



Welding & Cutting Torch Technology

Product Catalogue

**Machine Control
Analogue Series**



About Us

Uniarc is part of a group of companies specializing in the production of Welding and Cutting torches.

With over 40 years experience, the group is positioned as a global leader at the heart of the welding torch industry.

Originally established in the United Kingdom in the 1980's, the company is now a fully-fledged, vertically integrated Chinese product innovator and manufacturer.

Our customers span a full cross section of the industry, ranging from general distribution to leading global original equipment manufacturers.

Our products are used in a broad cross-section of industrial sectors ranging from auto body repair to ship building.

Whether you need a standard off the shelf product or a customized branded option with your own colours, logos and packaging we have a one stop solution for your requirements.

Our team are here to help, contact us today if you need anymore information.



find out more www.uniarctorchology.com

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Machine Control

Analogue Liquid-Cooled Series

Features Focus

The Uniarc Analogue Torch series offers control of the welding machines parameters via the torch handle.

Consumable parts

All wear and spare parts are manufactured to the same specification as the OEM and are fully interchangeable.

Hanger Hook

A "plug and play" option, they encourage the operator to hang the torch off the ground where it is easy to locate.

Trigger Assembly

Rapid field servicing ensured by a simple "plug and play" system.

Switches can be exchanged in 5 seconds without the use of tools.

Available in standard and extended options



Spring Pins
Fitted with unbreakable spring loaded gun plug body pins.

Water In/Out Supports

Fitted as standard to ensure delivery and uninterrupted flow rate of coolants.

Rear Cable Support

Extra length cable support systems ensure smooth and consistent wire feed at any angle.



Swan Necks

Manufactured to the same specification as the OEM.

Ergo Handle

Handle weight has been reduced wherever possible, which when combined with the correct ratio of cable support length and stiffness, provides the perfect balance between user comfort and excellent wire feed performance.

Top and bottom handle soft grips ensure all day welder comfort.



Cable Systems

Cable systems use high temperature-resistant rubber cables and are colour coded for ease of identification.

Unique cable end geometries ensure leak free terminations.



Switch Plug

Analogue signalling sent through 5 core lead and separate plug to the machine

Gun Plug Housing

Tough and damage resistant, housings and nuts are formed in robust glass-reinforced polymers encasing all conductive parts in accordance with EN60974-7.

Machine Control

Analogue Torch Series

Ratings: 350 Amp to 450 Amp, Mixed Gas M21

Technical Data

Cooling Method

Rating: CO₂

Rating: Mixed Gas M21

Duty Cycle:

Wire Size:

