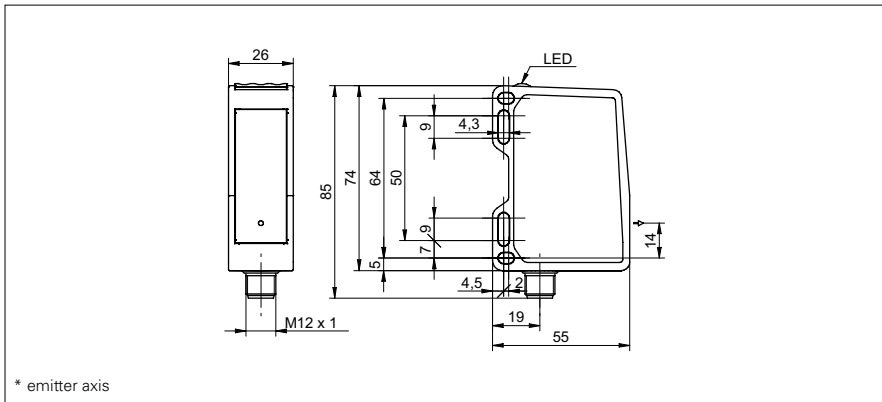


Distance sensors

OM70-11155463

dimension drawing



general data

version	OM70 multi-spot
measuring distance Sd	100 ... 150 mm
measuring range (width)	48 ... 72 mm
adjustment	Touch Display, RS485
power on indication	LED green
resolution	2 ... 4 µm 1) 2) 4) 5)
linearity error	± 30 ... ± 90 µm 1) 2) 4)
light source	pulsed red laser diode
wave length	656 nm
laser class	1
beam type	multi-spot
temperature drift	± 0,04 % Sde/K 1) 2) 4)

electrical data

response time / release time	3,5 ms 2) 3)
measuring frequency	570 Hz 2) 3)
voltage supply range +Vs	15 ... 28 VDC
current consumption max. (no load)	120 mA
output circuit	analog and RS 485
baud rate	115200, adjustable
output signal	4 ... 20 mA / 0 ... 10 VDC
output current	< 100 mA
short circuit protection	yes
reverse polarity protection	yes, Vs to GND

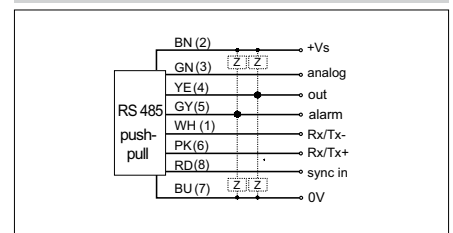
mechanical data

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

photo



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

Distance sensors
OM70-11155463
ambient conditions

ambient light immunity	< 35 kLux
operating temperature	-10 ... +50 °C
protection class	IP 67
storage temperature	-25 ... +75 °C
vibration (sinusoidal)	IEC 60068-2-6:2008 1.5 mm p-p at f = 10 - 57 Hz, 10 cycles per axis 10 g at f = 58 - 2000 Hz, 10 cycles per axis
shock (semi-sinusoidal)	IEC 60068-2-27:2009 50 g / 11 ms resp. 100 g / 6 ms, 10 jolts per axis and direction 100 g / 2 ms, 5000 jolts per axis and direction



- 1) Measurement with Baumer standardized measuring equipment and targets depending on measuring distance Sd
- 2) Measurement on 90% remission (white)
- 3) Measurement with reduced Field of View (start of measurement range 140 mm, end of measurement range 150 mm)
- 4) Measurement with measuring type average
- 5) Measurement with filtering