

AXXAIR

INNOVATIVE ORBITAL SOLUTIONS

ORBITAL WELDING Microfit closed head SAMX-25

NEW !



RANGE (o/d)

6 - 25.40 mm
(0.236" - 1")



MICROFIT CLOSED HEAD SAMX-25

RANGE: 6 - 25.40 mm o/d / 0.236" - 1" o/d

- **Functions:** Orbital TIG welding
- **Materials:** Any kind of steel and exotic alloy

SAMX-25 MicroFit head is the ideal solution for welding tubes with diameters of 6 mm and above, ensuring precision and reliability in every weld.

The machine is engineered to handle tubes and fittings, offering versatility in welding configurations. Whether it's tube-to-tube, tube-to-fitting, fitting-to-fitting, or any other combination, the SAMX-25 adapts seamlessly to meet the demands of your welding projects.



SAMX-25 with cassette

MAIN FEATURES

- High level of performance with a **high duty cycle**
- **Air or water cooled available**
- **Grease-free operation:** compatible with clean room standards
- Optimal positioning of tubes in the cassettes with an optimized clamping system, without risk of deforming the part to be welded
- **Optimized inert gas diffusion:** welds with very limited coloration
- **Easy maintenance and cleaning :** thanks to a tool integrated in the machine body
- **Compact and light:** 6.5kg (13 lbs) with 8 meters cable (26 ft)



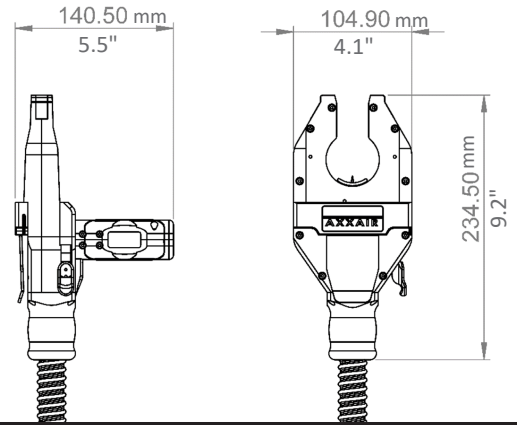
Machine compatible with Swagelok cassettes, please contact us.

SAMX-25 TECHNICAL FEATURES

MODEL SAMX-25

Part Number	SAMX-25A	SAMX-25E
Description	Microfit closed weld head with 8m (26ft) cable Air cooling	Microfit closed weld head with 8m (26ft) cable Water cooling
Tube diameter (o/d)	6 - 25.40 mm (0.236" - 1")	6 - 25.40 mm (0.236" - 1")
Electrode diameter	1.6 mm (1/16" in)	1.6 mm (1/16" in)
Weight with cable	6.5 kg (14 lbs)	6.5 kg (14 lbs)
Duty cycle	75A at 50%	100A at 80%
Max welding current	100 A	120 A
Operating temperature	+0°C / +40 °C (32°F/104°F)	+0°C / +40 °C (32°F/104°F)

DIMENSIONS



POWER SUPPLY



Compatible with the SAXX range of power supplies

DELIVERY AND STORAGE



Delivered in a shockproof case with a suspension assembly

Cassette

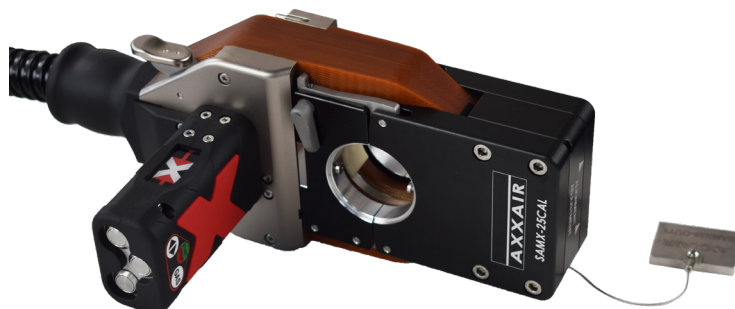
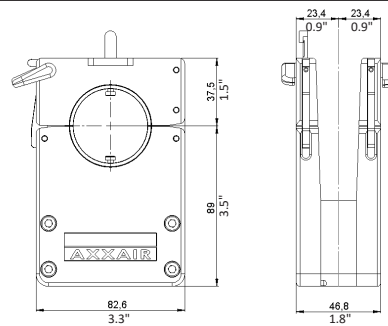
(available as an accessory)

