

WELDING TORCHES





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SWITCH ON. PRESS AND WELD

MIGATRONIC

Being one of the leading suppliers of professional welding solutions. Migatronik focuses on developing and supplying high-quality welding torches for MIG/MAG, TIG, MMA and plasma welding. Migatronik 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.migatronik.com

*We reserve the right to make corrections in the event of a misprint.
The products delivered may differ from the photos in the catalogue.*

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

ABBREVIATIONS MIG:

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

Art. no.	Model
80191174	ML140 Softgrip 360° 3m 0.8 ZA
80197150	ML150 TWIST 3m 0.8
80197151	ML150 TWIST 4m 0.8
80197153	ML 150 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 ALU
80197244	ML240 TWIST 3m 1.0 Alu/Stainless
80197246	ML240 TWIST 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.

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/ 150 C/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

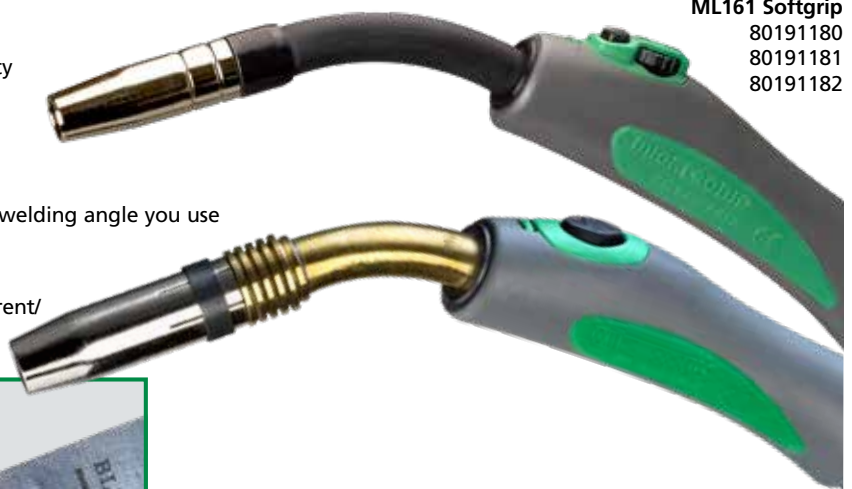
* = Minimum gas flow for compliance with maximum performance.

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



The swan neck can be turned 360° without tools



ML161 Softgrip
80191180
80191181
80191182

ML241 Softgrip
80191190
80191191
80191192



Art. no. 80300100
Keypad unit
Standard equipment



Art. no. 80300273
Keypad unit with
horizontal MIG control
knob (RH).
Requires
electronic box MPS-4TF.
Art. no. 76116982

Connection XE



1988 - 1998
Automig 180 XE
Automig 200 XE

Connection ZA



1998 -
Automig 181
Automig 183
Automig 221
Automig 223
Automig 231
Automig 271
Automig 273
Automig 250 XE

Art. no.	Model	No of pcs.
80191177	ML150C/ XR 3m 0.8	1
80191178	ML150C / XE 3m 0.8	1
80191179	ML150C ZA 3m 0.8	1

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

Connection ZA



1998 -
Automig 181
Automig 183
Automig 221
Automig 223
Automig 231



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 spring pin.

Spring pin for ZA air

Art. no.....80100810

Spring pin for ZA water

Art. no.....80100811



Ball-and-socket joint



ZA. water

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

SUITABLE FOR	MIG/MAG conventional stepregulated machines				MIG/MAG inverter machines													
	Automig 183-223	Automig 273	MIG S 385x	MIG S 445x	RallyMig 161i	Automig ² 183i	Automig ² 233i / 273i	Automig ² 183i DUO	Automig ² 233i DUO	Automig ² 273i DUO	Automig 300 Pulse	Omega Yard 300/ Omega ² 300	SIGMA SELECT 300 C / S	SIGMA SELECT 400 C / S	SIGMA SELECT 550 C / S	Omega ² 400 C/S	Omega ² 550 C/S	
WELDING TORCHES																		

WELDING TORCHES WITHOUT REGULATION																		
80191174 1)	ML140 Softgrip 360° 3m 0.8 ZA	(*)																(*)
80197150	ML150 TWIST 3 m 0.8	*					*		*									(*)
80197151	ML150 TWIST 4 m 0.8	*					*		*									(*)
80197153	ML150 TWIST 5 m 0.8	*					*		*									(*)
80197156	ML150 TWIST 3 m 1.0 ALU	*					*		*									(*)
80191180 1)	ML161 3 m RallyMIG 161i					*												
80191181 1)	ML161 Softgrip 360° 3m 0.8	*					*		*									(*)
80197240	ML240 TWIST 3 m 0.8	*	*	(*)				*		*	*	*	*	*	*	*	*	
80197242	ML240 TWIST 3 m 1.0 ALU	*	*	(*)				*		*	*	*	*	*	*	*	*	
80197246	ML240 TWIST 3 m 1.2 ALU	*	*	(*)				*		*	*	*	*	*	*	*	*	
80197244	ML240 TWIST 3m 1.0 ALU/Stainless	*	*	(*)				*		*	*	*	*	*	*	*	*	
80197241	ML240 TWIST 4 m 0.8	*	*	(*)				*		*	*	*	*	*	*	*	*	
80197243	ML240 TWIST 5 m 0.8	*	*	(*)				*		*	*	*	*	*	*	*	*	
80191190 1)	ML241 Softgrip 360° 3 m 1.0	*	*	(*)				*		*	*	*	*	*	*	*	*	(*)
80191191 1)	ML241 Softgrip 360° 4 m 1.0	*	*	(*)				*		*	*	*	*	*	*	*	*	(*)
80191192 1)	ML241 Softgrip 360° 4 m 1.2	*	*	(*)				*		*	*	*	*	*	*	*	*	(*)

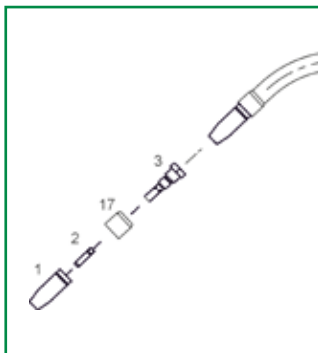
SUITABLE FOR	MIG/MAG conventional stepregulated machines				MIG/MAG inverter machines												
	Automig 183-223	Automig 273	MIG S 385x	MIG S 445x	RallyMig 161i	Automig ² 183i	Automig ² 233i / 273i	Automig ² 183i DUO	Automig ² 233i DUO	Automig ² 273i DUO	Automig 300 Pulse	Omega Yard 300/ Omega ² 300	SIGMA SELECT 300 C / S	SIGMA SELECT 400 C / S	SIGMA SELECT 550 C / S	Omega ² 400 C/S	Omega ² 550 C/S
WELDING TORCHES																	

WELDING TORCHES WITHOUT REGULATION																	
80197250	ML250 TWIST 3 m 0.8	*	*	(*)				*	*	*	*	*					
80197251	ML250 TWIST 4 m 0.8	*	*	(*)				*	*	*	*	*					
80197253	ML250 TWIST 5 m 0.8	*	*	(*)				*	*	*	*	*					
80197254	ML250 TWIST 3m 1.0	*	*	(*)				*	*	*	*	*					
80197300	ML300 TWIST 3 m 1.0	*		*	(*)							*	*				
80197304	ML300 TWIST 3 m 1.0 ALU	*		*	(*)							*					
80197301	ML300 TWIST 4 m 1.0	*		*	(*)							*	*				
80197302	ML300 TWIST 4 m 1.2	*		*	(*)							*	*				
80197303	ML300 TWIST 5 m 1.0	*		*	(*)							*	*				
80197360	ML360 TWIST 3 m 1.0			*	(*)							*	*	*	(*)		
80197374	ML360 TWIST 3 m 1.6 KD			*	(*)											(*)	
80197361	ML360 TWIST 4 m 1.0			*	(*)							*	*	*	(*)		
80197364	ML360 TWIST 4 m 1.2			*	(*)											(*)	
80197363	ML360 TWIST 5 m 1.0			*	(*)							*	*	*	(*)		
80197381	ML380 HD TWIST 4m 1.2			*	(*)							*	*	*	*		
80197400	ML400 TWIST 3 m 1.2			*	*							*	*	*	*	(*)	
80197401	ML400 TWIST 4 m 1.2			*	*							*	*	*	*	(*)	
80197403	ML400 TWIST 5 m 1.2			*	*							*	*	*	*	(*)	
80197500	ML500 TWIST 3 m 1.2											*	*	*		(*)	
80197501	ML500 TWIST 4 m 1.2											*	*	*		*	
80197503	ML500 TWIST 5 m 1.2											*	*	*		*	

WELDING TORCHES WITH REGULATION																	
80196150	ML150 TWIST R 3 m 0.8	*						*	*			(*)					
80196155	ML150 TWIST R 3 m 1.0 ALU	*						*	*			(*)					
80196151	ML150 TWIST R 4 m 0.8	*						*	*			(*)					
80196240	ML240 TWIST R 3 m 0.8	*	*	(*)				*	*	*	*	*					
80196243	ML240 TWIST R 3 m 1.0 ALU	*	*	(*)				*	*	*	*	*					
80196244	ML240 TWIST R 3 m 1.02 ALU	*	*	(*)				*	*	*	*	*					
80196241	ML240 TWIST R 4 m 0.8	*	*	(*)				*	*	*	*	*					
80196238	ML240 TWIST R 3 m 0.8 Steel	*	*	(*)				*	*	*	*	*					
80196239	ML240 TWIST R 4 m 0.8 Steel	*	*	(*)				*	*	*	*	*					
80196245	ML240 TWIST R 4 m 1.0 ALU	*	*	(*)				*	*	*	*	*					
80196249	ML240 TWIST R 3 m 1.2 ALU/CU	*	*	(*)				*	*	*	*	*					
80196250	ML250 TWIST R 3 m 0.8	*	*	(*)				*	*	*	*	*					
80196252	ML250 TWIST R 3 m 1.0 ALU	*	*	(*)				*	*	*	*	*					
80196251	ML250 TWIST R 4 m 0.8	*	*	(*)				*	*	*	*	*					
80196257	ML250 TWIST R 4 m 1.0 ALU	*	*	(*)				*	*	*	*	*					
80196300	ML300 TWIST R 3 m 1.0	*		*	(*)							*	*				
80196301	ML300 TWIST R 4 m 1.0	*		*	(*)							*	*				
80196360	ML360 TWIST R 3 m 1.0			*	(*)							*	*	*	(*)		
80196361	ML360 TWIST R 4 m 1.0			*	(*)							*	*	*	(*)		

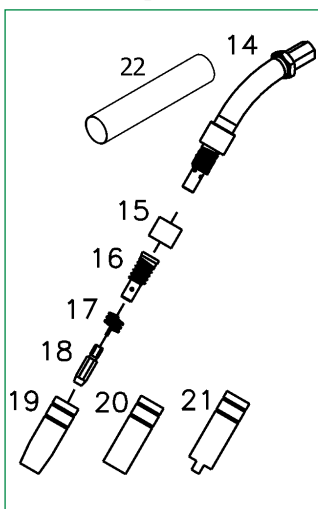
WEAR PARTS FOR AIR-COOLED MIG WELDING TORCHES

Wear parts for ML 140



Position no.	Art. no.	Description	No of pcs.
1	83080017	Gas nozzle ML140 threaded conic	10
2	80130142	CONTACT TIP. PLEASE SEE PAGE 18	1
17	80120500	Insulating bush	10
3	80110039	Contact nozzle for ML 140 left	10

