## MIG/MAG welding torches Push-Pull Plus

## Air and liquid cooled



The welding torches of the Push-Pull Plus series, specially developed for aluminum welding requirements and the use of thin wires, makes problem-free and consistent wire feed and constant wire feed possible, even with longer cable assemblies. A powerful, sturdy pull motor with potentiometer guarantees exact speed regulation. For an optimum wire feed without frictional loss, the contact pressure of the feeding rollers can be regulated precisely and easily directly on the handle. The ergonomic handle ensures optimum, low-fatigue handling.



The screw-type torch necks can be replaced quickly. They are available as either straight or 45° angled versions. A special interface between the handle and the torch neck makes it possible to turn the necks up to 360°. All torches, both air and liquid-cooled for capacities of up to 400 A, are based on the tried-and-trusted "MB" torch neck design.

The main areas of application for these welding torches include wharfs, manufacturers of containers and ships etc., as well as in vehicle and wagon building. Wherever exact and constant wire feeding is an absolute must.

- Identical motor characteristics as standard Push-Pull
- Consistent and problem-free wire feeding thanks to a powerful pull motor
- Precise contact pressure regulation of the wire feeding rollers directly on the torch
- Available with optional potentiometer for speed regulation
- Wearing parts are identical to those of the triedand-trusted MB torch series – minimised stocking
- Optimum torch cooling long tool lives
- Sturdy design long service life

Туре	Cooling	Rating		Duty cycle	Wire size
		CO,	Mixed gas M21	(%)	(mm)
Push-Pull Plus 36 D	air	300 A	270 A	60	0.8-1.2
Push-Pull Plus 240 D	liquid	270 A	240 A	100	0.8-1.2
Push-Pull Plus 401 D	liquid	400 A	350 A	100	0.8-1.2

Torch complete (40 V motor)	Part-No.	Part-No.	Part-No.
Туре	8 m without Poti	8 m with Poti	Swan neck
Push-Pull Plus 36 D; straight; GZ-2	085.0104.1	085.0106.1	085.0116.1
Push-Pull Plus 36 D; 45° bend; GZ-2	085.0105.1	085.0107.1	085.011 <i>7</i> .1
Push-Pull Plus 240 D; straight; WZ-2	095.0110.1	095.0119.1	095.0040.1
Push-Pull Plus 240 D; 45° bend; WZ-2	095.0111.1	095.0120.1	095.0052.1
Push-Pull Plus 401 D; straight; WZ-2	095.0100.1	095.0114.1	095.0002
Push-Pull Plus 401 D; 45° bend; WZ-2	095.0101.1	095.0115.1	095.0015