STANDARD CASSETTE



PART NO: SAMX25-CAB01

DIMENSIONS (mm/inch)



CONSUMABLES

Electrodes (sold by pack of 10)

PART NUMBER	DESCRIPTION	Outside diameter of the tube to be welded (min - max)	
		min	max
SCE16-28.5	Pre-ground tungsten electrode diameter 1.6 mm ($\frac{1}{16}$ " in), length 28.5 mm (per 10)	6 mm (0.236")	15.7 mm (0.618")
SCE16-23.5	Pre-ground tungsten electrode diameter 1.6 mm ($\frac{1}{16}$ " in), length 23.5 mm (per 10)	15.7 mm (0.618")	25.4 mm (1")



ACCESSORIES

Clamping jaws

- Stainless steel
- 1 set of collets includes 2 half shells. 2 sets are required to cover both sides of the cassette (4 half shells).



PART NUMBER	DESCRIPTION	Outside diameter of the tube to be welded (inch / mm)	
		inch	mm
SMX25-06.00	Jaws (2pcs) for standard cassette OD = 6.00 mm (0.236")	0.236"	6.00 mm
SMX25-06.35	Jaws (2pcs) for standard cassette OD = 1/4 inch (6,35 mm)	1/4"	6.35 mm
SMX25-07.93	Jaws (2pcs) for standard cassette OD = 5/16 inch (7.938 mm)	5/16"	7.938 mm
SMX25-08.00	Jaws (2pcs) for standard cassette OD = 8.00 mm (0.315")	0.315"	8.00 mm
SMX25-09.52	Jaws (2pcs) for standard cassette OD = 3/8 inch (9.525 mm)	3/8"	9.525 mm
SMX25-10.00	Jaws (2pcs) for standard cassette OD = 10.00 mm (0.394")	0.394"	10.00 mm
SMX25-12.00	Jaws (2pcs) for standard cassette OD = 12.00 mm (0.472")	0.472"	12.00 mm
SMX25-12.70	Jaws (2pcs) for standard cassette OD = 1/2 inch (12.70 mm)	1/2"	12.70 mm
SMX25-14.00	Jaws (2pcs) for standard cassette OD = 14.00 mm (0.551")	0.551"	14.00 mm
SMX25-15.00	Jaws (2pcs) for standard cassette OD = 15.00 mm (0.591")	0.591"	15.00 mm
SMX25-15.87	Jaws (2pcs) for standard cassette OD = 5/8 inch (15.875 mm)	5/8"	15.875 mm
SMX25-16.00	Jaws (2pcs) for standard cassette OD = 16.00 mm (0.630")	0.630"	16.00 mm
SMX25-18.00	Jaws (2pcs) for standard cassette OD = 18.00 mm (0.709")	0.709"	18.00 mm
SMX25-19.00	Jaws (2pcs) for standard cassette OD = 19.00 mm (0.748")	0.748"	19.00 mm
SMX25-19.05	Jaws (2pcs) for standard cassette OD = 19.05 mm (3/4")	3/4"	19.05 mm
SMX25-20.00	Jaws (2pcs) for standard cassette OD = 20.00 mm (0.787")	0.787"	20.00 mm
SMX25-22.00	Jaws (2pcs) for standard cassette OD = 22.00 mm (0.866")	0.866"	22.00 mm
SMX25-22.22	Jaws (2pcs) for standard cassette OD = 22.22mm (7/8")	7/8"	22.22 mm
SMX25-23.00	Jaws (2pcs) for standard cassette OD = 23.00 mm (0.905")	0.905"	23.00 mm
SMX25-25.00	Jaws (2pcs) for standard cassette OD = 25.00 mm (0.984")	0.984"	25.00 mm
SMX25-25.40	Jaws (2pcs) for standard cassette OD = 25.40 mm (1")	1"	25.40 mm

These jaws require a minimum straight length of the welding piece of 23.4 mm (0.905")



Thin clamping Jaws

- Thin clamping jaws are recommended for welding fittings.
- 1 set of collets includes 2 half shells. 2 sets are required to cover both sides of the cassette (4 half shells).



