

A welder wearing a dark protective suit and gloves is holding a MIG torch. The background is dark and out of focus, suggesting an industrial setting. The entire image is covered with a dark green semi-transparent overlay.

Welding torches and wear parts

MIGATRONIC

Table of contents

Air-cooled MIG welding torches	4	TIG 4CE welding torches	25
MIG-A Twist®	4	Wear parts for TIG 4CE welding torches	26
Air-cooled MIG welding torches	5	Wear parts for TIG 4CE 9/20/30	26
ML 161 & ML 241	5	Gas lenses with filter	30
Wear parts for		TIG 9/20/30.....	30
air-cooled MIG welding torches.....	6	Information - Set-up.....	30
Wear parts for ML 140.....	6	Wear parts for TIG 4CE 17/26/18	31
Wear parts for ML 150 Twist / ML 161 / ML 150C....	6	Wear parts for TIG 4CE 18SC	33
Wear parts for ML 250 Twist	6	Wear parts for TIG 4CE 450.....	34
Wear parts for ML 240 Twist / ML 241	7	Wear parts for TIG 4CE SNK.....	35
Wear parts for ML 300 Twist / ML 360 Twist	7	Special torch body for "Stubby" system.....	36
Wear parts for ML 380 Twist.....	8	Special parts for TIG 4CE 24-G/24-W	37
Wear parts for ML 400 Twist.....	8	Wear parts according to	
Wear parts for ML 500 Twist.....	8	individual requirements.....	38
Water-cooled MIG welding torches	9	TIG Ergo welding torches.....	39
MIG-A Twist®	9	Cable connector for TIG Ergo welding torches	40
Wear parts for		TIG Ergo control units	42
water-cooled MIG welding torches.....	10	Wear parts for TIG Ergo welding torches	43
Wear parts for MV 240 Twist	10	Wear parts for TIG Ergo 101/301/321.....	43
Wear parts for MV 400 FKS Twist	10	TIG Adjust 101/201/301/401.....	45
Advanced Cooling System.....	10	Wear parts for TIG Ergo welding torches	46
Wear parts for MV 500 FKS Twist	11	Gas lenses with filter	
Wear parts for MV 450 / 550 Twist	11	TIG Ergo 101/301/321/TIG Adjust.....	48
MIG-A Twist® MIG-A Twist® control units	12	Information - Set-up.....	48
For Sigma Select / Sigma Core /		Wear parts for TIG Ergo 201/221/401.....	49
Sigma One / Automig.....	12	Wear parts for TIG Ergo 451.....	51
Smart Torch modules for MIG-A Twist*)	12	Special torch body for "Stubby" system.....	52
MigAir welding torches with fume extraction..	13	Special torch body WP24	53
Water-cooled Push-Pull torch		Special torch body/-head DSF 225 FLEX	54
for MIG/MAG welding	14	Wear parts according to	
Wear parts for PP FKS 400.....	14	individual requirements.....	55
Contact tips and Tip adaptors	15	Plasma cutting torches and wear parts.....	56
Choice of Contact Tip.....	15	Zeta 60	56
Choice of Tip Adaptor - Material and Design.....	15	Wear Parts for Plasma Cutting Handle	56
Gas nozzles	18	Zeta 100 / Zeta 100 Automation	57
Spare parts for ZA and Wire liners	20	Plasma welding torches.....	58
Wire liners	21	Wear parts for plasma welding torches.....	59
Migatronik recommends.....	21	PWM-4A.....	59
TIG ERGO vs TIG 4CE	22	PWM-300.....	59
TIG 4CE welding torches	23	Tungsten electrodes	60
TIG 4CE regulation modules	24	Wear parts in retail blister packs.....	61

Switch on Press and Weld

**In this catalogue you will
find information about:**

- Welding Torches
- Technical Data

MIGATRONIC

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

CONTACT

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

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

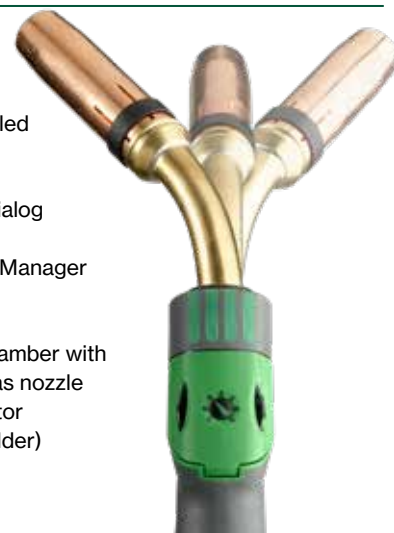
Air-cooled MIG welding torches

MIG-A Twist®

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

Abbreviations MIG:

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



Art. no.	Model
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
80197247	ML240 Twist 30° 3m 1.2 ALU
80196240	ML240 Twist R 3m 0.8
80196243	ML240 Twist R 3m 1.0 ALU
80196244	ML240 Twist R 3m 1.2 ALU
80196249	ML240 Twist R 3m 1.2 ALU/Cu
80196241	ML240 Twist R 4m 0.8
80196245	ML240 Twist R 4m 1.0 ALU
80197245	ML240 TWIST 3m 0.8 MIG-Brazing
80197249	ML240 TWIST 4m 0.8 MIG-Brazing
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

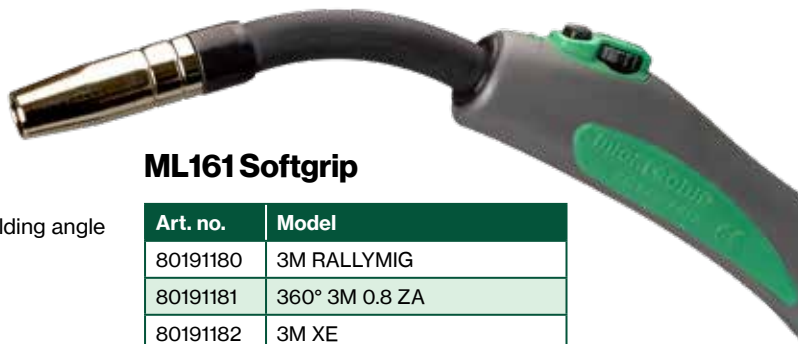
Model Twist	ML 140	ML 150/150C/161	ML 240/241	ML 250	ML 300	ML 360	ML 380	ML 400	ML 500
Duty cycle CO ₂ 60%	120 A	180 A	250 A	230 A	295 A	380 A	380 A	400 A	500 A
Duty cycle CO ₂ 100%	100 A	160 A	225 A	205 A	260 A	400 A		350 A	450 A
Mixgas 60%	160 A	170 A	220 A	225 A	255 A	310 A	350 A	360 A	450 A
Mixgas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

* = Minimum gas flow for compliance with maximum performance

Air-cooled MIG welding torches

ML 161 & ML 241

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

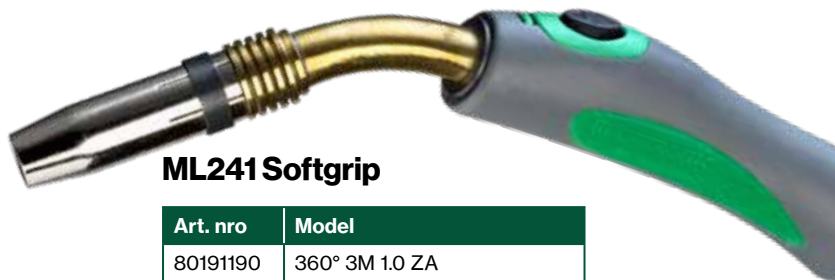


ML161 Softgrip

Art. no.	Model
80191180	3M RALLYMIG
80191181	360° 3M 0.8 ZA
80191182	3M XE



Svanehalsen kan drejes 360° uden brug af værktøj.



ML241 Softgrip

Art. nro	Model
80191190	360° 3M 1.0 ZA
80191191	360° 4M 1.0 ZA
80191192	360° 4M 1.2 ZA



Art. no. 80300100
Keypad unit
Standard equipment

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

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



Connection X



1972 - 1988

Automig 120 Automig 180 X
Automig 140 Automig 185 X
Automig 160 Automig 200 X
Automig 250 X

Connection XE



1988 - 1998

Automig 180 XE
Automig 200 XE

ML 150C

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



Connection ZA

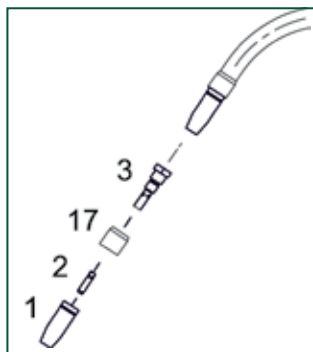


1998 -

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

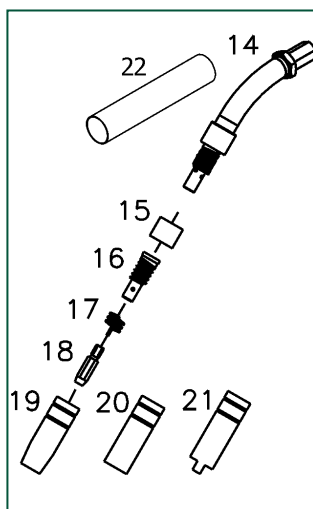
Wear parts for air-cooled MIG welding torches

Wear parts for ML 140



Position no.	Art. no.	Description	Package quantity
1	83080017	Gas nozzle ML 140 threaded conic	10
2	80130142	Contact tip - please see page 15	1
17	80120500	Insulating bush	10
3	80110039	Tip adaptor M8, left-handed thread	10

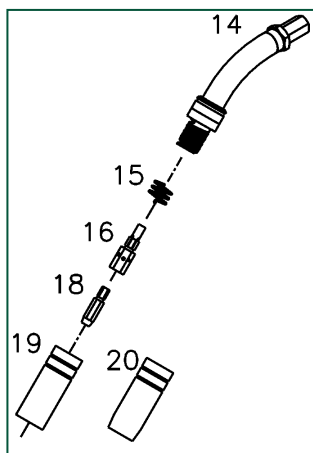
Wear parts for ML 150 Twist / ML 161 / ML 150C



Position no.		Art. no.	Description	Package quantity
14	*	80152202	Swan neck ML 150 MIG-A Twist	1
	□	80150038	Swan neck ML 161 w/fitting	1
	△	80150037	Swan neck ML 150C w/fitting	1
15	* □ △	80120500	Insulating bush	10
16	*	80110020	Contact nozzle ML 150	10
	* □	80110021	Contact nozzle ML 161/ML 150C, (left-hand thread)	10
17	* □ △	80100021	Retaining clamp	10
18	* □ △	80130202	Contact tip - please see page 15	50
19	* □ △	80140023	Gas nozzle, conic	10
20		80140500	Gas nozzle, cylindric	10
21		80140022	Gas nozzle, spot	10
22		80100073	Protection cover	1
		81100252	Wear parts box ML 150 Ergo/Twist 0.6 steel	1
		81100223	Wear parts box ML 150 Ergo/Twist 0.8 steel	1
		81100270	Wear parts box ML 150 B/161 C MB 15 cu LH	1
		81100271	Wear parts box ML 150 Ergo/Twist cu RH	1

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

Wear parts for ML 250 Twist

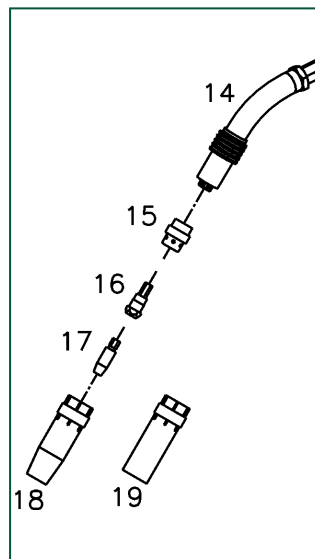


Position no.		Art. nr.	Description	Package quantity
14		80152302	Swan neck ML 250 MIG-A Twist	1
15		80100600	Retaining clamp ML 250	10
16	*	80110601	Tip adaptor ML 250 M6, 37mm	10
		80110602	Tip adaptor ML 250 M6, 35mm	10
18	*	80131200	Contact tip - please see page 15	50
19		80140600	Gas nozzle ML 250, cylindric	10
20	*	80140601	Gas nozzle ML 250, conic	10
		81100253	Wear parts box ML 250, 0.6 steel	1
		81100224	Wear parts box ML 250, 0.8-1.0 steel	1
		81100273	Wear parts box ML 250 MB25 cu	1

* = Pre-assembled as standard

Wear parts for air-cooled MIG welding torches

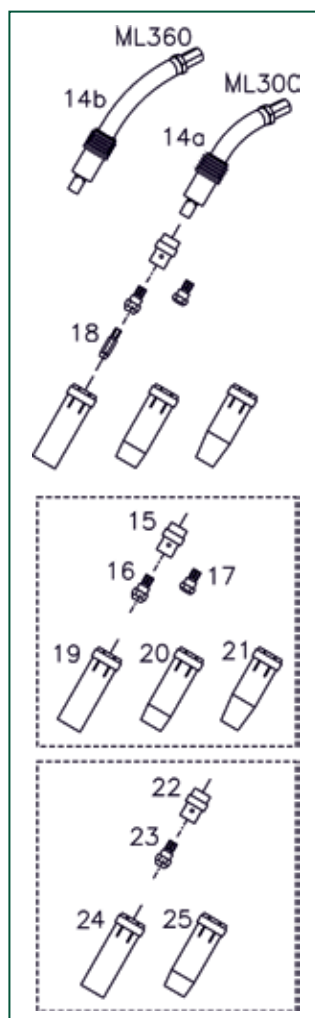
Wear parts for ML 240 Twist / ML 241



Position no.	Art. no.	Description	Package quantity
14	80152402 80152403 80150039	Swan neck ML 240 MIG-A Twist Swan neck ML 240 30° Alu Swan neck ML 241 w/fitting	1 1 1
15	* 83077480 83077481	Gas diffuser ML/MV 240 Black Gas diffuser ML/MV 240 White	10 10
16	* 80110604 83077149 80110603	Tip adaptor ML-MV 240 CuCrZr, 5mm Tip adaptor ML-MV 240 brass, 5mm Tip adaptor ML-MV 240 brass, 7mm	10 10 10
17		80131200 Contact tip - please see page 15	10
18	*	80140610 Gas nozzle ML/MV 240, conic	10
19		80140611 Gas nozzle ML/MV 240, cylindric	10
	81100214 81100231 81100274	Wearparts box ML 240, 0.6-0.8 steel Wearparts box ML 240, 1.0 steel Wearparts box ML 240 MB24 cu	1 1 1

* = Pre-assembled as standard

Wear parts for ML 300 Twist / ML 360 Twist

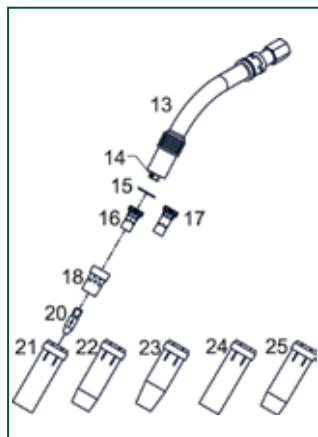


Position no.	Art. no.	Description	Package quantity
14a	80152502	Swan neck ML 300 MIG-A Twist	1
14b	80152602	Swan neck ML 360 MIG-A Twist	1
15	* 80120301	Gas diffuser ML 300/360, 30mm white	10
16	* 80112636 80112640	Tip adaptor ML 300/360 M8-6, 25mm Brass Tip adaptor ML 300/360 M8-6, 25mm CuCrZr	10 10
17	80110026 80110300	Tip adaptor ML 300/360 M8-6, 22mm Tip adaptor ML 300/360 M8-8, 23mm	10 10
18	*	80131201 Contact tip - please see page 15	10
19	80240300	Gas nozzle cylindric, 76mm	10
20	*	80240303 Gas nozzle conic, 76mm	10
21	80240304	Gas nozzle super conic, 76mm	10
22	80120306	Gas diffuser ML 360, 32mm white	10
23	80112637 80112638 80112639	Tip adaptor ML 300/360 M8-6, 32mm Brass Tip adaptor ML 300/360 M8-8, 28mm Brass Tip adaptor ML 300/360 M8-8, 32mm Brass	10 10 10
24	80140701	Gas nozzle cylindric nickelled, 84mm	10
25	80140700	Gas nozzle conic nickelled, 84mm	10
	81100232 81100254 81100275 81100276	Wearparts box ML 300, 1.0 steel Wearparts box ML 300, 1.0 steel CuCrZr Wearparts box ML 300/360 MB26 cu Wearparts box ML 300/360 MB36 84mm cu	1 1 1 1

* = Pre-assembled as standard

Wear parts for air-cooled MIG welding torches

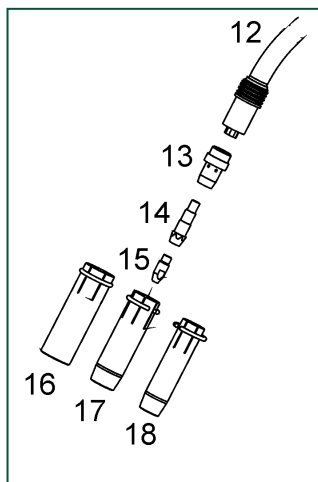
Wear parts for ML 380 Twist



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

* = Pre-assembled as standard

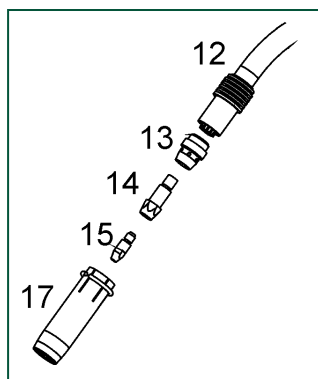
Wear parts for ML 400 Twist



Position no.	Art. no.	Description	Package quantity
12	80152702	Swan neck ML 400 MIG-A Twist	1
13a	* 80120310	Gas diffuser ML 400, white	10
13b	80120311	Gas diffuser ML 400, ceramic	10
13c	* 80120312	Gas diffuser ML 400, black	10
14a	* 80110040	Tip adaptor ML 400 M8-8, 43mm	10
14b	80110041	Tip adaptor ML 400 M8-8, 47mm	10
15	80231103	Contact tip - please see page 16	50
16	80140722	Gas nozzle ML 400, cylindric	10
17	* 80140721	Gas nozzle ML 400, conic Ø18mm	10
18	80140720	Gas nozzle ML 400, conic Ø14mm	10

* = Pre-assembled as standard

Wear parts for ML 500 Twist



Position no.	Art. no.	Description	Package quantity
12	80152802	Swan neck ML 500 MIG-A Twist	1
13	* 80120313	Gas diffuser ML 500, white	10
14	80110042	Tip adaptor ML 500 M10/M8, 43mm CuCrZr	10
15	* 80231103	Contact tip - please see page 16	50
17	* 80140723	Gas nozzle ML 500, conic Ø20mm	10

* = Pre-assembled as standard

Water-cooled MIG welding torches

MIG-A Twist®

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

ABBREVIATIONS MIG:

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



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

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

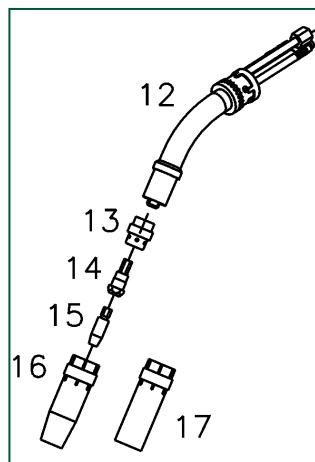
Art. no.	Model
80297240	MV240 Twist 3m 1.0
80297241	MV240 Twist 4m 1.0
80297245	MV240 Twist 5m 1.0
80296240	MV240 Twist R 3m 1.0
80296241	MV240 Twist R 4m 1.0
80296242	MV240 Twist R 3m 1.0 ALU
80297602	MV400 FKS Twist 3m 1.2
80297603	MV400 FKS Twist 4m 1.2
80297605	MV400 FKS Twist 5m 1.2
80297606	MV400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

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

Alle modeller leveres med fjederstift

Wear parts for water-cooled MIG welding torches

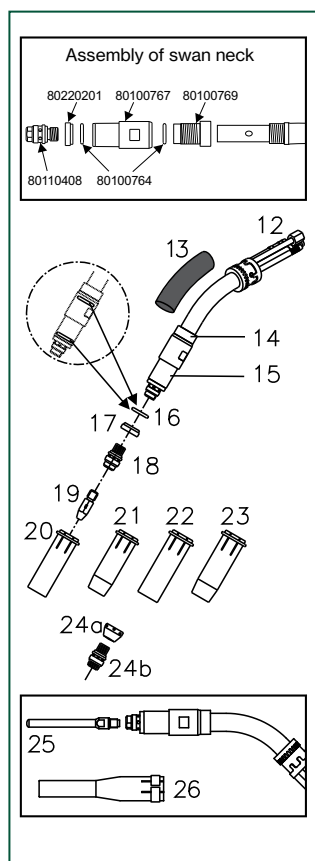
Wear parts for MV 240 Twist



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

* = Pre-assembled as standard

Wear parts for MV 400 FKS Twist



Position no.	Art. no.	Description	Package quantity
12	80252500	Swan neck MV 400 FKS Twist	1
	80252501	Swan neck MV 400 FKS Twist 30° Alu	1
13	92555041	Shrink FLEX Ø24 /8mm, 1.2m glue	1
14	80100769	Insulator for cooling unit FKS 400	1
15	80100767	Water cooling unit FKS 400	1
16	80100764	O-Ring FKS 400W (2 pcs. needed)	1
17	80220201	Insulating ring FKS 400W	10
18	* 80110408	Tip adaptor MV 400 FKS, 24mm	10
19	* 80231202	Contact tip - please see page 16	10
20	80240308	Gas nozzle MV 400 FKS cylindric, 62mm	10
21	* 80240307	Gas nozzle MV 400 FKS conic, 62mm	10
22	80240318	Gas nozzle MV 400 FKS cylindric, 67mm	10
23	80240317	Gas nozzle MV 400 FKS conic, 67mm	10
24a	80220315	Gas diffuser isolator 400 FKS	10
24b	80110411	Tip adaptor for isolator 400 FKS, 24mm	10
25	80700227	Contact tip L=85/63/M8 1.2 CuCrZr	1
26	80240323	Gas nozzle L=114/52 Ø15 nickel-plated	1
	81100236	Wear parts box MV 400 FKS, 1.0-1.2 steel	1
	81100279	Wear parts box MV FKS 400	1