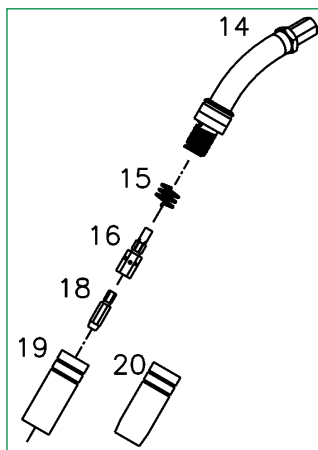
Wear parts for ML 150 TWIST / ML 161 / ML 150C



Position no.	Art. no.	Description	No of pcs.
14	* □ Δ	Swan neck ML150 MIG-A Twist Swan neck ML 161 w/fitting Swan neck ML 150C w/fitting	1 1 1
15	* □ Δ	Insulating bush	10
16	* □	Contact nozzle Contact nozzle ML 161. ML150C	10 10
17	* □ Δ	Retaining clamp ML120/130/150	10
18	* □ Δ	CONTACT TIP. PLEASE SEE PAGE 18	50
19	* □ Δ	Gas Nozzle ML120/130/150 Conic	10
20		Gas Nozzle ML120/130/150 Cylindric	10
21		Gas Nozzle ML120/130/150 SPOT	10
22		Protection cover	1
		81100252 81100223	1 1
		Wearparts box ML150 Ergo/Twist 0.6 steel Wearparts box ML150 Ergo/Twist 0.8 steel	1 1

* = ML150 pre-assembled as standard. □ = ML161 pre-assembled as standard. Δ = ML150C pre-assembled as standard

Wear parts for ML 250 TWIST

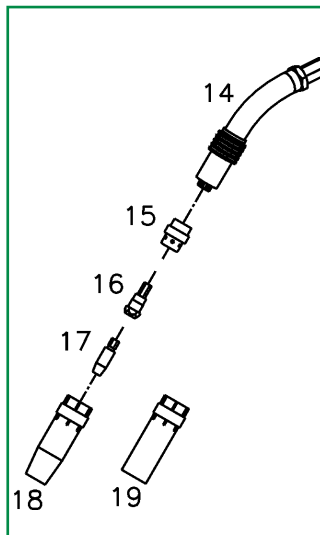


Position no.	Art. no.	Description	No of pcs.
14		Swan neck ML250 MIG-A Twist	1
15		Retaining clamp ML250	10
16	*	Tip adaptor ML250 M6 37mm Tip adaptor ML250 M6 35mm	10 10
18	*	CONTACT TIP. PLEASE SEE PAGE 18	50
19		Gas Nozzle ML250 Cylindric	10
20	*	Gas Nozzle ML250 Conic	10
		81100253 81100224 81100220	1 1 1
		Wearparts box ML 250 0.6 steel Wearparts box ML 250 0.8-1.0 steel Wearparts box ML250 1.0 alu	1 1 1

* = Pre-assembled as standard

WEAR PARTS FOR AIR-COOLED MIG WELDING TORCHES

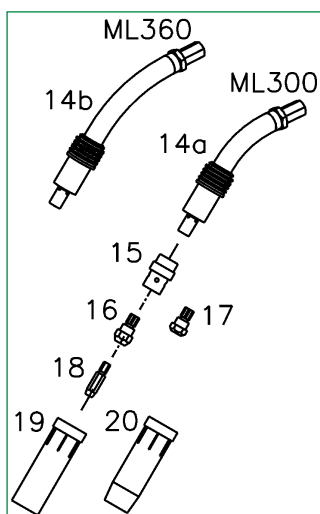
Wear parts for ML 240 TWIST/ ML 241



Position no.	Art. no.	Description	No of pcs.	
14	80152402	Swan neck ML240 MIG-A Twist	1	
	80151403	Swan neck ML 240 Manager	1	
	80150039	Swan neck ML 241 w/fitting	1	
15	*	83077480	Gas diffuser ML/MV24 Black	10
	83077481	Gas diffuser ML/MV24 White	10	
16	*	80110604	Tip adaptor ML-MV240 CuCrZr 5mm	10
	83077149	Tip adaptor ML-MV240 brass 5mm	10	
	80110603	Tip adaptor ML-MV240 brass 7mm	10	
17	80131200	CONTACT TIP. PLEASE SEE PAGE 18	10	
18	*	80140610	Gas Nozzle ML/MV240 Conic	10
	80140611	Gas Nozzle ML/MV240 Cylindric	10	
	81100214	Wearparts box ML240 0.6-0.8 steel	1	
	81100231	Wearparts box ML240 1.0 steel	1	
	81100221	Wearparts box ML/MV240 1.0 alu	1	

* = Pre-assembled as standard

Wear parts for ML 300 TWIST/ML 360 TWIST

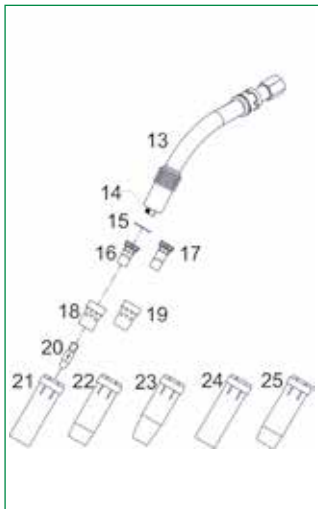


Position no.	Art. no.	Description	No of pcs.	
14a	80152502	Swan neck ML300 MIG-A Twist	1	
14b	80152602	Swan neck ML360 MIG-A Twist	1	
15	*	80120301	Gas diffuser ML300/360 White	10
	80120306	Gas diffuser ML360 32mm White	10	
16	80112636	Tip adaptor ML300/360 M8-6 25mm Brass	10	
	80112637	Tip adaptor ML300/360 M8-6 32mm Brass	10	
	*	80112640	Tip adaptor ML300/360 M8-6 25mm CuCrZr	10
	80112638	Tip adaptor ML300/360 M8-8 23mm Brass	10	
	80112639	Tip adaptor ML300/360 M8-8 32mmBrass	10	
17	80110026	Tip adaptor ML300/360 M8-6 22mm	10	
	80110300	Tip adaptor ML300/360 M8-8 23mm	10	
18	*	80131201	CONTACT TIP. PLEASE SEE PAGE 18	10
	80240300	Gas nozzle ML/MV Cylindric	10	
19	80140701	Gas nozzle ML360 Cylindric nickelled	10	
	80240303	Gas nozzle ML/MV Conic	10	
20	80140700	Gas nozzle ML360 Conic nickelled	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

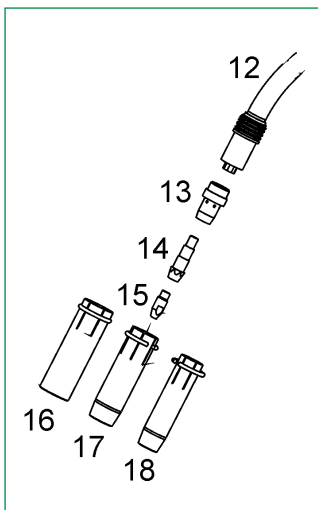
Wear parts for ML 380 TWIST



Position no.	Art. no.	Description	No of pcs.
13	80152605	Swan neck ML380 MIG-A Twist	1
14	80110413	Tip holder adaptor M10-1*20L for ML 380 HD	10
15	*	80220326 Insulating washer ML380 HD KD	1
16	*	80110406 Tip adaptor MV450-550 CuCrZr 25	10
17		80110409 Tip adaptor MV450-550 CuCrZr 29	10
18	*	80220309 Gas diffuser MV450/550 White	10
19		80220307 Gas diffuser MV450/550 CYLINDR	10
20		80231207 CONTACT TIP. PLEASE SEE PAGE 19	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 ML360 Cylindric nickelled	10
25		80140700 Gas nozzle ML360 Conic nickelled	10

* = Pre-assembled as standard

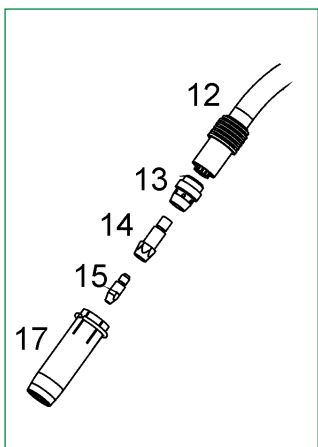
Wear parts for ML 400 TWIST



Position no.	Art. no.	Description	No of pcs.
12	80152702	Swan neck ML400 MIG-A Twist	1
13a	*	80120310 Gas diffuser ML400 White	10
13b		80120311 Gas diffuser ML400 Ceramic	10
13c	*	80120312 Gas diffuser ML400 Black	10
14a	*	80110040 Tip adaptor ML400 M8-8 43mm	10
14b		80110041 Tip adaptor ML400 M8-8 47mm	10
15		80231103 CONTACT TIP. PLEASE SEE PAGE 19	50
16		80140722 Gas Nozzle ML400 Cylindric	10
17	*	80140721 Gas Nozzle ML400 Conic ø 18mm	10
18		80140720 Gas Nozzle ML400 Conic ø 14mm	10

* = Pre-assembled as standard

Wear parts for ML 500 TWIST



Position no.	Art. no.	Description	No of pcs.
12	80152802	Swan neck ML500 MIG-A Twist	1
13	*	80120313 Gas diffuser ML500 White	10
14		80110042 Tip adaptor ML500 M10/M8 43mm. CuCrZr	10
15	*	80231103 CONTACT TIP. PLEASE SEE PAGE 19	50
17	*	80140723 Gas Nozzle ML500 Conic ø 20mm	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** = Teflon liner
- 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
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.

