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Weldcraft™ W-350 Series

Formerly WP-18 Series

Hand-Held Water-Cooled TIG Welding Torches

Quick Specs

Models
W-350
W-350 Valve

Applications
Aluminum fabrication
Aluminum ship repair
Automotive
Exotic material fabrication
Light and heavy manufacturing
Maintenance and repair
Metal fabrication
Pipe and tube fabrication
Pressure vessel fabrication
Shipbuilding
Tool and die
Tube and pipe
Vocational

Rated Output
DC: 350 A, AC: 250 A

Duty Cycle 100%

Electrode Range
.020–5/32 in. (0.5–4.0 mm)

W-350 Series TIG torches

Formerly known as the WP-18 Series, the W-350 Series is comprised of rugged torches engineered for high-amperage and continuous hand-held welding in mechanized applications. With the W-350 Series, welders can handle their welding applications with more power and comfort.

Reduce downtime and costs by minimizing overheating with the unique cooling design engineered for operator comfort.

Reduce discomfort and fatigue using the comfortable handle design.

Superior gas flow control offered through the built-in fingertip gas control (W-350 Valve).

Note: Torches delivered may vary slightly from images shown.



W-350
(WP-18)

W-350 Valve
(WP-18V)

TRUE BLUE® WARRANTY

Miller Electric Mfg. LLC
An ITW Welding Company
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MillerWelds.com

Certified System™
ISO 9001 Quality

Torch Packages

Models		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-18	W-350	**WP-18-12-R**	**WP-18-25-R**	**WP-18-12**	**WP-18-25**
WP-18V	W-350 Valve	—	**WP-18V-25-R**	—	**WP-18V-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.



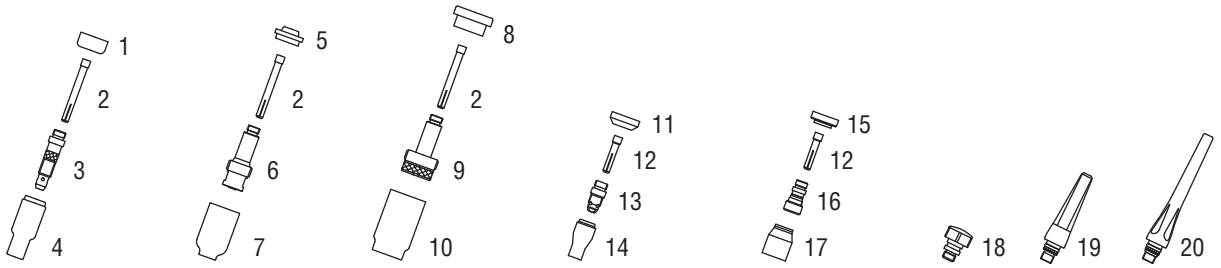
225028
50 mm thread-lock-style for water-cooled torch.



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)	5/32 (4.0)
1 Insulator (required)	18CG	18CG	18CG	18CG	18CG
2 Collet	10N22	10N23	10N24	10N25	54N20
3 Collet Body	10N30	10N31	10N32	10N28	406488

Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
4 Alumina	10N50	10N49	10N48	10N47	10N46	10N45	10N44	—
* Long Alumina	—	10N49L	10N48L	10N47L	—	—	—	—
* Lava	—	—	105Z44	105Z45	08N78	—	—	—
* Long Lava	—	105Z60	—	105Z61	—	—	—	—

Gas Lens

Electrode Size — inch (mm)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)
5 Insulator (required)	54N01	54N01	54N01	54N01	54N01
2 Collet	10N22	10N23	10N24	10N25	54N20
6 Gas Lens	45V24	45V25	45V26	45V27	45V28

Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
7 Alumina Gas Lens	54N18	54N17	54N16	54N15	54N14	—	—	54N19
* Long Gas Lens	—	54N17L	54N16L	54N15L	—	—	—	—

Large Diameter Gas Lens

Electrode Size — inch (mm)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)
8 Insulator (required)	54N63	54N63	54N63	54N63	54N63
2 Collet	10N22	10N23	10N24	10N25	54N20
9 Large Diameter Gas Lens	45V0204	45V116	45V64	995795	45V63

Nozzle Size — size # (inch)	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	—

Stubby Non-Gas Lens

Electrode Size — inch (mm)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
11 Insulator (required)	18CG20	18CG20	18CG20	18CG20
12 Stubby Collet	10N22S	10N23S	10N24S	10N25S
13 Stubby Collet Body	17CB20	17CB20	17CB20	17CB20

Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
14 Stubby Alumina	13N08	13N09	13N10	13N11	13N12	13N13	—	—

Stubby Gas Lens

Electrode Size — inch (mm)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
15 Insulator (required)	17GLG20	17GLG20	17GLG20	17GLG20
12 Stubby Collet	10N22S	10N23S	10N24S	10N25S
16 Stubby Gas Lens	17GL040	17GL116	17GL332	17GL18

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

Back Caps

18 Short **57Y04** **19** Medium **300M** **20** Long **57Y02**

**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-350		WP-18
W-350 Valve		WP-18V
Handles		
W-350 (ribbed)		H-200R
W-350 Valve (knurled)		H-200
Valve Knob		
W-350 Valve		VS-1
Braided Rubber Power Cables and Hoses		
	12.5 ft. (3.8 m)	25 ft. (7.6 m)
Power Cable	40V64R	41V29R
Water Hose	40V74R	41V32R
Gas Hose	40V75R18	41V30R18
Vinyl Power Cables and Hoses		
	12.5 ft. (3.8 m)	25 ft. (7.6 m)
Power Cable	40V64	41V29
Water Hose	40V74	41V32
Gas Hose	40V75	41V30

Genuine Miller® Accessories



Gas Lens Kit AK3GL
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 AK3C
Includes one short back cap, one of each size (#5, #6, #8) 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.



Accessory Kit MAK-2S
Includes one short and one long back cap, four back cap o-rings, two cup gaskets, one gas lens insulator, and one of each size (.040, 1/16, 3/32, 1/8 inch) gas lens. Also includes the following: ten collets (1) .040, (3) 1/16, (3) 3/32, (2) 1/8, (1) 5/32; and eight collet bodies (1) .040, (2) 1/16, (2) 3/32, (2) 1/8, (1) 5/32.

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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