* = Pre-assembled as standard

Note: 24a and 24b must be used together

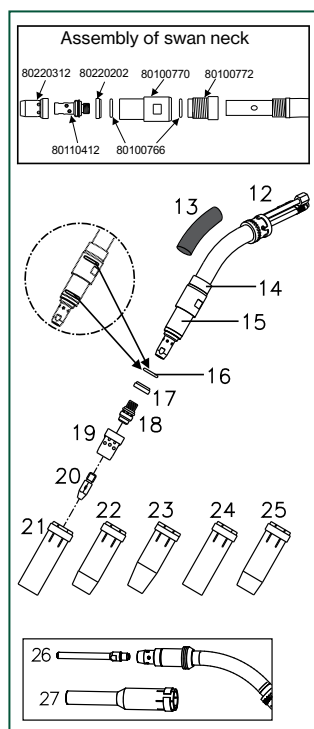


Advanced Cooling System

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

Wear parts for water-cooled MIG welding torches

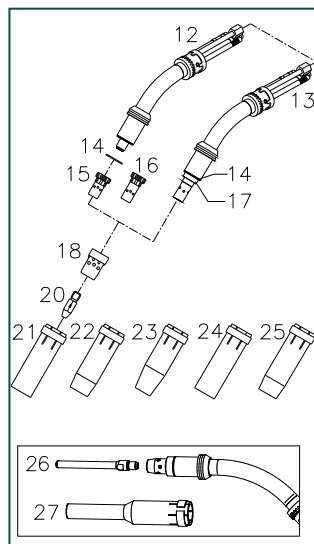
Wear parts for MV 500 FKS Twist



Position no.	Art. no.	Description	Package quantity
12	80252502	Swan neck MV 500 FKS Twist	1
13	92555041	Shrink FLEX Ø24 /8mm, 1.2m glue	1
14	80100772	Insulator for cooling unit FKS 500	1
15	80100770	Water cooling unit FKS 500	1
16	80100766	O-Ring FKS 500W (2 pcs.)	1
17	80220202	Insulating ring FKS 500W	10
18	* 80110410	Tip adaptor MV 500 FKS, 38mm CuCrZr	10
19	* 80220312	Gas diffuser MV FKS/HD-S white	10
	80220313	Gas diffuser ceramic HD-S+500FKS	10
20	* 80231202	Contact tip - please see page 16	10
21	80240300	Gas nozzle ML/MV cylindric	10
22	* 80240303	Gas nozzle ML/MV conic	10
23	80240304	Gas nozzle ML/MV super conic	10
24	80140701	Gas nozzle cylindric nickelled	10
25	80140700	Gas nozzle conic nickelled	10
26	80700227	Contact tip L85/63/M8, 1.2 CuCrZr	1
27	80700226	Gas nozzle L: 128/60 Ø15 high gloss	1
	81100237	Wear parts box MV 500 FKS, 1.0-1.2 steel	1
	81100280	Wear parts box MV FKS 500	1

* = Pre-assembled as standard

Wear parts for MV 450 / 550 Twist



Position no.	Art. no.	Description	Package quantity
12	80252202	Swan neck MV 450KD MIG-A Twist	1
12	80252302	Swan neck MV 550KD MIG-A Twist	1
13	80252204	Swan neck MV 450 MIG-A Twist	1
13	80252304	Swan neck MV 550 MIG-A Twist	1
14	80220303	Insulating washer MV 450/550	10
15.1	80110401	Tip adaptor MV 450/550 brass, M8 25mm	10
15.2	* 80110406	Tip adaptor MV 450-550 CuCrZr, 25mm	10
15.3	80110403	Tip adaptor MV 450/550 brass, M6 25mm	10
16.1	80110402	Tip adaptor MV 450/550 brass, M8 29mm	10
16.2	80110409	Tip adaptor MV 450-550 CuCrZr, 29mm	10
17	80200307	Threaded ring	1
18.1	* 80220309	Gas diffuser MV 450/550, white	10
18.2	80220306	Gas diffuser MV 450/550. black	10
18.3	80220310	Gas diffuser MV 450/550, ceramic	10
20	* 80231202	Contact tip - please see page 16	10
21	80240300	Gas nozzle ML/MV, cylindric	10
22	* 80240303	Gas nozzle ML/MV, conic	10
23	80240304	Gas nozzle ML/MV, super conic	10
24	80140701	Gas nozzle, cylindric nickelled	10
25	80140700	Gas nozzle, conic nickelled	10
26	80700227	Contact tip L85/63/M8, 1.2 CuCrZr	1
27	80700226	Gas nozzle L: 128/60 Ø15 high gloss	1
	81100216	Wear parts box MV 450/550, 1.0-1.2 steel	1
	81100277	Wear parts box MV450/550 MB401/501D	1
	81100278	Wear parts box MV450/550 MB401/501D ccz	1

* = Pre-assembled as standard

MIG-A Twist® MIG-A Twist® control units

For Sigma Select / Sigma Core / Sigma One / Automig

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

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



Basic module 80100401
Always included



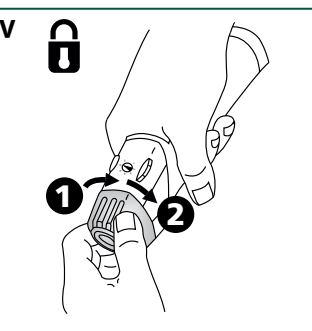
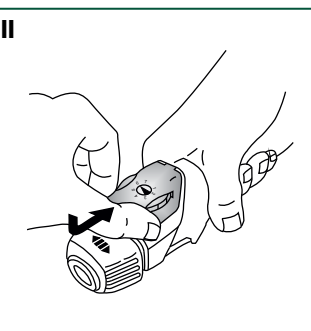
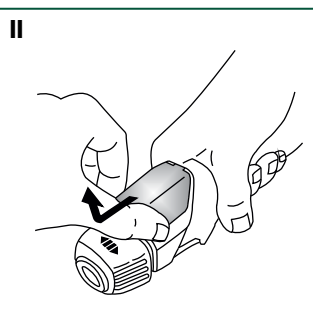
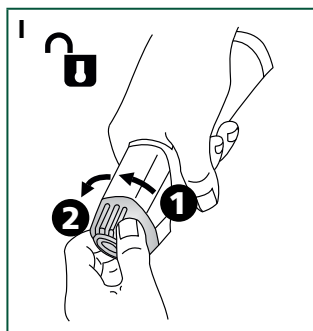
Potentiometer module..... 80100402



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



Potentiometer module for Kemppi 80100410



Smart Torch modules for MIG-A Twist*)



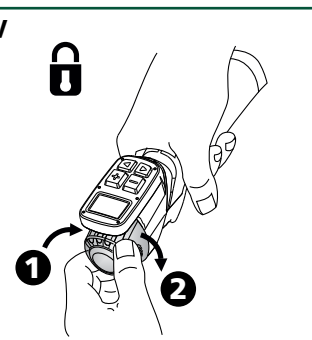
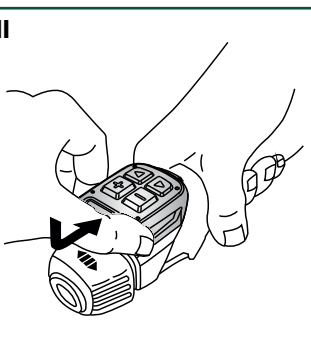
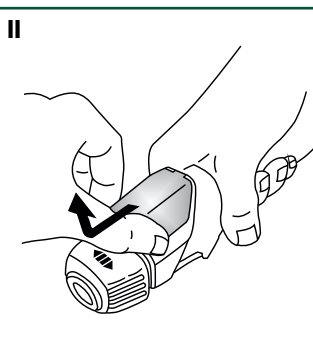
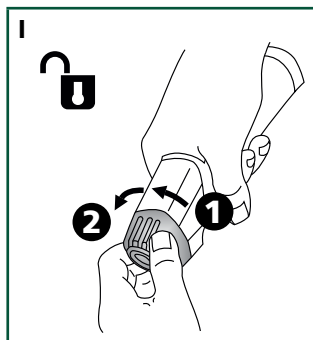
Graphical Smart Torch module with 4 buttons for MIG-A Twist 80100430



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



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



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

MigAir welding torches with fume extraction

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

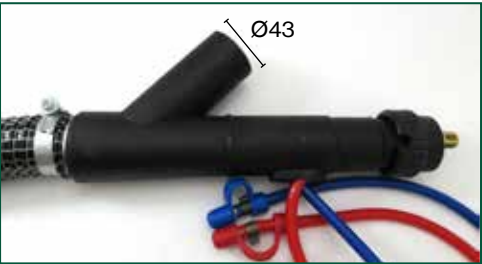


Art. no.	ML 240 aircooled
80193310	ML240 MigAir 4m
80193311	ML240 MigAir 5m
Art. no.	MV 400 FKS watercooled
80293017	MV400 FKS MigAir 4m
80293018	MV400 FKS MigAir 5m

Art. no.	Description	
80160520		Steel liner 4.4m 0.6-0.8 white
80160550		Steel liner 5.4m 0.6-0.8 white
80160545		Steel liner 4.4m 1.2-1.6 red
80160546	*	Steel liner 5.4m 1.2-1.6 red
80200345		Fume nozzle long
80100793		Fume nozzle short
* = Pre-assembled as standard		
Wear parts: Please refer to MV 240 and MV 400 FKS page 9		



ZA connection air



ZA connection water



ADAPTER For HOSE Ø50 mm <=> Ø45 mm

Adapter to connect a Ø50mm connection to a Ø45mm hose and a Ø45mm connection to a Ø50mm hose.

Art.no.....82031206



EXTRACTION HOSE

Flex extraction hose for MigaVent Mini and mouthpiece in running metre. Inside diameter Ø51 mm. Art.no.....92570042

Flex extraction hose for MigAir and mouthpiece in running metre. Inside diameter Ø45 mm. Art.no.....92570041

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

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

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

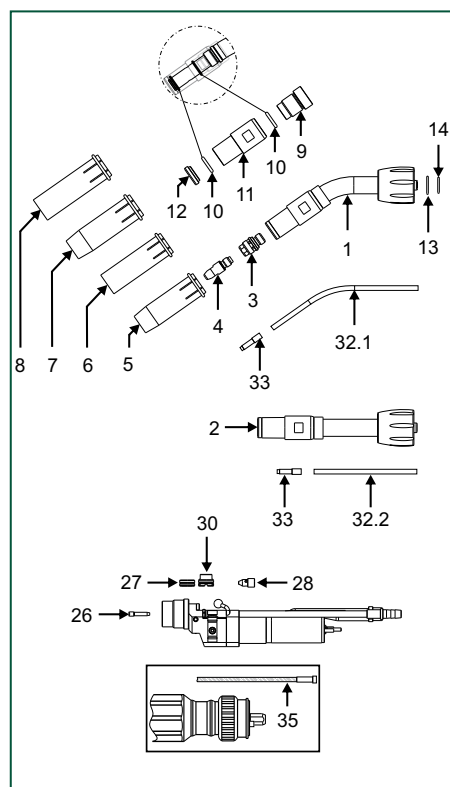
Art. no.	Model
80890410	Push-Pull FKS400 straight, 10m 1.2mm U-groove
80890411	Push-Pull FKS400 curved, 10m 1.2mm U-groove
80890415	Push-Pull FKS400 straight, 10 m 1.2mm U-groove Including Graphical Smart Torch module
80890416	Push-Pull FKS400 curved, 10 m 1.2mm U-groove Including Graphical Smart Torch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

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



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

Wear parts for PP FKS 400



Pos. no.	Art. no.	Description	Min. order quantity	NB order together
1	80850450	Swan neck 35° curved turnable	1	X
2	80850451	Swan neck straight turnable	1	X
3	80110408	Contact nozzle, 24mm	1	
4	* 80231103	Contact tip - please see page 16		X X
5	* 80240307	Gas nozzle conic, 62mm	10	X X
6	80240308	Gas nozzle cylindric, 62mm	10	
7	80240317	Gas nozzle conic, 67mm	10	
8	80240318	Gas nozzle cylindric, 67mm	10	
9	80100769	Insulating bush, cooling	1	
10	80100764	O-ring Ø12x2.5 (2 pcs. needed)	1	
11	80100767	Water cooling unit	1	
12	80220201	Insulating ring	10	
13	80100847	O-ring Ø13.2x1.55 (1.60)	1	
14	80100848	O-ring Ø10.3x 1.55 (1.60)	1	
26	80100853	Wire guide	1	
28	80100832	Wire feed nozzle	1	
32.1	80100851	Neck-Liner for curved swan neck	1	X
32.2	80100852	Neck-Liner for straight swan neck	1	X
33	80100850	Heat protection for neck-Liner (optional)	1	

* = Pre-assembled as standard

Pos. 35		Pos. 30		Pos. 27		Description	Wire rolls kit. Art. no.
Art. no.	Description	Drive roll	Art. no.	Pressure roll	Art. no.		
80160588	Wire liner PA Ø2.0x4.0x10m f. Ø0.8-1.2mm wire		80700415		80700420	Alu Ø0.8 U-groove, white	73940134
80160589	Wire liner PA Ø2.3x4.7x10m f. Ø1.2-1.6mm wire		80700416		80700421	Alu Ø1.0 U-groove, blue	73940135
80160201	Steel liner blue, Ø1.5x4.0x10m f. Ø0.8-1.0mm wire		80700417*		80700422*	Alu Ø1.2 U-groove, red	73940136
80160202	Steel liner red, Ø2.0x4.0x10m f. Ø1.2-1.6mm wire		80700410		80700420	Steel Ø0.8 V-groove, white	73940130
80160203	Steel liner yellow, Ø2.5x4.5x10m f. Ø1.6-2.0mm wire		80700411		80700421	Steel Ø1.0 V-groove, blue	73940131
80160205	PTFE liner blue, Ø1.5x4.0x10m f. Ø0.8-1.0mm wire		80700412		80700422	Steel Ø1.2 V-groove, red	73940132
80160206	PTFE liner red, Ø2.0x4.0x10m f. Ø1.2-1.6mm wire						
80160207	PTFE liner yellow, Ø2.7x4.5x10m f. Ø1.6-2.0mm wire						

* = Pre-assembled as standard

Contact tips and Tip adaptors

Choice of Contact Tip

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

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

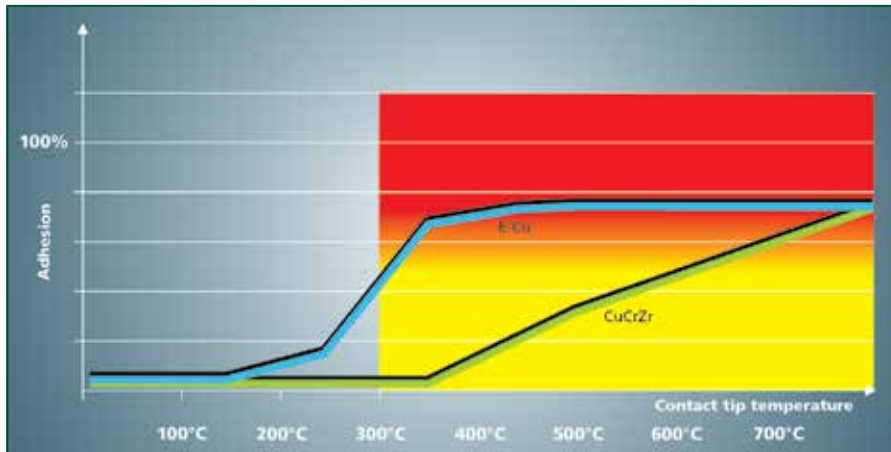
Contact tips for ML/MV are available in different materials and lengths so as to

ensure best possible welding result.

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

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

Please refer to the list of contact tips.



Choice of Tip Adaptor - Material and Design

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

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

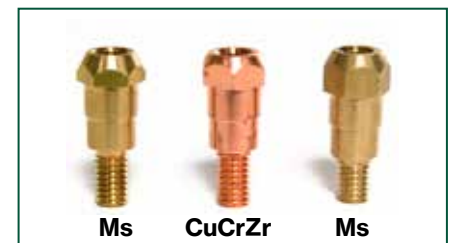
MV 450/550 torches are supplied with integrated or separate tip adaptors.

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 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.

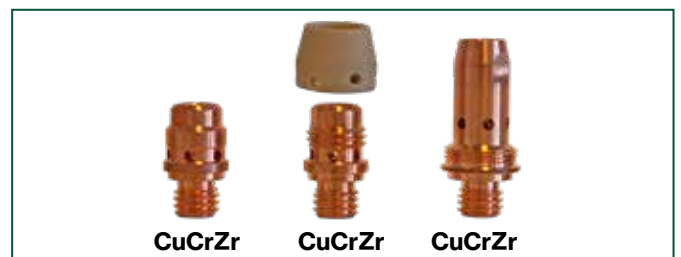
ML / MV 240



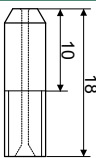
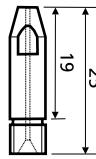
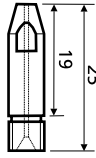
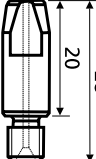
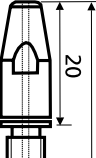
MV 450 / MV 550



MV 450 FKS / MV 550 FKS



Contact tips

Contact tip - design and length	Art. no.	Item description	15-G	25-G	ML 240	ML 300	ML 360	MV 240
M 5								
	80130140	Ø0.6 M5 Ø5 x18mm E-Cu						
	80130141	Ø0.8 M5 Ø5 x18mm E-Cu						
	80130142	Ø1.0 M5 Ø5 x 18mm E-Cu						
M 6								
	80130001	Ø0.6 M6 Ø6 x 25mm Cu nickel-plated	(•)	(•)	(•)	(•)	(•)	(•)
	80130002	Ø0.8 M6 Ø6 x 25mm Cu nickel-plated	(•)	(•)	(•)	(•)	(•)	(•)
	80130003	Ø1.0 M6 Ø6 x 25mm Cu nickel-plated	(•)	(•)	(•)	(•)	(•)	(•)
	80130004	Ø1.2 M6 Ø6 x 25mm Cu nickel-plated	(•)	(•)	(•)	(•)	(•)	(•)
	80130101	Ø0.6 M6 Ø6 x 25mm Cu	(•)	(•)	(•)			
	80130102	Ø0.8 M6 Ø6 x 25mm Cu	(•)	(•)	(•)			
	80130103	Ø1.0 M6 Ø6 x 25mm Cu	(•)	(•)	(•)			
	80130104	Ø1.2 M6 Ø6 x 25mm Cu	(•)	(•)	(•)			
	80130201	Ø0.6 M6 Ø8 x 28mm Cu	•	•	•	•	•	•
	80130202	Ø0.8 M6 Ø8 x 28mm Cu	•	•	•	•	•	•
	80130203	Ø1.0 M6 Ø8 x 28mm Cu	•	•	•	•	•	•
	80130204	Ø1.2 M6 Ø8 x 28mm Cu	•	•	•	•	•	•
	80131200	Ø0.8 M6 Ø8 x 28mm CuCrZr	•	•	•	•	•	•
	80131201	Ø1.0 M6 Ø8 x 28mm CuCrZr	•	•	•	•	•	•
	80131202	Ø1.2 M6 Ø8 x 28mm CuCrZr	•	•	•	•	•	•
	80131203	Ø1.4 M6 Ø8 x 28mm CuCrZr	•	•	•	•	•	•
	80131204	Ø1.6 M6 Ø8 x 28mm CuCrZr	•	•	•	•	•	•

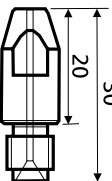
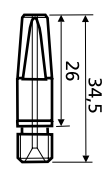
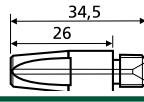
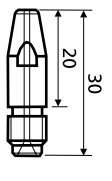
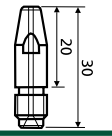
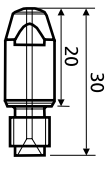
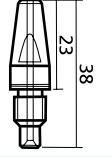
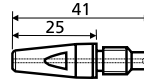
• = Mild steel Fe, stainless steel CrNi and FCW recommended. (•) = Alternative.

Note: for aluminum welding it is recommendable to go up in size according to welding wire, e.g.

1.0 alu-wire = 1.2 nozzle

1.2 alu-wire = 1.4 nozzle

Contact tips

Contact tip - design and length	Art. no.	Item description	26-G	40-G	410-W	510-W
M 8						
	80231101	Ø0.8 M8 Ø10 x 30mm E-Cu	•	•	•	•
	80231102	Ø1.0 M8 Ø10 x 30mm E-Cu	•	•	•	•
	80231103	Ø1.2 M8 Ø10 x 30mm E-Cu	•	•	•	•
	80231106	Ø1.4 M8 Ø10 x 30mm E-Cu	•	•	•	•
	80231104	Ø1.6 M8 Ø10 x 30mm E-Cu	•	•	•	•
	80231110	Ø0.8 M8 Ø8 x 35mm CuCrZr	••	••	••	••
	80231111	Ø1.0 M8 Ø8 x 35mm CuCrZr	••	••	••	••
	80231112	Ø1.2 M8 Ø8 x 35mm CuCrZr	••	••	••	••
	80231113	Ø1.6 M8 Ø8 x 35mm CuCrZr	••	••	••	••
	80231121	Ø1.0 M8 Ø10 x 35mm E-Cu	(•) (•)	(•) (•)	(•) (•)	(•) (•)
	80231122	Ø1.2 M8 Ø10 x 35mm E-Cu	(•) (•)	(•) (•)	(•) (•)	(•) (•)
	80231200	Ø0.8 M8 Ø8 x 30mm CuCrZr	•	•	•	•
	80231201	Ø1.0 M8 Ø8 x 30mm CuCrZr	•	•	•	•
	80231202	Ø1.2 M8 Ø8 x 30mm CuCrZr	•	•	•	•
	80231203	Ø1.6 M8 Ø8 x 30mm CuCrZr	•	•	•	•
	80231204	Ø1.4 M8 Ø8 x 30mm CuCrZr	•	•	•	•
	80231220	Ø0.8 M8 Ø8 x 30mm CuCrZr heavy duty	•	•	•	•
	80231221	Ø1.0 M8 Ø8 x 30mm CuCrZr heavy duty	•	•	•	•
	80231222	Ø1.2 M8 Ø8 x 30mm CuCrZr heavy duty	•	•	•	•
	80231205	Ø0.8 M8 Ø10 x 30mm CuCrZr	•	•	•	•
	80231206	Ø1.0 M8 Ø10 x 30mm CuCrZr	•	•	•	•
	80231207	Ø1.2 M8 Ø10 x 30mm CuCrZr	•	•	•	•
	80231208	Ø1.4 M8 Ø10 x 30mm CuCrZr	•	•	•	•
	80231209	Ø1.6 M8 Ø10 x 30mm CuCrZr	•	•	•	•
	80231300	Ø0.8 M8 Ø10 x 38mm CuCrZr	•••		•••	•••
	80231301	Ø1.0 M8 Ø10 x 38mm CuCrZr	•••		•••	•••
	80231302	Ø1.2 M8 Ø10 x 38mm CuCrZr	•••		•••	•••
	80231303	Ø1.6 M8 Ø10 x 38mm CuCrZr	•••		•••	•••
	80231401	Ø1.0 M8 Ø10 x 41mm CuCrZr	•••		•••	•••
	80231402	Ø1.2 M8 Ø10 x 41mm CuCrZr	•••		•••	•••

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

• = Aluminiumssvejsning.

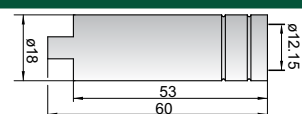
Aluminium welding.