Minimum Water Flow

Minimum Water Inlet Pressure

Minimum Cooling Requirements

Maximum Water Inlet Pressure

Maximum Water Inlet Temperature

MM401W

Liquid-Cooled

400A

350A

100%

0.8-1.2mm

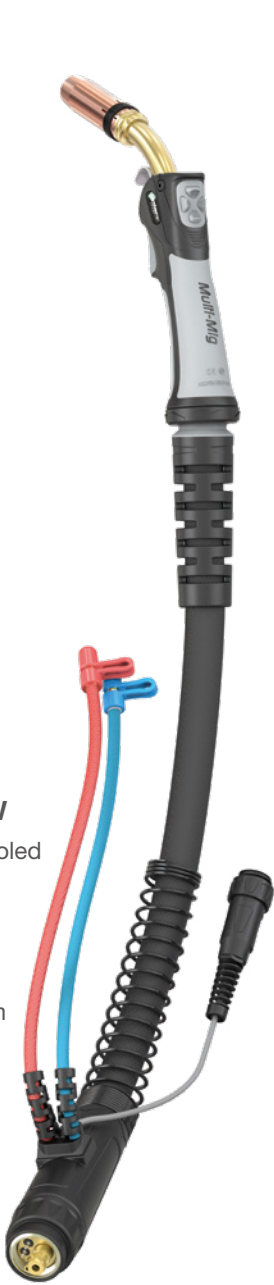
1.2 l/min

2.0 Bar

1000W

5.0 Bar

50°C



MM501W

Liquid-Cooled

500A

450A

100%

1.0-1.6mm

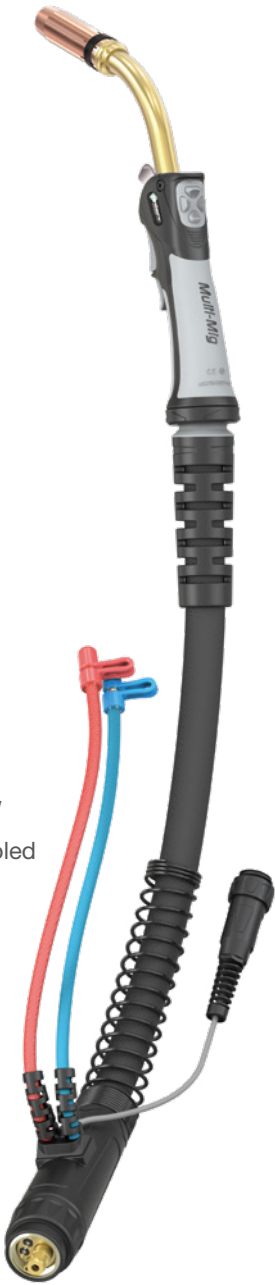
1.2 l/min

2.0 Bar

1200W

5.0 Bar

50°C



Order Codes	MM4001-AM1-MT1-30ER	MM5000-AM1-MT1-30ER
	MM4001-AM1-MT1-40ER	MM5000-AM1-MT1-40ER
	MM4001-AM1-MT1-50ER	MM5000-AM1-MT1-50ER

Analogue Torch Control

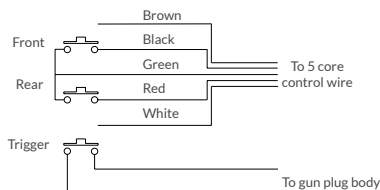
Welding programmes can be changed via a 2 or 4 way control module.

Analogue signals are sent through a 5 core switch lead and separate control plug to the machine.



Control Module
UNAM1

Function:
Job Mode
Up/Down Control

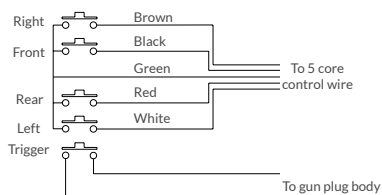


Wiring Method UNAM1



Control Module
UNAM2

Function:
Job Mode
Up/Down Control x 2



Wiring Method UNAM2

Plug and Play



Remove Screw

Remove Module

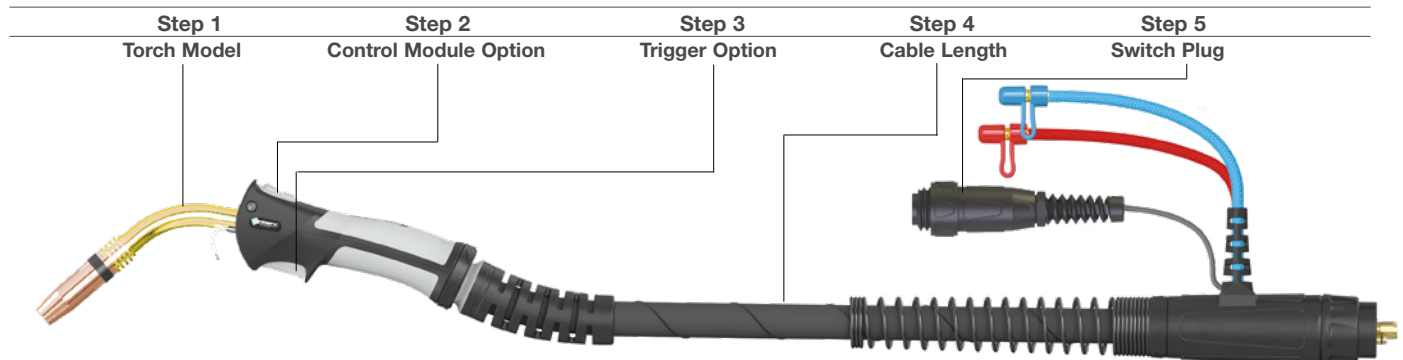
Replace Module

Replace Screw

Machine Control

Analogue Torch Range

Torch Package Configurator



Ordering Information

Torch package part numbering is configured using the simple 5 stage system outlined below:

1. Select the torch model
2. Select the control module
3. Select the trigger type
4. Select the cable length
5. Select the switch plug

Example: MM5000-AM1-MT1-30ER

Analogue 501W Liquid-Cooled Torch Package c/w 2 way up/down control and standard trigger x 3mt

Step 1 Torch Model		Step 2 Control Module Option		Step 3 Trigger Option		Step 4 Cable Length		Step 5 Switch Plug	
Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description
MM401W	MM401 Liquid-Cooled Package	MT1	Standard Trigger	30ER	Cable Assembly x 3mt	UERP0	2 Pin Amphenol Plug		
MM501W	MM501 Liquid-Cooled Package	MT2	Extended Trigger	40ER	Cable Assembly x 4mt	UERP1	4 Pin Amphenol Plug		
				50ER	Cable Assembly x 5mt	UERP2	5 Pin Amphenol Plug		
						UERP3	6 Pin Amphenol Plug		
						UERP4	14 Pin Amphenol Plug		
						UERP6	8 Pin Amphenol Plug		
						UERP6-5	5 Pin Amphenol Plug		
						UERP7	3 Pin Tuchel Plug		
						UERP8	9 Pin Tuchel Plug		
						UERP9	5 Pin Tuchel Plug		
						UERP11	7 Pin Uniarc Plug		
						UXS12-J3P	3 Pin Plug		

Part No.	Description
AM1	2 Way Module Mig Control
AM2	4 Way Module Mig Control

Part No.	Description
UNAM1	Module Mig Control Kit
UNAM2	Module Mig Control Kit

FUNCTION: Job Mode Up/Down Control		FUNCTION: Job Mode Up/Down Control x 2	
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Machine Control Analogue Torch Range Switch Wire Plugs



