


MIGZONE AIR WELDGUARD SERIES

MZ-AWG

air and watercooled fume extraction MIG/MAG-Torches

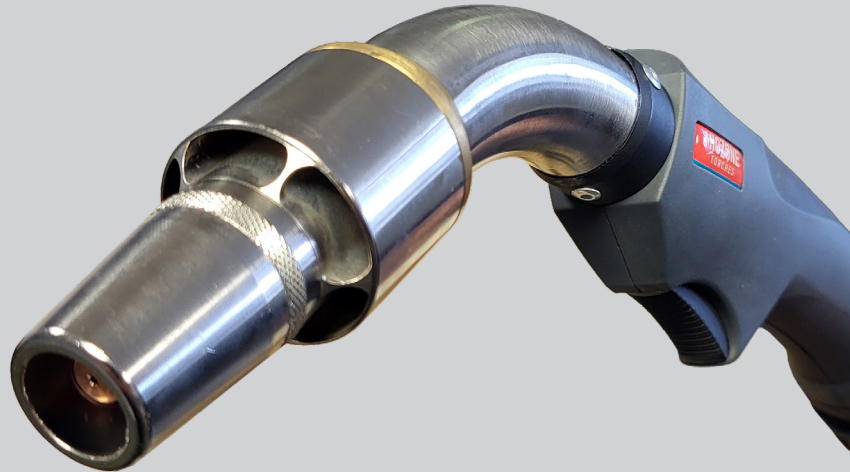
The compact, ergonomic MIG/MAG smoke extraction torch from the MIGZONE AiR WeldGuard series is the perfect solution for welders who prioritize efficiency, comfort, and safety. Its streamlined design and ergonomic construction allow for effortless handling and precise control during the welding process.

Thanks to its effective smoke extraction system, the MIGZONE AiR WeldGuard torch minimizes exposure to welding fumes, creating a healthier work environment for the operator. By reducing smoke and harmful particles, it not only enhances air quality but also mitigates the risk of health issues.

The torch's convenient size makes it ideal for use in confined workspaces or hard-to-reach areas. Additionally, its ergonomic design ensures comfortable handling over extended periods, minimizing fatigue.

Overall, the smoke extraction torch from the MIGZONE AiR WeldGuard series offers an optimal blend of performance, comfort, and safety, making it an indispensable tool for professional welders who demand the highest standards from their equipment.

- Technical data according to CE EN 60 974-7 and ISO 21904-1
- New Fume Extraction concept
- U/D Module
- Premium components installed



Torches


35
%DC

MZ-AWG
(model)

Mixed Gas M21
(EN 60974-7)

 $\varnothing$
(in mm)

Page
260G

260A

0.8 - 1.2

5


100
%DC

MZ-AWG
(model)

Mixed Gas M21
(EN 60974-7)

 $\varnothing$
(in mm)

Page
300W

300A

0.8 - 1.2

8

i 300W Duty Cycle

Consider the duty cycle at different current levels.

100
%DC **300A**
60
%DC **350A**
40
%DC **400A**

With a cooling capacity of min. 800W and a torch inlet pressure of the coolant of 3 – 6bar.

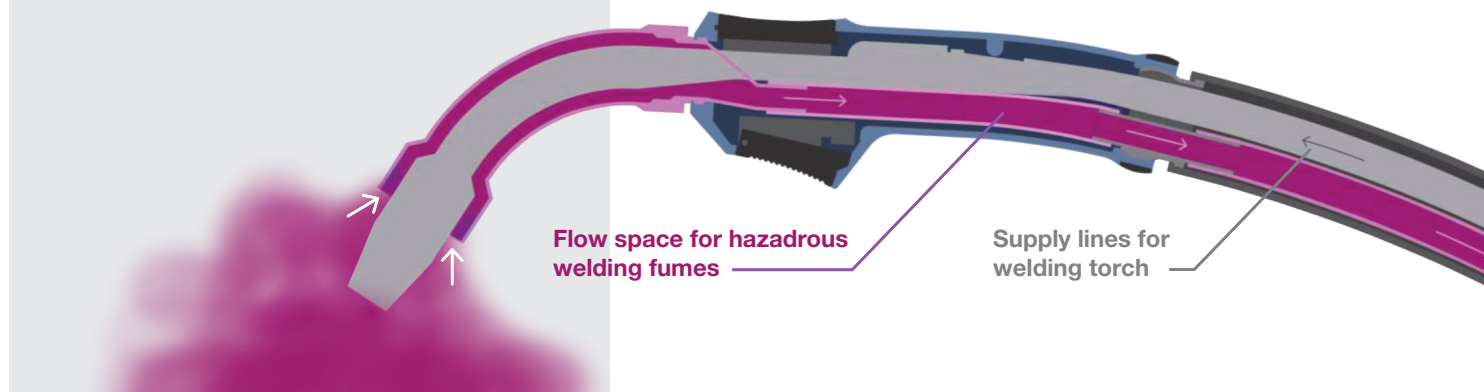
MIGZONE MZ-AWG – Fume extraction principle

AiR WeldGuard®

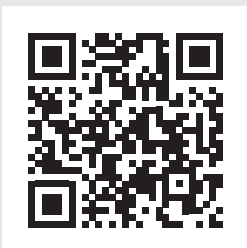
Its unique functional principle with closed flow chamber protects:

- Welder
- Maintenance technician
- Electronics
- Components
- Budget

The separate flow chamber significantly increases the service life of the welding fume extraction torch!



