9-TW
gas-cooled

Different modular switch units available:
single push-button
double push-button
up/down (4 push-buttons)
single push-button
with potentiometer



9F-TW
gas-cooled

9V-TW
gas-cooled



9FV-TW
gas-cooled



110 Amp./100% duty cycle (DC)
95 Amp./100% duty cycle (AC)

HSN 559

9-TW / 9F-TW / 9V-TW / 9FV-TW

gas-cooled

Equipment: **A** standard
B gas lens
C gas lens medium size
D gas lens jumbo





Kir Royal argon nozzle
fits equipment line **B**
with firmly built-in sieves
for perfect gas circulation



20930016
for 1,0 - 3,2



A

Insulator gasket
20089011

Collet L25mm
20□2502 **for** 1,0/1,6/2,4/3,2
□ **Please fill in size**



Collet body
2096□02 **for** 1,0/1,6/2,4/3,2
□ **Please fill in size**



Ceramic nozzle L30mm
for standard collet body
Please state size
Also available in special lengths
L48mm / L63mm / L89mm

B

Insulator gasket
20089011



Collet L25mm
20□2502 **for** 1,0/1,6/2,4/3,2
□ **Please fill in size**



Gas lens
2096□11 **for** 1,0/1,6/2,4/3,2
□ **Please fill in size**



Ceramic nozzle L25,5mm
for gas lens
Please state size
Also available in special lengths
L35mm / L72mm

C



Gas lens insulator medium size
20089031



Collet L40mm
20□4011 **for** 1,0/1,6/2,4/3,2
□ **Please fill in size**



Gas lens medium size
2096□31 **for** 1,0/1,6/2,4/3,2
□ **Please fill in size**



Ceramic nozzle L42mm
for gas lens medium size
Please state size
Also available in special length
L76mm

