



V18

Widest portfolio of M18 photoelectric sensors

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Technical data overview

Dimensions (W x H x D)	18 mm x 18 mm x 63.6 mm 18 mm x 18 mm x 60.6 mm 18 mm x 18 mm x 78 mm 18 mm x 18 mm x 75 mm 18 mm x 18 mm x 79.4 mm 18 mm x 18 mm x 65.2 mm 18 mm x 18 mm x 88 mm 18 mm x 18 mm x 92 mm 18 mm x 18 mm x 96 mm 18 mm x 18 mm x 86 mm
Sensing range max.	3 mm ... 100 mm ¹⁾ 0 mm ... 50 mm ¹⁾ 30 mm ... 90 mm ¹⁾ 3 mm ... 200 mm ¹⁾ 5 mm ... 400 mm ¹⁾ 10 mm ... 800 mm ¹⁾ 0.05 m ... 3.7 m ²⁾ 0 m ... 20 m 25 mm ... 140 mm ¹⁾ 30 mm ... 92 mm ¹⁾ 2 mm ... 100 mm ¹⁾ 2 mm ... 200 mm ¹⁾ 2 mm ... 400 mm ¹⁾ 0.005 m ... 5 m ²⁾ 0.005 m ... 3.5 m ²⁾ 0.03 m ... 2.5 m ²⁾ 0 m ... 22 m
Light source	LED
Type of light	Infrared light / visible red light (depending on type)
Enclosure rating	IP67
Housing material	Metal Nickel-plated brass Plastic PBT/PC Metal Nickel-plated brass with plastic nuts
Adjustment	None Potentiometer, 270° Sensing range Potentiometer, 270° Sensitivity Potentiometer, 270°

¹⁾ Object with 90 % reflectance (referred to standard white, DIN 5033).

²⁾ Reflector C110A.

Product description

The V18 family has the widest portfolio of M18 sensors on the market. Users can choose from a variety of options, including sensors with or without sensitivity control, metal or plastic housings and straight or right-angle housing designs. Due to the wide variety of options, the V18 is an ideal solution for countless applications.

Some of these applications include detection of clear bottles on packaging machines, parts detection on metal forming presses and product detection on conveyors.

At a glance

- Photoelectric sensor family in a cylindrical M18 housing
- Widest portfolio of M18 photoelectric sensors
- Available with or without sensitivity control, with a metal or a plastic housing, straight or right-angle design, and 3 or 4-wire, AC and DC options

Web: <https://www.bolenscontrol.com/> - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com

Your benefits

- Simple, standardized design ensures easy mounting, alignment and replacement
- Low-cost solution for standard applications in material handling and packaging industries
- Variety of sensor models gives users the flexibility to choose the right solution based on their application requirements

Ordering information

Other models and accessories →

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background blanking
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 mm ... 50 mm	NPN	Potentiometer	Male connector M12, 4-pin	VTF18-3N5440	6012996
		None	Cable, 3-wire, 2 m ¹⁾	VTF18-3N5612	6013012
	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTF18-3P5212	6012967
			Male connector M12, 4-pin	VTF18-3P5740	6013041
		None	Male connector M12, 4-pin	VTF18-3P5640	6013023
3 mm ... 100 mm	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTF18-3P1212	6012823
				VTF18-3P1412	6012859
				VTF18-3P1712	6012895
			Male connector M12, 4-pin	VTF18-3P1240	6012825
				VTF18-3P1740	6012897
		None	Cable, 3-wire, 2 m ¹⁾	VTF18-3P1112	6012805
				VTF18-3P5612	6013021
			Male connector M12, 4-pin	VTF18-3P1140	6012807
				VTF18-3P1340	6012843
				VTF18-3P1640	6012879

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background blanking
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 mm ... 50 mm	NPN	None	Cable, 3-wire, 2 m ¹⁾	VTF18-3E5612	6013015
	PNP	Potentiometer	Male connector M12, 4-pin	VTF18-3F5240	6012972
				VTF18-3F5440	6013008
				VTF18-3F5740	6013044
		None	Cable, 3-wire, 2 m ¹⁾	VTF18-3F5612	6013024
			Male connector M12, 4-pin	VTF18-3F5140	6012954
				VTF18-3F5640	6013026