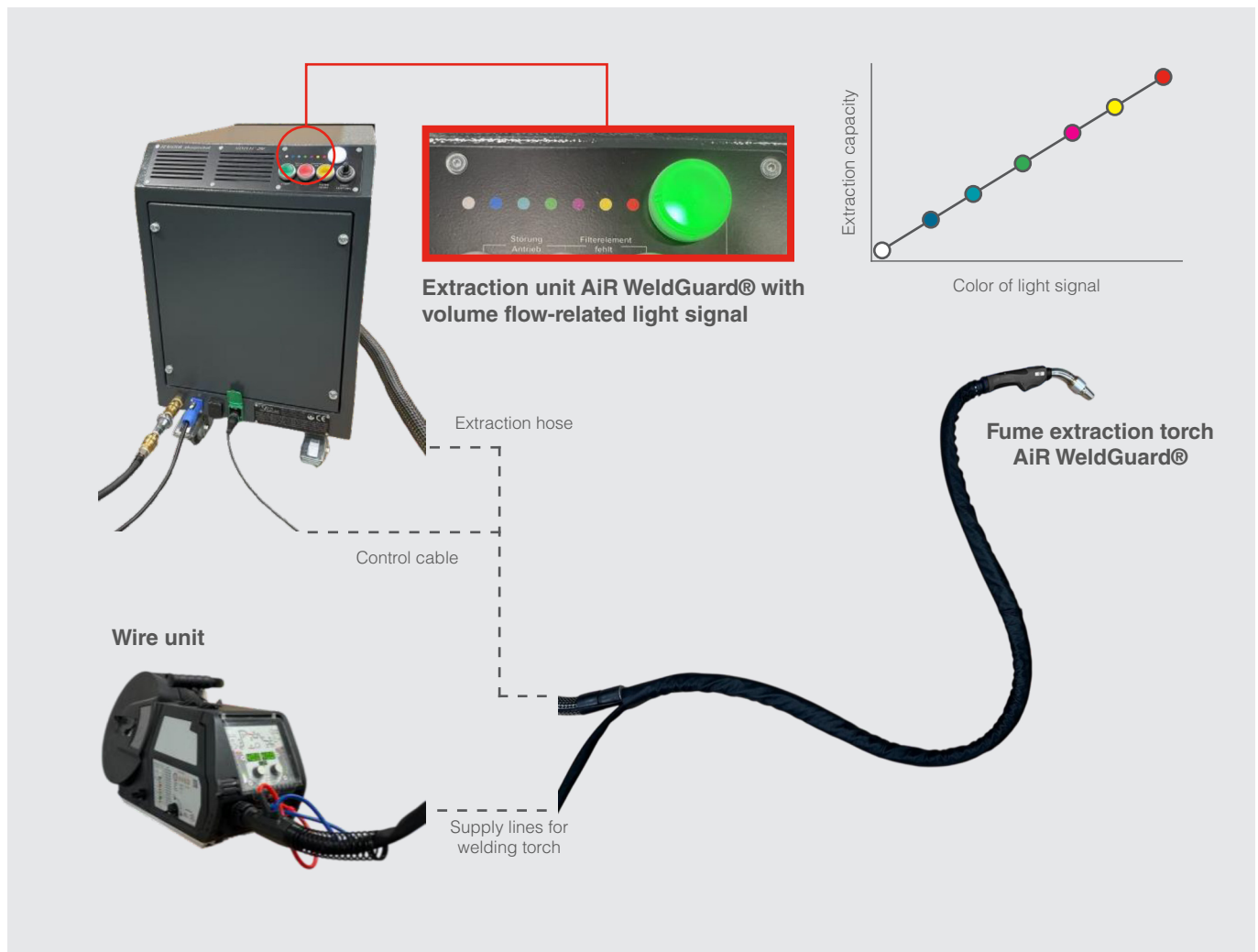
Check out our AWG introduction video!



Conventional fume extraction torch

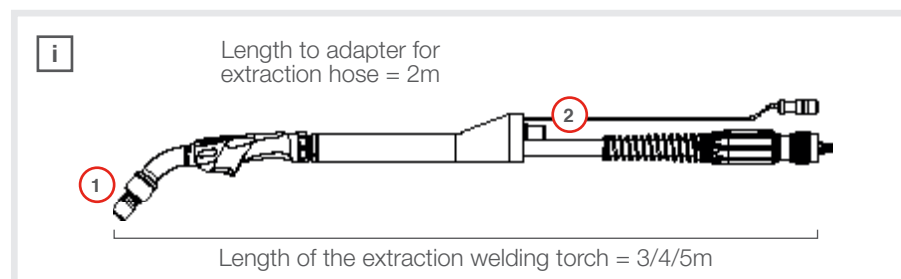


Overview of the AiR WeldGuard® system



Simple and pragmatic handling is our priority:

- 7-color light signal on the extraction unit simplifies setting the "correct" extraction volume flow, even from a greater distance.
- Fume extraction torch with Up/Down module enables the extraction capacity to be controlled.
- Water-cooled and gas-cooled fume extraction torches available in 3/4/5m lengths.
- AVM-1 measuring system enables measurement and digital documentation of the set extraction values.



Air flow rates

- | | | |
|----------------------------|------------------------|--------------------------|
| 1 Extraction nozzle | 2 Adapter Ø40mm | Negative pressure |
| 53 m³/h* | 74 m³/h* | 11,2 kPa* |

*Values with additional 2m extraction hose Ø38mm

MIGZONE MZ-AWG – complete torches and accessories

Structure of the SKU for a complete torch package

2 260 A 4 0 1 0 0

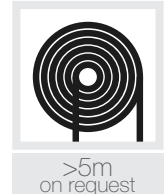
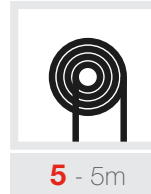
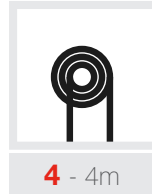
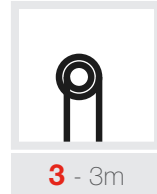
Torch Model Cable Package Length Switch Type Connector Type

i This Example: MZ-AWG 260G cpl. with 4m cable package, blind switch and Euro-connection

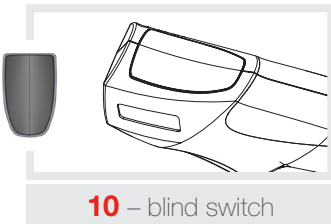
Torch Options – 2XXXAx0xxx



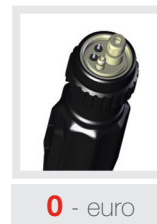
Cable Package Length Options – 2xxxAX0xxx



Switch Options – 2xxxAx0XXx



Connector Options – 2xxxAx0xxX



i Additional connection types

Other machine connections are available on request.

i General Info

- *1 Equipped as standard with contact tip M8 Ø1,0mm
- *2 Equipped as standard with contact tip M8 Ø1,2mm
- *3 Torches with Up/Down for power source control are equipped as standard without plug.

i Extraction hoses not included

The extraction hose is **not included** in the complete torch packages mentioned above. If you need an exhaust hose you can order a single unit. Please also try the starter kit on the right.