D



Gas lens insulator jumbo
20089021



Collet L40mm
20□4011 **for** 1,0/1,6/2,4/3,2
□ **Please fill in size**



Gas lens jumbo
2096□21 **for** 1,0/1,6/2,4/3,2
□ **Please fill in size**

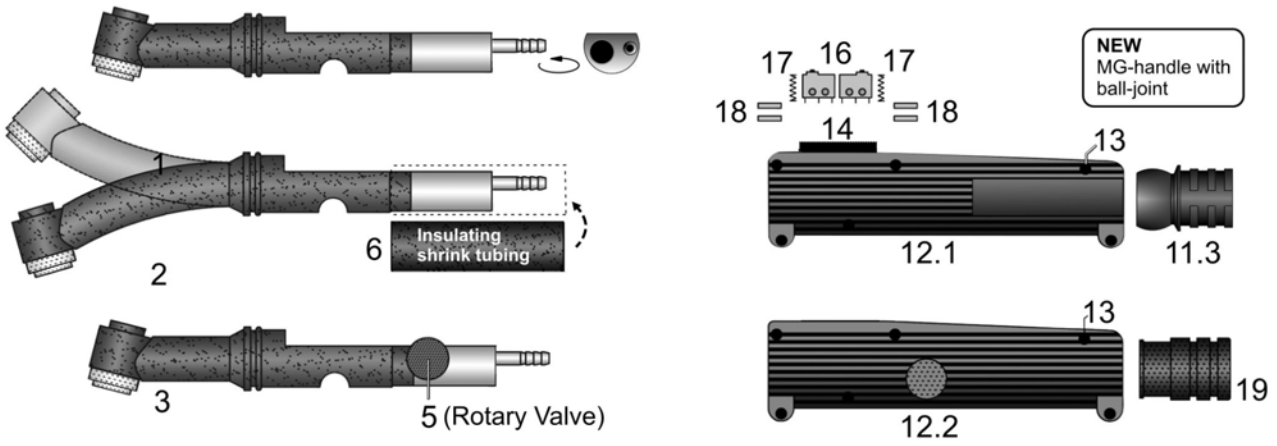


Ceramic nozzle L48mm
for gas lens jumbo
Please state size

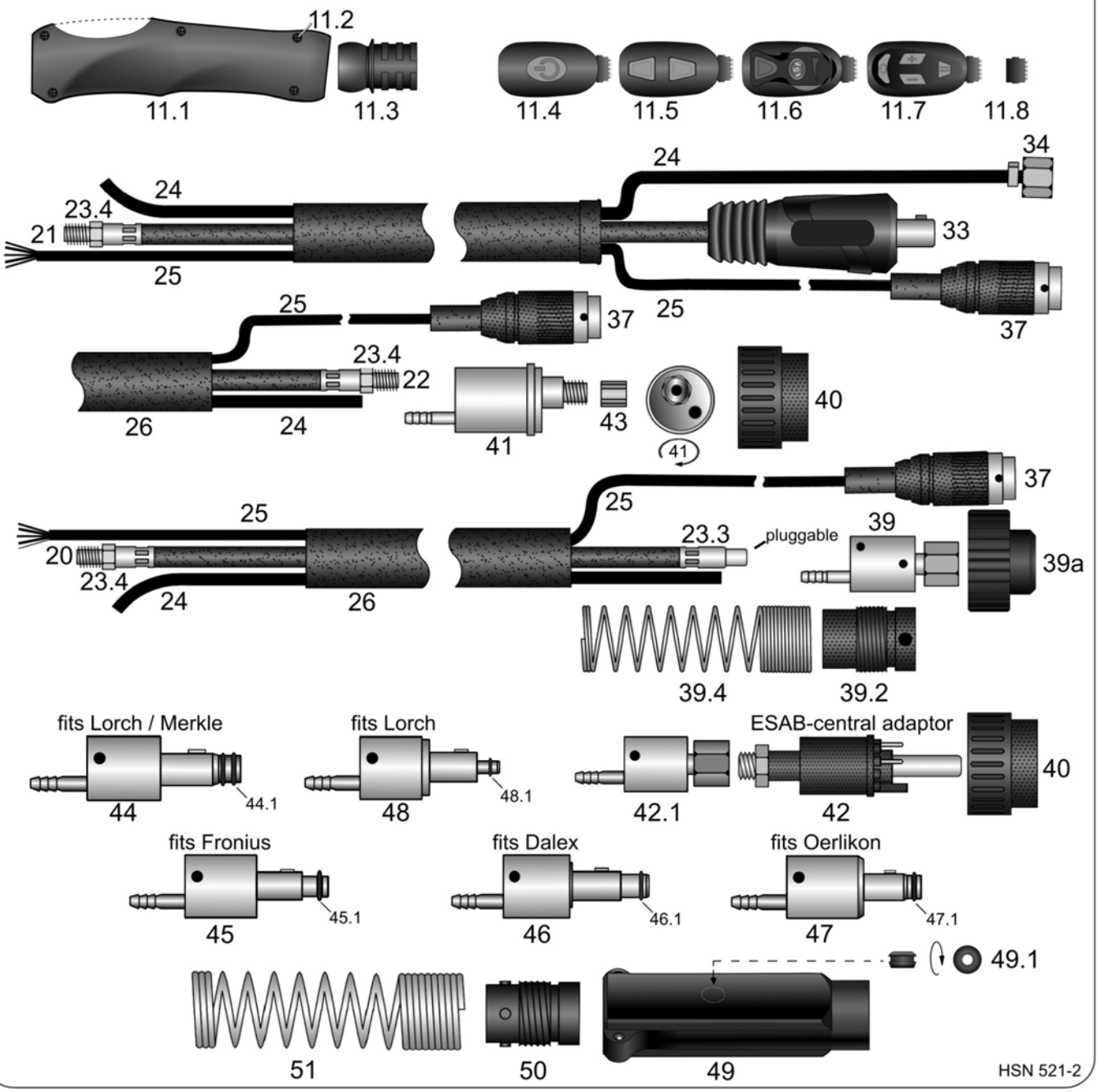
HSN 717-4

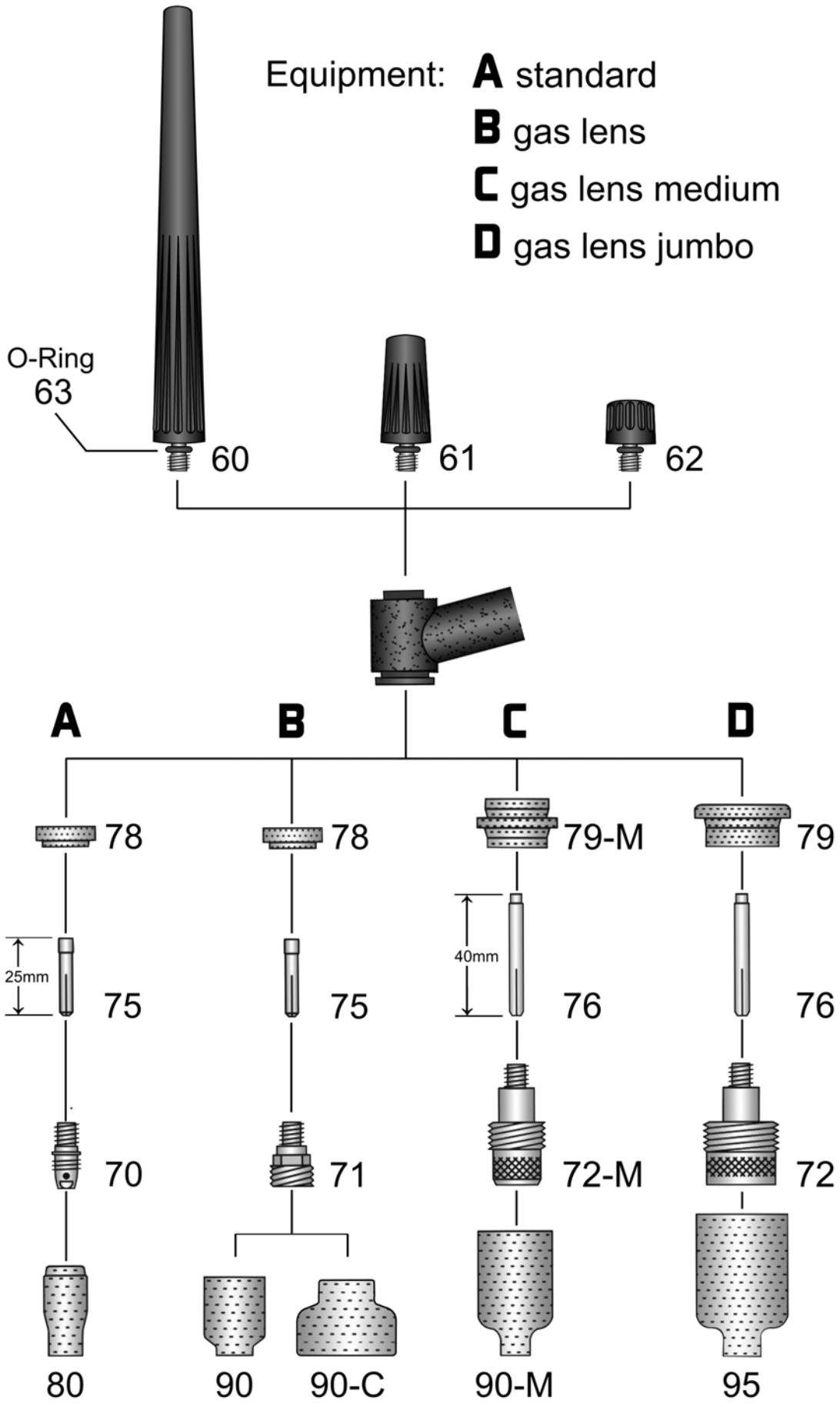
9-TW gas-cooled

110 Ampere at 100% duty cycle (DC) - 95 Ampere at 100% duty cycle (AC)



Forma WIG-handle with ball joint - different modular switch units - special switching modules on request




Equipment:
A standard
B gas lens
C gas lens medium
D gas lens jumbo
O-Ring
63
60
61
62
A
B
C
D
78
78
79-M
79
25mm
40mm
75
75
76
76
70
71
72-M
72
80
90
90-C
90-M
95
HSN 102-1

9-TW

Welding-torch TIG gas-cooled

110A at 100% duty cycle (DC) - 95A at 100% duty cycle (AC)

