General Catalog 2026

WELDING EQUIPMENT | WELDING TORCHES | ACCESSORIES



MADE IN GERMANY

60 Jahre | years

08/2026

www.merkle.de

Table of Contents

1. Price list 6

2. MIG/MAG welding units 10

2.1. MIG/MAG welding units step controlled 11

2.1.1. RedMIG eco 2800 K 12

2.2. MIG/MAG welding units step controlled with synergic wire feed 15

2.2.1. OptiMIG eco 450 DW 16

2.2.2. Accessories for OptiMIG eco 450 DW 18

2.3. MIG/MAG welding units continuously controlled 21

2.3.1. MobiMIG 180 K 22

2.3.2. MobiMIG 280 K 26

2.3.3. MobiMIG 321 K 30

2.3.4. MobiMIG 322 K 34

2.3.5. MobiMIG 322 KW 36

2.3.6. Accessories for MobiMIG 322 K/KW 38

2.3.7. GreenMIG 400 KW 40

2.3.8. GreenMIG 500 KW 42

2.3.9. GreenMIG 400 DW 44

2.3.10. GreenMIG 500 DW 46

2.3.11. Accessories for GreenMIG 400/500 KW/DW 48

3. Synergic Pulse welding units 52

3.1. Synergic Pulse welding units - series HighPULSE touch 53

3.1.1. HighPULSE touch 350 K 54

3.1.2. Accessories for HighPULSE touch 350 K 56

3.1.3. Water cooling unit WK 300 59

3.1.4. HighPULSE touch 400 KW 60

3.1.5. HighPULSE touch 450 KW 62

3.1.6. HighPULSE touch 400 DW 64

3.1.7. HighPULSE touch 450 DW 66

3.1.8. Accessories for HighPULSE touch 400/450 KW/DW 68

3.2. Synergic Pulse welding units for hand welding - series HighPULSE 73

3.2.1. HighPULSE 354 K 74

3.2.2. Accessories for HighPULSE 354 K 76

3.2.3. Water cooling unit WK 300 79

3.2.4. HighPULSE 353 K 80

3.2.5. HighPULSE 454 KW 82
3.2.6. HighPULSE 554 KW 84
3.2.7. HighPULSE 354 DW 86
3.2.8. HighPULSE 454 DW 88
3.2.9. HighPULSE 554 DW 90
3.2.10. Accessories for HighPULSE 354/454/554 KW/DW 92
3.2.11. HighPULSE 354/454/554 DW TWIN 98
3.3. Synergic Pulse welding units for automation and robotics 102
3.3.1. HighPULSE 354 RS 103
3.3.2. HighPULSE 454 RS 104
3.3.3. HighPULSE 554 RS 105

4. MIG/MAG welding torches 112
4.1. Hand welding torches 113
4.1.1. SB/SBT 157 G 114
4.1.2. SB/SBT 307 G 118
4.1.3. SB/SBT 351 G 124
4.1.4. SB/SBT 352 W 128
4.1.5. SB/SBT 504 W 134
4.1.6. SB/SBT 603 W 142
4.1.7. HSB/HSBT 600 W 148
4.2. Fume extraction welding torches 153
4.2.1. RSB/RSBT 351 G 154
4.2.2. RSB/RSBT 504 W 160
4.3. Push-Pull welding torches 167
4.3.1. PP/PPT 307 G 168
4.3.2. PP/PPT 504 W 174
4.4. Machine and robot welding torches 181
4.4.1. MSB 401 W 182
4.4.2. MSB 603 W 188
4.4.3. ROB 505 W 194

5. TIG welding units 202
5.1. TIG DC welding units 203
5.1.1. LiteTIG 190 DC 204
5.1.2. LiteTIG 210 DC 208

5.1.3. MobiTIG 304 DC 212
5.1.4. HighTIG W 352 DC 216
5.1.5. HighTIG 452 DC 220
5.1.6. HighTIG 552 DC 224
5.1.7. HighTIG 452/552 DC RS 228
5.2. TIG AC/DC welding units 233
5.2.1. LiteTIG 190 AC/DC 234
5.2.2. LiteTIG 210 AC/DC 238
5.2.3. LogiTIG 221 AC/DC 242
5.2.4. Water cooling unit WK 210 246
5.2.5. LogiTIG 240 AC/DC 248
5.2.6. Water cooling unit WK 230 252
5.2.7. LogiTIG 300 AC/DC 254
5.2.8. Water cooling unit WK 300 258
5.2.9. Insquare W 321 AC/DC 260
5.2.10. Insquare W 421 AC/DC 264
5.2.11. Insquare W 600 AC/DC 268

6. TIG welding torches 272
6.1. TH 202 G 274
6.2. TH 452 W 280
6.3. TH 600 W 286
6.4. TM 450 W 290
6.5. Cold Wire Feed System KDFZ 294

7. MMA/stick electrode welding units 296
7.1. LiteARC 160 298
7.2. LiteARC 180 300
7.3. MobiARC 284 cel 302
7.4. MobiARC 284 cel ± 306

8. Accessories 310
8.1. Wire feed DV-21 311
8.2. Wire feed DV-26 314
8.3. Wire feed DV-31 318
8.4. Water cooling units 322
8.5. WeldFACTORY i4.0 (Q.MACS) 323

8.6. Software, Program updates, Calibration 324
8.7. Calibration unit MCU 1000 325
8.8. Accessories 327
8.9. Advertising articles 330
8.10. Leaflets and Catalogues 331

1. Price list



MIG/MAG WELDING UNITS

Model	without accessories	with accessories	with torch 3 m	with torch 4 m	torch model
RedMIG eco Series - step controlled, 4-roller wire feeder					
RedMIG eco 2800 K (DV-26)*					SB 307 G
OptiMIG eco Series - synergic step control, TEDAC system, 4-roller wire feeder					
OptiMIG eco 450 DW*					SBT 504 W
MobiMIG Series - synergic continuous control, TEDAC system, electrode					
MobiMIG 180 K					SBT 157 G
MobiMIG 280 K					SBT 307 G
MobiMIG 321 K					SBT 307 G
MobiMIG 321 K – with WK 300, TW 112					SBT 504 W
MobiMIG 322 K					SBT 307 G
MobiMIG 322 KW					SBT 504 W
GreenMIG Series - continuously controlled, TEDAC system, PULSEARC upgrade available					
GreenMIG 400 KW					SBT 504 W
GreenMIG 400 DW					SBT 504 W
GreenMIG 500 KW					SBT 504 W
GreenMIG 500 DW					SBT 504 W

SYNERGIC MIG PULSE-ARC WELDING MACHINES

Model	without accessories	with accessories	with torch 3 m	with torch 4 m	torch model
HighPULSE touch Series - with intuitive touch-display control					
HighPULSE touch 350 K					SBT 307 G
HighPULSE touch 350 K – with WK 301, TW 112					SBT 504 W
HighPULSE touch 400 KW					SBT 504 W
HighPULSE touch 450 KW					SBT 504 W
HighPULSE touch 400 DW					SBT 504 W
HighPULSE touch 450 DW					SBT 504 W
HighPULSE Series					
HighPULSE 354 K					SBT 307 G
HighPULSE 354 K – with WK 300, TW 112					SBT 504 W
HighPULSE 353 K					
HighPULSE 454 KW					SBT 504 W
HighPULSE 554 KW					SBT 504 W
HighPULSE 354 DW					SBT 504 W
HighPULSE 454 DW-26					SBT 504 W
HighPULSE 454 DW-31					SBT 504 W
HighPULSE 554 DW-26					SBT 504 W
HighPULSE 554 DW-31					SBT 504 W
HighPULSE 354 DW TWIN					
HighPULSE 454 DW TWIN					
HighPULSE 554 DW TWIN					
HighPULSE 354/454/554 RS	Robot- and automation power source, see data sheet/catalogue				

TIG WELDING UNITS

Model	without accessories	with accessories	with torch 4 m	with torch 8 m	torch model
TIG DC Series - portable DC TIG welding units					
LiteTIG 190 DC					TH 202 G
LiteTIG 210 DC					TH 202 G
MobiTIG 304 DC					TH 202 G
MobiTIG 304 DC with WK 210, TW 112					TH 452 W
TIG AC/DC Series - portable AC/DC TIG welding units					
LiteTIG 190 AC/DC					TH 202 G
LiteTIG 210 AC/DC					TH 202 G
LogiTIG 221 AC/DC					TH 202 G
LogiTIG 221 AC/DC with WK 210, TW 112					TH 452 W
LogiTIG 240 AC/DC					TH 202 G
LogiTIG 240 AC/DC with WK 230, TW 112					TH 452 W
LogiTIG 300 AC/DC					TH 202 G
LogiTIG 300 AC/DC with WK 300, TW 112					TH 452 W
HighTIG Series (DC)					
HighTIG W 352 DC					TH 452 W
HighTIG 452 DC					
HighTIG 452 DC with WK 350, TW 114					TH 452 W
HighTIG 552 DC					
HighTIG 552 DC with WK 350, TW 114					TH 600 W
HighTIG 452 DC RS		plus combination			
HighTIG 552 DC RS		plus combination			
INSQUARE Series (AC/DC) - TIG welding units with integrated water cooler					
Insquare W 321 AC/DC					TH 452 W
Insquare W 421 AC/DC					TH 452 W
Insquare W 600 AC/DC					TH 600 W

WATER COOLING UNITS - TROLLEYS

Model
Water cooling unit WK 210
Water cooling unit WK 230
Water cooling unit WK 300
Water cooling unit WK 350
Trolley model TW 112
Drawer option for TW 112
Trolley model TW 114

MMA/STICK ELECTRODE WELDING UNITS

Model	without accessories	with accessories
LiteARC 160		
LiteARC 180		
MobiARC 284 cel		
MobiARC 284 cel ±		

MIG/MAG WELDING TORCHES

	standard - SB			TEDAC - SBT			
Model	**3 m**	**4 m**	**5 m**	**3 m**	**4 m**	**5 m**	
SB/SBT 157 G			-			-	gas cooled
SB/SBT 307 G							gas cooled
SB/SBT 351 G							gas cooled
SB/SBT 352 W			-			-	water cooled
SB/SBT 504 W short version							water cooled
SB/SBT 504 W long version							water cooled
SB/SBT 603 W			-			-	water cooled
HSB/HSBT 600 W			-			-	water cooled
R 351 G fume extraction			-				gas cooled
R 504 W fume extraction			-				water cooled
MSB 401 W machine welding torch			see data sheet/catalogue				water cooled
ROB 505 W robot and machine welding torch			see data sheet/catalogue				water cooled
MSB 504 W machine welding torch			see data sheet/catalogue				water cooled
MSB 603 W machine welding torch			see data sheet/catalogue				water cooled

PUSH PULL TORCHES

Model	standard PP, 8 m	TEDAC PPT, 8 m	
307 G - 22°			gas cooled
307 G - 45°			gas cooled
504 W - straight			water cooled
504 W - bent			water cooled

TIG WELDING TORCHES

	Standard		Potentiometer		
Model	**4 m**	**8 m**	**4 m**	**8 m**	**torch connector**
TH 202 G gas cooled			-		MERKLE TCG-Connector
TH 452 W water cooled					MERKLE TCG-Connector
TH 600 W water cooled					MERKLE TCG-Connector
TM 450 W water cooled	see data sheet/catalogue				machine torch

2. MIG/MAG welding units

2. MIG/MAG welding units

2.1 Welding units step controlled
RedMIG eco 2800 K

2.2 Welding units step controlled
with synergic wire feed
OptiMIG eco 450 DW

2.3 Welding units continuously controlled
MobiMIG 180/280/321/322 K/KW
GreenMIG 400/500 KW
GreenMIG 400/500 DW

2.1. MIG/MAG welding units step controlled



2.1.1. RedMIG eco 2800 K

Primary:	
Voltage:	3 x 400 V
Frequency:	50 / 60 Hz
Contin. power:	4.8 kVA
Contin. current:	7.9 A
Max. current:	15 A
Efficiency:	85%
Secondary:	
Open circuit voltage:	17-36 V
Welding voltage:	15.3 - 28 V
Welding current:	25 - 250 A
Duty cycle 30 % (10 min.):	280 A (40 °C)
Duty cycle 60 % (10 min.):	210 A (40 °C)
Duty cycle 100 %:	180 A (40 °C)



Protection class:	IP 21
Insulation:	H
Cooling:	AF
Mains switch:	range 0-1-2
Voltage control:	14 steps
Operation modes:	2-/4-stroke/stitch/spot welding
Wire feed speed:	potentiometer
Wire burn back:	preset
Spot welding time:	potentiometer
Intermissiontime:	potentiometer
Control lamp:	mains on
Rectifier:	silicon press-in diodes
Choke:	1-step
Norm:	EN 60974-1 "S" / CE
Torch cooling:	gas
Gas bottle holder:	10 - 20 l cylinders
Mains supply cable:	4 x 1.5 mm², 5 m long
	with plug 3 x 400 V / 16 A
Gas hose:	2 m long
Socket 50 mm²:	for earth lead
Weight:	97 kg
Dimensions l x w x h:	800 x 460 x 655 mm

Wire feeder: compact mounted, model DV-26

Voltage:	26 V-DC
Wire feed motor:	DC motor with worm gear drive
	0.7-25 m/min
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Standard wire equipment:	mild steel 0.8 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**MIG/MAG welding unit RedMIG eco 2800 K**				
	**A**	**MIG/MAG welding unit RedMIG eco 2800 K with 4-roller-drive DV-26**		**69**	**165998**
	AB	**MIG/MAG welding unit RedMIG eco 2800 K with 4-roller-drive DV-26 and accessories**		**69**	**SET166000**
	ABC1	**MIG/MAG welding unit RedMIG eco 2800 K with 4-roller-drive DV-26 and accessories and hand welding torch SB 307 G, 3 m**		**69**	**SET166002**
	ABC2	**MIG/MAG welding unit RedMIG eco 2800 K with 4-roller-drive DV-26 and accessories and hand welding torch SB 307 G, 4 m**		**69**	**SET166004**
B	**Standard accessories:**				
	B1	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	B2	Regulator argon/CO2 standard version		46	107018
C	**Welding torches:**				
	**C1**	**MIG/MAG hand welding torch model SB 307 G, 3 m**		**06**	**02210758**
	C2	**MIG/MAG hand welding torch model SB 307 G, 4 m**		**06**	**02210759**
D	**Accessories:**				
	D1	Adapter for wire spool		46	02900104
	D2	Front carriage extension for RedMIG and CompactMIG 280 K for using 50 l gas cylinders		46	157750
E	**Additional wire equipment for DV-26:**				
	E1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
	E2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
	E3	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
	E4	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
	E5	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
	E6	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860

2.2. MIG/MAG welding units step controlled with synergic wire feed



2.2.1. OptiMIG eco 450 DW

Primary:	
Voltage:	3 x 400 V
Frequency:	50 Hz
Continuous power:	14.2 kVA
Continuous current:	20.5 A
Max. current:	24.1 A
Efficiency:	85%
Secondary:	
Open circuit voltage:	16 - 48.5 V
Welding voltage:	15.5 - 34 V
Welding current:	30 - 400 A
Duty cycle 80 % (10 min.):	400 A (40 °C)
Duty cycle 100 %:	370 A (40 °C)



Protection class:	IP 23
Insulation:	H
Cooling:	AF
Mains switch:	3 phase
Voltage control:	28 steps 4-step coarse selector 7-step fine selector
Operation modes:	2-/4-stroke/stitch/spot welding
Wire feed speed:	automatic setting through synergic controller (can be switched off)
Arc trim:	adjustable +/- 30 % at potentiometer or TEDAC torch
Wire selection:	selector switch
Wire burn back:	adjustable
Spot welding/interm. time:	adjustable
Creep start:	adjustable
Safety cut-off:	in 4-stroke operation
Wire insertion auto:	in 2-stroke operation
Functions:	gas test, wire inching
Digital display:	2 digital displays for current, voltage, wire feed speed and material thickness with pre-display and hold function
Norm:	EN 60974-1 "S" / CE
Torch cooling:	integrated water cooler
Gas bottle holder:	10, 20, 50 l cylinders
Mains supply cable:	4 x 4.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m long
Choke:	100%, option: 60%
Socket 50 mm²:	for earth lead
Lifting eyes:	4 pieces (option)
Push pull torch:	connector (option)
Weight:	240 kg
Dimensions l x w x h:	990 x 510 x 1135 mm incl. gas bottle holder

Wire feeder: separately mounted, model DV-26	
Supply:	26 V-DC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Potentiometer:	Wire feed speed
Wire feed support:	D 300/15 DIN 8559
Torch connection:	Euro connector
Connection cable:	1.6 m, 50 mm² water
Standard wire equipment:	mild steel 1.2 mm
Weight:	18 kg
Dimensions:	610 x 400 x 180 mm

	Pos.	Description	Pu	PrGrp	Part No.
		MIG/MAG welding unit OptiMIG eco 450 DW with wire feeder and 1.6 m interconnection cable:			
		With DV-26 wire feeder:			
	AB1	**MIG/MAG welding unit OptiMIG eco 450 DW**		01	SET168857
	AB1C	**MIG/MAG welding unit OptiMIG eco 450 DW with accessories**		01	SET168859
	AB1CD1	**MIG/MAG welding unit OptiMIG eco 450 DW with accessories and hand welding torch SBT 504 W, 3 m**		01	SET168860
	AB1CD2	**MIG/MAG welding unit OptiMIG eco 450 DW with accessories and hand welding torch SBT 504 W, 4 m**		01	SET168862
A		**Power source (without wire feeder):**			
	A	MIG/MAG welding unit OptiMIG eco 450 DW (power source)		01	168848
B		**Wire feeder:**			
	B1	Wire feeder DV-26 for OptiMIG 351/451/551/eco 450 DW		46	149922
!		**Use wire feeder DV-31 for wire > 1.2 mm:**			
	B2	Wire feeder DV-31 (OT) für OptiMIG 351/451/551/eco 450 DW		46	149924
C		**Standard accessories:**			
	C1	Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
	C2	Regulator argon/CO2, single stage		46	01200300
D		**Welding torches:**			
	D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	D3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

2.2.2. Accessories for OptiMIG eco 450 DW

	Pos.	Description	Pu	PrGrp	Part No.
1 Accessories:					
	1.1	Adapter for wire spool		46	02900104
	1.2	Torch holder D27 for mounting at the handle or handle tube		46	157598
	1.3	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	1.4	Filter frame incl. filter for OptiMIG reduced duty cycle		46	109524
	1.5	Filter for OptiMIG	10 pcs	46	109528
	1.6	Metal filter insert for OptiMIG		46	156682
	1.7	Push-Pull kit installed inside the welding unit		46	02110403
	1.8	Connection for automated welding welding ON, arc OK, emergency STOP for MAG 30 controller		46	114668
	1.9	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	1.10b	Price reduction: no integrated water cooling unit (D version)		46	01903611
	1.11	Lifting eye screw, galvanized	4 pcs	46	09002001
	1.12	Optional choke socket 60 % for series OptiMIG and CompactMIG		46	144610
2 Accessories for wire feeder:					
	2.1	Rotatable device for wire feeder including screw set		46	137436
	2.2	4 wheels mounted on the wire feeder		46	00102109

	Pos.	Description	Pu	PrGrp	Part No.
	2.3	Suspension device for wire feeder electrically isolated		46	00502878
	2.4	Option for wire feeder DV-31 (OT) 0.5 - 30 m/min. incl. wire straightener and motor without tacho when not using DV-26		46	01910011
	2.5	Balancer G4 for rotatable device 137.436		05	158714
	2.6	Wheelbase widening set for OptiMIG DW		46	117548
	2.7	Connection for wire feed liner inside the wire feeder box		46	110454

3 Connection cable to wire feeder:

	3.1	Connection cable 5 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	138844
	3.2	Connection cable 10 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	138846
	3.3	Connection cable 15 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	153218
	3.4	Connection cable 20 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	153220
	3.5	Connection cable 30 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	154388

Price reduction, when not taken:

	3.6	Connection cable 1.6 m 70 mm², w.c. HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	138842

4 Additional wire equipment for DV-26 and DV-31:

	4.1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
	4.2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
	4.3	Kit for mild steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113850
	4.4	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
	4.5	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
	4.6	Kit for stainl. steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113856
	4.7	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
	4.8	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860
	4.9	Kit for alu 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113862

Pos.	Description	Pu	PrGrp	Part No.
4.10	Kit for core wire 1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113864
4.11	Kit for core wire 1.6 mm (DV-26/31/32) (2 drive rings and wire core)		46	113866

2.3. MIG/MAG welding units continuously controlled



2.3.1. MobiMIG 180 K

Primary:	
Power supply:	1 x 230 V
Frequency:	50 / 60 Hz
MIG/MAG operation:	
Open circuit voltage:	64 V
Welding voltage:	15 - 23 V
Welding current:	25 - 180 A
Duty cycle 20 % (10 min.):	180 A (40 °C)
Duty cycle 60 % (10 min.):	110 A (40 °C)
Duty cycle 100 %:	90 A (40 °C)
Prim. contin. power:	3.7 kVA
Prim. contin. current:	16 A
Prim. max. current:	26 A



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	synergic operation, automatic energy control
Programs:	MIG/MAG, MMA/stick electrode, TIG DC (LiftTIG), ColdMIG
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, stitch. spot welding
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, soft start
Power source:	inverter
Sockets 50 mm²:	earth lead and electrode cable
Torch cooling:	gas
Mains supply cable:	3 x 2.5 mm², 2.5 m long with plug
Gas hose:	2 m
Handle:	on top of the machine
Norm:	EN 60974-1 "S" / CE
Weight:	17 kg
Dimensions l x w x h:	450 x 210 x 480 mm

TIG operation:	
Open circuit voltage:	64 V
Welding voltage:	10 - 17.2 V
Welding current:	10 - 180 A
Duty cycle 20 % (10 min.):	180 A (40 °C)
Duty cycle 60 % (10 min.):	110 A (40 °C)
Duty cycle 100 %:	90 A (40 °C)
Prim. contin. power:	2.8 kVA
Prim. contin. current:	12 A
Prim. max. current:	23 A
MMA/stick electrode operation:	
Open circuit voltage:	64 V
Welding voltage:	20.6 - 26.4 V
Welding current:	25 - 160 A
Duty cycle 30 % (10 min.):	150 A (40 °C)
Duty cycle 60 % (10 min.):	90 A (40 °C)
Duty cycle 100 %:	80 A (40 °C)
Prim. contin. power:	3.7 kVA
Prim. contin. current:	16 A
Prim. max. current:	26 A

Wire feeder: compact mounted, Model DV-21	
Supply:	26 V-DC
Wire feed motor:	DC motor with worm gear drive 0.5 - 20 m/min.
Wire feed system:	2-roller-drive DV-21
Reel hub assembly:	D 200/5
Torch connection:	EURO connector
Standard wire equipment:	mild steel 0.8 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**MIG/MAG welding unit MobiMIG 180 K**				
	**A**	**MIG/MAG welding unit MobiMIG 180 K**		**20**	**122354**
	AB	**MIG/MAG welding unit MobiMIG 180 K with accessories**		**20**	**SET122356**
	ABC1	**MIG/MAG welding unit MobiMIG 180 K with accessories and TEDAC hand welding torch SBT 157 G, 3 m**		**20**	**SET122358**
	ABC2	**MIG/MAG welding unit MobiMIG 180 K with accessories and TEDAC hand welding torch SBT 157 G, 4 m**		**20**	**SET122360**
!	**Software ColdMIG included for free**				
B	**Standard accessories:**				
	B1	Earth lead 25 mm², 4 m long with plug and earth clamp		46	02210400
	B2	Regulator argon/CO2 standard version		46	107018
C	**Welding torches:**				
	**C1**	**MIG/MAG hand welding torch TEDAC, model SBT 157 G, 3 m**		**06**	**118704**
	C2	**MIG/MAG hand welding torch TEDAC, model SBT 157 G, 4 m**		**06**	**118706**
D	**Accessories:**				
	D1	TIG hand welding torch TH 202 G-MAG, 4 m for HighPULSE 28x/35x K and MobiMIG with Euro connector leather/rubber hose assembly		10	133632
	D2	TIG hand welding torch TH 202 G-MAG, 8 m for HighPULSE 28x/35xK and MobiMIG with Euro connector leather/rubber hose assembly		10	129532
	D3	Torch holder D27 for mounting at the handle or handle tube		46	157598
	D4	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938
	D5	Drawer option for trolley TW 112 incl. one drawer		46	138940
	D6	Adapter for centering of small wire spool		46	133070
	D7	Electrode welding cable 16 mm², 4 m incl. plug 50 mm² electrode holder		46	115702

	Pos.	Description	Pu	PrGrp	Part No.
	D8	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

E Software (for free):

ColdMIG	E1	Software for ColdMIG process for MobiMIG 180 K		17	122352

F Additional wire equipment for DV-21:

	F1	Kit for mild steel 0.6 mm (DV-21,20/2) (without contact tips)		46	01200387
	F2	Kit for mild steel 0.8 mm (DV-21,20/2) (without contact tips)		46	01200388
	F3	Kit for mild steel 1.0 mm (DV-21,20/2) (without contact tips)		46	01200389
	F4	Kit for stainless steel 0.8 mm (DV-21,20/2) (without contact tips)		46	01200390
	F5	Kit for stainless steel 1.0 mm (DV-21,20/2) (without contact tips)		46	01200391
	F6	Kit for aluminium 1.0 mm (DV-21,20/2) (without contact tips)		46	01200392

2.3.2. MobiMIG 280 K

Primary:		
Power supply:	3 x 400 V 3 x 220 - 440 V* 1 x 220 - 440 V*	
Frequency:	50 / 60 Hz	
Data at supply voltage:	**3 x 400 V**	**1 x 230 V***
MIG/MAG operation:		
Open circuit voltage:	90 V	103 V*
Welding voltage:	15 - 28 V	15 - 23 V*
Welding current:	25 - 280 A	25 - 180 A*
Duty cycle 20 % (10 min.):		180 A (40 °C)*
Duty cycle 35 % (10 min.):	280 A (40 °C)	
Duty cycle 50 % (10 min.):	280 A (20 °C)	
Duty cycle 60 % (10 min.):	240 A (40 °C)	110 A (40 °C)*
Duty cycle 100 %:	210 A (40 °C)	90 A (40 °C)*
Prim. contin. power:	9 kVA	3.7 kVA*
Prim. contin. current:	13 A	16 A*
Prim. max. current:	20 A	26 A*



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	synergic operation, automatic energy control
Programs:	MIG/MAG, MMA/stick electrode, TIG DC (LiftTIG), ColdMIG
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, stitch, spot welding
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, soft start
Power source:	inverter
Sockets 50 mm²:	earth lead and electrode cable
Torch cooling:	gas
Mains supply cable:	4 x 2.5 mm², 5 m long with plug 400 V / 16 A
Gas hose:	2 m
Handle:	on top of the machine
Norm:	EN 60974-1 "S" / CE
Weight:	27 kg
Dimensions l x w x h:	470 x 255 x 545 mm

*: BiPowerPLUS: Multi voltage supply system:
automatic switching between 1 and 3 phase
in the range 220 – 440 V (option)

Data at supply voltage:	**3 x 400 V**	**1 x 230 V***
TIG operation:		
Open circuit voltage:	90 V	103 V*
Welding voltage:	10 - 21.2 V	10 - 17.2 V*
Welding current:	10 - 280 A	10 - 180 A*
Duty cycle 20 % (10 min.):		180 A (40 °C)*
Duty cycle 35 % (10 min.):	280 A (40 °C)	
Duty cycle 50 % (10 min.):	280 A (20 °C)	
Duty cycle 60 % (10 min.):	240 A (40 °C)	110 A (40 °C)*
Duty cycle 100 %:	210 A (40 °C)	90 A (40 °C)*
Prim. contin. power:	8.3 kVA	2.8 kVA*
Prim. contin. current:	12 A	12 A*
Prim. max. current:	16 A	23 A*
MMA/stick electrode operation:		
Open circuit voltage:	90 V	103 V*
Welding voltage:	20.6 - 31.2 V	20.6 - 31.2 V
Welding current:	20 - 280 A	25 -160 A*
Duty cycle 35 % (10 min.):	280 A (40 °C)	150 A (20 °C)*
Duty cycle 50 % (10 min.):	250 A (40 °C)	
Duty cycle 60 % (10 min.):	240 A (40 °C)	90 A (40 °C)*
Duty cycle 100 %:	210 A (40 °C)	80 A (40 °C)*
Prim. contin. power:	8.3 kVA	3.7 kVA*
Prim. contin. current:	14 A	16 A*
Prim. max. current:	21 A	26 A*

Wire feeder: compact mounted, Model DV-26

Supply:	26 V-DC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Wire feed system:	4-roller-drive DV-26
Reel hub assembly:	D 200/5
Torch connection:	EURO connector
Standard wire equipment:	mild steel 0.8 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**MIG/MAG welding unit MobiMIG 280 K**				
	**A**	**MIG/MAG welding unit MobiMIG 280 K**		**20**	**128432**
	AB	**MIG/MAG welding unit MobiMIG 280 K with accessories**		**20**	**SET128434**
	ABC1	**MIG/MAG welding unit MobiMIG 280 K with accessories and TEDAC hand welding torch SBT 307 G, 3 m**		**20**	**SET128436**
	ABC2	**MIG/MAG welding unit MobiMIG 280 K with accessories and TEDAC hand welding torch SBT 307 G, 4 m**		**20**	**SET128438**
!	**Software ColdMIG included for free**				
B	**Standard accessories:**				
	B1	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	B2	Regulator argon/CO2 standard version		46	107018
C	**Welding torches:**				
	C1	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 3 m		06	02210858
	C2	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 4 m		06	02210859
	C3	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 5 m		06	154994
D	**Accessories:**				
	D1	BiPowerPLUS for series MobiMIG 280 K, MobiARC 282/284 cel, MobiTIG 284/304 DC		46	131445
	D2	Adapter: Schuko plug 230 V to CEE connector 16 A/400 V for MobiARC 282/284 cel, MobiTIG 284/304 DC, MobiMIG 280/300/320 K		46	130766
	D3a	TIG hand welding torch TH 202 G-MAG, 4 m for HighPULSE 28x/35x K and MobiMIG with Euro connector leather/rubber hose assembly		10	133632
	D3b	TIG hand welding torch TH 202 G-MAG, 8 m for HighPULSE 28x/35xK and MobiMIG with Euro connector leather/rubber hose assembly		10	129532
	D4	Torch holder D27 for mounting at the handle or handle tube		46	157598
	D5a	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938

	Pos.	Description	Pu	PrGrp	Part No.
	D5b	Drawer option for trolley TW 112 incl. one drawer		46	138940
	D6	Adapter for centering of small wire spool		46	133070
	D7	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

E Software (for free):

	E1	Software for ColdMIG process for MobiMIG 280/320/321/322		17	128430

F Additional wire equipment for DV-26:

	F1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
	F2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
	F3	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
	F4	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
	F5	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
	F6	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860

2.3.3. MobiMIG 321 K

Primary:		
Power supply:	3 x 400 V 3 x 220 - 440 V* 1 x 220 - 440 V*	
Frequency:	50 / 60 Hz	
Data at supply voltage:	**3 x 400 V**	**1 x 230 V***
MIG/MAG operation:		
Open circuit voltage:	90 V	103 V*
Welding voltage:	15 - 30 V	15 - 23 V*
Welding current:	25 - 320 A	25 - 180 A*
Duty cycle 20 % (10 min.):		180 A (40 °C)*
Duty cycle 30 % (10 min.):	320 A (40 °C)	
Duty cycle 35 % (10 min.):	300 A (40 °C)	
Duty cycle 60 % (10 min.):	260 A (40 °C)	110 A (40 °C)*
Duty cycle 100 %:	240 A (40 °C)	90 A (40 °C)*
Prim. contin. power:	11.1 kVA	3.7 kVA*
Prim. contin. current:	16 A	16 A*
Prim. max. current:	23 A	26 A*



Optional: with water cooling unit WK 300 and trolley TW 112, with drawer as an option.

Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	synergic operation, automatic energy control
Programs:	MIG/MAG, MMA/stick electrode, ColdMIG
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, stitch, spot welding
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, soft start
Power source:	inverter
Sockets 50 mm²:	earth lead and electrode cable
Torch cooling:	gas, option: water
Mains supply cable:	4 x 2.5 mm², 5 m long with plug 400 V / 32 A
Gas hose:	2 m
Handle:	on top of the machine
Norm:	EN 60974-1 "S" / CE
Weight:	32 kg
Dimensions l x w x h:	600 x 300 x 565 mm

Data at supply voltage:	**3 x 400 V**	**1 x 230 V***
Option MMA/stick electrode operation:		
Open circuit voltage:	90 V	103 V*
Welding voltage:	20.8 - 32 V	20.8 - 26.4 V*
Welding current:	20 - 300 A	20 -160 A*
Duty cycle 20 % (10 min.):		160 A (40 °C)*
Duty cycle 30 % (10 min.):	300 A (40 °C)	
Duty cycle 60 % (10 min.):	250 A (40 °C)	110 A (40 °C)*
Duty cycle 100 %:	230 A (40 °C)	90 A (40 °C)*
Prim. contin. power:	12.5 kVA	3.7 kVA*
Prim. contin. current:	18 A	16 A*
Prim. max. current:	24 A	26 A*

Wire feeder: compact mounted, Model DV-26

Supply:	26 V-DC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Wire feed system:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Standard wire equipment:	mild steel 0.8 mm

*: BiPowerPLUS: Multi voltage supply system:
automatic switching between 1 and 3 phase in the range 220 – 440 V
(option, not in combination with socket for water cooler)

	Pos.	Description	Pu	PrGrp	Part No.
A		**MIG/MAG welding unit MobiMIG 321 K**			
	**A**	**MIG/MAG welding unit MobiMIG 321 K**		**01**	**156556**
	AB	**MIG/MAG welding unit MobiMIG 321 K with accessories**		**01**	**SET156558**
	ABC1	**MIG/MAG welding unit MobiMIG 321 K with accessories and TEDAC hand welding torch SBT 307 G, 3 m**		**01**	**SET156560**
	ABC2	**MIG/MAG welding unit MobiMIG 321 K with accessories and TEDAC hand welding torch SBT 307 G, 4 m**		**01**	**SET156562**
!		**Software ColdMIG included for free**			
		With water cooler and trolley TW 112:			
		**MIG/MAG welding unit MobiMIG 321 K with water cooler WK 300, trolley TW 112**		**01**	**SET156564**
		MIG/MAG welding unit MobiMIG 321 K with water cooler WK 300, trolley TW 112 incl. accessories		**01**	**SET156566**
		MIG/MAG welding unit MobiMIG 321 K with water cooler WK 300, trolley TW 112, incl. accessories and TEDAC torch SBT 504 W, 3 m		**01**	**SET156568**
		MIG/MAG welding unit MobiMIG 321 K with water cooler WK 300, trolley TW 112, incl. accessories and TEDAC torch SBT 504 W, 4 m		**01**	**SET156570**
	Option	Drawer option for trolley TW 112 incl. one drawer		46	138940
B		**Standard accessories:**			
	B1	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	B2	Regulator argon/CO2 standard version		46	107018
C		**Welding torches:**			
	C1	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 3 m		06	02210858
	C2	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 4 m		06	02210859
	C3	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 5 m		06	154994
D		**Accessories:**			
	D1	BiPowerPLUS for MobiMIG 321/322 not in combination with socket for water cooling unit		46	131446

	Pos.	Description	Pu	PrGrp	Part No.
	D2	Adapter: Schuko plug 230 V to CEE connector 32 A/400 V for MobiMIG 321/322		46	143244
	D3	Torch holder D27 for mounting at the handle or handle tube		46	157598
	D4a	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938
	D4b	Drawer option for trolley TW 112 incl. one drawer		46	138940
	D5	Cover for operation panel for MobiMIG 320/321 K		46	155918
	D6	Suspension device, electrically isolated for HighPULSE 28x/35x K and HighPULSE touch 280/350 K		46	107540
	D7	Filter frame incl. filter for MobiMIG 321 K, reduced duty cycle		46	160090
	D8	Filter 130x320x34 mm MobiMIG 321 K (min. 10 pieces)		46	160084
	D9	Connection for automated welding for MobiTIG 284/304 DC, MobiMIG 321/322 - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	123166
	D9a	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	D10	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

E Accessories for water cooler:

	E1	Water cooling unit model WK 300		46	02610143
	E2	Socket for water cooling unit 6-pol. for MobiTIG 284/304 DC and MobiMIG 320/321		46	124858
	E3	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	E4	MIG/MAG hand welding torch TEDAC, model SBT 352 W, 3 m		06	142546
	E5	MIG/MAG hand welding torch TEDAC, model SBT 352 W, 4 m		06	142548

	Pos.	Description	Pu	PrGrp	Part No.
	E6	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	E7	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484

F Software (for free):

ColdMIG	F1	Software for ColdMIG process for MobiMIG 280/320/321/322		17	128430

G Additional wire equipment for DV-26:

	G1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
	G2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
	G3	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
	G4	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
	G5	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
	G6	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860

2.3.4. MobiMIG 322 K

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
MIG/MAG operation:	
Open circuit voltage:	90 V
Welding voltage:	15 - 30 V
Welding current:	25 - 320 A
Duty cycle 20 % (10 min.):	
Duty cycle 30 % (10 min.):	320 A (40 °C)
Duty cycle 35 % (10 min.):	300 A (40 °C)
Duty cycle 60 % (10 min.):	270 A (40 °C)
Duty cycle 100%:	250 A (40 °C)
Prim. contin. power:	11,1 kVA
Prim. contin. current:	16 A
Prim. max. current:	23 A



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	synergic operation, automatic energy control
Programs:	MIG/MAG, MMA/stick electrode, ColdMIG
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, stitch, spot welding
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, soft start
Power source:	inverter
Sockets 50 mm²:	earth lead and electrode cable
Torch cooling:	gas
Mains supply cable:	4 x 2.5 mm², 5 m long with plug 400 V / 32 A
Gas hpse:	2 m
Handle:	EN 60971-1 "S" / CE
Weight::	52 kg
Dimensions l x w x h.:	760 x 420 x 920 mm

Option MMA/stick electrode operation:	
Open cicuit voltage::	90 V
Welding voltage:	20.8 - 32 V
Welding current:	20 - 300 A
Duty cycle 20 % (10 min.):	
Duty cycle 30 % (10 min.):	300 A (40 °C)
Duty cycle 60 % (10 min.):	250 A (40 °C)
Duty cycle 100%:	230 A (40 °C)
Prim. contin. power::	12.5 kVA
Prim. contin. current:	18 A
Prim. max. current:	24 A

Wire feeder: compact mounted, Model DV-26	
Supply:	26 V-DC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Wire feed system:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Standard wire equipment:	mild steel 0,8 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**MIG/MAG welding unit MobiMIG 322 K**				
	**A**	**MIG/MAG welding unit MobiMIG 322 K**		**01**	**166934**
	AB	**MIG/MAG welding unit MobiMIG 322 K with accessories**		**01**	**SET166936**
	ABC1	**MIG/MAG welding unit MobiMIG 322 K with accessories and TEDAC hand welding torch SBT 307 G, 3 m**		**01**	**SET166938**
	ABC2	**MIG/MAG welding unit MobiMIG 322 K with accessories and TEDAC hand welding torch SBT 307 G, 4 m**		**01**	**SET166940**
B	**Standard accessories:**				
	B1	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	B2	Regulator argon/CO2 standard version		46	107018
C	**Welding torches:**				
	C1	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 3 m		06	02210858
	C2	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 4 m		06	02210859
	C3	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 5 m		06	154994

2.3.5. MobiMIG 322 KW

Primary:	
Power supply:	3 x 400 V
Frequency:	50 Hz
MIG/MAG operation:	
Open circuit voltage:	90 V
Welding voltage:	15 - 30 V
Welding current:	25 - 320 A
Duty cycle 20 % (10 min.):	
Duty cycle 30 % (10 min.):	320 A (40 °C)
Duty cycle 35 % (10 min.):	300 A (40 °C)
Duty cycle 60 % (10 min.):	270 A (40 °C)
Duty cycle 100%:	250 A (40 °C)
Prim. contin. power:	11.1 kVA
Prim. contin. current:	16 A
Prim. max. current:	23 A



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	synergic operation, automatic energy control
Programs:	MIG/MAG, MMA/stick electrode, ColdMIG
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, stitch, spot welding
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, soft start
Power source:	inverter
Sockets 50 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 2.5 mm², 5 m long with plug 400 V / 32 A
Gas hpse:	2 m
Handle:	EN 60971-1 "S" / CE
Weight::	63 kg
Dimensions l x w x h.:	760 x 420 x 920 mm

Option MMA/stick electrode operation:

Open cicuit voltage::	90 V
Welding voltage:	20.8 - 32 V
Welding current:	20 - 300 A
Duty cycle 20 % (10 min.):	
Duty cycle 30 % (10 min.):	300 A (40 °C)
Duty cycle 60 % (10 min.):	250 A (40 °C)
Duty cycle 100%:	230 A (40 °C)
Prim. contin. power::	12.5 kVA
Prim. contin. current:	18 A
Prim. max. current:	24 A

Wire feeder: compact mounted, Model DV-26

Supply:	26 V-DC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Wire feed system:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Standard wire equipment:	mild steel 0,8 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**MIG/MAG welding unit MobiMIG 322 KW**				
	A	**MIG/MAG welding unit MobiMIG 322 KW**		**01**	**166164**
	AB	**MIG/MAG welding unit MobiMIG 322 KW with accessories**		**01**	**SET166166**
	**ABC1**	**MIG/MAG welding unit MobiMIG 322 KW with accessories and TEDAC hand welding torch SBT 504 W, 3 m**		**01**	**SET166168**
	ABC2	**MIG/MAG welding unit MobiMIG 322 KW with accessories and TEDAC hand welding torch SBT 504 W, 4 m**		**01**	**SET166170**

! Software ColdMIG included for free

B Standard accessories:

	B1	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	B2	Regulator argon/CO2 standard version		46	107018

C Welding torches:

	C1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	C2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	C3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

2.3.6. Accessories for MobiMIG 322 K/KW

	Pos.	Description	Pu	PrGrp	Part No.
1	**Accessories:**				
	1.1.	BiPowerPLUS for MobiMIG 321/322 not in combination with socket for water cooling unit		46	131446
	1.2.	Adapter: Schuko plug 230 V to CEE connector 32 A/400 V for MobiMIG 321/322		46	143244
	1.3.	Torch holder D27 for mounting at the handle or handle tube		46	157598
	1.4.	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	1.5	Connection for automated welding for MobiTIG 284/304 DC, MobiMIG 321/322 - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	123166
	1.6	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	1.7	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584
2	**Software (for free):**				
	2.1.	Software for ColdMIG process for MobiMIG 280/320/321/322		17	128430
3	**Additional wire equipment for DV-26:**				
	3.1.	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
	3.2.	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
	3.3.	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
	3.4.	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
	3.5.	Kit for stainl. steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113856
	3.6.	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
	3.7.	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860

2.3.7. GreenMIG 400 KW

Primary:	
Power supply:	3 x 400 V
Frequency:	50 Hz
Contin. power:	13.8 kVA
Contin. current:	20 A
Max. current:	25 A
Secondary:	
Open circuit voltage:	70 V
Welding voltage:	15.5 - 34 V
Welding current:	30 - 400 A
Duty cycle 60 % (10 min.):	400 A (40 °C)
Duty cycle 100 %:	360 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Arc length:	automatic energy control
Programs:	MIG/MAG, MIG brazing, PulseARC (option), MMA/stick electrode, DeepARC, ColdMIG
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current, (stitch, spot welding)
Gas check:	button with hold function and automatic switch off
Button:	Wire inching
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, soft start (programmable)
Jobs:	100 jobs
Control:	via touch display and/or rotary encoder with push button
Rotary encoder:	energy, arc length
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974-1 "S" / CE
Weight:	109 kg
Dimensions l x w x h:	1210 x 430 x 880 mm

Wire feeder: integrated, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Standard wire equipment:	mild steel 1.2 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**MIG/MAG welding unit GreenMIG 400 KW**				
	A	**Synergic MIG welding unit GreenMIG 400 KW**		**01**	**163730**
	**AB**	**Synergic MIG welding unit GreenMIG 400 KW with accessories**		**01**	**SET163732**
	ABC1	**Synergic MIG welding unit GreenMIG 400 KW with accessories and TEDAC torch SBT 504 W, 3 m**		**01**	**SET163734**
	ABC2	**Synergic MIG welding unit GreenMIG 400 KW with accessories and TEDAC torch SBT 504 W, 4 m**		**01**	**SET163736**
B	**Standard accessories:**				
	B1	Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	C2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	C3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660
D	**Software upgrade:**				
	D1	Upgrade GreenMIG 400/500 to PulseARC welding incl. Interpulse (NOTE: Can only be installed starting from Rev. Inv. ME-I6 1.4A and ME-ISD1.2A)		17	168876
	D2	Upgrade for GreenMIG 400/500 aluminium programs		17	168878
	D3	Upgrade for GreenMIG 400/500 stainless steel programs		17	168882

2.3.8. GreenMIG 500 KW

Primary:	
Power supply:	3 x 400 V
Frequency:	50 Hz
Contin. power:	14.8 kVA
Contin. current:	26 A
Max. current:	38 A
Secondary:	
Open circuit voltage:	70 V
Welding voltage:	15.5 - 39 V
Welding current:	30 - 500 A
Duty cycle 40 % (10 min.):	500 A (40°C)
Duty cycle 60 % (10 min.):	440 A (40 °C)
Duty cycle 100 %:	390 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Arc length:	automatic energy control
Programs:	MIG/MAG, MIG brazing, PulseARC (option), MMA/stick electrode, DeepARC, ColdMIG
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current, (stitch, spot welding)
Gas check:	button with hold function and automatic switch off
Button:	Wire inching
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, soft start (programmable)
Jobs:	100 jobs
Control:	via touch display and/or rotary encoder with push button
Rotary encoder:	energy, arc length
Power source:	inverter
Sockets 95 mm²:	for earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974-1 "S" / CE
Weight:	109 kg
Dimensions l x w x h:	1210 x 430 x 880 mm

Wire feeder: integrated, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Standard wire equipment:	mild steel 1.2 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**MIG/MAG welding unit GreenMIG 500 KW**				
	A	**Synergic MIG welding unit GreenMIG 500 KW**		**01**	**164800**
	**AB**	**Synergic MIG welding unit GreenMIG 500 KW with accessories**		**01**	**SET164802**
	ABC1	**Synergic MIG welding unit GreenMIG 500 KW with accessories and TEDAC torch SBT 504 W, 3 m**		**01**	**SET164804**
	ABC2	**Synergic MIG welding unit GreenMIG 500 KW with accessories and TEDAC torch SBT 504 W, 4 m**		**01**	**SET164806**
B	**Standard accessories:**				
	B1	Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	C2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	C3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660
D	**Software upgrade:**				
	D1	Upgrade GreenMIG 400/500 to PulseARC welding incl. Interpulse (NOTE: Can only be installed starting from Rev. Inv. ME-I6 1.4A and ME-ISD1.2A)		17	168876
	D2	Upgrade for GreenMIG 400/500 aluminium programs		17	168878
	D3	Upgrade for GreenMIG 400/500 stainless steel programs		17	168882

2.3.9. GreenMIG 400 DW

Primary:	
Power supply:	3 x 400 V
Frequency:	50 Hz
Contin. power:	13.8 kVA
Contin. current:	20 A
Max. current:	25 A
Secondary:	
Open circuit voltage:	70 V
Welding voltage:	15.5 - 34 V
Welding current:	30 - 400 A
Duty cycle 60 % (10 min.):	400 A (40 °C)
Duty cycle 100 %:	360 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Arc length:	automatic energy control
Programs:	MIG/MAG, MIG brazing, PulseARC (option), MMA/stick electrode, DeepARC, ColdMIG
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Wire inching:	button and wire inching automatic
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the wire feeder, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, soft start (programmable)
Jobs:	100 jobs
Control:	via touch display and/or rotary encoder with push button
Rotary encoder:	energy, arc length
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974-1 "S" / CE
Weight:	130 kg (incl. wire feeder)
Dimensions l x w x h:	1210 x 430 x 1200 mm (incl. wire feeder and rotary device)

Wire feeder: separately mounted, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	18 kg
Dimensions l x w x h:	610 x 410 x 195 mm

Wire feeder: separately mounted, model DV-31

Supply voltage:	42 V-AC/42 V-DC
Wire feed:	4-roller drive 0.5 - 30 m/min. with wire straightener
Button:	wire inching
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weighnt:	21 kg
Dimensions l x w x h:	610 x 410 x 195 mm

	Pos.	Description	Pu	PrGrp	Part No.
MIG/MAG welding unit GreenMIG 400 DW with wire feeder and 1.6 m interconnection cable:					
With DV-26 wire feeder:					
	**AB1**	**Synergic MIG welding unit GreenMIG 400 DW (DV-26)**		**01**	**SET163650**
	AB1C	**Synergic MIG welding unit GreenMIG 400 DW (DV-26) with accessories**		**01**	**SET163652**
	AB1CD1	**Synergic MIG welding unit GreenMIG 400 DW (DV-26) with accessories and TEDAC torch SBT 504 W, 3 m**		**01**	**SET163654**
	AB1CD2	**Synergic MIG welding unit GreenMIG 400 DW (DV-26) with accessories and TEDAC torch SBT 504 W, 4 m**		**01**	**SET163656**
A Power source (without wire feeder):					
	A	Synergic MIG welding unit (power source) GreenMIG 400 DW, without wire feeder		01	163650
B Wire feeder:					
	B1	Wire feeder DV-26 for GreenMIG, SpeedMIG touch incl. control panel		46	155550
! Use wire feeder DV-31 for wire > 1.2 mm:					
	B2	Wire feeder DV-31 (OT) for GreenMIG, SpeedMIG touch incl. control panel		46	155551
C Standard accessories:					
	C1	Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
	C2	Regulator argon/CO2, single stage		46	01200300
D Welding torches:					
	D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	D3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660
E Software upgrade:					
PulseARC	E1	Upgrade GreenMIG 400/500 to PulseARC welding incl. Interpulse (NOTE: Can only be installed starting from Rev. Inv. ME-I6 1.4A and ME-ISD1.2A)		17	168876
ALU	E2	Upgrade for GreenMIG 400/500 aluminium programs		17	168878
CrNi	E3	Upgrade for GreenMIG 400/500 stainless steel programs		17	168882

2.3.10. GreenMIG 500 DW

Primary:	
Power supply:	3 x 400 V
Frequency:	50 Hz
Contin. power:	14.8 kVA
Contin. current:	26 A
Max. current:	38 A
Secondary:	
Open circuit voltage:	70 V
Welding voltage:	15.5 - 39 V
Welding current:	30 - 500 A
Duty cycle 40 % (10 min.):	500 A (40°C)
Duty cycle 60 % (10 min.):	440 A (40 °C)
Duty cycle 100 %:	390 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Arc length:	automatic energy control
Programs:	MIG/MAG, MIG brazing, PulseARC (option), MMA/stick electrode, DeepARC, ColdMIG
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Wire inching:	button and wire inching automatic
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the wire feeder, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, soft start (programmable)
Jobs:	100 jobs
Control:	via touch display and/or rotary encoder with push button
Rotary encoder:	energy, arc length
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974-1 "S" / CE
Weight:	130 kg (incl. wire feeder)
Dimensions l x w x h:	1210 x 430 x 1200 mm (incl. wire feeder and rotary device)

Wire feeder: separately mounted, model DV-26

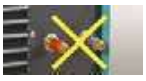
Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	18 kg
Dimensions l x w x h:	610 x 410 x 195 mm

Wire feeder: separately mounted, model DV-31

Supply voltage:	42 V-AC/42 V-DC
Wire feed:	4-roller drive 0.5 - 30 m/min. with wire straightener
Button:	wire inching
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	21 kg
Dimensions l x w x h:	610 x 410 x 195 mm

	Pos.	Description	Pu	PrGrp	Part No.
MIG/MAG welding unit GreenMIG 500 DW with wire feeder and 1.6 m interconnection cable:					
With DV-26 wire feeder:					
	**AB1**	**Synergic MIG welding unit GreenMIG 500 DW (DV-26)**		**01**	**SET164700**
	AB1C	**Synergic MIG welding unit GreenMIG 500 DW (DV-26) with accessories**		**01**	**SET164702**
	AB1CD1	**Synergic MIG welding unit GreenMIG 500 DW (DV-26) with accessories and TEDAC torch SBT 504 W, 3 m**		**01**	**SET164704**
	AB1CD2	**Synergic MIG welding unit GreenMIG 500 DW (DV-26) with accessories and TEDAC torch SBT 504 W, 4 m**		**01**	**SET164706**
A Power source (without wire feeder):					
	A	Synergic MIG welding unit (power source) GreenMIG 500 DW, without wire feeder		01	164700
B Wire feeder:					
	B1	Wire feeder DV-26 for GreenMIG, SpeedMIG touch incl. control panel		46	155550
! Use wire feeder DV-31 for wire > 1.2 mm:					
	B2	Wire feeder DV-31 (OT) for GreenMIG, SpeedMIG touch incl. control panel		46	155551
C Standard accessories:					
	C1	Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
	C2	Regulator argon/CO2, single stage		46	01200300
D Welding torches:					
	D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	D3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660
E Software upgrade:					
	E1	Upgrade GreenMIG 400/500 to PulseARC welding incl. Interpulse (NOTE: Can only be installed starting from Rev. Inv. ME-I6 1.4A and ME-ISD1.2A)		17	168876
	E2	Upgrade for GreenMIG 400/500 aluminium programs		17	168878
	E3	Upgrade for GreenMIG 400/500 stainless steel programs		17	168882

2.3.11. Accessories for GreenMIG 400/500 KW/DW

	Pos.	Description	Pu	PrGrp	Part No.
1	**Accessories:**				
	1.1	Adapter for wire spool		46	02900104
	1.2	Torch holder D27 for mounting at the handle or handle tube		46	157598
	1.3	Connection for remote control incl. socket 10-pol for SpeedMIG touch, GreenMIG KW		46	155850
	1.4	Remote control box for energy and voltage trim incl. 5 m cable		46	01903542
	1.5	Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
	1.6	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	1.7	Filter 340 x 190 mm for HighPULSE touch, GreenMIG 400/450/500 (minimum 10 pieces)	10 pcs	46	155848
	1.8a	Price reduction: no integrated water cooling unit (K version)		46	111832
	1.8b	Price reduction: no integrated water cooling unit (D version)		46	01903611
	1.9	Lifting eye screw, galvanized	4 pcs	46	09002001
	1.10a	MIG/MAG hand welding torch TEDAC, model SBT 352 W, 3 m		06	142546
	1.10b	MIG/MAG hand welding torch TEDAC, model SBT 352 W, 4 m		06	142548
	1.12	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584
2	**Accessories for wire feeder:**				
	2.1	Rotatable device for wire feeder including screw set		46	137436
	2.2	4 wheels mounted on the wire feeder		46	00102109

	Pos.	Description	Pu	PrGrp	Part No.
	2.3a	Cover with lock for operation panel at the wire feeder for HighPULSE, HighPULSE touch, GreenMIG		46	137546
	2.3b	Cover (standard) for operation panel at the wire feeder for HighPULSE, HighPULSE touch and GreenMIG		46	137547
	2.4	Control 'end of welding wire', installed in the wire feeder box		46	103365
	2.5	Suspension device for wire feeder electrically isolated		46	00502878
	2.6	Connection for wire feed liner inside the wire feeder box		46	110454

3 Connection cable for controller in wire feeder:

	3.1	Connection cable 5 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138518
	3.2	Connection cable 10 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138520
	3.3	Connection cable 15 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138522
	3.4	Connection cable 20 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138524
	3.5	Connection cable 30 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 incl. control cable for controller in wire feeder		46	145740

Price reduction, when not taken:

	3.6	Connection cable 1.6 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138516

4 Software:

	4.1	Upgrade GreenMIG 400/500 to PulseARC welding incl. Interpulse (NOTE: Can only be installed starting from Rev. Inv. ME-I6 1.4A and ME-ISD1.2A)		17	168876
	4.2	Upgrade for GreenMIG 400/500 aluminium programs		17	168878
	4.3	Upgrade for GreenMIG 400/500 stainless steel programs		17	168882

	Pos.	Description	Pu	PrGrp	Part No.
5	**Automation accessories:**				
	5.1	Connection automated welding GreenMIG, SMt emerg. STOP, welding ON, arc OK - socket 6 pol.		46	155852
	5.2	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
6	**Additional wire equipment for DV-26 and DV-31:**				
	6.1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
	6.2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
	6.3	Kit for mild steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113850
	6.4	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
	6.5	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
	6.6	Kit for stainl. steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113856
	6.7	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
	6.8	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860
	6.9	Kit for alu 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113862
	6.10	Kit for core wire 1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113864
	6.11	Kit for core wire 1.6 mm (DV-26/31/32) (2 drive rings and wire core)		46	113866
	6.12	Kit for core wire 2.0/2.4 mm (DV-31/32) (4 drive rings etc.)		46	113868
	6.13	Kit for core wire 2.8 mm (DV-31/32) (4 drive rings, etc.)		46	113870
	6.14	Kit for core wire 3.2 mm (DV-31/32) (4 drive rings etc.)		46	113872

3. Synergic Pulse welding units

3. Synergic Pulse welding units

3.1 Synergic Pulse welding units with touch control

HighPULSE touch 280/350 K
HighPULSE touch 400/450 KW
HighPULSE touch 400/450 DW

3.2 Synergic Pulse welding units

HighPULSE 284/354/353 K
HighPULSE 454/554 KW
HighPULSE 354/454/554 DW

3.3 Synergic Pulse welding units for automation and robotics

HighPULSE 354/454/554 RS

3.1. Synergic Pulse welding units - Series HighPULSE touch



3.1.1. HighPULSE touch 350 K

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
Synergic pulse / MIG operation:		
Open circuit voltage:	57 V	
Welding voltage:	15 - 31.5 V	
Welding current:	25 - 350 A	
Duty cycle 40 % (10 min.):	350 A (40 °C)	
Duty cycle 60 % (10 min.):	280 A (40 °C)	330 A (20 °C)
Duty cycle 100 %:	250 A (40 °C)	280 A (20 °C)
Prim. contin. power:	12.5 kVA	
Prim. contin. current:	18 A	
Prim. max. current:	25 A	



Optional: with water cooling unit WK 300 and trolley TW 112, with drawer as an option.