¹⁾ Do not bend below 0 °C.Web: <https://www.bolenscontrol.com/> - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
3 mm ... 100 mm	NPN	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTF18-3E1212	6012817
			Male connector M12, 4-pin	VTF18-3E1240	6012819
				VTF18-3E1740	6012891
		None	Cable, 3-wire, 2 m ¹⁾	VTF18-3E1112	6012799
				VTF18-3E1612	6012871
			Male connector M12, 4-pin	VTF18-3E1140	6012801
				VTF18-3E1640	6012873
				VTF18-3E1840	6012909
	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTF18-3F1212	6012826
				VTF18-3F1412	6012862
				VTF18-3F1712	6012898
				VTF18-3F1912	6012934
			Male connector M12, 4-pin	VTF18-3F1240	6012828
				VTF18-3F1440	6012864
				VTF18-3F1740	6012900
				VTF18-3F1940	6012936
		None	Cable, 3-wire, 2 m ¹⁾	VTF18-3F1112	6012808
				VTF18-3F1612	6012880
				VTF18-3F1812	6012916
			Male connector M12, 4-pin	VTF18-3F1140	6012810
				VTF18-3F1340	6012846
				VTF18-3F1640	6012882
				VTF18-3F1840	6012918

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
25 mm ... 140 mm	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTB18-4N1212	6030190
				VTB18-4N1212S01	6037542
			Male connector M12, 4-pin	VTB18-4N1240	6030191
				VTB18-4N1240S01	6037543
	PNP	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTB18-4P1212	6030188
				VTB18-4P1212S01	6037540
			Male connector M12, 4-pin	VTB18-4P1240	6030189
				VTB18-4P1240S01	6037541
30 mm ... 90 mm	PNP	Potentiometer	Male connector M12, 4-pin	VTF18-0P0040S01	6022494
30 mm ... 92 mm	PNP	Potentiometer	Male connector M12, 4-pin	VTB18-0P0240S01	6032862

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background blanking
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 mm ... 50 mm	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTF18-4N5212	6012964
			Male connector M12, 4-pin	VTF18-4N5240	6012966
		None	Male connector M12, 4-pin	VTF18-4N5640	6013020
	PNP	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTF18-4P5212	6012973
				VTF18-4P5412	6013009
				VTF18-4P5712	6013045
			Male connector M12, 4-pin	VTF18-4P5240	6012975
				VTF18-4P5440	6013011
				VTF18-4P5740	6013047
				VTF18-4P5940	6013083
		None	Cable, 4-wire, 2 m ¹⁾	VTF18-4P5612	6013027
				VTF18-4P5812	6013063
			Male connector M12, 4-pin	VTF18-4P5640	6013029

¹⁾ Do not bend below 0 °C.

Web: <https://www.bolenscontrol.com/> - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
2 mm ... 100 mm	NPN, PNP	None	Cable, 3-wire, 2 m ¹⁾	VT18-204172	6012018
3 mm ... 100 mm	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTF18-4N1212	6012820
				VTF18-4N1712	6012892
			Male connector M12, 4-pin	VTF18-4N1240	6012822
				VTF18-4N1740	6012894
		None	Cable, 4-wire	VTF18-4N1140	6012804
			Cable, 4-wire, 2 m ¹⁾	VTF18-4N1112	6012802
				VTF18-4N1112S01	6022491
				VTF18-4N1612	6012874
				VTF18-4N1812	6012910
			Male connector M12, 4-pin	VTF18-4N1640	6012876
				VTF18-4N1840	6012912
	PNP	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTF18-4P1212	6012829
				VTF18-4P1412	6012865
				VTF18-4P1712	6012901
				VTF18-4P1912	6012937
			Male connector M12, 4-pin	VTF18-4P1240	6012831
				VTF18-4P1440	6012867
				VTF18-4P1740	6012903
				VTF18-4P1940	6012939
		None	Cable, 4-wire	VTF18-4P1140	6012813
			Cable, 4-wire, 2 m ¹⁾	VTF18-4P1112	6012811
				VTF18-4P1612	6012883
				VTF18-4P1812	6012919
			Male connector M12, 4-pin	VTF18-4P1340	6012849
				VTF18-4P1640	6012885
				VTF18-4P1840	6012921

