



Model Number

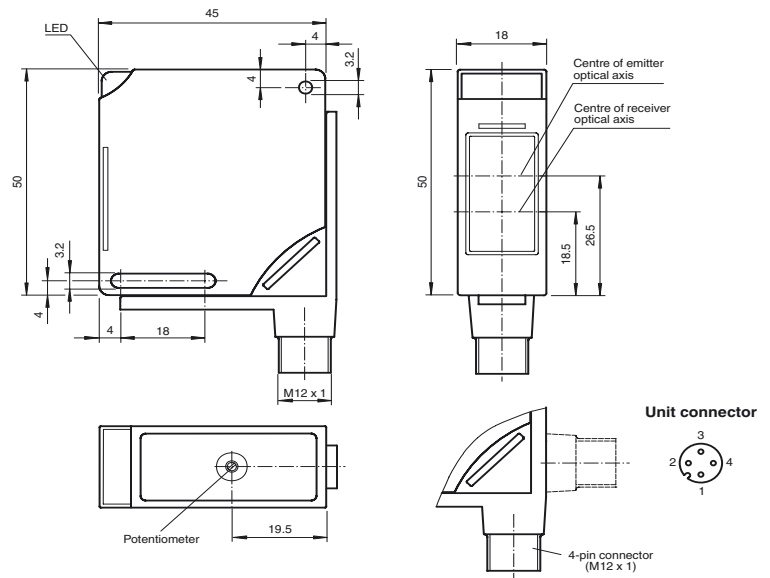
MLV11-54-Ex/40b/112

NAMUR retroreflective sensor, small housing design, 3 m detection range, red light, light/dark on, DC version, NAMUR output, M12 plug

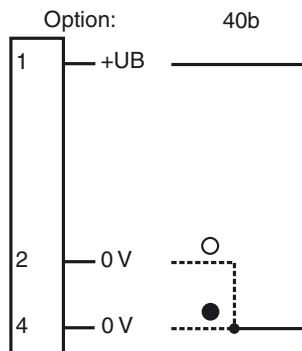
Features

- ATEX approval for zone 1 (Gas)
- Intrinsically safe, Ex op is ia IIC T6 Gb
- Glare protected with polarization filter
- Adjustable sensitivity

Dimensions



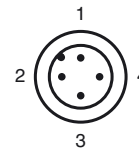
Electrical connection



○ = Light on

● = Dark on

Pinning according



Technical data

General specifications

Effective detection range	0 ... 3 m
Reflector distance	300 ... 3000 mm
Threshold detection range	3 m
Reference target	H85 reflector
Light source	LED
Light type	modulated visible red light , 660 nm
Polarization filter	yes
Ambient light limit	≤ 10000 Lux sun light ≤ 7500 Lux halogen light

Functional safety related parameters

MTTF _d	1319 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Function indicator	LED yellow: switching state
Control elements	sensitivity adjustment

Electrical specifications

Operating voltage	U _B	6 ... 15.5 V DC (R _i approx. 0 Ohm)
Ripple		5 %
Power consumption	P ₀	max. 64 mW
Time delay before availability	t _v	20 ms

Output

Switching type	light/dark on, programmable	
Signal output	1 NAMUR output NC/NO programmable	
Switching voltage	8 V DC (R _i approx. 1 kΩ)	
Switching frequency	f	≤ 100 Hz
Current consumption		
Reference target detected	connection 1, 2: ≥ 2.2 mA connection 1, 4: ≤ 1 mA	
Reference target not detected	connection 1, 2: ≤ 1 mA connection 1, 4: ≥ 2.2 mA	
Response time	5 ms	

Directive conformity

Electromagnetic compatibility	
Directive 2014/30/EU	EN 60947-5-2:2007+A1:2012

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 80 °C (-40 ... 176 °F)

Mechanical specifications

Degree of protection	IP67
Connection	V1 connector (M12 x 1), 4-pin, rotatable through 90°
Material	
Housing	PBT
Optical face	scratch resistant plastic lens
Mass	60 g

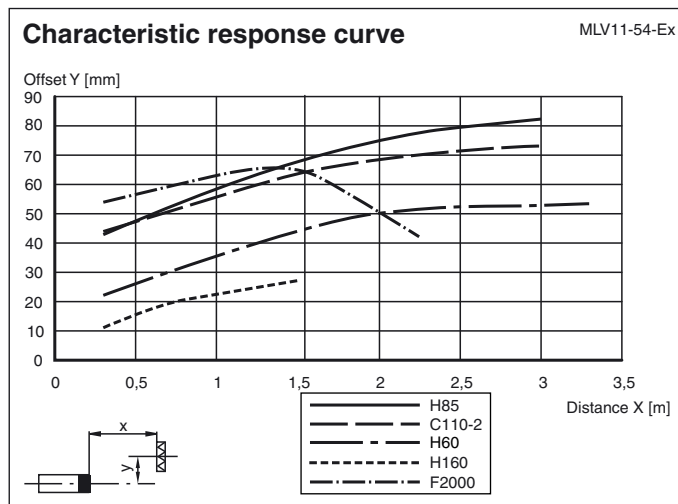
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-6:2000

Approvals and certificates

CCC approval	CCC approval / marking not required for products rated ≤36 V
--------------	--

Curves / Diagrams



Relative received light strength

MLV11-54-Ex

Reflector type:

H85 (80 mm x 80 mm)

C110_2 (ø = 84 mm)

H60 (60 mm x 40 mm)

F2000 (Foil, 100 mm x 100 mm)

H160 (60 mm x 18 mm)

Stability control > 3

Stability control < 3

