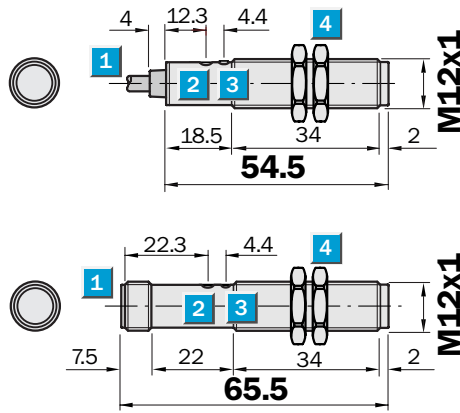


**Scanning distance**  
 0 ... 115 mm  
 0 ... 340 mm

Photoelectric proximity switches

- Sensitivity (scanning range) can be set per Teach-in at the “push of a button” or per control input C
- Minimum number of variants: Switching type L.ON or D.ON selectable per control input C
- Optic pre-failure message via operating reserve display

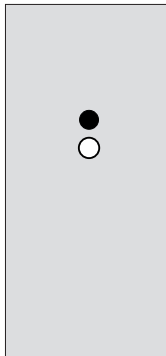
**Maßbild**



**Adjustments possible VT 12T-2**

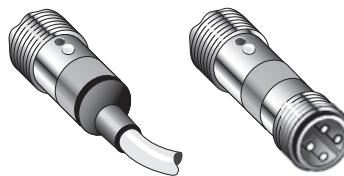
VT 12T-2P 112	VT 12T-2N 112
VT 12T-2P 410	VT 12T-2N 410
VT 12T-2P 132	VT 12T-2N 132
VT 12T-2P 430	VT 12T-2N 430

- 1 Cable or plug M12, 4-pin
- 2 Sensitivity adjustment (Teach-in button)
- 3 Yellow LED indicator:  
 – lights continuously: reception signal > reserve factor 2  
 – blinks: Reception signal < reserve factor 2 but > switching threshold 1
- 4 Mounting nuts (2x), SW 17, metal

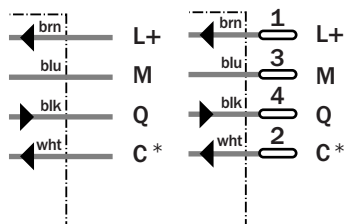


**Connection types**

VT 12T-2P 112	VT 12T-2P 410
VT 12T-2N 112	VT 12T-2N 410
VT 12T-2P 132	VT 12T-2P 430
VT 12T-2N 132	VT 12T-2N 430



4 x 0.14 mm<sup>2</sup>      4-pin, M12



\* Control input C, programming:  
 – Switching type L.ON/D.ON and  
 – External Teach-in  
 C = open (not assigned)  
 light-switching L.ON  
 C = + V<sub>S</sub>: dark-switching D.ON  
 C = 0 V: sensitivity setting per  
 “external Teach-in” active