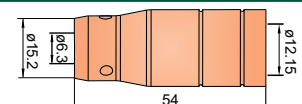
Note: for aluminum welding it is recommendable to go up in size according to welding wire, e.g. 1.0 alu-wire = 1.2 nozzle

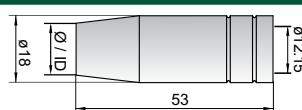
1.2 alu-wire = 1.4 nozzle

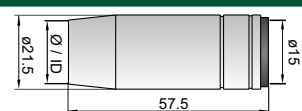
• = For gas nozzles with special length (depending on torch model) recommended. (•) = Alternative

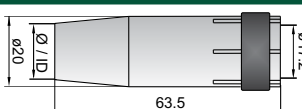
Gas nozzles

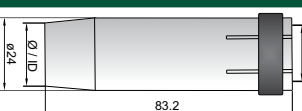
Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 150/150C	ML 161
	80140022	Punkt	16.0	1.0	Cu/Ni	•	•

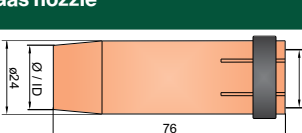
Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 150/150C	ML 161
	80140029	Innershield	Ø6.3	1.0	Cu	•	•

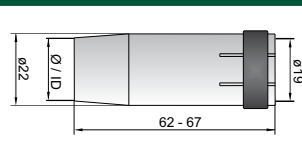
Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 150/150C	ML 161
	80140023	Conic	Ø12.0	1.15	Cu/Ni	•	•
	80140500	Cylindrical	Ø16.0	1.0	Cu/Ni	•	•

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 250	
	80140600	Cylindrical	Ø19.0	2.0	Cu/Ni	•	
	80140601	Conic	Ø15.0	2.0	Cu/Ni	•	

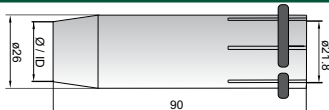
Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 240	MV 240
	80140610	Conic	Ø12.6	1.4	Cu/Ni	•	•
	80140611	Cylindrical	Ø17.2	1.4	Cu/Ni	•	•

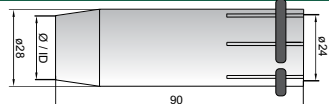
Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 300	ML 360 long
	80140700	Conic	Ø16.0	2.5	Cu/Ni	•	•
	80140701	Cylindrical	Ø20.1	2.5	Cu/Ni	•	•

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 300/360/380	MV 400/550	MV 550 FKS
	80240303	Conic	Ø16.0	2.5	Cu/Ni	•	•	•
	80240300	Cylindrical	Ø20.1	2.5	Cu/Ni	•	•	•
	80240304	Super conic	Ø14.0	2.5	Cu/Ni	•	•	•

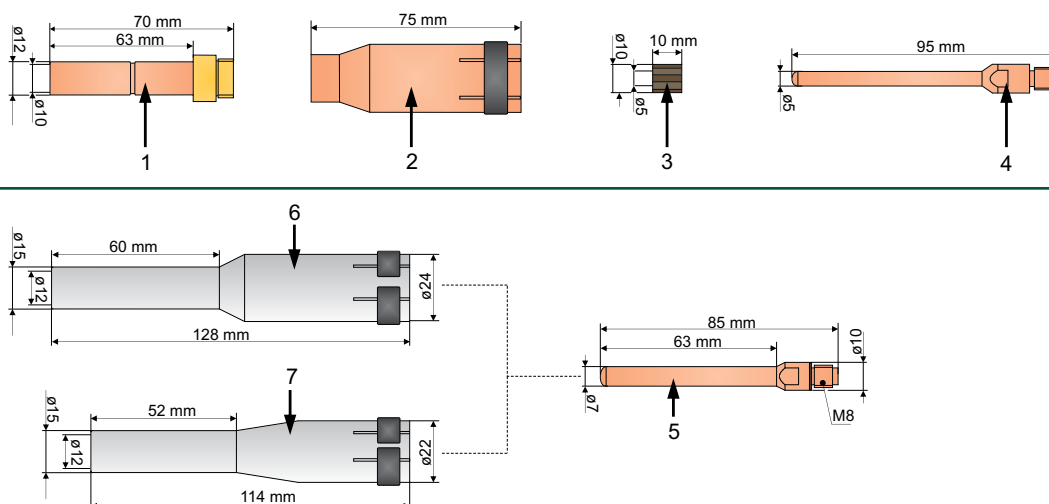
Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	MV 400 FKS	
	80240307	Conic	Ø14.5	2.0	Cu/Ni	•	62mm
	80240308	Cylindrical	Ø18.0	2.0	Cu/Ni	•	62mm
	80240317	Conic	Ø14.5	2.0	Cu/Ni	•	67mm
	80240318	Cylindrical	Ø18.0	2.0	Cu/Ni	•	67mm

Gas nozzles

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 400	
	80140720	Superconic	Ø14.0	2.5	Cu/Ni	•	
	80140721	Conic	Ø18.0	2.5	Cu/Ni	•	
	80140722	Cylindrical	Ø21.0	2.5	Cu/Ni	•	

Gas nozzle	Part no.	Description	Ø / ID	Wall thickness	Material	ML 500	
	80140723	Conic	Ø20.0	3.0	Cu/Ni	•	

Narrow Gap



Pos. no.	Part no.	Description	Wall thickness	Material	MV 450/550	FKS 400	FKS 500
1	80240321	Gas nozzle extension for gas nozzle bottle shape. 70mm	1.0	Cu/Ms	•		
2	80240320	Gas nozzle bottle shape. 75mm	2.5	Cu	•		
3	80220317	Gas diffuser centering bush Ø5xØ10x10mm		Fiber	•		
4.1	80231410	Contact tip Ø1.0 M8 Ø5x95mm		E-Cu	•		
4.2	80231412	Contact tip Ø1.2 M8 Ø5x95mm		E-Cu	•		
5.1	80700218	Contact tip L=85/63/M8 1.0		CuCrZr	•	•	•
5.2	80700227	Contact tip L=85/63/M8 1.2		CuCrZr	•	•	•
6	80700226	Gas nozzle L=128/60 Ø15 high gloss nickel-plated	1.5	Cu/Ni	•		•
7	80240323	Gas nozzle L=114/52 Ø15 nickel-plated	1.5	Cu/Ni		•	

Spare parts for ZA and Wire liners

Spare parts for ZA

Art. no.	Description
80200303	Swivel nut
26920008	Gas nipple brass
80100004	Gas nipple brass
26910008	Gas nipple CrNi
80100710	O-ring for ZA air/water
80100810	Spring pin for ZA air 25mm Ø6
80100811	Spring pin for ZA water 16mm Ø6
80100706	ZA-ML Spring pin air
80200332	ZA-ML Spring pin water
80200301	Nut for ZA connection

Swivel nut:	Gas nipple:	O-ring:	Spring pins:	
80200303	26920008 Ms	 x 1 80100710	without spring 21mm	80200312 Ø5
	80100004 Ms	 x 2	with spring 30mm	80100747 Ø5
	26910008 CrNi	 x 1	Spring pin for ZA air 25mm	80100810 Ø6
			Spring pin for ZA water 16mm	80100811 Ø6
			Socket Ø4 red, separate (2 pcs.)	18270004 

Wire liners

Art. no.	Description
80160520	Steel liner Ø3.9 4.4m 0.6-0.8mm white
80160521	Steel liner Ø4.8 4.4m 0.8-1.0mm blue
80160522	Steel liner Ø4.9 4.4m 1.2-1.6mm red
80160523	Steel liner Ø4.8 4.4m 1.6-2.4mm yellow
80160550	Steel liner Ø3.9 5.4m 0.6-0.8mm white
80160551	Steel liner Ø4.8 5.4m 0.8-1.0mm blue
80160552	Steel liner Ø4.9 5.4m 1.2-1.6mm red
80160553	Steel liner Ø4.8 5.4m 1.6-2.4mm yellow
80160558	Steel/teflonliner (PTFE) Ø4 3.4m 0.8-1.2mm
80160554	Steel/teflonliner (PTFE) Ø4 4.4m 0.8-1.2mm
80160555	Steel/teflonliner (PTFE) Ø5 4.4m 1.2-1.6mm
80160556	Steel/teflonliner (PTFE) Ø4 5.4m 0.8-1.2mm
80160557	Steel/teflonliner (PTFE) Ø5 5.4m 1.2-1.6mm
80160559	Steel/teflonliner (PTFE) Ø5 6.4m 1.2-1.6mm
80160711	Plastic liner (PEH) with bronze neck Ø4 4.4m 0.8-1.0mm blue
80160713	Plastic liner (PEH) with bronze neck Ø4 4.4m 1.2-1.6mm red
80160712	Plastic liner (PEH) with bronze neck Ø4 5.4m 0.8-1.0mm blue
80160714	Plastic liner (PEH) with bronze neck Ø4 5.4m 1.2-1.6mm red
80160700	Carbon teflon liner (carbon PTFE) with 60mm bronze neck Ø4 4.4m 0.8-1.0mm grey
80160707	Carbon teflon liner (carbon PTFE) with 60mm bronze neck Ø4 4.4m 1.2-1.6mm grey
80160708	Carbon teflon liner (carbon PTFE) with 60mm bronze neck Ø4 5.4m 1.2-1.6mm grey
80160720	Carbon teflon liner (carbon PTFE) Ø2.0x4.7 3.4m for 1.2mm wire incl. 20mm heat resistant end
80160721	Carbon teflon liner (carbon PTFE) PA Ø2.0x4.7 4.4m for 1.2mm wire incl. 20mm heat resistant end

Wire liners

Migatronic recommends

Wire	Wire diameter	Steel liner / Steel teflon liner					Plastic liner (PEH) with bronze neck		Carbon teflon liner (Carbon PTFE) with 60 mm bronze neck		Carbon teflon liner (Carbon PTFE) incl. 20 mm heat resistant end	
	ø x x mm	3.4 m	4.4 m	5.4 m	6.4 m		4.4 m	5.4 m	4.4 m	5.4 m	3.4 m	4.4 m
Length of liner	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								
Fe	0.6 mm	80160523	80160523	80160553								
	0.8 mm	80160558	80160554	80160556								
	1.0 mm	80160558	80160554	80160556								
	1.2 mm	80160558	80160554	80160556								
	1.4 mm		80160555	80160557	80160559							
	1.6 mm		80160555	80160557	80160559							
CrNi	0.8 mm	80160558	80160554	80160556								
	1.0 mm	80160558	80160554	80160556								
	1.2 mm	80160558	80160554	80160556								
	1.4 mm		80160555	80160557	80160559							
	1.6 mm		80160555	80160557	80160559							
	1.6 mm		80160555	80160557	80160559							
Fe Flux	0.6 mm	80160520	80160520	80160550								
	0.8 mm	80160521	80160521	80160551								
	1.0 mm	80160521	80160521	80160551								
	1.2 mm		80160591#	80160592#								
	1.4 mm	80160522	80160522	80160552								
	1.6 mm	80160522	80160522	80160552								
CrNi Flux	0.6 mm	80160523	80160523	80160553								
	0.8 mm	80160558	80160554	80160556								
	1.0 mm	80160558	80160554	80160556								
	1.2 mm	80160558	80160554	80160556								
	1.4 mm		80160555	80160557	80160559							
	1.6 mm		80160555	80160557	80160559							
Al	0.8 mm	80160558	80160554	80160556								
	1.0 mm	80160558	80160554	80160556								
	1.2 mm	80160558	80160554	80160556								
	1.4 mm		80160555	80160557	80160559							
	1.6 mm		80160555	80160557	80160559							
	1.6 mm		80160555	80160557	80160559							
* Used only in water-cooled welding torches and recommended for welding torch MV400 FKS 30° Alu (item no. 80297606 and 80297607)												
Fields highlighted in grey apply to steel teflon liner only												
For liner diameter Ø4 choose wire diameter 0.8 - 1.2 mm. For liner diameter Ø5 choose wire diameter 1.2 - 1.6 mm												
■ Ø5 liner. Recommended only for watercooled torches												
# Naked. Recommended only for watercooled torches												

TIG ERGO vs. TIG 4CE

 101 GAS COOLED TIG ERGO 101 DC - 90 AMP AC/DC - 65 AMP Duty Cycle - 60%	 9-G GAS COOLED TIG 4CE 9-G DC - 110 AMP AC/DC - 80 AMP Duty Cycle - 35%
 301 WATER COOLED TIG ERGO 301 DC - 225 AMP AC/DC - 160 AMP Duty Cycle - 100%	 20-W WATER COOLED TIG 4CE 20-W DC - 220 AMP AC/DC - 155 AMP Duty Cycle - 100%
 401 WATER COOLED TIG ERGO 401 DC - 400 AMP AC/DC - 280 AMP Duty Cycle - 100%	 18-W WATER COOLED TIG 4CE 18-W DC - 320 AMP AC/DC - 225 AMP Duty Cycle - 100%
 201 GAS COOLED TIG ERGO 201 DC - 110 AMP AC/DC - 75 AMP Duty Cycle - 60%	 17-G GAS COOLED TIG 4CE 17-G DC - 140 AMP AC/DC - 100 AMP Duty Cycle - 35%
 WP24W WATER COOLED TIG ERGO WP24W DC - 180 AMP AC/DC - 125 AMP Duty Cycle - 100%	 240-W WATER COOLED TIG 4CE 24-W DC - 210 AMP AC/DC - 150 AMP Duty Cycle - 100%
 451 WATER COOLED TIG ERGO 451 DC - 420 AMP AC/DC - 290 AMP Duty Cycle - 100%	NO MATCH
 WP24G GAS COOLED TIG ERGO WP24G DC - 125 AMP AC/DC - 90 AMP Duty Cycle - 35%	 24-G GAS COOLED TIG 4CE 24-G DC - 80 AMP AC/DC - 60 AMP Duty Cycle - 35%
 321 WATER COOLED TIG ERGO 321 DC - 325 AMP AC/DC - 230 AMP Duty Cycle - 100%	 30-W WATER COOLED TIG 4CE 30-W DC - 320 AMP AC/DC - 225 AMP Duty Cycle - 100%
NO MATCH	 450-W WATER COOLED TIG 4CE 450-W DC - 450 AMP AC/DC - 315 AMP Duty Cycle - 100%
 221 GAS COOLED TIG ERGO 221 DC - 130 AMP AC/DC - 90 AMP Duty Cycle - 60%	 26-G GAS COOLED TIG 4CE 26-G DC - 180 AMP AC/DC - 130 AMP Duty Cycle - 35%
NO MATCH	 28-G GAS COOLED TIG 4CE 28-G DC - 300 AMP AC/DC - 210 AMP Duty Cycle - 35%

TIG 4CE welding torches

TIG 4CE

TIG 4CE 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 450 amps.

All TIG models are supplied with a control module with a key unit as standard, but various control modules can be purchased.

ABBREVIATIONS TIG:

TIG 4CE	=	Model
G	=	Gas cooled (air cooled)
W	=	Water cooled
STD	=	Standard torch head
FLEX	=	Flexible torch head
SNK	=	Adjustable torch head
V	=	Valve
8 m	=	Length
7P	=	7 pin torch plug



GAS COOLED

Art. no.	TIG 4CE 9 RANGE
80381900	TIG 4CE 9-G STD 4m, 7P
80381901	TIG 4CE 9-G STD 8m, 7P
80381902	TIG 4CE 9-G STD 12m, 7P
80381903	TIG 4CE 9-G STD 16m, 7P
80381910	TIG 4CE 9-G FLEX 4m, 7P
80381911	TIG 4CE 9-G FLEX 8m, 7P
80381912	TIG 4CE 9-G FLEX 12m, 7P
80381913	TIG 4CE 9-G FLEX 16m, 7P
80381920	TIG 4CE 9-G SNK 4m, 7P
80381921	TIG 4CE 9-G SNK 8m, 7P
80381922	TIG 4CE 9-G SNK 12m, 7P
80381923	TIG 4CE 9-G SNK 16m, 7P
80381990	TIG 4CE 9V-G 4m, 7P
Art. no.	TIG 4CE 17 RANGE
80381700	TIG 4CE 17-G STD 4m, 7P
80381701	TIG 4CE 17-G STD 8m, 7P
80381702	TIG 4CE 17-G STD 12m, 7P
80381703	TIG 4CE 17-G STD 16m, 7P
80381710	TIG 4CE 17-G FLEX 4m, 7P
80381711	TIG 4CE 17-G FLEX 8m, 7P
80381712	TIG 4CE 17-G FLEX 12m, 7P
80381713	TIG 4CE 17-G FLEX 16m, 7P
80381720	TIG 4CE 17-G SNK 4m, 7P
80381721	TIG 4CE 17-G SNK 8m, 7P
80381722	TIG 4CE 17-G SNK 12m, 7P
80381723	TIG 4CE 17-G SNK 16m, 7P
Art. no.	TIG 4CE 24 RANGE
80381400	4CE 24-G STD 4m, 7P
80381401	4CE 24-G STD 8m, 7P
Art. no.	TIG 4CE 26 RANGE
80381600	TIG 4CE 26-G STD 4m, 7P
80381601	TIG 4CE 26-G STD 8m, 7P
80381602	TIG 4CE 26-G STD 12m, 7P
80381603	TIG 4CE 26-G STD 16m, 7P
80381610	TIG 4CE 26-G FLEX 4m, 7P
80381611	TIG 4CE 26-G FLEX 8m, 7P
80381612	TIG 4CE 26-G FLEX 12m, 7P
80381613	TIG 4CE 26-G FLEX 16m, 7P
Art. no.	TIG 4CE 28 RANGE
80381800	TIG 4CE 28-G STD 4m, 7P
80381801	TIG 4CE 28-G STD 8m, 7P
80381802	TIG 4CE 28-G STD 12m, 7P
80381803	TIG 4CE 28-G STD 16m, 7P

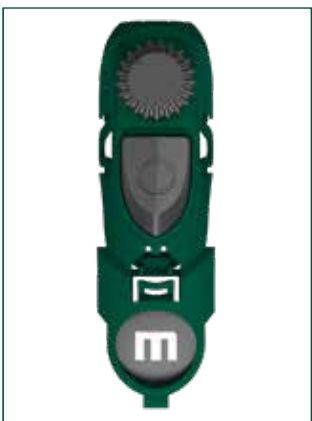
WATER COOLED

Art. no.	TIG 4CE 20 RANGE
80481200	TIG 4CE 20-W STD 4m, 7P
80481201	TIG 4CE 20-W STD 8m, 7P
80481210	TIG 4CE 20-W FLEX 4m, 7P
80481211	TIG 4CE 20-W FLEX 8m, 7P
80481220	TIG 4CE 20-W SNK 4m, 7P
80481221	TIG 4CE 20-W SNK 8m, 7P
Art. no.	TIG 4CE 30 RANGE
80481300	TIG 4CE 30-W STD 4m, 7P
80481301	TIG 4CE 30-W STD 8m, 7P
80481302	TIG 4CE 30-W STD 12m, 7P
80481303	TIG 4CE 30-W STD 16m, 7P
80481310	TIG 4CE 30-W FLEX 4m, 7P
80481311	TIG 4CE 30-W FLEX 8m, 7P
80481312	TIG 4CE 30-W FLEX 12m, 7P
80481313	TIG 4CE 30-W FLEX 16m, 7P
80481320	TIG 4CE 30-W SNK 4m, 7P
80481321	TIG 4CE 30-W SNK 8m, 7P
80481322	TIG 4CE 30-W SNK 12m, 7P
80481323	TIG 4CE 30-W SNK 16m, 7P
Art. no.	TIG 4CE 18 RANGE
80481800	TIG 4CE 18-W STD 4m, 7P
80481801	TIG 4CE 18-W STD 8m, 7P
80481810	TIG 4CE 18-W FLEX 4m, 7P
80481811	TIG 4CE 18-W FLEX 8m, 7P
Art. no.	TIG 4CE 450 RANGE
80481500	TIG 4CE 450-W STD 4m, 7P
80481501	TIG 4CE 450-W STD 8m, 7P
Art. no.	TIG 4CE 24-W RANGE
80481400	TIG 4CE 24-W STD 4m, 7P
80481401	TIG 4CE 24-W STD 8m, 7P

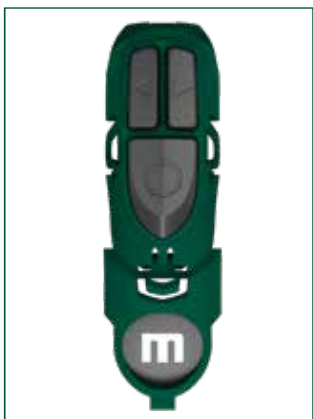
TIG 4CE regulation modules



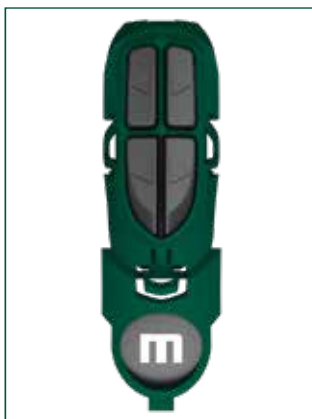
Single button
On/off button
Art. nr.80300700
(Standard fitted)



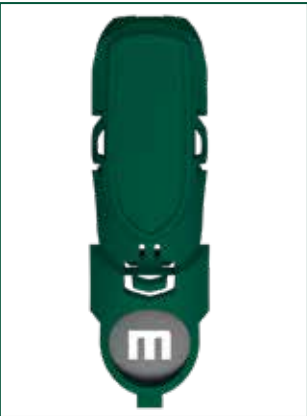
Single button
with horizontal TIG control knob
(RV)
Art. nr.80300701



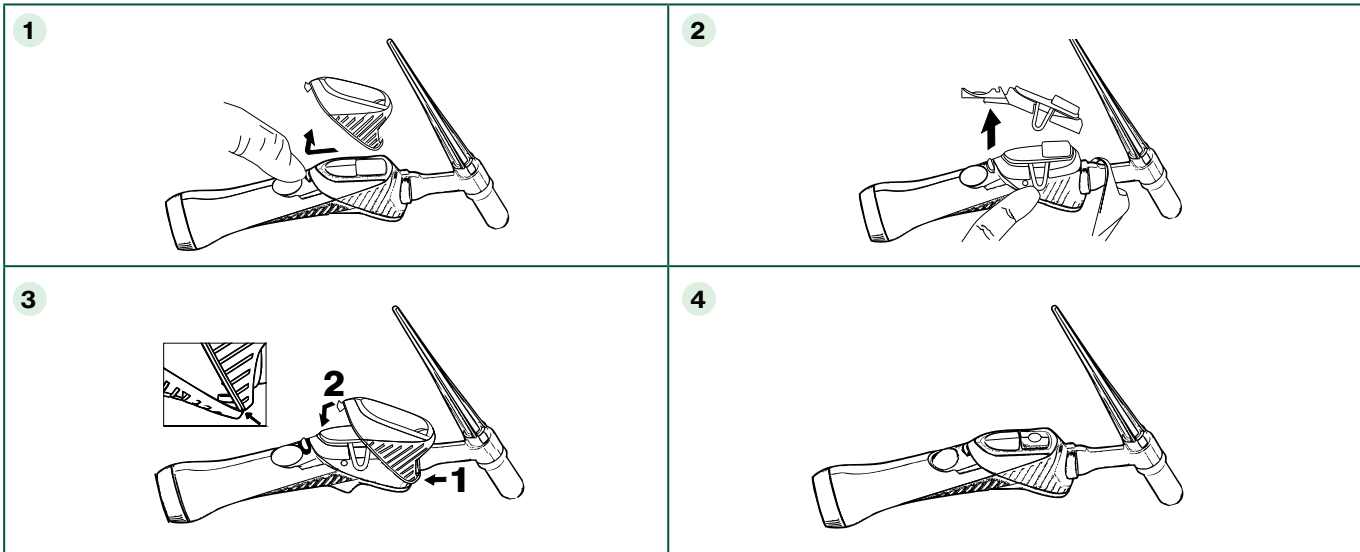
3 button
with 3-button module for ad-
justing ex.welding current, key
on/off, tack on/off. Functionali-
ty depending on machine.
Art. nr.80300703



4 button
with 4-button key for adjusting
ex.welding current, key on/
off, tack on/off. Functionality
depending on machine.
Art. nr. 80300704



Blank cover
For use with e.g. foot pedal
Art. nr.80300705



TIG 4CE welding torches

TYPE	9-G	17-G	18-W	20-W	24-G	24-W	26-G	28-G	30-W	450-W
Power rating AC	80A	100A	225A	155A	60A	150A	130A	210A	225A	315A
DC	110A	140A	320A	220A	80A	210A	180A	300A	320A	450A
Duty cycle	35%	35%	100%	100%	35%	100%	35%	35%	100%	100%
Electrode Ø (mm.)	1.0-1.6	1.0-2.4	1.0-4.0	1.0-3.2	1.0-1.6	1.0-2.4	1.0-4.0	1.6-4.0	1.0-3.2	1.6-4.8
Torch length	4-16mtr	4-16mtr	4-8mtr	4-8mtr	4-16mtr	4-8mtr	4-16mtr	4-8mtr	4-16mtr	4-8mtr
Voltage class	L	L	L	L	L	L	L	L	L	L
Welding gas	Argon DIN 32 526/1	Argon DIN 32 526/1	Argon DIN 32 526/1	Argon DIN 32 526/1	Argon DIN 32 526/1	Argon DIN 32 526/1	Argon DIN 32 526/1	Argon DIN 32 526/1	Argon DIN 32 526/1	Argon DIN 32 526/1
Gas flow rate in l/min	5-12	7-15	7-20	8-22	5-12	7-15	7-18	7-20	8-22	8-22
Cooling ■ Gas ▲ Water	■	■	▲	▲	■	▲	■	■	▲	▲
Highest supply cooling temperature at inlet hose packagee	-	-	60°C	60°C	-	60°C	-	-	60°C	60°C
Minimum quantity of cooling flow	-	-	1.0l/min	1.0l/min	-	1.0l/min	-	-	1.0l/min	1.0l/min
Lowest pressure of entry	-	-	2.5 bar	2.5 bar	-	2.5 bar	-	-	2.5 bar	2.5 bar
Highest pressure of entry	-	-	5.0 bar	5.0 bar	-	5.0 bar	-	-	5.0 bar	5.0 bar

TIG Extension Cable

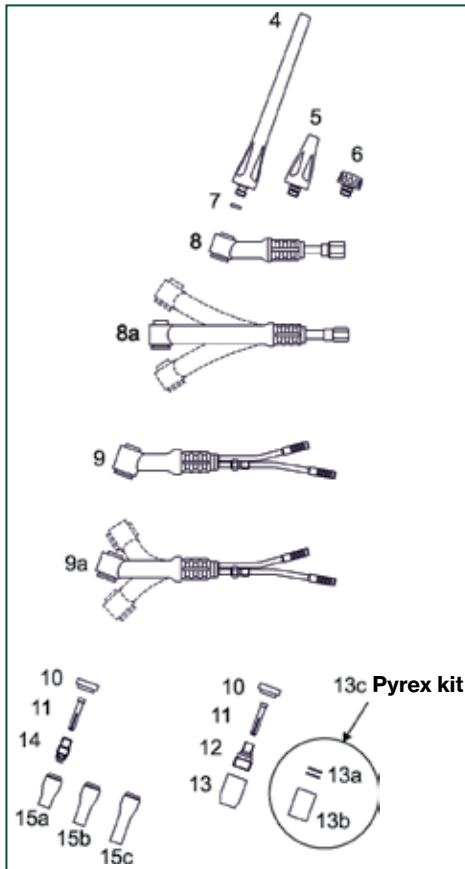
For extension of TIG welding hose. After use you can choose the short TIG welding hose again. If you use a water-cooled TIG extension cable the duty cycle of the standard torch remains unchanged because the TIG extension cable does not load the cooling unit.

