

# Orbital Welding System

Weld Head, Fixture Blocks,  
Side Plates, Plenum, and Collets



## Series 10

- Available for tube outside diameters from 1/4 to 1 in. and 6 to 25 mm
- Provides higher output capabilities
- Offers versatility for use in a variety of industries

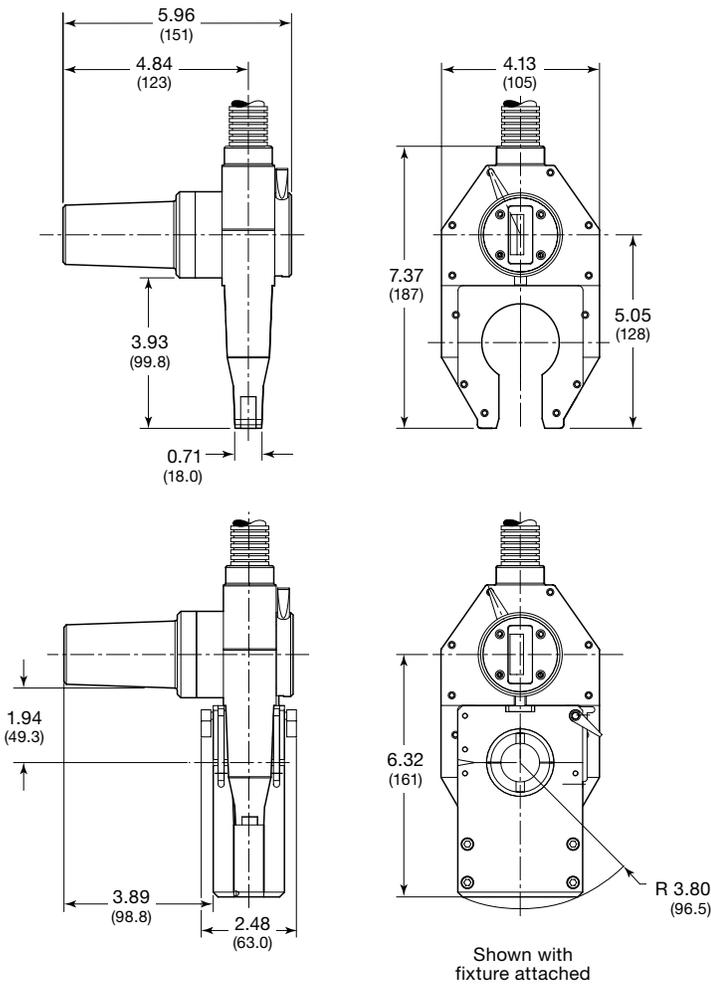
### Series 10 Weld Head

- Is for outside weld joint diameters of 1/4 to 1 in. and 6 to 25 mm
- Offers optical speed control—no tachometer or calibration required
- Has polarized power connectors to ensure proper weld head/power supply connection
- Provides higher output capabilities:
  - Increased performance
  - Heavier-wall tubing or pipe applications.

### Ordering Information and Dimensions

Dimensions, in inches (millimeters) are for reference only and are subject to change.

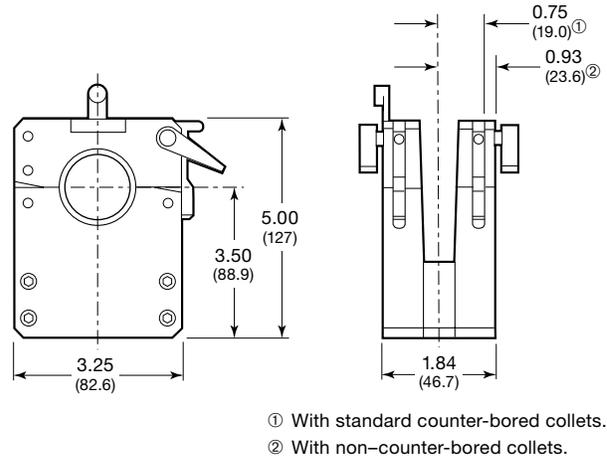
#### Weld Head



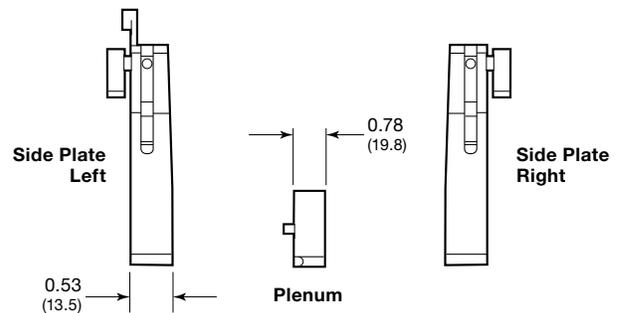
### Series 10 Fixture Blocks, Side Plates, and Plenum

