

Displacement Sensor CS134

Item number: 15135



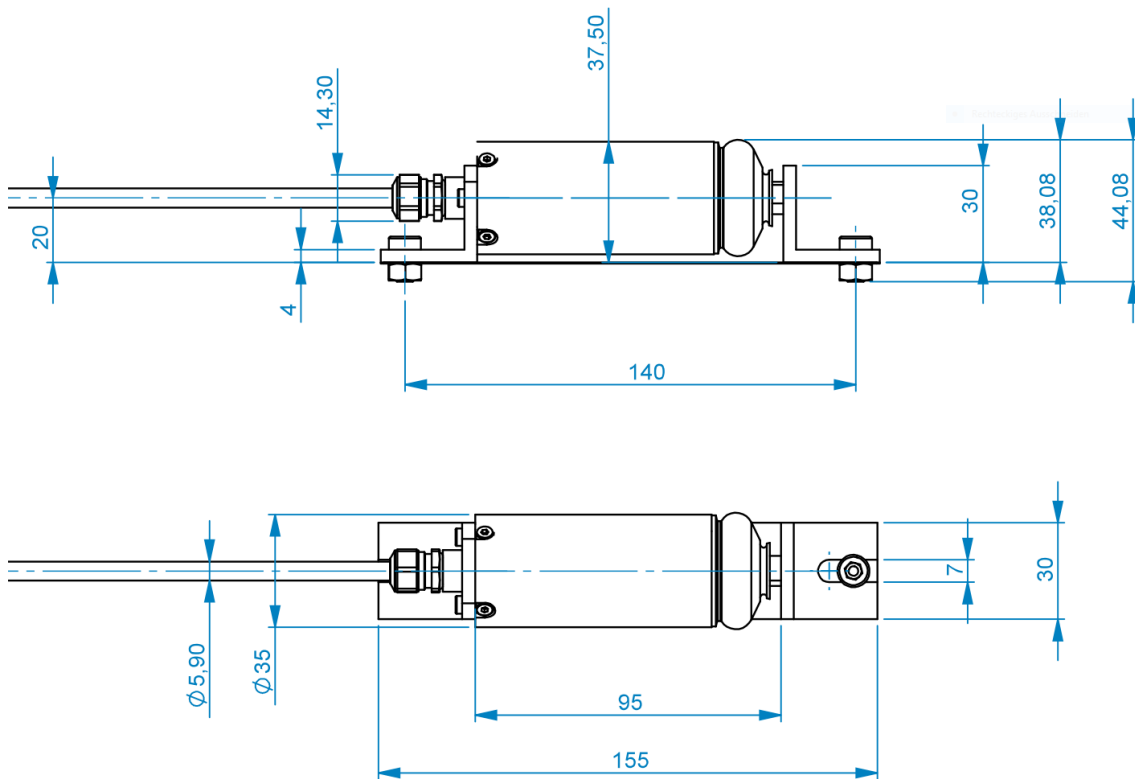
Highlights

- robust and high-resolution displacement sensor
- for static and dynamic displacement measurement and crack monitoring
- suitable for installation on uneven surfaces
- protection class IP65
- optionally with integrated electronics 4...20mA or 0...10V

The CS134 crack sensor is used to monitor expansion and cracks in structures. It is suitable for single-axis displacement measurement for the measuring range up to 2 mm or up to 5 mm.

This displacement sensor is constructed using strain gauge technology. The CS134 sensor is installed by screwing or gluing. To make disassembly easier, the CS134 crack sensor can be screwed onto brass bases. The brass bases (separate accessories) are glued to the component at the desired distance of 140 mm using a template. The strain gauges are protected from moisture by the enclosed construction. The protection class is IP65.

Technical Drawing



Technical Data

Basic Data		Unit
Typ	Risssensor	
Nennweg	2	
Material	Stainless steel	
Abmessung	155 x 30 x 44	

Electrical Data		Unit
Input resistance	1000	Ohm
Tolerance input resistance	10	Ohm
Output resistance	1000	Ohm
Tolerance output resistance	10	Ohm
Insulation resistance	200	MOhm
Rated range of excitation voltage from	2.5	V
Rated range of excitation voltage to	5	V
Operating range of excitation voltage from	1	V
Operating range of excitation voltage to	10	V
Rated output	1	mV/V

Accuracy Data		Unit
Accuracy class	0,1	
Relative linearity error	0.1	%FS
Relative zero signal hysteresis	0.05	%FS
Temperature effect on zero signal	0.02	%FS/K
Temperature effect on characteristic value	0.01	%FS/K
Relative creep	0.1	%RD/30min

Noise amplitude approx. 2 μ V/V Pk-Pk at 10 Hz bandwidth

Pin assignment

Channel	Symbol	Description	Wire color	PIN
	+Us	positive bridge supply	brown	1
	-Us	negative bridge supply	white	2
	+Ud	positive bridge output	blue	3
	-Ud	negative bridge output	black	4

Compressive load: positive output signal. Shield connected to sensor housing.