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Energetic
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
10 mm ... 800 mm	NPN	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTE18-3E8212	6013105
			Male connector M12, 4-pin	VTE18-3E8240	6013107
	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTE18-3F8212	6013114
				VTE18-3F8412	6013150
				VTE18-3F8712	6013186
				VTE18-3F8912	6013222
			Male connector M12, 4-pin	VTE18-3F8240	6013116
				VTE18-3F8440	6013152
				VTE18-3F8740	6013188
				VTE18-3F8940	6013224
	None	None	Cable, 3-wire, 2 m ¹⁾	VTE18-3F8612	6013168
3 mm ... 200 mm	NPN	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTE18-3E2212	6013393
			Male connector M12, 4-pin	VTE18-3E2240	6013395
		None	Cable, 3-wire, 2 m ¹⁾	VTE18-3E2112	6013375
			Male connector M12, 4-pin	VTE18-3E2640	6013449
	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTE18-3F2212	6013402
				VTE18-3F2412	6013438
				VTE18-3F2712	6013474
				VTE18-3F2240	6013404
			Male connector M12, 4-pin	VTE18-3F2440	6013440
				VTE18-3F2740	6013476
				VTE18-3F2940	6013512
		None	Cable, 3-wire, 2 m ¹⁾	VTE18-3F2112	6013384
				VTE18-3F2612	6013456
			Male connector M12, 4-pin	VTE18-3F2140	6013386
				VTE18-3F2640	6013458
				VTE18-3F2840	6013494

¹⁾ Do not bend below 0 °C.

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
5 mm ... 400 mm	NPN	Potentiometer	Male connector M12, 4-pin	VTE18-3E4240	6013251
		None	Cable, 3-wire, 2 m ¹⁾	VTE18-3E4612	6013303
			Male connector M12, 4-pin	VTE18-3E4140	6013233
	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTE18-3F4212	6013258
				VTE18-3F4412	6013294
				VTE18-3F4712	6013330
			Cable, 3-wire, 5 m ¹⁾	VTE18-3F4715	6013331
				VTE18-3F4240	6013260
			Male connector M12, 4-pin	VTE18-3F4440	6013296
				VTE18-3F4740	6013332
				VTE18-3F4940	6013368
		None	Cable, 3-wire, 2 m ¹⁾	VTE18-3F4112	6013240
				VTE18-3F4612	6013312
			Male connector M12, 4-pin	VTE18-3F4140	6013242
				VTE18-3F4640	6013314
				VTE18-3F4840	6013350

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Energetic
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
10 mm ... 800 mm	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTE18-3P8712	6013183
			Male connector M12, 4-pin	VTE18-3P8240	6013113
		None	Male connector M12, 4-pin	VTE18-3P8340	6013131
				VTE18-3P8640	6013167
3 mm ... 200 mm	NPN	None	Cable, 3-wire, 2 m ¹⁾	VTE18-3N2612	6013444
	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTE18-3P2212	6013399
			Male connector M12, 4-pin	VTE18-3P2240	6013401
		None	Cable, 3-wire, 2 m ¹⁾	VTE18-3P2612	6013453
5 mm ... 400 mm	NPN	None	Cable, 3-wire, 2 m ¹⁾	VTE18-3N4612	6013300
			Male connector M12, 4-pin	VTE18-3N4140	6013230
				VTE18-3N4640	6013302
	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VTE18-3P4712	6013327
				VTE18-3P4912	6013363
			Male connector M12, 4-pin	VTE18-3P4240	6013257
				VTE18-3P4440	6013293
				VTE18-3P4740	6013329
		None	Cable, 3-wire, 2 m ¹⁾	VTE18-3P4112	6013237
				VTE18-3P4612	6013309
			Male connector M12, 4-pin	VTE18-3P4140	6013239

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Energetic
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
10 mm ... 800 mm	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTE18-4N8212	6013108
				VTE18-4N8712	6013180
				VTE18-4N8912	6013216
			Male connector M12, 4-pin	VTE18-4N8240	6013110
				VTE18-4N8440	6013146
				VTE18-4N8740	6013182
		None	Cable, 4-wire, 2 m ¹⁾	VTE18-4N8112	6013090
	PNP	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTE18-4P8212	6013117
				VTE18-4P8412	6013153
				VTE18-4P8712	6013189
				VTE18-4P8912	6013225
			Male connector M12, 4-pin	VTE18-4P8240	6013119
				VTE18-4P8740	6013191
				VTE18-4P8940	6013227
		None	Cable, 4-wire, 2 m ¹⁾	VTE18-4P8112	6013099
				VTE18-4P8612	6013171
2 mm ... 100 mm	PNP	None	Male connector M12, 4-pin	VT18-2P4420S02	6011641
3 mm ... 200 mm	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTE18-4N2212	6013396

¹⁾ Do not bend below 0 °C.

