

# **ABL 220-TW**

gas-cooled

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

# **ABL 220F-TW**

gas-cooled

# **ABL 220V-TW**

gas-cooled

# **ABL 220FV-TW**

gas-cooled

240 Amp./100% duty cycle (DC)  
200 Amp./100% duty cycle (AC)



# ABL 220-TW / ABL 220F-TW / ABL 220V-TW / ABL 220FV-TW gas-cooled



O-ring black ID9-W2,5mm included  
17089011



Equipment: **A** standard  
**B** gas lens  
**C** gas lens jumbo  
**D** standard retro 220

**A**

**B**

**C**

**D**

Gas lens insulator  
17089021

Gas lens insulator jumbo  
17089031

Ceramic gas nozzle gasket  
22089071

Collet L52mm  
17□□5202 for 1,0/1,6/2,4  
18□□5202 for 3,2/4,0  
□□ Please fill in size

Collet L52mm  
17□□5202 for 1,0/1,6/2,4  
18□□5202 for 3,2/4,0  
□□ Please fill in size

Collet L52mm  
17□□5202 for 1,0/1,6/2,4  
18□□5202 for 3,2/4,0  
□□ Please fill in size

Collet L40mm ABL 220  
220□□402 for 1,0/1,6/2,4/3,2  
□□ Please fill in size

Collet body  
1796□□02 for 1,0/1,6/2,4  
1896□□02 for 3,2/4,0  
□□ Please fill in size

Gas lens  
1796□□11 for 1,0/1,6/2,4  
1896□□11 for 3,2/4,0  
□□ Please fill in size

Gas lens jumbo  
1796□□21 for 1,0/1,6/2,4  
1896□□21 for 3,2/4,0  
□□ Please fill in size

Copper Collet body  
ABL 220 up to 3,2mm  
22096001

Ceramic nozzle L47mm  
for standard collet body  
**Please state size**  
Also available in special length  
L76mm

