



**Model Number**

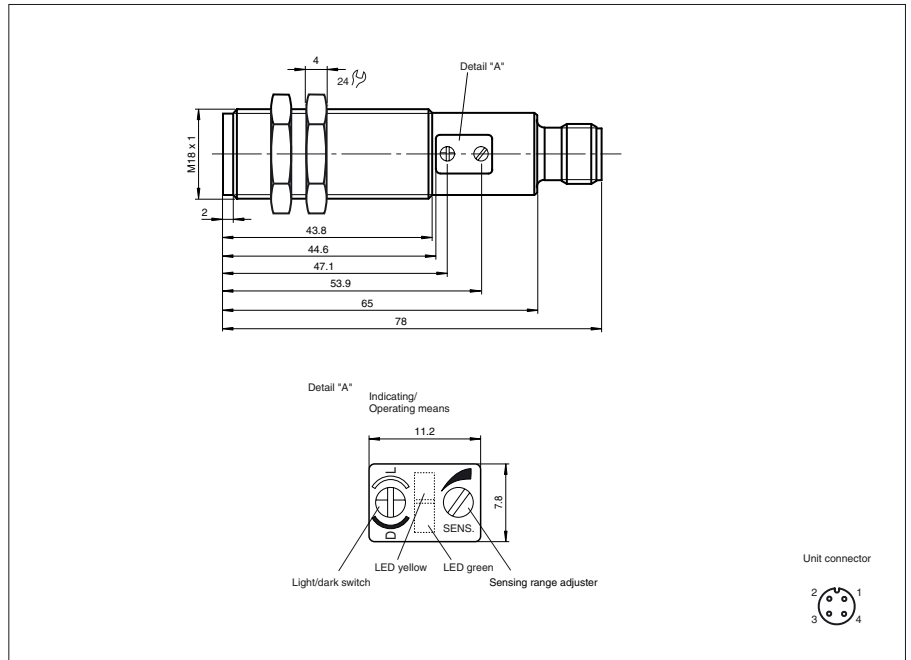
**VT18-8-H-120-M/40a/65b/118/128**

Background suppression sensor with M12, 4-pin metal connector

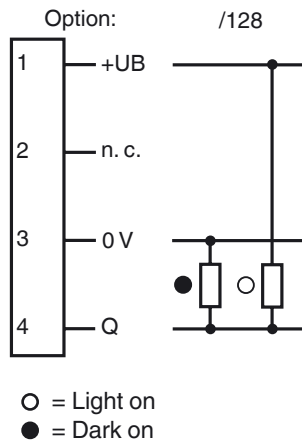
**Features**

- 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
- Not sensitive to ambient light, even with switched energy saving lamps
- Protection class II

**Dimensions**



**Electrical connection**



Release date: 2011-08-26 10:21 Date of issue: 2011-08-26 800191\_eng.xml

Subject to modifications without notice

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776-4411  
fa-info@pepperl-fuchs.com

Copyright Pepperl+Fuchs  
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**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, 660 nm visible red light
Light type	modulated visible red light
Black/White difference (6 %/90 %)	< 10 % at a distance of 120 mm
Approvals	CE, cULus
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 <sub>d</sub>	860 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Indicators/operating means**

Operating display	LED green, flashes in case of short-circuit
Function display	LED yellow, lights up with receiver lit
Controls	Detection range adjuster, light/dark switch

**Electrical specifications**

Operating voltage	U <sub>B</sub>	10 ... 30 V DC
Ripple		10 %
No-load supply current	I <sub>0</sub>	< 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 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

**Standard conformity**

Standards	EN 60947-5-2
-----------	--------------

**Ambient conditions**

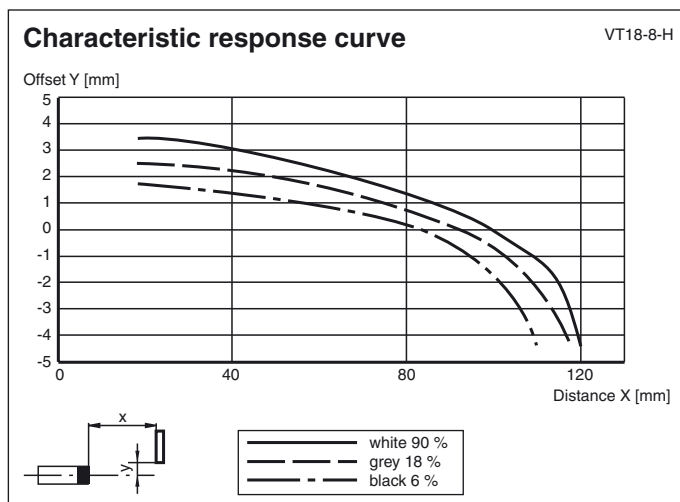
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-30 ... 70 °C (-22 ... 158 °F)

**Mechanical specifications**

Protection degree	IP67
Connection	M12 connector, 4-pin (Vario-Quick quick connect technology)
Material	
Housing	brass, nickel-plated
Optical face	plastic
Mass	60 g

**Approvals and certificates**

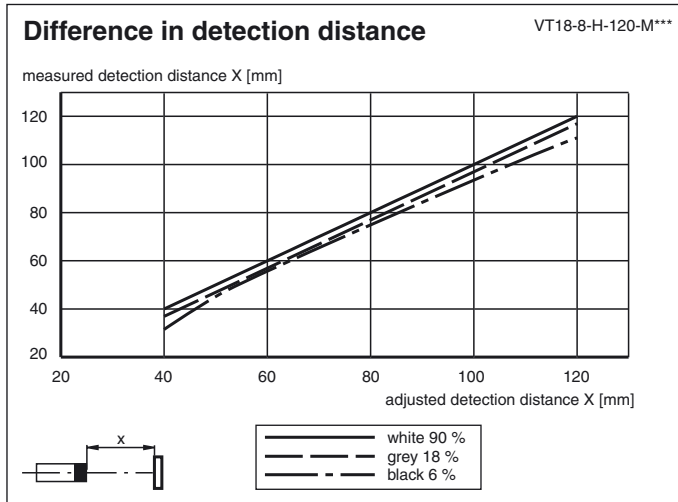
CCC approval	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.
--------------	--

**Curves/Diagrams****Accessories****BF 18**

Mounting flange, 18 mm

**OMH-VL18**

Mounting Bracket with swivel nut



Release date: 2011-08-26 10:21 Date of issue: 2011-08-26 800191\_eng.xml