

# MIG/MAG Welding Torch System

ROBO WH 650

ROBO WHPP 650

liquid cooled



**BINZEL.** The right welding torch for every job.

The welding torches belonging to this range of products are used for automatic arc-gas welding using both inert and active gases. They have a universal application and are suitable for all welding positions.

The standard unit is a water-cooled neck either straight or with a 22° or 45° bend with WH torch body, cable assembly with integral airblast hose and central adaptor for connection to the machine.

#### Technical data (EN 50 078):

Quick Change Neck WH 650

Rating: 650 A CO<sub>2</sub>  
550 A mixed gases 82/18  
(DIN 32 562)  
100% duty cycle

Wire sizes: 1.0-1.6 mm

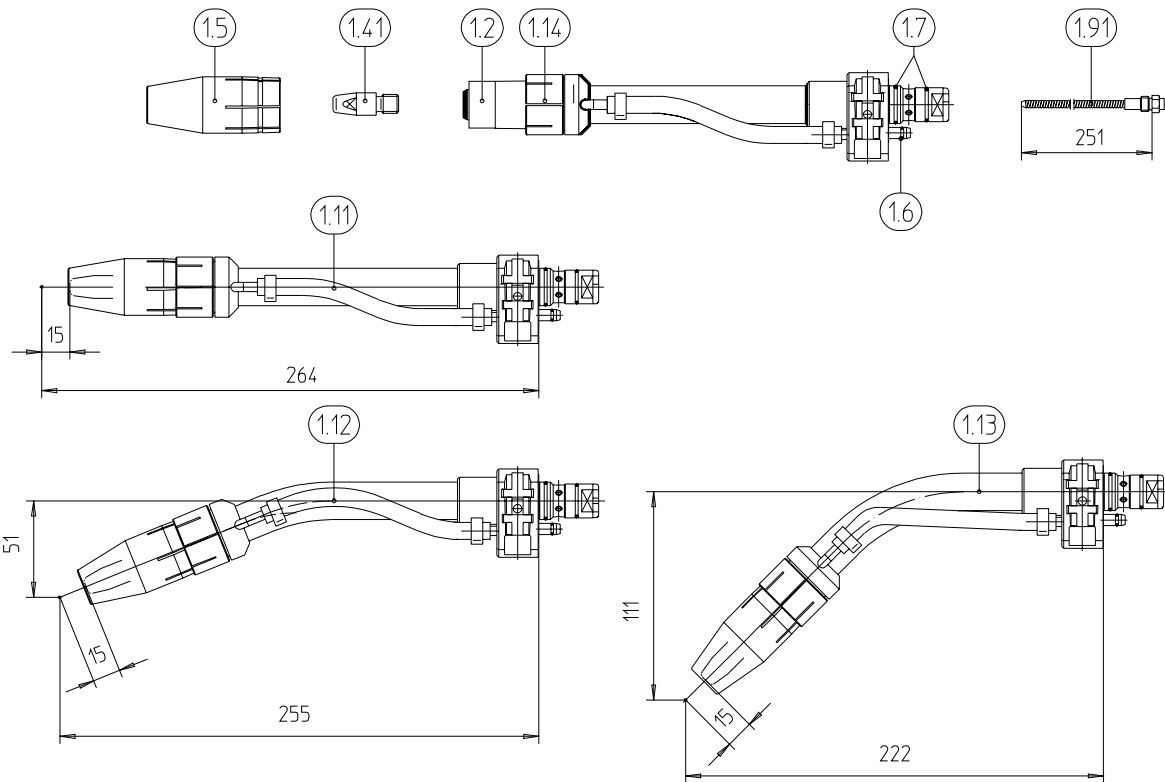
Motor: up to 42 V DC

Gearbox: i=17, 1:1 standard,  
different motor/gearboxes  
to special order

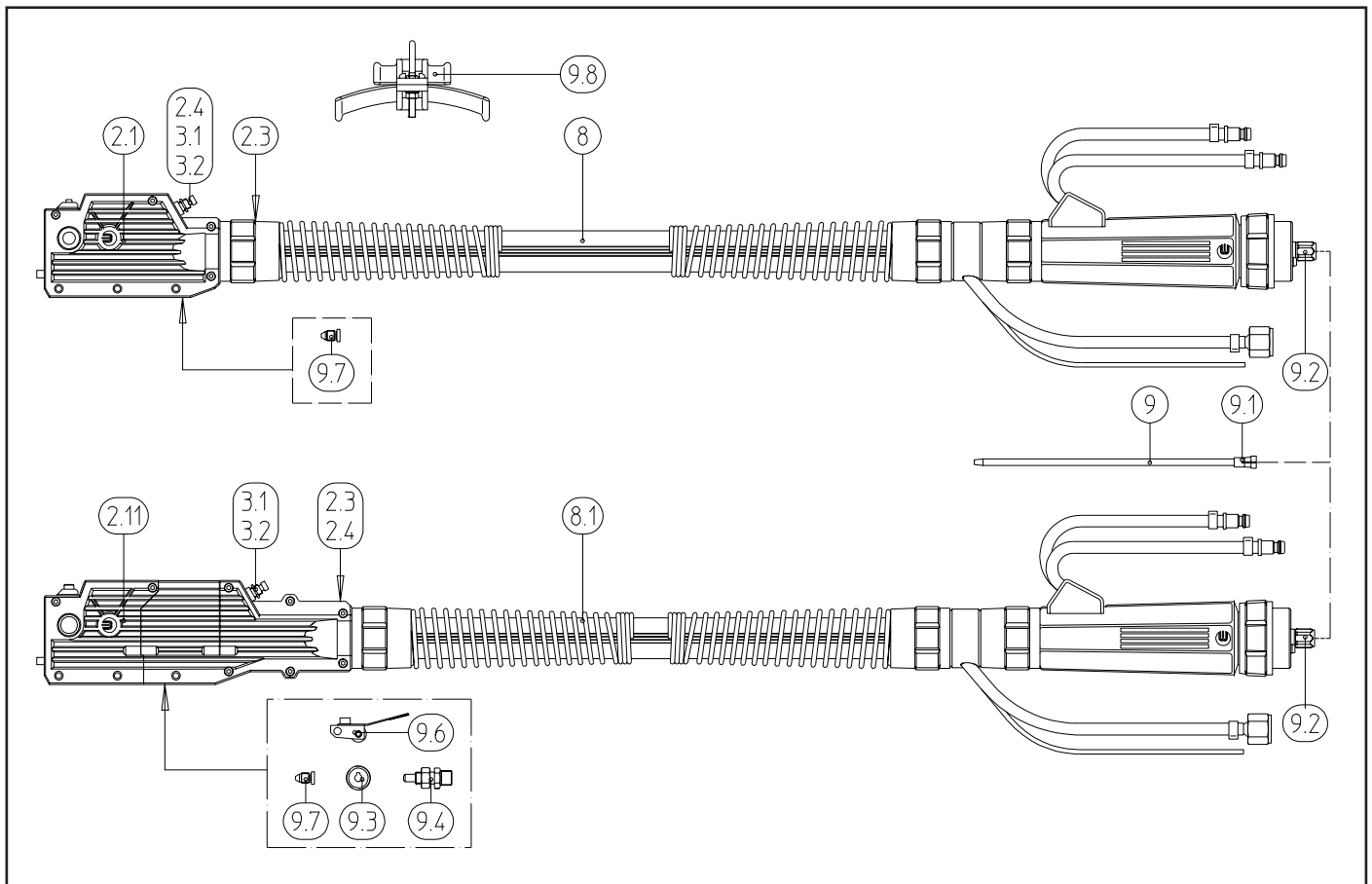
When pulse welding, reduce rating by 35%.

Welding & cutting brought to the point.





