



Photoelectric sensors V18, Through-beam photoelectric sensor

VS/VE18-4P3840



Model Name > [VS/VE18-4P3840](#)
Part No. > [6013785](#)



Illustration may differ

At a glance

- Cylindrical M18 housing
- Sensing distance up to 20 m
- 3- or 4-wire
- Straight or right-angle housing
- Metal or plastic housing

Your benefits

- Simple, standardized design ensures easy mounting, alignment and replacement
- Compact, space-saving design easily fits in tight application spaces



Features

Sensor/detection principle:	Through-beam photoelectric sensor
Housing design (light emission):	Cylindrical, angled, angled 90°
Housing length:	75 mm
Thread diameter (housing):	M18 x 1
Optical axis:	Radial
Sensing range max.:	0 m ... 20 m
Sensing range:	0 m ... 14 m
Type of light:	Infrared light
Light source:	LED ¹⁾
Light spot diameter (distance):	700 mm (14 m)
Angle of dispersion:	2.8 °

¹⁾ Average service life of 100,000 h at $T_A = +25\text{ °C}$

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	$\leq 10\%$ ²⁾
Power consumption:	$\leq 30\text{ mA}$ ³⁾
Output type:	NPN, Light/dark-switching, Selectable via L/D control wire, open collector
Switching mode selector:	Selectable via L/D control wire
Output current I _{max.} :	100 mA
Response time:	$\leq 2\text{ ms}$ ⁵⁾
Switching frequency:	250 Hz ⁶⁾
Connection type:	Connector M12, 4-pin

Circuit protection::::

Protection class:

Weight:

Housing material:

Enclosure rating:

Test input sender off:

Ambient operating temperature:

UL File-No.:

Switching mode characteristic:

SCHALTARTFUSSNOTE:

