

Characteristics

Rated operating distance 1.3 ... 2.5 mm for modules 1 ... 4.

Dynamic version, 5 Hz ... 20 kHz.

DC four-pole, differential line driver output (5 V, 50 mA).

Rotation detection with high operating frequency (up to 20 kHz) and high geometrical resolution (module ≥ 1).

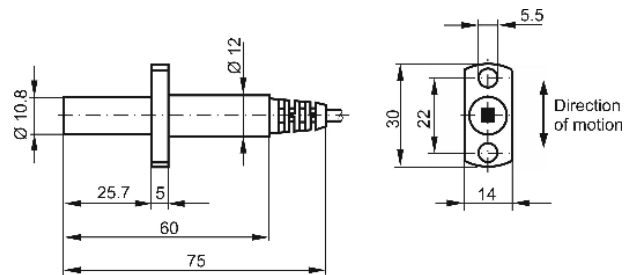
Detection of approaching or passing soft iron edges.

Differential output for interference-free transmission.

Tooth length should not exceed 3 mm.

Hall element sensors are unsuitable for detecting slots, for axial approach, and for non-magnetic materials.

Dimensions



Technical Data

(Unless otherwise specified $U_B = 24$ V, $T_U \approx 23$ °C, and $I_L = 0$)

Rated operating distances s_n (10 kHz)

1.3 mm for module 1
1.8 mm for module 2
2.4 mm for module 3
2.5 mm for module 4

Effective operating distance s_r s_n ($1 \pm 10\%$)

Operating voltage U_B 10 ... 24 ... 30 VDC

Permissible ripple voltage 10 %

Current consumption without load ≤ 10 mA

Maximum current load capacity of the output ≤ 50 mA

Output differential output

Operating frequency f 5 Hz ... 20 kHz

Ambient temperature range T_U - 25 ... + 80 °C

Reverse polarity protection yes

Protection against interference voltages yes

Short-circuit protection ≤ 20 s

Connection shielded PVC lead, LiYCY 4 x 0,25 mm²

Maximum lead length ≤ 150 m

Weight 30 g + lead weight

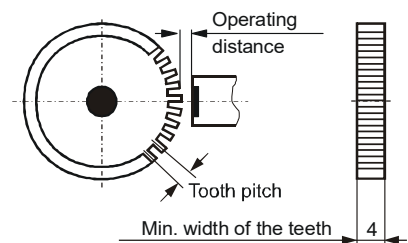
Design cylinder, $\varnothing 10.8$ with flange

Housing material / sensing face brass / plastic (PBT)

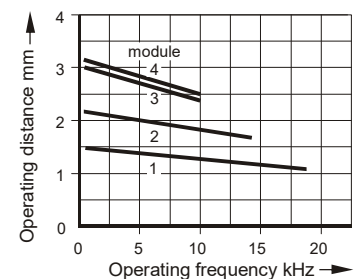
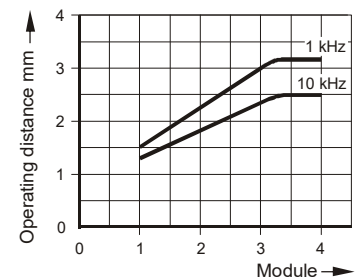
Protection rating according to EN 40050 IP 67

Mounting Instructions

Gear wheel St37 / C45



Operating 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 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. When the sensor is switched on but not activated, the output signal may adopt either the low or the 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!

Connection

DC voltage, four-pole,
differential output, outgoing PVC lead