	Art.-No.	
		Torches with first meter leather hose. Machine side separate connections.
		Torches and cable assemblies can be produced in excess lengths. Please find the different options and surcharges in the attachment "Custom made products" appendix C. We produce torches for more than 40 different brands of machines with different connection systems.
	90500401	Torch 9-TW / 4m 25mm²
	90500801	Torch 9-TW / 8m 25mm²
	90600401	FLEX-torch 9F-TW / 4m 25mm² neck flexible
	90600801	FLEX-torch 9F-TW / 8m 25mm² neck flexible
	90700401	Valve torch 9V-TW / 4m 25mm²
	90700801	Valve torch 9V-TW / 8m 25mm²
		TIG-spare cable assemblies in different qualities, machine side with separate connections and Tuchel plug, or, if ordered so, with the following connection systems:
	wig92401	TIG-spare cable assembly gas-cooled 4m - please state desired design!
	wig92801	TIG-spare cable assembly gas-cooled 8m - please state desired design!
		The following surcharges for machine side connections are only to find prices quickly. Please use our catalogue "TIG machine side connections" to find a "T"number which identifies a machine side connection system completely.
	29000101	Surcharge: machine side with EURO central adapter
	29002005	Surcharge: machine side power/gas plug fits Lorch/Merkle with 2 O-rings
	29002004	Surcharge: machine side power/gas plug fits Fronius with 1 O-ring
	29002006	Surcharge: machine side power/gas plug fits Dalex with 1 O-ring
	29002107	Surcharge: machine side power/gas plug fits Oerlikon with 1 O-ring
	29002002	Surcharge: machine side power/gas plug fits Lorch SK35 + gas-nipple
	29000112	Surcharge: machine side fits ESAB central adapter, 4 pins installed at position 3,4,5,6
		Please note that there might be additional charges for special control line plugs. See appendix D.
1	90591001	Torch body 9-TW
2	90691001	Torch body 9F-TW neck flexible (FLEX)
3	90791001	Torch body with valve 9V-TW
5	90789001	Rotary valve TW complete with O-rings
N.i.	17389013	O-ring ID3-W1,5mm fits rotary valve TW inside (material hepthon 951)
N.i.	17389012	O-ring ID4,6-W2mm fits rotary valve TW outside (material hepthon 951)
6	18050002	Ignition insulating hose L75mm / ID32mm down to ID16mm
11.1	91914601	Forma TIG handle with screws, ball joint, without modular switch unit
11.2	91914602	Forma screw for handle
11.3	91914603	Forma hose bracket with ball joint ID21,5mm (also fits MG-handle)
11.4	91914611	Forma modular switch unit: 1 button with connecting adapter
11.5	91914621	Forma modular switch unit: 2 buttons with connecting adapter
11.6	91914631	Forma modular switch unit: 1 button + potentiometer (10k) with connecting adapter
11.7	91914641	Forma modular switch unit: 2 buttons + up/down (4 switches) with connecting adapter
11.8	91914651	Forma connecting adapter fits control line to modular switch unit
N.i.	91914661	Forma switch module safety nipple
N.i.	91914671	TW-steadying adapter, anti turn locking for TW-torch bodies
12.1	91914061	MG-handle with ball joint, push-button, 2 return springs, 2 microswitches and 4 cylindrical pins

9-TW

Welding-torch TIG gas-cooled

110A at 100% duty cycle (DC) - 95A at 100% duty cycle (AC)

