



Short range distance sensors (displacement)
OD Precision, RS-422

OD5-30W05



Additional function: Anti interference mode, Automatic sensitivity adjustment, Selectable measuring frequency (automatic/0.1 ms ... 3.2 ms), Glass thickness measurement, Manual sensitivity adjustment, Averaging settings 1 ... 4,096x

Output rate: 0.1 ms

Note: OD Precision sensor head can be used with AOD5-P/N1 or stand-alone via RS-422

1) 3) Measurement on 90 % remission (ceramic, white), for OD5-25x measurement on mirror; averaging set to: 4096 2) Measurement on 90 % remission (ceramic, white), for OD5-25x measurement on mirror; averaging set to: 4096; constant ambient conditions 4) Time needed for automatic sensitivity adjustment is calculated as: sampling period x 20. At default setting 100 μ s (10kHz) this is \leq 2ms. 5) 6) Default setting for OD5-350x100 and OD5-500x200 = 0.8 ms, 1.25 kHz likewise, all other types = 0.1 ms/10 kHz 7) Wavelength 655 nm, max. output 1 mW

Interfaces

Data interface: RS-422

Laser off input: 1 x laser-off

Mechanics/electronics

Connection type: 0.5 m cable with connector 1)

Supply voltage V_s 2): DC 12 V ... 24 V

Warm-up time: \leq 5 min

Indication: LEDs, 4" color-display on optional controller unit

Weight: 250 g 3)

Housing material: Aluminum housing with glass lens

1) Extensible by cable to max. 50 m 2) DC 12 V (-5 %) ... DC 24 V (+10 %) 3) Inclusive 0.5 m cable

Ambient data

Enclosure rating: IP 67

Protection class: III

Ambient temperature: Operation: -10 ... 50 °C, Storage: -20 ... 60 °C

Temperature drift: \pm 0.01 % FS/K (FS = Full Scale = Measuring range of sensor)

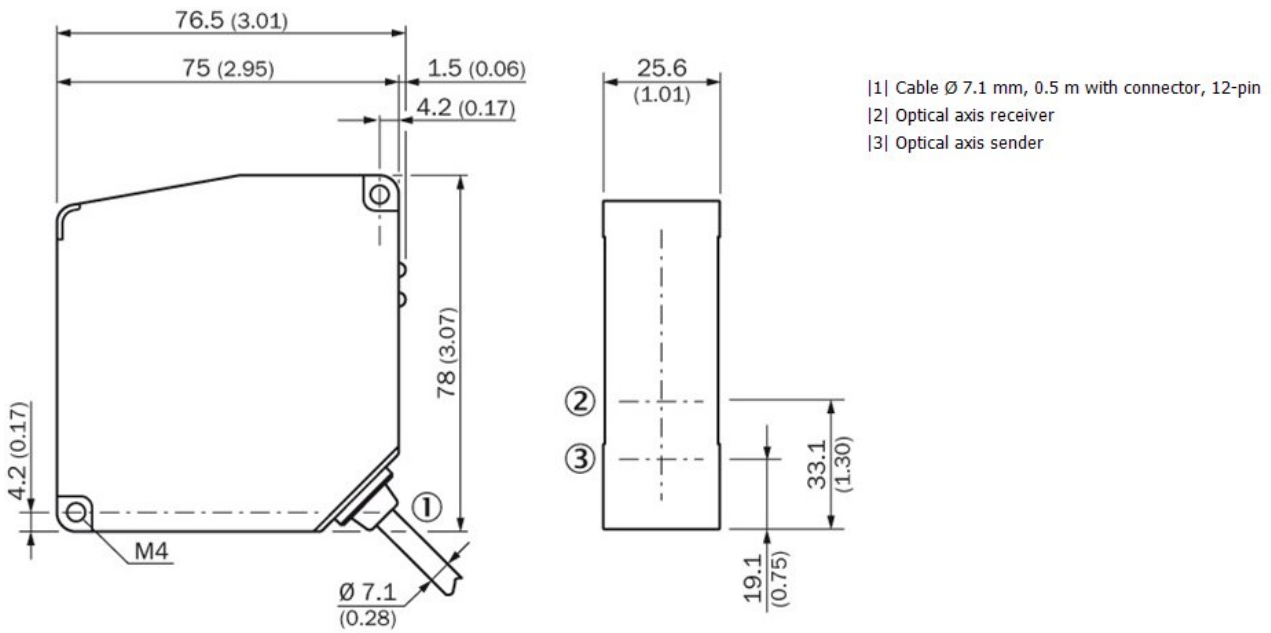
Typ. ambient light safety: Artificial light: \leq 3,000 lx
Sunlight: \leq 10,000 lx

Vibration resistance: 10 Hz ... 55 Hz (amplitude 1.5 mm, x-, y-, z-axis 2 hours each)

