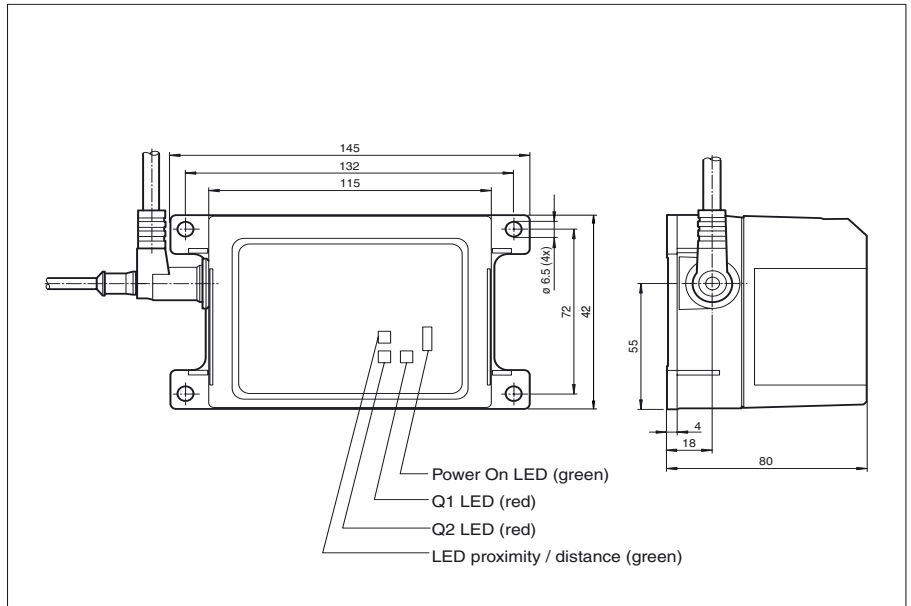




Dimensions



Model Number

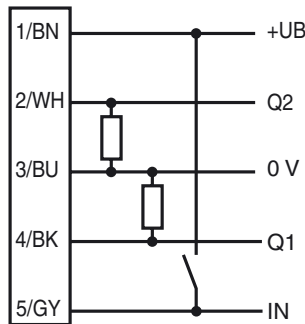
VDM54-6000-R/20/105

Distance measurement device
with 5-pin, M12 connector

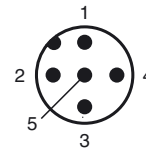
Features

- Adjustable switch outputs
- Not sensitive to ambient light
- Time-of-flight measurement

Electrical connection



Pinning according



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Technical data

General specifications

Light source	laser diode
Approvals	CE
Laser class	1 EN 60825-1
Sensing range	0 ... 6 m
Response delay	< 100 ms
Reference target	Reflector H100-2R
Light type	IR laser 905 nm
Ambient light limit	halogen light 50000 Lux

Indicators/operating means

Operating display	LED green
Function display	Switching state (output): 2x LED yellow Operating mode (Banking) : LED, green

Electrical specifications

Operating voltage	18 ... 30 V DC
Ripple	10 % within the supply tolerance
No-load supply current	$I_0 \leq 200 \text{ mA}$
Time delay before availability	$t_v \leq 300 \text{ ms}$

Input

Input signal	high: U_{B+} ; low: 0 V (for Banking near- / far-switching)
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Output

Switching type	dark ON
Signal output	2 pnp, short-circuit proof, protected against reverse polarity
Switching current	max. 200 mA
Voltage drop	$U_d \leq 2.4 \text{ V}$

Standard conformity

Standards	EN 60947-5-2
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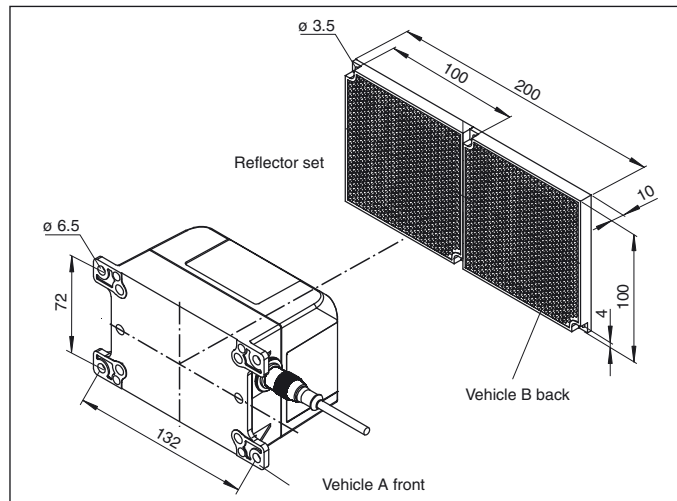
Ambient conditions