Ordering Number
On Page 12



Optional

AiR WeldGuard FRONT END CONSUMABLES STARTER KIT

Ordering Number
9940000242

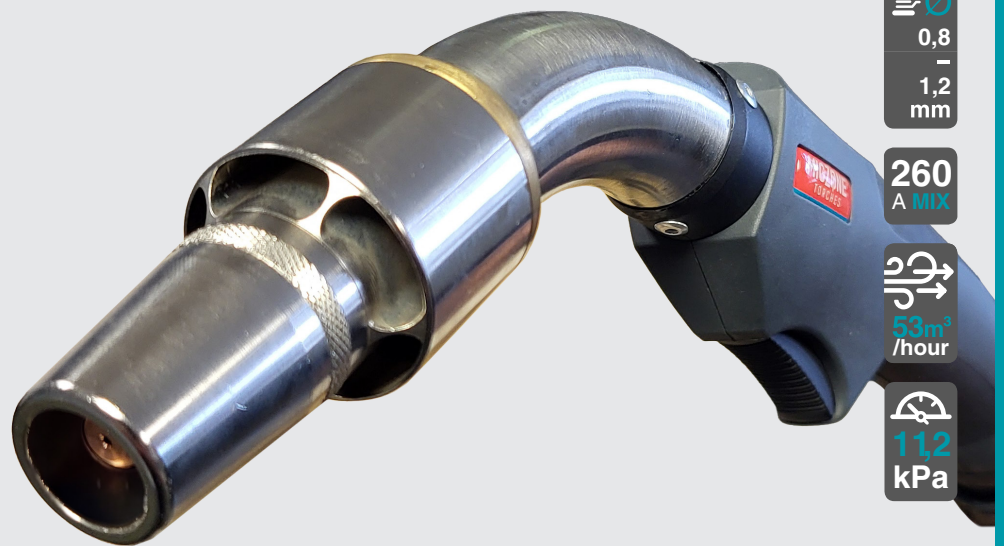
Content

- | | |
|---------------------|-----------------------------------|
| 1 x 24104085 | Centering unit |
| 5 x 0191501 | O-Ring |
| 3 x 2410707 | AiR WeldGuard gas diffuser |
| 5 x 2410610 | Contact Tip M8x30, Ø1,0mm |
| 5 x 2410612 | Contact Tip M8x30, Ø1,2mm |
| 2 x 20016004 | AiR WeldGuard gas nozzle |
| 1 x 75105105 | Siliconpaste |

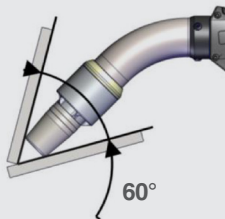


MIGZONE AIR WELDGUARD SERIES

MZ-AWG 260G

MIGZONE®
TORCHES**35**
%DC**0,8**
–
1,2
mm**260**
A MIX**53m³**
/hour**112**
kPa**i Accessibility**

The AiR WeldGuard excels in up to 60° tight angled operation situations comparable to any common MIG-torch.