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

Ceramic nozzle L48mm  
for gas lens jumbo  
**Please state size**

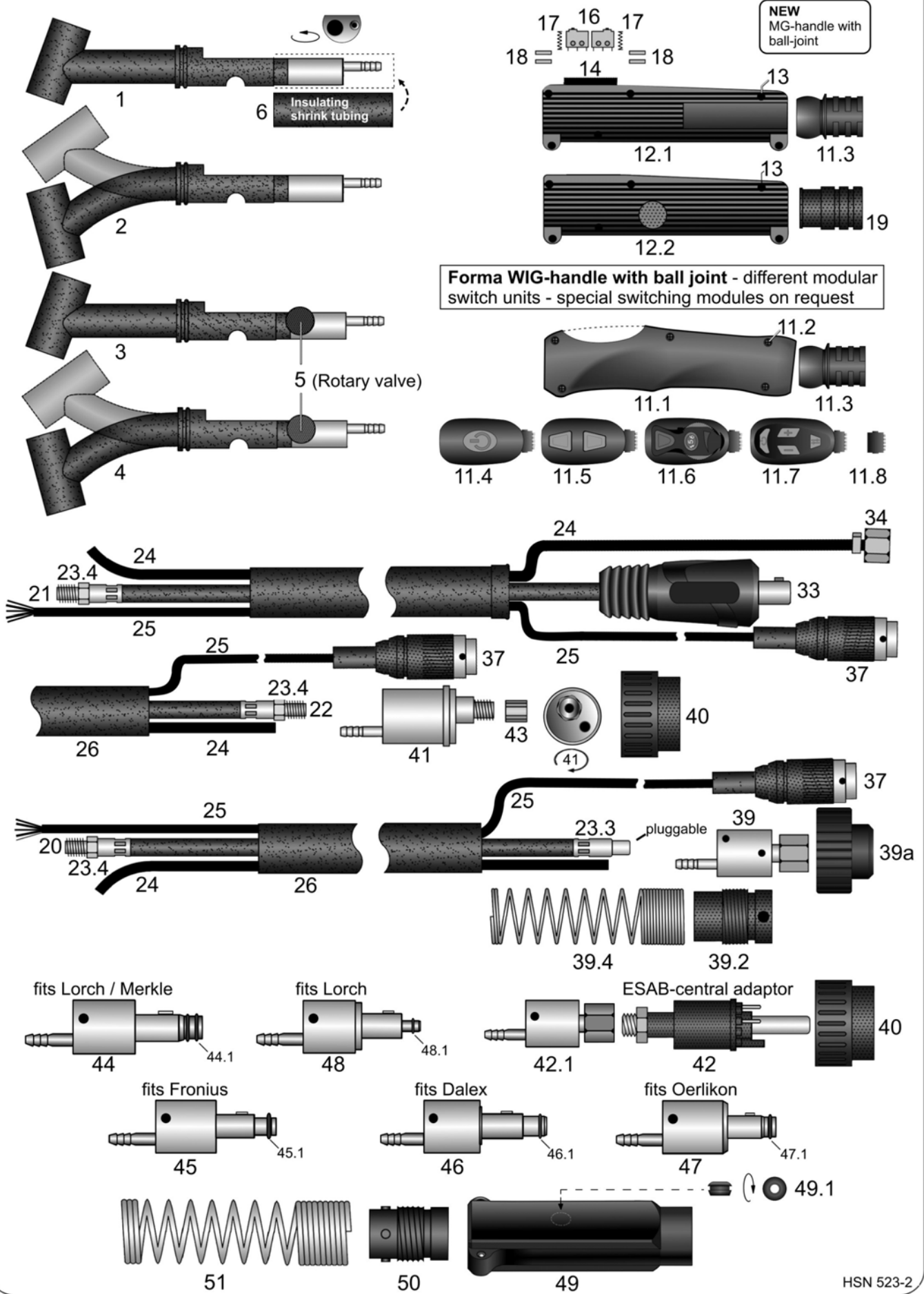
Ceramic nozzle L42mm  
for gas lens medium size  
**Please state size**  
Also available in special length  
L76mm