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	automatic energy control
Programs:	MIG/MAG, PulseARC, Interpulse, MMA, MIG brazing, DeepARC, ColdMIG, HighUP
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Wire inching:	button and wire inching automatic
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch,
Adjustable parameters:	choke inductance, wire burn back, pulse shape
Control:	via touch display and/or rotary encorder with push button
Rotary encorder:	energy, arc length
Job mode:	2000 Jobs programmable
Cover:	transparent, to protect the control panel
Power source:	inverter
Sockets 50 mm²:	earth lead and electrode cable
Torch cooling:	gas (option: water)
Socket water cooling unit:	6 pol.
Mains supply cable:	4 x 2,5 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Handle:	on top of the machine
Norm:	EN 60974-1 "S" / CE
Weight:	36.5 kg
Dimensions l x w x h:	600 x 300 x 565 mm

Option MMA/stick electrode operation:	
Open circuit voltage:	57 V
Welding voltage:	20 - 34 V
Welding current:	20 - 350 A
Duty cycle 40 % (10 min.):	350 A (40 °C)
Duty cycle 100 %:	250 A (40 °C)
Prim. contin. power:	13.1 kVA
Prim. contin. current:	19 A
Prim. max. current:	27 A

Wire feeder: compact mounted, Model DV-26	
Supply:	26 V-DC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Wire feed system:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Standard wire equipment:	mild steel 1.2 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**Portable Synergic Pulse welding unit HighPULSE touch 350 K**				
	A	**Synergic MIG Pulse welding unit HighPULSE touch 350 K**		30	158988
	AB	**Synergic Pulse welding unit HighPULSE touch 350 K with accessories**		30	SET158522
	ABC1	**Synergic Pulse welding unit HighPULSE touch 350 K with accessories and TEDAC torch SBT 307 G, 3 m**		30	SET158524
	ABC2	**Synergic MIG Pulse welding unit HighPULSE touch 350 K with accessories and TEDAC torch SBT 307 W, 4 m**		30	SET158526
	With water cooler and trolley TW 112:				
		Synergic Pulse welding unit HighPULSE touch 350 K incl. water cooler WK 300, trolley TW 112		30	SET158620
		**Synergic Pulse welding unit HighPULSE touch 350 K incl. water cooler WK 300, trolley TW 112, accessories**		30	SET158622
		Synergic Pulse welding unit HighPULSE touch 350 K incl. water cooler WK 300, trolley TW 112, accessories and TEDAC torch SBT 504 W, 3 m		30	SET158624
		Synergic Pulse welding unit HighPULSE touch 350 K incl. water cooler WK 300, trolley TW 112, accessories and TEDAC torch SBT 504 W, 4 m		30	SET158626
	Option	**Drawer option for trolley TW 112 incl. one drawer**		46	138940
!	**Software DeepARC, ColdMIG, HighUP included for free**				
B	**Standard accessories:**				
	B1	Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	**MIG/MAG hand welding torch TEDAC, model SBT 307 G, 3 m**		06	02210858
	C2	**MIG/MAG hand welding torch TEDAC, model SBT 307 G, 4 m**		06	02210859

3.1.2. Accessories for HighPULSE touch 350 K

	Pos.	Description	Pu	PrGrp	Part No.
1 Accessories:					
	1.1	Adapter for wire spool		46	02900104
	1.2	Torch holder D27 for mounting at the handle or handle tube		46	157598
	1.3a	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938
	1.3b	Drawer option for trolley TW 112 incl. one drawer		46	138940
	1.4	Push-Pull kit incl. socket 10-pol and switches for HighPULSE 28x/35x K and HighPULSE touch 280/350 K		46	107706
	1.5	Connection for remote control incl. socket for HighPULSE, SpeedMIG, OptiMIG in K version		46	155486
	1.6	Remote control box for energy and voltage trim incl. 5 m cable		46	01903542
	1.7	Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
	1.8	Dinse adapter for Euro torch connector (MIG/MAG)		46	01900544
	1.9	Suspension device, electrically isolated for HighPULSE 28x/35x K and HighPULSE touch 280/350 K		46	107540
	1.10	Filter frame incl. filter for HighPULSE 282, 284, 352, 354 K and HighPULSE touch 280/350 K reduced duty cycle		46	108424
	1.11	Filter mat 245 x 290 mm for Insquare 300/420/600, HighPULSE 282, 284, 352, 354 K, HighPULSE touch 280/350 K, CompactMIG 400 (min. 10 pieces)	10 pcs	46	00501048
	1.12	Metal filter for HighPULSE 284/354 K HighPULSE touch 280/350 K		46	157336
	1.13	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

	Pos.	Description	Pu	PrGrp	Part No.
2		**Accessories for water cooler:**			
	2.1	Water cooling unit model WK 300		46	02610143
	2.2	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	2.3	MIG/MAG hand welding torch TEDAC, model SBT 352 W, 3 m		06	142546
	2.4	MIG/MAG hand welding torch TEDAC, model SBT 352 W, 4 m		06	142548
	2.5	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	2.6	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
3		**Software (for free):**			
DeepARC	3.1	Software for DeepARC process for series HighPULSE/GreenMIG		17	120488
ColdMIG	3.2	Software for ColdMIG process for series HighPULSE/GreenMIG		17	118064
HighUP	3.3	Software for HighUP process for series HighPULSE/GreenMIG		17	134392
4		**Software:**			
EN 1090 WPQR	4.1	EN 1090 WPS/WPQR package incl. jobs for series HighPULSE and HighPULSE touch 350 - 550 A incl. calibration of the unit		17	135636
	4.2	Software ProDok32: generation and documentation of pulse and MIG/MAG programs for PC with RS 232 or USB port, for Windows, incl. dongle and 5 m cable, CD-ROM		17	113810
	4.3	Software ProJOB32pro: job generation and documentation, offline and online, and software updates for PC with RS 232, USB or ethernet port, for Windows, incl. 5 m cable, CD-ROM		17	125584
	4.4	Software ProJOB32: job generation and documentation, and software updates for PC with RS 232 or USB port, for Windows, incl. 5 m cable, converter, USB-Stick		17	118444
5		**Automation accessories:**			
Automation	5.1	Connection for automated welding for hand welding unit HighPULSE, SpeedMIG, HighTIG - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	138296
	5.2	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593

6 Additional wire equipment for DV-26:



Pos.	Description	Pu	PrGrp	Part No.
6.1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
6.2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
6.3	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
6.4	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
6.5	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
6.6	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860

3.1.3. Water cooling unit WK 300

Power supply:	230 V
Frequency:	50 Hz
Mains current:	1.6 A
Water pump:	high efficient pump 230 V
Water pressure:	3.5 bar
Water capacity:	3 l
Transformer:	230 V
Water pressure switch:	integrated
Functions:	automatic switch of fan and water pump
Electr. connection:	cable with 6-pole plug
Water connection:	2 quick couplings
Weight:	20 kg
Dimensions l x w x h:	600 x 300 x 260 mm



	Pos.	Description	Pu	PrGrp	Part No.
A	**Water cooling unit:**				
		**Water cooling unit model WK 300**		**46**	**02610143**
B	**Accessories:**				
	B1	Connection socket WK, 6-pin. for TIG 300 DC LT 240 AC/DC, HighPULSE RS, HighTIG RS		46	103675
	B2	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

3.1.4. HighPULSE touch 400 KW

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
Contin. power:	13.8 kVA
Contin. current:	20 A
Max. current:	25 A
Secondary:	
Open circuit voltage:	67 V
Welding voltage:	15 - 34 V
Welding current:	20 - 400 A
Duty cycle 80 % (10 min.):	400 A (40 °C)
Duty cycle 100 %:	360 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Arc length:	automatic energy control
Programs:	MIG/MAG, PulseARC, MMA, Interpulse, MIG brazing, DeepARC, ColdMIG, HighUP
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Wire inching:	button and wire inching automatic
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, pulse shape
Job-mode:	2000 jobs programmable
Control:	via touch display and/or rotary encoder with push button
Rotary encoder:	energy, arc length
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974-1 "S" / CE
Weight:	112 kg
Dimensions l x w x h:	1210 x 430 x 880 mm

Wire feeder: integrated, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Standard wire equipment:	mild steel 1.2 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**Synergic Pulse welding unit HighPULSE touch 400 KW**				
	A	**Synergic MIG Pulse welding unit HighPULSE touch 400 KW (DV-26)**		30	158992
	AB	**Synergic MIG Pulse welding unit HighPULSE touch 400 KW (DV-26) with accessories**		30	SET158722
	ABC1	**Synergic MIG Pulse welding unit HighPULSE touch 400 KW (DV-26) with accessories and TEDAC torch SBT 504 W, 3 m**		30	SET158724
	ABC2	**Synergic MIG Pulse welding unit HighPULSE touch 400 KW (DV-26) with accessories and TEDAC torch SBT 504 W, 4 m**		30	SET158726
B	**Standard accessories:**				
	B1	**Earth lead 70 mm², 4 m long with plug and earth clamp**		46	02210408
	B2	**Regulator argon/CO2, single stage**		46	01200300
C	**Welding torches:**				
	C1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	C2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	C3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

3.1.5. HighPULSE touch 450 KW

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
Contin. power:	13.8 kVA
Contin. current:	20 A
Max. current:	28 A
Secondary:	
Open circuit voltage:	67 V
Welding voltage:	15 - 36.5 V
Welding current:	20 - 450 A
Duty cycle 60 % (10 min.):	450 A (40 °C)
Duty cycle 100 %:	360 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Arc length:	automatic energy control
Programs:	MIG/MAG, PulseARC, MMA, Interpulse, MIG blazing, DeepARC, ColdMIG, HighUP
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Wire inching:	button and wire inching automatic
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, pulse shape
Job-mode:	2000 jobs programmable
Control:	via touch display and/or rotary encoder with push button
Rotary encoder:	energy, arc length
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974-1 "S" / CE
Weight:	112 kg
Dimensions l x w x h:	1210 x 430 x 880 mm

Wire feeder: integrated, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Standard wire equipment:	mild steel 1.2 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**Synergic Pulse welding unit HighPULSE touch 450 KW**				
	A	**Synergic MIG Pulse welding unit HighPULSE touch 450 KW (DV-26)**		30	158994
	AB	**Synergic MIG Pulse welding unit HighPULSE touch 450 KW (DV-26) with access.**		30	SET158996
	ABC1	**Synergic MIG Pulse welding unit HighPULSE touch 450 KW (DV-26) with access. and TEDAC torch SBT 504 W, 3 m**		30	SET158998
	ABC2	**Synergic MIG Pulse welding unit HighPULSE touch 450 KW (DV-26) with access. and TEDAC torch SBT 504 W, 4 m**		30	SET159000
B	**Standard accessories:**				
	B1	**Earth lead 95 mm², 4 m long with plug and earth clamp**		46	02210403
	B2	**Regulator argon/CO2, single stage**		46	01200300
C	**Welding torches:**				
	C1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	C2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	C3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

3.1.6. HighPULSE touch 400 DW

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
Contin. power:	13.8 kVA
Contin. current:	20 A
Max. current:	25 A
Secondary:	
Open circuit voltage:	67 V
Welding voltage:	15 - 34 V
Welding current:	20 - 400 A
Duty cycle 80 % (10 min.):	400 A (40 °C)
Duty cycle 100 %:	360 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Arc length:	automatic energy control
Programs:	MIG/MAG, PulseARC, MMA, Interpulse, MIG brazing, DeepARC, ColdMIG, HighUP
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Wire inching:	button and wire inching automatic
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the wire feeder, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, pulse shape
Job-mode:	2000 jobs programmable
Control:	via touch display and/or rotary encoder with push button
Rotary encoder:	energy, arc length
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974-1 "S" / CE
Weight:	133 kg (incl. wire feeder)
Dimensions l x w x h:	1210 x 430 x 1200 mm (incl. wire feeder and rotary device)

Wire feeder: separately mounted, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	18 kg
Dimensions l x w x h:	610 x 410 x 195 mm

Wire feeder: separately mounted, model DV-31

Supply voltage:	42 V-AC/42 V-DC
Wire feed:	4-roller drive 0.5 - 30 m/min. with wire straightener and tacho motor
Button:	wire inching
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	21 kg
Dimensions l x w x h:	610 x 410 x 195 mm

	Pos.	Description	Pu	PrGrp	Part No.
Synergic Pulse welding unit HighPULSE touch 400 DW incl. DV-26 and 1.6 m interconnetion cable:					
	**AB1**	**Synergic MIG Pulse welding unit HighPULSE touch 400 DW (DV-26)**		**30**	**SET158986**
	AB1C	**Synergic MIG Pulse welding unit HighPULSE touch 400 DW (DV-26) with access.**		**30**	**SET158988**
	AB1CD1	**Synergic MIG Pulse welding unit HighPULSE touch 400 DW (DV-26) with access. and TEDAC torch SBT 504 W, 3 m**		**30**	**SET158990**
	AB1CD2	**Synergic MIG Pulse welding unit HighPULSE touch 400 DW (DV-26) with access. and TEDAC torch SBT 504 W, 4 m**		**30**	**SET158992**
A Power source (without wire feeder):					
	A	Synergic MIG Pulse welding unit HighPULSE touch 400 DW Power source (without wire feeder)		30	158986
B Wire feeder:					
	B1	Wire feeder DV-26 for HighPULSE, HighPULSE touch, SpeedMIG		46	137652
! Use wire feeder DV-31 for wire > 1.2 mm:					
	B2	Wire feeder DV-31 (OT) for HighPULSE, HighPULSE touch, SpeedMIG		46	137650
C Standard accessories:					
	C1	Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
	C2	Regulator argon/CO2, single stage		46	01200300
D Welding torches:					
	D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	D3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

3.1.7. HighPULSE touch 450 DW

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
Contin. power:	13.8 kVA
Contin. current:	20 A
Max. current:	28 A
Secondary:	
Open circuit voltage:	67 V
Welding voltage:	15 - 36.5 V
Welding current:	20 - 450 A
Duty cycle 60 % (10 min.):	450 A (40 °C)
Duty cycle 100 %:	360 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Arc length:	automatic energy control
Programs:	MIG/MAG, PulseARC, MMA, Interpulse, MIG brazing, DeepARC, ColdMIG, HighUP
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Wire inching:	button and wire inching automatic
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the wire feeder, at the TEDAC torch
Adjustable parameters:	choke inductance, wire burn back, pulse shape
Job-mode:	2000 jobs programmable
Control:	via touch display and/or rotary encoder with push button
Rotary encoder:	energy, arc length
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974-1 "S" / CE
Weight:	133 kg (incl. wire feeder)
Dimensions l x w x h:	1210 x 430 x 1200 mm (incl. wire feeder and rotary device)

Wire feeder: separately mounted, model DV-26

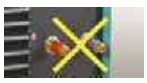
Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	18 kg
Dimensions l x w x h:	610 x 410 x 195 mm

Wire feeder: separately mounted, model DV-31

Supply voltage:	42 V-AC/42 V-DC
Wire feed:	4-roller drive 0.5 - 30 m/min. with wire straightener and tacho motor
Button:	wire inching
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	21 kg
Dimensions l x w x h:	610 x 410 x 195 mm

	Pos.	Description	Pu	PrGrp	Part No.
Synergic Pulse welding unit HighPULSE touch 450 DW incl. DV-26 and 1.6 m interconnection cable:					
	**AB1**	**Synergic MIG Pulse welding unit HighPULSE touch 450 DW (DV-26)**		**30**	**SET158710**
	AB1C	**Synergic MIG Pulse welding unit HighPULSE touch 450 DW (DV-26) with access.**		**30**	**SET158712**
	AB1CD1	**Synergic MIG Pulse welding unit HighPULSE touch 450 DW (DV-26) with access. and TEDAC torch SBT 504 W, 3 m**		**30**	**SET158714**
	AB1CD2	**Synergic MIG Pulse welding unit HighPULSE touch 450 DW (DV-26) with access. and TEDAC torch SBT 504 W, 4 m**		**30**	**SET158716**
A Power source (without wire feeder):					
	A	Synergic MIG Pulse welding unit HighPULSE touch 450 DW Power source (without wire feeder)		30	158710
B Wire feeder:					
	B1	Wire feeder DV-26 for HighPULSE, HighPULSE touch, SpeedMIG		46	137652
! Use wire feeder DV-31 for wire > 1.2 mm:					
	B2	Wire feeder DV-31 (OT) for HighPULSE, HighPULSE touch, SpeedMIG		46	137650
C Standard accessories:					
	C1	Earth lead 95 mm², 4 m long with plug and earth clamp		46	02210403
	C2	Regulator argon/CO2, single stage		46	01200300
D Welding torches:					
	D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	D3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

3.1.8. Accessoires for HighPULSE touch 400/450 KW/DW

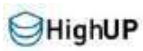
	Pos.	Description	Pu	PrGrp	Part No.
1	**Accessories:**				
	1.1	Adapter for wire spool		46	02900104
	1.2	Torch holder D27 for mounting at the handle or handle tube		46	157598
	1.3a	Push-Pull kit incl. sockets and switches for HighPULSE and SpeedMIG KW		46	138290
	1.3b	Push-Pull kit incl. sockets and switches for HighPULSE and SpeedMIG DW		46	138286
	1.4a	Connection for remote control incl. socket for HP, SM in KW version		46	155484
	1.4b	Connection for remote control incl. switch and socket for HighPULSE, SpeedMIG, OptiMIG in DW version		46	02110427
	1.5	Remote control box for energy and voltage trim incl. 5 m cable		46	01903542
	1.6	Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
	1.7	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	1.8	Filter 340 x 190 mm for HighPULSE touch, GreenMIG 400/450/500 (minimum 10 pieces)	10 pcs	46	155848
	1.9a	Price reduction: no integrated water cooling unit (K version)		46	111832
	1.9b	Price reduction: no integrated water cooling unit (D version)		46	01903611
	1.10	Lifting eye screw, galvanized	4 pcs	46	09002001

	Pos.	Description	Pu	PrGrp	Part No.
	1.11a	Cover WITH lock, transparent, for power source HighPULSE touch, GreenMIG Version KW and DW		46	158746
	1.11b	Cover WITHOUT lock, transparent, for power source HighPULSE touch, GreenMIG Version KW and DW		46	159398
	1.12	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

2 Accessories for wire feeder:

	2.1	Rotatable device for wire feeder including screw set		46	137436
	2.2	4 wheels mounted on the wire feeder		46	00102109
	2.3	Standard operation panel inside wire feeder for series HighPULSE, HighPULSE touch and SpeedMIG (only with special interconnection cable)		46	138526
	2.4	Cover (standard) for operation panel at the wire feeder for HighPULSE, HighPULSE touch and GreenMIG		46	137547
	2.5	Cover with lock for operation panel at the wire feeder for HighPULSE, HighPULSE touch, GreenMIG		46	137546
	2.6	Control 'end of welding wire', installed in the wire feeder box		46	103365
	2.7	Suspension device for wire feeder electrically isolated		46	00502878
	2.8	Balancer G4 for rotatable device 137.436		05	158714
	2.9	Wider wheel base (front) for HighPULSE touch, SpeedMIG touch DW		46	160188
	2.10	Connection for wire feed liner inside the wire feeder box		46	110454

Pos.	Description	Pu	PrGrp	Part No.
3	**Connection cable to wire feeder for controller in machine:**			
3.1	Connection cable 5 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	138844
3.2	Connection cable 10 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	138846
3.3	Connection cable 15 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	153218
3.4	Connection cable 20 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	153220
3.5	Connection cable 30 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	154388
	Price reduction, when not taken:			
3.6	Connection cable 1.6 m 70 mm², w.c. HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	138842
4	**Connection cable for controller in wire feeder:**			
4.1	Connection cable 1.6 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138516
4.2	Connection cable 5 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138518
4.3	Connection cable 10 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138520
4.4	Connection cable 15 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138522
4.5	Connection cable 20 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138524
4.6	Connection cable 30 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 incl. control cable for controller in wire feeder		46	145740
5	**Software (for free):**			
5.1	Software for DeepARC process for series HighPULSE/GreenMIG		17	120488
5.2	Software for ColdMIG process for series HighPULSE/GreenMIG		17	118064

	Pos.	Description	Pu	PrGrp	Part No.
	5.3	Software for HighUP process for series HighPULSE/GreenMIG		17	134392

6 Software:

	6.1	EN 1090 WPS/WPQR package incl. jobs for series HighPULSE and HighPULSE touch 350 - 550 A incl. calibration of the unit		17	135636
	6.2	Software ProDok32: generation and documentation of pulse and MIG/MAG programs for PC with RS 232 or USB port, for Windows, incl. dongle and 5 m cable, CD-ROM		17	113810
	6.3	Software ProJOB32pro: job generation and documentation, offline and online, and software updates for PC with RS 232, USB or ethernet port, for Windows, incl. 5 m cable, CD-ROM		17	125584
	6.4	Software ProJOB32: job generation and documentation, and software updates for PC with RS 232 or USB port, for Windows, incl. 5 m cable, converter, USB-Stick		17	118444

7 Automation accessories:

	7.1	Connection for automated welding for hand welding unit HighPULSE, SpeedMIG, HighTIG - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	138296
	7.1a	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	7.2	Connection for automated welding HP, SM, HT - emerg. STOP, welding ON, arc OK - 1 x control voltage OUTPUT 0 - 10 V - socket 10 pol.		46	158270
	7.2a	Connection cable 10-pol. 5m welding unit - automated system		46	01903556
	7.3	Bus interface "Universal" for hand welding units HighPULSE, ProfiNet, EtherCAT, EtherNet/IP, Modbus TCP u. RTU incl. serial-to-serial converter and 10 pole socket (please specify the required bus version)		17	167062
	7.4	Digital interface for job operation (6 bit - 63 jobs) or HighPULSE with socket 24 pol. signals: welding on, arc is started, emergency stop, torch blow out and 6 bits for jobs		17	159202

	Pos.	Description	Pu	PrGrp	Part No.
	7.4a	Connection cable 24-pin., 5 m welding unit - robot		46	01903557

8 Additional wire equipment for DV-26 and DV-31:

	8.1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
	8.2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
	8.3	Kit for mild steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113850
	8.4	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
	8.5	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
	8.6	Kit for stainl. steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113856
	8.7	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
	8.8	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860
	8.9	Kit for alu 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113862
	8.10	Kit for core wire 1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113864
	8.11	Kit for core wire 1.6 mm (DV-26/31/32) (2 drive rings and wire core)		46	113866
	8.12	Kit for core wire 2.0/2.4 mm (DV-31/32) (4 drive rings etc.)		46	113868
	8.13	Kit for core wire 2.8 mm (DV-31/32) (4 drive rings, etc.)		46	113870
	8.14	Kit for core wire 3.2 mm (DV-31/32) (4 drive rings etc.)		46	113872

3.2. Synergic Pulse welding units for hand welding - Series HighPULSE



3.2.1. HighPULSE 354 K

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
Synergic pulse / MIG operation:		
Open circuit voltage:	57 V	
Welding voltage:	15 - 31.5 V	
Welding current:	25 - 350 A	
Duty cycle 40 % (10 min.):	350 A (40 °C)	
Duty cycle 60 % (10 min.):	280 A (40 °C)	330 A (20 °C)
Duty cycle 100 %:	250 A (40 °C)	280 A (20 °C)
Prim. contin. power:	12.5 kVA	
Prim. contin. current:	18 A	
Prim. max. current:	25 A	



Optional: with water cooling unit WK 300 and trolley TW 112, with drawer as an option.



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	automatic energy control
Program capacity:	256 programs
Schweißverfahren:	MIG/MAG, PulseARC, MMA/stick electrode, MIG brazing, TIG DC, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current, stitch, spot welding
Gas check:	button with hold function and automatic switch off
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch, job mode
LEDs:	Mains, failure, temp. protection, hold function
Adjustable parameters:	choke inductance, pulse shape
Automated functions:	wire burn back, soft start (programmable)
Job mode:	2000 Jobs programmable
Cover:	transparent, to protect the control panel
Power source:	inverter
Sockets 50 mm²:	earth lead and electrode cable
Torch cooling:	gas (option: water)
Socket water cooling unit:	6 pol.
Mains supply cable:	4 x 2,5 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Handle:	on top of the machine
Norm:	EN 60974-1 "S" / CE
Weight:	36.5 kg
Dimensions l x w x h:	600 x 300 x 565 mm

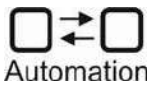
Option TIG operation:	
Open circuit voltage:	57 V
Welding voltage:	10 - 24 V
Welding current:	10 - 350 A
Duty cycle 40 % (10 min.):	350 A (40 °C)
Duty cycle 60 % (10 min.):	280 A (40 °C)
Duty cycle 100 %:	250 A (40 °C)
Prim. contin. power:	11.1 kVA
Prim. contin. current:	16 A
Prim. max. current:	23 A
Option MMA/stick electrode operation:	
Open circuit voltage:	57 V
Welding voltage:	20 - 34 V
Welding current:	20 - 350 A
Duty cycle 40 % (10 min.):	350 A (40 °C)
Duty cycle 100 %:	250 A (40 °C)
Prim. contin. power:	13.1 kVA
Prim. contin. current:	19 A
Prim. max. current:	27 A
Wire feeder: compact mounted, Model DV-26	
Supply:	26 V-DC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Wire feed system:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Standard wire equipment:	mild steel 1.2 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**Portable Synergic Pulse welding unit HighPULSE 354 K**				
	A	**Synergic MIG Pulse welding unit HighPULSE 354 K**		30	154136
	AB	**Synergic Pulse welding unit HighPULSE 354 K with accessories**		30	SET154144
	ABC1	**Synergic Pulse welding unit HighPULSE 354 K with accessories and TEDAC torch SBT 307 G, 3 m**		30	SET154146
	ABC2	**Synergic Pulse welding unit HighPULSE 354 K with accessories and TEDAC torch SBT 307 G, 4 m**		30	SET154148
		With water cooler and trolley TW 112:			
		Synergic Pulse welding unit HighPULSE 354 K incl. water cooler WK 300, trolley TW 112		30	SET154150
		**Synergic Pulse welding unit HighPULSE 354 K incl. water cooler WK 300, trolley TW 112, accessories**		30	SET154152
		Synergic Pulse welding unit HighPULSE 354 K incl. water cooler WK 300, trolley TW 112, accessories and TEDAC torch SBT 504 W, 3 m		30	SET154154
		Synergic Pulse welding unit HighPULSE 354 K incl. water cooler WK 300, trolley TW 112, accessories and TEDAC torch SBT 504 W, 4 m		30	SET154156
	Option	**Drawer option for trolley TW 112 incl. one drawer**		46	138940
B	**Standard accessories:**				
	B1	Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	**MIG/MAG hand welding torch TEDAC, model SBT 307 G, 3 m**		06	02210858
	C2	**MIG/MAG hand welding torch TEDAC, model SBT 307 G, 4 m**		06	02210859

3.2.2. Accessories for HighPULSE 354 K

	Pos.	Description	Pu	PrGrp	Part No.
1 Accessories:					
	1.1	Adapter for wire spool		46	02900104
	1.2	Torch holder D27 for mounting at the handle or handle tube		46	157598
	1.3a	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938
	1.3b	Drawer option for trolley TW 112 incl. one drawer		46	138940
	1.4	Push-Pull kit incl. socket 10-pol and switches for HighPULSE 28x/35x K and HighPULSE touch 280/350 K		46	107706
	1.5	Connection for remote control incl. socket for HighPULSE, SpeedMIG, OptiMIG in K version		46	155486
	1.6	Remote control box for energy and voltage trim incl. 5 m cable		46	01903542
	1.7	Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
	1.8	Dinse adapter for Euro torch connector (MIG/MAG)		46	01900544
	1.9	Suspension device, electrically isolated for HighPULSE 28x/35x K and HighPULSE touch 280/350 K		46	107540
	1.10	Filter frame incl. filter for HighPULSE 282, 284, 352, 354 K and HighPULSE touch 280/350 K reduced duty cycle		46	108424
	1.11	Filter mat 245 x 290 mm for Insquare 300/420/600, HighPULSE 282, 284, 352, 354 K, HighPULSE touch 280/350 K, CompactMIG 400 (min. 10 pieces)	10 pcs	46	00501048
	1.12	Metal filter for HighPULSE 284/354 K HighPULSE touch 280/350 K		46	157336
	1.13	Key switch for locking the system in job mode for HighPULSE and HighTIG series		46	148246

	Pos.	Description	Pu	PrGrp	Part No.
2	**Accessories for TIG operation:**				
	2.1a	TIG hand welding torch TH 202 G-MAG, 4 m for HighPULSE 28x/35x K and MobiMIG with Euro connector leather/rubber hose assembly		10	133632
	2.1b	TIG hand welding torch TH 202 G-MAG, 8 m for HighPULSE 28x/35xK and MobiMIG with Euro connector leather/rubber hose assembly		10	129532
	2.2	TIG hand welding torch model TH 452 W-MAG, 8 m for HighPULSE with Euro connector leather/rubber hose assembly		10	145092
3	**Accessories for water cooler:**				
	3.1	Water cooling unit model WK 300		46	02610143
	3.2	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	3.3	MIG/MAG hand welding torch TEDAC, model SBT 352 W, 3 m		06	142546
	3.4	MIG/MAG hand welding torch TEDAC, model SBT 352 W, 4 m		06	142548
	3.5	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	3.6	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
4	**Interface power source <-> computer:**				
	4.1	RS 232 Interface for series HighPULSE standard equipment		17	126540
	4.2	Ethernet interface for HighPULSE		17	126506
	4.3	Option Wifi equipment only in combination with 126.506 or 159.190		17	144106
5	**Software (for free):**				
	5.1	Software for DeepARC process for series HighPULSE/GreenMIG		17	120488
	5.2	Software for ColdMIG process for series HighPULSE/GreenMIG		17	118064
	5.3	Software for HighUP process for series HighPULSE/GreenMIG		17	134392
	5.4	Software for Interpulse process for series HighPULSE		17	120490

	Pos.	Description	Pu	PrGrp	Part No.
6 Software:					
	6.1	EN 1090 WPS/WPQR package incl. jobs for series HighPULSE and HighPULSE touch 350 - 550 A incl. calibration of the unit		17	135636
	6.2	Software ProDok32: generation and documentation of pulse and MIG/MAG programs for PC with RS 232 or USB port, for Windows, incl. dongle and 5 m cable, CD-ROM		17	113810
	6.3	Software ProJOB32pro: job generation and documentation, offline and online, and software updates for PC with RS 232, USB or ethernet port, for Windows, incl. 5 m cable, CD-ROM		17	125584
	6.4	Software ProJOB32: job generation and documentation, and software updates for PC with RS 232 or USB port, for Windows, incl. 5 m cable, converter, USB-Stick		17	118444
7 Robot and automation accessories:					
	7.1	Connection for automated welding for hand welding unit HighPULSE, SpeedMIG, HighTIG - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	138296
	7.2	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	7.3	Connection for automated welding HP, SM, HT - emerg. STOP, welding ON, arc OK - 1 x control voltage OUTPUT 0 - 10 V - socket 10 pol.		46	158270
	7.4	Connection cable 10-pol. 5m welding unit - automated system		46	01903556
8 Additional wire equipment for DV-26:					
	8.1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
	8.2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
	8.3	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
	8.4	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
	8.5	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
	8.6	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860

3.2.3. Water cooling unit WK 300

Power supply:	1 x 400 V / 230 V
Frequency:	50 Hz
Mains current:	1 A / 1.6 A
Water pump:	high efficient pump 230 V
Water pressure:	3.5 bar
Water capacity:	3 l
Transformer:	400 / 230 V
Water pressure switch:	integrated
Functions:	automatic switch of fan and water pump
electr. connection:	cable with 6-pole plug
Water connection:	2 quick couplings
Weight:	20 kg
Dimensions l x w x h:	600 x 300 x 260 mm



	Pos.	Description	Pu	PrGrp	Part No.
A	**Water cooling unit:**				
	**A**	**Water cooling unit model WK 300**		**46**	**02610143**
B	**Accessories:**				
	B1	Connection socket WK, 6-pin. for TIG 300 DC LT 240 AC/DC, HighPULSE RS, HighTIG RS		46	103675
	B2	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

3.2.4. HighPULSE 353 K

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
Synergic pulse/MIG operation:		
Open circuit voltage:	57 V	
Welding voltage:	15 - 31.5 V	
Welding current:	25 - 350 A	
Duty cycle 40 % (10 min.):	350 A (40 °C)	
Duty cycle 60 % (10 min.):	280 A (40 °C)	330 A (20 °C)
Duty cycle 100 %:	250 A (40 °C)	280 A (20 °C)
Prim. contin. power:	12.5 kVA	
Prim. contin. current:	18 A	
Prim. max. current:	25 A	



Protection class:	IP 20
Insulation class:	H
Cooling:	AF
Arc length:	automatic energy control
Program capacity:	512 programs
Programs:	MIG/MAG, PulseARC, InterPULSE, DeepARC, ColdMIG, HighUP
Adjustable parameters:	choke inductance, pulse shape wire burn back
Automated functions:	soft start (programmable)
Power source:	inverter
Socket 50 mm²:	earth lead
Torch cooling:	gas
Mains supply cable:	4 x 4 mm², 5 m long with plug 3 x 400 V / 32 A
Gas hose:	2 m
Suspension device:	on top of the machine
Norm:	EN 60974-1 "S" / CE
Weight:	49.6 kg
Dimensions l x w x h:	720 x 170 x 630 mm

With JOB operation panel:



Job mode:	4 Jobs, selectable at the TEDAC torch
Potentiometer:	trim (arc length or wire feed speed)
Job display:	4 big display modules
Buttons:	gas check and wire inching
Socket:	connection of external operation panel

With standard operation panel:



Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current, stitch, spot welding
LEDs:	Mains, failure, temp. protection, hold function
Energy adjustment:	at the machine, at the TEDAC torch, job mode
Job mode:	999 jobs programmable
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Potentiometers:	energy and arc trim
Buttons:	gas check and wire inching

Wire feeder compact mounted: Model DV-26

Supply:	26 V-DC / 42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Wire feed system:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Standard wire equipment:	mild steel 1.2 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**With standard operation panel:**				
	**A**	**Synergic MIG Pulse welding unit HighPULSE 353 K, slim version incl. standard operation panel**		**30**	**SET131919**
B	**With JOB operation panel:**				
	**B**	**Synergic MIG Pulse welding unit HighPULSE 353 K, slim version incl. operation panel with 4 jobs**		**30**	**SET131918**
C	**Accessories:**				
	C1	Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
	C2	Regulator argon/CO2, single stage		46	01200300
	C3	Adapter for wire spool		46	02900104
	C4	MAG Remote Control MRC-20 in housing for manual process control incl. displays for series HighPULSE with 5 m cable (only with 117.440 and job panel)		46	113808
	C5	Torch holder for HighPULSE 351/353 K bent, for SB/SBT torches		46	129972
	C6	Torch holder for HighPULSE 351/353 K bent, for RSB/T torches		46	129976
D	**Welding torches:**				
	D1	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 3 m		06	02210858
	D2	MIG/MAG hand welding torch TEDAC, model SBT 307 G, 4 m		06	02210859
	D3	MIG/MAG hand welding torch TEDAC, model SBT 351 G, 3 m		06	112938
	D4	MIG/MAG hand welding torch TEDAC, model SBT 351 G, 4 m		06	112940
	D5	Fume extraction torch TEDAC, model RSBT 351 G, 3 m		06	129276
	D6	Fume extraction torch TEDAC, model RSBT 351 G, 4 m		06	129278

3.2.5. HighPULSE 454 KW

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
Contin. power:	15.9 kVA	
Contin. current:	23 A	
Max. current:	34 A	
Secondary:		
Open circuit voltage:	72 V	
Welding voltage:	15 - 36.5 V	
Welding current:	20 - 450 A	
Duty cycle 50 % (10 min.):		450 A (40 °C)
Duty cycle 60 % (10 min.):	450 A (25 °C)	400 A (40 °C)
Duty cycle 100 %:	400 A (25 °C)	330 A (40 °C)



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	automatic energy control
Program capacity:	512 programs
Programs:	MIG/MAG, PulseARC, MMA/stick electrode, MIG brazing, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE option: TIG DC
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch, job mode
LEDs:	mains, failure, temp. protection, hold function
Adjustable parameters:	choke inductance, pulse shape, wire burn back
Automated functions:	soft start (programmable)
Job mode:	2000 jobs programmable
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Norm:	EN 60974-1 "S" / CE
Weight:	115 kg
Dimensions l x w x h:	1100 x 490 x 895 mm

Wire feeder: integrated, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Wire feed support:	D 300/15 DIN 8559
Torch connection:	Euro connector
Standard wire equipment:	mild steel 1.2 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**Synergic Pulse welding unit HighPULSE 454 KW**				
	**A**	**Synergic MIG Pulse welding unit HighPULSE 454 KW (DV-26)**		**30**	**SET154198**
	AB	**Synergic MIG Pulse welding unit HighPULSE 454 KW (DV-26) with accessories**		**30**	**SET154200**
	ABC1	**Synergic MIG Pulse welding unit HighPULSE 454 KW (DV-26) with accessories and TEDAC torch SBT 504 W, 3 m**		**30**	**SET154202**
	ABC2	**Synergic MIG Pulse welding unit HighPULSE 454 KW (DV-26) with accessories and TEDAC torch SBT 504 W, 4 m**		**30**	**SET154204**
B	**Standard accessories:**				
	B1	Earth lead 95 mm², 4 m long with plug and earth clamp		46	02210403
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	C2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	C3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

3.2.6. HighPULSE 554 KW

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
Contin. power:	19.4 kVA	
Contin. current:	28 A	
Max. current:	45 A	
Secondary:		
Open circuit voltage:	72 V	
Welding voltage:	15 - 41.5 V	
Welding current:	20 - 550 A	
Duty cycle 40 % (10 min.):		550 A (40 °C)
Duty cycle 50 % (10 min.):		500 A (40 °C)
Duty cycle 60 % (10 min.):	550 A (20 °C)	470 A (40 °C)
Duty cycle 100 %:	500 A (20 °C)	420 A (40 °C)



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	automatic energy control
Program capacity:	512 programs
Programs:	MIG/MAG, PulseARC, MMA/stick electrode, MIG brazing, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE option: TIG DC
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the TEDAC torch, job mode
LEDs:	mains, failure, temp. protection, hold function
Adjustable parameters:	choke inductance, pulse shape, wire burn back
Automated functions:	soft start (programmable)
Job mode:	2000 jobs programmable
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Norm:	EN 60974-1 "S" / CE
Weight:	120 kg
Dimensions l x w x h:	1100 x 490 x 895 mm

Wire feeder: integrated, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive
	0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Standard wire equipment:	mild steel 1.2 mm

	Pos.	Description	Pu	PrGrp	Part No.
A	**Synergic Pulse welding unit HighPULSE 554 KW**				
	A	**Pulse-Arc welding unit HighPULSE 554 KW (DV-26)**		**30**	**155582**
	**AB**	**Synergic MIG Pulse welding unit HighPULSE 554 KW (DV-26) with accessories**		**30**	**SET135794**
	ABC1	**Synergic MIG Pulse welding unit HighPULSE 554 KW (DV-26) with accessories and TEDAC torch SBT 504 W, 3 m**		**30**	**SET135796**
	ABC2	**Synergic MIG Pulse welding unit HighPULSE 554 KW (DV-26) with accessories and TEDAC torch SBT 504 W, 4 m**		**30**	**SET135798**
B	**Standard accessories:**				
	B1	Earth lead 95 mm², 4 m long with plug and earth clamp		46	02210403
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	C2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	C3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

3.2.7. HighPULSE 354 DW

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
Contin. power:	14.5 kVA	
Contin. current:	21 A	
Max. current:	25 A	
Secondary:		
Open circuit voltage:	57 V	
Welding voltage:	15 - 31.5 V	
Welding current:	25 - 350 A	
Duty cycle 50 % (10 min.):		350 A (40 °C)
Duty cycle 60 % (10 min.):	350 A (20 °C)	330 A (40 °C)
Duty cycle 100 %:	300 A (20 °C)	280 A (40 °C)



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	automatic energy control
Program capacity:	256 programs
Programs:	MIG/MAG, MMA/stick electrode, MIG brazing, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE option: TIG DC
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the wire feeder, at the TEDAC torch, job mode
LEDs:	mains, failure, temp. protection, hold function
Adjustable parameters:	choke inductance, wire burn back
Automated functions:	soft start (programmable)
Job mode:	2000 jobs programmable
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 4,0 mm², 5 m long with plug 3 x 400, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974 -1 "S" / CE
Weight:	130 kg (incl. wire feeder)
Dimensions l x w x h:	1100 x 490 x 1200 mm (incl. wire feeder and rotary device)

Wire feeder: separately mounted, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive
	0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Potentiometer:	energy
Potentiometer:	arc length (voltage trim)
Button:	wire inching
Wire feed support:	D 300/15 DIN 8559
Torch connection:	Euro connector
Connection cable:	1.6 m, 70 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	18 kg
Dimensions l x w x h:	610 x 410 x 195 mm

	Pos.	Description	Pu	PrGrp	Part No.
		Synergic Pulse welding unit HighPULSE 354 DW incl. wire feeder and 1.6 m interconnection cable:			
		With DV-26 wire feeder:			
	**AB1**	**Synergic MIG Pulse welding unit HighPULSE 354 DW (DV-26)**		**30**	**SET154158**
	AB1C	**Synergic MIG Pulse welding unit HighPULSE 354 DW (DV-26) with access.**		**30**	**SET154160**
	AB1CD1	**Synergic MIG Pulse welding unit HighPULSE 354 DW (DV-26) with access. and TEDAC torch SBT 504 W, 3 m**		**30**	**SET154162**
	AB1CD2	**Synergic MIG Pulse welding unit HighPULSE 354 DW (DV-26) with access. and TEDAC torch SBT 504 W, 4 m**		**30**	**SET154164**
A		**Power source (without wire feeder):**			
	A	Synergic MIG Pulse welding unit (power source) HighPULSE 354 DW, without wire feeder		30	154138
B		**Wire feeder DV-26:**			
	B1	Wire feeder DV-26 for HighPULSE, HighPULSE touch, SpeedMIG		46	137652
!		**Use wire feeder DV-31 for wire > 1.2 mm:**			
	B2	Wire feeder DV-31 (OT) for HighPULSE, HighPULSE touch, SpeedMIG		46	137650
C		**Standard accessories:**			
	C1	Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
	C2	Regulator argon/CO2, single stage		46	01200300
D		**Welding torches:**			
	D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

3.2.8. HighPULSE 454 DW

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
Contin. power:	15.9 kVA	
Contin. current:	23 A	
Max. current:	34 A	
Secondary:		
Open circuit voltage:	72 V	
Welding voltage:	15 - 36.5 V	
Welding current:	20 - 450 A	
Duty cycle 50 % (10 min.):		450 A (40 °C)
Duty cycle 60 % (10 min.):	450 A (20 °C)	400 A (40 °C)
Duty cycle 100 %:	400 A (20 °C)	330 A (40 °C)



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	automatic energy control
Program capacity:	512 programs
Programs:	MIG/MAG, PulseARC, MMA/stick electrode, MIG brazing, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE option: TIG DC
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the wire feeder, at the TEDAC torch, job mode
LEDs:	mains, failure, temp. protection, hold function
Adjustable parameters:	choke inductance, wire burn back
Automated functions:	soft start (programmable)
Job mode:	2000 jobs programmable
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6,0 mm², 5 m long with plug 3 x 400, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974 -1 "S" / CE
Weight:	140 kg (incl. wire feeder)
Dimensions l x w x h:	1100 x 490 x 1200 mm (incl. wire feeder and rotary device)

Wire feeder: separately mounted, model DV-26

Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Potentiometer:	energy
Potentiometer:	arc length (voltage trim)
Button:	wire inching
Wire feed support:	D 300/15 DIN 8559
Torch connection:	Euro connector
Connection cable:	1.6 m, 70 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	18 kg
Dimensions l x w x h:	610 x 410 x 195 mm

Wire feeder: separately mounted, model DV-31

Supply:	42 V-DC/42 V-AC
Wire feed motor:	4-roller drive 0.5 - 30 m/min. with wire straightener and tacho motor
Potentiometer:	energy
Potentiometer:	arc length (voltage trim)
Button:	wire inching
Wire feed support:	D 300/15 DIN 8559
Torch connection:	Euro connector
Connection cable:	1.6 m, 70 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	21 kg
Dimensions l x w x h:	610 x 410 x 195 mm

	Pos.	Description	Pu	PrGrp	Part No.
Synergic Pulse welding unit HighPULSE 454 DW incl. wire feeder and 1.6 m interconnection cable:					
With DV-26 wire feeder:					
	**AB1**	**Synergic MIG Pulse welding unit HighPULSE 454 DW (DV-26)**		**30**	**SET154166**
	AB1C	**Synergic MIG Pulse welding unit HighPULSE 454 DW (DV-26) with access.**		**30**	**SET154168**
	AB1CD1	**Synergic MIG Pulse welding unit HighPULSE 454 DW (DV-26) with access. and TEDAC torch SBT 504 W, 3 m**		**30**	**SET154170**
	AB1CD2	**Synergic MIG Pulse welding unit HighPULSE 454 DW (DV-26) with access. and TEDAC torch SBT 504 W, 4 m**		**30**	**SET154172**
With DV-31 wire feeder:					
	**AB2**	**Synergic MIG Pulse welding unit HighPULSE 454 DW (DV-31)**		**30**	**SET154174**
	AB2C	**Synergic MIG Pulse welding unit HighPULSE 454 DW (DV-31) with access.**		**30**	**SET154176**
	AB2CD1	**Synergic MIG Pulse welding unit HighPULSE 454 DW (DV-31) with access. and TEDAC torch SBT 504 W, 3 m**		**30**	**SET154178**
	AB2CD2	**Synergic MIG Pulse welding unit HighPULSE 454 DW (DV-31) with access. and TEDAC torch SBT 504 W, 4 m**		**30**	**SET154180**
A Power source (without wire feeder):					
	A	Synergic MIG Pulse welding unit (power source) HighPULSE 454 DW, without wire feeder		30	154142
B Wire feeder:					
	B1	Wire feeder DV-26 for HighPULSE, HighPULSE touch, SpeedMIG		46	137652
	B2	Wire feeder DV-31 (OT) for HighPULSE, HighPULSE touch, SpeedMIG		46	137650
C Standard accessories:					
	C1	Earth lead 95 mm², 4 m long with plug and earth clamp		46	02210403
	C2	Regulator argon/CO2, single stage		46	01200300
D Welding torches:					
	D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	D3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

3.2.9. HighPULSE 554 DW

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
Contin. power:	19.4 kVA	
Contin. current:	28 A	
Max. current:	45 A	
Secondary:		
Open circuit voltage:	72 V	
Welding voltage:	15 - 41.5 V	
Welding current:	20 - 550 A	
Duty cycle 40 % (10 min.):		550 A (40 °C)
Duty cycle 50 % (10 min.):		500 A (40 °C)
Duty cycle 60 % (10 min.):	550 A (20 °C)	470 A (40 °C)
Duty cycle 100 %:	500 A (20 °C)	420 A (40 °C)



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	automatic energy control
Program capacity:	512 programs
Programs:	MIG/MAG, PulseARC, MMA, MIG brazing, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE option: TIG DC
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the wire feeder, at the TEDAC torch, job mode
LEDs:	mains, failure, temp. protection, hold function
Adjustable parameters:	choke inductance, wire burn back
Automated functions:	soft start (programmable)
Job mode:	2000 jobs programmable
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974 -1 "S" / CE
Weight:	145 kg (incl. wire feeder)
Dimensions l x w x h:	1100 x 490 x 1200 mm (incl. wire feeder and rotary device)

Wire feeder: separately mounted, model DV-26

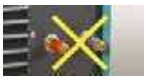
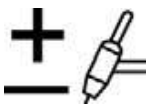
Supply:	26 V-DC/42 V-AC
Wire feed motor:	DC motor with worm gear drive 0.5 - 25 m/min.
Gear:	4-roller-drive DV-26
Potentiometer:	energy
Potentiometer:	arc length (voltage trim)
Button:	wire inching
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	Euro connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	18 kg
Dimensions l x w x h:	610 x 410 x 195 mm

Wire feeder: separately mounted, model DV-31

Supply voltage:	42 V-DC/42 V-AC
Wire feed:	4-roller drive 0.5 - 30 m/min. with wire straightener and tacho motor
Potentiometer:	energy
Potentiometer:	arc length (voltage trim)
Button:	wire inching
Reel hub assembly:	D 300/15 DIN 8559
Torch connection:	EURO connector
Connection cable:	1.6 m, 95 mm², water cooled
Standard wire equipment:	mild steel 1.2 mm
Weight:	21 kg
Dimensions l x w x h:	610 x 410 x 195 mm

	Pos.	Description	Pu	PrGrp	Part No.
Synergic Pulse welding unit HighPULSE 554 DW incl. wire feeder and 1.6 m interconnection cable:					
With DV-26 wire feeder:					
	AB1	**Synergic MIG Pulse welding unit HighPULSE 554 DW (DV-26)**		30	SET154182
	AB1C	**Synergic MIG Pulse welding unit HighPULSE 554 DW (DV-26) with access.**		30	SET154184
	AB1CD1	**Synergic MIG Pulse welding unit HighPULSE 554 DW (DV-26) with access. and TEDAC torch SBT 504 W, 3 m**		30	SET154186
	AB1CD2	**Synergic MIG PULSE welding unit HighPULSE 554 DW (DV-26) with access. and TEDAC torch SBT 504 W, 4 m**		30	SET154188
With DV-31 wire feeder:					
	AB2	**Synergic MIG Pulse welding unit HighPULSE 554 DW (DV-31)**		30	SET154190
	AB2C	**Synergic MIG Pulse welding unit HighPULSE 554 DW (DV-31) with access.**		30	SET154192
	AB2CD1	**Synergic MIG Pulse welding unit HighPULSE 554 DW (DV-31) with access. and TEDAC torch SBT 504 W, 3 m**		30	SET154194
	AB2CD2	**Synergic MIG PULSE welding unit HighPULSE 554 DW (DV-31) with access. and TEDAC torch SBT 504 W, 4 m**		30	SET154196
A Power source (without wire feeder):					
	A	Synergic MIG Pulse welding unit (power source) HighPULSE 554 DW, without wire feeder		30	154152
B Wire feeder:					
	B1	Wire feeder DV-26 for HighPULSE, HighPULSE touch, SpeedMIG		46	137652
	B2	Wire feeder DV-31 (OT) for HighPULSE, HighPULSE touch, SpeedMIG		46	137650
C Standard accessories:					
	C1	Earth lead 95 mm², 4 m long with plug and earth clamp		46	02210403
	C2	Regulator argon/CO2, single stage		46	01200300
D Welding torches:					
	D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660

3.2.10. Accessories for HighPULSE 354/454/554 DW

	Pos.	Description	Pu	PrGrp	Part No.
1 Accessories:					
	1.1	Adapter for wire spool		46	02900104
	1.2	Torch holder D27 for mounting at the handle or handle tube		46	157598
	1.3a	Push-Pull kit incl. sockets and switches for HighPULSE and SpeedMIG KW		46	138290
	1.3b	Push-Pull kit incl. sockets and switches for HighPULSE and SpeedMIG DW		46	138286
	1.4a	Connection for remote control incl. socket for HP, SM in KW version		46	155484
	1.4b	Connection for remote control incl. switch and socket for HighPULSE, SpeedMIG, OptiMIG in DW version		46	02110427
	1.5	Connection for buttons inching and gas test for ROB torch, mounted in wire feeder with 10 pol. socket		46	158422
	1.6	Remote control box for energy and voltage trim incl. 5 m cable		46	01903542
	1.7	Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
	1.8	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	1.9a	Filter for HighPULSE and SpeedMIG Version KW and DW, 320x330x25 mm (minimum 10 pieces)	10 pcs	46	113844
	1.9b	Metal filter insert for HighPULSE, SpeedMIG, HighTIG 300 x 315 x 20 mm		46	156144
	1.10a	Price reduction: no integrated water cooling unit (K version)		46	111832
	1.10b	Price reduction: no integrated water cooling unit (D version)		46	01903611
	1.11	Polarity change and TIG (DC) welding for series HighPULSE and SpeedMIG version DW (LiftTIG), MAG torch connector		46	138276

	Pos.	Description	Pu	PrGrp	Part No.
	1.12	TIG hand welding torch model TH 452 W-MAG, 8 m for HighPULSE with Euro connector leather/rubber hose assembly		10	145092
	1.13	Lifting eye screw, galvanized	4 pcs	46	09002001
	1.14a	MAG Remote Control MRC-50 for HighPULSE und SpeedMIG in steel casing with handgrip and magnet, incl. 5 m supply cable		46	154578
	1.14b	MAG Remote Control MRC-20 in housing for manual process control incl. displays for series HighPULSE with 5 m cable (only with 117.440 and job panel)		46	113808
	1.14c	Kit for connection of MRC TRC PRC installed in HighPULSE, HighTIG, HighPLAS		46	113804
	1.14d	Special cable for external user panel, Remote, ProJOB-PPC, suitable for trailing (per 1m), 5 x 2 x 0,34		17	117540
	1.15	Cover with lock, transparent, for power source HighPULSE, SpeedMIG and HighTIG version KW and DW		46	138238
	1.16	Power supply and automation connection or WCM, installed in the Merkle welding power source, 10 pin plug. : Welding ON, ARC OK, Emergency Stop and 42 V AC		31	132532
	1.17	Front panel for 4 jobs incl. trim potentiometer and buttons for gas test and wire inching for series HighPULSE when not using standard operation panel		46	137158
	1.18	Front panel MC-40 for series HighPULSE 8 job version with digital displays and rotary switches incl. digital process controller ME-MTC32 when not using standard operation panel		07	145766
	1.21	Bus connection for operation of TEDAC Digital torches at HighPULSE x54 DW and HighPULSE touch (only with special interconnection cable)		46	156414
	1.22a	MIG/MAG hand welding torch TEDAC DIGITAL, SBT 504 W digital, 3 m, short vers.		06	154244
	1.22b	MIG/MAG hand welding torch TEDAC DIGITAL, SBT 504 W digital, 4 m, short vers.		06	154248
	1.22c	MIG/MAG hand welding torch TEDAC DIGITAL, SBT 504 W digital, 5 m, short vers.		06	154252
	1.23	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

2 Accessories for wire feeder:

	2.1	Rotatable device for wire feeder including screw set		46	137436
	2.2	4 wheels mounted on the wire feeder		46	00102109
	2.3	Standard operation panel inside wire feeder for series HighPULSE, HighPULSE touch and SpeedMIG (only with special interconnection cable)		46	138526

	Pos.	Description	Pu	PrGrp	Part No.
	2.4a	Cover with lock for operation panel at the wire feeder for HighPULSE, HighPULSE touch, GreenMIG		46	137546
	2.4b	Cover (standard) for operation panel at the wire feeder for HighPULSE, HighPULSE touch and GreenMIG		46	137547
	2.5	Control 'end of welding wire', installed in the wire feeder box		46	103365
	2.6	Suspension device for wire feeder electrically isolated		46	00502878
	2.7	Balancer G4 for rotatable device 137.436		05	158714
	2.8	Wheelbase widening set for HighPULSE and SpeedMIG DW		46	117546
	2.9	Connection for wire feed liner inside the wire feeder box		46	110454

3 Connection cable to wire feeder for HighPULSE 354/454 DW:

	3.1	Connection cable 5 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	138844
	3.2	Connection cable 10 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	138846
	3.3	Connection cable 15 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	153218
	3.4	Connection cable 20 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	153220
	3.5	Connection cable 30 m 70 mm², HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	154388

Price reduction, when not taken:

	3.6	Connection cable 1.6 m 70 mm², w.c. HighPULSE, SpeedMIG 352, 452, 354, 454 OptiMIG 351, 451, HighPULSE touch 400/450 DW		46	138842

4 Connection cable to wire feeder for HighPULSE 554 DW:

	4.1	Connection cable 5 m 95 mm², HighPULSE, SpeedMIG 552, OptiMIG 551		46	137638
	4.2	Connection cable 10 m 95 mm², HighPULSE, SpeedMIG 552, OptiMIG 551		46	137642
	4.3	Connection cable 15 m 95 mm², HighPULSE, SpeedMIG 552, OptiMIG 551		46	137644
	4.4	Connection cable 20 m 95 mm², HighPULSE, SpeedMIG 552, OptiMIG 551		46	137646
	4.5	Connection cable 30 m 95 mm², HighPULSE, SpeedMIG 552, OptiMIG 551		46	154386

	Pos.	Description	Pu	PrGrp	Part No.
Price reduction, when not taken:					
	4.6	Connection cable 1.6m 95 mm², HighPULSE, SpeedMIG 552, OptiMIG 551		46	137634
5 Connection cable for controller in wire feeder:					
	5.1	Connection cable 1.6 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138516
	5.2	Connection cable 5 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138518
	5.3	Connection cable 10 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138520
	5.4	Connection cable 15 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138522
	5.5	Connection cable 20 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 for operation panel inside wire feeder		46	138524
	5.6	Connection cable 30 m 95 mm², HighPULSE, SpeedMIG 352, 452, 354, 454, 554, HighPULSE touch 400/450, GreenMIG 400/500 incl. control cable for controller in wire feeder		46	145740
6 Interface power source <-> computer:					
	6.1	RS 232 Interface for series HighPULSE standard equipment		17	126540
	6.2	Ethernet interface for HighPULSE		17	126506
	6.3	Option Wifi equipment only in combination with 126.506 or 159.190		17	144106
7 Software (for free):					
DeepARC	7.1	Software for DeepARC process for series HighPULSE/GreenMIG		17	120488
ColdMIG	7.2	Software for ColdMIG process for series HighPULSE/GreenMIG		17	118064
HighUP	7.3	Software for HighUP process for series HighPULSE/GreenMIG		17	134392
InterPULSE	7.4	Software for Interpulse process for series HighPULSE		17	120490
8 Software:					
EN 1090 WPQR	8.1	EN 1090 WPS/WPQR package incl. jobs for series HighPULSE and HighPULSE touch 350 - 550 A incl. calibration of the unit		17	135636

	Pos.	Description	Pu	PrGrp	Part No.
	8.2	Software ProDok32: generation and documentation of pulse and MIG/MAG programs for PC with RS 232 or USB port, for Windows, incl. dongle and 5 m cable, CD-ROM		17	113810
	8.3	Software ProJOB32pro: job generation and documentation, offline and online, and software updates for PC with RS 232, USB or ethernet port, for Windows, incl. 5 m cable, CD-ROM		17	125584
	8.4	Software ProJOB32: job generation and documentation, and software updates for PC with RS 232 or USB port, for Windows, incl. 5 m cable, converter, USB-Stick		17	118444

9 WeldFACTORY (Q.MACS):
control, documentation and evaluation of welding parameters, job management
(see section 10.5 of the general catalogue)

10 Automation accessories:

	10.1	Connection for automated welding for hand welding unit HighPULSE, SpeedMIG, HighTIG - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	138296
	10.1a	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	10.2	Connection for automated welding HP, SM, HT - emerg. STOP, welding ON, arc OK - 1 x control voltage OUTPUT 0 - 10 V - socket 10 pol.		46	158270
	10.2a	Connection cable 10-pol. 5m welding unit - automated system		46	01903556
	10.3	Bus interface "Universal" for hand welding units HighPULSE, ProfiNet, EtherCAT, EtherNet/IP, Modbus TCP u. RTU incl. serial-to-serial converter and 10 pole socket (please specify the required bus version)		17	167062
	10.3a	Connection cable 10-pol. 5m welding unit - automated system		46	01903556
	10.4	Digital interface for job operation (6 bit - 63 jobs) or HighPULSE with socket 24 pol. signals: welding on, arc is started, emergency stop, torch blow out and 6 bits for jobs		17	159202
	10.4a	Connection cable 24-pin., 5 m welding unit - robot		46	01903557

11 Additional wire equipment for DV-26 and DV-31:





Pos.	Description	Pu	PrGrp	Part No.
12.1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
12.2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
12.3	Kit for mild steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113850
12.4	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
12.5	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
12.6	Kit for stainl. steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113856
12.7	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
12.8	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860
12.9	Kit for alu 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113862
12.10	Kit for core wire 1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113864
12.11	Kit for core wire 1.6 mm (DV-26/31/32) (2 drive rings and wire core)		46	113866
12.12	Kit for core wire 2.0/2.4 mm (DV-31/32) (4 drive rings etc.)		46	113868
12.13	Kit for core wire 2.8 mm (DV-31/32) (4 drive rings, etc.)		46	113870
12.14	Kit for core wire 3.2 mm (DV-31/32) (4 drive rings etc.)		46	113872

3.2.11. HighPULSE 354/454/554 DW TWIN

Model HighPULSE	HP 354 DW	HP 454 DW	HP 554 DW
Primary:			
Power supply:	3 x 400 V	3 x 400 V	3 x 400 V
Frequency:	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Contin. power:	14.5 kVA	15.9 kVA	19.4 kVA
Contin. current:	21 A	23 A	28 A
Max. current:	25 A	34 A	45 A
Secondary:			
Open circuit voltage:	57 V	72 V	72 V
Welding voltage:	15 - 31.5 V	15 - 36.5 V	15 - 41.5 V
Welding current:	20 - 350 A	20 - 450 A	20 - 550 A
Duty cycle 40 % (40°C):			550 A
Duty cycle 50 % (40°C):	350 A	450 A	500 A
Duty cycle 60 % (40°C):	330 A	400 A	470 A
Duty cycle 100 % (40°C):	280 A	330 A	420 A



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	automatic energy control
Program capacity:	512 programs
Programs:	MIG/MAG, PulseARC, MMA, MIG brazing, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE, option: TIG DC
Program selection:	material, wire diameter and gas at the display
Operation modes:	2-stroke, 4-stroke, 4-stroke with start current
Gas check:	button with hold function and automatic switch off
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	at the machine, at the wire feeder, at the TEDAC torch, job mode
LEDs:	mains, failure, temp. protection, hold function
Adjustable parameters:	choke inductance, wire burn back
Automated functions:	soft start (programmable)
Job mode:	2000 jobs programmable
Power source:	inverter
Sockets 95 mm²:	earth lead and electrode cable
Torch cooling:	integrated water cooler
Mains supply cable:	4 x 4.0 mm² 4 x 6.0 mm² 4 x 6.0 mm² with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	for 10, 20 and 50 l cylinders
Stabilization:	± 10 % power mains fluctuation
Air filter:	as a standard
Norm:	EN 60974-1 "S" / CE
Weight:	155 kg 165 kg 170 kg (incl. wire feeder and connection cable)
Dimensions l x w x h:	1100 x 700 x 1200 mm (incl. wire feeder and rotary device)

Wire feeder: separately mounted, model DV-32 TWIN

Supply voltage:	42 V-AC/42 V-DC
Wire feed:	2 units 4-roller drive 0.5 - 30 m/min. with tacho motor
Standard wire equipment:	mild steel 1.2 mm
LED:	2 x selection of wire feeder
Reel hub assembly:	2 x D 300/15 DIN 8559
Torch connection:	EURO connector
Connection cable:	1.6 m, 95 mm², water cooled
Weight:	42 kg
Dimensions l x w x h:	662 x 440 x 424 mm

Synergic Pulse welding units HighPULSE DW TWIN incl. DV-32 and 1.6 m interconnection cable:



Pos.	Description	Pu	PrGrp	Part No.
A1B	**Synergic MIG Pulse welding unit ighPULSE 354 DW TWIN with twin wire feeder DV-32 TWIN**		**30**	**SET132279**
A2B	**Synergic MIG Pulse welding unit ighPULSE 454 DW TWIN with twin wire feeder DV-32 TWIN**		**30**	**SET132280**
A3B	**Synergic MIG Pulse welding unit HighPULSE 554 DW TWIN with twin wire feeder DV-32 TWIN**		**30**	**SET132282**

! Software DeepARC, ColdMIG, HighUP included for free

A Power source (without wire feeder):

A1	Synergic MIG Pulse welding unit (power source) HighPULSE 354 DW, without wire feeder	30	154138
A2	Synergic MIG Pulse welding unit (power source) HighPULSE 454 DW, without wire feeder	30	154142
A3	Synergic MIG Pulse welding unit (power source) HighPULSE 554 DW, without wire feeder	30	154152

B Wire feeder DV-32 TWIN:



B	Wire feeder DV-32 TWIN incl. suspension device	46	147922
B	Kit for connection of DV-31/32 TWIN for HighPULSE x52/x54 DW inkl. gas bottle holder for 2 cylinders and wider trolley	46	138264

C Accessories:





C1	Earth lead 95 mm², 4 m long with plug and earth clamp	46	02210403
C2	Regulator argon/CO2, single stage	46	01200300

D Welding torches:





D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.	06	142482
D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.	06	142484
D3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.	06	142660
D4	MIG/MAG hand welding torch TEDAC, SBT 504 W-Alu, 3 m, long vers. special equipment for aluminium welding	06	142672

E Accessories:





E1	Adapter for wire spool	46	02900104
E2	Torch holder D27 for mounting at the handle or handle tube	46	157598

	Pos.	Description	Pu	PrGrp	Part No.
	E3	Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
	E4	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	E5a	Filter for HighPULSE and SpeedMIG Version KW and DW, 320x330x25 mm (minimum 10 pieces)	10 pcs	46	113844
	E5b	Metal filter insert for HighPULSE, SpeedMIG, HighTIG 300 x 315 x 20 mm		46	156144
	E6	Switch-off of the open circuit voltage of the non activated torch for TWIN wire feeder		46	156928
	E7	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

F Accessories for wire feeder:

	F1	4 wheels mounted on the wire feeder		46	00102109
	F2	Rotatable device for wire feeder including screw set		46	137436
	F3	Wire straightener - 360° without wire sensor 4-roller-drive DV-32		46	146452

G Connection cable to wire feeder:

	G1	Connection cable 5 m 95 mm² TWIN HighPULSE 352/452/552 DW		46	138256
	G2	Connection cable 10 m 95 mm² TWIN HighPULSE 352/452/552 DW		46	138258
	G3	Connection cable 15 m 95 mm² TWIN HighPULSE 352/452/552 DW		46	138260
	G4	Connection cable 20 m 95 mm² TWIN HighPULSE 352/452/552 DW		46	138262

Price reduction, when not taken:

	G5	Connection cable 1.6 m 95 mm² TWIN HighPULSE 352/452/552 DW		46	138254

H Software (for free):

DeepARC	H1	Software for DeepARC process for series HighPULSE/GreenMIG		17	120488
ColdMIG	H2	Software for ColdMIG process for series HighPULSE/GreenMIG		17	118064
HighUP	H3	Software for HighUP process for series HighPULSE/GreenMIG		17	134392
InterPULSE	H4	Software for Interpulse process for series HighPULSE		17	120490

	Pos.	Description	Pu	PrGrp	Part No.
I	**Software:**				
	I1	EN 1090 WPS/WPQR package incl. jobs for series HighPULSE and HighPULSE touch 350 - 550 A incl. calibration of the unit		17	135636
J	**Additional wire equipment for DV-32:**				
	J1	Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113846
	J2	Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113848
	J3	Kit for mild steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113850
	J4	Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113852
	J5	Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113854
	J6	Kit for stainl. steel 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113856
	J7	Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)		46	113858
	J8	Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113860
	J9	Kit for alu 1.6 mm (DV-31/32) (2 drive rings and wire core)		46	113862
	J10	Kit for core wire 1.2 mm (DV-26/31/32) (2 drive rings and wire core)		46	113864
	J11	Kit for core wire 1.6 mm (DV-26/31/32) (2 drive rings and wire core)		46	113866
	J12	Kit for core wire 2.0/2.4 mm (DV-31/32) (4 drive rings etc.)		46	113868
	J13	Kit for core wire 2.8 mm (DV-31/32) (4 drive rings, etc.)		46	113870
	J14	Kit for core wire 3.2 mm (DV-31/32) (4 drive rings etc.)		46	113872

3.3. Synergic Pulse welding units for automation and robotics



3.3.1. HighPULSE 352 RS

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
Contin. power:	12 kVA
Contin. current:	17 A
Max. current:	25 A
Secondary:	
Open circuit voltage:	57 V
Welding voltage:	15 - 31.5 V
Welding current:	20 - 350 A
Duty cycle 60% (10 min.):	350 A (40 °C)
Duty cycle 100%:	300 A (40 °C)



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	Automatic energy control
Program capacity:	512 programs
Programs:	MIG/MAG, PulseARC, MIG brazing, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE
Program selection:	material, wire diameter and gas at the display (option)
Gas check:	button with hold function and automatic switch off
Wire inching:	button
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	control via the interface, job operation mode
LEDs:	mains, failure, temp. protection, hold function
Automated functions:	choke inductance, pulse shape, wire burn back adjustable at display, soft start programmable
Job mode:	2000 jobs programmable
Power source:	inverter
Sockets 95 mm²:	earth lead and torch
Torch cooling:	external water cooler (option)
Socket water cooling unit:	6-pol.
Mains supply cable:	4 x 2.5 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Stabilization:	± 10 % power mains fluctuation
Norm:	EN 60974-1 "S" / CE
Air filter:	as a standard
Weight:	51 kg
Dimensions l x w x h:	740 x 350 x 690 mm

Roboter interface:	bus interface (Profibus, DeviceNet, CANopen, interbus, analogue interface, etc.)
Communication:	RS 232, ethernet 10 Mbit with RJ45 connector (option)

3.3.2. HighPULSE 452 RS

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
Contin. power:	14.4 kVA
Contin. current:	25 A
Max. current:	34 A
Secondary:	
Open circuit voltage:	72 V
Welding voltage:	15 - 36.5 V
Welding current:	20 - 450 A
Duty cycle 50% (10 min.):	450 A (40 °C)
Duty cycle 60% (10 min.):	400 A (40 °C)
Duty cycle 100%:	330 A (40 °C)



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	Automatic energy control
Program capacity:	512 programs
Programs:	MIG/MAG, PulseARC, MIG brazing, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE
Program selection:	material, wire diameter and gas at the display (option)
Gas check:	button with hold function and automatic switch off
Wire inching:	button
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	control via the interface, job operation mode
LEDs:	mains, failure, temp. protection, hold function
Automated functions:	choke inductance, pulse shape, wire burn back adjustable at display, soft start programmable
Job mode:	2000 jobs programmable
Power source:	inverter
Sockets 95 mm²:	earth lead and torch
Torch cooling:	external water cooler (option)
Socket water cooling unit:	6-pol.
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Stabilization:	± 10 % power mains fluctuation
Norm:	EN 60974-1 "S" / CE
Air filter:	as a standard
Weight:	62 kg
Dimensions l x w x h:	740 x 350 x 690 mm

Roboter interface:	bus interface (Profibus, DeviceNet, CANopen, interbus, analogue interface, etc.)
Communication:	RS 232, ethernet 10 Mbit with RJ45 connector (option)

3.3.3. HighPULSE 552 RS

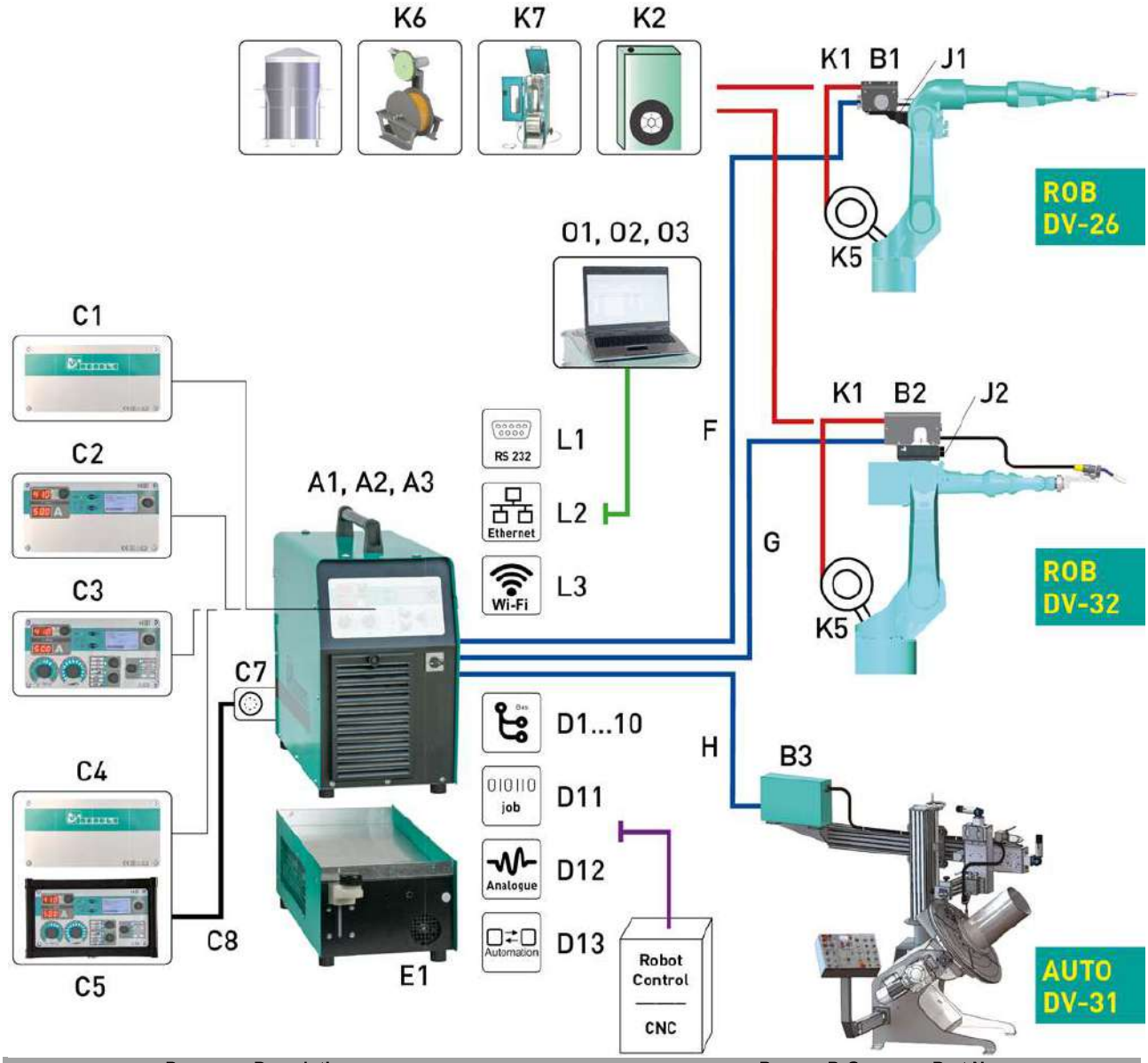
Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
Contin. power:	19.4 kVA	
Contin. current:	28 A	
Max. current:	45 A	
Secondary:		
Open circuit voltage:	72 V	
Welding voltage:	15 - 41.5 V	
Welding current:	20 - 550 A	
Duty cycle 40% (10 min.):		550 A (40 °C)
Duty cycle 50% (10 min.):		500 A (40 °C)
Duty cycle 60% (10 min.):	550 A (20 °C)	470 A (40 °C)
Duty cycle 100%:	500 A (20 °C)	420 A (40 °C)



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Arc length:	Automatic energy control
Program capacity:	512 programs
Programs:	MIG/MAG, PulseARC, MIG brazing, DeepARC, ColdMIG, HighUP, ProSWITCH, InterPULSE
Program selection:	material, wire diameter and gas at the display (option)
Gas check:	button with hold function and automatic switch off
Wire inching:	button
Digital display:	current, voltage, wire feed speed and material thickness with pre-display and hold function
Energy adjustment:	control via the interface, job operation mode
LEDs:	mains, failure, temp. protection, hold function
Automated functions:	choke inductance, pulse shape, wire burn back adjustable at display, soft start programmable
Job mode:	2000 jobs programmable
Power source:	inverter
Sockets 95 mm²:	earth lead and torch
Torch cooling:	external water cooler (option)
Socket water cooling unit:	6-pol.
Mains supply cable:	4 x 6.0 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Stabilization:	± 10 % power mains fluctuation
Norm:	EN 60974-1 "S" / CE
Air filter:	as a standard
Weight:	64 kg
Dimensions l x w x h:	740 x 350 x 690 mm

Roboter interface:	bus interface (Profibus, DeviceNet, CANopen, interbus, analogue interface, etc.)
Communication:	RS 232, ethernet 10 Mbit with RJ45 connector (option)

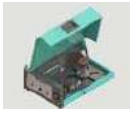
3.3.4. Robot Synergic Pulse welding units



Pos.	Description	Pu	PrGrp	Part No.
A	**Robot Synergic Pulse welding units:**			
A1	Robot MIG Pulse Welding Unit Model HighPULSE 354 RS (without front, interface and motor controller)		30	144020
A2	Robot MIG Pulse Welding Unit Model HighPULSE 454 RS (without front, interface and motor controller)		30	144022
A3	Robot MIG Pulse Welding Unit Model HighPULSE 554 RS (without front, interface and motor controller)		30	144024



! Software DeepARC, ColdMIG, HighUP included for free

	Pos.	Description	Pu	PrGrp	Part No.
B	**Wire feeder and motor controller (please select):**				
	B1	Robot wire feeder ROB DV-26 weight 7 kg		46	118458
	B1.1	Motor controller for ROB DV-26		46	118626
	B2	Robot wire feeding unit model ROB DV-32 (connection wire feeding liner) incl. tacho motor, robot gear, wire straightener, button gas test and wire inching, blow-out device 0.5 - 30 m/min, 9.7 kg		46	143660
	B2.1	Motor controller for ROB DV-31/32 for series HighPULSE RS		46	118628
	B3	Robot wire feeder box AUTO DV-31 with GN tacho motor, robot gear		46	01910031
	B3.1	Motor controller for ROB DV-31/32 for series HighPULSE RS		46	118628
C	**Operation panel/front (please select one):**				
	C1	Front panel MC-10 without displays without selectors for series HighPULSE incl. process controller ME-MTC32		07	117440
	C2	Front panel MC-30 with MTC32 for series HighPULSE with digital display (V, m/min, mm, %) and multi-function display with process controller		07	154424
	C3	Front panel MC-20 with MTC32 for series HighPULSE with digital display and multifunctional display incl. process controller +++ Machine type or serial number +++		46	153838
	External operation panel:				
	C4	Front panel MC-10 without displays without selectors for series HighPULSE incl. process controller ME-MTC32		07	117440
	C5	MAG Remote Control MRC-20 in housing for manual process control incl. displays for series HighPULSE with 5 m cable (only with 117.440 and job panel)		46	113808
	C6	MAG Remote Control MRC-21 mounted in ext. controller incl. displays for series HighPULSE with 5 m cable (only with 117.440)		46	113809
	C7	Kit for connection of MRC TRC PRC installed in HighPULSE, HighTIG, HighPLAS		46	113804
	C8	Special cable for external user panel, Remote, ProJOB-PPC, suitable for trailing (per 1m), 5 x 2 x 0,34		17	117540
D	**Interface connection (please select one):**				
	D1	Bus interface RS series "Universal" ProfiNet, EtherCAT, EtherNet/IP, Modbus TCP u. RTU incl. serial-to-serial converter and wiring and 10-pol socket emergency stop (please specify the required bus version)		17	167058
	D2	Interface RS series "CANopen" incl. wiring for welding unit and 10-pol socket emergency stop		17	117428

	Pos.	Description	Pu	PrGrp	Part No.
	D3	Bus interface RS series RS 485 incl. wiring for welding unit and 10-pol socket emergency stop		17	139818
	D1-3a	Connection cable 10-pol. 5m welding unit - automated system		46	01903556
	D4	Digital interface for job operation (6 bit - 63 jobs) or HighPULSE with socket 24 pol. signals: welding on, arc is started, emergency stop, torch blow out and 6 bits for jobs		17	159202
	D4a	Connection cable 24-pin., 5 m welding unit - robot		46	01903557
	D5	Analogue interface for RS series 8 IO, 24pol.		17	164184
	D5a	Connection cable 24-pin., 5 m welding unit - robot		46	01903557
	D6	Connection for automated welding or RS series incl. socket 6-pol. and signals: welding ON, arc OK, emergency stop		17	143998
	D6a	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	D7	Connection for automated welding HP, SM, HT - emerg. STOP, welding ON, arc OK - 1 x control voltage OUTPUT 0 - 10 V - socket 10 pol.		46	158270
	D8	Connection for automated welding HP, HPt, HT - emerg. STOP, welding ON, arc OK - 1 x control voltage INPUT 0 - 10 V - socket 10 pol.		46	158271
	D7-8a	Connection cable 10-pol. 5m welding unit - automated system		46	01903556

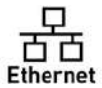
E Water cooling:

	E1	Water cooling unit model WK 350		46	144008
	E2	Water flow control device mounted in the water cooler		46	02610156
	E3	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

	Pos.	Description	Pu	PrGrp	Part No.
F	**Connection cables for ROB DV-26:**				
	F1	Connection cable, 5 m, 95 mm², w. robot - ROB DV-26 wire feeder high flex., incl. water hoses		46	118620
	F2	Connection cable, 10 m, 95 mm², w. robot - ROB DV-26 wire feeder high flex., incl. water hoses		46	118624
	F3	Connection cable, 15 m, 95 mm², w. robot - ROB DV-26 wire feeder high flex., incl. water hoses		46	143614
	F4	Connection cable, 20 m, 95 mm², w. robot - ROB DV-26 wire feeder high flex., incl. water hoses		46	142432
G	**Connection cables for ROB DV-32:**				
	G1	Connection cable, 5 m, 95 mm², w. power source - ROB DV-32 wire feeder high flex., incl. water hoses		46	144088
	G2	Connection cable, 10 m, 95 mm², w. power source - ROB DV-32 wire feeder high flex., incl. water hoses		46	144090
	G3	Connection cable, 15 m, 95 mm², w. power source - ROB DV-32 wire feeder high flex., incl. water hoses		46	144092
	G4	Connection cable, 20 m, 95 mm², w. power source - ROB DV-32 wire feeder high flex., incl. water hoses		46	144094
H	**Connection cables for AUTO DV-31:**				
	H1	Connection cable, 5 m, 95 mm² robot - wire feeder box incl. water hoses		46	02010928
	H2	Connection cable, 10 m, 95 mm², robot - wire feeder box incl. water hoses		46	02010930
	H3	Connection cable, 15 m, 95 mm², robot - wire feeder box incl. water hoses		46	144922
	H4	Connection cable, 20 m, 95 mm², robot - wire feeder box incl. water hoses		46	144924
J	**Assembly plates for wire feeders:**				
	J1	Assembly plate for ROB DV-26 (HW system) on hollow wrist robot (please specify the robot model)		51	161202
	J2	Assembly plate for mounting of ROB DV-32 on 3rd axis of robot (please specify the robot model)		05	144056
K	**Options and accessories:**				
	K1	Wire feeding liner from unspool device to wire feeder, 4 m		46	02200340
	K2	Box for wire spool incl. connection for wire feeding liner		46	101464
	K3	Dinse adapter for Euro torch connector (MIG/MAG)		46	01900544

	Pos.	Description	Pu	PrGrp	Part No.
	K4	Suspension device for wire feeder electrically isolated		46	00502878
	K5	Mounting device for wire spool (K300) incl. housing for KUKA robot		46	118474
	K6	Reel-Off Device ASV 300 for non-returnable large spools 300 kg		05	02900100
	K7	Reel-Off Device ASV 40 for aluminium wire spools, heated incl. wire end recognition		05	110130
	K8	Push-Pull kit installed inside the welding unit		46	02110403
	K9	Filter 205 x 314 mm for ighTIG / HighPULSE x52 RS		46	156804
	K10	Regulator argon/CO2, single stage		46	01200300
	K11	Earth lead 95 mm², 4 m long with plug and earth clamp		46	02210403
	K12	Earth lead 95 mm², 5 m long with plug 95 mm² and ring d=12 mm		46	139816
	K13	Protective gas control		46	01903578
	K14	Touch Sensor for HighPULSE, HighTIG for welding wire or gas nozzle (HighPULSE) or TIG electrode (HighTIG) (depending on welding torch)		46	106894
	K15	Trolley model TW 114, black for portable welding units and RS series (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	144000

L Interface power source <-> computer:

	L1	RS 232 Interface for series HighPULSE standard equipment		17	126540
	L2	Ethernet interface for HighPULSE		17	126506
	L3	Option Wifi equipment only in combination with 126.506 or 159.190		17	144106

	Pos.	Description	Pu	PrGrp	Part No.
M	**Welding software (free of charge):**				
DeepARC	M1	Software for DeepARC process for series HighPULSE/GreenMIG		17	120488
ColdMIG	M2	Software for ColdMIG process for series HighPULSE/GreenMIG		17	118064
HighUP	M3	Software for HighUP process for series HighPULSE/GreenMIG		17	134392
InterPULSE	M4	Software for Interpulse process for series HighPULSE		17	120490
N	**TANDEM welding:**				
	N1	Synchronisation for TANDEM welding of one synergic pulse welding unit		46	102417
	N2	Synchronisation cable for TANDEM welding, 4 m long		46	102418
O	**Software:**				
	O1	Software ProJOB32: job generation and documentation, and software updates for PC with RS 232 or USB port, for Windows, incl. 5 m cable, converter, USB-Stick		17	118444
	O2	Software ProJOB32pro: job generation and documentation, offline and online, and software updates for PC with RS 232, USB or ethernet port, for Windows, incl. 5 m cable, CD-ROM		17	125584
	O3	Software ProDok32: generation and documentation of pulse and MIG/MAG programs for PC with RS 232 or USB port, for Windows, incl. dongle and 5 m cable, CD-ROM		17	113810

P **WeldFACTORY (Q.MACS):**
control, documentation and evaluation of welding parameters, job management
(see section 10.5 of the general catalogue)

4. MIG/MAG welding torches

4. MIG/MAG welding torches

4.1 Hand welding torches

SB/SBT 157/307/351 G
SB/SBT 352/504/603 W
HSB/HSBT 600 W

4.2 Fume extraction welding torches

RSB/RSBT 351 G
RSB/RSBT 504 W

4.3 Push-Pull welding torches

PP/PPT 307 G
PP/PPT 504 W

4.4 Machine and Robot welding torches

MSB 401/603 W
ROB 505 W

4.1. Hand welding torches



4.1.1. SB/SBT 157 G

MIG/MAG hand welding torch SB/SBT 157 G

gas cooled



VERSIONS:

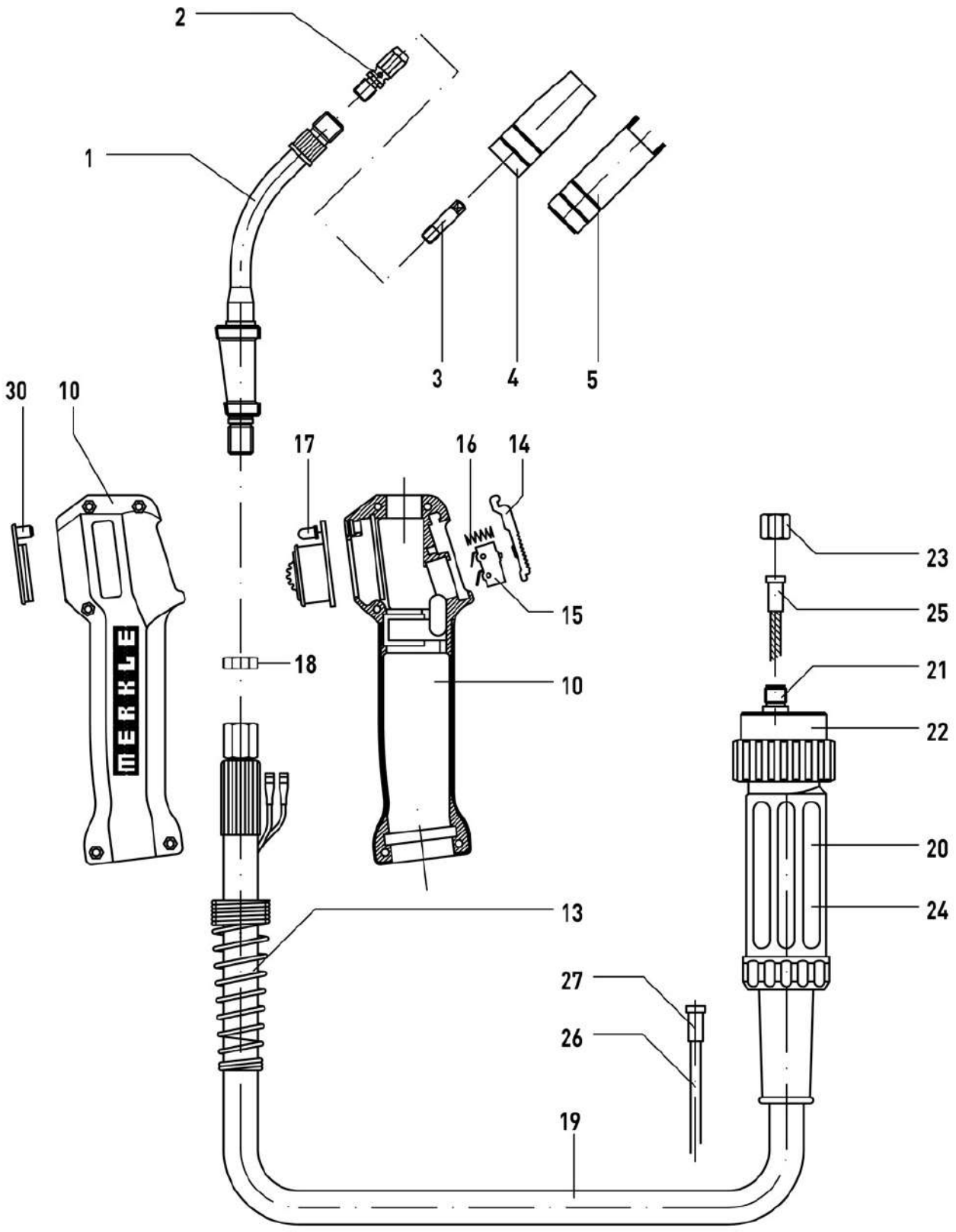


Standard



TEDAC

TECHNICAL DATA:	
Cooling:	gas cooled
Mixed gas:	150 A 60% duty cycle
CO_2:	180 A 60% duty cycle
Solid wire:	0.6 - 0.8 mm [
Aluminium wire:	0.8 - 1.0 mm [
Weight:	approx. 930 g/1 m H
The data are corresponding to (U = 14 + 0.05 x I)	


2
1
3
4
5
30
10
17
16
14
15
18
10
23
25
21
22
20
24
13
27
26
19
MERKLE

	Pos.	Description	Pu	PrGrp	Part No.
MIG/MAG hand welding torch SB/SBT 157 G					
		**MIG/MAG hand welding torch model SB 157 G, 3 m**		**06**	**118700**
		MIG/MAG hand welding torch model SB 157 G, 4 m		**06**	**118702**
		**MIG/MAG hand welding torch TEDAC, model SBT 157 G, 3 m**		**06**	**118704**
		MIG/MAG hand welding torch TEDAC, model SBT 157 G, 4 m		**06**	**118706**
Standard wire equipment: mild steel 0.8 mm					
Spare parts and consumables:					
	1	Torch neck SB/SBT 157 G		22	152216
	2	Tip adapter SB/SBT 157 G	10 pcs	22	152218
	3.1	Contact tip 0.6 mm SB/SBT 157 G M6 x 0.75 ECU	20 pcs	22	152181
	3.2	Contact tip 0.8 mm SB/SBT 157 G M6 x 0.75 ECU	20 pcs	22	152180
	3.3	Contact tip 1.0 mm SB/SBT 157 G M6 x 0.75 ECU	20 pcs	22	152182
	4	Gas nozzle SB/SBT 154/157 G		22	02210095
	5	Spot welding gas nozzle SB/SBT 154/157 G	10 pcs	22	02210096
	10	Handle MIG, complete with trigger and cover cap		22	105016
	13	Kinking protection spring for gas cooled MIG torches		22	113068
	14	Trigger for MIG/MAG torch (red)		22	02210796
	15	Micro switch for torch trigger		22	113638
	16	Spring for switch	10 pcs	22	02210131
Only for SBT 157 G:					
	17	TEDAC pc-board ME-BE-10.0 incl. slide switch and micro switch		22	02210800
	18	Nut for KOAX connector-V		22	142370

	Pos.	Description	Pu	PrGrp	Part No.
	19.1	Complete cable assembly SB/SBT 154/157 G 3 m, with Euro connector, without torch, without liner		22	02210316
	19.2	Complete cable assembly SB/SBT 154/157 G 4 m, with Euro connector, without torch, without liner		22	02210317
	20	Central connector MAG,gas cooled brass body, sleeve nut 3-part. kink protection		22	02511350
	21	Brass body central connector MAG gas cooled		22	02511401
	22	Sleeve nut black		22	02510300
	23	Liner nut for Euro connector	10 pcs	22	02511301
	24	Kinking protection at machine side MIG Euro connector (set 3 pieces)		22	02511300
	25.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	25.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247
	26.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	26.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	27	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554

Only for SB 157 G:

	30	Cover cap for TEDAC handle		22	02210604

4.1.2. SB/SBT 307 G

MIG/MAG hand welding torch
SB/SBT 307 G
gas cooled



VERSIONS:

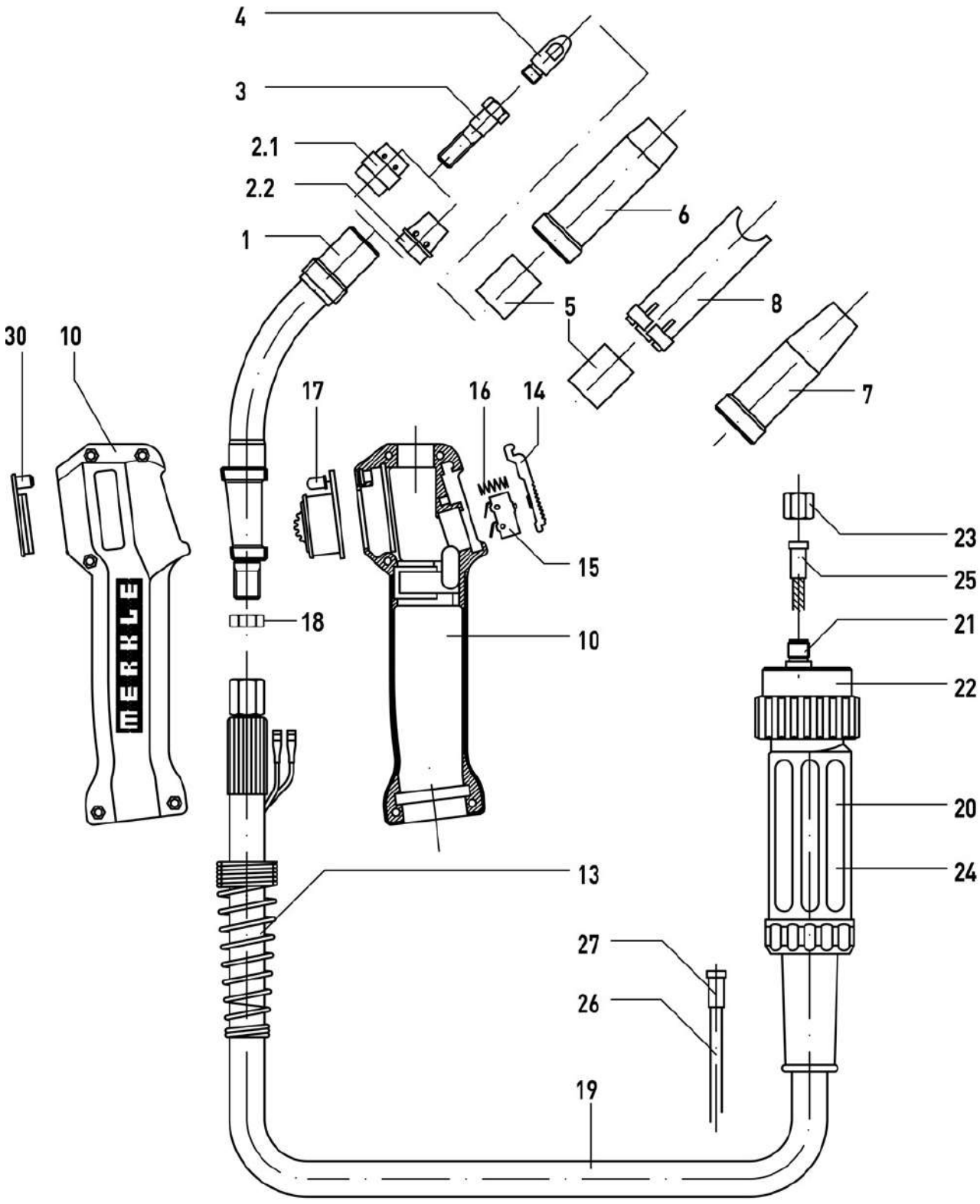


Standard



TEDAC

TECHNICAL DATA:	
Cooling:	gas cooled
Mixed gas:	280 A 60% duty cycle
CO_2:	300 A 60% duty cycle
Solid wire:	0.8 - 1.0 - 1.2 mm [
Aluminium wire:	0.8 - 1.0 - 1.2 mm [
Weight:	approx. 1100 g/1 m H
The data are corresponding to (U = 14 + 0.05 x I)	


4
3
2.1
2.2
1
6
5
8
7
30
10
17
16
14
15
18
10
23
25
21
22
20
24
13
27
26
19
MERKLE

	Pos.	Description	Pu	PrGrp	Part No.
MIG/MAG hand welding torch SB/SBT 307 G					
		MIG/MAG hand welding torch model SB 307 G, 3 m		**06**	**02210758**
		**MIG/MAG hand welding torch model SB 307 G, 4 m**		**06**	**02210759**
		MIG/MAG hand welding torch model SB 307 G, 5 m		**06**	**154992**
		MIG/MAG hand welding torch TEDAC, model SBT 307 G, 3 m		**06**	**02210858**
		**MIG/MAG hand welding torch TEDAC, model SBT 307 G, 4 m**		**06**	**02210859**
		MIG/MAG hand welding torch TEDAC, model SBT 307 G, 5 m		**06**	**154994**
Standard wire equipment: mild steel 1.0 mm					
Spare parts and consumables:					
	1	Torch body SB/SBT 307 G		22	02210757
	2.1a	Gas diffusor SB/SBT 307 G ceramic spatter resistent	10 pcs	22	02210219
	2.1b	Gas diffusor SB/T 307 G plastic, black, for gas nozzle 022.1.0267, 022.1.0310	10 pcs	22	02210222
	2.2	Gas diffusor SB/T 307 G, plastic for gas nozzle 111.462	10 pcs	22	111938
	3.1	Tip adapter, SB 307 G, 38 mm	10 pcs	22	02210217
	3.2	Tip adapter SB 307, 38 mm for aluminium, inner diameter 4. 8 mm	10 pcs	22	02210215
	3.3	Tip adapter SB 307, 36 mm version DB	10 pcs	22	114756
	4.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
	4.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
	4.3	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
	4.4	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
	4.5	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
	4.6	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758
	5	Insulation ring SB 300/307	20 pcs	22	02210369
	6	Gas nozzle SB/SBT 300/307, with thread		22	02210267

	Pos.	Description	Pu	PrGrp	Part No.
	7	Gas nozzle 12 mm screw fixing (only with gas diffusor 111.938)	10 pcs	22	111462
	8	Spot welding gas nozzle 300/307 with fastening ring		22	02210310
	10	Handle MIG, complete with trigger and cover cap		22	105016
	13	Kinking protection spring for gas cooled MIG torches		22	113068
	14	Trigger for MIG/MAG torch (red)		22	02210796
	15	Micro switch for torch trigger		22	113638
	16	Spring for switch	10 pcs	22	02210131

Only for SBT 307 G:

	17	TEDAC pc-board ME-BE-10.0 incl. slide switch and micro switch		22	02210800
	18	Nut for KOAX connector-V		22	142370
	19.1	Complete cable assembly 35mm² 3 m, with Euro connector, without torch, without liner		22	02210296
	19.2	Complete cable assembly 35mm² 4 m, with Euro connector, without torch, without liner		22	02210297
	20	Central connector MAG,gas cooled brass body, sleeve nut 3-part. kink protection		22	02511350
	21	Brass body central connector MAG gas cooled		22	02511401
	22	Sleeve nut black		22	02510300
	23	Liner nut for Euro connector	10 pcs	22	02511301
	24	Kinking protection at machine side MIG Euro connector (set 3 pieces)		22	02511300
	25.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	25.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247

	Pos.	Description	Pu	PrGrp	Part No.
	25.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	25.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	26.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	26.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	27	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554

Only for SB 307 G:

	30	Cover cap for TEDAC handle		22	02210604

Max. length of torch lead for alu: 3 m.

4.1.3. SB/SBT 351 G

MIG/MAG hand welding torch SB/SBT 351 G

gas cooled



VERSIONS:

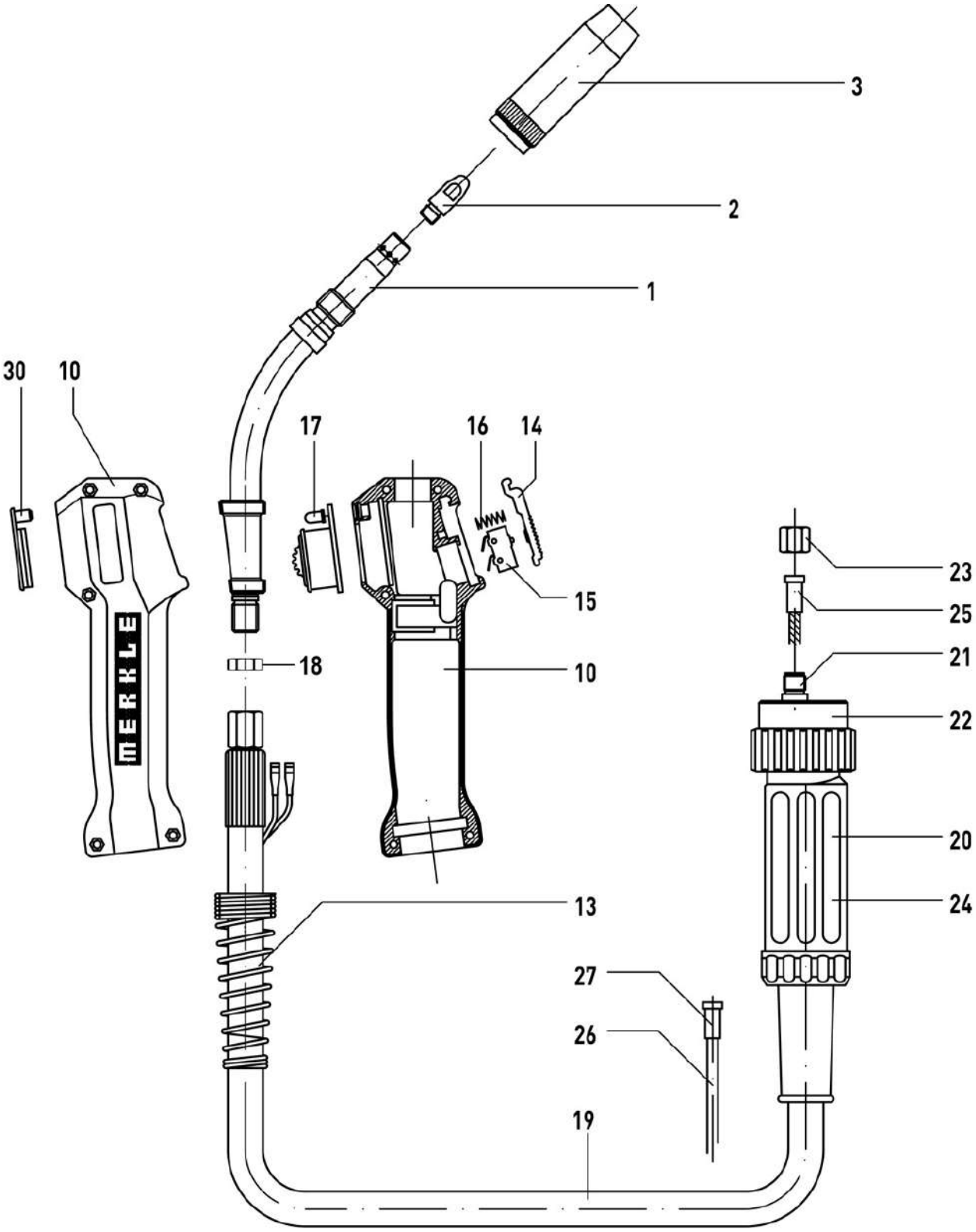


Standard



TEDAC

TECHNICAL DATA:	
Cooling:	gas cooled
Mixed gas:	250 A 60% duty cycle
CO_2:	280 A 60% duty cycle
Solid wire:	0.8 - 1.0 - 1.2 mm [
Aluminium wire:	0.8 - 1.0 - 1.2 mm [
Weight:	approx. 1350 g/1 m H
The data are corresponding to (U = 14 + 0.05 x I)	


3
2
1
30
10
17
16
14
15
18
10
23
25
21
22
20
24
13
27
26
19
MERKLE

MIG/MAG hand welding torch SB/SBT 351 G

Pos.	Description	Pu	PrGrp	Part No.
	MIG/MAG hand welding torch model SB 351 G, 3 m		**06**	**112934**
	**MIG/MAG hand welding torch model SB 351 G, 4 m**		**06**	**112936**
	MIG/MAG hand welding torch model SB 351 G, 5 m		**06**	**112376**
	MIG/MAG hand welding torch TEDAC, model SBT 351 G, 3 m		**06**	**112938**
	**MIG/MAG hand welding torch TEDAC, model SBT 351 G, 4 m**		**06**	**112940**
	MIG/MAG hand welding torch TEDAC, model SBT 351 G, 5 m		**06**	**118520**

Standard wire equipment: mild steel 1.0 mm

Spare parts and consumables:

	1	Torch neck SB/SBT 351 G		22	110628
	2.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
	2.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
	2.3	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
	2.4	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
	2.5	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
	2.6	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758
	2.7	Contact tip 1.6 mm alu CuCrZr M8	20 pcs	22	04511818
	3	Gas nozzle 15 mm SB/T, RSB/T 351 G with thread and insulation		22	104170
	10	Handle MIG, complete with trigger and cover cap		22	105016
	13	Kinking protection spring for gas cooled MIG torches		22	113068
	14	Trigger for MIG/MAG torch (red)		22	02210796
	15	Micro switch for torch trigger		22	113638
	16	Spring for switch	10 pcs	22	02210131

Only for SBT 351 G:

	17	TEDAC pc-board ME-BE-10.0 incl. slide switch and micro switch		22	02210800
	18	Nut for KOAX connector-V		22	142370

	Pos.	Description	Pu	PrGrp	Part No.
	19.1	Complete cable assembly, 3 m with Euro connector, without torch, without liner		22	02210323
	19.2	Complete cable assembly, 4 m with Euro connector, without torch, without liner		22	02210324
	20	Central connector MAG,gas cooled brass body, sleeve nut 3-part. kink protection		22	02511350
	21	Brass body central connector MAG gas cooled		22	02511401
	22	Sleeve nut black		22	02510300
	23	Liner nut for Euro connector	10 pcs	22	02511301
	24	Kinking protection at machine side MIG Euro connector (set 3 pieces)		22	02511300
	25.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	25.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247
	25.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	25.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	26.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	26.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	26.3	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
	26.4	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	27.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	27.2	Collet for teflon liner 2.7 x 4.7	10 pcs	22	102997

Only for SB 351 G:

	30	Cover cap for TEDAC handle		22	02210604

Max. length of torch lead for alu: 3 m.

4.1.4. SB/SBT 352 W

MIG/MAG hand welding torch SB/SBT 352 W

water cooled



VERSIONS:

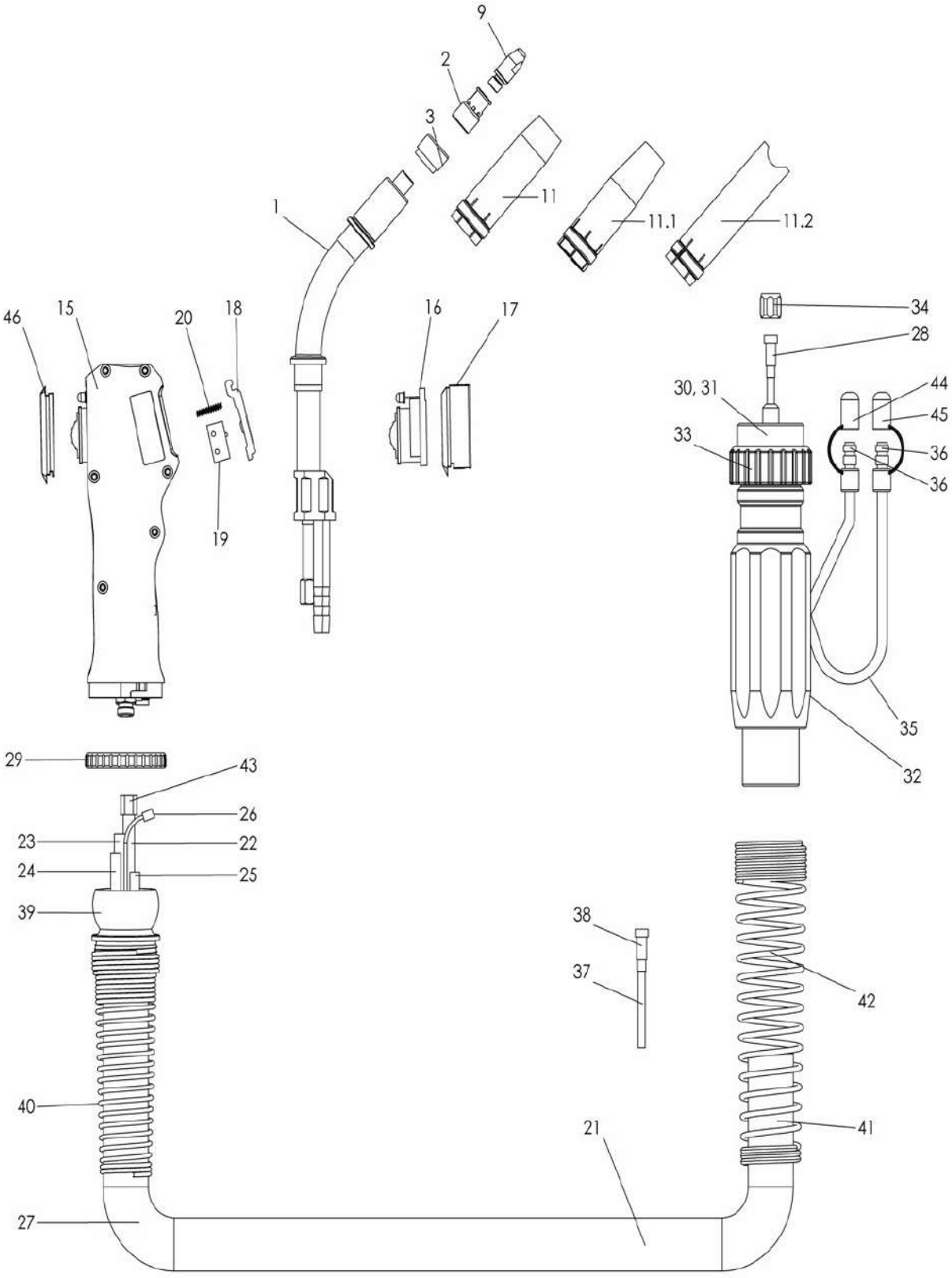


Standard



TEDAC®

TECHNICAL DATA:	
Cooling:	water cooled
Mixed gas:	300 A 60% duty cycle
Solid wire:	0.8 - 1.0 - 1.2 mm [
Aluminium wire:	1.0 - 1.2 mm [
Weight:	approx. 1350 g/1 m H
The data are corresponding to (U = 14 + 0.05 x I)	


9
2
3
1
11
11.1
11.2
46
15
20
18
19
16
17
34
28
30, 31
44
45
33
36
36
35
32
29
43
26
23
22
24
25
39
38
37
42
40
21
41
27

	Pos.	Description	Pu	PrGrp	Part No.
MIG/MAG hand welding torch SB/SBT 603 W					
		**MIG/MAG hand welding torch model SB 352 W, 4 m**		**06**	**142550**
		MIG/MAG hand welding torch model SB 352 W, 3 m		**06**	**142544**
		**MIG/MAG hand welding torch TEDAC, model SBT 352 W, 3 m**		**06**	**142546**
		MIG/MAG hand welding torch TEDAC, model SBT 352 W, 4 m		**06**	**142548**
Standard wire equipment: mild steel 1.0 mm					
Spare parts and consumables:					
	1	Torch body SB/SBT 352 W 45° bent		22	142540
	2	Tip adapter SB/SBT 351/352 W		22	138292
	3	Insulation nut SB/SBt 300/351/352 W	10 pcs	22	138812
	9.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
	9.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
	9.3	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
	9.4	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
	9.5	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
	9.6	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758
	9.7	Contact tip 1.6 mm alu CuCrZr M8	20 pcs	22	04511818
	11	Gas nozzle 15 mm SB/SBT 351/352 W		22	138270
	11.1	Gas nozzle 12 mm SB/SBT 351/352 W		22	138352
	15	Handle for MIG/MAG torch with ball joint complete set left and right incl. screws (without ball joint)		22	131272
Only for SBT 352 W:					
	16	TEDAC pc-board ME-BE-2.1 incl. slide switch and micro switch		22	02210830
	17	Frame for TEDAC left and right for torches with ball joint		22	134478

	Pos.	Description	Pu	PrGrp	Part No.
	18	Trigger for MIG/MAG torch (red)		22	02210796
	19	Micro switch for torch trigger		22	113638
	20	Spring for switch	10 pcs	22	02210131
	21.1	Hose assembly 3 m water cooled SB/T 352/504 W incl. kinking protection and ball joint, without torch head, liner, Euro connector		22	142520
	21.2	Hose assembly 4 m water cooled SB/T 352/504 W incl. kinking protection and ball joint, without torch head, liner, Euro connector		22	142522
	21.3	Hose assembly 5 m water cooled SB/T 352/504 W incl. kinking protection and ball joint, without torch head, liner, Euro connector		22	142650
	22.1	Water-power-cable 3.0 m long for SB/T 352/504 W		22	142524
	22.2	Water-power-cable 4.0 m long for SB/T 352/504 W		22	142526
	22.3	Water power cable 5.0 m long for SB/T 352/504 W		22	142656
	23.1	Wire feeding hose complete 3.0 m long only for SB/T 504 W		22	134498
	23.2	Wire feeding hose complete 4.0 m long only for SB/T 504 W		22	134500
	23.3	Wire feeding hose complete 5.0 m long only for SB/T 504 W		22	134502
	23.4	Wire feeding hose 28 red, 5.5 x 1.75 per m		22	134438
		Nippel for wire feeding hose M8 x 1 / Ø8		22	142412
		Nippel for wire feeding hose M10 x 1 / Ø8		22	114114
	24	PVC hose 5 x 1.5, blue per m		22	00600205
	25	PVC hose 5 x 1.5, black per m		22	00600207
	26.1	Cable H07V-K 1.5 mm, black per m		22	00800200
	26.2	Cable H07V-K 1.5 mm red per m		22	00800204
	27.1	Protection hose 3 m complete incl. ball joint, and kinking protection, for water cooled torches		22	134490
	27.2	Protection hose 4 m complete incl. ball joint, and kinking protection, for water cooled torches		22	134492
	27.3	Protection hose 5 m complete incl. ball joint, and kinking protection, for water cooled torches		22	134494
	27.4	Protection hose 25 x 1.5 black for water cooled torches, per m		22	134436
	28.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	28.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247

	Pos.	Description	Pu	PrGrp	Part No.
	28.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	28.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	28.5	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 5 m long		22	113512
	29	Bayonet ring for all torches with ball joint		22	131788
	30	Euro-connector, torch side for water cooled version incl. spring		22	02510150
	31	Brass neck for Euro-connection water cooled		22	02510200
	32	Kinking protection, intake water cooled		22	02510100
	33	Sleeve nut black		22	02510300
	34	Liner nut for Euro connector	10 pcs	22	02511301
	35	PVC hose 5 x 1.5, red per m		22	00600206
	36	Coupling nipple for water	10 pcs	22	02510400
	37.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	37.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	37.3	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
	37.4	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	38.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	38.2	Collet for teflon liner 2.3 x 4.7	10 pcs	22	133140
	39	Ball joint connector V4		22	142302
	40	Spring for kinking protection for MIG/MAG torch watercooled		22	142286
	41	Kinking protection for MIG torches water cooled		22	02211580
	42	Spring for kinking protection Euro connector, water cooled		22	02211579

	Pos.	Description	Pu	PrGrp	Part No.
	43	Connection nipple M8x1 RH AG, for water-current-cable, torch side		22	141508
	44	Blue cap for torch water connector	10 pcs	22	130959
	45	Red cap for water torch connector	10 pcs	22	130958

Only for SB 352 W:

	46	Cover cap for torches with ball joint		22	134496

Max. length of torch lead for alu: 3 m.