A, B, C, D ⁷⁾ ⁸⁾ ⁹⁾ ¹⁰⁾

III

200 g

PBT/PC

IP 67

TE to 0 V

-25 °C ... 70 °C

UL No. NMFT2.E175606

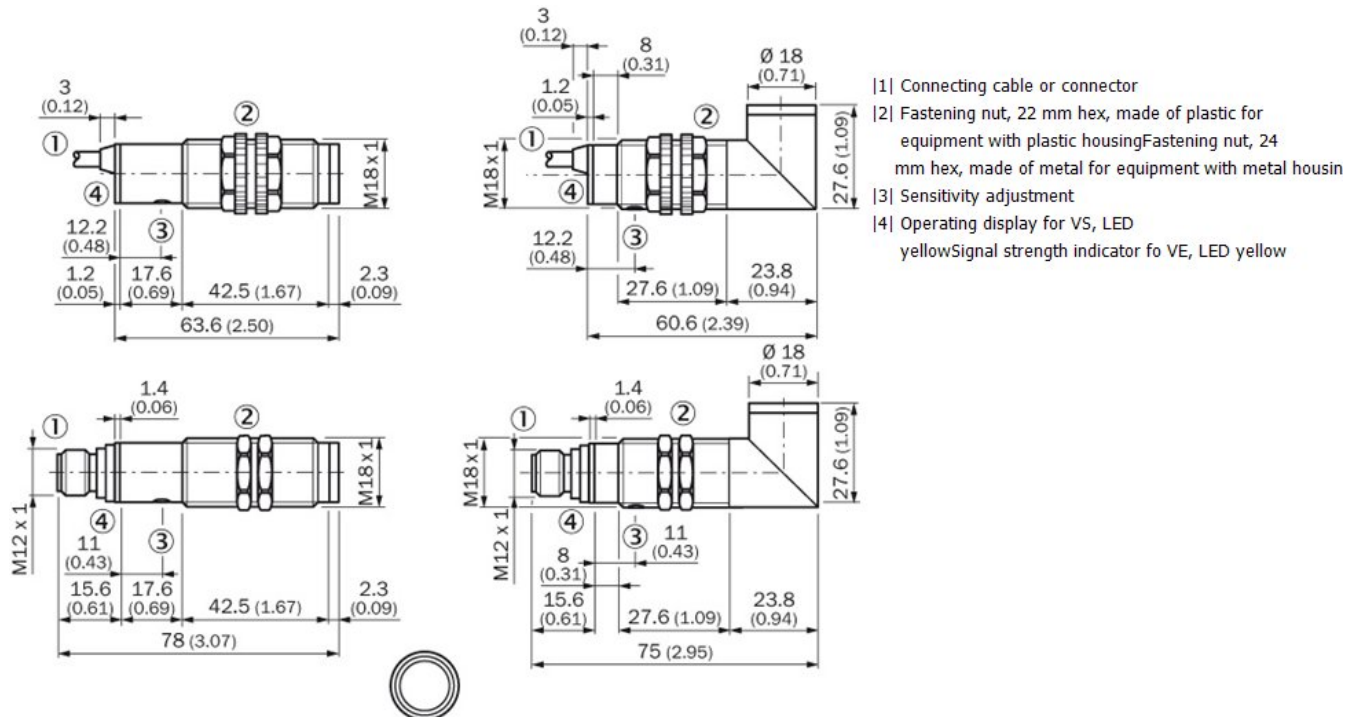
Open collector

Control wire open: dark-switching D.ON

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¹⁾ Limit values ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Without load ⁴⁾ Control wire open: dark-switching D.ON ⁵⁾ Signal transit time with resistive load ⁶⁾ With light/dark ratio 1:1 ⁷⁾ $A = V_S$ connections reverse-polarity protected ⁸⁾ B = inputs and output reverse-polarity protected ⁹⁾ C = interference suppression ¹⁰⁾ D = outputs overcurrent and short-circuit protected

Dimensional drawing

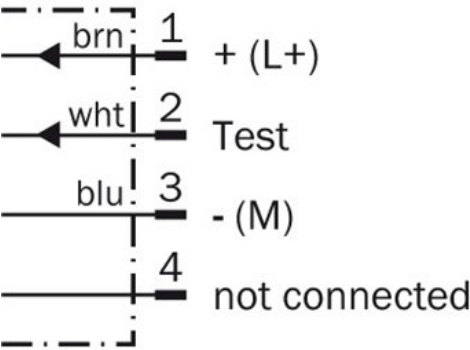


Adjustments possible

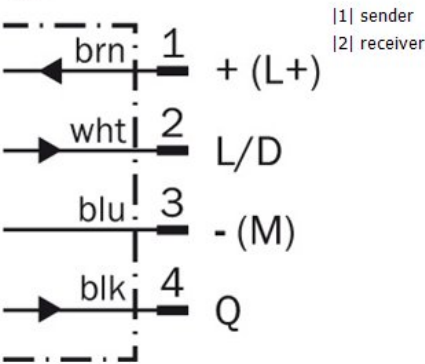


Connection diagram

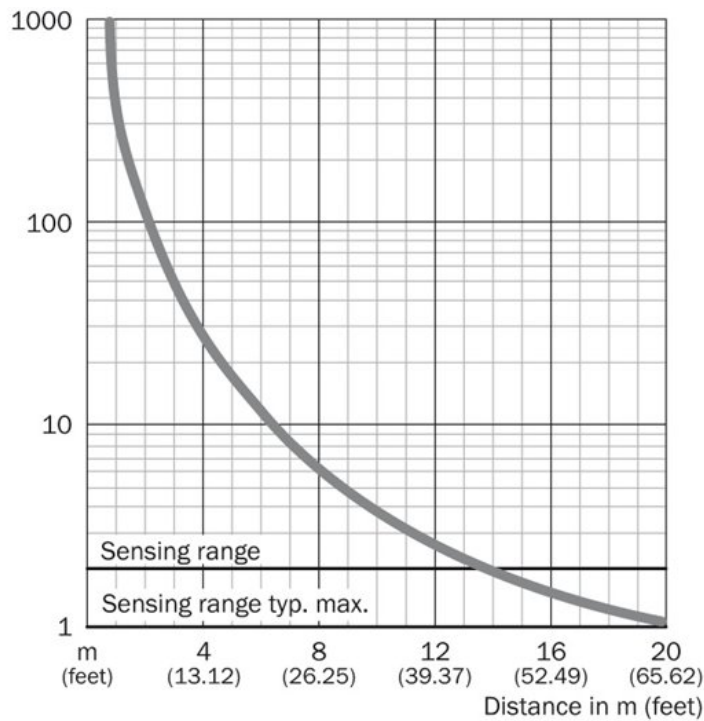
①



②



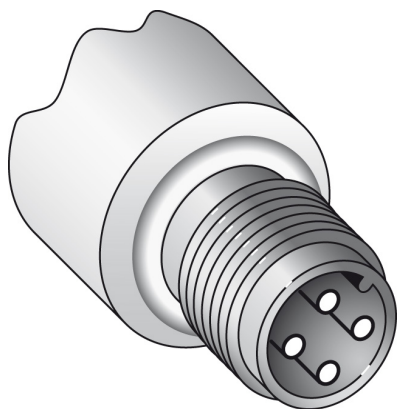
Characteristic curve



Sensing range diagram



Connection type



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