**See chapter Accessories**  
 Cables and connectors  
 Mounting systems

Technical data		VT 12T-2	P 112	P 410	N 112	N 410	P 132	P 430	N 132	N 430
<b>Scanning distance</b> , max. typical <sup>1)</sup>	0 ... 115 mm									
	0 ... 340 mm									
Operating distance <sup>1)</sup>	2 ... 100 mm									
	2 ... 300 mm									
Sensitivity setting	Manual, per Teach-in button									
	Electronic, per control input C (0 V) <sup>2)</sup>									
<b>Light source</b> <sup>3)</sup> , <b>light type</b>	LED, infrared light									
Light spot diameter	Approx. 20 mm at 100 mm									
	Approx. 28 mm at 300 mm									
Angle of dispersion of sender	Approx. 11.4° (SD = max.),									
	Approx. 22.6° (SD = 1/2 max.)									
	Approx. 5.3° (SD = max.),									
	Approx. 11.2° (SD = 1/2 max.)									
<b>Supply voltage</b> $V_S$	10 ... 30 V DC <sup>4)</sup>									
Ripple <sup>5)</sup>	≤ 10 %									
Current consumption <sup>6)</sup>	≤ 20 mA									
<b>Switching outputs</b>	Q: PNP									
	Q: NPN									
Output current $I_A$ max.	≤ 100 mA									
Switching mode	Light-/Dark-switching selectable <sup>2)</sup>									
Response time <sup>7)</sup>	≤ 1.25 ms									
Switching frequency max. <sup>8)</sup>	400/s									
<b>Connection types</b>	Cable <sup>9)</sup>	PVC, 2 m, 4 x 0.14 mm <sup>2</sup> , Ø 3.75 mm								
	Plug	M12, 4-pin								
<b>VDE protection class</b> <sup>10)</sup>	□									
<b>Circuit protection</b> <sup>11)</sup>	A, B, C, D									
<b>Enclosure rating</b>	IP 67									
<b>Ambient temperature</b> $T_A$	Operation	- 25 °C ... + 70 °C								
	Storage	- 25 °C ... + 70 °C								
<b>Weight</b>	With cable	Approx. 54 g								
	With plug	Approx. 18 g								
<b>Housing material</b>	Housing:	Nickel-coated brass/PA								
	Optics:	PC								

<sup>1)</sup> Object to be detected with 90 % remission (relating to standard white in acc. with DIN 5033); 100 x 100 mm

<sup>2)</sup> Control input C  
 - L.ON/D.ON and  
 - external Teach-in  
 C = open: light-switching L.ON  
 C = +  $V_S$ : dark-switching D.ON  
 C = 0 V: Sensitivity setting per "external Teach-in" active

<sup>3)</sup> Average service life 100,000 h at  $T_A = + 25 °C$

<sup>4)</sup> Limit values

<sup>5)</sup> May not exceed or fall short of  $V_S$  tolerances

<sup>6)</sup> Without load

<sup>7)</sup> Signal transit time with resistive load

<sup>8)</sup> With light/dark ratio 1:1

<sup>9)</sup> Do not bend below 0 °C

<sup>10)</sup> Reference voltage 50 V DC

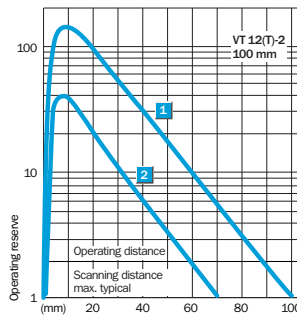
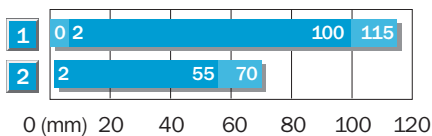
<sup>11)</sup> A =  $V_S$  connections reverse-polarity protected

B = Inputs and output reverse-polarity protected

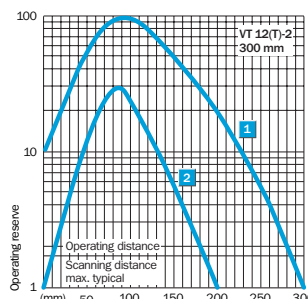
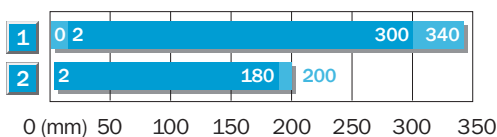
C = Interference pulse suppression

D = Outputs overload and short-circuit protected

**115 mm Scanning distance**



**340 mm Scanning distance**



■ Operating distance ■ Scanning distance, max. typical

- 1 Scanning distance on white, 90 % remission
- 2 Scanning distance on grey, 18 % remission

**Order information**

Type	Order no.
VT 12T-2P 112	6 026 211
VT 12T-2P 410	6 026 212
VT 12T-2N 112	6 026 209
VT 12T-2N 410	6 026 210
VT 12T-2P 132	6 026 215
VT 12T-2P 430	6 026 216
VT 12T-2N 132	6 026 213
VT 12T-2N 430	6 026 214