HSN 739-1

# ABL 220-TW gas-cooled



240 Ampere at 100% duty cycle (DC) - 200 Ampere at 100% duty cycle (AC)

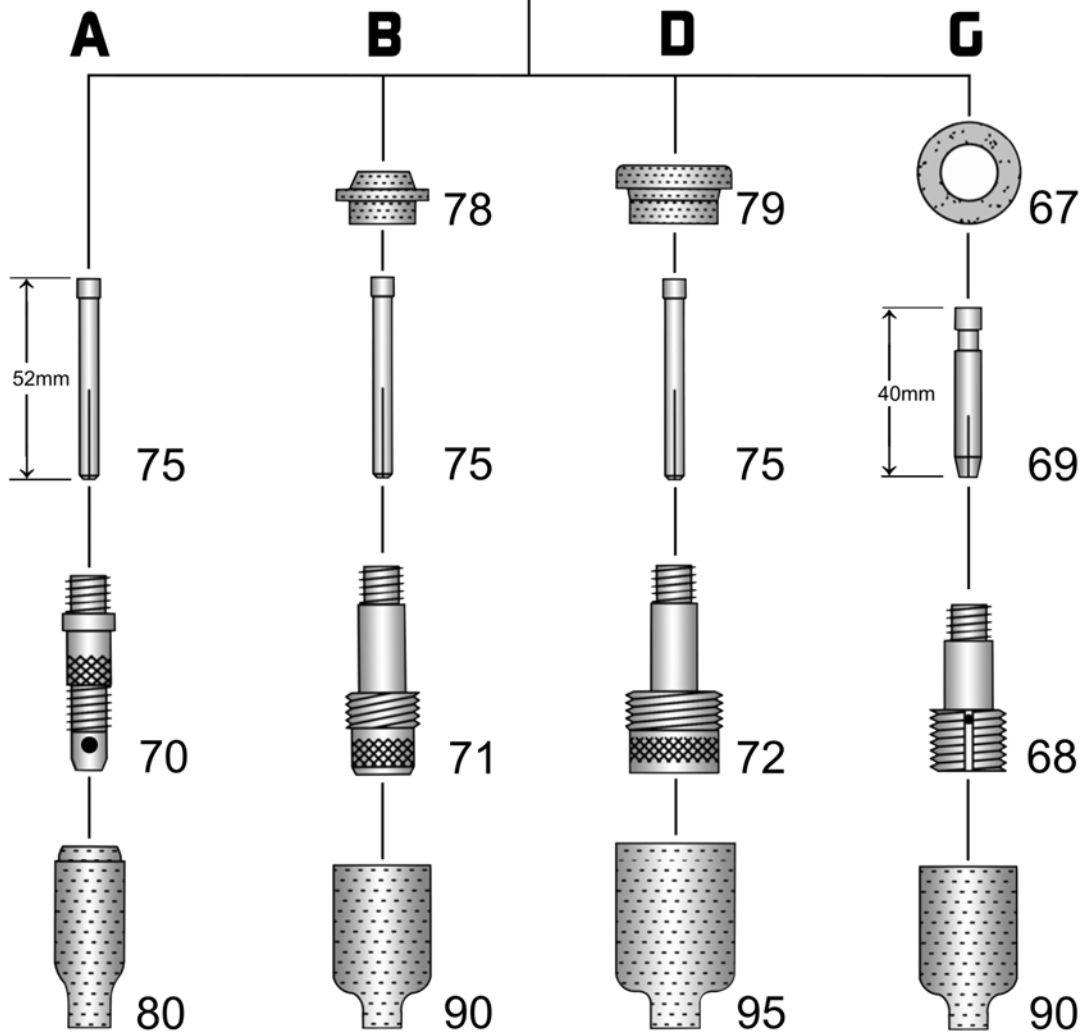
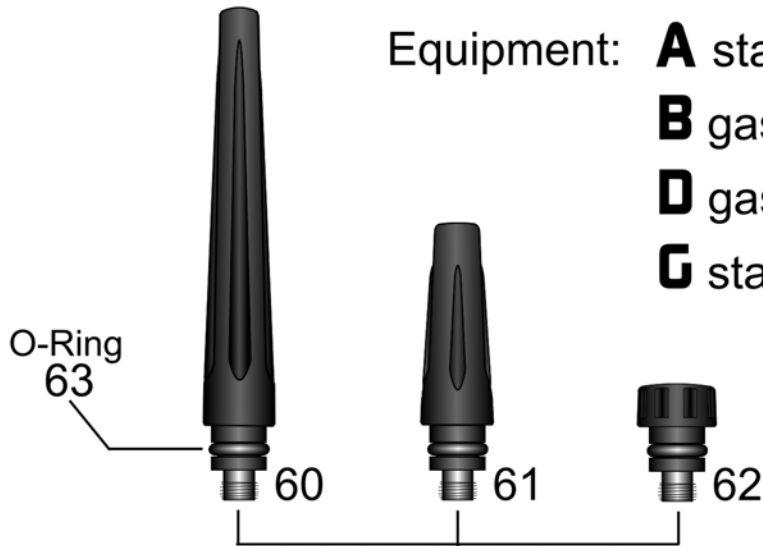


HSN 523-2

# ABL 220 - TW gas-cooled spare parts



Equipment: **A** standard  
**B** gas lens  
**D** gas lens jumbo  
**G** standard retro 220



