches	094-027651-00000

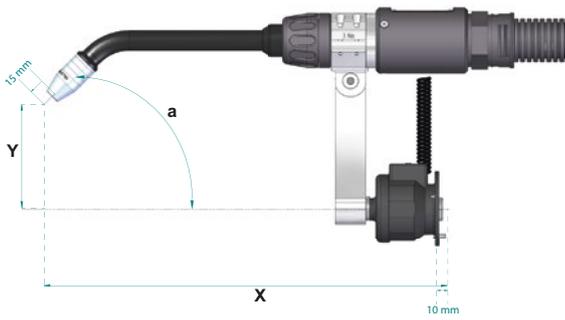
MIG/MAG robot welding torches RMT351W RSA

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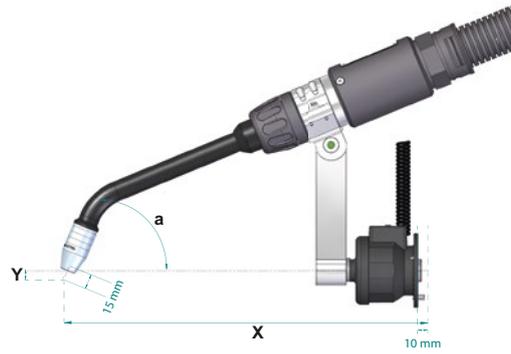


- MIG/MAG robot welding torch, water cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- Water stop for coolant
- One-piece liner
- Push-buttons for wire inching, wire return, gas test (function dependent on wire feeder)
- Suitable for M drive 4 Rob 2, 3, 5

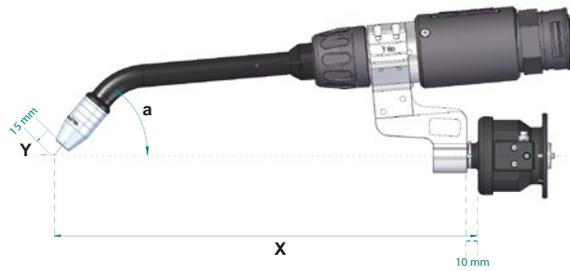
Duty cycle, CO2	350 A / 100 %
Duty cycle, M21	300 A / 100 %
Duty cycle, M21 pulse	260 A / 100 %
Wire Ø	0.8 mm - 1.2 mm



Types	X in mm	Y in mm	a in °	Radius in mm
0°	423,8	167	0	50
22,5°	418	136,6	22,5	
35°	409,4	118,1	35	
45°	399,6	103,2	45	



Types	X in mm	Y in mm	a in °	Radius in mm
0°	414,2	38,8	22,5	50
22,5°	397,3	12,9	45	
35°	382,2	-0,9	57,5	
45°	367,4	-10,9	67,5	

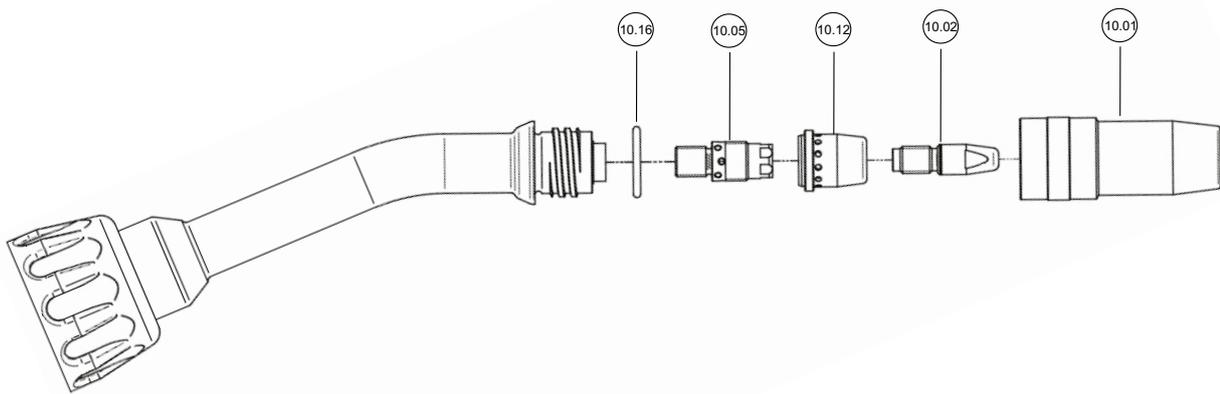


Types	X in mm	Y in mm	a in °	Radius in mm
22,5°	445	0	45	50
35°	444,9	0	45	
45°	446,4	0	50	

Item	Type	Designation	Length	Item no.
8	RSA MEDIUM PLUS	Collision sensor		094-023605-00000
9.1	RMT351W 0°	RMT 0° torch neck	-	094-027985-00000
9.1	RMT351W 22,5°	RMT 22.5° torch neck	-	094-028026-00000
9.1	RMT351W 35°	RMT 35° torch neck	-	094-028044-00000
9.1	RMT351W 45°	RMT 45° torch neck	-	094-028043-00000
9.2	TH RMT 0°-22,5° L=167 mm	Torch holder, adjustable	-	094-025140-00000
9.2	TH RMT 0°-22,5° L=199 mm	Torch holder, adjustable	-	094-028948-00000
9.2	TH RMT351W 22,5°	Torch holder	-	094-028314-00000
9.2	TH RMT351W 35°	Torch holder	-	094-028315-00000
9.2	TH RMT351W 45°	Torch holder	-	094-028316-00000
9.4	SP RMT W KON 100CM EZA	Hose package, water-cooled, with blow-out function	1m	094-525221-01100
9.4	SP RMT W KON 120CM EZA	Hose package, water-cooled, with blow-out function	1.2m	094-525221-01120
9.4	SP RMT W KON 125CM EZA	Hose package, water-cooled, with blow-out function	1.25m	094-525221-01125
9.4	SP RMT W KON 150CM EZA	Hose package, water-cooled, with blow-out function	1.5m	094-525221-01150
9.4	SP RMT W KON 200CM EZA	Hose package, water-cooled, with blow-out function	2m	094-525221-01200
9.4	SP RMT W KON 300CM EZA	Hose package, water-cooled, with blow-out function	3m	094-525221-01300
9.4	SP RMT W KON 400CM EZA	Hose package, water-cooled, with blow-out function	4m	094-525221-01400

► More hose package lengths and torch neck versions upon request!
 ► Order equipment for torch neck!

Consumables/Accessories



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle	13 mm			45mm		094-028369-00000
10.01	Gas nozzle	13 mm			48mm		094-027984-00000
10.02	Contact tip		0.8 mm	M7	30mm	CuCrZr	094-013535-00001
10.02	Contact tip		0.9 mm	M7	30mm	CuCrZr	094-013536-00001
10.02	Contact tip		1 mm	M7	30mm	CuCrZr	094-013537-00001
10.02	Contact tip		1.2 mm	M7	30mm	CuCrZr	094-013538-00001
10.05	Contact tip holder				18mm		094-024877-00000
10.12	Gas diffusers						094-024875-00000
10.16	O-ring for gas nozzle holder						094-022875-00000
10.16	O-ring						094-024874-00000
-	Multi-functional key for robot welding torch						094-028741-00000
-	Centring piece				15mm		094-026854-00001

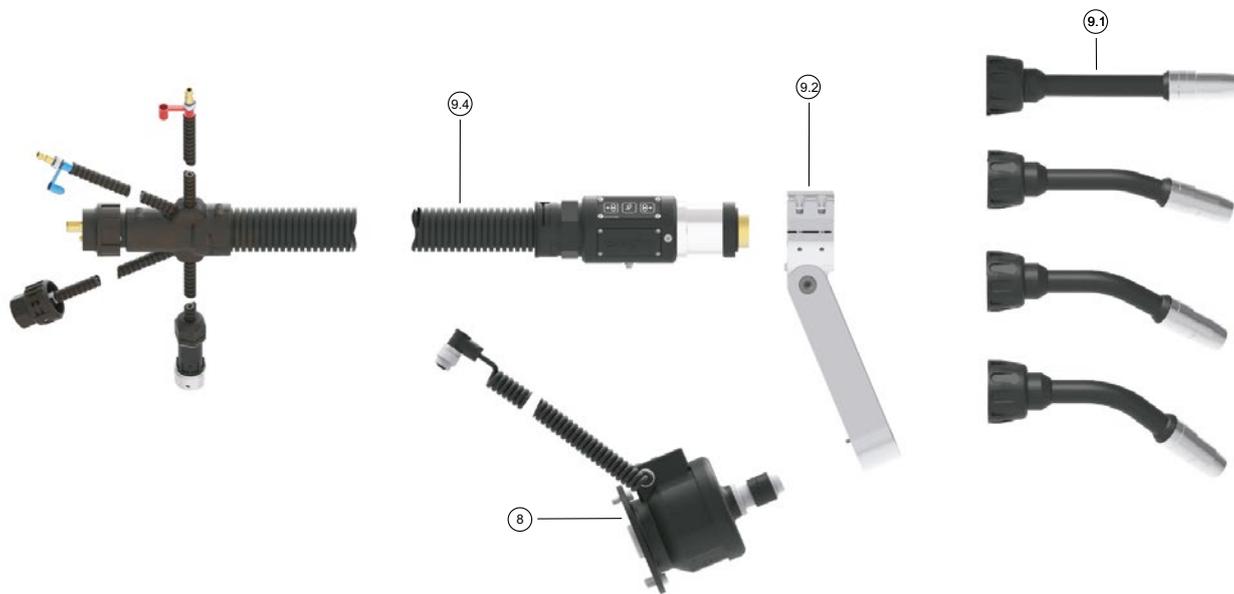
► More consumables and spare parts upon request!

Options/accessories

Designation	Item no.
Testing and straightening gauge for robot welding torches	094-028330-00000

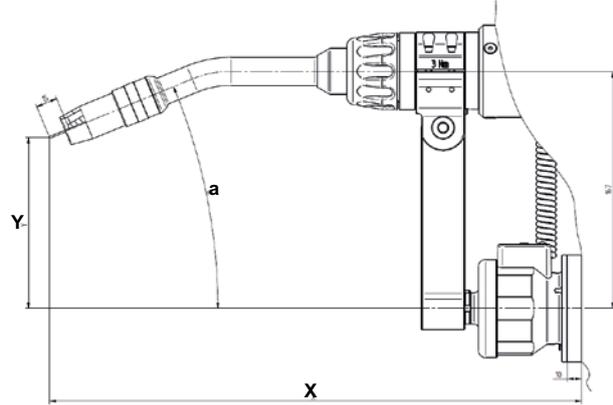
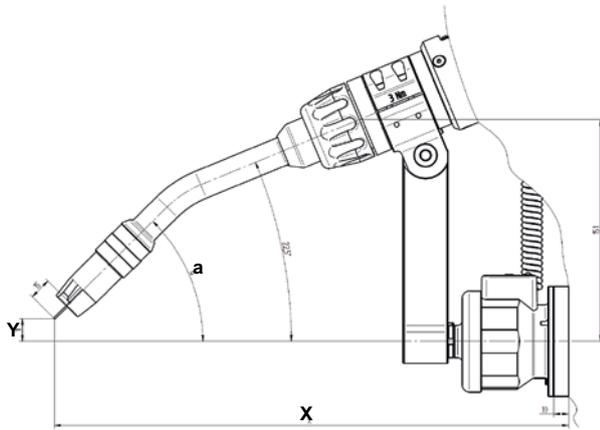
MIG/MAG robot welding torches RMT551W RSA

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- MIG/MAG robot welding torch, water cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- Water stop for coolant
- One-piece liner
- Push-buttons for wire inching, wire return, gas test (function dependent on wire feeder)
- Suitable for M drive 4 Rob 2, 3, 5

Duty cycle, CO2	650 A / 100 %
Duty cycle, M21	550 A / 100 %
Duty cycle, M21 pulse	500 A / 100 %
Wire Ø	0.8 mm - 1.2 mm
Connection	Euro torch connector
Test mark	CE sign

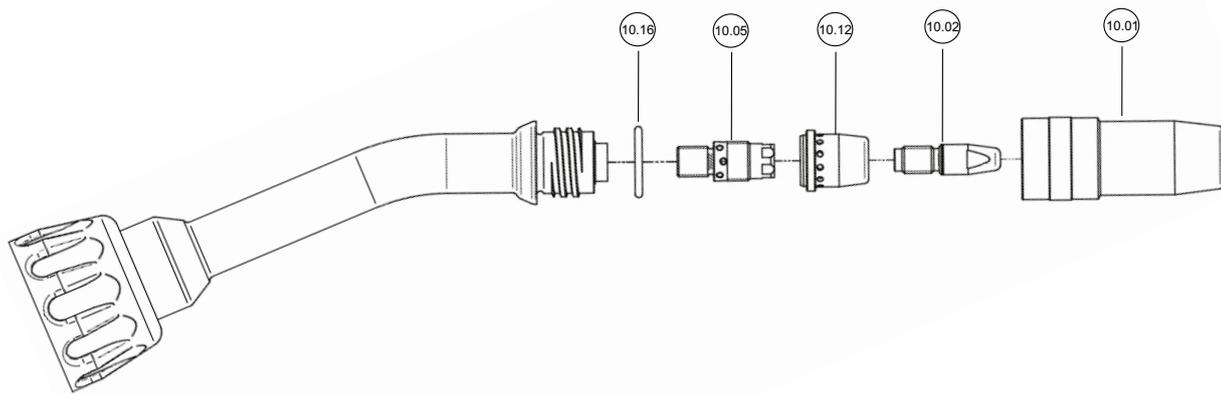


Types	X in mm	Y in mm	a in °	Radius in mm
0° W	376,5	+54	22,5	70
22,5° W	347,5	+15,5	45	
35° W	327	-7,5	57,5	
45° W	304	-21	67,5	
22,5° WL	446	-26	45	
35° WL	424,5	-52,5	57,5	
45° WL	393	-63	67,5	

Types	X in mm	Y in mm	a in °	Radius in mm
0° W	383	167	0	70
22,5° W	371	120	22,5	
35° W	360,5	91	35	
45° W	345,5	61	45	
22,5° WL	468	86,5	22,5	
35° WL	479	116,5	35	
45° WL	443,5	65	45	

Item	Type	Designation	Length	Item no.
8	RSA MEDIUM PLUS	Collision sensor		094-023605-00000
9.1	RMT551W 0° X239,3 Y0	RMT 0° torch neck	-	094-025531-00001
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	-	094-025074-00001
9.1	RMT551W 35° X215,4 Y80	RMT 35° torch neck	-	094-025075-00001
9.1	RMT551W 45° X200,9 Y100	RMT 45° torch neck	-	094-025076-00001
9.1	RMT551WL 0° X339,5 Y0	RMT 0° torch neck	-	094-027680-00000
9.1	RMT551WL 22,5° X330,4 Y46,5	RMT 22.5° torch neck	-	094-026635-00001
9.1	RMT551WL 35° X315,4 Y80	RMT 35° torch neck	-	094-026636-00001
9.1	RMT551WL 45° X300,9 Y100	RMT 45° torch neck	-	094-026637-00001
9.2	TH RMT 0°-22,5° L=167 mm	Torch holder, adjustable	-	094-025140-00000
9.2	TH RMT 0°-22,5° L=199 mm	Torch holder, adjustable	-	094-028948-00000
9.4	SP RMT W KON 100CM EZA	Hose package, water-cooled, with blow-out function	1m	094-525221-01100
9.4	SP RMT W KON 150CM EZA	Hose package, water-cooled, with blow-out function	1.5m	094-525221-01150
9.4	SP RMT W KON 200CM EZA	Hose package, water-cooled, with blow-out function	2m	094-525221-01200
9.4	SP RMT W KON 300CM EZA	Hose package, water-cooled, with blow-out function	3m	094-525221-01300
9.4	SP RMT W KON 400CM EZA	Hose package, water-cooled, with blow-out function	4m	094-525221-01400
9.4	SP RMT W KON 125CM EZA	Hose package, water-cooled, with blow-out function and wire brake	1.25m	094-525221-04125
9.4	SP RMT W KON 150CM EZA	Hose package, water-cooled, with blow-out function and wire brake	1.5m	094-525221-04150

- ▶ More hose package lengths and torch neck versions upon request!
- ▶ Order equipment for torch neck!



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle	15 mm			63mm		094-014177-00001
10.01	Gas nozzle	15 mm			66mm		094-014178-00001
10.01	Gas nozzle	17 mm			63mm		094-014179-00001
10.01	Gas nozzle	17 mm			66mm		094-014180-00001
10.01	Gas nozzle	19 mm			63mm		094-014181-00001
10.01	Gas nozzle	19 mm			66mm		094-014182-00001
10.02	Contact tip		0.8 mm	M9	35mm	CuCrZr	094-013528-00001
10.02	Contact tip, aluminium welding		0.8 mm	M9	35mm	E-Cu	094-013543-00001
10.02	Contact tip		0.9 mm	M9	35mm	CuCrZr	094-013529-00001
10.02	Contact tip, aluminium welding		0.9 mm	M9	35mm	E-Cu	094-013544-00001
10.02	Contact tip		1 mm	M9	35mm	CuCrZr	094-013530-00001
10.02	Contact tip, aluminium welding		1 mm	M9	35mm	E-Cu	094-013545-00001
10.02	Forced-contact contact tip		1 mm	M9	35mm	CuCrZr	094-017007-00001
10.02	Contact tip		1.2 mm	M9	35mm	CuCrZr	094-013531-00001
10.02	Contact tip, aluminium welding		1.2 mm	M9	35mm	E-Cu	094-013546-00001
10.02	Forced-contact contact tip		1.2 mm	M9	35mm	CuCrZr	094-016159-00001
10.02	Contact tip		1.4 mm	M9	35mm	CuCrZr	094-013532-00001
10.02	Contact tip, aluminium welding		1.4 mm	M9	35mm	E-Cu	094-013547-00001
10.02	Contact tip		1.6 mm	M9	35mm	CuCrZr	094-013533-00001
10.02	Contact tip, aluminium welding		1.6 mm	M9	35mm	E-Cu	094-013548-00001
10.02	Forced-contact contact tip		1.6 mm	M9	35mm	CuCrZr	094-025533-00000
10.02	Contact tip		2 mm	M9	35mm	CuCrZr	094-013534-00001
10.02	Contact tip, aluminium welding		2 mm	M9	35mm	E-Cu	094-013549-00001
10.05	Contact tip holder						094-025209-00000
10.05	Contact tip holder						094-025338-00000
10.12	Gas diffusers						094-028487-00000
10.16	O-ring for gas nozzle holder						094-022875-00000
-	Testing and straightening gauge for robot welding torches						094-026770-00000
-	O-ring for Euro torch connector						094-013967-00000
-	Torch key						094-016038-00001
-	Special hook spanner						094-027163-00003
-	Centring piece				15mm		094-026854-00001

► More consumables and spare parts upon request!

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Polyamid	094-013076-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Polyamid	094-013077-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Polyamid	094-013565-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	3.6m	094-013662-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	4.6m	094-013663-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	5.6m	094-013664-00502

RMT brass liners without wire brake

Item	Designation	Length	Item no.
10.07	Brass liner RMT 301W SH	330mm	094-026964-00000

RMT brass liners with wire brake

Item	Designation	Length	Item no.
10.07	Brass liners wire brake	300mm	094-025560-00000
10.07	Brass liners wire brake	450mm	094-028251-00000

RMT plastic liners with wire brake

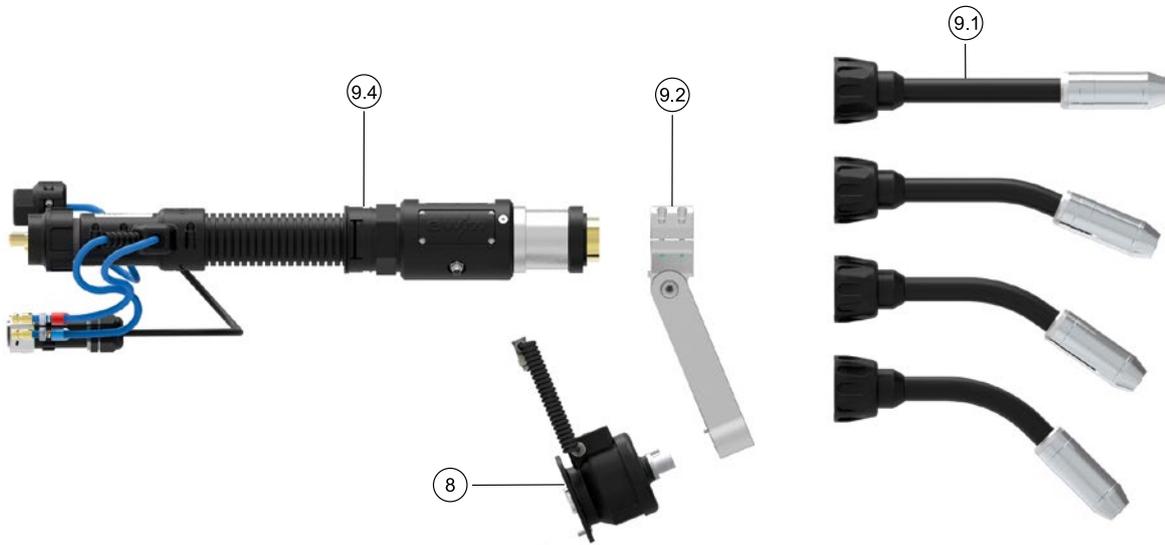
Item	Designation	Length	Item no.
10.03	Plastic liners wire brake	300mm	094-027875-00000

Options/accessories

Item	Designation	Item no.
-	Testing and straightening gauge for robot welding torches	094-027651-00000

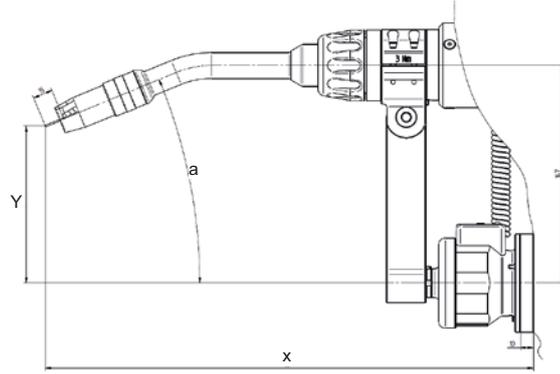
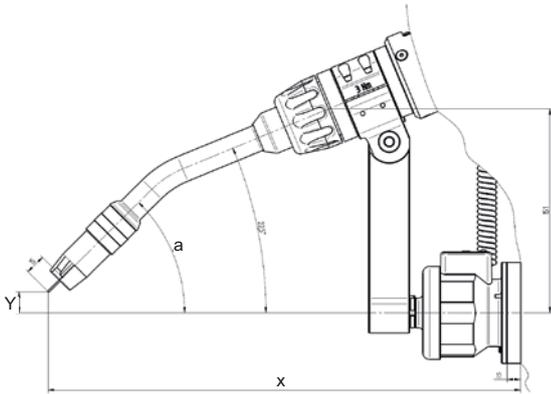
MIG/MAG robot welding torches RMT651W RSA

Made by
ewm[®]



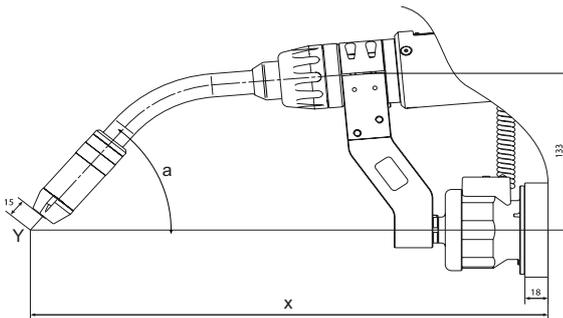
- MIG/MAG robot welding torch, water cooled
- Especially suitable for high welding currents and maximum duty cycles
- Water-cooled gas nozzle with integrated spatter protection and replaceable gas nozzle tip
- The replaceable gas nozzle tip reduces costs for consumables
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- Gas nozzle sensor in the torch neck
- Water stop for coolant
- One-piece liner
- Push buttons for wire inching, wire return, gas test (function dependent on wire feeder)
- Suitable for M drive 4 Rob 2, 3, 5

Duty cycle, CO2	650 A / 100 %
Duty cycle, M21	600 A / 100 %
Duty cycle, M21 pulse	550 A / 100 %
Wire Ø	0.8 mm - 2 mm
Connection	Euro torch connector
Test mark	CE sign



Types	X in mm	Y in mm	a in °	Radius in mm
0° W	409,2	44,2	22,5	100
22,5° W	380,6	0,5	45	
35° W	354,7	-23,8	57,5	
45° W	328,9	-41,7	67,5	

Types	X in mm	Y in mm	a in °	Radius in mm
0° W	417,7	167	0	100
22,5° W	408	115,7	22,5	
35° W	393,3,5	83,4	35	
45° W	376,4	56,9	45	

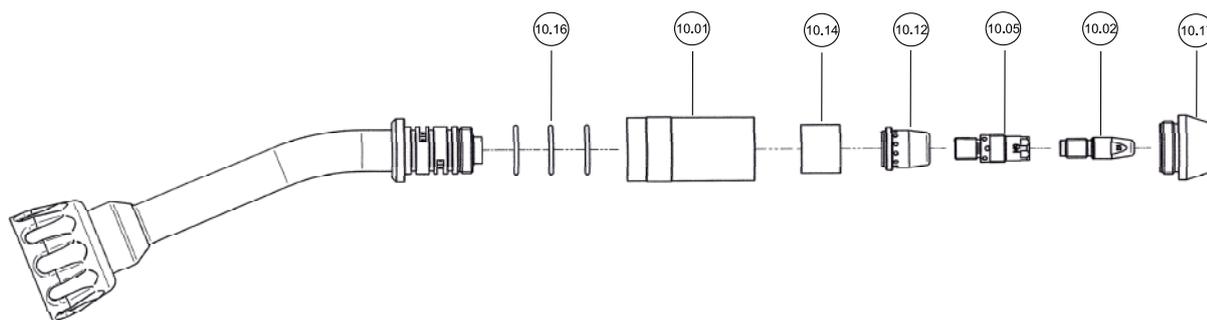


Types	X in mm	Y in mm	a in °	Radius in mm
22,5° W	400	0	22,5	100
35° W			35	
45° W			45	

Item	Type	Designation	Length	Item no.
8	RSA STRONG	Collision sensor		094-020727-00000
9.1	RMT651W 0°	Replaceable torch neck	-	094-028160-00000
9.1	RMT651W 22,5°	Replaceable torch neck	-	094-028149-00000
9.1	RMT651W 35°	Replaceable torch neck	-	094-028157-00000
9.1	RMT651W 45°	Replaceable torch neck	-	094-028158-00000
9.2	TH RMT 0°-22,5° L=167 mm	Torch holder, adjustable	-	094-025140-00000
9.2	TH RMT651W 22,5°	Torch holder, fixed	-	094-028323-00000
9.2	TH RMT651W 35°	Torch holder, fixed	-	094-028324-00000
9.2	TH RMT651W 45°	Torch holder, fixed	-	094-028325-00000
9.4	SP RMT W KON 99CM EZA	Hose package, water cooled	0.99m	094-525221-00099
9.4	SP RMT W KON 109CM EZA	Hose package, water cooled	1.09m	094-525221-00109
9.4	SP RMT W KON 117CM EZA	Hose package, water cooled	1.17m	094-525221-00117
9.4	SP RMT W KON 125CM EZA	Hose package, water cooled	1.25m	094-525221-00125
9.4	SP RMT W KON 90CM EZA	Hose package, water-cooled, with blow-out function	0.9m	094-525221-01090
9.4	SP RMT W KON 100CM EZA	Hose package, water-cooled, with blow-out function	1m	094-525221-01100
9.4	SP RMT W KON 120CM EZA	Hose package, water-cooled, with blow-out function	1.2m	094-525221-01120
9.4	SP RMT W KON 125CM EZA	Hose package, water-cooled, with blow-out function	1.25m	094-525221-01125
9.4	SP RMT W KON 150CM EZA	Hose package, water-cooled, with blow-out function	1.5m	094-525221-01150
9.4	SP RMT W KON 200CM EZA	Hose package, water-cooled, with blow-out function	2m	094-525221-01200
9.4	SP RMT W KON 300CM EZA	Hose package, water-cooled, with blow-out function	3m	094-525221-01300
9.4	SP RMT W KON 400CM EZA	Hose package, water-cooled, with blow-out function	4m	094-525221-01400
9.4	SP RMT W KON 150CM EZA	Hose package, water-cooled, with wire brake	1.5m	094-525221-02150
9.4	SP RMT W KON 125CM EZA	Hose package, water-cooled, with blow-out function and wire brake	1.25m	094-525221-04125
9.4	SP RMT W KON 150CM EZA	Hose package, water-cooled, with blow-out function and wire brake	1.5m	094-525221-04150

- ▶ More hose package lengths and torch neck versions upon request!
- ▶ Order equipment for torch neck!

Consumables/Accessories



Item	Designation	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle					094-020371-00000
10.02	Contact tip	0.8 mm	M9	35mm	CuCrZr	094-013528-00001
10.02	Contact tip, aluminium welding	0.8 mm	M9	35mm	E-Cu	094-013543-00001
10.02	Contact tip	0.9 mm	M9	35mm	CuCrZr	094-013529-00001
10.02	Contact tip, aluminium welding	0.9 mm	M9	35mm	E-Cu	094-013544-00001
10.02	Contact tip	1 mm	M9	35mm	CuCrZr	094-013530-00001
10.02	Contact tip, aluminium welding	1 mm	M9	35mm	E-Cu	094-013545-00001
10.02	Forced-contact contact tip	1 mm	M9	35mm	CuCrZr	094-017007-00001
10.02	Contact tip	1.2 mm	M9	35mm	CuCrZr	094-013531-00001
10.02	Contact tip, aluminium welding	1.2 mm	M9	35mm	E-Cu	094-013546-00001
10.02	Forced-contact contact tip	1.2 mm	M9	35mm	CuCrZr	094-016159-00001
10.02	Contact tip	1.4 mm	M9	35mm	CuCrZr	094-013532-00001
10.02	Contact tip, aluminium welding	1.4 mm	M9	35mm	E-Cu	094-013547-00001
10.02	Contact tip	1.6 mm	M9	35mm	CuCrZr	094-013533-00001
10.02	Contact tip, aluminium welding	1.6 mm	M9	35mm	E-Cu	094-013548-00001
10.02	Forced-contact contact tip	1.6 mm	M9	35mm	CuCrZr	094-025533-00000
10.02	Contact tip	2 mm	M9	35mm	CuCrZr	094-013534-00001
10.02	Contact tip, aluminium welding	2 mm	M9	35mm	E-Cu	094-013549-00001
10.05	Contact tip holder					094-025338-00000
10.12	Gas diffusers					094-028487-00000
10.14	Insulator					094-020307-00000
10.16	O-ring					094-020520-00000
10.17	Gas nozzle tip					094-020306-00002
-	O-ring for Euro torch connector					094-013967-00000
-	Torch key					094-016038-00001
-	O-ring					094-025198-00000
-	O-ring					094-025719-00000
-	O-ring					094-026613-00000
-	Special hook spanner					094-027163-00003
-	Testing and straightening gauge for robot welding torches					094-028365-00000
-	Multi-functional key for robot welding torch					094-028741-00000
-	Centring piece			15mm		094-026854-00001

► More consumables and spare parts upon request!

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Polyamid	094-013076-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Polyamid	094-013077-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Polyamid	094-013565-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	3.6m	094-013662-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	4.6m	094-013663-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	5.6m	094-013664-00502

RMT brass liners without wire brake

Item	Designation	Length	Item no.
10.07	Brass liner RMT 301W SH	330mm	094-026964-00000

RMT brass liners with wire brake

Item	Designation	Length	Item no.
10.07	Brass liners wire brake	300mm	094-025560-00000
10.07	Brass liners wire brake	450mm	094-028251-00000

RMT plastic liners with wire brake

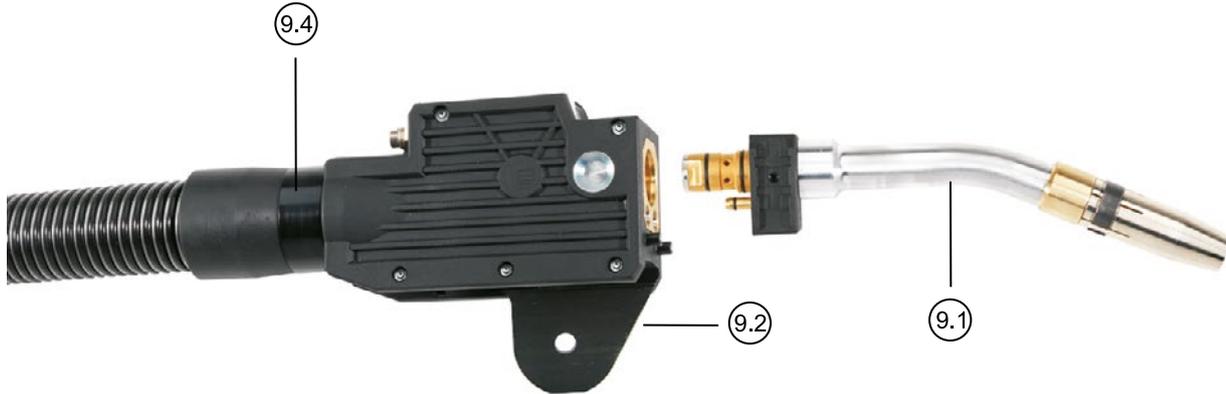
Item	Designation	Length	Item no.
10.03	Plastic liners wire brake	300mm	094-027875-00000

Options/accessories

Item	Designation	Item no.
-	Testing and straightening gauge for robot welding torches	094-027651-00000

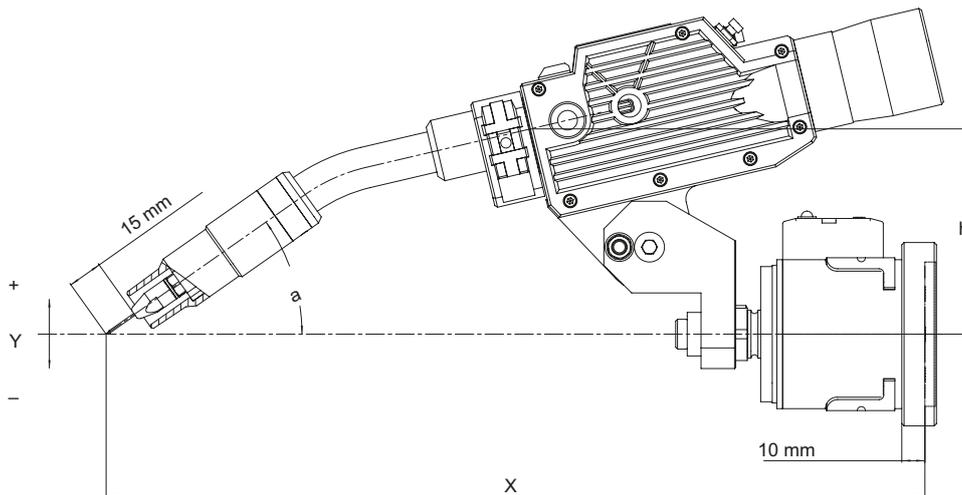
MIG/MAG robot welding torches

MTR242W



- MIG/MAG robot welding torch, water cooled
- Maximum TCP security
- Modular construction
- Quick-change torch neck
- Standard equipment: 1.2 mm steel contact tip, NW15.5/- 1.0 mm conical gas nozzle, 22° torch neck, 1.25 m hose package

Duty cycle, CO2	320 A / 100 %
Duty cycle, M21	280 A / 100 %
Wire Ø	0.8 mm - 1.2 mm
Connection	Euro torch connector



Standard holder

angle	X	Y	h	a
22°	354	0	89	35°
45°	349	0	99	46°

Segment holder

angle	X	Y	h	a
22°	356	55	100	22°
45°	350	3	100	45°

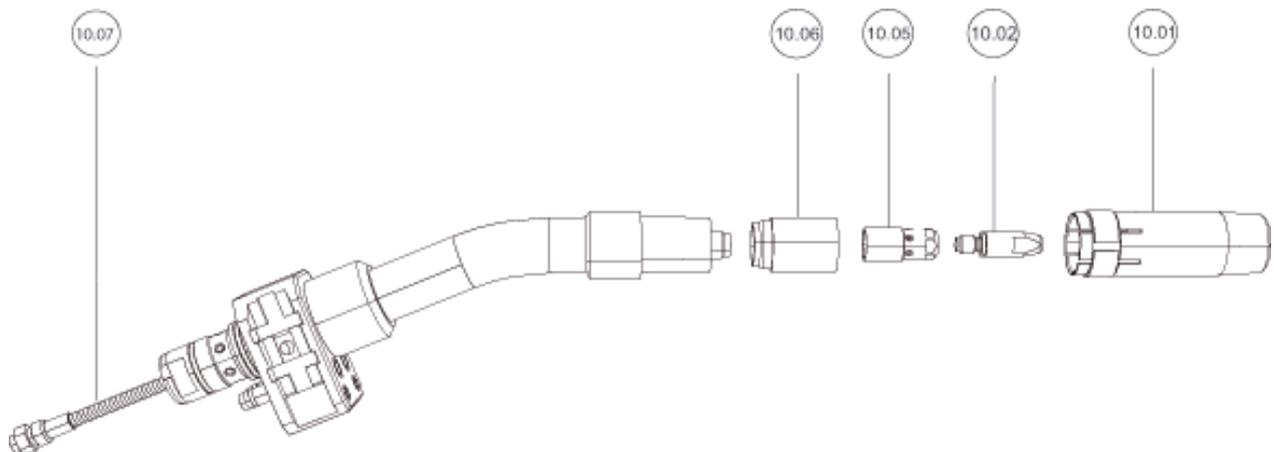
RTM-holder

angle	X	Y	h	a
22°	327	0	127	48°
45°	288	-44	127	71°

Item	Type	Designation	Length	Item no.
9	MTR242W 22 1.2mm 1.25m	MIG/MAG welding torch, water-cooled	-	094-500034-00000
9.1	RTN 242 DW 22DG	Torch neck EWM RT 22°	-	094-015036-00500
9.1	RTN 242 DW 45DG	Torch neck EWM RT 45°	-	094-013470-00500
9.2	RTMHOL	RTM holder WH	-	094-016549-00500
9.2	SEGHOL	Segment holder WH	-	094-016548-00500
9.2	STANHOL	Standard holder	-	094-010162-00500
9.4	TBROB RT W 1.00	EWM RT W hose package	1m	094-012720-00508
9.4	TBROB RT W 1.05	EWM RT W hose package	1.05m	094-012720-00500
9.4	TBROB RT W 1.15	EWM RT W hose package	1.15m	094-012720-00501
9.4	TBROB RT W 1.25	EWM RT W hose package	1.25m	094-012720-00502
9.4	TBROB RT W 1.45	EWM RT W hose package	1.45m	094-012720-00503
9.4	TBROB RT W 1.55	EWM RT W hose package	1.55m	094-012720-00509
9.4	TBROB RT W 1.65	EWM RT W hose package	1.65m	094-012720-00504
9.4	TBROB RT W 2.15	EWM RT W hose package	2.15m	094-012720-00505
9.4	TBROB RT W 2.65	EWM RT W hose package	2.65m	094-012720-00506
9.4	TBROB RT W 3.15	EWM RT W hose package	3.15m	094-012720-00507

► More hose package lengths, torch neck angles and replacement parts on request!

Consumables/Accessories



Item	Designation	Stick-out/ Recess	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, conical	-1mm	15.5 mm			62mm		094-016508-00500
10.02	Contact tip			0.8 mm	M6	28mm	CuCrZr	094-005407-00000
10.02	Contact tip			0.9 mm	M6	28mm	CuCrZr	094-005408-00000
10.02	Contact tip			1 mm	M6	28mm	CuCrZr	094-003339-00000
10.02	Contact tip			1.2 mm	M6	28mm	CuCrZr	094-005224-00000
10.05	Contact tip holder				M6	23.5mm		094-015037-00500
10.06	Spatter protection, standard					27mm		094-013472-00500

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Liner, steel, red	0.8 mm - 1.2 mm			3.2m	094-011627-00500
10.04	Liner, steel, red	0.8 mm - 1.2 mm	2 mm	4.5 mm	5mm	094-012655-00000

Brass liner

Item	Designation	Wire Ø	Length	Item no.
10.07	Brass liner for steel, 45°	1 mm - 1.2 mm	197mm	094-011812-00500
10.07	Brass liner for steel, 0°/22°	1 mm - 1.2 mm	197mm	094-015038-00500

Options/accessories

Designation	Item no.
Retrofit kit for gas nozzle sensor	394-004305-00000

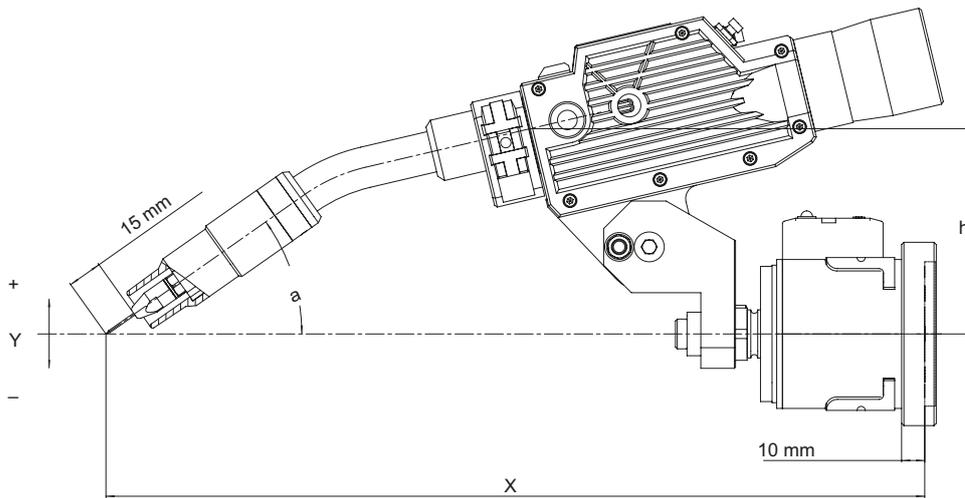
MIG/MAG robot welding torches

MTR242W PP



- MIG/MAG robot welding torch, water cooled
- Push/pull version
- Maximum TCP security
- Modular construction
- Quick-change torch neck
- Standard equipment: 1.2 mm steel contact tip, 15.5 mm-1 mm gas nozzle, 22° torch neck, 3.2 m hose package

Duty cycle, CO2	320 A / 100 %
Duty cycle, M21	280 A / 100 %
Wire Ø	0.8 mm - 1.2 mm
Connection	Euro torch connector



Standard holder

angle	X	Y	h	a
22°	354	0	89	35°
45°	349	0	99	46°

Segment holder

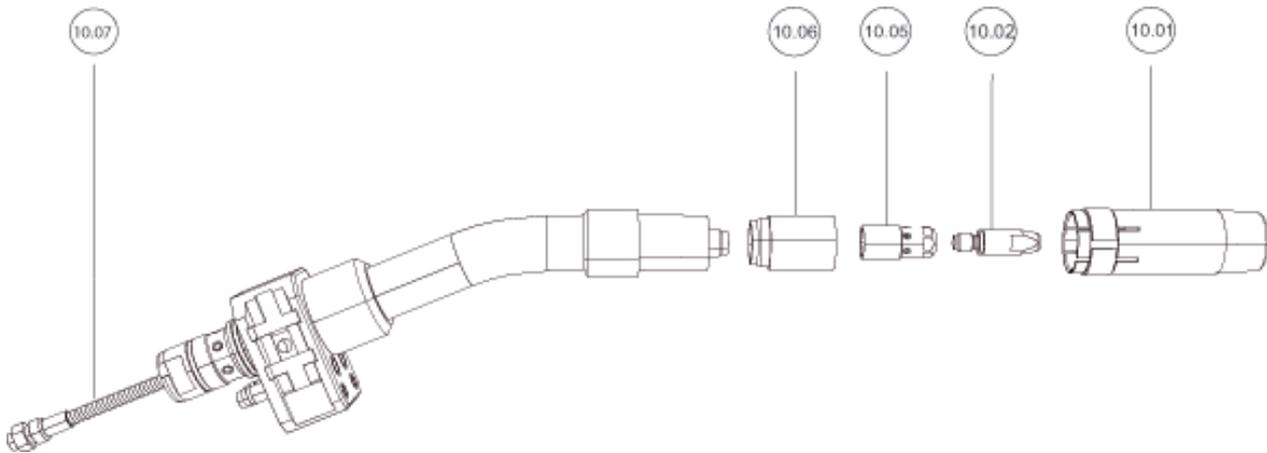
angle	X	Y	h	a
22°	356	55	100	22°
45°	350	3	100	45°

RTM-holder

angle	X	Y	h	a
22°	327	0	127	48°
45°	288	-44	127	71°

Item	Type	Designation	Length	Item no.
9	MTR242W PP 22 1.2mm 3.20m	MIG/MAG welding torch, push/pull, water-cooled	-	094-500074-00000
9.1	RTN 242 DW 22DG	Torch neck EWM RT 22°	-	094-015036-00500
9.1	RTN 242 DW 45DG	Torch neck EWM RT 45°	-	094-013470-00500
9.2	RTMHOL	RTM holder WH	-	094-016549-00500
9.2	SEGHOL	Segment holder WH	-	094-016548-00500
9.2	STANHOL	Standard holder	-	094-010162-00500
9.4	TBROB RT-PP W 0.90	EWM RT-PP W hose package	0.9m	394-010365-00000
9.4	TBROB RT-PP W I=13.7:1 1.10	EWM RT-PP W hose package	1.1m	094-016535-00500
9.4	TBROB RT-PP W I=13.7:1 1.25	EWM RT-PP W hose package	1.25m	094-016535-00510
9.4	TBROB RT-PP W I=13.7:1 1.50	EWM RT-PP W hose package	1.5m	094-016535-00501
9.4	TBROB RT-PP W I=13.7:1 1.70	EWM RT-PP W hose package	1.7m	094-016535-00502
9.4	TBROB RT-PP W I=13.7:1 2.20	EWM RT-PP W hose package	2.2m	094-016535-00503
9.4	TBROB RT-PP W I=13.7:1 2.50	EWM RT-PP W hose package	2.5m	094-016535-00509
9.4	TBROB RT-PP W I=13.7:1 2.70	EWM RT-PP W hose package	2.7m	094-016535-00504
9.4	TBROB RT-PP W I=13.7:1 3.20	EWM RT-PP W hose package	3.2m	094-016535-00505
9.4	TBROB RT-PP W I=13.7:1 4.20	EWM RT-PP W hose package	4.2m	094-016535-00506
9.4	TBROB RT-PP W I=13.7:1 4.70	EWM RT-PP W hose package	4.7m	094-016535-00507
9.4	TBROB RT-PP W I=13.7:1 5.20	EWM RT-PP W hose package	5.2m	094-016535-00508
9.4	TBROB RT-PP W I=13.7:1 6.00	EWM RT-PP W hose package	6m	094-016535-00512

► More hose package lengths, torch neck angles and replacement parts on request!