Wire feeding roll	Ø 0.8	Ø 1.0	Ø 1.2
ST/AL	095.0064.1	095.0065.1	095.0066.1

## Push-Pull Plus 36 D, Push-Pull Plus 240 D, Push-Pull Plus 401 D

Wear parts		Push-Pull Plus 36 D		Push-Pull Plus 240 D		Push-Pull Plus 401 D	
		+ 84	mm	+ 63	.5 mm	+ 76	5 mm
		Ø A	<b>3</b>	Ø B	Ø 20	o øc	Ø 24
Gas nozzle (10	O pcs.)	Ø A		Ø B		Ø C	
Cylindrical		Ø 19	145.0045	Ø 17	145.0047	Ø 20	145.0051
Conical		Ø 16	145.0078 <sup>1</sup>	Ø 12.5	145.0080 <sup>2</sup>	Ø 16	145.0085 <sup>3</sup>
Tapered		Ø 12	145.0126	Ø 10	145.0128	Ø 14	145.0132
		28 mm	30 mm		8 mm	28 mm	30 mm
	Ø 8	B 0 10		Ø 8_	Ø	8 0	+
Contact tip (10		M6	M8		M6	M6	M8
E-Cu	Ø 0.8	140.0051	140.0114		.0051	140.0051	140.0114
	Ø 1.0	140.0242	140.0313		.0242	140.0242	140.0313
	Ø 1.2	140.0379	140.04421		0.03792	140.0379	140.04423
E-Cu for Al	Ø 0.8	141.0001	141.0003		.0001	141.0001	141.0003
	Ø 1.0	141.0006	141.0008		.0006	141.0006	141.0008
	Ø 1.2	141.0010	141.0015		.0010	141.0010	141.0015
CuCrZr	Ø 0.8	140.0054	140.011 <i>7</i>		.0054	140.0054	140.011 <i>7</i>
	Ø 1.0	140.0245	140.0316		.0245	140.0245	140.0316
	Ø 1.2	140.0382	140.0445	140	.0382	140.0382	140.0445
	W 1.Z	140.0302	140.0443			•	
	Ø 1.2	28			6 mm	25	mm —
Cantact tin ha		M6/M8 28			6 mm	M6 / M8 25	M10x1
Contact tip ho		M6 / M8 28	mm	M6 + 26		M6/M8	
M6		M6/M8 28 M6/M8 142.0	mm M8	M6 + 26	M6	M6/M8 142.	M10x1
M6		28 M6 / M8 1 142.0	M8	M6 + 20	M6	M6/M8 142.	M10x1
M6		28 M6 / M8 1 142.0	M8 0005 0020 <sup>1</sup>	M6 + 20	M6	M6/M8 142.	M10x1 0008 0022 <sup>3</sup>
		28 M6 / M8 1 142.0	M8 0005 0020 <sup>1</sup>	M6 + 20	M6	M6/M8 142.	M10x1 0008 0022 <sup>3</sup>
M6 M8	<b>lder</b> (10 p	28 M6 / M8 1 142.0	M8 0005 0020 <sup>1</sup>	M6 + 20	M6	M6/M8 142.	M10x1 0008 0022 <sup>3</sup>
M6 M8 Gas diffuser (1	<b>lder</b> (10 p	28 M6/M8 142.0 142.0 142.0	M8 0005 00201	142	M6  .0003 <sup>2</sup> -	M6/M8 142. 142. 142.	M10x1 0008 0022 <sup>3</sup>
M6 M8 Gas diffuser (1 Standard	<b>lder</b> (10 p	28 M6/M8 142.0 142.0 142.0	M8  0005 0020¹  5 mm  0261¹	142	M6	M6/M8 142.142.1000 142.10000 142.1000 142.1000 142.1000 142.1000 142.1000 142.1000 142.100000 142.1000 142.1000 142.1000 142.1000 142.1000 142.1000 142.1000	M10x1 0008 0022 <sup>3</sup> 0145 <sup>3</sup>
M6 M8 Gas diffuser (1	<b>lder</b> (10 p	28 M6/M8 142.0 142.0 142.0	M8  0005 00201  5 mm  02611 0026	142	M6  .0003 <sup>2</sup> -	M6/M8 142.1 142.1 142.1 030.1 030.1	M10x1 0008 0022 <sup>3</sup>
M6 M8 Gas diffuser (1 Standard Long life Ceramic	<b>lder</b> (10 p	28 M6 / M8 142.0 142.0 142.0 014.0 014.0	M8  0005 00201  5 mm  02611 0026	142	M6  .0003 <sup>2</sup> -	M6/M8 142.1 142.1 142.1 030.1 030.1	M10x1  00008 00022 <sup>3</sup> 0145 <sup>3</sup> 00037
