

Welding torches and wear parts

MIGATRONIC

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Switch on, Press and Weld

MIGATRONIC

Being one of the leading suppliers of professional welding solutions, Migatronic focuses on developing and supplying highquality welding torches for MIG/MAG, TIG, MMA and plasma welding. Migatronic welding torches are in Ergonomically correct design; they fit both right and left hands and welders avoid straining wrists and fingers.

IN THIS CATALOGUE YOU WILL FIND INFORMATION ABOUT:

- Welding Torches
- Technical Data

CONTACT

If you have any questions please do not hesitate to contact us.

For terms of sale and delivery and warranty conditions please refer to **www.migatronic.com**

Air-cooled MIG welding torches

MIG-A Twist®

- Turnable swan neck
- Ergonomically correct working posture whichever welding angle you use
- Can be turned up to 90° in both directions. step-by-step at intervals of 15°
- Available in 60 different configurations
- Accessories: gas nozzles, swan necks, gas diffusers and liners
- Three different modules can be mounted/remounted at the handle
- Suits all welding machine makes

Art. no.	Model
80191174	ML140 Softgrip 360° 3m 0.8 ZA
80197150	ML150 Twist 3m 0.8
80197151	ML150 Twist 4m 0.8
80197153	ML150 Twist 5m 0.8
80197156	ML150 Twist 3m 1.0 Alu
80196150	ML150 Twist R 3m 0.8
80196151	ML150 Twist R 4m 0.8
80196155	ML150 Twist R 3m 1.0 Alu
80191180	ML161 3m RallyMIG 161i
80191181	ML161 Softgrip 360° 3m 0.8 ZA
80191182	ML161 Softgrip 360° 3m 0.8 XE
80197240	ML240 Twist 3m 0.8
80197241	ML240 Twist 4m 0.8
80197243	ML240 Twist 5m 0.8
80197242	ML240 Twist 3m 1.0 ALlu
80197244	ML240 Twist 3m 1.0 Alu/Stainless
80197246	ML240 Twist 3m 1.2 Alu
80197247	ML240 Twist 30° 3m 1.2 Alu
80196240	ML240 Twist R 3m 0.8
80196243	ML240 Twist R 3m 1.0 Alu
80196244	ML240 Twist R 3m 1.2 Alu
80196249	ML240 Twist R 3m 1.2 Alu/Cu
80196241	ML240 Twist R 4m 0.8
80196245	ML240 Twist R 4m 1.0 Alu
80191190	ML241 Softgrip 360° 3m 1.0
80191191	ML241 Softgrip 360° 4m 1.0
80191192	ML241 Softgrip 360° 4m 1.2

All models are supplied with Spring Pin.

ABBREVIATIONS MIG:

- ML** = Migatronic air-cooled torch
- 300** = Model size
- R** = Remote control/Dialog
- 8 m** = Length
- AH** = Advanced handle/Manager
- Alu** = Aluminum
- ZA** = Euro connection
- FKS** = Double cooling chamber with extra cooling of gas nozzle
- KD** = Separate tip adaptor (changeable tipholder)



Art. no.	Model
80197250	ML250 Twist 3m 0.8
80197251	ML250 Twist 4m 0.8
80197253	ML250 Twist 5m 0.8
80197254	ML250 Twist 3m 1.0
80196250	ML250 Twist R 3m 0.8
80196251	ML250 Twist R 4m 0.8
80196252	ML250 Twist R 3m 1.0 Alu
80196257	ML250 Twist R 4m 1.0 Alu
80197300	ML300 Twist 3m 1.0
80197301	ML300 Twist 4m 1.0
80197303	ML300 Twist 5m 1.0
80197304	ML300 Twist 3m 1.0 Alu
80197302	ML300 Twist 4m 1.2
80196300	ML300 Twist R 3m 1.0
80196301	ML300 Twist R 4m 1.0
80197360	ML360 Twist 3m 1.0
80197361	ML360 Twist 4m 1.0
80197363	ML360 Twist 5m 1.0
80197364	ML360 Twist 4m 1.2
80197374	ML360 Twist 3m 1.6
80196360	ML360 Twist R 3m 1.0
80196361	ML360 Twist R 4m 1.0
80197381	ML380 HD Twist 4m 1.2
80197400	ML400 Twist 3m 1.2
80197401	ML400 Twist 4m 1.2
80197403	ML400 Twist 5m 1.2
80197500	ML500 Twist 3m 1.2
80197501	ML500 Twist 4m 1.2
80197503	ML500 Twist 5m 1.2

MODEL TWIST	ML 140	ML 150/150C/161	ML 240/241	ML 250	ML 300	ML 360	ML 380	ML 400	ML 500
Duty cycle CO ₂ 60%	120 A	180 A	250 A	230 A	295 A	380 A	380 A	400 A	500 A
Duty cycle CO ₂ 100%	100 A	160 A	225 A	205 A	260 A	400 A		350 A	450 A
Mixgas 60%	160 A	170 A	220 A	225 A	255 A	310 A	350 A	360 A	450 A
Mixgas 100%	140 A	150 A	195 A	200 A	225 A	270 A		310 A	400 A
Gas flow +/-5%	15 l/min.*	15 l/min.*	15 l/min.*	15 l/min.*	15 l/min.*	15 l/min.*	15 l/min.*	18 l/min.*	20 l/min.*
Wire diameter. mm	0.6-1.2	0.6-1.2	0.6-1.6	0.6-1.6	0.6-1.6	0.6-1.6	0.6-1.6	0.8-2.4	0.6-2.4
Cable, mm ²	16	16	25	25	35	50	50	55	55
Weight, kg	0.9 kg	0.9 kg	1.2 kg	1.3 kg	1.6 kg	1.8 kg	1.9 kg	1.9 kg	2.0 kg
Total weight kg, 3 m	1.8 kg	1.8 kg	2.1 kg	2.1 kg	2.5 kg	2.9 kg	3.0 kg	3.5 kg	3.6 kg
Connection	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA

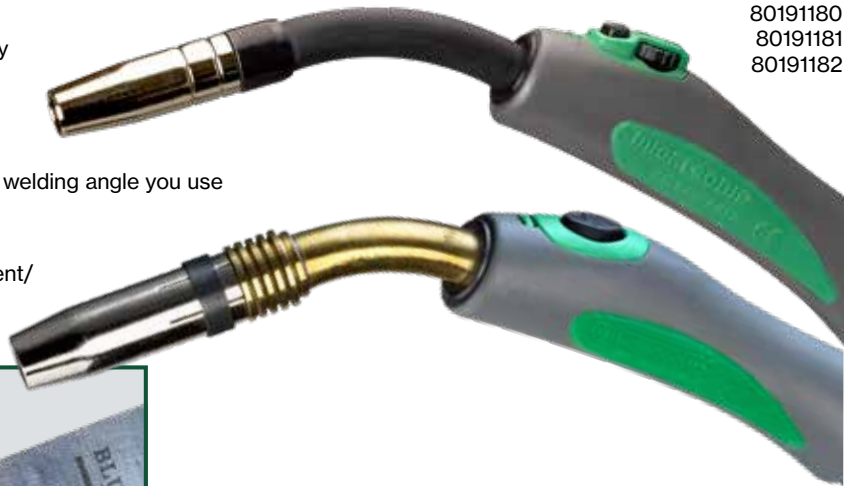
* = Minimum gas flow for compliance with maximum performance

Air-cooled MIG welding torches

ML 161 & ML 241

- Small handle, ease of operation and large flexibility
- Ball-and-socket joint between hose and handle
- Softgrip on the side of the handle
- The swan neck can be turned 360° without tools
- Ergonomically correct working posture whichever welding angle you use
- Supplied with a standard range of gas nozzles, swan necks, gas diffusers and liners
- A module for infinitely variable adjustment of current/wire can be mounted/remounted at the handle

ML161 Softgrip
80191180
80191181
80191182



ML241 Softgrip
80191190
80191191
80191192

The swan neck can be turned 360° without tools



Art. no. 80300100
Keypad unit
Standard equipment



Art. no. 80300273
Keypad unit with
horizontal MIG
control knob (RH).

Note:
Automig XE requires
electronic box MPS-4TF.
Art. no. 76116982

Connection X

1972 - 1988

Automig 120
Automig 140
Automig 160

Automig 180 X
Automig 185 X
Automig 200 X
Automig 250 X



Connection XE

1988 - 1998

Automig 180 XE
Automig 200 XE



ML 150C

Art. no.	Model
80191177	ML150C/ XR 3m 0.8
80191178	ML150C / XE 3m 0.8
80191179	ML150C ZA 3m 0.8



Connection ZA

1998 -

Automig 181
Automig 183
Automig 221
Automig 223
Automig 231
Automig 271
Automig 273
Automig 250 XE



Air-cooled MIG welding torches



Trigger and trigger stop
Trigger with soft bottom stop and changeover between short and long travel.

- 1. Trigger with microswitch complete MIG-A Twist
Art. no. 80100420
- 2. MIG-A Twist
Trigger adjust PAL
Art. no. 45050418



All models are supplied with ball-and-socket joint with spring pin.

- Spring pin for ZA air
Art. no. 80100810
- Spring pin for ZA water
Art. no. 80100811



Ball-and-socket joint



ZA, water cooling

* = Recommended. (*) Not recommendable for maximum performance. ¹⁾ Control unit is optionally available.

WELDING TORCHES		RallyMig 161i	Automig 230	Automig 270	Sigma One 230	Sigma One 270	Automig 300 Pulse	Omega Yard 300	Sigma One / Sigma Core / Sigma Select 300 C / S	Sigma One / Sigma Core / Sigma Select 400 C / S	Sigma One / Sigma Core / Sigma Select 550 C / S
80191174 ¹⁾	ML140 Softgrip 360° 3m 0.8 ZA		(*)	(*)	(*)	(*)		(*)			
80197150	ML150 Twist 3m 0.8		(*)	(*)	(*)	(*)		(*)			
80197151	ML150 Twist 4m 0.8		(*)	(*)	(*)	(*)		(*)			
80197153	ML150 Twist 5m 0.8		(*)	(*)	(*)	(*)		(*)			
80197156	ML150 Twist 3m 1.0 Alu		(*)	(*)	(*)	(*)		(*)			
80196150	ML150 Twist Reg. 3m 0.8		(*)	(*)	(*)	(*)		(*)			
80196155	ML150 Twist Reg. 3m 1.0 Alu		(*)	(*)	(*)	(*)		(*)			
80196151	ML150 Twist Reg. 4m 0.8		(*)	(*)	(*)	(*)		(*)			
80191180 ¹⁾	ML161 3m RallyMIG 161i	*									
80191181 ¹⁾	ML161 Softgrip 360° 3m 0.8		(*)	(*)	(*)	(*)		(*)			
80197240	ML240 Twist 3m 0.8		*	*	*	*	*	*	*		
80197242	ML240 Twist 3m 1.0 Alu		*	*	*	*	*	*	*		
80197246	ML240 Twist 3m 1.2 Alu		*	*	*	*	*	*	*		
80197247	ML240 Twist 30° 3m 1.2 Alu		*	*	*	*	*	*	*		
80197244	ML240 Twist 3m 1.0 Alu/Stainless		*	*	*	*	*	*	*		
80197241	ML240 Twist 4m 0.8		*	*	*	*	*	*	*		
80197243	ML240 Twist 5m 0.8		*	*	*	*	*	*	*		

An overview of control units can be found on page 15.

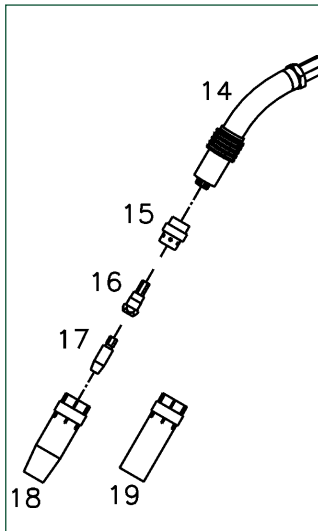
Air-cooled MIG welding torches

An overview of control units can be found on page 15.

WELDING TORCHES		RallyMig 161i	Automig 230	Automig 270	Sigma One 230	Sigma One 270	Automig 300 Pulse	Omega Yard 300	Sigma One / Sigma Core / Sigma Select 300 C / S	Sigma One / Sigma Core / Sigma Select 400 C / S	Sigma One / Sigma Core / Sigma Select 550 C / S
80196240	ML240 Twist Reg. 3m 0.8		*	*	*	*	*	*			
80196243	ML240 Twist Reg. 3m 1.0 Alu		*	*	*	*	*	*			
80196244	ML240 Twist Reg. 3m 1.2 Alu		*	*	*	*	*	*			
80196241	ML240 Twist Reg. 4m 0.8		*	*	*	*	*	*			
80196238	ML240 Twist Reg. 3m 0.8 steel		*	*	*	*	*	*			
80196239	ML240 Twist Reg. 4m 0.8 steel		*	*	*	*	*	*			
80196245	ML240 Twist Reg. 4m 1.0 Alu		*	*	*	*	*	*			
80196246	ML240 Twist Reg. 4m 1.2 Alu		*	*	*	*	*	*			
80196249	ML240 Twist Reg. 3m 1.2 Alu/Cu		*	*	*	*	*	*			
80191190 ¹⁾	ML241 Softgrip 360° 3m 1.0		*	*	*	*	*	*			
80191191 ¹⁾	ML241 Softgrip 360° 4m 1.0		*	*	*	*	*	*			
80191192 ¹⁾	ML241 Softgrip 360° 4m 1.2		*	*	*	*	*	*			
80197250	ML250 Twist 3m 0.8		*	*	*	*	*	*			
80197251	ML250 Twist 4m 0.8		*	*	*	*	*	*			
80197253	ML250 Twist 5m 0.8		*	*	*	*	*	*			
80197254	ML250 Twist 3m 1.0 steel		*	*	*	*	*	*			
80196250	ML250 Twist Reg. 3m 0.8		*	*	*	*	*	*			
80196252	ML250 Twist Reg. 3m 1.0 Alu		*	*	*	*	*	*			
80196251	ML250 Twist Reg. 4m 0.8		*	*	*	*	*	*			
80196257	ML250 Twist Reg. 4m 1.0 Alu		*	*	*	*	*	*			
80197300	ML300 Twist 3m 1.0		*	*	*	*	*	*	*		
80197304	ML300 Twist 3m 1.0 Alu		*	*	*	*	*	*			
80197301	ML300 Twist 4m 1.0		*	*	*	*	*	*	*		
80197302	ML300 Twist 4m 1.2		*	*	*	*	*	*	*		
80197303	ML300 Twist 5m 1.0		*	*	*	*	*	*	*		
80196300	ML300 Twist Reg. 3m 1.0		*	*	*	*	*	*	*		
80196301	ML300 Twist Reg. 4m 1.0		*	*	*	*	*	*	*		
80197360	ML360 Twist 3m 1.0								*	*	*
80197374	ML360 Twist 3m 1.6 KD										
80197361	ML360 Twist 4m 1.0								*	*	*
80197364	ML360 Twist 4m 1.2										
80197363	ML360 Twist 5m 1.0								*	*	*
80196360	ML360 Twist Reg. 3m 1.0								*	*	*
80196361	ML360 Twist Reg. 4m 1.0								*	*	*
80197381	ML380 HD Twist 4m 1.2							*	*	*	*
80197400	ML400 Twist 3m 1.2								*	*	*
80197401	ML400 Twist 4m 1.2								*	*	*
80197403	ML400 Twist 5m 1.2								*	*	*
80197500	ML500 Twist 3m 1.2								*	*	*
80197501	ML500 Twist 4m 1.2								*	*	*
80197503	ML500 Twist 5m 1.2								*	*	*

Wear parts for air-cooled MIG welding torches

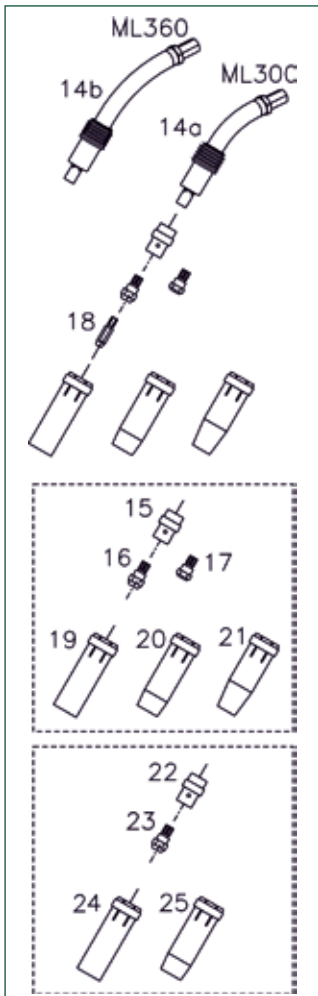
Wear parts for ML 240 Twist / ML 241



Position no.	Art. no.	Description	Min. order quantity
14	80152402	Swan neck ML 240 MIG-A Twist	1
	80152403	Swan neck ML 240 30° Alu	1
	80150039	Swan neck ML 241 w/fitting	1
15	* 83077480	Gas diffuser ML/MV 240 Black	10
	83077481	Gas diffuser ML/MV 240 White	10
16	* 80110604	Tip adaptor ML-MV 240 CuCrZr, 5mm	10
	83077149	Tip adaptor ML-MV 240 brass, 5mm	10
	80110603	Tip adaptor ML-MV 240 brass, 7mm	10
17	80131200	Contact tip - please see page 19	10
18	* 80140610	Gas nozzle ML/MV 240, conic	10
19	80140611	Gas nozzle ML/MV 240, cylindric	10
	81100214	Wearparts box ML 240, 0.6-0.8 steel	1
	81100231	Wearparts box ML 240, 1.0 steel	1
	81100221	Wearparts box ML/MV 240, 1.0 alu	1

* = Pre-assembled as standard

Wear parts for ML 300 Twist / ML 360 Twist

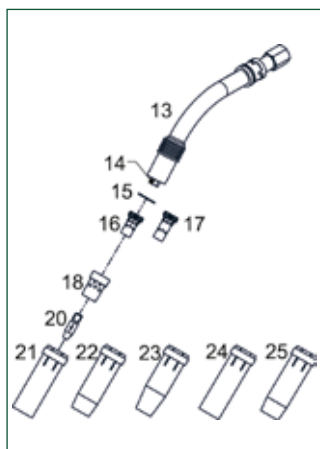


Position no.	Art. no.	Description	Min. order quantity
14a	80152502	Swan neck ML 300 MIG-A Twist	1
14b	80152602	Swan neck ML 360 MIG-A Twist	1
15	* 80120301	Gas diffuser ML 300/360, 30mm white	10
16	* 80112636	Tip adaptor ML 300/360 M8-6, 25mm Brass	10
	80112640	Tip adaptor ML 300/360 M8-6, 25mm CuCrZr	10
17	80110026	Tip adaptor ML 300/360 M8-6, 22mm	10
	80110300	Tip adaptor ML 300/360 M8-8, 23mm	10
18	* 80131201	Contact tip - please see page 19	10
19	80240300	Gas nozzle cylindric, 76mm	10
20	* 80240303	Gas nozzle conic, 76mm	10
21	80240304	Gas nozzle super conic, 76mm	10
22	80120306	Gas diffuser ML 360, 32mm white	10
23	80112637	Tip adaptor ML 300/360 M8-6, 32mm Brass	10
	80112638	Tip adaptor ML 300/360 M8-8, 28mm Brass	10
	80112639	Tip adaptor ML 300/360 M8-8, 32mm Brass	10
24	80140701	Gas nozzle cylindric nickelled, 84mm	10
25	80140700	Gas nozzle conic nickelled, 84mm	10
	81100232	Wearparts box ML 300, 1.0 steel	1
	81100254	Wearparts box ML 300, 1.0 steel CuCrZr	1

