

FACT SHEET

Picomig 305 – Puls – Synergic – 15 kg/D300

Picomig 355 – Puls – Synergic – 15 kg/D300



Picomig 305 puls

Picomig 355 puls

/ MIG/MAG

/ MIG/MAG pulse

/ TIG

/ MMA

/ forceArc

/ forceArc puls

/ rootArc

/ rootArc puls

Picomig 305 Synergic

Picomig 355 Synergic

/ MIG/MAG

/ TIG

/ MMA

/ forceArc

/ rootArc

TWO VERSIONS AVAILABLE:

Picomig puls TKM:

- Multiprocess inverter welding machine, pulse, with easy, one-knob operation and integrated wire feeder
- GMAW pulsed welding and GMAW standard welding
- Significantly less spatter formation and therefore less finishing work, all thanks to the pulse function
- GMAW pulse welding of aluminium and aluminium alloys
- EWM forceArc/forceArc puls characteristics for unalloyed steel
- EWM rootArc/rootArc puls characteristics for unalloyed steel
- Synergic characteristics for steel, CrNi, aluminium and flux cored wires
- MMA welding and TIG lift arc welding

Picomig Synergic TKM ¹⁾:

- Multiprocess inverter welding machine with simple synergic one-knob operation and integrated wire feeder
- GMAW standard welding
- EWM forceArc characteristics for unalloyed steel
- EWM rootArc characteristics for unalloyed steel
- Synergic characteristics for steel, CrNi, aluminium and flux cored wires
- MMA welding and TIG lift arc welding

FUNCTIONS

- Infinitely adjustable arc dynamics (choke effect)
- Non-latched/latched operation
- Spot welding
- Interval welding
- Adjustable gas pre-flow and post-flow time
- ewm Xnet also available via Xnet LAN/Wi-Fi gateway
- Connection capability for remote control
- Superb for welding self-shielded flux cored wires
- End-crater filling function directly via button on the control
- Adjustable sequence parameters for the start program and corresponding sequence parameters for the end program with the end-crater filling function

¹⁾ Picomig Synergic TKM without pulse function

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YOUR BENEFITS

- No need to purchase additional characteristics – all characteristics for this machine type are included in the scope of delivery ex works
- Comprehensive job list
- Portable or mobile with transport cart
- Choice of gas- or water-cooled operation with a cool50 U40 cooling unit. The cool50 U40 is powered through the Picomig – no other mains connection is required
- Wire spool diameter up to 300 mm (15 kg/D300) (200 mm (15 kg/D200) wire spool is possible with optional adapter)
- Sturdy casing suitable for construction sites
- Powerful, high-precision EWM eFeed 4-roll wire feeder for reliably feeding all solid and flux cored wires. Equipped ex works with 1.0 mm to 1.2 mm UNI rolls for low to high-alloy steel
- High open circuit voltage for excellent ignition characteristics
- Energy-saving thanks to high efficiency and the standby function
- Simple, tool-free reversal of the welding polarity
- Earth fault monitoring (PE protection)
- Splash-proof as per IP23
- 5 m mains lead
- Free WPQR package for certification up to and including EXC2 as per EN 1090, and up to and including S355 for welding unalloyed steels

END-CRATER FILL



- End-crater filling function can be selected directly using a button on the control
- Function available both in the Puls and the Synergic version
- At the end of the welding process, the set welding current is automatically lowered so that potential end-craters in the weld seam can be filled. This prevents cracking due to under-curvature
- Three-dimensional heat dissipation is also reduced as a result of the slow reduction in the welding current and filling of the end-crater, which minimises tension



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HIGHLIGHTS



+ Polarity selection:

Tool-free reversal of the welding polarity (+/-).

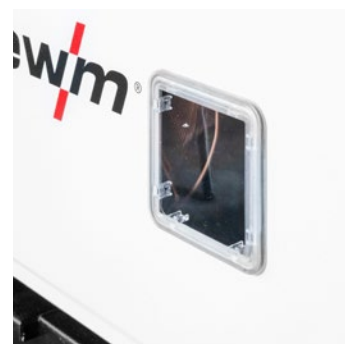
+ Park socket:

For secure "parking" of welding current cable for MMA welding.