4.1.5. SB/SBT 504 W

MIG/MAG hand welding torch SB/SBT 504 W

water cooled



long version

short version

VERSIONS:

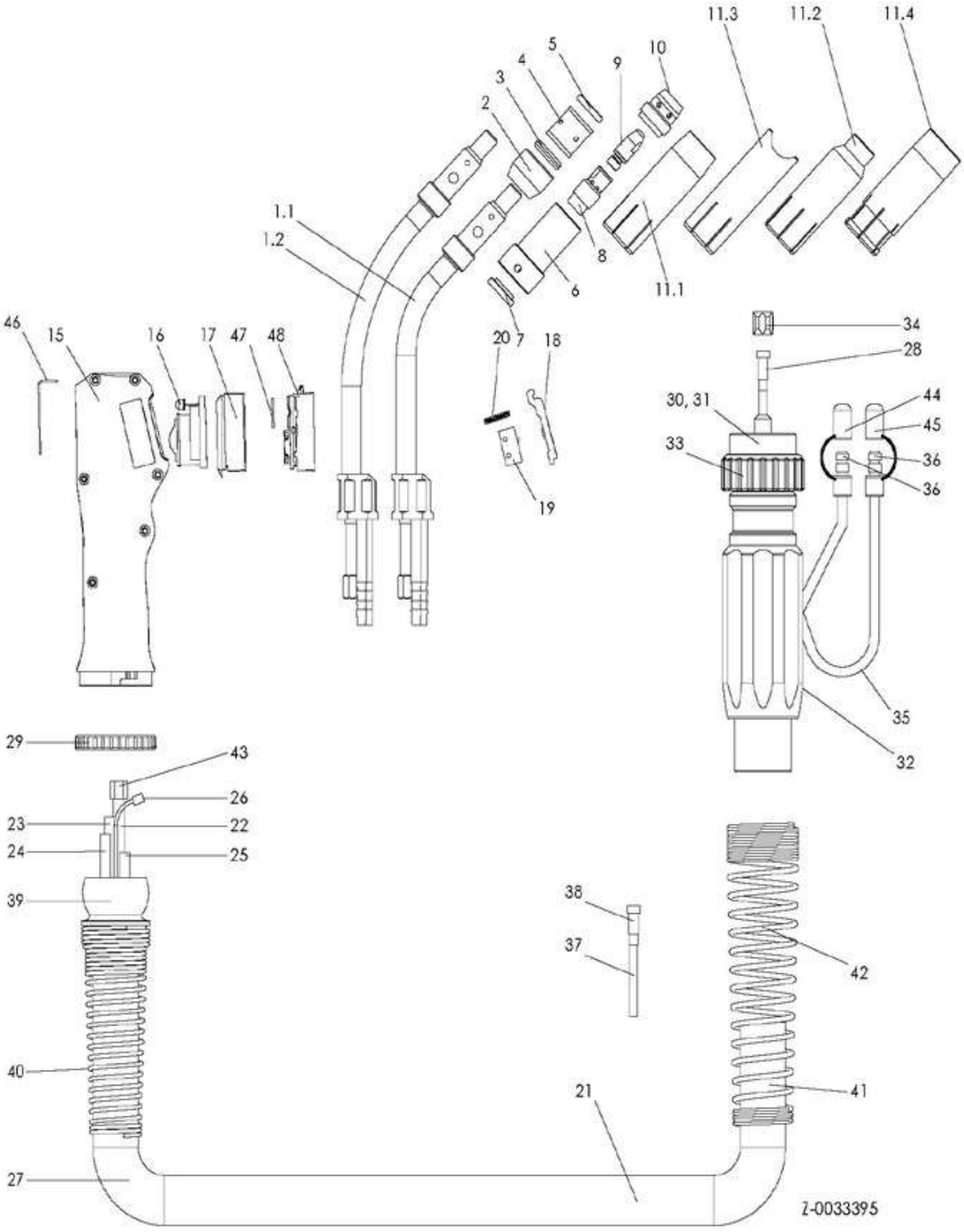


Standard



TEDAC®

TECHNICAL DATA:	
Cooling:	water cooled
Mixed gas:	400 A 60% duty cycle
CO_2:	450 A 60% duty cycle
Solid wire:	0.8 - 1.0 - 1.2 - 1.6 mm [
Aluminium wire:	1.0 - 1.2 - 1.6 mm [
Weight:	approx. 1400 g/1 m H
The data are corresponding to (U = 14 + 0.05 x I)	


11.3
11.2
11.4
5
4
3
2
9
10
1.1
1.2
8
6
11.1
46
15
16
17
47
48
20
7
18
19
34
28
30, 31
44
45
33
36
36
35
32
29
43
26
23
22
24
25
39
38
37
42
40
41
21
27
Z-0033395

	Pos.	Description	Pu	PrGrp	Part No.
A	**Standard version, short torch neck:**				
	A1	MIG/MAG hand welding torch model SB 504 W, 3 m, short version		06	142494
	A2	MIG/MAG hand welding torch model SB 504 W, 4 m, short version		06	142496
	A3	MIG/MAG hand welding torch model SB 504 W, 5 m, short version		06	142666
B	**Standard version, long torch neck:**				
	B1	MIG/MAG hand welding torch model SB 504 W, 3 m, long version		06	142492
	B2	MIG/MAG hand welding torch model SB 504 W, 4 m, long version		06	142490
	B3	MIG/MAG hand welding torch model SB 504 W, 5 m, long version		06	142664
	B4	MIG/MAG hand welding torch model SB 504 W-Alu, 3 m, long version special equipment for aluminium welding		06	142670
C	**With TEDAC system, short torch neck:**				
	C1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, short vers.		06	142482
	C2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, short vers.		06	142484
	C3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, short vers.		06	142660
D	**With TEDAC system, long torch neck:**				
	D1	MIG/MAG hand welding torch TEDAC, SBT 504 W, 3 m, long vers.		06	142486
	D2	MIG/MAG hand welding torch TEDAC, SBT 504 W, 4 m, long vers.		06	142488
	D3	MIG/MAG hand welding torch TEDAC, SBT 504 W, 5 m, long vers.		06	142662
	D4	MIG/MAG hand welding torch TEDAC, SBT 504 W-Alu, 3 m, long vers. special equipment for aluminium welding		06	142672
E	**TEDAC DIGITAL, short torch neck:**				
	E1	MIG/MAG hand welding torch TEDAC DIGITAL, SBT 504 W digital, 3 m, short vers.		06	154244
	E2	MIG/MAG hand welding torch TEDAC DIGITAL, SBT 504 W digital, 4 m, short vers.		06	154248
	E3	MIG/MAG hand welding torch TEDAC DIGITAL, SBT 504 W digital, 5 m, short vers.		06	154252

	Pos.	Description	Pu	PrGrp	Part No.
F		**TEDAC DIGITAL, long torch neck:**			
	**F1**	**MIG/MAG hand welding torch TEDAC DIGITAL, SBT 504 W digital, 3 m, long vers.**		**06**	**154254**
	F2	**MIG/MAG hand welding torch TEDAC DIGITAL, SBT 504 W digital, 4 m, long vers.**		**06**	**154260**
	F3	**MIG/MAG hand welding torch TEDAC DIGITAL, SBT 504 W digital, 5 m, long vers.**		**06**	**154262**
		Standard wire equipment: mild steel 1.2 mm			
		Spare parts and consumables:			
	1.1	Torch body complete, short version SB/SBT 504 W		22	142498
	1.2	Torch body complete, long version SB/SBT 504 W		22	142500
	2	Thread piece 503/504 W for water coat 131.280		22	131276
	3	O-ring 14 x 4	10 pcs	22	02210077
	4	Pressure bushing SB/SBT 502/503/504 W double wall	10 pcs	22	02211424
	5	O-ring 12 x 4	10 pcs	22	02210076
	6	Water coat SB503/504 W for thread piece 131.276		22	131280
	7	Isolator 503/504 W for water coat 131.280		22	131278
	8	Tip adapter SB/SBT 300/502/503/504 W	10 pcs	22	02211578
	9.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
	9.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
	9.3	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
	9.4	Contact tip Cu-Cr-Zr 1.4 mm M8	20 pcs	22	04511819
	9.5	Contact tip Cu-Cr-Zr 1.6 mm M8	20 pcs	22	04511817
	9.6	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
	9.7	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
	9.8	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758
	9.9	Contact tip 1.6 mm alu CuCrZr M8	20 pcs	22	04511818
	10.1	Gas diffusor 322/455/502/503/504, ceramics spatter resistant (for aluminium)	10 pcs	22	02211567

	Pos.	Description	Pu	PrGrp	Part No.
	10.2	Gas diffusor 455/502/503/504 W, plastic	10 pcs	22	02211568
	11.1	Gas nozzle 17 mm with fastening ring	10 pcs	22	04514300
	11.2	Gas nozzle 14 mm with fastening ring	10 pcs	22	04514301
	11.3	Spot welding gas nozzle with fastening ring	10 pcs	22	04514304
	11.4	Gas nozzle 21 mm heavy duty with fastening ring	10 pcs	22	04514305
	15	Handle for MIG/MAG torch with ball joint complete set left and right incl. screws (without ball joint)		22	131272
		Only for TEDAC torch:			
	16	TEDAC pc-board ME-BE-2.1 incl. slide switch and micro switch		22	02210830
	17	Frame for TEDAC left and right for torches with ball joint		22	134478
	18	Trigger for MIG/MAG torch (red)		22	02210796
	19	Micro switch for torch trigger		22	113638
	20	Spring for switch	10 pcs	22	02210131
	21.1	Hose assembly 3 m water cooled SB/T 352/504 W incl. kinking protection and ball joint, without torch head, liner, Euro connector		22	142520
	21.2	Hose assembly 4 m water cooled SB/T 352/504 W incl. kinking protection and ball joint, without torch head, liner, Euro connector		22	142522
	21.3	Hose assembly 5 m water cooled SB/T 352/504 W incl. kinking protection and ball joint, without torch head, liner, Euro connector		22	142650
	22.1	Water-power-cable 3.0 m long for SB/T 352/504 W		22	142524
	22.2	Water-power-cable 4.0 m long for SB/T 352/504 W		22	142526
	22.3	Water power cable 5.0 m long for SB/T 352/504 W		22	142656
	23.1	Wire feeding hose complete 3.0 m long only for SB/T 504 W		22	134498
	23.2	Wire feeding hose complete 4.0 m long only for SB/T 504 W		22	134500

	Pos.	Description	Pu	PrGrp	Part No.
	23.3	Wire feeding hose complete 5.0 m long only for SB/T 504 W		22	134502
	23.4	Wire feeding hose 28 red, 5.5 x 1.75 per m		22	134438
		Nippel for wire feeding hose M8 x 1 / Ø8		22	142412
		Nippel for wire feeding hose M10 x 1 / Ø8		22	114114
	24	PVC hose 5 x 1.5, blue per m		22	00600205
	25	PVC hose 5 x 1.5, black per m		22	00600207
	26.1	Cable H07V-K 1.5 mm, black per m		22	00800200
	26.2	Cable H07V-K 1.5 mm red per m		22	00800204
	27.1	Protection hose 3 m complete incl. ball joint, and kinking protection, for water cooled torches		22	134490
	27.2	Protection hose 4 m complete incl. ball joint, and kinking protection, for water cooled torches		22	134492
	27.3	Protection hose 5 m complete incl. ball joint, and kinking protection, for water cooled torches		22	134494
	27.4	Protection hose 25 x 1.5 black for water cooled torches, per m		22	134436
	28.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	28.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247
	28.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	28.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	28.5	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 3 m		22	02210248
	28.6	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 4 m		22	02210249
	29	Bayonet ring for all torches with ball joint		22	131788
	30	Euro-connector, torch side for water cooled version incl. spring		22	02510150
	31	Brass neck for Euro-connection water cooled		22	02510200
	32	Kinking protection, intake water cooled		22	02510100
	33	Sleeve nut black		22	02510300

	Pos.	Description	Pu	PrGrp	Part No.
	34	Liner nut for Euro connector	10 pcs	22	02511301
	35	PVC hose 5 x 1.5, red per m		22	00600206
	36	Coupling nipple for water	10 pcs	22	02510400
	37.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	37.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	37.3	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
	37.4	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	37.5	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 3 m (black, 2.7 x 4.7)		22	02210588
	37.6	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	38.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	38.2	Collet for teflon liner 2.7 x 4.7	10 pcs	22	102997
	39	Ball joint connector V4		22	142302
	40	Spring for kinking protection for MIG/MAG torch watercooled		22	142286
	41	Kinking protection for MIG torches water cooled		22	02211580
	42	Spring for kinking protection Euro connector, water cooled		22	02211579
	43	Connection nipple M8x1 RH AG, for water-current-cable, torch side		22	141508
	44	Blue cap for torch water connector	10 pcs	22	130959
	45	Red cap for water torch connector	10 pcs	22	130958

Only for SB 504 W:

	46	Cover cap for torches with ball joint		22	134496

	Pos.	Description	Pu	PrGrp	Part No.
Only for TEDAC DIGITAL:					
	47	Protective plastic glas for handle TEDAC DIGITAL torch		22	153900
	48	TEDAC DIGITAL module complete with display and control button		22	154048

4.1.6. SB/SBT 603 W

MIG/MAG hand welding torch SB/SBT 603 W

water cooled



VERSIONS:

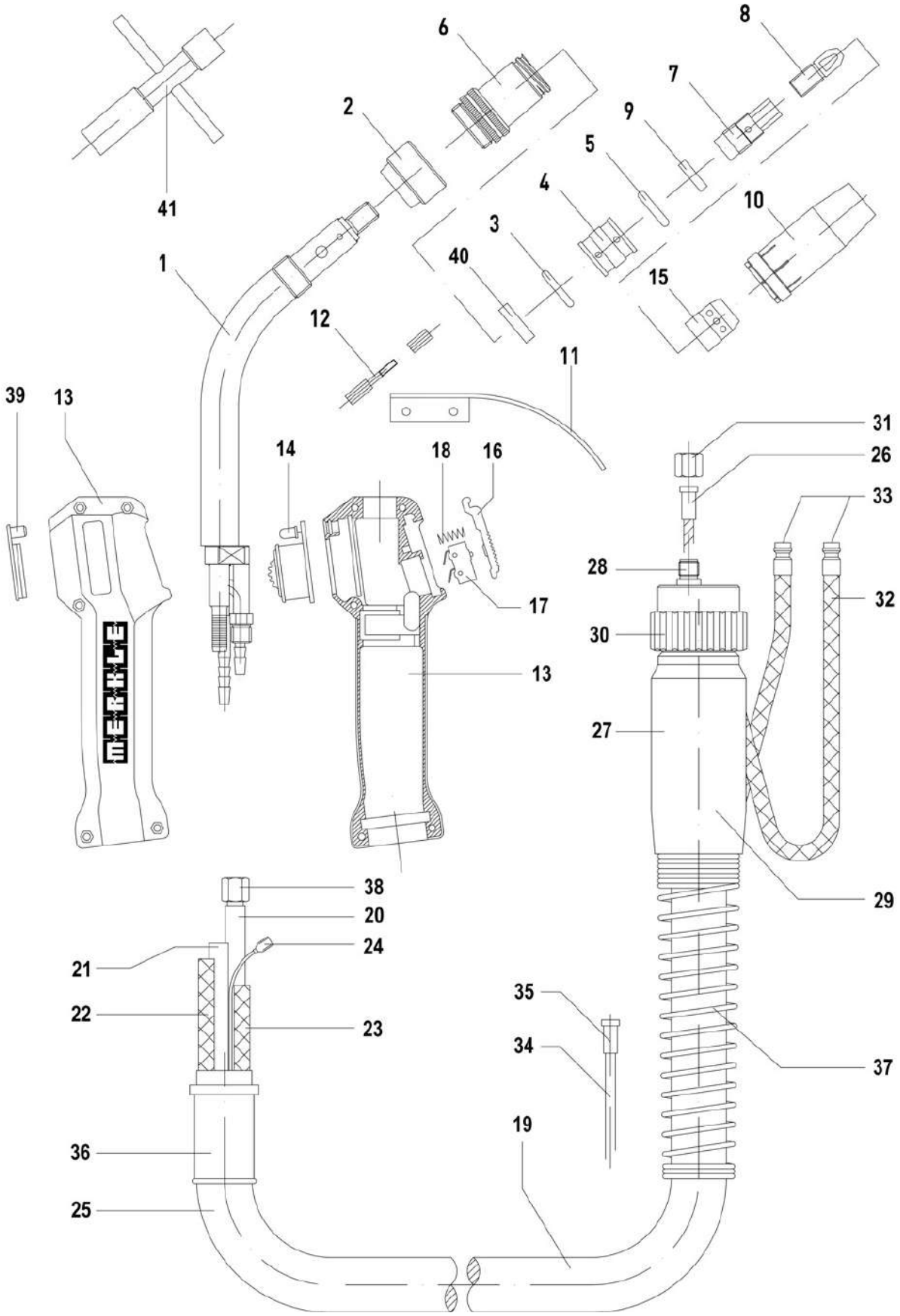


Standard



TEDAC

TECHNICAL DATA:	
Cooling:	water cooled
Mixed gas:	600 A 60% duty cycle
CO_2:	600 A 100% duty cycle
Solid wire:	1.0 - 1.2 - 1.6 mm [
Aluminium wire:	1.6 - 2.0 - 2.4 mm [
Weight:	approx. 1480 g/1 m H
The data are corresponding to (U = 14 + 0.05 x I)	


41
6
8
2
7
9
5
4
10
3
40
15
1
12
11
39
13
14
18
16
31
26
33
28
32
30
17
13
27
29
38
20
24
21
22
23
35
34
37
19
36
25

MIG/MAG hand welding torch SB/SBT 603 W



Pos.	Description	Pu	PrGrp	Part No.
	MIG/MAG hand welding torch model SB 603 W, 3 m		**06**	**02211790**
	MIG/MAG hand welding torch model SB 603 W, 4 m		**06**	**02211791**



	MIG/MAG hand welding torch TEDAC, model SBT 603 W, 3 m		**06**	**02211792**
	MIG/MAG hand welding torch TEDAC, model SBT 603 W, 4 m		**06**	**02211793**

Standard wire equipment: mild steel 1.2 mm

Spare parts and consumables:

1	Torch neck for SB 603 W, HSB 600 W		22	02211740
2	Thread ring for ROB 504, SB/MSB 603 W		22	111982
3	O-ring 16 x 3.5	10 pcs	22	02211777
4	Internal sleeve 600/603 W	2 pcs	22	02211753
5	O-ring 14 x 4	10 pcs	22	101059
6	Water coat ROB 504, SB/MSB 603 W for gas nozzle 110.136		22	110138
7	Tip holder 504/603 W	2 pcs	22	108258
8.1	High performance contact tip 1.0 mm for SB/MSB 600/603 W	20 pcs	22	02211758
8.2	High performance contact tip 1.2 mm for SB/MSB 600/603 W	20 pcs	22	02211759
8.3	High performance contact tip 1.6 mm for SB/MSB 600/603 W	20 pcs	22	02211761
8.4	High performance contact tip 1.0 mm alu for SB/MSB 600/603 W	20 pcs	22	107894
8.5	High performance contact tip 1.2 mm alu for SB/MSB 600/603 W	20 pcs	22	107896
8.6	High performance contact tip 1.6 mm alu for SB/MSB 600/603 W	20 pcs	22	107898
9	Ceramic ring 504/603 W	2 pcs	22	02210340
10	Gas nozzle d = 17 mm, l = 67 mm standard B/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	110136
11	Hand protection shield		22	02210850
12	Kit for mounting hand protection		22	02210851



13	Handle MIG, complete with trigger and cover cap		22	105016

Only for SBT 603 W:



14	TEDAC pc-board ME-BE-10.0 incl. slide switch and micro switch		22	02210800
15	Gas diffusor SB 300/603 W ceramic	5 pcs	22	107966



16	Trigger for MIG/MAG torch (red)		22	02210796

	Pos.	Description	Pu	PrGrp	Part No.
	17	Micro switch for torch trigger		22	113638
	18	Spring for switch	10 pcs	22	02210131
	19.1	Complete cable assembly, 3 m, w.c. without Euro-connector, without torch, without liner		22	130012
	19.2	Complete cable assembly, 4 m, w.c. without Euro-connector, without torch, without liner		22	130014
	20.1	Water-power-cable 3.0 m long SB 502/603/455/450/350		22	02210281
	20.2.	Water-power-cable 4.0 m long SB 502/603/455/450/350		22	02210282
	21.1	Wire feeding hose cpl. 3.0 m long		22	02211662
	21.2	Wire feed liner 4.0 m ROB-W, ROB-W-PP		22	02211664
	22	PVC hose 5 x 1.5, blue per m		22	00600205
	23	PVC hose 5 x 1.5, black per m		22	00600207
	24.1	Switch-cable, 3 m long		22	02210148
	24.2	Switch-cable, 4 m long		22	02210149
	25	Protection hose 25 x 1.5 black for water cooled torches, per m		22	134436
	26.1	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	26.2	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	26.3	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 3 m		22	02210248
	26.4	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 4 m		22	02210249
	27	Euro-connector, torch side for water cooled version incl. spring		22	02510150
	28	Brass neck for Euro-connection water cooled		22	02510200
	29	Kinking protection, intake water cooled		22	02510100
	30	Sleeve nut black		22	02510300
	31	Liner nut for Euro connector	10 pcs	22	02511301
	32	PVC hose 5 x 1.5, red per m		22	00600206

	Pos.	Description	Pu	PrGrp	Part No.
	33	Coupling nipple for water	10 pcs	22	02510400
	34.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	34.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	34.3	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
	34.4	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	34.5	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 3 m (black, 2.7 x 4.7)		22	02210588
	34.6	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 4 m (black, 2.7 x 4.7)		22	132788
	35.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	35.2	Collet for teflon liner 2.7 x 4.7	10 pcs	22	102997
	36	Kinking protection for MIG torches water cooled		22	02211580
	37	Spring for kinking protection Euro connector, water cooled		22	02211579
	38	Connection nipple for water-current-cable, torch side		22	04510201

Only for SB 603 W:

	39	Cover cap for TEDAC handle		22	02210604
	40	Distance ring 21,8 x 5,5 504/603 W		22	02211815
	41	Key for 504/600/603 W		22	01370043

Max. length of torch lead for alu: 3 m.

4.1.7. HSB/HSBT 600 W

MIG/MAG hand welding torch HSB/HSBT 600 W

water cooled, high performance gas nozzle



VERSIONS:

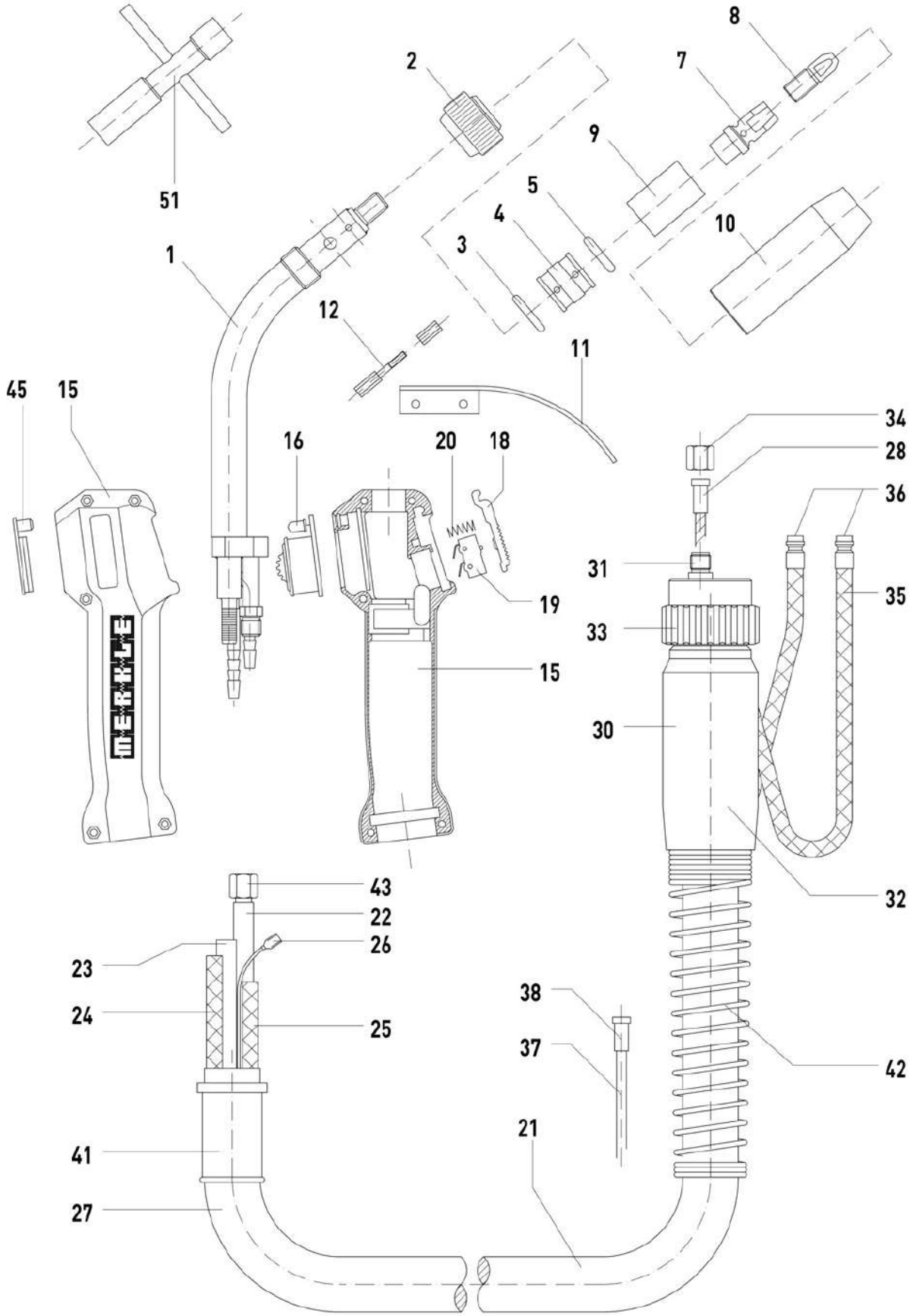


Standard



TEDAC

TECHNICAL DATA:	
Cooling:	water cooled
Mixed gas:	600 A 60% duty cycle
CO_2:	600 A 100% duty cycle
Solid wire:	1.0 - 1.2 - 1. 6 mm [
Weight:	approx. 1480 g/1 m H
The data are corresponding to (U = 14 + 0.05 x I)	


51
2
8
7
9
5
4
3
10
1
12
11
45
15
16
20
18
34
28
36
31
19
15
33
35
30
43
22
26
23
24
25
38
37
32
42
41
21
27

	Pos.	Description	Pu	PrGrp	Part No.
MIG/MAG hand welding torch HSB/HSBT 600 W					
		**High performance MIG/MAG hand torch model HSB 600 W, 3 m, long version with high performance gas nozzle**		**06**	**02211731**
		High performance MIG/MAG hand torch model HSB 600 W, 4 m, long version with high performance gas nozzle		**06**	**02211732**
		**High performance MIG/MAG hand torch TEDAC, HSBT 600 W, 3 m, long vers. with high performance gas nozzle**		**06**	**02211734**
		High performance MIG/MAG hand torch TEDAC, HSBT 600 W, 4 m, long vers. with high performance gas nozzle		**06**	**02211735**
Standard wire equipment: mild steel 1.2 mm					
Spare parts and consumables:					
	1	Torch neck for SB 603 W, HSB 600 W		22	02211740
	2	Fastening ring for HSB/HSBT 600 W		22	02211752
	3	O-ring 16 x 3.5	10 pcs	22	02211777
	4	Internal sleeve 600/603 W	2 pcs	22	02211753
	5	O-ring 14 x 4	10 pcs	22	101059
	7	Tip holder HSB 600 W (and 603 old)	2 pcs	22	02211755
	8.1	High performance contact tip 1.0 mm for SB/MSB 600/603 W	20 pcs	22	02211758
	8.2	High performance contact tip 1.2 mm for SB/MSB 600/603 W	20 pcs	22	02211759
	8.3	High performance contact tip 1.6 mm for SB/MSB 600/603 W	20 pcs	22	02211761
	9	Insulation sleeve HSB 600	2 pcs	22	02211763
	10.1	Gas nozzle 17 mm (short 85 mm) HSB 600, high performance vers.	3 pcs	22	02211765
	10.2	Gas nozzle 17 mm (long 90 mm) HSB 600, high performance vers.		22	02211769
	11	Hand protection shield		22	02210850
	12	Kit for mounting hand protection		22	02210851
	15	Handle MIG, complete with trigger and cover cap		22	105016
Only for HSBT 600 W:					
	16	TEDAC pc-board ME-BE-10.0 incl. slide switch and micro switch		22	02210800
	18	Trigger for MIG/MAG torch (red)		22	02210796
	19	Micro switch for torch trigger		22	113638
	20	Spring for switch	10 pcs	22	02210131

	Pos.	Description	Pu	PrGrp	Part No.
	21.1	Complete cable assembly, 3 m, w.c. without Euro-connector, without torch, without liner		22	130012
	21.2	Complete cable assembly, 4 m, w.c. without Euro-connector, without torch, without liner		22	130014
	22.1	Water-power-cable 3.0 m long SB 502/603/455/450/350		22	02210281
	22.2	Water-power-cable 4.0 m long SB 502/603/455/450/350		22	02210282
	23.1	Wire feeding hose cpl. 3.0 m long		22	02211662
	23.2	Wire feed liner 4.0 m ROB-W, ROB-W-PP		22	02211664
	24	PVC hose 5 x 1.5, blue per m		22	00600205
	25	PVC hose 5 x 1.5, black per m		22	00600207
	26.1	Switch-cable, 3 m long		22	02210148
	26.2	Switch-cable, 4 m long		22	02210149
	27	Protective hose 28 x 1,5 black		22	00600405
	28.1	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	28.2	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	28.3	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 3 m		22	02210248
	28.4	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 4 m		22	02210249
	30	Euro-connector, torch side for water cooled version incl. spring		22	02510150
	31	Brass neck for Euro-connection water cooled		22	02510200
	32	Kinking protection, intake water cooled		22	02510100
	33	Sleeve nut black		22	02510300
	34	Liner nut for Euro connector	10 pcs	22	02511301
	35	PVC hose 5 x 1.5, red per m		22	00600206
	36	Coupling nipple for water	10 pcs	22	02510400
	37.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	37.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520

	Pos.	Description	Pu	PrGrp	Part No.
	37.3	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
	37.4	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	37.5	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 3 m (black, 2.7 x 4.7)		22	02210588
	37.6	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 4 m (black, 2.7 x 4.7)		22	132788
	38.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	38.2	Collet for teflon liner 2.7 x 4.7	10 pcs	22	102997
	41	Kinking protection for MIG torches water cooled		22	02211580
	42	Spring for kinking protection Euro connector, water cooled		22	02211579
	43	Connection nipple for water-current-cable, torch side		22	04510201

Only for HSB 600 W:

	45	Cover cap for TEDAC handle		22	02210604
	51	Key for 504/600/603 W		22	01370043

4.2. Fume extraction welding torches



4.2.1. RSB/RSBT 351 G

MIG/MAG fume extraction torch RSB/RSBT 351 G

gas cooled



VERSIONS:



Standard

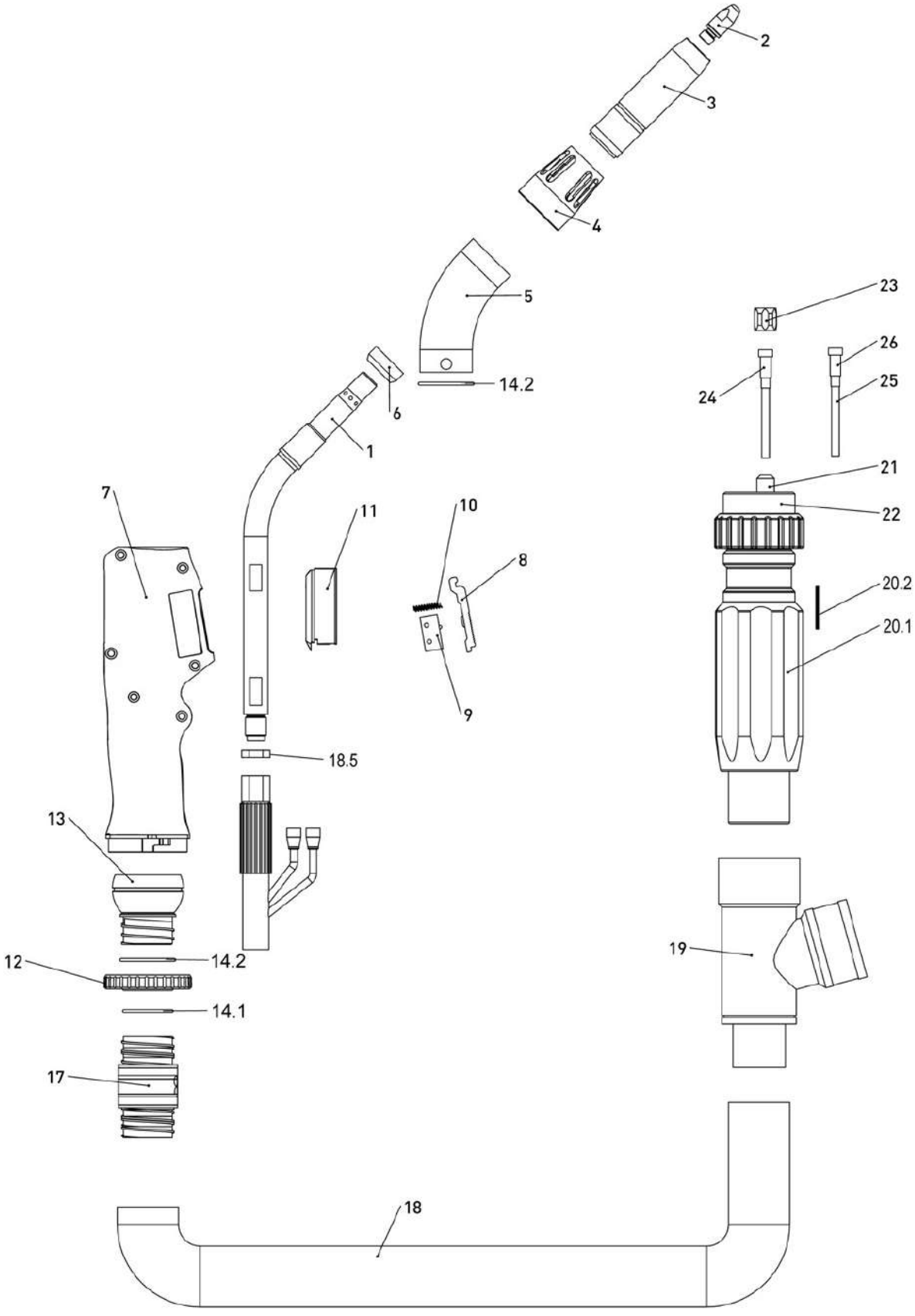


TEDAC®

TECHNICAL DATA:	
Cooling:	gas cooled
Mixed gas:	250 A 60% duty cycle
CO_2:	280 A 100% duty cycle
Solid wire:	0.8 - 1.0 - 1.2 mm [
Aluminium wire:	0.8 - 1.0 - 1.2 mm [
The data are corresponding to (U = 14 + 0.05 x I)	



- Integrated TEDAC system for remote control and display
- Extremely slim torch body: outer tube only 30 mm, fume nozzle only 32 mm diameter
- High fume extraction performance
- Same spare parts and consumables as SB/SBT 351 G
- TEDAC slide switch mounted in totally closed area
- High flexibility of the hose package due to ball joint
- Bypass control for adjustment of the vacuum


2
3
4
5
14.2
6
1
23
26
24
25
21
22
7
11
10
8
20.2
20.1
9
18.5
13
19
12
14.2
14.1
17
18

MIG/MAG fume extraction torch RSB/RSBT 351 G

	Pos.	Description	Pu	PrGrp	Part No.
		**Fume extraction torch model RSB 351 G, 3 m**		**06**	**129270**
		Fume extraction torch model RSB 351 G, 4 m		**06**	**129272**
		**Fume extraction torch TEDAC, model RSBT 351 G, 3 m**		**06**	**129276**
		Fume extraction torch TEDAC, model RSBT 351 G, 4 m		**06**	**129278**

Spare parts and consumables:

	1	Torch neck RSB/T 351 G		22	130322
	2.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
	2.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
	2.2	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
	2.3	Contact tip Cu-Cr-Zr 1.4 mm M8	20 pcs	22	04511819
	2.4	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
	2.5	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
	2.6	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758
	2.7	Contact tip 1.6 mm alu CuCrZr M8	20 pcs	22	04511818
	3	Gas nozzle 15 mm SB/T, RSB/T 351 G with thread and insulation		22	104170
	4	Fume extraction nozzle RSB/T 351 G		22	129074
	5	Fume extraction tube FT RSB/T 351 G		22	129094
	6	Isolation piece RSB/T 351 G		22	129080
	7	Handle fume extraction torch left and right		22	130320
	8	Trigger for MIG/MAG torch (red)		22	02210796
	9	Micro switch for torch trigger		22	113638
	10	Spring for switch	10 pcs	22	02210131

Only for RSBT 351 G:

	11	TEDAC pcb incl. slide switch and frame for RSBT 351/503		22	131274

	Pos.	Description	Pu	PrGrp	Part No.
	12	Bayonet ring for all torches with ball joint		22	131788
	13	Ball joint connection RSB/T 351 G		22	129638
	14.1	O-Ring 26 x 1,5		22	131292
	14.2	O ring 28 x 2		24	05011542

Only for RSB 351 G:

	15	Cover cap for RSB torches with ball joint		22	131996
	16	Closing ring RSB/T 351 G		22	129650
	17.1	Bypass piece complete RSB/T 351 G		22	132594
	17.2	Bypass piece for RSB/T 351 G		22	130962
	17.3	Bypass controller ring RSB/T 351 G		22	130964
	18.1	Fume extraction hose D=29 mm (per m)		22	129626
	18.2	Coax cable, 3 m, 35 mm², for RSB/T 351 G		22	130968
	18.3	Coax cable, 4 m, 35 mm², for RSB/T 351 G		22	130982
	18.4	Coax cable, 5 m, 35 mm², for RSB/T 351 G		22	131560
	18.5	Nut for KOAX connector-V		22	142370
	19	T-connector RSB/RSBT D=29 mm		22	129564
	20.1	Kinking protection, intake water cooled		22	02510100
	20.2	Cover cap on water outlets for handle, water cooled		22	117508
	21	Brass body central connector MAG gas cooled		22	02511401

	Pos.	Description	Pu	PrGrp	Part No.
	22	Sleeve nut black		22	02510300
	23	Liner nut for Euro connector	10 pcs	22	02511301
	24.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	24.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247
	24.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	24.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	25.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	25.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	25.3	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
	25.4	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	26.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	26.2	Collet for teflon liner 2.7 x 4.7	10 pcs	22	102997

4.2.2. RSB/RSBT 504 W

MIG/MAG fume extraction torch RSB/RSBT 504 W

water cooled



VERSIONS:

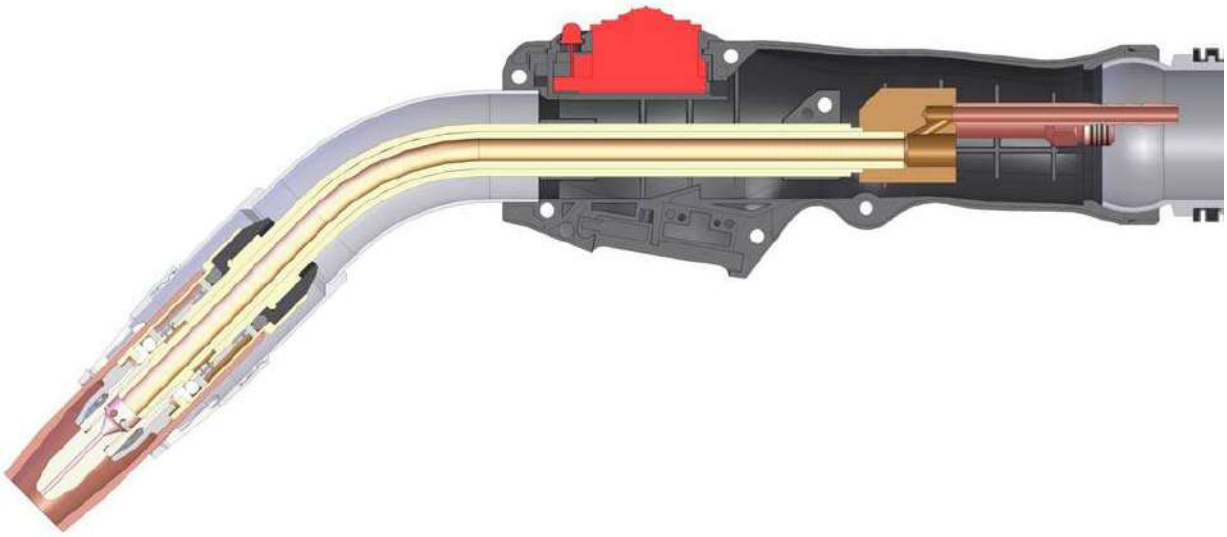


Standard

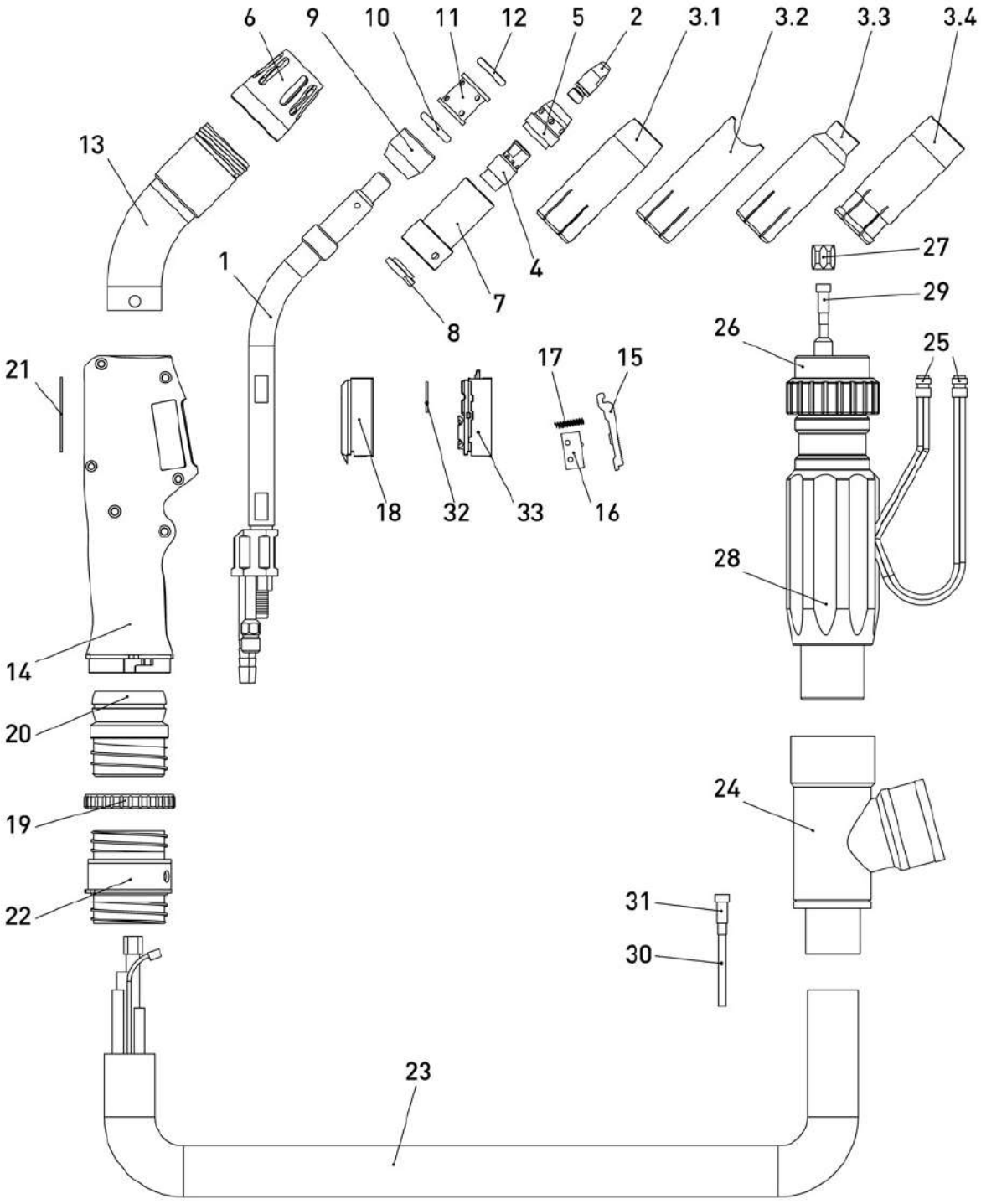


TEDAC®

TECHNICAL DATA:	
Cooling:	water cooled
Mixed gas:	400 A 60% duty cycle
CO_2:	450 A 60% duty cycle
Solid wire:	0.8 - 1.0 - 1.2 - 1.6 mm [
Aluminium wire:	1.0 - 1.2 - 1.6 mm [
The data are corresponding to (U = 14 + 0.05 x I)	



- Integrated TEDAC system for remote control and display
- Extremely slim torch body: outer tube only 34 mm,
  fume nozzle only 36 mm diameter
- High fume extraction performance
- Same spare parts and consumables as SB/SBT 504 W
- TEDAC slide switch mounted in totally closed area
- High flexibility of the hose package due to ball joint
- Bypass control for adjustment of the vacuum


6
9
10
11
12
5
2
3.1
3.2
3.3
3.4
13
1
4
7
8
27
29
26
25
21
17
15
18
32
33
16
28
14
20
19
22
24
31
30
23

	Pos.	Description	Pu	PrGrp	Part No.
MIG/MAG fume extraction torch RSB/RSBT 504 W					
		Fume extraction torch model RSB 504 W, 3 m		**06**	**164104**
		Fume extraction torch model RSB 504 W, 4 m		**06**	**164106**
		**Fume extraction torch TEDAC, model RSBT 504 W, 3 m**		**06**	**164102**
		Fume extraction torch TEDAC, model RSBT 504 W, 4 m		**06**	**164108**
Standard wire equipment: mild steel 1.2 mm					
Spare parts and consumables:					
		Torch body RSB/RSBT 504 W without water coat		22	160180
	2.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
	2.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
	2.2	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
	2.3	Contact tip Cu-Cr-Zr 1.4 mm M8	20 pcs	22	04511819
	2.4	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
	2.5	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
	2.6	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758
	2.7	Contact tip 1.6 mm alu CuCrZr M8	20 pcs	22	04511818
	3.1	Gas nozzle 17 mm with fastening ring	10 pcs	22	04514300
	3.2	Spot welding gas nozzle with fastening ring	10 pcs	22	04514304
	3.3	Gas nozzle 14 mm with fastening ring	10 pcs	22	04514301
	3.4	Gas nozzle 21 mm heavy duty with fastening ring	10 pcs	22	04514305
	4	Tip adapter SB/SBT 300/502/503/504 W	10 pcs	22	02211578
	5.1	Gas diffusor 322/455/502/503/504, ceramics spatter resistant (for aluminium)	10 pcs	22	02211567
	5.2	Gas diffusor 455/502/503/504 W, plastic	10 pcs	22	02211568
	6	Fume extraction nozzle RSB/T 503 W		22	130992

	Pos.	Description	Pu	PrGrp	Part No.
	7	Water coat SB503/504 W for thread piece 131.276		22	131280
	8	Isolator 503/504 W for water coat 131.280		22	131278
	9	Thread piece 503/504 W for water coat 131.280		22	131276
	10	O-ring 14 x 4	10 pcs	22	02210077
	11	Pressure bushing SB/SBT 502/503/504 W double wall	10 pcs	22	02211424
	12	O-ring 12 x 4	10 pcs	22	02210076
	13	Fume extraction tube RSB/T 503 W		22	130990
	14	Handle fume extraction torch left and right		22	130320
	15	Trigger for MIG/MAG torch (red)		22	02210796
	16	Micro switch for torch trigger		22	113638
	17	Spring for switch	10 pcs	22	02210131

Only for RSBT 503 W:

	18	TEDAC pcb incl. slide switch and frame for RSBT 351/503		22	131274
		Bayonet ring for all torches with ball joint		22	131788
	20	Ball joint connection RSB/T 503 W		22	131778

Only for RSB 503 W:

	21	Cover cap for RSB torches with ball joint		22	131996

	Pos.	Description	Pu	PrGrp	Part No.
	22.1	Bypass piece complete RSB/T 503 W		22	132596
	22.2	Bypass piece for RSB/T 503 W		22	131196
	22.3	Bypass controller ring RSB/T 503 W		22	131194
	23.1	Fume extraction hose 38 mm (per m)		22	103634
	23.1	Complete cable assembly, RSB/T 504 W 3 m, with Euro-connector, without torch, without liner		22	167044
	23.2	Complete cable assembly, RSB/T 504 W 4 m, with Euro-connector, without torch, without liner		22	167046
	24	T-connector RSB/RSBT D=38 mm		22	103635
	25	Coupling nipple for water	10 pcs	22	02510400
	26	Brass neck for Euro-connection water cooled		22	02510200
	27	Liner nut for Euro connector	10 pcs	22	02511301
	28	Kinking protection, intake water cooled		22	02510100
	29.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	29.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247
	29.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	29.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	29.5	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 3 m		22	02210248
	29.6	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 4 m		22	02210249
	30.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	30.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	30.3	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
					

	Pos.	Description	Pu	PrGrp	Part No.
	30.4	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	30.5	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 3 m (black, 2.7 x 4.7)		22	02210588
	30.6	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 4 m (black, 2.7 x 4.7)		22	132788
	31.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	31.2	Collet for teflon liner 2.7 x 4.7	10 pcs	22	102997
	32.1	Wire feeding hose complete 3.0 m long only for SB/T 504 W		22	134498
	32.2	Wire feeding hose complete 4.0 m long only for SB/T 504 W		22	134500
	32.3	Wire feeding hose 28 red, 5.5 x 1.75 per m		22	134438
	32.5	Nippel for wire feeding hose M8 x 1 / Ø8		22	142412
	32.5	Nippel for wire feeding hose M10 x 1 / Ø8		22	114114
	33.1	Water-power-cable 3.0 m long for SB/T 352/504 W		22	142524
	33.2	Water-power-cable 4.0 m long for SB/T 352/504 W		22	142526
	34.1	PVC hose 5 x 1.5, blue per m		22	00600205
	34.2	PVC hose 5 x 1.5, red per m		22	00600206
	35	PVC hose 5 x 1.5, black per m		22	00600207
	36.1	Cable H07V-K 1.5 mm, black per m		22	00800200
	36.2	Cable H07V-K 1.5 mm red per m		22	00800204
	37	O-Ring 26 x 1,5		22	131292
	38	O ring 28 x 2		24	05011542

4.3. Push-Pull welding torches



4.3.1. PP/PPT 307 G

MIG/MAG Push-Pull torch
PP/PPT 307 G
gas cooled



45° bent



22° bent

VERSIONS:

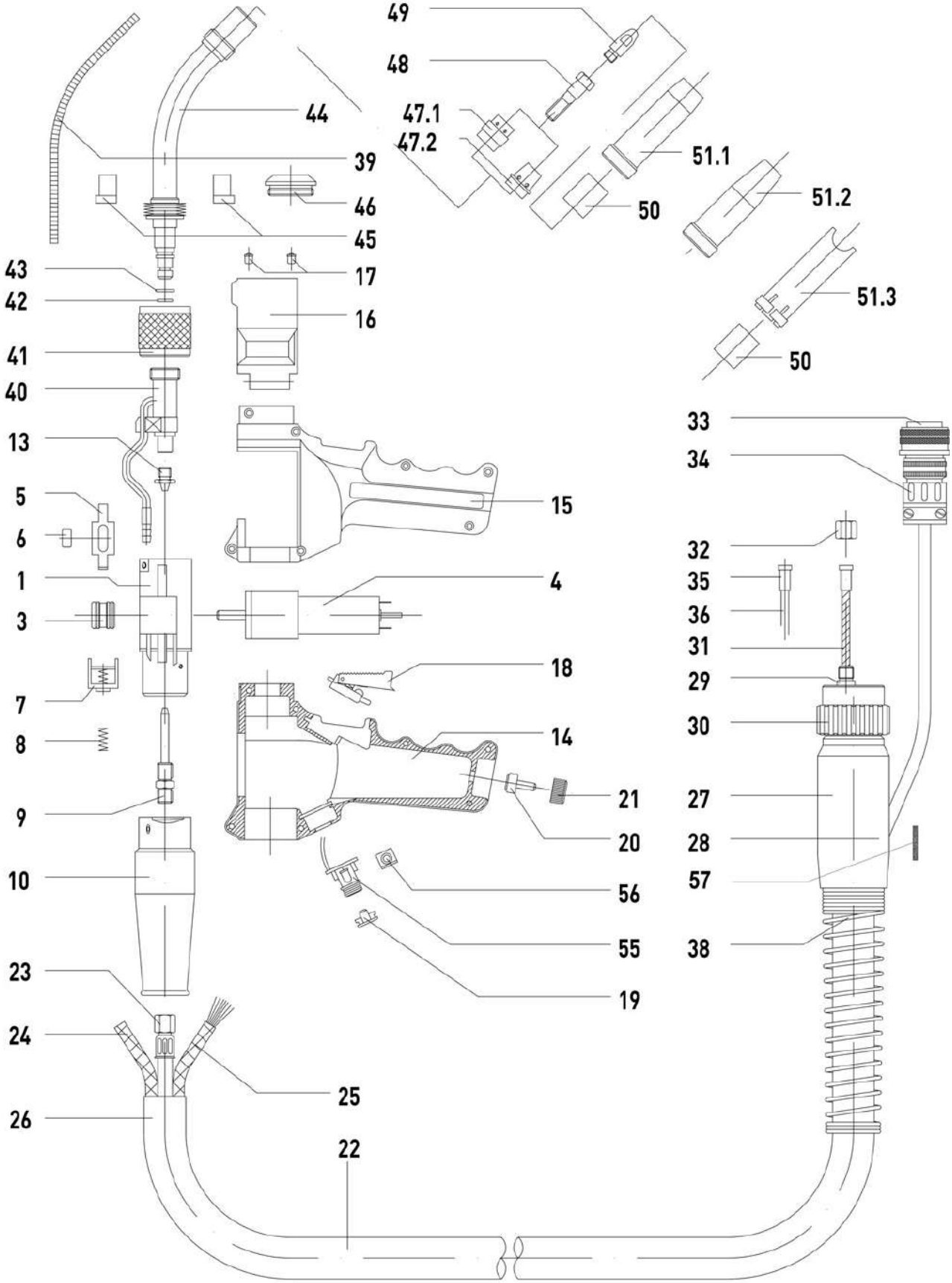


Standard



TEDAC®

TECHNICAL DATA:	
Cooling:	gas cooled
Mixed gas:	280 A 60% duty cycle
CO_2:	300 A 60% duty cycle
Solid wire:	0.8 - 1.0 - 1.2 mm [
Aluminium wire:	0.8 - 1.0 - 1.2 mm [
Weight:	approx. 1200 g/1 m H
The data are corresponding to (U = 14 + 0.05 x I)	


49
48
47.1
47.2
51.1
50
51.2
51.3
50
44
39
46
45
43
42
41
40
13
5
6
1
3
7
8
9
10
23
24
26
25
22
17
16
15
4
18
14
21
20
56
55
19
33
34
32
35
36
31
29
30
27
28
57
38

	Pos.	Description	Pu	PrGrp	Part No.
MIG/MAG-Push-Pull welding torch PP/PPT 307 G					
		**Push pull hand welding torch model PP 307 G, 22° bent, 8 m with rotatable torch head**		**06**	**02110292**
		**Push pull hand welding torch model PP 307 G, 45° bent, 8 m with rotatable torch head**		**06**	**02110293**
		**Push pull hand welding torch TEDAC, PPT 307 G, 22° bent, 8 m, with rotatable torch head**		**06**	**02110294**
		**Push pull hand welding torch TEDAC, PPT 307 G, 45° bent, 8 m, with rotatable torch head**		**06**	**02110295**
Standard wire equipment: mild steel 1.0 mm					
Spare parts and consumables:					
	1	Motor-block PP torch		22	02110151
	3.1	Wire feeding roller st. 0.8 mm (PP)		22	02110251
	3.2	Wire feeding roller st. 1.0 mm (PP)		22	02110252
	3.3	Wire feeding roller st. 1.2 mm (PP)		22	02110253
	3.6	Wire feeding roller alu 1.2 mm (PP)		22	02110257
	3.4	Wire feeding roller alu 0.8 mm (PP)		22	02110255
	3.5	Wire feeding roller alu 1.0 mm (PP)		22	02110256
	4	Wire feeding motor, PP-torch		22	02110272
	5	Pressure bracket PPL/PPW		22	02110160
	6	Pressure roller PPL/PPW		22	02110170
	7	Pressure bracket complete		22	02110181
	8	Spring DFO, 7x4, 3x9, 3x4x1.12 for fastening yoke 021.1.0181		22	02110182
	9	Insertion nozzle PP 307/502/504 Cold wire feed system KDZF		22	02110190
	10	Kinking protection		22	02110279
	13	Insertion nozzle KDZF (cold wire) PP 307/502		22	02110205

	Pos.	Description	Pu	PrGrp	Part No.
	14, 15	Handle for Push-Pull hand welding torch PP/T 307, 502, 504 with fixed torch body, left and right side		22	134468
	16	Swivel cover for PP torch		22	02110237
	17	Stainless steel pressure piece, spring lock		22	02110185
	18	Torch interruptor		22	02110335
	19	Cover cap for TEDAC handle		22	02210604
	20	Potentiomenter 10 kOhm PP-torch		22	00100506
	21			22	139940
	22	Torch lead cpl. 8 m, PP/PPT 307 without torch, with Euro-connector		22	02110119
	23	Coax cable, cpl. 8 m, PP-torch		22	02110288
	24	Gas hose 8 m		22	02110260
	25	Control cable 8 x 0,5 (8 G 0,5) per meter		07	114578
	26	Protection hose 25 x 1.5 black for water cooled torches, per m		22	134436
	27	Euro-connector, torch side for water cooled version incl. spring		22	02510150
	28	Kinking protection, intake water cooled		22	02510100
	29	Brass neck for Euro-connection water cooled		22	02510200
	30	Sleeve nut black		22	02510300
	31	Liner for steel uncoated 2,5 x 4,5 0.6 -1.6 mm, 8 m long		22	02110325
	32	Liner nut for Euro connector	10 pcs	22	02511301
	33	Socket 10-pole (-) (for push pull torch)		22	02110384
	34	Cable support for 10 pol. plug		07	02110388
	35	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554