MIG-A TWIST® CONTROL UNITS



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



Turn the fitting Remove the cover Attach the module Lock the fitting

Basic module
80100401

Potentiometer
module (80100402)

Potentiometer module
for Kemppi (80100410)

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

Sequence module.
3 steps (80100403)

Smart Torch modules for MIG-A Twist on Sigma Select or Automig 300 Pulse*)



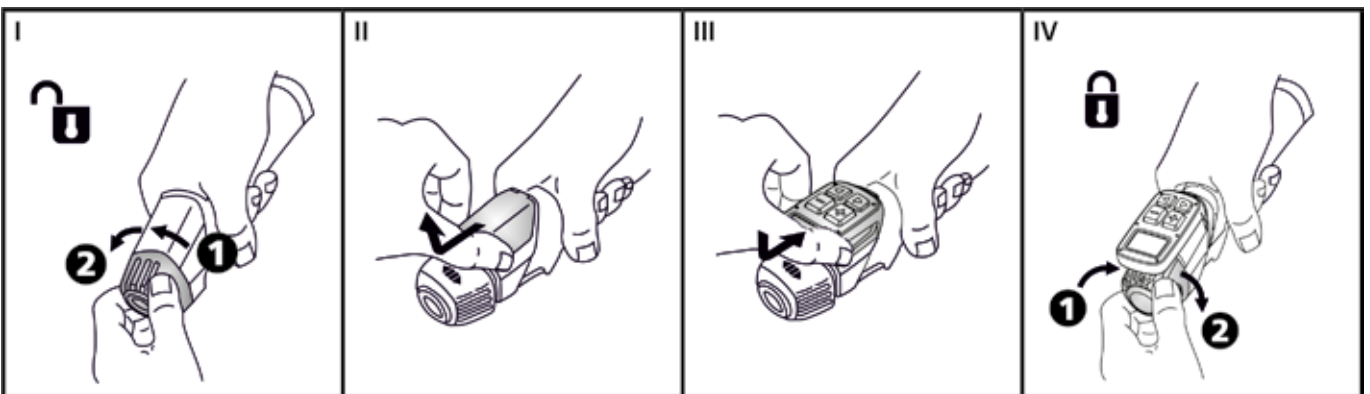
Graphical Smart Torch module with
4 buttons for MIG-A Twist (80100430)



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



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 the digital MIG Manager®. FKS is designed specifically for pulse welding and spray transfer welding.

WATER-COOLED MIG WELDING TORCHES

SUITABLE FOR	MIG/MAG conventional stepregulated machines		MIG/MAG inverter machines				
	MIG S 385x	MIG S 445x	SIGMA SELECT 300 C / S	SIGMA SELECT 400 C / S	SIGMA SELECT 550 C / S	Omega ² 400 C/S	Omega ² 550 C/S
WELDING TORCHES							

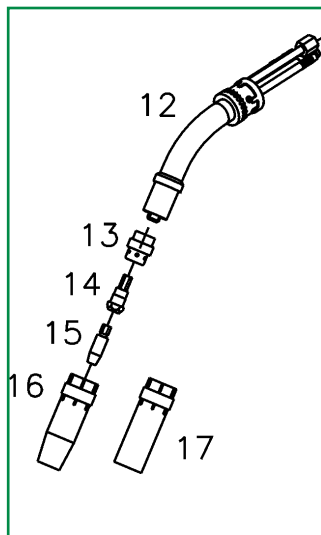
WELDING TORCHES WITHOUT REGULATION								
80297240	MV240 TWIST 3 m 1.0	*	*	(*)	(*)		(*)	
80297241	MV240 TWIST 4 m 1.0	*	*	(*)	(*)		(*)	
80297245	MV240 TWIST 5 m 1.0	*	*	(*)	(*)		(*)	
80297457	MV450 TWIST 3 m 1.0 KD	*	*	*	*	*	*	(*)
80297450	MV450 TWIST 3 m 1.2 KD	*	*	*	*	*	*	(*)
80297452	MV450 TWIST 3 m 1.2	*	*	*	*	*	*	(*)
80297454	MV450 TWIST 4 m 1.0 KD	*	*	*	*	*	*	(*)
80297451	MV450 TWIST 4 m 1.2 KD	*	*	*	*	*	*	(*)
80297453	MV450 TWIST 4 m 1.2	*	*	*	*	*	*	(*)
80297455	MV450 TWIST 5 m 1.2 KD	*	*	*	*	*	*	(*)
80297456	MV450 TWIST 5 m 1.2	*	*	*	*	*	*	(*)
80297550	MV550 TWIST 3 m 1.2 KD	*	*	*	*	*	*	*
80297552	MV550 TWIST 3 m 1.2	*	*	*	*	*	*	*
80297551	MV550 TWIST 4 m 1.2 KD	*	*	*	*	*	*	*
80297553	MV550 TWIST 4 m 1.2	*	*	*	*	*	*	*
80297555	MV550 TWIST 5 m 1.2 KD	*	*	*	*	*	*	*
80297556	MV550 TWIST 5 m 1.2	*	*	*	*	*	*	*
80297602	MV400 FKS TWIST 3 m 1.2	*	*	*	*	*	*	(*)
80297603	MV400 FKS TWIST 4 m 1.2	*	*	*	*	*	*	(*)
80297605	MV400 FKS TWIST 5 m 1.2	*	*	*	*	*	*	*
80297700	MV500 FKS TWIST 3 m 1.2	*	*	*	*	*	*	*
80297701	MV500 FKS TWIST 4 m 1.2	*	*	*	*	*	*	*
80297705	MV500 FKS TWIST 5 m 1.2	*	*	*	*	*	*	*

WELDING TORCHES WITH REGULATION								
80296240	MV240 TWIST R 3 m 1.0	*	*	(*)	(*)		(*)	
80296241	MV240 TWIST R 4 m 1.0	*	*	(*)	(*)		(*)	
80296242	MV240 TWIST R 3 m 1.0 ALU	*	*	(*)	(*)		(*)	
80296464	MV450 TWIST R 3 m 1.0 HD ALU	*	*	*	*	*	*	(*)
80296450	MV450 TWIST R 3 m 1.2 KD	*	*	*	*	*	*	(*)
80296452	MV450 TWIST R 3 m 1.2	*	*	*	*	*	*	(*)
80296451	MV450 TWIST R 4 m 1.2 KD	*	*	*	*	*	*	(*)
80296453	MV450 TWIST R 4 m 1.2	*	*	*	*	*	*	(*)
80296550	MV550 TWIST R 3 m 1.2 KD	*	*	*	*	*	*	*
80296552	MV550 TWIST R 3 m 1.2	*	*	*	*	*	*	*
80296551	MV550 TWIST R 4 m 1.2 KD	*	*	*	*	*	*	*
80296553	MV550 TWIST R 4 m 1.2	*	*	*	*	*	*	*
80296557	MV550 TWIST R 6 m 1.2 KD	*	*	*	*	*	*	(*)
80296602	MV400 FKS TWIST R 3 m 1.2	*	*	*	*	*	*	(*)
80296603	MV400 FKS TWIST R 4 m 1.2	*	*	*	*	*	*	(*)
80296700	MV500 FKS TWIST R 3 m 1.2	*	*	*	*	*	*	*
80296701	MV500 FKS TWIST R 4 m 1.2	*	*	*	*	*	*	*

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

WEAR PARTS FOR WATER-COOLED MIG WELDING TORCHES

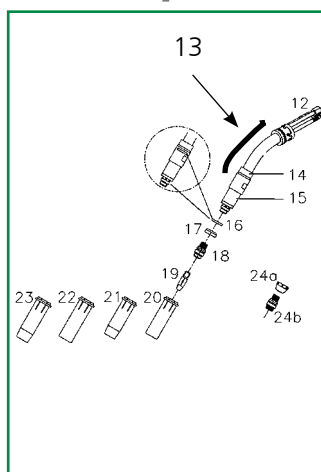
Wear parts for MV 240 TWIST



Position no.	Art. no.	Description	No of pcs.
12	80252101 80251107	Swan neck MV240 MIG-A Twist Swan neck MV 240 Manager	1 1
13a	* 83077480	Gas diffuser ML/MV24 Black	10
13b	83077481	Gas diffuser ML/MV24 White	10
13c	80220311	Gas diffuser ML/MV24 Ceramic	10
14	* 80110604 83077149 80110603	Tip adaptor ML-MV240 CuCrZr 5mm Tip adaptor ML-MV240 brass 5mm Tip adaptor ML-MV240 brass 7mm	10 10 10
15	* 80131201	CONTACT TIP. PLEASE SEE PAGE 21	10
16	* 80140610	Gas Nozzle ML/MV240 Conic	10
17	80140611	Gas Nozzle ML/MV240 Cylindric	10
	81100221	Wearparts box ML/MV 240 1.0 alu	1

* = Pre-assembled as standard

Wear parts for FKS 400 TWIST



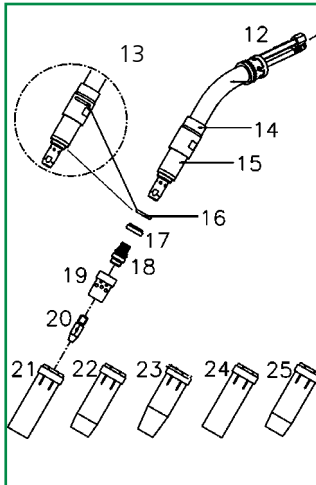
Position no.	Art. no.	Description	No of pcs.
12	80252500 80251501	Swan neck MV400 FKS Twist Swan neck MV 400 FKS Manager	1 1
13	92555041	Shrink FLEX Ø24 /8mm 1.2m glue	1
14	80100769	Insulator for cooling unit FKS400	1
15	80100767	Water cooling unit FKS 400	1
16	80100764	O-Ring FKS400W (2 pcs.)	1
17	80220201	Insulation ring FKS400W	10
18	* 80110408	Tip adaptor MV400FKS 24mm	10
19	* 80231202	CONTACT TIP. PLEASE SEE PAGE 20	10
20	80240308	Gas Nozzle MV400FKS Cylindric 62mm	10
21	* 80240307	Gas Nozzle MV400FKS Conic 62mm	10
22	80240318	Gas Nozzle MV400FKS Cylindric 67mm	10
23	80240317	Gas Nozzle MV400FKS Conic 67mm	10
24a	80220315	Gas difusor isolator 400FKS	10
24b	80110411	Tipadaptor for gas difuser MV400FKS 24mm	10
	81100236	Wearparts box MV 400 FKS 1.0-1.2 steel	1

* = Pre-assembled as standard

Note: 24a and 24b must be used together

WEAR PARTS FOR WATER-COOLED MIG WELDING TORCHES

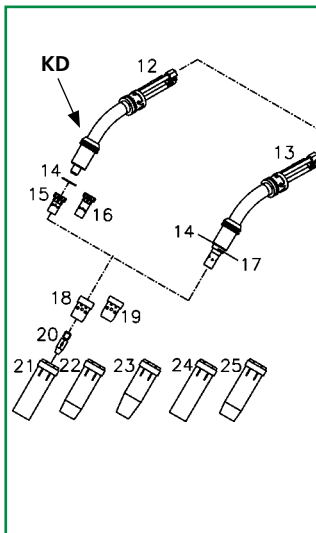
Wear parts for MV FKS 500 TWIST



Position no.	Art. no.	Description	No of pcs.	
12	80252502	Swan neck MV500 FKS Twist	1	
13	92555041	Shrink FLEX Ø24 /8MM 1.2m Glue	1	
14	80100772	Insulator for cooling unit FKS500	1	
15	80100770	Water cooling unit FKS 500	1	
16	80100766	O-Ring FKS500W (2 pcs.)	1	
17	80220202	Insulation ring FKS500W	10	
18	*	80110410	Tip adaptor MV500FKS 38mm CuCrZr	10
19	*	80220312	Gas diffuser MV FKS/HD-S White	10
		80220313	Gas diffuser Ceramic HD-S+500FKS	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 ML360 Cylindric nickelled	10
25		80140700	Gas Nozzle ML360 Conic nickelled	10
		81100237	Wearparts 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	No of pcs.	
12	80252202	Swan neck MV450KD MIG-A Twist	1	
12	80252302	Swan neck MV550KD MIG-A Twist	1	
13	80252204	Swan neck MV450 MIG-A Twist	1	
13	80252304	Swan neck MV550 MIG-A Twist	1	
14	80220303	Insulating Washer MV450/550	10	
15.1	80110401	Tip adaptor MV450/550 M8 25mm Brass	10	
15.2	*	80110406	Tip adaptor MV450-550 CuCrZr 25	10
15.3	80110403	Tip adaptor MV450/550 M6 25mm Brass	10	
16.1	80110402	Tip adaptor MV450/550 M8 29mm Brass	10	
16.2	80110409	Tip adaptor MV450-550 CuCrZr 29mm	10	
17	80200307	Threaded Ring	1	
18.1	*	80220309	Gas diffuser MV450/550 White	10
18.2		80220306	Gas diffuser MV450/550 Black	10
18.3		80220310	Gas diffuser MV450/550 Ceramic	10
19		80220307	Gas diffuser MV450/550 Cylindric	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 ML360 Cylindric nickelled	10
25		80140700	Gas Nozzle ML360 Conic nickelled	10
		81100216	Wearparts box MV450/550 1.0-1.2 steel	1