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
				VTE18-4N2412	6013432
				VTE18-4N2712	6013468
				VTE18-4N2912	6013504
			Male connector M12, 4-pin	VTE18-4N2240	6013398
		None	Cable, 4-wire, 2 m ¹⁾	VTE18-4N2612	6013450
			Male connector M12, 4-pin	VTE18-4N2340	6013416
				VTE18-4N2640	6013452
	PNP	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTE18-4P2212	6013405
				VTE18-4P2412	6013441
				VTE18-4P2712	6013477
				VTE18-4P2912	6013513
			Male connector M12, 4-pin	VTE18-4P2240	6013407
				VTE18-4P2240S01	6044589
				VTE18-4P2440	6013443
				VTE18-4P2740	6013479
				VTE18-4P2940	6013515
		None	Cable, 4-wire, 2 m ¹⁾	VTE18-4P2112	6013387
				VTE18-4P2612	6013459
			Male connector M12, 4-pin	VTE18-4P2140	6013389
				VTE18-4P2640	6013461
5 mm ... 400 mm	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTE18-4N4212	6013252
				VTE18-4N4412	6013288
				VTE18-4N4712	6013324
			Cable, 4-wire, 5 m ¹⁾	VTE18-4N4215	6013253

¹⁾ Do not bend below 0 °C.

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
			Male connector M12, 4-pin	VTE18-4N4240	6013254
				VTE18-4N4440	6013290
				VTE18-4N4740	6013326
				VTE18-4N4940	6013362
		None	Cable, 4-wire, 2 m ¹⁾	VTE18-4N4612	6013306
				VTE18-4N4812	6013342
			Male connector M12, 4-pin	VTE18-4N4640	6013308
	PNP	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTE18-4P4212	6013261
				VTE18-4P4412	6013297
				VTE18-4P4712	6013333
				VTE18-4P4912	6013369
			Male connector M12, 4-pin	VTE18-4P4240	6013263
				VTE18-4P4440	6013299
				VTE18-4P4740	6013335
				VTE18-4P4940	6013371
		None	Cable, 4-wire, 2 m ¹⁾	VTE18-4P8440	6013155
				VTE18-4P4612	6013315
			Male connector M12, 4-pin	VTE18-4P4812	6013351
				VTE18-4P4140	6013245
				VTE18-4P4640	6013317
				VTE18-4P4840	6013353

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0.05 m ... 3.7 m	NPN	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VL18-3N3212	6013534
				VL18-3N3412	6013570
			Male connector M12, 4-pin	VL18-3N3440	6013572
				VL18-3N3940	6013644
		None	Cable, 3-wire, 2 m ¹⁾	VL18-3N3112	6013516
				VL18-3N3612	6013588
				VL18-3N3812	6013624

¹⁾ Do not bend below 0 °C.

Web: <https://www.bolenscontrol.com/> - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
	PNP	Potentiometer	Male connector M12, 4-pin	VL18-3N3140	6013518
				VL18-3N3340	6013554
				VL18-3N3640	6013590
				VL18-3N3840	6013626
			Cable, 3-wire, 2 m ¹⁾	VL18-3P3212	6013543
				VL18-3P3712	6013615
				VL18-3P3912	6013651
			Male connector M12, 4-pin	VL18-3P3240	6013545
				VL18-3P3440	6013581
				VL18-3P3740	6013617
				VL18-3P3940	6013653
		None	Cable, 3-wire, 2 m ¹⁾	VL18-3P3112	6013525
				VL18-3P3312	6013561
				VL18-3P3612	6013597
				VL18-3P3812	6013633
			Cable, 3-wire, 5 m ¹⁾	VL18-3P3115	6013526
			Male connector M12, 4-pin	VL18-3P3140	6013527
				VL18-3P3340	6013563
				VL18-3P3640	6013599
				VL18-3P3840	6013635

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0.05 m ... 3.7 m	NPN	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VL18-3E3212	6013537
		None	Cable, 3-wire, 2 m ¹⁾	VL18-3E3612	6013591
			Male connector M12, 4-pin	VL18-3E3140	6013521
				VL18-3E3340	6013557
				VL18-3E3640S01	6022490
	PNP	Potentiometer	Male connector M12, 4-pin	VL18-3F3240	6013548
				VL18-3F3440	6013584
				VL18-3F3740	6013620
				VL18-3F3940	6013656
		None	Cable, 3-wire, 2 m ¹⁾	VL18-3F3112	6013528
				VL18-3F3612	6013600
				VL18-3F3812	6013636
			Cable, 3-wire, 5 m ¹⁾	VL18-3F3815	6013637
				VL18-3F3140	6013530
			Male connector M12, 4-pin	VL18-3F3340	6013566
				VL18-3F3640	6013602
				VL18-3F3840	6013638