MIGZONE MZ-AWG Series – aircooled MIG/MAG-Torch

DIN Norm

Technical data according to CE EN 60 974-7 and ISO 21904-1

The Concept

New Fume Extraction design blend of performance, comfort, and safety

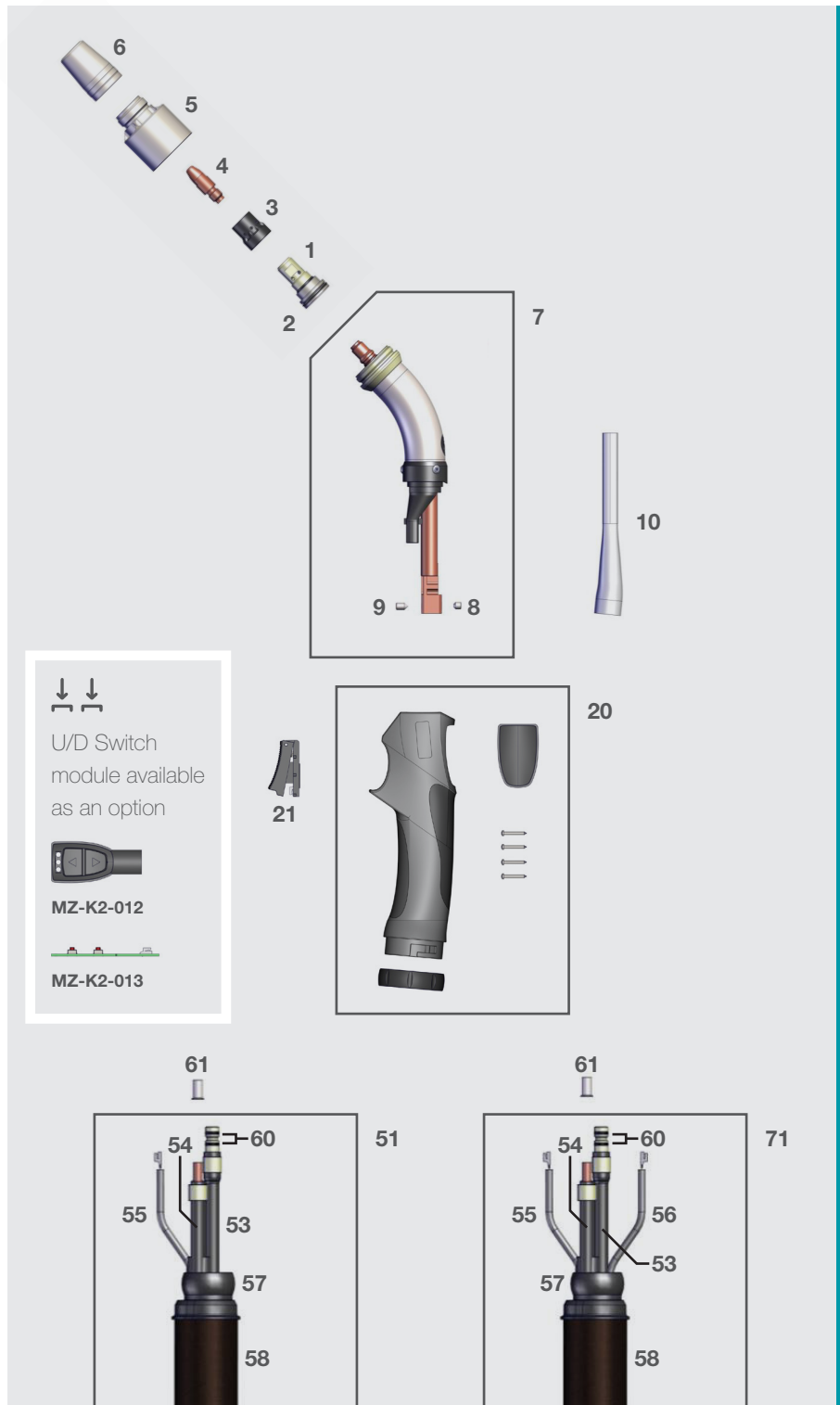
The Trigger

U/D Module (Option)awdawdawd
awdawdawd

The Gun and Cable

Premium components installed

MIGZONE MZ-AWG 260G – aircooled MIG/MAG-Torch



U/D Switch
module available
as an option



MZ-K2-012



MZ-K2-013

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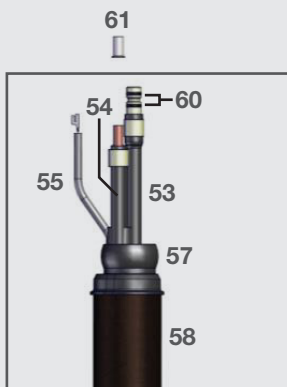
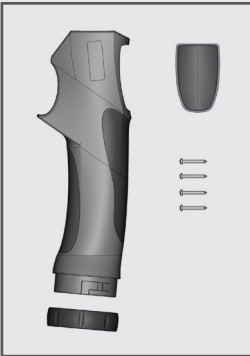
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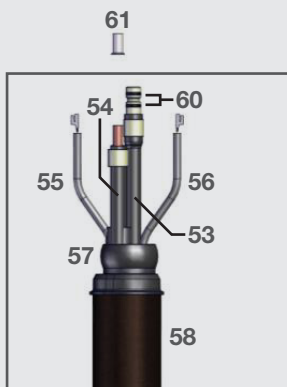
69

70

71



51



71

Torch Front Group

1	Centering unit with tip adapter L = 32mm (Brass)	24104085
2	O-Ring, heavy duty 19x1,5mm	0191501
3	Gas Diffuser AIR WeldGuard	2410707
4	Contact tip M8x30	Pro Eco
	ECu	24106xx 24106xxL
	CuCrZr	24176xx 24176xxL
	for Alu	24166xx -



Tips available in Ø 0.8 / 0.9 / 1.0 / 1.2
Please insert wire diameter at **xx**.
Example Ø 1,0 mm is: 10; Art.-No.: = 2410610

5	Extraction Nozzle L = 42mm	1010305010
6	Gas Nozzle screw-on L = 35mm conical NW15	20016004
	Swan neck incl. extraction bend 260G	
7	45° complete	2260A100
8	Set screw M5x5	000F247
9	Set screw M5x8	000F248
10	Exhaust duct guide hose Heat-resistant	05506041

Handle Group

20	MIG-Handle MZ-K2, grey left + right half	MZ-K2-014
22	Trigger cpl. MZ-K2	MZ-K2-015

Cable Group

57	Ball joint complete	4505024031
58	Leather 2m complete	MZ-LS-38M-2S
60	O-Ring 7x1,2mm	0171200
61	Ferrule	AR4013-16

*	Extraction hose 2m	0550522-2
*	Single Ear Clamp D = 27,0 for extraction hose	0321270



Parts marked with * are not
shown in the images on the left.

Cable Group

	Part	3m	4m	5m
51	Cable Assembly MZ-AWG cpl.	24138A30	24138A40	24138A50
71	Cable Assembly MZ-AWG up/down cpl.	24138A31	24138A41	24138A51
53	Outer Liner MZ-AWG cpl.	24146A30	24146A40	24146A50
54	Power Cable 16mm² cpl.	24147A30	24147A40	24147A50
55	Control Cable MZ-AWG cpl. flat to male	24144M30	24144M40	24144M50
56	Control Cable MZ-AWG cpl. flat to none	24144M31	24144M41	24144M51

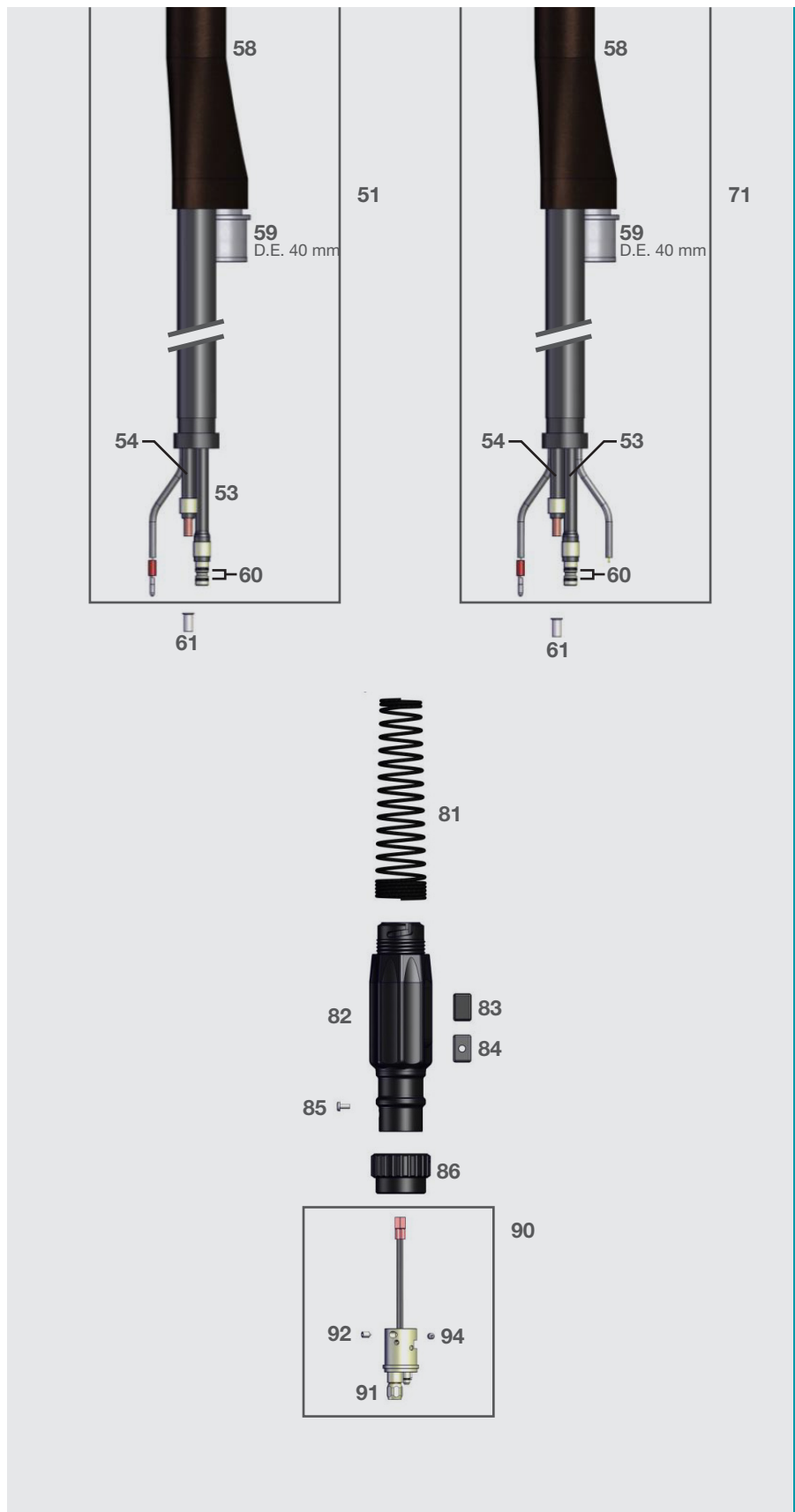


Warning Notice

Use only ceramic sprays,
such as Rhino Ceramic. The
particles from water- and oil-
based antisplatter sprays are carried
along by the extraction airflow and
cause contamination in the ex-
traction hose and filter unit, which
can impair the performance of the
entire extraction system.