HSN 105-1

## **ABL 220-TW**

**Welding-torch TIG gas-cooled**

**240A at 100% duty cycle (DC) - 200A 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.**

22060401 Torch ABL 220-TW / 4m 35mm<sup>2</sup>

22060801 Torch ABL 220-TW / 8m 35mm<sup>2</sup>

22070401 FLEX-torch ABL 220F-TW / 4m 35mm<sup>2</sup> neck flexible

22070801 FLEX-torch ABL 220F-TW / 8m 35mm<sup>2</sup> neck flexible

22080401 Valve torch ABL 220V-TW / 4m 35mm<sup>2</sup>

22080801 Valve torch ABL 220V-TW / 8m 35mm<sup>2</sup>

22090401 FLEX-Valve torch ABL 220FV-TW / 4m 35mm<sup>2</sup> neck flexible

22090801 FLEX-Valve torch ABL 220FV-TW / 8m 35mm<sup>2</sup> neck flexible

**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 22069101 Torch body ABL 220-TW

2 22079101 Torch body ABL 220F-TW neck flexible (FLEX)

3 22089101 Torch body with valve ABL 220V-TW

4 22099101 Torch body with valve ABL 220FV-TW neck flexible (FLEX)

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

## ABL 220 - TW

### Welding-torch TIG gas-cooled

240A at 100% duty cycle (DC) - 200A at 100% duty cycle (AC)

Art.-No.		
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
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	26942403	Power cable 35mm <sup>2</sup> 26/220-TW / 4m fits power/gas plugs + power gas junction (pgj)
20	26942803	Power cable 35mm <sup>2</sup> 26/220-TW / 8m fits power/gas plugs + power gas junction (pgj)
21	26942402	Power cable 35mm <sup>2</sup> 26/220-TW / 4m with SK25 or SK35 <--- please state!
21	26942802	Power cable 35mm <sup>2</sup> 26/220-TW / 8m with SK25 or SK35 <--- please state!
22	26942404	Power cable 35mm <sup>2</sup> 26/220-TW / 4m EURO fits central adapter (OT-M10x1)
22	26942804	Power cable 35mm <sup>2</sup> 26/220-TW / 8m EURO fits central adapter (OT-M10x1)
23.3	22089057	TIG-Power cable connector pluggable ID8,2mm fits 35mm <sup>2</sup>
23.4	22089054	TIG-Power cable connector OT-M10x1 ID8,2mm fits 35mm <sup>2</sup>
<b>Reel goods:</b> 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 3x0,34mm <sup>2</sup> shielded black (100m)
N.i.	91902711	Meter control line 3x0,5mm <sup>2</sup> green (100m)
25	91902721	Meter control line 5x0,25mm <sup>2</sup> grey (100m)
26	22150002	Meter neoprene protective hose ID22mm 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
<b>More control line plugs see appendix D</b>		
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)

## ABL 220 - TW

### Welding-torch TIG gas-cooled

240A at 100% duty cycle (DC) - 200A at 100% duty cycle (AC)

Art.-No.		
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)
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
o.A.	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	17091311	Holch back cap long (german version with black O-ring) AS17-AS18-ABL220 57Y02-D
61	17091321	Holch back cap medium (german version with black O-ring) AS17-AS18-ABL220 57Y03-D
62	17091301	Holch back cap short (german version with black O-ring) AS17-AS18-ABL220 57Y04-D
63	17089011	O-ring black ID9-W2,5mm for back cap
67	22089071	Ceramic gas nozzle gasket ABL 220
68	22096001	Copper collet body ABL 220 up to 3,2mm
<b>Brazen collets L-40mm</b> <b>suitable equipment line (G) standard Retro 220</b>		
69	22010402	Collet L40mm ABL 220 / 1,0
69	22016402	Collet L40mm ABL 220 / 1,6
69	22024402	Collet L40mm ABL 220 / 2,4
69	22032402	Collet L40mm ABL 220 / 3,2
70	17961002	Collet body 17-18-26-220 / 1,0 10N30
70	17961602	Collet body 17-18-26-220 / 1,6 10N31
70	17962402	Collet body 17-18-26-220 / 2,4 10N32
70	18963202	Collet body 17-18-26-220 / 3,2 10N28

## ABL 220 - TW

Welding-torch TIG gas-cooled

240A at 100% duty cycle (DC) - 200A at 100% duty cycle (AC)