* = Pre-assembled as standard

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.
Maxs. pressure (water)	-	5 bar
Maxs. 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
Cab. mm ²	25	16
Weight	1.4 kg	1.7 kg
Total weight kg. 8 m	4.8 kg	4.9 kg
Connection	ZA	ZA
Norm	IEC 60974-7. IEC 60974-10	



Art. no. ML 240 aircooled	
80193310	ML240 MIG AIR 4m
80193311	ML240 MIG AIR 5m
Art. no. MV 400 FKS watercooled	
80293017	MV400 FKS MIG AIR 4m
80293018	MV400 FKS MIG AIR 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 14	



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

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

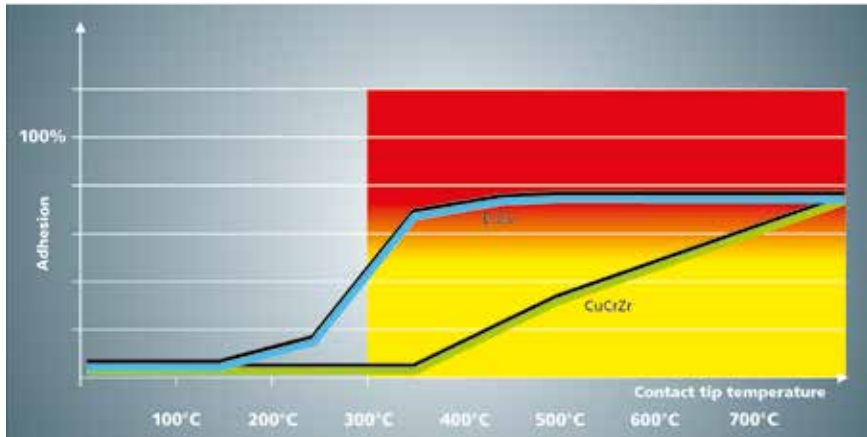
is the most optimal choice of contact tip in terms of welding properties and/or operating costs.

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.

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



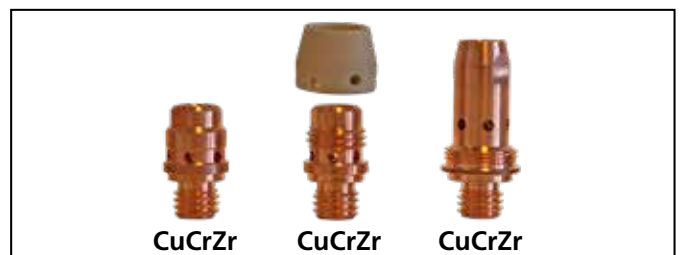
MV 450/550 torches are supplied with integrated or separate tip adaptors.

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 lower, but in return, the tip adaptor is

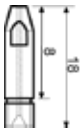
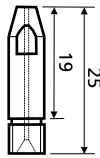
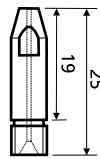
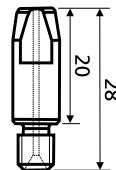
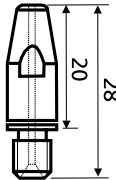
MV 450 / MV 550



MV 450 FKS / MV 550 FKS

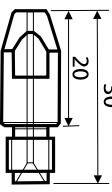
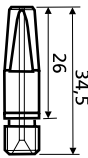
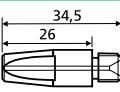
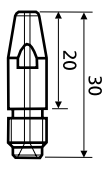
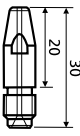
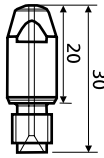
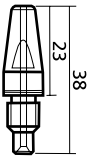
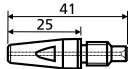


CONTACT TIPS

Contact tip - design and length	Art. no.	Item description	ML 140	ML 150	ML 250	ML 240	ML 300	ML 360
M 5								
	80130140	∅ 0.6 M5 ∅ 5 x 18mm E-Cu	•					
	80130141	∅ 0.8 M5 ∅ 5 x 18mm 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		•	•	•	•	•

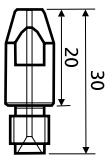
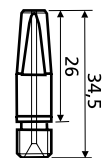
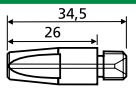
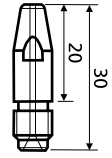
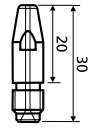
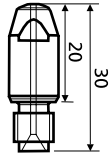
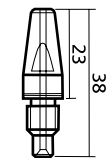
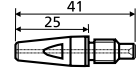
• = Mild steel Fe, stainless steel CrNi and FCW. Recommended. (•) = Alternative

CONTACT TIPS

Contact tip - design and length	Art. no.	Item description	ML 380	ML 400	ML 500
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	•••		

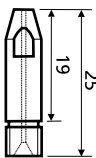
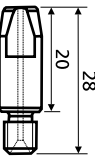
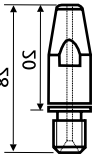
- = Mild steel Fe, stainless steel CrNi and FCW. Recommended. (•) = Alternative
- = Aluminium welding.
- = For gas nozzles with special length (depending on torch model). Recommended. (•) = Alternative

CONTACT TIPS

Contact tip - design and length	Art. no.	Item description	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


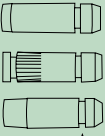


CONTACT TIPS

Contact tip - design and length	Art. no.	Item description	MV 240
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	(•)
	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

SPARE PARTS FOR ZA AND WIRE LINERS

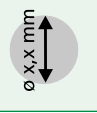
Spare parts for ZA	
Art. no.	Description
80200303	Swivel nut
26920008	Gas nipple Ms
80100004	Gas nipple Ms
26910008	Gas nipple CrNi
80100710	O-ring for ZA air/water
80200312	Spring pin without spring 21.5 mm \varnothing 5
80100747	Spring pin with spring 24.0 mm \varnothing 5.2
80100810	Spring pin for ZA air 24mm \varnothing 6.5
80100811	Spring pin for ZA water 12mm \varnothing 6.5
80100706	ZA-ML Spring pin air
80200332	ZA-ML Spring pin water
80200301	Nut for ZA connection

<p>Swivel nut: 80200303</p> 	<p>Gas nipple: 26920008 Ms 80100004 Ms 26910008 CrNi</p> 	<p>O-ring: x 1 80100710 x 2 x 1</p> 	<p>Spring pins without spring 21.5 mm 80200312 \varnothing5.0 without spring 19.0 mm 80100773 \varnothing6.5 with spring 24.0 mm 80100747 \varnothing5.2 Spring pin for ZA air 24.0 mm 80100810 \varnothing6.5 Spring pin for ZA water 12.0 mm 80100811 \varnothing6.5</p>	<p>Hunstik \varnothing4 rod. løse (2 stk.) 18270004</p> 
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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
80160147	Teflon liner (PTFE) with bronze neck \varnothing 4 4m 0.8-1.0mm blue
80160148	Teflon liner (PTFE) with bronze neck \varnothing 4 4m 1.2-1.6mm red
80160150	Teflon liner (PTFE) with bronze neck \varnothing 4 5m 0.8-1.0mm blue
80160151	Teflon liner (PTFE) with bronze neck \varnothing 4 5m 1.2-1.6mm red
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 bronze neck \varnothing 4 4.4m 0.8-1.0mm grey
80160707	Carbon teflon liner (carbon PTFE) with bronze neck \varnothing 4 4.4m 1.2-1.6mm grey
80160708	Carbon teflon liner (carbon PTFE) with bronze neck \varnothing 4 5.4m 1.2-1.6mm grey

WIRE LINERS

Migatronic recommends

Wire	Wire diameter	Steel liner / Steel teflon liner			Plastic liner (PEH) with bronze neck		Teflon liner (PTFE) with bronze neck		Carbon teflon liner (carbon PTFE) with bronze neck	
		3.4 m	4.4 m	5.4 m	4.4 m	5.4 m	4.4 m	5.4 m	4.4 m	5.4 m
Length of liner										
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						
2.0 mm	80160523	80160523	80160553							
2.4 mm	80160523	80160523	80160553							
CrNi Stainless steel	0.8 mm	80160558	80160554	80160556					80160700	
	1.0 mm	80160558	80160554	80160556					80160700	
	1.2 mm	80160558	80160554	80160556					80160707	
Cu Copper alloys	1.2 mm		80160555	80160557	80160559				80160707	80160708
	1.4 mm		80160555	80160557	80160559				80160707	80160708
	1.6 mm		80160555	80160557	80160559				80160707	80160708
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						
2.0 mm	80160523	80160523	80160553							
2.4 mm	80160523	80160523	80160553							
CrNi Flux Stainless steel with- flux cored wire	0.8 mm	80160558	80160554	80160556					80160147	80160700
	1.0 mm	80160558	80160554	80160556				80160148	80160700	
	1.2 mm	80160558	80160554	80160556					80160707	
	1.2 mm		80160555	80160557	80160559				80160707	80160708
	1.4 mm		80160555	80160557	80160559				80160707	80160708
1.6 mm		80160555	80160557	80160559				80160707	80160708	
Al Aluminium	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						
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										
* Naked. Only recommended for water-cooled 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.



