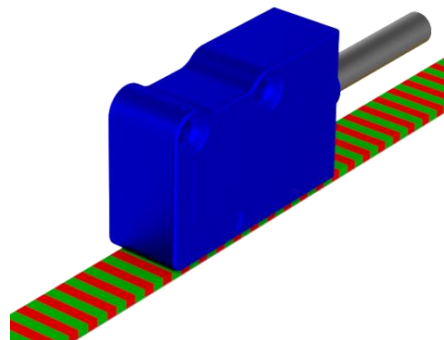


Datasheet

- Magnetic sensor for very small measurements
- Resolutions up to 0.5 μm
- Mounting of the magnetic sensor through wide alignment tolerances
- As a cable standard with low friction coefficient and oil resistant
- Protected against inversion of power supply polarity
- IP-Rating: IP67



Mechanical Data

Materia	Housing Cable ¹⁾	Aluminium; die-cast PVC, Ø6,1 (=8-wire)
	Power Supply	0,35 mm ²
	Signals	0,14 mm ²
	Length	2 m (standard)
	Bending Radius	> 60 mm
Weight		40 g
Pole Pitch		2+2 mm
Resolution		< 0,5 μm^2)
Accuracy		$\pm 8 \mu\text{m}$
Repeatability		± 1 Increment
Distance	Sensor-Magnetic Scale	0,1 ... 1 mm (with magnetic scale WM2)
Reference Index		C = at constant distance (2 mm) E = external
Traversing Speed		< 12 m/s
Relative Humidity		100%
Operating Temperature		0 °C ... +50 °C
Storage Temperature		-20 °C ... +80 °C

¹⁾ PUR cable, cable with reduced section or other length on request

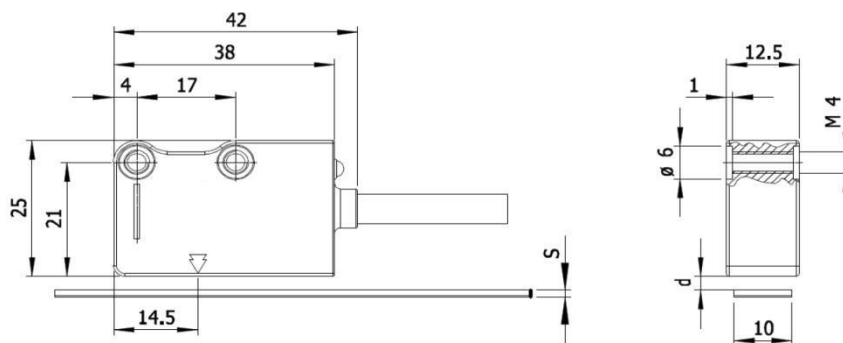
²⁾ Depending on CNC division factor

Electrical Data

Power Supply		5 VDC ... 28 VDC $\pm 5\%$
Power Consumption	unload load	< 90 mA < 110 mA (with 5 V and R = 120 Ω) < 70 mA (with 28 V and R = 1,2 k Ω)
Frequency		< 6 kHz
Output		sinus wave 1 Vpp
Amplitude	A and B I ₀	0,6 Vpp ... 1,2 Vpp 0,25 V ... 0,6 V usable component
Phase Displacement		90° $\pm$ 10° electrical
Vibration	EN 60068-2-6	300 m/s ² [55 ... 2.000 Hz]
Shock	EN 60068-2-27	1.000 m/s ² (11 ms)
IP-Rating		IP67

Datasheet

Dimensions



Value in mm	WM2	WM2 + DB01	WM1 + PS1
s	1,3	1,6	2,1
d IMV2	0,1 ... 1	< 0,7	< 0,2

s = width

d = distance to be observed between the sensor and the surface of the magnetic tape
(or rather cover tape/ Support)

Ordering Example

Type IMV2 - C - 528V - S - M02/N - SC

Resolution

2 = <0,5 µm

Reference Index

C = at constant pitch (2 mm)

E = external

Power Supply

528V = 5 VDC ... 28 VDC

Output Circuit

S = sinus wave, 1Vpp

Cable

M01/N = 1m

M02/N = 2m

M03/N = 3m

Connection

SC = open Cable

C3 = C3

C4 = C4

1) Different lengths are available in the following version

L_{MAX} = 10 m sensor cable

L_{MAX} = 100 m sensor cable (2m) + extension cable (power supply 0.5 mm²)

2) With a traversing speed about 1 m / s, a cable for continuous movements recommended