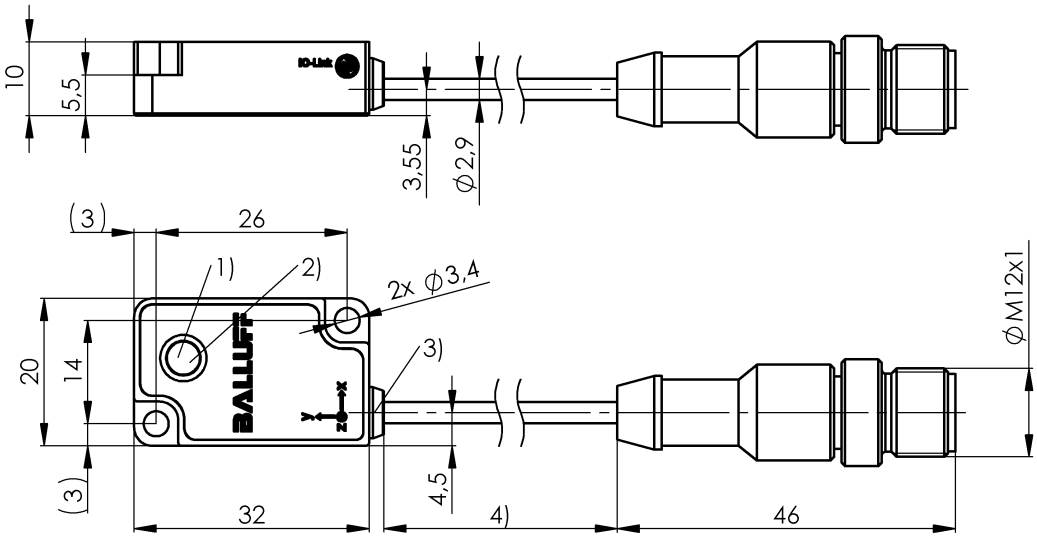
Condition Monitoring Sensors

BCM R15E-002-DI00-01,5-S4
Order Code: BCM0002



1) Membrane, 2) LED orange, 3) LED green, 4) Cable length

Basic features

Approval/Conformity	CE UKCA WEEE cULus
Function	Vibration analysis in time domain Contact temperature monitoring Relative Humidity Ambient Pressure
Principle of operation	Condition Monitoring Sensors
Series	R15

Display/Operation

Display	LED green LED orange

Electrical connection

Bending radius min., fixed cable	3 x D
Bending radius min., flexible cable	≥ 5 D
Cable diameter D	2.9 mm +0.1/-0.05 mm
Conductor cross-section	0.14 mm²
Connection	Cable with connector, M12x1-Male, 3-pin, 1.5 m, PUR
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Current draw max.	10 mA
Operating voltage Ub	18...30 VDC
Protection class	III
Rated operating voltage Ue DC	24 V
Ready delay tv max.	1.5 s

Environmental conditions

Ambient temperature	-25...70 °C
EN 61000-4-2, ESD	Severity Level 2
EN 61000-4-3, RFI	Severity Level 3
EN 61000-4-4, Burst	Severity Level 4
EN 61000-4-6, High-frequency fields	Severity Level 3
IP rating	IP67
Storage temperature	-25...70 °C

Function module ambient pressure

Ambient pressure, measuring range	300...1100 hPa
Ambient pressure, non-linearity	±0.1 % FS
Ambient pressure, resolution	0.15 hPa

Function module contact temperature

Contact temperature, measuring error	±1.5 °C
Contact temperature, measuring range	-25...+70 °C
Contact temperature, non-linearity	±0.5 °C
Contact temperature, resolution	0.1 °C
Contact temperature, settling time	5 min

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Function module relative humidity

Relative humidity, measuring range	5...95 %RH
Relative humidity, non-linearity	±2.5 % RH
Relative humidity, resolution	1 %RH
Relative humidity, settling time	5 min

Function module vibration

Vibration, Evaluation values time domain	RMS Peak to Peak Max Crest Factor Skewness Kurtosis
Vibration, frequency range	2...1800 Hz (±10 %) 2...2500 Hz (±3 dB)
Vibration, measuring principle	MEMS
Vibration, measuring range	-16...16 g
Vibration, number of measuring axes	3

Interface

Baud rate	COM3 (230,4 kBaud)
Interface	IO-Link 1.1
Process data IN	20 bytes
Process data OUT	0 bytes
Process data cycle min.	10 ms

Material

Housing material	1.4404 stainless steel, Membrane: ePTFE with nylon fleece

Mechanical data

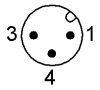
Dimension	20 x 10 x 32 mm
Mounting part	Screw M3 (2x)
Mounting surface	≥ 32 x 20 mm
Weight	30 g

Remarks

For additional information, refer to user's guide.
Order accessories separately.
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



Wiring Diagrams (Schematic)

Pin	Color	Signal
1	BN	+24V
3	BU	GND
4	BK	C/Q