



**Model Number**

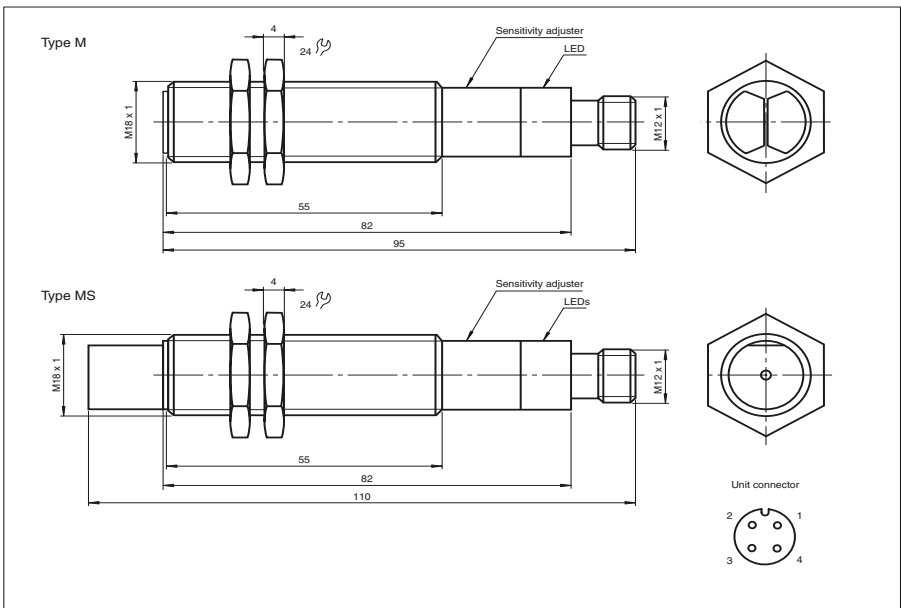
**VT18-H-MS-120/32/40b/92**

Background suppression sensor with M12, 4-pin metal connector

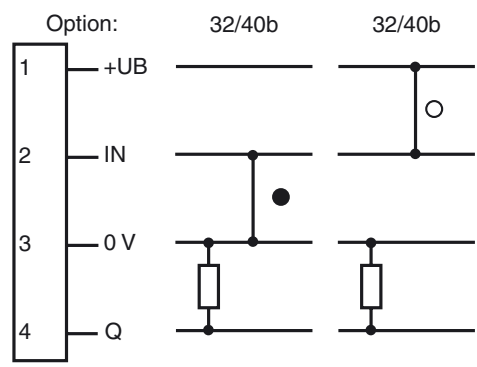
**Features**

- Sensing range 10 mm up to 120 mm
- M18 threaded housing made of brass, nickel plated
- Infrared light design
- Optical surface flush with housing
- Electrical light-/dark switching
- Optical face alternatively lateral or frontal

**Dimensions**



**Electrical connection**



○ = Light on  
● = Dark on

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## Technical data

### General specifications

Detection range	10 ... 120 mm
Detection range min.	10 ... 80 mm
Detection range max.	10 ... 120 mm
Light source	IRED
Black/White difference (6%/90%)	< 45 %
Approvals	CE
USA	UL
Kanada	CSA
Light type	infrared, modulated light
Diameter of the light spot	approx. 10 mm at a distance of 120 mm
Angle of divergence	approx. 4 °
Optical face	lateral
Ambient light limit	40000 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

Function display	LED yellow: switching state LED red: stability control display
Operating elements	sensitivity adjuster

### Electrical specifications

Operating voltage	U <sub>B</sub>	10 ... 30 V DC
Ripple		10 %
No-load supply current	I <sub>0</sub>	< 35 mA

### Output

Switching type	Light/dark ON selectable programmable	
Signal output	1 pnp, short-circuit proof, protected against reverse polarity	
Switching voltage	30 V DC	
Switching current	max. 100 mA	
Switching frequency	f	500 Hz
Response time		1 ms

### Standard conformity

Standards	EN 60947-5-2
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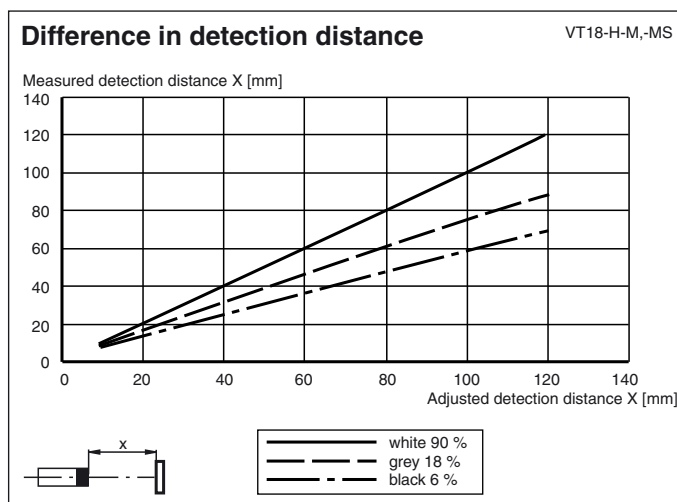
### Ambient conditions

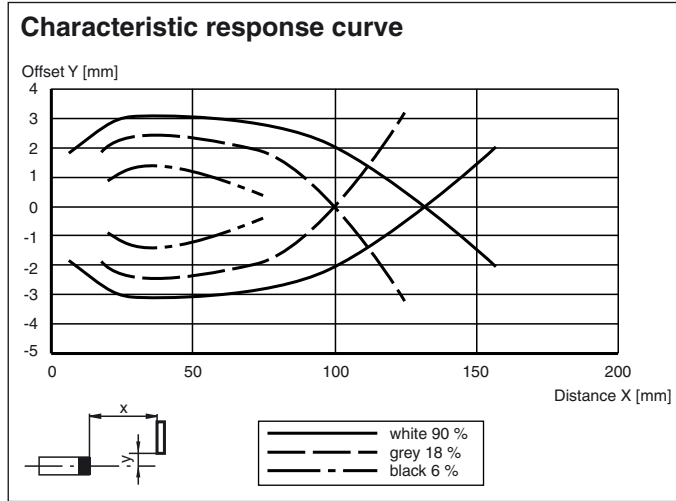
Ambient temperature	-25 ... 60 °C (248 ... 333 K)
Storage temperature	-25 ... 60 °C (248 ... 333 K)

### Mechanical specifications

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

## Curves/Diagrams





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