Kit Order Codes

Part Number	Description
UERP0	2 Pin Amphenol Plug



Kit Order Codes

Part Number	Description
UERP1	4 Pin Amphenol Plug



Kit Order Codes

Part Number	Description
UERP2	5 Pin Amphenol Plug



Kit Order Codes

Part Number	Description
UERP3	6 Pin Amphenol Plug



Kit Order Codes

Part Number	Description
UERP4	14 Pin Amphenol Plug



Kit Order Codes

Part Number	Description
UERP6	8 Pin Amphenol Plug
UERP6-5	5 Pin Amphenol Plug



Kit Order Codes

Part Number	Description
UERP7	3 Pin Tuchel Plug



Kit Order Codes

Part Number	Description
UERP8	9 Pin Tuchel Plug



Kit Order Codes

Part Number	Description
UERP9	5 Pin Tuchel Plug



Kit Order Codes

Part Number	Description
UERP11	7 Pin Uniarc Plug

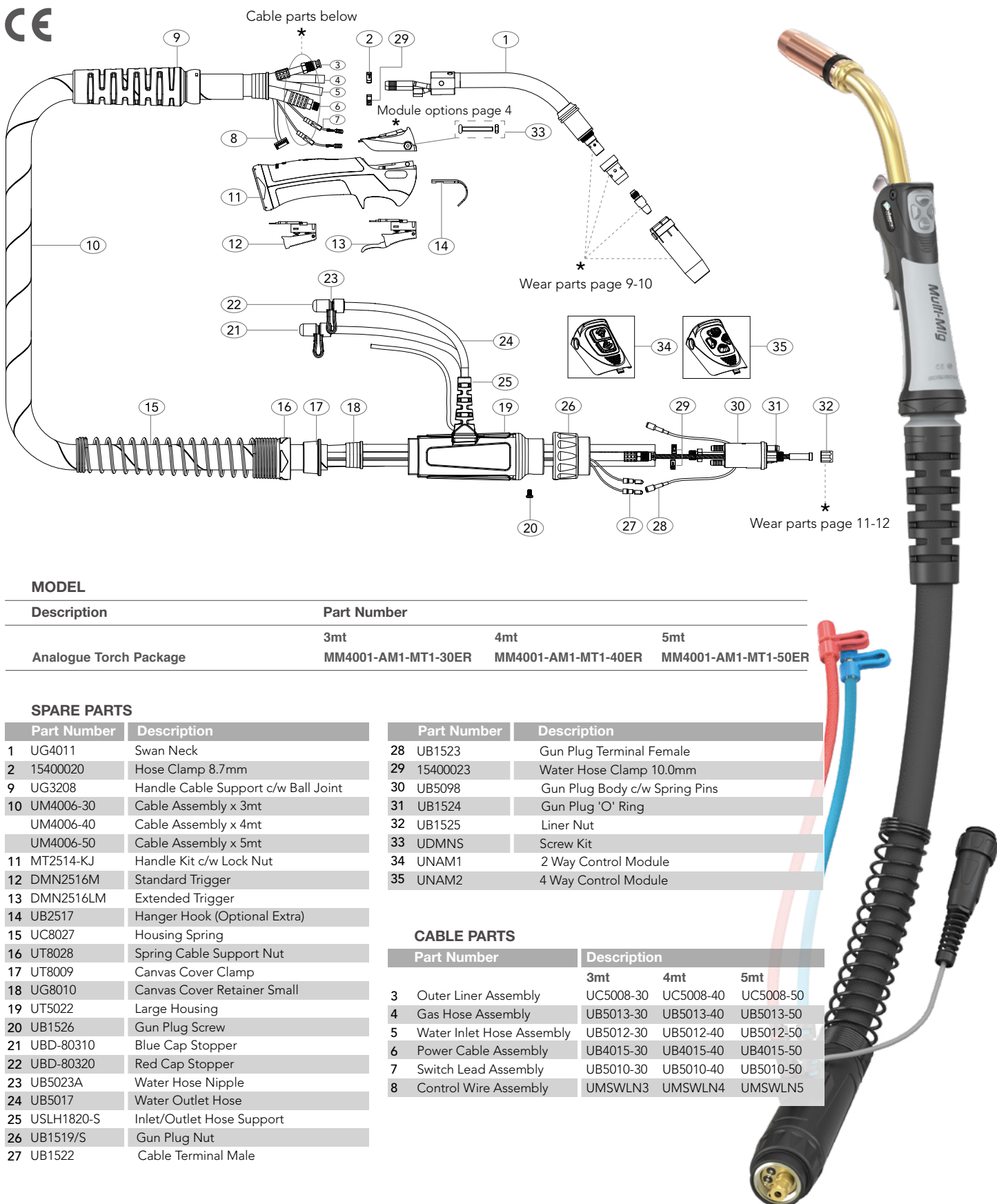


Kit Order Codes

Part Number	Description
UXS12-J3P	3 Pin Plug

MM401W Machine Control Analogue Liquid-Cooled Mig Welding Torch

Rating: 400A CO₂ 350A mixed gas M21, EN60974-7 @ 100% duty cycle. 0.8 to 1.2mm wires



MODEL

Description	Part Number		
	3mt	4mt	5mt
Analogue Torch Package	MM4001-AM1-MT1-30ER	MM4001-AM1-MT1-40ER	MM4001-AM1-MT1-50ER

