

UR12.P50-GP2C.7BF

Ultrasonic 2 point proximity switch

Article number: 11704836

Overview

- Fastest limit value detection due to extremely short response times
- Acquisition of two independent limit values
- Flexible parameterization and additional diagnostic data thanks to IO-Link
- Shortest blind zone in its class
- High performance in compact housing



IO-Link

Technical data

General data

Special type	2 point proximity switch
Scanning range Sd	15 ... 500 mm
Scanning range close limit Sdc	15 ... 500 mm
Scanning range far limit Sde	15 ... 500 mm
Version	IO-Link dual channel Multiplex version
Hysteresis typ.	4 % Sde
Repeat accuracy	< 0.5 mm
Temperature drift	> 50 mm < 2 % of distance to target Sde < 50 mm ± 1 mm
Power-up drift	Compensated after 15 min.
Response time ton/toff min	< 16 ms
Response time ton/toff standard	< 40 ms
Sonic frequency	290 kHz
Adjustment	line-Teach, IO-Link
Output indicator	Yellow LED / red LED
Light indicator	LED yellow
Power on indication	LED green
Alignment measuring axis	< 2°
Resolution	< 0.3 mm

Electrical data

Voltage supply range +Vs	12 ... 30 VDC
Current consumption typ.	35 mA
Output circuit	Push-pull
Output current	100 mA
Voltage drop Vd	<3 VDC
Residual ripple	< 10 % Vs
Short circuit protection	Yes
Reverse polarity protection	Yes, Vs to GND

Communication interface

Interface	IO-Link V1.1
Baud rate	38,4 kBaud (COM 2)
Cycle time	≥ 8 ms
Process data length	48 Bit
Process data structure	Bit 0 = SSC1 (distance) Bit 1 = SSC2 (distance) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 8-15 = scale factor Bit 16-47 = 32 Bit measurement
IO-Link port type	Class A
Additional data	Distance Excess gain Operating cycles Operating hours Boot cycles Operating voltage Device temperature Histograms
Adjustable parameters	Time filters LED status indicators Output logic Output circuit Counter Beam forming Deactivate the sensor element Find Me function
IO-Link	Yes

Mechanical data

Design	Cylindrical threaded
Housing material	Brass nickel plated
Width / diameter	12 mm
Height / length	50 mm
Connection types	Connector M12 5 pin
Tightening torque max.	15 Nm (Front: 10 Nm)

UR12.P50-GP2C.7BF

Ultrasonic 2 point proximity switch

Article number: 11704836

Technical data

Ambient conditions

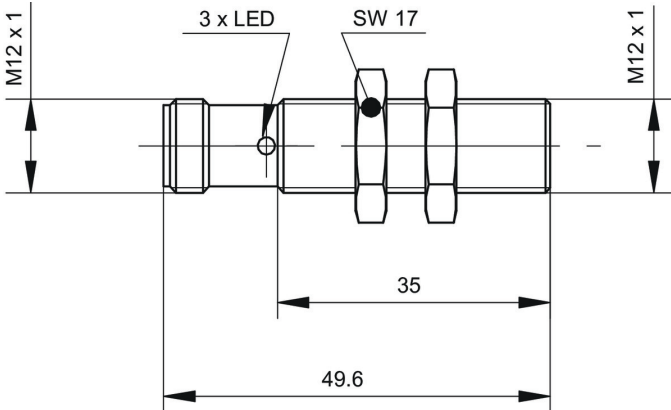
Operating temperature -25 ... +65 °C

Ambient conditions

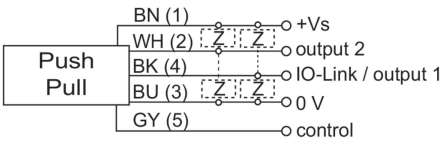
Storage temperature -40 ... +75 °C

Protection class IP 67

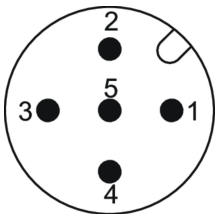
Dimension drawing



Connection diagram



Pin assignment



Typical sonic cone profile