Item	Designation	Stick-out/ Recess	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, conical	-1mm	15.5 mm			62mm		094-016508-00500
10.02	Contact tip			0.8 mm	M6	28mm	CuCrZr	094-005407-00000
10.02	Contact tip			0.9 mm	M6	28mm	CuCrZr	094-005408-00000
10.02	Contact tip			1 mm	M6	28mm	CuCrZr	094-003339-00000
10.02	Contact tip			1.2 mm	M6	28mm	CuCrZr	094-005224-00000
10.05	Contact tip holder				M6	23.5mm		094-015037-00500
10.06	Spatter protection, standard					27mm		094-013472-00500

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Liner, steel, red	0.8 mm - 1.2 mm			3.2m	094-011627-00500
10.04	Liner, steel, red	0.8 mm - 1.2 mm	2 mm	4.5 mm	5mm	094-012655-00000

Brass liner

Item	Designation	Wire Ø	Length	Item no.
10.07	Brass liner for aluminium, 0°/22°	0.8 mm - 1 mm	197mm	094-016517-00000
10.07	Brass liner for aluminium, 45°	0.8 mm - 1 mm	219mm	094-016519-00000
10.07	Brass liner for steel, 45°	1 mm - 1.2 mm	197mm	094-011812-00500
10.07	Brass liner for steel, 0°/22°	1 mm - 1.2 mm	197mm	094-015038-00500
10.07	Brass liner for aluminium, 0°/22°	1.2 mm - 1.6 mm	197mm	094-016518-00000
10.07	Brass liner for aluminium, 45°	1.2 mm - 1.6 mm	197mm	094-016520-00000

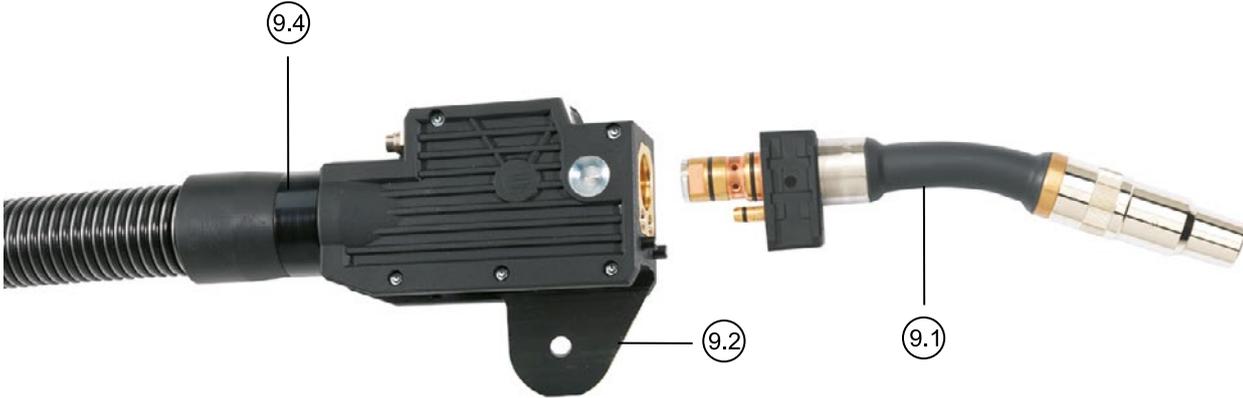
Drive rolls

Item	Designation	Wire Ø	Item no.
10.08	Drive roll for aluminium (U-groove)	0.8 mm	094-010186-00000
10.08	Drive roll, universal (V-groove)	0.8 mm	094-016546-00500
10.08	Universal wire feed roll, 0.9 mm	0.9 mm	094-010193-00000
10.08	Drive roll for aluminium (U-groove)	0.9 mm	094-019519-00000
10.08	Drive roll for aluminium (U-groove)	1 mm	094-010187-00500
10.08	Drive roll, universal (V-groove)	1 mm	094-010194-00500
10.08	Drive roll for aluminium (U-groove)	1.2 mm	094-010188-00000
10.08	Drive roll, universal (V-groove)	1.2 mm	094-010195-00500
10.08	Universal wire feed roll, 1.4 mm	1.4 mm	094-010196-00000
10.08	Drive roll, universal (V-groove)	1.6 mm	094-010197-00500
10.08	Drive roll for aluminium (U-groove)	1.6 mm	094-016545-00500

Options/accessories

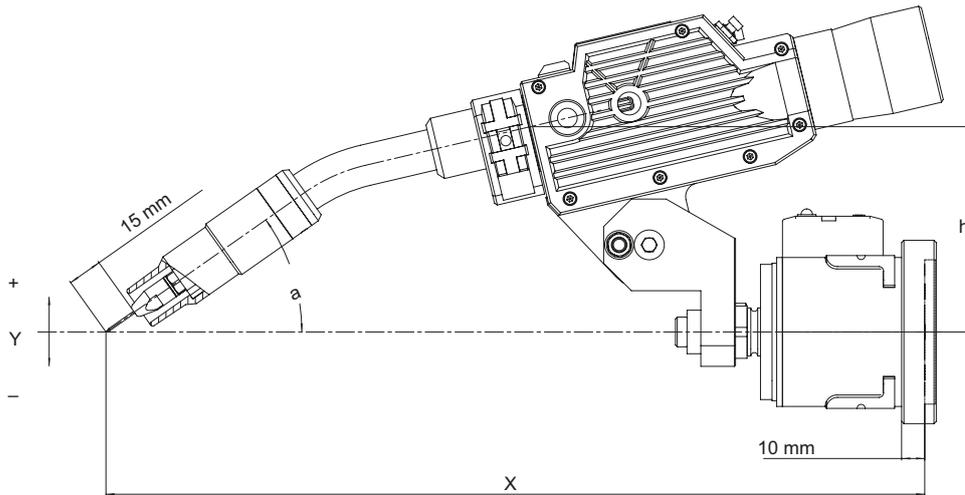
Designation	Item no.
Retrofit kit for gas nozzle sensor	394-004305-00000

MIG/MAG robot welding torches MTR500W



- MIG/MAG robot welding torch, water cooled
- Extremely durable and compact
- Maximum TCP security
- Modular construction
- Quick-change torch neck
- Standard equipment: 1.2 mm steel contact tip, NW15.5/-1.1 mm conical gas nozzle, 22° torch neck, 1.25 m hose package

Duty cycle, CO2	550 A / 100 %
Duty cycle, M21	500 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector



Standard holder

angle	X	Y	h	a
22°	354	0	89	35°
45°	349	0	99	46°

Segment holder

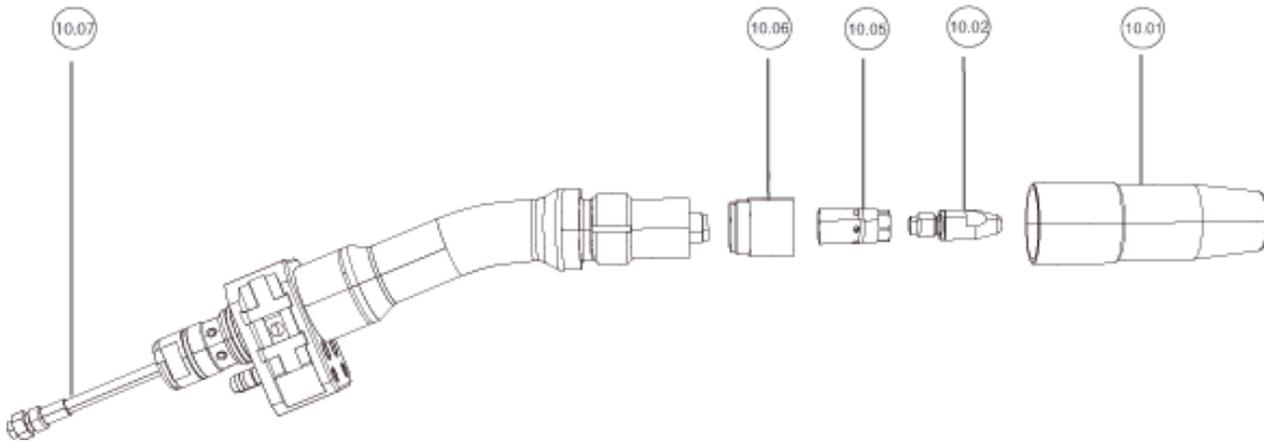
angle	X	Y	h	a
22°	356	55	100	22°
45°	350	3	100	45°

RTM holder

angle	X	Y	h	a
22°	327	0	127	48°
45°	288	-44	127	71°

Item	Type	Designation	Length	Item no.
9	MTR500W 22 1.2mm 1.25m	MIG/MAG welding torch, water-cooled	-	094-500035-00000
9.1	BH ROB 500W 22° x242 y50	Torch neck EWM RT 22°	-	094-016505-00500
9.1	BH ROB 500W 35° x227 y81	Torch neck EWM RT 35°	-	394-006015-00000
9.1	BH ROB 500W 45° x192 y97	Torch neck EWM RT 45°	-	094-016507-00500
9.2	RTMHOL	RTM holder WH	-	094-016549-00500
9.2	SEGHOL	Segment holder WH	-	094-016548-00500
9.2	STANHOL	Standard holder	-	094-010162-00500
9.4	TBROB RT W 1.00	EWM RT W hose package	1m	094-012720-00508
9.4	TBROB RT W 1.05	EWM RT W hose package	1.05m	094-012720-00500
9.4	TBROB RT W 1.15	EWM RT W hose package	1.15m	094-012720-00501
9.4	TBROB RT W 1.25	EWM RT W hose package	1.25m	094-012720-00502
9.4	TBROB RT W 1.45	EWM RT W hose package	1.45m	094-012720-00503
9.4	TBROB RT W 1.55	EWM RT W hose package	1.55m	094-012720-00509
9.4	TBROB RT W 1.65	EWM RT W hose package	1.65m	094-012720-00504
9.4	TBROB RT W 2.15	EWM RT W hose package	2.15m	094-012720-00505
9.4	TBROB RT W 2.65	EWM RT W hose package	2.65m	094-012720-00506
9.4	TBROB RT W 3.15	EWM RT W hose package	3.15m	094-012720-00507

► More hose package lengths, torch neck angles and replacement parts on request!



Item	Designation	Stickout/ Recess	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, conical	+1.9mm	15.5 mm			72.5mm		094-010220-00500
10.01	Gas nozzle, conical	-1.1mm	15.5 mm			75.5mm		094-016512-00500
10.02	Contact tip			0.8 mm	M8	30mm	CuCrZr	094-005409-00000
10.02	Contact tip			0.9 mm	M8	30mm	CuCrZr	094-005410-00000
10.02	Contact tip			1 mm	M8	30mm	CuCrZr	094-005225-00000
10.02	Contact tip			1.2 mm	M8	30mm	CuCrZr	094-004207-00000
10.02	Contact tip			1.4 mm	M8	30mm	CuCrZr	094-005411-00000
10.02	Contact tip			1.6 mm	M8	30mm	CuCrZr	094-005412-00000
10.05	Contact tip holder				M8	23.2mm		094-009896-00500
10.06	Spatter protection, high-temperature-resistant					21mm		094-013862-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Liner, steel, red	0.8 mm - 1.2 mm			3.2m	094-011627-00500
10.04	Liner, steel, red	0.8 mm - 1.2 mm	2 mm	4.5 mm	5mm	094-012655-00000
10.04	Steel liner, steel, blue	1.4 mm - 1.6 mm			3.2m	094-010579-00500
10.04	Steel liner, steel, blue	1.4 mm - 1.6 mm			5m	094-022407-00000

Brass liner

Item	Designation	Wire Ø	Item no.
10.07	BSLred brass liner for steel, 0°/22°	0.8 mm - 1.2 mm	094-016521-00500
10.07	BSLred brass liner for steel, 35°/45°	0.8 mm - 1.2 mm	094-016523-00500
10.07	BSLblue brass liner for steel, 0°/22°	1.4 mm - 1.6 mm	094-016522-00500
10.07	BSLblue brass liner for steel, 35°/45°	1.4 mm - 1.6 mm	094-016524-00500

Options/accessories

Designation	Item no.
Retrofit kit for gas nozzle sensor	394-004305-00000

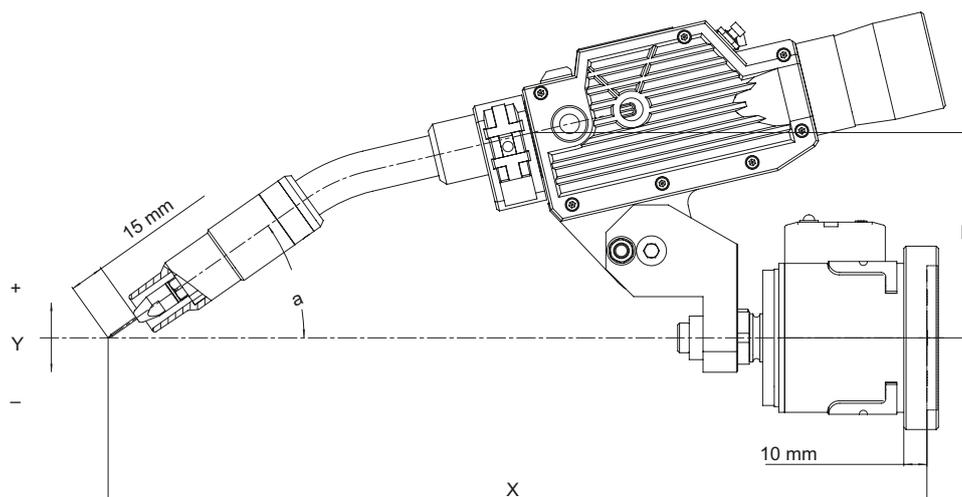
MIG/MAG robot welding torches

MTR500W PP



- MIG/MAG robot welding torch, water cooled
- Extremely durable and compact
- Push/pull version
- Maximum TCP security
- Modular construction
- Quick-change torch neck
- Standard equipment: 1.2 mm steel contact tip, NW15.5/- 1.1 mm conical gas nozzle, 22° torch neck, 4.2 m hose package

Duty cycle, CO2	550 A / 100 %
Duty cycle, M21	500 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector



Standard holder

angle	X	Y	h	a
22°	354	0	89	35°
45°	349	0	99	46°

Segment holder

angle	X	Y	h	a
22°	356	55	100	22°
45°	350	3	100	45°

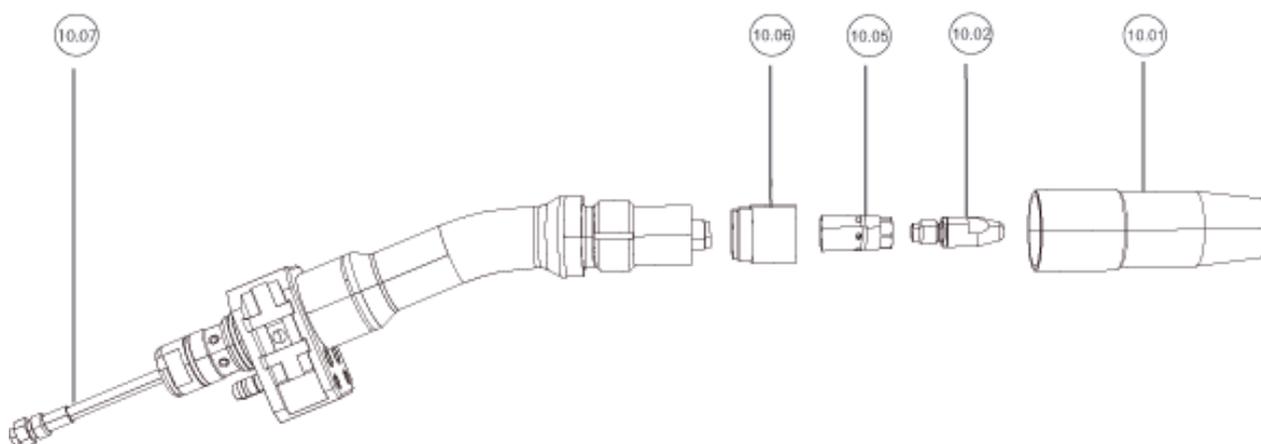
RTM holder

angle	X	Y	h	a
22°	327	0	127	48°
45°	288	-44	127	71°

Item	Type	Designation	Length	Item no.
9	MTR500W PP 22°, 1.50m	MIG/MAG welding torch, push/pull, water-cooled	1.5m	094-500073-00002
9	MTR500W PP 22°, 3.20m	MIG/MAG welding torch, push/pull, water-cooled	3.2m	094-500073-00000
9	MTR500W PP 22°, 4.20m	MIG/MAG welding torch, push/pull, water-cooled	4.2m	094-500073-00001
9	MTR500W PP 22°, 5.20m	MIG/MAG welding torch, push/pull, water-cooled	5.2m	094-500073-00003
9	MTR500W PP 22°, 6.0m	MIG/MAG welding torch, push/pull, water-cooled	6m	094-500073-00004
9.1	BH ROB 500W 22° x242 y50	Torch neck EWM RT 22°	-	094-016505-00500
9.1	BH ROB 500W 35° x227 y81	Torch neck EWM RT 35°	-	394-006015-00000
9.1	BH ROB 500W 45° x192 y97	Torch neck EWM RT 45°	-	094-016507-00500
9.2	RTMHOL	RTM holder WH	-	094-016549-00500
9.2	SEGHOL	Segment holder WH	-	094-016548-00500
9.2	STANHOL	Standard holder	-	094-010162-00500
9.4	TBROB RT-PP W 0.90	EWM RT-PP W hose package	0.9m	394-010365-00000
9.4	TBROB RT-PP W I=13.7:1 1.10	EWM RT-PP W hose package	1.1m	094-016535-00500
9.4	TBROB RT-PP W I=13.7:1 1.25	EWM RT-PP W hose package	1.25m	094-016535-00510
9.4	TBROB RT-PP W I=13.7:1 1.50	EWM RT-PP W hose package	1.5m	094-016535-00501
9.4	TBROB RT-PP W I=13.7:1 1.70	EWM RT-PP W hose package	1.7m	094-016535-00502
9.4	TBROB RT-PP W I=13.7:1 2.20	EWM RT-PP W hose package	2.2m	094-016535-00503
9.4	TBROB RT-PP W I=13.7:1 2.50	EWM RT-PP W hose package	2.5m	094-016535-00509
9.4	TBROB RT-PP W I=13.7:1 2.70	EWM RT-PP W hose package	2.7m	094-016535-00504
9.4	TBROB RT-PP W I=13.7:1 3.20	EWM RT-PP W hose package	3.2m	094-016535-00505
9.4	TBROB RT-PP W I=13.7:1 4.20	EWM RT-PP W hose package	4.2m	094-016535-00506
9.4	TBROB RT-PP W I=13.7:1 4.70	EWM RT-PP W hose package	4.7m	094-016535-00507
9.4	TBROB RT-PP W I=13.7:1 5.20	EWM RT-PP W hose package	5.2m	094-016535-00508
9.4	TBROB RT-PP W I=13.7:1 6.00	EWM RT-PP W hose package	6m	094-016535-00512

- ▶ Also available with ECS connection for applications using soft welding consumables.
- ▶ More hose package lengths, torch neck angles and replacement parts on request!

Consumables/Accessories



Item	Designation	Stickout/ Recess	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, conical	+1.9mm	15.5 mm			72.5mm		094-010220-00500
10.01	Gas nozzle, conical	-1.1mm	15.5 mm			75.5mm		094-016512-00500
10.02	Contact tip			0.8 mm	M8	30mm	CuCrZr	094-005409-00000
10.02	Contact tip			0.9 mm	M8	30mm	CuCrZr	094-005410-00000
10.02	Contact tip			1 mm	M8	30mm	CuCrZr	094-005225-00000
10.02	Contact tip			1.2 mm	M8	30mm	CuCrZr	094-004207-00000
10.02	Contact tip			1.4 mm	M8	30mm	CuCrZr	094-005411-00000
10.02	Contact tip			1.6 mm	M8	30mm	CuCrZr	094-005412-00000
10.05	Contact tip holder				M8	23.2mm		094-009896-00500
10.06	Spatter protection, high-temperature-resistant					21mm		094-013862-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Liner, steel, red	0.8 mm - 1.2 mm			3.2m	094-011627-00500
10.04	Liner, steel, red	0.8 mm - 1.2 mm	2 mm	4.5 mm	5mm	094-012655-00000
10.04	Steel liner, steel, blue	1.4 mm - 1.6 mm			3.2m	094-010579-00500
10.04	Steel liner, steel, blue	1.4 mm - 1.6 mm			5m	094-022407-00000

Brass liner

Item	Designation	Wire Ø	Item no.
10.07	BSLred brass liner for steel, 0°/22°	0.8 mm - 1.2 mm	094-016521-00500
10.07	BSLred brass liner for steel, 35°/45°	0.8 mm - 1.2 mm	094-016523-00500
10.07	Brass liner for aluminium, 0°/22°	1 mm - 1.2 mm	094-016525-00000
10.07	Brass liner for aluminium, 35°/45°	1 mm - 1.2 mm	094-016527-00000
10.07	Brass liner for aluminium, 0°/22°	1.2 mm - 1.6 mm	094-016526-00000
10.07	Brass liner for aluminium, 35°/45°	1.2 mm - 1.6 mm	094-016528-00000
10.07	BSLblue brass liner for steel, 0°/22°	1.4 mm - 1.6 mm	094-016522-00500
10.07	BSLblue brass liner for steel, 35°/45°	1.4 mm - 1.6 mm	094-016524-00500

Drive rolls

Item	Designation	Wire Ø	Item no.
10.08	Drive roll for aluminium (U-groove)	0.8 mm	094-010186-00000
10.08	Drive roll, universal (V-groove)	0.8 mm	094-016546-00500
10.08	Universal wire feed roll, 0.9 mm	0.9 mm	094-010193-00000
10.08	Drive roll for aluminium (U-groove)	0.9 mm	094-019519-00000
10.08	Drive roll for aluminium (U-groove)	1 mm	094-010187-00500
10.08	Drive roll, universal (V-groove)	1 mm	094-010194-00500
10.08	Drive roll for aluminium (U-groove)	1.2 mm	094-010188-00000
10.08	Drive roll, universal (V-groove)	1.2 mm	094-010195-00500
10.08	Universal wire feed roll, 1.4 mm	1.4 mm	094-010196-00000
10.08	Drive roll, universal (V-groove)	1.6 mm	094-010197-00500
10.08	Drive roll for aluminium (U-groove)	1.6 mm	094-016545-00500

Options/accessories

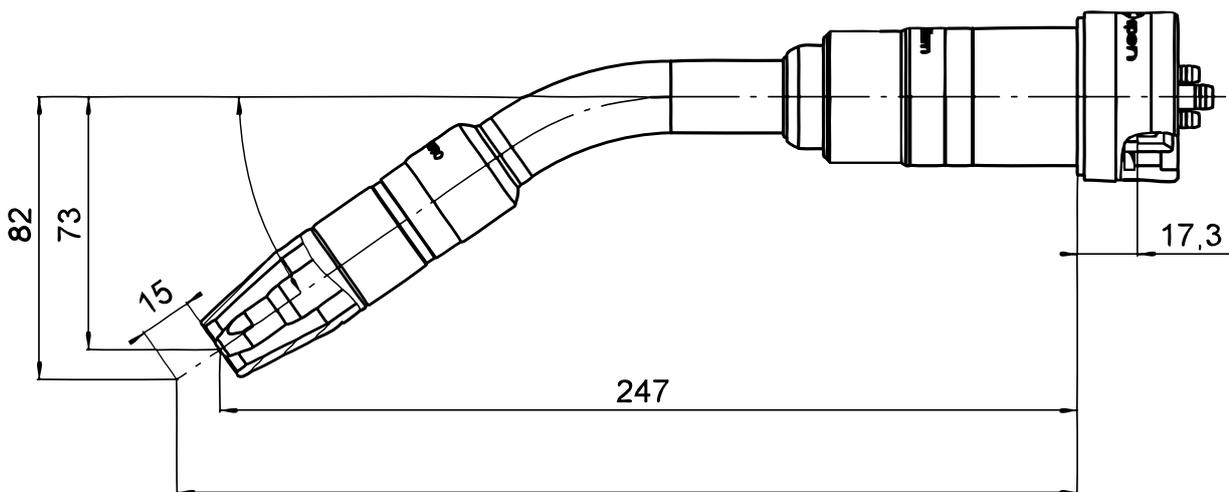
Designation	Item no.
Retrofit kit for gas nozzle sensor	394-004305-00000

MIG/MAG robot welding torches for hollow wrist systems RTN500G



- MIG/MAG welding torch for hollow wrist robots, gas-cooled
- Extremely durable and compact
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- One-piece liner
- Suitable for M drive 4 Rob 5

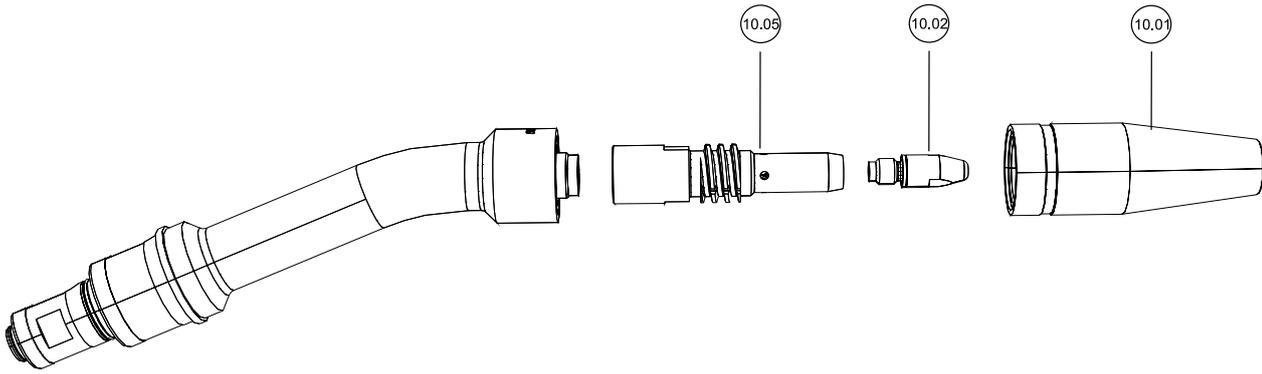
Duty cycle, CO2	500 A / 100 %
Duty cycle, M21	400 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector



Item	Type	Designation	Length	Item no.
8	iCAT A	Collision sensor		094-012718-00000
8	iSTM A	Torch interface complete	-	094-012932-00000
8.1	FLANGE ABB IRB 1600	Intermediate flange, ABB IRB 1600/1620		094-019884-00000
8.1	FLANGE ABB IRB 2600	Intermediate flange, ABB IRB 1520/2600		094-019886-00000
8.1	FLANGE FANUC 710	Intermediate flange, FANUC 710iC		094-022624-00000
8.1	FLANGE FANUC AM 100iD	Intermediate flange, FANUC AM 100iD/120iD		394-004306-00000
8.1	FLANGE FANUC iSTM	Intermediate flange, FANUC 100iC/120iC		094-012934-00000
8.1	SWIVEL FANUC iSTM	Rotating joint, FANUC 100iC/120iC		094-012935-00000
8.1	FLANGE FANUC	Intermediate flange, FANUC 100iC/120iC/20iA		094-013711-00000
8.1	FLANGE KAWASAKI 006	Intermediate flange, KAWASAKI BA006N/BA006L		394-004256-00000
8.1	FLANGE KUKA	KUKA KR5/KR6/KR8/KR16 L8 intermediate flange		094-013316-00000
8.1	FLANGE KUKA KR16 arc HW	Intermediate flange, KUKA KR16		094-019885-00000
8.1	FLANGE MOTOMAN 56mm	Intermediate flange, MOTOMAN		094-012715-00000
8.1	ZF ICAT D=56.0MM D=62	Intermediate flange, MOTOMAN		094-021590-00000
9.1	TN RTN500G 0°	Torch neck	-	094-011259-00000
9.1	TN RTN500G 22°	Torch neck	-	094-011260-00500
9.1	TN RTN500G 35°	Torch neck	-	094-011261-00000
9.1	TN RTN500G 45°	Torch neck	-	094-011262-00000
9.4	SP ABB/KUKA HW G 1,03M	Hose package, water-cooled, for hollow wrist robot	1.03m	094-019866-00000
9.4	SP G ABB 1520	Hose package, gas-cooled, for hollow wrist robot	-	094-022742-00000
9.4	SP G ABB 1600	Hose package, gas-cooled, for hollow wrist robot	-	094-022743-00000
9.4	SP G ABB 1620	Hose package, gas-cooled, for hollow wrist robot	-	094-022744-00000
9.4	SP G ABB 2600	Hose package, gas-cooled, for hollow wrist robot	-	094-022745-00000
9.4	SP G ABB 2600-8-200	Hose package, gas-cooled, for hollow wrist robot	-	094-022746-00000
9.4	SP G COMAU SMART5	Hose package, gas-cooled, for hollow wrist robot	-	094-022747-00000
9.4	SP G FANUC 100iC	Hose package, gas-cooled, for hollow wrist robot	-	094-022748-00000
9.4	SP G FANUC 100iC 12	Hose package, gas-cooled, for hollow wrist robot	-	094-022749-00000
9.4	SP G FANUC 100iC 7L	Hose package, gas-cooled, for hollow wrist robot	-	094-022750-00000
9.4	SP G FANUC 100iC 8L	Hose package, gas-cooled, for hollow wrist robot	-	094-022751-00000
9.4	SP G FANUC 100iC 12S	Hose package, gas-cooled, for hollow wrist robot	-	094-022752-00000
9.4	SP G FANUC 120iC	Hose package, gas-cooled, for hollow wrist robot	-	094-022753-00000
9.4	SP G FANUC 120iC 12L	Hose package, gas-cooled, for hollow wrist robot	-	094-022754-00000
9.4	SP G FANUC 710iC 12L	Hose package, gas-cooled, for hollow wrist robot	-	094-022758-00000
9.4	SP G FANUC 100iD	Hose package, gas-cooled, for hollow wrist robot	-	394-008698-00000
9.4	SP G FANUC M-20iA 12L	Hose package, gas-cooled, for hollow wrist robot	-	094-022755-00000
9.4	SP G FANUC M-20iA 20M2	Hose package, gas-cooled, for hollow wrist robot	-	094-022756-00000
9.4	SP G FANUC M-20iA 35M2	Hose package, gas-cooled, for hollow wrist robot	-	094-022757-00000
9.4	SP G iSTM FANUC 100iC	Hose package, gas-cooled, for hollow wrist robot	-	094-022810-00000
9.4	SP G iSTM FANUC 100iC 12	Hose package, gas-cooled, for hollow wrist robot	-	094-022811-00000
9.4	SP G iSTM FANUC 100iC 7L	Hose package, gas-cooled, for hollow wrist robot	-	094-022812-00000
9.4	SP G iSTM FANUC 100iC 8L	Hose package, gas-cooled, for hollow wrist robot	-	094-022813-00000
9.4	SP G iSTM FANUC 100iC 12S	Hose package, gas-cooled, for hollow wrist robot	-	094-022814-00000
9.4	SP G iSTM FANUC 120iC	Hose package, gas-cooled, for hollow wrist robot	-	094-022815-00000
9.4	SP G iSTM FANUC 120iC 12L	Hose package, gas-cooled, for hollow wrist robot	-	094-022816-00000
9.4	SP G iSTM FANUC M-20iA 12L	Hose package, gas-cooled, for hollow wrist robot	-	094-022817-00000
9.4	SP G iSTM FANUC M-20iA 20M2	Hose package, gas-cooled, for hollow wrist robot	-	094-022818-00000
9.4	SP G iSTM FANUC M-20iA 35M2	Hose package, gas-cooled, for hollow wrist robot	-	094-022819-00000
9.4	SP G iSTM FANUC 710iC 12L	Hose package, gas-cooled, for hollow wrist robot	-	094-022820-00000
9.4	SP G KUKA KR16 ARC HW	Hose package, gas-cooled, for hollow wrist robot	-	094-022759-00000
9.4	SP G KUKA KR16 L8 ARC HW	Hose package, gas-cooled, for hollow wrist robot	-	094-022760-00000
9.4	SP G KUKA KR6 R1820 HW	Hose package, gas-cooled, for hollow wrist robot	-	094-022762-00000
9.4	SP G KUKA KR8 R1420 HW	Hose package, gas-cooled, for hollow wrist robot	-	094-022763-00000
9.4	SP G KUKA KR6 R1620 HW	Hose package, gas-cooled, for hollow wrist robot	-	094-022764-00000
9.4	SP G KUKA KR8 R2100 arc HW	Hose package, gas-cooled, for hollow wrist robot	-	394-008876-00000
9.4	SP G MOTOMAN EA1400	Hose package, gas-cooled, for hollow wrist robot	-	094-022765-00000
9.4	SP G MOTOMAN EA1800	Hose package, gas-cooled, for hollow wrist robot	-	094-022766-00000
9.4	SP G MOTOMAN EA1900	Hose package, gas-cooled, for hollow wrist robot	-	094-022767-00000
9.4	SP G MOTOMAN MA1400	Hose package, gas-cooled, for hollow wrist robot	-	094-022768-00000

9.4	SP G MOTOMAN MA1550	Hose package, gas-cooled, for hollow wrist robot	-	094-022770-00000
9.4	SP G MOTOMAN MA1800	Hose package, gas-cooled, for hollow wrist robot	-	094-022771-00000
9.4	SP G MOTOMAN MA1900	Hose package, gas-cooled, for hollow wrist robot	-	094-022772-00000
9.4	SP G MOTOMAN MA2010	Hose package, gas-cooled, for hollow wrist robot	-	094-022773-00000
9.4	SP G MOTOMAN MH24	Hose package, gas-cooled, for hollow wrist robot	-	094-022774-00000
9.4	SP G MOTOMAN VA1400	Hose package, gas-cooled, for hollow wrist robot	-	094-022775-00000

- ▶ Please indicate the robot type for each enquiry or order.
- ▶ Further intermediate flanges and hose packages for different robot types and torch neck models are available upon request!
- ▶ iSTM-model hose packages can only be used in combination with an iSTM torch interface and the corresponding flange!
- ▶ Please note: Torch neck, collision sensor, intermediate flange and hose package are not included in the scope of supply and must be ordered separately!
- ▶ Order welding torch fully equipped. Replacement parts and equipment parts are not part of the scope of supply and must be ordered based on the specific application!



Item	Designation	Stick-out/ Recess	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, conical	+3mm	16 mm			72mm		094-011265-00000
10.01	Gas nozzle, conical	0mm	16 mm			75mm		094-011263-00000
10.01	Gas nozzle, conical	-2mm	16 mm			77mm		094-011264-00000
10.02	CuCrZr contact tip, silver plated			0.8 mm	M8	30mm	CuCrZr, silver-plated	094-011269-00000
10.02	CuCrZr contact tip, silver plated			0.9 mm	M8	30mm	CuCrZr, silver-plated	094-011270-00000
10.02	CuCrZr contact tip, silver plated			1 mm	M8	30mm	CuCrZr, silver-plated	094-011271-00000
10.02	CuCrZr contact tip, silver plated			1.2 mm	M8	30mm	CuCrZr, silver-plated	094-011272-00000
10.02	CuCrZr contact tip, silver plated			1.4 mm	M8	30mm	CuCrZr, silver-plated	094-011273-00000
10.02	CuCrZr contact tip, silver plated			1.6 mm	M8	30mm	CuCrZr, silver-plated	094-011274-00000
10.05	Contact tip holder				M8	70mm		094-011276-00500

► More consumables and spare parts upon request!

