

ESAB A6S Compact 300 Welding Head for inside welding

The A6S Compact 300 welding head gives you, not only great opportunities of inner pipe welding in small pipes, but also an excellent welding result.

The Compact 300 welding head is designed for inside longitudinal welding of pipes with a minimum inner diameter of 300 mm and inside circumferential seam welding of pipes with a minimum diameter of 500 mm.

One important part is the guiding of the wire by help of rollers in this small diameter of 300 mm. When welding with the standard Compact 300 head the maximum depth with an inner diameter of 300 mm will be 1350 mm without prolongation. The total length of Compact 300 is 1635 mm.

In connection with the ESAB Column & Boom CaB 300 S, the minimum inner diameter which the head and boom can enter is 400 mm. The head can of course be used together with other ESAB Column & Booms.

The Compact 300 is designed to weld with a maximum wire diameter of 4 mm, when welding carbon steel and a maximum wire diameter of 3.2 mm, for welding of stainless steel. The welding head is designed for single wire. The built-in pneumatic valve, to open or close the feeding of flux from the FFRS System (1), will be controlled by help of the PEH control box (2).

Compact 300 is equipped with a motorized slide cross, which has a total stroke of 50 mm in x/z-direction. The motorized slides are to be controlled by the PAK control unit (3) with joystick. Accurate positioning and joint following lays the foundation for high quality result.



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Important add-on components

The Compact 300 welding head can be combined with optional standard components, such as:

Inductive sensor

The head can be adapted with inductive sensor to secure the correct arc distance.

TV monitoring equipment

TV monitoring equipment can be integrated into the system, thereby enabling the operator to supervise and adjust the head position from the outside via the TV screen. The monitoring system is equipped with built-in hair cross.

Laser pointer

The laser pointer is useful together with the TV monitoring equipment, when positioning the torch to the weld joint.

Flux handling (1)

The FFRS system is designed for continuous, highcapacity welding operations. The flux is delivered from the pressure tank to the welding head's flux hopper and dispersed to weld bead. After welding, excessive flux is recovered by means of the electrically powered recovery unit from the suction nozzle through the suction hose to the primary separator.

See fact sheet FFRS 1200 and 3000, XA00104920.

Process Controller (2)

With PEH electronic control equipment, you can quickly and accurately programme all welding parameters before welding commences. Extensive integration of the control system with the power source guarantees very high reliability in the welding process. All controls for the welding motions and the entire welding process are located on the control panel.

See fact sheet PEH, XA00089320.

PAK Control unit (3)

The PAK control unit has been developed for manual positioning and joint tracking of all ESAB motorized standard slides. The PAK control unit is available in two versions; with or without remote control.

See leaflet PAK-GMD, XA00068420.

Technical data

Wire dimensions (mm) Steel	3 - 4
Stainless	3.2
Permissible load 100% (A)	800
Control voltage (V)	42
Travel speed (m/min)	0.1-1.7
Linear slides setting range (mm)	50
Angular slide setting range (°)	360
Wire feed speed, standard (m/min)	0.2 - 4.0
Wire feed speed, high (m/min)	0.4 - 8.0

Accessories

Contact tips, wire size M12	
3.0 mm	0154 623 005
3.2 mm	0154 623 004
4.0 mm	0154 623 003
Feed rollers, wire size	
3.0 - 3.2 mm 4.0 mm	0218 510 298 0218 510 286

Ordering information

A6S Compact 300 welding head, standard	0809 280 880
A6S Compact 300 welding head, high speed	0809 280 881
Inductive sensor	0811 178 880
TV monitoring equipment	0811 176 880
Laser pointer	0811 177 880

*) Longitudinal welding: min inner dia 300 mm Circumferential welding: min inner dia 500 mm



*) see above



ESAB reserves the right to alter specifications without prior notice ESAB is approved according to ISO 9001:2000





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