Art. no.	Description
74303610	10m 25mm² Air 7-pole without box
74303615	15m 35mm² Air 7-pole without box
74303620	20m 35mm² Air 7-pole without box
74355710	10m 50mm² Water 7-pole without box
74355715	15m 50mm² Water 7-pole without box
74355720	20m 50mm² Water 7-pole without box



Wear parts for TIG 4CE welding torches

Wear parts for TIG 4CE 9/20/30



TIG 4CE 9-G 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 4CE 9-G is typically used for welding in stainless materials.

TIG 4CE 20-W and 4CE 30-W 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 4CE 9/20/30 are typically used for welding in steel, stainless steel and aluminium.

TIG 4CE 9/20/30 can be equipped with all wear parts displayed to the right and the control unit is easily replaced.



Wear parts box

TIG 101/301 9/20 1.6mm
TIG 101/301 9/20 2.4mm



Pyrex kit



Set of standard wear parts

Ø1.6 TIG 9/20/30... 80300117 A
Ø2.4 TIG 9/20/30... 80300119 B

Set of wear parts. gas lenses

(Not shown)

Ø1.6 TIG 9/20/30... 80300140 G
Ø2.4 TIG 9/20/30... 80300141 H



Wear parts box

TIG 9/20/30

1.6/2.4..... 81100228 C
2.4/3.2..... 81100248 D

Pos. no.	A	B	C	D	E	F	G	H	Art. no.	Description	Package quantity
			1	1	1	1			80400117	Electrode cap long	10
5			1	1					80400116	Electrode cap medium	10
6			1	1					80400115	Electrode cap short	10
7			2	2					80400204	O-Ring electrode cap	10
8									80300790	Torch body TIG 4CE 9	1
8a									80300791	Torch body TIG 4CE 9F	1
									80300051	Torch body TIG 4CE 9F, 100 mm	1
									80300052	Torch body TIG 4CE 9F, 135 mm	1
9									80300720	Torch body TIG 4CE 20	1
9a									80300730	Torch body TIG 4CE 30, 62 mm	1
									80300721	Torch body TIG 4CE 20F, 55 mm	1
									80300731	Torch body TIG 4CE 30F, 62 mm	1
10			1	1	2	2			80300219	Insulator TIG 9/20/30	10
11									80430211	Electrode clamp Ø1.0 mm CuCr	10
	1		5		3		1		80430212	Electrode clamp Ø1.6 mm CuCr	10
		1	5	5		3		1	80430213	Electrode clamp Ø2.4 mm CuCr	10
				5					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 4CE welding torches

Pos. no.	A	B	C	D	E	F	G	H	Art. no.	Description	Package quantity
12									80410210	Gas lens 1.0mm copper/brass	10
							1		80410211	Gas lens 1.6mm copper/brass	10
								1	80410212	Gas lens 2.4mm copper/brass	10
									80410213	Gas lens 3.2mm copper/brass	10
									80410214	Gas lens II 1.0mm cast brass	10
									80410215	Gas lens II 1.6mm 1 cast brass	10
									80410216	Gas lens II 2.4mm cast brass	10
									80410217	Gas lens II 3.2mm cast brass	10
13									80440210	Gas nozzle lens #4 Ø6.4 / 1/4"	10
									80440211	Gas Nozzle lens #5 Ø8.0 / 5/16"	10
							1	1	80440212	Gas Nozzle lens #6 Ø9.6 / 3/8"	10
									80440213	Gas Nozzle lens #7 Ø11.2 / 7/16"	10
									80440214	Gas Nozzle lens #8 Ø12.7 / 1/2"	10
13 a									80300321	O-ring for Pyrex glass nozzle	1
13 b									80440235	Pyrex glass nozzle 25mm Ø20	1
13 c									80449235	Pyrex kit for TIG 4CE 9/20/30 gaslens (2xnozzle, 4xO-ring)	1
14									80410201	Electrode holder Ø1.0	10
	1		2		1				80410202	Electrode holder Ø1.6	10
		1	2	2					80410203	Electrode holder Ø2.4	10
				2					80410204	Electrode holder Ø3.2	10
15a					1				80440201	Gas nozzle #4 Ø6.4 / 1/4"	10
			5	5	1	1			80440202	Gas nozzle #5 Ø8.0 / 5/16"	10
	1	1	5	5	1	1			80440203	Gas nozzle #6 Ø9.6 / 3/8"	10
			5	5	1	1			80440204	Gas nozzle #7 Ø11.2 / 7/16"	10
					1	1			80440205	Gas nozzle #8 Ø12.7 / 1/2"	10
									80440206	Gas nozzle TIG 101/301/321 #10 Ø16 / 5/8"	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
	1		10	10	1		1		80361372	Tungsten electrodes - see page 59	10
		1	10	10		1	1		80361374		10
									80361376		10
Box contents	A								80300117	Standard wearing part set Ø1.6	1
		B							80300119	Standard wearing part set Ø2.4	1
			C						81100228	Wear parts box 1.6/2.4	1
				D					81100248	Wear parts box 2.4/3.2	1
					E				81100320	Wear parts box TIG 101/301 9/20 1,6mm	1
						F			81100321	Wear parts box TIG 101/301 9/20 2,4mm	1
							G		80300140	Wearing part set 1.6 gas lens	1
								H	80300141	Wearing part set 2.4 gas lens	1

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

Wear parts for TIG 4CE welding torches

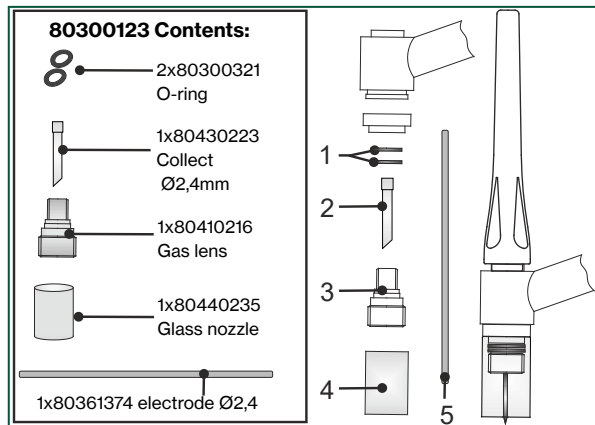


Pyrex gas lens kit

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

Pyrex gas lens kit for standard gas lens TIG 9/20/30

Art. no. 80300123



Pos. no.	Art. no.	Description	Package quantity
	80300123	Kit for TIG 9/20/30 gaslens	1
1	80300321	O-ring for Pyrex glass nozzle	1
2	80430223	Collet Ø2.4mm	10
3	80410216	Gas lens II Ø2.4 TIG	10
4	80440235	Pyrex glass nozzle	1
5	80361374	Tungsten electrode Ø2.4 mm SuperBlue	1

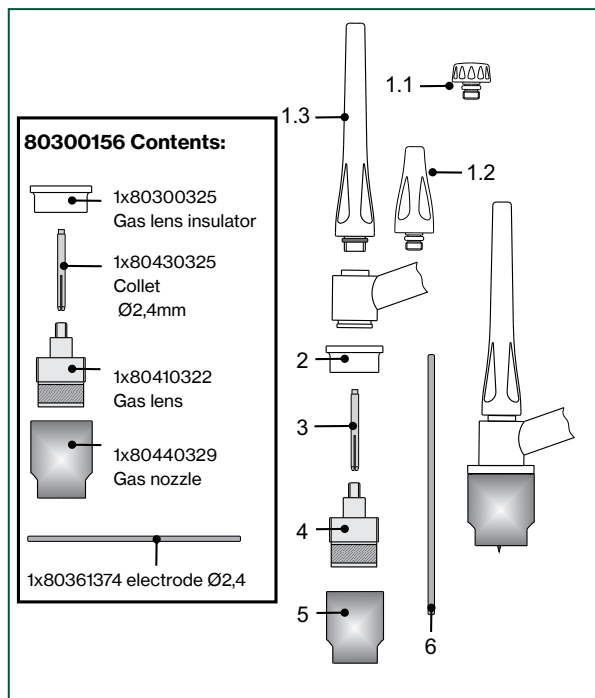


Ceramic jumbo wear parts kit Ø1.6-Ø2.4

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

Ceramic jumbo wear parts kit Ø1.6-Ø2.4 TIG9/20/30

Art. no. 80300156



Pos. no.	Art. no.	Description	Package quantity
	80300156	Jumbo ceramic kit Ø2.4 TIG 9/20/30	1
1.1	80400115	Electrode cap short TIG 9/20/30	10
1.2	80400116	Electrode cap medium TIG 9/20/30	10
1.3	80400117	Electrode cap long TIG 9/20/30	10
2	80300325	Gas lens insulator	1
3.1	80430324	Collet Ø1.6mm TIG 9/20/30	1
3.3	80430325	Collet Ø2.4mm TIG 9/20/30	1
3.3	80430326	Collet Ø3.2mm TIG 9/20/30	1
4.1	80410321	Gas lens Ø1.6mm TIG 9/20/30	1
4.2	80410322	Gas lens Ø2.4mm TIG 9/20/30	1
4.3	80410323	Gas lens Ø3.2mm TIG 9/20/30	1
5.1	80440326	Gas nozzle #6 Ø9.6 TIG 9/20/30	1
5.2	80440327	Gas nozzle #8 Ø12.8 TIG 9/20/30	1
5.3	80440328	Gas nozzle #10 Ø16.0 TIG 9/20/30	1
5.4	80440329	Gas nozzle #12 Ø19.2 TIG 9/20/30	1
5.5	80440330	Gas nozzle #15 Ø24.0 TIG 9/20/30	1
6	80361374	Tungsten electrode Ø2.4 mm SuperBlue	10

Wear parts for TIG 4CE welding torches



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

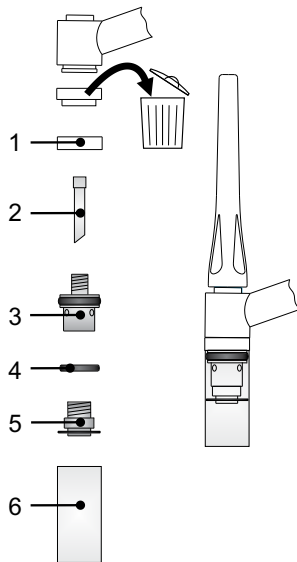
Glass ceramic (Pyrex) TIG gas nozzle provides an excellent view of the arc, weld pool and tungsten electrode when welding in hard-to-reach locations. At the same time, the gas lens with many layers of fine-mesh net ensures a laminar gas flow, which also enables a longer stick-out on the tungsten electrode.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

Pyrex Kit small Ø1.6-Ø2.4mm TIG 4CE 9/20/30

Art. no.80300616

80300616 Contents:

-  1x80300326
insulator
-  1x80430222
collet Ø1.6mm
-  1x80430223
collet Ø2.4mm
-  1x80310425
collet housing
incl. O-ring
-  1x43570029
O-ring for housing
-  1x80310426
Gas lens body 1.6
-  1x80310427
Gas lens body 2.4
-  1x80440331
Pyrex gas cup



Pos. no.	Art. no.	Description	Package quantity
	80300616	Pyrex Kit small Ø1.6-Ø2.4 TIG 4CE 9/20/30	1
1	80300326	Insulator	1
2.1	80430222	Collet Ø1.6mm brass wedge TIG 4CE 9/20/30	10
2.2	80430223	Collet Ø2.4mm brass wedge TIG 4CE 9/20/30	10
2.3	80430224	Collet Ø3.2mm brass wedge TIG 4CE 9/20/30	10
3	80310425	Collet housing	1
4	43570029	O-ring for housing	1
5.1	80310426	Gas lens body 1.6mm	1
5.2	80310427	Gas lens body 2.4mm	1
5.3	80310428	Gas lens body 3.2mm	1
6	80440331	Pyrex gas cup	1

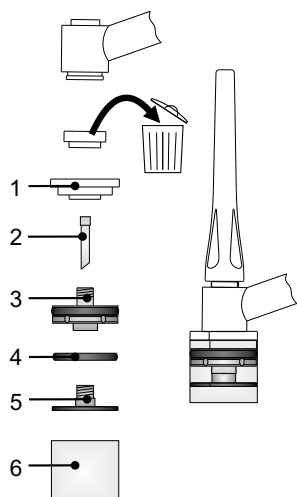


Pyrex Kit jumbo Ø1.6-Ø2.4mm TIG 4CE 9/20/30

Art. no.80300617

80300617 Contents:

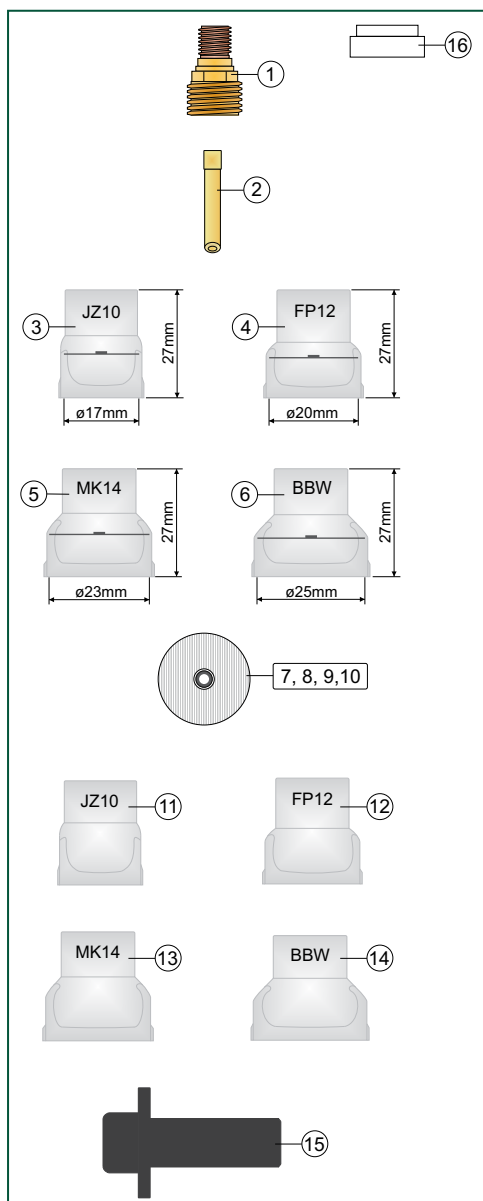
-  1x80300327
insulator
-  1x80430222
collet Ø1.6mm
-  1x80430223
collet Ø2.4mm
-  1x80310429
collet housing
incl. O-ring
-  1x43570030
O-ring for housing
-  1x80310430
Gas lens body 1.6
-  1x80440332
Pyrex gas cup



Pos. no.	Art. no.	Description	Package quantity
	80300617	Pyrex Kit jumbo Ø1.6-Ø2.4 TIG 4CE 9/20/30	1
1	80300327	Insulator	1
2.1	80430222	Collet Ø1.6mm brass wedge TIG 4CE 9/20/30	10
2.2	80430223	Collet Ø2.4mm brass wedge TIG 4CE 9/20/30	10
2.3	80430224	Collet Ø3.2mm brass wedge TIG 4CE 9/20/30	10
3	80310429	Collet housing	1
4	43570030	O-ring for housing	1
5.1	80310430	Gas lens body 1.6mm	1
5.2	80310431	Gas lens body 2.4mm	1
5.3	80310432	Gas lens body 3.2mm	1
6	80440332	Pyrex gas cup	1

Wear parts for TIG 4CE welding torches

Gas lenses with filter TIG 9/20/30



Pos. no.	A	B	Art. no.	Description	Package quantity
	1	1	80400115	Electrode cap short TIG 9/20/30	10
	1	1	80400117	Electrode cap medium TIG 9/20/30	10
1.1			80410215	Gas lens, brass Ø1.6mm	1
1.2			80410216	Gas lens brass, Ø2.4mm	1
1.3	1		80410211	Gas lens, Cu Ø1.6mm	1
1.4		1	80410212	Gas lens, Cu Ø2.4mm	1
2.1	2		80430222	Collet, brass Ø1.6mm	1
2.2		2	80430223	Collet, brass Ø2.4mm	1
3.1	1		80440420	Gas nozzle JZ10 Ø17mm with filter 1.6mm	1
3.2			80440421	Gas nozzle JZ10 Ø17mm with filter 2.4mm	1
4.1	1		80440430	Gas nozzle FP12 Ø20mm with filter 1.6mm	1
4.2		1	80440431	Gas nozzle FP12 Ø20mm with filter 2.4mm	1
5.1	1		80440440	Gas nozzle MK14 Ø23mm with filter 1.6mm	1
5.2		1	80440441	Gas nozzle MK14 Ø23mm with filter 2.4mm	1
6.1			80440450	Gas nozzle BBW Ø25mm with filter 1.6mm	1
6.2		1	80440451	Gas nozzle BBW Ø25mm with filter 2.4mm	1
7.1			80410425	Gas nozzle filter JZ10 Ø17mm 1.6mm	1
7.2			80410426	Gas nozzle filter JZ10 Ø17mm 2.4mm	1
8.1			80410435	Gas nozzle filter FP12 Ø20mm 1.6mm	1
8.2			80410436	Gas nozzle filter FP12 Ø20mm 2.4mm	1
9.1			80410445	Gas nozzle filter MK14 Ø23mm 1.6mm	1
9.2			80410446	Gas nozzle filter MK14 Ø23mm 2.4mm	1
10.1			80410455	Gas nozzle filter BBW Ø25mm 1.6mm	1
10.2			80410456	Gas nozzle filter BBW Ø25mm 2.4mm	1
11			80440405	Gas nozzle JZ10 Ø17mm without filter	1
12			80440406	Gas nozzle FP12 Ø20mm without filter	1
13			80440407	Gas nozzle MK14 Ø23mm without filter	1
14			80440408	Gas nozzle BBW Ø25mm without filter	1
15			80440460	Filter installation tool JZ10 - BBW	1
16	2	2	80300219	Isolator	10
	1		80361372	Tungsten electrodes - see page 59	10
		1	80361374		10
Box contents	A		81100328	Wear parts box 1.6mm	1
	B		81100329	Wear parts box 2.4 mm	1



Wear parts box

TIG 9/20 1.6mm
Gas nozzle
with filter 81100328 A

TIG 9/20 24mm
Gas nozzle
with filter..... 81100329 B



Information - Set-up

Note:

Max. recommended electrode stick-out to gas lens: 3.2mm

Max. amps. with 1/16"-1.6mm electrode: 70-150A DC / 60-125A AC

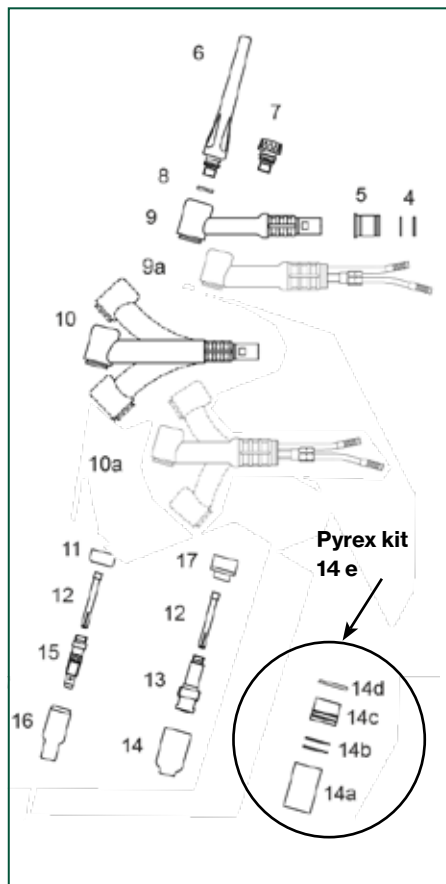
Max. amps. with 3/32"-2.4mm electrode: 150-250A DC / 120-210A AC

Is recommended to used electrode stick-out of minimum 10mm for aluminium welding to avoid clogging of the gas nozzle filter from welding fumes and spatter.

Nozzle size	Ø /ID	Recommended gas flow	Max. Electrode stick-out
10	17mm-5/8"	12 l/min	20mm
12	20mm-3/4"	12-14 l/min	25mm
14	23mm-15/16"	14-17 l/min	25mm
16	25mm-1"	14-21 l/min	35mm

Wear parts for TIG 4CE welding torches

Wear parts for TIG 4CE 17/26/18



TIG 4CE 17-G is typically used for production and on-site repairs in stainless steel and aluminium.

TIG 4CE 26-G is typically used for production and heavy-duty welding in aluminium.

TIG 4CE 18-W is designed for production and site repairs in stainless steel and aluminium in thick wall thicknesses, using up to 400 A DC.