* = Pre-assembled as standard

Wear parts for air-cooled MIG welding torches

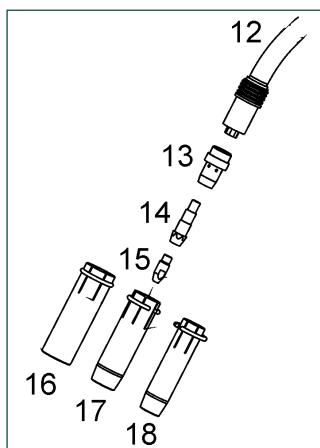
Wear parts for ML 380 Twist



Position no.	Art. no.	Description	Min. order quantity
13	80152605	Swan neck ML 380 MIG-A Twist	1
14	80110413	Tip holder adaptor M10-1*20L HD	10
15	* 80220326	Insulating washer ML 380 HD KD	1
16	* 80110406	Tip adaptor CuCrZr, 25mm	10
17	80110409	Tip adaptor CuCrZr, 29mm	10
18	* 80220309	Gas diffuser white	10
20	80231207	Contact tip - please see page 20	10
21	80240300	Gas nozzle ML/MV cylindric, 76mm	10
22	* 80240303	Gas nozzle ML/MV conic, 76mm	10
23	80240304	Gas nozzle ML/MV super conic, 76mm	10
24	80140701	Gas nozzle cylindric nickelled, 84mm	10
25	80140700	Gas nozzle conic nickelled, 84mm	10

* = Pre-assembled as standard

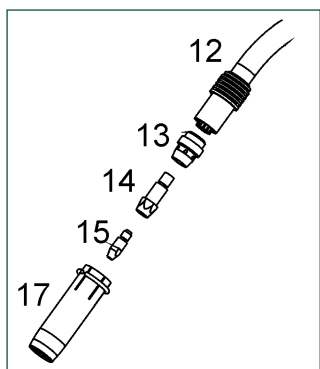
Wear parts for ML 400 Twist



Position no.	Art. no.	Description	Min. order quantity
12	80152702	Swan neck ML 400 MIG-A Twist	1
13a	* 80120310	Gas diffuser ML 400, white	10
13b	80120311	Gas diffuser ML 400, ceramic	10
13c	* 80120312	Gas diffuser ML 400, black	10
14a	* 80110040	Tip adaptor ML 400 M8-8, 43mm	10
14b	80110041	Tip adaptor ML 400 M8-8, 47mm	10
15	80231103	Contact tip - please see page 20	50
16	80140722	Gas nozzle ML 400, cylindric	10
17	* 80140721	Gas nozzle ML 400, conic ø18mm	10
18	80140720	Gas nozzle ML 400, conic ø14mm	10

* = Pre-assembled as standard

Wear parts for ML 500 Twist



Position no.	Art. no.	Description	Min. order quantity
12	80152802	Swan neck ML 500 MIG-A Twist	1
13	* 80120313	Gas diffuser ML 500, white	10
14	80110042	Tip adaptor ML 500 M10/M8, 43mm CuCrZr	10
15	* 80231103	Contact tip - please see page 20	50
17	* 80140723	Gas nozzle ML 500, conic ø20mm	10

* = Pre-assembled as standard

Water-cooled MIG welding torches



MIG-A Twist®

- Turnable swan neck
- Ergonomically correct working posture whichever welding angle you use
- Can be turned up to 45° in both directions. step-by-step at intervals of 15°
- Available in 60 different configurations
- Accessories: gas nozzles, swan necks, gas diffusers and liners
- Three different modules can be mounted/remounted at the handle
- Suits all welding machine makes

ABBREVIATIONS MIG:

- MV** = Migatronic water-cooled torch
- 300** = Model size
- R** = Remote control/Dialog
- 8 m** = Length
- AH** = Advanced handle/Manager
- Alu** = Aluminum
- ZA** = Euro connection
- FKS** = Double cooling chamber with extra cooling of gas nozzle
- KD** = Separate tip adaptor

MODEL TWIST	MV 240	MV 400 FKS	MV 450**	MV 450 KD	MV 500 FKS	MV 550**	MV 550 KD
Duty cycle CO ₂ 60%	300 A	415 A	450 A	400 A	560 A	550 A	500 A
Duty cycle CO ₂ 100%	300 A	415 A	450 A	400 A	560 A	550 A	500 A
Mixgas 60%	270 A	350 A	400 A	350 A	520 A	500 A	450 A
Mixgas 100%	270 A	350 A	400 A	350 A	520 A	500 A	450 A
Min. flow rate water cooling 1 bar	1 l/min.	1 l/min.	1 l/min.	1 l/min.	1 l/min.	1 l/min.	1 l/min.
Gas flow +/-5%	15 l/min.*	18 l/min.*	18 l/min.*	18 l/min.*	18 l/min.*	18 l/min.*	18 l/min.*
Wire diameter, mm	0.6-1.8	0.8-2.4	0.6-3.2	0.6-3.2	0.8-2.4	0.6-3.2	0.8-2.4
Cable, mm ²	16	16	16	16	16	16	16
Weight	1.5 kg	1.6 kg	1.6 kg	1.6 kg	1.7 kg	1.6 kg	1.6 kg
Total weight kg, 3 m	3.0 kg	3.1 kg	3.0 kg	3.0 kg	3.2 kg	3.0 kg	3.0 kg
Connection	ZA	ZA	ZA	ZA	ZA	ZA	ZA

* = Minimum gas flow for compliance with maximum performance. ** = Integrated tip adaptor

Art. no.	Model
80297240	MV240 Twist 3m 1.0
80297241	MV240 Twist 4m 1.0
80297245	MV240 Twist 5m 1.0
80296240	MV240 Twist R 3m 1.0
80296241	MV240 Twist R 4m 1.0
80296242	MV240 Twist R 3m 1.0 Alu
80297602	MV400 FKS Twist 3m 1.2
80297603	MV400 FKS Twist 4m 1.2
80297605	MV400 FKS Twist 5m 1.2
80297606	MV400 FKS Twist 3m 30° 1.2 Alu
80297607	MV400 FKS Twist 4m 30° 1.2 Alu
80296602	MV400 FKS Twist R 3m 1.2
80296603	MV400 FKS Twist R 4m 1.2
80297450	MV450 Twist 3m 1.2 KD
80297451	MV450 Twist 4m 1.2 KD
80297452	MV450 Twist 3m 1.2
80297453	MV450 Twist 4m 1.2
80297456	MV450 Twist 5m 1.2
80297457	MV450 Twist 3m 1.0 KD
80297454	MV450 Twist 4m 1.0 KD
80297458	MV450 Twist 3m 1.2 KD Alu
80297455	MV450 Twist 5m 1.2 KD
80296464	MV450 Twist R 3m 1.0 HD Alu

Art. no.	Model
80296450	MV450 Twist R 3m 1.2 KD
80296451	MV450 Twist R 4m 1.2 KD
80296452	MV450 Twist R 3m 1.2
80296453	MV450 Twist R 4m 1.2
80297700	MV500 FKS Twist 3m 1.2
80297701	MV500 FKS Twist 4m 1.2
80297705	MV500 FKS Twist 5m 1.2
80296700	MV500 FKS Twist R 3m 1.2
80296701	MV500 FKS Twist R 4m 1.2
80297550	MV550 Twist 3m 1.2 KD
80297551	MV550 Twist 4m 1.2 KD
80297555	MV550 Twist 5m 1.2 KD
80297552	MV550 Twist 3m 1.2
80297553	MV550 Twist 4m 1.2
80297556	MV550 Twist 5m 1.2
80296550	MV550 Twist R 3m 1.2 KD
80296551	MV550 Twist R 4m 1.2 KD
80296557	MV550 Twist R 6m 1.2 KD
80296552	MV550 Twist R 3m 1.2
80296553	MV550 Twist R 4m 1.2

All models are supplied with Spring Pin.

Water-cooled MIG welding torches

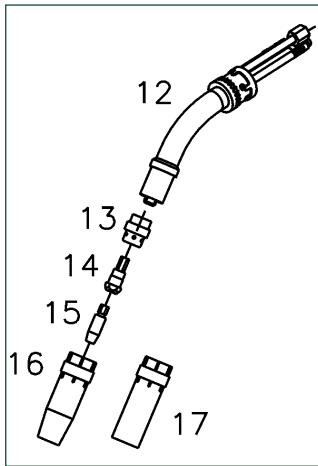
An overview of control units can be found on page 15.

WELDING TORCHES		Sigma One Sigma Core Sigma Select 300 C / S	Sigma One Sigma Core Sigma Select 400 C / S	Sigma One Sigma Core Sigma Select 550 C / S
80297240	MV240 Twist 3m 1.0	(*)	(*)	
80297241	MV240 Twist 4m 1.0	(*)	(*)	
80297245	MV240 Twist 5m 1.0	(*)	(*)	
80296240	MV240 Twist Reg. 3m 1.0	(*)	(*)	
80296241	MV240 Twist Reg. 4m 1.0	(*)	(*)	
80296242	MV240 Twist Reg. 3m 1.0 Alu	(*)	(*)	
80297457	MV450 Twist 3m 1.0 KD	*	*	*
80297450	MV450 Twist 3m 1.2 KD	*	*	*
80297452	MV450 Twist 3m 1.2	*	*	*
80297454	MV450 Twist 4m 1.0 KD	*	*	*
80297458	MV450 Twist 3m 1.2 KD Alu	*	*	*
80297451	MV450 Twist 4m 1.2 KD	*	*	*
80297453	MV450 Twist 4m 1.2	*	*	*
80297455	MV450 Twist 5m 1.2 KD	*	*	*
80297456	MV450 Twist 5m 1.2	*	*	*
80296464	MV450 Twist Reg. 3m 1.0 HD Alu	*	*	*
80296450	MV450 Twist Reg. 3m 1.2 KD	*	*	*
80296452	MV450 Twist Reg. 3m 1.2	*	*	*
80296451	MV450 Twist Reg. 4m 1.2 KD	*	*	*
80296453	MV450 Twist Reg. 4m 1.2	*	*	*
80297550	MV550 Twist 3m 1.2 KD	*	*	*
80297552	MV550 Twist 3m 1.2	*	*	*
80297551	MV550 Twist 4m 1.2 KD	*	*	*
80297553	MV550 Twist 4m 1.2	*	*	*
80297555	MV550 Twist 5m 1.2 KD	*	*	*
80297556	MV550 Twist 5m 1.2	*	*	*
80296550	MV550 Twist Reg. 3m 1.2 KD	*	*	*
80296552	MV550 Twist Reg. 3m 1.2	*	*	*
80296551	MV550 Twist Reg. 4m 1.2 KD	*	*	*
80296553	MV550 Twist Reg. 4m 1.2	*	*	*
80296557	MV550 Twist Reg. 6m 1.2 KD	*	*	*
80297602	MV400 FKS Twist 3m 1.2	*	*	*
80297603	MV400 FKS Twist 4m 1.2	*	*	*
80297605	MV400 FKS Twist 5m 1.2	*	*	*
80297606	MV400 FKS Twist 3m 30° Alu 1.2	*	*	*
80297607	MV400 FKS Twist 4m 30° Alu 1.2	*	*	*
80296602	MV400 FKS Twist Reg. 3m 1.2	*	*	*
80296603	MV400 FKS Twist Reg. 4m 1.2	*	*	*
80297700	MV500 FKS Twist 3m 1.2	*	*	*
80297701	MV500 FKS Twist 4m 1.2	*	*	*
80297705	MV500 FKS Twist 5m 1.2	*	*	*
80296700	MV500 FKS Twist Reg. 3m 1.2	*	*	*
80296701	MV500 FKS Twist Reg. 4m 1.2	*	*	*

* = Recommended. (*) Not recommendable for maximum performance.

Wear parts for water-cooled MIG welding torches

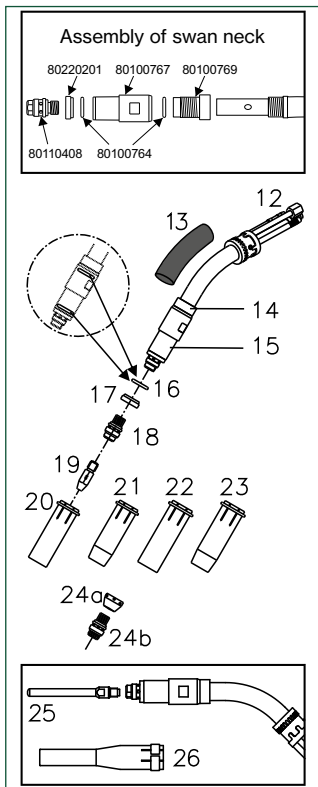
Wear parts for MV 240 Twist



Position no.	Art. no.	Description	Min. order quantity
12	80252101	Swan neck MV 240 MIG-A Twist	1
13a	* 83077480	Gas diffuser ML/MV 240, black	10
13b	83077481	Gas diffuser ML/MV 240, white	10
13c	80220311	Gas diffuser ML/MV 240, ceramic	10
14	* 80110604 83077149 80110603	Tip adaptor ML/MV 240, CuCrZr 5mm Tip adaptor ML/MV 240, brass 5mm Tip adaptor ML/MV 240, brass 7mm	10 10 10
15	* 80131201	Contact tip - please see page 19	10
16	* 80140610	Gas nozzle ML/MV 240, conic	10
17	80140611	Gas nozzle ML/MV 240, cylindric	10
	81100221	Wear parts box ML/MV 240, 1.0 alu	1

* = Pre-assembled as standard

Wear parts for MV 400 FKS Twist



Position no.	Art. no.	Description	Min. order quantity
12	80252500 80252501	Swan neck MV 400 FKS Twist Swan neck MV 400 FKS Twist 30° Alu	1 1
13	92555041	Shrink FLEX Ø24 /8mm, 1.2m glue	1
14	80100769	Insulator for cooling unit FKS 400	1
15	80100767	Water cooling unit FKS 400	1
16	80100764	O-Ring FKS 400W (2 pcs. needed)	1
17	80220201	Insulating ring FKS 400W	10
18	* 80110408	Tip adaptor MV 400 FKS, 24mm	10
19	* 80231202	Contact tip - please see page 20	10
20	80240308	Gas nozzle MV 400 FKS cylindric, 62mm	10
21	* 80240307	Gas nozzle MV 400 FKS conic, 62mm	10
22	80240318	Gas nozzle MV 400 FKS cylindric, 67mm	10
23	80240317	Gas nozzle MV 400 FKS conic, 67mm	10
24a	80220315	Gas diffuser isolator 400 FKS	10
24b	80110411	Tip adaptor for isolator 400 FKS, 24mm	10
25	80700227	Contact tip L=85/63/M8 1.2 CuCrZr	1
26	80240323	Gas nozzle L=114/52 ø15 nickel-plated	1
	81100236	Wear parts box MV 400 FKS, 1.0-1.2 steel	1

* = Pre-assembled as standard

Note: 24a and 24b must be used together

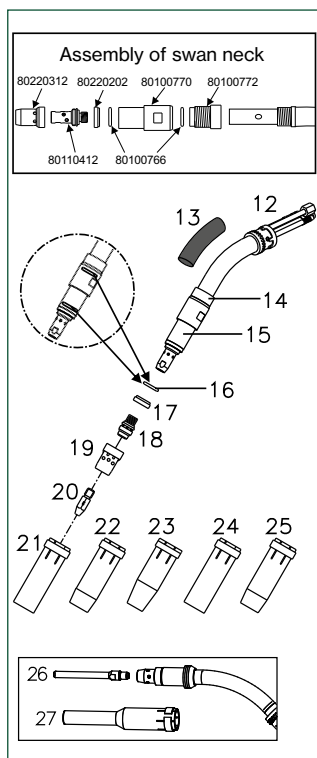


Advanced Cooling System

FKS welding torches feature double cooling chamber for efficient cooling at the gas nozzle; also available with Dialog adjustment of welding current or Smart torch adjustment of various parameters. FKS is designed specifically for pulse welding and spray transfer welding.

Wear parts for water-cooled MIG welding torches

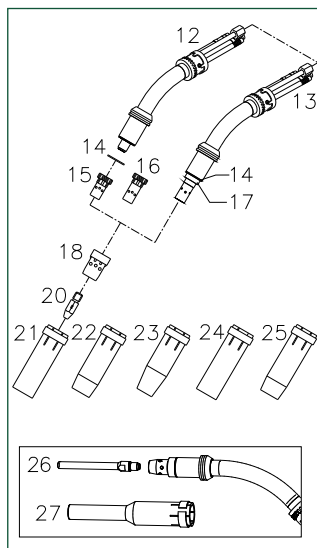
Wear parts for MV 500 FKS Twist



Position no.	Art. no.	Description	Min. order quantity
12	80252502	Swan neck MV 500 FKS Twist	1
13	92555041	Shrink FLEX Ø24 /8mm, 1.2m glue	1
14	80100772	Insulator for cooling unit FKS 500	1
15	80100770	Water cooling unit FKS 500	1
16	80100766	O-Ring FKS 500W (2 pcs.)	1
17	80220202	Insulating ring FKS 500W	10
18	*	80110410 Tip adaptor MV 500 FKS, 38mm CuCrZr	10
19	*	80220312 Gas diffuser MV FKS/HD-S white 80220313 Gas diffuser ceramic HD-S+500FKS	10 10
20	*	80231202 Contact tip - please see page 20	10
21	80240300	Gas nozzle ML/MV cylindric	10
22	*	80240303 Gas nozzle ML/MV conic	10
23	80240304	Gas nozzle ML/MV super conic	10
24	80140701	Gas nozzle cylindric nickelled	10
25	80140700	Gas nozzle conic nickelled	10
26	80700227	Contact tip L85/63/M8, 1.2 CuCrZr	1
27	80700226	Gas nozzle L: 128/60 ø15 high gloss	1
	81100237	Wear parts box MV 500 FKS, 1.0-1.2 steel	1

* = Pre-assembled as standard

Wear parts for MV 450 / 550 Twist



Position no.	Art. no.	Description	Min. order quantity
12	80252202	Swan neck MV 450KD MIG-A Twist	1
12	80252302	Swan neck MV 550KD MIG-A Twist	1
13	80252204	Swan neck MV 450 MIG-A Twist	1
13	80252304	Swan neck MV 550 MIG-A Twist	1
14	80220303	Insulating washer MV 450/550	10
15.1	80110401	Tip adaptor MV 450/550 brass, M8 25mm	10
15.2	*	80110406 Tip adaptor MV 450-550 CuCrZr, 25mm	10
15.3	80110403	Tip adaptor MV 450/550 brass, M6 25mm	10
16.1	80110402	Tip adaptor MV 450/550 brass, M8 29mm	10
16.2	80110409	Tip adaptor MV 450-550 CuCrZr, 29mm	10
17	80200307	Threaded ring	1
18.1	*	80220309 Gas diffuser MV 450/550, white	10
18.2	80220306	Gas diffuser MV 450/550. black	10
18.3	80220310	Gas diffuser MV 450/550, ceramic	10
20	*	80231202 Contact tip - please see page 20	10
21	80240300	Gas nozzle ML/MV, cylindric	10
22	*	80240303 Gas nozzle ML/MV, conic	10
23	80240304	Gas nozzle ML/MV, super conic	10
24	80140701	Gas nozzle, cylindric nickelled	10
25	80140700	Gas nozzle, conic nickelled	10
26	80700227	Contact tip L85/63/M8, 1.2 CuCrZr	1
27	80700226	Gas nozzle L: 128/60 ø15 high gloss	1
	81100216	Wear parts box MV 450/550, 1.0-1.2 steel	1

* = Pre-assembled as standard

MIG-A Twist® control units

For Sigma Select / Sigma Core / Sigma One / Automig

MIG-A Twist® welding torches are configurable with different modules
 A module is easily replaced as required, without tools.



