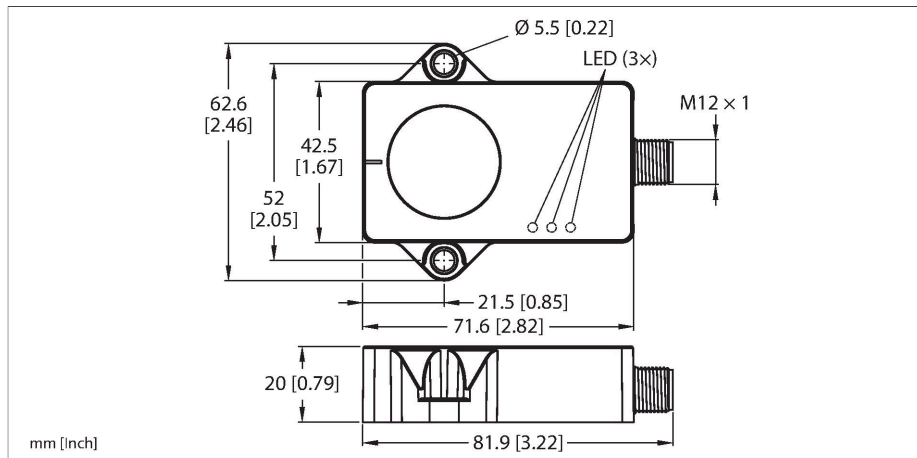


CMMT-QR20-IOL6X3-H1141

Magnetic Field Sensor – For Condition Monitoring with IO-Link



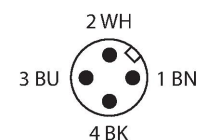
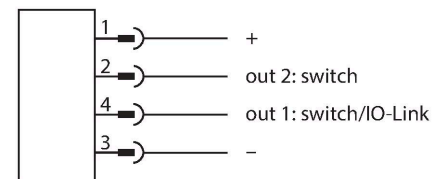
Technical data

Type	CMMT-QR20-IOL6X3-H1141
ID	100041125
General data	
Function	Magnetic field sensor
Measuring range	-40... 105 °C
Resolution — temperature	0.1 K
Repeat accuracy	0.2 °C
Electrical data	
Operating voltage	18...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 150 mA
No-load current	≤ 24 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	Programmable, IO-Link SIO Mode
Output 2	Switching output
max. load current I _o	0.05 mA
Response time	Min. 8 s
Setting option	IO-Link
IO-Link	
IO-Link specification	V 1.1
IO-Link port type	Class A
Communication mode	COM 3 (230.4 kBaud)
Process data width	32 bit
Measured value information	24 bit
Switchpoint information	8 bit

Features

- Connection: Male connector, M12 × 1
- Protection class IP67/IP68
- Three-axis magnetic field measurement and sum vector calculation
- Temperature measurement
- Sensor-2-cloud compatible
- Output 1: push/pull, IO-Link
- Output 2: PNP/NPN
- Offset settings, limit value determination for each axis and assignment of the axes to the outputs via IO-Link

Wiring diagram



Functional principle

Condition monitoring sensors are specially designed for use in system parts in which the environmental parameters can have a significant influence on machine availability or process quality. By monitoring characteristic data within the application, e.g. application temperature, humidity, vibration, etc., process deviations can be detected at an early stage and countermeasures initiated. For this purpose, the continuous detection value is transferred to the controller via IO-Link

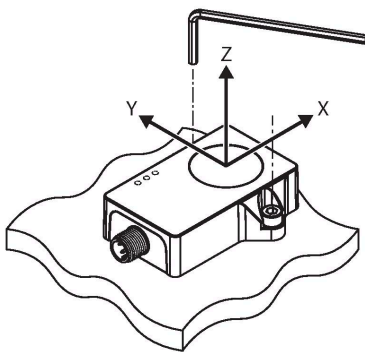
Technical data

Frame type	2.2
Minimum cycle time	10 ms
Function pin 4	IO-Link
Function Pin 2	SIO
Maximum cable length	20 m
Profile support	Smart Sensor Profile
Mechanical data	
Design	Rectangular, QR20
Dimensions	71.6 x 62.6 x 20 mm
Housing material	Plastic, Ultem
Electrical connection	Connector, M12 × 1
Ambient temperature	-25...+70 °C
Protection class	IP68
Power-on indication	LED, Green
Switching state	2 × LEDs, Yellow
EMV	EN 61326-1

process data and customer-specific limit value exceedance/shortfall is additionally transported. The robust sensor design can be used indoors as well as outdoors for more challenging applications. Using the CMMT to capture the magnetic environment can be useful in many applications, such as detecting permanent magnets in packaging or moving parts within a metal structure. In addition, the sensor detects the internal temperature. If the ambient temperatures exceed or fall below the specified operating temperature of the sensor, the data will continue to be recorded for approx. the next hour.

Mounting instructions

Mounting instructions/Description



● 4 mm
3 Nm