Set of standard wear parts

Ø1.6 TIG 17/26/18..80300274 B
Ø2.4 TIG 17/26/18..80300118 A

Set of wear parts gas lenses

(Not shown)

Ø1.6 TIG 17/26/18..80300142 F
Ø2.4 TIG 17/26/18..80300143 G



Wear parts box

TIG 201/401 17/18/26 1,6mm81100323 D
TIG 201/401 17/18/26 2,4mm81100324 E



Wear parts box

TIG 17/26/1881100230 C

Pos. no.	A	B	C	D	E	F	G	Art. no.	Description	Package quantity
4								80300301	O-ring Ø17.5x1.5mm	1
5								80400312	Transition piece for 201HD-401	1
6			1	1	1			80300201	Electrode cap long	10
7			1					80300200	Electrode cap short	10
8			2					80300223	O-ring for cap	1
9								80300770	Torch body TIG 4CE 17, 70 mm	1
								80300760	Torch body TIG 4CE 26	1
9a								80300780	Torch body TIG 4CE 18	1
								80300771	Torch body TIG 4CE 17F, 70 mm	1
10								80300761	Torch body TIG 4CE 17F, 86 mm	1
								80300781	Torch body TIG 4CE 18F, 80 mm	1
10a								80400423	Torch body TIG 401 Flex 80mm	1
11			2	2	2			80300189	Insulator TIG 201/401	10
12		1	5	2		1		80330110	Electrode clamp Ø1.0mm Cu	10
	1		5		2		1	80330111	Electrode clamp Ø1.6mm Cu	10
								80330112	Electrode clamp Ø2.4mm Cu	10
								80330113	Electrode clamp Ø3.2mm Cu	10
								80330114	Electrode clamp Ø4.0mm Cu	10
13								80310411	Gas lens 1.0mm	10
						1		80310412	Gas lens 1.6mm	10
							1	80310413	Gas lens 2.4mm	10
								80310414	Gas lens 3.2mm	10
								80310415	Gas lens 4.0mm	10

Wear parts for TIG 4CE welding torches

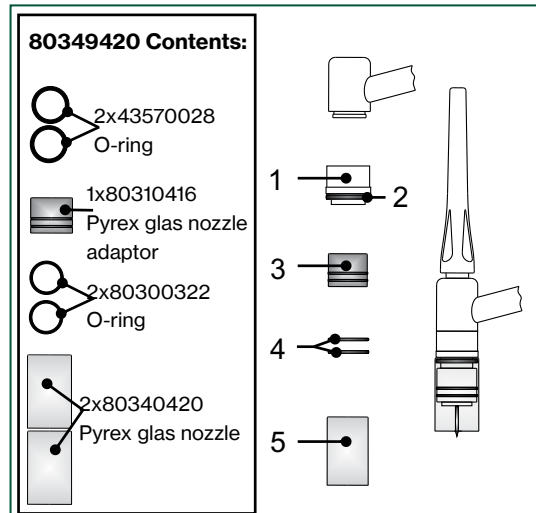
Pos. no.	A	B	C	D	E	F	G	Art. no.	Description	Package quantity
14								80340400	Nozzle for gas lens #4 Ø6.4 / 1/4"	10
								80340401	Nozzle for gas lens #5 Ø8.0 / 5/16"	10
								80340402	Nozzle for gas lens #6 Ø9.6 / 3/8"	10
						1	1	80340403	Nozzle for gas lens #7 Ø11.2 / 7/16"	10
								80340404	Nozzle for gas lens #8 Ø12.7 / 1/2"	10
								80340406	Nozzle for gas lens #11 Ø17.5 / 11/16"	10
14 a								80340420	Pyrex glass nozzle 42mm Ø25	1
14 b								80300322	O-ring for Pyrex glass nozzle	1
14 c								80310416	Pyrex glass nozzle adapter	1
14 d								43570028	O-ring red silicon Ø16,9 x Ø2,75	1
14 e								80349420	Pyrex kit for gas lens (2xnozzle, 2xO-ring, 1xadapter)	1
15								80310004	Electrode holder Ø1.0	10
		1	2	1				80310000	Electrode holder Ø1.6	10
	1		2	1				80310001	Electrode holder Ø2.4	10
								80310002	Electrode holder Ø3.2	10
								80310003	Electrode holder Ø4.0	10
16				1	1			80340001	Gas nozzle #4 Ø6.4 / 1/4"	10
			5	1	1			80340002	Gas nozzle #5 Ø8.0 / 5/16"	10
	1	1	5	1	1			80340003	Gas nozzle #6 Ø9.6 / 3/8"	10
			5	1	1			80340004	Gas nozzle #7 Ø11.2/ 7/16"	10
				1	1			80340005	Gas nozzle #8 Ø12.7 / 1/2"	10
								80340006	Gas nozzle #10 Ø15.7 / 5/8"	10
								80340007	Gas nozzle #12 Ø19.0 / 3/4"	10
17						1	1	80300220	Gas lens insulator	10
		1	10	1		1		80361372	Tungsten electrodes - see page 59	10
	1		10		1		1	80361374		10
Box contents	A							80300118	Standard wearing part set Ø2.4	1
	B							80300274	Standard wearing part set Ø1.6	1
		C						81100230	Wear parts box	1
			D					81100323	Wear parts box TIG 201/401 17/18/26 1,6mm (See sample on page 29)	1
				E				81100324	Wear parts box TIG 201/401 17/18/26 2,4mm (See sample on page 29)	1
					F			80300142	Wearing part set 1.6 gas lens	1
						G		80300143	Sliddelesæt 2.4 gaslinse	1

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



Pyrex gas nozzle kit
std. gas lens: TIG 17/26/18
Art. no.80349420

Pos. no.	Art. no.	Description	Package quantity
	80349420	Pyrex kit TIG 17/26/18 gas lens	1
1	80300220	Gas lens insulator	1
2	43570028	O-ring red silicon Ø16.9 x Ø2.75	1
3	80310416	Pyrex glas nozzle adaptor	1
4	80300322	O-ring, Pyrex glas nozzle Ø16mm Ø20mm	1
5	80340420	Pyrex glass nozzle 42mm Ø22 Ø26 ±0.3mm	1

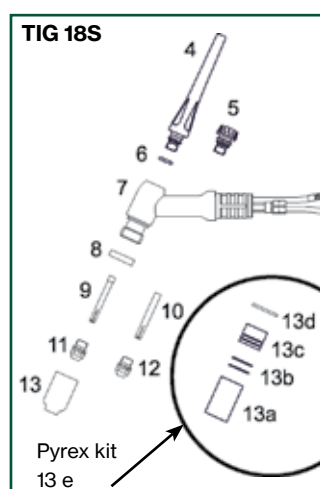


Wear parts for TIG 4CE welding torches

Wear parts for TIG 4CE 18SC

Pos. no.	A	B	Art. no.	Description	Package quantity
4			80300201	Electrode cap long	10
5			80300200	Electrode cap short	10
6			80300223	O-ring for cap TIG	1
7			80400782	Torch body TIG 4CE 18SC	1
8	1		80300239	Insulator TIG 4CE 18SC	10
9			80330110	Electrode clamp Ø1.0mm Cu	10
			80330111	Electrode clamp Ø1.6mm Cu	10
	1		80330112	Electrode clamp Ø2.4mm Cu	10
			80330113	Electrode clamp Ø3.2mm Cu	10
			80330114	Electrode clamp Ø4.0mm Cu	10
10			80330106	Collet HD TIG 451 4.0mm	10
			80330107	Collet HD TIG 451 4.8 mm	10
11	1		80310010	Collet body TIG 451 1.0-3.2mm	10
12			80310011	Collet body TIG 451 3.2-4.8mm	10
13			80340400	Nozzle for gas lens #4 Ø6.4 / 1/4"	10
			80340401	Nozzle for gas lens #5 Ø8.0 / 5/16"	10
			80340402	Nozzle for gas lens #6 Ø9.6 / 3/8"	10
	1		80340403	Nozzle for gas lens #7 Ø11.2 / 7/16"	10
			80340404	Nozzle for gas lens #8 Ø12.7 / 1/2"	10
			80340406	Nozzle for gas lens #11 Ø17.5 / 11/16"	10
13 a		2	80340420	Pyrex glass nozzle 42mm Ø25	1
13 b		2	80300322	O-ring for Pyrex glass nozzle	1
13 c		1	80310416	Pyrex glass nozzle adaptor	1
13 d		2	43570028	O-ring red silicon Ø16.9 x Ø2.75	1
	1		80361374	Tungsten electrodes - see page 59	10
			80361376		10
Box contents	A		80300136	Standard wearing part set Ø2.4 TIG 4CE 18SC	1
	B		80349420	Pyrex kit for TIG 201/221/401 gas lens (2xnozzle, 2xO-ring, 1xadapter) (13 e)	1

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



TIG 4CE 18SC is the strongest model in our range of TIG welding torches. TIG 4CE 18SC is water-cooled and designed for heavy-duty welding.

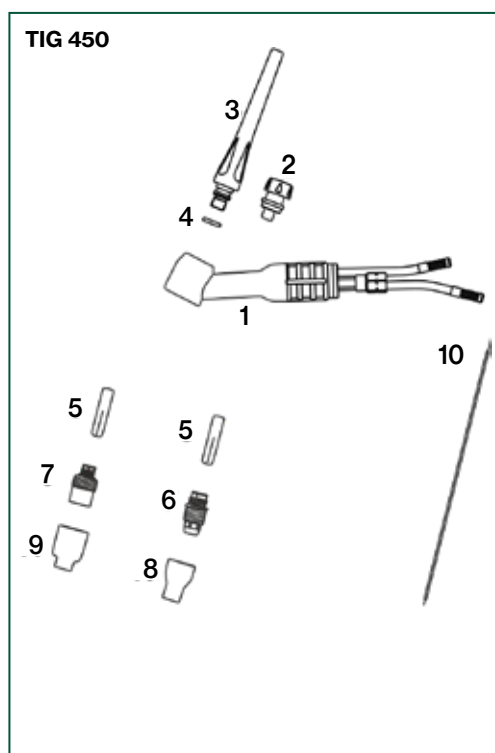
TIG 4CE 18SC is typically used for high performance production and on-site repairs in stainless steel and aluminium in thick wall-thicknesses using up to 450A DC welding current.

TIG 4CE 18SC can be equipped with all wearing parts displayed above and the control unit is easily replaced.

Wear parts for TIG 4CE welding torches

Wear parts for TIG 4CE 450

Pos. no.	A	Art. no.	Description	Package quantity
1		80300745	Torch body TIG 4CE 450	1
2		80300331	Electrode cap short	10
3		80300332	Electrode cap long	10
4		80300333	O-ring for electrode cap/torch	1
5		80330115	Electrode clamp STD Ø1.6 mm, 36,5 mm	10
	1	80330116	Electrode clamp STD Ø2.4 mm, 36,5 mm	10
		80330117	Electrode clamp STD Ø3.2 mm, 36,5 mm	10
		80330118	Electrode clamp STD Ø4.0 mm, 36,5 mm	10
		80330119	Electrode clamp STD Ø4.8 mm, 36,5 mm	10
6	1	80310015	Collet body STD Ø1.6-6.4 mm	10
7		80310017	Gas lens	10
8		80340421	Nozzle for gas lens STD #8 Ø9.5 1/2", 28x38 mm	10
	1	80340422	Nozzle for gas lens STD #6 Ø12.7 / 3/8", 28x38 mm	10
		80340423	Nozzle for gas lens STD #10 Ø15.9 5/8", 28x38 mm	10
9		80340435	Nozzle for gas lens #8 Ø9.6 / 1/2", 30x39.3 mm	10
		80340436	Nozzle for gas lens #6 Ø12.7 / 3/8", 30x39.3 mm	10
		80340437	Nozzle for gas lens #10 Ø19.9 / 5/8", 30x39.3 mm	10
10		80361374	Tungsten electrodes - see page 59	10
		80361376		10
Box contents	A	80300295	Standard Wear parts box TIG450 Ø2.4	1



TIG 4CE SNK

Wear parts for TIG 4CE SNK



TIG 4CE 17-G is typically used for welding stainless steel and aluminum in repair and production.

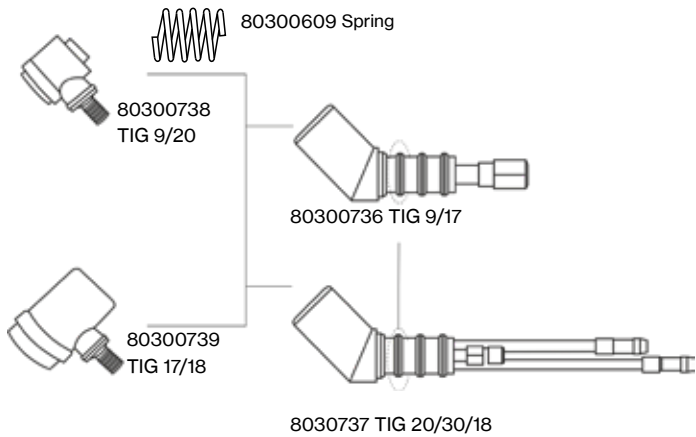
TIG 4CE 26-G is typically used for heavy duty and production tasks in aluminum.

TIG 4CE 18-W is used for welding with currents up to 400 A DC, e.g. in heavy stainless steel and aluminum in production and repair.

Art. no.	TIG SNK SERIE	Package quantity
80300738	Torch body TIG 4CE 9/20 lille	1
80300739	Torch body TIG 4CE 17/18 stort	1
80300736	Burner body air-cooled	1
80300737	Burner body water-cooled	1
80300609	Spring	1
Wear parts air cooled: see under TIG 9/20		
Water-cooled wear parts: see under TIG 17/18		



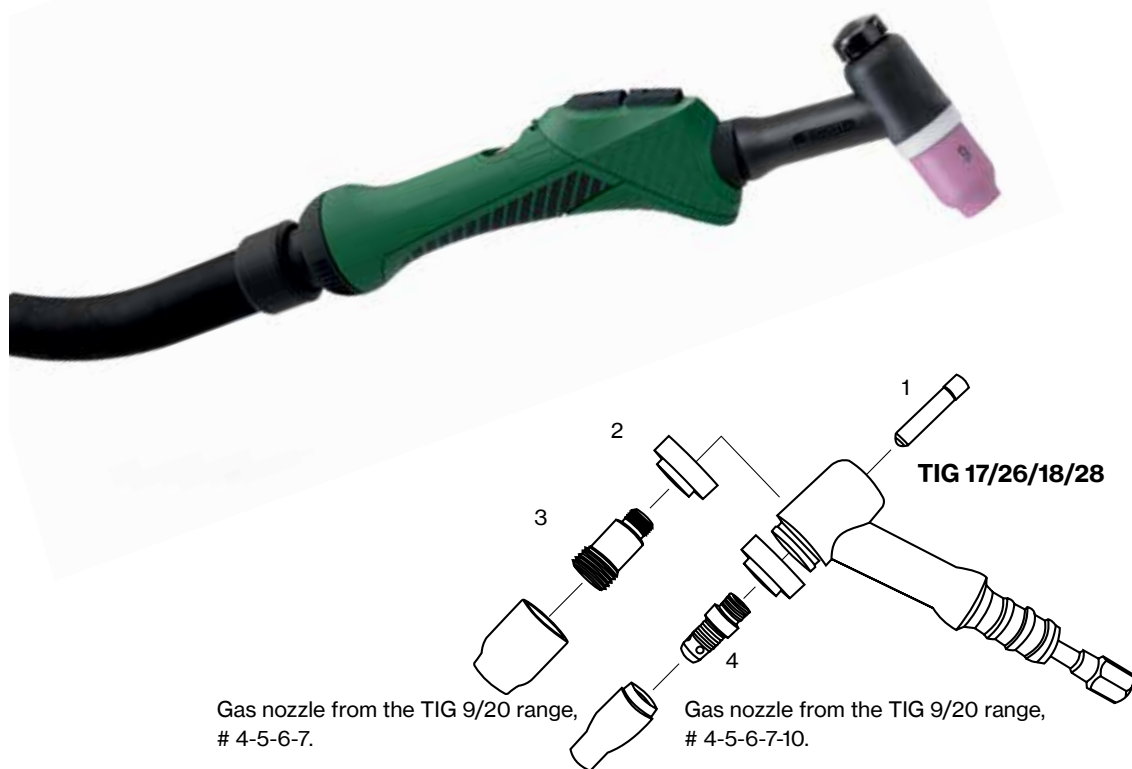
TIG SNK air or water cooled torches are for welding in accessible air locations.TIG SNK or water cooled torches are for welding in accessible air locations.



Special "Stubby" parts for TIG 4CE 17/26/18/28

Special torch body for "Stubby" system

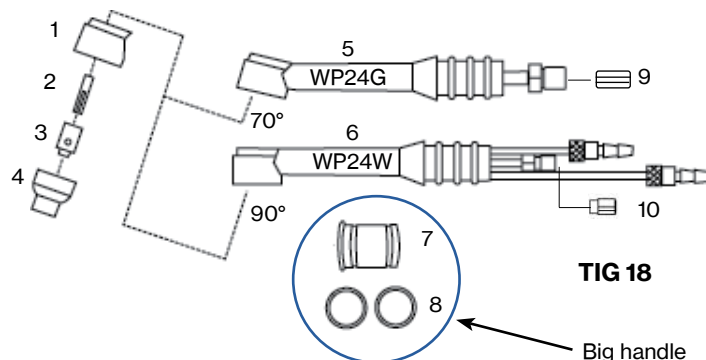
Stubby parts are used for TIG 17/26/18. Stubby parts reduce the height of the torch and provide better access to hard-to-reach locations.



Pos. no.	A	B	C	D	Art. no.	System "Stubby"	Package quantity
1					80330030	Collet Ø1.0mm "Stubby"	10
	1		1		80330031	Collet Ø1.6mm "Stubby"	10
		1		1	80330032	Collet Ø2.4mm "Stubby"	10
					80330033	Collet Ø3.2mm "Stubby"	10
2	1	1	1	1	80300236	Insulator for gas lens "Stubby"	1
3					80310421	Gas lens 1.0mm "Stubby"	10
			1		80310422	Gas lens 1.6mm "Stubby"	10
				1	80310424	Gas lens 2.4mm "Stubby"	10
4	1	1	1	1	80310020	Electrodeholder "Stubby"	10
	1		1		80361372	Tungsten electrodes - see page 59	10
		1		1	80361374		10
Box contents	A				80300286	Wearing parts set TIG Stubby Ø1.6	1
		B			80300287	Wearing parts set TIG Stubby Ø2.4	1
			C		80300288	Wearing parts set TIG Stubby Ø1.6 gas lens	1
				D	80300289	Wearing parts set TIG Stubby Ø2.4 gas lens	1

Special parts for TIG 4CE 24-G/24-W

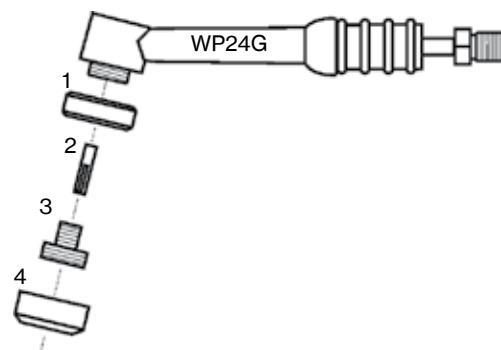
The torch body fits in everywhere



Pos. no.	A	B	C	Art. no.	WP24 parts	Package quantity
1	1	1	2	80300225	Insulator	1
2			2	80330009	Electrode clamp 1.0mm	10
	1		2	80330010	Electrode clamp 1.6mm	10
		1		80330011	Electrode clamp 2.4mm	10
			2	80310006	Electrode holder 1.0mm	10
3	1		2	80310007	Electrode holder 1.6mm	10
			1	80310008	Electrode holder 2.4mm	10
				80340024	Gas nozzle #4 Ø6.4 / 1/4"	10
4		1	5	80340025	Gas nozzle #5 Ø8.0 / 5/16"	10
			1	80340026	Gas nozzle #6 Ø9.6 / 3/8"	10
5				80300028	WP24G torch head body air 70°	1
6				80400309	WP24W torch head body water 90°	1
7				80400312	Transition piece for 201HD-401	1
8				43572417	O-ring, 2 pcs.	1
9				29420111	Socket 3/8"24UNF right W11X15	1
10				29420108	Adaptor 1/4"UNF-3/8"24UNF left	1
	1		10	80361372	Tungsten electrodes - see page 59	10
		1	10	80361374		10
Box contents	A			80300284	Wearing parts set TIG WP24 Ø1.6	1
		B		80300285	Wearing parts set TIG WP24 Ø2.4	1
			C	81100238	Wear parts box TIG WP24/DSF225	1

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

Pos. no.	Art. no.	WP24 Mini parts	Min. order quantity
1	80300311	WP24 insulator mini for gaslens	5
2	80330010	Electrode clamp 1.6mm	10
	80330011	Electrode clamp 2.4mm	10
3	80410218	TIG 9/20 gas lens mini Ø1.6	5
	80410219	TIG 9/20 gas lens mini Ø2.4	5
4	80440198	Gas nozzle for TIG 9/20 mini #5 Ø8.0 / 5/16"	10
	80440199	Gas nozzle for TIG 9/20 mini #6 Ø9.6 / 3/8"	10



Wear parts according to individual requirements

As standard Migatronc 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.

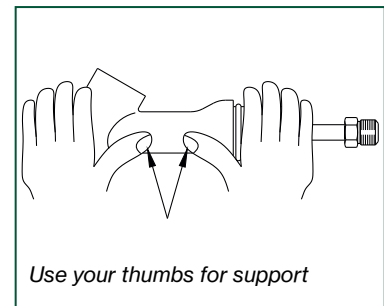
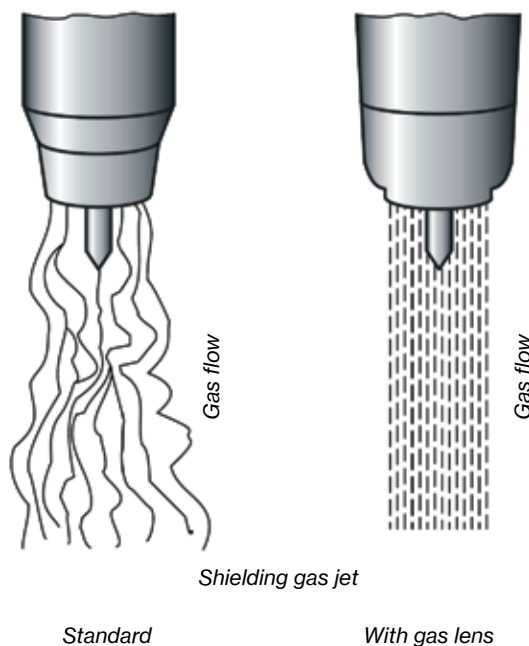
If you choose **standard wear parts**, the TIG torch body will be equipped with electrode holder and electrode clamp as well as ceramic gas nozzle. the function of which is to guide the shielding gas towards the weld zone so as to displace the atmospheric air.

