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Weldcraft™ W-250 Series

Formerly WP-20 Series

Hand-Held Water-Cooled TIG Welding Torches

Quick Specs

Models
W-250
W-250 Valve

Applications
Aerospace
Dairy
Food/beverage industry
Light and heavy manufacturing
Maintenance and repair
Petro/chemical
Precision fabrication
Shipbuilding
Tube and pipe
Vocational

Rated Output
DC: 250 A, AC: 180 A

Duty Cycle 100%

Electrode Range
.020–1/8 in. (0.5–3.2 mm)



W-250
(WP-20)

W-250 Valve
(WP-20V)

W-250 Series TIG torches

Formerly known as the WP-20 Series, the W-250 Series water-cooled torches provide consistent performance and long-term trouble-free service with around-the-head water cooling.

Extend torch life and minimize downtime due to overheating with the efficient around-the-head cooling design.

Comfort and control are increased with the lightweight, compact body design.

Reduce leakage of gas and water through secure mechanical fittings and connections.

Easy hose replacement with the innovative mechanical fittings design (W-250 Valve).

Note: Torches delivered may vary slightly from images shown.

TRUE BLUE® WARRANTY

Miller®

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MillerWelds.com

Certified System™
ISO 9001
Quality

Torch Packages

Models		Braided Rubber		Vinyl	
Old Model	New Name	12.5 ft. (3.8 m)	25 ft. (7.6 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)
WP-20	W-250	**WP-20-12-R**	**WP-20-25-R**	**WP-20-12**	**WP-20-25**
WP-20V	W-250 Valve	—	—	—	**WP-20V-25**

***V** = Valve*
Torch packages include torch body, handle, power cable, long back cap, gas hose, and water hose.

Connectors

Power cable connectors



195377
50 mm Dinse-style with water return line for water-cooled torch.



195380
50 mm Dinse-style gas thru with gas and water return lines for water-cooled torch.



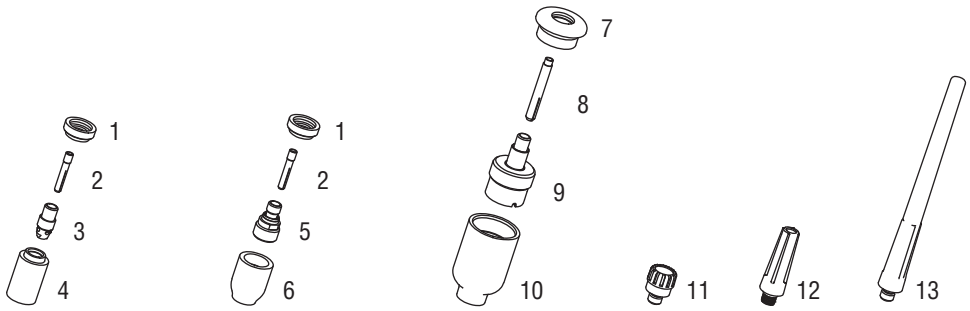
225028
50 mm thread-lock-style for water-cooled torch.



45V11
Power cable adapter for water-cooled torch.

Machines	Connection Type	1-Piece Power Cable Connectors
TIG Machines		
CST® 280 (Dinse)	50 mm Dinse-style	**195377**
Dynasty® 200/210/280/350/400	50 mm Dinse-style	**195377**
Dynasty® 700/800	50 mm thread-lock	**225028**
Maxstar® 200/210/280/350/400	50 mm Dinse-style	**195377**
Maxstar® 700/800	50 mm thread-lock	**225028**
Syncrowave® 200/210	50 mm Dinse-style gas thru	**195380**
Syncrowave® 250 DX/300/350 DX (Dinse)	50 mm Dinse-style	**195377**
Syncrowave® 250 DX/300/350 DX (stud)	1/2 in. stud	**45V11**
Multiprocess Machines		
Dimension™ 302/452/NT 450/650/652	1/2 in. stud	**45V11**
Dynasty® 280 DX Multiprocess	50 mm Dinse-style	**195377**
Multimatic® 255	50 mm Dinse-style	**195377**
PipeWorx	1/2 in. stud	**45V11**
XMT® 304/350	50 mm Dinse-style	**195377**
XMT® 450	1/2 in. stud	**45V11**
Engine-Driven Machines		
Most Big Blue®, Trailblazer®, Bobcat™, Blue Star® and Wildcat® models	1/2 in. stud	**45V11**
Big Blue® 450 Duo CST	50 mm Dinse-style	**195377**
General Reference		
	50 mm Dinse-style	**195377**
	50 mm Dinse-style gas thru	**195380**
	50 mm thread-lock	**225028**
	1/2 in. stud	**45V11**
Other Adapter		
	Stud to Dinse-style adapter	**232728**

Consumables (Refer to Owner's Manual for additional replacement parts.)



