Baumer
Passion for Sensors

Distance sensors

OM70-L1500.HV1500.VI

Distance sensors - high performance

Article number: 11112015

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 line basic
measuring distance Sd	150 … 1500 mm
measuring range Mr	1350 mm
sweet spot	1500 mm
adjustment	Touch Display, RS485
power on indication	LED green
output indicator	LED yellow / LED red
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	line
temperature drift	0,100 % 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

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

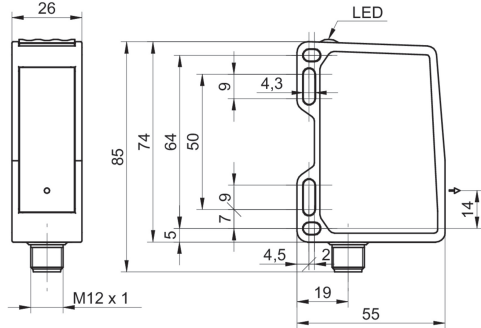|	
width / diameter	26 mm
height / length	74 mm
depth	55 mm
type	rectangular, front view
housing material	aluminum
front (optics)	glass
connection types	connector M12 8 pin
weight	130 g

ambient conditions

ambient light immunity	< 35 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

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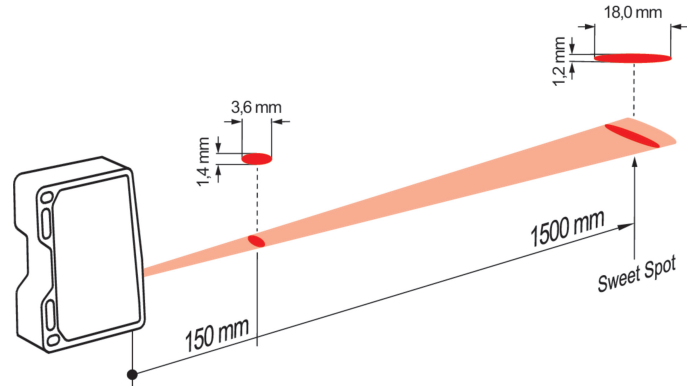
- Measurement with Baumer standardized measuring equipment and targets (Measurement on 90% remission (white)). Values of Resolution, linearity error and repeat accuracy apply to a measurement with filter setting (Median: 9, Average: 128).

dimension drawing

beam characteristic (typically)

connection diagram

BN (2)		+Vs
GN (3)	Z Z	analog
YE (4)		out
GY (5)		alarm
WH (1)		Rx/Tx-
PK (6)		Rx/Tx+
RD (8)		sync in
BU (7)	Z Z	0V

RS 485 push-pull
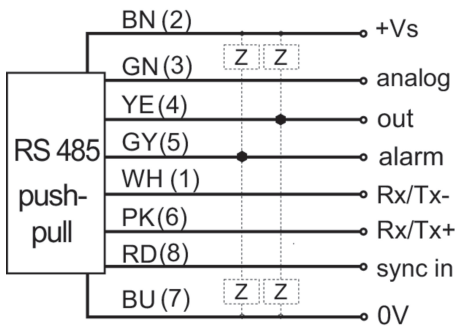
laser warning

**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

pin assignment