+ Euro torch connector:

Highly efficient welding torch connector, also suitable for Dinse connector using adapter (ADAP DZA/EZA / 094-016765-00000).



+ Inspection window:

The wire spool, filling level and drive inlet guide are always in view.



+ Welding torch holder:

Securely mount the welding torch so that it's always on hand (ON TH TG.03/TG.04/TG.11 R / 092-002699-00000).



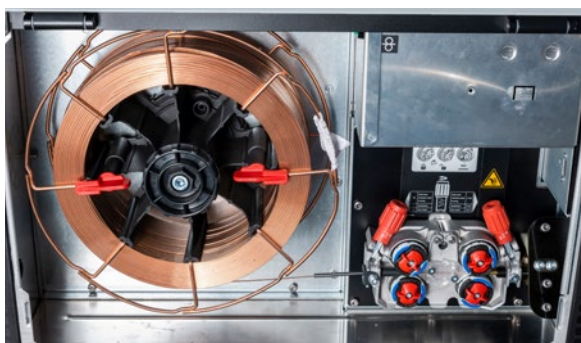
+ Carrying handle:

Robust and comfortable carrying handle for easy transport.



+ Optional carrying strap:

The optional carrying strap can be retro-fitted (ON TG/092-004310-00000).

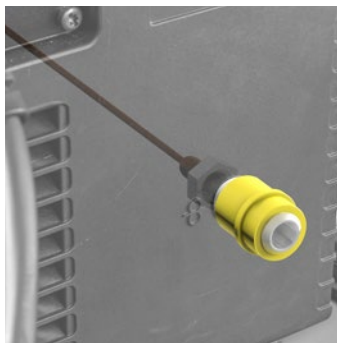


+ Wire spool:

Wire feeding with a 15 kg/D300 wire spool possible.

+ 4-roll wire feed mechanism:

Powerful, high-precision EWM eFeed 4-roll wire feeder to reliably feed all solid and flux cored wires. Equipped with 0.8 mm/0.9 mm/1.0 mm UNI rolls for low to high-alloy steel.



+ Drum feed:

Features a cavity in the rear panel for drum feed.

The Rolliner wire guide can be installed in this cavity for drum feed. 0003 / 092-007929-00000.



+ Optional dirt and dust filter:

Protects welding machine against extreme contamination. Fast and tool-free mounting and cleaning (ON filter TG.0003/092-002662-00000).

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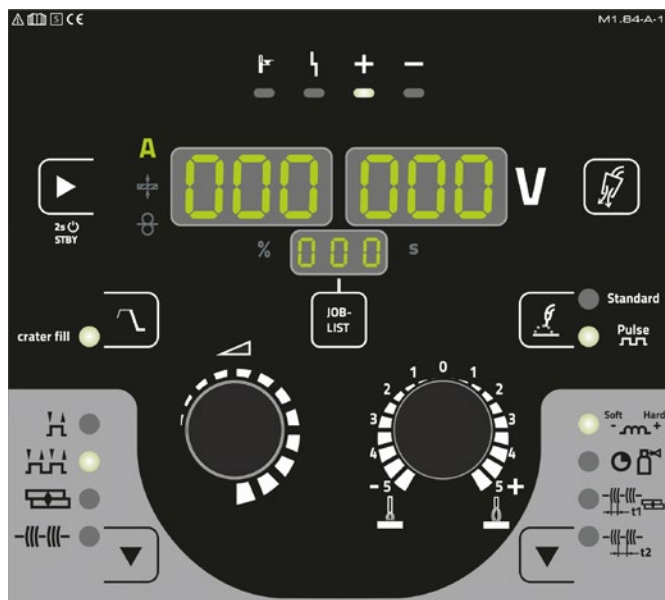
CONTROLS

All welding parameters and functions can be easily and conveniently set using the control. Using the extensive JOB list, users can quickly define and configure all welding tasks.