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



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



Keypad unit with vertical TIG control knob (RH)
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



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



Old model. use:
80300100
80300101
80300130

New model (2012 →). use:
80300060
80300061
80300070
80300063

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 101/201 welding torch



Cable connector for air-cooled TIG 221 welding torch

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	460 A
Duty cycle AC 60%	65 A	75 A	90 A	160 A	230 A	280 A	320 A
Duty cycle DC 100%	80 A	90 A	110 A	225 A	325 A	400 A	460 A
Duty cycle AC 100%	55 A	65 A	80 A	160 A	230 A	280 A	320 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

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	TIG101RV 4m 7P
80392660	TIG101RV 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 4 m 7P
80392804	TIG ERGO 201RV 8 m 7P

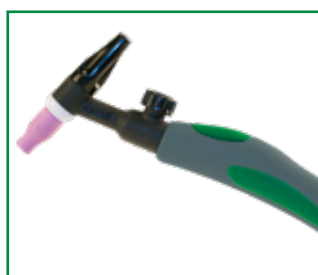
Art. no.	TIG 221 RANGE
80392875	TIG ERGO 221 4m 7 POL
80392876	TIG ERGO 221 8m 7 POL
80392887	TIG ERGO 221 15M 7 POL
80392877	TIG ERGO 221RH 4m 7 POL
80392878	TIG ERGO 221RH 8m 7 POL
80392888	TIG ERGO 221RH 15M 7 POL
80392879	TIG ERGO 221RV 4m 7 POL
80392880	TIG ERGO 221RV 8m 7 POL
80392881	TIG ERGO 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

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



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



7/6 pole adaptor
Art. no.....80300116



7 pole TIG ZA adaptor
Art. no.....75990007

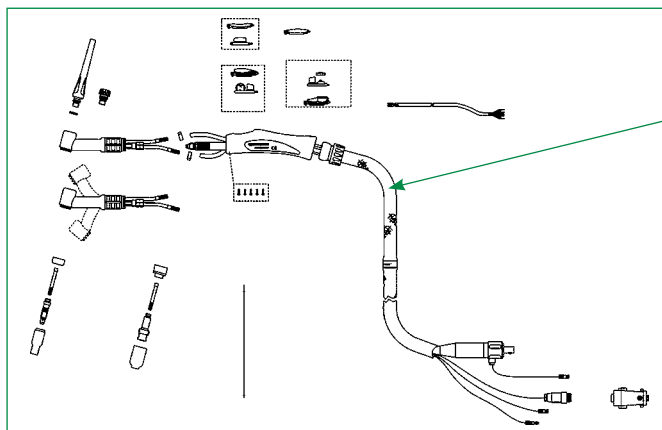
ABBREVIATIONS TIG:

- TIG 201** = Model
- R** = Remote control/Dialog
- FLEX** = Flexible torch body
- 8 m** = Length
- RH** = Horizontal regulation
- RV** = Vertical regulation

TIG ERGO WELDING TORCHES

SUITABLE FOR	TIG & MMA machines								
	RallyMIG	Focus Stick 120E/161E	PI 200 Air / Focus TIG 160/200	PI 200 Water	PI 250 Air	PI 250 Water	PI 350 Air	PI 350 W	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



Leather cover with zip
For protection of the welding hose.

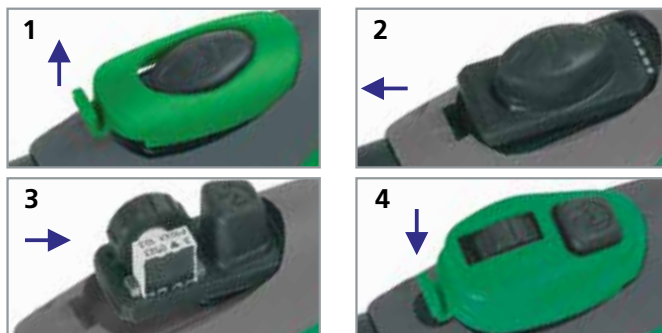


For TIG 101/301
Art. no..... 80300134



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.



A Migatronic TIG welding torch is equipped with an easily replaceable control unit on the torch handle. As standard, the control unit consists of a keypad unit but for use on Migatronic TIG welding machines, we recommend a control unit with both keypad unit and control knob.

Art. no.	Description
74303610	10m 25mm ² Air 7-P w/o box
74303615	15m 25mm ² Air 7-P w/o box
74303620	20m 25mm ² Air 7-P w/o box
74355710	10m 50mm ² Water 7-P w/o box
74355715	15m 50mm ² Water 7-P w/o box
74355720	20m 50mm ² Water 7-P w/o box
80300134	ZIP leather for TIG 101/301

WEAR PARTS FOR TIG ERGO WELDING TORCHES

Wear parts boxes for TIG Ergo 101 - 401

81100228 Wear parts box TIG 101/301/321		
80300219	1 pcs.	Insulator TIG101/301
80361372	10 pcs.	Tungsten electrode WS2 Ø1.6 superblue
80361374	10 pcs.	Tungsten electrode WS2 Ø2.4 superblue
80400115	1 pcs.	Electrode clamp short TIG 101/301/321
80400116	1 pcs.	Electrode clamp medium TIG 101/301/321
80400117	1 pcs.	Electrode clamp long TIG 101/301/321
80400204	2 pcs.	O/RING ELECTR. CAP TIG 101/301/321
80410202	2 pcs.	Electrode Holder Ø1.6 TIG101/301/321
80410203	2 pcs.	Electrode Holder Ø2.4 TIG101/301/321
80430212	5 pcs.	Electrode Clamp Ø1.6 MM CuCr
80430213	5 pcs.	Electrode Clamp Ø2.4 MM CuCr
80440202	5 pcs.	Gas Nozzle TIG101/301/321 #5 Ø8.0 / 5/16"
80440203	5 pcs.	Gas Nozzle TIG101/301/321 #6 Ø9.6 / 3/8"
80440204	5 pcs.	Gas Nozzle TIG101/301/321 #7 Ø11.2 / 7/16"



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



Set of standard wear parts
Ø1.6 TIG101-321 80300117
Ø2.4 TIG101-321 80300119

**Set of wear parts. gas lenses
(Not shown)**
Ø1.6 TIG 101-32180300140
Ø2.4 TIG 101-32180300141

81100230 Wear parts box TIG 201/221/401		
80300189	2 pcs.	Insulator TIG 201-401
80361372	10 pcs.	Tungsten electrode WS2 Ø1.6 superblue
80361374	10 pcs.	Tungsten electrode WS2 Ø2.4 superblue
80300200	1 pcs.	Electrode cap short TIG 201-401
80300201	1 pcs.	Electrode cap long TIG201-401
80300223	2 pcs.	O-Ring for cap TIG201/401
80310000	2 pcs.	Electrode holder Ø1.6 TIG201/401
80310001	2 pcs.	Electrode holder Ø2.4 TIG201/401
80330111	5 pcs.	Electrode clamp Ø1.6 MM CuCr
80330112	5 pcs.	Electrode clamp Ø2.4 MM CuCr
80340002	5 pcs.	Gas Nozzle TIG201/401 #5 Ø8.0 / 5/16"
80340003	5 pcs.	Gas Nozzle TIG201/401 #6 Ø9.6 / 3/8"
80340004	5 pcs.	Gas Nozzle TIG201/401 #7 Ø11.2/ 7/16"



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

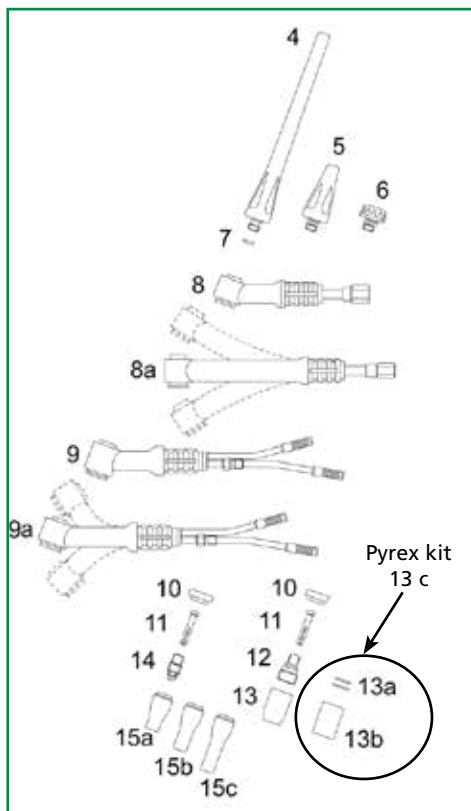


Set of standard wear parts
Ø1.6 TIG 201-40180300274
Ø2.4 TIG 201-40180300118

**Set of wear parts. gas lenses
(Not shown)**
Ø1.6 TIG 201-40180300142
Ø2.4 TIG 201-40180300143

WEAR PARTS FOR TIG ERGO WELDING TORCHES

Wear parts for TIG Ergo 101/301/321



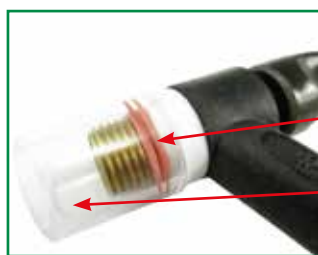
TIG 101 is a small, lightweight air-cooled TIG welding torch for use in hard-to-reach locations and where welding current does not exceed approx. 100 A DC.

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

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



Pyrex kit for TIG 101/301/321 gas lens
(2xnozzle, 4xO-ring)

Art. no.....80449235

Pyrex glass nozzle o-ring

Art. no.....80300321

Pyrex glass nozzle

Art. no.....80440235



Electrode clamp brass wedge

Art. no.....80430222

Art. no.....80430223

Art. no.....80430224



Position no.	Art. no.	Description	No of pcs.
4	□ Δ	80400117 Electrode clamp long TIG 101/301/321	10
5	□ Δ	80400116 Electrode clamp medium TIG 101/301/321	10
6	□ Δ	80400115 Electrode clamp short TIG 101/301/321	10
7	□ 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
8a		80300052 Torch body TIG 101 Flex 135mm	1
		80400310 Torch body TIG 301 55mm	1
9		80400311 Torch body TIG 301 Flex 55mm	1
9a		80400315 Torch body TIG 301 Flex 105mm	1
		80400316 Torch body TIG 301 Flex 135mm	1
10	□ Δ	80300219 Insulator TIG101/301/321	10
11		80430211 Electrode clamp Ø1.0 mm CuCr	10
	*□	80430212 Electrode clamp Ø1.6 mm CuCr	10
	□ 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

