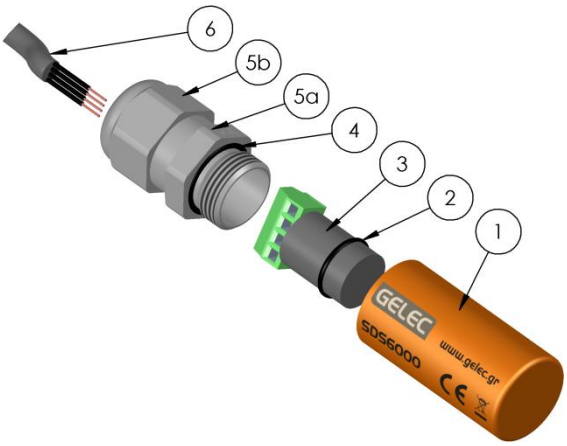
SEAM DETECTOR SENSOR SDS6000

The Seam Detector Sensor SDS6000 is a part of the Seam Detection System, which is commonly used in fabric dyeing machines. Having an innovative and latest technology magnetic sensor, it maximizes the detection efficiency. It is compatible with the Seam Detector Unit SDU6000. It should be mounted externally on the machine close to the fabric path (up to 30cm), which has a magnet (MSD05 - Ø8x40mm) sewed on its seam.

OVERVIEW OF THE SENSOR



Exploded view *pic 1*

(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)

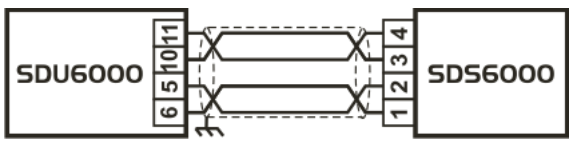
VERSIONS

The sensor comes in two versions, **SDS6000** and High Temperature version **SDS6000-HT.**
For the sensor's replacement, only the sensor spare part **SDS6000-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 5,6,10,11 on the unit) (*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.

pic 2



pic 3

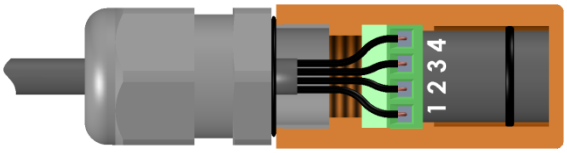
2. Dismantle the device *(pic1)*. Unscrew the gland body (5a) from the casing (1) and remove the sensor (3).

3. Insert the cable in the cable gland and connect the wires at the sensor terminal block.

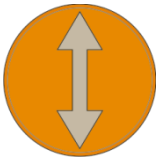
4. With the sealing nut (5b) relaxed, put the sensor back in the casing and tighten the gland body (5a) into the casing with a spanner (19mm size) until heavy resistance is achieved. Notice that you should keep the casing steady (NOT the gland body) during tightening, to avoid internal cable torsion. 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.

6. At the bottom of the sensor there is a double-direction arrow *(pic5)*. Install the sensor in a way that the fabric route in that point (and therefore the magnet route), is parallel to that arrow. This will maximize the sensor's detecting ability.



Final assembly *pic 4*



pic 5

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.

TECHNICAL DATA		
	SDS6000	**SD6000-HT**
Operating temperature	-20°C ... +100°C	-15°C ... +135°C
Dimensions when assembled	Ø20mm x 64mm	Ø20mm x 61mm
Weight	19 gr	38 gr
Connection Cable	4 x 0,34…1 mm^2 Cable outer Ø 4,5…10mm Shielded	4 x 0,34…1 mm^2 Cable outer Ø 5,8…6,8mm 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
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.