Quick access to all relevant information, operating instructions, accessories and options for retrofitting using the QR code directly via the control.

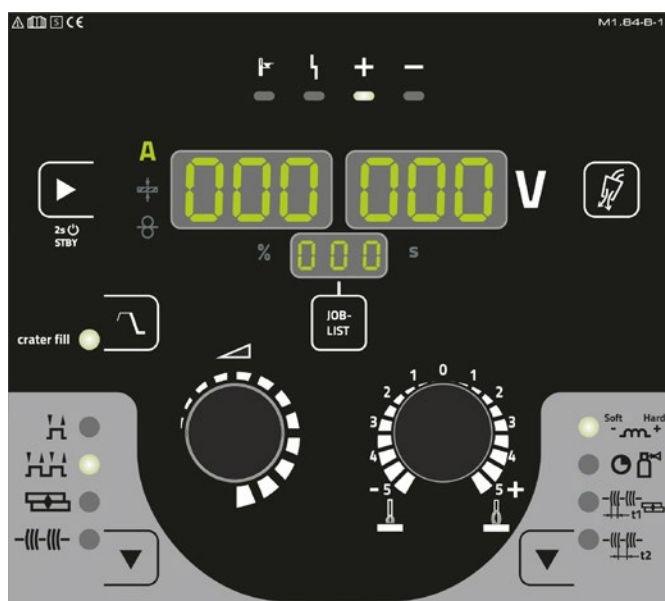


Puls



Operation mode	One-knob operation with pulse function
Welding procedures	MIG/MAG MIG/MAG pulse TIG MMA
Special function	End-crater filling (with button)
Operating modes	Non-latched latched spot welding interval
Parameters in display	Welding current wire feed speed Material thickness JOB number Error code Polarity display
MMA functions	Hot start Arcforce Antistick

Synergic



Operation mode	One-knob operation
Welding procedures	MIG/MAG TIG MMA
Special function	End-crater filling (with button)
Operating modes	Non-latched latched spot welding interval
Parameters in display	Welding current wire feed speed Material thickness JOB number Error code Polarity display
MMA functions	Hot start Arcforce Antistick

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JOB LIST

Massivdraht solid wire		Ø inch mm				
⊗	🔧	.023	.030	.035	.040	.045
		0,6	0,8	0,9	1,0	1,2
JOB						
SG2/3 G3/4 Si1	CO ₂ -100 / C1	176	1	2	3	4
	Ar-82/CO ₂ -18 M20 - M21	175	6	7	8	9
CrNi	Ar-97,5/CO ₂ -2,5 M12		34	223	35	36
CuSi Löten / Brazing	Ar-100 / I1		114	177	115	116
	Ar97,5/CO ₂ -2,5 M12		110	178	111	112
CuAl Löten / Brazing	Ar-100 / I1		122		123	124
	Ar97,5/CO ₂ -2,5 M12		118		119	120
AlMg	Ar-100 / I1		74		75	76
	Ar-70/He-30 / I3		78		79	80
AlSi	Ar-100 / I1		82		83	84
	Ar-70/He-30 / I3		86		87	88
Al99	Ar-100 / I1		90		91	92
	Ar-70/He-30 / I3		94		95	96

Fülldraht metal / flux-cored		Ø inch mm				
⊗	🔧	.030	.035	.040	.043	.045
		0,8	0,9	1,0	1,1	1,2
JOB						
E70C Metal	Ar-82/CO ₂ -18 M20 - M21	235	236	237		238
E71T Rutile	Ar-82/CO ₂ -18 M20 - M21	240	241	242		243
	CO ₂ -100 / C1		246	247		248
E71T	Self-Shielded		172		171	170
CrNi	Metal Ar-97,5/CO ₂ -2,5 M12	227		228		229
	Rutil / Basic Ar-82/CO ₂ -18 M20 - M21	231		232		233
	CO ₂ -100 / C1	210		211		212