MIGZONE MZ-AWG 260G – aircooled MIG/MAG-Torch

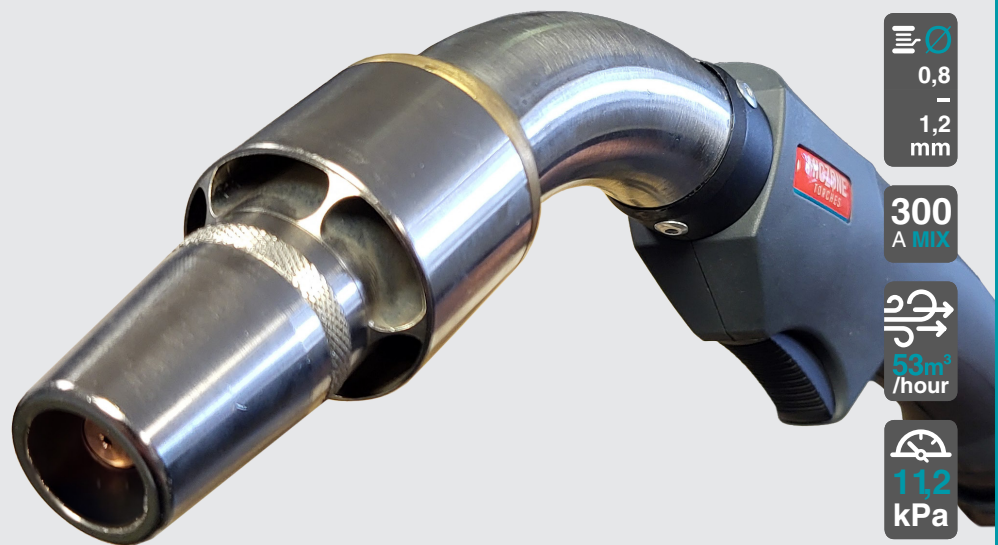


Cable Group	
58	Leather 2m complete MZ-LS-38M-2S
59	Connector for extraction hose 10103056
60	O-Ring 7x1,2mm 0171200
61	Ferrules AR4013-16
*	Extraction hose 2m 0550522-2
*	Single Ear Clamp D = 27,0 for extraction hose 0321270
81	Cable Support Spring ZA-22
82	Plug Housing without nut ZA-23 Cap for gun plug housing
83	standard ZA-69
84	with hole 6051603
90	Euro-connector air-cooled 2151506 Nut
86	Plug ZA-25
91	Union ZA-27 Screw
85	for Gun Plug Body ZA-24
92	Set M5x5 000F247
94	Set M5x8 000F248

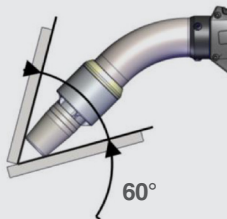
***** Parts marked with * are not shown in the images on the left.

MIGZONE AIR WELDGUARD SERIES

MZ-AWG 300W

MIGZONE®
TORCHES**100**
%DC0,8
–
1,2
mm**300**
A MIX53m³
/hour**112**
kPa**i Accessibility**

The AiR WeldGuard excels in up to 60° tight angled operation situations comparable to any common MIG-torch.

**i 300W Duty Cycle**

Consider the duty cycle at different current levels.

100 300A
%DC**60** 350A
%DC**40** 400A
%DC

With a cooling capacity of min. 800W and a torch inlet pressure of the coolant of 3 – 6bar.

