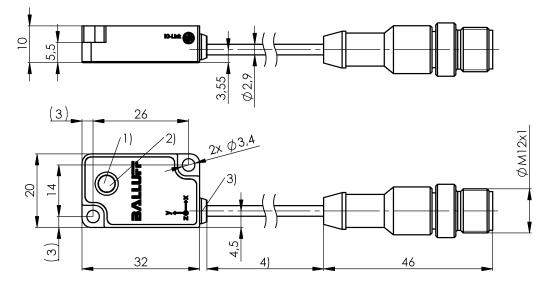
Condition Monitoring Sensors BCM R15E-002-DI00-01,5-S4 Order Code: BCM0002





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



Basic features

Approval/Conformity	CE	Bending radius min., fix
	cULus	Bending radius min., fle
	EAC	Cable diameter D
	WEEE	Conductor cross-section
Function	Vibration Velocity	Connection
	Vibration Acceleration	
	Vibration Severity Zone	Number of conductors
	Contact Temperature	
	Relative Humidity	Polarity reversal protect
	Ambient Pressure	Protection against devic
	Sensor Self-Awareness	Short-circuit protection
Principle of operation	Condition Monitoring Sensors	
Series	R15	Electrical data
Disularion		Current draw max.
Display/Operation		Operating voltage Ub
Display	Run - LED green	Protection class

Display

Run - LED green Communication - LED green, slow flashing (1 Hz) Ping - LED green, asyncronous very fast flashing (4 Hz) and fast flashing (2 Hz) Event - LED orange, fast flashing (2 Hz)

Electrical connection

3 x D
5 x D
2.9 mm +0.1/-0.05 mm
0.14 mm ²
Cable with connector, M12x1- Male, 3-pin, 1.5 m, PUR
3
yes
yes
yes
10 mA
1830 VDC

Operating voltage Ub	1830 VD
Protection class	Ш
Rated operating voltage Ue DC	24 V
Ready delay tv max.	1.5 s

Environmental conditions

Ambient temperature	070 °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	-2070 °C

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Function module ambient pressure

Ambient pressure, measuring range	3001100 hPa
Ambient pressure, non-linearity	±0.1 % FS
Ambient pressure, resolution	0.15 hPa

Function module contact temperature

Contact temperature, measuring error $\pm 2~\%$ FS		
Contact temperature, measuring 070 °C		
range		
Contact temperature, non-linearity	±0.75 % FS	
Contact temperature, resolution	0.1 °C	
Contact temperature, settling time	5 min	

Function module relative humidity

Relative humidity, measuring range	595 %rF
Relative humidity, non-linearity	±2.5 % FS
Relative humidity, resolution	1 %rF
Relative humidity, settling time	5 min

Function module vibration

Vibration, frequency range	23200 Hz
Vibration, measuring principle	MEMS
Vibration, number of measuring axes	3
Vibration, sampling rate	6400 Hz

Function module vibration acceleration

Vibration acceleration, measuring error RMS	±5 %FS @79.4 Hz
Vibration acceleration, measuring range RMS	016 g
Vibration acceleration, non-linearity RMS	±2 %FS @79.4 Hz
Vibration acceleration, resolution RMS	0.006 g @79.4 Hz
Vibration acceleration, statistical	RMS
evaluation variables [for each	Peak to Peak
measuring axis]	

BVLLAL

Function module vibration velocity

Vibration velocity, evaluation	RMS
variables [for each measuring axis]	Peak to Peak
	Mean
	Standard Deviation
	Crest Factor
	Skew
	Kurtosis
Vibration velocity, measuring error RMS	±5 %FS @79.4 Hz
Vibration velocity, measuring range RMS	0220 mm/s @79.4 Hz
Vibration velocity, non-linearity RMS	±2 %FS @79.4 Hz
Vibration velocity, resolution RMS	0.42 mm/s @79.4 Hz

Interface

Baud rate	COM3 (230,4 kBaud)
Interface	IO-Link 1.1
Interface setting option	Flexible process data configuration Vibration measurement based or ISO 10816-3 Data preprocessing (statistics) Events (pre-alarms and main alarms) Delay times for alarms Search function with LED display (ping)
Process data IN	20 bytes
Process data OUT	0 bytes
Process data cycle min.	10 ms
Material	
Housing material	Stainless steel (1.4404), Membrane: ePTFE with nylon fleece
Mechanical data	
Dimension	20 x 10 x 32 mm
Mounting part	Screw M3 (2x)
Mounting part	

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.

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Connector Drawings

$$3 \underbrace{\bullet}_{4} 1$$

Wiring Diagrams

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