forceArc		Ø inch mm		
⊗	🔧	.030	.040	.045
		0,8	1,0	1,2
JOB				
SG2/3 G3/4 Si1	Ar-82/CO ₂ -18 M21	189	179	
	Ar-90/CO ₂ -10 M20	190	254	

rootArc		Ø inch mm		
⊗	🔧	.030	.040	.045
		0,8	1,0	1,2
JOB				
SG2/3 G3/4 Si1	CO ₂ -100 / C1		204	205
	Ar-82/CO ₂ -18 M20 - M21		206	207

MIG / MAG GMAW		188
manual non synergic		
Zusatz additional		
WIG TIG		127
E-Hand MMA		128

pulse only in Picomig puls Version	
	Standard
	Standard / Puls
	standard
	standard / pulse

color-code	
	Stahl
	Edelstahl
	Aluminium
	mild steel
	stainless steel
	aluminium

094-029327-0000

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Picomig 355 – Puls – Synergic – 15 kg/D300

TECHNICAL DATA

Versions	Picomig 305 puls TKM	Picomig 305 Synergic TKM	Picomig 355 puls TKM	Picomig 355 Synergic TKM
Setting range for welding current	5 A–300 A		5 A–350 A	
Duty cycle 40 °C	300 A/35%		350 A/40 %	
	240 A/60%		300 A/60 %	
	190 A/100%		270 A/100 %	
Open circuit voltage	80 V		79 V	
Mains voltage/mains tolerance	3 x 400 V (-25% to +20%)			
Mains frequency	50 Hz/60 Hz			
Wire feed speed	0.5 m/min to 25 m/min			
	19.68 ipm–944.88 ipm			
Spool diameter	15 kg/D300*			
Protection classification	IP23			
Product certification				
Dimensions (L x W x H)	636 mm x 298 mm x 482 mm			
	25 inch x 11.7 inch x 19 inch			
Weight	29.5 kg/65 lbs		34.4 kg/75.9 lbs	
Standards	IEC 60974-1, -5 and -10 CL.A			

*With an optional adapter (CA D200 094-011803-00000), a 200 mm (5 kg/D200) wire spool is also possible.

ITEM NUMBERS

Name	PU	Item number	PG	Price
Picomig 305 puls TKM	1	090-005697-00502	M3	4.540,00 €
Picomig 305 Synergic TKM	1	090-005698-00502	M3	3.400,00 €
Picomig 355 puls TKM	1	090-005699-00502	M3	5.010,00 €
Picomig 355 Synergic TKM	1	090-005700-00502	M3	3.680,00 €

PACKING UNITS

Name	PU	Item number	PG	Price
Packing unit: 6 pieces Picomig 305 puls	6	092-015798-00502	M2	27.240,00 €
Packing unit: 6 pieces Picomig 305 Synergic	6	092-015799-00502	M2	20.400,00 €
Packing unit: 6 pieces Picomig 355 puls	6	092-015800-00502	M2	30.060,00 €
Packing unit: 6 pieces Picomig 355 Synergic	6	092-015801-00502	M2	22.080,00 €

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Picomig 355 – Puls – Synergic – 15 kg/D300



COOLING UNIT

- Water connections in the front, for compact machines
- Modular design, tool-free installation
- Excellent torch cooling and therefore cost savings on consumables thanks to the high-performance centrifugal pump
- External coolant water filling nozzle with filling level indicator
- We recommend using a cooling unit with a reinforced pump (cool50 U42) for an overall hose package length longer than 30 m

TECHNICAL DATA

Version	cool50 U40	cool50 U42
Mains voltage	1 x 400 V	
Mains frequency	50 Hz/60 Hz	
Cooling capacity at 1 l/min	1,000 W	
Pump pressure	3.5 bar	4.5 bar
Tank capacity	5.5 l	
Protection classification (when mounted)	IP23	
Product certification	CE UK EAC	
Dimensions (L x W x H)	695 mm x 298 mm x 329 mm	
	27.4 inches x 11.7 inches x 13 inches	
Weight	21 kg	21.5 kg
	46.3 lbs	47.4 lbs
Standards	IEC 60974-1, -2 and -10 CL.A	