M6 M8 Gas diffuser (1 Standard Long life Ceramic	<b>Ider</b> (10 p	28 M6 / M8 142.0 142.0 142.0 142.0 142.0 142.0 142.0 142.0	M8  0005 0020¹  5 mm  0261¹ 0026 0023	142 142 012	0 mm -0.0183 <sup>2</sup>	142. 142. 142. 28 030. 030. 030.	M10x1  0008 0022 <sup>3</sup> 0145 <sup>3</sup> 0037 0190
M6 M8 Gas diffuser (1 Standard Long life Ceramic Liner Neck liner <sup>4</sup> 0.8-	lder (10 p	28 M6 / M8 142.0 142.0 142.0 142.0 014.0 014.0 014.0	M8  0005 0020¹  5 mm  0261¹ 0026 0023	142 142 142 149.6	M6  .0003 <sup>2</sup> - 0 mm - 0.0183 <sup>2</sup> 00264.3	142. 142. 142. 030. 030. 030. 030.	M10x1  00008 00022 <sup>3</sup> 0145 <sup>3</sup> 00037 0190
M6 M8 Gas diffuser (1 Standard Long life Ceramic Liner Neck liner <sup>4</sup> 0.8- Neck liner <sup>4</sup> 1.2 r	Ider (10 p	014.0 014.0 014.0 149.0 149.0	M8  0005 0020¹  5 mm  0261¹ 0026 0023  260.3 261.3¹	142 142 012 149.0 149.0	.0003 <sup>2</sup> - 0 mm - 0.0183 <sup>2</sup> 0264.3 0265.3 <sup>2</sup>	142. 142. 142. 28 030. 030. 030. 030. 149.0 149.0	M10x1  0008 00022³  0145³ 0037 0190  264.3 265.3³
M6 M8 Gas diffuser (1 Standard Long life Ceramic Liner Neck liner <sup>4</sup> 0.8 – Neck liner <sup>4</sup> 1.2 r Neck liner <sup>5</sup> 0.8 –	Ider (10 p 10 pcs.) -1.0 mm mm -1.0 mm	014.0 014.0 014.0 014.0 014.0 149.0 149.0 149.0	M8  0005 0020¹  5 mm  00261¹ 0026 0023  260.3 261.3¹ 262.3	142 142 012 149.0 149.0 149.0 149.0	.0003 <sup>2</sup> 0183 <sup>2</sup> 0264.3 .0265.3 <sup>2</sup> .0266.3	142. 142. 142. 28 030. 030. 030. 030. 149.0 149.0 149.0	M10x1  00008 00022 <sup>3</sup> mm  0145 <sup>3</sup> 0037 0190  264.3 265.3 <sup>3</sup> 266.3
M6 M8 Gas diffuser (1 Standard Long life Ceramic Liner Neck liner <sup>4</sup> 0.8- Neck liner <sup>5</sup> 0.8- Neck liner <sup>5</sup> 1.2 r	10 pcs.) -1.0 mm mm -1.0 mm	014.0 014.0 014.0 014.0 014.0 149.0 149.0 149.0	M8  0005 0020¹  5 mm  00261¹ 0026 0023  260.3 261.3¹ 262.3 263.3¹	149.0 149.0 149.0 149.0 149.0	.0183 <sup>2</sup> 0264.3 .0265.3 <sup>2</sup> .0266.3 .0267.3 <sup>2</sup>	142. 142. 142. 28 030. 030. 030. 149.0 149.0 149.0 149.0	M10x1  00008 00022 <sup>3</sup> mm  0145 <sup>3</sup> 0037 0190  264.3 265.3 <sup>3</sup> 266.3 267.3 <sup>3</sup>
