



Photoelectric sensors  
V12-2, Through-beam photoelectric sensor

VS/VE12-2P430



**Model Name** > VS/VE12-2P430  
**Part No.** > 6026224



*Illustration may differ*

**At a glance**

- Sensing distance up to 5.0 m
- M12 metal housing with an IP 67 enclosure rating
- Long sensing distances, short response times
- 2 teach-in modes: Standard teach mode for basic applications, precise teach mode with small hysteresis for special applications
- Adjustable light or dark switching as complementary outputs
- PNP or NPN output available

**Your benefits**

- The combination of a sender and receiver enables precise switching and positioning
- Reliable product detection over a long sensing distance up to 5 m improves machine performance
- Space-saving mounting due to M12 miniature housing with cable or M12 device connector
- IP 67-rated metal housing offers a long service life that withstands harsh environments, reducing maintenance time and costs



**Features**

Sensor/detection principle:	Through-beam photoelectric sensor
Housing design (light emission):	Cylindrical, straight
Housing length:	66.3 mm
Thread diameter (housing):	Round connector M12 x 1
Sensing range max.:	0 m ... 5 m
Sensing range:	0 m ... 4 m
Type of light:	Infrared light
Light source:	LED <sup>1)</sup>
Wave length:	880 nm
Angle of dispersion:	Ca. 1.4 °
Light spot size (distance):	Ø 100 mm (4 m)

<sup>1)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

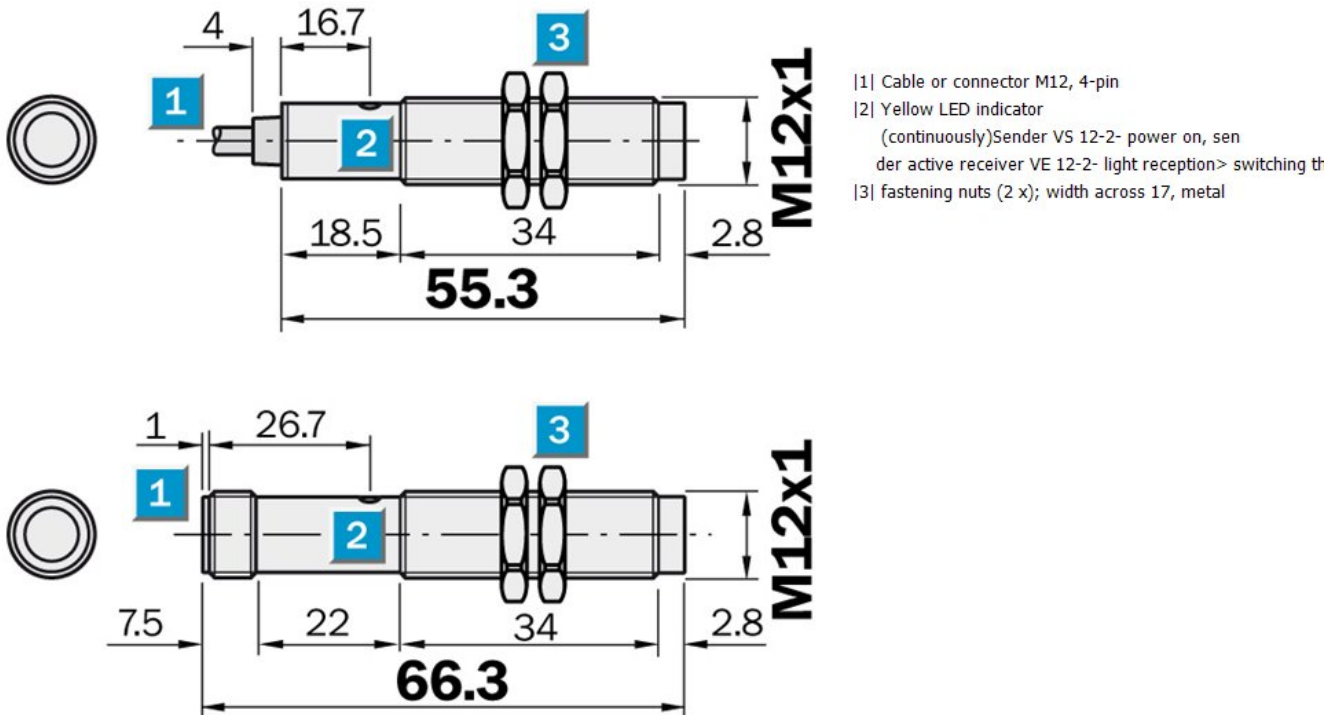
**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 <sup>1)</sup>
Ripple:	≤ 10 % <sup>2)</sup>
Power consumption:	20 <sup>3)</sup>