Steel liners

Item	Designation	Wire Ø	Length	Item no.
10.04	Steel liner, steel, black	0.8 mm - 1.2 mm	2m	094-011667-00500

Options/accessories

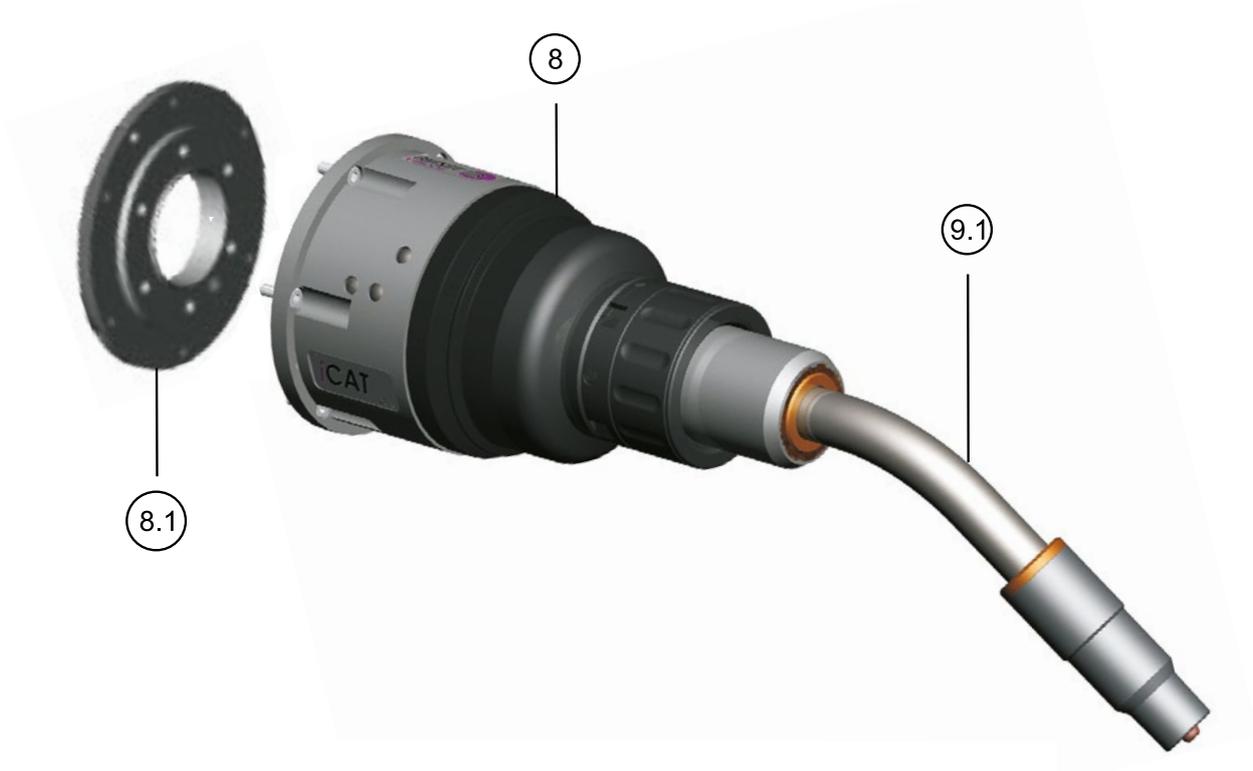
Item	Designation	Item no.
-	Testing and straightening gauge for robot welding torches	094-026538-00000

Overview of torch hose packages for RTN500G

ABB	IRB 1600ID	094-022743-00000	
ABB	IRB 1620ID	094-022744-00000	
ABB	IRB 1660ID-4/1.55		
ABB	IRB 1660ID-6/1.55		
ABB	IRB 2600ID	094-022745-00000	
ABB	IRB 2600ID-8/2.0	094-022746-00000	
ABB	IRB 2600ID-15/1.85		
ABB	IRB 1520ID-4/1.5	094-022742-00000	
COMAU	Arc4-5-1.95		
COMAU	SMART5	094-022747-00000	
FANUC	ARC Mate 100iC/6L		
FANUC	ARC Mate 100iC/7L	094-022750-00000	094-022812-00000
FANUC	ARC Mate 100iC/8L	094-022751-00000	094-022813-00000
FANUC	ARC Mate 100iC/10L		
FANUC	ARC Mate 100iC/10S		
FANUC	ARC Mate 100iC/12	094-022749-00000	094-022811-00000
FANUC	ARC Mate 100iC/12S	094-022752-00000	094-022814-00000
FANUC	ARC Mate 100iD	394-008698-00000	
FANUC	ARC Mate 100iD/8L		
FANUC	ARC Mate 100iD/10L		
FANUC	ARC Mate 120iC	094-022753-00000	094-022815-00000
FANUC	ARC Mate 120iC/10L		
FANUC	ARC Mate 120iC/12L	094-022754-00000	094-022816-00000
FANUC	ARC Mate 120iD		
FANUC	ARC Mate 120iD/12L		
FANUC	ARC Mate 100iC	094-022748-00000	094-022810-00000
FANUC	M-10ia/6L		
FANUC	M-10iA/7L		
FANUC	M-20iA/12L	094-022755-00000	094-022817-00000
FANUC	M-20iA/20M2	094-022756-00000	094-022818-00000
FANUC	M-20iA/35M2	094-022757-00000	094-022819-00000
FANUC	M-710iC/12L	094-022758-00000	094-022820-00000
Kawasaki	BA006L		
Kawasaki	BA006N		
KUKA	KR 6 R1620 arc HW	094-022764-00000	
KUKA	KR 6 R1820 arc HW	094-022762-00000	
KUKA	KR 6 R1840-2 arc HW		
KUKA	KR 8 R1420 arc HW	094-022763-00000	
KUKA	KR 8 R1440-2 arc HW		
KUKA	KR 8 R1620 arc HW		
KUKA	KR 8 R1640-2 arc HW		
KUKA	KR 8 R2100 arc HW	394-008876-00000	
KUKA	KR 5 arc HW	094-022761-00000	
KUKA	KR 8 R2100-2 arc HW		
KUKA	KR 16 arc HW	094-022759-00000	
KUKA	KR 16 L8 arc HW	094-022760-00000	
Motoman	AR1440		
Motoman	AR1730		
Motoman	AR2010		
Motoman	AR3120		
Motoman	MA1440	094-022769-00000	
Motoman	EA1400	094-022765-00000	
Motoman	EA1800N	094-022766-00000	

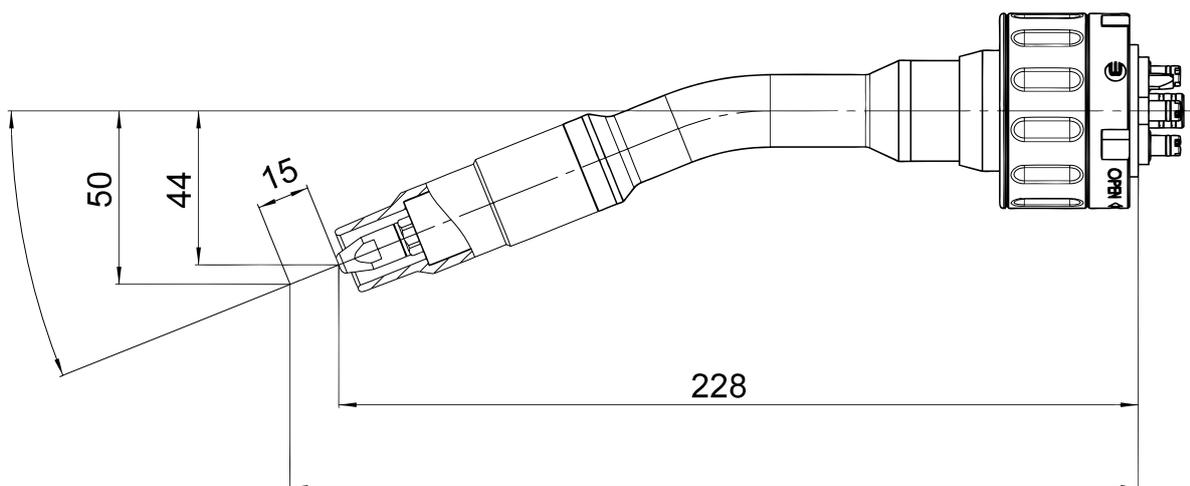
Robot manufacturer	Robot types	Hose package with iCAT A	Hose package with iSTM A
Motoman	EA1900	094-022767-00000	
Motoman	MA1400	094-022768-00000	
Motoman	MA1550	094-022768-00000	
Motoman	MA1800	094-022771-00000	
Motoman	MA1900	094-022772-00000	
Motoman	MA2010	094-022773-00000	
Motoman	VA1400	094-022775-00000	
Motoman	SSA2000		
Motoman	MH24	094-022774-00000	
REIS	RV20-6HW		

MIG/MAG robot welding torches for hollow wrist systems RTN500W



- MIG/MAG welding torch for hollow wrist robots, water cooled
- Extremely durable and compact
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- One-piece liner
- Suitable for M drive 4 Rob 5

Duty cycle, CO2	500 A / 100 %
Duty cycle, M21	500 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector

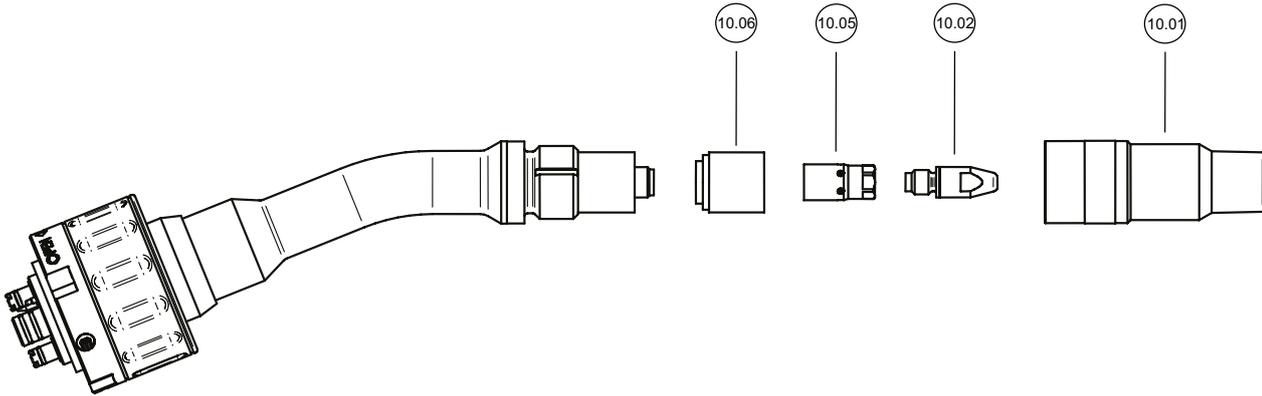


Item	Type	Designation	Length	Item no.
8	iCAT W	Collision sensor		094-012714-00000
8	iSTM ABIROB W	Torch interface complete	-	094-012933-00000
8.1	FLANGE ABB IRB 1600	Intermediate flange, ABB IRB 1600/1620		094-019884-00000
8.1	FLANGE ABB IRB 2600	Intermediate flange, ABB IRB 1520/2600		094-019886-00000
8.1	FLANGE FANUC 710	Intermediate flange, FANUC 710iC		094-022624-00000
8.1	FLANGE FANUC AM 100iD	Intermediate flange, FANUC AM 100iD/120iD		394-004306-00000
8.1	FLANGE FANUC iSTM	Intermediate flange, FANUC 100iC/120iC		094-012934-00000
8.1	SWIVEL FANUC iSTM	Rotating joint, FANUC 100iC/120iC		094-012935-00000
8.1	FLANGE FANUC	Intermediate flange, FANUC 100iC/120iC/20iA		094-013711-00000
8.1	FLANGE KAWASAKI 006	Intermediate flange, KAWASAKI BA006N/BA006L		394-004256-00000
8.1	FLANGE KUKA	KUKA KR5/KR6/KR8/KR16 L8 intermediate flange		094-013316-00000
8.1	FLANGE KUKA KR16 arc HW	Intermediate flange, KUKA KR16		094-019885-00000
8.1	FLANGE MOTOMAN 56mm	Intermediate flange, MOTOMAN		094-012715-00000
8.1	ZF ICAT D=56.0MM D=62	Intermediate flange, MOTOMAN		094-021590-00000
9.1	TN RTN500W 22°	Torch neck with gas nozzle sensor, 22°	-	094-012936-00000
9.1	TN RTN500W 35°	Torch neck with gas nozzle sensor, 35°	-	094-012937-00000
9.1	TN RTN500W 45°	Torch neck with gas nozzle sensor, 45°	-	094-012716-00000
9.4	SP W ABB 1520	Hose package, water-cooled, for hollow wrist robot	-	094-022776-00000
9.4	SP W ABB 1520iD 4/15	Hose package, water-cooled, for hollow wrist robot	-	394-008885-00000
9.4	SP W ABB 1600	Hose package, water-cooled, for hollow wrist robot	-	094-022777-00000
9.4	SP W ABB 1620	Hose package, water-cooled, for hollow wrist robot	-	094-022778-00000
9.4	SP W ABB 2600	Hose package, water-cooled, for hollow wrist robot	-	094-022779-00000
9.4	SP W ABB 2600-8-200	Hose package, water-cooled, for hollow wrist robot	-	094-022780-00000
9.4	SP W COMAU SMART5	Hose package, water-cooled, for hollow wrist robot	-	094-022781-00000
9.4	SP W FANUC 100iC	Hose package, water-cooled, for hollow wrist robot	-	094-022782-00000
9.4	SP W FANUC 100iC 12	Hose package, water-cooled, for hollow wrist robot	-	094-022783-00000
9.4	SP W FANUC 100iC 7L	Hose package, water-cooled, for hollow wrist robot	-	094-022784-00000
9.4	SP W FANUC 100iC 8L	Hose package, water-cooled, for hollow wrist robot	-	094-022785-00000
9.4	SP W FANUC 100iC 12S	Hose package, water-cooled, for hollow wrist robot	-	094-022786-00000
9.4	SP W FANUC 120iC	Hose package, water-cooled, for hollow wrist robot	-	094-022787-00000
9.4	SP W FANUC 120iC 12L	Hose package, water-cooled, for hollow wrist robot	-	094-022788-00000
9.4	SP W FANUC 100iD / MOTO-MAN AR1440	Hose package, water-cooled, for hollow wrist robot	-	394-008118-00000
9.4	SP W FANUC 100iD 10L	Hose package, water-cooled, for hollow wrist robot	-	394-006560-00000
9.4	SP W FANUC 120iD 12L	Hose package, water-cooled, for hollow wrist robot	-	394-006535-00000
9.4	SP W FANUC M-20iA 12L	Hose package, water-cooled, for hollow wrist robot	-	094-022789-00000
9.4	SP W FANUC M-20iA 20M2	Hose package, water-cooled, for hollow wrist robot	-	094-022790-00000
9.4	SP W FANUC M-20iA 35M2	Hose package, water-cooled, for hollow wrist robot	-	094-022791-00000
9.4	SP W FANUC 710iC 12L	Hose package, water-cooled, for hollow wrist robot	-	094-022792-00000
9.4	SP W iSTM FANUC 100iC	Hose package, water-cooled, for hollow wrist robot	-	094-022821-00000
9.4	SP W iSTM FANUC 100iC 12	Hose package, water-cooled, for hollow wrist robot	-	094-022822-00000
9.4	SP W iSTM FANUC 100iC 7L	Hose package, water-cooled, for hollow wrist robot	-	094-022823-00000
9.4	SP W iSTM FANUC 100iC 8L	Hose package, water-cooled, for hollow wrist robot	-	094-022824-00000
9.4	SP W iSTM FANUC 100iC 12S	Hose package, water-cooled, for hollow wrist robot	-	094-022825-00000
9.4	SP W iSTM FANUC 120iC	Hose package, water-cooled, for hollow wrist robot	-	094-022826-00000
9.4	SP W iSTM FANUC 120iC 12L	Hose package, water-cooled, for hollow wrist robot	-	094-022827-00000
9.4	SP W iSTM FANUC M-20iA 12L	Hose package, water-cooled, for hollow wrist robot	-	094-022828-00000
9.4	SP W iSTM FANUC M-20iA 20M2	Hose package, water-cooled, for hollow wrist robot	-	094-022829-00000
9.4	SP W iSTM FANUC M-20iA 35M2	Hose package, water-cooled, for hollow wrist robot	-	094-022830-00000
9.4	SP W iSTM FANUC 710iC 12L	Hose package, water-cooled, for hollow wrist robot	-	094-022831-00000
9.4	SP W KUKA KR16 ARC HW	Hose package, water-cooled, for hollow wrist robot	-	094-022793-00000
9.4	SP W KUKA KR16 L8 ARC HW	Hose package, water-cooled, for hollow wrist robot	-	094-022794-00000
9.4	SP W KUKA KR5 ARC HW	Hose package, water-cooled, for hollow wrist robot	-	094-022795-00000
9.4	SP W KUKA KR6 R1820 HW	Hose package, water-cooled, for hollow wrist robot	-	094-022796-00000
9.4	SP W KUKA KR8 R1420 HW	Hose package, water-cooled, for hollow wrist robot	-	094-022797-00000
9.4	SP W KUKA KR6 R1620 HW	Hose package, water-cooled, for hollow wrist robot	-	094-022798-00000
9.4	SP W KUKA KR8 R2100 arc HW	Hose package, water-cooled, for hollow wrist robot	-	394-007074-00000
9.4	SP W MOTOMAN EA1400	Hose package, water-cooled, for hollow wrist robot	-	094-022799-00000

9.4	SP W MOTOMAN EA1800	Hose package, water-cooled, for hollow wrist robot	-	094-022800-00000
9.4	SP W MOTOMAN EA1900	Hose package, water-cooled, for hollow wrist robot	-	094-022801-00000
9.4	SP W MOTOMAN MA1400	Hose package, water-cooled, for hollow wrist robot	-	094-022802-00000
9.4	SP W MOTOMAN MA1440	Hose package, water-cooled, for hollow wrist robot	-	094-022803-00000
9.4	SP W MOTOMAN MA1550	Hose package, water-cooled, for hollow wrist robot	-	094-022804-00000
9.4	SP W MOTOMAN MA1800	Hose package, water-cooled, for hollow wrist robot	-	094-022805-00000
9.4	SP W MOTOMAN MA1900	Hose package, water-cooled, for hollow wrist robot	-	094-022806-00000
9.4	SP MOTOMAN ICAT W MA2010	Hose package, water-cooled, for hollow wrist robot	-	094-022807-00000
9.4	SP W MOTOMAN MH24	Hose package, water-cooled, for hollow wrist robot	-	094-022808-00000
9.4	SP W MOTOMAN VA1400	Hose package, water-cooled, for hollow wrist robot	-	094-022809-00000
9.4	SP W FANUC 100iD / MOTO- MAN AR1440	Hose package, water-cooled, for hollow wrist robot	-	394-008118-00000

- ▶ Please indicate the robot type for each enquiry or order.
- ▶ Further intermediate flanges and hose packages for different robot types and torch neck models are available upon request!
- ▶ iSTM-model hose packages can only be used in combination with an iSTM torch interface and the corresponding flange!
- ▶ Please note: Torch neck, collision sensor, intermediate flange and hose package are not included in the scope of supply and must be ordered separately!
- ▶ Order welding torch fully equipped. Replacement parts and equipment parts are not part of the scope of supply and must be ordered based on the specific application!

Consumables/Accessories



Item	Designation	Stickout/ Recess	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, conical	+1.9mm	15.5 mm			72.5mm		094-010220-00500
10.01	Gas nozzle, conical	-1.1mm	15.5 mm			75.5mm		094-010219-00000
10.02	Contact tip			0.8 mm	M8		E-Cu	094-001252-00000
10.02	Contact tip			1 mm	M8		E-Cu	094-000941-00000
10.02	Contact tip			1.2 mm	M8		E-Cu	094-000942-00000
10.02	Contact tip			1.4 mm	M8		E-Cu	094-001253-00000
10.02	Contact tip			1.6 mm	M8		E-Cu	094-001254-00000
10.05	Contact tip holder				M8	23.2mm	Copper	094-010891-00000
10.06	Spatter protection, standard				M18	21mm		094-009897-00000
10.06	Spatter protection, high-temperature-resistant				M18	21mm		094-013862-00000

► More consumables and spare parts upon request!

Steel liners

Item	Designation	Wire Ø	Length	Item no.
10.04	Steel liner, steel, black	0.8 mm - 1.2 mm	2m	094-011667-00500

Overview of torch hose packages for RTN500W

ABB	IRB 1600ID	094-022777-00000	
ABB	IRB 1620ID	094-022778-00000	
ABB	IRB 1660ID-4/1.55		
ABB	IRB 1660ID-6/1.55		
ABB	IRB 2600ID	094-022779-00000	
ABB	IRB 2600ID-8/2.0	094-022780-00000	
ABB	IRB 2600ID-15/1.85		
ABB	IRB 1520ID-4/1.5	394-008885-00000	
ABB	IRB 1520ID	094-022776-00000	
COMAU	Arc4-5-1.95		
COMAU	SMART5	094-022781-00000	
FANUC	ARC Mate 100iC/6L		
FANUC	ARC Mate 100iC/7L	094-022784-00000	094-022823-00000
FANUC	ARC Mate 100iC/8L	094-022785-00000	094-022824-00000
FANUC	ARC Mate 100iC/10L		
FANUC	ARC Mate 100iC/10S		
FANUC	ARC Mate 100iC/12	094-022783-00000	094-022822-00000
FANUC	ARC Mate 100iC/12S	094-022786-00000	094-022825-00000
FANUC	ARC Mate 100iD	394-008118-00000	
FANUC	ARC Mate 100iD/8L		
FANUC	ARC Mate 100iD/10L	394-006560-00000	
FANUC	ARC Mate 120iC	094-022787-00000	094-022826-00000
FANUC	ARC Mate 120iC/10L		
FANUC	ARC Mate 120iC/12L	094-022788-00000	094-022827-00000
FANUC	ARC Mate 120iD		
FANUC	ARC Mate 120iD/12L	394-006535-00000	
FANUC	ARC Mate 100iC	094-022782-00000	094-022821-00000
FANUC	M-10ia/6L		
FANUC	M-10iA/7L		
FANUC	M-20iA/12L	094-022789-00000	094-022828-00000
FANUC	M-20iA/20M2	094-022790-00000	094-022829-00000
FANUC	M-20iA/35M2	094-022791-00000	094-022830-00000
FANUC	M-710iC/12L	094-022792-00000	094-022831-00000
Kawasaki	BA006L		
Kawasaki	BA006N		
KUKA	KR 6 R1620 arc HW	094-022798-00000	
KUKA	KR 6 R1820 arc HW	094-022796-00000	
KUKA	KR 6 R1840-2 arc HW		
KUKA	KR 8 R1420 arc HW	094-022797-00000	
KUKA	KR 8 R1440-2 arc HW		
KUKA	KR 8 R1620 arc HW		
KUKA	KR 8 R1640-2 arc HW		
KUKA	KR 8 R2100 arc HW	394-007074-00000	
KUKA	KR 5 arc HW	094-022795-00000	
KUKA	KR 8 R2100-2 arc HW		
KUKA	KR 16 arc HW	094-022793-00000	
KUKA	KR 16 L8 arc HW	094-022794-00000	
Motoman	AR1440	394-008118-00000	
Motoman	AR1730		
Motoman	AR2010	094-022807-00000	
Motoman	AR3120		
Motoman	MA1440	094-022803-00000	
Motoman	EA1400	094-022799-00000	

Robot manufacturer	Robot types	Hose package with iCAT W	Hose package with iSTM W
Motoman	EA1800N	094-022800-00000	
Motoman	EA1900	094-022801-00000	
Motoman	MA1400	094-022802-00000	
Motoman	MA1550	094-022804-00000	
Motoman	MA1800	094-022805-00000	
Motoman	MA1900	094-022806-00000	
Motoman	MA2010	094-022807-00000	
Motoman	VA1400	094-022809-00000	
Motoman	SSA2000		
Motoman	MH24	094-022808-00000	
REIS	RV20-6HW		

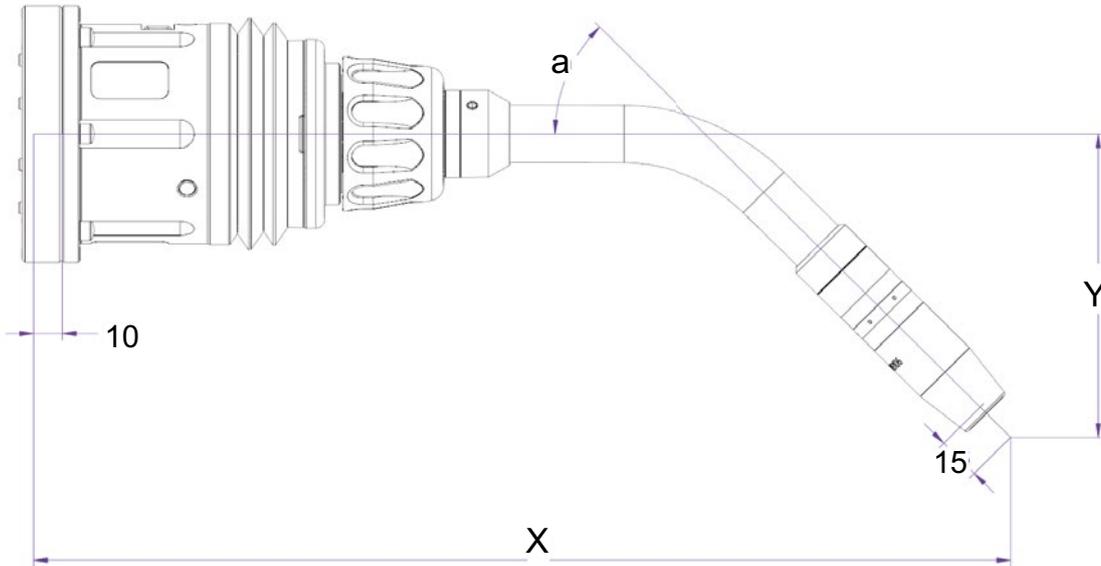
MIG/MAG robot welding torches for hollow wrist systems RMT301G

Made by
ewm[®]



- MIG/MAG welding torch for hollow wrist robots, gas-cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- One-piece liner
- Push buttons for wire inching, wire return, gas test (function dependent on wire feeder)
- Suitable for M drive 4 Rob 5

Duty cycle, CO2	340 A / 100 %
Duty cycle, M21	270 A / 100 %
Duty cycle, M21 pulse	220 A / 100 %
Wire Ø	0.8 mm - 1.2 mm
Connection	Euro torch connector

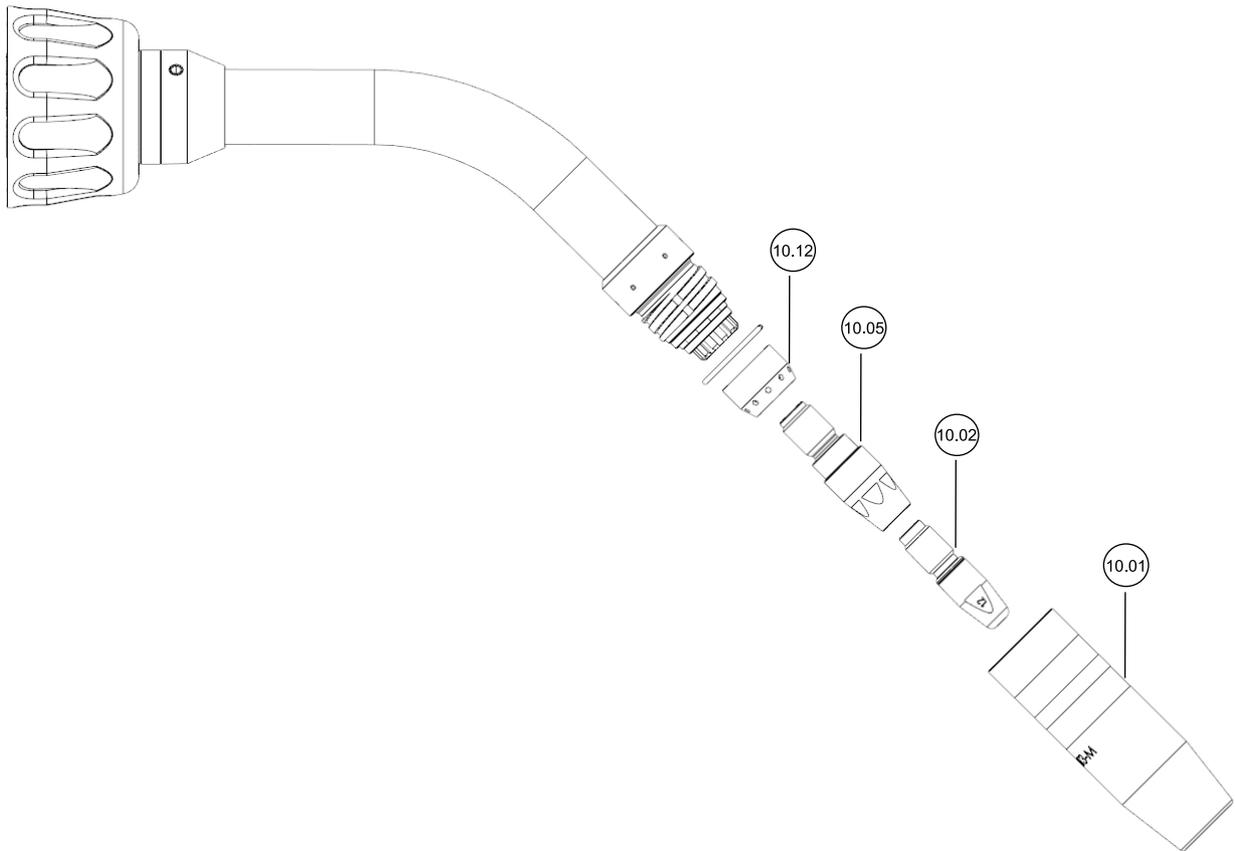


Types	X in mm	Y in mm	a in °	Radius in mm
0°	382,3	0	0	0
22,5°	372,8	49,9	22,5	70
35°	357,8	81,9	35	
45°	341,2	106,5	45	

Item	Type	Designation	Length	Item no.
8	RSA HW W SOFT	Collision sensor		090-005655-00000
8	RSA HW W MEDIUM	Collision sensor		090-005656-00000
8	RSA HW W STRONG	Collision sensor		090-005657-00000
8.1	ZF RSA HW LK=56MM (8XM4)	Intermediate flange, plastic		094-025491-00000
8.1	ZF RSA HW LK=58MM (12XM4)	Intermediate flange, plastic		094-025625-00000
8.1	ZF RSA HW LK=64MM (8XM4)	Intermediate flange, plastic		094-025556-00000
8.1	ZF RSA HW ALU LK=56MM (6XM4)	Intermediate flange, aluminium		094-027786-00000
8.1	ZF RSA HW ALU LK=66MM (5XM5)	Intermediate flange, aluminium		094-027727-00000
8.1	ZF RSA HW ALU LK=80 (6XM6)	Intermediate flange, aluminium		094-027676-00000
9.1	RMT301G 0°	RMT 0° torch neck	-	094-029870-00000
9.1	RMT301G 22,5°	RMT 22.5° torch neck	-	094-029639-00000
9.1	RMT301G 35°	RMT 35° torch neck	-	094-029640-00000
9.1	RMT301G 45°	RMT 45° torch neck	-	094-029641-00000
9.4	SP RMT G HW 970MM EZA	Hose package, gas-cooled, for hollow wrist robot	9.7m	094-029642-00000

- Please indicate the robot type for each enquiry or order.
- Further intermediate flanges and hose packages for different robot types and torch neck models are available upon request!

Consumables/Accessories



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle				68mm		094-019406-00000
10.01	Gas nozzle, short	15 mm			65mm		094-019821-00001
10.01	Gas nozzle	15 mm			71mm		094-013106-00001
10.02	Contact tip		0.8 mm	M9	35mm	CuCrZr	094-013528-00001
10.02	Contact tip, aluminium welding		0.8 mm	M9	35mm	E-Cu	094-013543-00001
10.02	Contact tip		1 mm	M9	35mm	CuCrZr	094-013530-00001
10.02	Contact tip, aluminium welding		1 mm	M9	35mm	E-Cu	094-013545-00001
10.02	Contact tip		1.2 mm	M9	35mm	CuCrZr	094-013531-00001
10.02	Contact tip, aluminium welding		1.2 mm	M9	35mm	E-Cu	094-013546-00001
10.05	Contact tip holder						094-029682-00001
10.12	Gas diffusers						094-029681-00000

► More consumables and spare parts upon request!

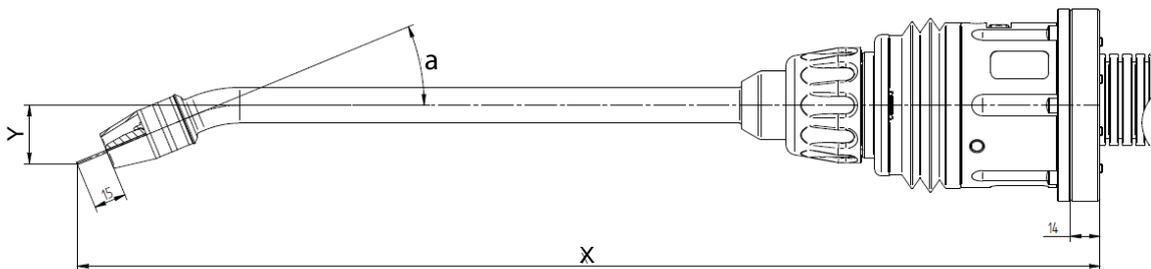
MIG/MAG robot welding torches for hollow wrist systems RMT301W RSA HW

Made by
ewm



- MIG/MAG welding torch for hollow wrist robots, water cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- Water stop for coolant
- One-piece liner
- Push buttons for wire inching, wire return, gas test (function dependent on wire feeder)
- Suitable for M drive 4 Rob 5

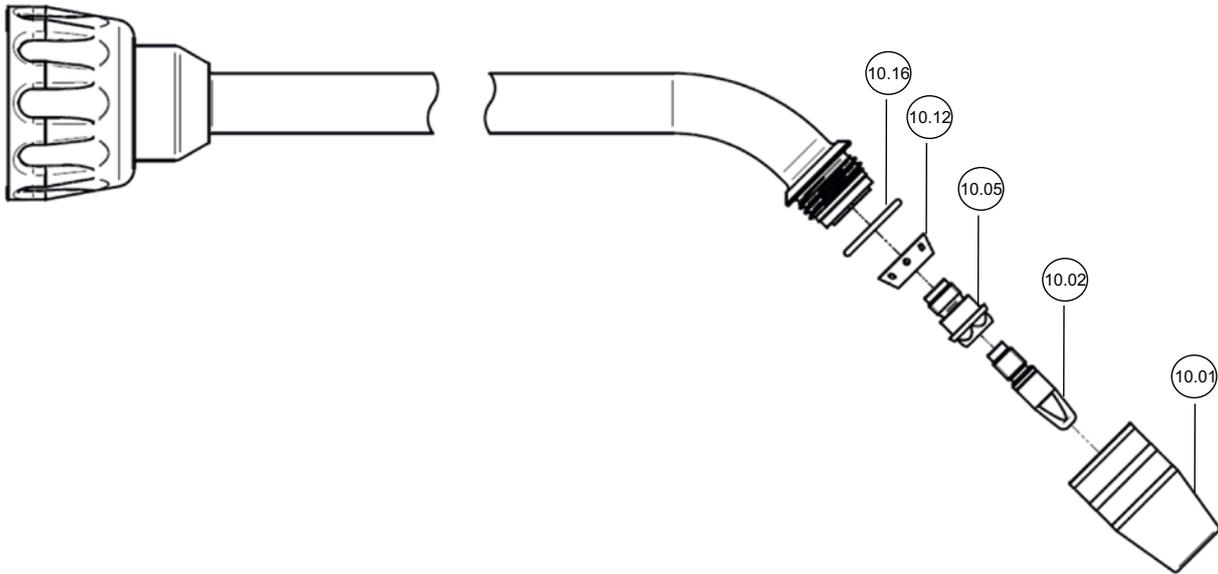
Duty cycle, CO2	330 A / 100 %
Duty cycle, M21	290 A / 100 %
Duty cycle, M21 pulse	250 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector
Test mark	CE sign



Types	X in mm	Y in mm	a in °	Radius in mm
0°	483	0	0	50
22,5°	478	27,5	22,5	
35°	470	44,5	35	
45°	462	58	45	

Item	Type	Designation	Length	Item no.
8	RSA HW W SOFT	Collision sensor		090-005655-00000
8	RSA HW W MEDIUM	Collision sensor		090-005656-00000
8	RSA HW W STRONG	Collision sensor		090-005657-00000
8.1	ZF RSA HW LK=58MM (11XM4)	Intermediate flange, aluminium		094-028447-00000
8.1	ZF RSA HW LK=56MM (8XM4)	Intermediate flange, plastic		094-025491-00000
8.1	ZF RSA HW LK=58MM (12XM4)	Intermediate flange, plastic		094-025625-00000
8.1	ZF RSA HW LK=64MM (8XM4)	Intermediate flange, plastic		094-025556-00000
8.1	ZF RSA HW ALU LK=56MM (6XM4)	Intermediate flange, aluminium		094-027786-00000
8.1	ZF RSA HW ALU LK=63MM (4XM6)	Intermediate flange, aluminium		092-007972-00000
8.1	ZF RSA HW ALU LK=66MM (5XM5)	Intermediate flange, aluminium		094-027727-00000
8.1	ZF RSA HW ALU LK=80 (6XM6)	Intermediate flange, aluminium		094-027676-00000
9.1	RMT301WL 0° X=359 Y=0	RMT 0° torch neck	-	094-027909-00000
9.1	RMT301WL 22,5° X=354 Y=27,5	RMT 22.5° torch neck	-	094-027114-00000
9.1	RMT301WL 35° X=346 Y=44	RMT 35° torch neck	-	094-027115-00000
9.1	RMT301WL 45° X=337,5 Y=58	RMT 45° torch neck	-	094-026981-00000
9.4	SP RMT W HW 092CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	0.92m	094-527019-01092
9.4	SP RMT W HW 097CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	0.97m	094-527019-01097
9.4	SP RMT W HW 100CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1m	094-527019-01100
9.4	SP RMT W HW 100CM EZA	Hose package, water-cooled, for hollow wrist robot	1m	094-527019-00100
9.4	SP RMT W HW 109CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.09m	094-527019-01109
9.4	SP RMT W HW 111CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.11m	094-527019-01111
9.4	SP RMT W HW 113CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.13m	094-527019-01113
9.4	SP RMT W HW 118CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.18m	094-527019-01118
9.4	SP RMT W HW 120CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.2m	094-527019-01120
9.4	SP RMT W HW 123CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.23m	094-527019-01123
9.4	SP RMT W HW 125CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.25m	094-527019-01125
9.4	SP RMT W HW 129CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.29m	094-527019-01129
9.4	SP RMT W HW 133CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.33m	094-527019-01133
9.4	SP RMT W HW 136CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.36m	094-527019-01136
9.4	SP RMT W HW 138CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.38m	094-527019-01138
9.4	SP RMT W HW 147CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.47m	094-527019-01147
9.4	SP RMT W HW 152CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.52m	094-527019-01152
9.4	SP RMT W HW 160CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.6m	094-527019-01160
9.4	SP RMT W HW 185CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.85m	094-527019-01185
9.4	SP RMT W HW 200CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	2m	094-527019-01200
9.4	SP RMT W HW 215CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	2.15m	094-527019-01215
9.4	SP RMT W HW 302CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	3.02m	094-527019-01302
9.4	SP RMT W HW 402CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	4.02m	094-527019-01402

- ▶ Please indicate the robot type for each enquiry or order.
- ▶ Further intermediate flanges and hose packages for different robot types and torch neck models are available upon request!
- ▶ Order equipment for torch neck!



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle	24 mm			37.8mm		094-024876-00000
10.02	Contact tip		0.8 mm	M7	30mm	CuCrZr	094-013535-00001
10.02	Contact tip		0.9 mm	M7	30mm	CuCrZr	094-013536-00001
10.02	Contact tip		1 mm	M7	30mm	CuCrZr	094-013537-00001
10.02	Contact tip		1.2 mm	M7	30mm	CuCrZr	094-013538-00001
10.05	Contact tip holder				18mm		094-024877-00000
10.12	Gas diffusers						094-024875-00000
10.16	O-ring						094-024874-00000
-	Retraction aid for hollow wrist hose package						094-027954-00000
-	O-ring for Euro torch connector						094-013967-00000
-	Torch key						094-016038-00001
-	Multi-functional key for robot welding torch						094-028741-00000
-	Hook spanners						098-005205-00000
-	Centring piece				15mm		094-026853-00001

► More consumables and spare parts upon request!

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Polyamid	094-013076-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Polyamid	094-013077-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Polyamid	094-013565-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501

RMT brass liners without wire brake

Item	Designation	Length	Item no.
10.07	Brass liner RMT 301W SH	330mm	094-026964-00000

RMT brass liners with wire brake

Item	Designation	Length	Item no.
10.07	Brass liners wire brake	300mm	094-025560-00000
10.07	Brass liners wire brake	450mm	094-028251-00000

RMT plastic liners with wire brake

10.03	Plastic liners wire brake	300mm	094-027875-00000
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Options/accessories

Item	Designation	Item no.
-	Testing and straightening gauge for robot welding torches	094-027651-00000

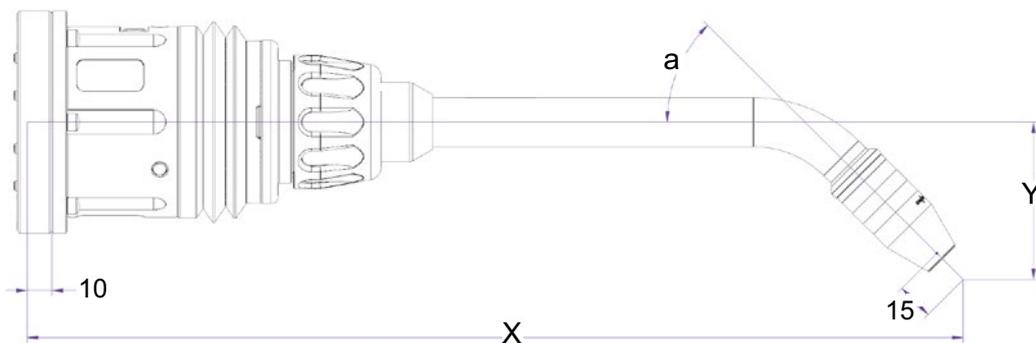
MIG/MAG robot welding torches for hollow wrist systems RMT351W RSA HW

Made by
ewm[®]



- MIG/MAG welding torch for hollow wrist robots, water cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- Water stop for coolant
- One-piece liner
- Push buttons for wire inching, wire return, gas test (function dependent on wire feeder)
- Suitable for M drive 4 Rob 5

Duty cycle, CO2	350 A / 100 %
Duty cycle, M21	300 A / 100 %
Duty cycle, M21 pulse	260 A / 100 %
Wire Ø	0.8 mm - 1.2 mm

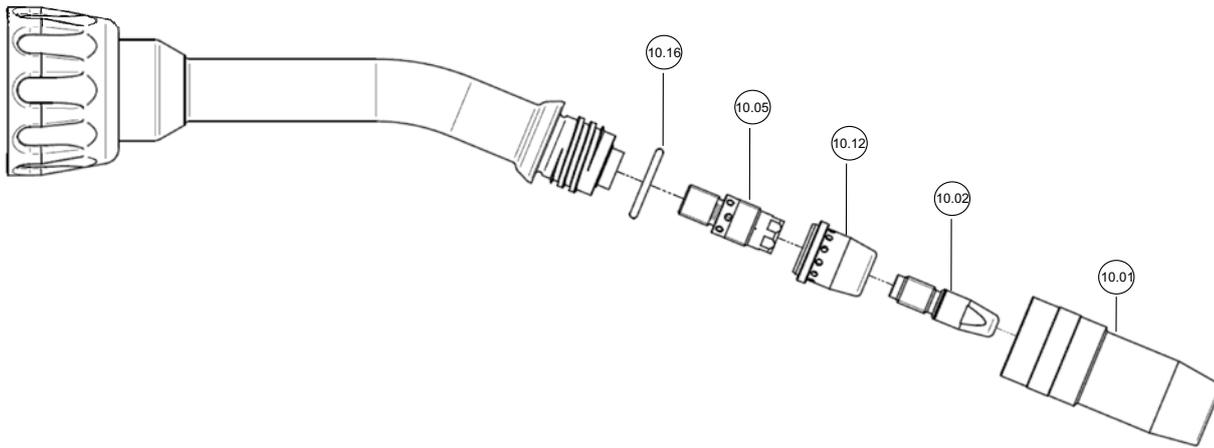


Types	X in mm	Y in mm	a in °	Radius in mm
0°	402,8	0	0	0
22,5°	396,8	30	22,5	50
35°	388,8	49	35	
45°	378,8	64	45	

Item	Type	Designation	Length	Item no.
8	RSA HW W SOFT	Collision sensor		090-005655-00000
8	RSA HW W MEDIUM	Collision sensor		090-005656-00000
8	RSA HW W STRONG	Collision sensor		090-005657-00000
9.1	RMT351W 0°	RMT 0° torch neck	-	094-027985-00000
9.1	RMT351W 22,5°	RMT 22.5° torch neck	-	094-028026-00000
9.1	RMT351W 35°	RMT 35° torch neck	-	094-028044-00000
9.1	RMT351W 45°	RMT 45° torch neck	-	094-028043-00000
9.4	SP RMT W HW 092CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	0.92m	094-527019-01092
9.4	SP RMT W HW 097CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	0.97m	094-527019-01097
9.4	SP RMT W HW 100CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1m	094-527019-01100
9.4	SP RMT W HW 100CM EZA	Hose package, water-cooled, for hollow wrist robot	1m	094-527019-00100
9.4	SP RMT W HW 109CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.09m	094-527019-01109
9.4	SP RMT W HW 111CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.11m	094-527019-01111
9.4	SP RMT W HW 113CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.13m	094-527019-01113
9.4	SP RMT W HW 118CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.18m	094-527019-01118
9.4	SP RMT W HW 120CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.2m	094-527019-01120
9.4	SP RMT W HW 123CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.23m	094-527019-01123
9.4	SP RMT W HW 125CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.25m	094-527019-01125
9.4	SP RMT W HW 129CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.29m	094-527019-01129
9.4	SP RMT W HW 133CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.33m	094-527019-01133
9.4	SP RMT W HW 136CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.36m	094-527019-01136
9.4	SP RMT W HW 138CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.38m	094-527019-01138
9.4	SP RMT W HW 147CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.47m	094-527019-01147
9.4	SP RMT W HW 152CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.52m	094-527019-01152
9.4	SP RMT W HW 160CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.6m	094-527019-01160
9.4	SP RMT W HW 185CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.85m	094-527019-01185
9.4	SP RMT W HW 200CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	2m	094-527019-01200
9.4	SP RMT W HW 215CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	2.15m	094-527019-01215
9.4	SP RMT W HW 302CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	3.02m	094-527019-01302
9.4	SP RMT W HW 402CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	4.02m	094-527019-01402

- ▶ Please indicate the robot type for each enquiry or order.
- ▶ Further intermediate flanges and hose packages for different robot types and torch neck models are available upon request!
- ▶ Order equipment for torch neck!

Consumables/Accessories



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle	13 mm			48mm		094-027984-00000
10.02	Contact tip		1.2 mm	M7	30mm	CuCrZr	094-013538-00001
10.05	Contact tip holder				18mm		094-024877-00000
10.12	Gas diffusers						094-024875-00000
10.16	O-ring						094-024874-00000
-	Retraction aid for hollow wrist hose package						094-027954-00000
-	Multi-functional key for robot welding torch						094-028741-00000
-	Centring piece				15mm		094-026854-00001

► More consumables and spare parts upon request!