M6 M8  Gas diffuser (1 Standard Long life Ceramic  Liner Neck liner <sup>4</sup> 0.8- Neck liner <sup>5</sup> 0.8- Neck liner <sup>5</sup> 1.2 r Liner blank 0.8 n	10 pcs.) -1.0 mm mm -1.0 mm mm	014.0 014.0 014.0 014.0 149.0 149.0 149.0 122.0	M8  0005 0020¹  5 mm  0261¹ 0026 0023  260.3 261.3¹ 262.3 263.3¹ 010	149.0 149.0 149.0 149.0 149.0 122.0	0003 <sup>2</sup> - 0003 <sup>2</sup> - 0183 <sup>2</sup> - 0264.3 0265.3 <sup>2</sup> 0266.3 0267.3 <sup>2</sup> 0010	030.4 030.4 030.4 030.4 030.4 030.4 149.0 149.0 149.0 149.0	M10x1  00008 00022 <sup>3</sup> 0145 <sup>3</sup> 0037 0190  264.3 265.3 <sup>3</sup> 266.3 267.3 <sup>3</sup> 0110
M6 M8  Gas diffuser (1 Standard Long life Ceramic  Liner Neck liner <sup>4</sup> 0.8- Neck liner <sup>5</sup> 0.8- Neck liner <sup>5</sup> 1.2 r Liner blank 0.8 n Liner blank 1.0-	10 pcs.) -1.0 mm mm -1.0 mm mm -1.0 mm	014.0 014.0 014.0 014.0 014.0 149.0 149.0 149.0 122.0 122.0	M8  0005 0020¹  5 mm  0261¹ 0026 0023  260.3 261.3¹ 262.3 263.3¹ 010 040	149.0 149.0 149.0 149.0 149.0 122.0 122.0	0.0003 <sup>2</sup> - 0.0183 <sup>2</sup> - 0.0183 <sup>2</sup> - 0.0264.3 0.0265.3 <sup>2</sup> 0.0266.3 0.0267.3 <sup>2</sup> 0.010 0.0040	142.1 142.1 142.1 142.1 149.0 149.0 149.0 149.0 122.0 122.0	M10x1  00008 000223  mm  101453 0037 0190  264.3 265.33 266.3 267.33 010 0040
M6 M8  Gas diffuser (1 Standard Long life Ceramic  Liner Neck liner <sup>4</sup> 0.8- Neck liner <sup>5</sup> 0.8- Neck liner <sup>5</sup> 1.2 r Liner blank 0.8 n Liner blank 1.0- Liner insulated 0.	10 pcs.) -1.0 mm mm -1.0 mm mm -1.0 mm	014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0	M8  D005 D0201  Smm D026 D023  260.3 261.31 262.3 263.31 D10 D040 D169	149.0 149.0 149.0 149.0 149.0 122.0 122.0 124.0	0.0003 <sup>2</sup> - 0.0003 <sup>2</sup> - 0.0183 <sup>2</sup> - 0.0183 <sup>2</sup> - 0.0183 <sup>2</sup> - 0.0183 <sup>2</sup> 0.0265.3 <sup>2</sup> 0.0266.3 0.0267.3 <sup>2</sup> 0.010 0.0040 0.0169	142.1 142.1 142.1 142.1 149.0 149.0 149.0 149.0 122.0 122.0 124.0	M10x1  00008 000223  mm  1 01453 0037 0190  264.3 265.33 266.3 267.33 010 040 0169
M6 M8  Gas diffuser (1 Standard Long life Ceramic  Liner Neck liner <sup>4</sup> 0.8- Neck liner <sup>5</sup> 0.8- Neck liner <sup>5</sup> 1.2 r Liner blank 0.8 r Liner blank 1.0- Liner insulated 0. PTFE liner 0.8 mi	10 pcs.)  -1.0 mm  mm -1.0 mm  mm  1.2 mm .8 mm  m	142.0 142.0 142.0 142.0 142.0 142.0 142.0 142.0 122.0 122.0 124.0 126.0	0005 00201 5 mm 02611 0026 0023 260.3 261.31 262.3 263.31 010 040 169 013	149.0 149.0 149.0 149.0 149.0 122.0 122.0 124.0 126.0	0.0003 <sup>2</sup> - 0.0183 <sup>2</sup> - 0.0264.3 0.0265.3 <sup>2</sup> 0.0266.3 0.0267.3 <sup>2</sup> 0.010 0.040 0.0169 0.013	142.1 142.1 142.1 142.1 142.1 149.0 149.0 149.0 149.0 149.0 122.0 122.0 124.0 126.0	M10x1  00008 000223  01453 00037 0190  264.3 265.33 266.3 267.33 010 040 0169 013
