



ME503WF MIG/MAG FUME EXTRACTION TORCH 500 Amp.



These torches are characterized by the following features:

- Direct extraction at the arc to protect the respiratory system
- Simple extraction control at the front of the handle
- Optimal torch cooling - high durability
- Easy installation to existing MIG/MAG workplaces
- Time-saving torch change by the MECHAFIN Euro Central Adapter System
- MECHAFIN Euro Central French-pin Adapter

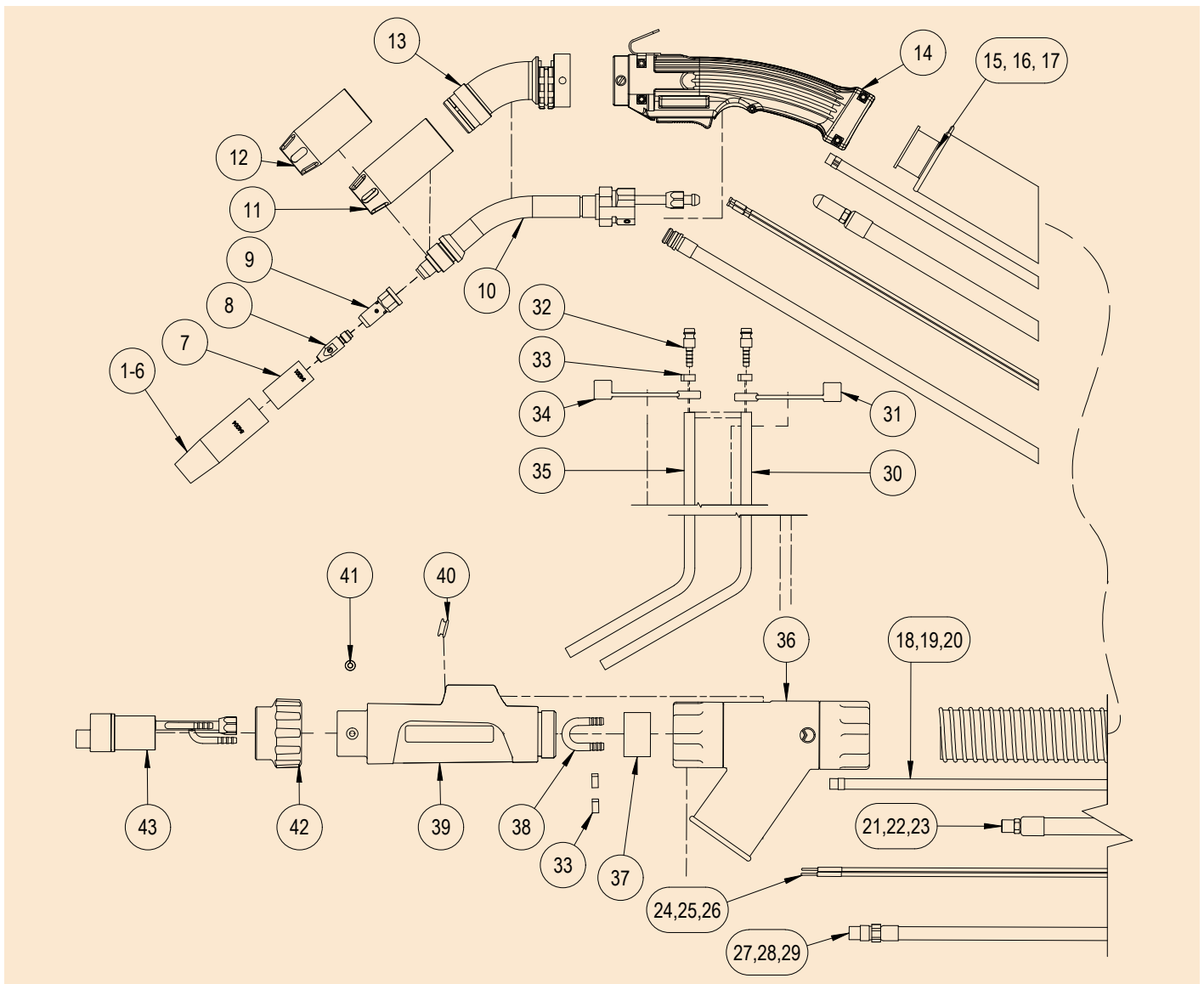
Model	ME503WF
Maximum current CO ₂	500 A
Duty Cycle CO ₂	80%
Maximum current Argon M.G.*	400 A
Duty Cycle Argon	80%
Extraction Rate	ca. 70 m ³ /h
Wire Ø	0.8 - 3.2 mm

