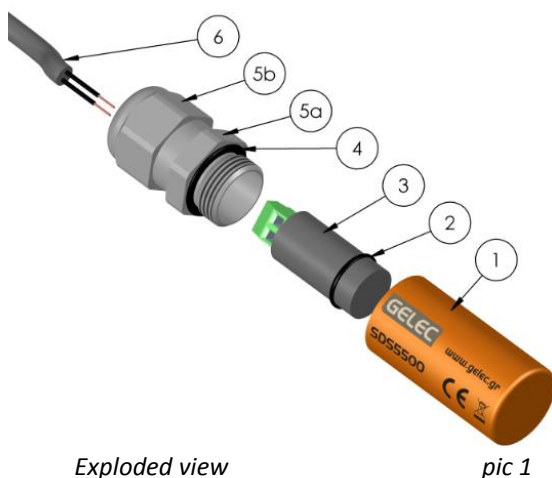


SEAM DETECTOR SENSOR SDS5500

The Seam Detector Sensor SDS5500 is a part of the Seam Detection System, which is commonly used in fabric dyeing machines, using inductor technology. It is compatible with the Seam Detector Units GCSDU5000 and SDU6000. It should be mounted externally on the machine close to the fabric path (up to 25cm), which has a magnet (MSD05 - Ø8x40mm) sewed on its seam.

OVERVIEW OF THE SENSOR

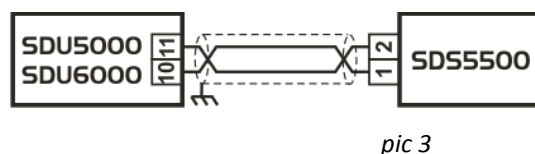
- (1) Sensor casing
- (2) Shock absorbing o-ring
- (3) Sensor and terminal block encapsulated in casting system (epoxy resin)
- (4) Sealing o-ring
- (5) Cable gland (M 16x1,5) for the cable insertion, connection and sealing
- (6) Connection cable (not included)

VERSIONS

The sensor comes in two versions, **SDS5500** and High Temperature version **SDS5500-HT**. For the sensor's replacement, only the sensor spare part **SDS5500-SP** is needed (item 3 in Exploded view).

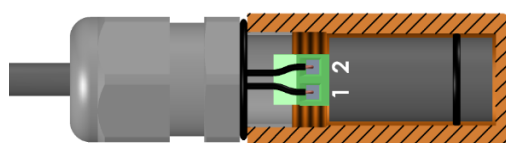
INSTALLATION / REPLACEMENT PROCEDURE

1. Prepare the cable to suit the equipment geometry (*pic2*) and connect properly to the SD unit (terminals 10/11 on the unit, specific polarity not important) (*pic3*). Notice that the shield should only be grounded at the cable end where the SD Unit is installed. At the sensor side, just cut the shield so it is covered from the outer jacket and don't connect. A connection diagram is also printed on the sensor casing.



2. Dismantle the device (*pic1*). Unscrew the gland body (5a) from the casing (1) and remove the sensor (3).

3. Insert the cable in the cable gland and connect the wires at the sensor terminal block.
4. With the sealing nut (5b) relaxed, put the sensor back in the casing and tighten the gland body (5a) into the casing with a spanner (19mm size) until heavy resistance is achieved. The sealing (4) and the shock absorbing (2) o-rings should be in their position.
5. Hold the sensor in its final position by pushing the cable (6) against the casing, and tighten the seal nut (5b) with a spanner until it has clearly engaged the cable and cannot be further tightened.



Final assembly

In case a sensor replacement is needed, just exchange the old sensor (3) with the new spare part and follow the same procedure. The rest of the existing equipment (installation cabling, cable gland, casing, etc.) will remain as it was.

REPLACING OLDER SENSOR VERSIONS

The SDS5500 is compatible with the GCSDU5000 Seam Detector Unit. It is proper for replacing any sensor which works with these units. Follow the procedure below.

1. Cut the existing cable close to the old sensor, in order to have adequate length for the new sensor installation.
2. Follow the installation procedure as described above.
3. Using the onboard trimmer of the GCSDU5000 unit, increase the sensitivity to maximum. In case this maximum level causes undesirable detections due to other interferences, observe the operation and start reducing the sensitivity, until you have only the true magnet passages detected.

TECHNICAL DATA		
	SDS5500	SD5500-HT
Operating temperature	-20°C ... +100°C	-15°C ... +135°C
Dimensions when assembled	Ø20mm x 64mm	Ø20mm x 61mm
Weight	24 gr	43 gr
Connection Cable	2 x 0,34...1 mm ² Cable outer Ø 4,5...10mm (shielded)	2 x 0,34...1 mm ² Cable outer Ø 4,8...5,8mm Cable outer Ø 8,5...10,8mm (shielded) ⁽¹⁾
Materials (Casing/Cable gland)	Ertalon 4.6 / Polyamide, CR	Ertalon 4.6 / Nickel-plated brass, FKM
Resistance	approx. 800 Ohms (at 25°C)	
Degree of protection	IP67 when correctly mounted	

⁽¹⁾ If the use of shielded cable is necessary at the HT version, a thread enlarger combined with a bigger cable gland is necessary, due to the shielded cable's bigger outer diameter. Please contact us for details.