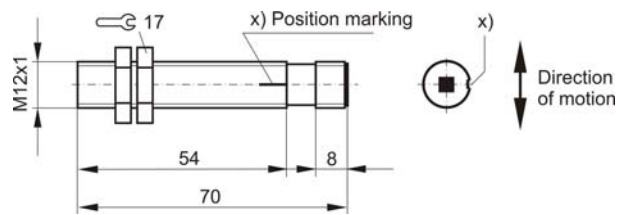


### Characteristics

Rated operating distance 0.3 mm for module 0.5  
 Static version, 0 Hz ... 10 kHz  
 DC-three-poles, push-pull output (plus- and minus-switching)  
 Rotation speed detection with high operating frequency (up to 10 kHz) and high geometrical resolution (module 0.5)  
 Magneto-resistive switches are unsuitable for detection slots, for axial approach, and for non-magnetic materials

### Dimensions



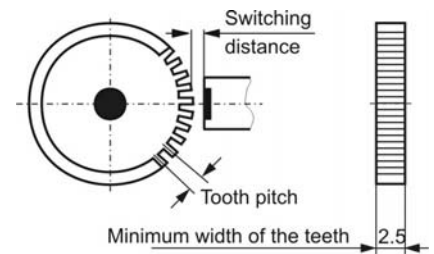
### Technical Data

(Unless otherwise specified  $U_B = 24\text{ V}$ ,  $T_U \approx 23\text{ }^\circ\text{C}$ , and  $I_L = 0$ )

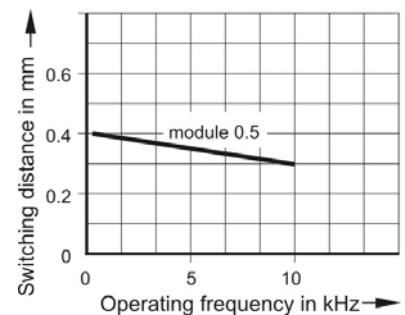
Rated operating distance $s_n$ (10 kHz)	0.3 mm for module 0.5
Operating voltage $U_B$	10 ... <u>24</u> ... 30 VDC
Permissible ripple voltage	10 %
Current consumption without load	$\leq 25\text{ mA}$
Maximum current load capacity of the output	$\leq 25\text{ mA}$
Voltage drop ( $I_L = 0$ )	$\leq 1.5\text{ V}$
Voltage drop ( $I_L = 25\text{ mA}$ )	$\leq 10\text{ V}$
Output	1 push-pull, temporary short-circuit protection $\leq 20\text{ s}$
Operating frequency $f$	0 Hz ... 10 kHz
Ambient temperature range $T_U$	-25 ... +75 $^\circ\text{C}$
Reverse polarity protection	yes
Connection	M12 connector, 4-pole
Maximum lead length	$\leq 150\text{ m}$
Weight	30 g
Design	cylinder, M12 x 1
Housing material / sensing face	brass / brass
Permissible torque without / with toothed disc	9 Nm / 30 Nm
Protection rating according to EN 60529	IP 65

### Mounting instructions

Gear wheel St37 / C45



### Switching distance as a function of module and operating frequency



### Notes

For mounting, a precise vertical alignment of the housing to the tooth flanks is necessary. The switching point is not in the geometric axis of the magneto-resistive switch. Keep away metal cuttings from the sensing face. Avoid operation near strong magnetic fields. The distance between the connecting lead and the control leads of the inductive loads should be  $\geq 30\text{ cm}$ . Use a shielded lead for lead length  $> 10\text{ m}$ . When the sensor is switched on but not activated, the output signal may either show a low or high state.

### Certification

Complies with standard EN 60947-5-2



### Safety Regulations

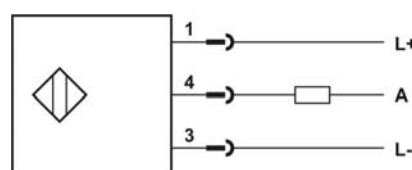
Connection, commissioning and maintenance may only be accomplished by qualified or instructed staff.

We are certified according to DIN EN ISO 9001

Subject to technical changes!

### Wiring

DC voltage, three-pole,  
push-pull output, plug



### Plug

