



Model Number

VDM35-30-R/20/105/122

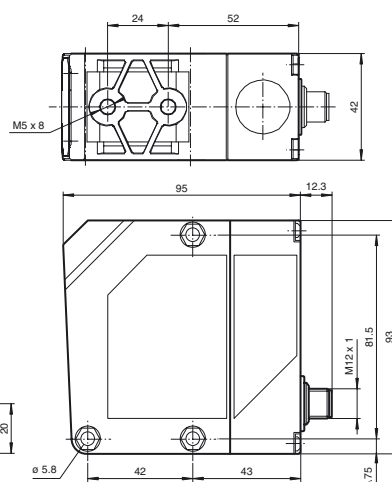
Distance sensor

with 5-pin, M12 x 1 connector

Features

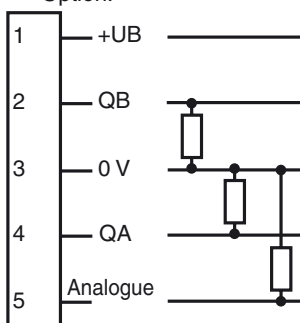
- Can be aligned using an integrated pilot laser
- Adjustable switch outputs
- Not sensitive to ambient light
- Analog output 4 mA ... 20 mA

Dimensions

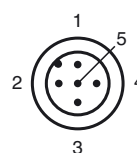


Electrical connection

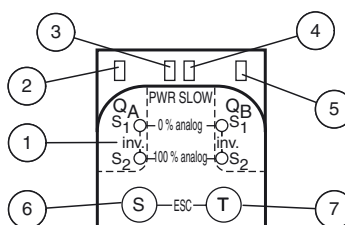
Option:



Pinout



Indicators/operating means



1	LED Menue	red
2	LED QA	yellow
3	LED Fast	orange
4	LED Power	green
5	LED QB	yellow
6	Button Set	
7	Button Toggle	

Technical data**General specifications**

Measurement range	0.2 ... 30 m
Reference target	OFR-100/100
Light source	laser diode
Light type	modulated visible red light modulated infrared light

Laser nominal ratings

Note	VISIBLE AND INVISIBLE LASER RADIATION , DO NOT STARE INTO BEAM
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Laser class	Measurement laser: 1 Alignment laser: 2
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Wave length	Measurement laser: 905 nm Alignment laser: 650 nm
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Beam divergence	Measurement laser: 2 mrad Alignment laser: 1 mrad
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Pulse length	Measurement laser: 6 ns Alignment laser: 0.25 µs
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Repetition rate	Measurement laser: 40 kHz Alignment laser: 1 kHz
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Maximum optical power output	Measurement laser: 1.8 W Alignment laser: 3 mW
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Measuring method	Time of flight measurement
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Diameter of the light spot	45 mm x 60 mm at a distance of 30 m
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Ambient light limit	5000 Lux
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Temperature influence	analog typ. 0.1 ‰/K, switch output typ. 0.05 ‰/K
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Indicators/operating means

Operation indicator	LED green
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Function indicator	LED yellow: switching state (2x) , LED orange : Operating mode
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Control elements	Control panel : Adjuster for switch point , Operating mode , Analog output (S - Set , T - Toggle)
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Parameterization indicator	LED red (4x)
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Electrical specifications

Operating voltage	U_B	18 ... 30 V DC , class 2
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Ripple		10 % within the supply tolerance
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No-load supply current	I_0	≤ 125 mA / 24 V DC
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Time delay before availability	t_v	≤ 300 ms
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Output

Switching type	light/dark on, switchable
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Signal output	2 PNP, short-circuit protected
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Switching current	max. 100 mA
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Measurement output	1 analog output 4 ... 20 mA, short-circuit/overload protected , $R_{max} = 500 \text{ Ohm}$
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Voltage drop	U_d	≤ 2.4 V
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Deviation of the characteristic curve	typ. ≤ ± 60 mm
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Switching frequency	f	Fast: 17 Hz / Slow: 8 Hz
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Response time		Fast: 30 ms / Slow: 65 ms
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Repeat accuracy	R	Fast: typ. ≤ ± 10 mm / Slow: typ. ≤ ± 5 mm
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Ambient conditions

Ambient temperature	-10 ... 50 °C (14 ... 122 °F)
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Storage temperature	-40 ... 80 °C (-40 ... 176 °F)
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Mechanical specifications

Protection degree	IP67
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Connection	M12 x 1 connector, 5-pin
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Material	
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Housing	ABS
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Optical face	PMMA
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Mass	200 g
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Compliance with standards and directives

Directive conformity	
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EMC Directive 2004/108/EC	EN 60947-5-2
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Standard conformity	
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Laser class	IEC 60825-1:2001
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Approvals and certificates

Approvals	CE, cULus
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Accessories**OMH-VDM35**

Mounting bracket

OMH-VDM35-01

Adjustment set series VDM35

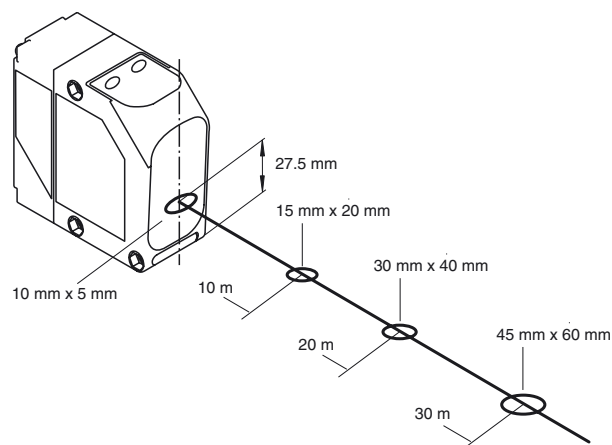
VDM35-AR

Alignment aid for VDM35 and VDM70 series

Other suitable accessories can be found at www.pepperl-fuchs.com

Curves/Diagrams

Light spot representation



Aligning of reflector