Build group	Pos.	Description	Specifications	Order-no.
<b>Quick Change Neck</b>	1.11	Swan neck ROBO WH 650, straight		962.0421
		Swan neck ROBO WH 650, sensor, straight		962.0566
	1.12	Swan neck ROBO WH 650, 22°		962.0422
		Swan neck ROBO WH 650, sensor, 22°		962.0567
	1.13	Swan neck ROBO WH 650, 45°		962.0423
		Swan neck ROBO WH 650, sensor, 45°		962.0568
<b>Wear parts</b>	1.14	Nozzle clamping ring		944.0020
	1.2	Nozzle insulator high heat resistant	10 pcs.	146.0056
	1.41	Contact tip M10 CuCrZr, Ø 1.0, 35 mm	10 pcs.	140.0348
		Contact tip M10 CuCrZr, Ø 1.2, 35 mm	10 pcs.	140.0481
		Contact tip M10 CuCrZr, Ø 1.4, 35 mm	10 pcs.	140.0547
		Contact tip M10 CuCrZr, Ø 1.6, 35 mm	10 pcs.	140.0616
	1.5	Gas nozzle NW 16, conical, 71 mm	10 pcs.	145.0444
		Gas nozzle NW 16, conical, 71 mm	10 pcs.	145.0445
		Gas nozzle NW 16, conical, 71 mm	10 pcs.	145.0446
<b>Component parts</b>	1.6	O-ring 3.5 x 1.2 mm	20 pcs.	165.0062
	1.7	O-ring 15.0 x 1.5 mm	20 pcs.	165.0015
	1.91	Neck liner for wire <sup>1)</sup> Ø 1.0 - 1.2 mm		962.0435
		Neck liner for wire <sup>1)</sup> Ø 1.4 - 1.6 mm		962.0425
		Neck liner for wire <sup>2)</sup> Ø 1.0 mm		962.0439
	Neck liner for wire <sup>2)</sup> Ø 1.2 - 1.6 mm		962.0429	



Build group	Pos.	Description	Specifications	Order-no.
<b>Cable assembly ROBO WH and ROBO WHPP</b>	2.1	Housing ROBO-WH body cpl.		960.0003
	2.11	Housing ROBO-WHPP body cpl.		961.0003
	2.3	Cable support connector		960.0022
	2.4	Panel mounted socket, 3-pole		175.0051
		w/o. fig. Component-WH, consisting of: manuel neck change tool, screw M3x10 (6 pcs.), grease, silicon free (10g)		960.0150
		Component-WHPP, consisting of: manuel neck change tool, screw M3x10 (6 pcs.), grease, silicon free (10g), fuse incl. housing		961.0226
	3.1	Wire inch push button switch		185.0024
	3.2	Cap		185.0035
	8	Cable assembly cpl. WH, 1.00 m Cable assembly cpl. WH, 1.20 m Cable assembly cpl. WH, 1.50 m Cable assembly cpl. WH, 2.00 m Cable assembly cpl. WH, 2.50 m Cable assembly cpl. WH, 3.00 m	liquid cooled	964.2119 964.2120 964.2121 964.2122 964.2123 964.2124
	8.1	Cable assembly cpl. WHPP, 2.00 m Cable assembly cpl. WHPP, 3.00 m Cable assembly cpl. WHPP, 4.00 m	liquid cooled	964.3122 964.3124 964.3125

