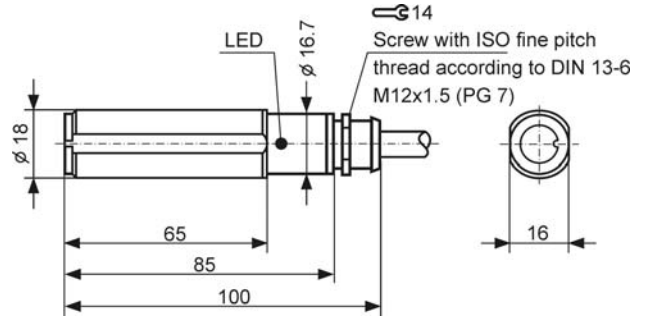


Characteristics

Rated operating distance 1.3 ... 2.5 mm with module 1 ... 4
 Dynamic version, 5 Hz ... 20 kHz
 DC-three-pole, push-pull output (plus- and minus-switching)
 Speed detection with high operating frequency (up to 20 kHz) at a high geometrical resolution capacity (module ≥ 1)
 Hall element sensors are not suitable for the detection of slots, axial approaching and for not magnetizable materials

Dimensions



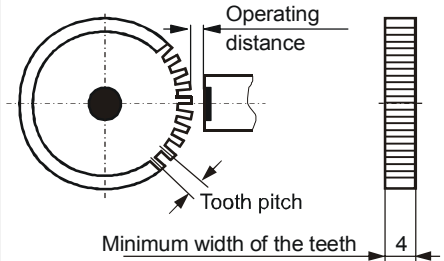
Technical data

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

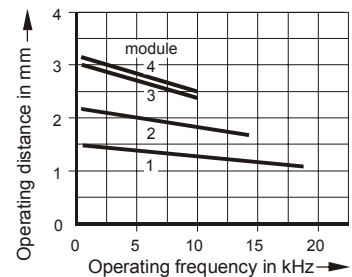
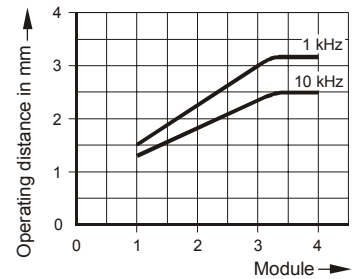
Rated operating distances s_n (10 kHz)	1.3 mm with module 1 1.8 mm with module 2 2.4 mm with module 3 2.5 mm with module 4
Effective operating distance s_r	$s_n (1 \pm 10\%)$
Operating voltage U_B	8 ... 24 ... 30 VDC
Permissible ripple voltage	10 %
Current consumption without load	$\leq 10\text{ mA}$
Maximum current-carrying capacity of the output	$\leq 25\text{ mA}$
Residual current (locked output)	plus-switching $\leq 0.5\text{ mA}$ minus-switching $\leq 2.5\text{ mA}$
Voltage drop (conductive output; $I_L = 25\text{ mA}$)	plus-switching $\leq 12\text{ V}$ minus-switching $\leq 10\text{ V}$
Output	push-pull, short-circuit-protection $\leq 20\text{ s}$
Operating frequency f	5 Hz ... 20 kHz
Ambient temperature range T_U	- 25 ... + 80 $^\circ\text{C}$
Switching point modification over the temperature	- 4 $\mu\text{m} / ^\circ\text{C}$
Reverse polarity protection	yes
Connection	lead connection, LiYCY 3 x 0.34 mm ²
Maximum lead length	$\leq 150\text{ m}$
Weight	150 g (without connection lead)
Design	cylinder $\varnothing 18\text{ mm}$
Housing material / sensing face	steel / plastic (PBT)
Protection rating according to EN 60529	IP 67

Mounting instructions

Gear wheel St37 / C45



Operating distance as a function of module and frequency



Notes

When mounting, the housing has to be aligned vertically to the tooth centres. The switching point is not in the axis of the hall element switch. Keep away metal splinters from the sensing face. Avoid operation near strong magnetic fields. The distance of the connecting cable to the control cables of inductive consumers should be $\geq 30\text{ cm}$ if possible. In case of cable length $> 10\text{ m}$, use a shielded cable. Put shield only device-sided on L- (0 V). After having been switched on the output signal may show a low- or high status without having been actuated.

Certification

Complies with standard EN 60947-5-2



Safety regulations

Connection, start-up and maintenance may only be accomplished by qualified or instructed personnel.

We are certified according to DIN EN ISO 9001
 Subject to technical changes!

Connection

DC voltage, three-pole,
 push-pull output, PVC lead connection