Gas diffuser (1 Standard Long life Ceramic  Liner Neck liner <sup>4</sup> 0.8 - Neck liner <sup>5</sup> 0.8 - Neck liner <sup>5</sup> 1.2 r Liner blank 0.8 n Liner blank 1.0 - Liner insulated 0. PTFE liner 0.8 mr PTFE liner 1.0 - 1.	10 pcs.)  -1.0 mm mm -1.0 mm mm -1.2 mm .8 mm m .2 mm	014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0	M8  D0005 D0001  5 mm D0261 D026 D023  260.3 261.3 262.3 263.3 010 040 169 013 030	149.0 149.0 149.0 149.0 149.0 122.0 122.0 124.0 126.0 126.0	0.0003 <sup>2</sup> - 0.0183 <sup>2</sup> - 0.0264.3 0.0265.3 <sup>2</sup> 0.0266.3 0.0267.3 <sup>2</sup> 0.010 0.040 0.0169 0.013 0.030	142.0 142.0 142.0 142.0 149.0 149.0 149.0 149.0 122.0 122.0 124.0 126.0 126.0	mm
Gas diffuser (1 Standard Long life Ceramic  Liner Neck liner <sup>4</sup> 0.8- Neck liner <sup>5</sup> 0.8- Neck liner <sup>5</sup> 1.2 r Liner blank 0.8 n Liner blank 1.0- Liner insulated 0. PTFE liner 0.8 mr PTFE liner 1.0-1. Carb. PTFE liner	10 pcs.)  -1.0 mm mm -1.0 mm mm .1.2 mm .8 mm m .2 mm 0.8 mm	142.0 142.0 142.0 142.0 142.0 142.0 142.0 142.0 142.0 122.0 122.0 124.0 126.0 127.0	M8  0005 00201  5 mm  002611 0026 0023  260.3 261.31 262.3 263.31 010 040 169 013 030 015	149.0 149.0 149.0 149.0 122.0 122.0 124.0 126.0 127.0	.0003 <sup>2</sup>	142.0 142.0 142.0 142.0 149.0 149.0 149.0 149.0 122.0 122.0 124.0 126.0 126.0 127.0	M10x1  00008 000223  mm  01453 0037 0190  264.3 265.33 266.3 267.33 010 040 0169 013 030 015
M6 M8  Gas diffuser (1 Standard Long life Ceramic  Liner Neck liner <sup>4</sup> 0.8- Neck liner <sup>5</sup> 0.8- Neck liner <sup>5</sup> 1.2 r Liner blank 0.8 n	10 pcs.)  -1.0 mm mm -1.0 mm mm .1.2 mm .8 mm m .2 mm 0.8 mm	014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0 014.0	M8  0005 00201  5 mm  002611 0026 0023  260.3 261.31 262.3 263.31 010 040 169 013 030 015	149.0 149.0 149.0 149.0 149.0 122.0 122.0 124.0 126.0 127.0 127.0	0.0003 <sup>2</sup> - 0.0183 <sup>2</sup> - 0.0264.3 0.0265.3 <sup>2</sup> 0.0266.3 0.0267.3 <sup>2</sup> 0.010 0.040 0.0169 0.013 0.030	142.0 142.0 142.0 142.0 149.0 149.0 149.0 149.0 122.0 122.0 124.0 126.0 126.0	M10x1  00008 000223  mm  101453 0037 0190  264.3 265.33 266.3 267.33 1010 1040 1169 1013 1030 1015 1009

<sup>&</sup>lt;sup>1</sup> Included in the standard equipment for complete torches Push-Pull Plus 36 D.

 $<sup>^{\</sup>rm 2}$  Included in the standard equipment for complete torches Push-Pull Plus 240 D.

Included in the standard equipment for complete torches Push-Pull Plus 401 D.
 For straight torch necks (0°).
 For bended torch necks (45°).