

Model Number

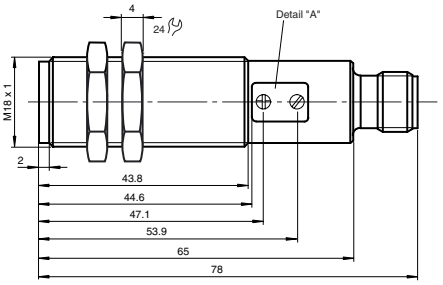
VT18-8-H-120-M/40a/65b/118/128

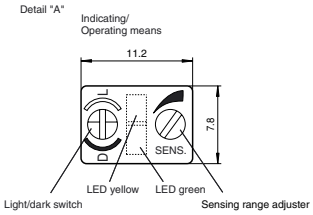
Background suppression sensor
with 4-pin, M12 x 1 connector

Features

- Adjustable background suppression
- Array control panel with highly visible LED display
- Flashing power on LED in case of short-circuit
- Multiple device installation possible, no mutual interference (no cross-talk)
- Not sensitive to ambient light, even with switched energy saving lamps
- Protection class II

Dimensions



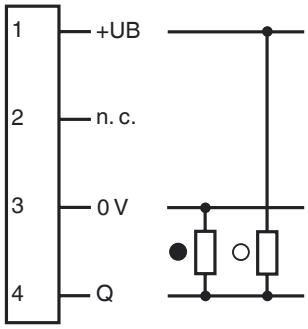


Unit connector



Electrical connection

Option: /128



○ = Light on
● = Dark on

Release date: 2015-02-05 11:28 Date of issue: 2015-02-12 800191_eng.xml

Technical data

General specifications		
Detection range		20 ... 120 mm , adjustable
Detection range min.		20 ... 40 mm
Detection range max.		20 ... 120 mm
Light source		LED
Light type		modulated visible red light , 660 nm
Black/White difference (6 %/90 %)		< 10 % at a distance of 120 mm
Diameter of the light spot		approx. 6 mm at a distance of 120 mm
Optical face		frontal
Ambient light limit		30000 Lux
Functional safety related parameters		
$MTTF_d$		860 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Indicators/operating means		
Operation indicator		LED green, flashes in case of short-circuit
Function indicator		LED yellow, lights up with receiver lit
Control elements		Detection range adjuster, light/dark switch
Electrical specifications		
Operating voltage	U_B	10 ... 30 V DC
Ripple		10 %
No-load supply current	I_0	< 35 mA
Protection class		II , rated voltage ≤ 300 V AC with pollution degree 1-2 according to IEC 60664-1
Output		
Switching type		light/dark on, switchable
Signal output		Push-pull (4 in 1) output short-circuit protected overvoltage protected
Switching voltage		30 V DC
Switching current		max. 200 mA
Switching frequency	f	500 Hz
Response time		1 ms
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-30 ... 70 °C (-22 ... 158 °F)
Mechanical specifications		
Degree of protection		IP67
Connection		M12 connector, 4-pin (Vario-Quick quick connect technology)
Material		
Housing		brass, nickel-plated
Optical face		plastic
Mass		60 g
Compliance with standards and directives		
Standard conformity		
Product standard		EN 60947-5-2
Approvals and certificates		
CE conformity		yes
Protection class		II , rated voltage ≤ 300 V AC with pollution degree 1-2 according to IEC 60664-1
UL approval		cULus
CCC approval		CCC approval / marking not required for products rated ≤36 V

Accessories

BF 18
Mounting flange, 18 mm

OMH-VL18
Mounting Bracket with swivel nut

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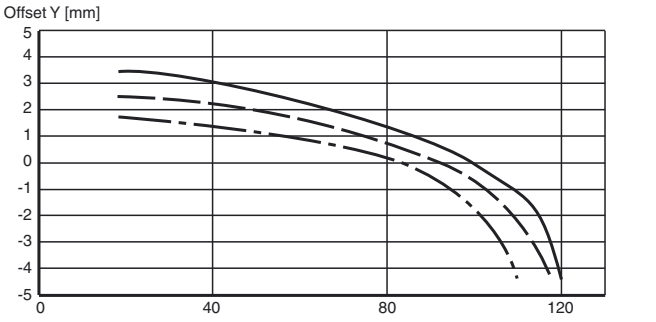
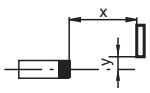
Curves/Diagrams

Characteristic response curve

VT18-8-H

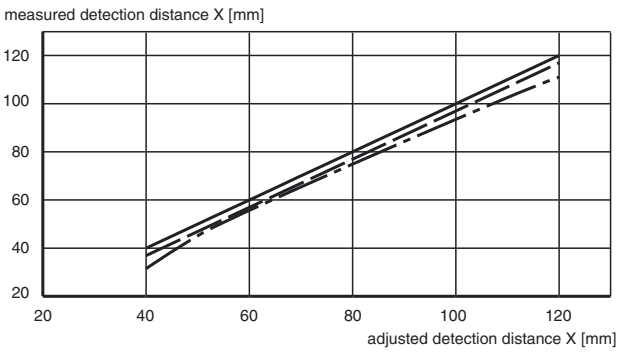


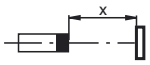


white 90 %
grey 18 %
black 6 %

Difference in detection distance

VT18-8-H-120-M***





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