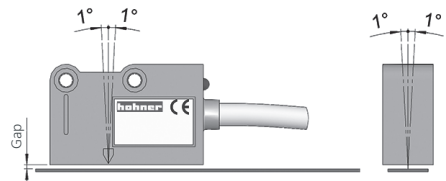
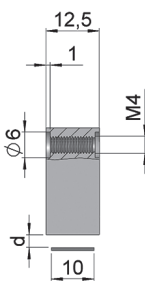
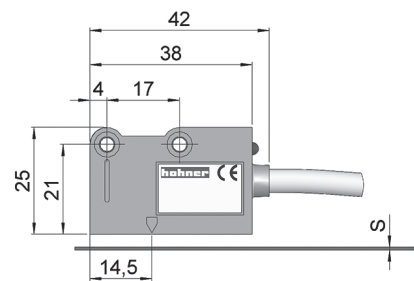
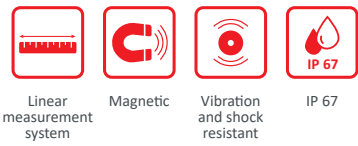




SERIE MSH

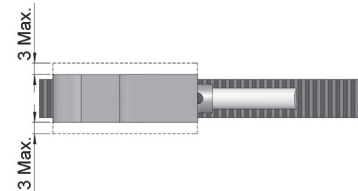
LINEAR MEASURING MAGNETIC SENSOR

- Magnetic detection without contact
- Easy assembly
- Resolution 5 μm
- Accuracy $\pm 6 \mu\text{m}$
- Pole pitch 1+1
- Protection class IP67
- Metallic cover
- Connection by cable (other cable length available)



Magnetic band CSH

	CSH	CSH + PS*	CSH + AP*
S (mm)	1.3	1.6	2.1
d (mm)	0.1 \div 0.4	-	-



Drawing MSH sensor dimensions

Sensor alignment tolerances

SENSOR REFERENCE

Reference example: MSH-5528

Serie	Resolution	Power supply	Special Customer
MSH -	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

Pole pitch 1+1 5.5 μm (*) 528. 5...28 VDC

(*) Resolution between edges (1 Pulse = 4 edges). Other resolutions available, upon request (0.5, 1, 10 μm).

BAND REFERENCE

Serie

CSH

Band length: mm



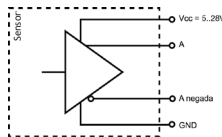
SERIE MSH

LINEAR MEASURING MAGNETIC SENSOR

SENSOR SPECIFICATIONS

Resolution	5 μm
Accuracy	$\pm 6 \mu\text{m}$
Repeatability	± 1 increment
GAP, distance sensor/band (d) see previous table	0,1 to 0,4 mm
Speed	6 m/s (10 μm)
Housing	Metallic
Protection class (EN 60529)	IP67
Operating temperature range	0°C to +50°C
Storage temperature range	-20°C to +80°C
Humidity	100% not condensed
Vibration (EN 60068-2-6)	300 m/s ² (55...2000 Hz)
Shock (EN 60068-2-27)	1000 m/s ² (11ms)
Weight	40g
Connection	2 meters cable

OUTPUT SIGNALS



OUTPUT CIRCUIT	Line Driver
Power supply	5...28 VDC $\pm 5\%$
Load without charge	Max: 60 mA
Load with charge	140 mA max (VDC=5V and Z= 120 Ω) 90 mA max (VDC=28V and Z= 1,2k Ω)
Frequency	300 kHz
Short circuit protection	Yes
Protection polarity inversion	Yes

Channel A leads 90° electrics channel B

CONNECTION



	Cable
	3x2x0,14+2x0,35 mm ²
GND	Blue
VCC	Red
A	Green
B	White
\tilde{A}	Orange
\tilde{B}	Sky blue
0 (reference)	Brown
$\tilde{0}$	Yellow

The cable's bending radius should not be lower than 60 mm.

BAND SPECIFICATIONS

Pole pitch	1+1 mm
Accuracy at 20°C	$\pm 30 \mu\text{m}/\text{meter}$
Width band	10 mm
Thickness band "S" (see previous table)	1,3 mm
Maximum length	50 m
Thermal expansion	$10,5 \times 10^{-6} \text{ } ^\circ\text{C}^{-1}$ Tref: 20°C $\pm 0,1^\circ\text{C}$
Bending radius	$\geq 130 \text{ mm}$
Operating temperature range	0°C to +70°C
Storage temperature range	-20°C to +80°C