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

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

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



TIG Ergo welding torches

TIG Ergo – for optimal TIG Welding

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

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

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

ABBREVIATIONS TIG:

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



AIR-COOLED

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

WATER-COOLED

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

Model TIG Ergo	TIG 101	TIG 201	TIG 221	TIG 301	TIG 321	TIG 401	TIG 451
Duty cycle DC 60%	90 A	110 A	130 A	230 A	325 A	400 A	420 A
Duty cycle AC 60%	65 A	75 A	90 A	160 A	230 A	280 A	290 A
Duty cycle DC 100%	80 A	90 A	110 A	225 A	325 A	400 A	420 A
Duty cycle AC 100%	55 A	65 A	80 A	160 A	230 A	280 A	290 A
Cooling	Air	Air	Air	Water	Water	Water	Water
Gas flow +/-5%	7 l/min	7 l/min	7 l/min	9 l/min	9 l/min	11 l/min	11 l/min
Electrode diameter, mm	1.0-2.4	1.0-2.4	1.0-2.4	1.0-3.2	1.0-3.2	1.0-4.0	1.0-4.8
Cable, mm2	15	15	21	4/6 (8 m)	12/15 (8 m)	12/15 (8 m)	18 (8 m)
Weight at 1m height	0.8 kg	1.0 kg	1.0 kg	0.8 kg	1.0 kg	1.1 kg	1.2 kg
Total weight kg, 4 m	1.7 kg	1.9 kg	2.0 kg	1.5 kg	2.0 kg	2.2 kg	2.7 kg

TIG Ergo welding torches

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

*) Recommended
 (*) Not recommendable for maximum performance

Cable connector for TIG Ergo welding torches



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



Cable connector for water-cooled TIG 301 welding torch.



Cable connector for air-cooled TIG 221 welding torch.



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

TIG Ergo welding torches



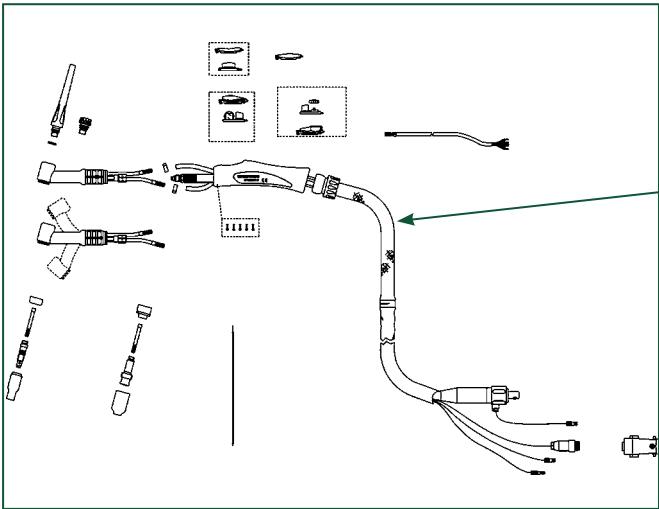
TIG Ergo 101V, 4m
 Art. no.80392615



7/6 pole adapter
 Art. no. 80300116



7 pole TIG ZA adapter
 Art. no.75990007



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



TIG Extension Cable

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

Art. no.	Description
74303610	10m 25mm² Air 7-pole without box
74303615	15m 35mm² Air 7-pole without box
74303620	20m 35mm² Air 7-pole without box
74355710	10m 50mm² Water 7-pole without box
74355715	15m 50mm² Water 7-pole without box
74355720	20m 50mm² Water 7-pole without box



TIG Ergo control units



Blank cover

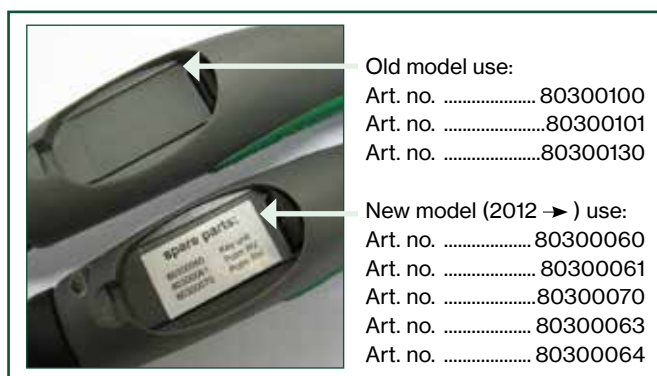
For use with e.g. foot switch
Art. no. 80300102



Keypad unit

Art. no. 80300100
(old model)

Art. no. 80300060
(new model)



Old model use:

Art. no. 80300100
Art. no. 80300101
Art. no. 80300130

New model (2012 →) use:

Art. no. 80300060
Art. no. 80300061
Art. no. 80300070
Art. no. 80300063
Art. no. 80300064



Keypad unit

with vertical TIG control knob
(RV)
Art. no. 80300101
(old model)

Art. no. 80300061
(new model)



Keypad unit

with horizontal TIG control
knob (RH)
Art. no. 80300130
(old model)

Art. no. 80300070
(new model)



Up/Down module

with 4-function key for adjust-
ment of welding current incl.
TIG-A-Tack function. The
welding current is increased
/ reduced with 2 amps. Long
press for constant increase /
decrease.

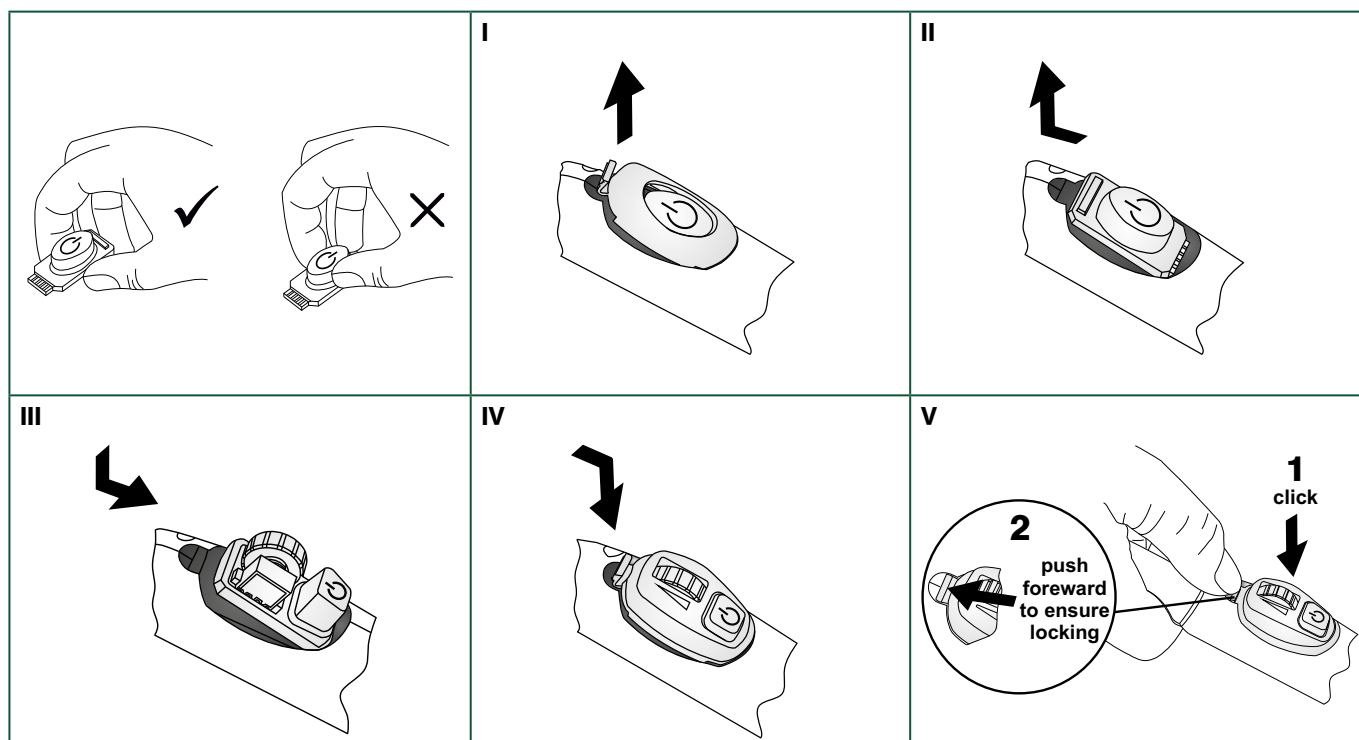
Art. no. 80300063*
* Applies to software versions
as of 2.17



Up/Down module

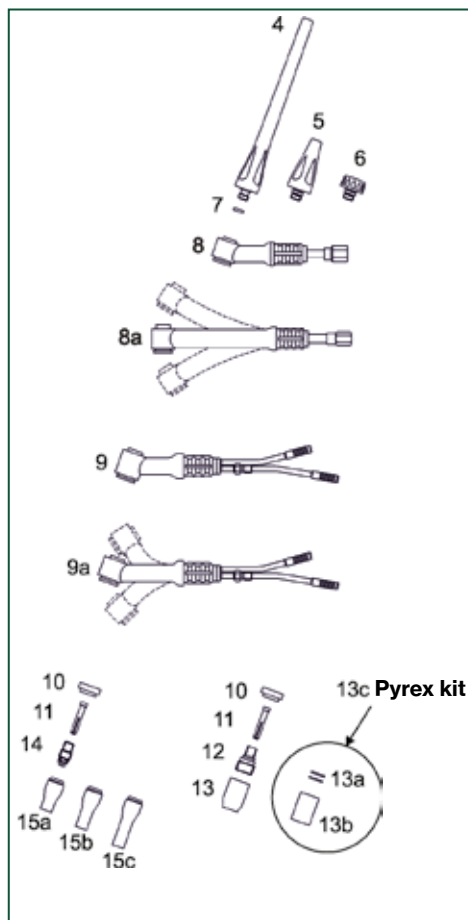
with 3-function key for adjust-
ment of welding current. The
welding current is increased
/ reduced with 2 amps. Long
press for constant increase /
decrease.

Art. no. 80300064*
* Applies to software versions
as of 2.17



Wear parts for TIG Ergo welding torches

Wear parts for TIG Ergo 101/301/321



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

TIG 101 is typically used for welding in stainless materials.

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

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

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



Wear parts box

Ø1.6 81100320 E
Ø2.4 81100321 F



Set of standard wear parts

Ø1.6 803001107 A
Ø2.4 80300119 B

Set of wear parts. gas lenses

(Not shown)

Ø1.6 80300140 G
Ø2.4 80300141 H



Wear parts box

Ø1.6/Ø2,4 81100228 C
Ø2,4/Ø3,2 81100248 D

Pos. no.	A	B	C	D	E	F	G	H	Art. no.	Description	Package quantity
			1	1	1	1			80400117	Electrode cap long TIG 101/301/321	10
5			1	1					80400116	Electrode cap medium TIG 101/301/321	10
6			1	1					80400115	Electrode cap short TIG 101/301/321	10
7			2	2					80400204	O-Ring electrode cap TIG 101/301/321	10
8									80300194	Torch body TIG 101 60mm	1
8a									80300195	Torch body TIG 101 Flex 60mm	1
									80300051	Torch body TIG 101 Flex 100mm	1
									80300052	Torch body TIG 101 Flex 135mm	1
9									80400310	Torch body TIG 301/321 55mm	1
9a									80400311	Torch body TIG 301 Flex 55mm	1
									80400315	Torch body TIG 301 Flex 105mm	1
									80400316	Torch body TIG 301 Flex 135mm	1
10			1	1	2	2			80300219	Insulator TIG 101/301/321	10
11									80430211	Electrode clamp Ø1.0 mm CuCr	10
	1		5		3		1		80430212	Electrode clamp Ø1.6 mm CuCr	10
		1	5	5		3		1	80430213	Electrode clamp Ø2.4 mm CuCr	10
				5					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

Pos. no.	A	B	C	D	E	F	G	H	Art. no.	Description	Package quantity
12									80410210	Gas lens 1.0mm 101/301 copper/brass	10
							1		80410211	Gas lens 1.6mm 101/301 copper/brass	10
								1	80410212	Gas lens 2.4mm 101/301 copper/brass	10
									80410213	Gas lens 3.2mm 101/301 copper/brass	10
									80410214	Gas lens II 1.0mm 101/301 cast brass	10
									80410215	Gas lens II 1.6mm 101/301 cast brass	10
									80410216	Gas lens II 2.4mm 101/301 cast brass	10
									80410217	Gas lens II 3.2mm 101/301 cast brass	10
13									80440210	Gas nozzle lens TIG101/301 #4 Ø6.4 / 1/4"	10
									80440211	Gas Nozzle lens TIG101/301 #5 Ø8.0 / 5/16"	10
							1	1	80440212	Gas Nozzle lens TIG101/301 #6 Ø9.6 / 3/8"	10
									80440213	Gas Nozzle lens TIG101/301 #7 Ø11.2 / 7/16"	10
									80440214	Gas Nozzle lens TIG101/301 #8 Ø12.7 / 1/2"	10
13 a									80300321	O-ring for Pyrex glass nozzle	1
13 b									80440235	Pyrex glass nozzle 25mm Ø20	1
13 c									80449235	Pyrex kit for TIG 101/301/321 gaslens (2xnozzle, 4xO-ring)	1
14									80410201	Electrode holder Ø1.0 TIG 101/301/321	10
	1		2		1				80410202	Electrode holder Ø1.6 TIG 101/301/321	10
		1	2	2					80410203	Electrode holder Ø2.4 TIG 101/301/321	10
				2					80410204	Electrode holder Ø3.2 TIG 101/301/321	10
15a					1				80440201	Gas nozzle TIG 101/301/321 #4 Ø6.4 / 1/4"	10
			5	5	1	1			80440202	Gas nozzle TIG 101/301/321 #5 Ø8.0 / 5/16"	10
	1	1	5	5	1	1			80440203	Gas nozzle TIG 101/301/321 #6 Ø9.6 / 3/8"	10
			5	5	1	1			80440204	Gas nozzle TIG 101/301/321 #7 Ø11.2 / 7/16"	10
					1	1			80440205	Gas nozzle TIG 101/301/321 #8 Ø12.7 / 1/2"	10
									80440206	Gas nozzle TIG 101/301/321 #10 Ø16 / 5/8"	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 58	10
									80361374		10
									80361376		10
Box contents	A								80300117	Standard wearing part set Ø1.6 TIG 101/301/321	1
		B							80300119	Standard wearing part set Ø2.4 TIG 101/301/321	1
			C						81100228	Wear parts box TIG 101/301/321 1.6/2.4	1
				D					81100248	Wear parts box TIG 101/301/321 2.4/3.2	1
					E				81100320	Wear parts box TIG 101/301 9/20 1.6mm	1
						F			81100321	Wear parts box TIG 101/301 9/20 2.4mm	1
							G		80300140	Wearing part set 1.6 gas lens TIG 101/301/321	1
								H	80300141	Wearing part set 2.4 gas lens TIG 101/301/321	1

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

TIG Adjust 101/201/301/401

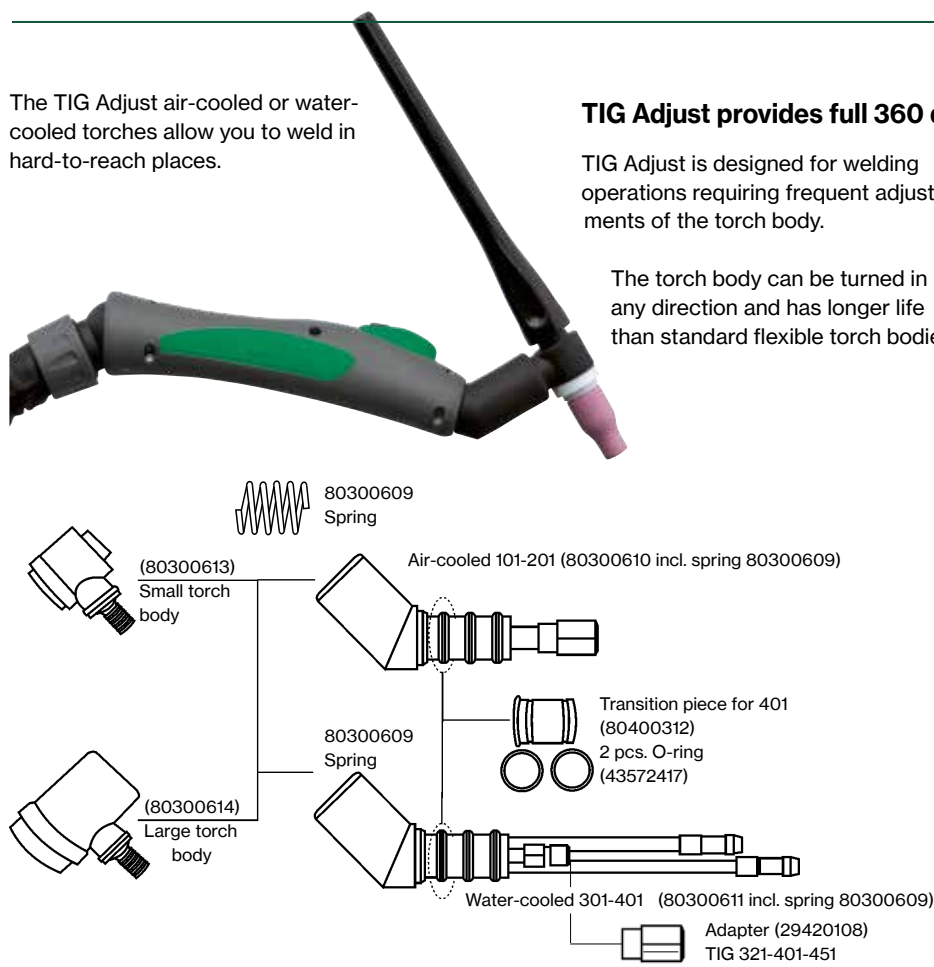
The TIG Adjust air-cooled or water-cooled torches allow you to weld in hard-to-reach places.

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 80300613	TIG 101	Adjust 4m	80392705
	TIG 101	Adjust 8m	80392706
	TIG 101R	Adjust 4m	80392700
	TIG 101R	Adjust 8m	80392701
TIG 201 Large torch body 80300614	TIG 201	Adjust 4m	80392845
	TIG 201	Adjust 8m	80392846
	TIG 201R	Adjust 4m	80392847
	TIG 201R	Adjust 8m	80392848

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

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

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

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

Wear parts for TIG Ergo welding torches



Pos. no.	Art. no.	Description	Package quantity
	80349420	Pyrex kit TIG 201/221/401 gas lens	1
1	80300220	Gas lens insulator	1
2	43570028	O-ring red silicon Ø16.9 x Ø2.75	1
3	80310416	Pyrex glas nozzle adaptor	1
4	80300322	O-ring, Pyrex glas nozzle Ø16mm Ø20mm	1
5	80340420	Pyrex glass nozzle 42mm Ø22 Ø26 ±0.3mm	1

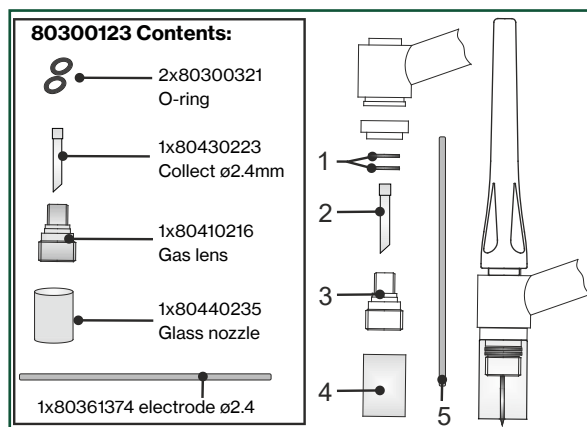


Pyrex gas lens kit

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

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

Art. no.80300123



Pos. no.	Art. no.	Description	Package quantity
	80300123	Kit for TIG 101/301/321 gaslens	1
1	80300321	O-ring for Pyrex glass nozzle	1
2	80430223	Collet Ø2.4mm	10
3	80410216	Gas lens II Ø2.4 TIG	10
4	80440235	Pyrex glass nozzle	1
5	80361374	Tungsten electrode Ø2.4 mm SuperBlue	1

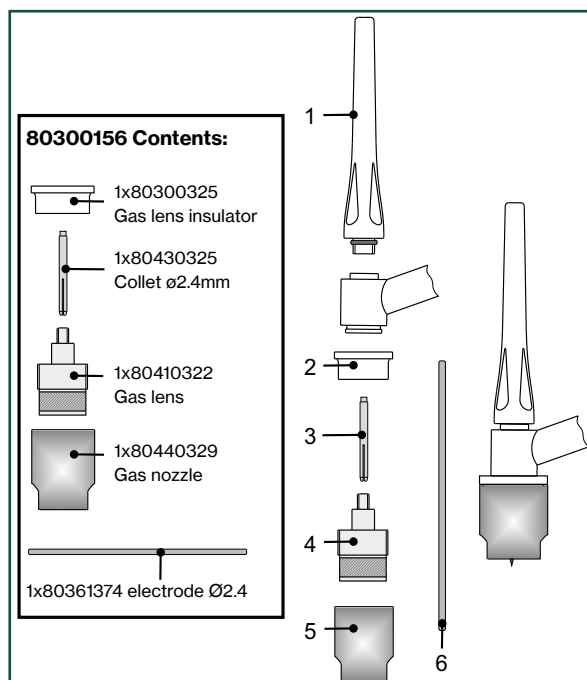


Ceramic jumbo wear parts kit Ø1.6-Ø2.4

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

Ceramic jumbo wear parts kit Ø1.6-Ø2.4 TIG 101/301/321

Art. no.80300156



Pos. no.	Art. no.	Description	Package quantity
	80300156	Jumbo ceramic kit Ø2.4 TIG 101/301/321	1
1.1	80400115	Electrode cap short TIG 101/301/321	10
1.2	80400116	Electrode cap medium TIG 101/301/321	10
1.3	80400117	Electrode cap long TIG 101/301/321	10
2	80300325	Gas lens insulator	1
3.1	80430324	Collet Ø1.6mm TIG 101/301/321	1
3.3	80430325	Collet Ø2.4mm TIG 101/301/321	1
3.3	80430326	Collet Ø3.2mm TIG 101/301/321	1
4.1	80410321	Gas lens Ø1.6mm TIG 101/301/321	1
4.2	80410322	Gas lens Ø2.4mm TIG 101/301/321	1
4.3	80410323	Gas lens ø3.2mm TIG 101/301/321	1
5.1	80440326	Gas nozzle #6 Ø9.6 TIG 101/301/321	1
5.2	80440327	Gas nozzle #8 Ø12.8 TIG 101/301/321	1
5.3	80440328	Gas nozzle #10 Ø16.0 TIG 101/301/321	1
5.4	80440329	Gas nozzle #12 Ø19.2 TIG 101/301/321	1
5.5	80440330	Gas nozzle #15 Ø24.0 TIG 101/301/321	1
6	80361374	Tungsten electrode Ø2.4 mm SuperBlue	10