Basic module (80100401)
 Always included



Potentiometer module
 (80100402)

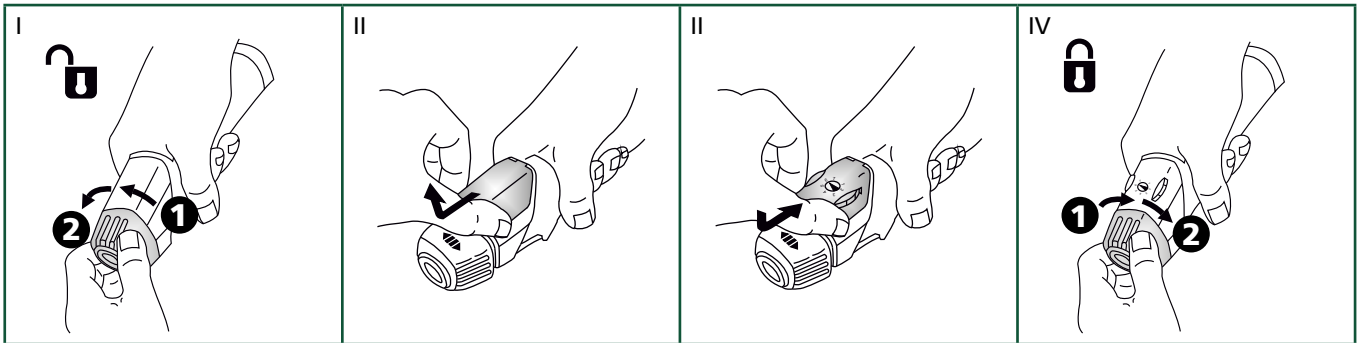


Sequence module (80100403)
*(Only Sigma Select after
 purchase of sequence
 function)*



Potentiometer module for
 Kemppi (80100410)

Please note:
 all trademarks
 mentioned in this
 catalogue are property
 of the respective
 companies.



Smart Torch modules for MIG-A Twist*)



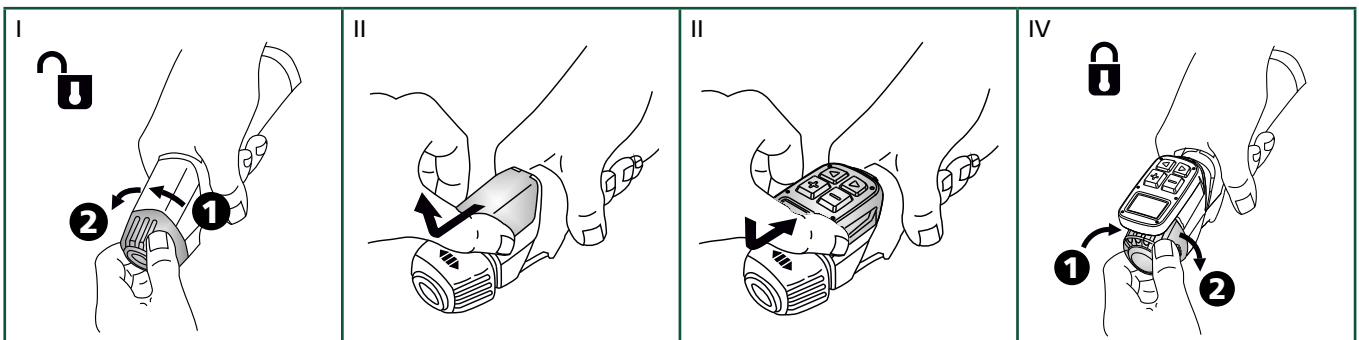
Graphical Smart Torch module with
 4 buttons for MIG-A Twist (80100430)



Smart Torch module with 4 buttons
 for MIG-A Twist (80100431)



Smart Torch module with 2 button
 for MIG-A Twist (80100432)



*) Note: Smart Torch modules are only compatible with Sigma Select and/or Automig 300 Pulse power sources equipped with wire feeder PCB 71613664 version C1 and later. For earlier versions - please contact your Migatron Service Partner

MigAir welding torches with fume extraction

MODEL	ML 240 MigAir	MV 400 FKS MigAir
Duty cycle CO ₂ 60%	250 A	415 A
Duty cycle CO ₂ 100%	225 A	415 A
Mixgas 60%	220 A	350 A
Mixgas 100%	195 A	350 A
Cooling	Air	Water
Min. flow rate watercooling 1 bar	-	1 l/min.
Max. pressure (water)	-	5 bar
Max. water temperature	-	70°C
Gas flow +/-5%	10-20 l/min.	10-20 l/min.
Wire diameter. mm	0.8-1.2	0.8-1.6
Cable mm ²	25	16
Weight	1.4 kg	1.7 kg
Total weight kg, 4 m	4.8 kg	4.9 kg
Connection	ZA	ZA
Norm	IEC 60974-7. IEC 60974-10	



Art. no.	ML 240 aircooled
80193310	ML240 MigAir 4m
80193311	ML240 MigAir 5m

Art. no.	MV 400 FKS watercooled
80293017	MV400 FKS MigAir 4m
80293018	MV400 FKS MigAir 5m

Art. no.	Description
80160520	Steel liner 4.4m 0.6-0.8 white
80160550	Steel liner 5.4m 0.6-0.8 white
80160545	Steel liner 4.4m 1.2-1.6 red
80160546	* Steel liner 5.4m 1.2-1.6 red
80200345	Fume nozzle long
80100793	Fume nozzle short

* = Pre-assembled as standard

Wear parts: Please refer to MV 240 and MV 400 FKS page 13



ZA connection air



ADAPTER FOR HOSE
ø50 mm => ø45 mm
 Adapter to connect a ø50 mm connection to a ø45 mm hose and a ø45 mm connection to a ø50 mm hose.
 Art.no.....82031206



EXTRACTION HOSE
 Flex extraction hose for MigaVent Mini and mouthpiece in running metre. Inside diameter ø 51 mm.
 Art.no.....92570042

Flex extraction hose for MigAir and mouthpiece in running metre. Inside diameter ø 45 mm.
 Art.no.....92570041



ZA connection water

Water-cooled Push-Pull torch for MIG/MAG welding

The water-cooled Push-Pull torch for MIG/MAG welding will ensure precise and stable wire feeding of the softest welding wire in the workshop, including aluminum.

Choose the Push-Pull torch with a Graphical Smart Torch module to provide easy access to adjusting welding parameter on the torch handle.

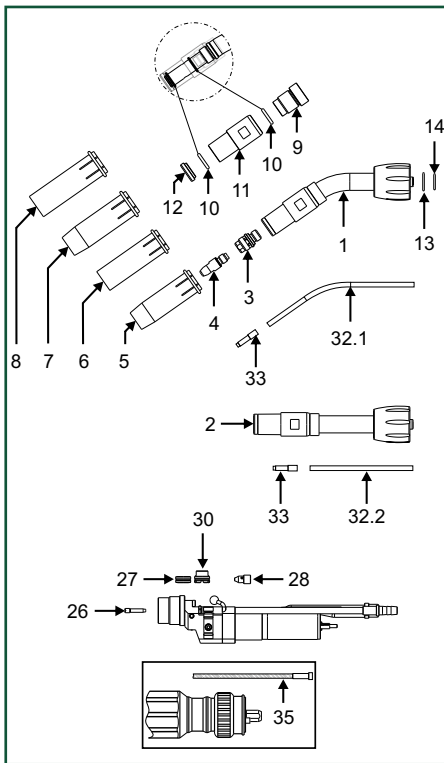


All Sigma Select machines purchased since February 2021 supports the Push-Pull torch.

Art. no.	Model
80890410	Push-Pull FKS400 straight, 10m 1.2mm U-groove
80890411	Push-Pull FKS400 curved, 10m 1.2mm U-groove
80890415	Push-Pull FKS400 straight, 10 m 1.2mm U-groove Including Graphical Smart Torch module
80890416	Push-Pull FKS400 curved, 10 m 1.2mm U-groove Including Graphical Smart Torch module

The Push-Pull torch is configured for welding in 1.2mm aluminum, but a wide range of wear parts is available to fit each welding task.

Wear parts for PP FKS 400



Position no.	Art. no.	Description	Min. order quantity
1	80850450	Swan neck 35° curved turnable	1
2	80850451	Swan neck straight turnable	1
3	80110408	Contact nozzle, 24mm	1
4	*	80231103 Contact tip - please see page 20	
5	*	80240307 Gas nozzle conic, 62mm	10
6		80240308 Gas nozzle cylindric, 62mm	10
7		80240317 Gas nozzle conic, 67mm	10
8		80240318 Gas nozzle cylindric, 67mm	10
9	80100769	Insulating bush, cooling	1
10	80100764	O-ring $\phi 12 \times 2.5$ (2 pcs. needed)	1
11	80100767	Water cooling unit	1
12	80220201	Insulating ring	10
13	80100847	O-ring $\phi 13.2 \times 1.55$ (1.60)	1
14	80100848	O-ring $\phi 10.3 \times 1.55$ (1.60)	1
26	80100853	Wire guide	1
28	80100832	Wire feed nozzle	1
32.1	80100851	Neck-Liner for curved swan neck	1
32.2	80100852	Neck-Liner for straight swan neck	1
33	80100850	Heat protection for neck-Liner	1

* = Pre-assembled as standard

Pos. 35	
Art. no.	Description
80160588	Wire liner PA $\phi 2.0 \times 4.0 \times 10$ m f. $\phi 0.8-1.2$ mm wire
80160589	Wire liner PA $\phi 2.3 \times 4.7 \times 10$ m f. $\phi 1.2-1.6$ mm wire
80160201	Steel liner blue, $\phi 1.5 \times 4.0 \times 10$ m f. $\phi 0.8-1.0$ mm wire
80160202	Steel liner red, $\phi 2.0 \times 4.0 \times 10$ m f. $\phi 1.2-1.6$ mm wire
80160203	Steel liner yellow, $\phi 2.5 \times 4.5 \times 10$ m f. $\phi 1.6-2.0$ mm wire
80160205	PTFE liner blue, $\phi 1.5 \times 4.0 \times 10$ m f. $\phi 0.8-1.0$ mm wire
80160206	PTFE liner red, $\phi 2.0 \times 4.0 \times 10$ m f. $\phi 1.2-1.6$ mm wire
80160207	PTFE liner yellow, $\phi 2.7 \times 4.5 \times 10$ m f. $\phi 1.6-2.0$ mm wire

Pos. 30		Pos. 27		Description	Wire rolls kit Art. no.
Drive roll	Art. no.	Pressure roll	Art. no.		
	80700415		80700420	Alu $\phi 0.8$ U-groove, white	73940134
	80700416		80700421	Alu $\phi 1.0$ U-groove, blue	73940135
	80700417*		80700422*	Alu $\phi 1.2$ U-groove, red	73940136
	80700410		80700420	Steel $\phi 0.8$ V-groove, white	73940130
	80700411		80700421	Steel $\phi 1.0$ V-groove, blue	73940131
	80700412		80700422	Steel $\phi 1.2$ V-groove, red	73940132

* = Pre-assembled as standard

Contact tips and Tip adaptors

Choice of Contact Tip

With the exception of ML 150/250 types. a Migatronic ML/MV torch is equipped as standard with a CuCrZr (copper, chromium, zirconium) contact tip, in the most frequently used dimension as well as a gas nozzle.

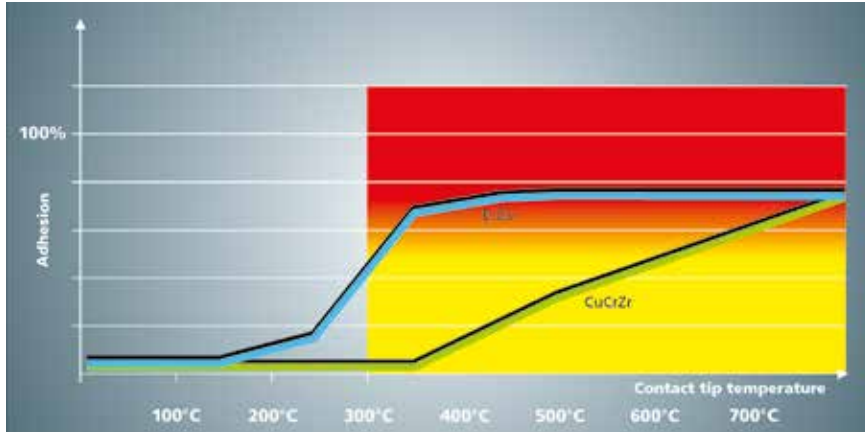
This is the most optimal choice of contact tip in terms of welding properties and/or operating costs.

Contact tips for ML/MV are available in different materials and lengths so as to ensure best possible welding result.

For MIG pulse welding and welding in aluminium we recommend longer contact tips combined with longer gas nozzles, for optimization of welding current transmission and gas shielding. A slim contact tip will have a lower temperature as it will receive less radiant heat from the arc.

That is why we recommend CuCrZr (copper, chromium, zirconium) contact tips which are considerably harder and less sensitive to high temperatures. An ordinary E-Cu (copper) type of contact tip will become soft and adhere to the welding wire if the temperature in the contact tip exceeds 300°C. A CuCrZr contact tip will do that much later (see graph to the left).

Please refer to the list of contact tips.



Choice of Tip Adaptor - Material and Design

Some types of torches can be equipped with various designs of tip adaptors. This allows the welder to optimise to another type of contact tip (thread/length). A tip adaptor made of CuCrZr will increase the performance of the torch.

A standard tip adaptor is made of Ms (brass) which is characterized by strength and non-optimal thermal conductivity. CuCrZr is characterized by the strength and ductility of Ms and the thermal conductivity of E-Cu. That is why it is possible to achieve better performance by using a CuCrZr contact tip.

lower but in return the tip adaptor is replaceable. FKS types have separate tip adaptors with direct connection to the cooling water. That is why they are up to the performance standard of torches with integrated tip adaptors.

MV 500 FKS is equipped as standard with separate CuCrZr tip adaptor.

Please refer to the list of tip adaptors.

ML / MV 240



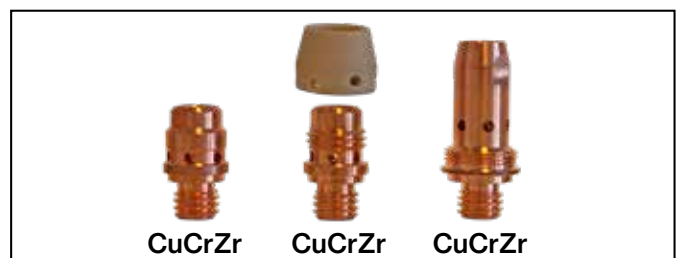
MV 450/550 torches are supplied with integrated or separate tip adaptors.

For maximum performance we recommend integrated tip adaptors but if thread for contact tip becomes defective the swan neck must be replaced. The performance of a torch with separate tip adaptor is typically

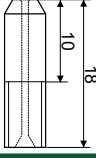
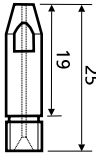
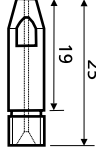
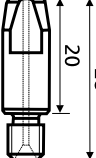
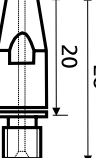
MV 450 / MV 550



MV 450 FKS / MV 550 FKS



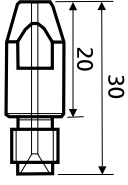
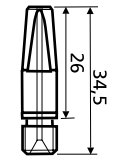
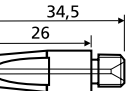
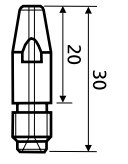
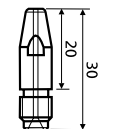
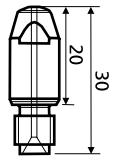
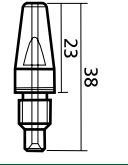
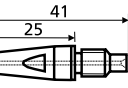
Contact tips

Contact tip - design and length	Art. no.	Item description	ML 140	ML 150/ ML 161	ML 250	ML 240	ML 300	ML 360	MV 240
M 5									
	80130140	∅ 0.6 M5 ∅ 5 x18mm E-Cu	•						
	80130141	∅ 0.8 M5 ∅ 5 x18mm E-Cu	•						
	80130142	∅ 1.0 M5 ∅ 5 x 18mm E-Cu	•						
M 6									
	80130001	∅ 0.6 M6 ∅ 6 x 25 mm Cu nickel-plated		(•)	(•)	(•)	(•)	(•)	(•)
	80130002	∅ 0.8 M6 ∅ 6 x 25 mm Cu nickel-plated		(•)	(•)	(•)	(•)	(•)	(•)
	80130003	∅ 1.0 M6 ∅ 6 x 25 mm Cu nickel-plated		(•)	(•)	(•)	(•)	(•)	(•)
	80130004	∅ 1.2 M6 ∅ 6 x 25 mm Cu nickel-plated		(•)	(•)	(•)	(•)	(•)	(•)
	80130101	∅ 0.6 M6 ∅ 6 x 25 mm Cu		(•)	(•)	(•)			
	80130102	∅ 0.8 M6 ∅ 6 x 25 mm Cu		(•)	(•)	(•)			
	80130103	∅ 1.0 M6 ∅ 6 x 25 mm Cu		(•)	(•)	(•)			
	80130104	∅ 1.2 M6 ∅ 6 x 25 mm Cu		(•)	(•)	(•)			
	80130201	∅ 0.6 M6 ∅ 8 x 28 mm Cu		•	•	•	•	•	•
	80130202	∅ 0.8 M6 ∅ 8 x 28 mm Cu		•	•	•	•	•	•
	80130203	∅ 1.0 M6 ∅ 8 x 28 mm Cu		•	•	•	•	•	•
	80130204	∅ 1.2 M6 ∅ 8 x 28 mm Cu		•	•	•	•	•	•
	80131200	∅ 0.8 M6 ∅ 8 x 28 mm CuCrZr		•	•	•	•	•	•
	80131201	∅ 1.0 M6 ∅ 8 x 28 mm CuCrZr		•	•	•	•	•	•
	80131202	∅ 1.2 M6 ∅ 8 x 28 mm CuCrZr		•	•	•	•	•	•
	80131203	∅ 1.4 M6 ∅ 8 x 28 mm CuCrZr		•	•	•	•	•	•
	80131204	∅ 1.6 M6 ∅ 8 x 28 mm CuCrZr		•	•	•	•	•	•

• = Mild steel Fe, stainless steel CrNi and FCW recommended. (•) = Alternative

Note: for aluminum welding it is recommendable to go up in size according to welding wire, e.g. 1.0 alu-wire = 1.2 nozzle
1.2 alu-wire = 1.4 nozzle