*mixed gas

Type	Item no. - 3.0m	Item no. - 3.5m	Item no. - 4.0m	Item no. - 5.0m
ME503WF French Pin	58595	on request	58596	58597

Different lengths available upon request

Replacement Parts:



Pos.	Item no.	Description	pcs.	Pos.	Item no.	Description	pcs.
1	54004	Nozzle Spray H.D. i.d. 15mm	1	23	55124	Power water cable complete 5.0	1
2	54006	Nozzle Dip long conical i.d. 15mm	1	24	56030	Switch control cable complete 3.0m	1
3	54003	Nozzle Dip short conical i.d. 15mm	1	25	56040	Switch control cable complete 4.0m	1
4	54022	Nozzle Pulse H.D. i.d. 15mm	1	26	56053	Switch control cable complete 5.0m	1
5	54011	Nozzle Spray H.D. long i.d. 15mm	1	27	56114	Wire guide ME501-601W/ ME552WSC complete 3.0m	1
6	54007	Nozzle Parallel H.D. i.d. 19mm	1	28	56116	Wire guide ME501-601W/ ME552WSC complete 4.0m	1
7	54001	Nozzle insulator Ø19x16.5x37	1	29	56118	Wire guide ME501-601W/ ME552WSC complete 5.0m	1
8	57804	Contact tip M8, for alu wire 1.2-1.4, hexagonal	1	30	13161	Red braided rubber hose	1
9	54002	Gas diffuser M8	1	31	115823	Protective cap, red	1
10	55069	Swan neck water cooled 40° ME500W	1	32	76053	Quickfit nipple (male) 4mm	1
11	117299	Extraction nozzle ME503AF/WF L: 82	1	33	11029	Oetiker clamp	1
12	119565	Extraction nozzle ME503AF/WF L: 70	1	34	115822	Protective cap, blue	1
13	117305	Extraction tube complete	1	35	13119	Blue braided rubber hose	1
14	119349	Handle fume extraction	1	36	119756	Fume extraction adapter	1
15	119306	Fume extraction hose without regulation 3.0m	1	37	119770	Rubber Seal	1
16	119307	Fume extraction hose without regulation 4.0m	1	38	119783	Cold water jumper	1
17	119309	Fume extraction hose without regulation 5.0m	1	39	119685	Central adapter housing 1900 complete	1
18	120137	Water inlet hose complete 3.0m	1	40	119730	Rubber grommet 1900	1
19	120138	Water inlet hose complete 4.0m	1	41	76050	Pan-head screw with slot M4 x 9	1
20	120139	Water inlet hose complete 5.0m	1	42	57098	Adapter nut complete	1
21	55120	Power water cable complete 3.0m	1	43	119811	2-pin central adapter M12 x 1. complete french pin, separat gas - 60°	1
22	55122	Power water cable complete 4.0m	1				

Gas Diffuser		54002 M8
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Liners Hard Wire		57195: 3.0m, blue for steel wire 0.8-1.2	57281: 3.0m, grey for steel wire 1.2-1.4
		57197: 4.0m, blue for steel wire 0.8-1.2	57283: 4.0m, grey for steel wire 1.2-1.4
		56429: 5.0m, blue for steel wire 0.8-1.2	56434: 5.0m, grey for steel wire 1.2-1.4
		57261: 3.0m, red for steel wire 1.4-2.0	57381: 3.0m, yellow for steel wire 2.0-3.2
		57263: 4.0m, red for steel wire 1.4-2.0	57383: 4.0m, yellow for steel wire 2.0-3.2
		57265: 5.0m, red for steel wire 1.4-2.0	57385: 5.0m, yellow for steel wire 2.0-3.2

Liners Soft Wire		57155: 3.0m, black for alu wire 0.8-1.0	57200: 3.0m, blue for alu wire 1.0-1.2
		57157: 4.0m, black for alu wire 0.8-1.0	57202: 4.0m, blue for alu wire 1.0-1.2
		57393: 5.0m, black for alu wire 0.8-1.0	57204: 5.0m, blue for alu wire 1.0-1.2
		57250: 3.0m, red for alu wire 1.6	114706: 3.0m, yellow for alu wire 2.0-3.2
		57252: 4.0m, red for alu wire 1.6	114708: 4.0m, yellow for alu wire 2.0-3.2
		57489: 5.0m, red for alu wire 1.6	114710: 5.0m, yellow for alu wire 2.0-3.2