Art.-No.		
71	17961011	Gas lens 17-18-26-220 / 1,0 45V24
71	17961611	Gas lens 17-18-26-220 / 1,6 45V25
71	17962411	Gas lens 17-18-26-220 / 2,4 45V26
71	18963211	Gas lens 17-18-26-220 / 3,2 45V27
72	17961021	Jumbo-Gas lens 17-18-26-220 / 1,0 45V0204
72	17961621	Jumbo-Gas lens 17-18-26-220 / 1,6 45V116
72	17962421	Jumbo-Gas lens 17-18-26-220 / 2,4 45V64
72	18963221	Jumbo-Gas lens 17-18-26-220 / 3,2 995795
Brazen collets L-52mm suitable equipment line (A) standard collet body suitable equipment line (B) gas lens suitable equipment line (D) gas lens jumbo		
75	17105202	Collet L52mm AS17-AS18-ABL220 / 1,0 10N22-D
75	17165202	Collet L52mm AS17-AS18-ABL220 / 1,6 10N23-D
75	17245202	Collet L52mm AS17-AS18-ABL220 / 2,4 10N24-D
75	18325202	Collet L52mm AS17-AS18-ABL220 / 3,2 10N25-D
78	17089021	PTFE-Gas-lens insulator 17-18-26-220 54N01
79	17089031	PTFE-Gas-lens insulator Jumbo 17-18-26-220 54N63
Ceramic gas nozzles in different lengths suitable equipment line (A) standard collet body		
80	17930401	Ceramic gas nozzle L47mm 17-18-26-220 / Gr.4 10N50 (pu= 10pieces)
80	17930501	Ceramic gas nozzle L47mm 17-18-26-220 / Gr.5 10N49 (pu= 10pieces)
80	17930601	Ceramic gas nozzle L47mm 17-18-26-220 / Gr.6 10N48 (pu= 10pieces)
80	17930701	Ceramic gas nozzle L47mm 17-18-26-220 / Gr.7 10N47 (pu= 10pieces)
80	17930801	Ceramic gas nozzle L47mm 17-18-26-220 / Gr.8 10N46 (pu= 10pieces)
80	17930101	Ceramic gas nozzle L47mm 17-18-26-220 / Gr.10 10N45 (pu= 10pieces)
80	17930121	Ceramic gas nozzle L47mm 17-18-26-220 / Gr.12 10N44 (pu= 10pieces)
N.i.	17930404	Ceramic gas nozzle L76mm 17-18-26-220 / Gr.4 10N50L (pu= 10pieces)
N.i.	17930504	Ceramic gas nozzle L76mm 17-18-26-220 / Gr.5 10N49L (pu= 10pieces)
N.i.	17930604	Ceramic gas nozzle L76mm 17-18-26-220 / Gr.6 10N48L (pu= 10pieces)
N.i.	17930704	Ceramic gas nozzle L76mm 17-18-26-220 / Gr.7 10N47L (pu= 10pieces)
Ceramic gas nozzles different lengths suitable equipment line (B) gas lens suitable equipment line (G) standard Retro 220		
90	22093041	Gas nozzle for gas lens L42mm / Gr.4 54N18 (pu= 10pieces)
90	22093051	Gas nozzle for gas lens L42mm / Gr.5 54N17 (pu= 10pieces)
90	22093061	Gas nozzle for gas lens L42mm / Gr.6 54N16 (pu= 10pieces)
90	22093071	Gas nozzle for gas lens L42mm / Gr.7 54N15 (pu= 10pieces)
90	22093081	Gas nozzle for gas lens L42mm / Gr.8 54N14 (pu= 10pieces)
90	22093111	Gas nozzle for gas lens L42mm / Gr.11 54N19-11 (pu= 10pieces)
90	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)

## **ABL 220 - TW**

**Welding-torch TIG gas-cooled**

**240A at 100% duty cycle (DC) - 200A at 100% duty cycle (AC)**

**Art.-No.**

**Ceramic gas nozzles jumbo in different lengths  
suitable equipment 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.**