Wear parts for TIG Ergo welding torches

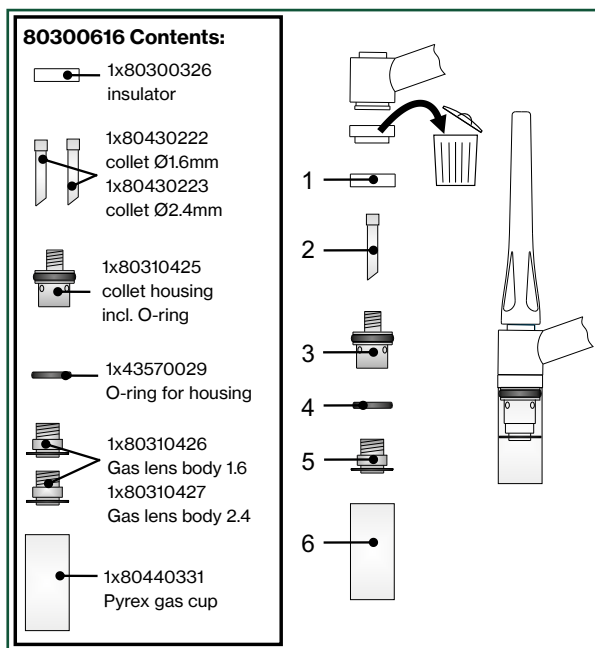


Pyrex kit with Pyrex gas nozzle and built-in gas lens

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

Pyrex Kit small Ø1.6-Ø2.4mm TIG 101/301/321

Art. no.80300616

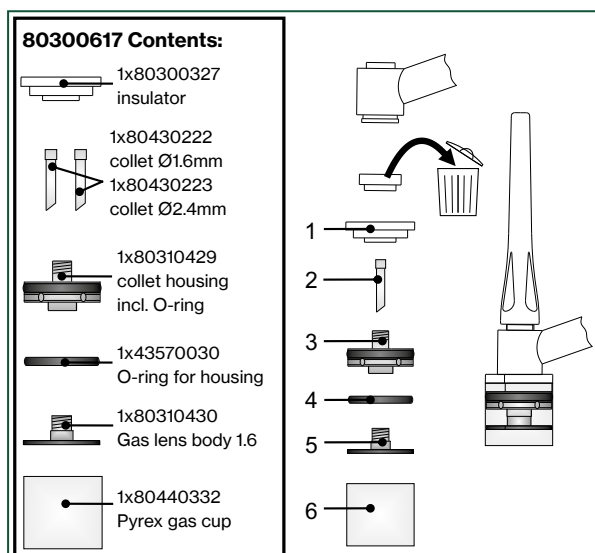


Pos. no.	Art. no.	Description	Package quantity
	80300616	Pyrex Kit small Ø1.6-Ø2.4 TIG 101/301/321	1
1	80300326	Insulator	1
2.1	80430222	Collet ø1.6mm brass wedge TIG 101/301/321	10
2.2	80430223	Collet ø2.4mm brass wedge TIG 101/301/321	10
2.3	80430224	Collet ø3.2mm brass wedge TIG 101/301/321	10
3	80310425	Collet housing	1
4	43570029	O-ring for housing	1
5.1	80310426	Gas lens body 1.6mm	1
5.2	80310427	Gas lens body 2.4mm	1
5.3	80310428	Gas lens body 3.2mm	1
6	80440331	Pyrex gas cup	1



Pyrex Kit jumbo Ø1.6-Ø2.4mm TIG 101/301/321

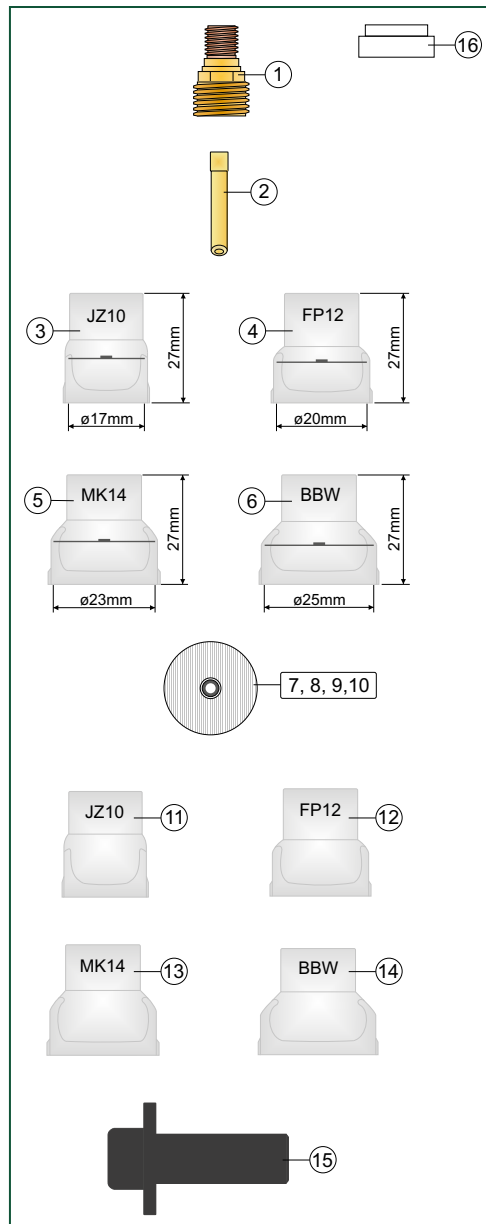
Art. no.80300617



Pos. no.	Art. no.	Description	Package quantity
	80300617	Pyrex Kit jumbo Ø1.6-Ø2.4 TIG 101/301/321	1
1	80300327	Insulator	1
2.1	80430222	Collet ø1.6mm brass wedge TIG 101/301/321	10
2.2	80430223	Collet ø2.4mm brass wedge TIG 101/301/321	10
2.3	80430224	Collet ø3.2mm brass wedge TIG 101/301/321	10
3	80310429	Collet housing	1
4	43570030	O-ring for housing	1
5.1	80310430	Gas lens body 1.6mm	1
5.2	80310431	Gas lens body 2.4mm	1
5.3	80310432	Gas lens body 3.2mm	1
6	80440332	Pyrex gas cup	1

Wear parts for TIG Ergo welding torches

Gas lenses with filter TIG Ergo 101/301/321/TIG Adjust



Pos. no.	A	B	Art. no.	Description	Package quantity
	1	1	80400115	Electrode cap short TIG 9/20/30	
	1	1	80400117	Electrode cap medium TIG 9/20/30	
1.1			80410215	Gas lens, brass Ø1.6mm	1
1.2			80410216	Gas lens brass, Ø2.4mm	1
1.3	1		80410211	Gas lens, Cu Ø1.6mm	1
1.4		2	80410212	Gas lens, Cu Ø2.4mm	1
2.1	1		80430222	Collet, brass Ø1.6mm	1
2.2		2	80430223	Collet, brass Ø2.4mm	1
3.1	1		80440420	Gas nozzle JZ10 Ø17mm with filter 1.6mm	1
3.2			80440421	Gas nozzle JZ10 Ø17mm with filter 2.4mm	1
4.1	1		80440430	Gas nozzle FP12 Ø20mm with filter 1.6mm	1
4.2		2	80440431	Gas nozzle FP12 Ø20mm with filter 2.4mm	1
5.1	1		80440440	Gas nozzle MK14 Ø23mm with filter 1.6mm	1
5.2		2	80440441	Gas nozzle MK14 Ø23mm with filter 2.4mm	1
6.1			80440450	Gas nozzle BBW Ø25mm with filter 1.6mm	1
6.2		2	80440451	Gas nozzle BBW Ø25mm with filter 2.4mm	1
7.1			80410425	Gas nozzle filter JZ10 Ø17mm 1.6mm	1
7.2			80410426	Gas nozzle filter JZ10 Ø17mm 2.4mm	1
8.1			80410435	Gas nozzle filter FP12 Ø20mm 1.6mm	1
8.2			80410436	Gas nozzle filter FP12 Ø20mm 2.4mm	1
9.1			80410445	Gas nozzle filter MK14 Ø23mm 1.6mm	1
9.2			80410446	Gas nozzle filter MK14 Ø23mm 2.4mm	1
10.1			80410455	Gas nozzle filter BBW Ø25mm 1.6mm	1
10.2			80410456	Gas nozzle filter BBW Ø25mm 2.4mm	1
11			80440405	Gas nozzle JZ10 Ø17mm without filter	1
12			80440406	Gas nozzle FP12 Ø20mm without filter	1
13			80440407	Gas nozzle MK14 Ø23mm without filter	1
14			80440408	Gas nozzle BBW Ø25mm without filter	1
15			80440460	Filter installation tool JZ10 - BBW	1
16	2	2	80300219	Isolator	
Box contents	A		81100328	Wear parts box 1.6mm	
	B		81100329	Wear parts box 2.4mm	



Wear parts box

TIG 101/301 1.6mm
Gas nozzle with filter 81100328 A

TIG 101/301 2.4mm
Gas nozzle with filter 81100329 B



Information - Set-up

Note:

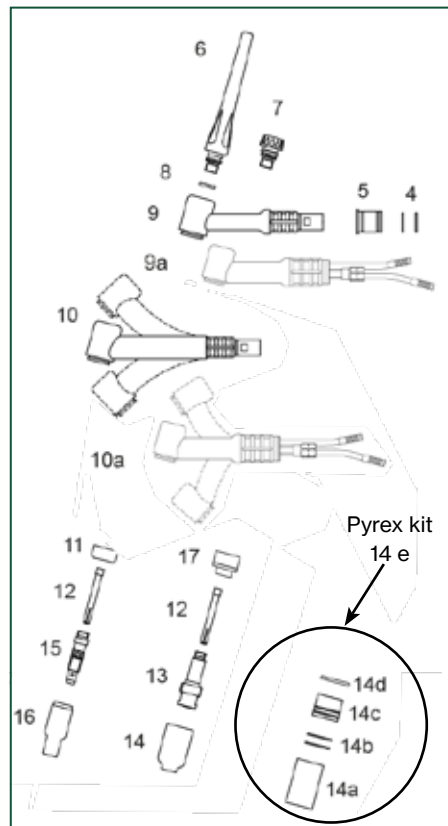
Max. recommended electrode stick-out to gas lens: 3.2mm
Max. amps. with 1/16"-1.6mm electrode: 70-150A DC / 60-125A AC
Max. amps. with 3/32"-2.4mm electrode: 150-250A DC / 120-210A AC

It is recommended to use electrode stick-out of minimum 10mm for aluminium welding to avoid clogging of the gas nozzle filter from welding fumes and spatter.

Nozzle size	Ø /ID	Recommended gas flow	Max. Electrode stick-out
10	17mm-5/8"	12 l/min	20mm
12	20mm-3/4"	12-14 l/min	25mm
14	23mm-15/16"	14-17 l/min	25mm
16	25mm-1"	14-21 l/min	35mm

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.



Wear parts box

Ø1.6mm 81100323 D
Ø2.4mm 81100324 E



Set of standard wear parts

Ø1.6 80300274 B
Ø2.4 80300118 A

Set of wear parts gas lenses

(Ikke afbilledet)

Ø1.6 80300142 F
Ø2.4 80300143 G



Wear parts box

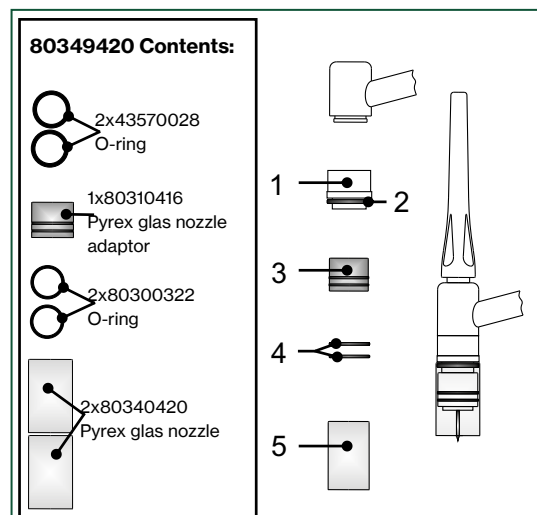
Art. nr. 81100230 C

Pos. nr.	A	B	C	D	E	F	G	Art. nr.	Description	Package quantity
4								80300301	O-ring Ø17.5x1.5mm	1
5								80400312	Transition piece for 201HD-401	1
6			1	1	1			80300201	Electrode cap long TIG 201-401	10
7			1					80300200	Electrode cap short TIG 201-401	10
8			2					80300223	O-ring for cap TIG 201/401	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			2	2	2			80300189	Insulator TIG 201/401	10
12		1	5	2		1		80330110	Electrode clamp Ø1.0mm Cu	10
	1		5		2		1	80330111	Electrode clamp Ø1.6mm Cu	10
								80330112	Electrode clamp Ø2.4mm Cu	10
								80330113	Electrode clamp Ø3.2mm Cu	10
								80330114	Electrode clamp Ø4.0mm Cu	10
13								80310411	Gas lens 1.0mm TIG 201/401	10
						1		80310412	Gas lens 1.6mm TIG 201/401	10
							1	80310413	Gas lens 2.4mm TIG 201/401	10
								80310414	Gas lens 3.2mm TIG 201/401	10
								80310415	Gas lens 4.0mm TIG 201/401	10

Wear parts for TIG Ergo welding torches

Pos. no.	A	B	C	D	E	F	G	Art. no.	Description	Package quantity
14								80340400	Nozzle for gas lens TIG 201/221/401/451 #4 Ø6.4 / 1/4"	10
								80340401	Nozzle for gas lens TIG 201/221/401/451 #5 Ø8.0 / 5/16"	10
								80340402	Nozzle for gas lens TIG 201/221/401/451 #6 Ø9.6 / 3/8"	10
					1	1		80340403	Nozzle for gas lens TIG 201/221/401/451 #7 Ø11.2 / 7/16"	10
								80340404	Nozzle for gas lens TIG 201/221/401/451 #8 Ø12.7 / 1/2"	10
								80340406	Nozzle for gas lens TIG 201/221/401/451 #11 Ø17.5 / 11/16"	10
14 a								80340420	Pyrex glass nozzle 42mm Ø25	1
14 b								80300322	O-ring for Pyrex glass nozzle	1
14 c								80310416	Pyrex glass nozzle adapter	1
14 d								43570028	O-ring red silicon Ø16,9 x Ø2,75	1
14 e								80349420	Pyrex kit for TIG 201/221/401 gas lens (2xnozzle, 2xO-ring, 1xadapter)	1
15								80310004	Electrode holder Ø1.0 TIG 201/401	10
	1	2	1					80310000	Electrode holder Ø1.6 TIG 201/401	10
	1	2	1					80310001	Electrode holder Ø2.4 TIG 201/401	10
								80310002	Electrode holder Ø3.2 TIG 201/401	10
								80310003	Electrode holder Ø4.0 TIG 201/401	10
16				1	1			80340001	Gas nozzle TIG 201/401 #4 Ø6.4 / 1/4"	10
			5	1	1			80340002	Gas nozzle TIG 201/401 #5 Ø8.0 / 5/16"	10
	1	1	5	1	1			80340003	Gas nozzle TIG 201/401 #6 Ø9.6 / 3/8"	10
			5	1	1			80340004	Gas nozzle TIG 201/401 #7 Ø11.2 / 7/16"	10
				1	1			80340005	Gas nozzle TIG 201/401 #8 Ø12.7 / 1/2"	10
								80340006	Gas nozzle TIG 201/401 #10 Ø15.7 / 5/8"	10
								80340007	Gas nozzle TIG 201/401 #12 Ø19.0 / 3/4"	10
17						1	1	80300220	Gas lens insulator TIG 201/401	10
	1	10	1		1			80361372	Tungsten electrodes - see page 58	10
	1	10		1		1		80361374		10
Box contents	A							80300118	Standard wearing part set Ø2.4 TIG 201/221/401	1
	B							80300274	Standard wearing part set Ø1.6 TIG 201/221/401	1
		C						81100230	Wear parts box TIG 201/221/401	1
			D					81100323	Wear parts box TIG 201/401 17/18/26 1,6mm (See sample content on page 29)	1
				E				81100324	Wear parts box TIG 201/401 17/18/26 2,4mm (See sample content on page 29)	1
					F			80300142	Wearing part set 1.6 gas lens TIG 201/401	1
						G		80300143	Wearing part set 2.4 gas lens TIG 201/401	1

The size of the gas nozzle (inside diameter), fx #4 = 4 x 1,6mm = 6,4mm.

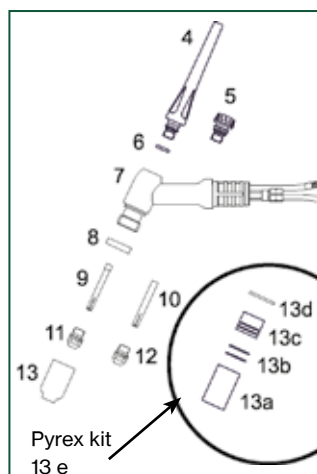


Wear parts for TIG Ergo welding torches

Wear parts for TIG Ergo 451

Pos. no.	A	B	C	Art. no.	Description	Package quantity
4				80300201	Electrode cap long	10
5				80300200	Electrode cap short	10
6				80300223	O-ring for cap	1
7				80400425	Torch body TIG 451	1
8	1	1		80300239	Insulator TIG 451	10
9				80330110	Electrode clamp Ø1.0mm Cu	10
				80330111	Electrode clamp Ø1.6mm Cu	10
	1			80330112	Electrode clamp Ø2.4mm Cu	10
		1		80330113	Electrode clamp Ø3.2mm Cu	10
				80330114	Electrode clamp Ø4.0mm Cu	10
10				80330106	Collet HD 4.0mm	10
				80330107	Collet HD 4.8 mm	10
11	1	1		80310010	Collet body standard 1.0-3.2mm	10
12				80310011	Collet body 3.2-4.8mm	10
13				80340400	Nozzle for gas lens #4 Ø6.4 / 1/4"	10
				80340401	Nozzle for gas lens #5 Ø8.0 / 5/16"	10
				80340402	Nozzle for gas lens #6 Ø9.6 / 3/8"	10
	1	1		80340403	Nozzle for gas lens #7 Ø11.2 / 7/16"	10
				80340404	Nozzle for gas lens #8 Ø12.7 / 1/2"	10
				80340406	Nozzle for gas lens #11 Ø17.5 / 11/16"	10
13 a			2	80340420	Pyrex glass nozzle 42mm Ø25	1
13 b			2	80300322	O-ring for Pyrex glass nozzle	1
13 c			1	80310416	Pyrex glass nozzle adaptor	1
13 d			2	43570028	O-ring red silicon Ø16.9 x Ø2.75	1
	1			80361374	Tungsten electrodes - see page 58	10
		1		80361376		10
Box contents	A			80300136	Std. Sliddelesæt Ø2,4 TIG 451	1
	B			80300138	Std. Sliddelesæt Ø3,2 TIG 451	1
			C	80349420	Pyrex kit for TIG 201/221/401 gas lens (2xnozzle, 2xO-ring, 1xadapter) (13 e)	1

Gasdyssestørrelse (indvendig diameter), fx #4 = 4 x 1,6 mm = 6,4mm.



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

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

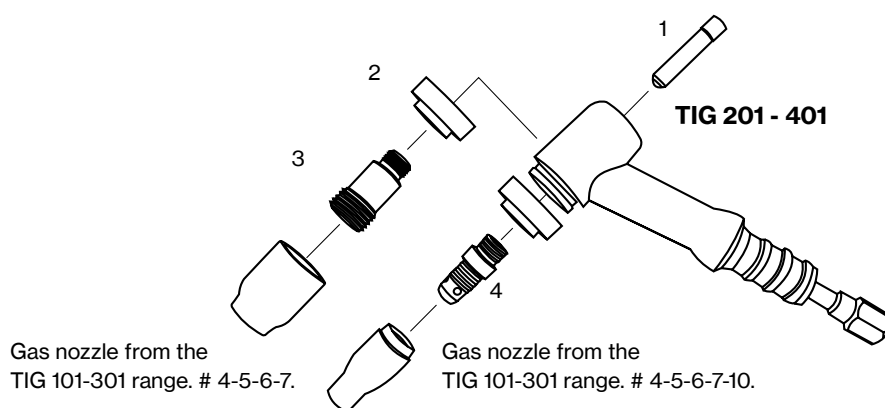
TIG 451 can be equipped with all wearing parts displayed above and the control unit is easily replaced.

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

Special torch body for "Stubby" system



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



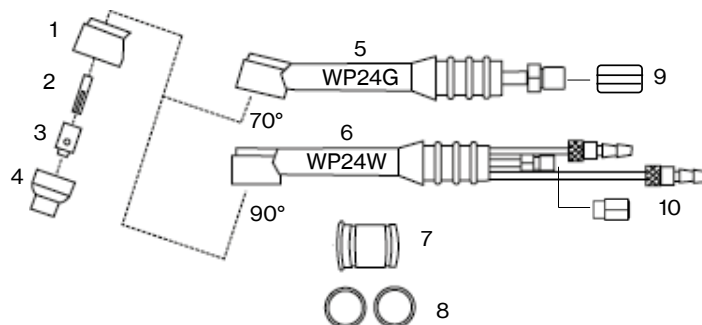
Pos. no.	A	B	C	D	Art. no.	System "Stubby"	Package quantity
1					80330030	Collet Ø1.0mm "Stubby"	10
	1		1		80330031	Collet Ø1.6mm "Stubby"	10
		1		1	80330032	Collet Ø2.4mm "Stubby"	10
					80330033	Collet Ø3.2mm "Stubby"	10
2	1	1	1	1	80300236	Insulator for gas lens "Stubby"	1
3					80310421	Gas lens 1.0mm "Stubby"	10
			1		80310422	Gas lens 1.6mm "Stubby"	10
				1	80310424	Gas lens 2.4mm "Stubby"	10
4	1	1	1	1	80310020	Electrodeholder "Stubby"	10
	1		1		80361372	Tungsten electrodes - see page 58	10
		1		1	80361374		10
Box contents	A				80300286	Wearing parts set TIG Stubby Ø1.6	1
		B			80300287	Wearing parts set TIG Stubby Ø2.4	1
			C		80300288	Wearing parts set TIG Stubby Ø1.6 gas lens	1
				D	80300289	Wearing parts set TIG Stubby Ø2.4 gas lens	1



Special parts for WP 24

Special torch body WP24

The torch body fits in everywhere.

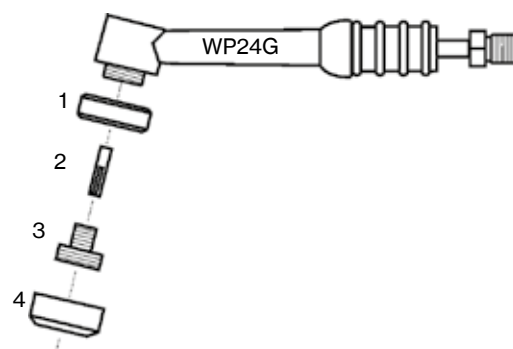


Pos. no.	A	B	C	Art. nro	WP24 parts	Package quantity
1	1	1	2	80300225	Insulator	1
2			2	80330009	Electrode clamp 1.0mm	10
	1		2	80330010	Electrode clamp 1.6mm	10
		1		80330011	Electrode clamp 2.4mm	10
3			2	80310006	Electrode holder 1.0mm	10
	1		2	80310007	Electrode holder 1.6mm	10
		1		80310008	Electrode holder 2.4mm	10
4				80340024	Gas nozzle #4 Ø6.4 / 1/4"	10
	1		5	80340025	Gas nozzle #5 Ø8.0 / 5/16"	10
		1	5	80340026	Gas nozzle #6 Ø9.6 / 3/8"	10
5				80300028	WP24G torch head body air 70°	1
6				80400309	WP24W torch head body water 90°	1
7				80400312	Transition piece for 201HD-401	1
8				43572417	O-ring, 2 pcs.	1
9				29420111	Socket 3/8"24UNF right W11X15 (101/201 cable size)	1
10				29420108	Adaptor TIG 321/401/451 left	1
	1		10	80361372	Tungsten electrodes - see page 58	10
		1	10	80361374		10
Box contents	A			80300284	Wearing parts set TIG WP24 Ø1.6	1
		B		80300285	Wearing parts set TIG WP24 Ø2.4	1
			C	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.

