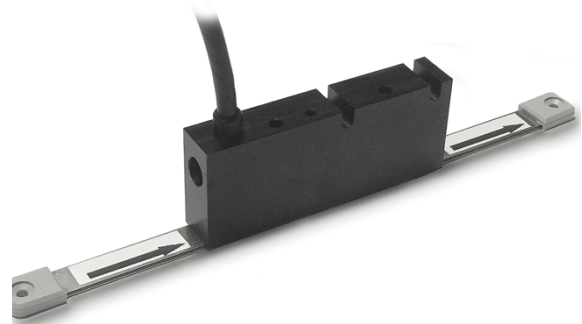


# Datenblatt

## Features at a glance

- Magnetic, absolute sensor for linear measurement
- Resolution 0.01 mm
- Non-contact reading of sensor
- Measuring range up to 40 m
- Backlash-free measuring position during movement in non-powered state



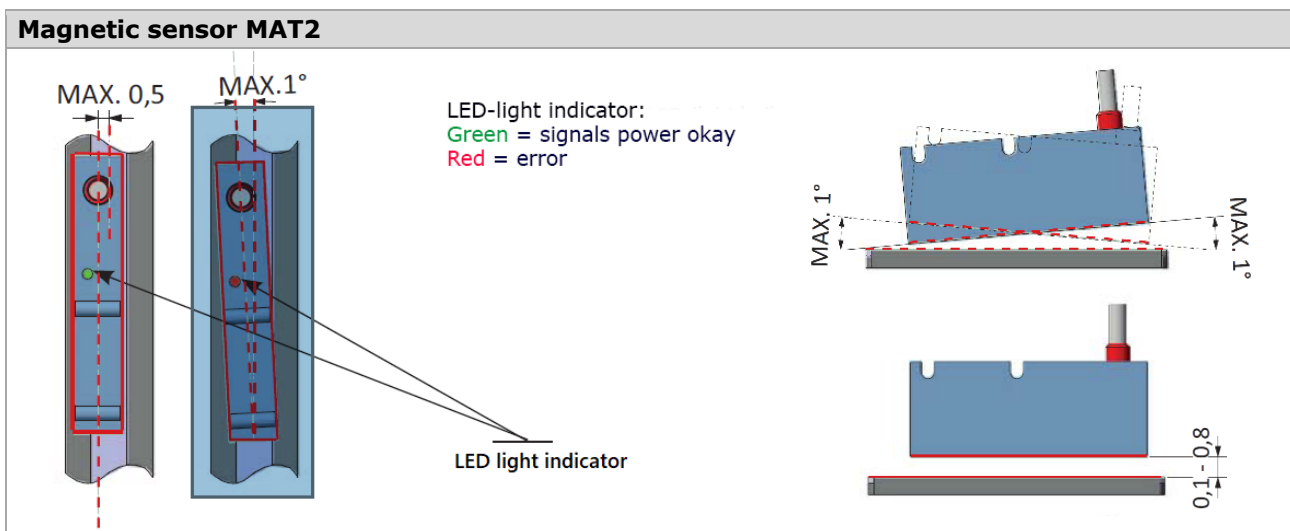
## Mechanical characteristics

Material Housing	Aluminium
Resolution	0,01 mm
Measurement accuracy	± 0,1 mm/m
Measuring length	Max. 40,875 m
Distance sensor/ magnetic band	0,1 - 0,8 mm
Displacement speed	Max. 5 m/s
Working temperature	0 °C up to +50 °C
IP-Rating	IP66
EMC	2014/30/UE

## Electrical characteristics

Electrical connection	Cable output Ø6,6 mm PUR Ig standard: 2m (5 m, 10 m)
Output format	24 or 25 Bit in SSI Gray / Binary code (to be specified) + parity (optional)
Clock SSI	32 kHz ÷ 1,5 MHz
Interface	SSI
Power supply	10 to 30 VDC ± 20%; max. 200 mA

## Alignment tolerances

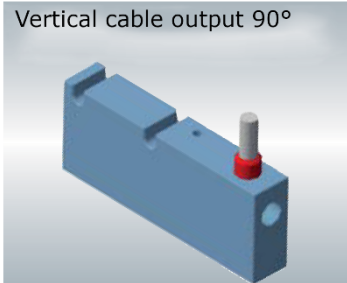


# Datenblatt

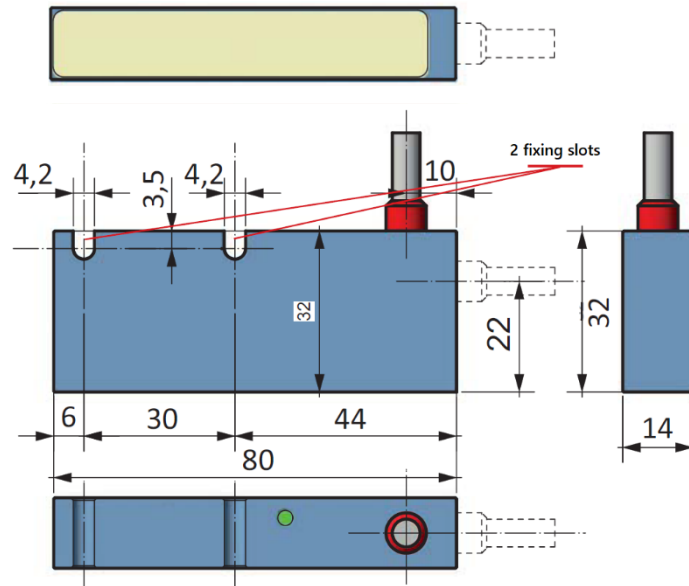
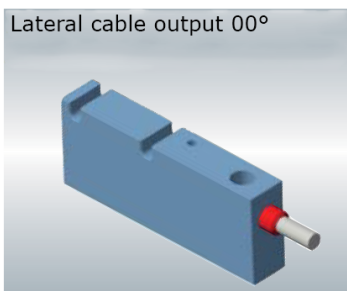
## Dimensions

