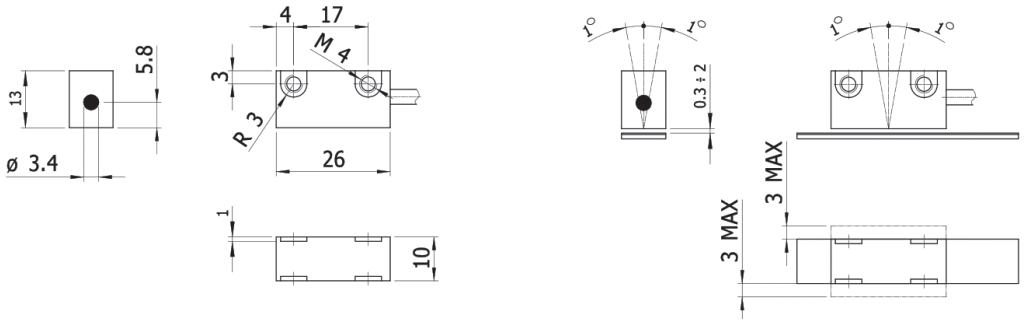
SERIE VIMS

DIGITAL READOUT WITH MAGNETIC SENSOR

- Magnetic detection without contact
- Easy assembly
- One axis Digital Readout with 6 ½ digit LCD and negative sign
- Programmable resolution
- Accuracy ±20 µm
- Pole pitch 2+2
- Wide alignment tolerances
- Magnetic Sensor of small overall dimensions
- Connection by cable (other cable length available)

Linear measurement system | Magnetic | Vibration and shock resistant | Sensor IP 67 | Digital Readout IP 43 | Express Delivery



Drawing VIMS sensor dimensions

REFERENCE

Reference example: VIMS-2BM02

Serie	Pole pitch	Power supply	Connection	Special Customer
VIMS -	□	□	□□□	.□□
	2. 2+2 mm	**B.** Batteries **E.** External power supply (1.5...5 V)	**M02.** 2 meters cable	

Configurable settings instruccions in VIMS reference manual, section 9.

BAND REFERENCE

Serie	
CSM	Band length: □□,□□ m (*)

(*) 1 unit = 1 meter.

IMPORTANT: In order not to compromise the accuracy of the system, the magnetic band must be longer than the machine run of at least 4 cm from each side.

For a better protection of magnetic band from shavings, liquid sprinklings, powder, etc. we suggest to always use the stainless steel cover PS, already equipped with a double-sided adhesive tape, or the aluminium support AP (see accessories).

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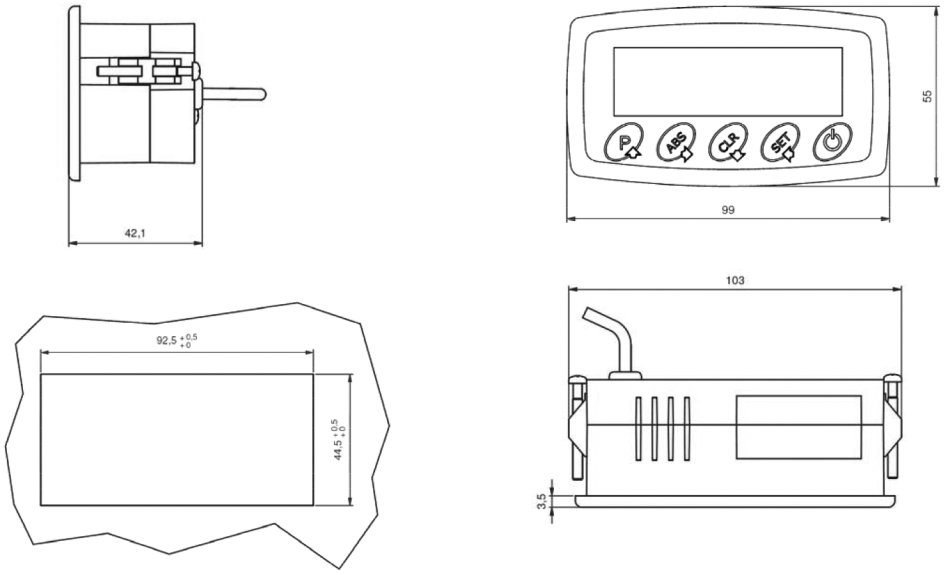

Drawing VIMS digital readout dimensions

MECHANICAL AND ELECTRICAL SPECIFICATIONS	
Display	6 ½ digits LCD h = 13 mm and negative sign
Programmable resolution	1.0 - 0.1 - 0.05 - 0.01 mm 0.01 - 0.001 - 1/16 - 1/32 - 1/64 inch 1° - 0.1° - 0.01° - 0.001° angular
Repeatability	± 1/2 digit
Power supply	Batteries x2 LR6 AA External (1.5...5 V)
Operating temperature range	0°C to +50°C
Storage temperature range	-20°C to +70°C
Humidity	95% (not condensed)

READOUT	
Weight	0.01 Kg
Vibration (EN 60068-2-6)	25 m/s² (55Hz...2000Hz)
Protection class (EN 60529)	IP 43

CABLE - 6 cores Ø 3,4 mm	
Minimum bending radius	25 mm
Length	2 m

SENSOR SPECIFICATIONS	
Maximum speed	4 m/s
Sensor - magnetic band gap	0.3...2 mm
Accuracy	± 20 µm
Magnetic band to be used with – pole pitch	CSM (2+2mm)
Vibration (EN 60068-2-6)	300 m/s² (55Hz...2000Hz)
Shock (EN 60068-2-27)	1000 m/s² (11 ms)
Protection class (EN 60529)	IP 67

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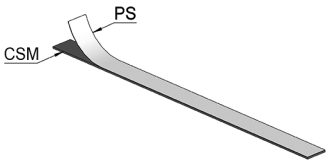
BAND SPECIFICATIONS

Pole pitch	2+2 mm
Accuracy at 20°C	±30 µm/m
Width band	10 mm
Thickness band	1.3 mm
Maximum length	50 m
Thermal expansion	10.5 x 10^{-6} $°C^{-1}$ T ref = 20°C ± 0.1°C
Bending radius	≥ 130 mm
Operating temperature range	0°C to +70°C
Storage temperature range	-20°C to +80°C

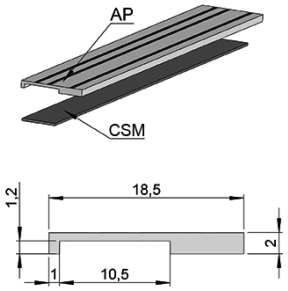
ACCESSORIES

PS: Cover for band protection



Stainless steel cover for protection.
To be placed in the magnetic band. (10 mm width - 0.3 mm thickness).

AP: Aluminium support



It is not possible to use the support AP if the magnetic band is already covered by PS band protection.

INSTALLATION AND HANDLING

1. Degrease the surface you want to place the magnetic band by using alcohol and dry it carefully.
2. Place the band and keep it aligned with the reader head ensuring the magnetic part is just next to the sensor.
3. Place the cover PS or the support AP, if provided.
4. The max. adhesion will be achieved after 48 hours from sticking.
5. Keep other magnetic parts clear from the tape.
6. Store and roll up the tape keeping the magnetic strip on the outside, in order to avoid tensions.

WARNING

WHAT TO AVOID

1. All mechanical reworks (Cutting, drilling, face milling a.s.o.).
2. All mishandling.
3. Impacts and external stress.
4. Avoid other magnetic fields.