	Art.-No.	
12.2	91914033	MG-handle fits TW valve torch
13	91914421	MG-tapping screw
14	91915002	MG-push button
16	91914121	MG-microswitch
17	91914221	MG-return spring
18	91914321	MG-cylindrical pin
19	91915001	MG-hose bracket without ball joint ID19,5mm
20	17942403	Power cable 25mm² 9/17-TW / 4m fits power/gas plugs + power gas junction (pgj)
20	17942803	Power cable 25mm² 9/17-TW / 8m fits power/gas plugs + power gas junction (pgj)
21	17942402	Power cable 25mm² 9/17-TW / 4m with SK25 or SK35 <--- please state!
21	17942802	Power cable 25mm² 9/17-TW / 8m with SK25 or SK35 <--- please state!
22	17942404	Power cable 25mm² 9/17-TW / 4m fits EURO central adapter (OT-M10x1)
22	17942804	Power cable 25mm² 9/17-TW / 8m fits EURO central adapter (OT-M10x1)
23.3	22089056	TIG-Power cable connector pluggable ID7,2mm fits 25mm² for power/gas plugs + pgj
23.4	22089053	TIG-Power cable connector OT-M10x1 ID7,2mm fits 25mm²
		Reel goods: Prices are per meter and only applicable for purchasing of complete rolls
24	41500001	Meter ST 70 PVC hose ID4,0-W1,5mm black for gas (100m)
24	41500005	Meter HT 130 TPE hose ID4,0-W1,5mm grey for gas (100m)
N.i.	91902701	Meter control line 3x0,34mm² shielded black (100m)
N.i.	91902711	Meter control line 3x0,5mm² green (100m)
25	91902721	Meter control line 5x0,25mm² grey (100m)
26	20150002	Meter neoprene protective hose ID20mm black (40m)
N.i.	91915004	Leather protective hose ID22mm / 1 meter long
N.i.	91915007	Leather protective hose ID22mm / 1 meter long with ball joint and hose connector
N.i.	91915013	Hose connector leather protective hose / protection hose ID22,5mm (black) with slot, OD with grooves
33	91918201	Powercable-plug SK-25 bayonet connection AD8mm
33	91918301	Powercable-plug SK-35 bayonet connection AD13mm
34	91901501	Coupling nut IT-G1/4"
N.i.	91901211	Hose connector 4mm fits coupling nut R1/4""
37	91904101	Plug 3-poles Tuchel with bayonet-catch
37	91904111	Plug 5-poles Tuchel with bayonet-catch
		More control line plugs see appendix D
39	91918521	TIG power gas junction (pgj) with connection: IT-G1/8"
39	91918522	TIG power gas junction (pgj) with connection: IT-G1/4"
39	91918523	TIG power gas junction (pgj) with connection: IT-G3/8"
39a	91903503	Insulating sleeve with inner hexagonal shape A/F17 for TIG power-connection IT-G1/4"
N.i.	91918551	Attachment screw (plastic) M5x12mm for power gas junction (pgj)
N.i.	91918552	3 grommets for attachment screws M5x12mm power gas junction (pgj)
N.i.	91918542	Section of insulating hose ID35-L80mm power gas junction (pgj)
39.2	91918541	TIG spring socket small (without knobs)

9-TW

Welding-torch TIG gas-cooled

110A at 100% duty cycle (DC) - 95A at 100% duty cycle (AC)

	Art.-No.	
39.4	91918531	Cable support spring L125mm for power gas junction (pgj)
40	91900701	Terminal nut insulated fits EURO central adapter
41	91900122	TIG central adapter EURO (fits separate lines)
42	91900301	TIG central adapter identical ESAB, 4 contact pins at position 3,4,5,6
42.1	91918561	TIG power gas junction (pgj) fits ESAB central adapter
43	91900901	Swivel nut IT-M10x1 (rounded edges) fits EURO central adapter
44	9190411n	Power/gas plug fits Lorch / Merkle with 2 O-rings / power connection like pgj
44.1	81600001	O-ring ID8-W1,6mm fits Lorch/Merkle
45	91918326	Power/gas plug fits Fronius with 1 O-ring / power connection like pgj
45.1	62190001	O-ring ID6,2-W1,9mm fits Fronius
46	9190416e	Power/gas plug fits Dalex with 1 O-ring / power connection like pgj
46.1	63240001	O-ring ID6,3-W2,4mm fits Dalex
47	9190422n	Power/gas plug fits Oerlikon with 1 O-ring / power connection like pgj
47.1	60717801	O-ring ID6,07-W1,78mm fits Oerlikon
48	9190421n	Power/gas plug fits Lorch Sk35 + gas-nipple / power connection like pgj
48.1	91900801	O-ring ID4-W1mm fits gas-nipple EURO central adapter
N.i.	91900552	TIG cable support long (like MIG-MAG) with screws fits ESAB central adapter
N.i.	91900554	Attachment screw M4x8mm fits ESAB central adapter
49	91900556	TIG cable support short with screws (fits gas-cooled)
N.i.	91920702	Screw M3x11,5mm fits Ratio/Industry/RAUCH handle and cable support
N.i.	91920703	M3 mounting socket fits Ratio/Industry/RAUCH handle and cable support
N.i.	91900602	Screw M4x6mm fits TIG cable support short
49.1	91901012	Reduction-eyelet (rubber) from ID10,5mm to ID5mm fits TIG cable support short
50	91912801	Spring-socket fits cable support
51	91912601	Cable support spring
60	20091321	Holch back cap long 9-20 41V24/41V24-D
61	20091311	Holch back cap medium 9-20 41V35/41V35-D
62	20091301	Holch back cap short 9-20 41V33/41V33-D
63	20089001	O-ring ID4,6-W2mm for back cap black
70	20961002	Collet body 9-20 / 1,0 13N26
70	20961602	Collet body 9-20 / 1,6 13N27
71	20961011	Gas lens 9-20 / 1,0 45V42
71	20961611	Gas lens 9-20 / 1,6 45V43
72-M	20961031	Gas lens medium 9-20 / 1,0
72-M	20961631	Gas lens medium 9-20 / 1,6
72	20961021	Jumbo-Gas lens 9-20 / 1,0 45V0204S
72	20961621	Jumbo-Gas lens 9-20 / 1,6 45V116S
		Brazen collets L-25mm suitable equipment line (A) standard collet body suitable equipment line (B) gas lens
75	20102502	Collet L25mm 9-20 / 1,0 13N21
75	20162502	Collet L25mm 9-20 / 1,6 13N22