MIGZONE MZ-AWG Series – watercooled MIG/MAG-Torch

DIN Norm

Technical data according to CE EN 60 974-7 and ISO 21904-1

The Concept

New Fume Extraction design blend of performance, comfort, and safety

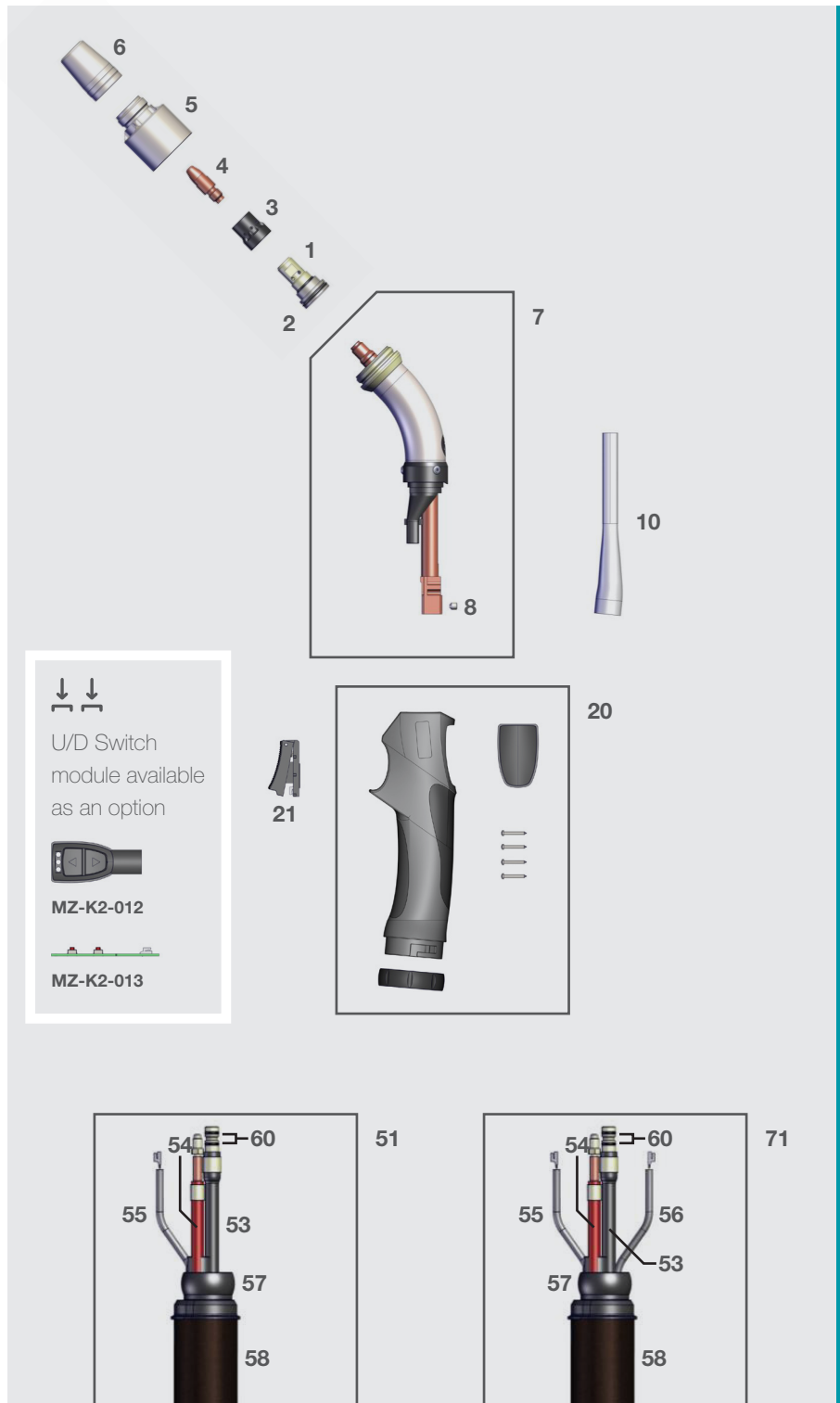
The Trigger

U/D Module (Option)

The Gun and Cable

Premium components installed

MIGZONE MZ-AWG 300W – watercooled MIG/MAG-Torch



Torch Front Group

1	Centering unit with tip adapter L = 32mm (Brass)	24104085
2	O-Ring, heavy duty 19x1,5mm	0191501
3	Gas Diffuser Air WeldGuard	2410707
4	Contact tip M8x30	Pro Eco
	ECu	24106xx 24106xxL
	CuCrZr	24176xx 24176xxL
	for Alu	24166xx -

i Tips available in Ø 0.8 / 0.9 / 1.0 / 1.2
Please insert wire diameter at **xx**.
Example Ø 1,0 mm is: 10; Art.-No.: = 2410610

5	Extraction Nozzle L = 42mm	1010305010
6	Gas Nozzle screw-on L = 35mm conical NW15	20016004
	Swan neck incl. extraction bend 300W	
7	45° complete	2300A100
8	Set screw M5x5	000F247
10	Exhaust duct guide hose Heat-resistant	05506041

Handle Group

20	MIG-Handle MZ-K2, grey left + right half	MZ-K2-014
21	Trigger cpl. MZ-K2	MZ-K2-015

Cable Group

57	Ball joint complete	4505024031
58	Leather 2m complete	MZ-LS-38M-2S
60	O-Ring 7x1,2mm	0171200

*	Extraction hose 2m	0550522-2
*	Single Ear Clamp D = 27,0 for extraction hose	0321270

***** Parts marked with * are not shown in the images on the left.

Cable Group

	Part	3m	4m	5m
51	Cable Assembly MZ-AWG cpl.	24138A30	24138A40	24138A50
71	Cable Assembly MZ-AWG up/down cpl.	24138A31	24138A41	24138A51
53	Outer Liner MZ-AWG cpl.	24146A30	24146A40	24146A50
54	Power Cable cpl.	24147A30	24147A40	24147A50
55	Control Cable MZ-AWG cpl. flat to male	24144M30	24144M40	24144M50
56	Control Cable MZ-AWG cpl. flat to none	24144M31	24144M41	24144M51