Contact tips

Contact tip - design and length	Item no.	Item description	ML 380	ML 400	ML 500	MV 450	MV 550	MV 400 FKS	MV 500 FKS
M 8									
	80231101	∅ 0.8 M8 ∅ 10 x 30 mm E-Cu	•	•	•	•	•	•	•
	80231102	∅ 1.0 M8 ∅ 10 x 30 mm E-Cu	•	•	•	•	•	•	•
	80231103	∅ 1.2 M8 ∅ 10 x 30 mm E-Cu	•	•	•	•	•	•	•
	80231106	∅ 1.4 M8 ∅ 10 x 30 mm E-Cu	•	•	•	•	•	•	•
	80231104	∅ 1.6 M8 ∅ 10 x 30 mm E-Cu	•	•	•	•	•	•	•
	80231110	∅ 0.8 M8 ∅ 8 x 35 mm CuCrZr	••	••	••	••	••	••	••
	80231111	∅ 1.0 M8 ∅ 8 x 35 mm CuCrZr	••	••	••	••	••	••	••
	80231112	∅ 1.2 M8 ∅ 8 x 35 mm CuCrZr	••	••	••	••	••	••	••
	80231113	∅ 1.6 M8 ∅ 8 x 35 mm CuCrZr	••	••	••	••	••	••	••
	80231121	∅ 1.0 M8 ∅ 10 x 35 mm E-Cu	(•) (•)	(•) (•)	(•) (•)	(•) (•)	(•) (•)	(•) (•)	(•) (•)
	80231122	∅ 1.2 M8 ∅ 10 x 35 mm E-Cu	(•) (•)	(•) (•)	(•) (•)	(•) (•)	(•) (•)	(•) (•)	(•) (•)
	80231200	∅ 0.8 M8 ∅ 8 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231201	∅ 1.0 M8 ∅ 8 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231202	∅ 1.2 M8 ∅ 8 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231203	∅ 1.6 M8 ∅ 8 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231204	∅ 1.4 M8 ∅ 8 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231220	∅ 0.8 M8 ∅ 8 x 30 mm CuCrZr heavy duty	•	•	•	•	•	•	•
	80231221	∅ 1.0 M8 ∅ 8 x 30 mm CuCrZr heavy duty	•	•	•	•	•	•	•
	80231222	∅ 1.2 M8 ∅ 8 x 30 mm CuCrZr heavy duty	•	•	•	•	•	•	•
	80231205	∅ 0.8 M8 ∅ 10 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231206	∅ 1.0 M8 ∅ 10 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231207	∅ 1.2 M8 ∅ 10 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231208	∅ 1.4 M8 ∅ 10 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231209	∅ 1.6 M8 ∅ 10 x 30 mm CuCrZr	•	•	•	•	•	•	•
	80231300	∅ 0.8 M8 ∅ 10 x 38 mm CuCrZr	•••				•••	•••	•••
	80231301	∅ 1.0 M8 ∅ 10 x 38 mm CuCrZr	•••				•••	•••	•••
	80231302	∅ 1.2 M8 ∅ 10 x 38 mm CuCrZr	•••				•••	•••	•••
	80231303	∅ 1.6 M8 ∅ 10 x 38 mm CuCrZr	•••				•••	•••	•••
	80231401	∅ 1.0 M8 ∅ 10 x 41 mm CuCrZr	•••					••	••
	80231402	∅ 1.2 M8 ∅ 10 x 41 mm CuCrZr	•••					••	••

- = Mild steel Fe, stainless steel CrNi and FCW recommended. (•) = Alternative
- = Aluminium welding.
- = For gas nozzles with special length (depending on torch model) recommended. (•) = Alternative

Note: for aluminum welding it is recommendable to go up in size according to welding wire, e.g. 1.0 alu-wire = 1.2 nozzle
1.2 alu-wire = 1.4 nozzle

Gas nozzles

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 150/150C	ML 161
	80140022	Spot	ø16.0	1.0	Cu/Ni	•	•

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 150/150C	ML 161
	80140029	Innershield	ø6.3	1.0	Cu	•	•

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 150/150C	ML161
	80140023	Conic	ø12.0	1.15	Cu/Ni	•	•
	80140500	Cylindrical	ø16.0	1.0	Cu/Ni	•	•

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 250	
	80140600	Cylindrical	ø15.0	2.0	Cu/Ni	•	
	80140601	Conic	ø19.0	2.0	Cu/Ni	•	

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 240	MV 240
	80140610	Conic	ø12.6	1.4	Cu/Ni	•	•
	80140611	Cylindrical	ø17.2	1.4	Cu/Ni	•	•

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 300	ML 360 long
	80140700	Conic	ø20.1	2.5	Cu/Ni	•	•
	80140701	Cylindrical	ø16.0	2.5	Cu/Ni	•	•

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 300/360/380	MV 400/550	MV 550 FKS
	80240303	Conic	ø16.0	2.5	Cu/Ni	•	•	•
	80240300	Cylindrical	ø20.1	2.5	Cu/Ni	•	•	•
	80240304	Super conic	ø14.0	2.5	Cu/Ni	•	•	•

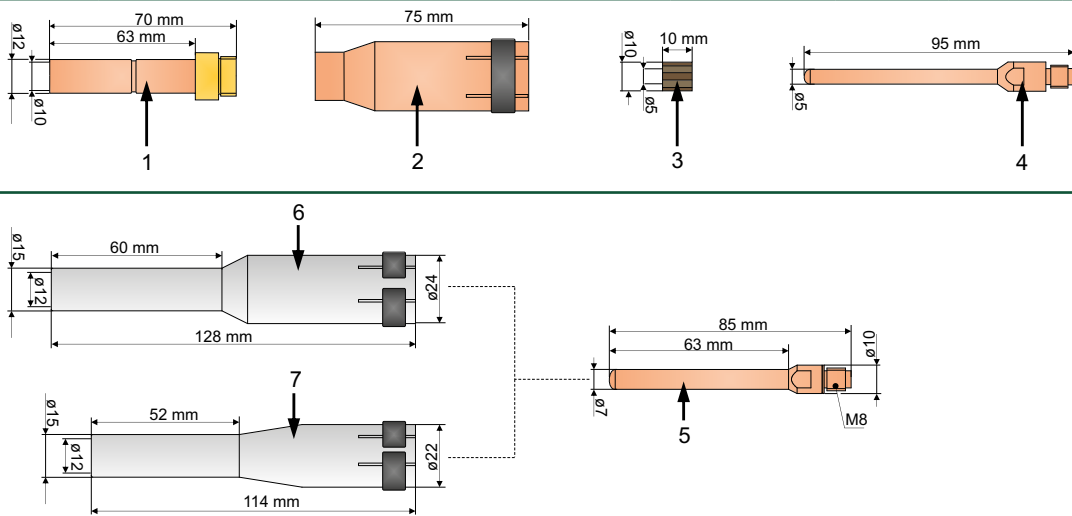
Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	MV 400 FKS	
	80240307	Conic	ø14.5	2.0	Cu/Ni	•	
	80240308	Cylindrical	ø18.0	2.0	Cu/Ni	•	
	80240317	Conic	ø14.5	2.0	Cu/Ni	•	
	80240318	Cylindrical	ø18.0	2.0	Cu/Ni	•	

Gas nozzles

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 400	
	80140720	Conic	ø14.0	2.5	Cu/Ni	•	
	80140721	Conic	ø18.0	2.5	Cu/Ni	•	
	80140722	Cylindrical	ø21.0	2.5	Cu/Ni	•	

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 500	
	80140723	Conic	ø20.0	3.0	Cu/Ni	•	




Narrow Gap

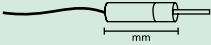


Pos. no.	Part no.	Description	Wall thickness	Material	MV 450/550	FKS 400	FKS 500
1	80240321	Gas nozzle extension for gas nozzle bottle shape, 70mm	1.0	Cu/brass	•		
2	80240320	Gas nozzle bottle shape, 75mm	2.5	Cu	•		
3	80220317	Gas diffuser centering bush ø5xø10x10mm		Fibre	•		
4.1	80231410	Contact tip ø1.0 M8 ø5x95mm		E-Cu	•		
4.2	80231412	Contact tip ø1.2 M8 ø5x95mm		E-Cu	•		
5	80700227	Contact tip L=85/63/M8 1.2		CuCrZr	•	•	•
6	80700226	Gas nozzle L=128/60 ø15 high gloss nickel-plated	1.5	Cu/Ni	•		•
7	80240323	Gas nozzle L=114/52 ø15 nickel-plated	1.5	Cu/Ni		•	

Spare parts for ZA and Wire liners

Spare parts for ZA	
Art. no.	Description
80200303	Swivel nut
26920008	Gas nipple brass
80100004	Gas nipple brass
26910008	Gas nipple CrNi
80100710	O-ring for ZA air/water
80200312	Spring pin without spring 21mm \varnothing 5
80100747	Spring pin with spring 30mm \varnothing 5
80100810	Spring pin for ZA air 25mm \varnothing 6
80100811	Spring pin for ZA water 16mm \varnothing 6
80100706	ZA-ML Spring pin air
80200332	ZA-ML Spring pin water
80200301	Nut for ZA connection

Swivel nut:	Gas nipple:	O-ring:	Spring pins:	
80200303	26920008 Brass	 x 1	80100710	without spring 21mm
	80100004 Brass	x 2		80200312 \varnothing 5
	26910008 CrNi	x 1		80100747 \varnothing 5
				Spring pin for ZA air 25mm
				80100810 \varnothing 6
				Spring pin for ZA water 16mm
				80100811 \varnothing 6
				Socket \varnothing 4 red, separate (2 pcs.)
				18270004 



Wire liners	
Art. no.	Description
80160520	Steel liner \varnothing 3.9 4.4m 0.6-0.8mm white
80160521	Steel liner \varnothing 4.8 4.4m 0.8-1.0mm blue
80160522	Steel liner \varnothing 4.9 4.4m 1.2-1.6mm red
80160523	Steel liner \varnothing 4.8 4.4m 1.6-2.4mm yellow
80160550	Steel liner \varnothing 3.9 5.4m 0.6-0.8mm white
80160551	Steel liner \varnothing 4.8 5.4m 0.8-1.0mm blue
80160552	Steel liner \varnothing 4.9 5.4m 1.2-1.6mm red
80160553	Steel liner \varnothing 4.8 5.4m 1.6-2.4mm yellow
80160558	Steel/teflonliner (PTFE) \varnothing 4 3.4m 0.8-1.2mm
80160554	Steel/teflonliner (PTFE) \varnothing 4 4.4m 0.8-1.2mm
80160555	Steel/teflonliner (PTFE) \varnothing 5 4.4m 1.2-1.6mm
80160556	Steel/teflonliner (PTFE) \varnothing 4 5.4m 0.8-1.2mm
80160557	Steel/teflonliner (PTFE) \varnothing 5 5.4m 1.2-1.6mm
80160559	Steel/teflonliner (PTFE) \varnothing 5 6.4m 1.2-1.6mm
80160711	Plastic liner (PEH) with bronze neck \varnothing 4 4.4m 0.8-1.0mm blue
80160713	Plastic liner (PEH) with bronze neck \varnothing 4 4.4m 1.2-1.6mm red
80160712	Plastic liner (PEH) with bronze neck \varnothing 4 5.4m 0.8-1.0mm blue
80160714	Plastic liner (PEH) with bronze neck \varnothing 4 5.4m 1.2-1.6mm red
80160700	Carbon teflon liner (carbon PTFE) with 60mm bronze neck \varnothing 4 4.4m 0.8-1.0mm grey
80160707	Carbon teflon liner (carbon PTFE) with 60mm bronze neck \varnothing 4 4.4m 1.2-1.6mm grey
80160708	Carbon teflon liner (carbon PTFE) with 60mm bronze neck \varnothing 4 5.4m 1.2-1.6mm grey
80160720	Carbon teflon liner (carbon PTFE) \varnothing 2.0x4.7 3.4m for 1.2mm wire incl. 20mm heat resistant end
80160721	Carbon teflon liner (carbon PTFE) PA \varnothing 2.0x4.7 4.4m for 1.2mm wire incl. 20mm heat resistant end

Wire liners

Migatronc recommends

Wire	Wire diameter	Steel liner / Steel teflon liner			Plastic liner (PEH) with bronze neck		Carbon teflon liner (carbon PTFE) with 60 mm bronze neck		Carbon teflon liner (carbon PTFE) incl. 20 mm heat resistant end		
		3.4 m	4.4 m	5.4 m	6.4 m	4.4 m	5.4 m	4.4 m	5.4 m	3.4 m	4.4 m
Fe Mild steel	0.6 mm	80160520	80160520	80160550							
	0.8 mm	80160521	80160521	80160551							
	1.0 mm	80160521	80160521	80160551							
	1.2 mm	80160522	80160522	80160552							
	1.4 mm	80160522	80160522	80160552							
	1.6 mm	80160522	80160522	80160552							
CrNi Stainless steel	0.8 mm	80160558	80160554	80160556							
	1.0 mm	80160558	80160554	80160556							
	1.2 mm	80160558	80160554	80160556							
	1.4 mm		80160555	80160557	80160559						
	1.4 mm		80160555	80160557	80160559						
	1.6 mm		80160555	80160557	80160559						
Fe Flux Steel with flux cored wire	0.6 mm	80160520	80160520	80160550							
	0.8 mm	80160521	80160521	80160551							
	1.0 mm	80160521	80160521	80160551							
	1.0 mm		80160591#	80160592#							
	1.2 mm		80160591#	80160592#							
	1.2 mm	80160522	80160522	80160552							
	1.4 mm	80160522	80160522	80160552							
	1.6 mm	80160522	80160522	80160552							
	1.6 mm	80160522	80160522	80160552							
	2.0 mm	80160523	80160523	80160553							
CrNi Flux Stainless steel with flux cored wire	0.8 mm	80160558	80160554	80160556							
	1.0 mm	80160558	80160554	80160556							
	1.2 mm	80160558	80160554	80160556							
	1.2 mm		80160555	80160557	80160559						
	1.4 mm		80160555	80160557	80160559						
	1.6 mm		80160555	80160557	80160559						
Al Aluminum	1.0 mm	80160558	80160554	80160556							
	1.2 mm	80160558	80160554	80160556							
	1.2 mm		80160555	80160557	80160559						
	1.2 mm		80160555	80160557	80160559						
	1.4 mm		80160555	80160557	80160559						
	1.6 mm		80160555	80160557	80160559						

* Used only in water-cooled welding torches and recommended for welding torch MV400 FKS 30° Alu (item no. 80297606 and 80297607)

Fields highlighted in grey apply to steel teflon liner only

For liner diameter ø4 choose wire diameter 0.8 - 1.2 mm. For liner diameter ø5 choose wire diameter 1.2 - 1.6 mm

■ ø5 liner. Recommended only for watercooled torches

Naked. Recommended only for watercooled torches

TIG Ergo welding torches

TIG Ergo – for optimal TIG Welding

TIG Ergo is designed with focus on Ergonomics, user-friendliness, movability and reliability.

The TIG Ergo range includes more than 50 different models – from small air-cooled to heavy duty water-cooled models for welding with more than 400 amps.

All TIG Ergo models are configurable with different control units as well as handle in two sizes with ball-and-socket joint and soft grip.

ABBREVIATIONS TIG:

- TIG 201 = Model
- R = Regulation
- FLEX = Flexible torch body
- 8 m = Length
- RH = Horizontal regulation
- RV = Vertical regulation



AIR-COOLED

Art. no.	TIG 101 RANGE
80392655	TIG Ergo 101 4m 7P
80392658	TIG Ergo 101 Flex 4m 7P
80392656	TIG Ergo 101 8m 7P
80392657	TIG Ergo 101 Flex 8m 7P
80392650	TIG Ergo 101RH 4m 7P
80392653	TIG Ergo 101RH Flex 4m 7P
80392651	TIG Ergo 101RH 8m 7P
80392652	TIG Ergo 101RH Flex 8m 7P
80392659	TIG 101RV 4m 7P
80392660	TIG 101RV 8m 7P
80392615	TIG Ergo 101V 4m
Art. no.	TIG 201 RANGE
80392795	TIG Ergo 201 4m 7P
80392801	TIG Ergo 201 FLEX 4m 7P
80392796	TIG Ergo 201 8m 7P
80392794	TIG Ergo 201 FLEX 8m 7P
80392797	TIG Ergo 201RH 4m 7P
80392802	TIG Ergo 201RH FLEX 4m 7P
80392798	TIG Ergo 201RH 8m 7P
80392799	TIG Ergo 201RH FLEX 8m 7P
80392803	TIG Ergo 201RV 4m 7P
80392804	TIG Ergo 201RV 8m 7P
Art. no.	TIG 221 RANGE
80392875	TIG Ergo 221 4m 7 POL
80392876	TIG Ergo 221 8m 7 POL
80392887	TIG Ergo 221 15M 7 POL
80392877	TIG Ergo 221RH 4m 7 POL
80392878	TIG Ergo 221RH 8m 7 POL
80392888	TIG Ergo 221RH 15M 7 POL
80392879	TIG Ergo 221RV 4m 7 POL
80392880	TIG Ergo 221RV 8m 7 POL
80392881	TIG Ergo 221 FLEX 4m 7 POL
80392882	TIG Ergo 221 FLEX 8m 7 POL
80392883	TIG Ergo 221RH FLEX 4m 7 POL
80392884	TIG Ergo 221RH FLEX 8m 7 POL

WATER-COOLED

Art. no.	TIG 301 RANGE
80492140	TIG Ergo 301 4m 7P
80492143	TIG Ergo 301 FLEX 4m 7P
80492141	TIG Ergo 301 8m 7P
80492142	TIG Ergo 301 FLEX 8m 7P
80492135	TIG Ergo 301RH 4m 7P
80492138	TIG Ergo 301RH FLEX 4m 7P
80492136	TIG Ergo 301RH 8m 7P
80492137	TIG Ergo 301RH FLEX 8m 7P
80492144	TIG Ergo 301RV 4m 7P
80492145	TIG Ergo 301RV 8m 7P
Art. no.	TIG 321 RANGE
80492150	TIG Ergo 321 4m 7P
80492151	TIG Ergo 321 8m 7P
80492152	TIG Ergo 321RH 4m 7P
80492153	TIG Ergo 321RH 8m 7P
Art. no.	TIG 401 RANGE
80492215	TIG Ergo 401 4m 7P
80492216	TIG Ergo 401 8m 7P
80492235	TIG Ergo 401RH 4m 7P
80492236	TIG Ergo 401RH 8m 7P
80492237	TIG Ergo 401RV 4m 7P
80492238	TIG Ergo 401RV 8m 7P
80492241	TIG Ergo 401RH FLEX 4m
80492242	TIG Ergo 401RH FLEX 8m
Art. no.	TIG 451 RANGE
80492315	TIG Ergo 451 4m 7P
80492316	TIG Ergo 451 8m 7P
80492335	TIG Ergo 451 RH 4m 7P
80492336	TIG Ergo 451 RH 8m 7P
80492337	TIG Ergo 451 RV 4m 7P
80492338	TIG Ergo 451 RV 8m 7P

MODEL TIG ERGO	TIG 101	TIG 201	TIG 221	TIG 301	TIG 321	TIG 401	TIG 451
Duty cycle DC 60%	90 A	110 A	130 A	230 A	325 A	400 A	420 A
Duty cycle AC 60%	65 A	75 A	90 A	160 A	230 A	280 A	290 A
Duty cycle DC 100%	80 A	90 A	110 A	225 A	325 A	400 A	420 A
Duty cycle AC 100%	55 A	65 A	80 A	160 A	230 A	280 A	290 A
Cooling	Air	Air	Air	Water	Water	Water	Water
Gas flow +/-5%	7 l/min	7 l/min	7 l/min	9 l/min	9 l/min	11 l/min	11 l/min
Electrode diameter, mm	1.0-2.4	1.0-2.4	1.0-2.4	1.0-3.2	1.0-3.2	1.0-4.0	1.0-4.8
Cable, mm ²	15	15	21	4/6 (8 m)	12/15 (8 m)	12/15 (8 m)	18 (8 m)
Weight at 1 m height	0.8 kg	1.0 kg	1.0 kg	0.8 kg	1.0 kg	1.1 kg	1.2 kg
Total weight kg, 4 m	1.7 kg	1.9 kg	2.0 kg	1.5 kg	2.0 kg	2.2 kg	2.7 kg

TIG Ergo welding torches

SUITABLE FOR	TIG & MMA machines								
	RallyMIG	Focus Stick 120E/161E	PI 200 Air / Focus TIG 161/200	PI 200 Water	PI 250 Air	PI 250 Water	PI 350 Air	PI 350 Water	PI 500
WELDING TORCHES									
TIG Ergo 101V	*	*							
TIG Ergo 101 RANGE 7 pole			(*)		(*)				
TIG Ergo 201/221 RANGE 7 pole			*		*		(*)		
TIG Ergo 301/321 RANGE 7 pole				*		*		*	(*)
TIG Ergo 401 RANGE 7 pole				*		*		*	(*)
TIG Ergo 451 RANGE 7 pole				*		*		*	*

*) Recommended *) Not recommendable for maximum performance

Cable connector for TIG Ergo welding torches



Cable connector for water-cooled TIG 321/401/451 welding torch



Cable connector for water-cooled TIG 301 welding torch

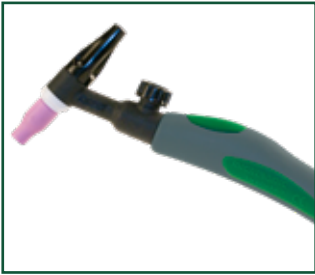


Cable connector for air-cooled TIG 221 welding torch



Cable connector for air-cooled TIG 101/201 welding torch

TIG Ergo welding torches



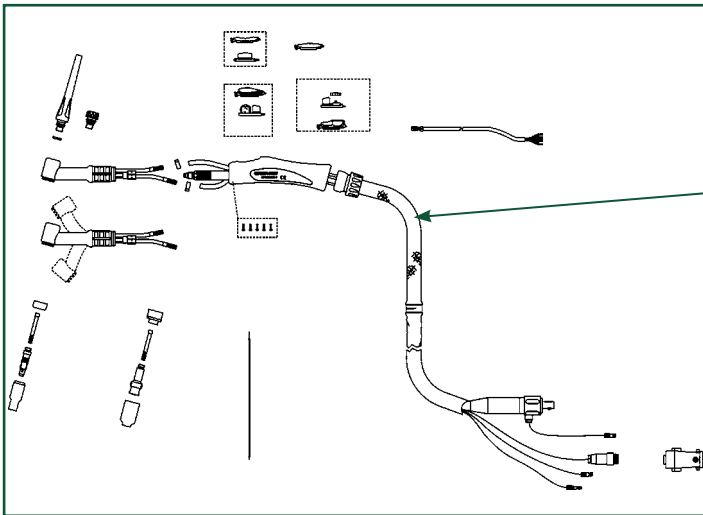
TIG Ergo 101V, 4m
Art. no.80392615



7/6 pole adapter
Art. no.80300116



7 pole TIG ZA adapter
Art. no.75990007



Leather cover with zip
For protection of the welding hose.
For TIG 101/301
Art. no.80300134



TIG Extension Cable

For extension of TIG welding hose. After use you can choose the short TIG welding hose again. If you use a water-cooled TIG extension cable the duty cycle of the standard torch remains unchanged because the TIG extension cable does not load the cooling unit.