SPARE PARTS

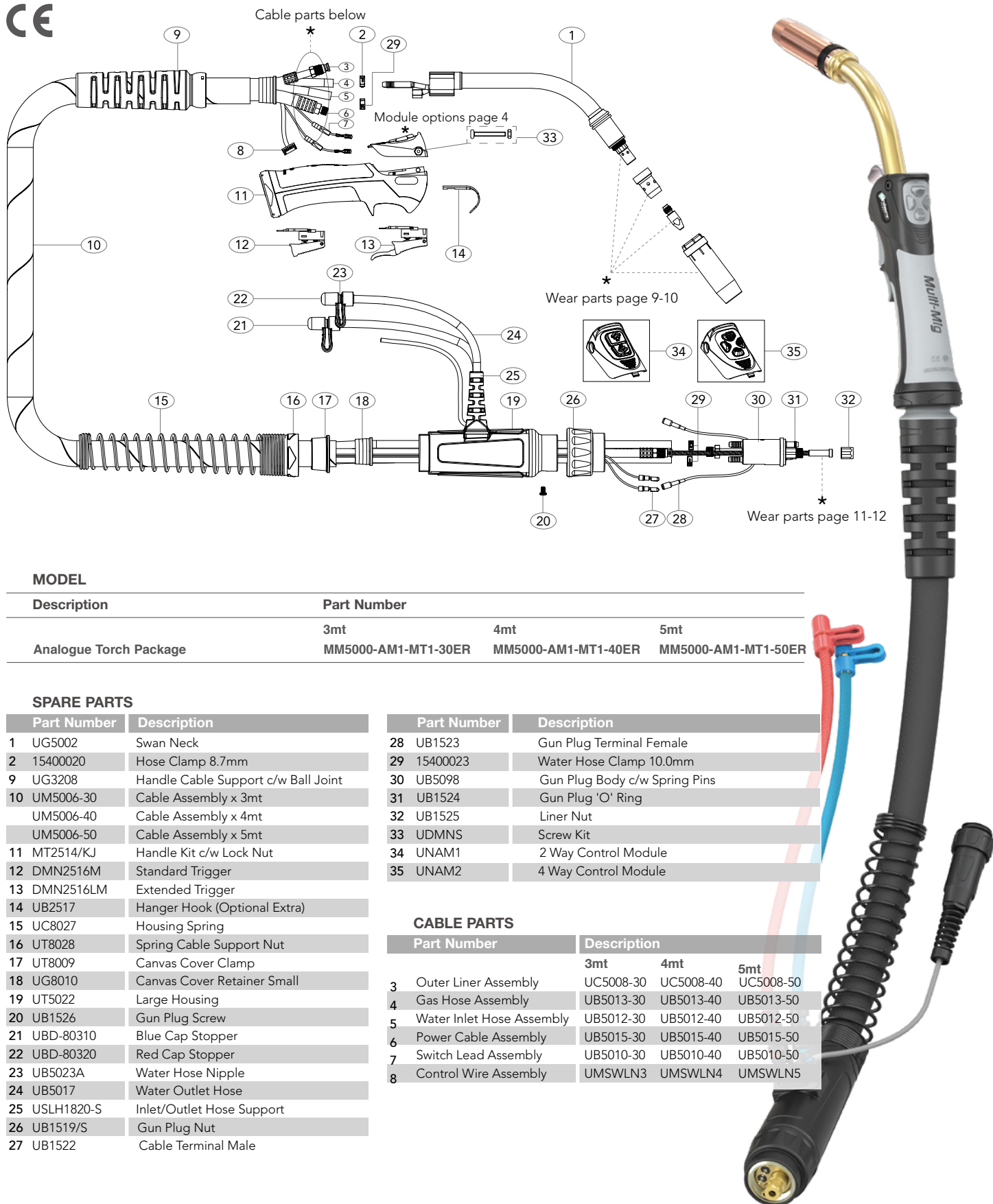
Part Number	Description
1 UG4011	Swan Neck
2 15400020	Hose Clamp 8.7mm
9 UG3208	Handle Cable Support c/w Ball Joint
10 UM4006-30	Cable Assembly x 3mt
UM4006-40	Cable Assembly x 4mt
UM4006-50	Cable Assembly x 5mt
11 MT2514-KJ	Handle Kit c/w Lock Nut
12 DMN2516M	Standard Trigger
13 DMN2516LM	Extended Trigger
14 UB2517	Hanger Hook (Optional Extra)
15 UC8027	Housing Spring
16 UT8028	Spring Cable Support Nut
17 UT8009	Canvas Cover Clamp
18 UG8010	Canvas Cover Retainer Small
19 UT5022	Large Housing
20 UB1526	Gun Plug Screw
21 UBD-80310	Blue Cap Stopper
22 UBD-80320	Red Cap Stopper
23 UB5023A	Water Hose Nipple
24 UB5017	Water Outlet Hose
25 USLH1820-S	Inlet/Outlet Hose Support
26 UB1519/S	Gun Plug Nut
27 UB1522	Cable Terminal Male

