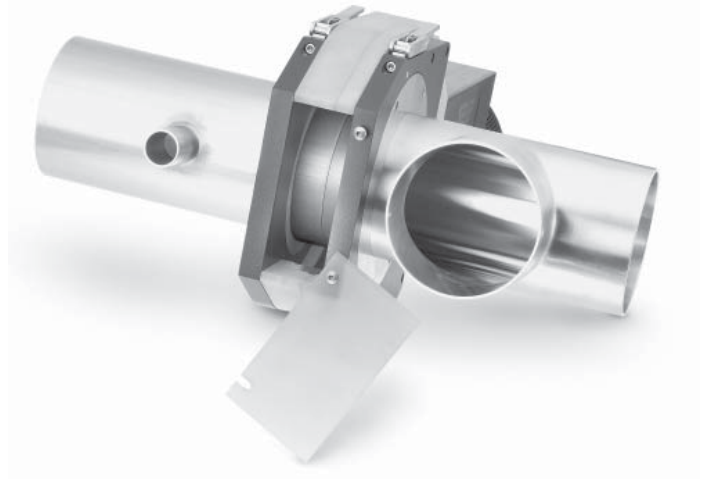


Orbital Welding System

Weld Head, Tube and Pipe Collets, and Tungsten Electrodes

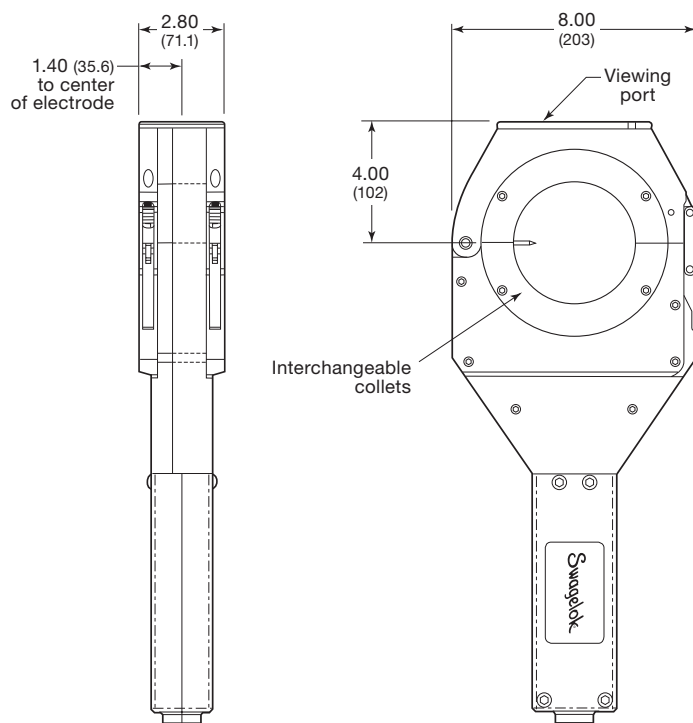
Series 40 Weld Head

- Is available for outside tube diameters ranging from 1 1/2 to 4 in. (38.1 to 104 mm), and pipe diameters ranging from 1 1/4 to 4 in. (42.2 to 114 mm)
- Provides an ideal welding solution in the bioprocessing and semiconductor industries, among others
- Includes an integral fixture block
- Is compact and portable, due to air cooling
- Includes viewing port, allowing the operator to line up the weld for ultimate reliability
- Offers optical speed control—no tachometer or calibration required.



Ordering Information and Dimensions

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



Cable Length ft (m)	Ordering Number	Weld Head Weight ^① lb (kg)
15 (4.6)	SWS-40H-15FT ^②	12.8 (5.8)
25 (7.6)	SWS-40H-25FT ^③	
50 (15.2)	SWS-40H-50FT	

① Weight does not include collets or cable.

② Can be used with 37.5 ft (11.4 m) or 12.5 ft (3.8 m) extension cable.

③ Can be used with 12.5 ft (3.8 m) extension cable.

Tube and Pipe Collets and Tungsten Electrodes

Tube Collets

- Hold components rigidly during welding.
- Are easily changed for varying outside diameters.



Pipe Collets

- Design compensates for pipe size variation.
- Pre-tacking of weld joint is required.

Options and Accessories

Weld Head Extension Cable

Swagelok weld head extension cables, in combination with the standard weld head, provide weld head operation up to a maximum of 50 ft (15.2 m) away from the power supply. Cables are available in lengths of 12.5 and 37.5 ft (3.8 and 11.4 m).



Extension Cable ft (m)	Ordering Number
37.5 (11.4)	SWS-WHEC-B-37.5FT
12.5 (3.8)	SWS-WHEC-B-12.5FT

Support Extensions

Use support extensions when welding vertical runs of pipe. The support extensions minimize angular misalignment and provide maximum rigidity. Use in sets of either 4 or 8 pieces.

Description	Ordering Number
Support extension	SWS-40CI-EXT

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.

Tungsten Electrodes

Swagelok® electrodes, available in packages of 10, provide consistent, repeatable welds. Electrodes consist of 2 % ceriated tungsten, axially ground to rigid specifications.

Ordering Information and Dimensions

Two collet halves are required per side plate.

Tube Collet Size		Ordering Number	
in.	mm	Collet Half	Tungsten Electrodes
1 1/2	38.1	SWS-40CI-24	SWS-C.094-2.615-P
—	42.4	SWS-40CI-42.4MM	SWS-C.094-2.530-P
	44.5	SWS-40CI-44.5MM	SWS-C.094-2.489-P
	48.3	SWS-40CI-48.3MM	SWS-C.094-2.414-P
2	50.8	SWS-40CI-32	SWS-C.094-2.365-P
—	54.0	SWS-40CI-54MM	SWS-C.094-2.302-P
	60.3	SWS-40CI-60.3MM	SWS-C.094-2.178-P
2 1/2	63.5	SWS-40CI-40	SWS-C.094-2.115-P
3	76.2	SWS-40CI-48	SWS-C.094-1.865-P
3 1/2	88.9	SWS-40CI-56	SWS-C.094-1.615-P
4	101.6	SWS-40CI-64	SWS-C.094-1.365-P
—	104.0	SWS-40CI-104MM	SWS-C.094-1.318-P

Pipe Collet Size		Ordering Number	
in.	mm (JIS)	Collet Half	Tungsten Electrodes
1 1/4	42.2	SWS-40CI-20P	SWS-C.094-2.530-P
1 1/2	48.3	SWS-40CI-24P	SWS-C.094-2.414-P
2	60.3	SWS-40CI-32P	SWS-C.094-2.168-P
—	60.5 (50A)	SWS-40CI-60.5MMP	SWS-C.094-2.164-P
2 1/2	73.0	SWS-40CI-40P	SWS-C.094-1.918-P
—	76.3 (65A)	SWS-40CI-76.3MMP	SWS-C.094-1.853-P
3	88.9	SWS-40CI-48P	SWS-C.094-1.605-P
—	89.1 (80A)	SWS-40CI-89.1MMP	SWS-C.094-1.601-P
3 1/2	101.6 (90A)	SWS-40CI-56P	SWS-C.094-1.355-P
4	114.3 (100A)	SWS-40CI-64P	SWS-C.094-1.105-P

Warranty Information

Swagelok products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit swagelok.com or contact your authorized Swagelok representative.