

❖ A swivelling TIG torch provides the capability for fillet welds or pulled-T joint

## ORBIWELD TP

The new generation of open-arc weld heads. With or without cold-wire-feeding.

Forget everything you know about open-arc-weld heads!

The all new ORBIWELD TP series are completely unique in design, making it very versatile. Locating the motor inside the main housing, results in the ORBIWELD TP series being very compact in design and the revolutionary design of the drive system makes large & bulky drive mechanisms a thing of the past.

The new series of ORBIWELD TP open arc weld heads is available in 4 sizes:

Model	For tube/pipe ID [mm]	For tube/pipe ID [inch]	Code
TP 250	20* - 77	1/2 - 3	811 000 001
TP 400	30 - 115	1 1/2 - 4 1/2	812 000 001
TP 600	70 - 170	3 - 6	813 000 001
TP 1000	120 - 275	5 - 10	814 000 001

\* Diameters as small as 10 mm (1/4 inch) can be accommodated with diameter specific collets.



TP 250 with remote wire feeder KD 4



TP 600 with KD 3-100 wire feeder





## ORBIWELD TP – unique in design and functionality!

The clamping mechanism and jaws move with a parallel motion and results in a secure clamping of the weld head with a large clamping cross section. The clamping range of the jaws can be infinitely adjusted through the diameter range of the head by rotation of a single knob.

All ORBIWELD TP weld heads are supplied with hardened steel clamp jaws which provide optimal clamping efficiency. Alternatively stainless steel clamp jaws can be supplied.

ORBIWELD TP weld heads can be easily clamped into position and are locked in position with a quick action lever mechanism. A built in remote control panel eliminates the need for a separate and additional remote control unit.

A swivelling TIG torch provides the capability for fillet welds or pulled-T joint.

With the models TP 400/600 and 1000 the TIG torch is mounted on a precision slide to give precise, fine control of the electrode during welding.

The wire tip can also be adjusted to ensure the wire is fed into the centre of the weld pool.

An optional on-board wire feed unit is available for the **ORBIWELD TP 400, 600 and 1000** weld heads.

The wire feeder is located close to the welding torch which ensures a responsive wire feeding which is synchronised with the pulsing of the welding current. This gives much better control of the weld pool than systems which have to

push or pull the wire from a remote, separate wire feeder over long distances, thus not allowing responsive precise synchronisation with the current pulses.

For field applications the compact wire feeder on the weld head is more comfortable than a separate, heavy wire feeder.

The **KD 3-62** is a wire feed unit which uses a special mini-spool to allow the ORBIWELD TP 400, 600 and 1000 weld heads to be used in low radial clearance applications.

The **KD 3-100** wire feed unit is designed for use with the ORBIWELD TP 600 or 1000 weld heads and is designed to accommodate standard D100 wire spools.

Because of the compact design of the ORBIWELD TP 250 the **KD 4**, remote wire feed unit is used. The KD 4 is housed in a robust ABS case which is supplied with a shoulder strap for easy and comfortable transportation for the operator. The **KD 4** has short Teflon liner which guides the wire to the weld head with minimal back-lash for trouble-free wire feeding.

The **KD 4** wire feed units accommodates standard D100 wire spools and weighs less than 2 kg when no wire is loaded.





*KD 3-62 with mini-spool for the head models TP 400 / 600 / 1000.*

*KD 3-100 with D 100 standard spool for head models TP 600 and 1000*

*KD 4 with closed cover for TP 250.*

*KD 4 with open cover.*

## Accessories

### Clamping range reduction set for ORBIWELD TP 250

Optional reduction of min. clamping range down to OD 12 mm (1/2 inch).

Article	Tube/pipe OD [mm]	Tube/pipe OD [inch]	Code
Clamping range reduction 12.00 - 77.00 set for ORBIWELD TP 250	12.00 - 77.00	1/2 - 3	<b>811 050 002</b>

### Optional stainless steel clamp jaws for ORBIWELD TP

Article	Code
Optional stainless steel clamp jaws for ORBIWELD TP 250	<b>811 050 006</b>
Optional stainless steel clamp jaws for ORBIWELD TP 400	<b>812 050 002</b>
Optional stainless steel clamp jaws for ORBIWELD TP 600	<b>813 050 002</b>
Optional stainless steel clamp jaws for ORBIWELD TP 1000	<b>814 050 001</b>

### Cold wire feeding system ORBIWELD TP

Can be mounted directly on the weld head existing of:

- Feed motor
- Adjustable wire guide system
- KD 3-62: With spool adapter with special 62 mm mini spool (empty);

KD 3-100 and KD 4: With spool adapter for D 100 standard spools.

- KD 4: External wire-feeding box, with spool adapter for standard D 100 spools. Total weight without wire spool less than 2000 g!

