

# BVS420 - VIBRATION SENSOR WITH SELF-TEST

## FUNCTION:

The vibration velocity sensor BVS420 is used for permanent monitoring of the vibration severity of rotating machines in accordance with DIN / ISO 10816. The sensor delivers a 4 ... 20mA current loop signal analogous to the rms value of the vibration velocity. This current signal can be connected directly to standardized MCR technology, such as limit value relays, PLC, etc. As a special feature, this sensor has a self-test input, in which the internal sensor element is electrostatically charged and thus the entire sensor is tested. The output signal goes to > 20mA.

## DESIGN:

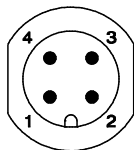
The BVS420 is housed in a watertight stainless steel housing. For attachment to the machine there is an M8 threaded hole in the bottom. A threaded bolt M8x20 for screwing into a blind hole is included. The electrical connection is made via a 4-pin M12 flange plug.

## USAGE:

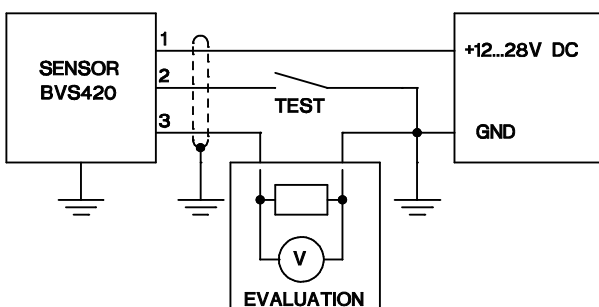
The sensor is used wherever machines have to be continuously monitored for their imbalance, such as fans, pumps, compressors, centrifuges, etc

## PIN ASSIGNMENT:

- |   |                 |
|---|-----------------|
| 1 | +12...28V       |
| 2 | Self-Test Input |
| 3 | Output 4...20mA |
| 4 | Not connected   |



## CONNECTION SCHEME:



## TECHNICAL DATA:

Measurand:	Vibration Velocity
Measuring Ranges:	0...16mm/s or 0...32mm/s
Frequency Range:	10...1000Hz (-3dB) (Butterworth 4.Order)
Measurement Accuracy:	+/- 5%
Non Linearity:	+/- 2%
Transverse Sensitivity:	< 5%
Supply Voltage :	24V (12...28V) DC
Current Output :	4...20mA
Housing Material:	Stainless Steel V2A
Thread Hole:	M8 x 8mm
Mounting Torque:	8 Nm
Protection Grade :	IP 67
Ambient Temperature :	-20...+70° Celsius
Dimensions (DxL) :	29,6 x 62mm
Hexagonal Base:	SW30
Weight :	appx. 150g

## DIMENSIONS:

