

# ORBIWELD 12

Compact TIG weld head  
- ideal for tight spaces

## Micro weld head

It doesn't get any smaller or more effective than this: Thanks to its extremely narrow construction the OW 12 offers a unique diversity of functions as well as a high duty cycle previously unknown in weld heads of this size through its liquid cooling. This micro weld head is a compact space-saving marvel and guarantees continually reproducible, high-quality weld seams, even with high currents. Particularly suitable for welding all common microfittings!

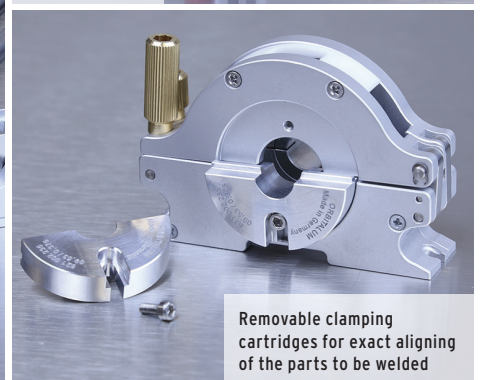
Small-sized modules - base machine, clamping cartridges and clamping inserts - specially for applications in very tight spaces



Extremely narrow design and yet highly durable thanks to intensive liquid cooling system



Removable clamping cartridges for exact aligning of the parts to be welded



**The OW 12 with its small-sized modules - basic machine, clamping cartridges and clamping inserts - is the ideal tool for work under tight spaces such as the semiconductor industry, aerospace, pharmaceutical industry as well as the ultra pure water supply sectors.**

All the important commands for welding can be transmitted to the power supply via a control panel built into the robust and durable aluminum handle, so that no additional remote control is required.

The removable clamping cartridge enables accurate alignment with the parts to be welded, even where there is very little space.

### ADDITIONAL FEATURES:

- Toolless quick change system for clamping cartridges and clamping inserts
- Wide clamping cartridge (Type "B") with exchangeable clamping shells for standard applications
- Extremely narrow clamping cartridges (Type "A") for welding microfittings and for other applications with very limited clamping lengths
- The head is 5.7 kg (12.6 lbs) light. All connections for electricity, gas and cooling water are firmly integrated in the OW 12
- To increase productivity, the optional ORBITWIN switching unit allows working with up to two heads in an alternating fashion, thus reducing conversion times and downtimes considerably
- Including highly flexible hose package (length: 7.5 m/24.6 ft) with strain relief to the power source - optionally extendable to up to 20.0 m (64 ft)

**The success model OW 12 has been optimized even further!**

**The result: A well-engineered weld head with unequalled robustness, high ease of use and even higher performance, for example through:**

- ✓ Higher temperature stability
- ✓ Improved ignition characteristics
- ✓ Optimized rotor guidance
- ✓ Optimized weld gas control
- ✓ Liquid-cooled
- ✓ Integrated control panel
- ✓ 7.5 m (24.6 ft) hose package



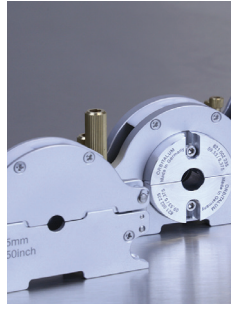
Robust and stable aluminum handle with integrated control panel



Quick change system for clamping shells



Particularly suitable for welding all common microfittings



Diameter-specific clamping cartridges - available separately



Aluminum clamping inserts for OW 12, type "B" (wide) - available separately

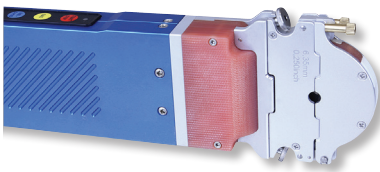


Comprehensive range of accessories, e.g. ORBmax residual oxygen meter

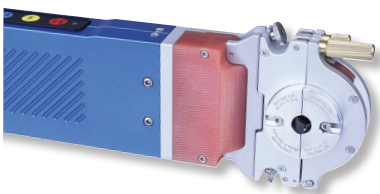
POSSIBLE APPLICATIONS OW 12:	MICROFITTING-TO-MICROFITTING	MICROFITTING-TO-TUBE	TUBE-TO-TUBE	ADVANTAGES
Clamping cartridges, type "A" (narrow)	x	x	x	High flexibility thanks to narrow design
Clamping cartridges, type "B" (wide)			x	Low cost due to exchangeable clamping inserts