- Are for outside weld joint diameters of 1/4 to 1 in. and 6 to 25 mm
- Offer improved productivity from the ability to set up one fixture while welding with another fixture
- Fixture block includes centering gauge

#### Fixture Block



#### Fixture Side Plates and Plenum



Description	Cable Length ft (m)	Ordering Number
Weld head (includes arc gap gauge, tool package, and tungsten electrodes)	15 (4.6)	SWS-10H-D-15
	35 (10.7)	SWS-10H-D-35
	50 (15.2)	SWS-10H-D-50

Cables attach directly to the Swagelok® M200 power supply. For Swagelok M100 and earlier power supply models, an adapter is required.  
Ordering number: **SWS-M100-WH-ADPTR**



Description	Ordering Number
Fixture block	CWS-10TFB
Fixture side plate—left	CWS-10TSPL
Fixture side plate—right	CWS-10TSPR
Plenum	CWS-10PLEN

## Tube Collets

- Are removable to allow for easy component size changes
- Hold components rigidly during welding
- Unique universal collet design holds components with a  $\pm 0.005$  in. (0.13 mm) tube outside diameter variation.
- Are offered in counter-bored and non-counter-bored styles for a full range of applications



## Ordering Information

### Counter-Bored Collets

Standard series 10 collets are counter-bored to offer greater clearance for welding components. Two collet halves are required per side plate.

### Non-Counter-Bored Collets

Non-counter-bored collets provide ease of alignment. Two collet halves are required per side plate.

To order, add **T** to the ordering number.

Example: CWS-10UCI-04T

Collet Size in.	Collet Half Ordering Number
1/4	CWS-10UCI-04
5/16	CWS-10UCI-05
3/8	CWS-10UCI-06
1/2	CWS-10UCI-08
5/8	CWS-10UCI-10
3/4	CWS-10UCI-12
7/8	CWS-10UCI-14
1	CWS-10UCI-16

Collet Size mm	Collet Half Ordering Number
6	CWS-10UCI-06MM
8	CWS-10UCI-08MM
10	CWS-10UCI-10MM
12	CWS-10UCI-12MM
14	CWS-10UCI-14MM
15	CWS-10UCI-15MM
16	CWS-10UCI-16MM
18	CWS-10UCI-18MM
19	CWS-10UCI-19MM
20	CWS-10UCI-20MM
22	CWS-10UCI-22MM
23	CWS-10UCI-23MM
25	CWS-10UCI-25MM

## Options and Accessories

### Weld Head Extension Cables

Swagelok weld head extension cables enable weld head operation away from the M200 power supply, up to a total cable length of 200 ft (61 m).

See the Swagelok *Series 10 Weld Head User's Manual*, MS-13-204, for information on weld head performance with optional weld head extension cables.



Extension Cable ft (m)	Ordering Number
35 (10.7)	SWS-WHEC-D-35
50 (15.2)	SWS-WHEC-D-50

### Weld Head Adapter Cable

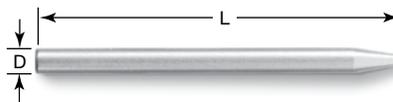
The weld head adapter cable allows connection from earlier Swagelok 10H-B model weld heads to the Swagelok M200 power supply.

Ordering number:  
**SWS-M200-WH-ADPTR**



## Tungsten Electrodes

Swagelok electrodes, available in packages of ten, provide consistent, repeatable welds. Electrodes consist of 2 % ceriated tungsten, axially ground to rigid specifications.



Weld Joint Nominal Outside Diameter		Electrode Diameter (D) in. (mm)	Electrode Length (L) in. (mm)	Ordering Number
in.	mm			
1/4 through 5/8	6 through 16	0.062 (1.5)	1.105 (28.1)	CWS-C.062-1.105-P
3/4 through 1	18 through 25		0.855 (21.7)	CWS-C.062-.855-P

**Safe Product Selection**

**When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.**

**Caution: Do not mix or interchange parts with those of other manufacturers.**

**Warranty Information**

Swagelok products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit [swagelok.com](http://swagelok.com) or contact your authorized Swagelok representative.