9-TW

Welding-torch TIG gas-cooled

110A at 100% duty cycle (DC) - 95A at 100% duty cycle (AC)

	Art.-No.	
		Brazen collets L-40mm suitable equipment line (C) gas lens midsize suitable equipment line (D) gas lens jumbo
76	20104011	Collet L40mm 9-20 / 1,0 13N21L
76	20164011	Collet L40mm 9-20 / 1,6 13N22L
78	20089011	PTFE-isolator gasket 9-20
79-M	20089031	PTFE-gas lens isolator medium 9-20
79	20089021	PTFE-gas lens isolator Jumbo 9-20 54N63-20
		Ceramic gas nozzles in different lengths suitable equipment line (A) standard collet body
80	20930401	Ceramic gas nozzle L30mm / Gr. 4 13N08 (pu=10pieces)
80	20930501	Ceramic gas nozzle L30mm / Gr. 5 13N09 (pu=10pieces)
80	20930601	Ceramic gas nozzle L30mm / Gr. 6 13N10 (pu=10pieces)
80	20930701	Ceramic gas nozzle L30mm / Gr. 7 13N11 (pu=10pieces)
80	20930801	Ceramic gas nozzle L30mm / Gr. 8 13N12 (pu=10pieces)
80	20930101	Ceramic gas nozzle L30mm / Gr.10 13N13 (pu=10pieces)
N.i.	20930304	Ceramic gas nozzle L48mm / Gr. 3 796F70 (pu=10pieces)
N.i.	20930404	Ceramic gas nozzle L48mm / Gr. 4 796F71 (pu=10pieces)
N.i.	20930504	Ceramic gas nozzle L48mm / Gr. 5 796F72 (pu=10pieces)
N.i.	20930604	Ceramic gas nozzle L48mm / Gr. 6 796F73 (pu=10pieces)
N.i.	20930306	Ceramic gas nozzle L63mm / Gr. 3 796F74 (pu=10pieces)
N.i.	20930406	Ceramic gas nozzle L63mm / Gr. 4 796F75 (pu=10pieces)
N.i.	20930506	Ceramic gas nozzle L63mm / Gr. 5 796F76 (pu=10pieces)
N.i.	20930606	Ceramic gas nozzle L63mm / Gr. 6 796F77 (pu=10pieces)
N.i.	20930408	Ceramic gas nozzle L89mm / Gr. 4 796F79 (pu=10pieces)
		Ceramic gas nozzles in different lengths suitable equipment line (B) gas lens
90	20931401	Ceramic gas nozzle for gas lens L25,5mm 9-20 / Gr.4 53N58 (pu=10pieces)
90	20931501	Ceramic gas nozzle for gas lens L25,5mm 9-20 / Gr.5 53N59 (pu=10pieces)
90	20931601	Ceramic gas nozzle for gas lens L25,5mm 9-20 / Gr.6 53N60 (pu=10pieces)
90	20931701	Ceramic gas nozzle for gas lens L25,5mm 9-20 / Gr.7 53N61 (pu=10pieces)
90	20931801	Ceramic gas nozzle for gas lens L25,5mm 9-20 / Gr.8 53N61-S (pu=10pieces)
N.i.	20931404	Ceramic gas nozzle for gas lens L35mm 9-20 / Gr.4 53N58L (pu=10pieces)
N.i.	20931504	Ceramic gas nozzle for gas lens L35mm 9-20 / Gr.5 53N59L (pu=10pieces)
N.i.	20931604	Ceramic gas nozzle for gas lens L35mm 9-20 / Gr.6 53N60L (pu=10pieces)
N.i.	20931704	Ceramic gas nozzle for gas lens L35mm 9-20 / Gr.7 53N61L (pu=10pieces)
N.i.	20931804	Ceramic gas nozzle for gas lens L35mm 9-20 / Gr.8 53N61SL (pu=10pieces)
N.i.	20931406	Ceramic gas nozzle for gas lens L72mm 9-20 / Gr.4 53N58XL (pu=10pieces)
N.i.	20931506	Ceramic gas nozzle for gas lens L72mm 9-20 / Gr.5 53N59XL (pu=10pieces)
N.i.	20931606	Ceramic gas nozzle for gas lens L72mm 9-20 / Gr.6 53N60XL (pu=10pieces)
N.i.	20931706	Ceramic gas nozzle for gas lens L72mm 9-20 / Gr.7 53N61XL (pu=10pieces)
N.i.	20931806	Ceramic gas nozzle for gas lens L72mm 9-20 / Gr.8 53N61SXL (pu=10pieces)
90-C	20930016	Ceramic nozzle for gas lens Kir Royal 9-20 / fits tuncsten electrode up to 3,2mm

