

VL18-54-MS/40a/118/128

Retroreflective sensor with polarisation filter

VL18-54-MS/40a/118/128

with M12, 4-pin metal connector



- ◆ Clearly arranged control panel with very light LED display
- ◆ Flashing power on LED in case of short-circuit
- ◆ Optical face lateral, embeddable to the housing
- ◆ Multiple device installation possible, no mutual interference
- ◆ Not sensitive to ambient light, even with switched energy saving lamps
- ◆ Protection class II

General specifications

Effective detection range	0 ... 3.5 m
Threshold detection range	4 m
Light source	LED, Red light 660 nm
Approvals	CE, cULus
Light type	red, modulated light
Diameter of the light spot	160 mm at a distance of 3500 mm
Angle of divergence	3 °
Optical face	lateral
Ambient light limit	30000 Lux
Hysteresis H	< 15 %

Indicators/operating means

Operating display	LED green, flashes in case of short-circuit
Function display	LED yellow, light with free light beam , flashes when falling short of the stability control , OFF when light beam is interrupted
Operating elements	Sensitivity adjuster, light/dark switch

Electrical specifications

Operating voltage	10 ... 30 V DC , class 2
Protection class	II , rated voltage ≤ 300 V AC with degree of pollution 1-2 according to IEC 60664-1
Ripple	10 %
No-load supply current I_0	< 35 mA

Output

Switching type	light/dark ON, switchable
Signal output	Push-pull output short-circuit proof overvoltage protected
Switching voltage	30 V DC
Switching current	max. 200 mA
Switching frequency f	500 Hz
Response time	1 ms

Standard conformity

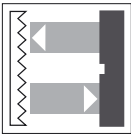
Standards	EN 60947-5-2
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Ambient conditions

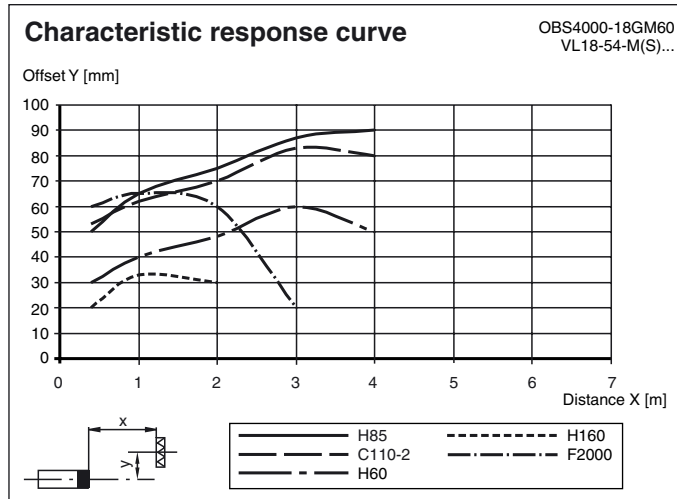
Ambient temperature	-25 ... 70 °C (248 ... 343 K)
Storage temperature	-30 ... 70 °C (243 ... 343 K)

Mechanical specifications

Protection degree	IP67
Connection	M12 connector, 4-pin
Material	
Housing	brass, nickel-plated
Optical face	plastic
Mass	60 g



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Relative received light strength

OBS4000-18GM60
VL18-54-M(S)

Reflector type:

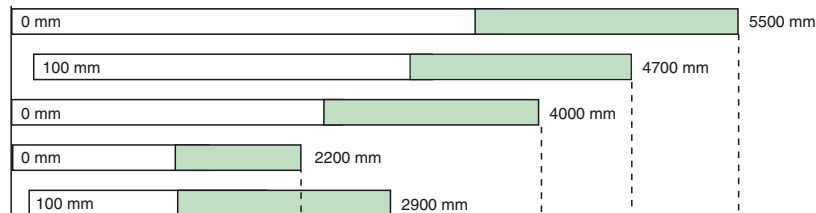
H85 (80 mm x 80 mm)

C110_2 ($\phi = 84$ mm)

H60 (60 mm x 40 mm)

H160 (60 mm x 18 mm)

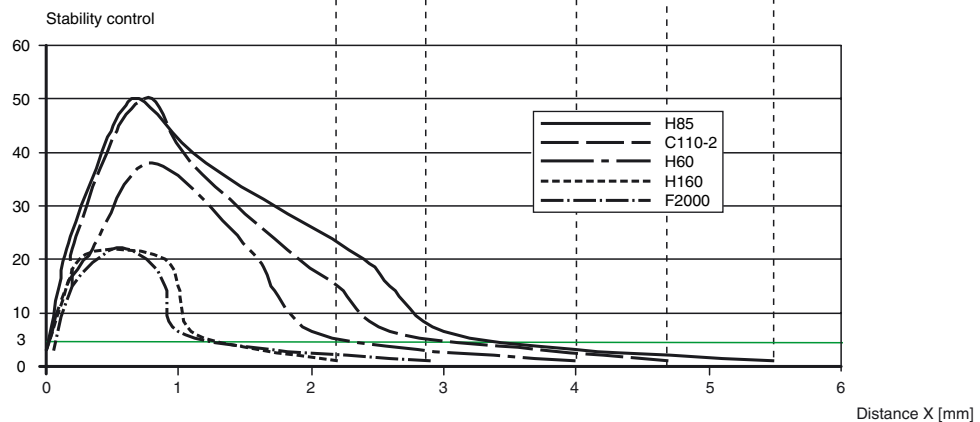
F2000 (Foil, 100 mm x 100 mm)



Stability control

□ Stability control > 3

■ Stability control < 3



Additional information



Visible laser light.
Laser class 2.
Do not look into the laser beam!