Contact Tips		Contact Tip M8 hexagonal (pure copper) MOQ = 10 pcs.	Contact Tip M8 round, copsil (copper-silver) MOQ = 10 pcs.
		57800: M8, 0.8, hexagonal	57835 - M8, copsil (CuCrZr) 0.8, round
		57802: M8, for alu wire 0.8-1.0, hexagonal	57837: M8, copsil for alu wire 0.8-1.0, round
		57803: M8, for alu wire 1.0-1.2, hexagonal	57838: M8, copsil for alu wire 1.0-1.2, round
		57804: M8, for alu wire 1.2-1.4, hexagonal	57839: M8, copsil for alu wire 1.2-1.4, round
		57805: M8, for alu wire 1.4-1.6, hexagonal	57840: M8, copsil for alu wire 1.4-1.6, round
		57834: M8, for alu wire 1.6-1.8, hexagonal	57860: M8, copsil for alu wire 1.6-1.8, round
		57806: M8, for alu wire 1.8-2.0, hexagonal	57841: M8, copsil for alu wire 1.8-2.0, round
		57807: M8, 2.4, hexagonal	57842: M8, copsil (CuCrZr) 2.4, round
		57813: M8, 2.8, hexagonal	57843: M8, copsil (CuCrZr) 2.8, round
		57815: M8, 3.2, hexagonal	57844: M8, copsil (CuCrZr) 3.2, round

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	11	117299	Extraction nozzle ME503AF/WF L: 82
	12	119565	Extraction nozzle ME503AF/WF L: 70

Mechafin recommends:



Kemper MiniFil



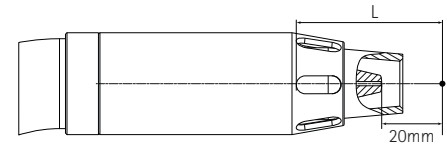
Kemper VacuFil



Extraction data Mechafin extraction torches:

The specifications of the INRS in France and the ISO standard 21 904 prescribe for extraction torches with a max. welding current of more than 200A a required detection speed of at least 0.35 m/s at the point of origin of the welding fumes (20 mm in front of the nozzle). ME-503WF achieve this speed at:

ME503WF L= 48mm $Q_{1min} = 38 \text{ m}^3/\text{h}$ at the extraction nozzle
 Near the connecting piece a negative pressure of approx. 9,500 Pa.
 and a detection speed of 55 m³/h must be applied

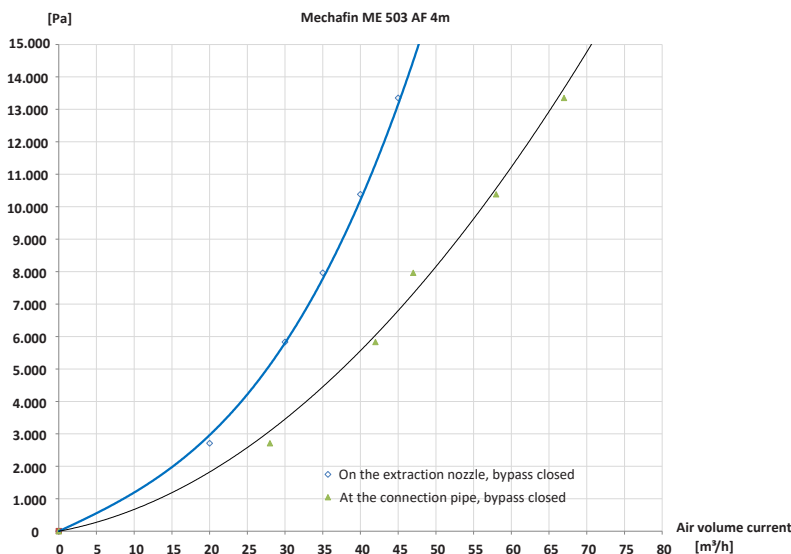


If the use of a different nozzle results in a different dimension „L“, the required extraction rates must be adjusted accordingly.

The minimum volume flow at the extraction nozzle is calculated from the dimension „L“ (in m) as follows: $Q_1 = v * 3.600 * 4 * \pi * L^2$

Pressure loss

Negative pressure at the connection pipe



Mechafin AG
 Chrummacherstr. 3 | CH-8954 Geroldswil | Switzerland
 Telephone +41 44 749 30 60 | Facsimile +41 44 749 30 70
 Mail info@mechafin.ch | Web www.mechafin.com

Mechafin Ltd
 Leigh Street | High Wycombe | Buckinghamshire | HP11 2QU UK
 Telephone +44 1494 441 110 | Facsimile +44 1494 473 049
 Mail enquiries@mechafin.co.uk | Web www.mechafin.com

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