9-TW

Welding-torch TIG gas-cooled

110A at 100% duty cycle (DC) - 95A at 100% duty cycle (AC)

	Art.-No.	
		Ceramic gas nozzles in different lengths suitable equipment line (C) midsize gas lens
90-M	22093041	Gas nozzle for gas lens L42mm / Gr.4 54N18 (pu=10pieces)
90-M	22093051	Gas nozzle for gas lens L42mm / Gr.5 54N17 (pu=10pieces)
90-M	22093061	Gas nozzle for gas lens L42mm / Gr.6 54N16 (pu=10pieces)
90-M	22093071	Gas nozzle for gas lens L42mm / Gr.7 54N15 (pu=10pieces)
90-M	22093081	Gas nozzle for gas lens L42mm / Gr.8 54N14 (pu=10pieces)
90-M	22093111	Gas nozzle for gas lens L42mm / Gr.11 54N19-11 (pu=10pieces)
90-M	22093121	Gas nozzle for gas lens L42mm / Gr.12 54N19 (pu=10pieces)
N.i.	22093054	Gas nozzle for gas lens L76mm / Gr.5 54N17L (pu=10pieces)
N.i.	22093064	Gas nozzle for gas lens L76mm / Gr.6 54N16L (pu=10pieces)
N.i.	22093074	Gas nozzle for gas lens L76mm / Gr.7 54N15L (pu=10pieces)
N.i.	22093084	Gas nozzle for gas lens L76mm / Gr.8 54N14L (pu=10pieces)
		Ceramic gas nozzles jumbo in different lengths suitable eqipment line (D) gas lens jumbo
95	22093066	Jumbo gas nozzle L48mm / Gr.6 57N75 (pu=10pieces)
95	22093086	Jumbo gas nozzle L48mm / Gr.8 57N74 (pu=10pieces)
95	22093106	Jumbo gas nozzle L48mm / Gr.10 53N88 (pu=10pieces)
95	22093126	Jumbo gas nozzle L48mm / Gr.12 53N87 (pu=10pieces)
N.i.	22093067	Jumbo gas nozzle L73mm / Gr.6 57N75L (pu=10pieces)
N.i.	22093087	Jumbo gas nozzle L73mm / Gr.8 57N74L (pu=10pieces)
N.i.	22093107	Jumbo gas nozzle L73mm / Gr.10 53N88L (pu=10pieces)
N.i.	22093127	Jumbo gas nozzle L73mm / Gr.12 53N87L (pu=10pieces)
		Top quality tungsten electrodes in 8 different qualities, see appendix A.