



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 ¹⁾
Wave length:	880 nm
Angle of dispersion:	Ca. 1.4 °
Light spot size (distance):	Ø 100 mm (4 m)

¹⁾ Average service life of 100,000 h at T_A = +25 °C

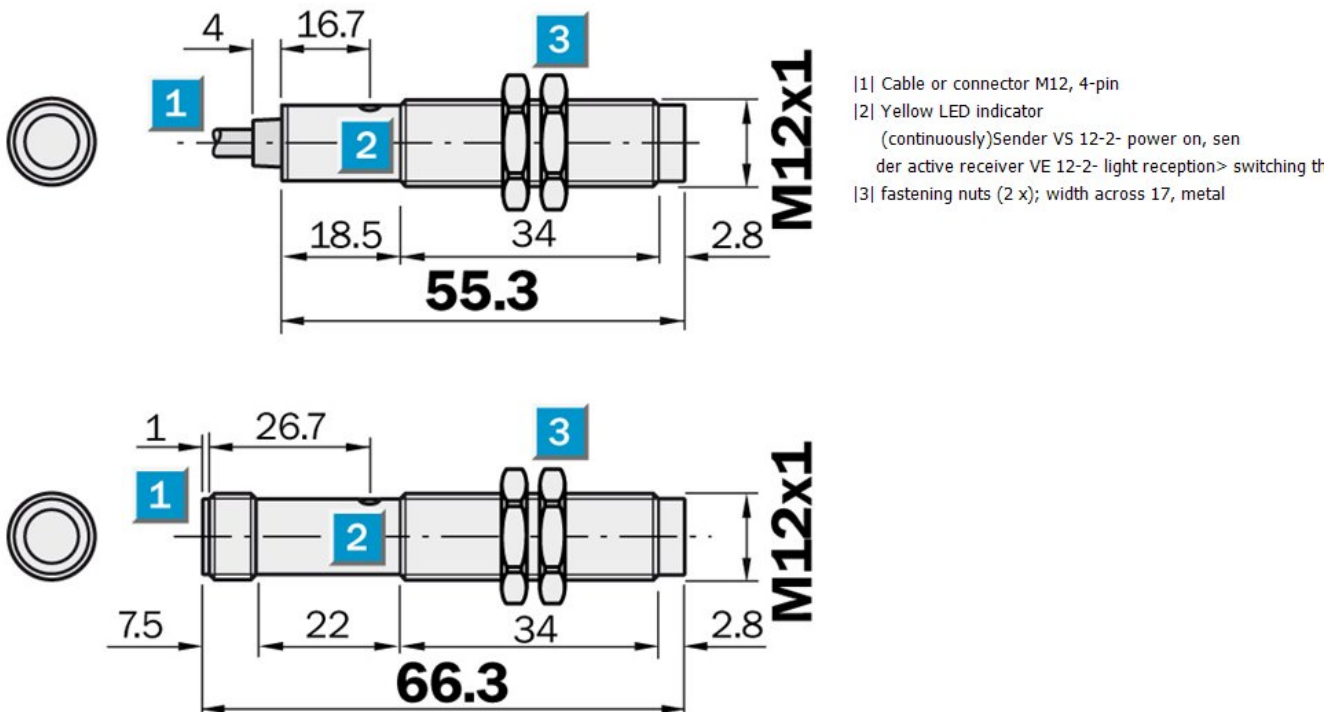
Mechanics/electronics

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

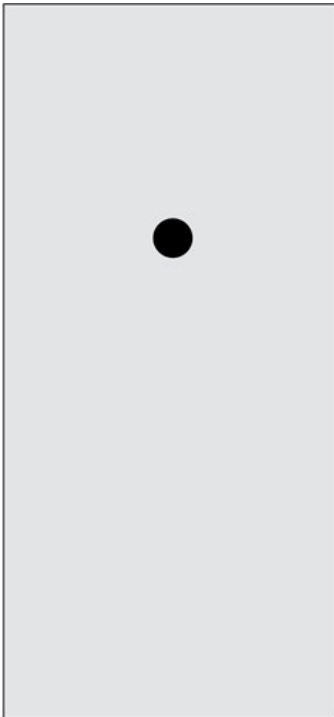
Output type:	PNP
Switching mode:	Light/dark-switching
Switching mode selector:	Selectable via L/D control wire
Output current I _{max} :	100 ⁴⁾
Response time:	≤ 2 ms ⁵⁾
Switching frequency:	250 ⁶⁾
Connection type:	Connector M12, 4-pin
Circuit protection:::	A, B, C, D ^{7) 8) 9) 10)}
Protection class:	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_S tolerances ^{3) 4)} Without load 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