Options/accessories

Designation	Item no.
Testing and straightening gauge for robot welding torches	094-028330-00000

MIG/MAG robot welding torches for hollow wrist systems

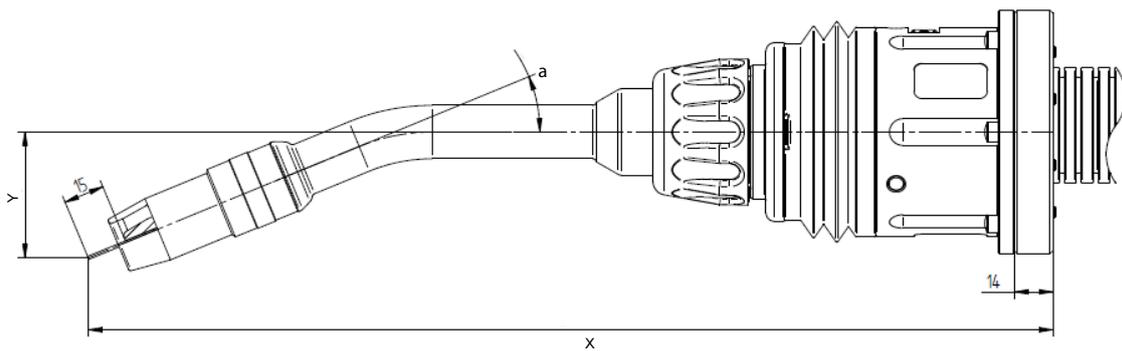
RMT551W RSA HW

Made by
ewm[®]



- MIG/MAG welding torch for hollow wrist robots, water cooled
- Maximum TCP safety
- Modular construction
- Quick-change torch neck
- Water stop for coolant
- One-piece liner
- Push buttons for wire inching, wire return, gas test (function dependent on wire feeder)
- Suitable for M drive 4 Rob 5

Duty cycle, CO2	650 A / 100 %
Duty cycle, M21	550 A / 100 %
Duty cycle, M21 pulse	500 A / 100 %
Wire Ø	0.8 mm - 1.2 mm
Connection	Euro torch connector
Test mark	CE sign



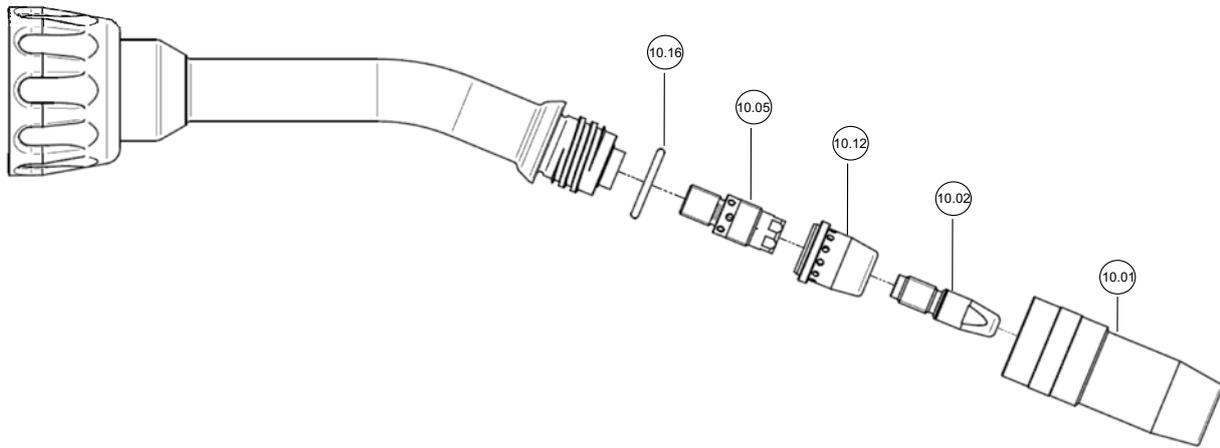
Types	X in mm	Y in mm	a in °	Radius in mm
0° W	363	0	0	70
22,5° W	354	46,5	22,5	
35° W	341	74,5	35	
45° W	326	96,5	45	

Types	X in mm	Y in mm	a in °	Radius in mm
0° WL	463,5	0	0	70
22,5° WL	454	48,5	22,5	
35° WL	440,5	77	35	
45° WL	425	100	45	

Item	Type	Designation	Length	Item no.
8	RSA HW W SOFT	Collision sensor		090-005655-00000
8	RSA HW W MEDIUM	Collision sensor		090-005656-00000
8	RSA HW W STRONG	Collision sensor		090-005657-00000
8.1	ZF RSA HW LK=58MM (11XM4)	Intermediate flange, aluminium		094-028447-00000
8.1	ZF RSA HW LK=56MM (8XM4)	Intermediate flange, plastic		094-025491-00000
8.1	ZF RSA HW LK=58MM (12XM4)	Intermediate flange, plastic		094-025625-00000
8.1	ZF RSA HW LK=64MM (8XM4)	Intermediate flange, plastic		094-025556-00000
8.1	ZF RSA HW ALU LK=56MM (6XM4)	Intermediate flange, aluminium		094-027786-00000
8.1	ZF RSA HW ALU LK=63MM (4XM6)	Intermediate flange, aluminium		092-007972-00000
8.1	ZF RSA HW ALU LK=66MM (5XM5)	Intermediate flange, aluminium		094-027727-00000
8.1	ZF RSA HW ALU LK=80 (6XM6)	Intermediate flange, aluminium		094-027676-00000
9.1	RMT551W 0° X239,3 Y0	RMT 0° torch neck	-	094-025531-00001
9.1	RMT551W 22,5° X230,4 Y46,5	RMT 22.5° torch neck	-	094-025074-00001
9.1	RMT551W 35° X215,4 Y80	RMT 35° torch neck	-	094-025075-00001
9.1	RMT551W 45° X200,9 Y100	RMT 45° torch neck	-	094-025076-00001
9.1	RMT551WL 0° X339,5 Y0	RMT 0° torch neck	-	094-027680-00000
9.1	RMT551WL 22,5° X330,4 Y46,5	RMT 22.5° torch neck	-	094-026635-00001
9.1	RMT551WL 35° X315,4 Y80	RMT 35° torch neck	-	094-026636-00001
9.1	RMT551WL 45° X300,9 Y100	RMT 45° torch neck	-	094-026637-00001
9.4	SP RMT W HW 092CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	0.92m	094-527019-01092
9.4	SP RMT W HW 097CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	0.97m	094-527019-01097
9.4	SP RMT W HW 100CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1m	094-527019-01100
9.4	SP RMT W HW 100CM EZA	Hose package, water-cooled, for hollow wrist robot	1m	094-527019-00100
9.4	SP RMT W HW 109CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.09m	094-527019-01109
9.4	SP RMT W HW 111CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.11m	094-527019-01111
9.4	SP RMT W HW 113CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.13m	094-527019-01113
9.4	SP RMT W HW 118CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.18m	094-527019-01118
9.4	SP RMT W HW 120CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.2m	094-527019-01120
9.4	SP RMT W HW 123CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.23m	094-527019-01123
9.4	SP RMT W HW 125CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.25m	094-527019-01125
9.4	SP RMT W HW 129CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.29m	094-527019-01129
9.4	SP RMT W HW 133CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.33m	094-527019-01133
9.4	SP RMT W HW 136CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.36m	094-527019-01136
9.4	SP RMT W HW 138CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.38m	094-527019-01138
9.4	SP RMT W HW 147CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.47m	094-527019-01147
9.4	SP RMT W HW 152CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.52m	094-527019-01152
9.4	SP RMT W HW 160CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.6m	094-527019-01160
9.4	SP RMT W HW 185CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	1.85m	094-527019-01185
9.4	SP RMT W HW 200CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	2m	094-527019-01200
9.4	SP RMT W HW 215CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	2.15m	094-527019-01215
9.4	SP RMT W HW 302CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	3.02m	094-527019-01302
9.4	SP RMT W HW 402CM EZA	Hose package, water cooled, hollow wrist, with blow-out function	4.02m	094-527019-01402

- ▶ Please indicate the robot type for each enquiry or order.
- ▶ Further intermediate flanges and hose packages for different robot types and torch neck models are available upon request!
- ▶ Order equipment for torch neck!

Consumables/Accessories



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle	15 mm			63mm		094-014177-00001
10.01	Gas nozzle	15 mm			66mm		094-014178-00001
10.01	Gas nozzle	17 mm			63mm		094-014179-00001
10.01	Gas nozzle	17 mm			66mm		094-014180-00001
10.01	Gas nozzle	19 mm			63mm		094-014181-00001
10.01	Gas nozzle	19 mm			66mm		094-014182-00001
10.02	Contact tip		0.8 mm	M9	35mm	CuCrZr	094-013528-00001
10.02	Contact tip, aluminium welding		0.8 mm	M9	35mm	E-Cu	094-013543-00001
10.02	Contact tip		0.9 mm	M9	35mm	CuCrZr	094-013529-00001
10.02	Contact tip, aluminium welding		0.9 mm	M9	35mm	E-Cu	094-013544-00001
10.02	Contact tip		1 mm	M9	35mm	CuCrZr	094-013530-00001
10.02	Contact tip, aluminium welding		1 mm	M9	35mm	E-Cu	094-013545-00001
10.02	Forced-contact contact tip		1 mm	M9	35mm	CuCrZr	094-017007-00001
10.02	Contact tip		1.2 mm	M9	35mm	CuCrZr	094-013531-00001
10.02	Contact tip, aluminium welding		1.2 mm	M9	35mm	E-Cu	094-013546-00001
10.02	Forced-contact contact tip		1.2 mm	M9	35mm	CuCrZr	094-016159-00001
10.02	Contact tip		1.4 mm	M9	35mm	CuCrZr	094-013532-00001
10.02	Contact tip, aluminium welding		1.4 mm	M9	35mm	E-Cu	094-013547-00001
10.02	Contact tip		1.6 mm	M9	35mm	CuCrZr	094-013533-00001
10.02	Contact tip, aluminium welding		1.6 mm	M9	35mm	E-Cu	094-013548-00001
10.02	Forced-contact contact tip		1.6 mm	M9	35mm	CuCrZr	094-025533-00000
10.02	Contact tip		2 mm	M9	35mm	CuCrZr	094-013534-00001
10.02	Contact tip, aluminium welding		2 mm	M9	35mm	E-Cu	094-013549-00001
10.05	Contact tip holder						094-025209-00000
10.05	Contact tip holder						094-025338-00000
10.12	Gas diffusers						094-028487-00000
10.16	O-ring for gas nozzle holder						094-022875-00000
-	Retraction aid for hollow wrist hose package						094-027954-00000
-	Testing and straightening gauge for robot welding torches						094-026770-00000
-	O-ring for Euro torch connector						094-013967-00000
-	Torch key						094-016038-00001
-	Multi-functional key for robot welding torch						094-028741-00000
-	Hook spanners						098-005205-00000
-	Centring piece				15mm		094-026854-00001

► More consumables and spare parts upon request!

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Polyamid	094-013076-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Polyamid	094-013077-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Polyamid	094-013565-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	3.6m	094-013662-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	4.6m	094-013663-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	5.6m	094-013664-00502

RMT brass liners without wire brake

Item	Designation	Length	Item no.
10.07	Brass liner RMT 301W SH	330mm	094-026964-00000

RMT brass liners with wire brake

Item	Designation	Length	Item no.
10.07	Brass liners wire brake	300mm	094-025560-00000
10.07	Brass liners wire brake	450mm	094-028251-00000

RMT plastic liners with wire brake

Item	Designation	Length	Item no.
10.03	Plastic liners wire brake	300mm	094-027875-00000

Overview of torch hose packages for RMT301, 551W RSA HW

Robot manufacturer	Robot types	Hose package with RSA W HW	Alternative
ABB	IRB 1600ID	094-527019-01118	
ABB	IRB 1620ID		
ABB	IRB 1660ID-4/1.55		
ABB	IRB 1660ID-6/1.55		
ABB	IRB 2600ID		
ABB	IRB 2600ID-8/2.0	094-527019-01152	
ABB	IRB 2600ID-15/1.85	094-527019-01125	
ABB	IRB 1520ID-4/1.5		
ABB	IRB 1520ID	094-527019-01120	
COMAU	Arc4-5-1.95		
COMAU	SMART5		
FANUC	ARC Mate 100iC/6L		
FANUC	ARC Mate 100iC/7L		
FANUC	ARC Mate 100iC/8L	094-527019-01138	
FANUC	ARC Mate 100iC/10L		
FANUC	ARC Mate 100iC/10S		
FANUC	ARC Mate 100iC/12		
FANUC	ARC Mate 100iC/12S		
FANUC	ARC Mate 100iD	094-527019-01097	
FANUC	ARC Mate 100iD/8L	094-527019-01136	
FANUC	ARC Mate 100iD/10L	094-527019-01118	
FANUC	ARC Mate 120iC	094-527019-01118	
FANUC	ARC Mate 120iC/10L		
FANUC	ARC Mate 120iC/12L	094-527019-01160	
FANUC	ARC Mate 120iD	094-527019-01118	094-527019-01113
FANUC	ARC Mate 120iD/12L		
FANUC	ARC Mate 100iC	094-527019-01097	
FANUC	M-10ia/6L		
FANUC	M-10ia/7L	094-527019-01118	
FANUC	M-20ia/12L		
FANUC	M-20ia/20M2		
FANUC	M-20ia/35M2		
FANUC	M-710iC/12L		
Kawasaki	BA006L	094-527019-01142	
Kawasaki	BA006N	094-527019-01109	
KUKA	KR 6 R1440-2 arc HW E	094-527019-01100	
KUKA	KR 6 R1620 arc HW		
KUKA	KR 6 R1820 arc HW		
KUKA	KR 6 R1840-2 arc HW	094-527019-01113	
KUKA	KR 6 R2010-2 arc HW E		
KUKA	KR 8 R1420 arc HW		
KUKA	KR 8 R1440-2 arc HW	094-527019-01097	
KUKA	KR 8 R1620 arc HW		
KUKA	KR 8 R1640-2 arc HW	094-527019-01092	
KUKA	KR 8 R2100 arc HW		
KUKA	KR 5 arc HW		
KUKA	KR 8 R2100-2 arc HW	094-527019-01129	
KUKA	KR 16 arc HW	094-527019-01123	
KUKA	KR 16 L8 arc HW		
Motoman	AR1440	094-527019-01097	
Motoman	AR1730	094-527019-01160	

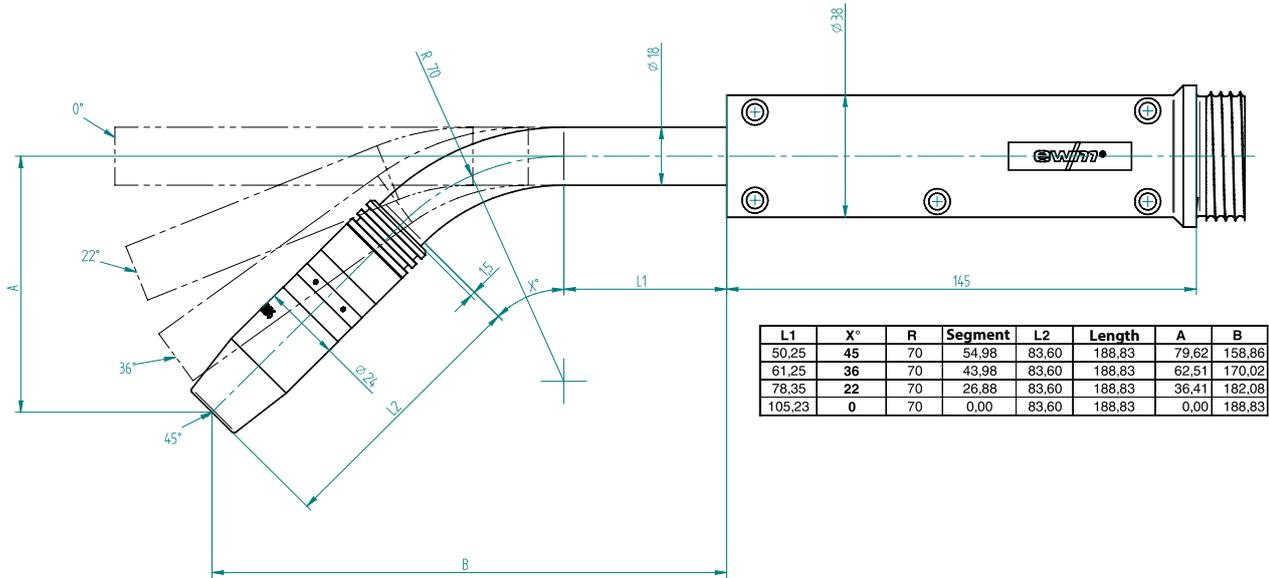
Robot manufacturer	Robot types	Hose package with RSA W HW	Alternative
Motoman	AR2010	094-527019-01138	
Motoman	AR3120	094-527019-01215	
Motoman	MA1440		
Motoman	EA1400		
Motoman	EA1800N		
Motoman	EA1900		
Motoman	MA1400		
Motoman	MA1550		
Motoman	MA1800		
Motoman	MA1900		
Motoman	MA2010		
Motoman	VA1400		
Motoman	SSA2000		
Motoman	MH24		
REIS	RV20-6HW		

MIG/MAG automated welding torches AMT301G



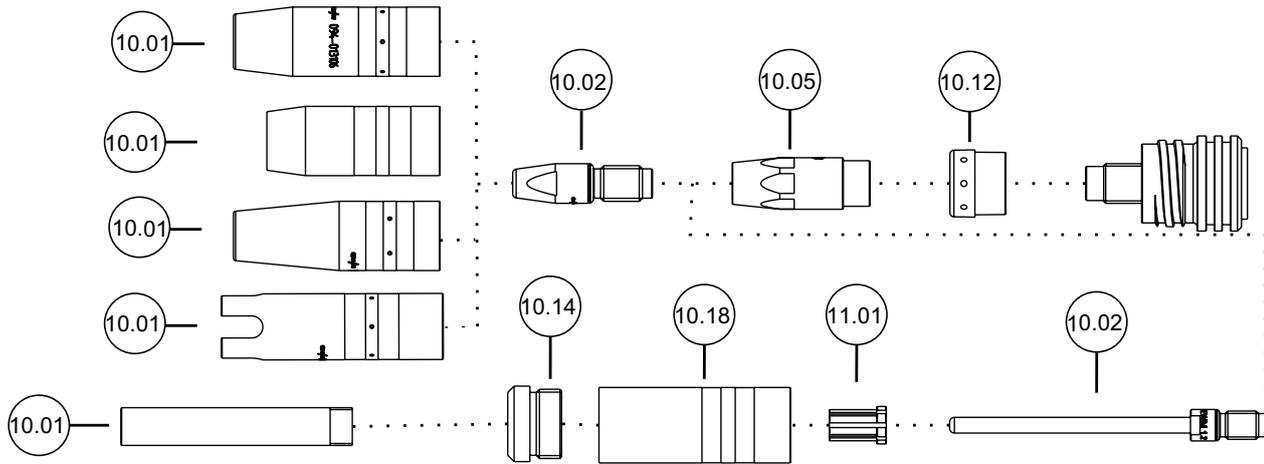
- Standard equipment: contact tip, 1.0 mm steel, gas nozzle NW15 77 mm
- Gas-cooled MIG/MAG automated welding torch
- Optimal cooling through moulded inner tubes
- Clamping diameter range 38 mm

Duty cycle, CO2	330 A / 60 %
Duty cycle, M21	300 A / 60 %
Duty cycle, M21 pulse	210 A / 60 %
Wire Ø	0.8 mm - 1.2 mm
Connection	Euro torch connector
Thread, contact tip	M9



Item	Type	Designation	Length	Item no.
9	AMT301G 1.5m 0° M9	Automated MIG/MAG welding torch, gas-cooled	1.5m	094-500061-00015
9	AMT301G 1.5m 22° M9	Automated MIG/MAG welding torch, gas-cooled	1.5m	094-500062-00015
9	AMT301G 1.5m 36° M9	Automated MIG/MAG welding torch, gas-cooled	1.5m	094-500063-00015
9	AMT301G 1.5m 45° M9	Automated MIG/MAG welding torch, gas-cooled	1.5m	094-500064-00015
9	AMT301G 3m 0° M9	Automated MIG/MAG welding torch, gas-cooled	3m	094-500061-00000
9	AMT301G 3m 22° M9	Automated MIG/MAG welding torch, gas-cooled	3m	094-500062-00000
9	AMT301G 3m 36° M9	Automated MIG/MAG welding torch, gas-cooled	3m	094-500063-00000
9	AMT301G 3m 45° M9	Automated MIG/MAG welding torch, gas-cooled	3m	094-500064-00000
9	AMT301G 4m 0° M9	Automated MIG/MAG welding torch, gas-cooled	4m	094-500061-00004
9	AMT301G 4m 22° M9	Automated MIG/MAG welding torch, gas-cooled	4m	094-500062-00004
9	AMT301G 4m 36° M9	Automated MIG/MAG welding torch, gas-cooled	4m	094-500063-00004
9	AMT301G 4m 45° M9	Automated MIG/MAG welding torch, gas-cooled	4m	094-500064-00004
9	AMT301G 5m 0° M9	Automated MIG/MAG welding torch, gas-cooled	5m	094-500061-00005
9	AMT301G 5m 22° M9	Automated MIG/MAG welding torch, gas-cooled	5m	094-500062-00005
9	AMT301G 5m 36° M9	Automated MIG/MAG welding torch, gas-cooled	5m	094-500063-00005
9	AMT301G 5m 45° M9	Automated MIG/MAG welding torch, gas-cooled	5m	094-500064-00005
9.2	TH AMT	Torch holder suitable for AMT torches	-	092-019400-00000

Consumables/Accessories



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, Innershield				59.5mm		094-019554-00000
10.01	Gas nozzle, narrow gap welding				73mm		094-019626-00000
10.01	Gas nozzle, narrow gap welding				76mm		094-022226-00000
10.01	Gas nozzle	13 mm			71mm		094-013105-00001
10.01	Gas nozzle, very conical, narrow gap welding	13 mm			71mm		094-019853-00001
10.01	Gas nozzle, short	15 mm			65mm		094-019821-00001
10.01	Gas nozzle	15 mm			71mm		094-013106-00001
10.01	Gas nozzle, short	18 mm			65mm		094-019822-00001
10.01	Gas nozzle	18 mm			71mm		094-013107-00001
10.01	Spot gas nozzle	20 mm			80mm		094-020945-00000
10.02	Contact tip		0.8 mm	M8	30mm	CuCrZr	094-014024-00000
10.02	Contact tip		0.8 mm	M8	30mm	E-Cu	094-016109-00000
10.02	Contact tip, aluminium welding		0.8 mm	M8	30mm	E-Cu	094-016115-00000
10.02	Contact tip		0.8 mm	M9	35mm	CuCrZr	094-013528-00001
10.02	Contact tip, aluminium welding		0.8 mm	M9	35mm	E-Cu	094-013543-00001
10.02	Contact tip, narrow gap welding		0.8 mm	M9	100mm	CuCrZr	094-021189-00001
10.02	Contact tip		0.9 mm	M8	30mm	CuCrZr	094-013129-00000
10.02	Contact tip		0.9 mm	M8	30mm	E-Cu	094-016110-00000
10.02	Contact tip, aluminium welding		0.9 mm	M8	30mm	E-Cu	094-016116-00000
10.02	Contact tip		0.9 mm	M9	35mm	CuCrZr	094-013529-00001
10.02	Contact tip, aluminium welding		0.9 mm	M9	35mm	E-Cu	094-013544-00001
10.02	Contact tip		1 mm	M8	30mm	CuCrZr	094-014222-00000
10.02	Contact tip		1 mm	M8	30mm	E-Cu	094-016111-00000
10.02	Contact tip, aluminium welding		1 mm	M8	30mm	E-Cu	094-016117-00000
10.02	Contact tip		1 mm	M9	35mm	CuCrZr	094-013530-00001
10.02	Contact tip, aluminium welding		1 mm	M9	35mm	E-Cu	094-013545-00001
10.02	Contact tip, narrow gap welding		1 mm	M9	100mm	CuCrZr	094-019616-00000
10.02	Contact tip		1.2 mm	M8	30mm	E-Cu	094-007238-00000
10.02	Contact tip		1.2 mm	M8	30mm	CuCrZr	094-013113-00000
10.02	Contact tip, aluminium welding		1.2 mm	M8	30mm	E-Cu	094-016118-00000
10.02	Contact tip		1.2 mm	M9	35mm	CuCrZr	094-013531-00001

10.02	Contact tip, aluminium welding	1.2 mm	M9	35mm	E-Cu	094-013546-00001
10.02	Contact tip, narrow gap welding	1.2 mm	M9	100mm	CuCrZr	094-019617-00000
10.02	Contact tip	1.4 mm	M8	30mm	CuCrZr	094-014191-00000
10.02	Contact tip	1.4 mm	M8	30mm	E-Cu	094-016112-00000
10.02	Contact tip, aluminium welding	1.4 mm	M8	30mm	E-Cu	094-016119-00000
10.02	Contact tip	1.4 mm	M9	35mm	CuCrZr	094-013532-00001
10.02	Contact tip, aluminium welding	1.4 mm	M9	35mm	E-Cu	094-013547-00001
10.02	Contact tip, narrow gap welding	1.4 mm	M9	100mm	CuCrZr	094-020019-00000
10.02	Contact tip	1.6 mm	M8	30mm	CuCrZr	094-014192-00000
10.02	Contact tip	1.6 mm	M8	30mm	E-Cu	094-016113-00000
10.02	Contact tip, aluminium welding	1.6 mm	M8	30mm	E-Cu	094-016120-00000
10.02	Contact tip	1.6 mm	M9	35mm	CuCrZr	094-013533-00001
10.02	Contact tip, aluminium welding	1.6 mm	M9	35mm	E-Cu	094-013548-00001
10.02	Contact tip, narrow gap welding	1.6 mm	M9	100mm	CuCrZr	094-019618-00000
10.05	Contact tip holder		M8	34.1mm	CuCrZr	094-013109-00003
10.05	Contact tip holder		M9	34.5mm	CuCrZr	094-013539-00002
10.05	Contact tip holder		M8	37.1mm	CuCrZr	094-013110-00002
10.05	Contact tip holder		M9	37.5mm	CuCrZr	094-013540-00002
10.12	Gas diffusers			11.9mm	Plastic	094-013096-00004
10.14	Capillary tube					094-019625-00000
10.18	Gas nozzle body					094-019623-00000
11.01	Centring sleeve					094-019627-00000
-	Hexagonal nut				Brass	094-001080-00000
-	Collet chuck				Brass	094-001082-00000
-	Collet chuck				Brass	094-001291-00000
-	O-ring for Euro torch connector					094-013967-00000
-	Torch key					094-016038-00001

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Teflon liner	0.6 mm - 1 mm	1.5 mm	4 mm		Teflon	094-013487-00100
10.03	PA liner, by the metre	0.6 mm - 1 mm	1.4 mm	4 mm		PA	094-013781-00200
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm		Carbon teflon	094-013870-00100
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, Teflon	0.6 mm - 1 mm	1.5 mm	4 mm	3m	Teflon	094-013800-00000
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm	3m	Carbon teflon	094-013871-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, Teflon	0.6 mm - 1 mm	1.5 mm	4 mm	4m	Teflon	094-013800-00004
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm	4m	Carbon teflon	094-013871-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, Teflon	0.6 mm - 1 mm	1.5 mm	4 mm	5m	Teflon	094-013800-00005
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm	5m	Carbon teflon	094-013871-00005
10.03	Teflon liner	1.2 mm - 1.6 mm	2 mm	4 mm		Teflon	094-013490-00100
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm		Carbon teflon	094-013524-00100
10.03	PA liner, by the metre	1.2 mm - 1.6 mm	2 mm	4 mm		PA	094-013782-00200
10.03	Combined liner, Teflon	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Teflon	094-013801-00000
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Carbon teflon	094-013828-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3.5m	Polyamid	092-018706-00003
10.03	Combined liner, Teflon	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Teflon	094-013801-00004
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Carbon teflon	094-013828-00004
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4.5m	Polyamid	092-018706-00004
10.03	Combined liner, Teflon	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Teflon	094-013801-00005
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Carbon teflon	094-013828-00005
10.03	Teflon liner	1.6 mm - 2 mm	2.7 mm	4.7 mm		Teflon	094-013523-00100
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm		Carbon teflon	094-013525-00100
10.03	PA liner, by the metre	1.6 mm - 2 mm	2.3 mm	4.7 mm		PA	094-013783-00200
10.03	Combined liner, PA	1.6 mm - 2 mm	2.3 mm	4.7 mm	3m	Polyamid	094-013665-00000
10.03	Combined liner, Teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	3m	Teflon	094-013802-00000
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	3m	Carbon teflon	094-013829-00000
10.03	Combined liner, PA	1.6 mm - 2 mm	2.3 mm	4.7 mm	4m	Polyamid	094-013666-00000
10.03	Combined liner, Teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	4m	Teflon	094-013802-00004
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	4m	Carbon teflon	094-013829-00004
10.03	Combined liner, PA	1.6 mm - 2 mm	2.3 mm	4.7 mm	5m	Polyamid	094-013667-00000
10.03	Combined liner, Teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	5m	Teflon	094-013802-00005
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	5m	Carbon teflon	094-013829-00005
10.17	O-ring						094-001249-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	3.6m	094-013662-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	4.6m	094-013663-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	5.6m	094-013664-00502

Options/accessories

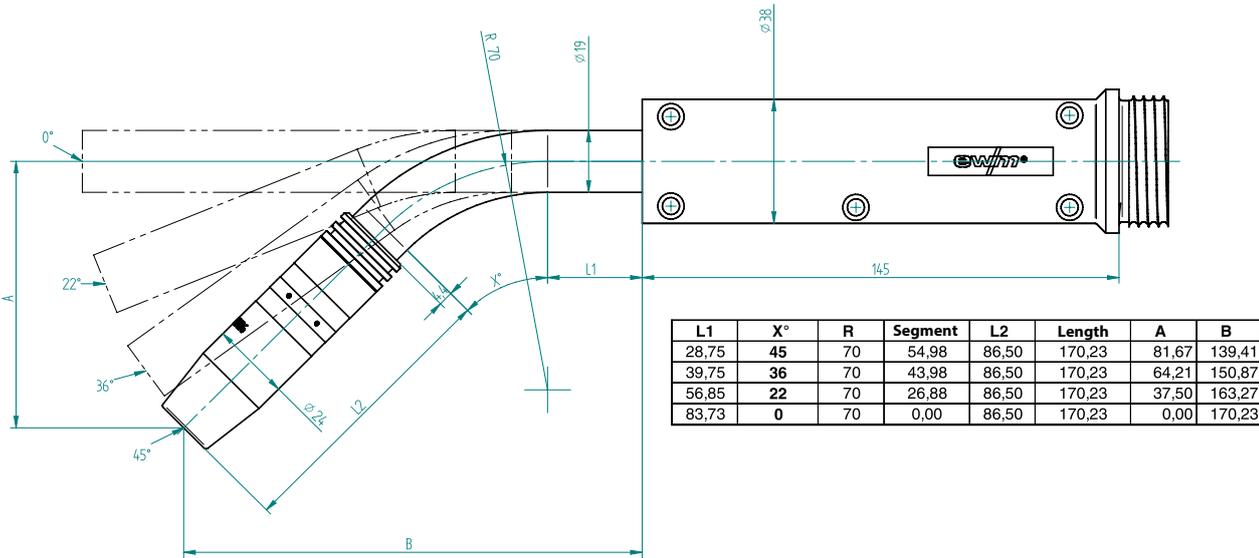
Item	Designation	Item no.
9.2	Torch holder suitable for AMT torches	092-019400-00000

MIG/MAG automated welding torches AMT451W



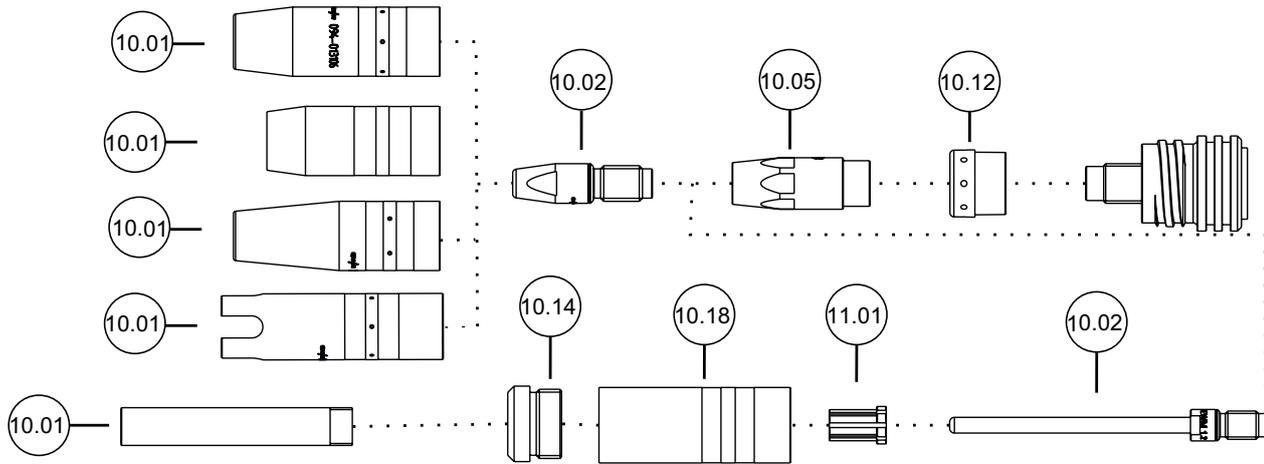
- Standard equipment: 1.2 mm steel contact tip, 71 mm NW15 gas nozzle
- Water cooled MIG/MAG welding torch
- Optimal cooling through moulded inner tubes
- Fabric-reinforced coolant hoses for even more robustness
- Clamping diameter range 38 mm

Duty cycle, CO2	500 A / 100 %
Duty cycle, M21	450 A / 100 %
Duty cycle, M21 pulse	350 A / 100 %
Wire Ø	0.8 mm - 1.6 mm
Connection	Euro torch connector
Thread, contact tip	M9



Item	Type	Designation	Length	Item no.
9	AMT451W 0° 1.5m M9	Automated MIG/MAG welding torch, water-cooled	1.5m	094-500065-00015
9	AMT451W 0° 3m M9	Automated MIG/MAG welding torch, water-cooled	3m	094-500065-00000
9	AMT451W 0° 4m M9	Automated MIG/MAG welding torch, water-cooled	4m	094-500065-00004
9	AMT451W 0° 5m M9	Automated MIG/MAG welding torch, water-cooled	5m	094-500065-00005
9	AMT451W 22° 1.5m M9	Automated MIG/MAG welding torch, water-cooled	1.5m	094-500066-00015
9	AMT451W 22° 3m M9	Automated MIG/MAG welding torch, water-cooled	3m	094-500066-00000
9	AMT451W 22° 4m M9	Automated MIG/MAG welding torch, water-cooled	4m	094-500066-00004
9	AMT451W 22° 5m M9	Automated MIG/MAG welding torch, water-cooled	5m	094-500066-00005
9	AMT451W 36° 1.5m M9	Automated MIG/MAG welding torch, water-cooled	1.5m	094-500067-00015
9	AMT451W 36° 3m M9	Automated MIG/MAG welding torch, water-cooled	3m	094-500067-00000
9	AMT451W 36° 4m M9	Automated MIG/MAG welding torch, water-cooled	4m	094-500067-00004
9	AMT451W 36° 5m M9	Automated MIG/MAG welding torch, water-cooled	5m	094-500067-00005
9	AMT451W 45° 1.5m M9	Automated MIG/MAG welding torch, water-cooled	1.5m	094-500068-00015
9	AMT451W 45° 3m M9	Automated MIG/MAG welding torch, water-cooled	3m	094-500068-00000
9	AMT451W 45° 4m M9	Automated MIG/MAG welding torch, water-cooled	4m	094-500068-00004
9	AMT451W 45° 5m M9	Automated MIG/MAG welding torch, water-cooled	5m	094-500068-00005
9.2	TH AMT	Torch holder suitable for AMT torches	-	092-019400-00000

Consumables/Accessories



Item	Designation	Nozzle Ø	Wire Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, Innershield				59.5mm		094-019554-00000
10.01	Gas nozzle, narrow gap welding				73mm		094-019626-00000
10.01	Gas nozzle, narrow gap welding				76mm		094-022226-00000
10.01	Gas nozzle	13 mm			71mm		094-013105-00001
10.01	Gas nozzle, very conical, narrow gap welding	13 mm			71mm		094-019853-00001
10.01	Gas nozzle, short	15 mm			65mm		094-019821-00001
10.01	Gas nozzle	15 mm			71mm		094-013106-00001
10.01	Gas nozzle, short	18 mm			65mm		094-019822-00001
10.01	Gas nozzle	18 mm			71mm		094-013107-00001
10.01	Spot gas nozzle	20 mm			80mm		094-020945-00000
10.02	Contact tip		0.8 mm	M8	30mm	CuCrZr	094-014024-00000
10.02	Contact tip		0.8 mm	M8	30mm	E-Cu	094-016109-00000
10.02	Contact tip, aluminium welding		0.8 mm	M8	30mm	E-Cu	094-016115-00000
10.02	Contact tip		0.8 mm	M9	35mm	CuCrZr	094-013528-00001
10.02	Contact tip, aluminium welding		0.8 mm	M9	35mm	E-Cu	094-013543-00001
10.02	Contact tip, narrow gap welding		0.8 mm	M9	100mm	CuCrZr	094-021189-00001
10.02	Contact tip		0.9 mm	M8	30mm	CuCrZr	094-013129-00000
10.02	Contact tip		0.9 mm	M8	30mm	E-Cu	094-016110-00000
10.02	Contact tip, aluminium welding		0.9 mm	M8	30mm	E-Cu	094-016116-00000
10.02	Contact tip		0.9 mm	M9	35mm	CuCrZr	094-013529-00001
10.02	Contact tip, aluminium welding		0.9 mm	M9	35mm	E-Cu	094-013544-00001
10.02	Contact tip		1 mm	M8	30mm	CuCrZr	094-014222-00000
10.02	Contact tip		1 mm	M8	30mm	E-Cu	094-016111-00000
10.02	Contact tip, aluminium welding		1 mm	M8	30mm	E-Cu	094-016117-00000
10.02	Contact tip		1 mm	M9	35mm	CuCrZr	094-013530-00001
10.02	Contact tip, aluminium welding		1 mm	M9	35mm	E-Cu	094-013545-00001
10.02	Contact tip, narrow gap welding		1 mm	M9	100mm	CuCrZr	094-019616-00000
10.02	Contact tip		1.2 mm	M8	30mm	E-Cu	094-007238-00000
10.02	Contact tip		1.2 mm	M8	30mm	CuCrZr	094-013113-00000
10.02	Contact tip, aluminium welding		1.2 mm	M8	30mm	E-Cu	094-016118-00000
10.02	Contact tip		1.2 mm	M9	35mm	CuCrZr	094-013531-00001

10.02	Contact tip, aluminium welding	1.2 mm	M9	35mm	E-Cu	094-013546-00001
10.02	Contact tip, narrow gap welding	1.2 mm	M9	100mm	CuCrZr	094-019617-00000
10.02	Contact tip	1.4 mm	M8	30mm	CuCrZr	094-014191-00000
10.02	Contact tip	1.4 mm	M8	30mm	E-Cu	094-016112-00000
10.02	Contact tip, aluminium welding	1.4 mm	M8	30mm	E-Cu	094-016119-00000
10.02	Contact tip	1.4 mm	M9	35mm	CuCrZr	094-013532-00001
10.02	Contact tip, aluminium welding	1.4 mm	M9	35mm	E-Cu	094-013547-00001
10.02	Contact tip, narrow gap welding	1.4 mm	M9	100mm	CuCrZr	094-020019-00000
10.02	Contact tip	1.6 mm	M8	30mm	CuCrZr	094-014192-00000
10.02	Contact tip	1.6 mm	M8	30mm	E-Cu	094-016113-00000
10.02	Contact tip, aluminium welding	1.6 mm	M8	30mm	E-Cu	094-016120-00000
10.02	Contact tip	1.6 mm	M9	35mm	CuCrZr	094-013533-00001
10.02	Contact tip, aluminium welding	1.6 mm	M9	35mm	E-Cu	094-013548-00001
10.02	Contact tip, narrow gap welding	1.6 mm	M9	100mm	CuCrZr	094-019618-00000
10.05	Contact tip holder		M8	34.1mm	CuCrZr	094-013109-00003
10.05	Contact tip holder		M9	34.5mm	CuCrZr	094-013539-00002
10.05	Contact tip holder		M8	37.1mm	CuCrZr	094-013110-00002
10.05	Contact tip holder		M9	37.5mm	CuCrZr	094-013540-00002
10.12	Gas diffusers			11.9mm	Plastic	094-013096-00004
10.14	Capillary tube					094-019625-00000
10.18	Gas nozzle body					094-019623-00000
11.01	Centring sleeve					094-019627-00000
-	Hexagonal nut				Brass	094-001080-00000
-	Collet chuck				Brass	094-001082-00000
-	Collet chuck				Brass	094-001291-00000
-	O-ring for Euro torch connector					094-013967-00000
-	Torch key					094-016038-00001

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Teflon liner	0.6 mm - 1 mm	1.5 mm	4 mm		Teflon	094-013487-00100
10.03	PA liner, by the metre	0.6 mm - 1 mm	1.4 mm	4 mm		PA	094-013781-00200
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm		Carbon teflon	094-013870-00100
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, Teflon	0.6 mm - 1 mm	1.5 mm	4 mm	3m	Teflon	094-013800-00000
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm	3m	Carbon teflon	094-013871-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, Teflon	0.6 mm - 1 mm	1.5 mm	4 mm	4m	Teflon	094-013800-00004
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm	4m	Carbon teflon	094-013871-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, Teflon	0.6 mm - 1 mm	1.5 mm	4 mm	5m	Teflon	094-013800-00005
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm	5m	Carbon teflon	094-013871-00005
10.03	Teflon liner	1.2 mm - 1.6 mm	2 mm	4 mm		Teflon	094-013490-00100
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm		Carbon teflon	094-013524-00100
10.03	PA liner, by the metre	1.2 mm - 1.6 mm	2 mm	4 mm		PA	094-013782-00200
10.03	Combined liner, Teflon	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Teflon	094-013801-00000
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Carbon teflon	094-013828-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3.5m	Polyamid	092-018706-00003
10.03	Combined liner, Teflon	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Teflon	094-013801-00004
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Carbon teflon	094-013828-00004
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4.5m	Polyamid	092-018706-00004
10.03	Combined liner, Teflon	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Teflon	094-013801-00005
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Carbon teflon	094-013828-00005
10.03	Teflon liner	1.6 mm - 2 mm	2.7 mm	4.7 mm		Teflon	094-013523-00100
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm		Carbon teflon	094-013525-00100
10.03	PA liner, by the metre	1.6 mm - 2 mm	2.3 mm	4.7 mm		PA	094-013783-00200
10.03	Combined liner, PA	1.6 mm - 2 mm	2.3 mm	4.7 mm	3m	Polyamid	094-013665-00000
10.03	Combined liner, Teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	3m	Teflon	094-013802-00000
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	3m	Carbon teflon	094-013829-00000
10.03	Combined liner, PA	1.6 mm - 2 mm	2.3 mm	4.7 mm	4m	Polyamid	094-013666-00000
10.03	Combined liner, Teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	4m	Teflon	094-013802-00004
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	4m	Carbon teflon	094-013829-00004
10.03	Combined liner, PA	1.6 mm - 2 mm	2.3 mm	4.7 mm	5m	Polyamid	094-013667-00000
10.03	Combined liner, Teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	5m	Teflon	094-013802-00005
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	5m	Carbon teflon	094-013829-00005
10.17	O-ring						094-001249-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	7m	094-025460-00000
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	7m	094-025461-00000
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	3.6m	094-013662-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	4.6m	094-013663-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	5.6m	094-013664-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	7m	094-025462-00000

Options/accessories

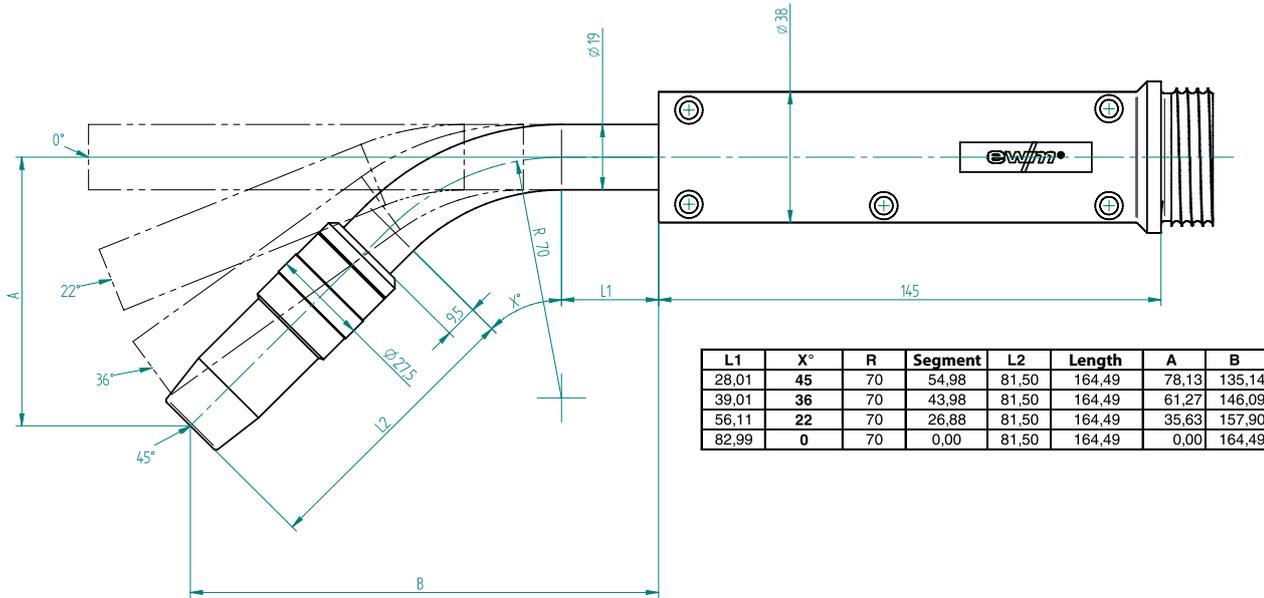
Item	Designation	Item no.
9.2	Torch holder suitable for AMT torches	092-019400-00000

MIG/MAG automated welding torches AMT551W



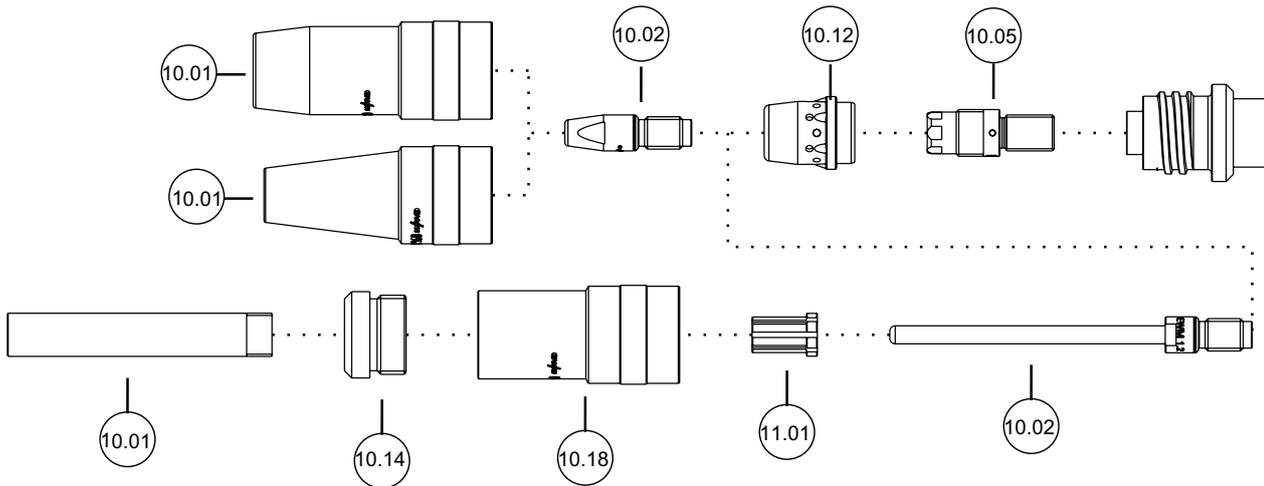
- Standard equipment: 1.2 mm steel contact tip, 66 mm NW17 gas nozzle
- Water cooled MIG/MAG welding torch
- Optimal cooling through moulded inner tubes
- Fabric-reinforced coolant hoses for even more robustness
- Clamping diameter range 38 mm

Duty cycle, CO2	650 A / 100 %
Duty cycle, M21	550 A / 100 %
Duty cycle, M21 pulse	500 A / 100 %
Wire Ø	0.8 mm - 2 mm
Connection	Euro torch connector
Thread, contact tip	M9



Item	Type	Designation	Length	Item no.
9	AMT551W 0° 1.5m M9	Automated MIG/MAG welding torch, water-cooled	1.5m	094-500069-00015
9	AMT551W 0° 3m M9	Automated MIG/MAG welding torch, water-cooled	3m	094-500069-00000
9	AMT551W 0° 4m M9	Automated MIG/MAG welding torch, water-cooled	4m	094-500069-00004
9	AMT551W 0° 5m M9	Automated MIG/MAG welding torch, water-cooled	5m	094-500069-00005
9	AMT551W 22° 1.5m M9	Automated MIG/MAG welding torch, water-cooled	1.5m	094-500070-00015
9	AMT551W 22° 3m M9	Automated MIG/MAG welding torch, water-cooled	3m	094-500070-00000
9	AMT551W 22° 4m M9	Automated MIG/MAG welding torch, water-cooled	4m	094-500070-00004
9	AMT551W 22° 5m M9	Automated MIG/MAG welding torch, water-cooled	5m	094-500070-00005
9	AMT551W 36° 1.5m M9	Automated MIG/MAG welding torch, water-cooled	1.5m	094-500071-00015
9	AMT551W 36° 3m M9	Automated MIG/MAG welding torch, water-cooled	3m	094-500071-00000
9	AMT551W 36° 4m M9	Automated MIG/MAG welding torch, water-cooled	4m	094-500071-00004
9	AMT551W 36° 5m M9	Automated MIG/MAG welding torch, water-cooled	5m	094-500071-00005
9	AMT551W 45° 1.5m M9	Automated MIG/MAG welding torch, water-cooled	1.5m	094-500072-00015
9	AMT551W 45° 3m M9	Automated MIG/MAG welding torch, water-cooled	3m	094-500072-00000
9	AMT551W 45° 4m M9	Automated MIG/MAG welding torch, water-cooled	4m	094-500072-00004
9	AMT551W 45° 5m M9	Automated MIG/MAG welding torch, water-cooled	5m	094-500072-00005
9.2	TH AMT	Torch holder suitable for AMT torches	-	092-019400-00000

Consumables/Accessories



Item	Designation	Nozzle Ø	Wire Ø	Outside Ø	Thread	Length	Material	Item no.
10.01	Gas nozzle, narrow gap welding					73mm		094-019626-00000
10.01	Gas nozzle, narrow gap welding					76mm		094-022226-00000
10.01	Gas nozzle, very conical, narrow gap welding	13 mm				63mm		094-019702-00000
10.01	Gas nozzle, very conical, narrow gap welding	13 mm				66mm		094-022227-00000
10.01	Gas nozzle	15 mm				63mm		094-014177-00001
10.01	Gas nozzle	15 mm				66mm		094-014178-00001
10.01	Gas nozzle	17 mm				63mm		094-014179-00001
10.01	Gas nozzle	17 mm				66mm		094-014180-00001
10.01	Gas nozzle	19 mm				63mm		094-014181-00001
10.01	Gas nozzle	19 mm				66mm		094-014182-00001
10.02	Contact tip		0.8 mm		M8	30mm	CuCrZr	094-014024-00000
10.02	Contact tip		0.8 mm		M8	30mm	E-Cu	094-016109-00000
10.02	Contact tip, aluminium welding		0.8 mm		M8	30mm	E-Cu	094-016115-00000
10.02	Contact tip		0.8 mm		M9	35mm	CuCrZr	094-013528-00001
10.02	Contact tip, aluminium welding		0.8 mm		M9	35mm	E-Cu	094-013543-00001
10.02	Contact tip, narrow gap welding		0.8 mm		M9	100mm	CuCrZr	094-021189-00001
10.02	Contact tip		0.9 mm		M8	30mm	CuCrZr	094-013129-00000
10.02	Contact tip		0.9 mm		M8	30mm	E-Cu	094-016110-00000
10.02	Contact tip, aluminium welding		0.9 mm		M8	30mm	E-Cu	094-016116-00000
10.02	Contact tip		0.9 mm		M9	35mm	CuCrZr	094-013529-00001
10.02	Contact tip, aluminium welding		0.9 mm		M9	35mm	E-Cu	094-013544-00001
10.02	Contact tip		1 mm		M8	30mm	CuCrZr	094-014222-00000
10.02	Contact tip		1 mm		M8	30mm	E-Cu	094-016111-00000
10.02	Contact tip, aluminium welding		1 mm		M8	30mm	E-Cu	094-016117-00000
10.02	Contact tip		1 mm		M9	35mm	CuCrZr	094-013530-00001
10.02	Contact tip, aluminium welding		1 mm		M9	35mm	E-Cu	094-013545-00001
10.02	Contact tip, narrow gap welding		1 mm		M9	100mm	CuCrZr	094-019616-00000
10.02	Contact tip		1.2 mm		M8	30mm	E-Cu	094-007238-00000
10.02	Contact tip		1.2 mm		M8	30mm	CuCrZr	094-013113-00000
10.02	Contact tip, aluminium welding		1.2 mm		M8	30mm	E-Cu	094-016118-00000

10.02	Contact tip	1.2 mm	M9	35mm	CuCrZr	094-013531-00001
10.02	Contact tip, aluminium welding	1.2 mm	M9	35mm	E-Cu	094-013546-00001
10.02	Contact tip, narrow gap welding	1.2 mm	M9	100mm	CuCrZr	094-019617-00000
10.02	Contact tip	1.4 mm	M8	30mm	CuCrZr	094-014191-00000
10.02	Contact tip	1.4 mm	M8	30mm	E-Cu	094-016112-00000
10.02	Contact tip, aluminium welding	1.4 mm	M8	30mm	E-Cu	094-016119-00000
10.02	Contact tip	1.4 mm	M9	35mm	CuCrZr	094-013532-00001
10.02	Contact tip, aluminium welding	1.4 mm	M9	35mm	E-Cu	094-013547-00001
10.02	Contact tip, narrow gap welding	1.4 mm	M9	100mm	CuCrZr	094-020019-00000
10.02	Contact tip	1.6 mm	M8	30mm	CuCrZr	094-014192-00000
10.02	Contact tip	1.6 mm	M8	30mm	E-Cu	094-016113-00000
10.02	Contact tip, aluminium welding	1.6 mm	M8	30mm	E-Cu	094-016120-00000
10.02	Contact tip	1.6 mm	M9	35mm	CuCrZr	094-013533-00001
10.02	Contact tip, aluminium welding	1.6 mm	M9	35mm	E-Cu	094-013548-00001
10.02	Contact tip, narrow gap welding	1.6 mm	M9	100mm	CuCrZr	094-019618-00000
10.02	Contact tip	2 mm	M8	30mm	CuCrZr	094-014193-00000
10.02	Contact tip	2 mm	M8	30mm	E-Cu	094-016114-00000
10.02	Contact tip, aluminium welding	2 mm	M8	30mm	E-Cu	094-016920-00000
10.02	Contact tip	2 mm	M9	35mm	CuCrZr	094-013534-00001
10.02	Contact tip, aluminium welding	2 mm	M9	35mm	E-Cu	094-013549-00001
10.05	Contact tip holder		M8	34.5mm	CuCrZr	094-015489-00003
10.05	Contact tip holder		M9	35mm	CuCrZr	094-013856-00004
10.05	Contact tip holder		M8	37.5mm	CuCrZr	094-016018-00003
10.05	Contact tip holder		M9	38mm	CuCrZr	094-016425-00003
10.12	Gas diffusers	20.2 mm		25mm	Plastic	094-013111-00002
10.14	Capillary tube					094-019625-00000
10.16	O-ring for gas nozzle holder					094-022875-00000
10.18	Gas nozzle body					094-019624-00000
11.01	Centring sleeve					094-019627-00000
-	Hexagonal nut				Brass	094-001080-00000
-	Collet chuck				Brass	094-001082-00000
-	Collet chuck				Brass	094-001291-00000
-	O-ring for Euro torch connector					094-013967-00000
-	Torch key					094-016038-00001

Liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Material	Item no.
10.03	Teflon liner	0.6 mm - 1 mm	1.5 mm	4 mm		Teflon	094-013487-00100
10.03	PA liner, by the metre	0.6 mm - 1 mm	1.4 mm	4 mm		PA	094-013781-00200
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm		Carbon teflon	094-013870-00100
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	3m	Polyamid	094-013687-00000
10.03	Combined liner, Teflon	0.6 mm - 1 mm	1.5 mm	4 mm	3m	Teflon	094-013800-00000
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm	3m	Carbon teflon	094-013871-00000
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	4m	Polyamid	094-013687-00004
10.03	Combined liner, Teflon	0.6 mm - 1 mm	1.5 mm	4 mm	4m	Teflon	094-013800-00004
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm	4m	Carbon teflon	094-013871-00004
10.03	Combined liner, PA	0.6 mm - 1 mm	1.4 mm	4 mm	5m	Polyamid	094-013687-00005
10.03	Combined liner, Teflon	0.6 mm - 1 mm	1.5 mm	4 mm	5m	Teflon	094-013800-00005
10.03	Combined liner, carbon teflon	0.6 mm - 1 mm	1.5 mm	4 mm	5m	Carbon teflon	094-013871-00005
10.03	Teflon liner	1.2 mm - 1.6 mm	2 mm	4 mm		Teflon	094-013490-00100
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm		Carbon teflon	094-013524-00100
10.03	PA liner, by the metre	1.2 mm - 1.6 mm	2 mm	4 mm		PA	094-013782-00200
10.03	Combined liner, Teflon	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Teflon	094-013801-00000
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm	3m	Carbon teflon	094-013828-00000
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	3.5m	Polyamid	092-018706-00003
10.03	Combined liner, Teflon	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Teflon	094-013801-00004
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm	4m	Carbon teflon	094-013828-00004
10.03	Combined liner, PA	1.2 mm - 1.6 mm	2 mm	4 mm	4.5m	Polyamid	092-018706-00004
10.03	Combined liner, Teflon	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Teflon	094-013801-00005
10.03	Combined liner, carbon teflon	1.2 mm - 1.6 mm	2 mm	4 mm	5m	Carbon teflon	094-013828-00005
10.03	Teflon liner	1.6 mm - 2 mm	2.7 mm	4.7 mm		Teflon	094-013523-00100
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm		Carbon teflon	094-013525-00100
10.03	PA liner, by the metre	1.6 mm - 2 mm	2.3 mm	4.7 mm		PA	094-013783-00200
10.03	Combined liner, PA	1.6 mm - 2 mm	2.3 mm	4.7 mm	3m	Polyamid	094-013665-00000
10.03	Combined liner, Teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	3m	Teflon	094-013802-00000
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	3m	Carbon teflon	094-013829-00000
10.03	Combined liner, PA	1.6 mm - 2 mm	2.3 mm	4.7 mm	4m	Polyamid	094-013666-00000
10.03	Combined liner, Teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	4m	Teflon	094-013802-00004
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	4m	Carbon teflon	094-013829-00004
10.03	Combined liner, PA	1.6 mm - 2 mm	2.3 mm	4.7 mm	5m	Polyamid	094-013667-00000
10.03	Combined liner, Teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	5m	Teflon	094-013802-00005
10.03	Combined liner, carbon teflon	1.6 mm - 2 mm	2.7 mm	4.7 mm	5m	Carbon teflon	094-013829-00005
10.17	O-ring						094-001249-00000

Steel liners

Item	Designation	Wire Ø	Inside Ø	Outside Ø	Length	Item no.
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	3.6m	094-013074-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	4.6m	094-013075-00501
10.04	Steel liner, insulated	0.8 mm - 1 mm	1.5 mm	3.8 mm	5.6m	094-014221-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	3.6m	094-007239-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	4.5m	094-014223-00501
10.04	Steel liner, insulated	1.2 mm - 1.6 mm	2 mm	4.6 mm	5.6m	094-014224-00501
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	3.6m	094-013662-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	4.6m	094-013663-00502
10.04	Steel liner, insulated	1.6 mm - 2 mm	2.4 mm	4.6 mm	5.6m	094-013664-00502

Options/accessories

Item	Designation	Item no.
9.2	Torch holder suitable for AMT torches	092-019400-00000

MIG/MAG robot welding torches

Contact tips

CT M6 E-Cu



- Contact tip made from E-Cu copper
- For universal use with all welding torches with M6 contact tip thread

Length	28 mm
Thread, contact tip	M6
Material	E-Cu

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-016101-00000
Contact tip	0.9 mm	10	094-016102-00000
Contact tip	1 mm	10	094-016103-00000
Contact tip	1.2 mm	10	094-016104-00000

CT M6 CuCrZr



- Contact tip made from copper/chrome/zirconium alloy
- For particularly long service life
- For universal use with all welding torches with M6 contact tip thread

Length	28 mm
Thread, contact tip	M6
Material	CuCrZr
Version	For extremely long service lives

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-013071-00000
Contact tip	0.9 mm	10	094-013122-00000
Contact tip	1 mm	10	094-013072-00000
Contact tip	1.2 mm	10	094-014317-00000

CT M6 E-Cu (Alu)



- Contact tip made from E-Cu copper
- Developed specially for aluminium wires
- For universal use with all welding torches with M6 contact tip thread

Length	28 mm
Thread, contact tip	M6
Material	E-Cu
Version	Developed specially for aluminium wires

Designation	Wire Ø	Packing unit	Item no.
Contact tip, aluminium welding	0.8 mm	10	094-016105-00000
Contact tip, aluminium welding	0.9 mm	10	094-016106-00000
Contact tip, aluminium welding	1 mm	10	094-016107-00000
Contact tip, aluminium welding	1.2 mm	10	094-016108-00000

CT M6 E-Cu



Length	28 mm
Thread, contact tip	M6
Material	E-Cu

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-001191-00000
Contact tip	1 mm	10	094-001228-00000
Contact tip	1.2 mm	10	094-001229-00000

CT M6 CuCrZr



Length	28 mm
Thread, contact tip	M6
Material	CuCrZr

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-005407-00000
Contact tip	0.9 mm	10	094-005408-00000
Contact tip	1 mm	10	094-003339-00000
Contact tip	1.2 mm	10	094-005224-00000

CT M6 E-Cu (Alu)



Length	28 mm
Thread, contact tip	M6
Material	E-Cu

Designation	Wire Ø	Packing unit	Item no.
Contact tip, aluminium welding	0.8 mm	10	094-001230-00000
Contact tip, aluminium welding	1 mm	10	094-001231-00000
Contact tip, aluminium welding	1.2 mm	10	094-001232-00000

CT M7 CuCrZr



- Precision-manufactured contact tip made from a copper/chrome/zirconium alloy
- For particularly long service life
- Self-centring with bore to house the steel liner/liner
- For universal use with all PM/MT torches with M7 contact tip thread

Length	30 mm
Thread, contact tip	M7
Material	CuCrZr
Version	For extremely long service lives

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-013535-00001
Contact tip	0.9 mm	10	094-013536-00001
Contact tip	1 mm	10	094-013537-00001
Contact tip	1.2 mm	10	094-013538-00001

CT M7 E-Cu (Alu)



- Precision-manufactured contact tip made from E-Cu copper
- Developed specially for aluminium wires
- Self-centring with fastener to secure the steel liner/liner
- For universal use with all PM/MT torches with M7 contact tip thread

Length	30 mm
Thread, contact tip	M7
Material	E-Cu
Version	Developed specially for aluminium wires

Designation	Wire Ø	Packing unit	Item no.
Contact tip, aluminium welding	0.8 mm	10	094-013550-00001
Contact tip, aluminium welding	0.9 mm	10	094-013551-00001
Contact tip, aluminium welding	1 mm	10	094-013552-00001
Contact tip, aluminium welding	1.2 mm	10	094-013553-00001

CT M8 CuCrZr



- Contact tip made from copper/chrome/zirconium alloy
- For particularly long service life
- For universal use with all welding torches with M8 contact tip thread

Length	30 mm
Thread, contact tip	M8
Material	CuCrZr
Version	For extremely long service lives

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-014024-00000
Contact tip	0.9 mm	10	094-013129-00000
Contact tip	1 mm	10	094-014222-00000
Contact tip	1.2 mm	10	094-013113-00000
Contact tip	1.4 mm	10	094-014191-00000
Contact tip	1.6 mm	10	094-014192-00000
Contact tip	2 mm	10	094-014193-00000

CT M8 E-Cu



- Contact tip made from E-Cu copper
- For universal use with all welding torches with M8 contact tip thread

Length	30 mm
Thread, contact tip	M8
Material	E-Cu

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-016109-00000
Contact tip	0.9 mm	10	094-016110-00000
Contact tip	1 mm	10	094-016111-00000
Contact tip	1.2 mm	10	094-007238-00000
Contact tip	1.4 mm	10	094-016112-00000
Contact tip	1.6 mm	10	094-016113-00000
Contact tip	2 mm	10	094-016114-00000

CT M8 E-Cu (Alu)



- Contact tip made from E-Cu copper
- Developed specially for aluminium wires
- For universal use with all welding torches with M8 contact tip thread

Length	30 mm
Thread, contact tip	M8
Material	E-Cu
Version	Developed specially for aluminium wires

Designation	Wire Ø	Packing unit	Item no.
Contact tip, aluminium welding	0.8 mm	10	094-016115-00000
Contact tip, aluminium welding	0.9 mm	10	094-016116-00000
Contact tip, aluminium welding	1 mm	10	094-016117-00000
Contact tip, aluminium welding	1.2 mm	10	094-016118-00000
Contact tip, aluminium welding	1.4 mm	10	094-016119-00000
Contact tip, aluminium welding	1.6 mm	10	094-016120-00000
Contact tip, aluminium welding	2 mm	10	094-016920-00000

CT M8 E-Cu



Length	30 mm
Thread, contact tip	M8
Material	E-Cu

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-001252-00000
Contact tip	1 mm	10	094-000941-00000
Contact tip	1.2 mm	10	094-000942-00000
Contact tip	1.4 mm	10	094-001253-00000
Contact tip	1.6 mm	10	094-001254-00000

CT M8 CuCrZr



Length	30 mm
Thread, contact tip	M8
Material	CuCrZr

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-005409-00000
Contact tip	0.9 mm	10	094-005410-00000
Contact tip	1 mm	10	094-005225-00000
Contact tip	1.2 mm	10	094-004207-00000
Contact tip	1.4 mm	10	094-005411-00000
Contact tip	1.6 mm	10	094-005412-00000
Contact tip	2 mm	10	094-005413-00000

CT M8 E-Cu (Alu)



Length	30 mm
Thread, contact tip	M8
Material	E-Cu

Designation	Wire Ø	Packing unit	Item no.
Contact tip, aluminium welding	0.8 mm	10	094-001257-00000
Contact tip, aluminium welding	1.2 mm	10	094-000944-00000
Contact tip, aluminium welding	1.4 mm	10	094-010165-00000
Contact tip, aluminium welding	1.6 mm	10	094-001258-00000
Contact tip, aluminium welding	1 mm	10	094-000943-00000

CT M9 CuCrZr



- Precision-manufactured contact tip made from copper/chrome/zirconium alloy
- For particularly long service life
- Self-centring with bore to house the steel liner/liner
- For universal use with all PM/MT torches with M9 contact tip thread

Length	35 mm
Thread, contact tip	M9
Material	CuCrZr

Version For extremely long service lives

Designation	Wire Ø	Packing unit	Item no.
Contact tip	0.8 mm	10	094-013528-00001
Contact tip	0.9 mm	10	094-013529-00001
Contact tip	1 mm	10	094-013530-00001
Contact tip	1.2 mm	10	094-013531-00001
Contact tip	1.4 mm	10	094-013532-00001
Contact tip	1.6 mm	10	094-013533-00001
Contact tip	2 mm	10	094-013534-00001
Contact tip	2.4 mm	10	094-013720-00001

CT M9 E-Cu (Alu)



- Precision-manufactured contact tip made from E-Cu copper
- Developed specially for aluminium wires
- Self-centring with bore to house the steel liner/liner
- For universal use with all PM/MT torches with M9 contact tip thread

Length	35 mm
Thread, contact tip	M9
Material	E-Cu
Version	Developed specially for aluminium wires

Designation	Wire Ø	Packing unit	Item no.
Contact tip, aluminium welding	0.8 mm	10	094-013543-00001
Contact tip, aluminium welding	0.9 mm	10	094-013544-00001
Contact tip, aluminium welding	1 mm	10	094-013545-00001
Contact tip, aluminium welding	1.2 mm	10	094-013546-00001
Contact tip, aluminium welding	1.4 mm	10	094-013547-00001
Contact tip, aluminium welding	1.6 mm	10	094-013548-00001
Contact tip, aluminium welding	2 mm	10	094-013549-00001

-CT M12 CUCRZR 45-

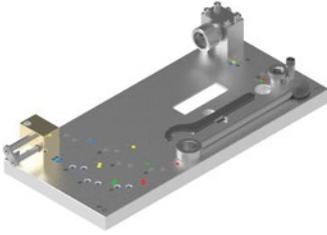


Length	45 mm
Thread, contact tip	M12
Material	CuCrZr

Designation	Wire Ø	Packing unit	Item no.
Contact tip	1.2 mm	10	094-021810-00000
Contact tip	1.4 mm	10	094-021811-00000
Contact tip	1.6 mm	10	094-021812-00000

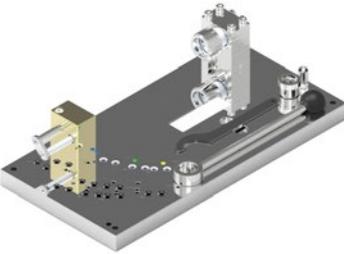
Welding torch tools

-PRL RMT301W-



Type	Designation	Item no.
PRL RMT301WL	Testing and straightening gauge for robot welding torches	094-027651-00000

-PRL RMT551W-



Type	Designation	Item no.
PRL RMT551W	Testing and straightening gauge for robot welding torches	094-025651-00000

-PRUEF- U. RICHTLEHRE-



Type	Designation	Item no.
PRL RMT551WL	Testing and straightening gauge for robot welding torches	094-026770-00000

-PRL RMT651W-



Wire Ø -

Type	Designation	Item no.
PRL RMT651W	Testing and straightening gauge for robot welding torches	094-028365-00000

-RTN FIX 360G/500G 0/22/45DG-



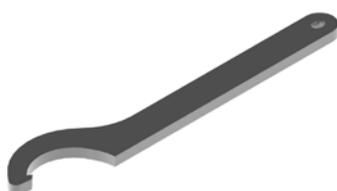
Type	Designation	Item no.
RTN FIX 360G/500G 0/22/45DG	Adjusting device for 0°, 22°, 45°	094-010152-00000

-EV ROB W500-



Type	Designation	Item no.
EV ROB W500	Adjusting device	394-008143-00000

-HS Gr.45-50-



Type	Designation	Item no.
HS 45-50	Hook spanners	098-005205-00000

-SHK D45 RMT-



Type	Designation	Item no.
SHK D45 RMT	Special hook spanner	094-027163-00003

MULTITOOL ROBOTIC



Type	Designation	Item no.
MULTITOOL ROBOTIC	Multi-functional key for robot welding torch	094-028741-00000

Welding torch tools

Torch key



- Torch key for fitting contact tip, contact tip holder and other accessories

Type	Designation	Item no.
TT SW5-SW12MM	Torch key	094-016038-00001

-EZH SP RMT W HW-



Type	Designation	Item no.
EZH SP RMT W HW	Retraction aid for hollow wrist hose package	094-027954-00000

-ZS M7 SO=15MM-



Type	Designation	Item no.
ZS M7 SO=15MM	Centring piece	094-026853-00001

-ZS M9 SO=15MM-



Type	Designation	Item no.
ZS M9 SO=15MM	Centring piece	094-026854-00001

Torch cleaning stations BRS COMP

-BRS COMP-



- System comprising torch cleaning station, spraying unit and wire cutter
- Precise and effective cleaning for nearly all robot welding torches
- Tried-and-tested cutting principle works even on tough spatters
- Precise fixing of the gas nozzle via 3-point clamp
- Targeted, economical spraying of anti-spatter spray
- Rugged and compact design

Type	Designation	Item no.
BRS COMP	Torch cleaning station	094-016560-00000
CUT MTR242W NW=15,5MM	Cutter	094-016577-00500
CUT MTR360G NW=16MM	Cutter	094-016566-00500
CUT MTR360G NW=14MM	Cutter	094-016570-00500
CUT MTR500G NW=16MM	Cutter	094-016573-00500
CUT MTR500W NW=15,5MM	Cutter	094-010274-00500
CUT 500W GD NW=15,5 L=72MM	Cutter	094-021222-00000
CUT 500G GD NW=16 L=72MM	Cutter	094-022396-00000
CUT F GD NW13,0MM	Cutter	094-010272-00000
CUT NW=13,0 ET=15,5MM	Cutter	094-023657-00000
CUT NW=13,0MM	Cutter	094-010271-00000
CUT NW 14 / ET 16mm	Cutter	394-010436-00000
CUT NW=15,5 ET=15,5MM	Cutter	094-023658-00000
PRIS 21	Clamping prism	094-010292-00500
PRIS 22	Clamping prism	394-002551-00000
PRIS 24	Clamping prism	094-010293-00000
PRIS 25	Clamping prism	094-010294-00500
PRIS 28	Clamping prism	094-010296-00500

Assignment of cutter and prism to welding torches for BRS COMP

Type of welding torch	with gas nozzle	with contact tip	Clamping prism	Cutter
MTR360G	094-010142-00500	M6	094-016561-00500	094-016570-00500
	094-010566-00500	M6	094-016561-00500	094-016566-00500
MTR500G / RTN500G	094-016487-00500	M8	094-010296-00500	094-016573-00500
	094-011265-00000	M8	094-010296-00000	094-022396-00000
	094-011263-00000	M8	094-010296-00000	094-016573-00000
	094-011264-00000	M8	094-010296-00000	094-016573-00000
MTR242W	094-016508-00500	M6	094-010292-00500	094-016577-00500
MTR500W / RTN500W	094-016512-00500	M8	094-010294-00500	094-010274-00500
	094-010220-00500	M8	094-010294-00500	094-021222-00000
	094-010219-00000	M8	094-010294-00000	094-010274-00000
MIG ROB ABK 500 MF	094-010221-00000	M8	094-010294-00500	094-010272-00500
MTR600W	094-021813-00000	M12	094-022272-00000	094-022273-00000
	094-021814-00000	M12	094-022272-00000	094-022274-00000
	094-021815-00000	M12	094-022272-00000	094-022275-00000
	094-021816-00000	M12	094-022272-00000	094-022277-00000
MTR300W	094-020913-00000	M6	094-010294-00500	094-023657-00000
	094-022432-00000	M6	094-010294-00500	094-010271-00000
	394-001924-00000	M6	094-010294-00500	094-023658-00000
RMT301W	094-024876-00000	M7	094-010293-00000	394-010436-00000
MTR505W	094-010221-00000	M8	094-010294-00500	094-010272-00000
	094-022446-00000	M8	094-010294-00500	094-010272-00000
	094-010222-00000	M8	094-010294-00500	094-021222-00000
	094-010220-00500	M8	094-010294-00500	094-021222-00000
	094-018003-00000	M8	094-010294-00500	094-010274-00500
	094-009895-00000	M8	094-010294-00500	094-010274-00500
	094-010219-00000	M8	094-010294-00500	094-010274-00500
RMT551W	094-014180-00001	M9	094-010295-00000	094-010276-00000
	094-014179-00001	M9	094-010295-00000	094-010276-00000

Torch cleaning stations

TCS COMP

-TCS COMP-



- System comprising torch cleaning station, spraying unit for anti-spatter spray and wire cutter
- Precise and effective cleaning for nearly all robot welding torches
- High degree of process reliability
- Easy to install with or without stand
- Targeted, economical spraying of anti-spatter spray
- Rugged and compact design

Type	Designation	Item no.
TCS COMP LP	Torch cleaning station, long	394-008846-00000
TCS COMP SP	Torch cleaning station, short	394-010000-00000
CPI TCS	Injection unit cover	394-010001-00000
RS TCS D20	Rubber seal	394-010002-00000
RS TCS D24	Rubber seal	394-010003-00000
RS TCS D30	Rubber seal	394-010004-00000
CF	Clamping flange, full	394-010005-00000
IN TCS	Injection nozzle	394-010006-00000
CLEAR TANK	Cleaning container	394-010007-00000
PS TCS	Protective sleeve	394-010009-00000
CC 5M	Control cable assembly	394-010010-00000
CC 10M	Control cable assembly	394-010011-00000
CC 15M	Control cable assembly	394-010012-00000
CC 20M	Control cable assembly	394-010013-00000
ASG 1L	Anti-spatter fluid	398-000809-00000
ASG 5L	Anti-spatter fluid	094-017108-00000
CUT NW 12 / ET 16,5mm	Cutter	394-010015-00000
CUT NW 13 / ET 15,5mm	Cutter	394-010034-00000
CUT NW 13 / ET 18mm	Cutter	394-010019-00000
CUT NW 13 / ET 19,7mm	Cutter	394-010022-00000
CUT NW 15 / ET 43mm	Cutter	394-010016-00000
CUT NW 15,5 / ET 15,5mm	Cutter	394-010031-00000
CUT NW 15,5 / ET 35mm	Cutter	394-010023-00000
CUT NW 15,5 / ET 39mm	Cutter	394-010024-00000
CUT NW 16 / ET 38mm	Cutter	394-010018-00000
CUT NW 16 / ET 46mm	Cutter	394-008848-00000
CUT NW 16 / ET 47mm	Cutter	394-010017-00000
CUT NW 17 / ET 23mm	Cutter	394-010033-00000
CUT NW 18 / ET 23mm	Cutter	394-010026-00000
CUT NW 20 / ET 36,5mm	Cutter	394-010025-00000
PRIS D21 TCS COMP / M6	Clamping prism	394-010032-00000
PRIS D22 TCS COMP / M6	Clamping prism	394-010014-00000
PRIS D25 TCS COMP / M6	Clamping prism	394-010020-00000
PRIS D26 TCS COMP / M6	Clamping prism	394-010027-00000
PRIS D27 TCS COMP / M6	Clamping prism	394-010028-00000
PRIS D28 TCS COMP / M6	Clamping prism	394-008847-00000
PRIS D29 TCS COMP / M6	Clamping prism	394-010029-00000
PRIS D30 TCS COMP / M6	Clamping prism	394-010021-00000
PRIS D34 TCS COMP / M6	Clamping prism	394-010030-00000

Assignment of cutter and prism to welding torches for TCS COMP

Type of welding torch	with gas nozzle	with contact tip	Clamping prism	Cutter
MTR360G	094-010561-00000	M6	394-010014-00000	394-010015-00000
	094-010562-00000	M6	394-010014-00000	394-010015-00000
	094-010563-00000	M6	394-010014-00000	394-010015-00000
	094-010565-00000	M6	394-010014-00000	394-010016-00000
	094-011665-00000	M6	394-010014-00000	394-010016-00000
	094-010566-00000	M6	394-010014-00000	394-010017-00000
	094-010567-00000	M6	394-010014-00000	394-010017-00000
	094-010568-00000	M6	394-010014-00000	394-010018-00000
	094-010142-00500	M6	394-010014-00000	394-010016-00000
	094-010566-00500	M6	394-010014-00000	394-010017-00000
MTR500G / RTN500G	094-011659-00000	M6	394-008847-00000	394-010019-00000
	094-011660-00000	M6	394-008847-00000	394-010019-00000
	094-011666-00000	M6	394-008847-00000	394-010016-00000
	094-011263-00000	M8	394-008847-00000	394-008848-00000
	094-011264-00000	M8	394-008847-00000	394-008848-00000
	094-011266-00000	M8	394-008847-00000	394-008848-00000
	094-011267-00000	M8	394-008847-00000	394-008848-00000
	094-016487-00500	M8	394-008847-00000	394-008848-00000
094-011265-00000	M8	394-008847-00000	394-010018-00000	
MTR242W	094-016508-00500	M6	394-010032-00000	394-010023-00000
MTR300W	094-022432-00000	M6	394-010020-00000	394-010019-00000
	094-020913-00000	M6	394-010020-00000	394-010034-00000
	394-001924-00000	M6	394-010020-00000	394-010031-00000
MTR500W / MTR505W / RTN500W	094-010221-00000	M8	394-010020-00000	394-010022-00000
	094-022446-00000	M8	394-010020-00000	394-010022-00000
	094-010222-00000	M8	394-010020-00000	394-010023-00000
	094-010220-00000	M8	394-010020-00000	394-010023-00000
	094-010219-00000	M8	394-010020-00000	394-010024-00000
	094-018003-00000	M8	394-010020-00000	394-010024-00000
	094-009895-00000	M8	394-010020-00000	394-010024-00000
	394-006391-00000	M8	394-010020-00000	394-010025-00000
	094-010220-00500	M8	394-010020-00000	394-010023-00000
	094-016512-00500	M8	394-010020-00000	394-010024-00000
RMT301G	094-022037-00001	M9	On request	On request
	094-022038-00001	M9	On request	On request
RMT301W	094-024876-00000	M7	On request	On request
RMT551W	094-014178-00001	M9	On request	On request
	094-014180-00001	M9	394-010028-00000	394-010033-00000
	094-014182-00001	M9	On request	On request
	094-014177-00001	M9	On request	On request
	094-014179-00001	M9	394-010028-00000	394-010033-00000
	094-014181-00001	M9	On request	On request

Collision sensors

CAT3 PRO

-CAT3 PRO TR-



- Collision sensor
- Collision sensor for the robot, welding torch or the rig in teach or automatic mode
- Orientation in all directions
- High reset precision after orientation
- Compatible with all standard robot types (via aluminium or plastic intermediate flange) with external torch hose package
- Delivery includes: Collision sensor, helix cable

Type	CAT3 PRO TR L	CAT3 PRO TR XL
Diameter	77 mm	
Weight	960 g	

Type	Designation	Item no.
CAT3 PRO TR L	Collision sensor	394-008604-00000
CAT3 PRO TR XL	Collision sensor	394-008605-00000

-HL CAT3 PRO TR-



- CAT3 PRO TR torch holder

Type	HL CAT3 PRO TR STD	HL CAT3 PRO TR RS
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Type	Designation	Item no.
HL CAT3 PRO TR STD	Standard holder	094-024721-00000
HL CAT3 PRO TR RS	Holder for grid positioning	394-008606-00000

-CAT3 PRO CR-



- Collision sensor
- Collision sensor for the robot, welding torch or the rig in teach or automatic mode
- Orientation in all directions
- High reset precision after orientation
- Compatible with all standard robot types (via aluminium or plastic intermediate flange) with external torch hose package
- Delivery includes: Collision sensor, helix cable, holder

Type	CAT3 PRO CR L	CAT3 PRO CR XL
Diameter	77 mm	
Weight	960 g	

Type	Designation	Item no.
CAT3 PRO CR L	Collision sensor	394-008602-00000
CAT3 PRO CR XL	Collision sensor	394-008603-00000

-HL CAT3 PRO CR-



- CAT3 PRO CR torch holder

Type	HL CAT3 PRO CR STD	HL CAT3 PRO CR RS
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Type	Designation	Item no.
HL CAT3 PRO CR STD	Standard holder	094-012839-00000
HL CAT3 PRO CR RS	Holder for grid positioning	094-008899-00000

Collision sensors

RSA

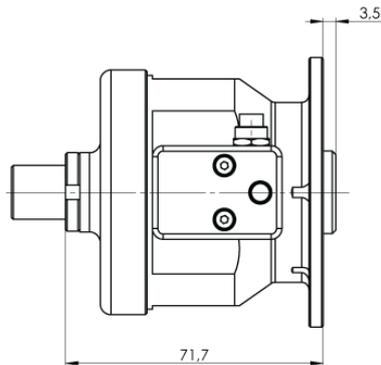
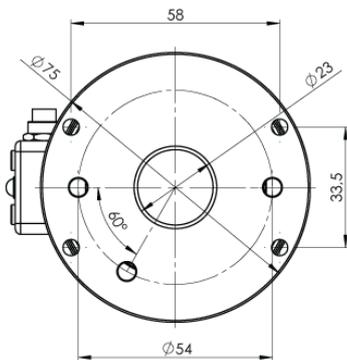
-RSA-



- Collision sensor for the robot, welding torch or the rig in teach or automatic mode
- Orientation in all directions
- High reset precision after orientation
- Precise switch points
- Visual function display (LED)
- Three triggering characteristics
- Low weight
- Compatible with all standard robot types (via aluminium or plastic intermediate flange) with external torch hose package
- Flange dimensions are identical to CAT2 and CAT3 versions
- Delivery includes: Collision sensor, bracket, helix cable, assembly material

Type	RSA SOFT	RSA MEDIUM	RSA MEDIUM PLUS	RSA STRONG
Principle	mechanical			
Switching contact	Opening contact max. 24V / 20 mA			
Reset precision	+/- 0.2 mm with a distance of 400 mm from the flange			
Orientation	+/- 14°			
Rotatable	360°			
Release torque (Mx, My)	7.5 Nm	14 Nm	25 Nm	33 Nm
Torsion (M)	8 Nm	11 Nm	22 Nm	22 Nm
Weight	560 g			

Type	Designation	Item no.
RSA SOFT	Collision sensor	094-020725-00000
RSA MEDIUM	Collision sensor	094-020726-00000
RSA MEDIUM PLUS	Collision sensor	094-023605-00000
RSA STRONG	Collision sensor	094-020727-00000



Collision sensors

RSA HW

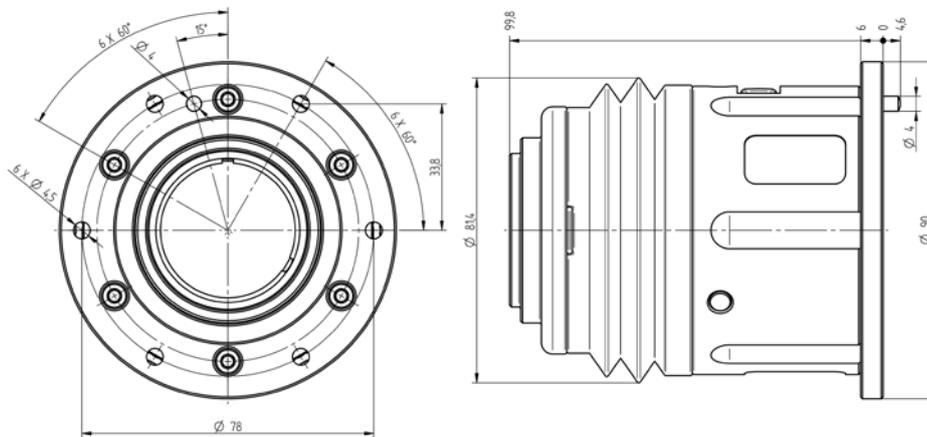
RSA HW



- Collision sensor for the robot, welding torch or the rig in teach or automatic mode
- Water-cooled version
- Orientation in all directions
- High reset precision after orientation
- Precise switch points
- Low weight
- Compatible with hollow wrist robot types (via aluminium or plastic intermediate flange) with internal RMT W HW torch hose package
- Delivery includes: Collision sensor

Type	RSA HW W SOFT	RSA HW W MEDIUM	RSA HW W STRONG
Principle	mechanical		
Switching contact	Break contact max. 24 V DC/100 mA		
Reset precision	+/- 0.1 mm with a distance of 400 mm from the flange		
Orientation	X, Y > 10° / Z 10°		
Switching contact trip	X, Y direction < 1° / Z direction ≤ 0.4 mm		
Release torque (Mx, My)	12.4 Nm	18 Nm	21.6 Nm
Weight	645 g	655 g	665 g

Type	Designation	Item no.
RSA HW W SOFT	Collision sensor	090-005655-00000
RSA HW W MEDIUM	Collision sensor	090-005656-00000
RSA HW W STRONG	Collision sensor	090-005657-00000



Collision sensors

iCAT

-iCAT-



- Collision sensor for the robot, welding torch or the rig in teach or automatic mode
- Gas or water-cooled version
- Orientation in all directions
- High reset precision after orientation
- Precise switch points
- Low weight
- Compatible with hollow wrist robot types (via aluminium or plastic intermediate flange) with internal SP G, SP W torch hose package
- Delivery includes: Collision sensor

Type	iCAT A	iCAT W
Principle	mechanical	
Switching contact	Break contact max. 24 V DC/100 mA	
Reset precision	+/- 0.1 mm with a distance of 300 mm from the flange	
Orientation	X, Y-Achse 10 ° / Z-Achse 4-8 mm	
Switching contact trip	X, Y-direction 0,7-1/Z-direction 0,5-1 mm	
Weight	1600 g	

Type	Designation	Item no.
iCAT A	Collision sensor	094-012718-00000
iCAT W	Collision sensor	094-012714-00000

Intermediate flanges

Robot flange for RSA/CAT2/CAT3



- Intermediate flange for fastening RSA, CAT2 and CAT3 robot collision sensors
- Intermediate flanges made of plastic or aluminium
- Please indicate the robot type for each order
- Only plastic flanges may be used for welding torch series MTR360G and MTR500G