PART NUMBER	DESCRIPTION	Outside diameter of the tube to be welded (inch / mm)	
SMX25-F06.00	Jaws (2pcs) for standard cassette OD = 6.00 mm (0.236")	0.236"	6.00 mm
SMX25-F06.35	Jaws (2pcs) for standard cassette OD = 1/4 inch (6,35 mm)	1/4"	6.35 mm
SMX25-F07.93	Jaws (2pcs) for standard cassette OD = 5/16 inch (7.938 mm)	5/16"	7.938 mm
SMX25-F08.00	Jaws (2pcs) for standard cassette OD = 8.00 mm (0.315")	0.315"	8.00 mm
SMX25-F09.52	Jaws (2pcs) for standard cassette OD = 3/8 inch (9.525 mm)	3/8"	9.525 mm
SMX25-F10.00	Jaws (2pcs) for standard cassette OD = 10.00 mm (0.394")	0.394"	10.00 mm
SMX25-F12.00	Jaws (2pcs) for standard cassette OD = 12.00 mm (0.472")	0.472"	12.00 mm
SMX25-F12.70	Jaws (2pcs) for standard cassette OD = 1/2 inch (12.70 mm)	1/2"	12.70 mm
SMX25-F14.00	Jaws (2pcs) for standard cassette OD = 14.00 mm (0.551")	0.551"	14.00 mm
SMX25-F15.00	Jaws (2pcs) for standard cassette OD = 15.00 mm (0.591")	0.591"	15.00 mm
SMX25-F15.87	Jaws (2pcs) for standard cassette OD = 5/8 inch (15.875 mm)	5/8"	15.875 mm
SMX25-F16.00	Jaws (2pcs) for standard cassette OD = 16.00 mm (0.630")	0.630"	16.00 mm
SMX25-F18.00	Jaws (2pcs) for standard cassette OD = 18.00 mm (0.709")	0.709"	18.00 mm
SMX25-F19.00	Jaws (2pcs) for standard cassette OD = 19.00 mm (0.748")	0.748"	19.00 mm
SMX25-F19.05	Jaws (2pcs) for standard cassette OD = 19.05 mm (3/4")	3/4"	19.05 mm
SMX25-F20.00	Jaws (2pcs) for standard cassette OD = 20.00 mm (0.787")	0.787"	20.00 mm
SMX25-F22.00	Jaws (2pcs) for standard cassette OD = 22.00 mm (0.866")	0.866"	22.00 mm
SMX25-F22.22	Jaws (2pcs) for standard cassette OD = 22.22mm (7/8")	7/8"	22.22 mm
SMX25-F23.00	Jaws (2pcs) for standard cassette OD = 23.00 mm (0.905")	0.905"	23.00 mm
SMX25-F25.00	Jaws (2pcs) for standard cassette OD = 25.00 mm (0.984")	0.984"	25.00 mm
SMX25-F25.40	Jaws (2pcs) for standard cassette OD = 25.40 mm (1")	1"	25.40 mm

These jaws require a minimum straight length of the welding piece of 19.05mm (0.748")



Cables

To increase the operating distance between the welding head and the SAXX power source, we offer cable extensions. The choice of the cable depends on the machine model (water or air cooling)

For SAMX-25A - air cooling

PART NUMBER	DESCRIPTION	NET WEIGHT	PACKAGING DIMENSIONS
SAFS-05MAX	Extension cable of 5m (15ft) Air cooling - without wire	7 kg (15.4 lbs)	40 x 59 x 25 cm 16 x 23 x 10 "
SAFS-10MAX	Extension cable of 10m (30ft) Air cooling - without wire	13 kg (28.7 lbs)	40 x 59 x 25 cm 16 x 23 x 10 "



For SAMX-25E - water cooling

PART NUMBER	DESCRIPTION	NET WEIGHT	PACKAGING DIMENSIONS
SAFS-05MX	Extension cable of 5m (15ft) Water cooling - without wire	8.2kg (18 lbs)	40 x 59 x 25 cm 16 x 23 x 10 "
SAFS-10MX	Extension cable of 10m (30ft) Water cooling - without wire	15.9 kg (35 lbs)	40 x 59 x 25 cm 16 x 23 x 10 "

In order to guarantee the proper functioning of the machine, a maximum length of 20m (60 ft) of extension or a maximum quantity of 2 extension cables is recommended. For a higher need, please consult us.