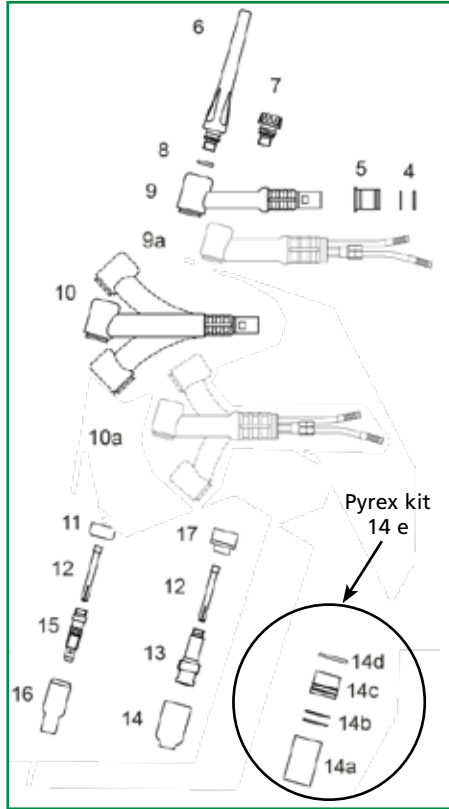
WEAR PARTS FOR TIG ERGO WELDING TORCHES

Position no.	Art. no.	Description	No of pcs.	
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	
13	80440210	Gas Nozzle Gas L TIG101/301 #4 Ø6.4 / 1/4"	10	
	80440211	Gas Nozzle Gas L TIG101/301 #5 Ø8.0 / 5/16"	10	
	80440212	Gas Nozzle Gas L TIG101/301 #6 Ø9.6 / 3/8"	10	
	80440213	Gas Nozzle Gas L TIG101/301 #7 Ø11.2 / 7/16"	10	
	80440214	Gas Nozzle Gas L TIG101/301 #8 Ø12.7 / 1/2"	10	
13a	80300321	Pyrex glass nozzle o-ring	1	
13b	80440235	Pyrex glass nozzle 25mm Ø20	1	
13c	80449235	Pyrex kit for TIG 101/301/321 gaslinse (2xnozzle, 4xO-ring)	1	
14	80410201	Electrode holder Ø1.0 TIG101/301/321	10	
	* □	80410202	Electrode holder Ø1.6 TIG101/301/321	10
	□ Δ	80410203	Electrode holder Ø2.4 TIG101/301/321	10
	Δ	80410204	Electrode holder Ø3.2 TIG101/301/321	10
15a	80440201	Gas Nozzle TIG101/301/321 #4 Ø6.4 / 1/4"	10	
	□ Δ	80440202	Gas Nozzle TIG101/301/321 #5 Ø8.0 / 5/16"	10
	* □ Δ	80440203	Gas Nozzle TIG101/301/321 #6 Ø9.6 / 3/8"	10
	□ Δ	80440204	Gas Nozzle TIG101/301/321 #7 Ø11.2 / 7/16"	10
		80440205	Gas Nozzle TIG101/301/321 #8 Ø12.7 / 1/2"	10
15b	80440221	Gas Nozzle Long 48mm #4L Ø6.4 / 1/4"	10	
	80440222	Gas Nozzle Long 48mm #5L Ø8.0 / 5/16"	10	
	80440223	Gas Nozzle Long 48mm #6L Ø9.6 / 3/8"	10	
15c	80440231	Gas Nozzle X-Long 64mm #4XL Ø6.4 / 1/4"	10	
	80440232	Gas Nozzle X-Long 64mm #5XL Ø8.0 / 5/16"	10	
	80440233	Gas Nozzle X-Long 64mm #6XL Ø9.6 / 3/8"	10	
	* □	80361372	Tungsten electrodes. See page 43	10
	□ Δ	80361374		10
	Δ	80361376		10
19	*	80300117	Std. wearingpart set Ø1.6 TIG 101/301/321	1
		80300119	Std. Wearingpart set Ø2.4 TIG 101/301/321	1
	□	81100228	Wear parts box TIG 101/301/321 1.6/2.4	1
	Δ	81100248	Wear parts box TIG 101/301/321 2.4/3.2	1
		80300140	Wearingpart set 1.6 gasl. TIG 101-301-321	1
		80300141	Wearingpart set 2.4 gasl. TIG 101-301-321	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 boxset.*

WEAR PARTS FOR TIG ERGO WELDING TORCHES

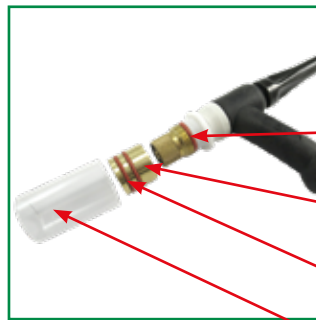
Wear parts for TIG Ergo 201/221/401



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.



Pyrex kit for TIG 201 // 221 // 401 gas lens
(2xnozzle, 2xO-ring, 1xadapter)

Art. no.....80349420

O-ring red silicon
Art. no.....43570028

Pyrex glass nozzle adaptor
Art. no.....80310416

Pyrex glass nozzle o-ring
Art. no.....80300322

Pyrex glass nozzle 42mm Ø25
Art. no.....80340420

Position no.	Art. no.	Description	No of pcs.
4	80300301	O-ring Ø17.5x1.5mm	1
5	80400312	Transition piece for 201HD-401	1
6	□ 80300201	Electrode cap long TIG201-401	10
7	□ 80300200	Electrode cap short TIG 201-401	10
8	□ 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	□ 80300189	Insulator TIG 201-401	10
12	80330110	Electrode clamp Ø1.0 mm CuCr	10
	□ 80330111	Electrode clamp Ø1.6 mm CuCr	10
	*□ 80330112	Electrode clamp Ø2.4 mm CuCr	10
	80330113	Electrode clamp Ø3.2 mm CuCr	10
	80330114	Electrode clamp Ø4.0 mm CuCr	10

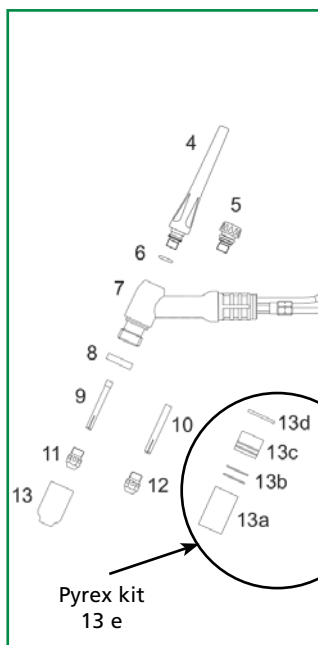
WEAR PARTS FOR TIG ERGO WELDING TORCHES

Position no.	Art. no.	Description	No of pcs.
13	80310411	Gas lens 1.0 mm TIG 201-401	10
	80310412	Gas lens 1.6 mm TIG 201-401	10
	80310413	Gas lens 2.4 mm TIG 201-401	10
	80310414	Gas lens 3.2 mm TIG 201-401	10
	80310415	Gas lens 4.0 mm TIG 201-401	10
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	Pyrex glass nozzle o-ring	1
14 c	80310416	Pyrex glass nozzle adaptor	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
	□ 80310000	Electrode holder Ø1.6 TIG201/401	10
	*□ 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"	10
	□ 80340002	Gas Nozzle TIG201/401 #5 Ø8.0 / 5/16"	10
	*□ 80340003	Gas Nozzle TIG201/401 #6 Ø9.6 / 3/8"	10
	□ 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
	□ 80361372	Tungsten electrodes. See page 43	10
	*□ 80361374		10
18	□ 80300118	Std. wearingpart set Ø2.4 TIG 201/221/401	1
	80300274	Std. wearingpart set Ø1.6 TIG 201/221/401	1
	□ 81100230	Wear parts box TIG 201/221/401	1
	80300142	Wearingpart set 1.6 gas lens TIG 201-401	1
	80300143	Wearingpart 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.*

WEAR PARTS FOR TIG ERGO WELDING TORCHES

Wear parts for TIG Ergo 451



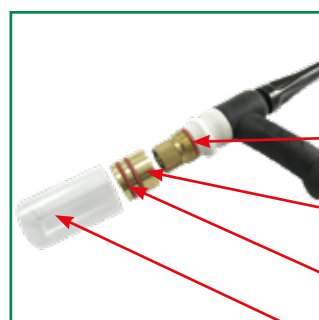
TIG 451 is the strongest model in our range of TIG welding torches. TIG 451 is water-cooled and designed for heavy-duty welding.

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 400A DC welding current.

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

Position no.	Art. no.	Description	No of pcs.
4	80300201	Electrode cap long TIG201-401	10
5	80300200	Electrode cap short TIG 201-401	10
6	80300223	O-ring for cap TIG201/401	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 TIG451 4,0 mm	10
	80330107	Collet HD TIG451 4,8 mm	10
11	* Δ 80310010	Collet body TIG451 1,0-3,2 mm	10
12	80310011	Collet body TIG451 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	Pyrex glass nozzle o-ring	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 43	10
	Δ 80361376		10
	* 80300136	Std. wearingpart set Ø2.4 TIG 451	1
	Δ 80300138	Std. wearingpart 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.



Pyrex kit for TIG 201 // 221 // 401 gas lens
 (2xnozzle, 2xO-ring, 1xadapter)

Art. no.....80349420

O-ring red silicon
 Art. no.....43570028

Pyrex glass nozzle adaptor
 Art. no.....80310416

Pyrex glass nozzle o-ring
 Art. no.....80300322

Pyrex glass nozzle 42mm Ø25
 Art. no.....80340420

TIG ADJUST 101/201/301/401

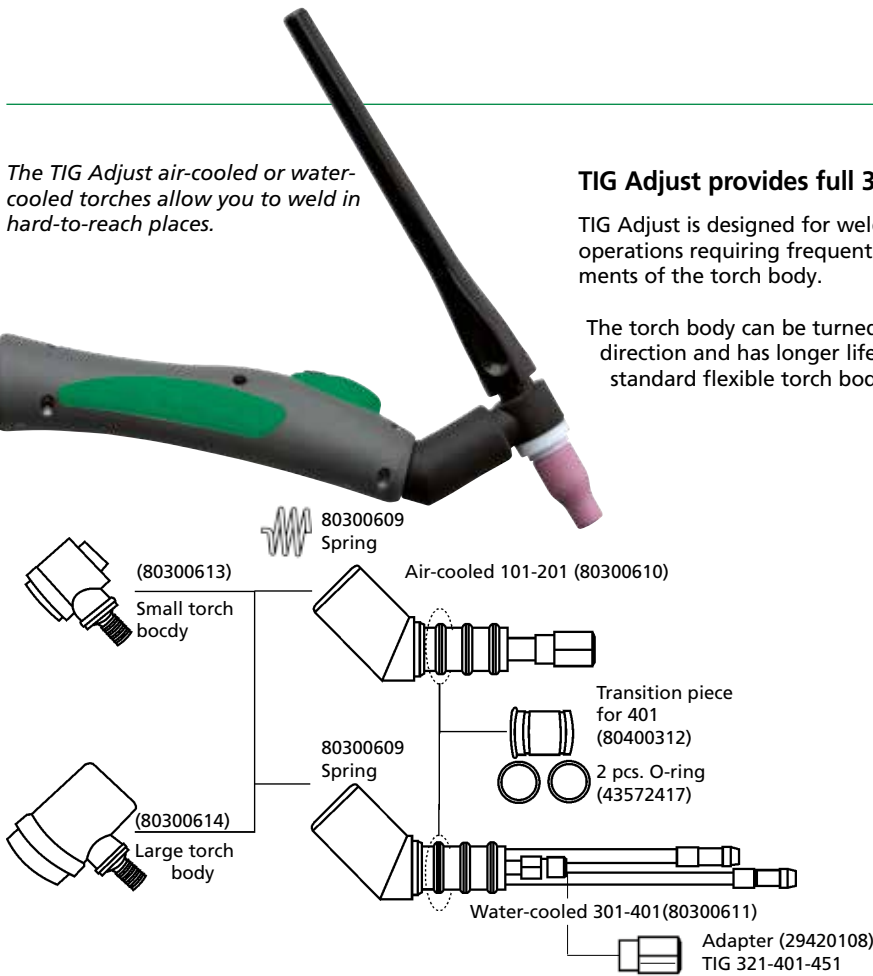
The TIG Adjust air-cooled or water-cooled torches allow you to weld in hard-to-reach places.