Type	Designation	Item no.
ZF NOCAT	Intermediate flange steel	094-022673-00000
HL CAT3 PRO CR STD	Standard holder	094-012839-00000
SE CAT	Screw set	094-023190-00000
SE CAT	Screw set	094-021505-00000

Intermediate flange RSA/CAT2/CAT3, aluminium

Robot manufacturer	Robot types	Version	Load	Item number
ABB	IRB 1600-6/1.2	Standard	6 kg	094-010198-00000
ABB	IRB 1600-10/1.2	Standard	10 kg	094-010198-00000
ABB	IRB 1600-6/1.45	Standard	6 kg	094-010198-00000
ABB	IRB 1600-10/1.45	Standard	10 kg	094-010198-00000
ABB	IRB 2600-10/1.85	Standard	10 kg	094-020593-00000
ABB	IRB 2600-12/1.65	Standard	12 kg	094-020593-00000
ABB	IRB 2600-12/1.85	Standard	12 kg	094-020593-00000
ABB	IRB 2600-20/1.65	Standard	20 kg	094-020593-00000
ABB	IRB 4600-20/2.5	Standard	20 kg	094-020593-00000
ABB	IRB 4600-40/2.55	Standard	40 kg	094-020593-00000
ABB	IRB 4600-45/2.05	Standard	45 kg	094-013724-00000
ABB	IRB 4600-60/2.05	Standard	60 kg	094-013724-00000
ABB	IRB 1400	Standard	5 kg	094-010198-00000
ABB	IRB 1410	Standard	5 kg	094-010198-00000
ABB	IRB 2400L	Standard	7 kg	094-020593-00000
ABB	IRB 2400L/10	Standard	10 kg	094-020593-00000
ABB	IRB 2400/16	Standard	16 kg	094-020593-00000
ABB	IRB 1600ID	Hollow wrist	4 kg	-
ABB	IRB 1620ID	Hollow wrist		-
ABB	IRB 1660ID-4/1.55	Hollow wrist	4 kg	094-022612-00000
ABB	IRB 1660ID-6/1.55	Hollow wrist	6 kg	094-022612-00000
ABB	IRB 2600ID-8/2.0	Hollow wrist	8 kg	094-022612-00000
ABB	IRB 2600ID-15/1.85	Hollow wrist	15 kg	094-022612-00000
ABB	IRB 1520ID-4/1.5	Hollow wrist	4 kg	094-022612-00000
COMAU	NS-12-1.85	Standard	12 kg	-
COMAU	NS-16-1.65	Standard	16 kg	-
COMAU	NJ-16-3.1	Standard	16 kg	094-020594-00000
COMAU	NJ-40-2.5	Standard	40 kg	-
COMAU	NJ-60-2.2	Standard	60 kg	-
COMAU	RACER 999	Standard	7 kg	094-013011-00000
COMAU	Arc4-5-1.95	Hollow wrist	5 kg	-
COMAU	SMART ARC4	Hollow wrist	5 kg	-
FANUC	ARC Mate 50iD	Standard	7 kg	094-016556-00000
FANUC	ARC Mate 50iD/6L	Standard	6 kg	094-016556-00000
FANUC	ARC Mate 50iD/7L	Standard	7 kg	094-016556-00000
FANUC	ARC Mate 0iA	Standard	3 kg	094-016556-00000
FANUC	ARC Mate 0iB	Standard	3 kg	094-016556-00000
FANUC	ARC Mate 100iB	Standard	6 kg	-
FANUC	M-710iC/20L	Standard	20 kg	-
FANUC	R-1000iA/80F	Standard	80 kg	094-022613-00000

Robot manufacturer	Robot types	Version	Load	Item number
FANUC	R-2000iA/165F	Standard	165 kg	094-022613-00000
FANUC	ARC Mate 100iC/6L	Hollow wrist	7 kg	094-020737-00000
FANUC	ARC Mate 100iC/7L	Hollow wrist	7 kg	094-020737-00000
FANUC	ARC Mate 100iC/8L	Hollow wrist	8 kg	094-020737-00000
FANUC	ARC Mate 100iC/10L	Hollow wrist		094-020737-00000
FANUC	ARC Mate 100iC/10S	Hollow wrist	10 kg	094-020737-00000
FANUC	ARC Mate 100iC/12	Hollow wrist	12 kg	094-020737-00000
FANUC	ARC Mate 100iC/12S	Hollow wrist	12 kg	094-020737-00000
FANUC	ARC Mate 100iD	Hollow wrist	12 kg	-
FANUC	ARC Mate 100iD/8L	Hollow wrist	8 kg	-
FANUC	ARC Mate 100iD/10L	Hollow wrist	10 kg	-
FANUC	ARC Mate 120iC	Hollow wrist	20 kg	094-020737-00000
FANUC	ARC Mate 120iC/10L	Hollow wrist	12 kg	094-020737-00000
FANUC	ARC Mate 120iC/12L	Hollow wrist	12 kg	094-020737-00000
FANUC	ARC Mate 120iD	Hollow wrist	25 kg	-
FANUC	ARC Mate 120iD/12L	Hollow wrist	12 kg	-
FANUC	ARC Mate 100iC	Hollow wrist	10 kg	094-020737-00000
FANUC	M-10iA/7L	Hollow wrist	7 kg	094-013011-00000
FANUC	M-20iA	Hollow wrist	20 kg	094-020737-00000
FANUC	M-20iA/12L	Hollow wrist	12 kg	094-020737-00000
FANUC	M-710iC/12L	Hollow wrist	20 kg	094-022614-00000
Hyundai	HR006	Standard		094-017174-00000
Hyundai	HA006L	Standard	6 kg	094-013011-00000
Hyundai	HH020	Standard	20 kg	094-010198-00000
Kawasaki	RA005L	Standard	5 kg	-
Kawasaki	RA006L	Standard	6 kg	-
Kawasaki	RA010L	Standard	10 kg	094-020594-00000
Kawasaki	RA010N	Standard	10 kg	094-013011-00000
Kawasaki	RA020N	Standard	20 kg	-
Kawasaki	RS020N	Standard	20 kg	-
Kawasaki	BA006L	Hollow wrist	6 kg	-
Kawasaki	BA006N	Hollow wrist	6 kg	-
KUKA	KR 6 R1820	Standard	6 kg	094-016556-00000
KUKA	KR 6 R1820 HP	Standard	6 kg	094-016556-00000
KUKA	KR 6 R1840-2	Standard	6 kg	094-022420-00000
KUKA	KR 8 R1620	Standard	8 kg	094-016556-00000
KUKA	KR 8 R1620 HP	Standard	8 kg	094-016556-00000
KUKA	KR 8 R2010-2	Standard	8 kg	094-010150-00000
KUKA	KR 10 R1100-2	Standard	5 kg	094-016556-00000
KUKA	KR 10 R1420	Standard	10 kg	094-016556-00000
KUKA	KR 10 R1420-2	Standard	10 kg	094-016556-00000
KUKA	KR 10 R1440-2	Standard	10 kg	094-022420-00000
KUKA	KR 10 R1420 HP	Standard	10 kg	094-016556-00000
KUKA	KR 12 R1810-2	Standard	12 kg	-
KUKA	KR 16 L6	Standard	6 kg	094-010198-00000
KUKA	KR 16 R1610-2	Standard	16 kg	094-010150-00000
KUKA	KR 16 R2010-2	Standard	16 kg	094-010150-00000
KUKA	KR 20 R1810-2	Standard	20 kg	-
KUKA	KR 20 R3100	Standard	20 kg	094-010150-00000
KUKA	KR 22 R1610-2	Standard	22 kg	-
KUKA	KR 5	Standard	5 kg	094-022420-00000
KUKA	KR 16	Standard	16 kg	094-010150-00000
KUKA	KR 16-2	Standard	16 kg	094-010150-00000
KUKA	KR 30 L16	Standard	16 kg	094-010150-00000
KUKA	KR 50 R2500	Standard	50 kg	094-022614-00000
KUKA	KR 60 L30	Standard	30 kg	094-022618-00000
KUKA	KR 60 L45	Standard	45 kg	094-013724-00000

KUKA	KR 90 R3100 extra	Standard	90 kg	-
KUKA	KR 120 R3100-2	Standard	120 kg	-
KUKA	KR 125	Standard	125 kg	094-020733-00000
KUKA	KR 150	Standard	150 kg	094-020733-00000
KUKA	KR 240	Standard	240 kg	094-020733-00000
KUKA	KR 240 R2700 prime	Standard	240 kg	094-020733-00000
KUKA	KR 200-2 comp	Standard	200 kg	094-020733-00000
KUKA	KR 210 R3100 ultra	Standard	210 kg	094-020733-00000
KUKA	KR 6 R1440-2 arc HW E	Hollow wrist	6 kg	-
KUKA	KR 6 R1820 arc HW	Hollow wrist	6 kg	-
KUKA	KR 6 R1840-2 arc HW	Hollow wrist	6 kg	-
KUKA	KR 6 R2100-2 arc HW E	Hollow wrist	6 kg	-
KUKA	KR 8 R1420 arc HW	Hollow wrist	8 kg	-
KUKA	KR 8 R1620 arc HW	Hollow wrist	8 kg	-
KUKA	KR 8 R2100 arc HW	Hollow wrist	8 kg	-
KUKA	KR 5 arc HW	Hollow wrist	5 kg	-
KUKA	KR 8 R2100-2 arc HW	Hollow wrist	8 kg	-
KUKA	KR 16 arc HW	Hollow wrist	16 kg	094-022832-00000
KUKA	KR 16 L8 arc HW	Hollow wrist	8 kg	-
Motoman	AR700	Standard	8 kg	094-022622-00000
Motoman	AR900	Standard	7 kg	094-022622-00000
Motoman	MC2000II	Standard	50 kg	-
Motoman	K6-C	Standard	6 kg	-
Motoman	HC10	Standard	10 kg	-
Motoman	HP20	Standard	20 kg	094-010198-00000
Motoman	HP20D-6	Standard	6 kg	094-013011-00000
Motoman	HP20D	Standard	20 kg	094-013011-00000
Motoman	HP20RD	Standard	20 kg	094-013011-00000
Motoman	HP20F	Standard	20 kg	094-013011-00000
Motoman	HP20D-CR7	Standard	20 kg	094-013011-00000
Motoman	UP20	Standard	20 kg	094-010198-00000
Motoman	MH5	Standard	5 kg	094-022622-00000
Motoman	MH5L	Standard	5 kg	094-022420-00000
Motoman	MH6	Standard	6 kg	094-010198-00000
Motoman	MH6-10	Standard	10 kg	094-010198-00000
Motoman	MH6S	Standard	6 kg	094-010198-00000
Motoman	MH6S-10	Standard	10 kg	094-010198-00000
Motoman	MH50	Standard	50 kg	094-022612-00000
Motoman	MH50-20	Standard	20 kg	094-010198-00000
Motoman	MH50-35	Standard	35 kg	094-022612-00000
Motoman	AR1440	Hollow wrist	12 kg	-
Motoman	AR1730	Hollow wrist	25 kg	-
Motoman	AR2010	Hollow wrist	12 kg	-
Motoman	AR3120	Hollow wrist	20 kg	-
Motoman	MA1440	Hollow wrist	6 kg	094-020737-00000
Motoman	EA1400	Hollow wrist	3 kg	094-020737-00000
Motoman	EA1800N	Hollow wrist	15 kg	094-020737-00000
Motoman	EA1900	Hollow wrist	3 kg	094-020737-00000
Motoman	MA1400	Hollow wrist	3 kg	094-020737-00000
Motoman	MA1550	Hollow wrist	3 kg	094-020737-00000
Motoman	MA1800	Hollow wrist	15 kg	094-020737-00000
Motoman	MA1900	Hollow wrist	3 kg	094-020737-00000
Motoman	MA2010	Hollow wrist	10 kg	094-020737-00000
Motoman	VA1400	Hollow wrist	3 kg	094-020737-00000
Motoman	SSA2000	Hollow wrist	3 kg	-
Motoman	MH24	Hollow wrist	24 kg	094-020737-00000
NACHI	MZ12	Standard	12 kg	094-010150-00000
OTC	FD-V6	Standard	8 kg	094-010198-00000

Robot manufacturer	Robot types	Version	Load	Item number
OTC	FD-V8	Standard	8 kg	094-010198-00000
OTC	EX-MV16	Standard	16 kg	094-010198-00000
REIS	RV10-6	Standard	6 kg	094-010150-00000
REIS	RV20-6	Standard	6 kg	094-010150-00000
REIS	RV20-16	Standard	16 kg	094-020594-00000
REIS	RV20-6HW	Hollow wrist	6 kg	-
Stäubli	TX2-40	Standard	2 kg	094-022420-00000
UNIVERSAL ROBOTS	URe	Cobot	5 kg	394-009129-00000
UNIVERSAL ROBOTS	UR10e	Cobot	10 kg	394-009129-00000
UNIVERSAL ROBOTS	UR16e	Cobot	16 kg	394-009129-00000

*Other intermediate flanges available upon request.

Intermediate flange RSA/CAT2/CAT3, plastic

Robot manufacturer	Robot types	Version	Load	Item number
ABB	IRB 1600-6/1.2	Standard	6 kg	094-013347-00000
ABB	IRB 1600-10/1.2	Standard	10 kg	094-013347-00000
ABB	IRB 1600-6/1.45	Standard	6 kg	094-013347-00000
ABB	IRB 1600-10/1.45	Standard	10 kg	094-013347-00000
ABB	IRB 2600-10/1.85	Standard	10 kg	094-020981-00000
ABB	IRB 2600-12/1.65	Standard	12 kg	094-020981-00000
ABB	IRB 2600-12/1.85	Standard	12 kg	094-020981-00000
ABB	IRB 2600-20/1.65	Standard	20 kg	094-020981-00000
ABB	IRB 4600-20/2.5	Standard	20 kg	094-020981-00000
ABB	IRB 4600-40/2.55	Standard	40 kg	094-020981-00000
ABB	IRB 4600-45/2.05	Standard	45 kg	094-016372-00000
ABB	IRB 4600-60/2.05	Standard	60 kg	094-016372-00000
ABB	IRB 1400	Standard	5 kg	094-013347-00000
ABB	IRB 1410	Standard	5 kg	094-013347-00000
ABB	IRB 2400L	Standard	7 kg	094-020981-00000
ABB	IRB 2400L/10	Standard	10 kg	094-020981-00000
ABB	IRB 2400/16	Standard	16 kg	094-020981-00000
ABB	IRB 1600ID	Hollow wrist	4 kg	094-022615-00000
ABB	IRB 1620ID	Hollow wrist		094-022615-00000
ABB	IRB 1660ID-4/1.55	Hollow wrist	4 kg	094-016371-00000
ABB	IRB 1660ID-6/1.55	Hollow wrist	6 kg	094-016371-00000
ABB	IRB 2600ID-8/2.0	Hollow wrist	8 kg	094-016371-00000
ABB	IRB 2600ID-15/1.85	Hollow wrist	15 kg	094-016371-00000
ABB	IRB 1520ID-4/1.5	Hollow wrist	4 kg	094-016371-00000
COMAU	NS-12-1.85	Standard	12 kg	-
COMAU	NS-16-1.65	Standard	16 kg	-
COMAU	NJ-16-3.1	Standard	16 kg	094-016370-00000
COMAU	NJ-40-2.5	Standard	40 kg	-
COMAU	NJ-60-2.2	Standard	60 kg	-
COMAU	RACER 999	Standard	7 kg	094-022616-00000
COMAU	Arc4-5-1.95	Hollow wrist	5 kg	-
COMAU	SMART ARC4	Hollow wrist	5 kg	-
FANUC	ARC Mate 50iD	Standard	7 kg	094-016367-00000
FANUC	ARC Mate 50iD/6L	Standard	6 kg	094-016367-00000
FANUC	ARC Mate 50iD/7L	Standard	7 kg	094-016367-00000
FANUC	ARC Mate 0iA	Standard	3 kg	094-016367-00000
FANUC	ARC Mate 0iB	Standard	3 kg	094-016367-00000
FANUC	ARC Mate 100iB	Standard	6 kg	-

FANUC	M-710iC/20L	Standard	20 kg	-
FANUC	R-1000iA/80F	Standard	80 kg	094-016373-00000
FANUC	R-2000iA/165F	Standard	165 kg	094-016373-00000
FANUC	ARC Mate 100iC/6L	Hollow wrist	7 kg	094-013478-00000
FANUC	ARC Mate 100iC/7L	Hollow wrist	7 kg	094-013478-00000
FANUC	ARC Mate 100iC/8L	Hollow wrist	8 kg	094-013478-00000
FANUC	ARC Mate 100iC/10L	Hollow wrist		094-013478-00000
FANUC	ARC Mate 100iC/10S	Hollow wrist	10 kg	094-013478-00000
FANUC	ARC Mate 100iC/12	Hollow wrist	12 kg	094-013478-00000
FANUC	ARC Mate 100iC/12S	Hollow wrist	12 kg	094-013478-00000
FANUC	ARC Mate 100iD	Hollow wrist	12 kg	394-006458-00000
FANUC	ARC Mate 100iD/8L	Hollow wrist	8 kg	394-006458-00000
FANUC	ARC Mate 100iD/10L	Hollow wrist	10 kg	394-006458-00000
FANUC	ARC Mate 120iC	Hollow wrist	20 kg	094-013478-00000
FANUC	ARC Mate 120iC/10L	Hollow wrist	12 kg	094-013478-00000
FANUC	ARC Mate 120iC/12L	Hollow wrist	12 kg	094-013478-00000
FANUC	ARC Mate 120iD	Hollow wrist	25 kg	394-006458-00000
FANUC	ARC Mate 120iD/12L	Hollow wrist	12 kg	394-006458-00000
FANUC	ARC Mate 100iC	Hollow wrist	10 kg	094-013478-00000
FANUC	M-10iA/7L	Hollow wrist	7 kg	094-022616-00000
FANUC	M-20iA	Hollow wrist	20 kg	094-013478-00000
FANUC	M-20iA/12L	Hollow wrist	12 kg	094-013478-00000
FANUC	M-710iC/12L	Hollow wrist	20 kg	094-022618-00000
Hyundai	HR006	Standard		394-006124-00000
Hyundai	HA006L	Standard	6 kg	094-022616-00000
Hyundai	HH020	Standard	20 kg	On request
Kawasaki	RA005L	Standard	5 kg	-
Kawasaki	RA006L	Standard	6 kg	-
Kawasaki	RA010L	Standard	10 kg	094-016370-00000
Kawasaki	RA010N	Standard	10 kg	094-022616-00000
Kawasaki	RA020N	Standard	20 kg	-
Kawasaki	RS020N	Standard	20 kg	-
Kawasaki	BA006L	Hollow wrist	6 kg	-
Kawasaki	BA006N	Hollow wrist	6 kg	-
KUKA	KR 6 R1820	Standard	6 kg	094-016367-00000
KUKA	KR 6 R1820 HP	Standard	6 kg	094-016367-00000
KUKA	KR 6 R1840-2	Standard	6 kg	094-022421-00000
KUKA	KR 8 R1620	Standard	8 kg	094-016367-00000
KUKA	KR 8 R1620 HP	Standard	8 kg	094-016367-00000
KUKA	KR 8 R2010-2	Standard	8 kg	094-016554-00000
KUKA	KR 10 R1100-2	Standard	5 kg	094-016367-00000
KUKA	KR 10 R1420	Standard	10 kg	094-016367-00000
KUKA	KR 10 R1420-2	Standard	10 kg	094-016367-00000
KUKA	KR 10 R1420 HP	Standard	10 kg	094-016367-00000
KUKA	KR 10 R1440-2	Standard	10 kg	094-022421-00000
KUKA	KR 12 R1810-2	Standard	12 kg	-
KUKA	KR 16 L6	Standard	6 kg	-
KUKA	KR 16 R1610-2	Standard	16 kg	094-016554-00000
KUKA	KR 16 R2010-2	Standard	16 kg	094-016554-00000
KUKA	KR 20 R1810-2	Standard	20 kg	-
KUKA	KR 20 R3100	Standard	20 kg	094-016554-00000
KUKA	KR 22 R1610-2	Standard	22 kg	-
KUKA	KR 5	Standard	5 kg	094-022421-00000
KUKA	KR 16	Standard	16 kg	094-016554-00000
KUKA	KR 16-2	Standard	16 kg	094-016554-00000
KUKA	KR 30 L16	Standard	16 kg	094-016554-00000
KUKA	KR 50 R2500	Standard	50 kg	094-022618-00000
KUKA	KR 60 L30	Standard	30 kg	094-022618-00000

Robot manufacturer	Robot types	Version	Load	Item number
KUKA	KR 60 L45	Standard	45 kg	094-016372-00000
KUKA	KR 90 R3100 extra	Standard	90 kg	-
KUKA	KR 120 R3100-2	Standard	120 kg	-
KUKA	KR 125	Standard	125 kg	094-021015-00000
KUKA	KR 150	Standard	150 kg	094-021015-00000
KUKA	KR 240	Standard	240 kg	094-021015-00000
KUKA	KR 240 R2700 prime	Standard	240 kg	094-021015-00000
KUKA	KR 200-2 comp	Standard	200 kg	094-021015-00000
KUKA	KR 210 R3100 ultra	Standard	210 kg	094-021015-00000
KUKA	KR 6 R1440-2 arc HW E	Hollow wrist	6 kg	-
KUKA	KR 6 R1820 arc HW	Hollow wrist	6 kg	094-022621-00000
KUKA	KR 6 R1840-2 arc HW	Hollow wrist	6 kg	094-022621-00000
KUKA	KR 6 R2100-2 arc HW E	Hollow wrist	6 kg	-
KUKA	KR 8 R1420 arc HW	Hollow wrist	8 kg	094-022621-00000
KUKA	KR 8 R1620 arc HW	Hollow wrist	8 kg	-
KUKA	KR 8 R2100 arc HW	Hollow wrist	8 kg	-
KUKA	KR 5 arc HW	Hollow wrist	5 kg	094-022621-00000
KUKA	KR 8 R2100-2 arc HW	Hollow wrist	8 kg	-
KUKA	KR 16 arc HW	Hollow wrist	16 kg	094-022833-00000
KUKA	KR 16 L8 arc HW	Hollow wrist	8 kg	094-022621-00000
Motoman	AR700	Standard	8 kg	094-022623-00000
Motoman	AR900	Standard	7 kg	094-022623-00000
Motoman	MC2000II	Standard	50 kg	-
Motoman	K6-C	Standard	6 kg	-
Motoman	HC10	Standard	10 kg	394-008436-00000
Motoman	HP20	Standard	20 kg	094-013347-00000
Motoman	HP20D-6	Standard	6 kg	094-022616-00000
Motoman	HP20D	Standard	20 kg	094-022616-00000
Motoman	HP20RD	Standard	20 kg	094-022616-00000
Motoman	HP20F	Standard	20 kg	094-022616-00000
Motoman	HP20D-CR7	Standard	20 kg	094-022616-00000
Motoman	UP20	Standard	20 kg	094-013347-00000
Motoman	MH5	Standard	5 kg	094-022623-00000
Motoman	MH5L	Standard	5 kg	094-022421-00000
Motoman	MH6	Standard	6 kg	094-013347-00000
Motoman	MH6-10	Standard	10 kg	094-013347-00000
Motoman	MH6S	Standard	6 kg	094-013347-00000
Motoman	MH6S-10	Standard	10 kg	094-013347-00000
Motoman	MH50	Standard	50 kg	094-016371-00000
Motoman	MH50-20	Standard	20 kg	094-013347-00000
Motoman	MH50-35	Standard	35 kg	094-016371-00000
Motoman	AR1440	Hollow wrist	12 kg	-
Motoman	AR1730	Hollow wrist	25 kg	-
Motoman	AR2010	Hollow wrist	12 kg	-
Motoman	AR3120	Hollow wrist	20 kg	-
Motoman	MA1440	Hollow wrist	6 kg	094-013478-00000
Motoman	EA1400	Hollow wrist	3 kg	094-013478-00000
Motoman	EA1800N	Hollow wrist	15 kg	094-013478-00000
Motoman	EA1900	Hollow wrist	3 kg	094-013478-00000
Motoman	MA1400	Hollow wrist	3 kg	094-013478-00000
Motoman	MA1550	Hollow wrist	3 kg	094-013478-00000
Motoman	MA1800	Hollow wrist	15 kg	094-013478-00000
Motoman	MA1900	Hollow wrist	3 kg	094-013478-00000
Motoman	MA2010	Hollow wrist	10 kg	094-013478-00000
Motoman	VA1400	Hollow wrist	3 kg	094-013478-00000
Motoman	SSA2000	Hollow wrist	3 kg	-
Motoman	MH24	Hollow wrist	24 kg	094-013478-00000
NACHI	MZ12	Standard	12 kg	094-016554-00000

OTC	FD-V6	Standard	8 kg	094-013347-00000
OTC	FD-V8	Standard	8 kg	094-013347-00000
OTC	EX-MV16	Standard	16 kg	-
REIS	RV10-6	Standard	6 kg	094-016554-00000
REIS	RV20-6	Standard	6 kg	094-016554-00000
REIS	RV20-16	Standard	16 kg	094-016370-00000
REIS	RV20-6HW	Hollow wrist	6 kg	-
Stäubli	TX2-40	Standard	2 kg	094-022421-00000
UNIVERSAL ROBOTS	URe	Cobot	5 kg	-
UNIVERSAL ROBOTS	UR10e	Cobot	10 kg	-
UNIVERSAL ROBOTS	UR16e	Cobot	16 kg	-

*Other intermediate flanges available upon request.

Intermediate flanges Robot flange for iSTM



- Overview of robot intermediate flanges for fastening iSTM A and iSTM W torch interfaces.
- Intermediate flanges made of plastic or aluminium.
- Please indicate the robot type for each order!

Intermediate flange robot for iSTM

Robot manufacturer	Robot types	Aluminium iSTM	Plastic iSTM
ABB	IRB 1600ID		
ABB	IRB 1620ID		
ABB	IRB 1660ID-4/1.55		
ABB	IRB 1660ID-6/1.55		
ABB	IRB 2600ID		
ABB	IRB 2600ID-8/2.0		
ABB	IRB 2600ID-15/1.85		
ABB	IRB 1520ID-4/1.5		
ABB	IRB 1520ID		
COMAU	Arc4-5-1.95		
COMAU	SMART5		
FANUC	ARC Mate 100iC/6L		094-012934-00000
FANUC	ARC Mate 100iC/7L		094-012934-00000
FANUC	ARC Mate 100iC/8L		094-012934-00000
FANUC	ARC Mate 100iC/10L		094-012934-00000
FANUC	ARC Mate 100iC/10S		094-012934-00000
FANUC	ARC Mate 100iC/12		094-012934-00000
FANUC	ARC Mate 100iC/12S		094-012934-00000
FANUC	ARC Mate 100iD		
FANUC	ARC Mate 100iD/8L		
FANUC	ARC Mate 100iD/10L		
FANUC	ARC Mate 120iC		094-012934-00000
FANUC	ARC Mate 120iC/10L		094-012934-00000
FANUC	ARC Mate 120iC/12L		094-012934-00000
FANUC	ARC Mate 120iD		
FANUC	ARC Mate 120iD/12L		
FANUC	ARC Mate 100iC		094-012934-00000
FANUC	M-10ia/6L		
FANUC	M-10iA/7L		
FANUC	M-20iA/12L		
FANUC	M-20iA/20M2		
FANUC	M-20iA/35M2		
FANUC	M-710iC/12L		
Kawasaki	BA006L		
Kawasaki	BA006N		
KUKA	KR 6 R1440-2 arc HW E		
KUKA	KR 6 R1620 arc HW		

KUKA	KR 6 R1820 arc HW		
KUKA	KR 6 R1840-2 arc HW		
KUKA	KR 6 R2100-2 arc HW E		
KUKA	KR 8 R1420 arc HW		
KUKA	KR 8 R1440-2 arc HW		
KUKA	KR 8 R1620 arc HW		
KUKA	KR 8 R1640-2 arc HW		
KUKA	KR 8 R2100 arc HW		
KUKA	KR 5 arc HW		
KUKA	KR 8 R2100-2 arc HW		
KUKA	KR 16 arc HW		
KUKA	KR 16 L8 arc HW		
Motoman	AR1440		
Motoman	AR1730		
Motoman	AR2010		
Motoman	AR3120		
Motoman	MA1440		
Motoman	EA1400		
Motoman	EA1800N		
Motoman	EA1900		
Motoman	MA1400		
Motoman	MA1550		
Motoman	MA1800		
Motoman	MA1900		
Motoman	MA2010		
Motoman	VA1400		
Motoman	SSA2000		
Motoman	MH24		
REIS	RV20-6HW		

Intermediate flanges Robot flange for iCAT



- Overview of robot intermediate flanges for fastening iCAT A and iCAT W robot collision sensors.
- Intermediate flanges made of plastic or aluminium.
- Please indicate the robot type for each order!

Intermediate flange robot for iCAT

Robot manufacturer	Robot types	Aluminium iCAT A, iCAT W	Plastic iCAT A, iCAT W
ABB	IRB 1600ID	094-019884-00000	
ABB	IRB 1620ID		
ABB	IRB 1660ID-4/1.55		094-019886-00000
ABB	IRB 1660ID-6/1.55		094-019886-00000
ABB	IRB 2600ID		094-019886-00000
ABB	IRB 2600ID-8/2.0		094-019886-00000
ABB	IRB 2600ID-15/1.85		094-019886-00000
ABB	IRB 1520ID-4/1.5	094-019884-00000	
ABB	IRB 1520ID	094-019884-00000	
COMAU	Arc4-5-1.95		
COMAU	SMART5		
FANUC	ARC Mate 100iC/6L		094-013711-00000
FANUC	ARC Mate 100iC/7L		094-013711-00000
FANUC	ARC Mate 100iC/8L		094-013711-00000
FANUC	ARC Mate 100iC/10L		094-013711-00000
FANUC	ARC Mate 100iC/10S		094-013711-00000
FANUC	ARC Mate 100iC/12		094-013711-00000
FANUC	ARC Mate 100iC/12S		094-013711-00000
FANUC	ARC Mate 100iD		394-004306-00000
FANUC	ARC Mate 100iD/8L		394-004306-00000
FANUC	ARC Mate 100iD/10L		394-004306-00000
FANUC	ARC Mate 120iC		094-013711-00000
FANUC	ARC Mate 120iC/10L		094-013711-00000
FANUC	ARC Mate 120iC/12L		094-013711-00000
FANUC	ARC Mate 120iD		394-004306-00000
FANUC	ARC Mate 120iD/12L		394-004306-00000
FANUC	ARC Mate 100iC		094-013711-00000
FANUC	M-10ia/6L		094-013711-00000
FANUC	M-10ia/7L		094-013711-00000
FANUC	M-20ia/12L		094-013711-00000
FANUC	M-20ia/20M2		094-013711-00000
FANUC	M-20ia/35M2		094-013711-00000
FANUC	M-710iC/12L		094-013711-00000
Kawasaki	BA006L		394-004256-00000
Kawasaki	BA006N		394-004256-00000
KUKA	KR 6 R1440-2 arc HW E		
KUKA	KR 6 R1620 arc HW		

KUKA	KR 6 R1820 arc HW		
KUKA	KR 6 R1840-2 arc HW		
KUKA	KR 6 R2100-2 arc HW E		
KUKA	KR 8 R1420 arc HW		
KUKA	KR 8 R1440-2 arc HW		
KUKA	KR 8 R1620 arc HW		
KUKA	KR 8 R1640-2 arc HW		
KUKA	KR 8 R2100 arc HW		
KUKA	KR 5 arc HW	094-013316-00000	
KUKA	KR 8 R2100-2 arc HW		
KUKA	KR 16 arc HW	094-019885-00000	
KUKA	KR 16 L8 arc HW	094-019885-00000	
Motoman	AR1440		094-021590-00000
Motoman	AR1730		
Motoman	AR2010		094-021590-00000
Motoman	AR3120		
Motoman	MA1440		
Motoman	EA1400	094-012715-00000	
Motoman	EA1800N		
Motoman	EA1900	094-012715-00000	
Motoman	MA1400	094-012715-00000	094-021590-00000
Motoman	MA1550	094-012715-00000	
Motoman	MA1800	094-012715-00000	
Motoman	MA1900	094-012715-00000	
Motoman	MA2010		094-021590-00000
Motoman	VA1400	094-012715-00000	
Motoman	SSA2000		
Motoman	MH24		094-021590-00000
REIS	RV20-6HW		

Intermediate flanges Robot flange for RSA HW



- Overview of robot intermediate flanges for fastening RSA HW robot collision sensor.
- Intermediate flanges made of plastic or aluminium.
- Please indicate the robot type for each order!

Intermediate flange robot for RSA HW

Robot manufacturer	Robot types	Aluminium RSA HW	Plastic RSA HW
ABB	IRB 1600ID		
ABB	IRB 1620ID		
ABB	IRB 1660ID-4/1.55	094-027676-00000	
ABB	IRB 1660ID-6/1.55	094-027676-00000	
ABB	IRB 2600ID	094-027676-00000	
ABB	IRB 2600ID-8/2.0	094-027676-00000	
ABB	IRB 2600ID-15/1.85	094-027676-00000	
ABB	IRB 1520ID-4/1.5	092-007972-00000	
ABB	IRB 1520ID	092-007972-00000	
COMAU	Arc4-5-1.95		
COMAU	SMART5		
FANUC	ARC Mate 100iC/6L		
FANUC	ARC Mate 100iC/7L		
FANUC	ARC Mate 100iC/8L		094-025491-00000
FANUC	ARC Mate 100iC/10L		
FANUC	ARC Mate 100iC/10S		
FANUC	ARC Mate 100iC/12		
FANUC	ARC Mate 100iC/12S		
FANUC	ARC Mate 100iD		094-025556-00000
FANUC	ARC Mate 100iD/8L		094-025556-00000
FANUC	ARC Mate 100iD/10L		094-025556-00000
FANUC	ARC Mate 120iC		094-025491-00000
FANUC	ARC Mate 120iC/10L		
FANUC	ARC Mate 120iC/12L		
FANUC	ARC Mate 120iD		094-025556-00000
FANUC	ARC Mate 120iD/12L		094-025556-00000
FANUC	ARC Mate 100iC		094-025491-00000
FANUC	M-10ia/6L		
FANUC	M-10ia/7L		094-025491-00000
FANUC	M-10ia/10S		094-025491-00000
FANUC	M-20ia/12L		
FANUC	M-20ia/20M2		
FANUC	M-20ia/35M2		
FANUC	M-710iC/12L		
Kawasaki	BA006L	094-027786-00000	
Kawasaki	BA006N	094-027786-00000	
KUKA	KR 6 R1440-2 arc HW E	094-028447-00000	
KUKA	KR 6 R1620 arc HW		
KUKA	KR 6 R1820 arc HW		
KUKA	KR 6 R1840-2 arc HW		094-025625-00000
KUKA	KR 6 R2100-2 arc HW E	094-028447-00000	

KUKA	KR 8 R1420 arc HW		
KUKA	KR 8 R1440-2 arc HW		094-025625-00000
KUKA	KR 8 R1620 arc HW		094-025625-00000
KUKA	KR 8 R1640-2 arc HW		094-025625-00000
KUKA	KR 8 R2100 arc HW		094-025625-00000
KUKA	KR 5 arc HW		
KUKA	KR 8 R2100-2 arc HW		
KUKA	KR 16 arc HW	094-027727-00000	
KUKA	KR 16 L8 arc HW		
Motoman	AR1440		094-025491-00000
Motoman	AR1730		094-025491-00000
Motoman	AR2010		094-025491-00000
Motoman	AR3120		094-025491-00000
Motoman	MA1440		094-025491-00000
Motoman	EA1400		
Motoman	EA1800N		
Motoman	EA1900		
Motoman	MA1400		
Motoman	MA1550		
Motoman	MA1800		
Motoman	MA1900		
Motoman	MA2010		094-025491-00000
Motoman	VA1400		
Motoman	SSA2000		
Motoman	MH24		
REIS	RV20-6HW		

Cobot flange and torch holders

-TH2 COAX-



- Cobot torch holder with different tilt angles for RMT robot welding torches
- Easy rotation around the tool center point (TCP)

Type	Designation	Item no.
TH RMT301W/551W 22,5°	Torch holder	094-028308-00000
TH RMT301W/551W 35°	Torch holder	094-028309-00000
TH RMT301W/551W 45°	Torch holder	094-028310-00000

-AF2-



- Adapter flange for Cobot torch holder TH2 COAX

Type	Designation	Item no.
AF2	Adapter flange	094-027802-00000

-TH1 NOCOAX 45°-



- Cobot torch holder with 45° tilt angle for RMT robot welding torches

Type	Designation	Item no.
TH1 NOCOAX 45°	Torch holder	094-026863-00000

-AF1-



- Adapter flange extension for cobot torch holder TH1 NOCOAX 45°

Type	Designation	Item no.
AF1	Adapter flange	094-027183-00000

-TH FLEX-



- Cobot torch holder with adjustable tilt angle for RMT robot welding torches

Type	Designation	Item no.
TH FLEX	Torch holder, adjustable	094-026995-00000

Cobot flange

Adapter flange and intermediate flange assignment for RMT cobot robot welding torch

	TH2 COAX 094-028308-00000 AF2 094-027802-00000	TH1 NOCOAX 094-026863-00000	TH1 NOCOAX 45° 094-026863-00000 AF1 094-027183-00000	TH FLEX 094-026995-00000
Doosan M0609, M0617, M1013, M1509			x	
Fanuc CRX-10iA		x	x*	
Hanwha HCR-5A			x	
Hanwha HCR-12A		x		
Universal Robots 5e			x	
Universal Robots 10e			x	
Yaskawa HC 10DT				x

Cobots

Doosan M0609, M0617, M1013, M1509			x	
Fanuc CRX-10iA		x	x*	
Hanwha HCR-5A			x	
Hanwha HCR-12A		x		
Universal Robots 5e			x	
Universal Robots 10e			x	
Yaskawa HC 10DT				x

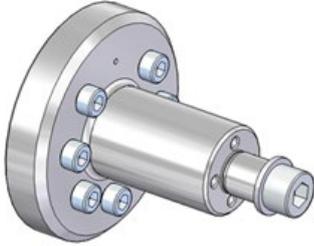
* recommended version

More intermediate flange extensions and cobot-specific adapter flanges available upon request.

Cobot flange and torch holders

-Flansche AMT / MTR PP-

- Classification of intermediate flanges and holders for AMT automated welding torch and MTR PP robot welding torch.



	Automated welding torches AMT	Robot welding torch MTR PP
	Intermediate flange 094-027802-00000 +	Intermediate flange 094-027802-00000 +
	Holders 094-012839-00000 +	Holders 094-012839-00000 +
	Torch holder AMT 092-019400-00000	Standard holder MTR 094-010162-00500
Cobots		
Doosan M0609, M0617, M1013, M1509	x	x
Fanuc CRX-10iA	x	x
Hanwha HCR-5A	x	x
Hanwha HCR-12A	x	x
Universal Robots 5e	x	x
Universal Robots 10e	x	x
Yaskawa HC 10DT	On request	On request

More cobot-specific intermediate flanges available upon request.



