



# VBR series

Vibrations and inclination sensor



Vibrations and inclination

## features

- M18 housing
- AISI316L stainless steel housing (front included)
- IP67 protection degree



## web contents



- Application notes
- Photos
- Catalogue / Manuals



## code description

VBR 1 / D 0 - 3 A

series	<b>VBR</b>	Vibrations and inclination sensor
housing	<b>1</b>	M18 short housing, f = 0...400 Hz
	<b>2</b>	M18 short housing, f = 0...1,250 Hz
exit	<b>D</b>	RS485 programming
	<b>0</b>	RS485 + analogue output
connect.	<b>3</b>	Full AISI316L housing
	<b>A</b>	Cable exit
	<b>V</b>	M12 pigtail cable exit

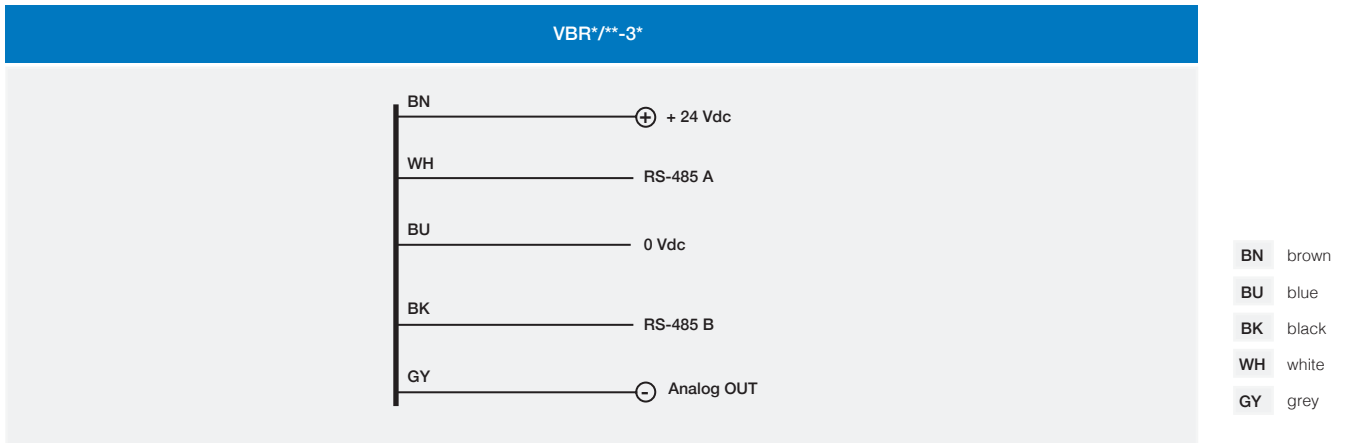


# technical specifications

Vibrations and inclination

	VBR1/D0-3*	VBR2/D0-3*
operating voltage	24 Vdc +/- 20%	
power consumption	< 1 W	
operative range	+/- 16 g (MAX)	
resolution	15.62 mg @ +/- 2 g 31.25 mg @ +/- 4 g 62.50 mg @ +/- 8 g 125 mg @ +/- 16 g	
detection axes	3 (X, Y, Z)	
frequency range	0...400 Hz	0...1,250 Hz
technology	MEMS (Micro Electro-Mechanical Systems)	
digital output	RS-485 (addressable) 57600 Baud rate - 1 bit stop - parity	RS-485 (addressable) 921600 Baud rate - 1 bit stop - parity
resolution digital output	16 bit @ RS-485 (complementary to 2) 12 bit @ analogue output	
voltage analogue output	0..5 V / 0..10 V (programmable)	
current analogue output	4..20 mA / 0..20 mA / 0..24 mA (programmable)	
load resistor (voltage)	1k...1M Ohm	
load resistor (current)	100...500 Ohm	
humidity	< 80 % without freeze	
temperature range	-25° C...+ 70°C	
storage temperature	-30°...+90°C without freeze	
electrical protections	polarity reversal transient	
protection degree	IP 67 (EN60529)	
housing material	AISI316L PA12	
connections	cable 5 poles pig Tail M12 5 poles	
dimensions	M18	
weight	100 gr	