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



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

	Variant	Article no.
TIG 301 Small torch body	TIG 301 Adjust 4 m*	80492190
	TIG 301 Adjust 8 m*	80492191
	TIG 301RH Adjust 4 m*	80492185
	TIG 301RH Adjust 8 m*	80492186
TIG 401 Large torch body	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 7p
80392706	TIG 101 Ergo ADJUST 8m 7p
80392700	TIG 101RH Ergo ADJUST 4m 7p
80392701	TIG 101RH Ergo ADJUST 8m 7p
80392845	TIG 201 Ergo ADJUST 4m 7p
80392846	TIG 201 Ergo ADJUST 8m 7p
80392847	TIG 201RH Ergo ADJUST 4m 7p
80392848	TIG 201RH Ergo ADJUST 8m 7p
80492190	TIG 301 Ergo ADJUST 4m 7p
80492191	TIG 301 Ergo ADJUST 8m 7p
80492185	TIG 301RH Ergo ADJUST 4m 7p
80492186	TIG 301RH Ergo ADJUST 8m 7p
80492265	TIG 401 Ergo ADJUST 4m 7p
80492266	TIG 401 Ergo ADJUST 8m 7p
80492285	TIG 401RH Ergo ADJUST 4m 7p
80492286	TIG 401RH Ergo ADJUST 8m 7p

Art. no.	TIG ADJUST RANGE	No of pcs.
80300613	Small torch body	1
80300614	Large torch body	1
80300610	Body gascooled	1
80300611	Body watercooled	1
80300609	Spring TIG Adjust	1
80400312	Transition piece for 201HD-401	1
43572417	O-ring	1
29420108	Adaptor 1/4" UNF-3/8" 24UNF left	1

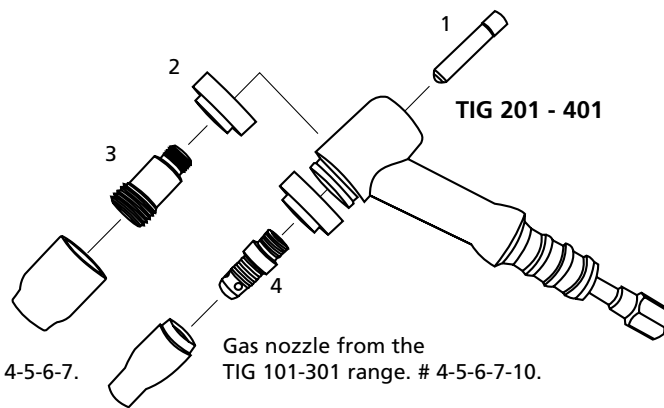
The products delivered may differ from the photos in the catalogue.

SPECIAL "STUBBY" PARTS FOR TIG 201/221/401

Special torch body for "Stubby" system



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



Gas nozzle from the TIG 101-301 range. # 4-5-6-7.

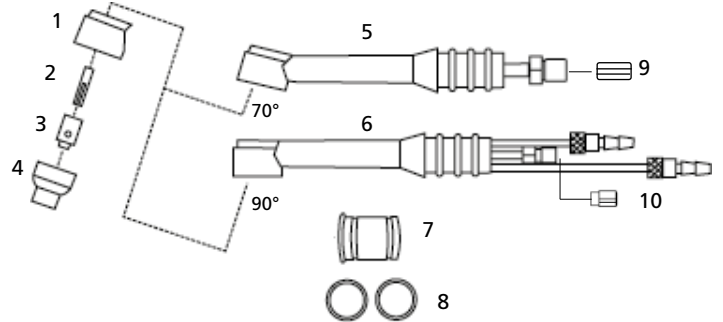
Gas nozzle from the TIG 101-301 range. # 4-5-6-7-10.

Pos. no.	Art. no.	System "Stubby"	No of pcs
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 gaslense	1
	80300289	Wearing parts set TIG Stubby ø2.4 gaslense	1

SPECIAL PARTS FOR WP 24

Special torch body WP24

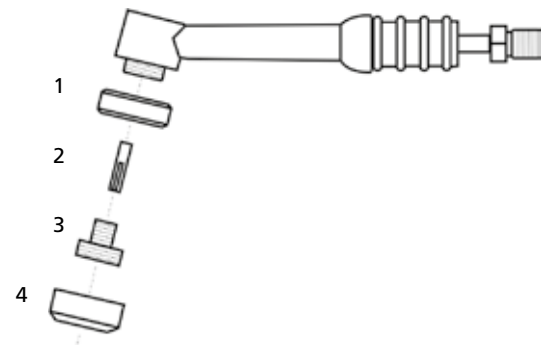
The torch body fits in everywhere.



Pos. no.	Art. no.	WP24 parts	No of pcs
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	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	No of pcs
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



TORCH BODY AND BODY HEAD

Special torch body/-head DSF 225 FLEX



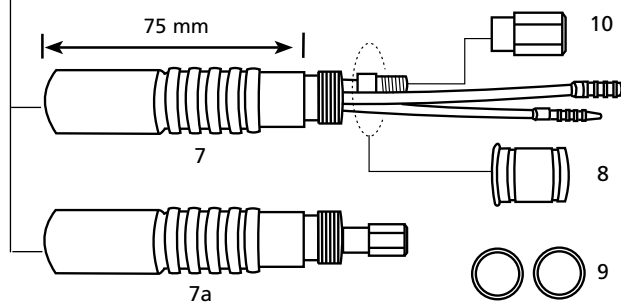
DSF 225 FLEX is a flexible water-cooled torch body with replaceable head.



TIG 201 DSF 225x3B #	4 m	7 pole	80392889
TIG 201 DSF 225x3B #	8 m	7 pole	80392890
TIG 301 DSF 225x3B #	4 m	7 pole	80492339
TIG 301 DSF 225x3B #	8 m	7 pole	80492340

- 1 70°
Small torch body # (*) 101/301/321
- 2 180°
Small torch body # (*) 101/301/321
- 3 90°
Small torch body (*) 101/301/321
- 4 70°
Small torch body # (**) WP24
- 5 70°
Large torch body (*) 201/401
- 6 180°
Large torch body (*) 201/401

Pos. nr.	Art. no.	DSF FLEX
	80392889	TIG Ergo 201 DSF 225x3B 4m 7p
	80392890	TIG Ergo 201 DSF 225x3B 8m 7p
	80492339	TIG Ergo 301 DSF 225x3B 4m 7p
	80492340	TIG Ergo 301 DSF 225x3B 8m 7p
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 WP24 70°
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
11	81100228	Wearing part box TIG 101/301/321 1.6/2.4
	81100238	Wearing part box TIG WP24/DSF225
	81100230	Wearing part box TIG 201/221/401



(*) Small torch body = wear parts 101-301-321. Large torch body = wear parts 201-401. (**) wp 24 wear parts.

WEAR PARTS ACCORDING TO INDIVIDUAL REQUIREMENTS

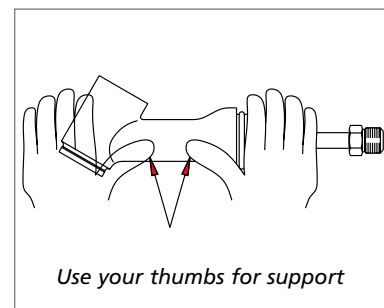
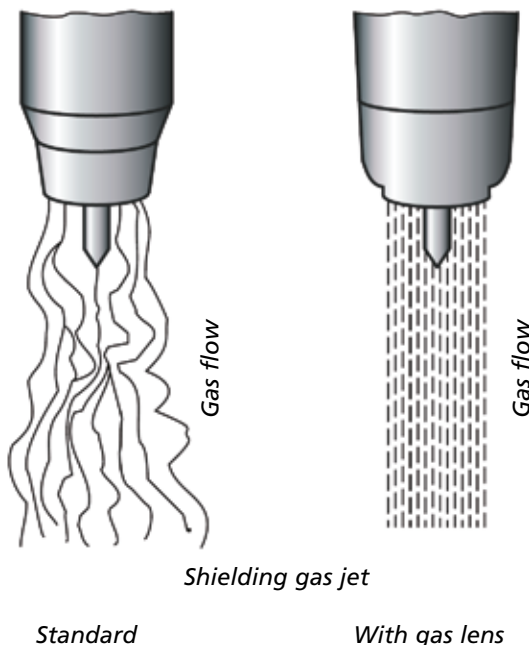
As standard. Migatronig TIG welding torches are supplied without wear parts. This allows you to equip your torches with wear parts as required. For list of wear parts for the individual models of TIG welding torches. please refer to previous pages.

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
Migatronig TIG FLEX torch bodies are flexible and shapeable for difficult welding operations. If several shapings are required, we recommend a turnable TIG torch body. For custom-built and special solutions, please refer to page 32.

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



Plasma cutting torch for Zeta 60. 6 m hose

Art. no.....80690091



Wearing part box for Zeta 60.

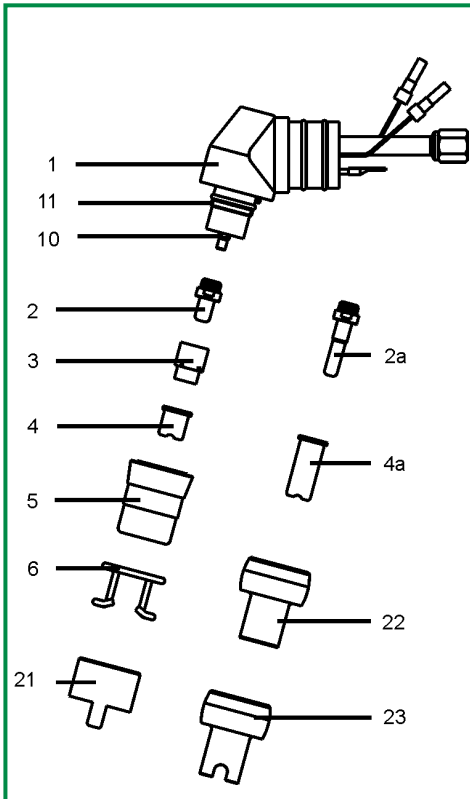
Art. no.....81100233



Bevel tools attachment kit for Zeta 60.