APPLICATION RANGE	ORBIWELD 12
Code	<b>821 000 010</b>
Tube OD, min. - max.	3.0 - 12.7 mm 0.118" - 0.500"
Electrode Ø	1.0 mm 0.039"
Machine weight including hose package	4.8 kg 10.6 lbs
Hose package length	7.5 m 24.6 ft
SCOPE OF DELIVERY	
Including:	<ul style="list-style-type: none"> <li>• 1 Micro weld head ORBIWELD 12</li> <li>• 1 Durable storage and shipping case</li> <li>• 1 Tool set</li> <li>• 1 Power connector adapter</li> <li>• 1 Feeler gauge</li> <li>• 1 Operating instructions and spare parts list</li> </ul>
Suitable accessories (available option):	<ul style="list-style-type: none"> <li>• Clamping cartridges for OW 12, type "A" (narrow)</li> <li>• Clamping cartridge for OW 12, type "B" (wide)</li> <li>• Clamping inserts for OW 12, type "B" (wide)</li> <li>• ESG tungsten grinders</li> <li>• ORBmax residual oxygen meter</li> <li>• ORBIPURGE forming set</li> <li>• Hose package extensions</li> <li>• WS2 tungsten electrodes</li> </ul>

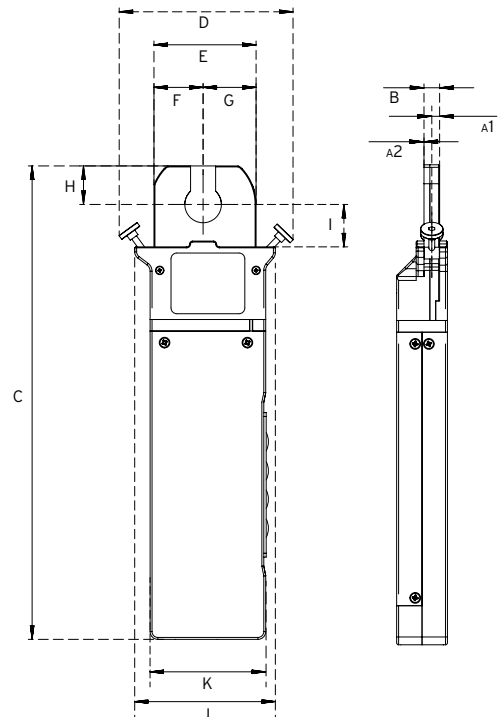
DIMENSIONS ORBIWELD 12	ELECTRODE INTERVAL					
	DIMENSION		CARTRIDGE TYPE "A"		CARTRIDGE TYPE "B"	
	[MM]	[INCH]	[MM]	[INCH]	[MM]	[INCH]
Dimension "A1"	4.25	0.167	6.35	0.250	15.60	0.614
Dimension "A2"	3.75	0.148	5.85	0.230	15.10	0.594
Dimension "B"	8.00	0.315	12.20	0.480	30.70	1.209
Dimension "C"	245.70	9.673				
Dimension "D"	90.00	3.543				
Dimension "E"	53.00	2.087				
Dimension "F"	25.50	1.004				
Dimension "G"	27.50	1.083				
Dimension "H"	20.00	0.787				
Dimension "I"	22.00	0.866				
Dimension "J"	73.00	2.874				
Dimension "K"	60.00	2.362				



ORBIWELD 12 with narrow clamping cartridge (type "A")



ORBIWELD 12 with wide clamping cartridge (type "B")



The technical data are not binding. They are not warranted characteristics and are subject to change.