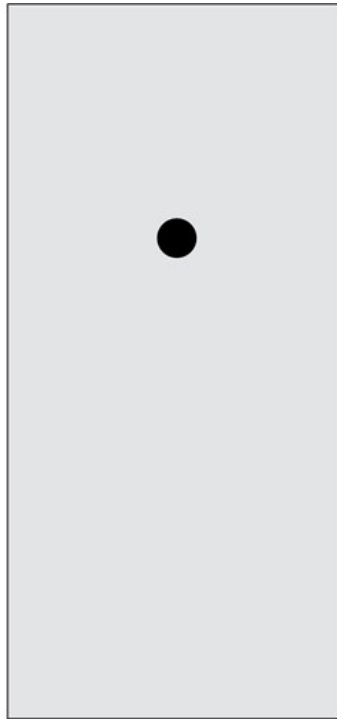
Output type:	PNP
Switching mode:	Light/dark-switching
Switching mode selector:	Selectable via L/D control wire
Output current I <sub>max</sub> .:	100 <sup>4)</sup>
Response time:	≤ 2 ms <sup>5)</sup>
Switching frequency:	250 <sup>6)</sup>
Connection type:	Connector M12, 4-pin
Circuit protection:::	A, B, C, D <sup>7) 8) 9) 10)</sup>
Protection class:	III
Weight:	36 g
Special device:	-
Housing material:	Nickel-plated brass/PA, Metal
Optics material:	PMMA
Enclosure rating:	IP 67
Ambient operating temperature:	-25 ... 70 °C
Ambient storage temperature:	-25 ... 70 °C

1) Limit values 2) May not exceed or fall short of V<sub>S</sub> tolerances 3) 4) Without load 5) Signal transit time with resistive load 6) With light/dark ratio 1:1 7) A = V<sub>S</sub> 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

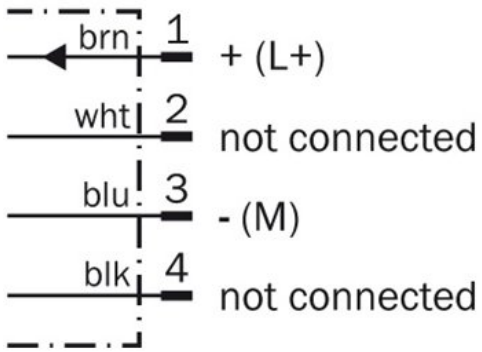


Adjustments possible

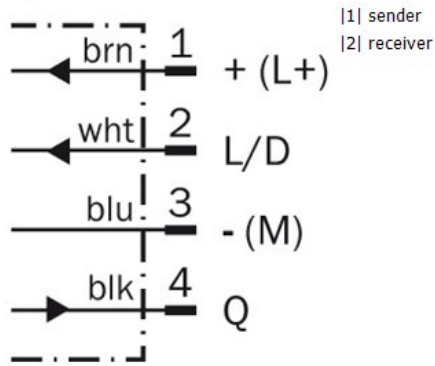


Connection diagram

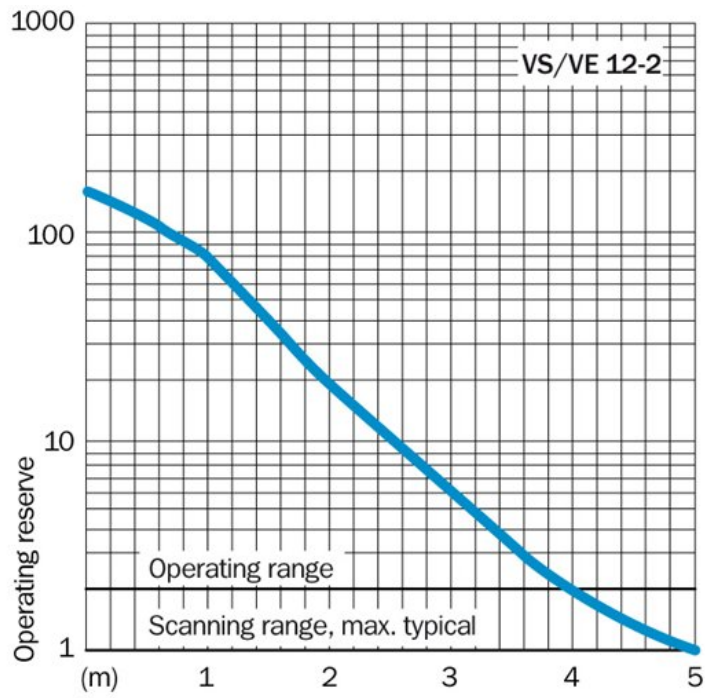
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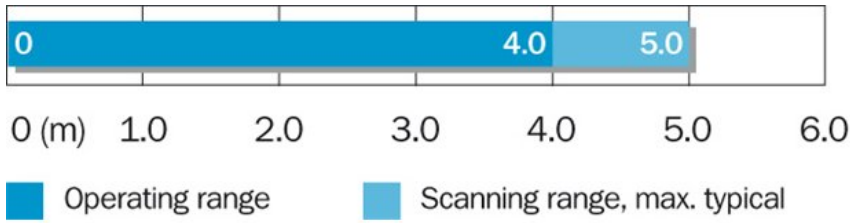
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### Characteristic curve



### Sensing range diagram



Connection type

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