

**overview**

- Adjustable reference distance (zero point position)
- Intuitive limitation of the measuring range
- Configurable switching output
- Selectable filters and trigger modes
- Additional data such as signal quality on request
- Export and import function for parameter sets



**Technical data**

**general data**

type	distance measuring
version	OM70 laser point basic
measuring distance Sd	150 ... 1500 mm
measuring range Mr	1350 mm
sweet spot	1500 mm
adjustment	Webserver, Ethernet TCP/IP
power on indication	LED green
output indicator	LED yellow / LED red
ethernet link indication	LED blue
resolution	13 ... 125 µm
repeat accuracy	3 ... 63 µm
linearity error	± 0,32 % Mr
light source	pulsed red laser diode
wave length	660 nm
laser class	2
beam type	point
temperature drift	0,100 % So/K
hysteresis digital output	adjustable

**electrical data**

response delay	0,8 ms
measuring frequency	2000 Hz
voltage supply range +Vs	15 ... 28 VDC
current consumption max. (no load)	75 mA
output circuit	analog and digital
output signal	4 ... 20 mA / 2 ... 10 mA / 0 ... 10 VDC / 0 ... 5 VDC

**electrical data**

output current	< 100 mA
switching output	push-pull
short circuit protection	yes
reverse polarity protection	yes, Vs to GND
interface	Ethernet TCP/IP
protocol	Profinet, Modbus TCP, OPC UA, UDP streaming
webserver	yes

**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 & M12 4 pin
weight	135 g

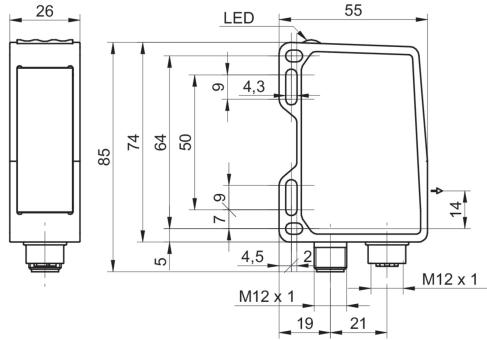
**ambient conditions**

ambient light immunity	< 35 kLux
operating temperature	-10 ... +50 °C
protection class	IP 67
storage temperature	-20 ... +60 °C
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

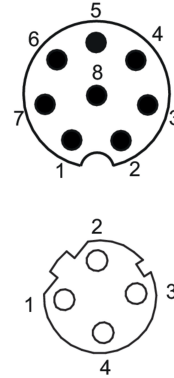
**remarks**

- 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).

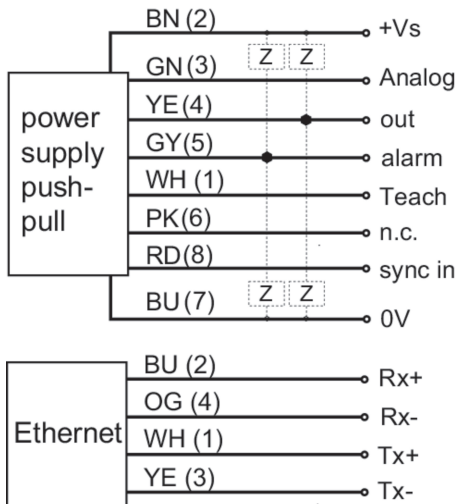
**dimension drawing**



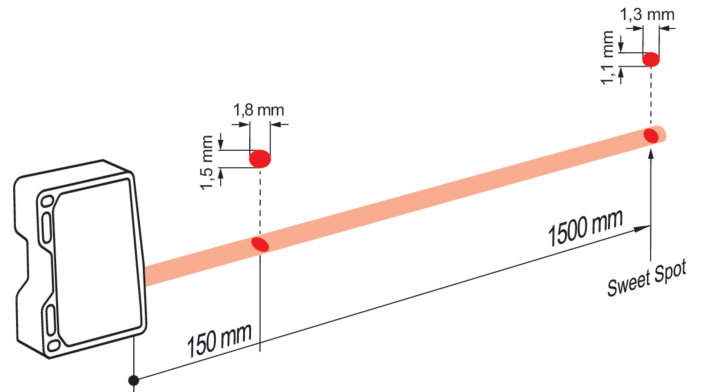
**pin assignment**




**connection diagram**



**beam characteristic (typically)**



**laser warning**



**LASER RADIATION**  
**DO NOT STARE INTO BEAM**  
Wavelength: 640...670nm  
  
IEC 60825-1, Ed. 3, 2014  
**CLASS 2 LASER PRODUCT**

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