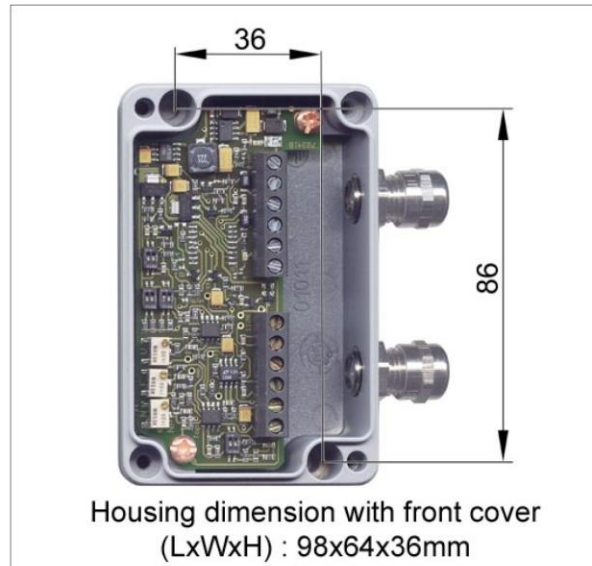




Sensor-Interface

Type SI-U, SI-I

- Design-Independent
- Direct Connection to PLC
- Long Input Lead Possibility from Sensor to Evaluation
- Applicable in Heavy Industries by Robust Aluminum Casting Housing
- Level of Protection IP 67



DESCRIPTION:

The sensor interface SI is designed for the interface adaption between sensor and evaluation. The interference-prone output signals of strain gauge-sensors are raised to a high level. Thus, the measurement safety and the measurement accuracy is crucially increased.

The excitation voltage range of 16...32 V and the analog outputs of 0...10 V, resp. 0 or 4...20 mA allow the direct signal processing with a PLC-Control.

The sensor is powered with stabilized DC voltage which is generated from unregulated supply (16...32 V).

The subsequent precision measuring amplifier converts the output signals of the sensor into standardized signals.

Serially, the interface is being delivered with PG7 screw connections. One or two Sensor sockets are available optionally.

An universal and easy adaptation to different sensors is possible through a wide control range of the zero point and the amplification by determining the coarse adjustment through a switch and by fine adjustment with the potentiometers.

The sensor can be detuned by a control switch.

Furthermore, an input filter is adjustable with a potentiometer (to eliminate interferences, e.g. by the frequency converter etc.).

TECHNICAL DATA:

Type	SI-U10	SI-U5	SI-I0	SI-I4	SI-I10	SI-I12
Art. No.	101131	103756	102146	101130	103755	103627

Evaluation Side

Supply	Supply Voltage	16...32 V DC					
	Ripple	<10%					
Signal Output	Current Consumption	<40 mA		<60 mA			
	Output Signal	0...±10 V	0...±5 V	0...20 mA	4...20 mA	10±10 mA	12±8 mA
		≤5 mA	≤5 mA	(3-wire technique)			
	Ripple	<20 mV					
	Gain Drift	<0.05%/10 K		<0.1%/10 K			
	Zero Point Drift	<0.15%/10 K		<0.2%/10 K			
	Load Resistance	>2 kΩ		<500 Ω			
	Output Resistance	<1 Ω		0.01 Ω			
General	Cable Length	2 m (max. 10 m)		2 m (max. 100 m)			
	Interface-Evaluation	10 Ω		30 Ω			
	Max. Input Lead Resistance						

Sensor Side

Excitation	Excitation Voltage for Sensor	10 V ±5% (Option 5 V)				
	Excitation Current for Sensor	≤150 mA				
Signal input	TC Excitation Voltage	0.1 mV/K				
	Input Voltage	2.5...40 mV				
General	Input Resistance	10 ⁹ Ω				
	Cable Length Sensor-Interface	1 m (max. 2.5 m)				

Miscellaneous

Cut-Off Frequency	<1.2 kHz	1 kHz
Nominal Temperature Range	+10...+40 °C	
Service Temperature Range	0...+60 °C	
Storage Temperature Range	-10...+70 °C	
Dimensions (L x W x H)	98 x 64 x 36 mm	
Level of Protection	IP 67	

Options	Art. No.	Function
V8	103757	Excitation voltage 8...16 V (not for SI-U10)
EED6	103758	Sensor connection pluggable ED6, incl. mating connector KS6
AES6	103759	Excitation / output pluggable ES6, incl. connector KD6
KE	103760	Control trigger external 8...28 V DC
2S	103340	Cable input for second sensor