	Pos.	Description	Pu	PrGrp	Part No.
	36	Teflon liner 2.0 x 4.0 Alu/stainl. steel 0.8 - 1.6 mm, 8 m		22	02110326
	38	Spring for kinking protection Euro connector, water cooled		22	02211579
	39	Brass liner 2 x 4, per meter		22	135578
	40	Torch neck support		22	02110020
	41	Sleeve		22	02110021
	42	O-ring 7.5 x 1.5, PP-torch 307		22	02110022
	43	O-ring 9.5 x 1.5, PP-torch 307		22	02110023
	44.1	Torch neck PP/PPT 307, 22°, cpl.		22	02110024
	44.2	Torch neck PP/PPT 307 G, 45°		22	02110025
	45	Bearing bush, seperated, PP 307		22	02110026
	46	Thread sleeve, PP 307		22	02110027
	47.1a	Gas diffusor SB/SBT 307 G ceramic spatter resistent	10 pcs	22	02210219
	47.1b	Gas diffusor SB/T 307 G plastic, black, for gas nozzle 022.1.0267, 022.1.0310	10 pcs	22	02210222
	47.2	Gas diffusor SB/T 307 G, plastic for gas nozzle 111.462	10 pcs	22	111938
	48.1	Tip adapter, SB 307 G, 38 mm	10 pcs	22	02210217
	48.2	Tip adapter SB 307, 38 mm for aluminium, inner diameter 4. 8 mm	10 pcs	22	02210215
	49.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
	49.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
	49.3	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
	49.4	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
	49.5	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
	49.6	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758
	50	Insulation ring SB 300/307	20 pcs	22	02210369
	51.1	Gas nozzle SB/SBT 300/307, with thread		22	02210267
	51.2	Gas nozzle 12 mm screw fixing (only with gas diffusor 111.938)	10 pcs	22	111462
	51.3	Spot welding gas nozzle 300/307 with fastening ring		22	02210310

	Pos.	Description	Pu	PrGrp	Part No.
	55	TEDAC pc-board ME-BE-10.0 incl. slide switch and micro switch		22	02210800
	56	Insertion element PP 307/502/504		22	02110337
	57	Cover cap on water outlets for handle, water cooled		22	117508

4.3.2. PP/PPT 504 W

MIG/MAG Push-Pull torch PP/PPT 504 W

water cooled



45° bent



straight

45° bent with rotatable torch head



VERSIONS:

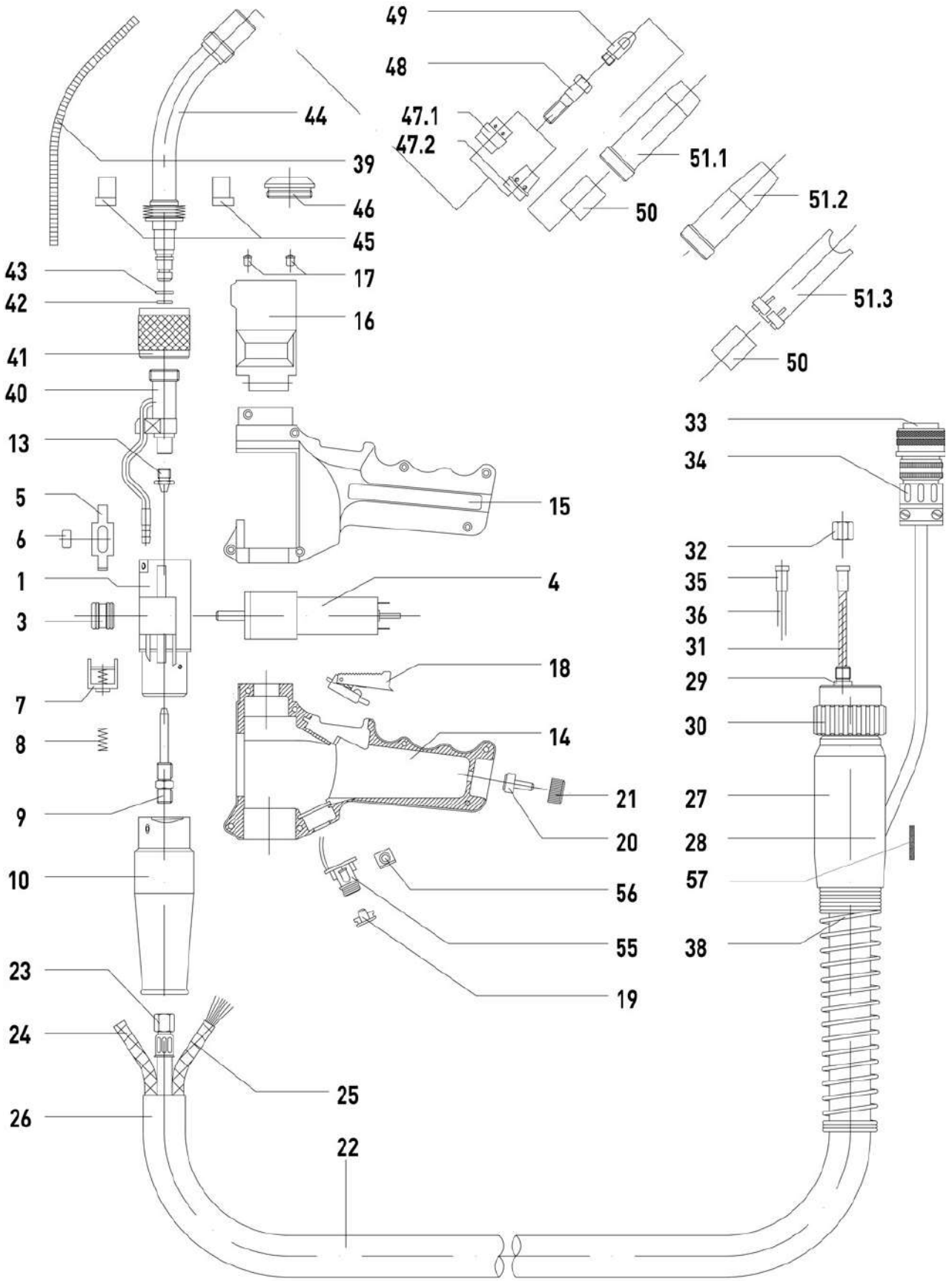


Standard



TEDAC®

TECHNICAL DATA:	
Cooling:	water cooled
Mixed gas:	400 A 60% duty cycle
CO_2:	450 A 60% duty cycle
Solid wire:	0.8 - 1.0 - 1.6 mm [
Aluminium wire:	0.8 - 1.0 - 1.6 mm [
Weight:	approx. 1850 g/1 m H
The data are corresponding to (U = 14 + 0.05 x I)	


49
48
47.1
47.2
44
39
46
45
51.1
50
51.2
51.3
50
43
42
41
40
13
5
6
1
3
7
8
9
10
23
24
26
25
22
17
16
15
4
18
14
21
20
56
55
19
33
34
32
35
36
31
29
30
27
28
57
38

	Pos.	Description	Pu	PrGrp	Part No.
MIG/MAG-Push-Pull welding torch PP/PPT 504 W					
		**Push-Pull hand welding torch model PP 504 W, straight, 8 m**		**06**	**166478**
		**Push-Pull hand welding torch model PP 504 W, 45° bent, 8 m**		**06**	**166474**
		**Push-Pull hand welding torch TEDAC, PPT 504 W, straight, 8 m**		**06**	**166472**
		**Push-Pull hand welding torch TEDAC, PPT 504 W, 45° bent, 8 m**		**06**	**166476**
With rotatable torch head:					
		**Push-Pull hand welding torch model PP 504 W, 45° bent, 8 m with rotatable torch head**		**06**	**131789**
		Push-Pull hand welding torch TEDAC, model PPT 504 W, 45 ° bent, 8 m with rotatable torch head		**06**	**131790**
Standard wire equipment: mild steel 1.0 mm					
Spare parts and consumables:					
	1	Motor-block PP torch		22	02110151
	2.1	Wire feeding roller st. 0.8 mm (PP)		22	02110251
	2.2	Wire feeding roller st. 1.0 mm (PP)		22	02110252
	2.3	Wire feeding roller st. 1.2 mm (PP)		22	02110253
	2.4	Wire feeding roller st. 1.6 mm (PP)		22	02110254
	2.5	Wire feeding roller alu 0.8 mm (PP)		22	02110255
	2.6	Wire feeding roller alu 1.0 mm (PP)		22	02110256
	2.7	Wire feeding roller alu 1.2 mm (PP)		22	02110257
	3	Wire feeding motor, PP-torch		22	02110272
	4	Pressure bracket PPL/PPW		22	02110160
	5	Pressure roller PPL/PPW		22	02110170
	6	Pressure bracket complete		22	02110181
	7	Spring DFO, 7x4, 3x9, 3x4x1.12 for fastening yoke 021.1.0181		22	02110182

	Pos.	Description	Pu	PrGrp	Part No.
	8	Insertion nozzle PP 307/502/504 Cold wire feed system KDZF		22	02110190
	9	Kinking protection		22	02110279
	10	Insertion nozzle KDZF (cold wire) PP 307/502		22	02110205
	11.1	Handle for Push-Pull hand welding torch PP/T 307, 502, 504 with fixed torch body, left and right side		22	134468
	11.2	Handle for Push-Pull hand welding torch PP/T 502/504 with rotatable torch body, left and right side		22	134472
	13	Swivel cover for PP torch		22	02110237
	14	Stainless steel pressure piece, spring lock		22	02110185
	15	Torch interruptor		22	02110335
	16	Cover cap for TEDAC handle		22	02210604
	17	Potentiomenter 10 kOhm PP-torch		22	00100506
	18			22	139940
	19	Torch lead cpl. 8 m, PP/T 502/504 without torch, without Euro-connection		22	134466
	20	Wire feeding hose 8 m		22	02110283
	20a	Connection nipple		22	02110310
	21	Gas hose 8 m		22	02110260
	22	Control cable 8 x 0,5 (8 G 0,5) per meter		07	114578
	23	Protection hose 25 x 1.5 black for water cooled torches, per m		22	134436
	24	Euro-connector, torch side for water cooled version incl. spring		22	02510150
	25	Kinking protection, intake water cooled		22	02510100
	26	Brass neck for Euro-connection water cooled		22	02510200
	27	Sleeve nut black		22	02510300
	28	Plastic liner 2.0 x 4.0 per meter		22	132792

	Pos.	Description	Pu	PrGrp	Part No.
	29	Liner nut for Euro connector	10 pcs	22	02511301
	30	Socket 10-pole (-) (for push pull torch)		22	02110384
	31	Cable support for 10 pol. plug		07	02110388
	32	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	33	Plastic liner 2.0 x 4.0 per meter		22	132792
	34	Spring for kinking protection Euro connector, water cooled		22	02211579
	35	Brass liner 2 x 4, per meter		22	135578
	36.1			22	166492
	36.2			22	166494
	36.3	Torch neck PP/PPT 504 W, 45° bent for torch with rotatable torch neck		22	158492
	37	Secure nut for PP/T 504 W with rotatable torch neck		22	158494
	38	Thread piece 503/504 W for water coat 131.280		22	131276
	39	O-ring 14 x 4	10 pcs	22	02210077
	40	O-ring 12 x 4	10 pcs	22	02210076
	41	Pressure bushing SB/SBT 502/503/504 W double wall	10 pcs	22	02211424
	42	Water coat SB503/504 W for thread piece 131.276		22	131280
	43	Insualtion ring SB/SBT 502 W	20 pcs	22	02211421
	44	Tip adapter SB/SBT 300/502/503/504 W	10 pcs	22	02211578
	45.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
	45.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
	45.3	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
	45.4	Contact tip Cu-Cr-Zr 1.4 mm M8	20 pcs	22	04511819
	45.5	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
	45.6	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
	45.7	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758

	Pos.	Description	Pu	PrGrp	Part No.
	46.1	Gas diffusor 322/455/502/503/504, ceramics spatter resistant (for aluminium)	10 pcs	22	02211567
	46.2	Gas diffusor 455/502/503/504 W, plastic	10 pcs	22	02211568
	47	Gas nozzle 17 mm with fastening ring	10 pcs	22	04514300
	47.1	Gas nozzle 21 mm heavy duty with fastening ring	10 pcs	22	04514305
	48	Spot welding gas nozzle with fastening ring	10 pcs	22	04514304
	49	Gas nozzle 14 mm with fastening ring	10 pcs	22	04514301
	50	TEDAC pc-board ME-BE-10.0 incl. slide switch and micro switch		22	02210800
	51	Insertion element PP 307/502/504		22	02110337
	52	PVC hose 5 x 1.5, blue per m		22	00600205
	53	PVC hose 5 x 1.5, red per m		22	00600206
	54	Coupling nipple for water	10 pcs	22	02510400
	55	Water-power-cable 8.0 m long		22	02110321
	56	O ring 12 x 1.5	10 pcs	22	131898
	57	O ring 11 x 1.5	10 pcs	22	131896
	58	O ring 9.25 x 1.78	10 pcs	22	02110040
	59	Water distributor for PP/T 504 W with rotatable torch neck		22	158496
	60	Red cap for water torch connector	10 pcs	22	130958
	61	Blue cap for torch water connector	10 pcs	22	130959
	62	Clamping V2 for PP torch		22	137424
	63	Kinking protection for MIG torches water cooled		22	02211580
	64	Isolation piece PP/T 503/504		22	139196

4.4. Machine and robot welding torches

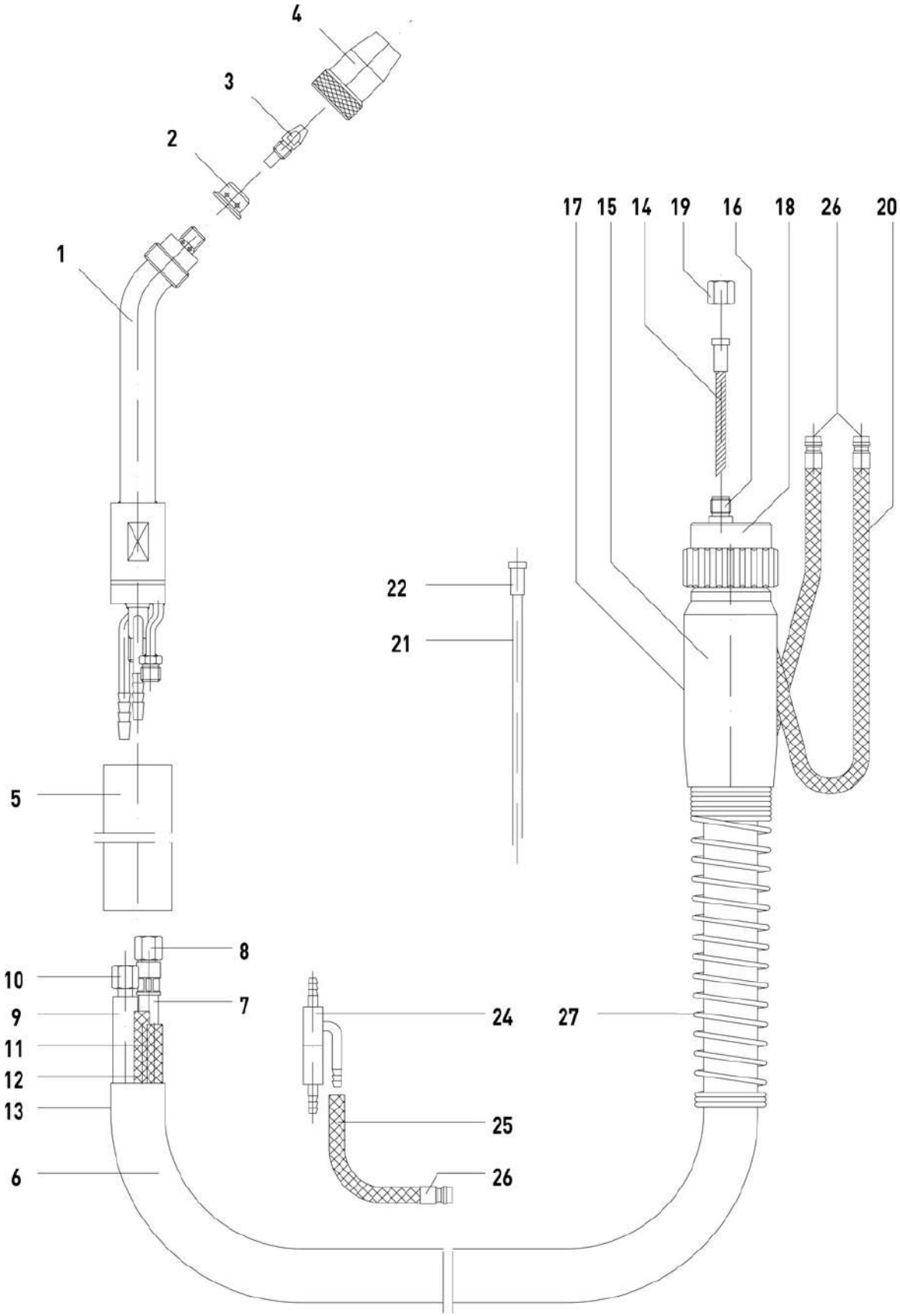


4.4.1. MSB 401 W

MIG/MAG machine welding torch
MSB 401 W
water cooled



TECHNICAL DATA:	
Cooling:	water cooled
Mixed gas:	380 A 60% duty cycle
CO_2:	350 A 100% duty cycle
Solid wire:	0.8 - 1.0 - 1.2 - 1.6 mm [
Aluminium wire:	1.0 - 1.2 - 1.6 mm [
The data are corresponding to (U = 14 + 0.05 x I)	


4
3
2
1
17
15
14
19
16
18
26
20
22
21
5
8
10
7
9
24
27
11
12
13
25
6
26

MIG/MAG machine welding torch MSB 401 W



Pos.	Description	Pu	PrGrp	Part No.
	MIG/MAG machine welding torch Model MSB 401 W, 1.5 m, bent		**06**	**111812**
	MIG/MAG machine welding torch Model MSB 401 W, 2.0 m, bend		**06**	**111816**
	MIG/MAG machine welding torch Model MSB 401 W, 2.5 m, bent		**06**	**111820**
	MIG/MAG machine welding torch Model MSB 401 W, 3.0 m, bent		**06**	**111824**
	MIG/MAG machine welding torch Model MSB 401 W, 4.0 m, straight		**06**	**111830**
	Blow-out device for MIG/MAG machine welding torch		**06**	**02211810**

Standard wire equipment: mild steel 1.2 mm

Spare parts and consumables:

1.1	Torch neck MSB 401 W, bent		22	111810
1.2	Torch neck MSB 401 W, straight		22	111806
2	Gas diffusor MSB 400/401 W ceramic		22	111802
3.1	Contact tip 0.8 MSB 401 W, Cu-Cr-Zr	20 pcs	22	111776
3.2	Contact tip 1.0 MSB 401 W, Cu-Cr-Zr	20 pcs	22	111780
3.3	Contact tip 1.2 MSB 401 W, Cu-Cr-Zr	20 pcs	22	111782
3.4	Contact tip 1.6 MSB 401 W, Cu-Cr-Zr	20 pcs	22	111786
3.5	Contact tip alu 0.8 for MSB 401 W Cu-Cr-Zr	20 pcs	22	111788
3.6	Contact tip alu 1.0 for MSB 401 W Cu-Cr-Zr	20 pcs	22	111790
3.7	Contact tip alu 1.2 for MSB 401 W Cu-Cr-Zr	20 pcs	22	111792
3.8	Contact tip alu 1.6 for MSB 401 W Cu-Cr-Zr	20 pcs	22	111794
4	Gas nozzle for MSB 400/401 W		22	111796
5	Carrier pipe for MSB 401 W, pvc		22	131512
6.1	Hose-package MSB, 1.5 m long with Euro-connection		22	02210157
6.2	Hose-package MSB, 2.0 m long with Euro-connection		22	02210158
6.3	Hose-package MSB, 2.5 m long with Euro-connection		22	02210159
6.4	Hose-package MSB, 1.5 m long with Euro-connection, blow-out-device		22	02210910
6.5	Hose-package MSB, 2.0 m long with Euro-connection, blow-out-device		22	02210911
6.6	Hose-package MSB, 2.5 m long with Euro-connection, blow-out-device		22	02210912
7.1	Water-power-cable 1.5 m long		22	02210283
7.2	Water-power-cable 2.0 m long		22	02210284
7.3	Water-power-cable 2.5 m long		22	02210285
8	Connection-nipple for water-power-cable, at torch side		22	04510200

	Pos.	Description	Pu	PrGrp	Part No.
	9.1	Wire feeding hose cpl. 1.5 m long		22	02211659
	9.2	Wire feeding hose cpl. 2.0 m long		22	02211660
	9.3	Wire feeding hose cpl. 2.5 m long		22	02211661
	10	Nipple for wire feeding hose at torch side		22	04510310
	11	PVC hose 5 x 1.5, blue per m		22	00600205
	12	PVC hose 5 x 1.5, black per m		22	00600207
	12.1	Gas-hose cpl. 1.5 mm long with blow-out-value		22	02210920
	12.2	Gas-hose cpl. 2.0 m long with blow-out-value		22	02210921
	12.3	Gas-hose cpl. 2.5 m long with blow-out-value		22	02210922
	13	Protective hose 28 x 1,5 black		22	00600405
	14.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	14.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247
	14.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	14.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	14.5	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 3 m		22	02210248
	14.6	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 4 m		22	02210249
	15	Euro-connector, torch side for water cooled version incl. spring		22	02510150
	16	Brass neck for Euro-connection water cooled		22	02510200
	17	Kinking protection, intake water cooled		22	02510100
	18	Sleeve nut black		22	02510300
	19	Liner nut for Euro connector	10 pcs	22	02511301
	20	PVC hose 5 x 1.5, red per m		22	00600206
	21.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	21.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	21.3	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
					

	Pos.	Description	Pu	PrGrp	Part No.
	21.4	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	21.5	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 3 m (black, 2.7 x 4.7)		22	02210588
	21.6	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 4 m (black, 2.7 x 4.7)		22	132788
	22.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	22.2	Collet for teflon liner 2.7 x 4.7	10 pcs	22	102997
	24	Blow-out-valve		22	02210055
	25	Hose highly flexible 5,0 x 1,5, black		22	104332
	26	Coupling nipple for water	10 pcs	22	02510400
	27	Spring for kinking protection Euro connector, water cooled		22	02211579
		Kinking protection for MIG torches water cooled		22	02211580

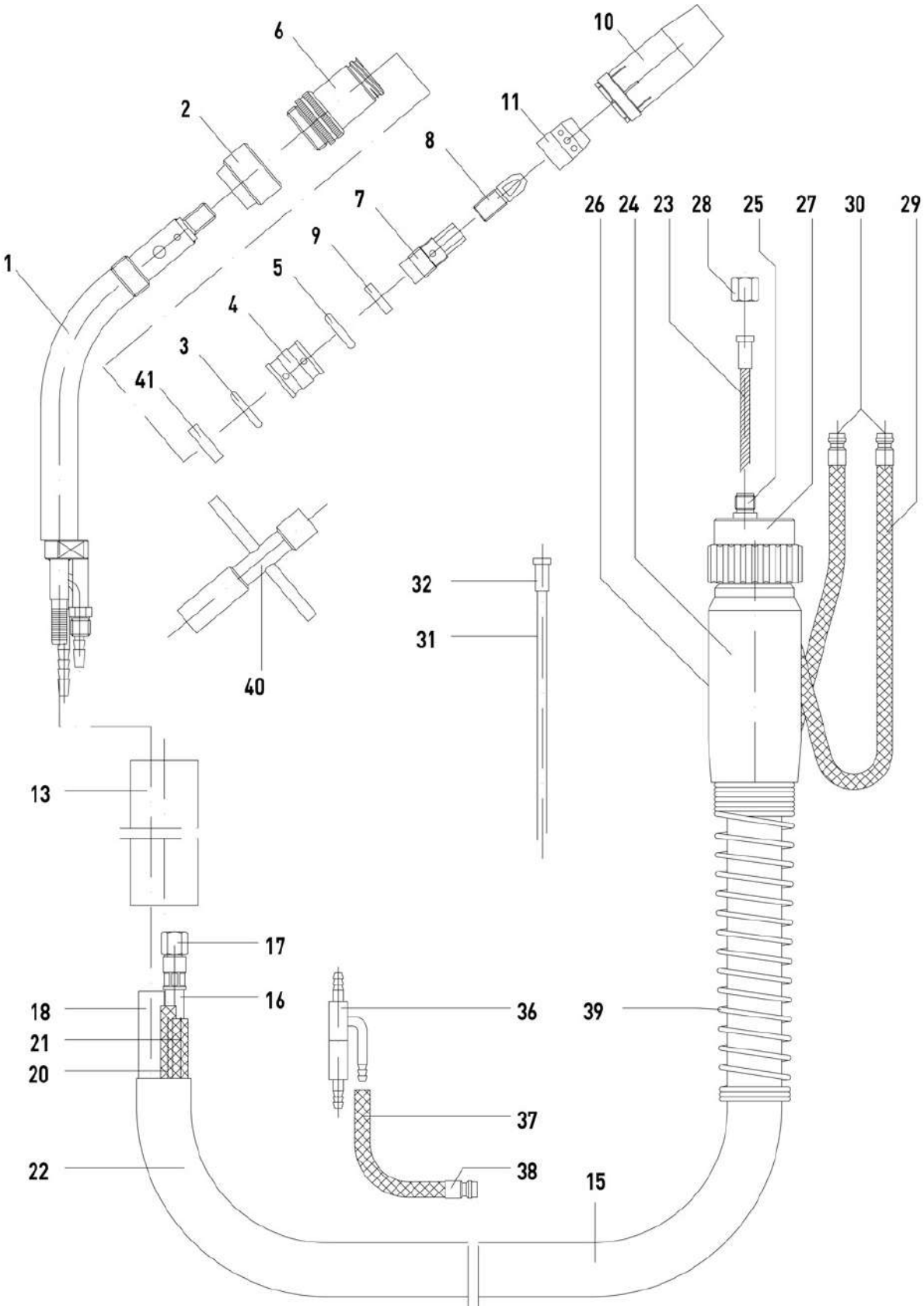
4.4.2. MSB 603 W

MIG/MAG machine welding torch MSB 603 W

water cooled



TECHNICAL DATA:	
Cooling:	water cooled
Mixed gas:	600 A 60% duty cycle
CO_2:	600 A 100% duty cycle
Solid wire:	1.0 - 1.2 - 1.6 mm [
Aluminium wire:	1.0 - 1.2 - 1.6 mm [
The data are corresponding to (U = 14 + 0.05 x I)	


1
2
3
4
5
6
7
8
9
10
11
13
15
16
17
18
20
21
22
23
24
25
26
27
28
29
30
31
32
36
37
38
39
40
41

MIG/MAG machine welding torch MSB 603 W





Pos.	Description	Pu	PrGrp	Part No.
	MIG/MAG machine welding torch model MSB 603 W, 1.5 m, straight		**06**	**02211801**
	MIG/MAG machine welding torch model MSB 603 W, 2.0 m straight		**06**	**02211803**
	MIG/MAG machine welding torch model MSB 603 W, 2.5 m , straight		**06**	**02211805**
	MIG/MAG machine welding torch model MSB 603 W, 3.0 m, straight		**06**	**02211807**
	MIG/MAG machine welding torch model MSB 603 W, 4.0 m, straight		**06**	**02211809**
	MIG/MAG machine welding torch model MSB 603 W, 1.5 m, bent		**06**	**02211800**
	MIG/MAG machine welding torch model MSB 603 W, 2.0 m, bent		**06**	**02211802**
	MIG/MAG machine welding torch model MSB 603 W, 2.5 m, bent		**06**	**02211804**
	MIG/MAG machine welding torch model MSB 603 W, 3.0 m, bent		**06**	**02211806**
	MIG/MAG machine welding torch model MSB 603 W, 4.0 m, bent		**06**	**02211808**
	Blow-out device for MIG/MAG machine welding torch		**06**	**02211810**

Standard wire equipment: mild steel 1.2 mm

Spare parts and consumables:

1.1	Torch neck MSB 603 W, straight		22	02211729
1.2	Torch neck MSB 603 W, bent		22	02211730
2	Thread ring for ROB 504, SB/MSB 603 W		22	111982
3	O-ring 16 x 3.5	10 pcs	22	02211777
4	Internal sleeve 600/603 W	2 pcs	22	02211753
5	O-ring 14 x 4	10 pcs	22	101059
6	Water coat ROB 504, SB/MSB 603 W for gas nozzle 110.136		22	110138
7	Tip holder 504/603 W	2 pcs	22	108258
8.1	High performance contact tip 1.0 mm for SB/MSB 600/603 W	20 pcs	22	02211758
8.2	High performance contact tip 1.2 mm for SB/MSB 600/603 W	20 pcs	22	02211759
8.3	High performance contact tip 1.6 mm for SB/MSB 600/603 W	20 pcs	22	02211761
8.4	High performance contact tip 1.0 mm alu for SB/MSB 600/603 W	20 pcs	22	107894
8.5	High performance contact tip 1.2 mm alu for SB/MSB 600/603 W	20 pcs	22	107896
8.6	High performance contact tip 1.6 mm alu for SB/MSB 600/603 W	20 pcs	22	107898
9	Ceramic ring 504/603 W	2 pcs	22	02210340

Pos.	Description	Pu	PrGrp	Part No.
10.1	Gas nozzle d = 17 mm, l = 67 mm standard B/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	110136
10.2	Gas nozzle d = 17 mm, l = 61 mm SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	138146
10.3	Gas nozzle d = 17 mm, l = 64 mm SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	138158
10.4	Gas nozzle d = 15.5 mm, l = 61 mm bottle shape SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	144046
10.5	Gas nozzle d = 15.5 mm, l = 64 mm bottle shape SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	144044
10.6	Gas nozzle d = 15.5 mm, l = 67 mm bottle shape SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	144042
11	Gas diffusor SB 300/603 W ceramic	5 pcs	22	107966
13	Handle tube MSB 455/603 W		22	02210125
15.1	Hose-package MSB, 1.5 m long with Euro-connection		22	02210157
15.2	Hose-package MSB, 2.0 m long with Euro-connection		22	02210158
15.3	Hose-package MSB, 2.5 m long with Euro-connection		22	02210159
15.4	Hose-package MSB, 1.5 m long with Euro-connection, blow-out-device		22	02210910
15.5	Hose-package MSB, 2.0 m long with Euro-connection, blow-out-device		22	02210911
15.6	Hose-package MSB, 2.5 m long with Euro-connection, blow-out-device		22	02210912
16.1	Water-power-cable 1.5 m long		22	02210283
16.2	Water-power-cable 2.0 m long		22	02210284
16.3	Water-power-cable 2.5 m long		22	02210285
16.4	Water-power-cable 4.0 m long SB 502/603/455/450/350		22	02210282
17	Connection-nipple for water-power-cable, at torch side		22	04510200
18.1	Wire feeding hose cpl. 1.5 m long		22	02211659
18.2	Wire feeding hose cpl. 2.0 m long		22	02211660
18.3	Wire feeding hose cpl. 2.5 m long		22	02211661
20	PVC hose 5 x 1.5, blue per m		22	00600205
21	PVC hose 5 x 1.5, black per m		22	00600207
21.1	Gas-hose cpl. 1.5 mm long with blow-out-value		22	02210920
21.2	Gas-hose cpl. 2.0 m long with blow-out-value		22	02210921
21.3	Gas-hose cpl. 2.5 m long with blow-out-value		22	02210922
22	Protection hose 25 x 1.5 black for water cooled torches, per m		22	134436

	Pos.	Description	Pu	PrGrp	Part No.
	23.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	23.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247
	23.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	23.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	23.5	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 3 m		22	02210248
	23.6	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 4 m		22	02210249
	24	Euro-connector, torch side for water cooled version incl. spring		22	02510150
	25	Brass neck for Euro-connection water cooled		22	02510200
	26	Kinking protection, intake water cooled		22	02510100
	27	Sleeve nut black		22	02510300
	28	Liner nut for Euro connector	10 pcs	22	02511301
	29	PVC hose 5 x 1.5, red per m		22	00600206
	31.1	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	31.2	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	31.3	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
	31.4	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	31.5	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 3 m (black, 2.7 x 4.7)		22	02210588
	31.6	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 4 m (black, 2.7 x 4.7)		22	132788
	32.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	32.2	Collet for teflon liner 2.7 x 4.7	10 pcs	22	102997
	36	Blow-out-valve		22	02210055
	37	Hose highly flexible 5,0 x 1,5, black		22	104332
	38	Coupling nipple for water	10 pcs	22	02510400

	Pos.	Description	Pu	PrGrp	Part No.
	39	Spring for kinking protection Euro connector, water cooled		22	02211579
	40	Key for 504/600/603 W		22	01370043
	41	Distance ring 21,8 x 5,5 504/603 W		22	02211815
		Kinking protection for MIG torches water cooled		22	02211580
				22	02211816
		Threaded insert M5 x 9.4 mm		22	04514606

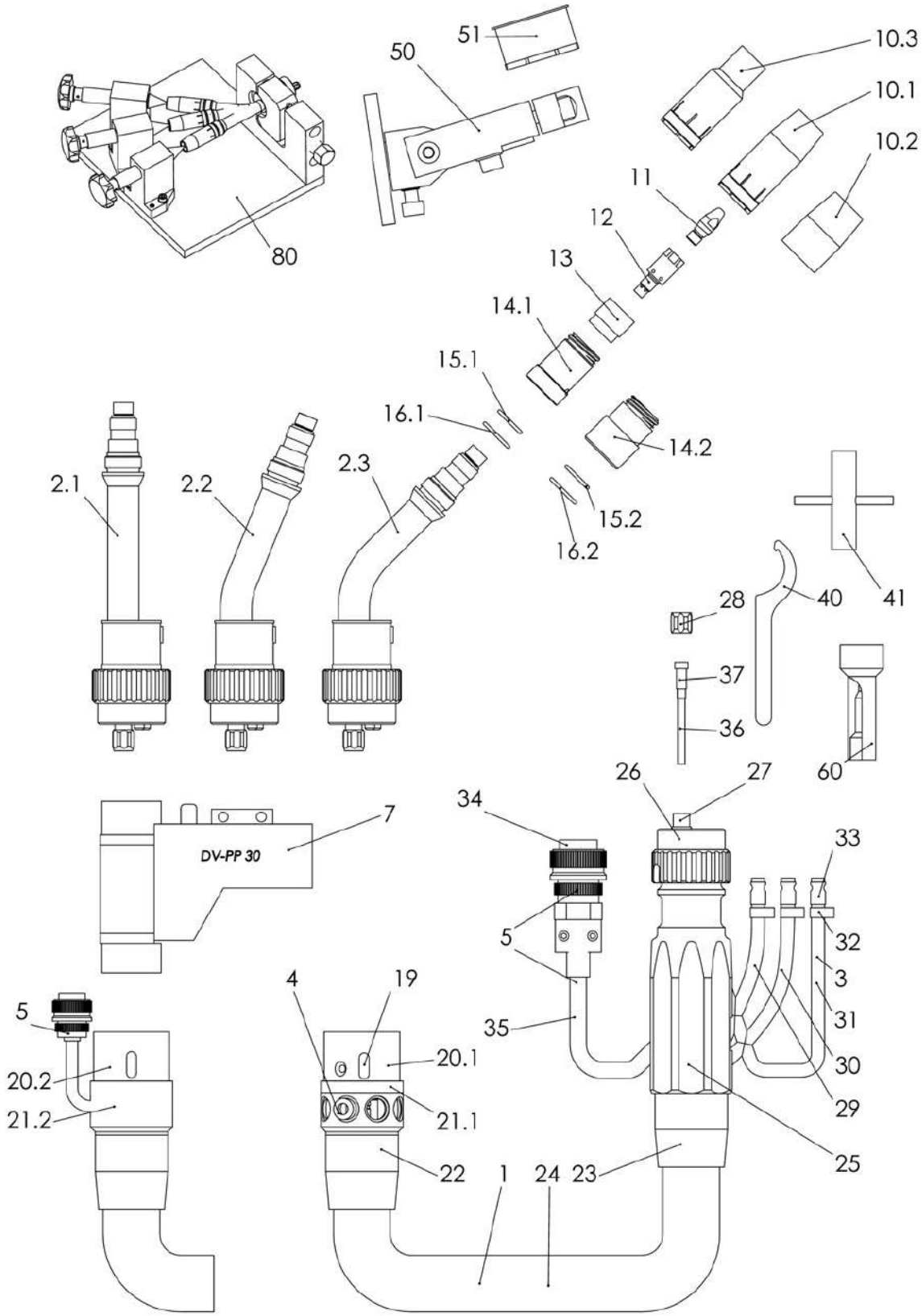
4.4.3. ROB 505 W

MIG/MAG machine welding torch ROB 505 W

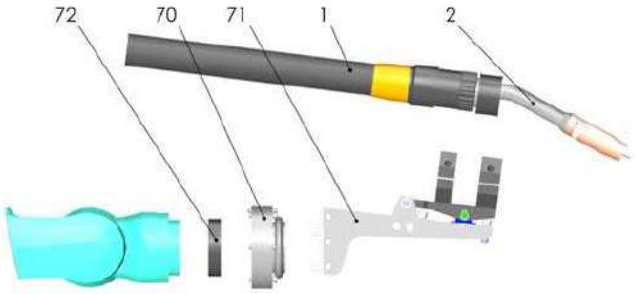
water cooled / Euro connector
separate torch head
Versions of the torch head: straight, 22° bent, 45° bent

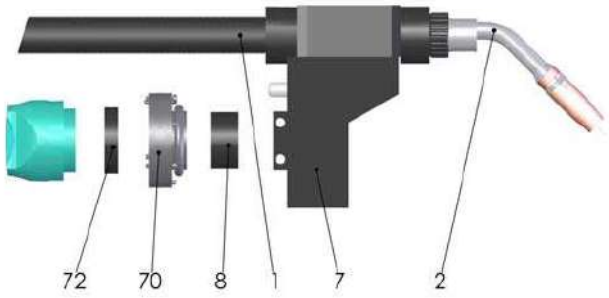


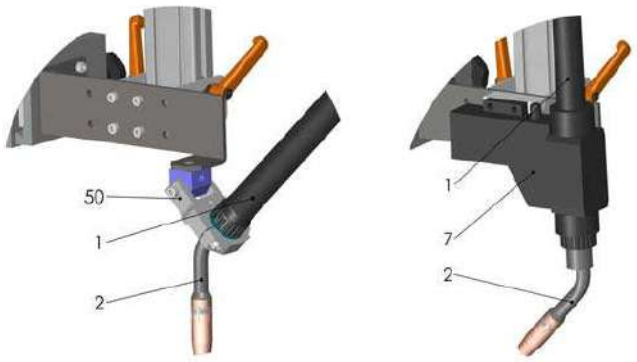
TECHNICAL DATA:		
Gas nozzle	Standard	High performance
60% duty cycle:	450 A (36.5 V)*	500 A (39.0 V)*
100% duty cycle:	400 A (34.0 V)*	450 A (36.5 V)*
*Mixed gas (Ar/CO_2 82/18)		
Cooling:	water cooled	
Wire diameter:	0.8 - 1.0 - 1.2 - 1.6 mm [	
Weight torch head:	0.75 kg	
The data are corresponding to (U = 14 + 0.05 x I)		


51
50
10.3
10.1
10.2
80
11
12
13
14.1
15.1
16.1
14.2
15.2
16.2
2.1
2.2
2.3
28
40
41
37
36
60
26
27
34
7
DV-PP 30
33
5
32
3
31
30
29
25
4
19
20.1
21.1
5
20.2
21.2
35
22
1
24
23

Pos.	Description	Pu	PrGrp	Part No.







Hose assemblies ROB 505 W

1.1	Hose assembly 1.2 m, ROB 505 W	06	118503
1.2	Hose assembly 1.5 m, ROB 505 W	06	118504
1.3	Hose assembly 2.0 m, ROB 505 W	06	119264
1.4	Hose assembly 2.5 m, ROB 505 W	06	119266

For use with WCM tractor:

1.5	Hose assembly up to 4 m, ROB 505 W (only for WCM)	06	133770
1.6	Hose assembly up to 8 m, ROB 505 W (only for WCM and PP)	06	133772

Torch bodies ROB 505 W



Pos.	Description	Pu	PrGrp	Part No.
2.1	**Torch body ROB 505 W, 0°**		**06**	**151829**
2.2	**Torch body ROB 505 W, 22°**		**06**	**118478**
2.3	**Torch body ROB 505 W, 45°**		**06**	**118480**

Options for ROB 505 W:

3	Blow-out device for hose assembly ROB 505 W		06	120478
4	Buttons "wire inching" and "gas test" at torch connector of hose assembly ROB 505 W incl. control cable with plug		06	120476
4.1	Fixture for switch		22	111590
5.1	Connection cable for TBi crash sensor mounted in hose assembly ROB 505 W		06	120132
5.2	Connection cable and socket for Dinse crash sensor mounted in hose assembly ROB 505 W		06	120134
5.3	Connection cable for AbicorBinzel crash sensor mounted in hose assembly ROB 505 W		06	120136
5.4	Connection cable for external buttons in torch holder or for push pull feeder ROB-PP mounted in hose assembly ROB 505 W		06	120138
6	Dinse torch connector for ROB 505 W		06	125334
7	Wire feed unit DV-PP 30 for ROB-W-PP with 4 roller drive		06	110900
8	Flange wire feed unit DV-PP 30 at crash sensor (please indicate crash sensor)		51	126824
9	Connection cable for touch sensor gas nozzle, mounted in the robot torch hose assembly, incl. cable from hose assembly to torch holder		06	146784
60.1	Torch cleaning station BRG 2000 incl. spray unit and milling head		51	117726
60.2	Milling head for torch cleaning station BRG 2000 for ROB 505 W		51	120492
60.3	Wire cutting unit DA 2000 KPL		51	117728
60.4	Stand for BRS 20, BRG 2000		51	111716
70.1	Crash sensor TBi KS2 without assembly device		51	145790
70.2	Crash sensor DIX SAS 100 system Dinse without adapter		51	128284
70.3	Crash sensor Binzel CAT2 without adapter		51	111402
71.1	Torch holder for ROB 505 W for TBi KS1/KS2 incl. accessories		51	123750
71.2	Torch holder for ROB 505 W Dinse TCP, for SASS 2000 incl. accessories		51	152325
71.3	Torch holder for ROB 505 W for Abicor Binzel CAT2, CAT 3 incl. accessories		51	123748
72.1	Flange for KUKA robot at crash sensor (please indicate exact robot model)		51	126812
72.2	Flange for MOTOMAN robot at crash sensor (please indicate exact robot model)		51	126814

Pos.	Description	Pu	PrGrp	Part No.
72.3	Flange for Fanuc robot at crash sensor (please indicate exact robot model)		51	126816
72.4	Flange for ABB robot at crash sensor (please indicate exact robot model)		51	126818
72.5	Flange for REIS robot at crash sensor (please indicate exact robot model)		51	128730

Spare parts and consumables:

10.1a	Gas nozzle d = 17 mm, l = 67 mm standard B/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	110136
10.1b	Gas nozzle d = 17 mm, l = 61 mm SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	138146
10.1c	Gas nozzle d = 17 mm, l = 64 mm SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	138158
10.2	Gas nozzle d=17 mm ROB 505 W high performance version push and screw fixing, nickel plated for water jacket 123.328	10 pcs	22	123332
10.3a	Gas nozzle d = 15.5 mm, l = 61 mm bottle shape SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	144046
10.3b	Gas nozzle d = 15.5 mm, l = 64 mm bottle shape SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	144044
10.3c	Gas nozzle d = 15.5 mm, l = 67 mm bottle shape SB/MSB 603, ROB 504/505 push and screw fixing, nickel plated for water jacket 151.656	10 pcs	22	144042
11.1	Contact tip ROB 355/505, 0.8 mm conical	20 pcs	22	124802
11.2	Contact tip ROB 355/505, 1.0 mm conical	20 pcs	22	124804
11.3	Contact tip ROB 355/505, 1.2 mm conical	20 pcs	22	124800
11.4	Contact tip ROB 355/505, 1.4 mm conical	20 pcs	22	124806
11.5	Contact tip ROB 355/505, 1.6 mm conical	20 pcs	22	124808
11.6	Contact tip ROB 355/505, 2.0 mm conical	20 pcs	22	124810
11.7	Contact tip ROB 355/505, 2.4 mm conical	20 pcs	22	124812
11.8	Contact tip ROB 355/505, alu 1.0 mm conical	20 pcs	22	125108
11.9	Contact tip ROB 355/505, alu 1.2 mm conical	20 pcs	22	125110
11.10	Contact tip ROB 355/505, alu 1.6 mm conical	20 pcs	22	124814
12.1	Tip adaptor ROB 505 W, conical with forced contacting (max. 1.4 mm)	10 pcs	22	124796
12.2	Tip adaptor ROB 505 W, conical without forced contacting (from 1.6 mm)	10 pcs	22	124798
13	Gas diffusor ROB 505 W	10 pcs	22	151695
14.1	Water coat ROB 505 W for gas nozzle 110.136		22	151656
14.2	Water coat ROB 505 W high performance version for gas nozzle 123.332		22	123328
15.1	O-ring 16 x 2, WHW 20	10 pcs	22	01340063
15.2	O ring 16 x 3 mm	10 pcs	22	00202402
16.1	O ring 18 x2	10 pcs	22	05011541

	Pos.	Description	Pu	PrGrp	Part No.
	16.2	O ring 18 x 3 mm	10 pcs	22	122942
	19	Keyfixture 6x6x16		22	112242
	20.1	Mounting piece for hose assembly ROB-W, ROB-W-PP (for 2 part kinking protection 110.904)		22	111598
	20.2	Mounting piece for hose assembly ROB-W, ROB-W-PP (for 1 part kinking protection 120.876)		22	120878
	21.1	Kinking protection (2 parts) for hose assembly ROB-W, ROB-W-PP for button and plug incl. switch connection (for 111.598)		22	110904
	21.2	Kinking protection (2 parts) for hose assembly ROB-W, ROB-W-PP		22	120876
	22.1	Nut on torch side ROB-W, ROB-W-PP		22	111588
	22.2	Ring holder ROB-W, ROB-W-PP		22	111594
	22.3	Locking ring ROB-W, ROB-W-PP		22	111596
	23.1	Nut on machine side ROB-W, ROB-W-PP		22	111592
	23.2	Ring holder ROB-W, ROB-W-PP		22	111594
	23.3	Locking ring ROB-W, ROB-W-PP		22	111596
	24	Protection hose for robot and machine welding torch		22	111418
	25	Kinking protection, intake water cooled		22	02510100
	26	Sleeve nut black		22	02510300
	27	Brass neck for Euro-connection water cooled		22	02510200
	28	Liner nut for Euro connector	10 pcs	22	02511301
	29	PVC hose 5 x 1.5, red per m		22	00600206
	30	PVC hose 5 x 1.5, blue per m		22	00600205
	31	PVC hose 5 x 1.5, black per m		22	00600207
	32	Clamping ring 9.5 GER		07	02210206
	33	Coupling nipple for water	10 pcs	22	02510400
	34.1	Socket 10-pole (-) (for push pull torch)		22	02110384
	34.2	Cable support for 10 pol. plug		07	02110388
	35	Special cable for external user panel, Remote, ProJOB-PPC, suitable for trailing (per 1m), 5 x 2 x 0,34		17	117540
	36.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	36.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247

	Pos.	Description	Pu	PrGrp	Part No.
	36.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	36.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	36.5	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 3 m		22	02210248
	36.8	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 4 m		22	02210249
	36.9	Liner for steel uncoated 2,5 x 4,5 0.6 -1.6 mm, 8 m long		22	02110325
	36.10	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
	36.11	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520
	36.12	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
	36.13	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	36.14	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 3 m (black, 2.7 x 4.7)		22	02210588
	36.15	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 4 m (black, 2.7 x 4.7)		22	132788
	37.1	Collet for teflon liner 2.0 x 4.0	10 pcs	22	107554
	37.2	Collet for teflon liner 2.7 x 4.7	10 pcs	22	102997
	38.1	Water current cable 1.2 m ROB-W, ROB-W-PP		22	121086
	38.2	Water current cable 1.5 m ROB-W, ROB-W-PP		22	110912
	38.3	Water-power-cable 2.0 m long		22	02210284
	38.4	Water-power-cable 2.5 m long		22	02210285
	38.5	Water-power-cable 4.0 m long SB 502/603/455/450/350		22	02210282
	38.6	Water-power-cable 8.0 m long		22	02110321
	39.1	Wire feed liner 1.2 m ROB-W, ROB-W-PP		22	121088
	39.2	Wire feed liner 1.5 m ROB-W, ROB-W-PP		22	110914
	39.3	Wire feed liner 2.0 m ROB-W, ROB-W-PP		22	02210280
	39.4	Wire feed liner 2.5 m ROB-W, ROB-W-PP		22	02210274
	39.5	Wire feed liner 4.0 m ROB-W, ROB-W-PP		22	02211664
	39.6	Wire feed liner 8.0 m ROB-W, ROB-W-PP		22	133774
	40	Key for water coat		22	121094
	41	Key for 504/600/603 W		22	01370043
	50	Machine Torch Mount Ø=35 mm for MIG/MAG torches, isolated		05	152232
	51	Isolation ring for machine welding torch		22	152225

Pos.	Description	Pu	PrGrp	Part No.
80	Test device for torch head ROB 505 W 0°, 22°, 45°		51	124754

5. TIG welding units

5. TIG welding units

5.1 TIG DC welding units

LiteTIG 190/210 DC
MobiTIG 304 DC
HighTIG W 350 DC
HighTIG 452/552 DC
HighTIG 452/552 DC RS

5.2 TIG AC/DC welding units

LiteTIG 190/210 AC/DC
LogiTIG 221/240/300 AC/DC
Insquare W 321/421/600 AC/DC

5.1. TIG DC welding units



5.1.1. LiteTIG 190 DC

Primary:	
Supply:	1 x 230 V
Frequency:	50 / 60 Hz
Cont. current:	16 A
Max. current (TIG/MMA):	30 A / 35 A
TIG operation:	
Open circuit voltage:	68 V
Welding voltage:	10.2 - 17.6 V
Welding current:	5 - 190 A
Duty cycle 25 % (10 min.):	190 A (40 °C)
Duty cycle 60 % (10 min.):	140 A (40 °C)
Duty cycle 100 %	115 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Modes:	TIG (DC) / MMA-welding
Parameter:	current 1, current 2, reduction, final current, gas post flow
Programmable jobs:	15 jobs
Adjustments:	continuously at rotary switch
Current control:	at the unit, at the torch, at the remote control
Functions:	2 stroke, 4 stroke, 4 stroke with current 2
Ignition:	HF / LiftTIG
Indication:	display
Current 2:	switchable via 2nd torch button
Spot welding time:	0.01 – 2.5 s
Pulse times slow:	0.1 - 2.5 s
Pulse times fast:	50 Hz - 16 kHz
Down slope time:	0 - 25 s
Up slope time:	0 - 2 s
Gas pre flow time:	0 - 2 s
Gas post flow time:	0 - 25 s
Hotstart time:	0.01 - 2.5 s
Hotstart current:	20 - 170 A
Arc force:	up to 170 A
Remote control:	connection via 5pol torch connection
Power source:	inverter
Ignition:	HF device
Torch connection:	Merkle TCG and 5-pole plug
Cooling torch:	gas
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	3 x 2.5 mm² 5 m long with plug Schuko
Gas hose:	2 m
Transport:	adjustable carry/shoulder strap
Norm:	EN 60974/1 S / CE
Weight:	7.4 kg
Dimension l x w x h:	410 x 150 x 240 mm

MMA/stick electrode operation:	
Stick electrode:	1.5 - 4 mm
Open circuit voltage:	68 V
Welding voltage:	20.8 - 26.8 V
Welding current:	20 - 170 A
Duty cycle 30 % (10 min.):	170 A (40 °C)
Duty cycle 60 % (10 min.):	135 A (40 °C)
Duty cycle 100 %	90 A (40 °C)

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG DC welding unit LiteTIG 190 DC**				
	A	**TIG welding unit LiteTIG 190 DC (Merkle TCG connector)**		**48**	**154082**
	AB	**TIG welding unit LiteTIG 190 DC with accessories (Merkle TCG connector)**		**48**	**SET154084**
	**ABC1**	**TIG welding unit LiteTIG 190 DC with accessories and torch TH 202 G, 4 m (Merkle TCG connector)**		**48**	**SET154086**
	ABC2	**TIG welding unit LiteTIG 190 DC with accessories and torch TH 202 G, 8 m (Merkle TCG connector)**		**48**	**SET154088**
B	**Standard accessories:**				
	B1	Earth lead 16 mm², 4 m long with plug 50 mm² and earth clamp		46	02210385
	B2	Regulator argon/CO2 standard version		46	107018
C	**Welding torches:**				
	C1	TIG hand welding torch TH 202 G, 4 m with TCG connector, leather/rubber hose assembly		10	129516
	C2	TIG hand welding torch TH 202 G, 8 m with TCG connector, leather/rubber hose assembly		10	129518
	C3	TIG hand welding torch TH 202 G, 8 m with TCG connector & potentiometer leather/rubber hose assembly		10	129520
D	**Accessories:**				
	D1a	Transportation box black material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 50 x 35 x 19.4 cm		46	n01200370
	D1b	Transportation box black big material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 59 x 47 x 21 cm		46	n01200372
	D2	Filter frame inkl. filter mat for LiteARC and LiteTIG 160, 180, 210 (assembly only at Merkle with special tool)		46	158294
	D3	Filter mat 120 x 125 mm for LiteARC and LiteTIG 160, 190		46	158292
	D4	Foot remote control pedal with 5 m cable and 5-pol plug		46	116730

	Pos.	Description	Pu	PrGrp	Part No.
	D5	Electrode welding cable 16 mm², 4 m incl. plug 50 mm² electrode holder		46	115702
	D6	Handle set for LiteTIG 190/210		46	158342
	D7a	Option external gas connection TIG units gas: 1/4" external thread, current: 50 mm², torch plug: 5-pol (not for LiteTIG series)		46	153800
	D7b	Option external gas connection TIG units as: quick coupling 2.7, current: 50 mm², torch plug: 5-pol		46	153802
	D8	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

5.1.2. LiteTIG 210 DC

Primary:	
Supply:	1 x 230 V
Frequency:	50 / 60 Hz
Cont. current:	16 A
Max. current (TIG/MMA):	22 A / 25 A
TIG operation:	
Open circuit voltage:	73 V
Welding voltage:	10.2 - 18.4 V
Welding current:	5 - 210 A
Duty cycle 20 % (10 min.):	210 A (40 °C)
Duty cycle 60 % (10 min.):	145 A (40 °C)
Duty cycle 100 %	135 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Modes:	TIG (DC) / MMA-welding
Parameter:	current 1, current 2, reduction, final current, gas post flow
Programmable jobs:	15 jobs
Adjustments:	continuously at rotary switch
Current control:	at the unit, at the torch, at the remote control
Functions:	2 stroke, 4 stroke, 4 stroke with current 2
Ignition:	HF / LiftTIG
Indication:	display
Current 2:	switchable via 2nd torch button
Spot welding time:	0.01 - 2.5 s
Pulse times slow:	0.1 - 2.5 s
Pulse times fast:	50 Hz - 16 kHz
Down slope time:	0 - 25 s
Up slope time:	0 - 2 s
Gas pre flow time:	0 - 2 s
Gas post flow time:	0 - 25 s
Hotstart time:	0.01 - 2.5 s
Hotstart current:	20 - 170 A
Arc force:	up to 170 A
Remote control:	connection via 5pol torch connection
Power source:	inverter
Ignition:	HF device
Torch connection:	Merkle TCG and 5-pole plug
Cooling torch:	gas
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	3 x 2.5 mm² 5 m long
Gas hose:	2 m
Transport:	adjustable carry/shoulder strap
Norm:	EN 60974/1 S / CE
Weight:	8.0 kg
Dimension l x w x h:	410 x 150 x 240 mm

MMA/stick electrode operation:	
Stick electrode:	1.5 - 4 mm
Open circuit voltage:	73 V
Welding voltage:	20.8 - 26,8 V
Welding current:	20 - 170 A
Duty cycle 20 % (10 min.):	170 A (40 °C)
Duty cycle 60 % (10 min.):	135 A (40 °C)
Duty cycle 100 %	125 A (40 °C)

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG DC welding unit LiteTIG 210 DC**				
	A	**TIG welding unit LiteTIG 210 DC (Merkle TCG connector)**		**48**	**155876**
	AB	**TIG welding unit LiteTIG 210 DC with accessories (Merkle TCG connector)**		**48**	**SET155878**
	**ABC1**	**TIG welding unit LiteTIG 210 DC with accessories and torch TH 202 G, 4 m (Merkle TCG connector)**		**48**	**SET155880**
	ABC2	**TIG welding unit LiteTIG 210 DC with accessories and torch TH 202 G, 8 m (Merkle TCG connector)**		**48**	**SET155882**
B	**Standard accessories:**				
	B1	Earth lead 16 mm², 4 m long with plug 50 mm² and earth clamp		46	02210385
	B2	Regulator argon/CO2 standard version		46	107018
C	**Welding torches:**				
	C1	TIG hand welding torch TH 202 G, 4 m with TCG connector, leather/rubber hose assembly		10	129516
	C2	TIG hand welding torch TH 202 G, 8 m with TCG connector, leather/rubber hose assembly		10	129518
	C3	TIG hand welding torch TH 202 G, 8 m with TCG connector & potentiometer leather/rubber hose assembly		10	129520
D	**Accessories:**				
	D1a	Transportation box black material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 50 x 35 x 19.4 cm		46	n01200370
	D1b	Transportation box black big material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 59 x 47 x 21 cm		46	n01200372
	D2	Filter frame inkl. filter mat for LiteARC and LiteTIG 160, 180, 210 (assembly only at Merkle with special tool)		46	158294
	D3	Filter mat 120 x 125 mm for LiteARC and LiteTIG 160, 190		46	158292
	D4	Foot remote control pedal with 5 m cable and 5-pol plug		46	116730

	Pos.	Description	Pu	PrGrp	Part No.
	D5	Electrode welding cable 16 mm², 4 m incl. plug 50 mm² electrode holder		46	115702
	D6	Handle set for LiteTIG 190/210		46	158342
	D7a	Option external gas connection TIG units gas: 1/4" external thread, current: 50 mm², torch plug: 5-pol (not for LiteTIG series)		46	153800
	D7b	Option external gas connection TIG units as: quick coupling 2.7, current: 50 mm², torch plug: 5-pol		46	153802
	D8	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

5.1.3. MobiTIG 304 DC

Primary:		
Supply:	3 x 220 - 400 V	1 x 220 - 440 V*
Frequency:	50 / 60 Hz	
Data at mains input:	**3 x 400 V**	**1 x 230 V***
Cont. power (TIG/MMA):	8.3 / 9.7 kVA	3.2 / 3.7 kVA
Cont. current (TIG/MMA):	12 / 14 A	14 /16 A
Max current (TIG/MMA):	16 / 21 A	26 / 26 A
TIG operation:		
Open circuit voltage:	90 V	90 V
Welding voltage:	10 - 22 V	10 - 17.2 V
Welding current:	5 - 300 A	5 - 180 A
Duty cycle 35 % (10 min.):	300 A (40 °C)	180 A (40 °C)
Duty cycle 60 % (10 min.):	265 A (40 °C)	110 A (40 °C)
Duty cycle 100 %:	250 A (40 °C)	90 A (40 °C)



Optional: with water cooling unit WK 210 and trolley TW 112, with drawer as an option.

Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Modes:	TIG (DC) / MMA-welding
Parameter:	current 1, current 2, reduction, final current, gas post flow
Adjustments:	continuously at rotary switch
Current control:	at the unit, at the torch, at the remote control
Functions:	2 stroke, 4 stroke, 4 stroke with current 2
Ignition:	HF / LiftTIG
Indication:	display
Current 2:	switchable via 2nd torch button
Spot welding time:	0.01 - 2.5 s
Pulse times slow:	0.1 - 2.5 s
Pulse times fast:	50 Hz - 12 kHz
Down slope time:	0 - 25 s
Up slope time:	0 - 2 s
Gas pre flow time:	0 - 2 s
Gas post flow time:	0 - 25 s
Hotstart time:	0.01 - 5 s
Hotstart current:	20 - 280 A
Arc force:	up to 280 A
Electrode type:	selectable rutile, basic
LEDs:	mains ON, welding ON, temperature protection, failure
Socket:	connection remote control
Current source:	inverter
Ignition:	HF device
Torch connection:	Merkle TCG and 5-pole plug
Torch cooling:	gas, option: water
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	4 x 2.5 mm² 5 m long with plug 400 V/16 A
Gas hose:	2 m
Connection water cooling device:	option
Handle:	at topside of device
Norm:	EN 60974/1 S / CE
Weight:	20 kg
Dimensions l x w x h:	495 x 210 x 450 mm

Data at mains input:	**3 x 400 V**	**1 x 230 V***
MMA/stick electrode operation:		
Stick electrode:	1.5 - 5.0 mm	1.5 - 3.25 mm
Open circuit voltage:	90 V	90 V
Welding voltage:	20.6 - 31.2 V	20 - 26 V
Welding current:	20 - 280 A	20 - 160 A
Duty cycle 40 % (10 min.):	280 A (40 °C)	160 A (40 °C)
Duty cycle 60 % (10 min.):	265 A (40 °C)	110 A (40 °C)
Duty cycle 100 %:	250 A** (40 °C)	90 A (40 °C)

*: BiPowerPLUS: Multi voltage supply system: Automatic switching between 1 and 3 phase in the range 220 – 400 V (option)

**: max. 210 A (40 °C) at duty cycle 100 % with 16 A fuse

	Pos.	Description	Pu	PrGrp	Part No.
A		**TIG DC welding unit MobiTIG 304 DC**			
	A	**TIG welding unit MobiTIG 304 DC (Merkle TCG connector)**		02	155888
	AB	**TIG welding unit MobiTIG 304 DC with accessories (Merkle TCG connector)**		02	SET155890
	ABC1	**TIG welding unit MobiTIG 304 DC with accessories and torch TH 202 G, 4 m (Merkle TCG connector)**		02	SET155892
	ABC2	**TIG welding unit MobiTIG 304 DC with accessories and torch TH 202 G, 8 m (Merkle TCG connector)**		02	SET155894
		With water cooler and trolley TW 112:			
		TIG welding unit MobiTIG 304 DC incl. water cooler WK 210 and trolley TW 112		02	SET155896
		TIG welding unit MobiTIG 304 DC with accessories incl. water cooler WK 210 and trolley TW 112		02	SET155898
		**TIG welding unit MobiTIG 304 DC with accessories and torch TH 452 W, 4 m incl. water cooler WK 210 and trolley TW 112**		02	SET155900
		TIG welding unit MobiTIG 304 DC with accessories and torch TH 452 W, 8 m incl. water cooler WK 210 and trolley TW 112		02	SET155902
	Option	**Drawer option for trolley TW 112 incl. one drawer**		46	138940
B		**Standard accessories:**			
	B1	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	B2	Regulator argon/CO2 standard version		46	107018
C		**Welding torches:**			
	C1	TIG hand welding torch TH 202 G, 4 m with TCG connector, leather/rubber hose assembly		10	129516
	C2	TIG hand welding torch TH 202 G, 8 m with TCG connector, leather/rubber hose assembly		10	129518

	Pos.	Description	Pu	PrGrp	Part No.
	C3	TIG hand welding torch TH 202 G, 8 m with TCG connector & potentiometer leather/rubber hose assembly		10	129520
	C4	TIG hand welding torch TH 452 W, 4 m with Merkle TCG connector, leather/rubber hose assembly		10	145080
	C5	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector, leather/rubber hose assembly		10	145082
	C6	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector and potentiometer leather/rubber hose assembly		10	145084

D Accessories:

	D1	BiPowerPLUS for series MobiMIG 280 K, MobiARC 282/284 cel, MobiTIG 284/304 DC		46	131445
	D2	Adapter: Schuko plug 230 V to CEE connector 16 A/400 V for MobiARC 282/284 cel, MobiTIG 284/304 DC, MobiMIG 280/300/320 K		46	130766
	D3	Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
	D4a	Foot remote with 5 m cable and 10 pin plug		46	01903000
	D4b	Foot remote with 8 m cable and 10 pin plug		46	01902999
	D5	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	D6.1	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938
	D6.2	Drawer option for trolley TW 112 incl. one drawer		46	138940
	D7	Euro connector for portable TIG welding units		46	110430
	D8	Adapter for connection of TIG torches with Euro connector to Merkle TCG connector		46	109234
	D9	Option external gas connection TIG units gas: 1/4" external thread, current: 50 mm², torch plug: 5-pol (not for LiteTIG series)		46	153800

	Pos.	Description	Pu	PrGrp	Part No.
	D10	Option external gas connection TIG units as: quick coupling 2.7, current: 50 mm², torch plug: 5-pol		46	153802
	D11	Connection for automated welding for MobiTIG 284/304 DC, MobiMIG 321/322 - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	123166
	D11.1	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	D12	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

E Accessories for using water cooler:

	E1	Water cooling unit model WK 210		46	143136
	E2	Socket for water cooling unit 6-pol. for MobiTIG 284/304 DC and MobiMIG 320/321		46	124858
	E3	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	E4	TIG hand welding torch TH 452 W, 4 m with Merkle TCG connector, leather/rubber hose assembly		10	145080
	E5	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector, leather/rubber hose assembly		10	145082
	E6	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector and potentiometer leather/rubber hose assembly		10	145084

5.1.4. HighTIG W 352 DC

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
TIG DC-operation:	
Open circuit voltage:	57 V
Welding voltage:	10 - 24 V
Welding current:	5 - 350 A
Duty cycle 50 % (10 min.):	350 A (40 °C)
Duty cycle 100 %:	280 A (40 °C)
Prim. cont. power:	13.1 kVA
Prim. cont. current:	19 A
Prim. max. current:	23 A



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Main switch:	3-phase
Welding modes:	TIG DC, MMA
Digital displays.	LED display with pre-indication and hold function for current, voltage
Timer functions:	OFF, quick and slow pulsation, spot welding time
Ignition:	OFF, high frequency, LiftTIG
Energy control:	at the machine, at the remote control, at the torch
Operation modes:	2-stroke, 4-stroke, 4-stroke with 2 currents, gas check, test, programming
Job-Operation:	2048 jobs programmable
Program storage:	512 programs
Gas pre-flow time:	0 - 3 s
Gas post-flow time:	0 - 25 s
Up slope time:	0 - 2 s
Down slope time:	0 - 20 s
Spot welding time:	0.1 - 25 s
Pulsation slow:	10 ms - 2.5 s
Pulsation fast:	50 Hz-12 kHz
Hotstart time:	0 - 1.5 s
Hotstart current:	10 - 200 %
Arc force:	100 - 250 %
LEDs:	mains ON, temperature protection, failure, display-hold
Power source:	inverter
Norm:	EN 60974-1 "S" / CE
Torch connection:	Euro connector with 5-pol. plug
Torch cooling:	integrated water cooler
Socket 95 mm²:	earth lead
Socket 50 mm²:	electrode cable
Mains supply cable:	4 x 4 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	10 - 20 - 50 l cylinders
Lifting eyes:	4 pieces (option)
Weight:	115 kg
Dimensions l x w x h:	1100 x 490 x 895 mm incl. gas bottle holder

MMA/stick electrode operation

Stick electrodes:	1.5 - 6 mm
Open circuit voltage:	57 V
Welding voltage:	20 - 34 V
Welding current:	20 - 350 A
Duty cycle 50 % (10 min.):	350 A (40 °C)
Duty cycle 100 %:	280 A (40 °C)
Prim. cont. power:	15.2 kVA
Prim. cont. current:	22 A
Prim. max. current:	27 A

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG DC welding unit HighTIG W 352 DC**				
	**A**	**TIG welding unit HighTIG W 352 DC**		**02**	**138882**
	AB	**TIG welding unit HighTIG W 352 DC with accessories**		**02**	**SET138884**
	ABC1	**TIG welding unit HighTIG W 352 DC with accessories and torch TH 452 W, 4 m**		**02**	**SET138885**
	ABC2	**TIG welding unit HighTIG W 352 DC with accessories and torch TH 452 W, 8 m**		**02**	**SET138886**
B	**Standard accessories:**				
	B1	Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	TIG hand welding torch model TH 452 W-EURO, 4 m with Euro connector leather/rubber hose assembly		10	145086
	C2	TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector leather/rubber hose assembly		10	145088
D	**Accessories:**				
	D1	TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector and potentiometer leather/rubber hose assembly		10	145090
	D2	Foot remote with 5 m cable and 10 pin plug		46	01903000
	D3	Foot remote with 8 m cable and 10 pin plug		46	01902999
	D4	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	D5	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	D6	Cover with lock, transparent, for power source HighPULSE, SpeedMIG and HighTIG version KW and DW		46	138238
	D7	Lifting eye screw, galvanized	4 pcs	46	09002001
	D8	Filter for HighPULSE and SpeedMIG Version KW and DW, 320x330x25 mm (minimum 10 pieces)	10 pcs	46	113844

	Pos.	Description	Pu	PrGrp	Part No.
	D9	Metal filter insert for HighPULSE, SpeedMIG, HighTIG 300 x 315 x 20 mm		46	156144

E Automation accessories:

	E1	Connection for automated welding for hand welding unit HighPULSE, SpeedMIG, HighTIG - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	138296
	E1.1	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593

5.1.5. HighTIG 452 DC

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
TIG DC-Operation:	
Open circuit voltage:	72 V
Welding voltage:	10 - 28 V
Welding current:	5 - 450 A
Duty cycle 50 % (10 min.):	450 A (40 °C)
Duty cycle 100 %:	350 A (40 °C)
Prim. cont. power:	13.2 kVA
Prim. cont. current:	19 A
Prim. max. current:	29 A



Optional: with water cooling unit WK 350 and trolley TW 114

Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Main switch:	3-phase
Welding modes:	TIG DC, MMA/stick electrode
Digital displays:	LED display with pre-indication and hold function for current, voltage
Timer functions:	OFF, quick and slow pulsation, spot welding time
Ignition:	high frequency, LiftTIG
Energy control:	at the machine, at the remote control, at the torch
Operation modes:	2-stroke, 4-stroke, 4-stroke with 2 currents, gas check
Job-Operation:	999 jobs programmable
Program storage:	512 storage places
Gas pre-flow time:	0 - 3 s
Gas post-flow time:	1 - 60 s
Up slope time:	0 - 2 s
Down slope time:	0 - 20 s
Spot welding time:	0.01 - 25 s
Pulsation slow:	10 ms - 2.5 s
Pulsation fast:	50 Hz - 12 kHz
Hotstart time:	0.1 - 2.0 s
Hotstart current:	5 - 450 A
Arc force:	0 - 100 %
LEDs:	mains ON, temperature protection failure, display-hold
Power source:	inverter
Norm:	EN 60974-1 "S" / CE
Torch connection:	Euro connector with 5-pole plug
Torch cooling:	separate water cooling system (option)
Socket water cooling unit:	6-pol.
Socket 95 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	4 x 6 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Weight:	63 kg
Dimensions l x w x h:	740 x 350 x 690 mm

MMA/stick electrode operation:	
Stick electrodes:	1.5 - 6 mm
Open circuit voltage:	72 V
Welding voltage:	20 - 38 V
Welding current:	20 - 450 A
Duty cycle 40 % (10 min.):	450 A (40 °C)
Duty cycle 100 %:	310 A (40 °C)
Prim. cont. power:	15.9 kVA
Prim. cont. current:	23 A
Prim. max. current:	39 A

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG DC welding unit HighTIG 452 DC**				
	A	**TIG welding unit HighTIG 452 DC with TIG Euro connector**		**02**	**SET144040**
	**ABC**	**TIG welding unit HighTIG 452 DC with water cooling unit WK 350 and trolley TW 114**		**02**	**SET144042**
	ABCDE	**TIG welding unit HighTIG 452 DC with water cooling unit WK 350 and trolley TW 114 incl. accessories and torch TH 452 W, 8 m**		**02**	**SET144046**
B	**Water cooling unit:**				
		Water cooling unit model WK 350		46	144008
C	**Trolley:**				
		Trolley model TW 114, black for portable welding units and RS series (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	144000
D	**Accessories:**				
		Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
		Regulator argon/CO2, single stage		46	01200300
E	**Welding torches:**				
		TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector leather/rubber hose assembly		10	145088
F	**Accessories:**				
	F1	TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector and potentiometer leather/rubber hose assembly		10	145090
	F2	TIG hand welding torch model TH 600 W-EURO, 8 m with Euro connector leather/fabric		10	104410
	F3	TIG hand welding torch model TH 600 W-EURO, 8 m with Euro connector and potentiometer leather/fabric		10	104416
	F4a	Foot remote with 5 m cable and 10 pin plug		46	01903000
	F4b	Foot remote with 8 m cable and 10 pin plug		46	01902999
	F5	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791

	Pos.	Description	Pu	PrGrp	Part No.
	F6	Key switch for locking the system in job mode for HighPULSE and HighTIG series		46	148246
	F7	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	F8	Filter 205 x 314 mm for ighTIG / HighPULSE x52 RS		46	156804
	F9	Cover for operation panel RS series 352/452/552		46	145206

5.1.6. HighTIG 552 DC

Primary:	
Power supply:	3 x 400 V
Frequency:	50 / 60 Hz
TIG DC operation:	
Open circuit voltage:	72 V
Welding voltage:	10 - 32 V
Welding current:	5 - 550 A
Duty cycle 50 % (10 min.):	550 A (40 °C)
Duty cycle 100 %:	420 A (40 °C)
Prim. cont. power:	18 kVA
Prim. cont. current:	26 A
Prim. max. current:	40 A



Optional: with water cooling unit WK 350 and trolley TW 114

Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Main switch:	3-phase
Welding modes:	TIG DC, MMA/stick electrode
Digital displays:	LED display with pre-indication and hold function for current, voltage
Timer functions:	OFF, quick and slow pulsation spot welding time
Ignition:	high frequency, liftTIG
Energy control:	at the machine, at the remote control, at the torch
Operation modes:	2-stroke, 4-stroke, 4-stroke with 2 currents, gas check
Job-Operation:	999 jobs programmable
Program memory:	512 storage places
Gas pre-flow time:	0 - 3 s
Gas post-flow time:	1 - 60 s
Up slope time:	0 - 2 s
Down slope time:	0 - 20 s
Spot welding time:	0.01 - 25 s
Pulsation slow:	10 ms - 2.5 s
Pulsation fast:	50 Hz - 12 kHz
Hotstart time:	0.1 - 2.0 s
Hotstart current:	5 - 550 A
Arc force:	0 - 100 %
LEDs:	mains ON, temperature protection failure, hold-function
Power source:	inverter
Norm:	EN 60974-1 "S" / CE
Torch connection:	Euro connector with 5-pole plug
Torch cooling:	separate water cooling system (option)
Socket water cooling unit:	6-pol.
Socket 95 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	4 x 6 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Weight:	65 kg
Dimensions l x w x h:	740 x 350 x 690 mm

MMA/stick electrode operation:	
Stick electrodes:	1.5 - 6 mm
Open circuit voltage:	72 V
Welding voltage:	20 - 42 V
Welding current:	20 - 550 A
Duty cycle 40 %(10 min.):	550 A (40 °C)
Duty cycle 100 %:	410 A (40 °C)
Prim. cont. power:	24.9 kVA
Prim. cont. current:	36 A
Prim. max. current:	52 A

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG DC welding unit HighTIG 552 DC**				
	A	**TIG welding unit HighTIG 552 DC with TIG Euro connection**		02	SET144050
	ABC	**TIG welding unit HighTIG 552 DC with water cooling unit WK 350 and trolley TW 114**		02	SET144052
	ABCDE	**TIG welding unit HighTIG 552 DC with water cooling unit WK 350 and trolley TW 114 with accessories and torch TH 600 W, 8 m**		02	SET144054
B	**Water cooling unit:**				
		Water cooling unit model WK 350		46	144008
C	**Trolley:**				
		Trolley model TW 114, black for portable welding units and RS series (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	144000
D	**Accessories:**				
		Earth lead 95 mm², 4 m long with plug and earth clamp		46	02210403
		Regulator argon/CO2, single stage		46	01200300
E	**Welding torches:**				
		TIG hand welding torch model TH 600 W-EURO, 8 m with Euro connector leather/fabric		10	104410
F	**Accessories:**				
	F1	TIG hand welding torch model TH 600 W-EURO, 8 m with Euro connector and potentiometer leather/fabric		10	104416
	F2	Foot remote with 5 m cable and 10 pin plug		46	01903000
	F3	Foot remote with 8 m cable and 10 pin plug		46	01902999
	F4	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	F5	Key switch for locking the system in job mode for HighPULSE and HighTIG series		46	148246
	F6	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

	Pos.	Description	Pu	PrGrp	Part No.
	F7	Filter 205 x 314 mm for ighTIG / HighPULSE x52 RS		46	156804
	F8	Cover for operation panel RS series 352/452/552		46	145206

5.1.7. HighTIG 452/552 DC RS

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 / 60 Hz	
TIG DC-operation:		
Model:	**452 DC**	**552 DC**
Open circuit voltage:	72 V	72 V
Welding voltage:	10 - 28 V	10 - 32 V
Welding current:	5 - 450 A	5 - 550 A
Duty cycle 40 %(10 min.):	450 A	550 A
Duty cycle 60 %(10 min.):		
Duty cycle 100 %:	350 A	420 A
Prim. cont. power:	13.2 kVA	18 kVA
Prim. cont. current:	19 A	26 A
Prim. max. current:	29 A	40 A



Optional: with water cooling unit WK 350 and trolley TW 114

Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Main switch:	3-phase
Welding modes:	TIG DC
Digital displays:	LED display with pre-indication and hold function for current, voltage
Timer functions:	OFF, quick and slow pulsation, spot welding time
Ignition:	high frequency
Energy control:	at the machine
Operation modes:	2-stroke, 4-stroke, 4-stroke with 2 currents, gas check
Job-Operation:	999 jobs programmable
Gas pre-flow time:	0 - 3 s
Gas post-flow time:	1 - 60 s
Up slope time:	0 - 2 s
Down slope time:	0 - 20 s
Spot welding time:	0.01 - 25 s
Pulsation slow:	10 ms - 2.5 s
Pulsation fast:	50 Hz - 12 kHz
Hotstart time:	0.1 - 2.0 s
Hotstart current:	0 - 100 %
Arc force:	0 - 100 %
LEDs:	mains ON, temperature protection, failure, hold function
Power source:	inverter
Norm:	EN 60974-1 "S" / CE
Sockets 95 mm²:	earth lead and torch
Torch cooling:	external water cooler (option)
Socket water cooling unit:	6-pol.
Mains supply cable:	4 x 6.0 mm², 5 m long (HT 452/552 DC) with plug 3 x 400 V, 32 A
Gas hose:	2 m
Stabilization:	± 10 % power mains fluctuation
Norm:	EN 60974-1 "S" / CE
Air filter:	as a standard
Weight:	63 kg (HT 452 DC) 65 kg (HT 552 DC)
Dimensions l x w x h:	740 x 350 x 690 mm (HT 452/552 DC)

Roboter interface:	bus interface (Profibus, DeviceNet, CANopen, interbus, analogue interface, etc.)
Communication:	RS 232, ethernet 10 Mbit with RJ45 connector (option)

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG DC robot and automation welding unit HighTIG 452/552 DC RS**				
	**A1**	**TIG Welding Unit Model HighTIG 452 DC and HighTIG 452 DC RS with TIG Euro connector (without interface, front panel, wiring)**		**02**	**144014**
	A2	**TIG Welding Unit Model HighTIG 552 DC and HighTIG 552 DC RS with TIG Euro connector (without interface, front panel, wiring)**		**02**	**144016**
B	**Operation panel/front (please select one):**				
	B1	Front panel for series HighTIG RS with display and controls		46	138894
	B2	Front panel without displays without selectors for series HighTIG/HighPLAS incl. process controller		46	139042
B3	**External operation panel:**				
	B3.1	Front panel without displays without selectors for series HighTIG/HighPLAS incl. process controller		46	139042
	B3.2	External operation panel in housing for manual process control incl. displays for series HighTIG with 5 m cable (only with 139.042 and job panel)		46	139438
	B3.3	External operation panel mounted in ext. controller incl. displays for series HighTIG with 5 m cable (only with 139.042)		46	139436
	B3.4	Kit for connection of MRC TRC PRC installed in HighPULSE, HighTIG, HighPLAS		46	113804
	B3.5	Special cable for external user panel, Remote, ProJOB-PPC, suitable for trailing (per 1m), 5 x 2 x 0,34		17	117540
C	**Interface connection (please select one):**				
	C1	Bus interface RS series "Universal" ProfiNet, EtherCAT, EtherNet/IP, Modbus TCP u. RTU incl. serial-to-serial converter and wiring and 10-pol socket emergency stop (please specify the required bus version)		17	167058
	C2	Interface RS series "CANopen" incl. wiring for welding unit and 10-pol socket emergency stop		17	117428
	C3	Bus interface RS series RS 485 incl. wiring for welding unit and 10-pol socket emergency stop		17	139818
	C1-3a	Connection cable 10-pol. 5m welding unit - automated system		46	01903556
	C4	Digital interface for job operation (6 bit - 63 jobs) or HighPULSE with socket 24 pol. signals: welding on, arc is started, emergency stop, torch blow out and 6 bits for jobs		17	159202
	C4a	Connection cable 24-pin., 5 m welding unit - robot		46	01903557

	Pos.	Description	Pu	PrGrp	Part No.
	C5	Analogue interface for RS series 8 IO, 24pol.		17	164184
	C5a	Connection cable 24-pin., 5 m welding unit - robot		46	01903557
	C6	Connection for automated welding or RS series incl. socket 6-pol. and signals: welding ON, arc OK, emergency stop		17	143998
	C6a	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	C7	Connection for automated welding HP, SM, HT - emerg. STOP, welding ON, arc OK - 1 x control voltage OUTPUT 0 - 10 V - socket 10 pol.		46	158270
	C8	Connection for automated welding HP, HPt, HT - emerg. STOP, welding ON, arc OK - 1 x control voltage INPUT 0 - 10 V - socket 10 pol.		46	158271
	C7-8a	Connection cable 10-pol. 5m welding unit - automated system		46	01903556
	C9	Internal wiring for HighTIG 352/452/552 DC for hand welding application without interface		46	144058

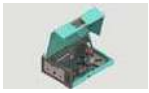
D Trolley:

	D1	Trolley model TW 114, black for portable welding units and RS series (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	144000

E Water cooling:

	E1	Water cooling unit model WK 350		46	144008
	E2	Water flow control device mounted in the water cooler		46	02610156
	E3	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

F Option cold wire:

	F1	Controller for cold wire feed KDZF with push-pull operation, installed inside HighTIG/HighPLAS incl. software		05	138921
	F2	Wire feed unit DV-31 KDZF / HDZF for cold / hot wire feed / including 5 m control cable		05	104634
	F3	Cold Wire Feed KDZF with Feed Tube for TM 450 W (Mechanic with Motor) for Push-Pull use		05	141614

	Pos.	Description	Pu	PrGrp	Part No.
	F4	Torch holder TIG / Plasma for machine welding torch TM 450 W, PM 400 W		05	103567

G External HF Box:

Required in manual mode when more than 8 m torch and 8 m extension are used, in automated mode when more than 8 m torch assembly are used

	G1	Extra charge for external HF box for HighTIG RS incl. HF ignition and torch connection		46	144068
	G2a	Connection cable 5 m for HighTIG RS to external HF box		46	138922
	G2b	Connection cable 10 m for HighTIG RS to external HF box		46	138924

H Accessories:

	H1	Regulator argon/CO2, single stage		46	01200300
	H2	Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
	H3	Earth lead 95 mm², 4 m long with plug and earth clamp		46	02210403
	H4	Earth lead 95 mm², 5 m long with plug 95 mm² and ring d=12 mm		46	139816
	H5	Foot remote with 5 m cable and 10 pin plug		46	01903000
	H6	Foot remote with 8 m cable and 10 pin plug		46	01902999
	H7	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	H8	Filter 205 x 314 mm for ighTIG / HighPULSE x52 RS		46	156804
	H9	Euro connector for portable TIG welding units		46	110430
	H10	Touch Sensor for HighPULSE, HighTIG for welding wire or gas nozzle (HighPULSE) or TIG electrode (HighTIG) (depending on welding torch)		46	106894
	H11	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

5.2. TIG AC/DC welding units



5.2.1. LiteTIG 190 AC/DC

Primary:	
Supply:	1 x 230 V
Frequency:	50 / 60 Hz
Cont. current:	16 A
Max. current (TIG/MMA):	30 A / 35 A
TIG operation:	
Open circuit voltage:	68 V
Welding voltage:	10 - 17.2 V
Welding current (DC):	5 - 190 A
Welding current (AC):	10 - 180 A
Duty cycle 20 % (10 min.):	180 A (40 °C)
Duty cycle 60 % (10 min.):	140 A (40 °C)
Duty cycle 100 %	115 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Modes:	TIG (AC/DC), MMA-welding
Parameter:	current 1, current 2, reduction, final current, gas post flow
Programmable jobs:	15 jobs
Adjustments:	continuously at rotary switch
Current control:	at the unit, at the torch, at the remote control
Functions:	2 stroke, 4 stroke, 4 stroke with current 2
Ignition:	HF / LiftTIG
Indication:	display
Current 2:	switchable via 2nd torch button
Spot welding time:	0.01 - 2.5 s
Pulse times slow:	0.1 - 2.5 s
Pulse times fast:	50 Hz - 16 kHz
Down slope time:	0 - 25 s
Up slope time:	0 - 2 s
Gas pre flow time:	0 - 2 s
Gas post flow time:	0 - 25 s
Hotstart time:	0.1 - 2 s
Hotstart current:	5 - 170 A
Arc force:	up to 170 A
AC frequency:	60 - 200 Hz
Balance:	15 - 70 %
Power socket:	via remote control connection
Power source:	inverter
Ignition:	HF device
Torch connection:	Merkle TCG and 5-pole plug
Torch cooling:	gas
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	3 x 2.5 mm² 5 m long with plug Schuko
Gas hose:	2 m
Transport:	adjustable carry/shoulder strap
Norm:	EN 60974/1 S / CE
Weight:	8.0 kg
Dimensions l x w x h:	410 x 150 x 240 mm

MMA/stick electrode operation:	
Stick electrode:	1.5 - 4 mm
Open circuit voltage:	68 V
Welding voltage:	20 - 26.8 V
Welding current:	20 - 170 A
Duty cycle 30 % (10 min.):	170 A (40 °C)
Duty cycle 60 % (10 min.):	135 A (40 °C)
Duty cycle 100 %	90 A (40 °C)

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG AC/DC welding unit LiteTIG 190 AC/DC**				
	A	**TIG welding unit LiteTIG 190 AC/DC (Merkle TCG connector)**		**48**	**155842**
	**AB**	**TIG welding unit LiteTIG 190 AC/DC with accessories (Merkle TCG connector)**		**48**	**SET155844**
	ABC1	**TIG welding unit LiteTIG 190 AC/DC with access. and torch TH 202 G, 4 m (Merkle TCG connector)**		**48**	**SET155846**
	ABC2	**TIG welding unit LiteTIG 190 AC/DC with access. and torch TH 202 G, 8 m (Merkle TCG connector)**		**48**	**SET155848**
B	**Standard accessories:**				
	B1	Earth lead 16 mm², 4 m long with plug 50 mm² and earth clamp		46	02210385
	B2	Regulator argon/CO2 standard version		46	107018
C	**Welding torches:**				
	C1	TIG hand welding torch TH 202 G, 4 m with TCG connector, leather/rubber hose assembly		10	129516
	C2	TIG hand welding torch TH 202 G, 8 m with TCG connector, leather/rubber hose assembly		10	129518
	C3	TIG hand welding torch TH 202 G, 8 m with TCG connector & potentiometer leather/rubber hose assembly		10	129520
D	**Accessories:**				
	D1a	Transportation box black material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 50 x 35 x 19.4 cm		46	n01200370
	D1b	Transportation box black big material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 59 x 47 x 21 cm		46	n01200372
	D2	Filter frame inkl. filter mat for LiteARC and LiteTIG 160, 180, 210 (assembly only at Merkle with special tool)		46	158294
	D3	Filter mat 120 x 125 mm for LiteARC and LiteTIG 160, 190		46	158292
	D4	Foot remote control pedal with 5 m cable and 5-pol plug		46	116730
	D5	Electrode welding cable 16 mm², 4 m incl. plug 50 mm² electrode holder		46	115702

	Pos.	Description	Pu	PrGrp	Part No.
	D6	Adapter for connection of TIG torches with Euro connector to Merkle TCG connector		46	109234
	D7	Handle set for LiteTIG 190/210		46	158342
	D8a	Option external gas connection TIG units gas: 1/4" external thread, current: 50 mm², torch plug: 5-pol (not for LiteTIG series)		46	153800
	D8b	Option external gas connection TIG units as: quick coupling 2.7, current: 50 mm², torch plug: 5-pol		46	153802
	D9	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

5.2.2. LiteTIG 210 AC/DC

Primary:	
Supply:	1 x 230 V
Frequency:	50 / 60 Hz
Cont. current:	16 A
Max. current (TIG/MMA):	22 A / 25 A
TIG operation:	
Open circuit voltage:	73 V
Welding voltage:	10.2 - 18.4 V
Welding current (DC):	5 - 210 A
Welding current (AC):	10 - 200 A
Duty cycle 20 % (10 min.):	210 A (40 °C)
Duty cycle 60 % (10 min.):	140 A (40 °C)
Duty cycle 100 %	130 A (40 °C)



Protection class:	IP 23
Insulation class:	F
Cooling:	AF
Modes:	TIG (AC/DC), MMA-welding
Parameter:	current 1, current 2, reduction, final current, gas post flow
Programmable jobs:	15 jobs
Adjustments:	continuously at rotary switch
Current control:	at the unit, at the torch, at the remote control
Functions:	2 stroke, 4 stroke, 4 stroke with current 2
Ignition:	HF / LiftTIG
Indication:	display
Current 2:	switchable via 2nd torch button
Spot welding time:	0.01 - 2.5 s
Pulse times slow:	0.1 - 2.5 s
Pulse times fast:	50 Hz - 16 kHz
Down slope time:	0 - 25 s
Up slope time:	0 - 2 s
Gas pre flow time:	0 - 2 s
Gas post flow time:	0 - 25 s
Hotstart time:	0.1 - 2 s
Hotstart current:	5 - 170 A
Arc force:	up to 170 A
AC frequency:	50 - 200 Hz
Balance:	10 - 70 %
Power socket:	via remote control connection
Power source:	inverter
Ignition:	HF device
Torch connection:	Merkle TCG and 5-pole plug
Torch cooling:	gas
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	3 x 2.5 mm² 5 m long with plug Schuko
Gas hose:	2 m
Transport:	adjustable carry/shoulder strap
Norm:	EN 60974/1 S / CE
Weight:	8.9 kg
Dimensions l x w x h:	410 x 150 x 240 mm

MMA/stick electrode operation:	
Stick electrode:	1.5 - 4 mm
Open circuit voltage:	73 V
Welding voltage:	20 - 26.8 V
Welding current:	20 - 170 A
Duty cycle 30 % (10 min.):	170 A (40 °C)
Duty cycle 60 % (10 min.):	130 A (40 °C)
Duty cycle 100 %	120 A (40 °C)

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG AC/DC welding unit LiteTIG 210 AC/DC**				
	**A**	**TIG welding unit LiteTIG 210 AC/DC (Merkle TCG connector)**		**48**	**155868**
	AB	**TIG welding unit LiteTIG 210 AC/DC with accessories (Merkle TCG connector)**		**48**	**SET155870**
	ABC1	**TIG welding unit LiteTIG 210 AC/DC with access. and torch TH 202 G, 4 m (Merkle TCG connector)**		**48**	**SET155872**
	ABC2	**TIG welding unit LiteTIG 210 AC/DC with access. and torch TH 202 G, 8 m (Merkle TCG connector)**		**48**	**SET155874**
B	**Standard accessories:**				
	B1	Earth lead 16 mm², 4 m long with plug 50 mm² and earth clamp		46	02210385
	B2	Regulator argon/CO2 standard version		46	107018
C	**Welding torches:**				
	C1	TIG hand welding torch TH 202 G, 4 m with TCG connector, leather/rubber hose assembly		10	129516
	C2	TIG hand welding torch TH 202 G, 8 m with TCG connector, leather/rubber hose assembly		10	129518
	C3	TIG hand welding torch TH 202 G, 8 m with TCG connector & potentiometer leather/rubber hose assembly		10	129520
D	**Accessories:**				
	D1a	Transportation box black material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 50 x 35 x 19.4 cm		46	n01200370
	D1b	Transportation box black big material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 59 x 47 x 21 cm		46	n01200372
	D2	Filter frame inkl. filter mat for LiteARC and LiteTIG 160, 180, 210 (assembly only at Merkle with special tool)		46	158294
	D3	Filter mat 120 x 125 mm for LiteARC and LiteTIG 160, 190		46	158292
	D4	Foot remote control pedal with 5 m cable and 5-pol plug		46	116730
	D5	Electrode welding cable 16 mm², 4 m incl. plug 50 mm² electrode holder		46	115702

	Pos.	Description	Pu	PrGrp	Part No.
	D6	Adapter for connection of TIG torches with Euro connector to Merkle TCG connector		46	109234
	D7	Handle set for LiteTIG 190/210		46	158342
	D8a	Option external gas connection TIG units gas: 1/4" external thread, current: 50 mm², torch plug: 5-pol (not for LiteTIG series)		46	153800
	D8b	Option external gas connection TIG units as: quick coupling 2.7, current: 50 mm², torch plug: 5-pol		46	153802
	D9	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

5.2.3. LogiTIG 221 AC/DC

Primary:		
Supply:	1 x 230 V	
Frequency:	50 / 60 Hz	
TIG operation:		
Open circuit voltage:	80 V	
Welding voltage:	10 - 18.8 V	
Welding current (DC):	3 - 220 A	
Welding current (AC):	5 - 220 A	
Duty cycle 25 % (10 min.):		220 A* (40 °C)
Duty cycle 30 % (10 min.):		200 A* (40 °C)
Duty cycle 40 % (10 min.):	220 A** (20 °C)	
Duty cycle 45 % (10 min.):	200 A** (20 °C)	
Duty cycle 60 % (10 min.):	190 A** (20 °C)	150 A (40 °C)
Duty cycle 100 %:	170 A (20 °C)	130 A (40 °C)
Prim. cont. power:	2.8 kVA	
Prim. cont. current:	12 A	
Prim. max. current:	24 A	



Optional: with water cooling unit WK 210 and trolley TW 112, with drawer as an option.

Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Operation modes:	TIG (DC and AC), MMA/stick electrode welding
Button:	current 1, current 2, down slope, final current, gas post flow time
Jobs:	17 jobs
Open circuit voltage:	< 24 V (option)
Setting:	continuous at rotary switch
Energy control:	at the unit, at the torch, at the hand remote control, foot pedal
Functions:	2 stroke, 4 stroke, 4 stroke with 2 currents
Ignition:	HF/LiftTIG
Indication:	display
Current 2:	switchable via 2nd torch button
Spot welding time:	0.01 - 2.5 s
Pulsation slow:	0.1 - 2.5 s
Pulsation fast:	50 Hz - 12 kHz
Pulse shape:	"hard"/"soft"
Down slope time:	0 - 25 s
Up slope time:	0 - 2 s
Gas pre-flow time:	0 - 2 s
Gas post-flow time:	0 - 25 s
Pos. igniton impuls:	0 - 200 ms
Balance:	± 91%
AC frequency:	50 - 200 Hz
AC curve shape:	square, soft, AC special, sinus (50 Hz)
Hotstart time:	0.1 - 2 s
Hotstart current:	5 - 220 A
Arc force:	up to 220 A
LED green:	mains ON
LED green:	welding ON
LED yellow:	temperature protection
LED red:	failure
Socket:	remote control

*: slow-blow fuse 16 A
**: slow blow fuse min. 20 A (and CEE plug)

Power source:	inverter
Ignition:	HF ignition generator
Torch connection:	Merkle TCG-connector and 5-pole socket
Torch cooling:	gas option: water
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	3 x 2.5 mm² 5 m long with plug schuko
Gas hose:	2 m
Connection for water cooling unit:	option
Handle:	on top of the machine
Norm:	EN 60974/1 S / CE
Weight:	17 kg
Dimensions l x w x h:	495 x 210 x 450 mm

MMA/stick electrode operation:

Stick electrodes:	1.5 - 3.25 mm	
Open circuit voltage:	80 V (with VRD < 24 V)	
Welding voltage:	20 - 27 V	
Welding current:	20 - 180 A	
Duty cycle 30 % (10 min.):		180 A (40 °C)
Duty cycle 60 % (10 min.):	170 A** (20 °C)	130 A (40 °C)
Duty cycle 100 %:	140 A** (20 °C)	110 A (40 °C)
Prim. cont. power:	3.2 kVA	
Prim. cont. current:	14 A	
Prim. max. current:	26 A	

	Pos.	Description	Pu	PrGrp	Part No.
A		**TIG AC/DC welding unit LogiTIG 221 AC/DC**			
	A	**TIG welding unit LogiTIG 221 AC/DC (Merkle TCG connector)**		49	143074
	AB	**TIG welding unit LogiTIG 221 AC/DC with accessories (Merkle TCG connector)**		49	SET143096
	ABC1	**TIG welding unit LogiTIG 221 AC/DC with accessories and torch TH 202 G, 4 m (Merkle TCG connector)**		49	SET143098
	ABC2	**TIG welding unit LogiTIG 221 AC/DC with accessories and torch TH 202 G, 8 m (Merkle TCG connector)**		49	SET143100
		With water cooler and trolley TW 112:			
		TIG welding unit LogiTIG 221 AC/DC incl. water cooler WK 210 and trolley TW 112		49	SET143102
		**TIG welding unit LogiTIG 221 AC/DC with accessories incl. water cooler WK 210 and trolley TW 112**		49	SET143104
		TIG welding unit LogiTIG 221 AC/DC with accessories incl. water cooler WK 210 and trolley TW 112 and torch TH 452 W, 4 m		49	SET143106
		TIG welding unit LogiTIG 221 AC/DC with accessories incl. water cooler WK 210 and trolley TW 112 and torch TH 452 W, 8 m		49	SET143108
	Option	**Drawer option for trolley TW 112 incl. one drawer**		46	138940
B		**Standard accessories:**			
	B1	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	B2	Regulator argon/CO2 standard version		46	107018
C		**Welding torches:**			
	C1	TIG hand welding torch TH 202 G, 4 m with TCG connector, leather/rubber hose assembly		10	129516
	C2	TIG hand welding torch TH 202 G, 8 m with TCG connector, leather/rubber hose assembly		10	129518
	C3	TIG hand welding torch TH 202 G, 8 m with TCG connector & potentiometer leather/rubber hose assembly		10	129520

	Pos.	Description	Pu	PrGrp	Part No.
D	**Accessories:**				
	D1a	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938
	D1b	Drawer option for trolley TW 112 incl. one drawer		46	138940
	D2	Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
	D3	Foot remote with 5 m cable and 10 pin plug		46	01903000
	D4	Foot remote with 8 m cable and 10 pin plug		46	01902999
	D5	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	D6	Adapter for connection of TIG torches with Euro connector to Merkle TCG connector		46	109234
	D7	Euro connector for portable TIG welding units		46	110430
	D8a	Option external gas connection TIG units gas: 1/4" external thread, current: 50 mm², torch plug: 5-pol (not for LiteTIG series)		46	153800
	D8b	Option external gas connection TIG units as: quick coupling 2.7, current: 50 mm², torch plug: 5-pol		46	153802
	D9	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584
E	**Accessories for using water cooler:**				
	E1	Water cooling unit model WK 210		46	143136
	E2	Socket for water cooling unit 6-pol. for LogiTIG 220/221 AC/DC		46	125928
	E3	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

	Pos.	Description	Pu	PrGrp	Part No.
	E4	TIG hand welding torch TH 452 W, 4 m with Merkle TCG connector, leather/rubber hose assembly		10	145080
	E5	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector, leather/rubber hose assembly		10	145082
	E6	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector and potentiometer leather/rubber hose assembly		10	145084

F Robot and automation accessories:

	F1	Connection for automated welding for LogiTIG 220/221 AC/DC - emerg. STOP, welding ON, arc OK - socket 6 pol. - increased HF ignition		46	125930
	F1.1	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	F2	Connection for automated welding - 1 control channel (0-10 V) - emerg. STOP, welding ON, arc OK - socket 10 pol.		46	01301123
	F2.1	Connection cable 10-pol. 5m welding unit - automated system		46	01903556

5.2.4. Water cooling unit WK 210

Power supply:	1 x 230 V
Frequency:	50 Hz
Mains current:	1 A / 1.6 A
Water pump:	high efficient pump 230 V
Water pressure:	3.5 bar
Water capacity:	3 l
Water pressure switch:	integrated
Functions:	automatic switch of fan and water pump
electr.connection:	cable with 6-pole plug
water connection:	2 quick couplings
Weight:	15 kg
Dimensions l x w x h:	590 x 210 x 210 mm



	Pos.	Description	Pu	PrGrp	Part No.
A	**Water cooling unit:**				
	**A**	**Water cooling unit model WK 210**		**46**	**143136**
B	**Accessories:**				
	B1	Socket for water cooling unit 6-pol. for LogiTIG 220/221 AC/DC		46	125928
	B2	Socket for water cooling unit 6-pol. for MobiTIG 284/304 DC and MobiMIG 320/321		46	124858
	B3	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

5.2.5. LogiTIG 240 AC/DC

Primary:	
Supply:	1 x 230 V / 3 x 400 V*
Frequency:	50 / 60 Hz
TIG operation:	
Open circuit voltage:	95 V
Welding voltage:	10 - 17.2 V / 19.6 V*
Welding current (DC):	3 - 180 A / 240 A*
Welding current (AC):	5 - 180 A / 240 A*
Duty cycle 35 % (10 min.):	240 A* (20 °C)
Duty cycle 60 % (10 min.):	160 A (40 °C)
Duty cycle 100 %:	130 A (40 °C)
Prim. cont. power:	3.7 kVA
Prim. cont. current:	16 A
Prim. max. current:	23 A / 32 A*



Optional: with water cooling unit WK 230 and trolley TW 112, with drawer as an option.



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Operation modes:	TIG (DC and AC), MMA/stick electrode welding
Button:	current 1, current 2, down slope, final current, gas post flow time
Jobs:	17 jobs
Setting:	continuous at rotary switch
Energy control:	at the unit, at the torch, at the hand remote control, foot pedal
Functions:	2 stroke, 4 stroke, 4 stroke with 2 currents
Ignition:	HF/LiftTIG
Indication:	display
Current 2:	switchable via 2nd torch button
Spot welding time:	0.01 - 2.5 s
Pulsation slow:	0.1 - 2.5 s
Pulsation fast:	50 Hz - 12 kHz
Pulse shape:	"hard" / "soft"
Down slope time:	0 - 25 s
Up slope time:	0 - 2 s
Gas pre-flow time:	0 - 2 s
Gas post-flow time:	0 - 25 s
Pos. igniton impuls:	0 - 200 ms
Balance:	± 91 %
AC frequency:	50 - 200 Hz
AC curve shape:	square, soft, sinus
Hotstart time:	0.1 - 2 s
Hotstart current:	5 - 160 A / 200 A*
Arc force:	up to 160 A / 200 A*
LED:	mains ON
LED:	welding ON
LED:	temperature protection
LED:	failure
Socket:	remote control
Power source:	inverter
Ignition:	HF ignition generator
Torch connection:	Merkle TCG-connector and 5-pole socket

Torch cooling:	gas option: water
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	5 x 4.0 mm² 5 m long with plug 400 V/32 A
Gas hose:	2 m
Connection for water cooling	unit: option
Handle:	on top of the machine
Norm:	EN 60974/1 S / CE
Weight:	24.5 kg
Dimensions l x w x h:	535 x 230 x 465 mm

MMA/stick electrode operation:

Stick electrodes:	1.5 - 4 mm
Open circuit voltage:	100 V
Welding voltage:	20 - 26.4 V / 28 V*
Welding current:	5 - 160 A / 200 A*
Duty cycle 40 % (10 min.):	200 A* (20 °C)
Duty cycle 60 % (10 min.):	150 A (40 °C)
Duty cycle 100 %:	120 A (40 °C)
Prim. cont. power:	4.1 kVA
Prim. cont. current:	16 A / 18 A*
Prim. max. current:	26 A / 34 A*

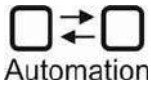
* BiPower-Technology:
Automatic switching to "High Current" mode at supply voltage 3phase 400 V/32 A

	Pos.	Description	Pu	PrGrp	Part No.
A		**TIG AC/DC welding unit LogiTIG 240 AC/DC**			
	A	**TIG welding unit LogiTIG 240 AC/DC (Merkle TCG connector)**		49	113226
	AB	**TIG welding unit LogiTIG 240 AC/DC with accessories (Merkle TCG connector)**		49	SET113228
	ABC1	**TIG welding unit LogiTIG 240 AC/DC with accessories and torch TH 202 G, 4 m (Merkle TCG connector)**		49	SET113230
	ABC2	**TIG welding unit LogiTIG 240 AC/DC with accessories and torch TH 202 G, 8 m (Merkle TCG connector)**		49	SET113232
		With water cooler and trolley TW 112:			
		TIG welding unit LogiTIG 240 AC/DC incl. water cooler WK 230 and trolley TW 112		49	SET113302
		**TIG welding unit LogiTIG 240 AC/DC with accessories incl. water cooler WK 230 and trolley TW 112**		49	SET113304
		TIG welding unit LogiTIG 240 AC/DC with accessories incl. water cooler WK 230 and trolley TW 112 and torch TH 452 W, 4 m		49	SET113290
		TIG welding unit LogiTIG 240 AC/DC with accessories incl. water cooler WK 230 and trolley TW 112 and torch TH 452 W, 8 m		49	SET113292
	Option	**Drawer option for trolley TW 112 incl. one drawer**		46	138940
B		**Standard accessories:**			
	B1	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	B2	Regulator argon/CO2 standard version		46	107018
C		**Welding torches:**			
	C1	TIG hand welding torch TH 202 G, 4 m with TCG connector, leather/rubber hose assembly		10	129516
	C2	TIG hand welding torch TH 202 G, 8 m with TCG connector, leather/rubber hose assembly		10	129518
	C3	TIG hand welding torch TH 202 G, 8 m with TCG connector & potentiometer leather/rubber hose assembly		10	129520

	Pos.	Description	Pu	PrGrp	Part No.
D	**Accessories:**				
	D1	Coupling 230/400 V 32 Socket 400 V/32 A to plug 230V/16 A		46	110612
	D2a	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938
	D2b	Drawer option for trolley TW 112 incl. one drawer		46	138940
	D3	Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
	D4	Foot remote with 5 m cable and 10 pin plug		46	01903000
	D5	Foot remote with 8 m cable and 10 pin plug		46	01902999
	D6	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	D7	Filter frame incl. filter for TIG 300 DC, LT 240 AC/DC, C 82		46	112548
	D8		10 pcs	46	112550
	D9	Adapter for connection of TIG torches with Euro connector to Merkle TCG connector		46	109234
	D10	Euro connector for portable TIG welding units		46	110430
	D11a	Option external gas connection TIG units gas: 1/4" external thread, current: 50 mm², torch plug: 5-pol (not for LiteTIG series)		46	153800
	D11b	Option external gas connection TIG units as: quick coupling 2.7, current: 50 mm², torch plug: 5-pol		46	153802
	D12	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584
E	**Accessories for using water cooler:**				
	E1	Water cooling unit model WK 230		46	02610142

	Pos.	Description	Pu	PrGrp	Part No.
	E2	Connection socket WK, 6-pin. for TIG 300 DC LT 240 AC/DC, HighPULSE RS, HighTIG RS		46	103675
	E3	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	E4	TIG hand welding torch TH 452 W, 4 m with Merkle TCG connector, leather/rubber hose assembly		10	145080
	E5	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector, leather/rubber hose assembly		10	145082
	E6	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector and potentiometer leather/rubber hose assembly		10	145084

F Robot and automation accessories:

	F1	Connection for automated welding - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	02010907
	F1.1	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	F2	Connection for automated welding - 1 control channel (0-10 V) - emerg. STOP, welding ON, arc OK - socket 10 pol.		46	01301123
	F2.1	Connection cable 10-pol. 5m welding unit - automated system		46	01903556

5.2.6. Water cooling unit WK 230

Power supply:	1 x 400 V / 230 V
Frequency:	50 Hz
Mains current:	1 A / 1.6 A
Water pump:	high efficient pump 230 V
Water pressure:	3.5 bar
Water capacity:	3 l
Transformer:	400 / 230 V
Water pressure switch:	integrated
Functions:	automatic switch of fan and water pump
electr. connection:	cable with 6-pole plug
Water connection:	2 quick couplings
Weight:	18 kg
Dimensions l x w x h:	610 x 230 x 215 mm



	Pos.	Description	Pu	PrGrp	Part No.
A	**Water cooling unit:**				
	**A**	**Water cooling unit model WK 230**		**46**	**02610142**
B	**Accessories:**				
	B1	Connection socket WK, 6-pin. for TIG 300 DC LT 240 AC/DC, HighPULSE RS, HighTIG RS		46	103675
	B2	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

5.2.7. LogiTIG 300 AC/DC

Primary:	
Supply:	3 x 400 V
Frequency:	50 / 60 Hz
TIG operation:	
Open circuit voltage:	70 V
Welding voltage:	10 - 22 V
Welding current:	5 - 300 A
Duty cycle 50 % (10 min.):	300 A (40 °C)
Duty cycle 60 % (10 min.):	280 A (40 °C)
Duty cycle 100 %:	250 A (40 °C)
Prim. cont. power:	10.4 kVA
Prim. cont. current:	15 A
Prim. max. current:	19 A



Optional: with water cooling unit WK 300 and trolley TW 112, with drawer as an option.

Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Operation modes:	TIG (DC und AC), MMA/stick electrode welding
Button:	current 1, current 2, down slope, final current, gas post flow time
Jobs:	17 jobs
Setting:	continuous at rotary switch
Energy control:	at the unit, at the torch, at the hand remote control, foot pedal
Functions:	2 stroke, 4 stroke, 4 stroke with 2 currents
Ignition:	HF/LiftTIG
Indication:	display
Current 2:	switchable via 2nd torch button
Spot welding time:	0.01 - 2.5 s
Pulsation slow:	0.1 - 2.5 s
Pulsation fast:	50 Hz - 12 kHz
Pulse shape:	"hard" / "soft"
Down slope time:	0 - 25 s
Up slope time:	0 - 2 s
Gas pre-flow time:	0 - 2 s
Gas post-flow time:	0 - 25 s
Pos. igniton impuls:	0 - 200 ms
Balance:	± 91 %
AC frequency:	50 - 200 Hz
AC curve shape:	square, soft, sinus
Hotstart time:	0.1 - 2 s
Hotstart current:	5 - 300 A
Arc force:	up to 300 A
LED green:	mains ON
LED green:	welding ON
LED yellow:	temperature protection
LED red:	failure
Socket:	remote control
Cover:	transparent, to protect the control panel
Power source:	inverter
Ignition:	HF ignition generator
Torch connection:	Merkle TCG-connector and 5-pole socket

Torch cooling:	gas
	option: water
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	5 x 4.0 mm² 5 m long with plug 400 V/32 A
Gas hose:	2 m
Connection for water cooling unit:	option
Handle:	on top of the machine
Norm:	EN 60974/1 S / CE
Weight:	39.2 kg
Dimensions l x w x h:	600 x 300 x 575 mm

MMA/stick electrode operation:

Stick electrodes:	1.5 - 4 mm
Open circuit voltage:	70 V
Welding voltage:	20 - 32 V
Welding current:	5 -300 A
Duty cycle 40 % (10 min.):	300 A (40 °C)
Duty cycle 60 % (10 min.):	270 A (40 °C)
Duty cycle 100 % ED:	230 A (40 °C)
Prim. cont. power:	13.1 kVA
Prim. cont. current:	19 A
Prim. max. current:	25 A

	Pos.	Description	Pu	PrGrp	Part No.
A		**TIG AC/DC welding unit LogiTIG 300 AC/DC**			
	A	**TIG welding unit LogiTIG 300 AC/DC (Merkle TCG connector)**		02	117236
	AB	**TIG welding unit LogiTIG 300 AC/DC with accessories (Merkle TCG connector)**		02	SET117238
	ABC1	**TIG welding unit LogiTIG 300 AC/DC with accessories and torch TH 202 G, 4 m (Merkle TCG connector)**		02	SET117240
	ABC2	**TIG welding unit LogiTIG 300 AC/DC with accessories and torch TH 202 G, 8 m (Merkle TCG connector)**		02	SET117242
		With water cooler and trolley TW 112:			
		TIG welding unit LogiTIG 300 AC/DC incl. water cooler WK 300 and trolley TW 112		02	SET117248
		**TIG welding unit LogiTIG 300 AC/DC with accessories incl. water cooler WK 300 and trolley TW 112**		02	SET117250
		TIG welding unit LogiTIG 300 AC/DC with accessories incl. water cooler WK 300 and trolley TW 112 and torch TH 452 W, 4 m		02	SET117244
		TIG welding unit LogiTIG 300 AC/DC with accessories incl. water cooler WK 300 and trolley TW 112 and torch TH 452 W, 8 m		02	SET117246
	Option	**Drawer option for trolley TW 112 incl. one drawer**		46	138940
B		**Standard accessories:**			
	B1	Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
	B2	Regulator argon/CO2, single stage		46	01200300
C		**Welding torches:**			
	C1	TIG hand welding torch TH 202 G, 4 m with TCG connector, leather/rubber hose assembly		10	129516
	C2	TIG hand welding torch TH 202 G, 8 m with TCG connector, leather/rubber hose assembly		10	129518
	C3	TIG hand welding torch TH 202 G, 8 m with TCG connector & potentiometer leather/rubber hose assembly		10	129520

	Pos.	Description	Pu	PrGrp	Part No.
D	**Accessories:**				
	D1a	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938
	D1b	Drawer option for trolley TW 112 incl. one drawer		46	138940
	D2	Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
	D3	Foot remote with 5 m cable and 10 pin plug		46	01903000
	D4	Foot remote with 8 m cable and 10 pin plug		46	01902999
	D5	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	D6	Filter frame incl. filter for LogiTIG 300 AC/DC, HighTIG 352 DC, MobiMIG 320 K (reduced duty cycle)		46	117530
	D7	Filter for LogiTIG 300 AC/DC, (min. 10 pieces)	10 pcs	46	117532
	D8	Adapter for connection of TIG torches with Euro connector to Merkle TCG connector		46	109234
	D9	Euro connector for portable TIG welding units		46	110430
	D10a	Option external gas connection TIG units gas: 1/4" external thread, current: 50 mm², torch plug: 5-pol (not for LiteTIG series)		46	153800
	D10b	Option external gas connection TIG units as: quick coupling 2.7, current: 50 mm², torch plug: 5-pol		46	153802
	D11	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584
E	**Accessories for using water cooler:**				
	E1	Water cooling unit model WK 300		46	02610143
	E2	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

	Pos.	Description	Pu	PrGrp	Part No.
	E3	TIG hand welding torch TH 452 W, 4 m with Merkle TCG connector, leather/rubber hose assembly		10	145080
	E4	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector, leather/rubber hose assembly		10	145082
	E5	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector and potentiometer leather/rubber hose assembly		10	145084

F Robot and automation accessories:

	F1	Connection for automated welding for LogiTIG 300 AC/DC - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	118068
	F1.1	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	F2	Connection for automated welding for LogiTIG 300 AC/DC - 1 control channel (0-10 V) - emerg. STOP, welding ON, arc OK - socket 10 pol.		46	118070
	F2.1	Connection cable 10-pol. 5m welding unit - automated system		46	01903556

G Accessories for synchron welding:

	G1	AC synchron welding incl. switch and socket		46	00503023
	G1.1	Test cable for AC synchron welding		46	00503024

5.2.8. Water cooling unit WK 300

Power supply:	1 x 400 V / 230 V
Frequency:	50 Hz
Mains current:	1 A / 1.6 A
Water pump:	high efficient pump 230 V
Water pressure:	3.5 bar
Water capacity:	3 l
Transformer:	400 / 230 V
Water pressure switch:	integrated
Functions:	automatic switch of fan and water pump
electr. connection:	cable with 6-pole plug
Water connection:	2 quick couplings
Weight:	20 kg
Dimensions l x w x h:	600 x 300 x 260 mm



	Pos.	Description	Pu	PrGrp	Part No.
A	**Water cooling unit:**				
	**A**	**Water cooling unit model WK 300**		**46**	**02610143**
B	**Accessories:**				
	B1	Connection socket WK, 6-pin. for TIG 300 DC LT 240 AC/DC, HighPULSE RS, HighTIG RS		46	103675
	B2	Coolant ME-KM 22 eco, 10 l for welding units		07	169376

5.2.9. Insquare W 321 AC/DC

Primary:

Power supply:	3 x 400 V
Frequency:	50 Hz

TIG DC- and AC-operation:

Open circuit voltage:	80 V
Welding voltage:	10 - 22.8 V
Welding current:	5 - 320 A
Duty cycle 60 % (10 min.):	320 A (40 °C)
Duty cycle 80 % (10 min.):	300 A (40 °C)
Duty cycle 100 %:	260 A (40 °C)
Prim. cont. power:	13.2 kVA
Prim. cont. current:	19 A
Prim. max. current:	22 A



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Main switch:	3-phase
Welding modes:	TIG DC (-), TIG DC (+), TIG DC (-) w. start puls (+), TIG AC "noise reduced", TIG AC "square arc", TIG AC "balanced TIG", MMA/stick electrode (-), MMA/stick electrode (+), MMA/stick electrode sinusodial, MMA/stick electrode square arc
Selector 1:	current 1, time 1, upslope and downslope time, start current, final current, ignition impulse, spot w. time, gas pre- and post-flow time
Selector 2:	current 2, time 2 (for pulsation), AC balance, AC frequency, hotstart time a. current, arc force, stick electrode diameter, display voltage
Adjusting:	2 rotary switches for selectors 1 and 2
Digital displays:	2 LED displays with pre-indication and hold function for current, voltage, time, frequency
Timer functions:	OFF, quick and slow pulsation, spot welding time
Ignition:	OFF, high frequency, LiftTIG
Energy control:	at the machine, at the remote controls, at the torch
Operation modes:	2-stroke, 4-stroke, 4-stroke with 2 currents, gas check, test, programming
Program storage:	20 programs
AC frequency:	50 - 200 Hz
AC balance:	9 - 91 %
Gas pre-flow time:	0 - 3 s
Gas post-flow time:	0 - 25 s
Up slope time:	0 - 2 s
Down slope time:	0 - 20 s
Ignition impulse:	0 - 100 ms
Spot welding time:	0.1 - 2.5 s

Pulsation slow:	10 ms - 2.5 s
Pulsation fast:	50 Hz - 5 kHz
Hotstart time:	0 - 1.5 s
Hotstart current:	10 - 200 %
Arc force:	100 - 250 %
Button:	test protection deviceg
Button:	program selection
LEDs:	mains ON, temperature protection failure, protection device, hold function, start current, up slope, down slope, current 1 + 2, final curr.
Power source:	inverter
Norm:	EN 60974-1 "S" / CE
Torch connection:	Euro connector with 5-pole plug
Torch cooling:	integrated water cooling system
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	4 x 4 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	10 - 20 - 50 l cylinders
Lifting eyes:	4 pieces (option)
Weight:	140 kg
Dimensions l x w x h:	1020 x 476 x 970 mm incl. gas bottle holder

MMA/stick electrode operation:

Stick electrodes:	1.5 - 6 mm (Cel-suitable)
Open circuit voltage:	80 V
Welding voltage:	20 - 32.8 V
Welding current:	5 - 320 A
Duty cycle 60 % (10 min.):	320 A (40 °C)
Duty cycle 80 % (10 min.):	300 A (40 °C)
Duty cycle 100 %:	260 A (40 °C)
Prim. cont. power:	14.5 kVA
Prim. cont. current:	21 A
Prim. max. current:	27 A

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG AC/DC welding unit Insquare W 321 AC/DC**				
	A	**TIG welding unit Insquare W 321 AC/DC**		**02**	**123790**
	**AB**	**TIG welding unit Insquare W 321 AC/DC with accessories**		**02**	**SET123792**
	ABC1	**TIG welding unit Insquare W 321 AC/DC with access. and torch TH 452 W, 4 m**		**02**	**SET123794**
	ABC2	**TIG welding unit Insquare W 321 AC/DC with access. and torch TH 452 W, 8 m**		**02**	**SET123796**
B	**Standard accessories:**				
	B1	Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	TIG hand welding torch model TH 452 W-EURO, 4 m with Euro connector leather/rubber hose assembly		10	145086
	C2	TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector leather/rubber hose assembly		10	145088
	C3	TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector and potentiometer leather/rubber hose assembly		10	145090
D	**Accessories:**				
	D1	Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
	D2	Foot remote with 5 m cable and 10 pin plug		46	01903000
	D3	Foot remote with 8 m cable and 10 pin plug		46	01902999
	D4	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	D5	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	D6	Filter frame incl. filter for Insquare W 321 and 421		46	122626

	Pos.	Description	Pu	PrGrp	Part No.
	D7	Door for control panel with lock for Insquare 321 and 421		46	123836
	D8	Lifting eye screw, galvanized	4 pcs	46	09002001
	D9	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

E Robot and automation accessories:

	E1	Connection for automated welding - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	02010907
	E1.1	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	E2	Robot interface - 3 control channel (0-10 V) - emerg. STOP, welding ON, arc OK, - socket 24 pol.		17	01903066
	E2.1	Connection cable 24-pin., 5 m welding unit - robot		46	01903557
	E3	Bus connection EtherCAT		17	101687

F Accessories for synchron welding:

	F1	AC synchron welding incl. switch and socket		46	00503023
	F1.1	Test cable for AC synchron welding		46	00503024

5.2.10. Insquare W 421 AC/DC

Primary:		
Power supply:	3 x 400 V	
Frequency:	50 Hz	
TIG DC- and AC-Operation:		
Open circuit voltage:	80 V	
Welding voltage:	10 - 26.8 V	
Welding current DC:	5 - 420 A	
Welding current AC:	5 - 400 A	
Duty cycle 40 % (10 min.):		420 A (40 °C)
Duty cycle 50 % (10 min.):	420 A (20 °C)	
Duty cycle 60 % (10 min.):	400 A (20 °C)	360 A (40 °C)
Duty cycle 100 %:	320 A (20 °C)	310 A (40 °C)
Prim. cont. power:	14.5 kVA	
Prim. cont. current:	21 A	
Prim. max. current:	28 A	



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Main switch:	3-phase
Welding modes:	TIG DC (-), TIG DC (+), TIG DC (-) w. start puls (+), TIG AC "noise reduced", TIG AC "square arc", TIG AC "balanced TIG", MMA/stick electrode (-), MMA/stick electrode (+), MMA/stick electrode sinusodial, MMA/stick electrode square arc
Selector 1:	current 1, time 1, upslope and downslope time, start current, final current, ignition impulse, spot w. time, gas pre- and post-flow time
Selector 2:	current 2, time 2 (for pulsation), AC balance, AC frequency, hotstart time a. current, arc force, stick electrode diameter, display voltage
Adjusting:	2 rotary switches for selectors 1 and 2
Digital displays:	2 LED displays with pre-indication and hold function for current, voltage, time, frequency
Timer functions:	OFF, quick and slow pulsation, spot welding time
Ignition:	OFF, high frequency, LiftTIG
Energy control:	at the machine, at the remote controls, at the torch
Operation modes:	2-stroke, 4-stroke, 4-stroke with 2 currents, gas check, test, programming
Program storage:	20 programs
AC frequency:	50 - 200 Hz
AC balance:	9 - 91 %
Gas pre-flow time:	0 - 3 s
Gas post-flow time:	0 - 25 s
Up slope time:	0 - 2 s
Down slope time:	0 - 20 s
Ignition impulse:	0 - 100 ms
Spot welding time:	0.1 - 2.5 s

Pulsation slow:	10 ms - 2.5 s
Pulsation fast:	50 Hz - 5 kHz
Hotstart time:	0 - 1.5 s
Hotstart current:	10 - 200 %
Arc force:	100 - 250 %
Button:	test protection device
Button:	program selection
LEDs:	mains ON, temperature protection failure, protection device, hold function, start current, up slope, down slope, current 1 + 2, final curr.
Power source:	inverter
Norm:	EN 60974-1 "S" / CE
Torch connection:	Euro connector with 5-pole plug
Torch cooling:	integrated water cooling system
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	4 x 4 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	10 - 20 - 50 l cylinders
Lifting eyes:	4 pieces (option)
Weight:	150 kg
Dimensions l x w x h:	1020 x 476 x 970 mm incl. gas bottle holder and handle, without lifting eyes

MMA/stick electrode operation:	
Stick electrodes:	1.5 - 6 mm (Cel-suitable)
Open circuit voltage:	80 V
Welding voltage:	20 - 36.8 V
Welding current:	5 - 420 A
Duty cycle 40 % (10 min.):	420 A (40 °C)
Duty cycle 60 % (10 min.):	360 A (40 °C)
Duty cycle 100 %:	300 A (40 °C)
Prim. cont. power:	14.5 kVA
Prim. cont. current:	21 A
Prim. max. current:	28 A

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG AC/DC welding unit Insquare W 421 AC/DC**				
	A	**TIG welding unit Insquare W 421 AC/DC**		**02**	**122624**
	**AB**	**TIG welding unit Insquare W 421 AC/DC with accessories**		**02**	**SET122626**
	ABC1	**TIG welding unit Insquare W 421 AC/DC with access. and torch TH 452 W, 4 m**		**02**	**SET122628**
	ABC2	**TIG welding unit Insquare W 421 AC/DC with access. and torch TH 452 W, 8 m**		**02**	**SET122630**
B	**Standard accessories:**				
	B1	Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	TIG hand welding torch model TH 452 W-EURO, 4 m with Euro connector leather/rubber hose assembly		10	145086
	C2	TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector leather/rubber hose assembly		10	145088
	C3	TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector and potentiometer leather/rubber hose assembly		10	145090
D	**Accessories:**				
	D1	Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
	D2	Foot remote with 5 m cable and 10 pin plug		46	01903000
	D3	Foot remote with 8 m cable and 10 pin plug		46	01902999
	D4	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	D5	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	D6	Filter frame incl. filter for Insquare W 321 and 421		46	122626

	Pos.	Description	Pu	PrGrp	Part No.
	D7	Door for control panel with lock for Insquare 321 and 421		46	123836
	D8	Lifting eye screw, galvanized	4 pcs	46	09002001
	D9	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

E Robot and automation accessories:

	E1	Connection for automated welding - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	02010907
	E1.1	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	E2	Robot interface - 3 control channel (0-10 V) - emerg. STOP, welding ON, arc OK, - socket 24 pol.		17	01903066
	E2.1	Connection cable 24-pin., 5 m welding unit - robot		46	01903557
	E3	Bus connection EtherCAT		17	101687

F Accessories for synchron welding:

	F1	AC synchron welding incl. switch and socket		46	00503023
	F1.1	Test cable for AC synchron welding		46	00503024

5.2.11. Insquare W 600 AC/DC

Primary:	
Power supply:	3 x 400 V
Frequency:	50 Hz
TIG DC- and AC-Operation:	
Open circuit voltage:	80 V
Welding voltage:	10 - 34 V
Welding current:	20 - 600 A
Duty cycle 80 % (10 min.):	600 A
Duty cycle 100 %:	500 A (40 °C)
Prim. cont. power:	24.2 kVA
Prim. cont. current:	35 A
Prim. max. current:	42 A



Protection class:	IP 23
Insulation class:	H
Cooling:	AF
Main switch:	3-phase
Welding modes:	TIG DC (-), TIG DC (+), TIG DC (-) w. start puls (+), TIG AC "noise reduced", TIG AC "square arc", TIG AC "balanced TIG", MMA/stick electrode (-), MMA/stick electrode (+), MMA/stick electrode sinusodial, MMA/stick electrode square arc
Selector 1:	current 1, time 1, upslope and downslope time, start current, final current, ignition impulse, spot w. time, gas pre- and post-flow time
Selector 2:	current 2, time 2 (for pulsation), AC balance, AC frequency, hotstart time a. current, arc force, stick electrode diameter, display voltage
Adjusting:	2 rotary switches for selectors 1 and 2
Digital displays:	2 LED displays with pre-indication and hold function for current, voltage, time, frequency
Timer functions:	OFF, quick and slow pulsation, spot welding time
Ignition:	OFF, high frequency, LiftTIG
Energy control:	at the machine, at the remote controls, at the torch
Operation modes:	2-stroke, 4-stroke, 4-stroke with 2 currents, gas check, test, programming
Program storage:	20 programs
AC frequency:	50 - 200 Hz
AC balance:	9 - 91 %
Gas pre-flow time:	0 - 3 s
Gas post-flow time:	0 - 25 s
Up slope time:	0 - 2 s
Down slope time:	0 - 20 s
Ignition impulse:	0 - 100 ms
Spot welding time:	0.1 - 2.5 s

Pulsation slow:	10 ms - 2.5 s
Pulsation fast:	50 Hz - 5 kHz
Hotstart time:	0 - 1.5 s
Hotstart current:	10 - 200 %
Arc force:	100 - 250 %
Button:	test protection deviceg
Button:	program selection
LEDs:	mains ON, temperature protection failure, protection device, hold function, start current, up slope, down slope, current 1 + 2, final curr.
Power source:	inverter
Norm:	EN 60974-1 "S" / CE
Torch connection:	Euro connector with 5-pole plug
Torch cooling:	integrated water cooling system
Socket 50 mm²:	earth lead
Socket 50 mm²:	electrode welding cable
Mains supply cable:	4 x 6 mm², 5 m long with plug 3 x 400 V, 32 A
Gas hose:	2 m
Gas bottle holder:	10 - 20 - 50 l cylinders
Lifting eyes:	4 pieces (option)
Weight:	255 kg
Dimensions l x w x h:	1055 x 630 x 1290 mm incl. gas bottle holder and handle, without lifting eyes

MMA/stick electrode operation:	
Stick electrodes:	1.5 - 6 mm (Cel-suitable)
Open circuit voltage:	80 V
Welding voltage:	20 - 44 V
Welding current:	5 - 600 A
Duty cycle 50 % (10 min.):	600 A (40 °C)
Duty cycle 60 % (10 min.):	550 A (40 °C)
Duty cycle 100 %:	450 A (40 °C)
Prim. cont. power:	25.6 kVA
Prim. cont. current:	37 A
Prim. max. current:	50 A

	Pos.	Description	Pu	PrGrp	Part No.
A	**TIG AC/DC welding unit Insquare W 600 AC/DC**				
	A	**TIG welding unit Insquare W 600 AC/DC**		**02**	**100304**
	**AB**	**TIG welding unit Insquare W 600 AC/DC with accessories**		**02**	**SET100306**
	ABC	**TIG welding unit Insquare W 600 AC/DC with accessories and torch TH 600 W, 8 m**		**02**	**SET100308**
B	**Standard accessories:**				
	B1	Earth lead 120 mm², 4 m long with plug and earth clamp		46	02210396
	B2	Regulator argon/CO2, single stage		46	01200300
C	**Welding torches:**				
	C1	TIG hand welding torch model TH 600 W-EURO, 8 m with Euro connector leather/fabric		10	104410
	C2	TIG hand welding torch model TH 600 W-EURO, 8 m with Euro connector and potentiometer leather/fabric		10	104416
D	**Accessories:**				
	D1	Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
	D2	Foot remote with 5 m cable and 10 pin plug		46	01903000
	D3	Foot remote with 8 m cable and 10 pin plug		46	01902999
	D4	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	D5	Coolant ME-KM 22 eco, 10 l for welding units		07	169376
	D6	Filter frame incl. filter for IQ 300/420/600, CM 350/400, RM 3000/4000, reduced duty cycle	2 pcs	46	00501047
	D7	Filter mat 245 x 290 mm for Insquare 300/420/600, HighPULSE 282, 284, 352, 354 K, HighPULSE touch 280/350 K, CompactMIG 400 (min. 10 pieces)	10 pcs	46	00501048

	Pos.	Description	Pu	PrGrp	Part No.
	D8	Lifting eye screw, galvanized	4 pcs	46	09002001
	D9	Mains plug 5-pol. CEE, 63 A, 400 V		07	01201702
	D10	Professional instruction in the operation of the welding unit, approx. 2 hours		85	129584

E Robot and automation accessories:

	E1	Connection for automated welding - emerg. STOP, welding ON, arc OK - socket 6 pol.		46	02010907
	E1.1	Connection cable 6-pol welding unit - automated system, 5 m		46	01903593
	E2	Robot interface - 3 control channel (0-10 V) - emerg. STOP, welding ON, arc OK, - socket 24 pol.		17	01903066
	E2.1	Connection cable 24-pin., 5 m welding unit - robot		46	01903557
	E3	Bus connection EtherCAT		17	101687

F Accessories for synchron welding:

	F1	AC synchron welding incl. switch and socket		46	00503023
	F1.1	Test cable for AC synchron welding		46	00503024

6. TIG welding torches

Hand welding torches
6.1. **TH 202 G**
6.2. **TH 452 W**
6.3. **TH 600 W**

Machine welding torch
6.4. **TM 450 W**

Cold Wire Feed System
6.5. **KDFZ**



6.1. TH 202 G

TIG hand welding torch
TH 202 G
gas cooled



VERSIONS:

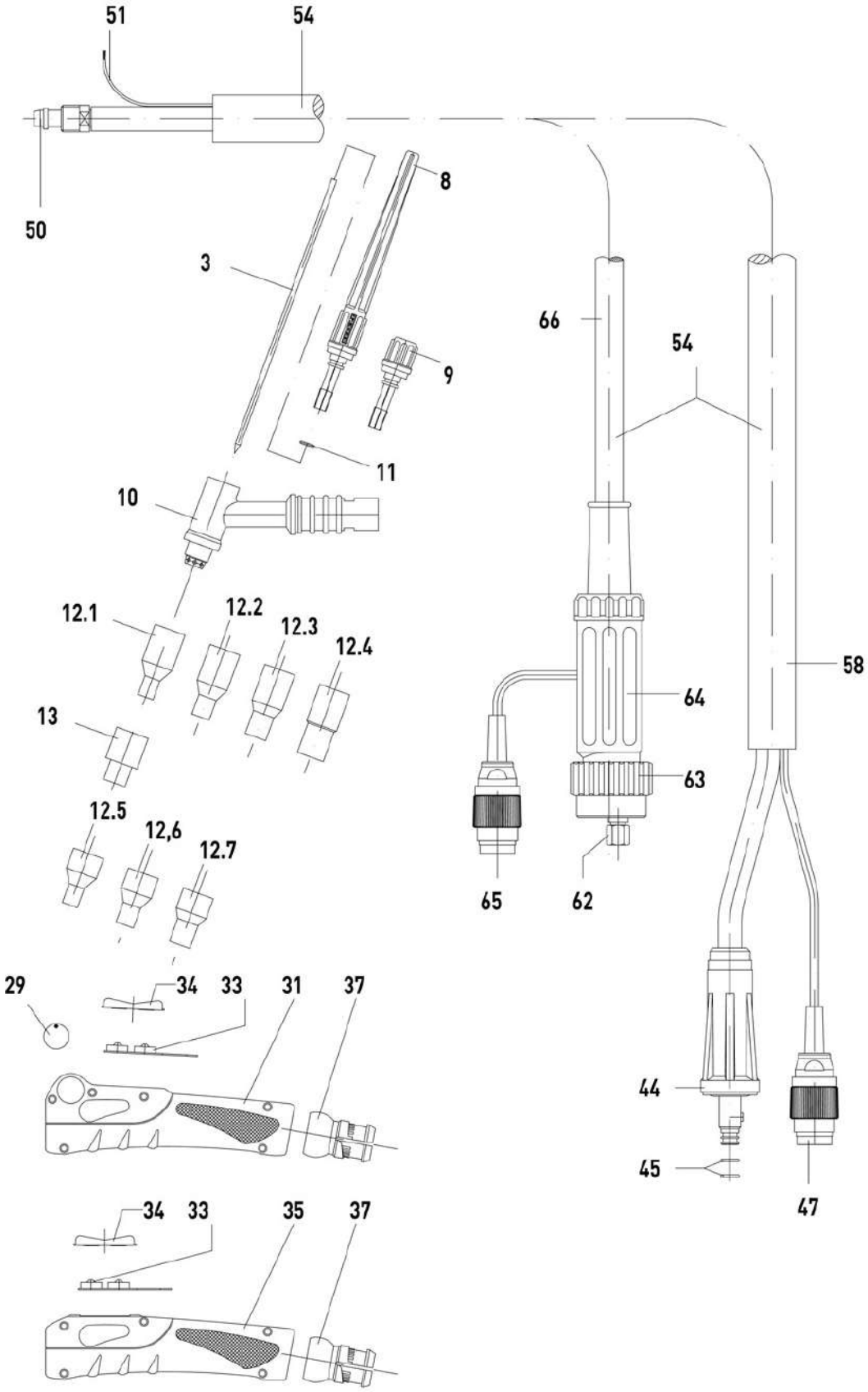


Standard



Potentiometer

TECHNICAL DATA:	
Cooling:	gas cooled
DC range:	200 A 40% duty cycle
AC range:	180 A 40% duty cycle*
	*at 30% positive polarity
Tungsten electrodes:	1.0 - 2.4 mm [
Weight:	230 g without hose assembly


51
54
50
8
3
9
11
10
12.1
12.2
12.3
12.4
13
12.5
12,6
12.7
29
34
33
31
37
34
33
35
37
66
54
58
64
63
65
62
44
45
47

Pos.	Description	Pu	PrGrp	Part No.
With Merkle TCG connection:				
	**TIG hand welding torch TH 202 G, 4 m with TCG connector, leather/rubber hose assembly**		**10**	**129516**
	TIG hand welding torch TH 202 G, 8 m with TCG connector, leather/rubber hose assembly		**10**	**129518**
	**TIG hand welding torch TH 202 G, 8 m with TCG connector & potentiometer leather/rubber hose assembly**		**10**	**129520**
With Euro connection:				
	**TIG hand welding torch model TH 202 G-EURO, 4 m with Euro connector leather/rubber hose assembly**		**10**	**129522**
	TIG hand welding torch model TH 202 G-EURO, 8 m with Euro connector leather/rubber hose assembly		**10**	**129526**
	**TIG hand welding torch model TH 202 G-EURO, 8 m with Euro connector & potentiometer leather/rubber hose assembly**		**10**	**129528**
With Euro connection for HighPULSE/MobiMIG:				
	**TIG hand welding torch TH 202 G-MAG, 4 m for HighPULSE 28x/35x K and MobiMIG with Euro connector leather/rubber hose assembly**		**10**	**133632**
	TIG hand welding torch TH 202 G-MAG, 8 m for HighPULSE 28x/35xK and MobiMIG with Euro connector leather/rubber hose assembly		**10**	**129532**
Standard equipment: 2.4 mm, ceramic 10.0				
Spare parts and consumables:				
	3.1 Tungsten-electrode, grey 1.0 x 175 mm	10 pcs	26	01300111
	3.2 Tungsten-electrode, grey 1.6 x 175 mm	10 pcs	26	01300112
	3.3 Tungsten-electrode, grey 2.4 x 175 mm	10 pcs	26	01300113
	8.1 Back cap "quick TIG" 1.0 mm, long TH 161/201/202 G		26	114184
	8.2 Back cap "quick TIG" 1.6 mm, long TH 161/201/202 G		26	114186
	8.3 Back cap "quick TIG" 2.4 mm, long TH 161/201/202 G		26	114188
	9.1 Back cap "quick TIG" 1.0 mm, short TH 161/201/202 G		26	114190
	9.2 Back cap "quick TIG" 1.6 mm, short TH 161/201/202 G		26	114192

	Pos.	Description	Pu	PrGrp	Part No.
	9.3	Back cap "quick TIG" 2.4 mm, short TH 161/201/202 G		26	114194
	10	Torch neck TH 202 G		26	129510
	11	O ring 9 x 1.5	10 pcs	26	02210704
	12.1	Ceramic nozzle 6.5 mm TH 202 G screwable version	10 pcs	26	128808
	12.2	Ceramic nozzle 8.0 mm TH 202 G screwable version	10 pcs	26	128806
	12.3	Ceramic nozzle 10.0 mm TH 202 G screwable version	10 pcs	26	128804
	12.4	Ceramic nozzle 12.5 mm TH 202 G screwable version	10 pcs	26	127348
	12.5	Ceramic nozzle 6.5 mm TH 202 G short screwable version, for gas lens	10 pcs	26	128814
	12.6	Ceramic nozzle 8.0 mm TH 202 G short screwable version, for gas lens		26	128812
	12.7	Ceramic nozzle 10.0 mm TH 202 G short screwable version, for gas lens		26	128810
	13.1	Gas lens 1.0 mm TH 202 G		26	129148
	13.2	Gas lens 1.6 mm TH 202 G		26	129146
	13.3	Gas lens 2.4 mm TH 202 G		26	129122
	29	Adjustment wheel incl. potentiometer for TH torch		26	108354
	31	Handle TIG torch, right and left side for torch with potentiometer (delivered without ball joint)		26	108368
	33	Pc board for TIG double button switch (for torch with ball joint)		26	107992
	34	Switch button (red) for TIG torch with ball joint		26	107994
	35	Handle TIG torch, right and left side (delivered without ball joint)		26	107988
	37	Kinking protection for TIG handle		26	107998

	Pos.	Description	Pu	PrGrp	Part No.
	44	Merkle TCG connector plug (gas cooled) incl. rubber housing and 2 o-rings		26	109554
	45	O-ring 8 x 1.6	10 pcs	22	103544
	47	Torch plug for TIG-torch (standard)		26	02110380
	50.1	Cable assembly 4 m, TH 201/202 G incl. Merkle TCG connector, control cable 3 x 0.5		26	106868
	50.2	Power cable 8 m TH 201/202 G		26	106872
	50.3	Power cable 8 m TH 201/202 G-MAG		26	107048
	51.1	Control cable 3 x 0.5 LIYY no shield		07	107646
	51.2	Control cable 5 x 0.5 LiYY no shield		26	107242
	54.1	Protection hose 4 m leather/rubber for TIG torch		26	114332
	54.2	Protection hose 8 m leather/rubber for TIG torch		26	114334
	58.1	Cable assembly 4 m, TH 201/202 G incl. Merkle TCG connector, control cable 3 x 0.5		26	106866
	58.2	Cable assembly 8 m, TH 201/202 G incl. Merkle TCG connector, control cable 3 x 0.5		26	106870
	58.3	Cable assembly 8 m, TH 201/202 G incl. Merkle TCG connector, control cable 5 x 1.5		26	106871

Hose assembly with Euro connector:

	62.1	Brass body for TIG Euro connector incl. nut 5/8"		26	01340048
	62.2	Brass body central connector MAG gas cooled		22	02511401
	63	Sleeve nut black		22	02510300
	64.1	Kinking protection at machine side TIG Euro connector (set 3 pieces)		26	01340049
	64.2	Kinking protection at machine side MIG Euro connector (set 3 pieces)		22	02511300
	65	Torch plug for TIG-torch (standard)		26	02110380
	66.1	Cable assembly 4 m, TH 201/202 G incl. Euro connector, control cable 3 x 0.5		26	108504

	Pos.	Description	Pu	PrGrp	Part No.
	66.2	Cable assembly 8 m, TH 201/202 G incl. Euro connector, control cable 3 x 0.5		26	108506
	66.3	Cable assembly 8 m, TH 201/202 G for torch with potentiometer incl. Euro connector, control cable 5 x 0.5		26	108507
	66.4	Cable assembly 4 m, TH 201/202 G-MAG incl. Euro connector, control cable 3 x 0.5		26	133634
	66.5	Cable assembly 8 m, TH 201/202 G-MAG incl. Euro connector, control cable 3 x 0.5		26	107047
		Double connector M 10 x 1		22	02511200

6.2. TH 452 W

TIG hand welding torch
TH 452 W
water cooled



VERSIONS:

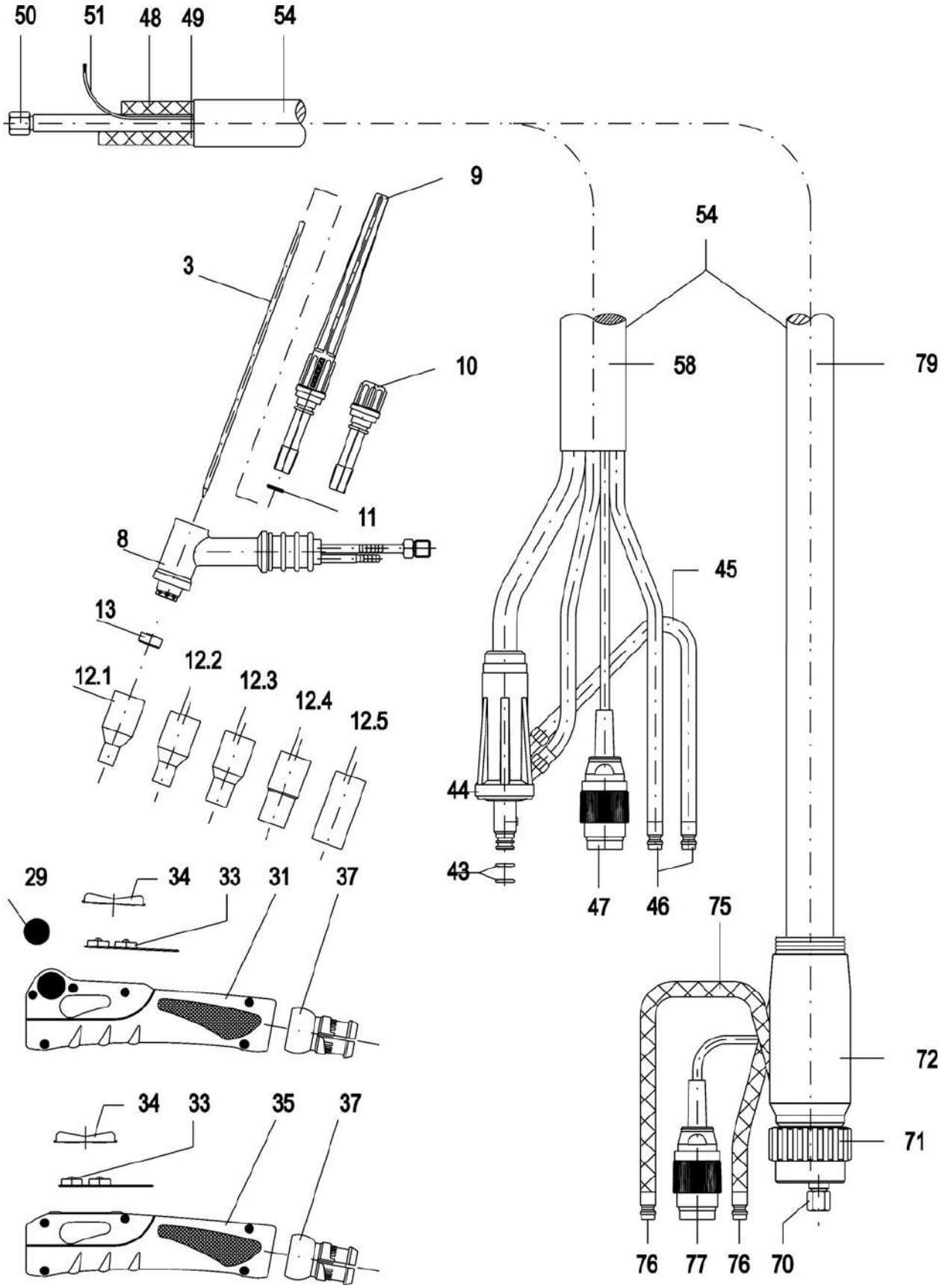


Standard



Potentiometer

TECHNICAL DATA:	
Cooling:	water cooled
DC range:	425 A 60% duty cycle
AC range:	385 A 60% duty cycle*
	*at 30% positive polarity
Tungsten electrodes:	1.0 - 4.0 mm [
Weight:	240 g without hose assembly


50
51
48
49
54
9
3
10
11
8
13
12.1
12.2
12.3
12.4
12.5
29
34
33
31
37
34
33
35
37
54
58
79
45
44
43
47
46
75
72
71
76
77
76
70

Pos.	Description	Pu	PrGrp	Part No.
	With Merkle TCG connection:			
	**TIG hand welding torch TH 452 W, 4 m with Merkle TCG connector, leather/rubber hose assembly**		**10**	**145080**
	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector, leather/rubber hose assembly		**10**	**145082**
	With Merkle TCG connection and potentiometer:			
	**TIG hand welding torch TH 452 W, 4 m with Merkle TCG connector and potentiometer leather/rubber hose assembly**		**10**	**145081**
	TIG hand welding torch TH 452 W, 8 m with Merkle TCG connector and potentiometer leather/rubber hose assembly		**10**	**145084**
	With Euro connection:			
	**TIG hand welding torch model TH 452 W-EURO, 4 m with Euro connector leather/rubber hose assembly**		**10**	**145086**
	TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector leather/rubber hose assembly		**10**	**145088**
	TIG hand welding torch model TH 452 W-MAG, 8 m for HighPULSE with Euro connector leather/rubber hose assembly		**10**	**145092**
	With Euro connection and potentiometer:			
	**TIG hand welding torch model TH 452 W-EURO, 4 m with Euro connector and potentiometer leather/rubber hose assembly**		**10**	**145087**
	TIG hand welding torch model TH 452 W-EURO, 8 m with Euro connector and potentiometer leather/rubber hose assembly		**10**	**145090**

Standard equipment: 3.2 mm, ceramic 12.5

! **Attention: Select gas nozzle holder (pos. 13) according to tungsten electrode diameter**

Spare parts and consumables:

3.1	Tungsten-electrode, grey 1.0 x 175 mm	10 pcs	26	01300111
3.2	Tungsten-electrode, grey 1.6 x 175 mm	10 pcs	26	01300112
3.3	Tungsten-electrode, grey 2.4 x 175 mm	10 pcs	26	01300113
3.4	Tungsten-electrode, grey 3.2 x 175 mm	10 pcs	26	01300114
3.5	Tungsten-electrode, grey 4.0 x 175 mm	10 pcs	26	01300115
8	Torch body TH 452 W		26	145016

	Pos.	Description	Pu	PrGrp	Part No.
	9.1	Back cap "quick TIG" 1.0 mm, long TH 452 W		26	142380
	9.2	Back cap "quick TIG" 1.6 mm, long TH 452 W		26	142382
	9.3	Back cap "quick TIG" 2.4 mm, long TH 452 W		26	142384
	9.4	Back cap "quick TIG" 3.2 mm, long TH 452 W		26	142400
	9.5	Back cap "quick TIG" 4.0 mm, long TH 452 W		26	142386
	10.1	Back cap "quick TIG" 1.0 mm, short TH 452 W		26	145430
	10.2	Back cap "quick TIG" 1.6 mm, short TH 452 W		26	145432
	10.3	Back cap "quick TIG" 2.4 mm, short TH 452 W		26	145434
	10.4	Back cap "quick TIG" 3.2 mm, short TH 452 W		26	145436
	10.5	Back cap "quick TIG" 4.0 mm, short TH 452 W		26	145438
	11	O ring 9 x 1.5	10 pcs	26	02210704
	12.1	Ceramic nozzle 6.5 TH 452 W	10 pcs	26	142402
	12.2	Ceramic nozzle 8.0 TH 452 W	10 pcs	26	142404
	12.3	Ceramic nozzle 10.0 TH 452 W	10 pcs	26	142406
	12.4	Ceramic nozzle 12.5 TH 452 W	10 pcs	26	142408
	12.5	Ceramic nozzle 15.0 TH 452 W	10 pcs	26	142410
	13.1	Gas nozzle holder 1.0 mm TH 452 W complete with integrated gas lense		26	142388
	13.2	Gas nozzle holder 1.6 mm TH 452 W complete with integrated gas lense		26	142390
	13.3	Gas nozzle holder 2.4 mm TH 452 W complete with integrated gas lense		26	142392
	13.4	Gas nozzle holder 3.2 mm TH 452 W complete with integrated gas lense		26	142394
	13.5	Gas nozzle holder 4.0 mm TH 452 W complete with integrated gas lense		26	142396
	29	Adjustment wheel incl. potentiometer for TH torch		26	108354
	31	Handle TIG torch, right and left side for torch with potentiometer (delivered without ball joint)		26	108368

	Pos.	Description	Pu	PrGrp	Part No.
	33	Pc board for TIG double button switch (for torch with ball joint)		26	107992
	34	Switch button (red) for TIG torch with ball joint		26	107994
	35	Handle TIG torch, right and left side (delivered without ball joint)		26	107988
	37	Kinking protection for TIG handle		26	107998
	43	O-ring 8 x 1.6	10 pcs	22	103544
	44	Merkle TCG connector plug (water cooled) incl. rubber housing and 2 o-rings		26	109556
	45	PVC hose 5 x 1.5, red per m		22	00600206
	46	Coupling nipple for water	10 pcs	22	02510400
	47	Torch plug for TIG-torch (standard)		26	02110380
	48	PVC hose 5 x 1.5, blue per m		22	00600205
	49	PVC hose 5 x 1.5, black per m		22	00600207
	50.1	Power cable TH 452 W, 4 m, 10 qmm, for torches with Merkle TCG and Euro connector		26	104378
	50.2	Power cable TH 452 W, 8 m, 10 qmm, for torches with Merkle TCG and Euro connector		26	104379
	51.1	Control cable 3 x 0.5 LIYY no shield		07	107646
	51.2	Control cable 5 x 0.5 LiYY no shield		26	107242
	54.1	Protection hose 4 m leather/rubber for TIG torch		26	114332
	54.2	Protection hose 8 m leather/rubber for TIG torch		26	114334
	58.1	Cable assembly TH 452 W, 4 m 10 qmm, Merkle TCG connector (control cable 3 x 0.5)		26	107652
	58.2	Cable assembly TH 452 W, 8 m 10 qmm, Merkle TCG connector (control cable 3 x 0.5)		26	107660
	58.3	Cable assembly TH 452 W, 4 m 10 qmm, Merkle TCG connector (control cable 5 x 0.5)		26	155618
	58.4	Cable assembly TH 452 W, 8 m 10 qmm, Merkle TCG connector (control cable 3 x 0.5)		26	107664

Hose assembly with Euro connector:

	Pos.	Description	Pu	PrGrp	Part No.
	70	Euro-connector for TIG torches, water cooled		26	01340061
	71	Sleeve nut black		22	02510300
	72	Kinking protection for water cooled TIG torches 3 pieces		22	117678
	75	PVC hose 5 x 1.5, red per m		22	00600206
	76	Coupling nipple for water	10 pcs	22	02510400
	77	Torch plug for TIG-torch (standard)		26	02110380
	79.1	Cable assembly TH/TM 452 W, 4 m 10 qmm, Euro connector, (control cable 3 x 0.5)		26	108362
	79.2	Cable assembly TH 452 W, 8 m 10 qmm, Euro connector, (control cable 3 x 0.5)		26	108364
	79.3	Cable assembly TH 452 W, 4 m 10 qmm, Euro connector, for torches with potentiometer (control cable 5 x 1.5)		26	155596
	79.4	Cable assembly TH 452 W, 8 m 10 qmm, Euro connector, for torches with potentiometer (control cable 5 x 0.5)		26	108366
	79.5	Cable assembly TH 452 W, 8 m MAG 10 qmm, MIG/MAG Euro connector, (control cable 3 x 1.5)		26	117928

6.3. TH 600 W

TIG hand welding torch
TH 600 W
water cooled



VERSIONS:

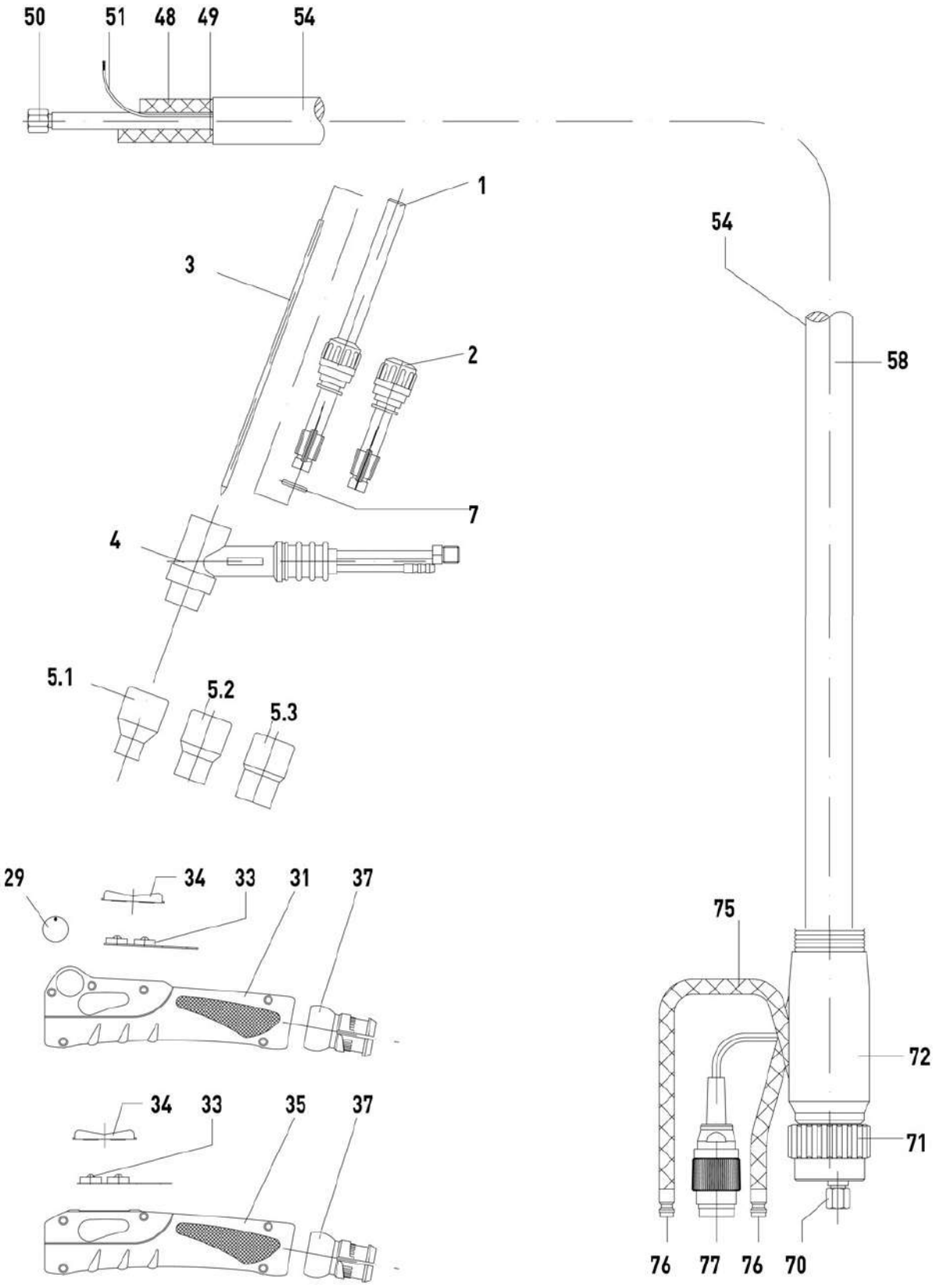


Standard



Potentiometer

TECHNICAL DATA:	
Cooling:	water cooled
DC range:	600 A 60% duty cycle
AC range:	600 A 60% duty cycle
Tungsten electrodes:	2.4 - 4.8 mm [
Weight:	360 g without hose assembly


50
51
48
49
54
1
3
2
7
4
5.1
5.2
5.3
29
34
33
31
37
34
33
35
37
54
58
75
72
71
76
77
76
70

	Pos.	Description	Pu	PrGrp	Part No.
TIG hand welding torch TH 600 W					
		**TIG hand welding torch model TH 600 W-EURO, 8 m with Euro connector leather/fabric**		**10**	**104410**
		**TIG hand welding torch model TH 600 W-EURO, 8 m with Euro connector and potentiometer leather/fabric**		**10**	**104416**
Standard equipment: 4.0 mm, ceramic 13.0					
Spare parts and consumables:					
	1.1	Back cap "quick TIG" 2.4 mm, long TH 600 W		26	107722
	1.2	Back cap "quick TIG" 3.2 mm, long TH 600 W		26	107724
	1.3	Back cap "quick TIG" 4.0 mm, long TH 600 W		26	107726
	1.4	Back cap "quick TIG" 4.8 mm, long TH 600 W		26	107728
	2.1	Back cap "quick TIG" 2.4 mm, short TH 600 W		26	107734
	2.2	Back cap "quick TIG" 3.2 mm, short TH 600 W		26	107736
	2.3	Back cap "quick TIG" 4.0 mm, short TH 600 W		26	107738
	2.4	Back cap "quick TIG" 4.8 mm, short TH 600 W		26	107740
	3.1	Tungsten-electrode, grey 2.4 x 175 mm	10 pcs	26	01300113
	3.2	Tungsten-electrode, grey 3.2 x 175 mm	10 pcs	26	01300114
	3.3	Tungsten-electrode, grey 4.0 x 175 mm	10 pcs	26	01300115
	3.4	Tungsten-electrode, grey 4.8 x 175 mm	10 pcs	26	01300116
	4	Torch neck TH 600 W		26	104270
	5.1	Ceramic nozzle 10.0, TH 600 W	10 pcs	26	104300
	5.2	Ceramic nozzle 13.0, TH 600 W	10 pcs	26	104302
	5.3	Ceramic nozzle 16.0, TH 600 W	10 pcs	26	104304
	7	O ring 11 x 2.5	10 pcs	26	05011829
	29	Adjustment wheel incl. potentiometer for TH torch		26	108354
	31	Handle TIG torch, right and left side for torch with potentiometer (delivered without ball joint)		26	108368
	33	Pc board for TIG double button switch (for torch with ball joint)		26	107992

	Pos.	Description	Pu	PrGrp	Part No.
	34	Switch button (red) for TIG torch with ball joint		26	107994
	35	Handle TIG torch, right and left side (delivered without ball joint)		26	107988
	37	Kinking protection for TIG handle		26	107998
	48	PVC hose 5 x 1.5, blue per m		22	00600205
	49	PVC hose 5 x 1.5, black per m		22	00600207
	50	Power cable TH 600 W, 8m, 16 qmm		26	107752
	51.1	Control cable 3 x 0.5 LIYY no shield		07	107646
	54	Protection hose 8 m leather/rubber for TIG torch		26	114334
	58.1	Cable assembly TH 600 W, 8 m 16 qmm, Euro connector		26	107744
	58.2	Cable assembly TH 600 W, 8 m 16 qmm, Euro connector for torch with potentiometer		26	107746
	70	Euro-connector for TIG torches, water cooled		26	01340061
	71	Sleeve nut black		22	02510300
	72	Kinking protection for water cooled TIG torches 3 pieces		22	117678
	75	PVC hose 5 x 1.5, red per m		22	00600206
	76	Coupling nipple for water	10 pcs	22	02510400
	77	Torch plug for TIG-torch (standard)		26	02110380

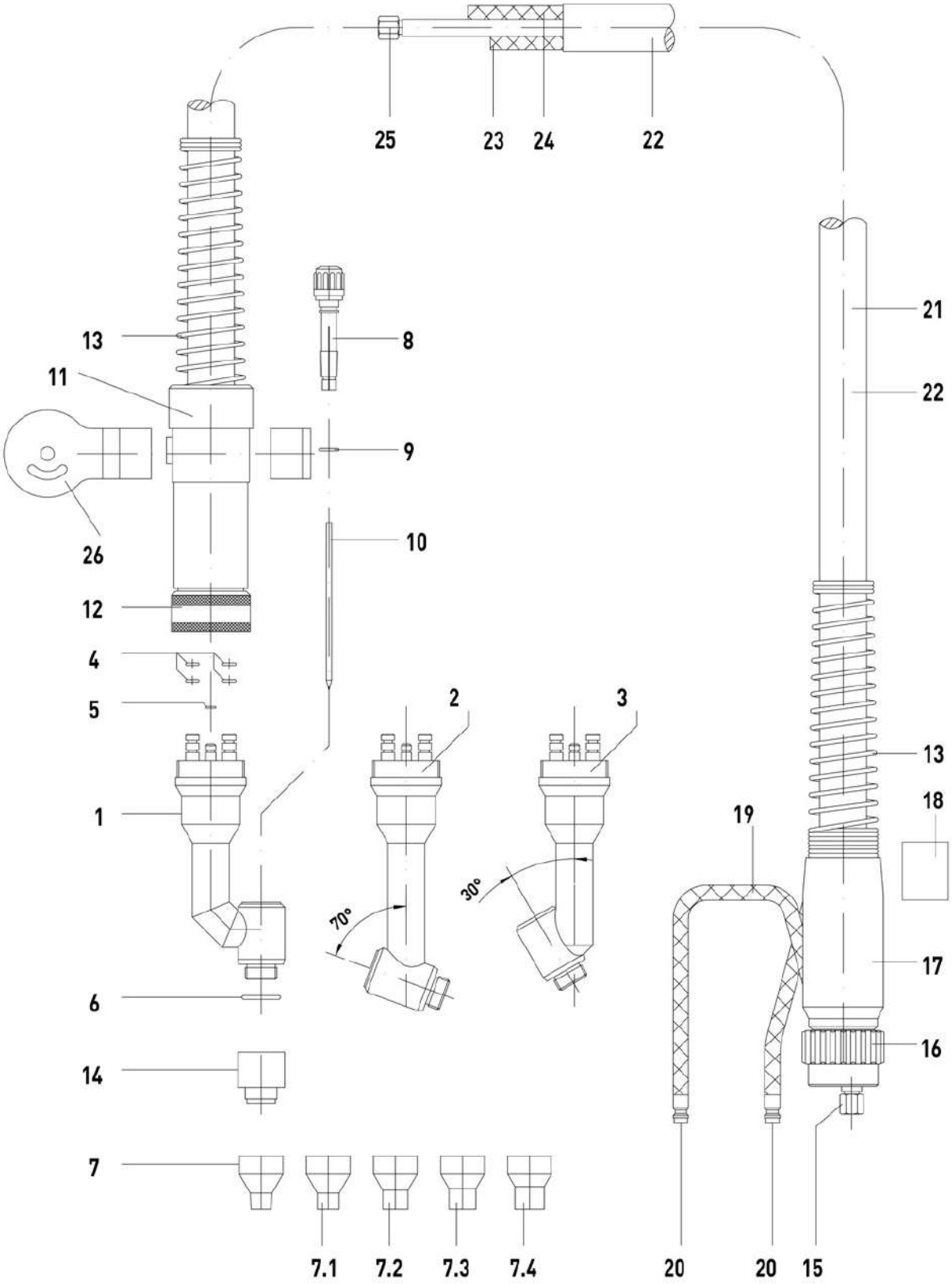
6.4. TM 450 W

TIG machine welding torch TM 450 W

water cooled / Euro connector
removable torch head
Versions of the torch head: straight, 30° bent, 70° bent



TECHNICAL DATA:	
Cooling:	water cooled
DC range:	450 A 60% duty cycle
AC range:	450 A 60% duty cycle
Tungsten electrodes:	1.0 - 4.0 mm [
Weight:	470 g torch head

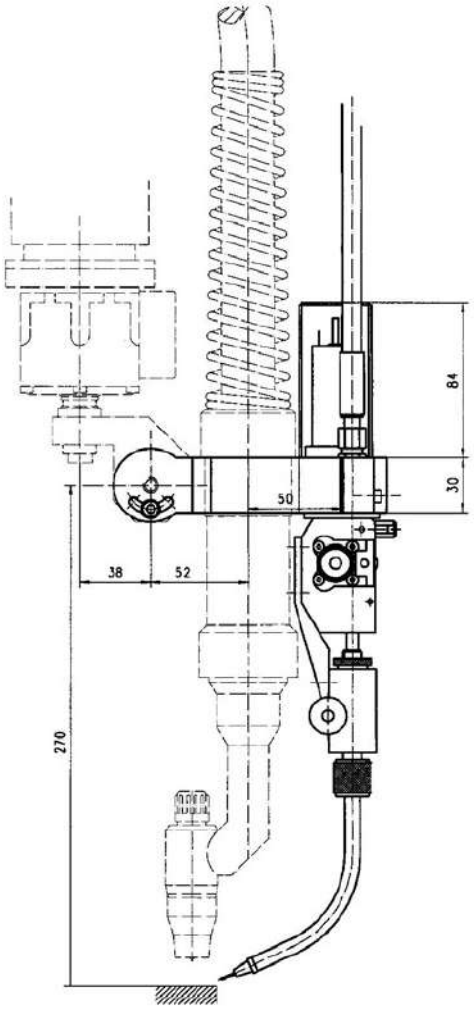

25
23
24
22
21
22
13
8
11
9
10
26
12
4
5
2
3
13
18
1
19
70°
30°
17
6
16
14
7
7.1
7.2
7.3
7.4
20
20
15

	Pos.	Description	Pu	PrGrp	Part No.
Hose assemblies:					
		Cable assembly TM 450 W, 4 m incl. upper torch head connector		**10**	**109406**
		Cable assembly TM 450 W, 8 m incl. upper torch head connector		**10**	**109408**
Torch heads:					
	**1**	**Torch head TM 450 W, straight**		**10**	**109392**
	**2**	**Torch head TM 450 W, 70° bent**		**10**	**109404**
	**3**	**Torch head TM 450 W, 30° bent**		**10**	**109400**
Spare parts and consumables:					
	4	O-ring 5 x 1.5 (PM 400/150)	10 pcs	26	103137
	5	O-ring 4 x 1 liner for steel 70 shore model PA431	10 pcs	22	02210333
	6	O ring 18 x 2.5	10 pcs	26	05011830
	7.1	Ceramic gas-nozzle size 4	10 pcs	26	01300066
	7.2	Ceramic gas-nozzle size 5	10 pcs	26	01300067
	7.3	Ceramic gas-nozzle size 6	10 pcs	26	01300068
	7.4	Ceramic gas-nozzle size 7	10 pcs	26	01300069
	7.5	Ceramic gas-nozzle size 8	10 pcs	26	01300070
	7.6	Ceramic gas-nozzle size 10	10 pcs	26	109870
	7.7	Ceramic gas-nozzle size 12	10 pcs	26	109872
	8	Back cap "quick TIG" 1.0 mm, short TH/TM 450 W		26	107685
	8.1	Back cap "quick TIG" 1.6 mm, short TH/TM 450 W		26	107687
	8.2	Back cap "quick TIG" 2.4 mm, short TH/TM 450 W		26	107689
	8.3	Back cap "quick TIG" 3.2 mm, short TH/TM 450 W		26	107693
	8.4	Back cap "quick TIG" 4.0 mm, short TH/TM 450 W		26	107695
	9	O ring 9 x 1.5	10 pcs	26	02210704
	10	Tungsten-electrode, grey 1.0 x 175 mm	10 pcs	26	01300111
	10.1	Tungsten-electrode, grey 1.6 x 175 mm	10 pcs	26	01300112
	10.2	Tungsten-electrode, grey 2.4 x 175 mm	10 pcs	26	01300113
	10.3	Tungsten-electrode, grey 3.2 x 175 mm	10 pcs	26	01300114
	10.4	Tungsten-electrode, grey 4.0 x 175 mm	10 pcs	26	01300115

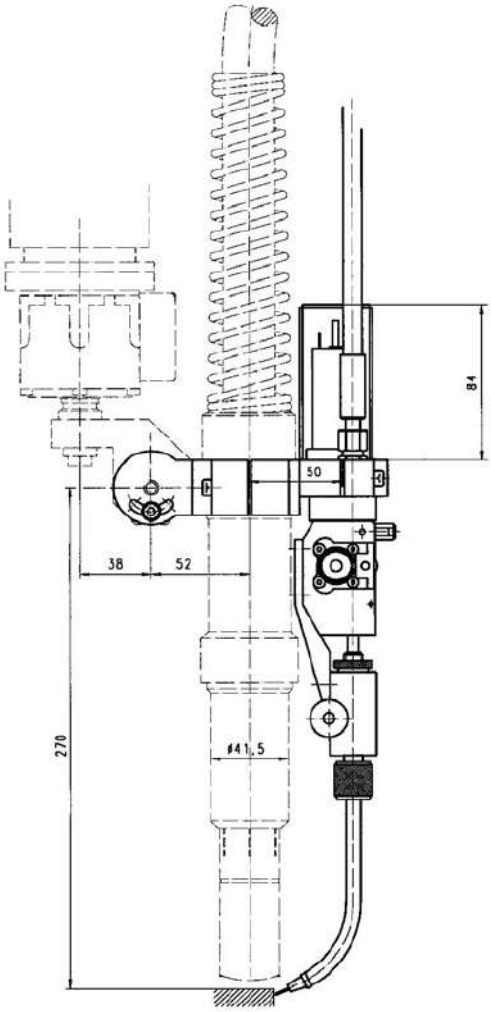
	Pos.	Description	Pu	PrGrp	Part No.
	11	Tube V2		26	140900
	11.1	Brass body for EURO connector, torch side, PM 150/400		24	103532
	12	Fastening nut TM 450 W		26	109388
	13	Spring for kinking protection Euro connector, water cooled		22	02211579
	14.1	Gas lense TM 450 W, 1.0 mm		26	125956
	14.2	Gas lense TM 450 W, 1.6 mm		26	125958
	14.3	Gas lense TM 450 W, 2.4 mm		26	125462
	14.4	Gas lense TM 450 W, 3.2 mm		26	125960
	14.5	Gas lense TM 450 W, 4.0 mm		26	125962
	15	Euro-connector for TIG torches, water cooled		26	01340061
	16	Sleeve nut black		22	02510300
	17	Kinking protection, intake water cooled		22	02510100
	18	Kinking protection for MIG torches water cooled		22	02211580
	19.1	PVC hose 7 x 2, black per m		07	00600105
	19.2	PVC hose 5 x 1.5, red per m		22	00600206
	20	Coupling nipple for water	10 pcs	22	02510400
	21	Cable assembly TH/TM 452 W, 4 m 10 qmm, Euro connector, (control cable 3 x 0.5)		26	108362
	21.1	Cable assembly TH 452 W, 8 m 10 qmm, Euro connector, (control cable 3 x 0.5)		26	108364
	22	Protection hose 25 x 1.5 black for water cooled torches, per m		22	134436
	23.1	PVC hose 7 x 2, black per m		07	00600105
	23.2	PVC hose 5 x 1.5, red per m		22	00600206
	24	PVC hose 5 x 1.5, black per m		22	00600207
	25	Power cable TH 452 W, 4 m, 10 qmm, for torches with Merkle TCG and Euro connector		26	104378
	25.1	Power cable TH 452 W, 8 m, 10 qmm, for torches with Merkle TCG and Euro connector		26	104379
	26	Torch holder TIG / Plasma for machine welding torch TM 450 W, PM 400 W		05	103567

6.5. KDZF

Cold Wire Feed System
Model KDZF



(with TM 450 W)