Build group	Pos.	Description	Specifications	Order-no.	
<b>Cable assembly ROBO WH and ROBO WHPP</b>	9.3	Drive Roll for Ø 1.0 mm alu. wire		961.0018	
		Drive Roll for Ø 1.2 mm alu. wire		961.0019	
		Drive Roll for Ø 1.4 mm alu. wire		961.0058	
		Drive Roll for Ø 1.6 mm alu. wire		961.0020	
		Universal Drive Roll for Ø 1.0 mm		961.0227	
		Universal Drive Roll for Ø 1.2 mm		961.0228	
		Universal Drive Roll for Ø 1.4 mm		961.0279	
		Universal Drive Roll for Ø 1.6 mm		961.0267	
	9.4	Inlet guide insulated		961.0238	
	9.6	Pressure roll cpl.		961.0010	
9.7	Outlet guide insulated		960.0151		
<b>Guide spiral liner / core liner</b>	9	Guide spiral liner blank 2.5/4.5 with collet	for 3.00 m	122.0056	
		Guide spiral liner blank 2.5/4.5 with collet	for 5.00 m	122.0063	
		Guide spiral liner blank 2.0/4.5 with collet	for 3.00 m	122.0031	
		Guide spiral liner blank 2.0/4.5 with collet	for 5.00 m	122.0039	
		Teflon core liner 2.7/4.7 yellow with collet and o-ring	for 3.00 m	126.0039	
		Teflon core liner 2.7/4.7 yellow with collet and o-ring	for 5.00 m	126.0045	
		Teflon core liner 2.0/4.0 red with collet and o-ring	for 3.00 m	126.0021	
		Teflon core liner 2.0/4.0 red with collet and o-ring	for 5.00 m	126.0028	
		Carbon Teflon core liner 1.5/4.0 with collet and o-ring	for 3.00 m	127.0002	
		Carbon Teflon core liner 1.5/4.0 with collet and o-ring	for 5.00 m	127.0004	
		Carbon Teflon core liner 2.0/4.0 with collet and o-ring	for 3.00 m	127.0005	
		Carbon Teflon core liner 2.0/4.0 with collet and o-ring	for 5.00 m	127.0008	
		Polyamid core liner 2.0/4.0 with collet and o-ring	for 3.00 m	128.0012	
		Polyamid core liner 2.0/4.0 with collet and o-ring	for 5.00 m	128.0016	
		Polyamid core liner 2.3/4.7 with collet and o-ring	for 3.00 m	128.0020	
		Polyamid core liner 2.3/4.7 with collet and o-ring	for 5.00 m	128.0030	
	9.1	Collet for core liner, Ø 4.0 mm	20 pcs.	131.0001	
		Collet for core liner, Ø 4.7 mm	20 pcs.	131.0002	
	9.2	Nut M10x1	10 pcs.	501.0082	
	w/o. fig.	O-ring Ø 3.5 x 1.5 mm	20 pcs.	165.0008	
	w/o. fig.	Guide tube for liner ≤ Ø 4.0 mm	up to 200 mm	129.xxxx	
	<b>Accessories</b>	9.8	Cable hanger		191.0039
		w/o. fig.	Alignment jig WH 650		837.0099
		Programming tip M10; TCP 15 mm		837.0117	
		Spanner	10 pcs.	191.0001	
		Sharpener for plastic liner		191.0064	
		Hose cutter		191.0062	
		Blades for hose cutter	10 pcs.	191.0063	

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**Order information**

We recommend that with the initial order for each cable assembly, two torch necks are purchased. Only with a spare neck can downtime associated with consumable servicing be kept to a minimum. It is also advisable to check each neck in the appropriate alignment jig before use.

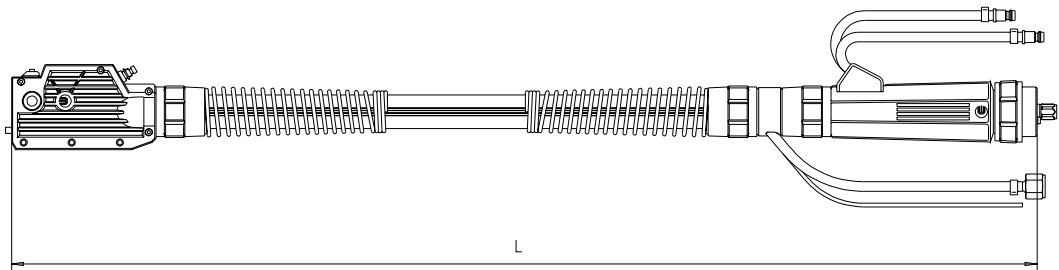
Control cable is supplied without connector, wire inching is realized by the 10-pol control cable.

When ordering ROBO WH 650 or ROBO WHPP 650, please specify:

- wire material
- wire diameter
- length of cable assembly

Additional declaration for ROBO WHPP 650:

- details of wire feeder
- manufacturer
- date of construction
- type
- special features



Overall length  $L=3.15$  m, with 3.0 m ROBO WH cable assembly

Overall length  $L=3.20$  m, with 3.0 m ROBO WHPP cable assembly

**Attaching the cable assembly to the robot**

To ensure that the cable assembly is securely attached to the robot, please use the BINZEL ATS-CAT torch mount with suitable extensions and brackets to meet your TCP requirements.

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