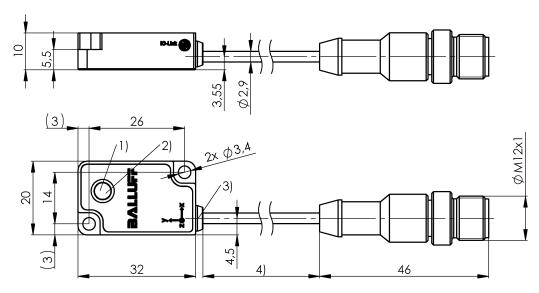
# BCM R15E-002-DI00-01,5-S4

Order Code: BCM0002





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











#### **Basic features**

Approval/Conformity CE UKCA cULus WEEE Function Vibration Velocity Vibration Acceleration Vibration Severity Zone Contact Temperature Relative Humidity Ambient Pressure Sensor Self-Awareness Principle of operation **Condition Monitoring Sensors** Series R15

#### Display/Operation

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**

Bending radius min., fixed cable 3 x D Bending radius min., flexible cable 5 x D Cable diameter D 2.9 mm +0.1/-0.05 mm Conductor cross-section 0.14 mm<sup>2</sup> Connection Cable with connector, M12x1-Male, 3-pin, 1.5 m, PUR

**Number of conductors** 3 Polarity reversal protected ves Protection against device mix-ups yes **Short-circuit protection** 

#### Electrical data

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

#### **Environmental conditions**

Ambient temperature 0...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 -20...70 °C

ETIM 6.0:

### **Condition Monitoring Sensors**

# BCM R15E-002-DI00-01.5-S4

## Order Code: BCM0002

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

Function module ambient pressure

#### Function module contact temperature

Contact temperature, measuring error ±2 % FS Contact temperature, measuring 0...70 °C

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 5...95 %rF Relative humidity, non-linearity ±2.5 % FS Relative humidity, resolution 1 %rF Relative humidity, settling time 5 min

#### **Function module vibration**

2...3200 Hz Vibration, frequency range MEMS Vibration, measuring principle Vibration, number of measuring axes 3 Vibration, sampling rate 6400 Hz

#### Function module vibration acceleration

±5 %FS @79.4 Hz Vibration acceleration, measuring

error RMS

Vibration acceleration, measuring

range RMS

Vibration acceleration, non-linearity

RMS

Vibration acceleration, resolution

RMS

Vibration acceleration, statistical evaluation variables [for each

measuring axis]

RMS

0...16 g

±2 %FS @79.4 Hz

0.006 g @79.4 Hz

Peak to Peak

Function module vibration velocity

Vibration velocity, evaluation variables [for each measuring axis]

Peak to Peak Mean

BVLLUFF

Standard Deviation Crest Factor Skew Kurtosis

±5 %FS @79.4 Hz

Vibration velocity, measuring error

RMS

Vibration velocity, measuring range

RMS

Vibration velocity, non-linearity RMS ±2 %FS @79.4 Hz Vibration velocity, resolution RMS

0...220 mm/s @79.4 Hz

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 on

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 1.4404 stainless steel.

Membrane: ePTFE with nylon

fleece

#### Mechanical data

Dimension 20 x 10 x 32 mm Mounting part Screw M3 (2x) 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.

## **Condition Monitoring Sensors**

BCM R15E-002-DI00-01,5-S4

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## **Connector Drawings**



## **Wiring Diagrams**

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