

Falldorf Sensor

ArcSensor S7

The S7 sensor is designed for seam tracking in arc welding.

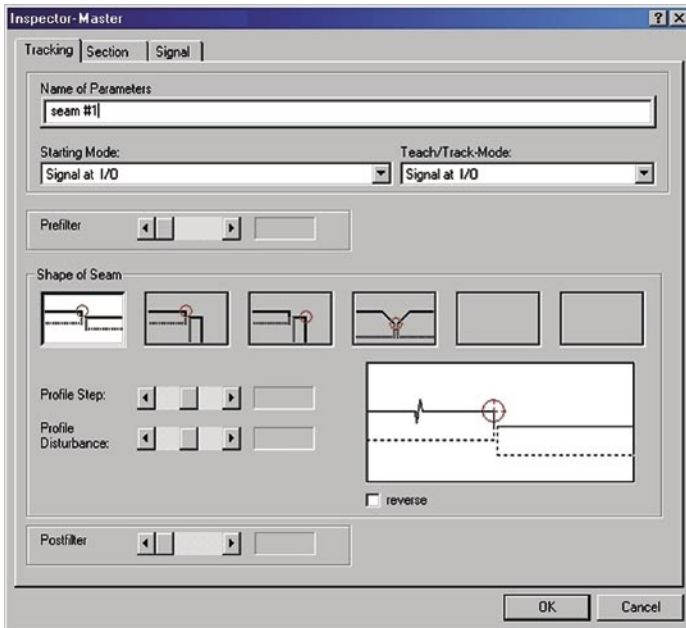
To operate the sensor in hostile environments the housing has an integrated cooling loop for water or air and air ducts to protect the optical windows from contamination. A disposable protective window can be exchanged easily.

An on-line evaluation of joint position, gap width and height mismatch is performed. Evaluation parameter sets for different joint types can be selected by PLC / robot / CNC. The joint position is supplied either to an external axis or to a robot / CNC controller. The gap volume may control a wire feeder. The seam image is displayed as a real time profile line. All calculated seam parameters are displayed graphically.

Software for Seam Tracking

Field of view / Accuracy

model	nominal stand-off [mm]	horizontal field of view [mm] at nominal stand off	vertical field of view [mm]	horizontal accuracy [mm]	vertical accuracy [mm]	speed [profiles/s]
S7/60/30/20	60	25	20 (-8/+12)	± 0.1	± 0.1	50
S7/90/42/44	90	37	39 (-17/+22)	± 0.2	± 0.3	50
S7/120/50/77	120	50	72 (-27/+45)	± 0.3	± 0.6	50



ArcSensor S7

data, external synchronization input and supply via M23 industrial connector
 (cable outlet available in inline or angled orientation optionally with detached connector)

free running or triggered

ca. 300 g

internal air ducts for purge air and disposable protective windows

cooling loop for water or air

3B visible laser

5 to +40°C or cooled

shielded twisted pairs for robot or cable track use, length: 10 / 30 / 60 m

Sensor Head connection

synchronization

weight

protection

cooling

laser class

operating temperature

cable

Computer type

industrial PC

PCI bus interface board

digital I/O (24 V), Profibus

RS232 / RS422 / Profibus / Ethernet

to PLC

to robot / CNC