ITEM NUMBERS

Name	Description	PU	Item number	PG	Price
cool50 U40	Cooling unit	1	090-008598-00502	M3	1.302,00 €
cool50 U42	Cooling unit with reinforced pump	1	090-008797-00502	M1	2.020,00 €

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OVERVIEW – EXAMPLE COMBINATIONS



Trolley 54
+ ON TG.03/04 MS TR.20/21



Trolley 54
+ ON TG.03/04 MS TR.20/21
+ cool50 U40



Trolley 54
+ ON TA TR.21
+ ON TG.03/04 MS TR.20/21



Trolley 53
+ ON TG.03/04 MS TR.20/21



Trolley 53
+ ON TG.03/04 MS TR.20/21
+ cool50 U40



Trolley 35.2-2



Trolley 55-5



Trolley 55-5
+ cool50 U40



Trolley 55-6
+ Crane-liftable using four
fixing points
+ Up to two shielding gas
cylinders



Trolley 55-6
+ cool50 U40
+ Crane-liftable using four
fixing points
+ Up to two shielding gas
cylinders

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TROLLY TRANSPORT SYSTEMS



Trolley 54:

- Transport cart (four wheels) for moving a power source, cooling unit, a tool box and shielding gas cylinder up to 33 l (200 bar)
- Fitted with suspension for cables on the cylinder holder ex works
- Solid, sturdy design

ON TA TR.21:

- Cross arm for housing a welding machine or wire feeder
- With the ON TA TR.21 (092-004390-00000) cross arm on Trolley 54 (090-008639-00000), only gas-cooled use of the welding machine is possible

ON TG.03/04 MS TR.20/21:

- Mounting set for fastening on the transport cart
- Required for safe assembly of welding machine or cooling unit or a tool box

Name	PU	Item number	PG	Price
Trolley 54	1	090-008639-00000	M1	313,00 €
ON TA TR.21	1	092-004390-00000	M1	110,00 €
ON TG.03/04 MS TR.20/21	1	092-004392-00000	M1	35,40 €



Trolley 53:

- Transport cart (four wheels) for moving a power source, cooling unit or a tool box
- Saves space
- Ideal for use on a gas ring line
- Solid, sturdy design

ON TG.03/04 MS TR.20/21:

- Mounting set for fastening on the transport cart
- Required for safe assembly of welding machine or cooling unit or a tool box

Name	PU	Item number	PG	Price
Trolley 53	1	090-008638-00000	M1	183,00 €
ON TG.03/04 MS TR.20/21	1	092-004392-00000	M1	35,40 €



Trolley 55-6:

- Transport cart (four wheels) for moving a power source, cooling unit, a tool box and one or two shielding gas cylinders up to 50 l (300 bar)
- Solid, sturdy design
- Crane-liftable using four fixing points as standard
- Supplied with roll brakes

Name	PU	Item number	PG	Price
Trolley 55-6 (one shielding gas cylinder)	1	090-008825-00000	M1	806,00 €
Trolley 55-6 (two shielding gas cylinders)	1	090-008826-00000	M1	832,00 €

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TROLLY TRANSPORT SYSTEMS



Trolley 55-5:

- Transport cart (four wheels) for moving a power source, cooling unit or a tool box and one shielding gas cylinder up to 50 l (300 bar)
- Solid, sturdy design

Name	PU	Item number	PG	Price
Trolley 55-5	1	090-008632-00000	M1	497,00 €
Trolley 55-5 (partially assembled)	1	090-008632-00001	M1	485,00 €



