## Warnings

Connect the power supply and the display/output device according to the safety regulations for electrical equipment.

The supply voltage must not exceed the specified limits. > Risk of injury, damage to or destruction of the sensor.



The magnetic field of the neodymium magnets and samarium is very strong and farreaching. The critical units are amongst other things, television, monitors, credit and EC cards, PCs, floppy disks, data processing media, videotapes, acoustic hearing apparatus and cardiac pacemaker.

> Danger of injury, damage to or destruction of sensitive devices

Avoid shocks and impacts to the sensor. Avoid continuous exposure to fluids, when disconnected.

> Damage to or destruction of the sensor

- Ferromagnetic material, as well as the magnetic field in the area of
- sensor systems affect the sensor characteristics.
- Therefore, the measuring range reduces or increases

#### **Main Measurement Direction**

The technical data in the catalogue refer to the main measurement direction. However, other magnet arrangements and directions of movement are possible but can result in a change of the characteristic line.

## 2 (.08)



# **Pin Assignment**

25.85 (1.02) 17.45 (.69)

165%

23.3 (.92)

2 (.08)

3 (.12)

2 (.08)

(.44) (.32) (.32)

11.3 ( 8.25 ( 6.5 (

2×103.4

13 dia)

+++++

19.9 (.78)

Pin	PC5/4(01) PC5/4/90(01)	Description	PIN assignment option SA8	
1	brown	+ Supply	3 0 0 1	
2	white	GND Out	$4(00)_{2}$	
3	blue	GND supply	4-pin female cable connector M8x1, solder pin side	
4	black	+ Out		
Pin	PC1/4-SR0 PC1/4-SR7	Description	PIN assignment option SR7	
1	brown	+ Supply	1234 +++++	
2	white	GND Out	PIN assignment option SR0	
3	blue	GND Supply		
4	black	+ Out	4-pin board connector, solder pin side	

#### **Sensor Mounting**

The sensor is mounted using cylinder head screws M3 (not ferromagnetic). The cable must be secured adequately near the connector according to the ambient conditions.



## Mounting with Cable Ties on Cylindrical Targets



Using an optional retaining plate the sensor can be mounted on a cylindrical target.

### Magnet Mounting

Mount the magnet on a measuring object using an adequate screw (not ferromagnetic).

Depending on the packaging unit, the magnet is provided with a shielding (washers) during shipment.

- In order to remove the shielding when mounting the sensor, push both washers laterally from the magnet.
- Please press the magnet out of the ring.
- Please carefully adhere to the warnings during mounting the magnet.

#### **Dimensional Drawing**

#### **Option SA8**

**Option SR7** 

21.45 (.84) 13.05 (.51) 2.45 (.49) 3.5 (.26)

¥0

4 (.16)

2.5

11 (.43)

165

17.4 (.69)

21.4 (.84)

27.4 (1.08)

53)

97) 97) 3.4

155 14

8 10

8 2

Ē



# X/////

Optional retaining plate not included in delivery with the preferred types. Dimensions in mm (inches), not to scale

## **Option SR0**











 $\square$  $\square$ 







# Mounting of Two Systems Next to Each Other

Please adhere to the distances stipulated in the graphic for the mounting of two systems.

Example (graphic): Magnet RL21 (SrFe); with other magnets, the distances change depending on the magnet size and strength.



Magnets of neighbouring sensors

Sphere of influence sensors / magnet 1 influence >  $\pm 0.5$  %

= End of measuring range

Dimensions in mm (inches), not to scale

### Sensor Signal (Magnet RL21)

	-F	-U45R	-U10	-I
SMR	402 Hz	0.5 V	2 V	4 mA
	±6 Hz	±0.2 V	±0.4 V	±0.8 mA
	1.5 mm	1.5 mm	1.5 mm	1.5 mm
EMR	285 HZ	4.5 V	9.6 V	19.2 mA
	±6 Hz	±0.2 V	±0.4 V	±0.8 mA