Intended use

A retro-reflexive photo-electric sensor contains a transmitter and a receiver together in a housing. The light from the sender is beamed back to the transmitter by a reflector. If the beam of light is interrupted by an object, the switching function is triggered.

Mounting instructions

Using the M18x1 threaded screw hole and two nuts included with delivery (SW 24 mm / max. torque 1.5 Nm), units can be mounted with a simple drill hole (ϕ 18 mm) or with a support bracket (not included with delivery).

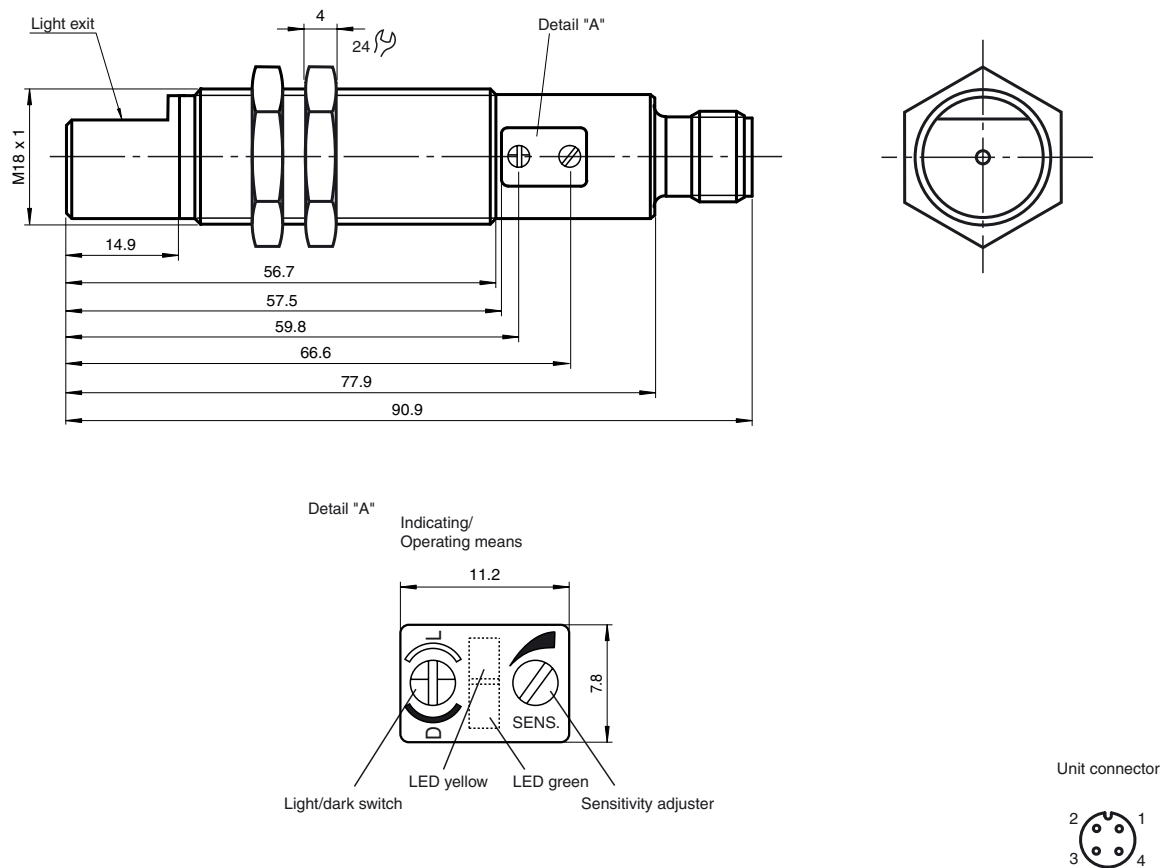
Please make certain the operating panel or LED displays are in the right position and visible.

Adjustment

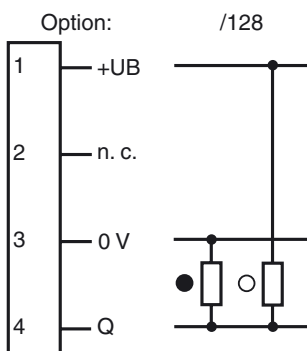
Subject to reasonable modifications due to technical advances.

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Dimensions



Electrical connection



○ = light on, ● = dark on