



Model Number

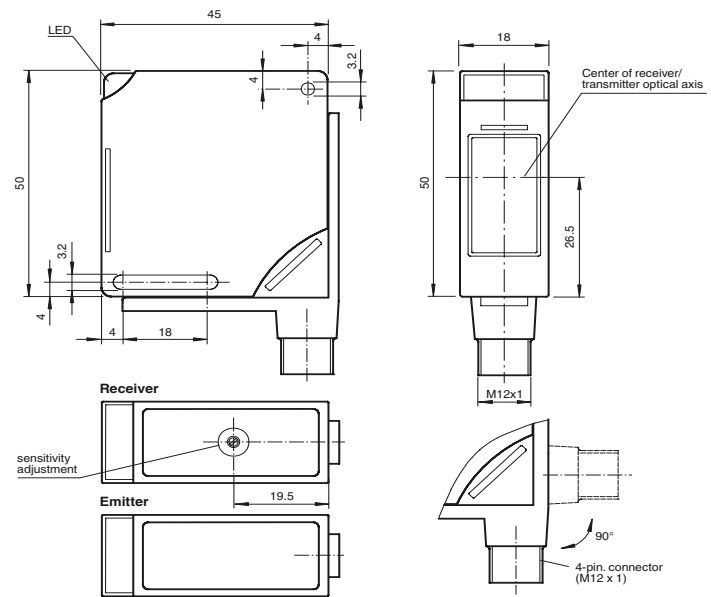
M11/MV11-Ex/40b/112

NAMUR thru-beam sensor, small housing design, 10 m detection range, red light, light/dark on, DC version, NAMUR output, M12 plug

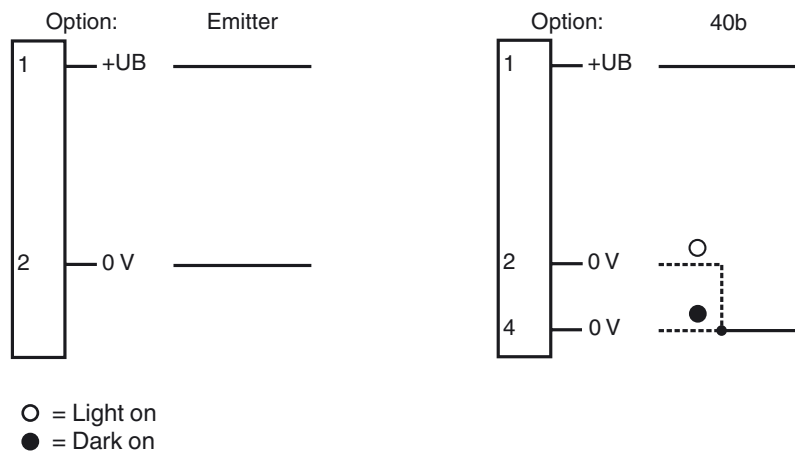
Features

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

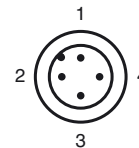
Dimensions



Electrical connection



Pinning according



Technical data

General specifications

Effective detection range	0 ... 10 m
Threshold detection range	10 m
Light source	LED
Light type	modulated visible red light , 660 nm
Ambient light limit	≤ 10000 Lux sun light ≤ 7500 Lux halogen light

Functional safety related parameters

MTTF _d	575 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Operation indicator	LED green: power on (emitter)
Function indicator	LED yellow: switching state (receiver)
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	Emitter: ≥ 2.2 mA , Receiver:
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

Housing width	18 mm
Housing height	50 mm
Housing depth	45 mm
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 (device)

Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-6:2000

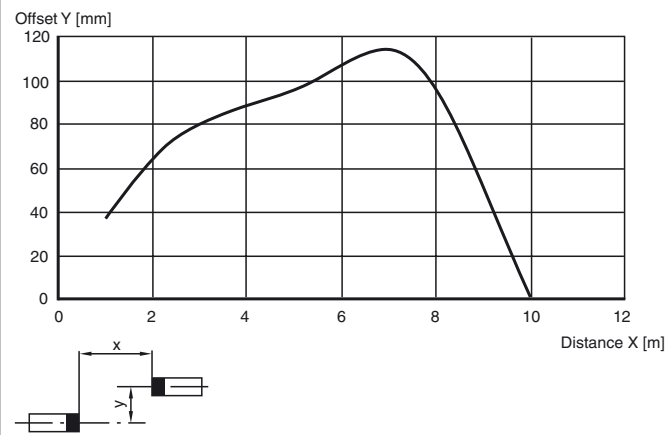
Approvals and certificates

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

Characteristic response curve

M11 / MV11-Ex



Relative received light strength

M11 / MV11-Ex