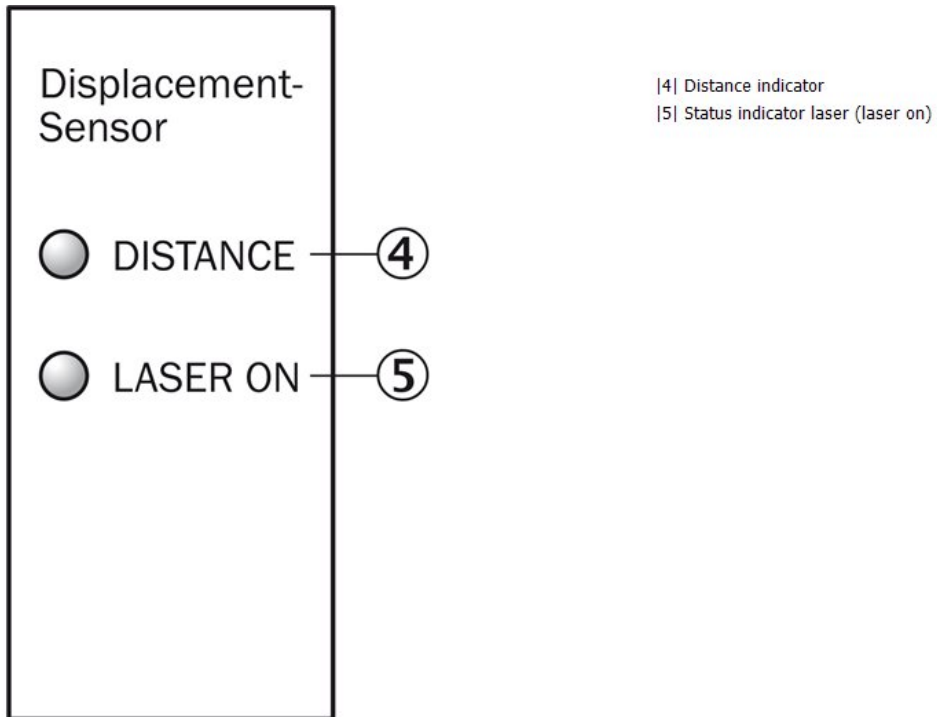
Shock resistance: 50 G (x-, y-, z-axis 3 times each)

Relative humidity (not condensing): 35 % ... 85 %

Dimensional drawing



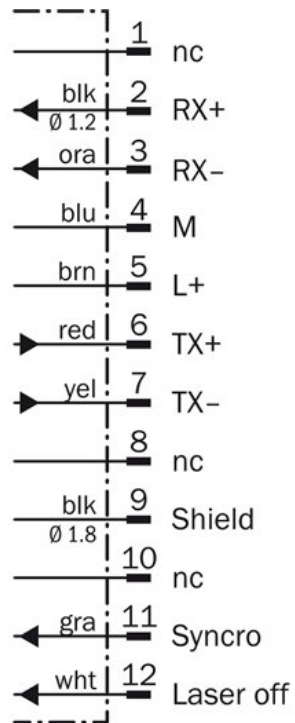
Adjustment possible



Connection type

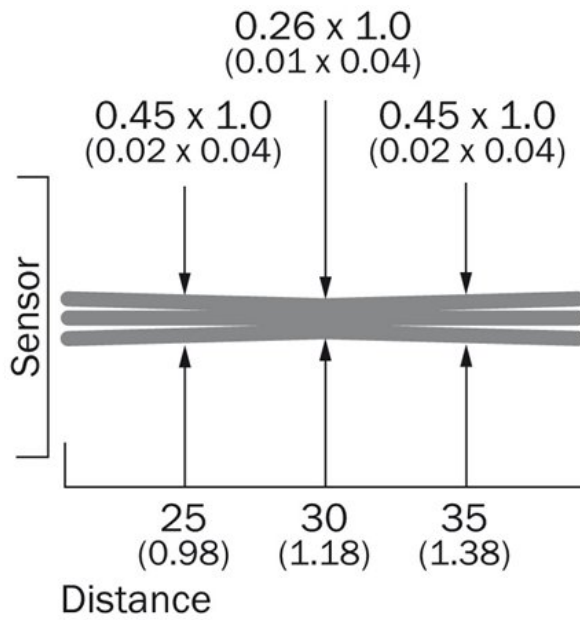


Connection diagram



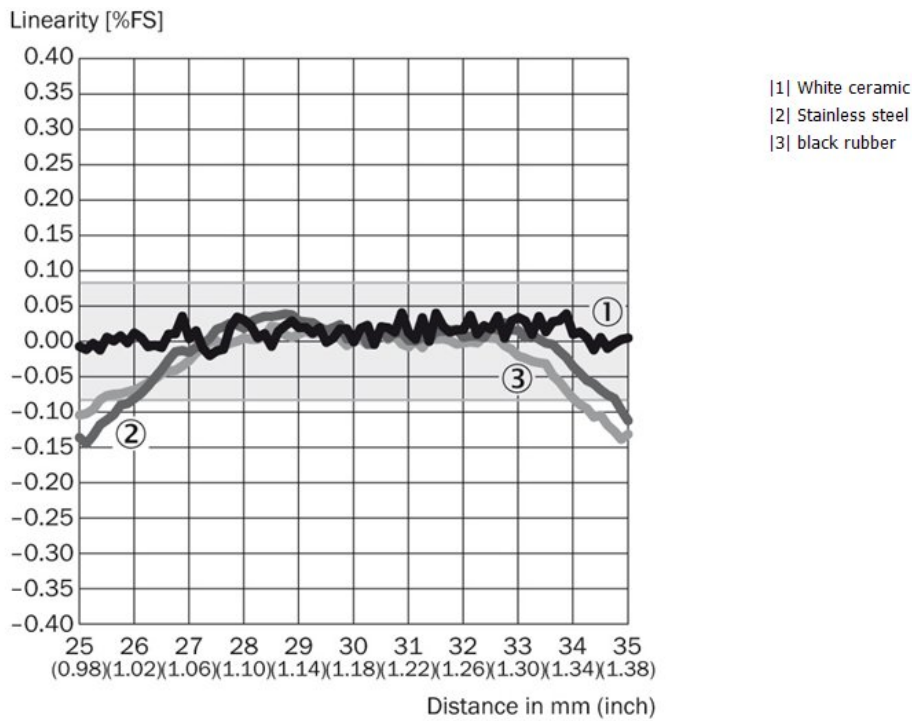
[1] not connected

Light spot size



All dimensions in mm (inch)

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