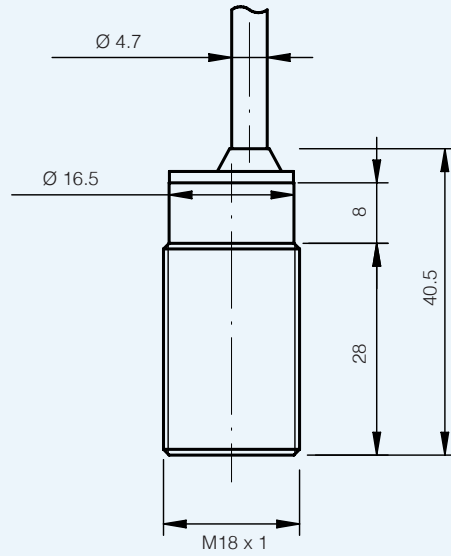
## electrical diagrams of connections



VBR

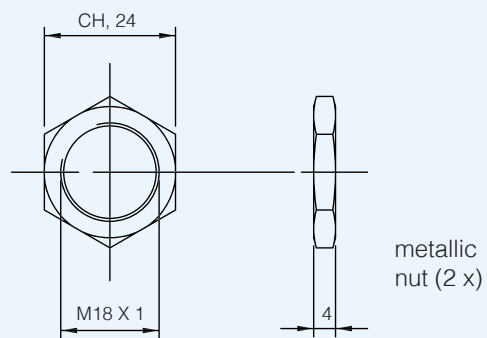
## dimensions (mm)

VBR\*/\*\*-3\*



## dimensions (mm)

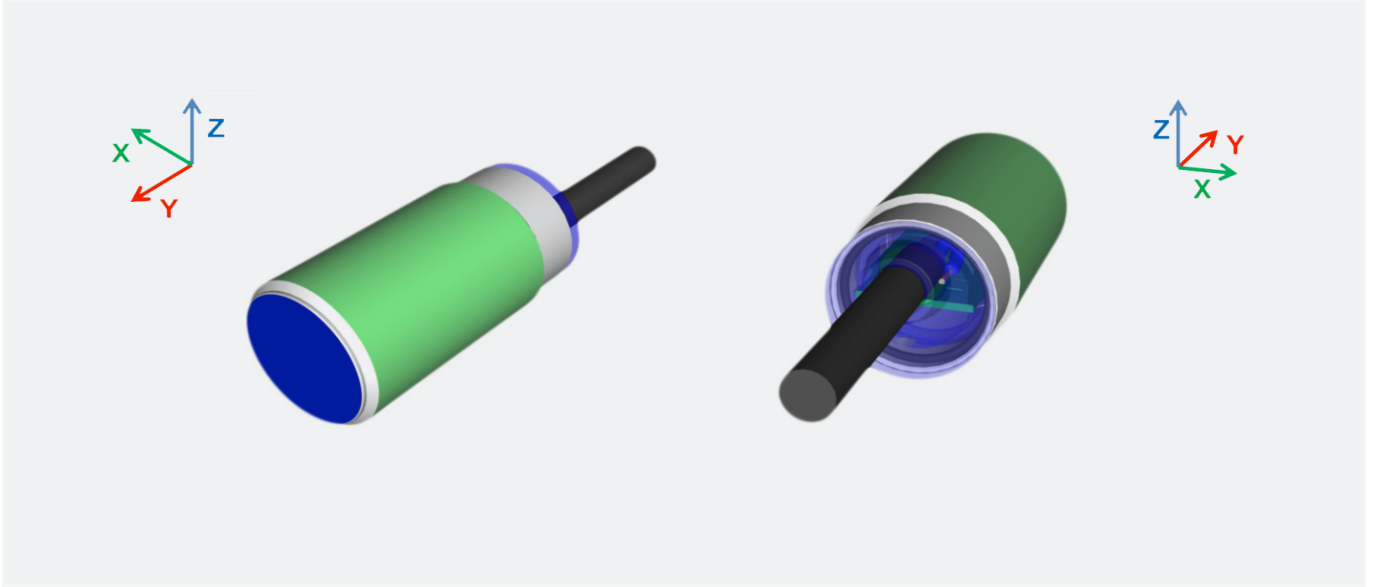
accessories included






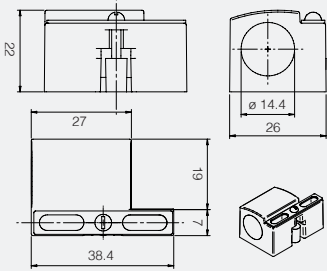
## axes directions

Vibrations and inclination

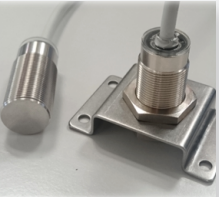
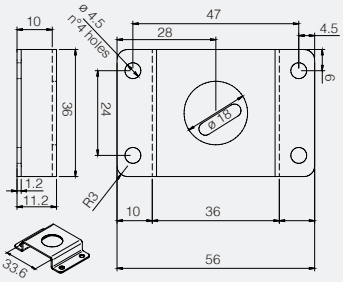


## accessories

### bracket ST 18 - S

product	to be used with	dimensions (mm)	description / installation
	VBR series		fixing bracket for M18 sensors

### bracket ST 18 - V

product	to be used with	dimensions (mm)	description / installation
	VBR series		fixing bracket for M18 sensors

### connection cables

**CD12M/0H-050A5** (PUR, 5 m)    **CD12M/0H-100A5** (PUR, 10 m)  
**CD12S/0H-050A1** (PVC, shielded, 5 m)    **CD12S/0H-100A1** (PVC, shielded, 10 m)

VBR