Non-Gas Lens

Electrode Size — inch (mm)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
1 Insulator (required)	598882	598882	598882	598882
2 Collet	13N21	13N22	13N23	13N24
3 Collet Body	13N26	13N27	13N28	13N29

Nozzle Size — size # (inch)	3 (3/16)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
4 Alumina	—	13N08	13N09	13N10	13N11	13N12	13N13	—	—
* Lava	—	13N14	13N15	13N16	13N17	—	13N19	—	—
* Long Lava	796F70	—	796F72	796F73	—	—	—	—	—
* X-Long Lava	796F74	796F75	—	796F77	—	—	—	—	—

Gas Lens

Electrode Size — inch (mm)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
1 Insulator (required)	598882	598882	598882	598882
2 Collet	13N21	13N22	13N23	13N24
5 Gas Lens	45V42	45V43	45V44	45V45

Nozzle Size — size # (inch)	3 (3/16)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
6 Alumina Gas Lens	—	53N58	53N59	53N60	53N61	53N61S	—	—	—

Large Diameter Gas Lens

Electrode Size — inch (mm)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
7 Insulator (required)	54N63-20	54N63-20	54N63-20	54N63-20
8 Collet	13N21L	13N22L	13N23L	13N24L
9 Large Diameter Gas Lens	45V0204S	45V116S	45V64S	995795S

Nozzle Size — size # (inch)	3 (3/16)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
10 Large Dia. Gas Lens	—	—	—	57N75	—	57N74	53N88	53N87	53N89
* Large Dia. Gas Lens-L	—	—	—	57N75L	—	57N74L	53N88L	53N87L	—
* Large Dia. Gas Lens-XL	—	—	—	57N75XL	—	57N74XL	53N88XL	53N87XL	—

Back Caps

11 Short **41V33** **12** Medium **41V35** **13** Long **41V24** * Back cap insulator **9-4**

**Not shown.*

Tungsten

Tungsten for the most demanding TIG welding applications!

Available in four types and industry-standard diameters, our line of Weldcraft™ tungsten electrodes has undergone rigorous testing to ensure the highest quality and durability. Color-coded packages include ten 7-inch (175 mm) tungsten electrodes.

Note: Refer to manufacturer SDS sheets for proper preparation and safety. Use proper ventilation/capture during preparation. Refer to manufacturer warning regarding ventilation.



Type	Diameter in. (mm)	Part #
2% Ceriated (EWCe-2)		
Performs well in DC welding and arc starting at low-current settings, and offers excellent performance in AC processes.	0.040 (1.0)	WC040X7
	1/16 (1.6)	WC116X7
	3/32 (2.4)	WC332X7
	1/8 (3.2)	WC018X7
	5/32 (4.0)	WC532X7
2% Lanthanated (EWLa-2)		
Provides excellent arc starting, arc stability and re-ignition, and less tip erosion in AC or DC welding. Can substitute for 2% Thoriated.	0.040 (1.0)	WL2040X7
	1/16 (1.6)	WL2116X7
	3/32 (2.4)	WL2332X7
	1/8 (3.2)	WL2018X7
	5/32 (4.0)	WL2532X7

Type	Diameter in. (mm)	Part #
Pure (EWP)		
Forms a clean, balled end when heated and provides good arc stability for AC welding with a balanced or unbalanced squarewave or sine wave.	0.040 (1.0)	—
	1/16 (1.6)	WP116X7
	3/32 (2.4)	WP332X7
	1/8 (3.2)	WP018X7
	5/32 (4.0)	—
Rare Earth (EWG)		
Combines the best of all alloying elements, and provides excellent arc stability in AC or DC welding.	0.040 (1.0)	—
	1/16 (1.6)	WG116X7
	3/32 (2.4)	WG332X7
	1/8 (3.2)	WG018X7
	5/32 (4.0)	—

Replacement Parts

Torch Bodies		
W-250		**WP-20**
W-250 Valve		**WP-20V**
Handles		
W-250 (ribbed)		**53N06R**
W-250 Valve (knurled)		**53N06**
Valve Knob		
W-250 Valve		**VS-2**
Braided Rubber Power Cables and Hoses		
	12.5 ft. (3.8 m)	25 ft. (7.6 m)
Power Cable	**45V03R**	**45V04R**
Water Hose*	**45V07R**	**45V08R**
Gas Hose*	**45V09R**	**45V10R**
Vinyl Power Cables and Hoses		
	12.5 ft. (3.8 m)	25 ft. (7.6 m)
Power Cable	**45V03HD**	**45V04HD**
Water Hose*	**45V07HD**	**45V08HD**
Gas Hose*	**45V09**	**45V10**

**Requires hose clamp 53N04.*

Genuine Miller® Accessories



Gas Lens Kit AK4GL
Includes one short back cap, one of each size (#6, #7, #8) alumina nozzle, and one of each size (1/16, 3/32, 1/8 inch) of the following: gas lens, collet, and 7-inch 2% ceriated tungsten electrode.



Accessory Kit AK4C
Includes one long back cap, one of each size (#5, #6, #7) alumina nozzle, and one of each size (1/16, 3/32, 1/8 inch) of the following: collet, collet body, and 7-inch 2% ceriated tungsten electrode.

Extension Kit
EK-1-25-R 25 ft. (7.6 m), rubber



Cable Covers
WC-3-10
10 ft. (3 m)
WC-3-22
22 ft. (6.7 m)



Wireless Remote Foot Control 300429
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 90-foot (27.4 m) operating range.



Wireless Remote Hand Control 300430
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 300-foot (91.4 m) operating range.



RCC-14 Remote Contactor and Current Control 151086
East/west rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord with 14-pin plug.



RCCS-14 Remote Contactor and Current Control 043688
North/south rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord with 14-pin plug.



Low-Conductivity TIG Coolant 043810
Sold in multiples of four in 1-gallon recyclable plastic bottles. Miller coolants contains a base of ethylene glycol and deionized water to protect against freezing to -37° Fahrenheit (-38°C) or boiling to 227° Fahrenheit (108°C).

Distributed by:

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The Power of Blue®

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