Art. no.	Description
74303610	10m 25mm ² Air 7-pole without box
74303615	15m 35mm ² Air 7-pole without box
74303620	20m 35mm ² Air 7-pole without box
74355710	10m 50mm ² Water 7-pole without box
74355715	15m 50mm ² Water 7-pole without box
74355720	20m 50mm ² Water 7-pole without box



TIG Ergo control units



Blank cover
For use with e.g. foot switch
Art. no.80300102



Keypad unit
Art. no.80300100 (old model)
Art. no.80300060 (new model)

Old model use:
Art. no.80300100
Art. no.80300101
Art. no.80300130

New model (2012 →) use:
Art. no.80300060
Art. no.80300061
Art. no.80300070
Art. no.80300063
Art. no.80300064



Keypad unit with vertical TIG control knob (RV)
Art. no.80300101 (old model)
Art. no.80300061 (new model)



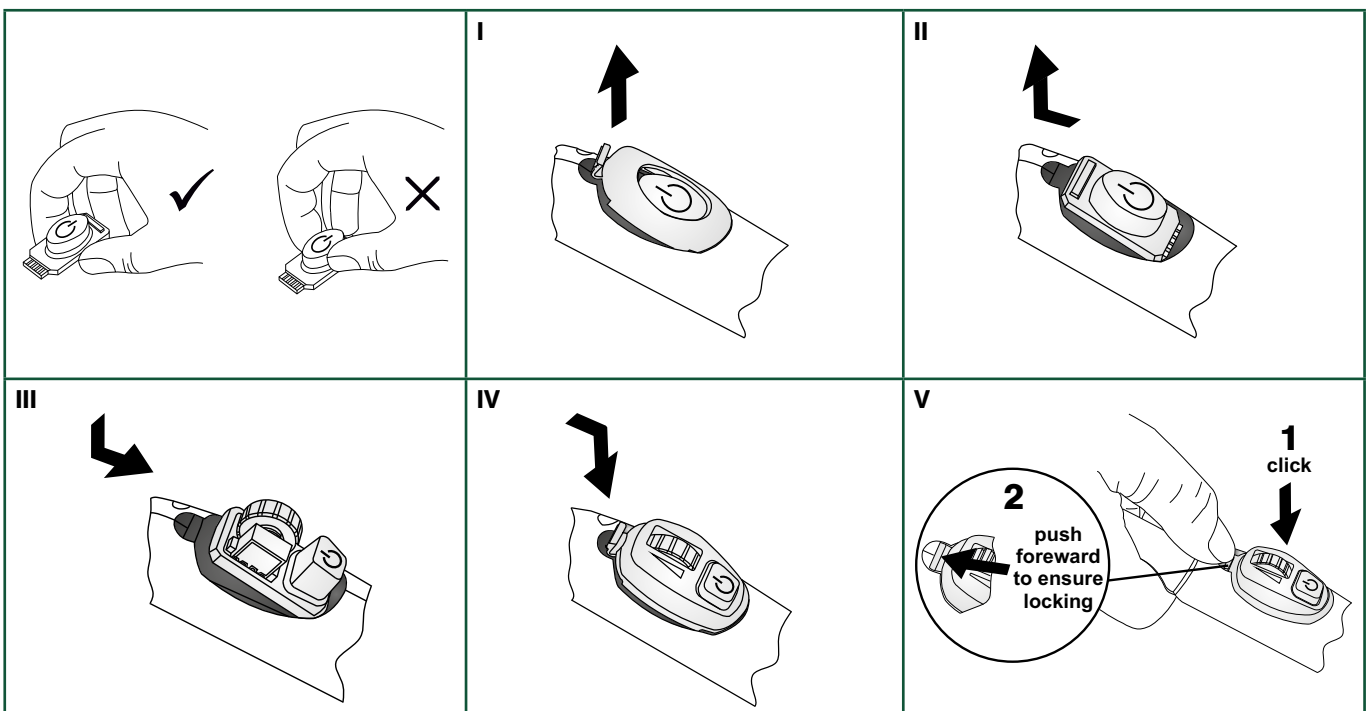
Keypad unit with horizontal TIG control knob (RH)
Art. no.80300130 (old model)
Art. no.80300070 (new model)



Up/Down module with 4-function key for adjustment of welding current incl. TIG-A-Tack function. The welding current is increased / reduced with 2 amps. Long press for constant increase / decrease.
Art. no.80300063
* Applies to software versions as of 2.17



Up/Down module with 3-function key for adjustment of welding current. The welding current is increased / reduced with 2 amps. Long press for constant increase / decrease.
Art. no.80300064*
* Applies to software versions as of 2.17



Wear parts for TIG Ergo welding torches

Wear parts boxes for TIG Ergo 101/201/221/301/321/401

81100228	Wear parts box TIG 101/301/321	
80300219	1 pcs	Insulator TIG 101/301/321
80361372	10 pcs	Tungsten electrode WS2 \varnothing 1.6 superblue
80361374	10 pcs	Tungsten electrode WS2 \varnothing 2.4 superblue
80400115	1 pcs	Electrode cap short TIG 101/301/321
80400116	1 pcs	Electrode cap medium TIG 101/301/321
80400117	1 pcs	Electrode cap long TIG 101/301/321
80400204	2 pcs	O-ring electrode cap TIG 101/301/321
80410202	2 pcs	Electrode holder \varnothing 1.6 TIG 101/301/321
80410203	2 pcs	Electrode holder \varnothing 2.4 TIG 101/301/321
80430212	5 pcs	Electrode clamp \varnothing 1.6 mm CuCr
80430213	5 pcs	Electrode clamp \varnothing 2.4 mm CuCr
80440202	5 pcs	Gas nozzle TIG 101/301/321 #5 \varnothing 8.0 / 5/16"
80440203	5 pcs	Gas nozzle TIG 101/301/321 #6 \varnothing 9.6 / 3/8"
80440204	5 pcs	Gas nozzle TIG 101/301/321 #7 \varnothing 11.2 / 7/16"



Wear parts box for TIG 101/301/321
Art. no. 81100228



Set of standard wear parts
 \varnothing 1.6 TIG101/301/321...80300117
 \varnothing 2.4 TIG101/301/321. 80300119

Set of wear parts. gas lenses (Not shown)
 \varnothing 1.6 TIG101/301/321. 80300140
 \varnothing 2.4 TIG101/301/321. 80300141

81100230	Wear parts box TIG 201/221/401	
80300189	2 pcs	Insulator TIG 201/221/401
80361372	10 pcs	Tungsten electrode WS2 \varnothing 1.6 superblue
80361374	10 pcs	Tungsten electrode WS2 \varnothing 2.4 superblue
80300200	1 pcs	Electrode cap short TIG 201/221/401
80300201	1 pcs	Electrode cap long TIG 201/221/401
80300223	2 pcs	O-Ring for electrode cap TIG 201/221/401
80310000	2 pcs	Electrode holder \varnothing 1.6 TIG 201/221/401
80310001	2 pcs	Electrode holder \varnothing 2.4 TIG 201/221/401
80330111	5 pcs	Electrode clamp \varnothing 1.6 mm CuCr
80330112	5 pcs	Electrode clamp \varnothing 2.4 mm CuCr
80340002	5 pcs	Gas nozzle TIG 201/221/401 #5 \varnothing 8.0 / 5/16"
80340003	5 pcs	Gas nozzle TIG 201/221/401 #6 \varnothing 9.6 / 3/8"
80340004	5 pcs	Gas nozzle TIG 201/221/401 #7 \varnothing 11.2 / 7/16"



Wear parts box for TIG 201/221/401
Art. no. 81100230

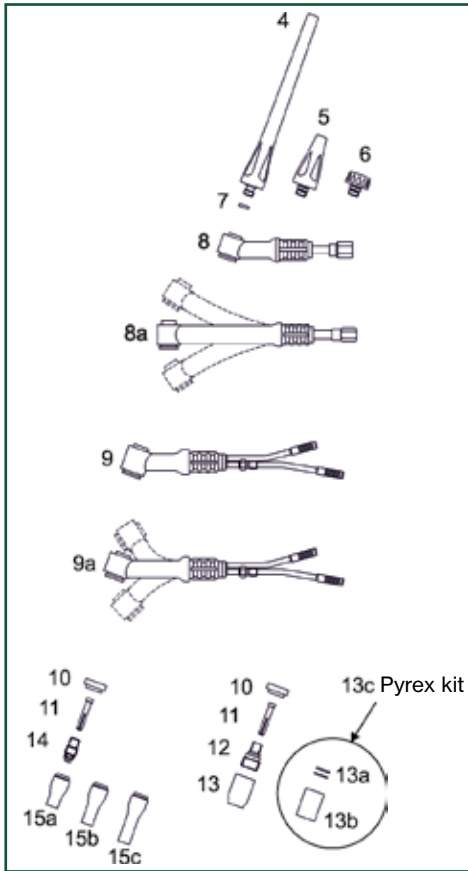


Set of standard wear parts
 \varnothing 1.6 TIG201/221/401.80300274
 \varnothing 2.4 TIG201/221/401. 80300118

Set of wear parts gas lenses (Not shown)
 \varnothing 1.6 TIG201/221/401. 80300142
 \varnothing 2.4 TIG201/221/401 80300143

Wear parts for TIG Ergo welding torches

Wear parts for TIG Ergo 101/301/321



TIG 101 is a small lightweight air-cooled TIG welding torch for use in hard-to-reach locations and where welding current does not exceed approx. 100 A DC.

TIG 101 is typically used for welding in stainless materials.

TIG 301 and 321 are extra robust water-cooled TIG welding torches. Water-cooling provides low temperature in the torch and handle as well as better comfort and longer durability.

TIG 101/301/321 are typically used for welding in steel, stainless steel and aluminium.

TIG 101/301/321 can be equipped with all wear parts displayed to the right and the control unit is easily replaced.

Position no.	Art. no.	Description	Min. order quantity
4	<input type="checkbox"/> Δ	80400117 Electrode cap long TIG 101/301/321	10
5	<input type="checkbox"/> Δ	80400116 Electrode cap medium TIG 101/301/321	10
6	<input type="checkbox"/> Δ	80400115 Electrode cap short TIG 101/301/321	10
7	<input type="checkbox"/> Δ	80400204 O-Ring electrode cap TIG 101/301/321	10
8		80300194 Torch body TIG 101 60mm	1
8a		80300195 Torch body TIG 101 Flex 60mm	1
		80300051 Torch body TIG 101 Flex 100mm	1
		80300052 Torch body TIG 101 Flex 135mm	1
9		80400310 Torch body TIG 301/321 55mm	1
9a		80400311 Torch body TIG 301 Flex 55mm	1
		80400315 Torch body TIG 301 Flex 105mm	1
		80400316 Torch body TIG 301 Flex 135mm	1
10	<input type="checkbox"/> Δ	80300219 Insulator TIG101/301/321	10
11		80430211 Electrode clamp ø1.0 mm CuCr	10
	* <input type="checkbox"/>	80430212 Electrode clamp ø1.6 mm CuCr	10
	<input type="checkbox"/> Δ	80430213 Electrode clamp ø2.4 mm CuCr	10
	Δ	80430214 Electrode clamp ø3.2 mm CuCr	10
		80430222 Electrode clamp ø1.6 mm brass wedge	10
		80430223 Electrode clamp ø2.4 mm brass wedge	10
		80430224 Electrode clamp ø3.2 mm brass wedge	10

Wear parts for TIG Ergo welding torches

Position no.	Art. no.	Description	Min. order quantity	
12	80410210	Gas lens 1.0mm 101-301 copper/brass	10	
	80410211	Gas lens 1.6mm 101-301 copper/brass	10	
	80410212	Gas lens 2.4mm 101-301 copper/brass	10	
	80410213	Gas lens 3.2mm 101-301 copper/brass	10	
	80410214	Gas lens II 1.0mm 101-301 cast brass	10	
	80410215	Gas lens II 1.6mm 101-301 cast brass	10	
	80410216	Gas lens II 2.4mm 101-301 cast brass	10	
	80410217	Gas lens II 3.2mm 101-301 cast brass	10	
13	80440210	Gas nozzle lens TIG101/301 #4 ϕ 6.4 / 1/4"	10	
	80440211	Gas Nozzle lens TIG101/301 #5 ϕ 8.0 / 5/16"	10	
	80440212	Gas Nozzle lens TIG101/301 #6 ϕ 9.6 / 3/8"	10	
	80440213	Gas Nozzle lens TIG101/301 #7 ϕ 11.2 / 7/16"	10	
	80440214	Gas Nozzle lens TIG101/301 #8 ϕ 12.7 / 1/2"	10	
13a	80300321	O-ring for Pyrex glass nozzle	1	
13b	80440235	Pyrex glass nozzle 25mm ϕ 20	1	
13c	80449235	Pyrex kit for TIG 101/301/321 gaslens (2xnozzle, 4xO-ring)	1	
14	80410201	Electrode holder ϕ 1.0 TIG101/301/321	10	
	* <input type="checkbox"/> <input type="checkbox"/>	80410202	Electrode holder ϕ 1.6 TIG101/301/321	10
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	80410203	Electrode holder ϕ 2.4 TIG101/301/321	10
	<input type="checkbox"/> <input type="checkbox"/>	80410204	Electrode holder ϕ 3.2 TIG101/301/321	10
15a	80440201	Gas nozzle TIG101/301/321 #4 ϕ 6.4 / 1/4"	10	
	<input type="checkbox"/> <input type="checkbox"/>	80440202	Gas nozzle TIG101/301/321 #5 ϕ 8.0 / 5/16"	10
	* <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	80440203	Gas nozzle TIG101/301/321 #6 ϕ 9.6 / 3/8"	10
	<input type="checkbox"/> <input type="checkbox"/>	80440204	Gas nozzle TIG101/301/321 #7 ϕ 11.2 / 7/16"	10
		80440205	Gas nozzle TIG101/301/321 #8 ϕ 12.7 / 1/2"	10
15b	80440221	Gas nozzle, long 48mm #4L ϕ 6.4 / 1/4"	10	
	80440222	Gas nozzle, long 48mm #5L ϕ 8.0 / 5/16"	10	
	80440223	Gas nozzle, long 48mm #6L ϕ 9.6 / 3/8"	10	
15c	80440231	Gas nozzle X-long 64mm #4XL ϕ 6.4 / 1/4"	10	
	80440232	Gas nozzle X-long 64mm #5XL ϕ 8.0 / 5/16"	10	
	80440233	Gas nozzle X-long 64mm #6XL ϕ 9.6 / 3/8"	10	
	* <input type="checkbox"/>	80361372	Tungsten electrodes - see page 46	10
	<input type="checkbox"/> <input type="checkbox"/>	80361374		10
	<input type="checkbox"/>	80361376		10
	*	80300117	Standard wearing part set ϕ 1.6 TIG 101/301/321	1
		80300119	Standard wearing part set ϕ 2.4 TIG 101/301/321	1
	<input type="checkbox"/>	81100228	Wear parts box TIG 101/301/321 1.6/2.4	1
	<input type="checkbox"/>	81100248	Wear parts box TIG 101/301/321 2.4/3.2	1
		80300140	Wearing part set 1.6 gas lens TIG 101-301-321	1
		80300141	Wearing part set 2.4 gas lens TIG 101-301-321	1

The size of the gas nozzle (inside diameter). e.g. #4 = 4 x 1.6 mm = 6.4 mm.

* = Incl. in wearing part box/set.

Wear parts for TIG Ergo welding torches

Pyrex gas lens kit for TIG 101/301/321

Art. no.80300123



Ceramic kit jumbo ø1,6-ø2,4mm TIG 101/301/321

Art. no.80300156



Pyrex kit small ø1,6-ø2,4mm TIG 101/301/321

Art. no.80300616



Pyrex kit jumbo ø1,6-ø2,4mm TIG 101/301/321

Art. no. . 80300617



80300123 Contents:

- 4x80300321 O-ring
- 1x80430223 Collet ø2.4mm
- 1x80410216 Gas lens
- 2x80440235 Glass nozzle
- 1x80361374 electrode ø2.4

Pyrex gas lens kit

Glass ceramic (Pyrex) TIG gas nozzle provides an excellent view of the arc, weld pool and tungsten electrode when welding in hard-to-reach locations.

Pyrex gas lens kit for standard gas lens TIG 101/301/321

Art. no.80300123

Pos. no.	Art. no.	Description	Min. order quantity
	80300123	Kit for TIG 101/301/321 gaslens	1
1	80300321	O-ring for Pyrex glass nozzle	1
2	80430223	Collet ø2.4mm	10
3	80410216	Gas lens II ø2.4 TIG	10
4	80440235	Pyrex glass nozzle	1
5	80361374	Tungsten electrode ø2.4 mm SuperBlue	1

80300156 Contents:

- 1x80300325 Gas lens insulator
- 1x80430325 Collet ø2.4mm
- 1x80410322 Gas lens
- 1x80440329 Gas nozzle
- 1x80361374 electrode ø2.4

Ceramic jumbo wear parts kit ø1.6-ø2.4

A Jumbo ceramic gas nozzle provides optimal gas shielding of the weld pool, also when welding in exotic materials, owing to its large diameter and unique gas filter. A gas lens with many layers of fine-mesh net ensures a laminar gas flow, which also enables a longer stick-out on the tungsten electrode. In some cases, you can weld in titanium without using trailing shield. This advantage also applies to welding in austenitic, super-austenitic, duplex and nickel materials.









