Characteristics

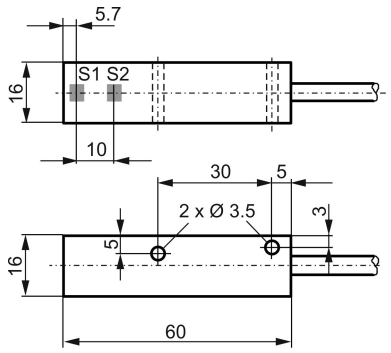
Rated operating distance 1.5 mm, flush mounting.

2 outputs, RS 422.

High operating frequency (up to 15 kHz) and high geometrical Resolution.

Detection of passing magnetic tapes with a pole pitch of approx. 3 mm.

Dimensions



Technical Data

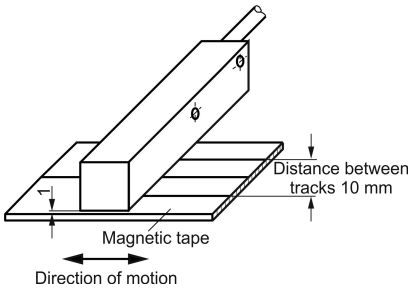
(Unless otherwise specified U_B = 5 V, T_U ≈ 23 °C, I_L = 0)

Operating voltage U_B	**5 (1 ± 5 %) VDC**
Permissible ripple voltage	2 %
Rated operating distance s_n for magnetic tape as specified in the mounting instructions	≤ 1.5 mm
Duty cycle v_T	0.5 (1 ± 10 %)
Phase shift φ	90° (1 ± 20 %)
Current consumption without load	≤ 10 mA
Maximum current load capacity of the output	≤ 80 mA
2 outputs	RS 422, short-circuit protection ≤ 20 s
Operating frequency f	0 ... 15 kHz
Ambient temperature range T_U	- 25 ... + 75 °C
Reverse polarity protection	yes
Connection	PVC lead, LiYY 6 x 0.25 mm²
Maximum lead length	≤ 10 m
Weight	90 g + lead weight
Design	60 x 16 x 16 mm
Housing material / sensing face	brass / polyurethane
Protection rating according to EN 60529	IP 67

Notes

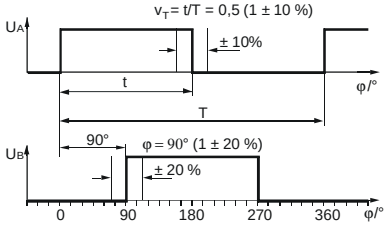
For mounting, a precise vertical alignment of the housing to the tooth flanks is necessary. The switching point is not in the geometric axis of the hall element sensor. Keep away metal cuttings from the sensing face. Avoid operation near strong magnetic fields. The distance between the connecting lead and the control leads of the inductive loads should be ≥ 30 cm. Use a shielded lead for lead length > 10 m. Apply shield only device-sided on L- (0 V). Hall element sensors are suitable for sensing magnetic tapes with varying polarization.

Mounting Instructions



Pulse Diagram

Rated operating distance 1.5 mm with magnetic tape and direction of motion as specified in the mounting instructions.



Duty cycle v_T and phase shift φ of the output signals depend directly on:

- the direction of motion of the sensor or of the magnetic tape
- the switching distance
- the pole pitch
- the magnetic strength of the magnetic tape

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

Certification

Complies with standard EN 60947-5-2

Safety Regulations

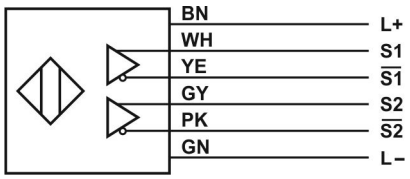
Connection, commissioning and maintenance may only be accomplished by qualified or instructed staff.

We are certified according to DIN EN ISO 9001

Subject to technical changes!

Connection

DC voltage, six-pole, outgoing PVC lead



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