Part Number	Description
28 UB1523	Gun Plug Terminal Female
29 15400023	Water Hose Clamp 10.0mm
30 UB5098	Gun Plug Body c/w Spring Pins
31 UB1524	Gun Plug 'O' Ring
32 UB1525	Liner Nut
33 UDMNS	Screw Kit
34 UNAM1	2 Way Control Module
35 UNAM2	4 Way Control Module

CABLE PARTS

Part Number	Description		
	3mt	4mt	5mt
3 Outer Liner Assembly	UC5008-30	UC5008-40	UC5008-50
4 Gas Hose Assembly	UB5013-30	UB5013-40	UB5013-50
5 Water Inlet Hose Assembly	UB5012-30	UB5012-40	UB5012-50
6 Power Cable Assembly	UB4015-30	UB4015-40	UB4015-50
7 Switch Lead Assembly	UB5010-30	UB5010-40	UB5010-50
8 Control Wire Assembly	UMSWLN3	UMSWLN4	UMSWLN5

All products conform to EN60974-7, CE and are RoHS2, REACH and WEEE compliant



MODEL

Description	Part Number		
	3mt	4mt	5mt
Analogue Torch Package	MM5000-AM1-MT1-30ER	MM5000-AM1-MT1-40ER	MM5000-AM1-MT1-50ER

SPARE PARTS

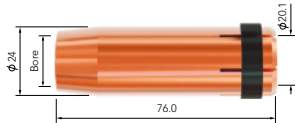
Part Number	Description	Part Number	Description
1 UG5002	Swan Neck	28 UB1523	Gun Plug Terminal Female
2 15400020	Hose Clamp 8.7mm	29 15400023	Water Hose Clamp 10.0mm
9 UG3208	Handle Cable Support c/w Ball Joint	30 UB5098	Gun Plug Body c/w Spring Pins
10 UM5006-30	Cable Assembly x 3mt	31 UB1524	Gun Plug 'O' Ring
UM5006-40	Cable Assembly x 4mt	32 UB1525	Liner Nut
UM5006-50	Cable Assembly x 5mt	33 UDMNS	Screw Kit
11 MT2514/KJ	Handle Kit c/w Lock Nut	34 UNAM1	2 Way Control Module
12 DMN2516M	Standard Trigger	35 UNAM2	4 Way Control Module
13 DMN2516LM	Extended Trigger		
14 UB2517	Hanger Hook (Optional Extra)		
15 UC8027	Housing Spring		
16 UT8028	Spring Cable Support Nut		
17 UT8009	Canvas Cover Clamp		
18 UG8010	Canvas Cover Retainer Small		
19 UT5022	Large Housing		
20 UB1526	Gun Plug Screw		
21 UBD-80310	Blue Cap Stopper		
22 UBD-80320	Red Cap Stopper		
23 UB5023A	Water Hose Nipple		
24 UB5017	Water Outlet Hose		
25 USLH1820-S	Inlet/Outlet Hose Support		
26 UB1519/S	Gun Plug Nut		
27 UB1522	Cable Terminal Male		

