

overview

- Touch display with Live Monitor function
- Configurable switching output
- Selectable filters and trigger modes



Technical data

general data

| | |
|---------------------------|------------------------|
| type | distance measuring |
| version | OM70 laser point basic |
| measuring distance Sd | 40 ... 140 mm |
| measuring range Mr | 100 mm |
| sweet spot | 130 mm |
| adjustment | Touch Display, RS485 |
| power on indication | LED green |
| output indicator | LED yellow / LED red |
| resolution | 1,2 ... 2,5 µm |
| repeat accuracy | 0,3 ... 0,7 µm |
| linearity error | ± 0,07 % Mr |
| light source | pulsed red laser diode |
| wave length | 660 nm |
| laser class | 1 |
| beam type | point |
| temperature drift | 0,015 % So/K |
| hysteresis digital output | adjustable |

electrical data

| | |
|------------------------------------|-------------------|
| response delay | 0,8 ms |
| measuring frequency | 2500 Hz |
| voltage supply range +Vs | 15 ... 28 VDC |
| current consumption max. (no load) | 75 mA |
| output circuit | analog and RS 485 |

remarks

- Measurement with Baumer standardized measuring equipment and targets (Measurement on 90% remission (white)). Values of Resolution, linearity error and repeat accuracy apply to a measurement with filter setting (Median: 9, Average: 128).

| | |
|-----------------------------|----------------------------|
| baud rate | 115200, adjustable |
| output signal | 4 ... 20 mA / 0 ... 10 VDC |
| output current | < 100 mA |
| switching output | push-pull |
| short circuit protection | yes |
| reverse polarity protection | yes, Vs to GND |

mechanical data

| | |
|------------------|-------------------------|
| width / diameter | 26 mm |
| height / length | 74 mm |
| depth | 55 mm |
| type | rectangular, front view |
| housing material | aluminum |
| front (optics) | glass |
| connection types | connector M12 8 pin |
| weight | 130 g |

ambient conditions

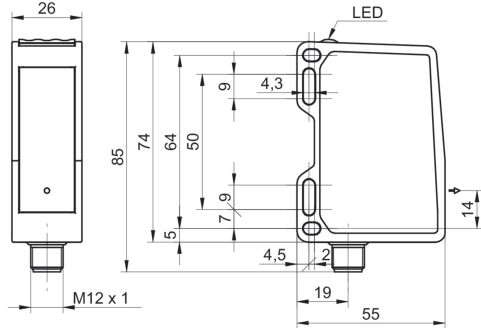
| | |
|-------------------------|---|
| ambient light immunity | < 38 kLux |
| operating temperature | -10 ... +50 °C |
| protection class | IP 67 |
| vibration (sinusoidal) | IEC 60068-2-6:2008 1 mm p-p at f = 10 - 55 Hz, duration 5 min per axis 30 min endurance at f = 55 Hz per axis |
| shock (semi-sinusoidal) | IEC 60068-2-27:2009 30 g / 11 ms, 6 jolts per axis and direction |

OM70-P0140.HH0130.VI

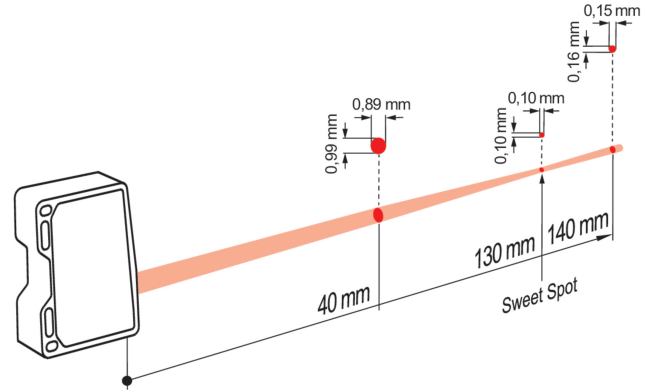
Distance sensors - high performance

Article number: 11112018

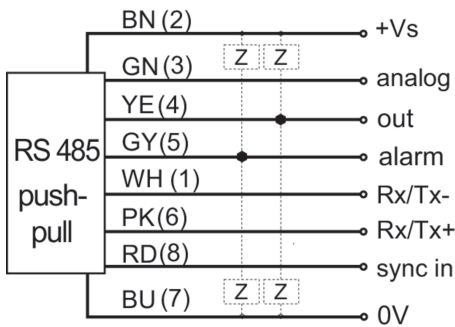
dimension drawing



beam characteristic (typically)



connection diagram



laser warning

**CLASS 1 LASER
PRODUCT**

IEC 60825-1/2014

Complies with 21 CFR 1040.10 and 1040.11
except for deviations pursuant to laser
notice No. 50, dated June 24, 2007

pin assignment