- As demonstrated on a Doosan M
- Intermediate flange extension
 - 45° adapter flange
 - Teach co-bot hose package
 - RMT 22.5 torch neck



- As demonstrated on a Fanuc CRX-10iA
- 45° adapter flange
 - Teach co-bot hose package
 - RMT 22.5° torch neck



- As demonstrated on a Fanuc CRX-10iA
- Intermediate flange extension
 - 45° adapter flange
 - Teach co-bot hose package
 - RMT 22.5° torch neck



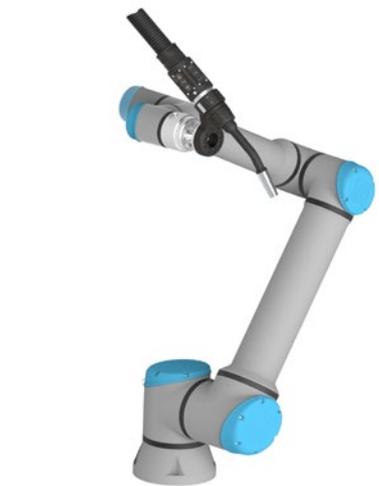
As demonstrated on a Hanwha HCR-5A

- Intermediate flange extension
- 45° adapter flange
- Teach co-bot hose package
- RMT 22.5 torch neck



As demonstrated on a Hanwha HCR-12A

- 45° adapter flange
- Teach co-bot hose package
- RMT 22.5 torch neck



As demonstrated on a Universal Robot

- Intermediate flange extension
- 45° adapter flange
- Teach co-bot hose package
- RMT 22.5 torch neck



As demonstrated on a Yaskawa HC10DT

- Adapter flange, adjustable
- Teach co-bot hose package
- RMT 22.5° torch neck

RMT welding fume extraction torch kit for robot systems

Replaceable extraction nozzle

Maximum accessibility to confined components

360°-rotatable extractor nozzle

Outstanding accessibility



RMT welding fume extraction torch kit for robot systems

- RMT welding fume extraction torch kit for conventional and hollow shaft robot systems
- Compatible with RMT robot welding torches
- Direct extraction of harmful emissions at the point of origin means that time-consuming extraction of the entire robot cell is not necessary
- Suitable for use on high-vacuum extraction systems and central hall extraction systems
- Easy kit assembly and disassembly
- Assembly tool is included in the supply package

Product benefits

The welding fumes are extracted directly at the point of origin:

- Less contamination of the extraction system
- Maximum utilisation of the work area reduces the required extraction capacity
- Saves expensive, time-consuming extraction of entire robot cells where there are large components and long processes
- An excellent solution, even for small robot cells
- Can be retrofitted into existing workstations at a low cost
- Extractor nozzle rotatable through $\pm 180^\circ$ for excellent accessibility: automatic for hollow wrist robots (alternatively the extractor nozzle can be fixed axially) and manual for conventional robots
- No internal contamination of the welding torch and hose package

Replaceable extraction nozzles

- Fitted with a conical nozzle as standard
- Cylindrical welding fume extraction nozzles are available for better accessibility, particularly for confined components (upon request)



Extractor nozzle can be rotated through $\pm 180^\circ$ for outstanding accessibility



Required extraction volume for removal at the point of origin

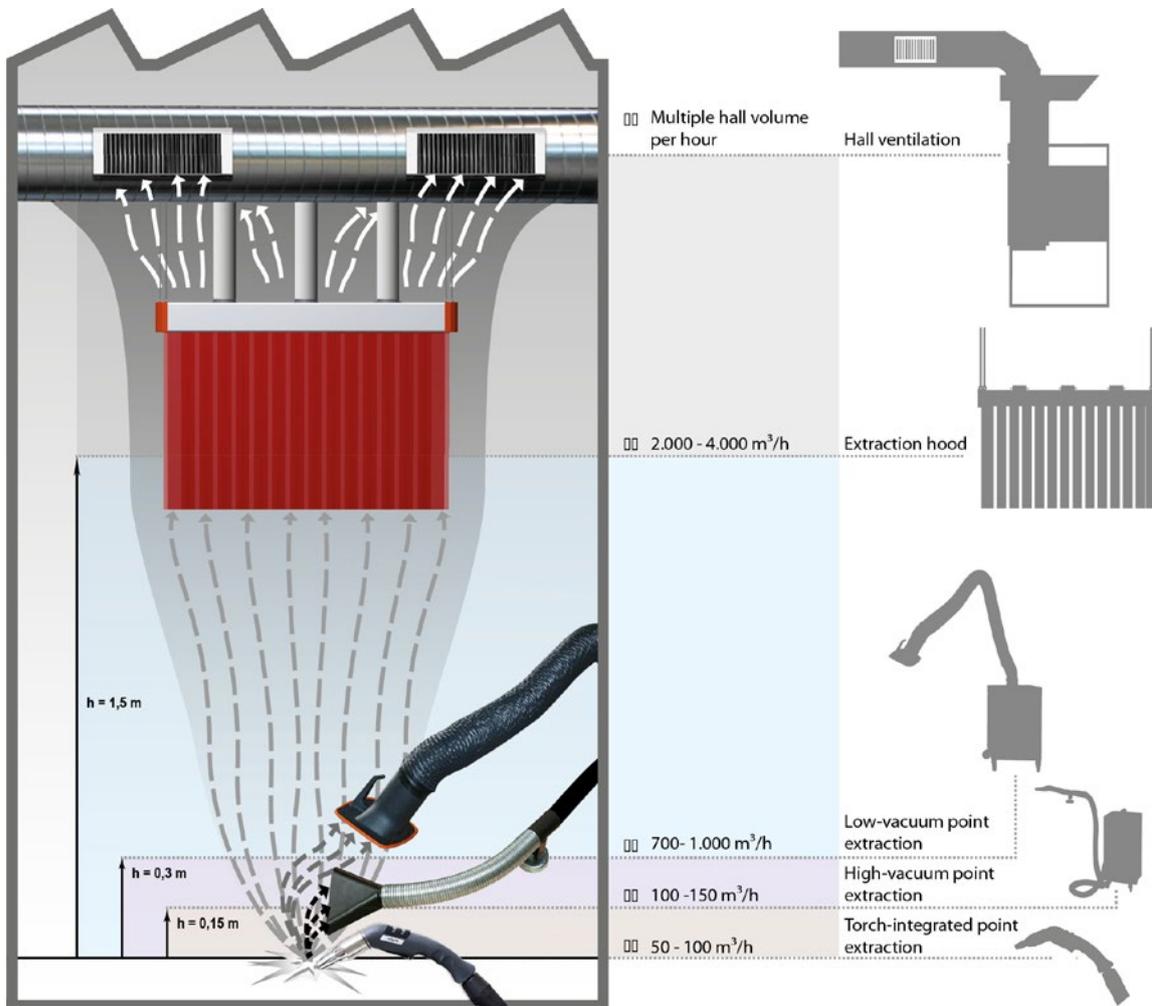


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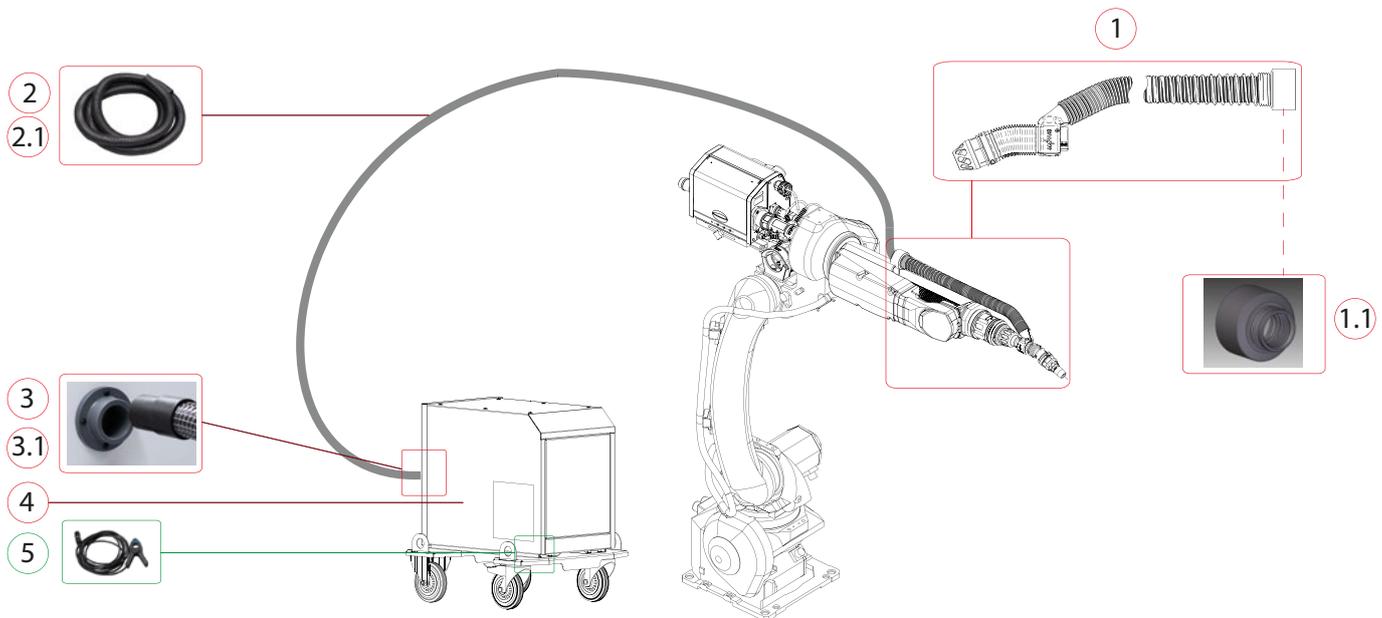
RMT welding fume extraction torch kit for robot systems

Please note when ordering:

- Welding machine, wire feeder, welding torch and all other components must be chosen and ordered separately
- RMT welding fume extraction torch kit fitted with a Ø 44-mm connection nozzle as standard
- Optionally, the RMT welding fume extraction torch kits can be retrofitted with a connection for a Ø 51-mm extraction hose
- **EWM Minivac equipment as supplied:** Connecting flange for an extraction hose Ø 44 mm
- Optionally, the EWM Minivac extraction system can be retrofitted with a connecting flange for a Ø 51-mm extraction hose
- Components marked in red are necessary for operation
- Components marked in green are not absolutely necessary for operation, but are recommended by EWM

Item numbers and order placement guide for RMT welding fume extraction torch kits

Type	Suitable for robot welding torches	PU	Item number
ON SRA-Kit RMT301W HW/KON 2 m	RMT301W	1	092-007963-00000
ON SRA-Kit RMT551W HW/KON 2 m	RMT551W	1	092-007964-00000
ON SRA-Kit RMT551WL HW/KON 2 m	RMT551WL	1	092-007965-00000



Order placement guide for fitting with an extraction hose Ø 44 mm (ex works)

Item Number	Designation	Length	PU	Item number
1	RMT welding fume extraction torch kit with extraction hose (2 m, Ø 25 mm) and adapter for connecting an extraction hose (Ø 44 mm)			
1.1	Included in the scope of delivery of an RMT welding fume extraction torch kit			
2	Extraction hose Ø 44 mm	1 m	1	092-004032-00010
		3 m	1	092-004032-00030
		5 m	1	092-004032-00050
		7.5 m	1	092-004032-00075
		10 m	1	092-004032-00100
3	Adapter for Ø 44-mm extraction hose	-	1	096-001280-00000
	Connecting flange 44 mm	-	-	assembled ex works
4	EWM Minivac 200 D	-	1	398-011035-00001
5	Sensor cable (4 m) with cross sensor and control LED for start/stop automation	4 m	1	398-011037-00000

Order placement guide for retrofitting with extraction hose Ø 51 mm

Item Number	Designation	Length	PU	Item number
1	RMT welding fume extraction torch kit with extraction hose (2 m, Ø 25 mm) and adapter for connecting an extraction hose (Ø 44 mm)			
1.1	Ø 25-mm extraction hose to Ø 51-mm extraction hose adapter	-		094-027987-00001
2.1	Extraction hose Ø 51 mm	1 m	1	092-004033-00010
		3 m	1	092-004033-00030
		5 m	1	092-004033-00050
		7.5 m	1	092-004033-00075
3.1	Adapter for Ø 51-mm extraction hose	-	1	398-004591-00000
	Connecting flange 51 mm	-	1	398-012458-00000
4	EWM Minivac 200 D	-	1	398-011035-00001
5	Sensor cable (4 m) with cross sensor and control LED for start/stop automation	4 m	1	398-011037-00000

Item numbers for welding fume extraction nozzles

Type	Suitable for RMT welding fume extraction torch kit	PU	Item number
SRAD DN 23 mm, Ø 38 mm, L 50 mm	RMT301W	1	094-026558-00002
SRAD DN 25 mm, Ø 41 mm, L 41 mm	RMT551W/RMT551WL	1	094-028006-00000

Function overview

As standard

Option RINT X12

Option BUSINTX11 / BUSINT XQ 4.0



Outputs:

- Emergency stop for collision switch
- Current flow signal
- Power relay contact
- Uactual
- Welding voltage measurement
- Power supply +15 V
- Power supply -15 V
- Iactual

Input:

- Welding machine emergency stop
- Start/stop

Available for selection:

- Inching via constant or ramp function
- Positive/negative input logic
- Non-latched/Special non-latched
- Standard/pulse welding

Signals:

- Welding process active/finished
- Standard/pulse welding activated
- Error reset
- Shielding gas valve
- Compressed air valve
- Pilot gas valve (plasma)
- Inching active/finished
- Reverse inching active/finished
- JOB selection active/finished
- Program selection
- I>0 arc detection
- Ready to weld/not ready
- Wire stick/no wire stick
- Error
- Workpiece detection

Signal monitoring:

- Welding voltage OK/not OK
- Welding current OK/not OK
- Wire feed speed OK/not OK
- Motor current OK/not OK

Control voltage:

- 0 V–10 V wire feed speed
- 0 V–10 V arc correction
- 0 V–10 V dynamic correction

Available for selection:

- JOB mode for automatic selection of welding type and operating mode
- Process control via 15 programs or control signals for wire feeder, voltage correction and arc dynamics
- Simulation with similar parameters of all process signals for determining cycle times
- Fast actual process values for seam tracking available as an option
- Workpiece search function (optional integration of fast actual process values required)

Signals:

- Manual signals for shielding gas, blow out, wire inching and reverse inching, welding type, operating mode
- Safety-related emergency shut-down of processes via software or optional hardware
- Safety switch-off in case of interruption in fieldbus connection
- Transfer of actual process values for welding voltage, welding and motor current, wire feed speed

Signal monitoring:

- Process signals for displaying the arc, process and system state
- Error indication
- Intelligent arc interruption, wire stick and ignition error detection
- Welding voltage
- Welding and motor current
- Wire feed speed
- Single channel message
- Collective relay output
- Over-range and under-range

Outputs:

- Up to four user-defined outputs

Inputs:

- Fast, external input for torch collision detection
- Three user-defined inputs

Matching EWM interfaces to robot controls from a variety of manufacturers

Manufacturer	Interface for automated welding	RINT X12	BUSINT X11 / XQ 4.0 DEVICE NET	BUSINT X11 / XQ 4.0 ETHERNET IP	BUSINT X11 / XQ 4.0 ETHERCAT	BUSINT X11 / XQ 4.0 MODBUS	BUSINT X11 / XQ 4.0 CANOPEN	BUSINT X11 / XQ 4.0 PROFIBUS	BUSINT X11 / XQ 4.0 PROFINET
Manufacturer / control									
ABB									
S3	*	+							
S4	*	+							
S4C	*	+						o	
S4C+		o	+						
IRC5		x	+	+					
COMAU									
C3G+		x							
C4G		x							
Doosan									
M-Serie						o		x	
Fanuc									
CRX				+				x	
R-J2	*	+						x	
R-J3	*	+	x						
R-J3iB	*	+	x						
R-J3iC	*	+			o				
R-J30iB		o			+				
R-30iB Plus					+				
IGM									
RT K3, K4		+						x	
RTi K5		o	+					x	
RTi K6						+			
RCE K6						+			
KAWASAKI									
C 40	*	+	x				x	x	
D 40	*	+	x				x	x	
E01					+			x	
KUKA									
KF 30/51	*	+							
KRC1	*	*	+				x		
VKRC1	*	*	x				x		
KRC2	*	*	+				x		
VKRC2	*	*	x				x		
KRC4						+			o
MOTOMAN									
ERC	*	+							
MRC	*	+							
XRC	*	+	+						
NX 100	*	+	o						
DX 100		+		x					x
DX 200		+							
YRC1000									+
OTC									
EN 5624	*	+							

Manufacturer	Interface for automated welding	RINT X12	BUSINT X11 / XQ 4.0 DEVICE NET	BUSINT X11 / XQ 4.0 ETHERNET IP	BUSINT X11 / XQ 4.0 ETHERCAT	BUSINT X11 / XQ 4.0 MODBUS	BUSINT X11 / XQ 4.0 CANOPEN	BUSINT X11 / XQ 4.0 PROFIBUS	BUSINT X11 / XQ 4.0 PROFINET
Panasonic									
G1/G2	*	+							
REIS									
RS4	*	+							
RS5	*	x					+		+
Universal Robots									
UR		o				o			
Key	+	Recommended version							
	o	Possible version							
	x	Possible, please contact EWM							
	*	Additional option							

Please note that this table is only to be used for guidance on possible configurations. You must consult your system integrator or robot manufacturer to determine whether the suggested interface version can be used in your application.

Interfaces

RINTX12

-RINTX12-



- Robot interface
- For installation in external switching cabinet
- Interface for controlling automated Titan, alpha Q, Phoenix, Taurus and Tetrix machine series in one machine (conversion via jumpers)
- Control signals, analogue: MIG/MAG control voltage for wire feed speed (welding power), arc voltage correction and dynamics – TIG/plasma control voltage: welding current, secondary current, pulse time, pause time
- Control signals, digital: Operating modes, e.g. non-latched, special non-latched, start/stop, gas test 1, 2, inching 1, 2, direction of rotation, inching speed (constant/ramp), welding type (standard MIG/pulse arc MIG welding)
- Status signals, analogue: Current, voltage
- Status signals, digital: Current flowing $I > 0$; ready for welding, stick, error
- JOB selection, up to 510 JOBS available, switching of internal/external JOB selection
- Program selection, 15 programs available
- JOB operation with welding and operating mode per program
- Expanded control signal to parameterise the pulse modes
- Simplified control (signal default setting via jumpers)
- Workpiece search function
- Software-based emergency shut-down signal
- Diagnostic interface for set up, problem analysis and operation of the Analyzer software
- Fast and easy integration into robot systems

Dimensions (L x B x H)	235 mm x 130 mm x 100 mm
Weight	ca. 1 kg

Type	Designation	Item no.
RINT X12 STANDARD	Standard robot interface	090-008291-00000
RINT X12 DV SWITCH	Robot interface including optional wire feeder switching	090-008291-00001
RINT X12 TANDEM	Robot interface including tandem option	090-008291-00002

Options/accessories

Type	Designation	Item no.
KB MOTOMAN-RINT X12	Cable harness for RINT X12 connection to Motoman XRC/NX-100/DX-100/DX-200	094-012212-00003
KB RINT X12 FANUC 34POL	Cable assembly	094-009441-00001
KB RINT X12 FANUC 50POL	Cable assembly	094-009440-00001
ON PLUG SET RINT X12	Retrofit option EWM plug set for RINT X12/DVINT X11	092-001822-00000

Interfaces

RINTX12

OW RINTX12 internal



- RINTX12 robot interface ex works integrated into XQ R power sources
- Interface for actuation of automated Titan XQ R and Phoenix XQ R machine series
- Control signals, analogue: MIG/MAG control voltage for wire feed speed (welding power), arc voltage correction and dynamics
- Control signals, digital: Operating modes, e.g. non-latched, special non-latched, start/stop, gas test 1, 2, inching 1, 2, direction of rotation, inching speed (constant/ramp), welding type (standard MIG/pulse arc MIG welding)
- Status signals, analogue: Current, voltage
- Status signals, digital: Current flowing $I > 0$; ready for welding, stick, error
- JOB selection, up to 510 JOBS available, switching of internal/external JOB selection
- Program selection, 15 programs available
- JOB operation with welding and operating mode per program
- Expanded control signal to parameterise the pulse modes
- Simplified control (signal default setting via jumpers)
- Workpiece search function
- Software-based emergency shut-down signal
- Diagnostic interface for set up, problem analysis and operation of the Analyzer software
- Fast and easy integration into robot systems

Type	Designation	Item no.
OW RINTX12 internal	RINTX12 robot interface	092-003869-00000

Options/accessories

Type	Designation	Item no.
RA5 23POL 5M	Connection cable, 23-pole, one-sided wire end ferrules	092-007727-00005
RA5 23POL 10M	Connection cable, 23-pole, one-sided wire end ferrules	092-007727-00010
RA5 28POL 5M	Connection cable, 28-pole, one-sided wire end ferrules	092-007728-00005
RA5 28POL 10M	Connection cable, 28-pole, one-sided wire end ferrules	092-007728-00010
RA5 23/28POL 5M FANUC	Connection cable, 23-pole, for Fanuc RJ-3iB/RJ-3iC	092-007729-00005
RA5 23/28POL 10M FANUC	Connection cable, 23-pole, for Fanuc RJ-3iB/RJ-3iC	092-007729-00010
RA5 23POL 5M MOTOMAN	Connection cable, 23-pole, for Motoman XRC/NX-100/DX-100/DX-200	092-007731-00005
RA5 23POL 10M MOTOMAN	Connection cable, 23-pole, for Motoman XRC/NX-100/DX-100/DX-200	092-007731-00010
RINTX12 OW DV Switch	Option for robot interface: Switching between two wire feeders	092-003884-00000
RINTX12 OW Tandem	Option for robot interface: Tandem process	092-003885-00000
RINTX12 OW DV Switch/ Tandem	Options for robot interface: Switching between two wire feeders and tandem process	092-003886-00000

Interfaces

BUSINT X11

-BUSINT X11-



- Industrial bus interface
- For installation in external switching cabinet
- Integration in manufacturing processes/robot applications, e.g. with DEVICE-NET, CAN-OPEN, ETHERCAT, ETHERNET IP, INTERBUS, PROFIBUS, PROFINET CU and MODBUS TCP systems
- Start/Stop; gas test 1, 2; inching 1, 2; rotation direction; welding type, JOB mode
- Digital inputs for JOB selection
- Up to 510 JOBS and 15 programs available
- Welding data monitoring: Current, voltage, wire feed speed, armature current
- Control voltage for wire feed speed (welding performance), arc voltage correction, dynamics/choke effect
- Diagnostic interface for set up, problem analysis and operation of the Analyzer software
- Optional switching between several wire drive units
- Optional for tandem process (master-slave mode)

Dimensions (L x B x H)	235 mm x 130 mm x 100 mm
Weight	ca. 1 kg

Type	Designation	Item no.
BUSINT X11 DEVICE NET	DEVICE-NET industrial bus interface	090-008230-00000
BUSINT X11 CAN-OPEN	CAN-OPEN industrial bus interface	090-008231-00000
BUSINT X11 ETHERCAT	ETHERCAT industrial bus interface	090-008626-00000
BUSINT X11 ETHERNET IP	ETHERNET IP industrial bus interface	090-008614-00000
BUSINT X11 INTERBUS	INTERBUS industrial bus interface	090-008228-00000
BUSINT X11 MODBUS TCP	MODBUS industrial bus interface	090-008695-00000
BUSINT X11 PROFIBUS	PROFIBUS industrial bus interface	090-008229-00000
BUSINT X11 PROFINET CU	PROFINET industrial bus interface, copper	090-008232-00000

► BUSINT X11 can be used with the Phoenix 355 Rob machines.

Options/accessories

Type	Designation	Code number	Item no.
OW DV SWITCH P	Operation of two wire feeders in automated systems	00001	042-001315-00000
OW TANDEM	Factory-fit option for the tandem process	00004	042-001317-00000
OW VOLTAGE SUPPLY IBUS3	Factory-fit option: external potential-free voltage supply, 24 V	00008	092-008197-00008
ON VOLTAGE SUPPLY IBUS3	Retrofit option: external potential-free voltage supply, 24 V		092-008197-00000

Interfaces BUSINT X11

-BUSINTX11 intern-



- BUSINTX11 robot interface ex works integrated into XQ R power sources
- Interface for actuation of automated Titan XQ R and Phoenix XQ R machine series
- Integration in manufacturing processes/robot applications, e.g. with DEVICE-NET, CAN-OPEN, ETHERCAT, ETHERNET IP, INTERBUS, PROFIBUS, PROFINET CU, PROFINET LWL, RUGGED LINE and MODBUS TCP systems
- Start/Stop; gas test 1, 2; inching 1, 2; rotation direction; welding type, JOB mode
- Digital inputs for JOB selection
- Up to 510 JOBS and 15 programs available
- Welding data monitoring: Current, voltage, wire feed speed, armature current
- Control voltage for wire feed speed (welding performance), arc voltage correction, dynamics/choke effect
- Diagnostic interface for set up, problem analysis and operation of the Analyzer software
- Optionally available with signal conditioning for seam tracking using fast actual process values (V, I)
- Optional switching between several wire drive units
- Optional for tandem process (master-slave mode)

Type	Designation	Item no.
OW BUSINT X11 CAN DeviceNet	CAN DeviceNet industrial bus interface	092-003853-00000
OW BUSINT X11 CANopen	CANOpen industrial bus interface	092-003863-00000
OW BUSINT X11 Profibus	PROFIBUS industrial bus interface	092-003864-00000
OW BUSINT X11 EthernetIP	EthernetIP industrial bus interface	092-003865-00000
OW BUSINT X11 Profinet	PROFINET industrial bus interface	092-003866-00000
OW BUSINT X11 EtherCAT	ETHERCAT industrial bus interface	092-003867-00000
OW BUSINT X11 MODBUS	MODBUS industrial bus interface	092-003868-00000
OW BUSINT X11 Interbus	INTERBUS industrial bus interface	092-003873-00000

► BUSINT X11 can be used with the Phoenix 355 Rob machines.

Options/accessories

Type	Designation	Item no.
BUSINT X11 OW DV Switch	Option for industrial bus interface Switching between two wire feeders	092-003875-00000
BUSINT X11 OW ST	Option for industrial bus interface Support for seam tracking	092-003876-00000
BUSINT X11 OW Tandem	Option for industrial bus interface Tandem process	092-003877-00000
BUSINT X11 OW DV Switch/ST	Option for industrial bus interface Switching between two wire feeders and weld seam tracking	092-003878-00000
BUSINT X11 OW DV Switch/Tandem/ST	Options for industrial bus interface: Switching between two wire feeders, tandem process and weld seam tracking	092-003879-00000
BUSINT X11 OW DV Switch/Tandem	Options for industrial bus interface: Switching between two wire feeders and tandem process	092-003880-00000
BUSINT X11 OW ST/Tandem	Options for industrial bus interface: Weld seam tracking and tandem process	092-003881-00000
BUSINT X11 OW external voltage	External, potential-free power supply for industrial bus interface	092-003882-00000

Options and item numbers, BUSINT X11

Option code number		00001	00002	00004	00008
Interface	Basic item number, without options	Wire feeder switching	Seam tracking	Tandem	External power supply
BUSINTX11 intern					
OW BUSINT X11 CANOPEN	092-003863-00000	o	o	o	o
OW BUSINT X11 DEVICE NET	092-003853-00000	o	o	o	o
OW BUSINT X11 INTERBUS	092-003873-00000	o	o	o	o
OW BUSINT X11 PROFIBUS	092-003864-00000	o	o	o	o
OW BUSINT X11 RUGGED LINE	On request	o	o	o	+
OW BUSINT X11 PROFINET CU	092-003866-00000	o	o	o	o
OW BUSINT X11 PROFINET LWL	On request	o	o	o	+
OW BUSINT X11 ETHERCAT	092-003867-00000	o	o	o	o
OW BUSINT X11 ETHERNET/IP	092-003865-00000	o	o	o	o
OW BUSINT X11 MODBUS TCP	092-003868-00000	o*	o*	o*	o
BUSINT X11 extern					
BUSINT X11 CANOPEN	090-008231-00000	o	-	o	o
BUSINT X11 DEVICE NET	090-008230-00000	o	-	o	o
BUSINT X11 INTERBUS	090-008228-00000	o	-	o	o
BUSINT X11 PROFIBUS	090-008229-00000	o	-	o	o
BUSINT X11 PROFINET CU	090-008232-00000	o	-	o	o
BUSINT X11 ETHERCAT	090-008626-00000	o	-	o	o
BUSINT X11 ETHERNET/IP	090-008614-00000	o	-	o	o
BUSINT X11 MODBUS TCP	090-008695-00000	o*	-	o*	o
Key					
	+	Included			
	o	Possible			
	o*	Possible, on request			
	-	Not possible			
The item number for orders consisting of a BUSINT X11 interface with options is made up as follows: In position A in the basic item number, insert the code number 9 (interface with option), and the code numbers corresponding to the option go in position B. If there are several options, their code numbers can also be added.					
Example					
Basic item number, without options	090-A08232-BBBBB				
Item number with option external power supply (00008)	090-908232-00008				
Item number with options wire feeder switching (00001) and external power supply (00008)	090-908232-00009				

Interfaces

BUSINT XQ 4.0

-BUSINT XQ 4.0-



- Industrial bus interface for installation in external electrical enclosure
- Integration in production/robot applications with e.g. DeviceNet, EtherCAT, EthernetIP, PROFIBUS, PROFINET and Modbus
- Start/Stop; gas test 1, 2; inching 1, 2; rotation direction; welding type, JOB mode
- Digital inputs for JOB selection
- Up to 510 JOBS and 15 programs available
- Welding data monitoring: Current, voltage, wire feed speed, armature current
- Control voltage for wire feed speed (welding performance), arc voltage correction, dynamics/choke effect
- Diagnostic interface for set up, problem analysis and operation of the Analyzer software
- Optional switching between several wire drive units

Weight	ca. 1 kg
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Type	Designation	Item no.
BUSINT XQ 4.0 DeviceNet	DeviceNet industrial bus interface	090-008312-00000
BUSINT XQ 4.0 CANopen	CANOpen industrial bus interface	090-008311-00000
BUSINT XQ 4.0 EtherCAT	ETHERCAT industrial bus interface	090-008317-00000
BUSINT XQ 4.0 EthernetIP	EthernetIP industrial bus interface	090-008316-00000
BUSINT XQ 4.0 MODBUS	MODBUS industrial bus interface	090-008313-00000
BUSINT XQ 4.0 PROFIBUS	PROFIBUS industrial bus interface	090-008314-00000
BUSINT XQ 4.0 PROFINET	PROFINET industrial bus interface	090-008315-00000

► BUSINT XQ 4.0 only can be used with welding machines without built-in interface

Options/accessories

Type	Designation	Code number	Item no.
ON VOLTAGE SUPPLY IBUS4	Retrofit option: external potential-free voltage supply, 24 V		092-008352-00000
OW DV SWITCH IBUS4	Operation of two wire feeders in automated systems	00001	042-001331-00000
OW VOLTAGE SUPPLY IBUS4	Factory-fit option: external potential-free voltage supply, 24 V	00008	092-008352-00008

Interfaces

BUSINT XQ 4.0

-BUSINT XQ 4.0 intern-



- Industrial bus interface built into power source
- Integration in production/robot applications with e.g. DeviceNet, EtherCAT, EthernetIP, PROFIBUS, PROFINET and Modbus
- Start/Stop; gas test 1, 2; inching 1, 2; rotation direction; welding type, JOB mode
- Digital inputs for JOB selection
- Up to 510 JOBS and 15 programs available
- Welding data monitoring: Current, voltage, wire feed speed, armature current
- Control voltage for wire feed speed (welding performance), arc voltage correction, dynamics/choke effect
- Diagnostic interface for set up, problem analysis and operation of the Analyzer software
- Optional switching between several wire drive units

► The item numbers can be found in the configuration tables for the corresponding power sources.

Options and item numbers BUSINT XQ 4.0

Option code number		00001	00002	00008
Interface	Basic item number, without options	Wire feeder switching	Seam tracking	External power supply
BUSINT XQ 4.0 intern				
OW BUSINT XQ 4.0 CANopen	092-004558-00000	o	o	o
OW BUSINT XQ 4.0 CAN DeviceNet	092-004557-00000	o	o	o
OW BUSINT XQ 4.0 Profibus	092-004559-00000	o	o	o
OW BUSINT XQ 4.0 Profinet	092-004561-00000	o	o	o
OW BUSINT XQ 4.0 EtherCAT	092-004562-00000	o	o	o
OW BUSINT XQ 4.0 EthernetIP	092-004560-00000	o	o	o
OW BUSINT XQ 4.0 MODBUS	092-004563-00000	o*	o*	o
BUSINT XQ 4.0 extern				
BUSINT XQ 4.0 CANopen	090-008311-00000	o	-	o
BUSINT XQ 4.0 DeviceNet	090-008312-00000	o	-	o
BUSINT XQ 4.0 Profibus	090-008314-00000	o	-	o
BUSINT XQ 4.0 Profinet	090-008315-00000	o	-	o
BUSINT XQ 4.0 EtherCAT	090-008317-00000	o	-	o
BUSINT XQ 4.0 EthernetIP	090-008316-00000	o	-	o
BUSINT XQ 4.0 MODBUS	090-008313-00000	o*	-	o
Key				
	+	Included		
	o	Possible		
	o*	Possible, on request		
	-	Not possible		
The item number for orders consisting of a BUSINT XQ 4.0 interface with options is made up as follows: In position A in the basic item number, insert the code number 9 (interface with option), and the code numbers corresponding to the option go in position B. If there are several options, their code numbers can also be added.				
Example				
Basic item number, without options		090-A08312-BBBBB		
Item number with option external power supply (00008)		090-908312-00008		
Item number with options wire feeder switching (00001) and external power supply (00008)		090-908312-00009		

Interfaces Accessories



- For industrial use

Type	Designation	Item no.
LAN Cable	Network cable, sold by the metre	094-020408-00500



Type	Designation	Item no.
RJ45	Plug for network cable	094-020407-00000

-CDN-



- Quick and clean insulation stripping of Ethernet and PROFINET cables
- Individual diameter adjustment for radius adjustment

Type	Designation	Item no.
KM GL	Cable knife	094-020409-00000

-FRV-25 7POL-



- 7-pole connection cable, suitable for installation in drag chains

Type	Designation	Item no.
FRV-25 7POL 10m	Connection cable, 7-pole	092-003417-00010
FRV-25 7POL 15m	Connection cable, 7-pole	092-003417-00015
FRV-25 7POL 20m	Connection cable, 7-pole	092-003417-00020
FRV-25 7POL 25m	Connection cable, 7-pole	092-003417-00025
FRV-25 7POL 30m	Connection cable, 7-pole	092-003417-00030

► Connection and extension cable for external LAN and WiFi gateway, panel, remote control

Digital 7-pole cable



- Digital 7-pole cable
- Extension for 7-pole remote control with permanently installed cable
- Connection cable for remote control and gateway without permanently installed cable

Type	Designation	Item no.
FRV 7POL 0.5m	Digital 7-pole cable	092-000201-00004
FRV 7POL 1m	Digital 7-pole cable	092-000201-00002
FRV 7POL 5m	Digital 7-pole cable	092-000201-00003
FRV 7POL 10m	Digital 7-pole cable	092-000201-00000
FRV 7POL 15m	Digital 7-pole cable	092-000201-00005
FRV 7POL 20m	Digital 7-pole cable	092-000201-00001
FRV 7POL 25m	Digital 7-pole cable	092-000201-00007

Cooling Internal

-Cool XQ R Standard-



- Ex works installation option
- Powerful cooling unit with centrifugal pump
- Coolant connections at rear
- Powerful pump
- Flow rate and temperature monitoring
- High cooling capacity and 8-litre water tank
- Recommended up to 10 m intermediate hose packages

Cooling capacity at 1 l/min.	1500 W
Tank capacity	8 l
Flow rate	5 l/min
Pump pressure	3.5 bar

Type	Designation	Item no.
OW F06W	Water cooling	092-003303-00000

OU F.06W / OU F.06WRF



- Conversion set for XQ welding machine – gas cooled to water cooled
- Conversion set – water block with reinforced pump not suitable for XQ compact welding machines

Type	Designation	Item no.
OU F06W	Conversion set, water cooler	092-003492-00000

-Cool XQ R plus-



- Ex works installation option
- Powerful cooling unit with reinforced centrifugal pump
- Coolant connections at rear
- Powerful pump
- Flow rate and temperature monitoring
- High cooling capacity and 8-litre water tank
- Recommended e.g. for long intermediate hose packages and with wire feeder switching option

Cooling capacity at 1 l/min.	1500 W
Tank capacity	8 l
Flow rate	20 l/min
Pump pressure	4.5 bar

Type	Designation	Item no.
OW F06WRF	Water cooling with boosted pump	092-003304-00000

OU F06WRF



- Conversion set, water cooler with reinforced pump
- Not suitable for XQ compact welding machines

Type	Designation	Item no.
OU F06WRF	Conversion set, water cooler with reinforced pump	092-003493-00000

Cooling Cooling units

Cool XQ R 55 U40



- Cooling unit for robot welding machines
- Flow monitor featured as standard: Protects welding torches from overheating and damage caused by low coolant flow
- Temperature-monitored coolant – protects the welding torch from overheating through hot coolant water
- Accessible filling nozzle with easy-to-read filling level indicator (MIN/MAX scale)
- Multivolt-compatible: Suitable for operation with mains voltages of 380 V to 400 V and 440 V to 480 V
- Optional water filter
- Temperature- and speed-controlled cooling fan – reduced contamination and less noise emissions as fan only runs when needed
- Coolant connections at rear
- Powerful pump, temperature-controlled fan

Mains voltage	1 x 400V (-)
Cooling capacity at 1 l/min.	1200 W
Tank capacity	4,5 l
Pump pressure	3.5 bar
Protection classification	IP23
Safety marking	CE UK ENEC
Dimensions (L x B x H)	665 mm x 298 mm x 247 mm 26.2 inch x 11.7 inch x 9.7 inch
Weight	19 kg 41.9 lbs
Standards	IEC 60974-1, -2 and -10 CL.A

Type	Designation	Item no.
Cool XQ R 55 U40	Cooling unit for robot welding machines, Multivolt-compatible	090-008865-00502

ON Filter K.07



- Can be assembled and disassembled without tools for cleaning
- Easy to clean
- Reliably protects the machine from impurities under tough working conditions.

Type	Designation	Item no.
ON Filter K.07	Dirt filter for air inlet	092-004630-00000

ON Water Filter K.07



- Water filter for optional retrofitting
- Filtration of dirt particles from the coolant circuit to protect the pump from damage and reduce contamination of the heat exchanger caused by deposits

Type	Designation	Item no.
ON Water Filter K.07	Optional water filter	092-004638-00000

Cooling Cooling units

Cool 55 C U40



- Cooling unit for compact, modular welding machines
- Can be used with water-cooled welding torches
- Front connections
- External coolant water filling nozzle with filling level indicator
- Optional water filter
- Modular design, tool-free installation
- Excellent torch cooling and therefore cost savings on consumables thanks to the high-performance centrifugal pump

We recommend using a cooling unit with a reinforced pump for an overall hose package length of 30 m and above or for machines with an additional miniDrive of 20 m and above.

Type	Cool 55 C U40
Mains voltage	1 x 400 V (- 25 % - + 20 %)
Mains frequency	50 Hz / 60 Hz
Cooling capacity at 1 l/ min.	1200 W
Pump pressure	3.5 bar
Tank capacity	4.5 l
Protection classification (mounted state)	IP23
Safety marking	
EMC class	A
Dimensions (L x B x H)	665 mm x 298 mm x 247 mm 26.2 inch x 11.7 inch x 9.7 inch
Weight	19 kg 41.9 lbs
Standards	IEC 60974-1, -2 and -10 CL.A

Type	Designation	Item no.
Cool 55 C U40	Cooling unit for compact, modular welding machines	090-008866-00502

► Full technical data can be found in the "Technical data" chapter of the operating instructions (operating instructions can be downloaded at www.ewm-sales.com)

Cool 55 C U42



- Cooling unit with boosted pump for compact, modular welding machines
- Can be used with water-cooled welding torches
- Front connections
- External coolant water filling nozzle with filling level indicator
- Optional water filter
- Modular design, tool-free installation
- Excellent torch cooling and therefore cost savings on consumables thanks to the high-performance centrifugal pump

We recommend using a cooling unit with a reinforced pump for an overall hose package length of 30 m and above or for machines with an additional miniDrive of 20 m and above.

Type	Cool 55 C U42
Mains voltage	1 x 400 V (- 25 % - + 20 %)
Mains frequency	50 Hz / 60 Hz
Cooling capacity at 1 l/min.	1200 W
Pump pressure	4.5 bar
Tank capacity	4.5 l
Protection classification (mounted state)	IP23
Safety marking	
EMC class	A
Dimensions (L x B x H)	665 mm x 298 mm x 247 mm 26.2 inch x 11.7 inch x 9.7 inch
Weight	21.5 kg 47.4 lbs
Standards	IEC 60974-1, -2 and -10 CL.A

Type	Designation	Item no.
Cool 55 C U42	Cooling unit with boosted pump for compact, modular welding machines	090-008867-00502

► Full technical data can be found in the "Technical data" chapter of the operating instructions (operating instructions can be downloaded at www.ewm-sales.com)

Cooling units Recooling units

-RK10-



- Powerful recooling unit
- Rear connections
- Coolant drain valve and coolant level indicator
- Temperature control and LED display
- Powerful pump, temperature-controlled fan

Mains voltage	1 x 230V (-)
Cooling capacity at 1 l / min.	1300 W (at 25°C) 1000 W (at 40°C)
Tank capacity	7 l
Dimensions (L x B x H)	370 mm x 518 mm x 700 mm
Weight	65 kg
Version	Heavy Duty

Type	Designation	Item no.
RK10	Recooling unit	094-027244-00000

-RK20-



- Powerful recooling unit
- Rear connections
- Coolant drain valve and coolant level indicator
- Temperature control and LED display
- Powerful pump, temperature-controlled fan

Mains voltage	1 x 230V (-)
Cooling capacity at 1 l / min.	2500 W (at 25°C) 2000 W (at 40°C)
Tank capacity	15 l
Dimensions (L x B x H)	542 mm x 467 mm x 850 mm
Weight	70 kg
Version	Heavy Duty

Type	Designation	Item no.
RK20	Recooling unit	094-027245-00000

-RK30-



- Powerful recooling unit
- Rear connections
- Coolant drain valve and coolant level indicator
- Temperature control and LED display
- Powerful pump, temperature-controlled fan

Mains voltage	3 x 400V (-)
Cooling capacity at 1 l / min.	3800 W (at 25°C) 3000 W (at 40°C)
Tank capacity	45 l
Dimensions (L x B x H)	781 mm x 659 mm x 1152 mm
Weight	125 kg
Version	Heavy Duty

Type	Designation	Item no.
RK30	Recooling unit	094-027247-00000

blueCool -10



- Coolant for water-cooled welding machines and cooling units
- Easy transport and storage
- Not subject to mandatory labelling
- No hazard class
- Increased corrosion protection thanks to corrosion inhibitors
- Extended durability compared to standard coolants
- Biodegradable
- Very low electrical conductivity
- Can be used on any EWM welding machine
- Detailed technical information and instructions for use can be found in the safety data sheet
- For existing systems, flush with water before exchanging the coolant

Electrical conductivity	<15 µS/cm
Density	1.04 g/cm ³
Water hazard class	1

Type	Designation	Item no.
blueCool -10 5 l	"blueCool" coolant to -10 °C (-14 °F), 5 l	094-024141-00005
blueCool -10 25 l	"blueCool" coolant to -10 °C (-14 °F), 25 l	094-024141-00025
blueCool -10 220 l	"blueCool" coolant to -10 °C (-14 °F), 220 l	094-024141-00220
FSP blueCool	blueCool frost protection tester/refractometer	094-026477-00000

blueCool -30



- Coolant for water-cooled welding machines and cooling units
- Easy transport and storage
- Not subject to mandatory labelling
- No hazard class
- Increased corrosion protection thanks to corrosion inhibitors
- Extended durability compared to standard coolants
- Biodegradable
- Very low electrical conductivity
- Can be used on any EWM welding machine
- Detailed technical information and instructions for use can be found in the safety data sheet
- For existing systems, flush with water before exchanging the coolant

Electrical conductivity	<15 µS/cm
Density	1.04 g/cm ³
Water hazard class	1

Type	Designation	Item no.
blueCool -30 5 l	Coolant up to -30 °C (-22 °F), 5 l	094-024142-00005
blueCool -30 25 l	Coolant up to -30 °C (-22 °F), 25 l	094-024142-00025
FSP blueCool	blueCool frost protection tester/refractometer	094-026477-00000

-HOSE BRIDGE-



- Hose bridge
- For operating gas-cooled torches on water-cooled welding machines

Type	Designation	Item no.
HOSE BRIDGE	Hose bridge	092-007857-00000

Cooling units Recooling units

-WS 2x0,5M-



Type	Designation	Item no.
WS 2x0,5M	Water hoses, two units	092-001953-00001

-UKV4SET 4M-



Type	Designation	Item no.
UKV4SET 4M	Hose connection set to connect a cooling unit	092-000587-00001

-SET 2 Y-PART-

Type	Designation	Item no.
SET 2 Y-PART	Water connection set, 2x Y-Part	092-S09218-04188

LFMG HANNA PRIMO 5



- Conductivity measuring device for measurement of TDS and conductivity
- LCD display for low battery alerts, automatic temperature compensation (ATC), automatic shutoff and automatic calibration

Type	Designation	Item no.
LFMG HANNA PRIMO 5	Conductivity measuring device	092-004216-00000

LFMG HANNA DIST 3



- Conductivity measuring device with LCD display
- Conductivity measuring range 0 to 2,000 µS/cm
- Temperature measuring range 0 to 50 °C
- Very straightforward handling
- Fast and precise
- Automatic 1-point calibration with 1,413 µS/cm calibration solution
- Automatic temperature-compensated measurement values
- Graphite electrode for reduced polarisation effects
- We recommend regular calibration to ensure proper operation Delivery includes 1 x 20 ml calibration fluid Additional calibration fluid (094-026147-00000) and a plastic cup for easy handling are available (094-024702-00000)

Type	Designation	Item no.
LFMG HANNA DIST 3	Conductivity measuring device	094-026184-00000

Service accessories

Spare parts set

-SERVICE SYSTEM SS01-



- Spare parts starter kit for service technicians for maintenance and repairs to EWM machines and EWM torches
- Covers machine, torch and automation

Machine spare parts: Casing screws, spacers, gas valves, ring screws, rotary knobs, tank caps, filter sieves, connecting pieces, couplings, safety fuses, push-buttons, switches, connection sockets, contact pins, protective dust caps, caps for openings in casings, jumpers, plug connectors, protective caps, strain reliefs

Torch spare parts: Microswitches, push-button springs, cable lugs, single-ear clamps, control cable plugs and contacts, connecting nipples, screws, cylindrical pins

- Approx. 2000 items total
- The assortment boxes can be ordered separately and the contents may be ordered in packing units (see spare parts catalogue)

Type	Designation	Item no.
SERVICE SYSTEM SS02	Spare parts starter set, two boxes	092-002469-00001

-BOX 1-2-



- Spare parts starter kit, separate boxes
- Box 1 contains assortment boxes 1–4
- Box 2 contains assortment boxes 5–8

Type	Designation	Item no.
BOX 1	Spare parts starter kit, box 1	092-007781-00001
SBOX 2	Spare parts starter kit, box 2	092-007786-00001

-Service Case 1-8-



Type	Designation	Item no.
SERVICE CASE SC01	Assortment box 1: Screws, hexagon spacers	092-007782-00001
SERVICE CASE SC02	Assortment box 2: Rotary dials and covers, gas valves, spacers, lifting eyes	092-007783-00001
SERVICE CASE SC03	Assortment box 3: Hose clamps, couplings, filters, pressure controllers, quick connect coupling, tank covers	092-007784-00001
SERVICE CASE SC04	Assortment box 4: Safety fuses	092-007785-00001
SERVICE CASE SC05	Assortment box 5: Burndy pin/socket contact, connection sockets	092-007787-00001
SERVICE CASE SC06	Assortment box 6: Minifit/old Burndy pin/socket contacts	092-007788-00001
SERVICE CASE SC07	Assortment box 7: Blind caps/caps	092-007789-00001
SERVICE CASE SC08	Assortment box 8: Switches, triggers, jumpers, drive pinions, strain relief, automatic cutouts	092-007790-00001

Service accessories A3-SH testing device

-A3-SH SET-



- Test machine for repetition tests of arc welding machines as per IEC EN 60974-4 (VDE 0544-4), as well as electrical operating material as per VDE 0701-0702.
- For single-phase machines with 230 V connection voltage and three-phase machines from 230 V to 400 V/32 A.
- Pre-installed automatic testing routines for EWM machines
- Universal test routines also for testing other manufacturers' machines
- Extensive database functions
- Free software updates for changes or modifications to testing procedures
- Test logs with your company logo

Delivery includes:

- Test Machine A3-SH
- Measuring leads
- 230 V connecting cable/AC
- USB cable
- EWM-specific test log/A3-S Remote database software
- Factory calibration certificate

Type	Designation	Item no.
A3-SH SET	Test machine for repetition test	090-008210-00000

Service accessories

Calibration device

Calibration device



- Calibration device for validation of arc welding systems as per IEC EN 60974-14 (replacement for BS EN 50504/VDE 0544-50), portable
- Analogue display of measurement data from mains input current and mains input voltage
- Digital display of measurement data from welding current, welding voltage, open circuit voltage (as per BS EN IEC 60974-1) and ambient temperature
- Delivery includes: Calibration device, 2 x measuring leads for external voltage measurement (2 m), 4 x load cables (4 m/95 mm²)
- A power source load is additionally required for standard-compliant validation, see LS 600A 090-008059-00101.

