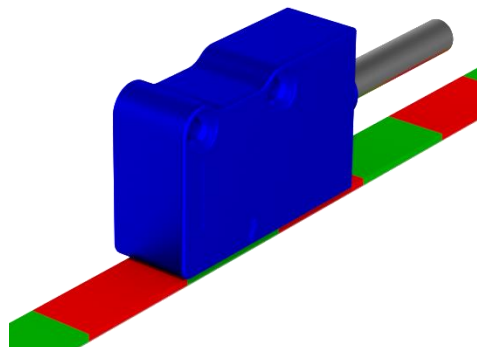


# Datasheet

- Magnetic sensor for very small measurements
- Resolutions up to 100 µm programmable (Pr) through the serial interface
- 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

Material	Housing	Aluminium; die-cast
Weight		40 g
Pole pitch		20+20 mm
Resolution		5.000; 1.000; 500; 100 µm
Accuracy		±500
Distance	Sensor - Magnetic Scale	7 ... 12 mm (with magnetic scale WM20)
Reference index		C = at constant distance (20 mm) E = external
Repeatability		± 1 Increment
Relative Humidity		100%
Operating Temperature		0 °C to +50 °C
Storage Temperature		-20 °C to +80 °C

<sup>1)</sup> PUR cable or cable with reduced section on request

<sup>2)</sup> With 1,000 µm resolution, the constant step is 4 mm.

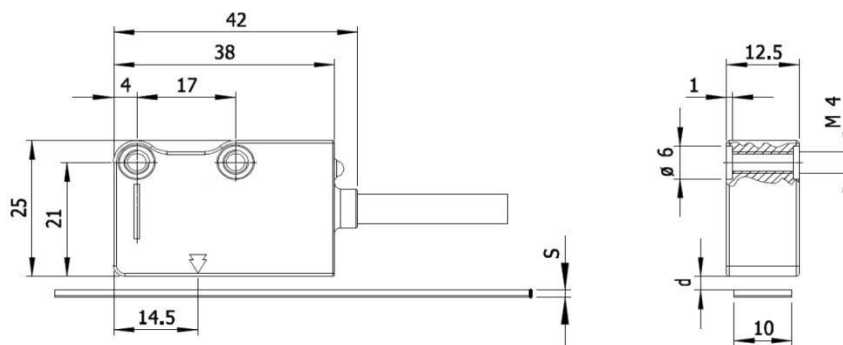
## Electrical Data

Power Supply		5-28 VDC ±5%
Power Consumption	unload load	< 60 mA < 140 mA (with 5 V and R = 120Ω) < 90 mA (with 5 V and R = 120Ω)
Frequency		< 300 kHz < 500 kHz (on request)
Traversing Speed <sup>3)</sup>		< 30 m/s
Output		Line Driver (ABZ, $\overline{ABZ}$ ) Push-Pull (ABZ)
Vibration	EN 60068-2-6	300 m/s <sup>2</sup> [55 ... 2.000 Hz]
Shock	EN 60068-2-27	1.000 m/s <sup>2</sup> (11 ms)
IP-Rating		IP67

<sup>3)</sup> The indicated speeds are referred to a maximum frequency of 300 kHz.

# Datasheet

## Dimensions



Value in mm	<b>WM20</b>	<b>WM20 + DB01</b>	<b>WM20 + SP202</b>
<b>s</b>	1,3	1,6	2,1
<b>d IMS20</b>	3 ... 13	< 12,7	< 12,2

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** **IMS20** - **100** - **C** - **528V** - **Y** - **M01/N** - **SC**

### Resolution [ $\mu\text{m}$ ]

5.000 / 1.000 / 500 / **100**

### Index- Pulse periodic

**C** = at constant pitch (10 mm)

**E** = external

### Output Voltage

**528V** = 5 VDC ... 28 VDC

### Output Circuit

**Y** = Push-Pull (ABZ)

**L** = Line Driver (ABZ,  $\overline{\text{ABZ}}$ )

### Cable

**M01/N** = 1m

M02/N = 2m

M03/N = 3m

### Connection

**SC** = open Cable

C3 = C3

C4 = C4