CABLE PARTS

Part Number		Description		
		3mt	4mt	5mt
3	Outer Liner Assembly	UC5008-30	UC5008-40	UC5008-50
4	Gas Hose Assembly	UB5013-30	UB5013-40	UB5013-50
5	Water Inlet Hose Assembly	UB5012-30	UB5012-40	UB5012-50
6	Power Cable Assembly	UB5015-30	UB5015-40	UB5015-50
7	Switch Lead Assembly	UB5010-30	UB5010-40	UB5010-50
8	Control Wire Assembly	UMSWLN3	UMSWLN4	UMSWLN5

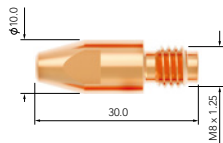
All products conform to EN60974-7, CE and are RoHS2, REACH and WEEE compliant

Wear Parts



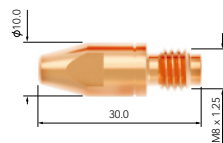
Nozzles

Part No.	Description	Bore	Wall	Material	MM401W	MM501W
UB5027	Cylindrical Nozzle	19.5	2.5mm	Copper	●	●
UB5028	Conical Nozzle	16.0	2.5mm	Copper	●	●
UB5028HD	Conical Nozzle HD	16.0	3.2mm	Copper	●	●
UB5029	Tapered Nozzle	14.0	2.5mm	Copper	●	●



Contact Tips

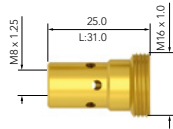
Part No.	Description	Material	Wire Size mm-inch	MM401W	MM501W
M8 x 30					
UB4014-08	Contact Tip	Ecu	0.8-0.030	●	●
UB4014-09	Contact Tip	Ecu	0.9-0.035	●	●
UB4014-10	Contact Tip	Ecu	1.0-0.040	●	●
UB4014-12	Contact Tip	Ecu	1.2-0.045	●	●
UB4014-14	Contact Tip	Ecu	1.4-0.055	●	●
UB4014-16	Contact Tip	Ecu	1.6-1/16"	●	●
UB4014-20	Contact Tip	Ecu	2.0-5/64"	●	●
UB4014-24	Contact Tip	Ecu	2.4-3/32"	●	●
UB4014-10A	Contact Tip	Ecu	1.0-0.040	●	●
UB4014-12A	Contact Tip	Ecu	1.2-0.045	●	●
UB4014-16A	Contact Tip	Ecu	1.6-1/16"	●	●



M8 x 30					
UB4015-08	Contact Tip	CuCrZr	0.8-0.030	●	●
UB4015-09	Contact Tip	CuCrZr	0.9-0.035	●	●
UB4015-10	Contact Tip	CuCrZr	1.0-0.040	●	●
UB4015-12	Contact Tip	CuCrZr	1.2-0.045	●	●
UB4015-13	Contact Tip	CuCrZr	1.3-0.052	●	●
UB4015-14	Contact Tip	CuCrZr	1.4-0.055	●	●
UB4015-16	Contact Tip	CuCrZr	1.6-1/16"	●	●
UB4015-20	Contact Tip	CuCrZr	2.0-5/64"	●	●
UB4015-24	Contact Tip	CuCrZr	2.4-3/32"	●	●
UB4015-10A	Contact Tip	CuCrZr	1.0-0.040	●	●
UB4015-12A	Contact Tip	CuCrZr	1.2-0.045	●	●
UB4015-16A	Contact Tip	CuCrZr	1.6-1/16"	●	●

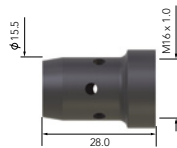
● Standard wear part range ● Torch package standard wear part set-up

Wear Parts



Tip Adaptors

Part No.	Description	Material	MM401W	MM501W
UB5001	Tip Adaptor 25.0mm M8	Brass	●	●
UB5001C	Tip Adaptor 25.0mm M8	Copper	●	●
UB5001L	Tip Adaptor Long	Brass	●	●








