Displacement Sensor CS134e 5mm

Item number: 12433

The CS134e crack sensor is used to monitor cracks in structures. It is suitable for single-axis displacement measurement for the measuring range of 5 mm. This displacement sensor is constructed in strain gauge technology. The CS134 sensor is installed by screwing or gluing. To facilitate disassembly, the CS134e crack sensor can be screwed onto brass bases. The brass bases (separate accessories) are glued to the component with the help of a template at the desired distance of 114mm. The strain gauges are protected from moisture by the enclosed construction. Outdoor use is therefore possible. Additional measures to protect the sensor from external forces, e.B covers, are recommended for long-term applications. The measured values at the analog output are updated with a frequency of 10 Hz. To trigger the "Tara" and "Scale" functions, the corresponding inputs "Ta" and "Sc" are connected with operating voltage for the duration of 3s. The functions are executed on the falling edge. The functions "Tara" and "Scale" can be deactivated independently of each other, so that e.B only the "Tara" function can be executed, or that both functions are activated or deactivated.

Technical Data

Basic Data		Unit
Typ	Risssensor	
Nennweg	5	
Material	Stainless steel	
Abmessung	134 x 30 x 34	

Electrical Data		Unit

Accuracy Data		Unit
Accuracy class	0,5	
Relative linearity error	1	%FS
Relative zero signal hysteresis	0	%FS
Temperature effect on zero signal	0	%FS/K
Temperature effect on characteristic value	0	%FS/K
Relative creep	0	%
Relative repeatability error	0	%

Measuring Frequency		Unit
Limit frequency (analog)	10	Hz

Supply		Unit
Supply voltage from	9	V
Supply voltage to	28	V
Current consumption from	20	mA

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

Pin assignment

Data Sheet CS134e 5mm

Channel	Symbol	Description	Wire color	PIN
	Ub	supply voltage (24V or 12V DC)	brown	1
	Ua	output signal (current or voltage)	white	2
	GND	ground supply voltage	blue	3
	Tara	control input for zero adjustment	black	4
	Scale	control input for gain adjustment	grey	5