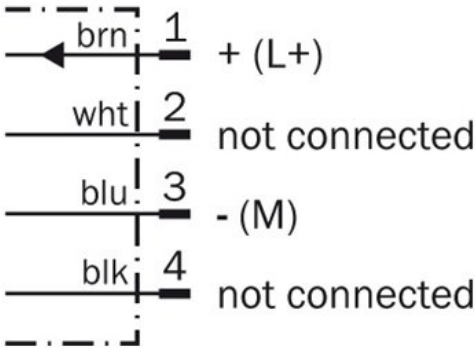


Adjustments possible

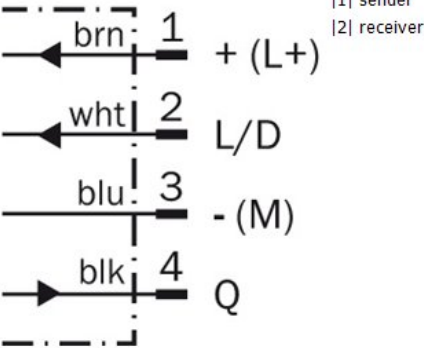


Connection diagram

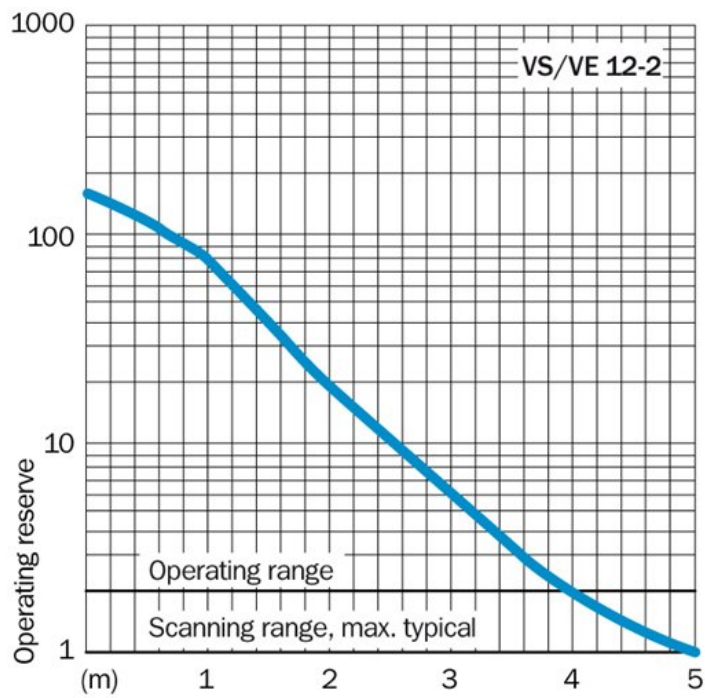
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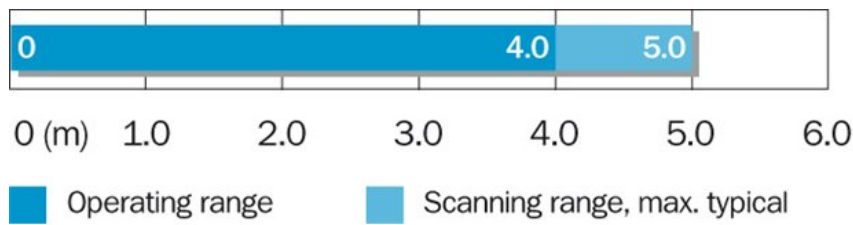
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Characteristic curve



Sensing range diagram



Connection type



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