Diffusers

Part No.	Description	Colour	Material	MM401W	MM501W
UB5005B	Diffuser	Black	DMC3	●	●
UB5005C	Diffuser	White	Ceramic	●	●
UB5005H	Diffuser, High Temperature	Black	HPP	●	●
UB5005W	Diffuser	White	DMC3	●	●

Wear Parts




Liners

Part No.	Length	Description	Nipple	Wire Size mm-inch	MM401W	MM501W
						
UB5033-30	3.5mt	Steel Liner x 3mt	Moulded Nipple	1.0-1.2	●	●
UB5033-40	4.5mt	Steel Liner x 4mt	Moulded Nipple	1.0-1.2	●	●
UB5033-50	5.5mt	Steel Liner x 5mt	Moulded Nipple	1.0-1.2	●	●
						
UB5033-30B	3.5mt	Steel Liner x 3mt	Brass Nipple	1.0-1.2	●	●
UB5033-40B	4.5mt	Steel Liner x 4mt	Brass Nipple	1.0-1.2	●	●
UB5033-50B	5.5mt	Steel Liner x 5mt	Brass Nipple	1.0-1.2	●	●
						
UB2513-30	3.6mt	Teflon Liner x 3mt	Teflon Brass Nipple	1.0-1.2	●	●
UB2513-40	4.6mt	Teflon Liner x 4mt	Teflon Brass Nipple	1.0-1.2	●	●
UB2513-50	5.6mt	Teflon Liner x 5mt	Teflon Brass Nipple	1.0-1.2	●	●
UNE1564	0.3mt	Optional Bronze Neck Liner	Brass Nipple	0.8-1.2	●	●
						
UB2564-30	3.6mt	Polyamide Liner x 3mt, 4.7mm O/D	Brass Nipple	1.2-1.6	●	●
UB2564-40	4.6mt	Polyamide Liner x 4mt, 4.7mm O/D	Brass Nipple	1.2-1.6	●	●
UB2564-50	5.6mt	Polyamide Liner x 5mt, 4.7mm O/D	Brass Nipple	1.2-1.6	●	●
						
UB5034-30	3.5mt	Steel Liner x 3mt 1.2-1.6mm	Moulded Nipple	1.2-1.6	●	●
UB5034-40	4.5mt	Steel Liner x 4mt 1.2-1.6mm	Moulded Nipple	1.2-1.6	●	●
UB5034-50	5.5mt	Steel Liner x 5mt 1.2-1.6mm	Moulded Nipple	1.2-1.6	●	●

● Standard wear part range ● Torch package standard wear part set-up

Wear Parts

Liners

Part No.	Length	Description	Nipple	Wire Size mm-inch	MM40TW	MM50TW
						
UB5034-30B	3.5mt	Steel Liner x 3mt 1.2-1.6mm	Brass Nipple	1.2-1.6	●	●
UB5034-40B	4.5mt	Steel Liner x 4mt 1.2-1.6mm	Brass Nipple	1.2-1.6	●	●
UB5034-50B	5.5mt	Steel Liner x 5mt 1.2-1.6mm	Brass Nipple	1.2-1.6	●	●
						
UB3626-30	3.6mt	Teflon Liner x 3mt	Brass Nipple	1.2-1.6	●	●
UB3626-40	4.6mt	Teflon Liner x 4mt	Brass Nipple	1.2-1.6	●	●
UB3626-50	5.6mt	Teflon Liner x 5mt	Brass Nipple	1.2-1.6	●	●
UNE2564	0.3mt	Optional Bronze Neck Liner	Brass Nipple	1.2-1.6	●	●
						
UB3564-30	3.6mt	Polyamide Liner x 3mt, 4.7mm O/D	Brass Nipple	1.6-2.0	●	●
UB3564-40	4.6mt	Polyamide Liner x 4mt, 4.7mm O/D	Brass Nipple	1.6-2.0	●	●
UB3564-50	5.6mt	Polyamide Liner x 5mt, 4.7mm O/D	Brass Nipple	1.6-2.0	●	●

● Standard wear part range ● Torch package standard wear part set-up

Welding & Cutting Torch Technology

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