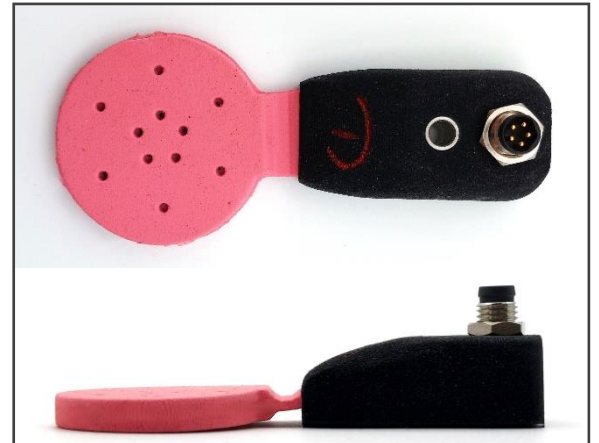


Load Sensor

Datasheet DLO-...



Properties

The rubbery structure of the TS-R-250 allows it to be attached to any surface, regardless of its shape (straight, curved, irregular). The softness of the sensor makes it ideal for contact with any object that needs to be gripped and where the contact force needs to be measured. Understanding the gripping force makes the process faster and more reliable and prevents damage to sensitive parts. It is equipped with a versatile electronic that provides analog output as well as digital communication and IOs.

- ◆ Flexible rubber-like sensor that can be mounted on surfaces of any shape
- ◆ Its flexibility even allows it to be mounted on the joints and hinges of a gripper
- ◆ The softness of the sensor protects fragile objects
- ◆ Ultra-low weight
- ◆ No additional measuring amplifier required
- ◆ Intelligent electronics with digital IOs, analog output and/or digital communication
- ◆ Compact design

Applications

- ◆ Picking up and placing
- ◆ Gripping & Clamping
- ◆ Soft robotics and soft grippers
- ◆ Robotics in general
- ◆ High Resolution Displacement Measurement

Load Sensor

Datasheet DLO-...

Technical Data

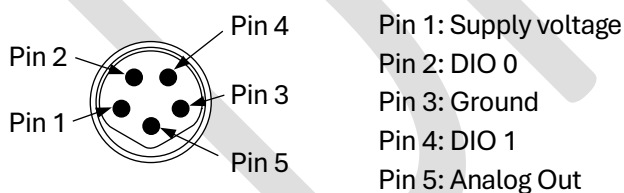
Weight	approx. 25g	Weight of sensor with electronic
Dimensions	Ø 40 6 mm	Outer Diameter of the Sensor Thickness of the Sensor
Pressure Range	≤ 250 kPa	Maximum pressure
Resolution	up to 12 bit	Electronic: Resolution of DAC
Communication	UART	Others on request
Digital IOs	In: max. 24 V Out: Open Drain, max. 24 V, 250 mA or 10 kΩ Pull-up	Function upon definition Resistive Loads only
Analog output	0...3.3 V 0...10 V 0...20 mA, max. 24 V 4..20 mA, max. 24 V	Proportional to sensor signal
Sampling frequency	≤2 kHz*	Maximum refreshing rate of analog output
Operating temp.	-55°C to 80°C	Can be higher for sensor with separate electronic
Supply voltage	3.4 to 5.2 VDC 12 VDC +/- 20% 24 VDC +/- 20% 9 to 30 VDC +/- 20%	Others on request
Connector	M8 5 Pin B-coded	Different orientations or M12 on request

* specification performed at 125 Hz

Mechanical Dimensions

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Contacts Position and Pinout



IEC 61076-2-104 B-coded M8