You will receive authorisation to use the EWM validation protocols after completing the optional EWM service training, "Validation as per IEC EN 60974-14"! Participation is highly recommended.

Mains voltage	3 x 400V (-)
Connection load	600 A / 60 %
	500 A / 100 %
Weight	25 kg
Test mark	CE UK
Protection classification	IP23
EMC class	A

Type	Designation	Item no.
KLE 2	Calibration device	090-008297-00502

Calibration costs

- Perform verification
- Professional documentation and identification
- Preparation of a report

Type	Designation	Item no.
KOS60	Calibration costs per welding machine	KOS-S00018-00000
KOSV38	Calibration certificate	KOS-V00038-00000

Type	Designation	Item no.
KLE+LS600A WEEKLY RENTAL	Weekly rental LS600A, incl. calibration unit and TESTO 470	KOS-S00019-00000
KLE+LS600A MONTHLY RENTAL	Monthly rental LS600A, incl. calibration unit and TESTO 470	KOS-S00020-00000

LS 600A



- Power source load for arc simulation
- For standard-compliant loading of arc welding systems during validation as per DIN EN IEC 60974-14 (replacement for DIN EN 50504/VDE 0544-50) or for loading power sources for service purposes
- Allows static loading of arc welding systems without igniting an arc.

Very straightforward handling:

- no tedious setting of the operating point.
- Simple toggling of the standard characteristics (MMA, TIG, MIG/MAG)

Delivery includes:

- load simulation device, load cable bridge

Mains voltage	3 x 400V (-)
Connection load	600 A / 60 % 500 A / 100 %
Weight	139.5 kg
Test mark	CE UK EAC
Protection classification	IP23
EMC class	A

Type	Designation	Item no.
LS 600A	Load simulation device	090-008059-00101

-TESTO 470-



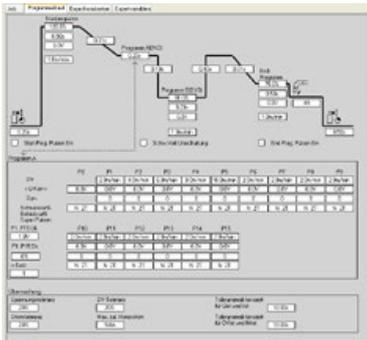
- Measuring device for measuring rotation speeds, speeds and lengths
- For validation of wire feeders compliant with EN 50504 (VDE 0544-50)
- Saving of average, max. and min. values and the last measurement value
- Measurement spacing up to 600 mm (optical measurement)
- Easy one-hand operation

Type	Designation	Item no.
TESTO 470	Measuring instrument for rotational speeds, velocities and lengths	098-005120-00000

Software/Xnet

PC300 XQ, Analyzer, QDOC, Xnet, WPQ Manager

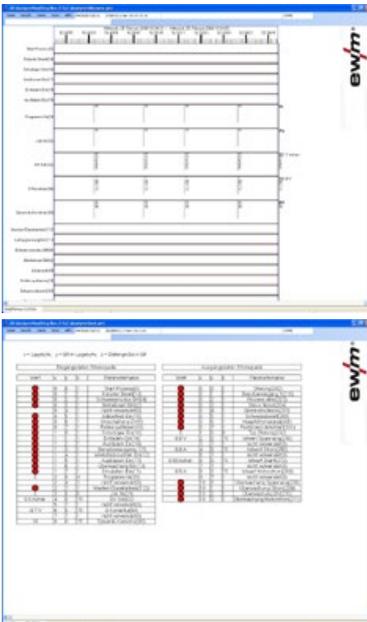
PC300 XQ Set



- Welding parameter software
- Windows interface makes operation straightforward
- Structured operating menus and levels for changing, setting and programming all welding parameters
- Management of up to 510 JOBS in a database with easy-to-use search options
- Exchange of JOBS to and from the welding machine
- Online data exchange, i.e. data is visualised in PC300 and mapped directly to the welding process (ideal for training and test welding purposes)
- Integrated password protection to protect against unauthorised changes
- Display of the actual values for the welding voltage and current, wire feed speed, wire feeder motor armature current and welding power using digital screen displays with bar graph and hold function
- Connection to a standard serial COM interface on the welding machine
- Default settings for welding data monitoring
- Always up to date due to standard update function for new welding parameters
- Ideal for data backup via easy exchange between power source and PC
- EWM Backup Tool – simple backup function of JOB and system configuration.
- EWM PC300 Light Version – simple operation, compressed to the most important functions.
- EWM Config Tool – configuration of system components.

Type	Designation	Item no.
PC300 XQ Set	PC300 XQ welding parameter software set, including CMSTICK, cable and SECINT X10 USB interface	090-008777-00000

-ANALYZER-



- Analysis software for control data
- Can be used with BUSINT X11 fieldbus interfaces for the alpha Q, Phoenix and Tetrix welding systems
- Can be used with RINT X12 analogue/digital interfaces for the alpha Q, Phoenix and Tetrix welding systems
- Non-time based display and representation of the currently used data profile (BUSINT X11 only)
- Display and representation of all activation and status signals in a compressed form and as a time-based logic diagram
- Storage and re-display of recorded signal sequences
- Signal editor
- Display of additional information about the state of the fieldbus and the welding machine (BUSINT X11 only)
- Display of machine type, performance class and software version of the process control
- EWM Config Tool - configuration of system components
- System requirements: Windows 7 (32-/64-bit), Windows Vista, Windows XP SP3, .NET Framework 2.0 installed (will be installed at the same time where applicable), Intel Pentium (or comparable) CPU with at least 2.4 GHz, min. 2 GB RAM, min. 4 GB free hard disk space, USB 1.1 or USB 2.0 for installation of software, USB 1.1 or USB 2.0 port for connection to welding machine; SECINT X10-USB PC connection cable, ADAPT X10 adaptor cable for use with BUSINT X11 and RINT X12 interfaces for installation in electrical enclosure

Type	Designation	Item no.
ANALYZER	Software for control and status signal analysis	090-008778-00000

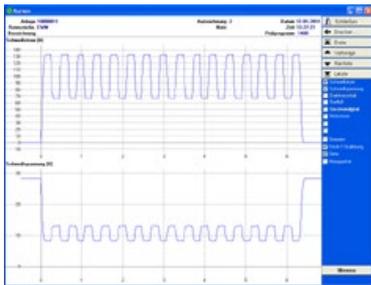
-Set PC300/ANALYZER-



- Welding parameter software PC300 + Analyzer software to analyse control data
- Only one USB dongle required to operate both programs

Type	Designation	Item no.
Set PC300 XQ / ANALYZER	Set comprising PC300 XQ and Analyzer software	090-008779-00000

-Set QDOC9000-2-



- Welding data documentation software
- Windows interface makes operation straightforward
- Quality control for welding production
- Suitable for creating welding instructions
- Also ideal for welding tasks requiring documentation
- Important tool in welding training
- Recording, monitoring and documentation of:
 - Welding voltage
 - Welding current
 - Wire feed motor armature current
 - Wire feed speed
- Adaptable, printable forms
- Easy export of data
- High-performance database-driven data functions

Type	Designation	Item no.
QDOC9000 V2.0	Set consisting of interface, documentation software, connection lead	090-008713-00000

Xnet Basis Set



- Software product for quality assurance in welding production
- Xnet Basis Set consisting of USB dongle with serial number, installation file and software usage licence

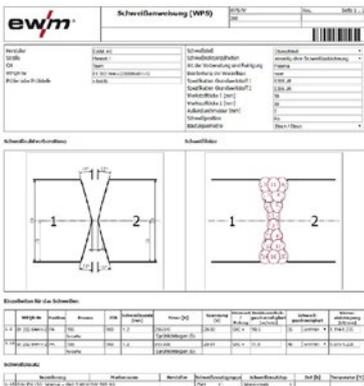
Range of functions:

- Machines/machine status visible via the network
- Monitoring of the welding parameters in real time
- Recording of the welding data
- Welding machine maintenance
- Scanning of barcodes
- Costs and consumption per barcode
- Analysis of the welding efficiency
- Calculation of the consumption for one or more machines
- Display of the most important information on the dashboard
- The energy per unit length and heat input for logged welding can be calculated based on the seam length and saved (illustration 2)
- Diagram in statistics expanded to also include process time and specified as standard (illustration 3)
- CSV file export from a single welding task with a sampling rate of 30 ms (No illustration)
- New privacy settings make it possible to visually indicate the welder by their name, their personnel number, the Xbutton ID or the system role in the welding data. The name can also be fully hidden, both in the welding data and in welder management (illustration 4)

Type	Designation	Item no.
Xnet Basis Set	Xnet Basis Set consisting of USB dongle with serial number, installation file and software usage licence	091-008836-00000

► The following must be observed:
 Availability of network infrastructure and necessary network communication must be checked
 System requirements as per Xnet data sheet
 Number of machine usage licences according to customer requirement

WPQ Manager single-station solution



Easy, quick creation and management of a database by WPQR and pWPS/WPS on a local PC

- Direct creation of a pWPS/WPS

Creation and management of a database for welder and welder qualification on a local PC

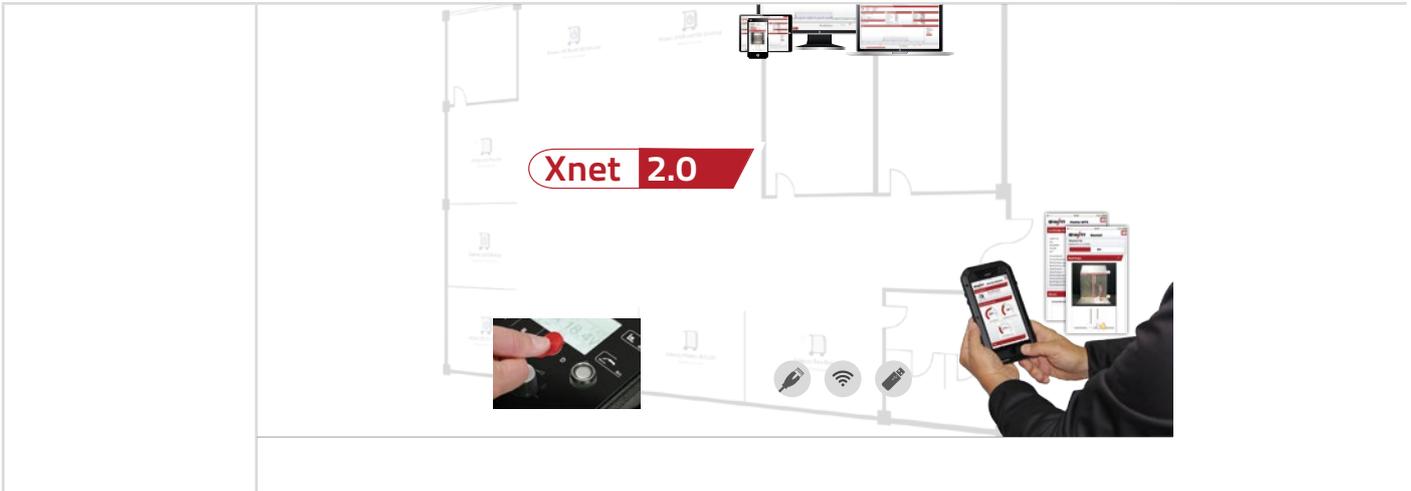
- Reminder in case of due confirmation/extension of welder qualification

The WPQ Manager cannot be readily used in combination with Xnet products

Type	Designation	Item no.
WPQ-Manager Server	WPQ Manager: Software for creating and managing welding documentation and welder qualifications as a server solution in the network	091-008837-00000
WPQ-X Manager (Upgrade 1)	Xnet software module for WPS creation and management	090-008814-00000

Structure of an Xnet system

Step 1 Configuring the software according to customer requirements



More information can be found in the Xnet price list and in the online shop:
www.ewm-sales.com/Xnet

Step 2 Configuring the hardware according to customer requirements

	EWM machines	Machines from other manufacturers
	<p>Xnet retrofitting for all EWM welding machines with 7-pole, digital interface</p> 	

Step 3 Defining the number of machine usage licences

	Not required
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Step 4 Commissioning and training by EWM

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■ For detailed questions about Xnet: xnet@ewm-group.com

Software/Xnet

EWM Xnet welding management system

Xnet Extended-Set LAN



- Xnet retrofitting set for LAN consisting of:
- One Xnet LAN gateway in a robust industry-compatible casing
- One machine usage licence
- One network cable (10 m)
- One 7-pole connection cable (5 m)

Range of functions:

- Connecting welding machines without integrated Xnet components to an Xnet system (for all EWM machines with integrated 7-pole interface)
- Data transfer via network cable
- USB interface for data recording and data transfer
- Connection of a barcode scanner possible
- Registration option via Xbutton
- Digital display with click wheel operation
- Showing the following information on the display: network status, network configuration, nominal/actual welding parameters, JOB information, Xnet monitoring of the welding parameters in real time, WPQR welding data assistant, component information, errors and warnings in the system

We offer bulk prices, use the price advantage

Type	Designation	Item no.
Xnet Extended-Set LAN	Xnet retrofitting set LAN: One machine licence, one LAN gateway, one network cable (10 m), one 7-pole connection cable (5 m), including connection for barcode scanner	091-008833-00001

Xnet Extended-Set WiFi



- Xnet retrofitting set for WiFi consisting of:
- One Xnet WiFi gateway in a robust industry-compatible casing
- One machine usage licence
- One 7-pole connection cable (5 m)

Range of functions:

- Connecting welding machines without integrated Xnet components to an Xnet system (for all EWM machines with integrated 7-pole interface)
- Data transfer via WiFi or network cable
- USB interface for data recording and data transfer
- Connection of a barcode scanner possible
- Registration option via Xbutton
- Digital display with click wheel operation
- Showing the following information on the display: network status, network configuration, nominal/actual welding parameters, JOB information, Xnet monitoring of the welding parameters in real time, WPQR welding data assistant, component information, errors and warnings in the system

We offer bulk prices, use the price advantage

Type	Designation	Item no.
Xnet Extended-Set WiFi	Set: One machine licence, one Wi-Fi gateway, one 7-pole connection cable (5 m)	091-008834-00001

Universal logger Base



- Complete set for connecting Xnet to all manufacturers' welding machines
- Parameter recording of: Welding current and voltage, wire feed speed and welding time

Set contents: External measuring unit, voltage measurement adapter, ammeter cable

- With the Xnet Universal logger, welding machines from all manufacturers can be connected to an Xnet gateway and the Xnet software.
- Almost all Xnet functions can be used, such as e.g.:
- Two different options are available for recording the wire feed speed of the connected welding machine:
 - 1) Mathematical calculation of the wire feed speed based on the measured welding current without an additional EMU WF 1 sensor wire sensor
 - 2) Metrological recording of the wire feed speed using the wire sensor EMU WF 1 sensor

Type	Designation	Item no.
Universal logger Base	Complete set for connecting Xnet to all manufacturers' welding machines	091-008842-00000

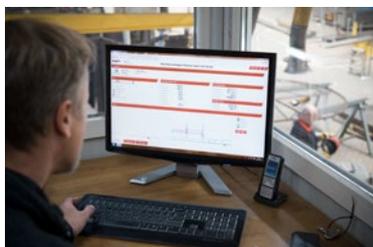
Universal logger DGC



- Complete set including gas measurement for connecting Xnet to all manufacturers' welding machines
- Parameter recording of: Welding current and voltage, wire feed speed, welding time and shielding gas quantity
- Set contents: External measuring unit including gas quantity measurement, voltage measurement adapter, ammeter cable, gas hose
- With the Xnet Universal logger, welding machines from all manufacturers can be connected to an Xnet gateway and the Xnet software.
- Almost all Xnet functions can be used, such as e.g.:
- Two different options are available for recording the wire feed speed of the connected welding machine:
 - 1) Mathematical calculation of the wire feed speed based on the measured welding current without an additional EMU WF 1 sensor wire sensor
 - 2) Metrological recording of the wire feed speed using the wire sensor EMU WF 1 sensor

Type	Designation	Item no.
Universal logger DGC	Complete set including gas measurement for connecting Xnet to all manufacturers' welding machines	091-008843-00000

-Xnet Workshop-



- The main goal of the workshop is to be able to use the full extent of Xnet and for participants to be able to determine the potential for their own companies. Participants must recognise the advantages of using the system in their daily work. At the same time, customer suggestions for future updates are noted and identified. The workshop forms the basis of implementation of the Xnet system in the ongoing welding production process. To sum up, the workshop, along with the EWM experts, helps to recognise daily benefits, reduce costs and increase the day-to-day efficiency. The result of the decision will prove the correctness of your decision and open up new possibilities for cooperation with EWM.

Type	Designation	Item no.
Xnet Workshop	Xnet workshop "Working efficiently with Xnet"	KOS-V00076-00000
KOS28	Hourly rate for installation and commissioning of the Xnet system	KOS-V00028-00000

► More Xnet components such as scanners and Xbutton sets can be found in the Xnet price list and in the online shop!

Degaussing prior to welding



Degauss 600

Magnetism is not desired where steel is welded. Undesired residual magnetism in steel parts results in an unstable and deflected arc. The effect may be so great that welding is impossible.

When using the Degauss 600, you can degauss your materials and workpieces. Following the easy installation of the components at the workpiece, the continuous degaussing process will automatically be completed within the shortest possible time.

The effect of the degaussing will show immediately in the subsequent welding process. Your welding results speak for themselves: The arc is stable and no longer deflected, there are no unnecessary arc striking spots, sidewalls are fused without lack of fusion, perfect results without rework or scrap are achieved.

Your benefits

- / Degaussing of magnetic materials and workpieces
- / Single button operation – automatic degaussing
- / Stable welding process without magnetic deflection – perfect welding result without finishing work



Your benefits

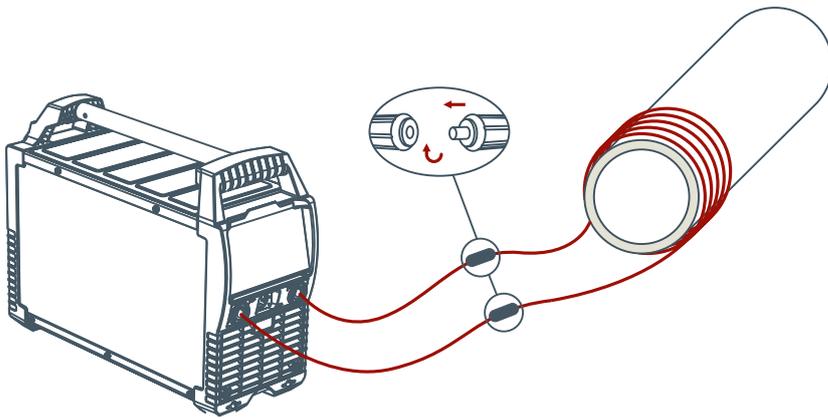
User's advantages

- / No deflection of the arc by residual magnetism in the workpiece
- / Avoidance of lack of fusion due to insufficient side-wall fusion
- / Minimisation of finishing work
- / Cost-efficient and high-quality results
- / Degaussing of pipes and metal sheets



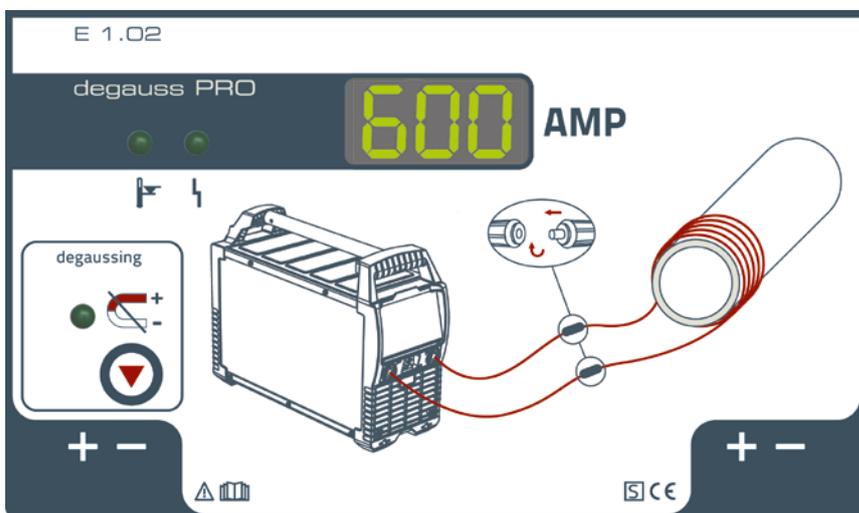
Very straightforward handling

- / The set includes all components required for degaussing
- / Quick connection at the pipe by means of three load cables
- / Single button operation
- / Automatic degaussing process
- / Use at -25 °C to +40 °C with mains voltage tolerances of +/-20%
- / Portable and robust



Degauss 600

- / Compact degaussing power source suitable for use at the construction site
- / Single button operation
- / Automatic degaussing process



Degaussing Degauss

-Degauss 600 Set-



- Set: Degauss 600 degaussing machine, two 5 m load cables (35 mm²) and one 20 m load cable (35 mm²), RT DGS1 remote control including 5 m connection cable

Degauss – automatic degaussing process before welding:

- dependable degaussing for better welding results through stable welding process without magnetic deflection, minimisation of finishing work

activgauss (10–250 A) – degaussing during welding:

- avoids moving up of magnetic field during the welding process in case of very long and strongly magnetised components
- Quick connection to the component thanks to the practical load cable set
- Unlimited generator operation even with long mains leads thanks to high mains voltage tolerances
- Robust design suitable for construction site use
- Impact-resistant casing
- Inspected protection against splash water (IP-34s)
- Portable, shoulder strap

RT DGS1 remote control – controls degaussing during welding (activgauss):

- activates the activgauss function
- Infinitely adjustable current for generation of the required opposing magnetic field
- Pole reversing switch, start/stop function
- Operation directly at the welding site

Recommended accessories: FIM1-4 magnetic field meter for measuring magnetic direct and alternating fields

Advantages of degaussing:

- No deflection of the arc by residual magnetism in the workpiece
- Prevention of lack of fusion due to insufficient sidewall fusion
- Minimisation of finishing work
- Cost-efficient and high-quality results

Version	Degauss 600
Setting range for welding current	10A - 600A
Mains voltage	3 x 400 V (- 25 % - + 20 %)
Mains frequency	50 Hz / 60 Hz
Protection classification	IP34s
Test mark	CE ENEC S
EMC class	A
Dimensions (L x B x H)	539 mm x 210 mm x 415 mm 21.2 inch x 8.3 inch x 16.3 inch
Weight	25 kg 55.1 lbs
Standards	IEC 60974-1 and -10 CL.A

Type	Designation	Item no.
Set Degauss 600	Set: Degauss 600 degaussing machine, two 5 m load cables (35 mm ²) and one 20 m load cable (35 mm ²), RT DGS1 remote control including 5 m connection cable	091-002065-00502

-RT DGS1-



- Remote control with a polarity reversing switch and start/stop function for Degauss 600
- Remote control activates additional function – generation of an opposing magnetic field during the welding process
- Infinitely adjustable current (0% to 100%) to produce the required opposing magnetic field directly at the welding site
- Cable not supplied in delivery, please order connection cable separately

Connection	19-pole
Weight	0.42 kg
Dimensions LxWxH in mm	111 mm x 111 mm x 90 mm
Test mark	CE ENEC

Type	Designation	Item no.
RT DGS1	Degauss remote control	090-008806-00000

Set LC 35 mm²



Type	Designation	Item no.
Set LC 35 mm ²	Set: Two 5-metre load cables (35 mm ²) and one 20-metre load cable (35 mm ²) for degaussing	092-002921-00000

-FIM1-4 Set-



- Magnetic field meter for measuring magnetic direct and alternating fields
- Three possible measuring ranges: 20 mT, 200 mT and 2000 mT
- Hand-held unit for operation with mains, battery or power-pack
- LCD digital display
- Measuring accuracy: $\pm 2\%$ of measured value ± 1 digit using internal calibration voltage, better than $\pm 1\%$ of measured value ± 1 digit using calibrated comparison magnet
- Resolution: 0.01 mT
- Output: ± 199.9 mV analogue output corresponding to 1,999 digits, connection for analogue display, X-Y plotter and A-D converter
- Operating time: about 100 hours with dry-cell battery, about 50 hours with power-pack charge (power pack not included)

Dimensions (L x B x H)	145 mm x 80 mm x 38 mm
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Type	Designation	Item no.
FIM1-4 Set	Set: magnetic field meter, including Hall effect sensor	092-002937-00000

Services

General information

The global economy is changing continuously. Markets evolve, requirements change, opportunities arise and fade away. Companies that are committed to supporting their customers in this kind of environment must be one thing above all, flexible.

For this reason, the EWM Group is continually expanding its worldwide presence. Our advanced manufacturing, service and training sites in key industrial and growth regions reinforce our dedication to be as close to our customers as absolutely possible. Continuous expansion of our network with EWM sales offices as well as committed sales and service partners ensures global availability and optimum customer service for the customers who use our products.

We believe that acting in our customers' interests means accepting their challenges as our own. That is why we continuously optimise our product and service offerings. Innovative power electronics, the latest information technology and comprehensive expertise in application issues flow into each of our four service areas and combine to create complete solutions for arc welding that offer real added value.

This price list gives you an overview of the wide range of services from EWM so that you can get the best possible results from our products.

Conditions

- All prices in this price list are net prices excluding any applicable sales or value-added tax and are not subject to any additional discounts.
- The prices remain valid until a new price list is released.
- Subject to technical modification.
- We deliver products and services on the basis of our "General Terms and Conditions of Sale" which can be found at www.ewm-group.com.

Sales and service partners

- Please visit our website at www.ewm-group.com to find the sales and service partner closest to you.

Services

Customised machine configuration

Included in delivery

- Order one or more weld-ready systems and configure them precisely to your requirements by adding relevant accessories and options. Of course, we are also happy to advise you beforehand about the optimum configuration for your welding task. We will assemble the system at our factory according to your specifications and test the system before delivery. The following services are included (varies according to machine type and composition):
- Mounting and assembly of trolley, cooling unit, multi-voltage module, pivot support and other accessories.
- Connection of the intermediate hose package to power source and wire feeder.
- Changing of the wire feed rollers and optimisation of the wire feed roller for your preferred wire.
- Configuration of welding torch: Gas and contact tip plus liner on MIG/MAG torches, tungsten electrode, gas nozzle and collet body on TIG torches.
- Filling of coolant container, connection of mains plug (European standard), gas supply, workpiece lead, etc.
- A trained employee will use pre-programmed JOBS (welding tasks) to perform a test weld using the wire/gas combination that you specify.

Costs

Type	Designation	Item no.
KOS25	Customised configuration with assembly for portable and compact systems	KOS-V00123-00000
KOS26	Customised configuration with assembly for decompact systems	KOS-V00122-00000

Services Commissioning

Included in delivery

- On-site assembly of individual components
- Connection of the hose packages and welding cables
- Connection of the supply lines (e.g. gas, mains, compressed air connection, etc.)
- Insert and inch in the welding filler (MIG/MAG)
- Adjust the wire feed system and the gas quantity
- Explanation of basic functions and test welding
- Tips on servicing and maintaining the machine
- If requested (and following written or verbal agreement), we will be happy to provide additional training after commissioning (see Chapter Instruction/Basic Training).

Costs

KOS3	Manual welding: hourly rate for welding experts, electrical engineers	KOS-A00000-00002
KOS4-I	Automated welding: Hourly rate for welding experts, electrical engineers, test welding	KOS-A00000-I0003
KOS49-01	Automated welding: Hourly rate for welding experts, electrical engineers, process supervision	KOS-V00013-00001
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

► The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Services

Instruction/basic training

Duration: 1 hour

Included in delivery

- In combination with the “customised machine configuration”, we offer you on-site commissioning. On the agreed date we commission your system at the place of installation, adjust the parameters to your current application and instruct you on the functions of the system.

Costs

Type	Designation	Item no.
KOS27	Commissioning: 1 hour	KOS-V00027-00000
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

- ▶ The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Duration: 2 hours

Included in delivery

- This detailed two-hour instruction/basic training is designed to give you a more in-depth overview of the functionality and performance of our machines. Building upon the one-hour instruction, all functions on the welding machine are explained in detail. We closely examine your configuration and applications in order to jointly optimise the welding process with you.

Costs

Type	Designation	Item no.
KOS29	Instruction/basic training: 2 hours	KOS-V00029-00000
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

- ▶ The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Services

Machine updates

Included in delivery

- Delivery of the machine to EWM Service in Mündersbach or on-site update
- Check of the existing software/machine version
- Machine updated to the latest software version

Costs

- You will be charged for replacement circuit boards and time spent. Freight costs for delivery and return will be charged according to the volume of the goods being sent.

Notes

- Replacement circuit boards and any other necessary parts and software are invoiced according to the currently valid price list or, if available, the valid price quotation.

KOS29	Machine update, hourly rate for welding experts, electrical engineers	KOS-S00015-00000
KOS29-I	Machine update, hourly rate for development staff, technicians/engineers	KOS-S00015-I0000
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

- The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Services

Calibration

Included in delivery

- Our calibration service is designed for those with the highest quality expectations.
- One of our service technicians uses a calibration device to adjust your welding machine. We are also happy to provide this service on-site.

Costs

- Freight costs for delivery and return will be charged according to the volume of the goods being sent.
- Determining welding parameters under load
- Correction of deviations
- Documentation of measurement values
- Quality assurance for reproducible welding results

Type	Designation	Item no.
KOS60	Calibration costs per welding machine	KOS-S00018-00000
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

- The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Services

Parameter determination/characteristics/process optimisation

Parameter determination

Included in delivery

- The welding machine required for the following services plus common gases and welding consumables are provided by EWM.
- If special gases, parent metals and consumables are needed for parameter determination/finding of characteristics, these must be provided in adequate quantities.
- You are required to deliver to your site at no charge your supplied samples, as well as the gases, parent metals and welding consumables. The freight costs for the return delivery are calculated based on the volume of goods dispatched.
- Any parts and software required will also be charged as per the quotation or the current price list.
- Parameters adjusted to your requirements

Costs

KOS3	Manual welding: hourly rate for welding experts, electrical engineers	KOS-A00000-00002
KOS4-I	Automated welding: Hourly rate for welding experts, electrical engineers, test welding	KOS-A00000-I0003
KOS3-I	Hourly rate for development staff, technicians/engineers	KOS-A00000-I0002

Preparing a characteristic

- You will receive from us a characteristic optimised for your requirements from our data pool.

Costs

KOS51	Fixed price per characteristic	KOS-A00007-00001
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Creating a new characteristic at our site

Included in delivery

- We create for you a new, customised characteristic in accordance with your requirements (welding task, parent metal, welding consumable, gas, etc.)

Costs

KOS3	Manual welding: hourly rate for welding experts, electrical engineers	KOS-A00000-00002
KOS4-I	Automated welding: Hourly rate for welding experts, electrical engineers, test welding	KOS-A00000-I0003

Process optimisation

Included in delivery

- Process optimisation or new determination according to your requirements.
- Because any process optimisation requires a customised solution, we are unable to give a more precise description here.

Costs

KOS49	Manual welding: hourly rate for welding experts, electrical engineers	KOS-V00013-00000
KOS49-01	Automated welding: Hourly rate for welding experts, electrical engineers, process supervision	KOS-V00013-00001
KOS4-I	Automated welding: Hourly rate for welding experts, electrical engineers, test welding	KOS-A00000-I0003
KOS49-I	Hourly rate for development staff, technicians/engineers	KOS-V00013-I0000
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

► The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Services

Demonstrations/training

Demonstrations/demonstration machines

Included in delivery

- We demonstrate for you the main features and functions as well as the performance capabilities of the machines.
- Welding on sample panels to demonstrate the various functions is included, highlighting the advantages to the user.
- Please bear in mind that a demonstration does not represent any form of training and cannot replace a training course.
- We can provide you with a machine for a long-term test. To do this, we conclude a contract with you for limited-time use of the machine in return for a fee.

Costs

Type	Designation	Item no.
KOS3	Manual welding: hourly rate for welding experts, electrical engineers	KOS-A00000-00002
KOS4-I	Automated welding: Hourly rate for welding experts, electrical engineers, test welding	KOS-A00000-I0003
KOS3-I	Hourly rate for development staff, technicians/engineers	KOS-A00000-I0002
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

► The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Training courses/advanced training courses/presentations

Included in delivery

- We offer our customers and sales partners training courses on our products, we present all new developments in our training news, we conduct welding training with different materials and help you develop excellence when it comes to service.
- An updated training calendar with detailed information about individual training events is available at www.ewm-group.com in the Download area under the Service heading.

Costs

- Free of charge in Mündersbach for sales partners
- On-site: Free of charge for sales partners, plus any travel costs, accommodation and expenses incurred, purchase of workpieces, welding consumables, gases, etc.
- On-site: Plus any costs for travel and accommodation as well as expenses incurred, purchase of workpieces, welding consumables, gases, etc.

Type	Designation	Item no.
TRAINING 1	Standard training courses (according to training calendar)	KOS-V00017-00000
TRAINING 2	Special training courses (topics at customer's request not already covered in training calendar)	KOS-V00017-00001
TRAINING 3	Expert training courses (highly specialised, by development staff)	KOS-V00017-00002
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

► Please note that for cancellations received less than 7 days before the start of the training course, the full course fee is payable, and for complimentary courses, €50.00 is payable for each participant.

Services

Service: Servicing and repair (incl. repetition test)

Included in delivery

- Repair or servicing, including repetition test, on-site or at EWM.

Costs

- The cost for this service is calculated from the work expense plus any applicable material costs. Spare parts required for repairs will be calculated upon the basis of the currently valid price list or a valid price quotation, to the extent not covered by our warranty terms (see Chapter Warranty Declaration).
- Freight costs for delivery and return will be charged according to the volume of the goods being sent.

Notes

- If requested, we will be happy to provide a cost estimate for the service. Cost estimates are invoiced at a flat rate of €50.00 (KOS-S00011-00000).
- These costs are not applied if the repair work is carried out.

KOS15	Hourly rate for electrical engineers	KOS-S00001-00000
KOS2	Hourly rate for test	KOS-S00002-00000
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

- The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Services

Metallurgic testing

At the EWM site

Included in delivery

- Non-destructive and destructive test of your welding samples
- Metallurgic testing of your welded sample
- Extensive report with results of the test

Costs

- Freight costs for delivery and return will be charged according to the volume of the goods being sent.

Type	Designation	Item no.
KOS54	Hourly rate for metallurgic testing	KOS-A00009-00000
KOS3	Manual welding: hourly rate for welding experts, electrical engineers	KOS-A00000-00002
KOS4-I	Automated welding: Hourly rate for welding experts, electrical engineers, test welding	KOS-A00000-I0003
KOS3-I	Hourly rate for development staff, technicians/engineers	KOS-A00000-I0002

- The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Services

Welding tests/sample welds

At EWM's site

Included in delivery

- Welding of samples with our machines
- Welding report with results
- The welding machine required and the standard gases and welding consumables are provided by EWM.
- If we will need special gases, parent metals and consumables for your sample welds, these must be provided in adequate quantities.

Costs

- Freight costs for delivery and return will be charged according to the volume of the goods being sent.

KOS3	Manual welding: hourly rate for welding experts, electrical engineers	KOS-A00000-00002
KOS4-I	Automated welding: Hourly rate for welding experts, electrical engineers, test welding	KOS-A00000-I0003

On-site

Included in delivery

- Welding of samples with our machines
- Welding report with results

Costs

- Freight costs for delivery and return will be charged according to the volume of the goods being sent.

KOS3	Manual welding: hourly rate for welding experts, electrical engineers	KOS-A00000-00002
KOS4-I	Automated welding: Hourly rate for welding experts, electrical engineers, test welding	KOS-A00000-I0003
KOS24	Mileage allowance	KOS-S00010-00000
KOS57	Hourly rate for travel expenses for technicians and engineers	KOS-V00057-00000

► The hourly rates given exclude any travel and accommodation costs incurred, as well as expenses!

Services

Rent/leasing/financing

Are you interested in a welding machine and would like to receive a price quotation? We are available to help at any time and will be happy to work with you to create a rental or leasing contract adapted to your requirements.

Welding machines are capital investments. For this reason, the decision to purchase such a product is influenced not only by good welding characteristics, but also to a large extent by a good return on investment. However, at first glance returns often appear insufficient.

For example, short-term, seasonal peaks in orders, special orders or other special occasions (training, welder tests, etc.) may cause capacity bottlenecks in your production, but the temporary nature of these events does not justify the procurement costs of a new machine, causing the investment to appear not worthwhile.

In other cases, you may have an urgent need to expand long-term capacity, but find it impossible to finance the purchase at the current time. Or perhaps you simply want to experience the quality of our machines over a longer period of time before making a purchase decision.

In order to react flexibly to all of these scenarios, we offer you the option of renting or leasing one or several welding machines as an alternative to a direct purchase.

• **Renting EWM welding machines**

- Cover short-term production bottlenecks with the latest EWM technology.
- Durations and rent are agreed individually.
- At the end of the contract duration, return the machine without surcharges or choose to purchase the machine with partial accounting of previous rental payments.
- Tax advantages: Rental payments may be deducted as operational expenses.

• **Leasing EWM welding machines**

- Transparent, uniform rates facilitate reliable planning
- Individualised determination of leasing rates, durations and closing charges
- Pay-as-you-earn: The leasing rates are incurred parallel to the use of the machine and can therefore be financed from the profits.
- This allows you to make a large investment without committing a large amount of capital.
- Tax advantages: Leasing charges may be deducted as operational expenses.

Services

General assembly and service conditions

The setup, commissioning or repair of systems supplied, and the instruction of operating staff on those systems, are undertaken on acceptance of the following conditions. The Assembly and Service Terms and Conditions are based on our General Terms and Conditions of business. These terms supplement and specify the general terms for the areas of assembly and service.

- The ordering party shall ensure that all preparations required for on-site completion of assembly work are carried out to ensure that the work can be started immediately on arrival. The connections for operating power and water must be provided up to the supply point, among other things. If the setup and commissioning of systems is delayed or prevented due to circumstances not under our control, the ordering party shall bear the costs for sending the personnel (travel costs, hourly rates, daily allowance, etc.) Not included in our services are electrical cabling at the installation site from the switching cabinet to the individual power consumers including installation material, prop supports, building, plastering and painting work, pneumatic and water installations, roofing and other building and additional work required. Any crane and scaffolding work required shall be carried out by the customer.
- The assembly and service rates, unless otherwise agreed, are calculated on the basis of time (incl. travel and waiting time) and costs. The following are also subject to charges: Allowances, accommodation, travel expenses and preparation costs required for assembly. For assembly work abroad, the additional costs, e.g. for obtaining visas, for any medical examination costs and immunisations, will be billed at cost. If additional safety tests are required for the work, e.g. radiation passport, these formalities must be completed in advance by the ordering party. The use of materials will be charged at cost + sales tax at the relevant prices valid at the time. The calculation will be carried out based on the work documentation from our engineers. The engineers are required to present their work documentation on completion of work (for extended assignments on a weekly basis) to our customers for signature. This shall also apply for flat-rate assembly work. For extended assemblies, monthly partial invoices will be generated. Time and materials required for assembly and service are acknowledged by signature, making them binding for both sides. If the ordering party refuses to sign, it shall submit a written declaration immediately to that respect. If our staff are not able to obtain the signature for any other reason, the details given on the customer service invoice shall be assumed to be agreed upon. Our engineers are not authorised to submit legally binding declarations on our behalf. All agreements not covered by the assembly and service conditions shall require written confirmation.
- Cost proposals are produced to the best of our knowledge, but are not binding. Should the price given in advance increase significantly during the maintenance work, consultation will be sought. Generation of a cost estimate is subject to a flat charge (€50.00 per estimate) but will be reimbursed when the associated contract is signed. The prices given in the cost estimates are valid for one month. Maintenance jobs with a low value are also carried out without providing a cost estimate in advance.
- Wage costs: Per working hour (worktime, waiting time, travel time and preparation time for staff on-site and office staff), based on 40 hours per week of 5 working days. Overtime and surcharges are not charged by EWM!
- Expenses are charged in accordance with the relevant regional regulations on travel costs.
- Travel and freight costs: We calculate the actual outlay incurred for transporting staff, their tools and their luggage, if incurred via public transport. When using motor vehicles (cars and service vehicles) we calculate €0.60/km. When using the train, we calculate 2nd class for travel in both directions. Flight costs will be charged at Business Class. Freight costs, for travel in both directions, for machines sent in for maintenance will be billed to the customer.
- Overnight stays will be charged at cost. Daily allowances and overnight stays are also charged for Sundays and holidays when the engineer is not working and does not travel home for cost reasons.
- The payment conditions in our general terms and conditions of business and delivery shall apply over and above any other agreements made where applicable. Unless written authorisation is provided, our engineers are not authorised to receive payments on our behalf. The payment due date for all services shall be 14 days net.
- Our services are provided in the German or English language. Should other languages be required, an interpreter should be procured by the customer!
- These general assembly and service terms and conditions shall apply from January 1, 2012. All previous assembly and service conditions are hereby invalidated.

Services

Disposal of old equipment

Germany's Used Electrical Equipment Law (Elektro-Altgeräte-Gesetz) stipulates that this machine does not belong in domestic waste. The machine contains valuable raw materials, which should be recycled, and electronic components, which must be disposed of. Do not dispose of the machine in household waste! Observe local regulations on disposal!

EWM participates in an approved waste disposal and recycling scheme and is registered in the National Register for Waste Electric Equipment (EAR) with reference number WEEE DE 57686922.

Please contact EWM regarding the options for returning your used electrical equipment: info@ewm-group.com

Machines can also be returned to EWM sales partners across Europe.

Manufacturer's declaration to end user

- According to European provisions (Directive 2012/19/EU of the European Parliament and the Council of 13 August 2012), used electric and electronic equipment may no longer be placed in unsorted municipal waste. It must be collected separately. The symbol depicting a waste container on wheels indicates that the equipment must be collected separately. Please help to protect the environment and ensure that this machine is placed in the appropriate collection category when you no longer wish to use it.
- German law (reform of the law governing the distribution, taking back and environmentally correct disposal of electric and electronic equipment [ElektroG] dated 20 October 2015) states that you are required to place used machines in a collection system separate from unsorted municipal waste. It is possible that legally authorised disposal authorities will also collect used equipment from private households.
- Please refer to your local waste collection calendar or ask your state or municipal government about options available in your area for returning or collecting used equipment.

Compliance with RoHS requirements

- We, EWM AG in Mündersbach, Germany, hereby confirm that all products which we supply to you that are subject to the RoHS Directive comply with RoHS requirements (Directive 2011/65/EU).

Packaging return

- German packaging legislation states that EWM is obliged to take back product packaging and guarantee its recycling or disposal. We work with an approved disposal system to meet these requirements.
- Packaging can be returned to any EWM sales partner after purchase. Please contact EWM directly in the case of machines purchased online.



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EWM is your partner for the best welding technology. With EWM, you'll weld more efficiently, more reliably and produce higher-quality results. EWM's innovative systems, high-performance welding procedures, digital technologies and services, and expert consultation all support you in achieving perfect results from your welding tasks.

www.ewm-group.com/en/

The content of this document has been researched, prepared and reviewed with all reasonable care. The information provided is subject to change; errors excepted.