Ceramic jumbo wear parts kit ø1.6-ø2.4 TIG 101/301/321

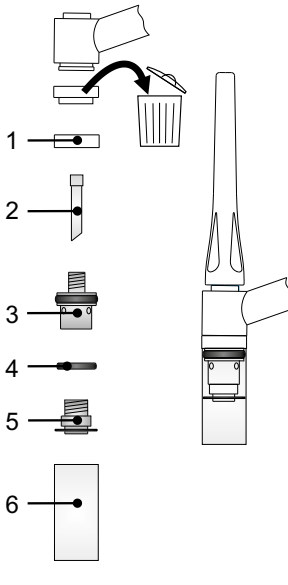
Art. no.80300156

Pos. no.	Art. no.	Description	Min. order quantity
	80300156	Jumbo ceramic kit ø2.4 TIG 101/301/321	1
1.1	80400115	Electrode cap short TIG 101/301/321	10
1.2	80400116	Electrode cap medium TIG 101/301/321	10
1.3	80400117	Electrode cap long TIG 101/301/321	10
2	80300325	Gas lens insulator	1
3.1	80430324	Collet ø1.6mm TIG 101/301/321	1
3.3	80430325	Collet ø2.4mm TIG 101/301/321	1
3.3	80430326	Collet ø3.2mm TIG 101/301/321	1
4.1	80410321	Gas lens ø1.6mm TIG 101/301/321	1
4.2	80410322	Gas lens ø2.4mm TIG 101/301/321	1
4.3	80410323	Gas lens ø3.2mm TIG 101/301/321	1
5.1	80440326	Gas nozzle #6 ø9.6 TIG 101/301/321	1
5.2	80440327	Gas nozzle #8 ø12.8 TIG 101/301/321	1
5.3	80440328	Gas nozzle #10 ø16.0 TIG 101/301/321	1
5.4	80440329	Gas nozzle #12 ø19.2 TIG 101/301/321	1
5.5	80440330	Gas nozzle #15 ø24.0 TIG 101/301/321	1
6	80361374	Tungsten electrode ø2.4 mm SuperBlue	10

Wear parts for TIG Ergo welding torches

80300616 Contents:

-  1x80300326 insulator
-  1x80430222 collet \varnothing 1.6mm
-  1x80430223 collet \varnothing 2.4mm
-  1x80310425 collet housing incl. O-ring
-  1x43570029 O-ring for housing
-  1x80310426 Gas lens body 1.6
-  1x80310427 Gas lens body 2.4
-  1x80440331 Pyrex gas cup



Pyrex kit with Pyrex gas nozzle and built-in gas lens

Glass ceramic (Pyrex) TIG gas nozzle provides an excellent view of the arc, weld pool and tungsten electrode when welding in hard-to-reach locations. At the same time, the gas lens with many layers of fine-mesh net ensures a laminar gas flow, which also enables a longer stick-out on the tungsten electrode. In some cases, you can weld in titanium without using trailing shield. This advantage also applies to welding in austenitic, super-austenitic, duplex and nickel materials.

Pyrex Kit small \varnothing 1.6- \varnothing 2.4mm TIG 101/301/321








Art. no.80300616

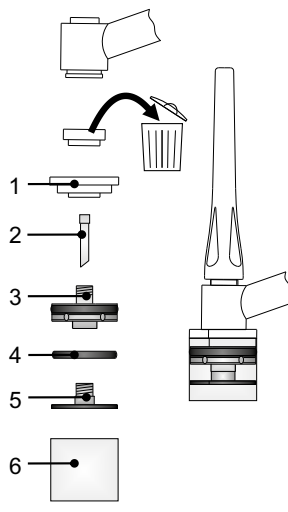
Pyrex Kit jumbo \varnothing 1.6- \varnothing 2.4mm TIG 101/301/321

Art. no.80300617

Pos. no.	Art. no.	Description	Min. order quantity
	80300616	Pyrex Kit small \varnothing1.6-\varnothing2.4 TIG 101/301/321	1
1	80300326	Insulator	1
2.1	80430222	Collet \varnothing 1.6mm brass wedge TIG 101/301/321	10
2.2	80430223	Collet \varnothing 2.4mm brass wedge TIG 101/301/321	10
2.3	80430224	Collet \varnothing 3.2mm brass wedge TIG 101/301/321	10
3	80310425	Collet housing	1
4	43570029	O-ring for housing	1
5.1	80310426	Gas lens body 1.6mm	1
5.2	80310427	Gas lens body 2.4mm	1
5.3	80310428	Gas lens body 3.2mm	1
6	80440331	Pyrex gas cup	1

80300617 Contents:

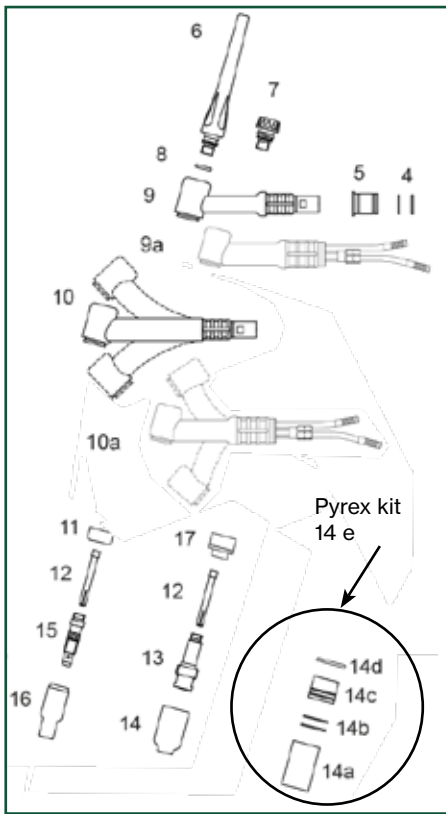
-  1x80300327 insulator
-  1x80430222 collet \varnothing 1.6mm
-  1x80430223 collet \varnothing 2.4mm
-  1x80310429 collet housing incl. O-ring
-  1x43570030 O-ring for housing
-  1x80310430 Gas lens body 1.6
-  1x80440332 Pyrex gas cup



Pos. no.	Art. no.	Description	Min. order quantity
	80300617	Pyrex Kit jumbo \varnothing1.6-\varnothing2.4 TIG 101/301/321	1
1	80300327	Insulator	1
2.1	80430222	Collet \varnothing 1.6mm brass wedge TIG 101/301/321	10
2.2	80430223	Collet \varnothing 2.4mm brass wedge TIG 101/301/321	10
2.3	80430224	Collet \varnothing 3.2mm brass wedge TIG 101/301/321	10
3	80310429	Collet housing	1
4	43570030	O-ring for housing	1
5.1	80310430	Gas lens body 1.6mm	1
5.2	80310431	Gas lens body 2.4mm	1
5.3	80310432	Gas lens body 3.2mm	1
6	80440332	Pyrex gas cup	1

Wear parts for TIG Ergo welding torches

Wear parts for TIG Ergo 201/221/401



TIG 201 is typically used for production and on-site repairs in stainless steel and aluminium.

TIG 221 is typically used for production and heavy-duty welding in aluminium.

TIG 401 is designed for production and site repairs in stainless steel and aluminium in thick wall thicknesses, using up to 400 A DC.

Position no.	Art. no.	Description	Min. order quantity
4	80300301	O-ring Ø17.5x1.5mm	1
5	80400312	Transition piece for 201HD-401	1
6	<input type="checkbox"/> 80300201	Electrode cap long TIG201-401	10
7	<input type="checkbox"/> 80300200	Electrode cap short TIG 201-401	10
8	<input type="checkbox"/> 80300223	O-ring for cap TIG201/401	1
9	80300196	Torch body TIG 201 70mm	1
	80300237	Torch body TIG 221	1
9a	80400422	Torch body TIG 401 80mm	1
10	80300197	Torch body TIG 201 Flex 70mm	1
	80300198	Torch body TIG 201 Flex 90mm	1
	80300238	Torch body TIG 221 Flex	1
10a	80400423	Torch body TIG 401 Flex 80mm	1
11	<input type="checkbox"/> 80300189	Insulator TIG 201-401	10
12	<input type="checkbox"/> 80330110	Electrode clamp ø1.0 mm CuCr	10
	<input type="checkbox"/> 80330111	Electrode clamp ø1.6 mm CuCr	10
	* <input type="checkbox"/> 80330112	Electrode clamp ø2.4 mm CuCr	10
	<input type="checkbox"/> 80330113	Electrode clamp ø3.2 mm CuCr	10
	<input type="checkbox"/> 80330114	Electrode clamp ø4.0 mm CuCr	10
13	<input type="checkbox"/> 80310411	Gas lens 1.0 mm TIG 201-401	10
	<input type="checkbox"/> 80310412	Gas lens 1.6 mm TIG 201-401	10
	<input type="checkbox"/> 80310413	Gas lens 2.4 mm TIG 201-401	10
	<input type="checkbox"/> 80310414	Gas lens 3.2 mm TIG 201-401	10
	<input type="checkbox"/> 80310415	Gas lens 4.0 mm TIG 201-401	10

Wear parts for TIG Ergo welding torches

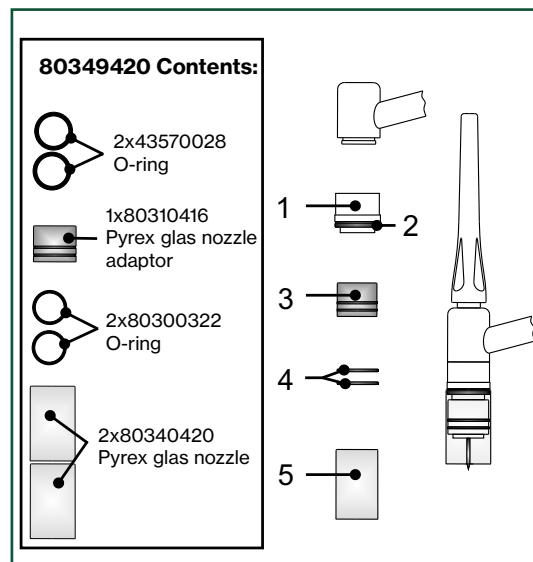
Position no.	Art. no.	Description	Min. order quantity
14	80340400	Nozzle for gas lens TIG 201/221/401/451 #4 ø6.4 / 1/4"	10
	80340401	Nozzle for gas lens TIG 201/221/401/451 #5 ø8.0 / 5/16"	10
	80340402	Nozzle for gas lens TIG 201/221/401/451 #6 ø9.6 / 3/8"	10
	80340403	Nozzle for gas lens TIG 201/221/401/451 #7 ø11.2 / 7/16"	10
	80340404	Nozzle for gas lens TIG 201/221/401/451 #8 ø12.7 / 1/2"	10
	80340406	Nozzle for gas lens TIG 201/221/401/451 #11 ø17.5 / 11/16"	10
14 a	80340420	Pyrex glass nozzle 42mm ø25	1
14 b	80300322	O-ring for Pyrex glass nozzle	1
14 c	80310416	Pyrex glass nozzle adapter	1
14 d	43570028	O-ring red silicon ø16,9 x ø2,75	1
14 e	80349420	Pyrex kit for TIG 201/221/401 gas lens (2xnozzle, 2xO-ring, 1xadapter)	1
15	80310004	Electrode holder ø1.0 TIG201/401	10
	<input type="checkbox"/> 80310000	Electrode holder ø1.6 TIG201/401	10
	* <input type="checkbox"/> 80310001	Electrode holder ø2.4 TIG201/401	10
	80310002	Electrode holder ø3.2 TIG201/401	10
	80310003	Electrode holder ø4.0 TIG201/401	10
	16	80340001	Gas nozzle TIG201/401 #4 ø6.4 / 1/4"
<input type="checkbox"/> 80340002		Gas nozzle TIG201/401 #5 ø8.0 / 5/16"	10
* <input type="checkbox"/> 80340003		Gas nozzle TIG201/401 #6 ø9.6 / 3/8"	10
<input type="checkbox"/> 80340004		Gas nozzle TIG201/401 #7 ø11.2/ 7/16"	10
80340005		Gas nozzle TIG201/401 #8 ø12.7 / 1/2"	10
80340006		Gas nozzle TIG201/401 #10 ø15.7 / 5/8"	10
80340007		Gas nozzle TIG201/401 #12 ø19.0 / 3/4"	10
17	80300220	Gas lens insulator TIG201-401	10
<input type="checkbox"/>	80361372	Tungsten electrodes - see page 46	10
* <input type="checkbox"/>	80361374		10
<input type="checkbox"/>	80300118	Standard wearing part set ø2.4 TIG 201/221/401	1
	80300274	Standard wearing part set ø1.6 TIG 201/221/401	1
<input type="checkbox"/>	81100230	Wear parts box TIG 201/221/401	1
	80300142	Wearing part set 1.6 gas lens TIG 201-401	1
	80300143	Wearing part set 2.4 gas lens TIG 201-401	1

The size of the gas nozzle (inside diameter). e.g. #4 = 4 x 1.6 mm = 6.4 mm. * Δ = Incl. in wearing part box/set.



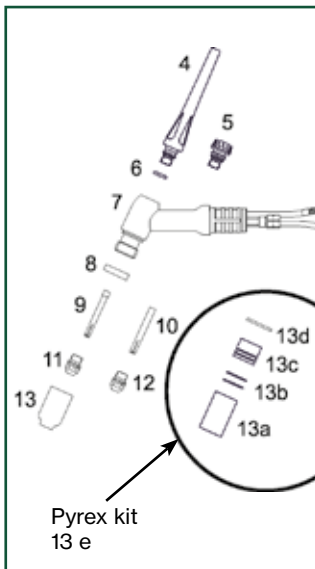
Pyrex gas nozzle kit for std. gas lens: TIG 201/221/401
Art. no.80349420

Pos. no.	Art. no.	Description	Min. order quantity
	80349420	Pyrex kit TIG 201/221/401 gas lens	1
1	80300220	Gas lens insulator	1
2	43570028	O-ring red silicon ø16.9 x ø2.75	1
3	80310416	Pyrex glas nozzle adaptor	1
4	80300322	O-ring, Pyrex glas nozzle ø16mm ø20mm	1
5	80340420	Pyrex glass nozzle 42mm ø22 ø26 ±0.3mm	1



Wear parts for TIG Ergo welding torches

Wear parts for TIG Ergo 451



TIG 451 is the strongest model in our range of TIG welding torches. TIG 451 is water-cooled and designed for heavy-duty welding.

TIG 451 is typically used for high performance production and on-site repairs in stainless steel and aluminium in thick wall-thicknesses using up to 420A DC welding current.

TIG 451 can be equipped with all wearing parts displayed above and the control unit is easily replaced.

Position no.	Art. no.	Description	Min. order quantity
4	80300201	Electrode cap long	10
5	80300200	Electrode cap short	10
6	80300223	O-ring for cap TIG	1
7	80400425	Torch body TIG 451	1
8	* Δ 80300239	Insulator TIG 451	10
9	80330110	Electrode clamp Ø1.0 mm CuCr	10
	80330111	Electrode clamp Ø1.6 mm CuCr	10
	* 80330112	Electrode clamp Ø2.4 mm CuCr	10
	Δ 80330113	Electrode clamp Ø3.2 mm CuCr	10
	80330114	Electrode clamp Ø4.0 mm CuCr	10
10	80330106	Collet HD TIG 451 4.0 mm	10
	80330107	Collet HD TIG 451 4.8 mm	10
11	* Δ 80310010	Collet body TIG 451 1.0-3.2 mm	10
12	80310011	Collet body TIG 451 3.2-4.8 mm	10
13	80340400	Nozzle for gas lens TIG 201/221/401/451 #4 Ø6.4 / 1/4"	10
	80340401	Nozzle for gas lens TIG 201/221/401/451 #5 Ø8.0 / 5/16"	10
	80340402	Nozzle for gas lens TIG 201/221/401/451 #6 Ø9.6 / 3/8"	10
	* 80340403	Nozzle for gas lens TIG 201/221/401/451 #7 Ø11.2 / 7/16"	10
	Δ 80340404	Nozzle for gas lens TIG 201/221/401/451 #8 Ø12.7 / 1/2"	10
	80340406	Nozzle for gas lens TIG 201/221/401/451 #11 Ø17.5 / 11/16"	10
13a	80340420	Pyrex glass nozzle 42mm Ø25	1
13b	80300322	O-ring for Pyrex glass nozzle	1
13c	80310416	Pyrex glass nozzle adaptor	1
13d	43570028	O-ring red silicon ø16.9 x ø2.75	1
13e	80349420	Pyrex kit for TIG 201/221/401 gas lens (2xnozzle, 2xO-ring, 1xadapter)	1
	* 80361374	Tungsten electrodes - see page 46	10
	Δ 80361376		10
	* 80300136	Standard wearing part set Ø2.4 TIG 451	1
	Δ 80300138	Standard wearing part set Ø3.2 TIG 451	1

The size of the gas nozzle (inside diameter). e.g. #4 = 4 x 1.6 mm = 6.4 mm.
 * □ Δ = Incl. in wearing part box/set.

TIG Adjust 101/201/301/401

The TIG Adjust air-cooled or water-cooled torches allow you to weld in hard-to-reach places.

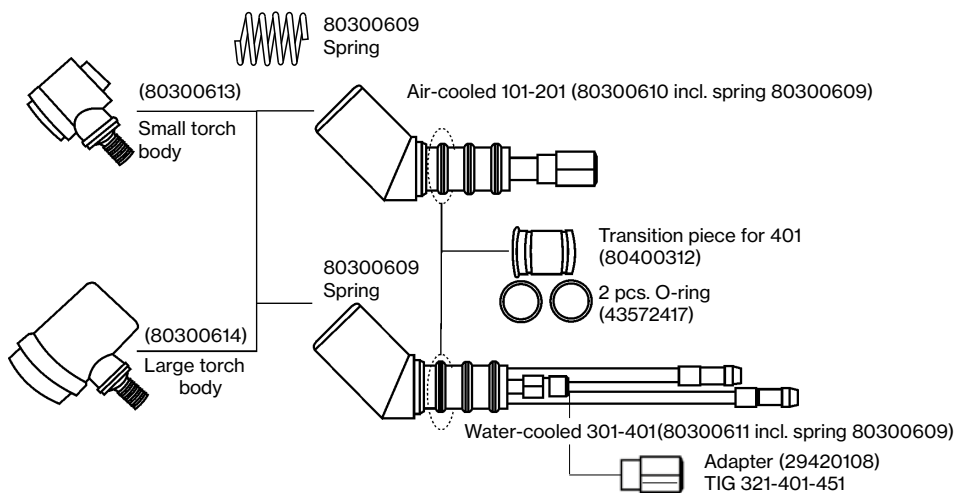


TIG Adjust provides full 360 degree-of-freedom

TIG Adjust is designed for welding operations requiring frequent adjustments of the torch body.

The torch body can be turned in any direction and has longer life than standard flexible torch bodies.