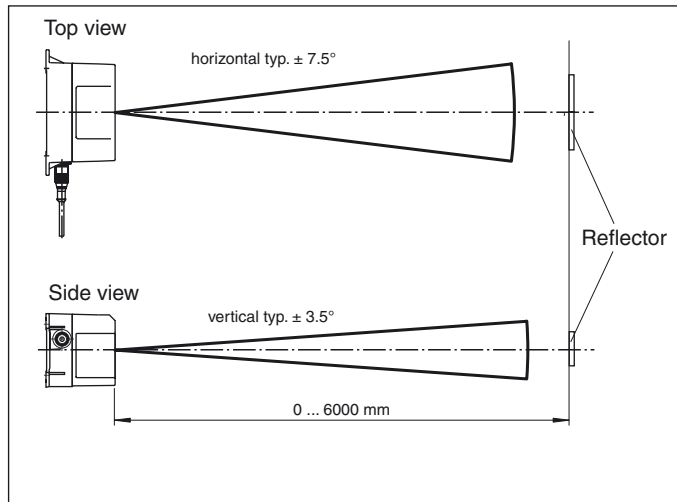
Ambient temperature	0 ... 50 °C (273 ... 323 K)
Storage temperature	-20 ... 70 °C (253 ... 343 K)

Mechanical specifications

Protection degree	IP54
Connection	connector M12 x 1, 5-pin
Material	
Housing	ABS
Mass	200 g

Curves/Diagrams





Adjustment

Banking near- / far-switching

E1 / Banking	Q ₁ switches when	Q ₂ switches when
0 V (LOW)	SP 1	SP 2
+ U _B (HIGH)	SP 3	SP 4

SP 1 / SP 2 / SP 3 / SP 4 = Distance setup

Example for near- / far-switching

E1 / Banking	Q ₁ switches when	Q ₂ switches when
0 V (LOW)	150 cm (SP 1)	450 cm (SP 2)
+ U _B (HIGH)	100 cm (SP 3)	150 cm (SP 4)

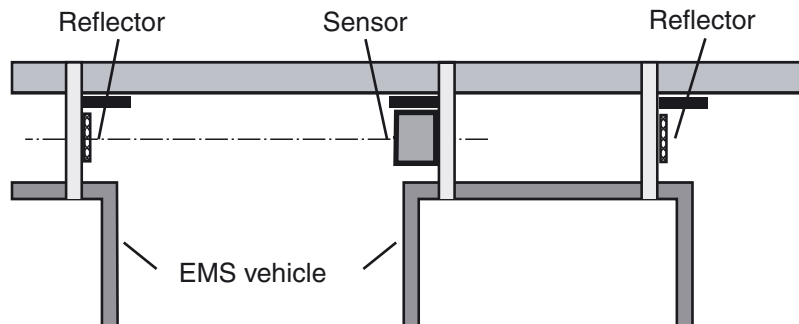
Input IN = LOW -> here large distance (vehicle loaded)

Q₂: controls slow motion

Q₁: stopps vehicle

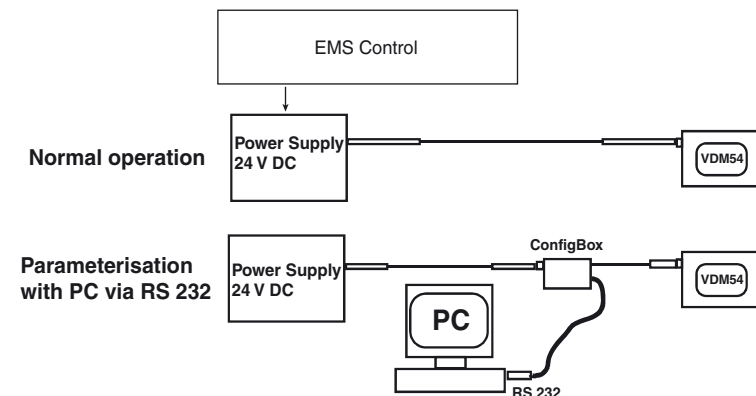
(In case of a wire break of IN the large distance is applied in this example)

Mounting example



Software

Setting with VDM Config
(Free download at www.pepperl-fuchs.com)



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