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0.05 m ... 3.7 m	PNP	None	Male connector M12, 4-pin	VL18-3P6340	6022488

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0.03 m ... 2.5 m	PNP	None	Male connector M12, 4-pin	VL18-2P4470S02	6011640
0.05 m ... 3.7 m	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VL18-4N3212	6013540

¹⁾ Do not bend below 0 °C.

Web: <https://www.bolenscontrol.com/> - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
				VL18-4N3412	6013576
				VL18-4N3712	6013612
			Male connector M12, 4-pin	VL18-4N3240	6013542
				VL18-4N3440	6013578
				VL18-4N3740	6013614
				VL18-4N3940	6013650
				VL18-4N3112	6013522
				VL18-4N3612	6013594
		None	Cable, 4-wire, 2 m ¹⁾	VL18-4N3115	6013523
				VL18-4N3115	6013523
			Male connector M12, 4-pin	VL18-4N3140	6013524
				VL18-4N3640	6013596
				VL18-4N3840	6013632
	PNP	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VL18-4P3212	6013549
				VL18-4P3412	6013585
				VL18-4P3712	6013621
				VL18-4P3912	6013657
			Male connector M12, 4-pin	VL18-4P3240	6013551
				VL18-4P3440	6013587
				VL18-4P3740	6013623
				VL18-4P3940	6013659
		None	Cable, 4-wire, 2 m ¹⁾	VL18-4P3112	6013531
				VL18-4P3312	6013567
				VL18-4P3612	6013603
				VL18-4P3812	6013639
			Male connector M12, 4-pin	VL18-4P3140	6013533
				VL18-4P3340	6013569
				VL18-4P3640	6013605
				VL18-4P3840	6013641

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0.05 m ... 3.7 m	NPN	None	Cable, 4-wire, 2 m ¹⁾	VL18-4N6112	6022445
	PNP	None	Cable, 4-wire, 2 m ¹⁾	VL18-4P6612	6022489
			Male connector M12, 4-pin	VL18-4P6640	6022487

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Through-beam photoelectric sensor
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 20 m	NPN	None	Cable, 3-wire, 2 m ¹⁾	VS/VE18-3N3112	6013660
			Male connector M12, 4-pin	VS/VE18-3N3640	6013734
				VS/VE18-3N3840	6013770
	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VS/VE18-3P3212	6013687
			Male connector M12, 4-pin	VS/VE18-3P3240	6013689
				VS/VE18-3P3440	6013725
				VS/VE18-3P3740	6013761
				VS/VE18-3P3940	6013797
		None	Cable, 3-wire, 2 m ¹⁾	VS/VE18-3P3112	6013669
				VS/VE18-3P3312	6013705
				VS/VE18-3P3612	6013741
				VS/VE18-3P3812	6013777
			Male connector M12, 4-pin	VS/VE18-3P3140	6013671
				VS/VE18-3P3340	6013707
				VS/VE18-3P3640	6013743
				VS/VE18-3P3840	6013779

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Through-beam photoelectric sensor
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 20 m	NPN	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VS/VE18-3E3712	6013753
			Male connector M12, 4-pin	VS/VE18-3E3240	6013683
		None	Cable, 3-wire, 2 m ¹⁾	VS/VE18-3E3612	6013735
			Male connector M12, 4-pin	VS/VE18-3E3640	6013737
	PNP	Potentiometer	Cable, 3-wire, 2 m ¹⁾	VS/VE18-3F3212	6013690
				VS/VE18-3F3412	6013726
			Male connector M12, 4-pin	VS/VE18-3F3240	6013692
				VS/VE18-3F3440	6013728
				VS/VE18-3F3740	6013764
				VS/VE18-3F3940	6013800
		None	Cable, 3-wire, 2 m ¹⁾	VS/VE18-3F3112	6013672
				VS/VE18-3F3612	6013744
			Male connector M12, 4-pin	VS/VE18-3F3140	6013674
				VS/VE18-3F3340	6013710
				VS/VE18-3F3640	6013746

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Through-beam photoelectric sensor
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 20 m	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VS/VE18-4N3212	6013684
				VS/VE18-4N3712	6013756
			Male connector M12, 4-pin	VS/VE18-4N3240	6013686
				VS/VE18-4N3740	6013758
		None	Cable, 4-wire, 2 m ¹⁾	VS/VE18-4N3112	6013666
				VS/VE18-4N3612	6013738

¹⁾ Do not bend below 0 °C.