- Air-cooled or water-cooled models
- Torch bodies in two different sizes
- Small torch body: standard wear parts from the TIG 101-301 range
- Large torch body: standard wear parts from the TIG 201-401 range
- Supplied without wear parts as standard
- TIG Adjust suits the two different size torch handles of the TIG Ergo range and all TIG Ergo control units are applicable.
- Available in all 4 m and 8 m TIG Ergo models and also in special lengths for regular orders.
- Can be ordered as a standard custom-built solution



TIG 101	Variant	Article no.
Small torch body 80300613	TIG 101 Adjust 4 m	80392705
	TIG 101 Adjust 8 m	80392706
	TIG 101R Adjust 4 m	80392700
	TIG 101R Adjust 8 m	80392701
Large torch body 80300614	TIG 201 Adjust 4 m	80392845
	TIG 201 Adjust 8 m	80392846
	TIG 201R Adjust 4 m	80392847
	TIG 201R Adjust 8 m	80392848

TIG 301	Variant	Article no.
Small torch body 80300613	TIG 301 Adjust 4 m	80492190
	TIG 301 Adjust 8 m	80492191
	TIG 301R Adjust 4 m	80492185
	TIG 301R Adjust 8 m	80492186
Large torch body 80300614	TIG 401 Adjust 4 m	80492265
	TIG 401 Adjust 8 m	80492266
	TIG 401R Adjust 4 m	80492285
	TIG 401R Adjust 8 m	80492286

Art. no.	TIG Adjust range
80392705	TIG 101 Ergo Adjust 4m, 7 pole
80392706	TIG 101 Ergo Adjust 8m, 7 pole
80392700	TIG 101RH Ergo Adjust 4m, 7 pole
80392701	TIG 101RH Ergo Adjust 8m, 7 pole
80392845	TIG 201 Ergo Adjust 4m, 7 pole
80392846	TIG 201 Ergo Adjust 8m, 7 pole
80392847	TIG 201RH Ergo Adjust 4m, 7 pole
80392848	TIG 201RH Ergo Adjust 8m, 7 pole
80492190	TIG 301 Ergo Adjust 4m, 7 pole
80492191	TIG 301 Ergo Adjust 8m, 7 pole
80492185	TIG 301RH Ergo Adjust 4m, 7 pole
80492186	TIG 301RH Ergo Adjust 8m, 7 pole
80492265	TIG 401 Ergo Adjust 4m, 7 pole
80492266	TIG 401 Ergo Adjust 8m, 7 pole
80492285	TIG 401RH Ergo Adjust 4m, 7 pole
80492286	TIG 401RH Ergo Adjust 8m, 7 pole

Art. no.	TIG Adjust range	Min. order quantity
80300613	Small torch body	1
80300614	Large torch body	1
80300610	Body gascooled	1
80300611	Body watercooled	1
80300609	Spring	1
80400312	Transition piece	1
43572417	O-ring	1
29420108	Adaptor 1/4"UNF-3/8"24UNF left-hand thread	1

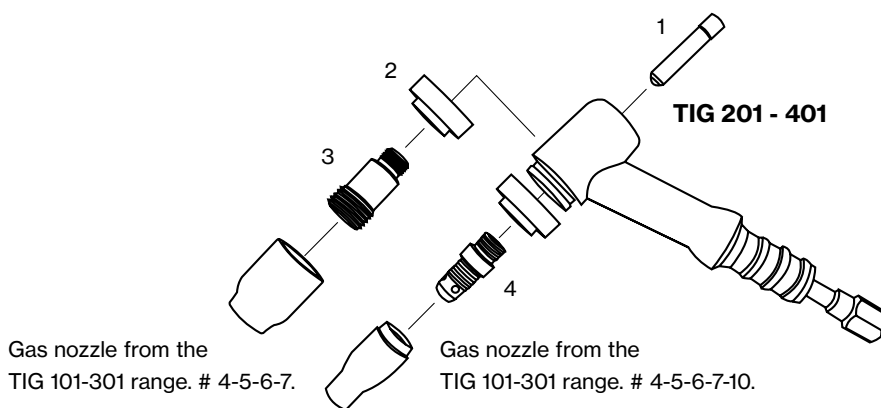
The products delivered may differ from the photos in the catalogue.

Special "Stubby" parts for TIG 201/221/401

Special torch body for "Stubby" system



Stubby parts are used for TIG 201, 221 and TIG 401. Stubby parts reduce the height of the torch and provide better access to hard-to-reach locations.

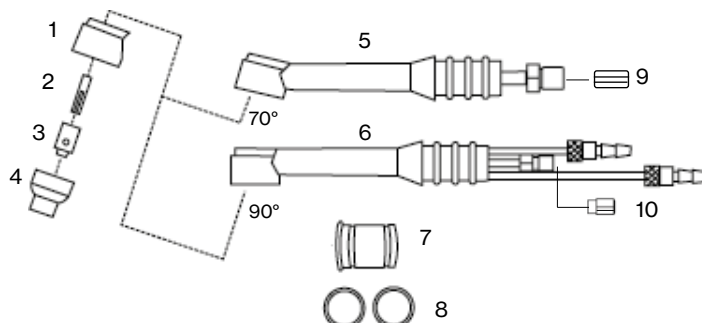


Pos. no.	Art. no.	System "Stubby"	Min. order quantity
1	80330030	Collet Ø1.0mm "Stubby"	10
	80330031	Collet Ø1.6mm "Stubby"	10
	80330032	Collet Ø2.4mm "Stubby"	10
	80330033	Collet Ø3.2mm "Stubby"	10
2	80300236	Insulator for gas lens "Stubby"	1
3	80310421	Gas lens 1.0mm "Stubby"	10
	80310422	Gas lens 1.6mm "Stubby"	10
	80310424	Gas lens 2.4mm "Stubby"	10
4	80310020	Electrodeholder "Stubby"	10
	80300286	Wearing parts set TIG Stubby ø1.6	1
	80300287	Wearing parts set TIG Stubby ø2.4	1
	80300288	Wearing parts set TIG Stubby ø1.6 gas lens	1
	80300289	Wearing parts set TIG Stubby ø2.4 gas lens	1

Special parts for WP 24

Special torch body WP24

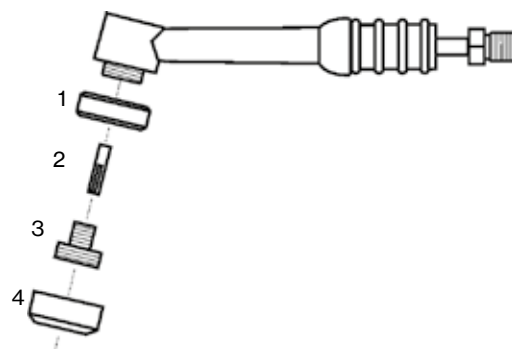
The torch body fits in everywhere.



Pos. no.	Art. no.	WP24 parts	Min. order quantity
1	80300225	Insulator	1
2	80330009	Electrode clamp 1.0mm	10
	80330010	Electrode clamp 1.6mm	10
	80330011	Electrode clamp 2.4mm	10
3	80310006	Electrode holder 1.0mm	10
	80310007	Electrode holder 1.6mm	10
	80310008	Electrode holder 2.4mm	10
4	80340024	Gas nozzle #4 Ø6.4 / 1/4"	10
	80340025	Gas nozzle #5 Ø8.0 / 5/16"	10
	80340026	Gas nozzle #6 Ø9.6 / 3/8"	10
5	80300028	WP24G torch head body air 70°	1
6	80400309	WP24W torch head body water 90°	1
7	80400312	Transition piece for 201HD-401	1
8	43572417	O-ring, 2 pcs.	1
9	29420111	Socket 3/8"24UNF right W11X15	1
10	29420108	Adaptor 1/4"UNF-3/8"24UNF left	1
	80300284	Wearing parts set TIG WP24 ø1.6	1
	80300285	Wearing parts set TIG WP24 ø2.4	1
	81100238	Wear parts box TIG WP24/DSF225	1

The size of the gas nozzle (inside diameter). e.g. #4 = 4 x 1.6 mm = 6.4 mm.

Pos. no.	Art. no.	WP24 Mini parts	Min. order quantity
1	80300311	WP24 insulator mini for gaslens	5
2	80330010	Electrode clamp 1.6mm	10
2	80330011	Electrode clamp 2.4mm	10
3	80410218	TIG 101/301 gas lens mini ø 1.6	5
3	80410219	TIG 101/301 gas lens mini ø 2.4	5
4	80440198	Gas nozzle for TIG101/301 mini #5 Ø8.0 / 5/16"	10
4	80440199	Gas nozzle for TIG101/301 mini #6 Ø9.6 / 3/8"	10



Special torch body/-head DSF 225 FLEX

DSF 225 FLEX is a flexible/turnable water-cooled torch body with replaceable head (up to 45 degree bending).



TIG 201/401









TIG 101/301/321



Standard wear parts

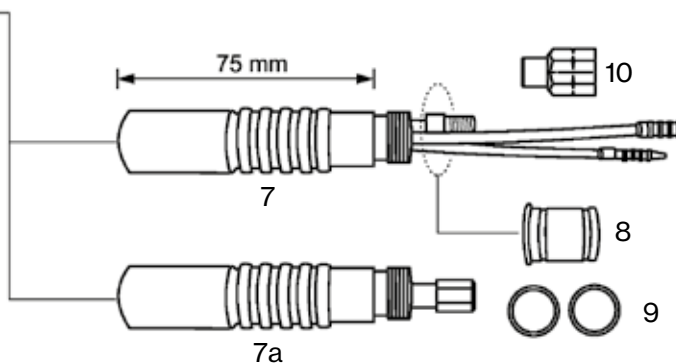
11

- 1  70°
TIG 101/301/321
- 2  180°
TIG 101/301/321
- 3  90°
TIG 101/301/321
- 4  70°
WP 24
- 5  70°
TIG 201/401
- 6  180°
TIG 201/401

Art. no.	DSF FLEX
80392889*	TIG Ergo 201 DSF 225x3B 4m 7-pole
80392890*	TIG Ergo 201 DSF 225x3B 8m 7-pole
80492339*	TIG Ergo 301 DSF 225x3B 4m 7-pole
80492340*	TIG Ergo 301 DSF 225x3B 8m 7-pole

* = Incl. 3 pcs torch bodys (pos. 1 - 2 - 4)

Pos. no.	Art. no.	DSF FLEX
1	80300016	Torch head small 70° TIG 101/301/321
2	80300191	Torch head small straight TIG 101/301/321
3	80300017	Torch head small 90° TIG 101/301/321
4	80300226	Torch head small 70° WP 24
5	80300187	Torch head big 70° TIG 201/401
6	80300190	Torch head big 180° TIG 201/401
7	80400307	FLEX torch body DSF 225
7a	80300249	FLEX torch body DSF 225 Air C
8	80400312	Transition piece for 201HD-401
9	80300301	O-ring Ø17.5x1.5mm
10	29420108	Adaptor 1/4"UNF-3/8"24UNF left-hand thread
11	81100228 81100238 81100230	Wearing part box TIG 101/301/321 1.6/2.4 Wearing part box TIG WP24/DSF225 Wearing part box TIG 201/221/401



Wear parts according to individual requirements

As standard Migatronic TIG welding torches are supplied without wear parts. This allows you to equip your torches with wear parts as required. For list of wear parts for the individual models of TIG welding torches please refer to previous pages.

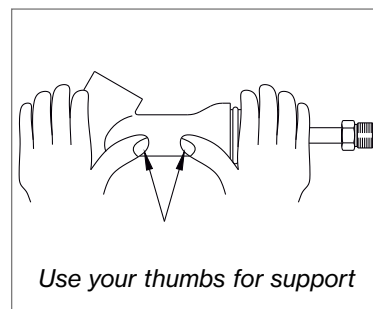
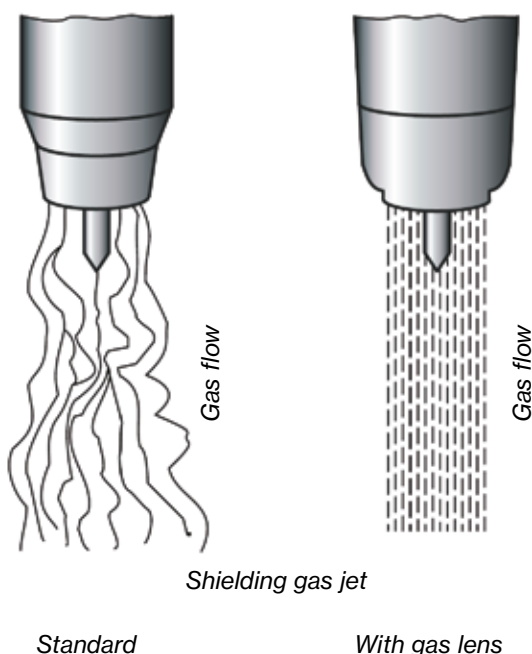
If you choose **standard wear parts**, the TIG torch body will be equipped with electrode holder and electrode clamp as well as ceramic gas nozzle. the function of which is to guide the shielding gas towards the weld zone so as to displace the atmospheric air.

For better **precision and control** during TIG welding, we recommend gas lenses for the TIG torch body which give a very uniform flow of the shielding gas and allow a longer electrode stickout. Use of gas lens may also reduce the gas consumption.

TIG FLEX torch body

Migatronic TIG FLEX torch bodies are flexible and shapeable for difficult welding operations. If several shapings are required, we recommend a turnable TIG torch body.

Shaping the torch body requires caution; the torch body must be cooled off and the maximum bending angle is 45°. Use your thumbs for support of the torch body as shown below.



Plasma cutting torches and wear parts

Zeta 60



Plasma cutting torch for Zeta 60, 6m hose

Art. no. 80690091



Wearing part box for Zeta 60

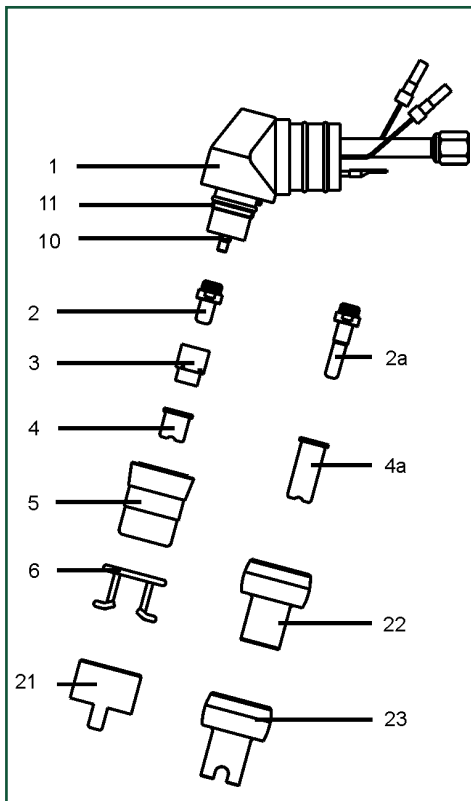
Art. no. 81100233



Bevel tools attachment kit for Zeta 60

Art. no. 80600220

Wear Parts for Plasma Cutting Handle



Pos. no.	Art. no.	Description	Min. order quantity
1	80650007	Torch body	1
2	80610009*	Electrode	10
2a	80610010	Electrode, long	1
3	80640119*	Insulating ring	1
4	80630024	Cutting nozzle, short ø0.9	10
4	80630023	Cutting nozzle, short ø1.0	10
4	80630022*	Cutting nozzle, short ø1.1	10
4	80630021	Cutting nozzle, short ø1.2	10
4a	80630025	Cutting nozzle, long ø0.9	1
4a	80630026	Cutting nozzle, long ø1.0	1
4a	80630027	Cutting nozzle, long ø1.1	1
4a	80630028	Cutting nozzle, long ø1.2	1
5	80640112*	Protection cap	1
6	80600109*	Distance spring	1
10	80600116	Diffuser	1
11	80600115	O-ring	1
21	80600118	Distance ring (2 legs)	1
22	80600119	Distance ring ø12mm	1
23	80600120	Distance ring ø12mm (4 legs)	1
	81100233	Wearing part box	1
	80600220	Bevel tools attachment kit	1

Plasma cutting torches and wear parts

Zeta 100 / Zeta 100 Automation



Plasma cutting torch for Zeta 100, 6m hose

Art. no. 80690095

Plasma torch for Zeta 100, 15 m

Art. no. 80690098



Plasma cutting torch for Zeta 100, 6m hose (automation)

Art. no. 80690096



Wearing part box for Zeta 100

Art. no. 81100239

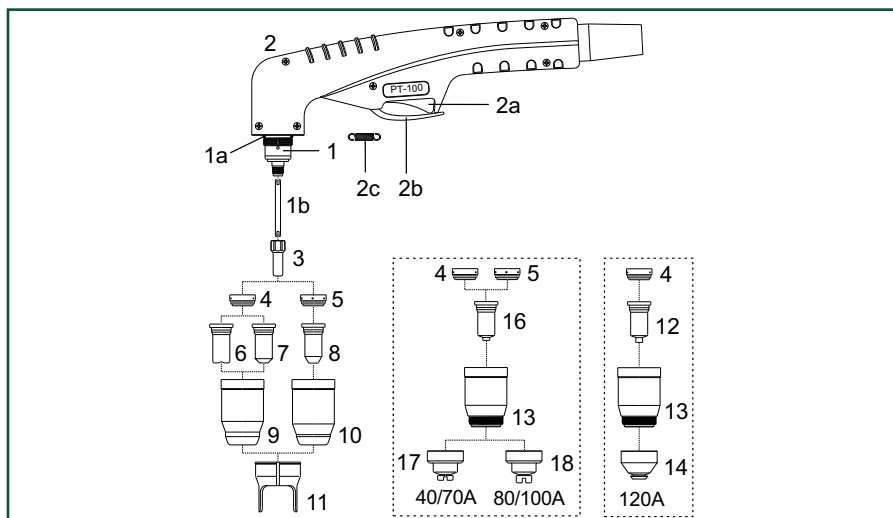


Bevel tools attachment kit for Zeta 100

Art. no. 80600230

Pos no.	Art. no.	Description	Min. order quantity
1	80650010	Torch cutting head	1
1	80650011	Torch cutting head	1
1a	80600121	O-ring	1
1b	80600122	Cooling tube	1
2	80600130	Handle incl. switch	1
2	80600132	Machine tube handle	1
2a	80600117	Switch	1
3*	80610011	Electrode	10
4	80600124	Gas diffuser 30-70A	1
5*	80600125	Gas diffuser 80-120A	1
6	80630204	Cutting nozzle, ø0.9 30-40A	10
7.1	80630205	Cutting nozzle, ø1.0 40-50A	10
7.2	80630206	Cutting nozzle, ø1.1 50-60A	10
7.3	80630207	Cutting nozzle, ø1.2 60-70A	10
8.1	80630208	Cutting nozzle, ø1.4 80-90A	10
8.2*	80630209	Cutting nozzle, ø1.5 90-100A	10
8.3	80630210	Cutting nozzle, ø1.6 100-120A	10
9	80640113	Protection cap 30-70A	1
10*	80640114	Protection cap 80-120A	1
11*	80600126	Distance ring (2 legs)	1
12	80630211	Gouging tip	1
13	80640115	Protection cap	1
14	80640116	Protection cap, gouging	1
16.1	80630225	Contact cutting tip ø1.0	10
16.2	80630226	Contact cutting tip ø1.1	10
16.3	80630227	Contact cutting tip ø1.2	10
16.4	80630228	Contact cutting tip ø1.4	10
16.5	80630229	Contact cutting tip ø1,6	10
17	80640117	Protection cap 40-70A, contact cutting	10
18	80640118	Protection cap 80-100A, contact cutting	10
	81100239	Wearing part box	1
	80600230	Bevel tools attachment kit	1

* = Pre-assembled as standard



Plasma welding torches

Art. no.	PWM-4A / PWM-300	Comments
84022578	PWM-4A1 180° w/o hose	
84022847	PWM-300 180° w/o hose	
80922100	Hose PWM-4A/PWM300 1.0 m	
80922150	Hose PWM-4A/PWM300 1.5 m	
80922200	Hose PWM-4A/PWM300 2.0 m	
80922300	Hose PWM-4A/PWM300 3.0 m	
80922350	Hose PWM-4A/PWM300 3.5 m	
80922400	Hose PWM-4A/PWM300 4.0 m	
80922450	Hose PWM-4A/PWM300 4.5 m	
80922500	Hose PWM-4A/PWM300 5.0 m	
80922550	Hose PWM-4A/PWM300 5.5 m	
80922600	Hose PWM-4A/PWM300 6.0 m	
80922650	Hose PWM-4A/PWM300 6.5 m	
80922700	Hose PWM-4A/PWM300 7.0 m	
80922750	Hose PWM-4A/PWM300 7.5 m	
80922800	Hose PWM-4A/PWM300 8.0 m	
73800001	Assembly box for Plasma hoses	For Plasma welding with hoses longer than 8m
74330800	Extension hose PMW4A/300 8.0 m	
74331100	Extension hose PMW4A/300 11.0 m	



