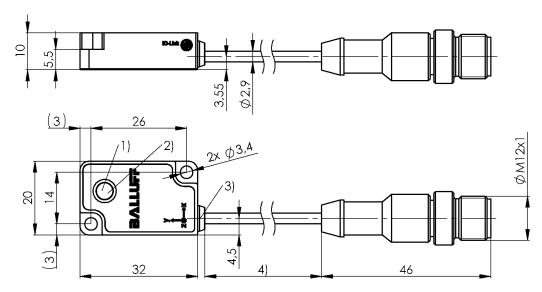
# BVLLUFF



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











## **Basic features**

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

## **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 contact temperature

0...70 °C

±0.75 % FS

0.1 °C

5 min

Contact temperature, measuring error ±2 % FS

Contact temperature, measuring

Contact temperature, non-linearity

Contact temperature, resolution

Contact temperature, settling time

Function module ambient pressure

Vibration velocity, evaluation variables [for each measuring axis]

Peak to Peak Mean Standard Deviation

BVLLUFF

Crest Factor Skew Kurtosis

Vibration velocity, measuring error

±5 %FS @79.4 Hz

RMS

Vibration velocity, measuring range 0...220 mm/s @79.4 Hz

RMS

Vibration velocity, non-linearity RMS ±2 %FS @79.4 Hz Vibration velocity, resolution RMS 0.42 mm/s @79.4 Hz

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

IO-Link

**IO-Link Profil IDs** N/A

**Function module vibration** 

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

**Function module vibration acceleration** 

Vibration acceleration, measuring

error RMS Vibration acceleration, measuring ±5 %FS @79.4 Hz

0...16 g

range RMS

Vibration acceleration, non-linearity

±2 %FS @79.4 Hz

RMS

Vibration acceleration, resolution

RMS

Vibration acceleration, statistical evaluation variables [for each

measuring axis]

0.006 g @79.4 Hz

RMS

Peak to Peak

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

Order Code: BCM0002



# **Connector Drawings**



# **Wiring Diagrams**

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

Subject to change without notice: 279554