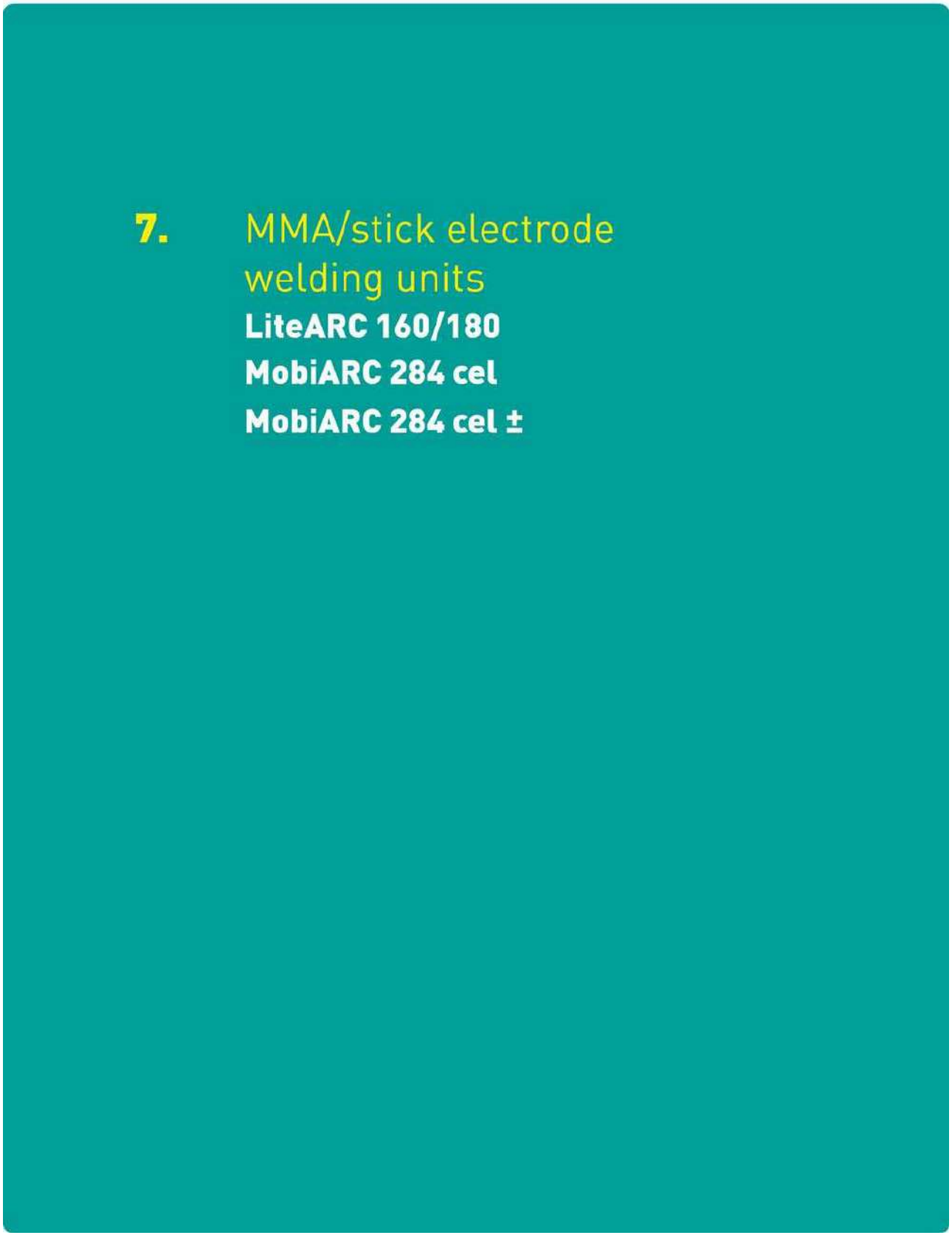
(with PM 400 W)

Technical Data:

Wire diameter:	0.8 - 1.2 mm
Wire feed speed:	0.5 - 5.0 m/min
Motor supply voltage:	42 V DC
Connection:	Euro connector and 10-pol plug

	Pos.	Description	Pu	PrGrp	Part No.
A	**Cold wire feed system WITH Push-Pull-operation:**				
	1a	Controller for cold wire feed KDZF with push-pull operation, installed in an automation system of Merkle		05	134570
	1b	Controller for cold wire feed KDZF with push-pull operation, installed inside HighTIG/HighPLAS incl. software		05	138921
	1c	Controller for cold wire feed KDZF with push-pull operation, model E052-DIS-PP installed in external cabinet supply voltage: 230 V incl. sequence controller		05	162546
	1d	Controller for cold wire feed KDZF with push-pull operation, model E052-ROB installed in an external cabinet supply voltage: 230 V control through: 1 x control voltage 0-3.3 V		05	145808
	1e	Connection cable 24-pol/10-pol. Power source to external KDZF controller housing, 4 m long		05	107410
	2	Wire feed unit DV-31 KDZF / HDZF for cold / hot wire feed / including 5 m control cable		05	104634
	3a	Cold Wire Feed KDZF with Feed Tube for PM 400 W (Mechanic with Motor) for Push-Pull use		05	141612
	3b	Cold Wire Feed KDZF with Feed Tube for TM 450 W (Mechanic with Motor) for Push-Pull use		05	141614
	4	Torch holder TIG / Plasma for machine welding torch TM 450 W, PM 400 W		05	103567
B	**Cold wire feed system WITHOUT Push-Pull-operation:**				
	1a	Controller for cold wire feed KDZF WITHOUT push-pull operation, installed inside HighTIG/HighPLAS incl. software		05	146018
	1b	Controller for cold wire feed KDZF without (!) push-pull operation, model E052-DIS installed in an external cabinet supply voltage: 230 V incl. sequence controller		05	162544
	1c	Connection cable 24-pol/10-pol. Power source to external KDZF controller housing, 4 m long		05	107410
	2	Wire feed unit DV-31 KDZF / HDZF for cold / hot wire feed / including 5 m control cable		05	104634
	3a	Cold Wire Feed KDZF without (!) Push-Pull with Feed Tube for PM 400 W		05	141608
	3b	Cold Wire Feed KDZF without (!) Push-Pull with Feed Tube for TM 450 W		05	141610
	4	Torch holder TIG / Plasma for machine welding torch TM 450 W, PM 400 W		05	103567

7. MMA/stick electrode welding units




MERKLE
LiteARC 180

7.1. LiteARC 160

Primary:		
Voltage:	1 x 230 V	
Frequency:	50 / 60 Hz	
Cont. power (MMA/TIG):	3.7 kVA / 2.8 kVA	
Cont. current (MMA/TIG):	16 A / 12 A	
Max. current (E/TIG):	26 A / 20 A	
MMA/stick electrode operation:		
Stick electrode:	1.5 - 3.25 mm	
Open circuit voltage:	64 V	
Welding voltage:	20.6 - 26.4 V	
Welding current:	15 - 160 A	
Duty cycle 25 % (10 min.):		150 A (40 °C)
Duty cycle 30 % (10 min.):	150 A (20 °C)	
Duty cycle 60 % (10 min.):	100 A (20 °C)	90 A (40 °C)
Duty cycle 100 %:	90 A (20 °C)	80 A (40 °C)



Protection class:	IP 23
Isolation class:	F
Cooling:	AF
Main switch:	2-phase
Operation modes:	MMA/stick welding, TIG (DC) welding with hotstart (fixed) LiftTIG ignition
Potentiometer:	welding current
LED:	mains ON
LED:	temperature protection
Functions:	anti stick, hotstart and arc force (fixed)
Norm:	EN 60974-1 "S" / CE
Socket 50 mm²:	earth lead cable
Socket 50 mm²:	electrode welding cable
Mains supply cable:	3 x 2.5 mm², 2.5 m long with plug schuko
Transport:	adjustable carry/shoulder strap
Protection cover:	in front of operation panel
Weight:	6.0 kg
Dimensions l x w x h:	360 x 150 x 240 mm

TIG operation:		
Open circuit voltage:	64 V	
Welding voltage:	10 - 16.4 V	
Welding current:	5 - 160 A	
Duty cycle 20 % (10 min.):		160 A (40 °C)
Duty cycle 25 % (10 min.):	160 A (20 °C)	
Duty cycle 60 % (10 min.):	100 A (20 °C)	90 A (40 °C)
Duty cycle 100 %:	90 A (20 °C)	80 A (40 °C)

	Pos.	Description	Pu	PrGrp	Part No.
A	**MMA/stick electrode and TIG welding unit LiteARC 160**				
	**A**	**MMA/Stick electrode and TIG welding unit model LiteARC 160**		**47**	**153772**
	AB	**MMA/Stick electrode and TIG welding unit model LiteARC 160 incl. accessories**		**47**	**SET153774**
B	**Standard accessories:**				
	B1	Earth lead 16 mm², 4 m long with plug 50 mm² and earth clamp		46	02210385
	B2	Electrode welding cable 16 mm², 4 m incl. plug 50 mm² electrode holder		46	115702
C	**Accessories:**				
	C1	Transportation box black material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 50 x 35 x 19.4 cm		46	n01200370
	C2	Filter frame inkl. filter mat for LiteARC and LiteTIG 160, 180, 210 (assembly only at Merkle with special tool)		46	158294
	C3	Filter mat 120 x 125 mm for LiteARC and LiteTIG 160, 190		46	158292
	C4	Handle set for LiteARC 160/180		46	158340
D	**Accessories for TIG welding:**				
	D1	TIG hand welding torch WHL 17-H with manual gas valve, 8 m and single connetor 50 mm2		10	101036
	D2	Regulator argon/CO2 standard version		46	107018

7.2. LiteARC 180

Primary:	
Voltage:	1 x 230 V
Frequency:	50 / 60 Hz
Cont. current:	16 A
Max. current (MMA/TIG):	35 A / 28 A
MMA/stick electrode operation:	
Stick electrode:	1.5 - 4 mm
Open circuit voltage:	68 V
Welding voltage:	20.8 - 26.8 V
Welding current:	20 - 170 A
Duty cycle 25 % (10 min.):	170 A (40 °C)
Duty cycle 60 % (10 min.):	130 A (40 °C)



Protection class:	IP 23
Isolation class:	H
Cooling:	AF
Main switch:	2-phase
Operation modes:	MMA/stick welding, with anti stick, arc force and hotstart TIG (DC) welding with LiftTIG ignition
Rotary switch:	welding current
Digital display:	welding current
LEDs:	mains ON temperature protection operation mode MMA/TIG hotstart arc force
Functions:	hotstart (adjustable) arc force (adjustable) anti stick
Norm:	EN 60974-1 "S" / CE
Socket 50 mm²:	earth lead cable
Socket 50 mm²:	electrode welding cable
Mains supply cable:	3 x 2.5 mm², 5 m long with plug schuko
Transport:	adjustable carry/shoulder strap
Weight:	5.2 kg
Dimensions l x w x h:	360 x 150 x 240 mm

TIG operation:	
Open circuit voltage:	68 V
Welding voltage:	10.4 - 17.2 V
Welding current:	10 - 180 A
Duty cycle 25 % (10 min.):	180 A (40 °C)
Duty cycle 60 % (10 min.):	130 A (40 °C)

	Pos.	Description	Pu	PrGrp	Part No.
A	**MMA/stick electrode and TIG welding unit LiteARC 180**				
	**A**	**MMA/Stick electrode and TIG welding unit model LiteARC 180**		**47**	**157786**
	AB	**MMA/Stick electrode and TIG welding unit model LiteARC 180 incl. accessories**		**47**	**SET146372**
B	**Standard accessories:**				
	B1	Earth lead 16 mm², 4 m long with plug 50 mm² and earth clamp		46	02210385
	B2	Electrode welding cable 16 mm², 4 m incl. plug 50 mm² electrode holder		46	115702
C	**Accessories:**				
	C1	Transportation box black material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 50 x 35 x 19.4 cm		46	n01200370
	C2	Filter frame inkl. filter mat for LiteARC and LiteTIG 160, 180, 210 (assembly only at Merkle with special tool)		46	158294
	C3	Filter mat 120 x 125 mm for LiteARC and LiteTIG 160, 190		46	158292
	C4	Handle set for LiteARC 160/180		46	158340
	C5	Remote control socket (5 pol) for LiteARC 180/200		46	157166
	C6	Hand remote control MFR-11 for LiteARC 180/200 with magnet, 5 m cable, 5 pol plug		46	157168
D	**Accessories for TIG welding:**				
	D1	TIG hand welding torch WHL 17-H with manual gas valve, 8 m and single connetor 50 mm2		10	101036
	D2	Regulator argon/CO2 standard version		46	107018

7.3. MobiARC 284 cel

Primary:		
Voltage:	3 x 400 V	
Frequency:	50 / 60 Hz	
Data at mains input:	**3 x 400 V**	**1 x 230 V***
Cont. power (TIG/MMA):	8.3 / 9.7 kVA	3.2 / 3.7 kVA
Cont. current (TIG/MMA):	12 / 14 A	14 / 16 A
Max. current (TIG/MMA):	16 / 21 A	26 / 26 A
MMA/stick electrode operation:		
Stick electrode:	1.5 - 6.0 mm (Cel-suitable)	1.5 - 3.25 mm
Open circuit voltage:	90 V	103 V
Welding voltage:	20.8 - 31.2 V	20.8 - 26.4 V
Welding current:	20 - 280 A	20 -160 A
Duty cycle 35 %:	280 A (40 °C)	150 A (20 °C)
Duty cycle 50 %:	250 A (40 °C)	
Duty cycle 60 %:	240 A (40 °C)	90 A (40 °C)
Duty cycle 100 %:	210 A (40 °C)	80 A (40 °C)



Protection class:	IP 23
Isolation class:	H
Cooling:	AF
Main switch:	3-phasig
Operation modes:	MMA/stick welding, TIG (DC) welding with LiftTIG ignition
Settings:	welding current, hotstart current, hotstart time, TIG down slope time, electrode type
LEDs:	mains ON, welding ON, failure, temperature protection
Display:	LED indication for current, time, voltage
Electrode type:	selectable rutile, basic, cellulose
Remote control:	power socket 10-pole
VRD:	optional
Power source:	inverter
Norm:	EN 60974-1 "S" / CE
Socket 50 mm²:	earth lead cable
Socket 50 mm²:	electrode welding cable
Mains supply cable:	4 x 2.5 mm² 5 m long with plug 400 V, 16 A
Weight:	17 kg
Dimensions l x w x h:	495 x 210 x 450 mm

Data at mains input:	**3 x 400 V**	**1 x 230 V***
TIG operation:		
Open circuit voltage:	90 V	103 V
Welding voltage:	10 - 21.2 V	10 - 16.4 V
Welding current:	3 - 280 A	3 - 160 A
Duty cycle 35 %:	280 A (40 °C)	150 A (20 °C)
Duty cycle 50 %:	250 A (40 °C)	
Duty cycle 60 %:	240 A (40 °C)	90 A (40 °C)
Duty cycle 100 %:	210 A (40 °C)	80 A (40 °C)

*: BiPowerPLUS: Multi voltage supply system:
automatic switiching between 1 and
3 phase in the range 220 – 400 V (option)

	Pos.	Description	Pu	PrGrp	Part No.
A	**MMA/stick electrode and TIG welding unit MobiARC 284 cel**				
	**A**	**MMA/stick electrode welding unit model MobiARC 284 cel**		**45**	**143078**
	AB	**MMA/Stick electrode welding unit model MobiARC 284 cel incl. accessories**		**45**	**SET143110**
B	**Standard accessories:**				
	B1	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	B2	Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
C	**Accessories:**				
	C1	BiPowerPLUS for series MobiMIG 280 K, MobiARC 282/284 cel, MobiTIG 284/304 DC		46	131445
	C2	Adapter: Schuko plug 230 V to CEE connector 16 A/400 V for MobiARC 282/284 cel, MobiTIG 284/304 DC, MobiMIG 280/300/320 K		46	130766
	C3	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	C4	Special cable, shielded with copper coat, 7 x 0,75 110 (per 1m)		07	00701015
D	**Electrode and earth cable:**				
	Up to 10 m length:				
		Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
		Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
		Welding cable, 35 mm², black (per m)		07	00900200
	Up to 25 m length:				
		Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
		Electrode welding cable 50 mm², 5 m incl. plug and electrode holder		46	129354

	Pos.	Description	Pu	PrGrp	Part No.
		Welding cable 50 mm², black (per m)		07	00900300

Up to 50 m length:

		Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
		Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
		Welding cable, 70 mm², black (per m)		07	00900400

7.4. MobiARC 284 cel ±

Primary:	
Voltage:	3 x 400 V
Frequency:	50 / 60 Hz
Cont. power (MMA/TIG):	9.7 kVA / 8.3 kVA
Cont. current (MMA/TIG):	14 A / 12 A
Max. current (MMA/TIG):	21 A / 16 A

MMA/stick electrode operation:

Stick electrode:	1.5 - 6.0 mm (Cel-suitable)	
Open circuit voltage:	90 V	
Welding voltage:	20.6 - 31.2 V	
Welding current:	15 - 280 A	
Duty cycle 35 %:		280 A (40 °C)
Duty cycle 50 %:	280 A (20 °C)	250 A (40 °C)
Duty cycle 60 %:	260 A (20 °C)	240 A (40 °C)
Duty cycle 100 %:	240 A (20 °C)	210 A (40° C)



Protection class:	IP 23
Isolation class:	H
Cooling:	AF
Main switch:	3-phase
Operation modes:	MMA/stick welding, TIG (DC) welding with LiftTIG ignition
Settings:	welding current, Hotstart current, Hotstart time, TIG down slope time, electrode type
LEDs:	mains ON, welding ON, failure, temperature protection
Display:	LED indication for current, time, voltage
Electrode type:	selectable rutile, basic, cellulose
Remote control:	socket 10-pole polarity switch
VRD:	optional
Power source:	inverter
Norm:	EN 60974-1 "S" / CE
Socket 50 mm²:	earth lead cable
Socket 50 mm²:	electrode welding cable
Mains supply cable:	4 x 2.5 mm² 5 m long with plug 400 V, 16 A
Weight:	19 kg
Dimensions l x w x h:	495 x 210 x 450 mm

TIG operation:

Open circuit voltage:	90 V	
Welding voltage:	10 - 21.2 V	
Welding current:	5 - 280 A	
Duty cyle 35 %:		280 A (40 °C)
Duty cycle 50 %:	280 A (20 °C)	250 A (40 °C)
Duty cycle 60 %:	270 A (20 °C)	240 A (40 °C)
Duty cycle 100 %:	240 A (20 °C)	210 A (40 °C)

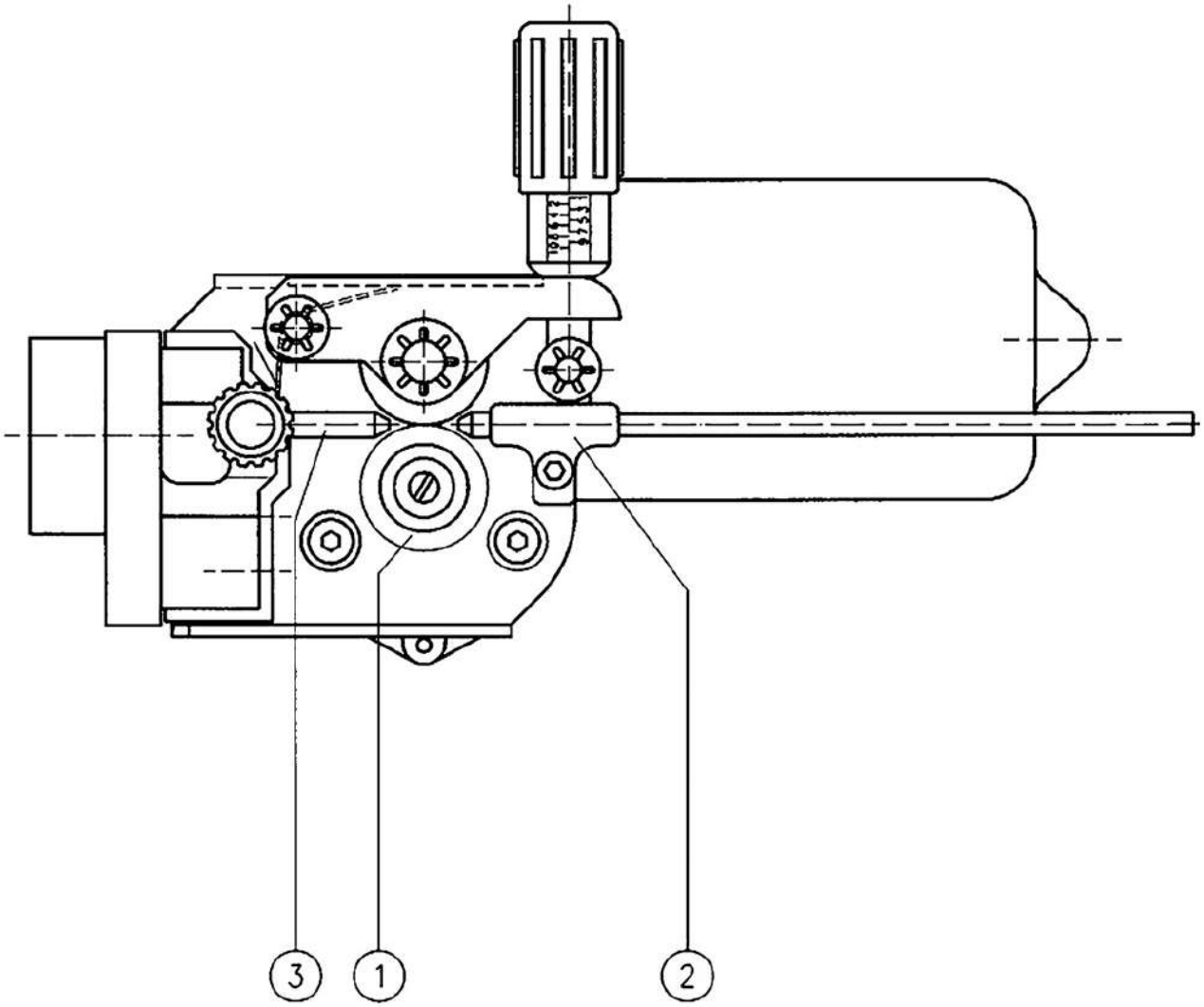
	Pos.	Description	Pu	PrGrp	Part No.
A		**MMA/stick electrode and TIG welding unit MobiARC 284 cel ±**			
	**A**	**MMA/Stick electrode welding unit MobiARC 284 cel ± with polarity switch**		**45**	**143112**
	AB	**MMA/Stick electrode welding unit MobiARC 284 cel ± with polarity switch incl. accessories**		**45**	**SET143114**
B		**Standard accessories:**			
		Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
		Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
		Accessories:			
		Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
		Special cable, shielded with copper coat, 7 x 0,75 110 (per 1m)		07	00701015
		Electrode and earth cable:			
		Up to 10 m length:			
		Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
		Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
		Welding cable, 35 mm², black (per m)		07	00900200
		Up to 25 m length:			
		Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
		Electrode welding cable 50 mm², 5 m incl. plug and electrode holder		46	129354
		Welding cable 50 mm², black (per m)		07	00900300
		Up to 50 m length:			
		Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408

	Pos.	Description	Pu	PrGrp	Part No.
		Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
		Welding cable, 70 mm², black (per m)		07	00900400

8. Accessories

8.1. Wire feeder gear DV-21
8.2. Wire feeder gear DV-26
8.3. Wire feeder gear DV-31
8.4. Water cooling units
8.5. WeldFACTORY i4.0 (Q.MACS)
8.6. Software, program updates, calibration
8.7. Calibration unit MCU 1000
8.8. Accessories
8.9. Promotional items
8.10. Brochures and catalogs

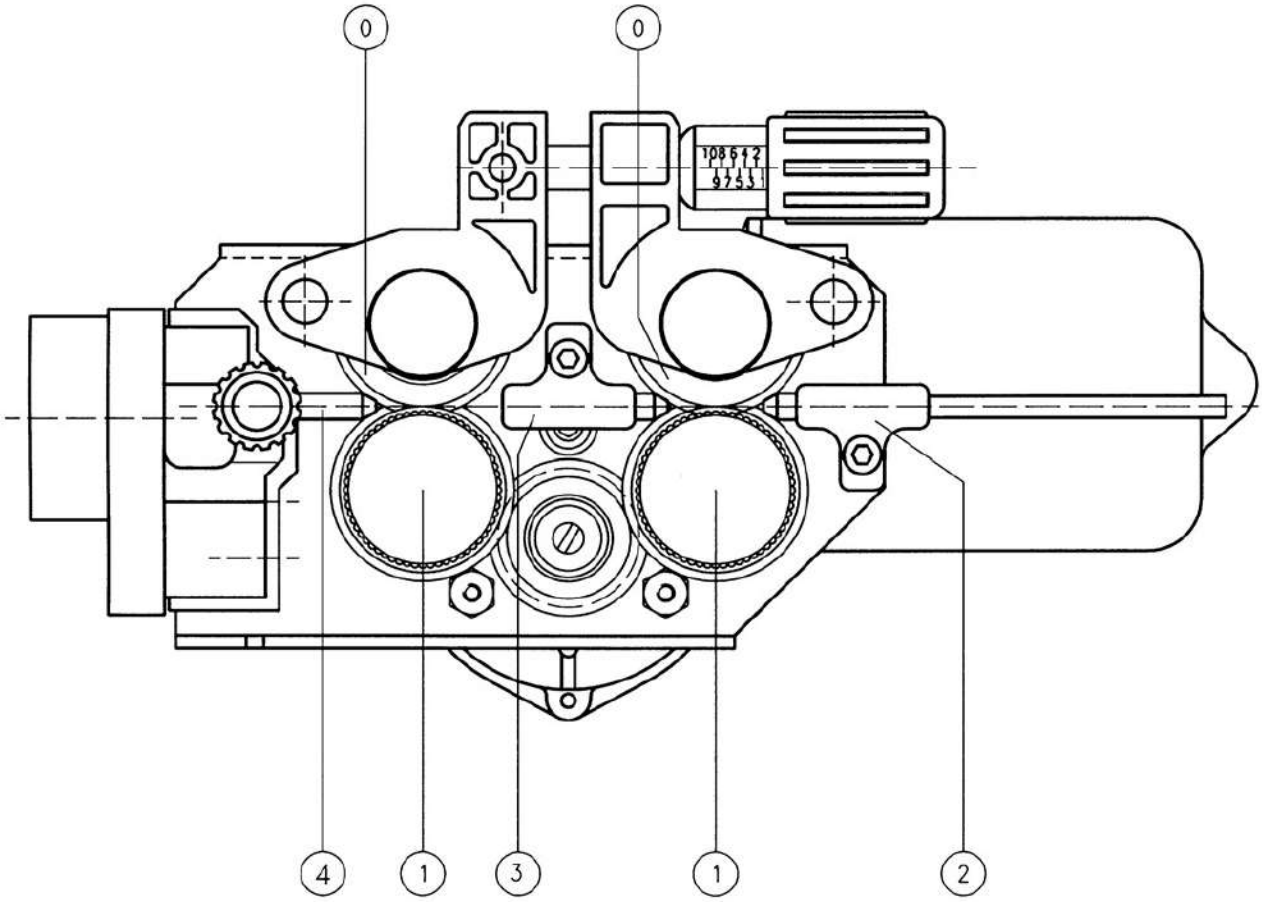
8.1. Wire feeder DV-21



	Pos.	Description	Pu	PrGrp	Part No.
2-roller drive wire feeder DV-21					
		**2-roller drive wire feeder DV-21, gear block with motor, Euro connector and drive roller**		**07**	**113756**
Additional wire equipment for DV-21:					
	A	**Kit for mild steel 0.6 mm (DV-21,20/2) (without contact tips)**		**46**	**01200387**
	B	**Kit for mild steel 0.8 mm (DV-21,20/2) (without contact tips)**		**46**	**01200388**
	**C**	**Kit for mild steel 1.0 mm (DV-21,20/2) (without contact tips)**		**46**	**01200389**
	D	**Kit for stainless steel 0.8 mm (DV-21,20/2) (without contact tips)**		**46**	**01200390**
	E	**Kit for stainless steel 1.0 mm (DV-21,20/2) (without contact tips)**		**46**	**01200391**
	F	**Kit for aluminium 1.0 mm (DV-21,20/2) (without contact tips)**		**46**	**01200392**
1 Drive rollers:					
	1.1	Drive roller steel 0.6/0.6 (DV-21,20/2)		46	01200215
	1.2	Drive roller steel 0.8/1.0 (DV-21,20/2)		46	01200209
	1.3	Drive roller steel 0.8/1.2 (DV-21,20/2)		46	01200216
	1.4	Drive roller alu 1.0/1.2 (DV-21,20/2)		46	01200212
2 Insertion piece:					
	2.1	Insertion piece DV-21, 26 complete with insertion liner		46	117938
3 Outgoing nozzle:					
	3.1	Outgoing and guidance nozzle pvc, DV-21, 20/2		46	01200384
4 Wire feed liners:					
	4.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
	4.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247
	4.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
	4.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
	4.5	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586

Pos.	Description	Pu	PrGrp	Part No.
5	**Contact tips (for SB/SBT 157 G):**			
				
5.1	Contact tip 0.6 mm SB/SBT 157 G M6 x 0.75 ECU	20 pcs	22	152181
5.2	Contact tip 0.8 mm SB/SBT 157 G M6 x 0.75 ECU	20 pcs	22	152180
5.3	Contact tip 1.0 mm SB/SBT 157 G M6 x 0.75 ECU	20 pcs	22	152182
6	**Contact tips (for SB/SBT 307 G):**			
				
6.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
6.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
6.3	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816

8.2. Wire feeder DV-26



	Pos.	Description	Pu	PrGrp	Part No.
4-roller drive wire feeder DV-26					
		**4-roller drive wire feeder DV-26 incl. motor nd Euro connector incl. pressure rollers, drive pinion and roller carrier from metal. without drive rings,**		**07**	**113564**
		4-roller drive wire feeder DV-26 incl. motor and Euro connector incl. pressure rollers, drive pinion and roller carrier from plastic. without drive rings,		**07**	**160772**
Additional wire equipment for DV-26:					
	A	**Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113846**
	B	**Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113848**
	**C**	**Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113852**
	D	**Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113854**
	E	**Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113858**
	F	**Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113860**
Components for additional wire equipment:					
	0.1	Pressure ring DV-26/31/32		46	124724
	0.2a	Roller carrier metal DV-26/30/31/32 with ball bearing		07	110560
	0.2b	Roller carrier plastic DV-26/31/32 with ball bearing		07	160768
	0.3	Distance ring for core wire equipment DV-26, DV-31		46	126968
	0.4a	Drive pinion DV-26, metal		07	113580
	0.4b	Drive pinion DV-26, plastic		07	158330
1 Drive rollers:					
	1.0	Drive ring steel 0.6 + 0.8 DV-26/31/32		46	113945
	1.1	Drive ring steel 0.8 + 1.0 DV-26/31/32		46	113946
	1.2	Drive ring steel 1.0 + 1.2 DV-26/31/32		46	01200272
	1.3	Drive ring steel 0.9 + 0.9 DV-26/31/32		46	01200262
	1.4	Drive ring alu 1.0 + 1.2 DV-26/31/32		46	01200281

	Pos.	Description	Pu	PrGrp	Part No.
	1.5	Drive ring alu 0.8 + 1.6 DV-26/31/32		46	01200282

2 Insertion piece:



2.1	Insertion piece DV-21, 26 complete with insertion liner		46	117938

3 Insertion and guidance nozzle:



3.1	Guidance piece with double guide DV-21/26		46	131508

4 Outgoing nozzle:



4.1	Outgoing nozzle DV-26, 31, 30/4 0.8 - 1.6 mm		46	110554

5 Wire feed liners:



5.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
5.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247



5.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
5.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
5.5	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 5 m long		22	113512



5.6	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
5.7	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520



5.8	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
5.9	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574



5.10	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 3 m (black, 2.7 x 4.7)		22	02210588
5.11	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 4 m (black, 2.7 x 4.7)		22	132788

6 Contact tips (for SB/SBT 157 G):



6.1	Contact tip 0.6 mm SB/SBT 157 G M6 x 0.75 ECU	20 pcs	22	152181
6.2	Contact tip 0.8 mm SB/SBT 157 G M6 x 0.75 ECU	20 pcs	22	152180
6.3	Contact tip 1.0 mm SB/SBT 157 G M6 x 0.75 ECU	20 pcs	22	152182

7 Contact tips SB/SBT 307/351/352/504:

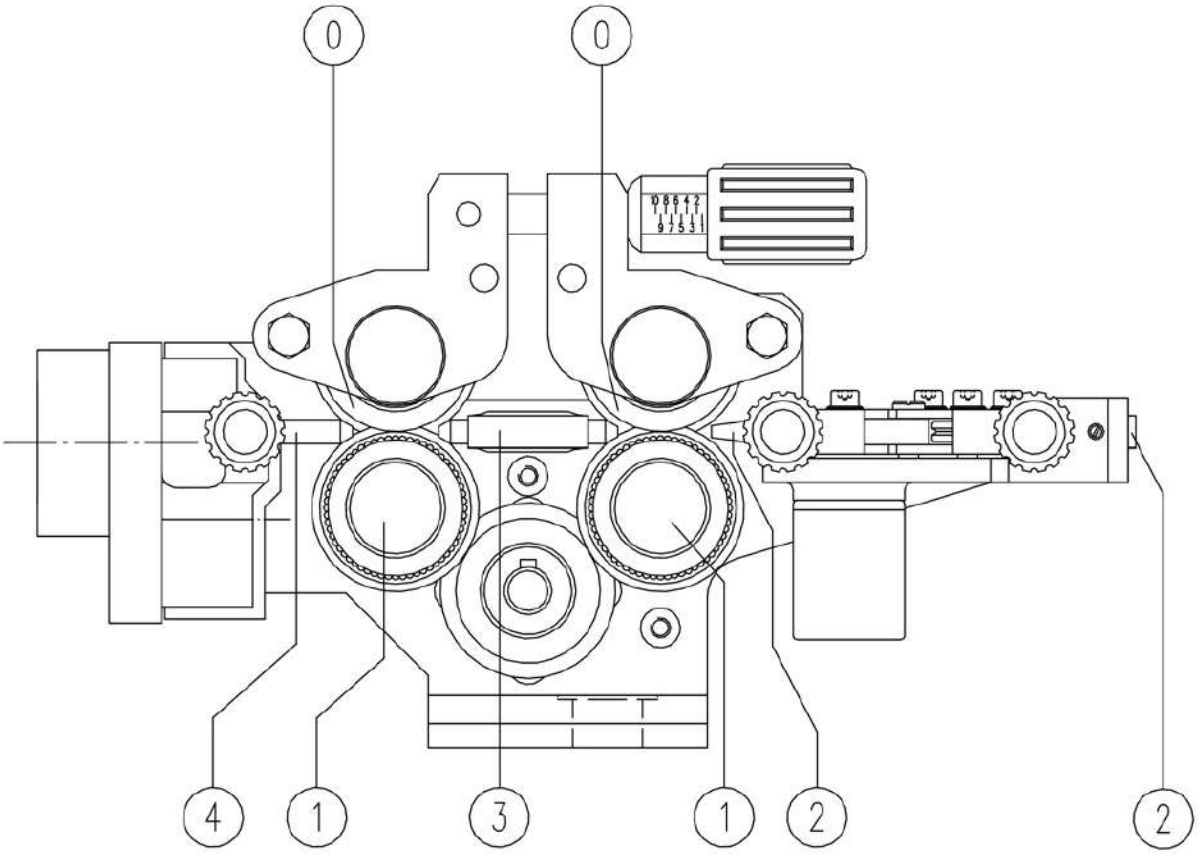


7.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
7.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
7.3	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
7.4	Contact tip Cu-Cr-Zr 1.4 mm M8	20 pcs	22	04511819
7.5	Contact tip Cu-Cr-Zr 1.6 mm M8	20 pcs	22	04511817



Pos.	Description	Pu	PrGrp	Part No.
7.6	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
7.7	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
7.8	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758
7.9	Contact tip 1.6 mm alu CuCrZr M8	20 pcs	22	04511818

8.3. Wire feeder DV-31



	Pos.	Description	Pu	PrGrp	Part No.
4-roller drive wire feeder DV-31					
		**4-roller drive wire feeder DV-31 (OT), incl. motor without tacho and Euro connector incl. pressure rollers, without drive rings**		**07**	**113836**
Additional wire equipment for DV-31:					
	A	**Kit for mild steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113846**
	B	**Kit for mild steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113848**
	C	**Kit for mild steel 1.6 mm (DV-31/32) (2 drive rings and wire core)**		**46**	**113850**
	D	**Kit for stainl. steel 0.8 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113852**
	E	**Kit for stainl. steel 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113854**
	**F**	**Kit for stainl. steel 1.6 mm (DV-31/32) (2 drive rings and wire core)**		**46**	**113856**
	G	**Kit for alu 0.8 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113858**
	H	**Kit for alu 1.0/1.2 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113860**
	I	**Kit for alu 1.6 mm (DV-31/32) (2 drive rings and wire core)**		**46**	**113862**
	J	**Kit for core wire 1.2 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113864**
	K	**Kit for core wire 1.6 mm (DV-26/31/32) (2 drive rings and wire core)**		**46**	**113866**
	L	**Kit for core wire 2.0/2.4 mm (DV-31/32) (4 drive rings etc.)**		**46**	**113868**
	**M**	**Kit for core wire 2.8 mm (DV-31/32) (4 drive rings, etc.)**		**46**	**113870**
	N	**Kit for core wire 3.2 mm (DV-31/32) (4 drive rings etc.)**		**46**	**113872**
Components for additional wire equipment:					
	0.1	Pressure ring DV-26/31/32		46	124724
	0.2	Roller carrier metal DV-26/30/31/32 with ball bearing		07	110560
	0.3	Distance ring for core wire equipment DV-26, DV-31		46	126968

Pos.	Description	Pu	PrGrp	Part No.
1	**Drive rollers:**			
1.0	Drive ring steel 0.6 + 0.8 DV-26/31/32		46	113945
1.1	Drive ring steel 0.8 + 1.0 DV-26/31/32		46	113946
1.2	Drive ring steel 1.0 + 1.2 DV-26/31/32		46	01200272
1.3	Drive ring steel 0.9 + 0.9 DV-26/31/32		46	01200262
1.4	Drive ring steel 1.6 + 1.6 DV-31/32		46	113948
1.5	Drive ring alu 1.0 + 1.2 DV-26/31/32		46	01200281
1.6	Drive ring alu 0.8 + 1.6 DV-26/31/32		46	01200282
1.7	Drive ring core wire 1.2 + 1.6 DV-31/32		46	01200291
1.8	Drive ring core wire 2.0 + 2.4 DV-31/32		46	01200292
1.9	Drive ring core wire 2.8 + 3.2 DV-31/32		46	01200293
2	**Insertion nozzle:**			
2.1	Insertion nozzle DV-31, 30/4 0.8 - 1.6 mm		46	110862
2.2	Insertion nozzle DV-31, 30/4 2.4 - 3.2 mm		46	110863
3	**Guidance nozzle:**			
3.1	Guidance nozzle DV-31, 30/4 0.8 - 1.6 mm		46	110552
3.2	Guidance nozzle DV-31, 30/4 2.4 - 3.2 mm		46	110553
4	**Outgoing nozzle:**			
4.1	Outgoing nozzle DV-26, 31, 30/4 0.8 - 1.6 mm		46	110554
4.2	Outgoing nozzle DV-31, 30/4 2.4 - 3.2 mm		46	110555
5	**Wire feed liners:**			
5.1	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 3 m long		22	02210246
5.2	Liner for steel (blue) 1.5x4.0 0.6 - 0.8 (1.0) mm, 4 m long		22	02210247
5.3	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 3 m long		22	02210244
5.4	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 4 m long		22	02210245
5.5	Liner for steel (red) 2.0x4.5 1.0 - (1.2) mm, 5 m long		22	113512
5.6	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 3 m		22	02210248
5.7	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 4 m		22	02210249
5.8	Liner for steel (uncoated) 2.5x4.5 1.2 - 1.6 mm, 5 m		22	130020
5.9	Teflon liner for alu and stainl.st. 0.8 - 1.2 mm, 3 m (red, 2.0 x 4.0) with brass outgoing liner		22	02210586
5.10	Teflon liner for stainless steel 0.8 - 1.2 mm, 4 m (red, 2.0 x 4.0) with brass outgoing liner		22	108520

	Pos.	Description	Pu	PrGrp	Part No.
	5.11	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 3 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	137778
	5.12	Teflon liner for alu and stainl.st. 1.2 - 1.6 mm, 4 m (dark grey, 2.3 x 4.7) with brass outgoing liner		22	135574
	5.13	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 3 m (black, 2.7 x 4.7)		22	02210588
	5.14	Teflon liner for alu and stainl.st. (1.2) - 1.6 mm, 4 m (black, 2.7 x 4.7)		22	132788

6 Contact tips SB/SBT 307/351/352/504:

	6.1	Contact tip Cu-Cr-Zr 0.8 mm M8	20 pcs	22	04511814
	6.2	Contact tip Cu-Cr-Zr 1.0 mm M8	20 pcs	22	04511815
	6.3	Contact tip Cu-Cr-Zr 1.2 mm M8	20 pcs	22	04511816
	6.4	Contact tip Cu-Cr-Zr 1.4 mm M8	20 pcs	22	04511819
	6.5	Contact tip Cu-Cr-Zr 1.6 mm M8	20 pcs	22	04511817
	6.6	Contact tip 0.8 mm alu CuCrZr M8	20 pcs	22	109754
	6.7	Contact tip 1.0 mm alu CuCrZr M8	20 pcs	22	109756
	6.8	Contact tip 1.2 mm alu CuCrZr M8	20 pcs	22	109758
	6.9	Contact tip 1.6 mm alu CuCrZr M8	20 pcs	22	04511818

8.4. Water cooling units

Power supply:	1 x 230 V 1 x 400 V / 230 V (WK 230 / 300)
Frequency:	50 Hz
Mains current:	1 A / 1.6 A
Water pump:	high efficiency pump 230 V
Water pressure:	3.5 bar
Water capacity:	3 l
Water pressure switch:	integrated
Functions:	automatic switch of water pump and fan
electr. connection:	cable with 6-pole plug
Water connection:	2 quick couplings
Weight/Dimensions l x w x h:	15 kg, 590x210x210 mm (WK 210) 18 kg, 610x230x215 mm (WK 230) 20 kg, 600x300x260 mm (WK 300) 28 kg, 700x355x285 mm (WK 350)



	Pos.	Description	Pu	PrGrp	Part No.
Water cooling units:					
		**Water cooling unit model WK 210**		**46**	**143136**
		**Water cooling unit model WK 230**		**46**	**02610142**
		**Water cooling unit model WK 300**		**46**	**02610143**
		**Water cooling unit model WK 350**		**46**	**144008**
Coolant ME-KM 20, ideal for all welding units and welding torches:					
		Coolant ME-KM 22 eco, 10 l for welding units		07	169376
		Coolant ME-KM 22 eco 25 l for welding units		07	169378
		Coolant ME-KM 22 eco, 220 l for welding units		07	169382
		Coolant ME-KM 22 eco, 1000 l for welding units		07	169384

8.5. WeldFACTORY i4.0 (Q.MACS)

	Pos.	Description	Pu	PrGrp	Part No.
1	**WeldFACTORY: software, required once per network for any number of workstations:**				
	1.1	Software WeldFACTORY incl. Weldassistent - Suitable for manual, automatic and robot controlled welding processes - Creation, execution, and monitoring of WPS-compliant welding procedures - Any quantity of welding units and machines in the network with any number of workstations - Data communication via OPC UA protocol - Integration of barcode scanners		17	159326
2	**WeldFACTORY: machine interface and license required for each welding unit:**				
	2.1	WeldFACTORY welding machine equipment without software for one unit (159.191), monitoring of current, voltage, incl. ethernet interface and industrial ethernet plug allowing connection to an existing ethernet		17	159190
	2.2	WeldFACTORY licence for one welding machine		17	159191
	2.3	Option Wifi equipment only in combination with 126.506 or 159.190		17	144106
3	**Options:**				
	3.1	WeldFACTORY gas flow monitoring hardware installed in the welding machine (incl. connection cable 1.6 m)		17	159328
	3.2	WeldFACTORY option wire feed speed monitoring sensor for DV-31		17	159330
	3.3	Barcode-Scanner for WeldFACTORY		17	159198
	3.4	Training and set-up for WeldFACTORY/QMACS software (price per day, extras not included)		85	139188

8.6. Software, Program updates, Calibration

Pos.	Description	Pu	PrGrp	Part No.
1	**Software for EN 1090:**			
1.1	EN 1090 WPS/WPQR package incl. jobs for series HighPULSE and HighPULSE touch 350 - 550 A incl. calibration of the unit		17	135636
1.2	EN 1090 WPS/WPQR package for series OptiMIG		17	138672
1.3	EN 1090 WPS/WPQR package for series HighPULSE, HighPULSE touch 350 - 550 A (incl. jobs) and OptiMIG for existing machines (calibration not included)		17	156806
2	**Software:**			
2.1	Software ProDok32: generation and documentation of pulse and MIG/MAG programs for PC with RS 232 or USB port, for Windows, incl. dongle and 5 m cable, CD-ROM		17	113810
2.2	Software ProJOB32: job generation and documentation, and software updates for PC with RS 232 or USB port, for Windows, incl. 5 m cable, converter, USB-Stick		17	118444
2.3	Software ProJOB32pro: job generation and documentation, offline and online, and software updates for PC with RS 232, USB or ethernet port, for Windows, incl. 5 m cable, CD-ROM		17	125584
3	**Program updates and welding software:**			
3.1	Programm update for all welding units incl. EPROM		17	100724
3.2	Programm update for MAG-30 controller		17	117972
3.3	Programm update for LogiTIG with pcb ME-TIG-4.7		17	137140
3.4	Programming of new welding program according to customer's specifications for synergic pulse units		17	100725
3.5	Programming of new welding program according to customer's specifications for MIG/MAG units		17	100726
3.6	Software for ColdMIG process for series HighPULSE/GreenMIG		17	118064
3.7	Software for DeepArc process for series HighPULSE		17	118162
3.8	Software for HighUP process for series HighPULSE/GreenMIG		17	134392
3.9	Software for Interpulse process for series HighPULSE		17	120490
4	**Calibration:**			
4.1	Calibration (incl. working time) for welding machines incl. preparation and documentation		85	100619

8.7. Calibration unit MCU 1000

Pos.	Description	Pu	PrGrp	Part No.
1	**Complete system:**			
				
1.1	Calibration unit MCU 1000, complete system consistant of: calibration resistor 1000 A, sensor box for wire speed and gas flow, software (without computer, printer, software-installation), all adapters and cables. For the calibration of welding units according to DIN EN 50504, suitable for MIG/MAG, TIG, MMA/stick electrode, Plasma - Measurement of welding current and voltage (+/- 1.0 %) - Measurement of temperatur and supply voltage (1ph/3ph) - External measurement of wire feed speed and gas flow - High duty cycle due to cooling with integrated fan - Automatic switching of the steps - HF proof design for calibration of TIG units - Grafic display for easy setting and recording of calibration and measurement parameters - Robust aluminium housing for mobile application at the customer - External software control - Automatic temperatur switch-off Dimensions appr. L 750 mm, W 310 mm, H 650 mm Weight approx. 45 kg		17	SET146510
1.2	Wheel set 160 mm 2 swivel wheels, 2 fix wheels		46	146132
1.3	Extension cable between sensor box (MCU 1000) and Euro connector at power source, approx. 1 m		46	146458
1.4	Calibration of the calibration unit MCU 1000 at Merkle Germany incl. BGUV3 check, incl. documentation, annually required		85	144204
1.5	Training and set-up for calibration system MCU 1000 incl. software installation (price per day, extras not included)		85	145956
1.6	Software installation via Teamviewer (3 h) Calibration unit MCU 1000 incl. telephone briefing		85	148478
2	**System components:**			
				
2.1	Calibration resistor 1000 A (MCU 1000) For the calibration of welding units according to DIN EN 50504, suitable for MIG/MAG, TIG, MMA/stick electrode, Plasma - Measurement of welding current and voltage (+/- 1.0 %) - Measurement of temperatur and supply voltage (1ph/3ph) - Connector for external measurement of wire feed speed and gas flow - High duty cycle due to cooling with integrated fan - Automatic switching of the steps - HF proof design for calibration of TIG units - Grafic display for easy setting and recording of calibration and measurement parameters - Robust aluminium housing for mobile application at the customer - External control with optional software - Automatic temperatur switch-off Dimensions appr. L 750 mm, W 310 mm, H 650 mm Weight approx. 45 kg		17	141500

Pos.	Description	Pu	PrGrp	Part No.
2.2	Set of two connection cables for MCU 1000 each 95 mm² abd 1.5 mm² with plugs in protection hose		46	143976
2.3	Adapter Euro connector --> Dinse socket with wire feed hose for external sensor box for MCU 1000		46	143974
2.4	Adapter cable and adapter for MCU 1000 for monitoring of the power supply voltage: 3~ 16 A CEE --> 6-pol Harting		46	146102
2.5	External sensor box for wire feed speed and gas flow for MCU 1000 and QMACS extern, for connection to Euro-connector, range 0 - 30 m/min and 3 - 30 l/min		46	141502
2.6	Connection cable between external sensor box and calibration resistor MCU 1000		46	143972
2.7	Calibration software (without installation) software functions: measurement of welding current (0-1000 A), welding voltage (0-100 V), wire feed speed (0-30 m/min), gas flow (0-20 l/min), supply voltage, room temperature (0-100°C) => parameter montoring and control if the parameters are within the tolerance limits => report creation in pdf, excel or word format software in German and English (latest software version can be downloaded)		17	141504
2.8	USB cable 3 m, transparent, gold plug with ferrit ring, USB-A to USB-B		46	144942

8.8. Accessories

	Pos.	Description	Pu	PrGrp	Part No.
1 Trolley:					
	1.1	Trolley model TW 112, black for portable welding units (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	138938
	1.2	Drawer option for trolley TW 112 incl. one drawer		46	138940
	1.3	Trolley model TW 114, black for portable welding units and RS series (incl. water cooling unit) incl. gas bottle holder for 1 cylinder		46	144000
2 Regulators:					
	2.1	Regulator argon/CO2 standard version		46	107018
	2.2	Regulator argon/CO2, single stage		46	01200300
	2.3	Gas regulator Argon-CO2 0-30 l/min with flow meter		46	114554
	2.4	Gas regulator Argon-CO2 0-5 l/min with flow meter		46	144214
3 Earth leads:					
	3.1	Earth lead 16 mm², 4 m long with plug 50 mm² and earth clamp		46	02210385
	3.2	Earth lead 25 mm², 4 m long with plug and earth clamp		46	02210400
	3.3	Earth lead 35 mm², 4 m long with plug 50 mm² and earth clamp		46	02210401
	3.4	Earth lead 50 mm², 4 m long with plug and earth clamp		46	02210402
	3.5	Earth lead 70 mm², 4 m long with plug and earth clamp		46	02210408
	3.6	Earth lead 95 mm², 4 m long with plug and earth clamp		46	02210403
	3.7	Earth lead 95 mm², 5 m long with plug 95 mm² and ring d=12 mm		46	139816
	3.8	Earth lead 120 mm², 4 m long with plug and earth clamp		46	02210396

	Pos.	Description	Pu	PrGrp	Part No.
4	**Electrode welding cables:**				
	4.1	Electrode welding cable 16 mm², 4 m incl. plug 50 mm² electrode holder		46	115702
	4.2	Electrode welding cable 35 mm², 5 m incl. plug 50 mm² & electrode holder		46	02210451
	4.3	Electrode welding cable 70 mm², 5 m incl. plug and electrode holder		46	02210449
5	**Remote controls:**				
	5.1	Foot remote control pedal with 5 m cable and 5-pol plug		46	116730
	5.2	Foot remote with 5 m cable and 10 pin plug		46	01903000
	5.3	Foot remote with 8 m cable and 10 pin plug		46	01902999
	5.4	Hand remote control MFR-10, 5 m with 10 pin plug, with magnetic foot incl. switch for polarity change (only MobiARC 284 cel +-)		46	123791
	5.5	Remote control box for energy and voltage trim incl. 5 m cable		46	01903542
	5.6	Hand remote 4m with 10 pin plug		46	01301059
	5.7	Hand remote 8m with 10 pin plug		46	01301060
	5.8	Foot switch with single button 3 m cable		05	01902900
	5.9	Foot switch with double button 3 m cable		05	01902901
	5.10	MAG Remote Control MRC-50 for HighPULSE und SpeedMIG in steel casing with handgrip and magnet, incl. 5 m supply cable		46	154578
6	**Filters:**				
	6.1		10 pcs	46	112550
	6.2	Filter for RS units 450/550 (minimum 10 pieces)	10 pcs	46	114468
	6.3	Filter for HighPULSE and SpeedMIG Version KW and DW, 320x330x25 mm (minimum 10 pieces)	10 pcs	46	113844
	6.4	Filter mat 245 x 290 mm for Insquare 300/420/600, HighPULSE 282, 284, 352, 354 K, HighPULSE touch 280/350 K, CompactMIG 400 (min. 10 pieces)	10 pcs	46	00501048

	Pos.	Description	Pu	PrGrp	Part No.
	6.5	Filter for OptiMIG	10 pcs	46	109528
	6.6	Metal filter for HighPULSE 284/354 K HighPULSE touch 280/350 K		46	157336
	6.7	Metal filter insert for HighPULSE, SpeedMIG, HighTIG 300 x 315 x 20 mm		46	156144

7 Accessories:

	7.1	Adapter for wire spool		46	02900104
	7.2	Torch holder D27 for mounting at the handle or handle tube		46	157598
	7.3	Transportation box black material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 50 x 35 x 19.4 cm		46	n01200370
	7.4	Transportation box black big material: polypropylen, water proof, for LiteARC 160/180, LiteTIG 190/210 inner dimensions 59 x 47 x 21 cm		46	n01200372
	7.5	Adapter for connection of TIG torches with Euro connector to Merkle TCG connector		46	109234

8.9. Advertising articles

	Pos.	Description	Pu	PrGrp	Part No.
Advertising articles					
		MERKLE ball pen, black		67	171047
	2	Swiss pocket-knife, 8,5 cm with bottle opener, screwdriver, pincers blue with white MERKLE print		67	102514
	3	MERKLE - Lighter black BIC L26		67	169648
	4	MERKLE porcelain mug		67	106784
	5	MERKLE meter, 2 m long ADGA		67	169650
	6	College block with 50 pages in MERKLE design		67	137980
	8	Desk pad à 25 sheets with new MERKLE design and welding positions		67	118088
	9	MERKLE - Drinking bottle green 800 ml, lid gray		67	169018
	10	MERKLE - License plate holder		67	169644
	11	MERKLE flag, 3 m x 1.20 m white with blue MERKLE print		67	106786
	12	Merkle cotton bag, green		67	169652

8.10. Leaflets and Catalogues

Pos.	Description	Pu	PrGrp	Part No.
1	**Leaflets:**			
	Prospekt -DE- Programmübersicht		00	109608
	Leaflet - Product Range		00	109610
	Prospekt -DE- RedMIG eco 2800 K		00	166876
	Leaflet - RedMIG eco 2800 K		00	166877
	Prospekt -DE- OptiMIG eco Bauserie		00	170585
	Leaflet -EN- OptiMIG eco series		00	171758
	Prospekt -DE- MobiMIG Bauserie		00	109654
	Leaflet - MobiMIG		00	109656
	Prospekt -DE- GreenMIG 400/500		00	167064
	Leaflet - GreenMIG 400/500		00	167066
	Prospekt -DE- HighPULSE touch Bauserie		00	109678
	Leaflet - HighPULSE touch		00	160152
	Prospekt -DE- HighPULSE Bauserie		00	109658
	Leaflet - HighPULSE		00	109660
	Prospekt -DE- LiteTIG		00	167068
	Leaflet - LiteTIG		00	167070
	Prospekt -DE- MobiTIG 304 DC		00	167072
	Leaflet - MobiTIG 304 DC		00	167074
	Prospekt -DE- LogiTIG Bauserie		00	142142
	Leaflet - LogiTIG		00	142144
	Prospekt -DE- Baureihen HighTIG, Insquare		00	109670
	Leaflet - HighTIG and Insquare		00	109672
	Prospekt -DE- LiteARC Bauserie		00	156114
	Leaflet - LiteARC 180		00	154726
	Prospekt -DE- MobiARC 284 cel		00	109674
	Leaflet - MobiARC 284 cel		00	109676
	Prospekt -DE- DeepARC		00	129710
	Leaflet - DeepARC		00	129712
	Prospekt -DE- ColdMIG		00	129718
	Leaflet - ColdMIG		00	129720
	Prospekt -DE- HighUP		00	132822
	Leaflet - HighUP		00	132930
	Prospekt -DE- Rauchabsaugbrenner		00	133930
	Leaflet - Fume extraction torches		00	133931
	Prospekt -DE- Automatisierung und Robotics		00	129706
	Leaflet - Automation and Robotics		00	129708
	Prospekt -DE- WeldROB		00	149368
	Leaflet -GB- WeldROB		00	160160
	Prospekt -DE- Schweißfahrwerk		00	160150
	Leaflet - Welding carriage		00	160162
	Prospekt -DE- WCM		00	133804
	Leaflet - WCM		00	133805
	Prospekt -DE- QMACS		00	134648

Pos.	Description	Pu	PrGrp	Part No.
	Leaflet - QMACS		00	134650
	Prospekt -DE- Kalibriergerät MCU 1000		00	142134
	Prospekt -DE- Kalibrieren/Wiederholprüfung		00	149364
	Prospekt -DE- DIN EN 1090		00	142136
	Leaflet - Company Profile		00	133806
	Prospekt -DE- Drehtische		00	156120
	Leaflet - Welding positioner		00	156122
	Leaflet - Welding units for shipbuilding		00	156124
	Prospekt -DE- TEDAC Digital		00	156126
	Leaflet - TEDAC Digital		00	160156
	Leaflet - MobiARC 160 / 160 mobil		00	109680
	Leaflet- Project Report Müller-Mitteltal		00	160154

2 Catalogues:

	General catalogue GERMAN		00	129728
	General catalogue ENGLISH		00	129730
	Automation catalogue GERMAN		00	129732
	Automation catalogue ENGLISH		00	129734

The current T/C for installation / customer service / sales and delivery can be found on our website

http://www.merkle.de/de/agb.html



CREATE YOUR FUTURE SUCCESSFULLY.

With MERKLE. Your specialist for welding units, welding machines, torches and intelligent automation systems.

With own subsidiaries and MERKLE dealers in Germany, Europe and many other countries throughout the world.

Welcome to MERKLE.

08/2026

PRODUCT RANGE

- MIG/MAG Welding Units
- Synergic Pulse Welding Units
- TIG Welding Units
- MMA / Stick Electrode Welding Units
- Welding Torches
- Turntables and Roller Drive Units
- Automation Components and Solutions
- Complete Solutions and Robotics
- Specialized Machinery Construction
- MERKLE WeldFACTORY - Industry 4.0

60 Jahre | years

MADE IN GERMANY

MERKLE Schweissanlagen-Technik GmbH
Industriestr. 3 | D-89359 Koetz | Germany
Phone: +49 8221 915-0
E-Mail: info@merkle.de

www.merkle.de