Assembly box for Plasma hoses
Art. no.73800001

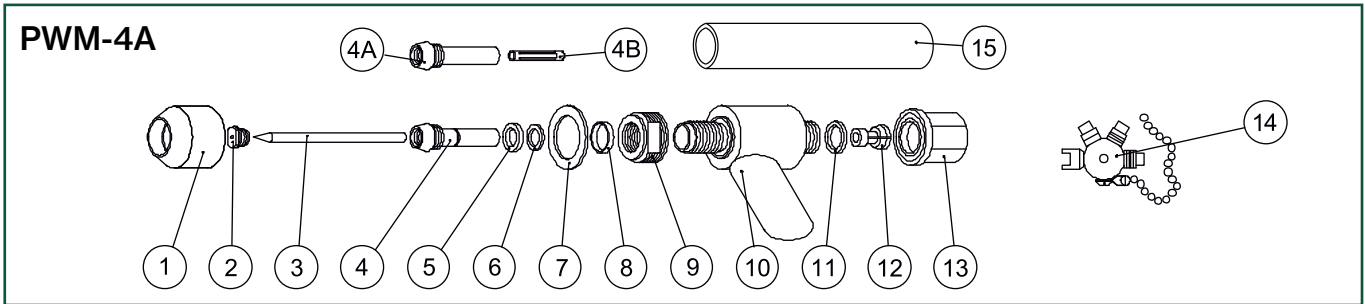


Extension hose PMW4A/300 8.0 m
Art. no.74330800



Hose PWM-4A/PWM300
Art. no.80922100 - 80922800

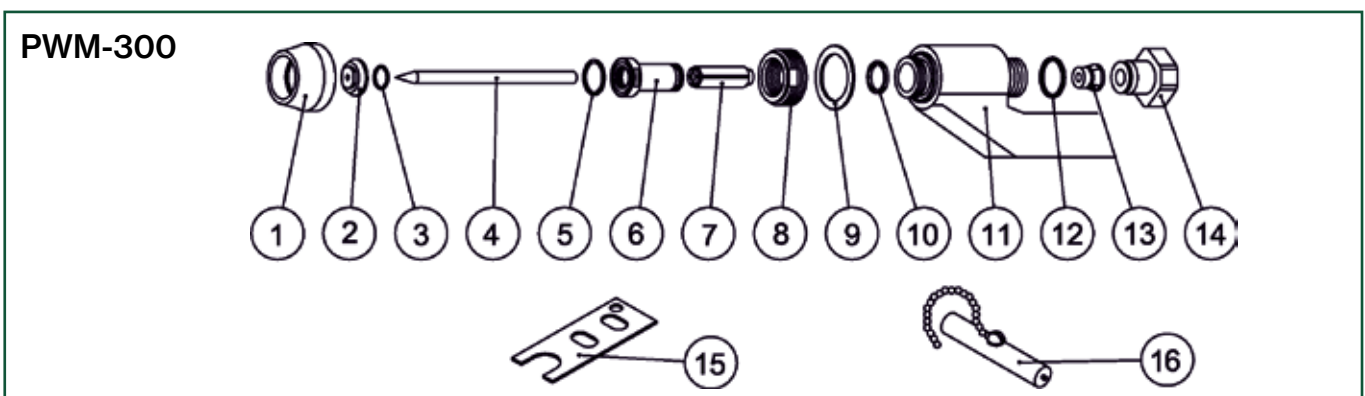
Wear parts for plasma welding torches



Pos. no.	Art. no.	PWM-4A
1	84084064	Ceramic nozzle std. f/4A
2	84091847	Nozzle std. 1.58 100A f/4A
	84091848	Nozzle std. 2.37 180A f/4A
	84091849	Nozzle std. 3.18 220A f/4A
	84091889	Nozzle 40A long
	84091890	Nozzle 90A long
	84091891	Nozzle 150A long
	84091892	Nozzle 180A long
3	80361396	Tungsten electrode WL20 ø4.8x91mm blue point 20°
	80361397*	Tungsten electrode WL20 ø4.8x111mm blue point 20°
4	84084012	Gas guidance & distributor 4A
4A	84084011	Gas guide f/4A
4B	84092204	Gas distributor white f/PWM-4A
5	84080560	O-ring f/4A (red)
6	84080528	O-ring f/4A & 6A
7	84084069	Washer f/ceramic nozzle 4A
8	84084024	Collar f/4A
9	84084040	Gas lens f/4A
10	84084014	Torch body PWH-4A 70°
	84084054	Torch body PWM-4A1 180°
11	84080530	O-ring f/4A
12	84091876	Electrode tong f/PWM-4A
13	84084158	Electrode cap f/4A
	84091877	Back cup PWM-4A long
14	84091873	Adjusting device

*Requires use of pos. 13 item no. 84091877

Pos. no.	Art. no.	PWM-300
1	84086542	Ceramic nozzle f/PWM-300 & 6A
2	84086575	Nozzle 2.36 200A f/300
	84086582	Nozzle 2.87 250A f/300
	84086572	Nozzle 3.18 300A f/300
	84084370	Nozzle 200AMP-LG PWM-300
	84084371	Nozzle 250AMP-LG PWM-300
	84084372	Nozzle 300 AMP-LG PWM-300
3	84092863	O-ring PWM-6A
4	80361396	Tungsten electrode WL20 ø4.8x91mm blue point 20°
5	84092956	O-ring
6	84086509	Gas guide
7	84086651	Gas distributor white f/300
8	84086541	Adaptor f/ceramic nozzle
9	84086512	Washer
10	84080531	O-ring ø25 x 0,15"
11	84086649	Torch body PWM-300
12	84083487	O-ring f/6A & PWM-300
13	84086650	Elektrode tong f/PWM-300
14	84086654	Electrode cap f/300
15	84086517	Key f/nozzle PWM-300
16	84086653	Adjusting device f/PWM-300



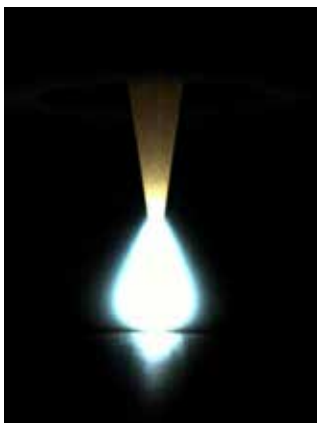
Tungsten electrodes

TIG						
Art. no.	Color	Alloy	Dimension, mm	DC Amp.	AC Amp.	Min. order quantity
80360022	Green	WP	1.6	40-130	45-90	10
80360024	Green	WP	2.4	130-310	80-140	10
80360026	Green	WP	3.2	160-310	150-190	10
80360042	Black	WL10	1.6	70-150	50-100	10
80360043	Black	WL10	2.4	140-230	100-190	10
80360044	Black	WL10	3.2	220-420	150-250	10
80360092	Blue	WL20	1.6	70-150	50-100	10
80360094	Blue	WL20	2.4	140-230	100-190	10
80360095	Blue	WL20	3.2	220-420	150-250	10
80361371	SuperBlue	WS2	1.0	15-80	10-60	10
80361372	SuperBlue	WS2	1.6	70-150	50-100	10
80361373	SuperBlue	WS2	2.0	90-200	100-160	10
80361374	SuperBlue	WS2	2.4	140-230	100-190	10
80361376	SuperBlue	WS2	3.2	220-420	150-250	10
80361377	SuperBlue	WS2	4.0	300-420	200-300	10
80361378	SuperBlue	WS2	4.8	500-675	330-460	10
Plasma						
Art. no.	Color	Alloy	Dimension, mm	DC Amp.	AC Amp.	Min. order quantity
80361396	Blue	WL20	4.8 x 91	500-675	330-460	1
80361397	Blue	WL20	4.8 x 111	500-675	330-460	1

Migatronic's range of high-quality tungsten electrodes is developed in co-operation with Europe's leading manufacturer of tungsten electrodes.

- No risk of radioactive radiation of users and environment
- Pointed electrode tip and stable arc after long service life
- Excellent ignition and reignition properties
- Improved welding quality and welding safety

Here you can see the difference between arcs ignited with high-quality and low-quality tungsten electrodes respectively.



High-quality tungsten



Low-quality tungsten: typically sideways arc ignition, the arc flashes and wanders slowly to the electrode tip which has to be cut off and reground.

- Green: Applicable for welding of aluminium
- Black: Applicable for welding of mild steel and stainless steel
- Blue: Applicable for welding of mild steel and stainless steel
- Super Blue: Applicable for welding of mild steel, stainless steel and aluminium. The electrode has excellent ignition and reignition properties and contains no substances hazardous to health.



Tungsten electrode WL20
ø4.8x91mm Blue point 20°

Art. no. 80361396

Wear parts in retail blister packs

Standard Migatronic wear parts are also available in blister packs that are ready to hang on wall displays. Clear labeling with barcode, item text and item number makes re-ordering easy.

Blister packs are intended for customers requiring small quantity purchases.

Please contact Migatronic for more information



Wear parts in retail blister packs

Art. no.	Kits wire feed rolls	Minimum order quantity
73949039	2-roll 0,8	1
73949040	2-roll 1,0	1
73949083	MWF 0,6 V-groove black/white	1
73949054	MWF 0,8 V-groove white	1
73949055	MWF 1,0 V-groove blue	1
73949056	MWF 1,0 U-groove blue	1
73949057	MWF 1,2 V-groove red	1
73949058	MWF 1,2 U-groove red	1

Art. no.	Tip adaptors MIG/MAG	Minimum order quantity
80119020	For ML120/130/150 34mm x2	5
80119601	For ML250 m6 37mm x2	5
80119602	For ML250 m6 35mm x2	5
80119604	For ML/MV240 5mm CuCrZr x2	5
83079149	For ML/MV 240 brass 5mm x 2	5
80119640	For ML300-360 25 mm CuCrZr x2	5
80119401	For MV450/550 m8 25mm x2	5
80119406	Holder for MV450/550 CuCrZr 25mm x2	5
80109021	Retaining clamp ML120/130/150 x2	5
80119021	For ML150C/161 (Plus 15) x2	5
80149029	Nozzles for ML150/161 for innershield wire	5
80109600	Retaining clamp ML250 x2	5

Art. no.	Contact tips MIG/MAG	Minimum order quantity
80139101	For \varnothing 0,6 m6 \varnothing 6x25mm E-Cu x 10	5
80139102	For \varnothing 0,8 m6 \varnothing 6x25mm E-Cu x 10	5
80139103	For \varnothing 1,0 m6 \varnothing 6x25mm E-Cu x 10	5
80139104	For \varnothing 1,2 m6 \varnothing 6x25mm E-Cu x 10	5
80139201	For \varnothing 0,6 m6 \varnothing 8x28mm E-Cu x 10	5
80139202	For \varnothing 0,8 m6 \varnothing 8x28mm E-Cu x 10	5
80139203	For \varnothing 1,0 m6 \varnothing 8x28mm E-Cu x 10	5
80139204	For \varnothing 1,2 m6 \varnothing 8x28mm E-Cu x 10	5
80139200	For \varnothing 0,8 m6 \varnothing 8x28mm CuCrZr x 10	5

Art. no.	Contact tips MIG/MAG	Minimum order quantity
80138201	For \varnothing 1,0 m6 \varnothing 8x28mm CuCrZr x 10	5
80138202	For \varnothing 1,2 m6 \varnothing 8x28mm CuCrZr x 10	5
80239101	For \varnothing 0,8 m8 \varnothing 10x30mm E-Cu x 10	5
80239102	For \varnothing 1,0 m8 \varnothing 10x30mm E-Cu x 10	5
80239103	For \varnothing 1,2 m8 \varnothing 10x30mm E-Cu x 10	5
80239200	For \varnothing 0,8 m8 \varnothing 8x30mm CuCrZr x 5	2
80239201	For \varnothing 1,0 m8 \varnothing 8x30mm CuCrZr x 5	5
80239202	For \varnothing 1,2 m8 \varnothing 8x30mm CuCrZr x 5	2
80239204	For \varnothing 1,4 m8 \varnothing 8x30mm CuCrZr x 5	2
80239206	For \varnothing 1,0 m8 \varnothing 10x30mm CuCrZr x 5	2
80239207	For \varnothing 1,2 m8 \varnothing 10x30mm CuCrZr x 5	2

Art. no.	Gas nozzles MIG/MAG	Minimum order quantity
80149023	For ML120/130/150/161, conic x 2	5
80149500	For ML150/161, cylindrical	5
80149022	For ML150/161 for spot welding	5
80149601	For ML250, conic x 2	5
80249303	For ML300/360/MV450/550/FKS550, conic Cu x 2	5
80149610	For ML/MV240, conic x 2	5

Art. no.	Gasdiffuser MIG/MAG	Minimum order quantity
83079480	For ML/MV240 black x 2	5
80129301	For ML300/360 white x 2	5
80229309	For MV450/550 white x 2	5

Wear parts in retail blister packs

Art. no.	Gas nozzles TIG	Minimum order quantity
80349002	For TIG201/401 #5 Ø8.0 / 5/16" x2	5
80349003	For TIG201/401 #6 Ø9.6 / 3/8" x2	5
80349004	For TIG201/401 #7 Ø11.2 / 7/16" x2	5
80349005	For TIG201/401 #8 Ø12.7 / 1/2" x2	5
80349006	For TIG201/401 #10 Ø15.7 / 5/8" x2	5
80349007	For TIG201/401 #12 Ø19.0 / 3/4" x2	5
80349420	Pyrex kit for TIG 201/221/401 gas lens (2xnozzle, 2xO-ring, 1xadapter)	1
80449201	For TIG101/301 #4 Ø6.4 / 1/4" x2	5
80449202	For TIG101/301 #5 Ø8.0 / 5/16" x2	5
80449203	For TIG101/301 #6 Ø9.6 / 3/8" x2	5
80449204	For TIG101/301 #7 Ø11.2 / 7/16" x2	5
80449205	For TIG101/301 #8 Ø12.7 / 1/2" x2	5
80449235	Pyrex kit for TIG 101/301/321 gaslinse (2xnozzle, 4xO-ring)	1

Art. no.	Insulator TIG	Minimum order quantity
80309219	For TIG 101/301 x2	5
80309189	For TIG 201/401 x2	5

Art. no.	Collet body TIG	Minimum order quantity
80419201	For ø1,0 TIG101/301	5
80419202	For ø1,6 TIG101/301 x 2	5
80419203	For ø2,4 TIG101/301 x 2	5
80419204	For ø3,2 TIG101/301 x 2	5
80319000	For ø1,6 TIG201/401 x 2	5
80319001	For ø2,4 TIG201/401 x 2	5
80319002	For ø3,2 TIG201/401 x 2	5

Art. no.	Electrode collet TIG	Minimum order quantity
80439211	For ø1.0 mm CuCr x 2, TIG 101/301/321	1
80439212	For ø1.6 mm CuCr x 2, TIG 101/301/321	5
80439213	For ø2.4 mm CuCr x 2, TIG 101/301/321	5
80439214	For ø3.2 mm CuCr x 2, TIG 101/301/321	1
80439222	For ø1.6 mm brass x 2, TIG 101/301/321	1
80439223	For ø2.4 mm brass x 2, TIG 101/301/321	1
80439224	For ø3.2 mm brass x 2, TIG 101/301/321	1
80339111	For ø1.6 mm CuCr x 2, 201/221/401	5
80339112	For ø2.4 mm CuCr x 2, 201/221/401	5
80339113	For ø3.2 mm CuCr x 2, 201/221/401	5

Art. no.	Electrode caps TIG	Minimum order quantity
80409115	Short for TIG 101/301/321	5
80409116	Medium for TIG 101/301/321	5
80409117	Long for TIG 101/301/321	5
80309200	Short for TIG 201/401	5
80309201	Long for TIG 201/401	5

Art. no.	O-ring TIG	Minimum order quantity
80309223	For electrode cap TIG 201/401	1

Wear parts in retail blister packs

Art. no.	Electrode holder MMA	Minimum order quantity
80559010	MMA electrode holder 200A	1
80559009	MMA electrode holder 450A	1
80559038	Electrode holder 200A	1
80559037	Electrode holder 300A	1
80559036	Electrode holder 600A	1
80559028	Spare head 45/90° for electrode holder 400/600A	1

Art. no.	Earth clamps	Minimum order quantity
80569010	Earth clamp 250A	1
80569011	Earth clamp 400A	1
80569012	Earth clamp 500A	1
80569022	Screw earth clamp 600A	1

Art. no.	Cutting tips Plasma	Minimum order quantity
80639024	ø0,9 for CUT40/60 x5	2
80639023	ø1,0 for CUT40/60 x5	2
80639022	ø1,1 for CUT40/60 x5	2
80639021	ø1,2 for CUT40/60 x5	2
80639025	ø0,9 for CUT40/60x5, long	2
80639026	ø1,0 for CUT40/60x5, long	2
80639027	ø1,1 for CUT40/60x5, long	2
80639028	ø1,2 for CUT40/60x5, long	2
80639204	ø0,9 for Zeta100 x 5	2
80639205	ø1,0 for Zeta100 x 5	2
80639206	ø1,1 for Zeta100 x 5	2
80639207	ø1,2 for Zeta100 x 5	2
80639208	ø1,4 for Zeta100 x 5	2
80639209	ø1,5 for Zeta100 x 5	2
80639210	ø1,6 for Zeta100 x 5	2

Art. no.	Retaining caps Plasma	Minimum order quantity
80649112	For CUT45/63 x 2	1
80649113	For 30/70A Zeta 100	1
80649114	For 80/120A Zeta 100	1
80649115	For Zeta100 for gouging	1
80649116	For Zeta100 for gouging x 2	1

Art. no.	Plasma	Minimum order quantity
80619009	Electrode for CUT 45-63 x 2	5
80649119	Insulation ring for CUT45/63x5	1
80619011	Electrode for Zeta100 x 5	5
80609124	Gas distributor 30/70 for Zeta100 x 2	5
80609122	Cooling tube for Zeta100 x 2	5
80639211	Gouging tip for Zeta100 x 2	5
80609118	Double pointed x 2 for CUT40/60	5
80609119	Spacer ø12mm x 2 for CUT40/60	5
80609120	Spacer 4-pointed ø12mm x 2 for CUT40/60	5
80609109	Distance ring for CUT 45/63 x 2	5

Art. no.	Lenses for welding helmets	Minimum order quantity
81919058	DIN 10 60 x 110 mm	1
81919057	DIN11 60 x 110 mm	1
81919051	Magnifying lens 51 x 108 mm, +1,0	1
81919046	Magnifying lens 51 x 108 mm, +1,5	1
81919047	Magnifying lens 51 x 108 mm, +2,0	1
81919048	Magnifying lens 51 x 108 mm, +2,5	1

Art. no.	Miscellaneous	Minimum order quantity
18118002	Dinse coupling socket 35-70 mm ²	1
18119102	Extension socket 35-50 mm ² female	1
18129006	Dinse plug 10-25B ø10mm male	1
81949028	Nozzle and wirecutter large	1
81979018	Cleaning needles set short	1
81969129	Swivel nut gasket for optimizer x 5	1
81979209	D75/S80 gas igniter OX1	1

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