### Magnetic sensor MAT2

Vertical cable output 90°



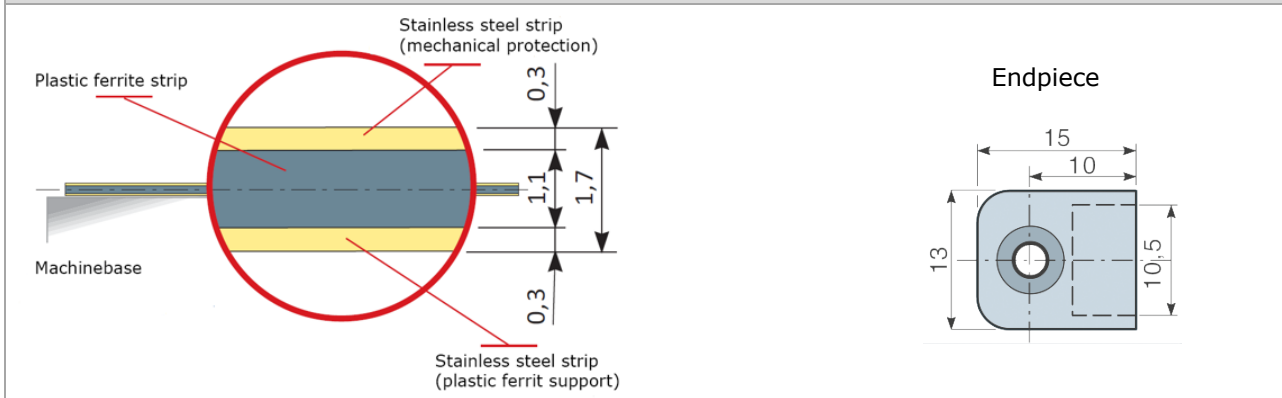
Lateral cable output 00°



All dimensions in mm

## Accessory

### Magnetic band PA50/10



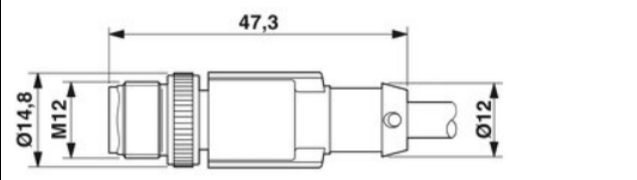
## Technical characteristics Magnetic band PA50/10

Length	Max. 40,955 m Standard length min. 30 cm, then multiples of 50 cm, other lengths on request Terminals for band (optional)
Width	10 mm
Thickness	1,7 mm
Bending radius	≥ 75 mm
Linear thermal expansion	11 ppm/K
Material	Plastic-Ferrite band, supported by a stainless-steel band
Working temperature	-10 ÷ 65°C

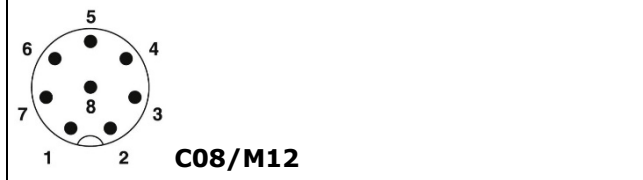
# Datenblatt

## Electrical connection Magnetic sensor MAT2

### Dimensions and pin assignment cable magnetic sensor MAT2



Dimensional drawing: M12 plug, straight, shielded



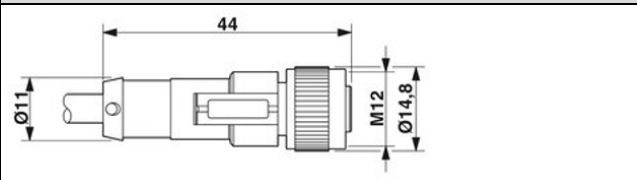
Schematic drawing: Pin diagram connector (plug) M12, 8-pin, A-coded, view pin side

### Pin assignment cable magnetic sensor MAT2

PIN	Wire colour	Signal	Function
1	green	GN	GND
2	brown	BN	+24 VDC
3	yellow	YE	CK+
4	orange	OG	CK-
5	violet	VT	D-
6	withe	WH	D+
7	black	BK	DIR
8	grey	GY	Z

Circuit diagram: Contact assignment of the M12 plug

### Dimensions and pin assignment extension cable VLK-8



Dimensional drawing: M12 socket, straight, shielded



Schematic drawing: Pin diagram connector (socket) M12, 8-pin, A-coded, view socket side

### Pin assignment extension cable VLK-8

PIN	Wire colour	Signal	Function
1	withe	WH	GND
2	brown	BN	+24 VDC
3	green	GN	CK+
4	yellow	YE	CK-
5	grey	GY	D-
6	pink	PK	D+
7	blue	BU	DIR
8	red	RD	Z

Circuit diagram: Contact assignment of the M12 socket

