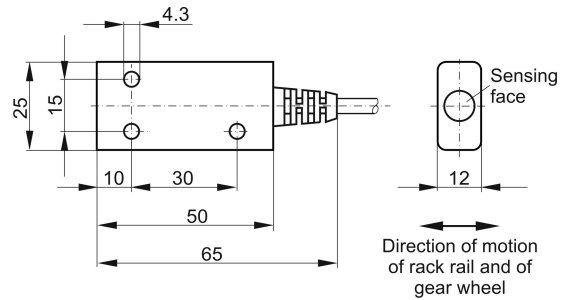


Characteristics

Rated operating distance 0.4 mm, flush mounting
DC three-pole, push-pull output (plus- and minus-switching)
High geometrical resolution (module ≥ 1)
Detection of approaching or passing soft iron edges
Magneto-resistive sensors are unsuitable for detecting slots, for axial approach, and for non-magnetic materials

Dimensions

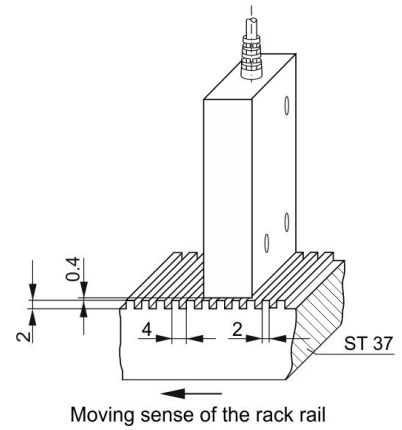


Technical Data

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

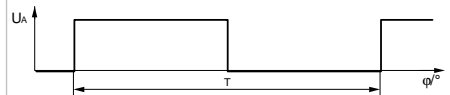
Rated operating distance s_n	0.4 mm
for rack rail as specified	
in the mounting instructions	
Duty cycle v_T	0.5 ($1 \pm 25\%$)
Phase shift φ	$90^\circ (\pm 45^\circ)$
Operating voltage U_B	10 ... <u>24</u> ... 30 VDC
Permissible ripple voltage	10 %
Current consumption without load	$\leq 25\text{ mA}$
Maximum current load capacity of the outputs	$\leq 25\text{ mA}$
Voltage drop ($I_L = 0$)	$\leq 1.5\text{ V}$
Voltage drop ($I_L = 25\text{ mA}$)	$\leq 10\text{ V}$
Output	push-pull, short-circuit protection $\leq 20\text{ s}$
Operating frequency f	0 ... 10 kHz
Ambient temperature range T_U	$-25 \dots +75\text{ }^\circ\text{C}$
Reverse polarity protection	yes
Connection	PVC lead, LiYY 3 x 0.34 mm ²
Maximum lead length for 10 kHz	15 m
Weight	40 g + lead weight
Design	50 x 25 x 12 mm
Housing material / sensing face	aluminium / brass
Protection rating according to EN 60529	IP 67

Mounting Instructions



Pulse Diagram

Rated operating distance 0.4 mm with rack rail and direction of motion as specified in the mounting instructions.



Duty cycle v_T of the output signals directly depend on:

- the direction of motion of the rack rail
- the switching distance
- the ratio tooth - gap
- the material of the rack rail

Any deviation from the instructions can lead to a modification of the specifications.

Notes

The sensor was optimised for the rack rail as specified in the mounting instructions, but may also be used for rack rails with smaller and larger tooth depth. 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 sensor. 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 $> 10\text{ m}$. Apply shield only device-sided on L- (0 V).

Certification

Complies with the standard EN 60947-5-2



Safety regulations

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

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

Wiring

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