Trolley 35.2-2

- Transport cart (two wheels) for moving a power source, cooling unit and one shielding gas cylinder up to 50 l (300 bar)
- When using machines from the Picomig 185/225/355, Phoenix 355 and Taurus 355 series, no additional cooling unit can be installed on the Trolley.
- Solid, sturdy design
- Crane-liftable with crane suspension option (ON CS TR.01, 092-002931-00000)

Name	PU	Item number	PG	Price
Trolley 35.2-2	1	090-008296-00000	M3	653,00 €

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OPTIONS FOR RETROFITTING



ON case:

- Tool box for mounting to transport cart Trolley 55-5/Trolley 55-6/Trolley 54/Trolley 53
- All tools and wear parts always on hand

Name	PU	Item number	PG	Price
ON case	1	092-002899-00000	M1	457,00 €



ON CS T.0005/TG.0003/D.0002:

- Crane suspension

ON FIX CS:

- Fastening of the side flap

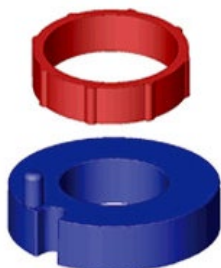
Name	PU	Item number	PG	Price
ON CS T.0005/TG.0003/D.0002	1	092-002549-00000	M1	587,00 €
ON FIX CS	1	092-002741-00000	M1	74,80 €



ON filter TG.0003:

- Dirt filter for air inlet
- Comprised of two filter units

Name	PU	Item number	PG	Price
ON filter TG.0003	1	092-002662-00000	M1	151,00 €



CA D200:

- Centering adapter for 5 kg (D200) spools on wire spool support for D300 spools

Name	PU	Item number	PG	Price
CA D200	1	094-011803-00000	S1	62,60 €

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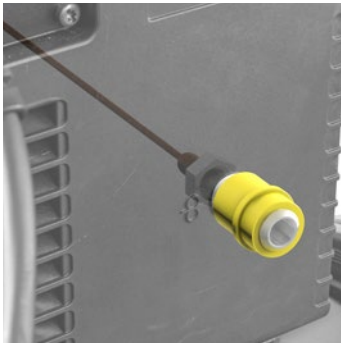
OPTIONS FOR RETROFITTING



AK300:

- Wire spool adapter for use with a wire basket spool (B 300)

Name	PU	Item number	PG	Price
AK300	1	094-001803-00001	E1	14,00 €



ON D barrel TG.0003:

- Rolliner wire guide for drum feed

Name	PU	Item number	PG	Price
ON D barrel TG.0003	1	092-007929-00000	M1	175,00 €



ON TH TG.03/TG.04/TG.11 R:

- Torch holder for attaching to the welding machine
- For TIG and MIG/MAG welding torches

Name	PU	Item number	PG	Price
ON TH TG.03/TG.04/TG.11 R	1	092-002699-00000	M1	46,00 €

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WELDING EQUIPMENT



Proreg Ar/CO2 230bar D:

- Pressure regulator with manometer
- Manufactured in accordance with ISO 2503
- Maximum primary pressure of 230 bar
- Infinite and highly accurate adjustment
- Safety manometer with pressure meter or flow meter (bar/psi or litres per minute)
- With cut-off valve

Versions	Proreg Ar/CO2 230bar 15l D	Proreg Ar/CO2 230bar 30l D
Gas flow	15 l	30 l
Gas type	Argon/CO ₂	
Hose connection	G 1/4"	
Cylinder connection	W21.80 x 1/14"	
Cylinder pressure	230 bar	
Standards	ISO 2503	

Name	PU	Item number	PG	Price
Proreg Ar/CO2 230bar 15l D	1	394-008488-10015	E1	69,50 €
Proreg Ar/CO2 230bar 30l D	1	394-008488-10030	E1	69,50 €



WK50mm² Ø 13 mm 350A/60% 4m/K:

- Workpiece lead with clamp
- 350 A/60%
- Length: 4 m

Name	PU	Item number	PG	Price
WK50 mm ² Ø 13 mm 350A/60% 4 m/K	1	092-000003-00000	M12	87,00 €



GH 2 x 1/4" :

- Shielding gas hose
- Equipped with plastic nuts on both sides for tool-free assembly
- Gas type: Argon/H₂/CO₂ (purging gas)
- 6 bar working pressure
- 2 x G1/4" hose connection
- DIN EN ISO 3821
- DIN EN 1256

Name	Length	PU	Item number	PG	Price
GH 2 x 1/4"	2 m	1	094-000010-00001	E1	21,10 €
	3 m	1	094-000010-00003	E1	30,10 €
	5 m	1	094-000010-00005	E1	41,00 €
	10 m	1	094-000010-00011	E1	61,40 €

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WELDING TORCH



PM 301 W M7:

- Water-cooled MIG/MAG welding torch with Euro torch connector
- Secure hold thanks to rubber inserts in the grip
- The flexible ball joint makes it comfortable to work with, even in difficult spots
- The torch trigger protection prevents the arc being ignited unintentionally

Equipment as supplied (steel wire Ø 1.2 mm):

- Gas nozzle Ø 13 mm; 66 mm
- Gas diffuser Ø 9.5 mm; 10.5 mm
- Contact tip M7 x 30 mm; Ø 1.2 mm and contact tip holder M7 x 31.5 mm
- Steel liner, red; Ø 2.0 mm x 4.6 mm



MT 301 W M7:

- Water-cooled MIG/MAG welding torch with Euro torch connector
- Robust welding torch with compact, ergonomically shaped grip
- Most suitable for use in tough environments
- Ideal balance between complete robustness and perfect handling

Equipment as supplied (steel wire Ø 1.2 mm):

- Gas nozzle Ø 13 mm; 66 mm
- Gas diffuser Ø 9.5 mm; 10.5 mm
- Contact tip M7 x 30 mm; Ø 1.2 mm and contact tip holder M7 x 31.5 mm
- Steel liner, red; Ø 2.0 mm x 4.6 mm



UM 401 W M8:

- Water-cooled standard MIG/MAG welding torch with Euro torch connector
- Ergonomic grip with ball joint
- Anti-kink spring on both the welding torch and the connection
- Type-related standard consumables

Equipment as supplied (steel wire Ø 1.2 mm):

- Gas nozzle, conical, Ø 16 mm; 76 mm
- Gas distributor "Long life", 28 mm
- Contact tip, M8 x 30 mm; Ø 1.2 mm
- Contact tip holder, M8 x 25 mm

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WELDING TORCHES – TECHNICAL DATA

Version	PM 301 W	MT 301 W	UM 240 W
CO2 duty cycle	330 A/100%		400 A/100 %
M21 duty cycle	290 A/100%		350 A/100 %
M21 pulse duty cycle	250 A/100%		
Wire Ø	0.8 mm – 1.2 mm		0.8 mm – 1.6 mm
Connection	Euro torch connector		
Thread, contact tip	M7		M8
Lengths	3 m		
	4 m		
	5 m		
Torch neck bend angle	45°		
Product certification	CE UK EAC		

WELDING TORCHES – ITEM NUMBERS

Name	Description	Length	PU	Item number	PG	Price
PM 301 W	Water-cooled professional MIG/MAG welding torches	3 m	1	094-700003-00000	B1	437,00 €
		4 m	1	094-700003-00004	B1	469,00 €
		5 m	1	094-700003-00005	B1	501,00 €
MT 301 W	Water-cooled professional MIG/MAG welding torches	3 m	1	094-500058-00000	B1	463,00 €
		4 m	1	094-500058-00004	B1	497,00 €
		5 m	1	094-500058-00005	B1	531,00 €
UM 401 W	Water-cooled standard MIG/MAG welding torches	3 m	1	394-600011-00000	B4	207,00 €
		4 m	1	394-600011-00004	B4	232,50 €
		5 m	1	394-600011-00005	B4	254,50 €



View the Picomig 305/355, welding torches, all trollies and other accessories directly in the online shop using the QR code!