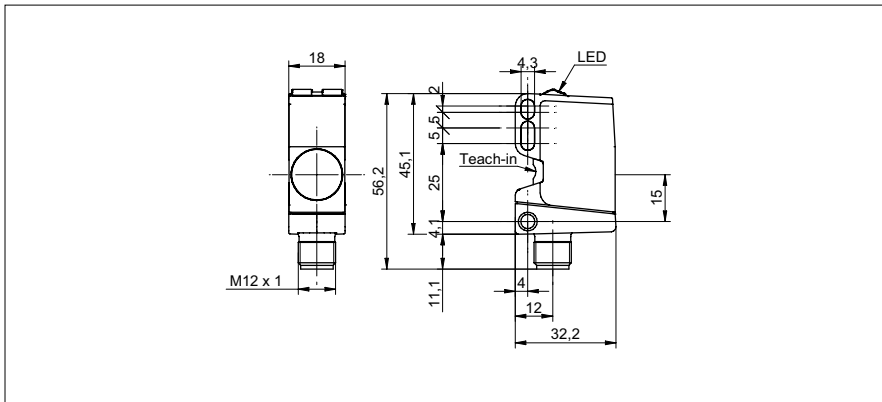


Ultrasonic proximity sensors

U500.PA0.2-11200633

dimension drawing



general data

| | |
|------------------------------|-----------------------------|
| special type | 2 point proximity switch |
| scanning range Sd | 70 ... 1000 mm |
| scanning range far limit Sde | 70 ... 1000 mm |
| version | IO-Link dual channel |
| hysteresis typ. | 4 % Sde |
| repeat accuracy | < 0,5 mm |
| temperature drift | < 2 % Sde |
| power-up drift | compensated after 15 min. |
| response time ton | < 40 ms |
| release time toff | < 40 ms |
| sonic frequency | 200 kHz |
| adjustment | qTeach, line-Teach, IO-Link |
| output indicator | yellow LED / red LED |
| power on indication | LED green |
| alignment measuring axis | < 2° |

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 | < 3,5 VDC |
| residual ripple | < 10 % Vs |
| short circuit protection | yes |
| reverse polarity protection | yes |

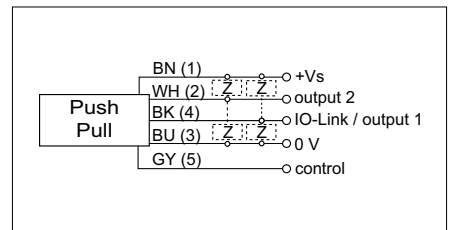
mechanical data

| | |
|---------------------|---------------------|
| type | rectangular |
| housing material | plastic (ASA, PMMA) |
| coating active face | PEEK |
| width / diameter | 18 mm |
| height / length | 45 mm |
| depth | 32 mm |
| connection types | connector M12 5 pin |

photo



connection diagram



Ultrasonic proximity sensors

U500.PA0.2-11200633

ambient conditions

| | |
|-----------------------|----------------|
| operating temperature | -25 ... +65 °C |
| storage temperature | -40 ... +75 °C |
| protection class | IP 67 |

communications interface

| | |
|------------------------|---|
| interface | IO-Link V1.1 |
| baud rate | 38,4 kBaud (COM 2) |
| cycle time | ≥ 12 ms |
| process data length | 32 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
 function of pin 5
 deactivate the sensor element
 Find Me function

typical sonic cone profile