Article	For ORBIWELD	Code
Cold wire feeding system KD 3-62	TP 400 – 1000	<b>812 050 001</b>
Cold wire feeding system KD 3-100	TP 600 – 1000	<b>813 050 001</b>
Cold wire feeding system KD 4	TP 250	<b>811 050 001</b>

### Control cable

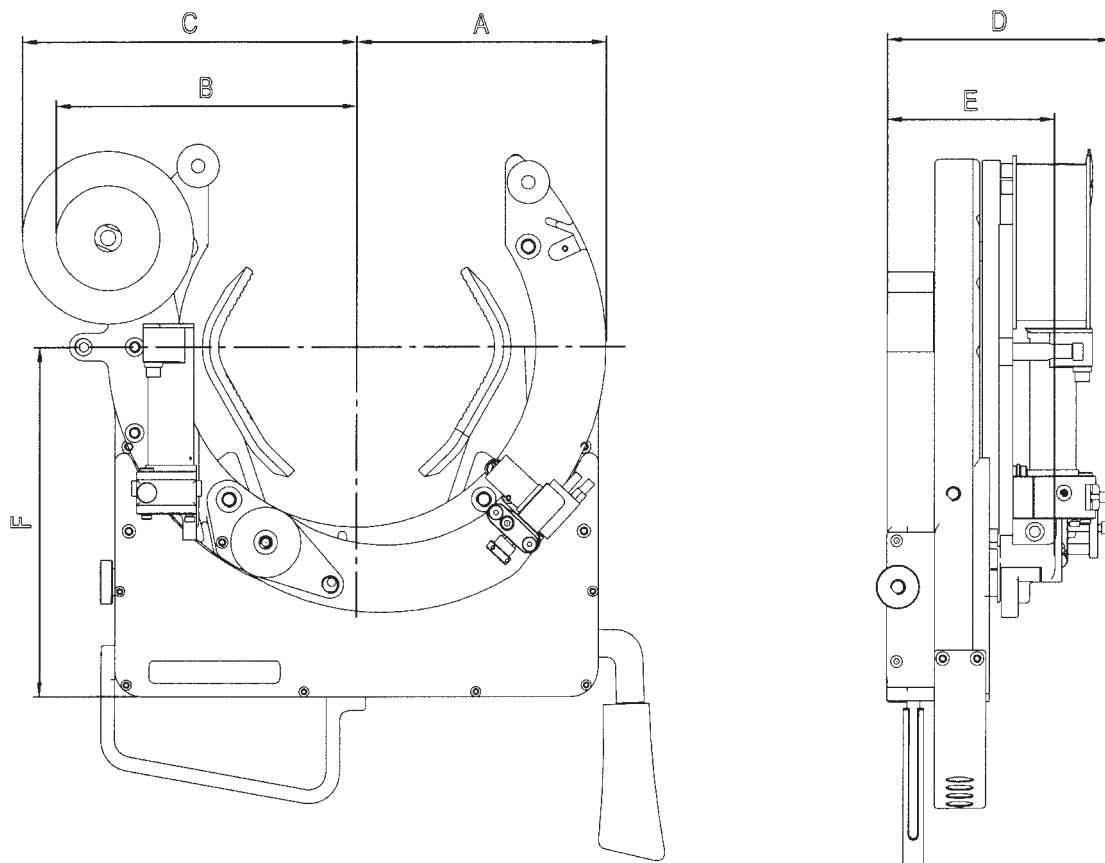
Suitable for all ORBIWELD TP heads.

Article	Length [m]	Length [ft]	Code
Control cable for all ORBIWELD TP heads	7.5	24.6	<b>811 050 003</b>

### Ground cable

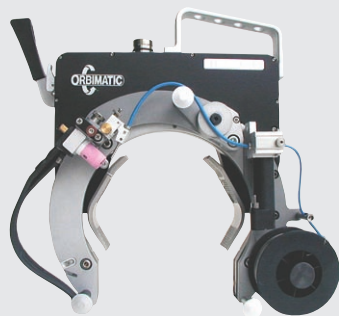
Article	Length [m]	Length [ft]	Code
Ground cable for 165 A	5.0	16.4	<b>811 050 004</b>
Ground cable for 300 A	5.0	16.4	<b>811 050 005</b>

# ORBIWELD TP open-arc weld heads



Description	TP 250		TP 400		TP 600		TP 1000	
	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]	[mm]	[inch]
A Without wire	86.0	3.386	108.0	4.252	146.0	5.748	216.0	8.504
B With wire KD 3-62	x	x	155.0	6.102	176.0	6.929	216.0	8.504
C With wire KD 3-100	x	x	x	x	196.0	7.717	237.0	9.331
D	85.0	3.346	120.0	4.724	120.0	4.724	160.0	6.299
E Tungsten	74.0	2.913	90.0	3.543	97.0	3.819	146.0	5.748
F	125.0	4.921	200.0	7.874	202.0	7.953	270.0	10.630
Weight excluding cable and wire feeder [kg/lbs]	2.1	4.630	5.4	11.905	8.0	17.637	16.9	37.258

x = Not available



The technical data are not binding. They are not warranted characteristics and are subject to change. Please consult our general conditions of supply.

Stamp of distributor:

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