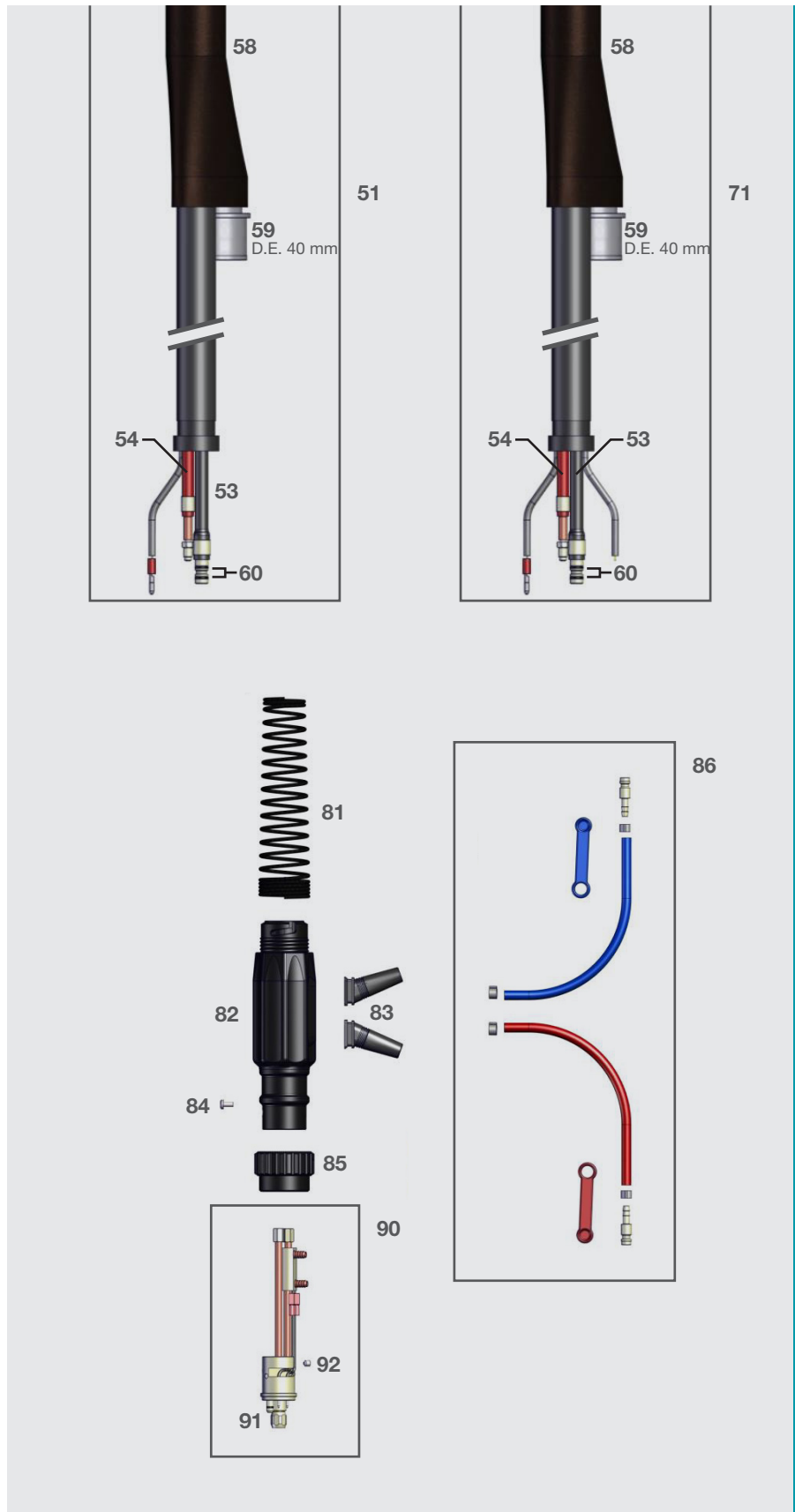


Warning Notice

Use only ceramic sprays, such as Rhino Ceramic. The particles from water- and oil-based antisplatter sprays are carried along by the extraction airflow and cause contamination in the extraction hose and filter unit, which can impair the performance of the entire extraction system.



MIGZONE MZ-AWG 300W – watercooled MIG/MAG-Torch



Cable Group	
58	Leather 2m complete MZ-LS-38M-2S
59	Connector for extraction hose 10103056
60	O-Ring 7x1,2mm 0171200
*	Extraction hose 2m 0550522-2
*	Single Ear Clamp D = 27,0 for extraction hose 0321270
81	Cable Support Spring ZA-22
82	Plug Housing without nut ZA-23
83	Rubber 6051610
86	Central connection hoses Water, complete ZA-26
90	Euro-connector water-cooled 706150521
	Nut
85	Plug ZA-25
91	Union ZA-27
	Screw
84	M4x6 for Gun Plug Body ZA-24
92	Set M5x5 000F247

* Parts marked with * are not shown in the images on the left.

MIGZONE MZ-AWG – Liners for Euro connection

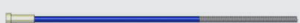
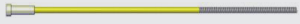
Liner length

35320X0K

 **X** – Specify the desired length for wire conduits and liners. Available in **3/4/5m**. Contact us for different length.

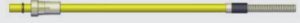
Steel liners, insulated – for Euro-connection

(Carbon steel, G3Si1, G4Si1, SG2, SG1 etc.)

Model	Wire-Ø [mm]	Dimension [mm]	Collet (PU = 10)	Brass liner 0,3 m with sleeve	Liner complete	Bundle (50m)
blue 	0,8 - 1,0	1,5 x 4,0	2155645	-	34415X0	3441500
red 	0,9 - 1,2	2,0 x 4,0		-	34420X0	3442000
yellow 	1,2 - 1,6	2,5 x 4,0		-	34425X0	3442500

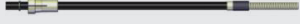
Combi PTFE liners – for Euro connection

(Aluminum (AlMg, AlSi etc.), Stainless steel (chrome-nickel, VA, V2A etc.), Special alloys (CuSi etc.), Carbon steel (G3Si1, SG2 etc.))

Model	Wire-Ø [mm]	Dimension [mm]	Collet (PU = 10)	Brass liner 0,3 m with sleeve	Liner complete	Bundle (100m)
blue 	0,8 - 1,0	1,5 x 4,0	2155740	3412200300	34115X0K	3411500
red 	0,9 - 1,2	2,0 x 4,0			34120X0K	3412000
yellow 	1,2 - 1,6	2,7 x 4,7	2415747	3452200300	34727X0K	3472700

Combi Carbon PTFE liners – for Euro connection

(Carbon steel (G3Si1, SG2 etc.), Special alloys (CuSi etc.), conditional aluminum (AlMg, AlSi etc.))

Model	Wire-Ø [mm]	Dimension [mm]	Collet (PU = 10)	Brass liner 0,3 m with sleeve	Liner complete	Bundle (100m)
black 	0,8 - 1,0	1,5 x 4,0	2155740	3412200300	35115X0K	3511500
black 	1,0 - 1,2	2,0 x 4,0			35120X0K	3512000
black 	1,2 - 1,6	2,7 x 4,7	2415747	3452200300	35727X0K	3572700

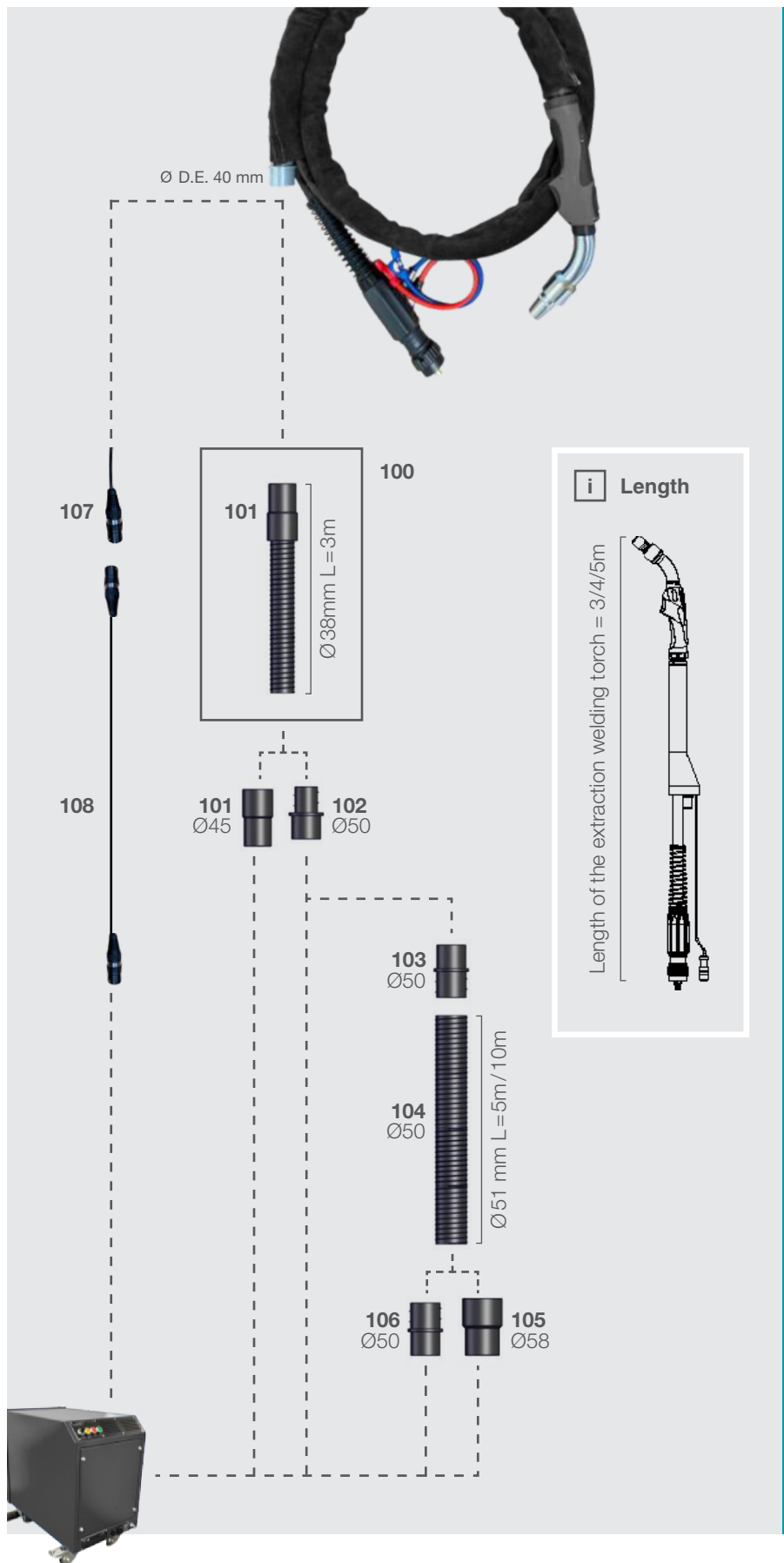
Combi PA liners – for Euro connection

(Carbon steel (G3Si1, SG2 etc.), Special alloys (CuSi etc.), conditional aluminum (AlMg, AlSi etc.))

Model	Wire-Ø [mm]	Dimension [mm]	Collet (PU = 10)	Brass liner 0,3 m with sleeve	Liner complete	Bundle (200m)
grey 	0,6 - 0,9	1,4 x 4,0	2155740	3412200300	35314X0K	3531400
grey 	0,8 - 1,2	2,0 x 4,0			35320X0K	3522000-200
grey 	1,2 - 1,6	2,3 x 4,7	2415747	3452200300	35323X0K	3532300-200

 **O-Rings for all Combi liners – Part No. 0031500 (PU = 10)**

MIGZONE MZ-AWG – Extraction hoses and extraction accessories



Group: Extraction

100	Extraction hose LW38mm L = 3m with extraction adapter	0550501-3S1
	Extraction adapter	
101	Ø45 for Ø38mm hose	10103054
105	Ø58 for Ø51mm hose	101030540
	Coupling Ø50	
102	male for Ø38mm hose	101030580
103	female for Ø51mm hose	101030582
106	male for Ø50mm hose	101030581
	Extraction hose LW51	
104	L=5m	055050151-5
	L=10m	055050151-10
107	Control fume extraction unit Plug	0003601
108	Extension for control fume extraction unit, pre-assembled with plug and socket, incl. Velcro cable tie	
	5m	0510301-5S
	10m	0510301-10S
	15m	0510301-15S

i Coupling

The male coupling **102** and **106** fits the Minivac 200D.



i Extraction unit

Conventional extraction units can be equipped with different connection piece diameters depending on the manufacturer.

Extraction unit Minivac 200D and accessories

1



Non-EU Options

Connection voltage and cables for countries with different sockets and voltages (e.g. UK, USA, Canada) available on request.

Technical Data

Connection voltage	230V / 50 Hz
Engine output	1,5 kW
Extraction capacity	170 m³/h
Negative pressure max.	35000 Pa
Minimum air flow rate	80 m³/h
Ø connection flange	51 mm
Separation level >	99,8 %
Noise level (at 100% extraction capacity)	max. 65 dB(A)
Dimensions	↗ 700 mm ↔ 440 mm ↕ 585 mm
Weight	45 kg
Filtering methods	Cleaning filter
Filter cleaning	Automatic
Filter area approx.	5 m²
IFA-approval	W3-tested
Test mark	CE

2



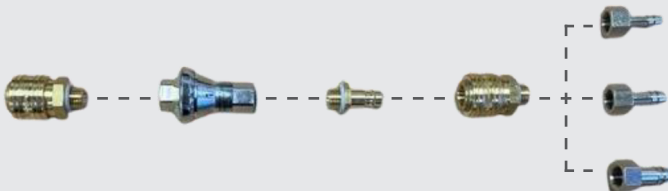
3



Spare Parts

- 1 Air WeldGuard® extraction unit FUMATOR® Minivac 200D, U/D-ready, 7-color light signal 230V/50Hz (Pos. 3 (3m) included) **10080021**
- 2 Air WeldGuard® automatic stat/stop sensor cable with pliers for Minivac 200D 4m **1008002001**
- 3 Air WeldGuard® mains connection cable cpl. for Minivac 200D with Neutrik and Schuko plug 3m **1008002002**
6m **1008002003**
- 4 Compressed air connection set Air WeldGuard® for extraction unit (saves the pressure reducer) 5 bar **1008002004**
- * Filter cartridge with with two open ends mechanical Ø325x300 made of polyester fleece 5 m² filter area **1008002101**
- * Filter mats (=5 pcs) Minivac for external air intake **1008002102**

4



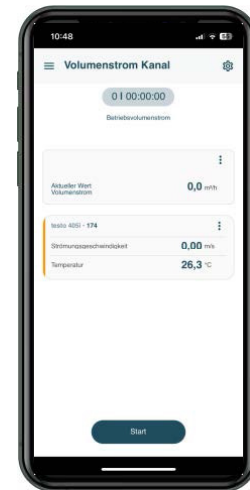
 Parts marked with * are not shown in the images on the left.

Measuring system AVM-1 AiR WeldGuard® for suction volume flow



Advantages of the AVM-1 AiR WeldGuard® measuring system:

- Compact solution in one case
- Accurate volume flow measurement over an adjustable period of time
- Values transmitted via Bluetooth to mobile device
- Direction-independent measurement
- Values can be saved and accessed at any time
- Free App included



Download the app!



Measuring system AVM-1 AiR WeldGuard®

consists of

- 1x Suction volume flow measuring tube
- 1x Reducing sleeve
- 1x Measuring device

Ordering Number
101030570



This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin gray lines. There are 20 columns and 20 rows of squares, creating a total area of 400 small squares. The grid covers the entire page except for a narrow white border around the edges.