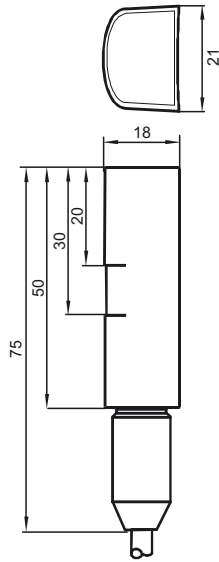


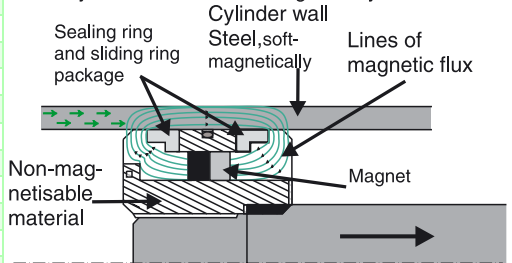
For hydraulic cylinder
 Zero-contact detection of
 piston position
 No holes are required in
 the cylinder
 Freely positionable
 Simple, protected attach-
 ment



General specifications	
Switching element function	PNP Antivalent
Rated operating distance s_n	
Installation	on the cylinder
Output polarity	DC
Switching range s_b	typ. 50 mm
Nominal ratings	
Operating voltage U_B	10 ... 30 V
Reverse polarity protection	protected against reverse polarity
Short-circuit protection	pulsing
Voltage drop U_d	≤ 1.5 V
Operating current I_L	0 ... 100 mA
No-load supply current I_0	≤ 30 mA
Indication of the switching state	LED, red
Standard conformity	
Standards	EN 60947-5-2
Ambient conditions	
Ambient temperature	-25 ... 85 °C (248 ... 358 K)
Mechanical specifications	
Connection type	1.4 m, PVC cable with AMP connector
Core cross-section	0.5 mm ²
Housing material	Polyamide (PA)
Sensing face	Polyamide (PA)
Protection degree	IP67

Magnetic System

Primary Construction of the Magnetic System



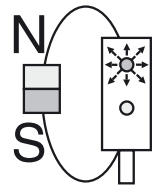
For this sensor principle it is not sufficient to simply mount the permanent magnet onto the piston. A magnetic system has to be constructed which conducts the magnetic flux of the permanent magnets directly into the cylinder wall in order to achieve the strongest possible magnetisation. For further details regarding the construction of magnetic systems, refer to the manual. A field trial is generally recommended before practical operation!

Magnets

The magnets are axially magnetised. It must be ensured that all magnets are mounted with the same polarity!

Definition of polarity

An approaching permanent magnet with the north pole pointing towards the cable connection of the sensor causes output 1 to respond and the red LED to light.



Antivalent output

By means of the sensor's antivalent output stage the appropriate output can be chosen depending on the polarity of the magnetic system or the mounting location of the sensor.

Mounting

The sensor is mounted directly on the surface towards the cylinder axle. For this purpose, pressure bands, tightening straps or hose band clamps can be used.

Connection type:

