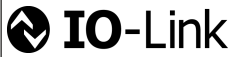


Characteristics

0640 - TRANSMITTER - IO-LINK - UNIVERSAL



- Input channel 1:	Strain gauge full bridge
- Input channel 2:	Universal
- Output:	IO-Link
- Resolution:	16 bit / 24 bit
- Accuracy:	max. 0,05% of nominal range
- Operating temperature:	-20...+85 °C
- Electrical connection:	M12, 5-pole
- Sensor connection:	M12, 8-pole
- Configuration:	Software
- Material:	PBT-GF 30
- Protection class:	IP65

Technical Data

Input

Strain gauge channel:

Measuring unit:	unitless
Sensor types:	Strain gauge full bridge
Measurement range:	freely adjustable inside a range of -3200,0...+3200,0

Universal channel:

Measuring unit:	°C preset
Sensor types:	Universal
Measurement range:	corresponds to maximum range of sensor

Note: other measurement units, ranges and sensor types are available on request

Possible sensors and measurement ranges:

Pt100:	Sensor:	1x Pt100
	Connection:	3-wire
	Nominal range:	-200...800 °C
	Sensor current:	0,9 mA

Thermocouple:

Type J:	Measurement range:	-210...1200 °C
Type K:	Measurement range:	-200...1372 °C
Type N:	Measurement range:	-200...1300 °C

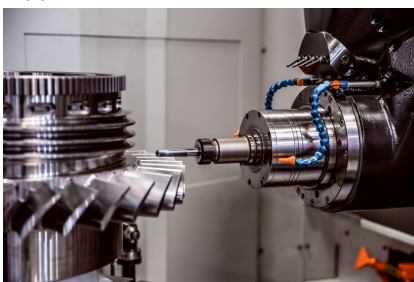
Strain gauge full bridge:
(e.g. force/pressure)

Measurement range:	corresponds to maximum range of sensor (measuring units freely selectable)
Supply voltage:	3 V
Resistance:	min. 1x 350 Ω for max. 1x strain gauge full bridge min. 2x 700 Ω for max. 2x strain gauge full bridges (Connection of more full bridges is possible, but the necessary minimum resistance will rise in proportion.)

Note: other measurement ranges and sensor types are available on request

Applications

The transmitter is universally applicable and can be configured for temperature, force and pressure applications. The universal transmitter MIUT-IO has a 2-channel IO-Link interface and is suitable for a wide range of industrial applications.



● Technical Data (Continued)

Output

Interface: IO-Link
Signal level: 0/24V (as per IO-Link specification)

Environmental Conditions

Temperature: Operating range: -20...+80 °C
Storage: -20...+85 °C
Humidity: 30...90% rH (40 °C, no condensation)
EMC: tested as per: EN 61000-6-2:2005 / EN 61000-6-4:2007 + A1:2011
Cable length: max. 2 m (MISG-IO - sensor element) / max. 20 m (MISG-IO - IO-Link master)

Performance Parameters

Measuring amplifier: Accuracy: max. 0,05% of range + sensor error
Resolution: Strain gauge channel: 16 bit / Universal channel: 24 bit
Filter setting strain gauge: 0,5 s
Filter setting temperature: 25 s
Switch-on delay: <5 s
Response time: 20 ms

Supply

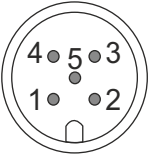
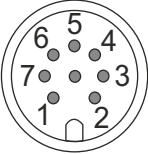
Voltage: 24 VDC
Current: Standard: <30 mA
Switching (SIO): max. 100 mA / Total current: max. 130 mA
Reverse voltage protection: Yes (no function, no damage)

Mechanics

Material: PBT-GF30
Protection class: IP65
Connections: M12 5-pole (electrical) / M12 8-pole (sensor)
Fitting position: any
Dimensions: 96 x 35 x 28 mm / without plugs: 71 x 35 x 28 mm
Weight: approx. 60 g

● **Electrical Connection**

Pin assignment

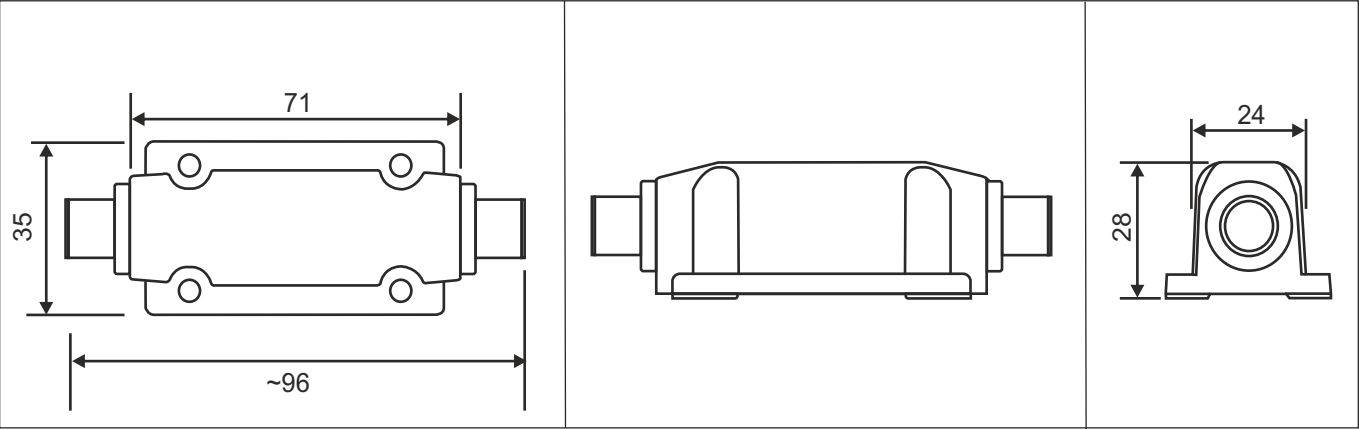
Connection Evaluation	Connection Sensor
M12, 5-pole	M12, 8-pole
	

Connection Evaluation	U+	NC	U-	C/Q	NC
Pins (M12, 5-pole)	1	2	3	4	5

Connection Sensor	U+	S+	U-	S-	NC	Pt100+ / TC+	Pt100- / TC-	Pt100-
Pins (M12, 8-pole)	1	2	3	4	5	6	7	8

Note: NC = Not Connected / not used

● **Dimensions (in mm)**



● **Order Code**

N O X X X X - X X

Input:	Strain gauge and universal (channel 1 and 2)	2							
Output:	IO-Link	1							
Electr. connection:	M12, 5-pole	2							
Sensor connection:	M12, 8-pole	3							
Configuration:	customized (please specify) ¹	0							
Special model:	No							0	
	Yes (please specify)							1	

1) Factory setting depends on input channel:
Universal: Measuring unit °C, max. Measurement range
Strain gauge: unitless