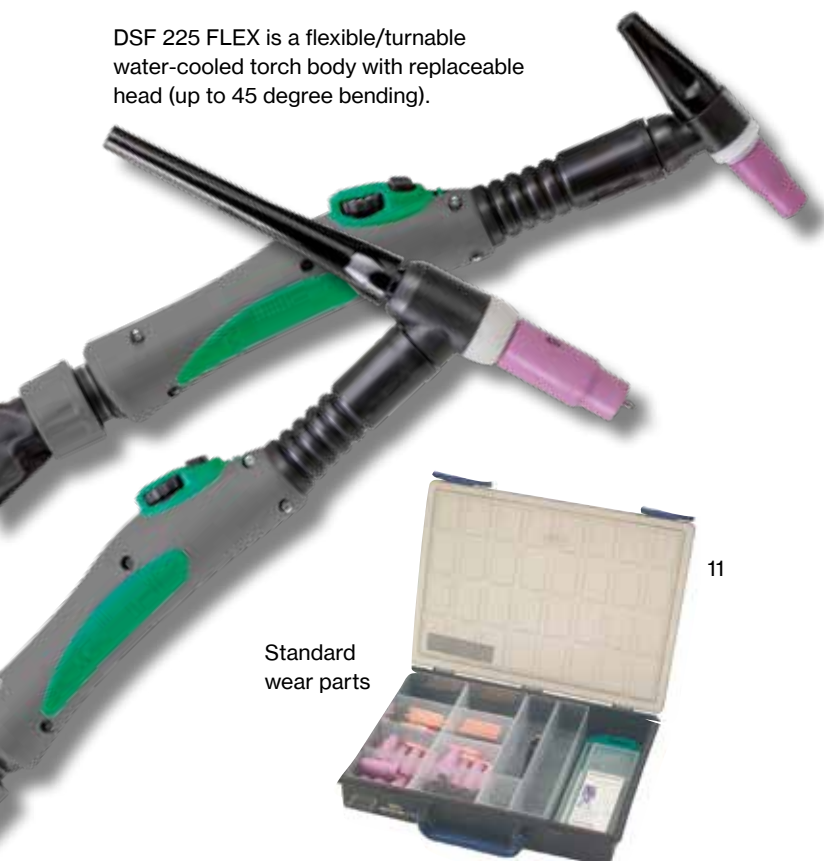


Pos. no.	Art. no.	WP24 Mini parts	Package quantity
1	80300311	WP24 insulator mini for gaslens	5
2	80330010	Electrode clamp 1.6mm	10
2	80330011	Electrode clamp 2.4mm	10
3	80410218	TIG 101/301 gas lens mini Ø1.6	5
3	80410219	TIG 101/301 gas lens mini Ø2.4	5
4	80440198	Gas nozzle for TIG101/301 mini #5 Ø8.0 / 5/16"	10
4	80440199	Gas nozzle for TIG101/301 mini #6 Ø9.6 / 3/8"	10



Special torch body/-head DSF 225 FLEX

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



11

Standard wear parts

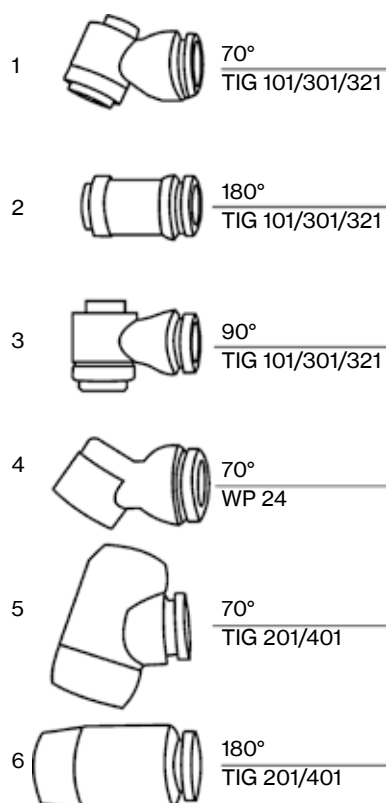


TIG 201/401

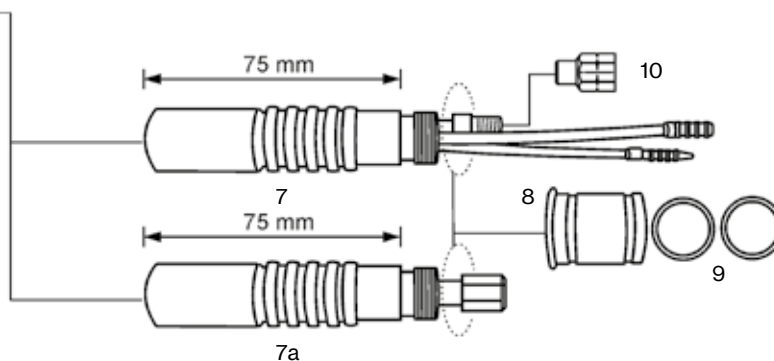


TIG 101/301/321

Art. no.	DSF FLEX
80392889*	TIG Ergo 201 DSF 225x3B 4m 7-pole
80392890*	TIG Ergo 201 DSF 225x3B 8m 7-pole
80492339*	TIG Ergo 301 DSF 225x3B 4m 7-pole
80492340*	TIG Ergo 301 DSF 225x3B 8m 7-pole
* = Incl. 3 pcs torch bodys (pos. 1 - 2 - 4)	



Pos.	Art. no.	Modification: TIG - DSF FLEX	TIG 101 Air	TIG 201 Air	TIG 221 Air	TIG 301 Water	TIG 321 Water
		Handle ID size	Ø15	Ø15	Ø20	Ø15	Ø20
1	80300016	Torch head small 70° TIG 101/301/321	X	X		X	X
2	80300191	Torch head small straight TIG 101/301/321	X	X		X	X
3	80300017	Torch head small 90° TIG 101/301/321	X	X		X	X
4	80300226	Torch head small 70° WP 24	X	X		X	X
5	80300187	Torch head big 70° TIG 201/401	X	X	X		X
6	80300190	Torch head big 180° TIG 201/401	X	X	X		X
7	80400307	FLEX torch body DSF 225				X	X
7a	80300249	FLEX torch body DSF 225, Air	X	X	X		X
8	80400312	Transition piece for 201HD-401			X		X
9	43572417	O-ring Ø17,3xØ2,4mm (2 pcs)			X		X
10	29420108	Adaptor TIG 321/401/451, left					X
11	81100228 81100238 81100230	Wearing part box TIG 101/301/321 1.6/2.4 Wearing part box TIG WP24/DSF225 Wearing part box TIG 201/221/401					



Wear parts according to individual requirements

As standard Migatron 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.

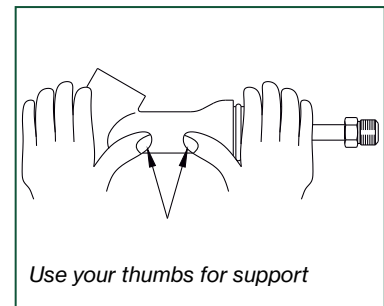
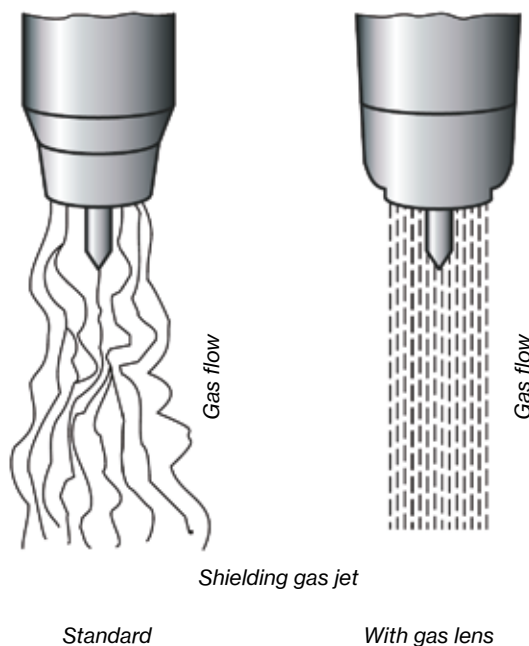
If you choose **standard wear parts**, the TIG torch body will be equipped with electrode holder and electrode clamp as well as ceramic gas nozzle. the function of which is to guide the shielding gas towards the weld zone so as to displace the atmospheric air.

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

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

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



Plasma cutting torches and wear parts

Zeta 60



Plasma cutting torch for Zeta 60, 6m hose
Art. no. 80690091

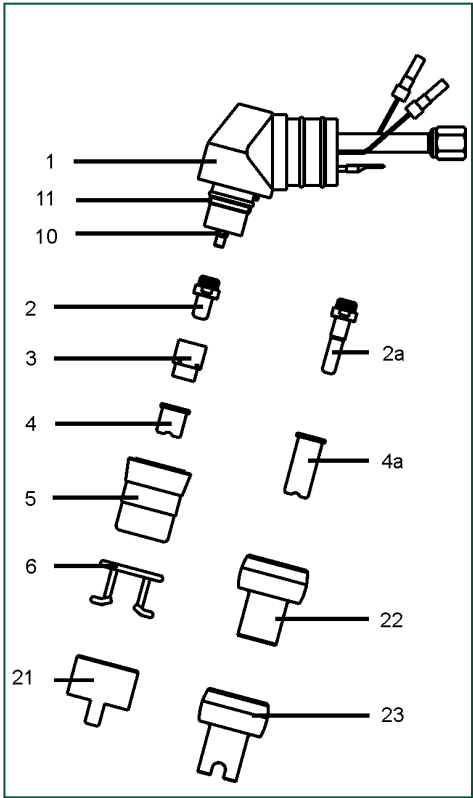


Wearing part box for Zeta 60
Art. no.81100233



Bevel tools attachment kit for Zeta 60
Art. no.80600220

Wear Parts for Plasma Cutting Handle



Pos. no.	Art. no.	Description	Min. order quantity
1	80650007	Torch body	1
2	80610009*	Electrode	10
2a	80610010	Electrode, long	1
3	80640119*	Insulating ring	1
4	80630024	Cutting nozzle, short Ø0.9	10
	80630023	Cutting nozzle, short Ø1.0	10
	80630022*	Cutting nozzle, short Ø1.1	10
	80630021	Cutting nozzle, short Ø1.2	10
4a	80630025	Cutting nozzle, long Ø0.9	1
	80630026	Cutting nozzle, long Ø1.0	1
	80630027	Cutting nozzle, long Ø1.1	1
	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

* = Pre-assembled as standard

Plasma cutting torches and wear parts

Zeta 100 / Zeta 100 Automation



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

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



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



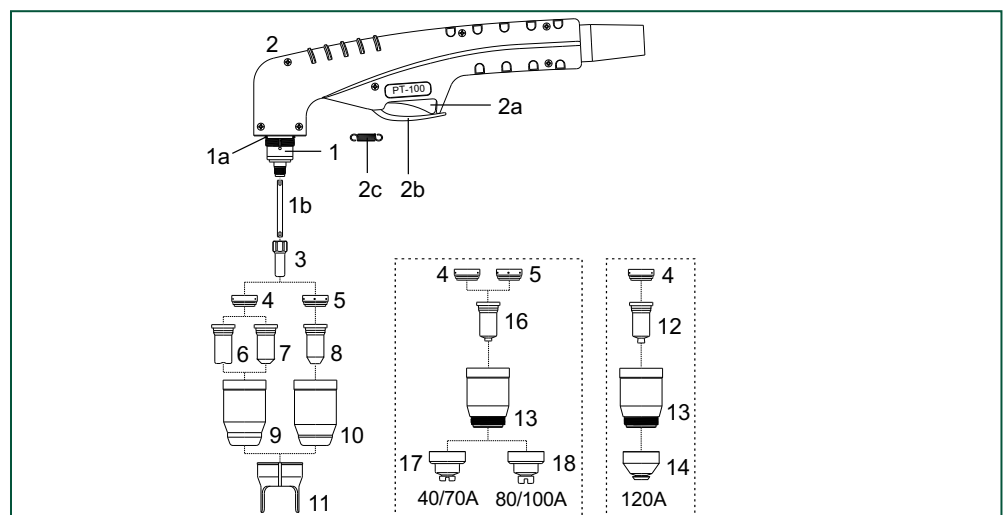
Wearing part box for Zeta 100
Art. no. 81100239



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

Pos no.	Art. no.	Description	Min. order quantity
1	80650010	Torch cutting head ZETA 100 manuel	1
	80650011	Torch cutting head ZETA 100 automat	1
1a	80600121	O-ring	1
1b	80600122	Cooling tube	1
2	80600130	Handle incl. switch	1
	80600132	Machine tube handle	1
2a	80600117	Switch	1
3	80610011*	Electrode	10
4	80600124	Gas diffuser 30-70A	1
5	80600125*	Gas diffuser 80-120A	1
6	80630204	Cutting nozzle, Ø0.9 30-40A	10
7.1	80630205	Cutting nozzle, Ø1.0 40-50A	10
7.2	80630206	Cutting nozzle, Ø1.1 50-60A	10
7.3	80630207	Cutting nozzle, Ø1.2 60-70A	10
8.1	80630208	Cutting nozzle, Ø1.4 80-90A	10
8.2	80630209*	Cutting nozzle, Ø1.5 90-100A	10
8.3	80630210	Cutting nozzle, Ø1.6 100-120A	10
9	80640113	Protection cap 30-70A	1
10	80640114*	Protection cap 80-120A	1
11	80600126*	Distance ring (2 legs)	1
12	80630211	Gouging tip	1
13	80640115	Protection cap	1
14	80640116	Protection cap, gouging	1
16.1	80630225	Contact cutting tip Ø1.0	10
16.2	80630226	Contact cutting tip Ø1.1	10
16.3	80630227	Contact cutting tip Ø1.2	10
16.4	80630228	Contact cutting tip Ø1.4	10
16.5	80630229	Contact cutting tip Ø1,6	10
17	80640117	Protection cap 40-70A, contact cutting	10
18	80640118	Protection cap 80-100A, contact cutting	10
	81100239	Wearing part box	1
	80600230	Bevel tools attachment kit	1

* = Pre-assembled as standard



Plasma welding torches



Assembly box for Plasma hoses

Art. no. 73800001



Extension hose PMW4A/300 8.0 m

Art. no. 74330800



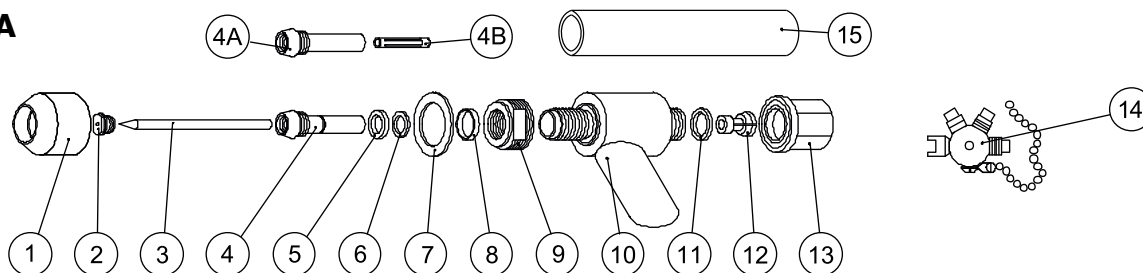
Hose PWM-4A/PWM300

Art. no.. 80922100 - 80922800

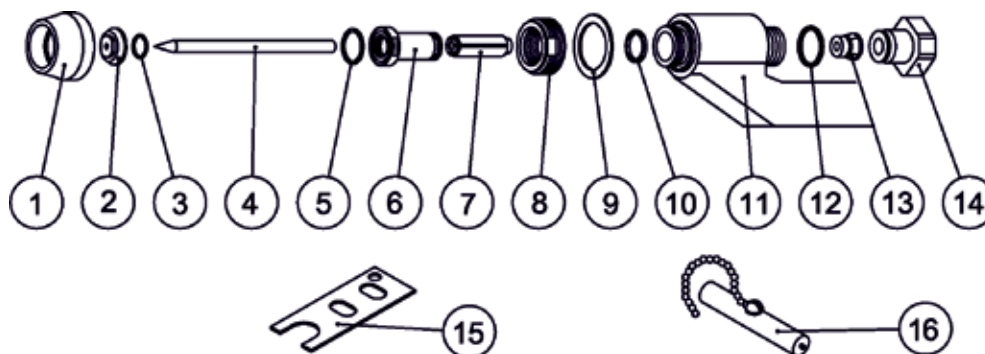
Art. no.	PWM-4A / PWM-300	Comments
84022578	PWM-4A1 180° w/o hose	
84022847	PWM-300 180° w/o hose	
80922100	Hose PWM-4A/PWM300 1.0 m	
80922150	Hose PWM-4A/PWM300 1.5 m	
80922200	Hose PWM-4A/PWM300 2.0 m	
80922300	Hose PWM-4A/PWM300 3.0 m	
80922350	Hose PWM-4A/PWM300 3.5 m	
80922400	Hose PWM-4A/PWM300 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	

Wear parts for plasma welding torches

PWM-4A



PWM-300



Pos. no.	Art. no.	PWM-4A
1	84084064	Ceramic nozzle std. f/4A
2	84091847	Nozzle std. 1.58 100A f/4A
	84091848	Nozzle std. 2.37 180A f/4A
	84091849	Nozzle std. 3.18 220A f/4A
	84091889	Nozzle 40A long
	84091890	Nozzle 90A long
	84091891	Nozzle 150A long
	84091892	Nozzle 180A long
3	80361396	Tungsten electrode WL20 Ø4.8x91mm blue point 20°
	80361397*	Tungsten electrode WL20 Ø4.8x111mm blue point 20°
4	84084012	Gas guidance & distributor 4A
4A	84084011	Gas guide f/4A
4B	84092204	Gas distributor white f/PWM-4A
5	84080560	O-ring f/4A (red)
6	84080528	O-ring f/4A & 6A
7	84084069	Washer f/ceramic nozzle 4A
8	84084024	Collar f/4A
9	84084040	Gas lens f/4A
10	84084014	Torch body PWH-4A 70°
	84084054	Torch body PWM-4A1 180°
11	84080530	O-ring f/4A
12	84091876	Electrode tong f/PWM-4A
13	84084158	Electrode cap f/4A
	84091877	Back cup PWM-4A long
14	84091873	Adjusting device

*Requires use of pos. 13 item no. 84091877

Pos. no.	Art. no.	PWM-300
1	84086542	Ceramic nozzle f/PWM-300 & 6A
2	84086575	Nozzle 2.36 200A f/300
	84086582	Nozzle 2.87 250A f/300
	84086572	Nozzle 3.18 300A f/300
	84084370	Nozzle 200AMP-LG PWM-300
	84084371	Nozzle 250AMP-LG PWM-300
	84084372	Nozzle 300 AMP-LG PWM-300
3	84092863	O-ring PWM-6A
4	80361396	Tungsten electrode WL20 Ø4.8x91mm blue point 20°
5	84092956	O-ring
6	84086509	Gas guide
7	84086651	Gas distributor white f/300
8	84086541	Adaptor f/ceramic nozzle
9	84086512	Washer
10	84080531	O-ring Ø25 x 0,15"
11	84086649	Torch body PWM-300
12	84083487	O-ring f/6A & PWM-300
13	84086650	Elektrode tong f/PWM-300
14	84086654	Electrode cap f/300
15	84086517	Key f/nozzle PWM-300
16	84086653	Adjusting device f/PWM-300

Tungsten electrodes

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

Plasma						
Art. no.	Color	Alloy	Dimension, mm	DC Amp.	AC Amp.	Min. order quantity
80361396	Blue	WL20	4.8 x 91	500-675	330-460	1
80361397	Blue	WL20	4.8 x 111	500-675	330-460	1

Migatron'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.

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.



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.



Tungsten electrode WL20
Ø4.8x91mm Blue point 20°
 Art. no.80361396

Wear parts in retail blister packs

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

Blister packs are intended for customers requiring small quantity purchases.

Please contact Migatronic for more information



Art. no.	Kits wire feed rolls	Min. order quantity
73949039	2-roll 0.8	1
73949040	2-roll 1.0	1
73949083	MWF 0.6 V-groove black/white	1
73949054	MWF 0.8 V-groove white	1
73949055	MWF 1.0 V-groove blue	1
73949056	MWF 1.0 U-groove blue	1
73949057	MWF 1.2 V-groove red	1
73949058	MWF 1.2 U-groove red	1

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

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

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

Wear parts in retail blister packs

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

Art. no.	Insulator TIG	Min. order quantity
80309219	For TIG101/301 x2	5
80309189	For TIG 201/401 x2	5

Art. no.	Collet body TIG	Min. order quantity
80419201	For Ø1.0 TIG101/301	5
80419202	For Ø1.6 TIG101/301 x 2	5
80419203	For Ø2.4 TIG101/301 x 2	5
80419204	For Ø3.2 TIG101/301 x 2	5
80319000	For Ø1.6 TIG201/401 x 2	5
80319001	For Ø2.4 TIG201/401 x 2	5
80319002	For Ø3.2 TIG201/401 x 2	5

Art. no.	Electrode collet TIG	Min. order quantity
80439211	For Ø1.0 mm CuCr x 2, TIG 101/301/321	1
80439212	For Ø1.6 mm CuCr x 2, TIG 101/301/321	5
80439213	For Ø2.4 mm CuCr x 2, TIG 101/301/321	5
80439214	For Ø3.2 mm CuCr x 2, TIG 101/301/321	1
80439222	For Ø1.6 mm brass x 2, TIG 101/301/321	1
80439223	For Ø2.4 mm brass x 2, TIG 101/301/321	1
80439224	For Ø3.2 mm brass x 2, TIG 101/301/321	1
80339111	For Ø1.6 mm CuCr x 2, 201/221/401	5
80339112	For Ø2.4 mm CuCr x 2, 201/221/401	5
80339113	For Ø3.2 mm CuCr x 2, 201/221/401	5

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

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

Wear parts in retail blister packs

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

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

Art. no.	Cutting tips Plasma	Min. order quantity
80639024	Ø0.9 for CUT40/60 x5	2
80639023	Ø1.0 for CUT40/60 x5	2
80639022	Ø1.1 for CUT40/60 x5	2
80639021	Ø1.2 for CUT40/60 x5	2
80639025	Ø0.9 for CUT40/60x5, long	2
80639026	Ø1.0 for CUT40/60x5, long	2
80639027	Ø1.1 for CUT40/60x5, long	2
80639028	Ø1.2 for CUT40/60x5, long	2
80639204	Ø0.9 for Zeta100 x 5	2
80639205	Ø1.0 for Zeta100 x 5	2
80639206	Ø1.1 for Zeta100 x 5	2
80639207	Ø1.2 for Zeta100 x 5	2
80639208	Ø1.4 for Zeta100 x 5	2
80639209	Ø1.5 for Zeta100 x 5	2
80639210	Ø1.6 for Zeta100 x 5	2

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

Art. no.	Plasma	Min. order quantity
80619009	Electrode for CUT 45-63 x 2	5
80649119	Insulation ring for CUT45/63x5	1
80619011	Electrode for Zeta100 x 5	5
80609124	Gas distributor 30/70 for Zeta100 x 2	5
80609122	Cooling tube for Zeta100 x 2	5
80639211	Gouging tip for Zeta100 x 2	5
80609118	Double pointed x 2 for CUT40/60	5
80609119	Spacer Ø12mm x 2 for CUT40/60	5
80609120	Spacer 4-pointed Ø12mm x 2 for CUT40/60	5
80609109	Distance ring for CUT 45/63 x 2	5

Art. no.	Lenses for welding helmets	Min. order quantity
81919058	DIN 10 60 x 110 mm	1
81919057	DIN11 60 x 110 mm	1
81919051	Magnifying lens 51 x 108 mm, +1.0	1
81919046	Magnifying lens 51 x 108 mm, +1.5	1
81919047	Magnifying lens 51 x 108 mm, +2.0	1
81919048	Magnifying lens 51 x 108 mm, +2.5	1

Art. no.	Miscellaneous	Min. order quantity
18118002	Dinse coupling socket 35-70 mm²	1
18119102	Extension socket 35-50 mm² 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

Migatronic A/S
Aggersundvej 33
9690 Fjerritslev
Denmark

Telephone: (+45) 96 500 600
Fax: (+45) 96 500 601
sales@migatronic.dk

MIGATRONIC