

Overview

- 4 ... 20 mA current output
- Analog force measurement with digital IO-Link interface
- Individual and application-specific parameterization



Technical data

General data

Output signal	4 ... 20 mA IO-Link
Non-linearity	< 0.04 %
Repeatability	< 0.01 %
Temperature effect zero	< 0.01 % / 10K

Mechanical data

Material housing	Aluminium, 6060, chem. passivated
Electrical connection on sensor side	M8, 4 pin, female
Electrical connection on control side	M12, 5 pin, male

Environmental conditions

Operating temperature range	-40 ... 85 °C
Storage temperature range	-40 ... 85 °C
Protection class EN 60529, ISO20653	IP 65
Vibration IEC 60068-2-6	10 ... 57 Hz: 1.5 mm p-p, 58 ... 2000 Hz: 10 g
Random IEC 60068-2-64	20 ... 1000 Hz: 0.1 g ² /Hz
Shock IEC 60068-2-27	50 g / 11 ms, 100 g / 6 ms

Electrical data bridge

Bridge resistance	≥ 350 Ω
Signal area	± 3.8 mV/V
Power supply	2.5 VDC

Electrical data

Supply voltage	18 ... 30 VDC
Current consumption	< 40 mA
Resolution ADC	24 bit
Sampling rate input	8 kS/s
Resolution DAC	14 bit

Electrical data

Sampling rate output analog	8 kS/s
Cut-off frequency (3 db)	1 kHz
SNR @1.0 mV/V	> 75 dB
Short circuit protection	Yes
Reverse polarity protection	Yes
Max. Output range	0 ... 22 mA

IO-Link interface

IO-Link version	1.1
IO-Link port type	Class A
Baud rate	230,4 kbaud (COM3)
Process data length	32 bit
Cycle time	≥ 1 ms
SIO-mode	Yes
Process data (cyclic)	Process Value Scale exponent SSC 1 SSC 2 Quality Alarm

IO-Link features

Parameterizable	Process input Unit (N, kg, μm/m) selectable Teach-in Offset/ Tare Correlation to known force Analog output signal Output range analog signal Alarm state analog signal Functions I/O's selectable
Additional functions	Low pass filter Peak value memory Sample and hold Two digital switching points (SSC) Remote operation

DAB10-AI

Measuring amplifier with current output and digital IO-Link interface

Article number: 11237419

Technical data

IO-Link features

Additional data

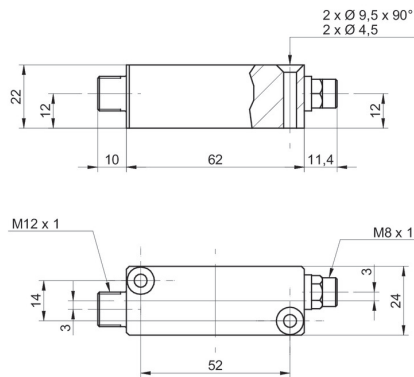
Diagnostic data
Error detection

Compliance and approvals

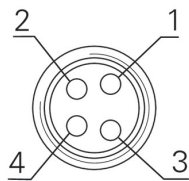
Conformity

CE
UL

Dimensional drawings (mm)

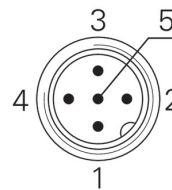


Electrical connection



- 1 +Vs
- 2 Sig +
- 3 -Vs
- 4 Sig -

Electrical connection on sensor side



- 1 +Vs / L+
- 2 I_{OUT}
- 3 0V / L-
- 4 C/Q
- 5 DI/DQ

Electrical connection on control side

Connection diagram

