

Technical data**General specifications**

Sensor range	20 mm +/- 3 mm
Light source	laser diode
Light type	red
Laser nominal ratings	
Note	LASER LIGHT , DO NOT STARE INTO BEAM
Laser class	2
Wave length	650 nm
Beam divergence	< 1.5 mrad
Maximum optical power output	< 1 mW
Target velocity	max. 1 m/s
Detection direction	Along the long axis of the housing
Ambient light limit	5000 Lux

Indicators/operating means

Function display	LED yellow: lights up when limit value exceeded, based on the set velocity of movement , flashes when the speed and/or operating distance is outside the measuring range
Controls	Potentiometer for setting the limiting velocity for output 1 Adjustment range typ. 0.3 ... 2 m/s

Electrical specifications

Operating voltage	U_B	10 ... 30 V DC
Ripple		max. 10 %
No-load supply current	I_0	< 100 mA

Output

Signal output	3 Push-pull outputs, short-circuit proof, reverse polarity protected
Switching voltage	max. 30 V DC
Switching current	max. 100 mA

Output 1

Output type	Limit value exceeded, based on the set velocity of movement
Signal output	PNP, active on overshoot of limit value

Output 2

Output type	Forward and standstill/reverse motion
Signal output	PNP, active on detected forward motion, NPN, active on stop and detected reverse motion

Output 3

Output type	Position sensor
Signal output	1 pulse per mm object movement. (type. 150 μ s, pnp active)
Accuracy	≤ 1 % at 1 m measurement path and constant speed of 1 m/s at nominal distance
Repeat accuracy	≤ 0.5 %

Ambient conditions

Ambient temperature	0 ... 40 °C (32 ... 104 °F)
Storage temperature	-10 ... 60 °C (14 ... 140 °F)

Mechanical specifications

Protection degree	IP65
Connection	5-pin plastic M12 connector without cable
Material	
Housing	Plastic terluran GV15
Optical face	glass
Mass	approx. 85 g

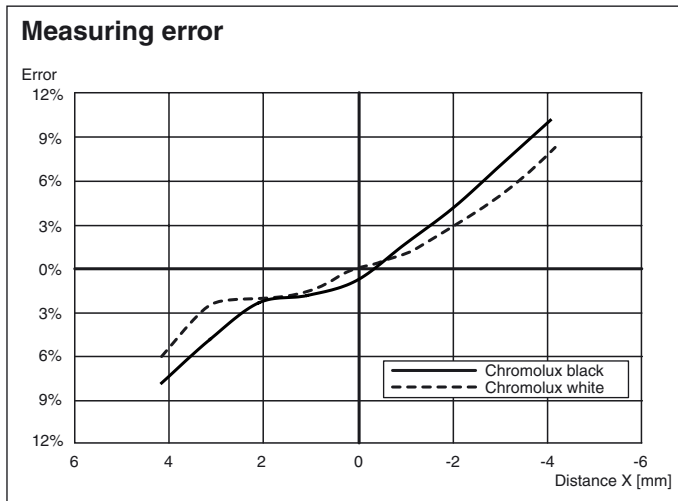
Compliance with standards and directives

Directive conformity	EMC Directive 2004/108/EC
Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007
Laser class	IEC 60825-1:2007 Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007

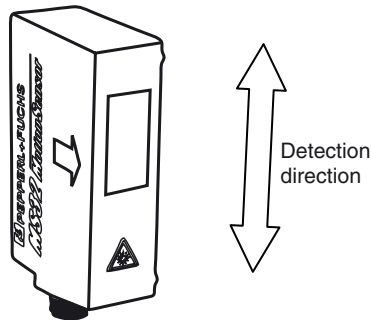
Approvals and certificates

UL approval	cULus
CCC approval	Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.

Curves/Diagrams

**Detection direction**

Along to longitudinal housing direction

**Laser notice laser class 2**

- The irradiation can lead to irritation especially in a dark environment. Do not point at people!
- Caution: Do not look into the beam!
- Maintenance and repairs should only be carried out by authorized service personnel!
- Attach the device so that the warning is clearly visible and readable.
- Caution – Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.