Art. no.....80600220

Wear Parts for Plasma Cutting Handle



Pos. no.	Art. no.	Description	No of pcs.
Zeta 60			
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



Plasma cutting torch for Zeta 100. 6 m hose
Art. no.....80690095

Plasma torch for Zeta 100. 15 m
Art. no.....80690098



Plasma cutting torch for Zeta 100. 6 m hose (automation)
Art. no.....80690096

Pos no.	Art. no.	Description	No of pcs.		
				Zeta 100	Zeta 100 Automat
1	80650010	Torch cutting head	1	x	
1	80650011	Torch cutting head	1		x
1a	80600121	O-ring	1	x	x
1b	80600122	Cooling tube	1	x	x
2	80600130	Handle. incl. switch	1	x	
2	80600132	Machine tube handle	1		x
2a	80600117	Switch	1	x	
3*	80610011	Electrode	10	x	x
4	80600124	Gas diffuser 30-70A	1	x	x
5*	80600125	Gas diffuser 80-120A	1	x	x
6	80630204	Cutting nozzle, ϕ 0.9 30-40A	10	x	x
7.1	80630205	Cutting nozzle, ϕ 1.0 40-50A	10	x	x
7.2	80630206	Cutting nozzle, ϕ 1.1 50-60A	10	x	x
7.3	80630207	Cutting nozzle, ϕ 1.2 60-70A	10	x	x
8.1	80630208	Cutting nozzle, ϕ 1.4 80-90A	10	x	x
8.2*	80630209	Cutting nozzle, ϕ 1.5 90-100A	10	x	x
8.3	80630210	Cutting nozzle, ϕ 1.6 100-120A	10	x	x
9	80640113	Protection cap 30-70A	1	x	x
10*	80640114	Protection cap 80-120A	1	x	x
11*	80600126	Distance ring (2 legs)	1	x	x
12	80630211	Gouging tip	1	x	x
13	80640115	Protection cap	1	x	x
14	80640116	Protection cap. gouging	1	x	x
16.1	80630225	Contact cutting tip ϕ 1.0	10	x	x
16.2	80630226	Contact cutting tip ϕ 1.1	10	x	x
16.3	80630227	Contact cutting tip ϕ 1.2	10	x	x
16.4	80630228	Contact cutting tip ϕ 1.4	10	x	x
16.5	80630229	Contact cutting tip ϕ 1,6	10	x	x
17	80640117	Protection cap 40-70A, contact cutting	10	x	x
18	80640118	Protection cap 80-100A, contact cutting	10	x	x
	81100239	Wearing part box	1	x	x
	80600230	Bevel tools attachment kit	1	x	x

* = Pre-assembled as standard



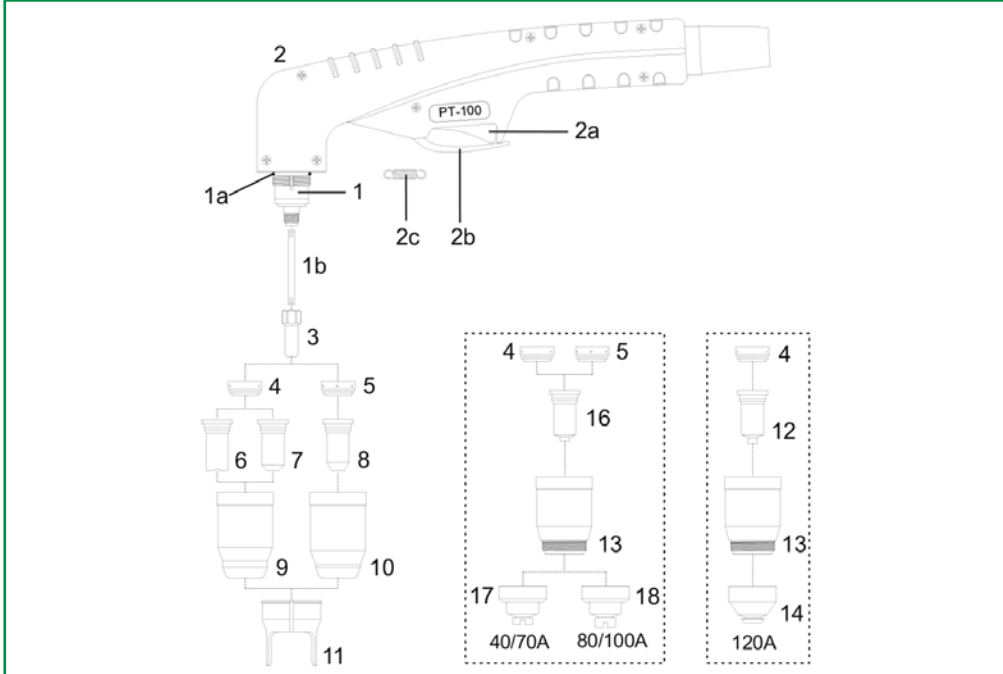
Wearing part box for Zeta 100.
Art. no.....81100239



Bevel tools attachment kit for Zeta 100.
Art. no.....80600230

PLASMA CUTTING TORCHES

Wear parts for plasma cutting torches



Assembly box for Plasma hoses
Art. no.....73800001

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	

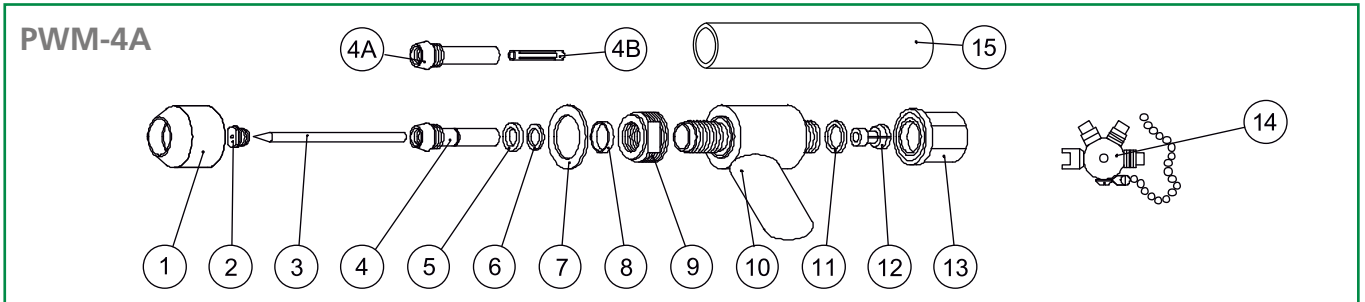


Extension hose PMW4A/300 8.0 m
Art. no.....74330800



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

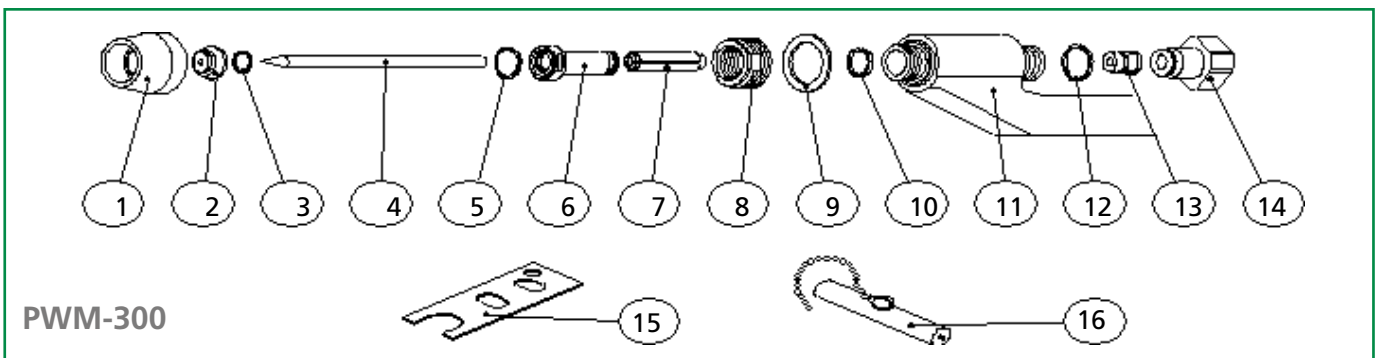
WEAR PARTS FOR PLASMA WELDING TORCHES



Position 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	Weld.tip 40A long
	84091890	Weld.tip 90A long
	84091891	Weld.tip 150A long
	84091892	Weld.tip 190A long
3	80361396	Tungsten electrode WL20 \varnothing 4.8x91mm Blue point 20°
	80361397*	Tungsten electrode WL20 \varnothing 4.8x111mm 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
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 f/4A & 6A

*Requires use of pos. 13 item no. 84091877

Position 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 \varnothing 4.8x91mm Blue point 20°
5	84092956	O-ring PWM-6A
6	84086509	Gas guide f/6A & 300
7	84086651	Gas distributor white f/300
8	84086541	Adaptor f/ceramic nozzle 6A
9	84086512	Washer f/6A
10	84080531	O-ring 25 x 015 f/6A
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

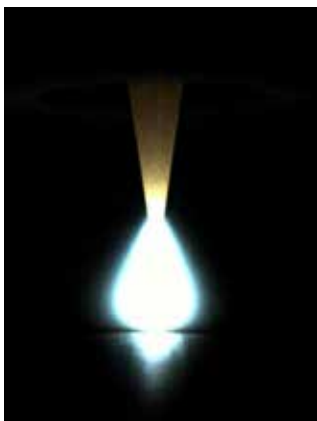
TIG						
Art. no.	Color	Alloy	Dimension, mm	DC Amp.	AC Amp.	No of pcs.
80360022	Green	WP	1.6	40-130	45-90	10
80360024	Green	WP	2.4	130-310	80-140	10
80360026	Green	WP	3.2	160-310	150-190	10
80360042	Black	WL10	1.6	70-150	50-100	10
80360043	Black	WL10	2.4	140-230	100-190	10
80360044	Black	WL10	3.2	220-420	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.	No of pcs.
80361396	Blue	WL20	4.8 x 91	500-675	330-460	1
80361397	Blue	WL20	4.8 x 111	500-675	330-460	1

Migatronik'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 Migatronik 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 Migatronik for more information



Art. no.	Wire Feed rolls	No of pcs
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	No of pcs
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	No of pcs
80139101	For ø0,6 m6 ø6x25mm E-Cu x 10	5
80139102	For ø0,8 m6 ø6x25mm E-Cu x 10	5
80139103	For ø1,0 m6 ø6x25mm E-Cu x 10	5
80139104	For ø1,2 m6 ø6x25mm E-Cu x 10	5
80139201	For ø0,6 m6 ø8x28mm E-Cu x 10	5
80139202	For ø0,8 m6 ø8x28mm E-Cu x 10	5
80139203	For ø1,0 m6 ø8x28mm E-Cu x 10	5
80139204	For ø1,2 m6 ø8x28mm E-Cu x 10	5
80139200	For ø0,8 m6 ø8x28mm CuCrZr x 10	5

Art. no.	Contact tips MIG/MAG	No of pcs
80138201	For ø1,0 m6 ø8x28mm CuCrZr x 10	5
80138202	For ø1,2 m6 ø8x28mm CuCrZr x 10	5
80239101	For ø0,8 m8 ø10x30mm E-Cu x 10	5
80239102	For ø1,0 m8 ø10x30mm E-Cu x 10	5
80239103	For ø1,2 m8 ø10x30mm E-Cu x 10	5
80239200	For ø0,8 m8 ø8x30mm CuCrZr x 5	2
80239201	For ø1,0 m8 ø8x30mm CuCrZr x 5	5
80239202	For ø1,2 m8 ø8x30mm CuCrZr x 5	2
80239204	For ø1,4 m8 ø8x30mm CuCrZr x 5	2
80239206	For ø1,0 m8 ø10x30mm CuCrZr x 5	2
80239207	For ø1,2 m8 ø10x30mm CuCrZr x 5	2

Art. no.	Gas nozzles MIG/MAG	No of pcs
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	No of pcs
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	No of pcs
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	No of pcs
80309219	For TIG101/301 x2	5
80309189	For TIG 201/401 x2	5

Art. no.	Collet body TIG	No of pcs
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	No of pcs
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	No of pcs
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 IG 201/401	5

Art. no.	O-ring TIG	No of pcs
80309223	For electrode cap TIG201/401	1

Art. no.	Electrode holder MMA	No of pcs
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	No of pcs
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	No of pcs
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	No of pcs
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	No of pcs
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	No of pcs
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	No of pcs
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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