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
	PNP		Male connector M12, 4-pin	VS/VE18-4N3140	6013668
				VS/VE18-4N3340	6013704
				VS/VE18-4N3640	6013740
				VS/VE18-4N3840	6013776
		Potentiometer	Cable, 4-wire, 2 m ¹⁾	VS/VE18-4P3212	6013693
				VS/VE18-4P3412	6013729
				VS/VE18-4P3712	6013765
				VS/VE18-4P3912	6013801
			Male connector M12, 4-pin	VS/VE18-4P3240	6013695
				VS/VE18-4P3440	6013731
				VS/VE18-4P3740	6013767
				VS/VE18-4P3940	6013803
		None	Cable, 4-wire, 2 m ¹⁾	VS/VE18-4P3112	6013675
				VS/VE18-4P3312	6013711
				VS/VE18-4P3612	6013747
				VS/VE18-4P3812	6013783
			Male connector M12, 4-pin	VS/VE18-2P4440S02	6011642
				VS/VE18-4P3140	6013677
				VS/VE18-4P3340	6013713
				VS/VE18-4P3640	6013749
				VS/VE18-4P3840	6013785

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
25 mm ... 140 mm	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTB18-3N1212	6030197
			Male connector M12, 4-pin	VTB18-3N1240	6030199
	PNP	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTB18-3P1212	6030193
			Male connector M12, 4-pin	VTB18-3P1240	6030195

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
25 mm ... 140 mm	NPN	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTB18-3E1212	6030196
			Male connector M12, 4-pin	VTB18-3E1240	6030198
	PNP	Potentiometer	Cable, 4-wire, 2 m ¹⁾	VTB18-3F1212	6030192
			Male connector M12, 4-pin	VTB18-3F1240	6030194

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Energetic
- **Light source:** LED
- **Voltage type:** AC
- **Switching mode:** Light switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
2 mm ... 100 mm	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VT18-2T1112	6011370
			Male connector M12, 4-pin	VT18-2T1410	6011373
2 mm ... 200 mm	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VT18-2T1132	6011371
			Male connector M12, 4-pin	VT18-2T1430	6011374

¹⁾ Do not bend below 0 °C.

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
2 mm ... 400 mm	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VT18-2T1152	6011372
			Male connector M12, 4-pin	VT18-2T1450	6011375

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Energetic
- **Light source:** LED
- **Voltage type:** AC
- **Switching mode:** Dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
2 mm ... 100 mm	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VT18-2T2112	6022094
			Cable, 3-wire, 5 m ¹⁾	VT18-2T2115	6040902
			Male connector M12, 4-pin	VT18-2T2410	6022095
2 mm ... 200 mm	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VT18-2T2132	6022096
			Male connector M12, 4-pin	VT18-2T2430	6022097
2 mm ... 400 mm	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VT18-2T2152	6022098
			Male connector M12, 4-pin	VT18-2T2450	6022099

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light source:** LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
2 mm ... 100 mm	NPN, PNP	None	Male connector M12, 4-pin	VT18-204470	6012019

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light source:** LED
- **Voltage type:** AC
- **Switching mode:** Light switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0.005 m ... 3.5 m	TRIAC	None	Male connector M12, 4-pin	VL18-2T1460	6022093

¹⁾ Do not bend below 0 °C.

Web: <https://www.bolenscontrol.com/> - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0.005 m ... 5 m	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VL18-2T1132	6022090
			Male connector M12, 4-pin	VL18-2T1430	6022091

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light source:** LED
- **Voltage type:** AC
- **Switching mode:** Dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0.005 m ... 3.5 m	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VL18-2T2162	6011377
			Male connector M12, 4-pin	VL18-2T2460	6011379
0.005 m ... 5 m	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VL18-2T2132	6011376
			Male connector M12, 4-pin	VL18-2T2430	6011378

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light source:** LED
- **Voltage type:** AC
- **Switching mode:** Light switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0.005 m ... 3.5 m	TRIAC	None	Cable, 3-wire, 2 m ¹⁾	VL18-2T1162	6022092

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Through-beam photoelectric sensor
- **Light source:** LED
- **Voltage type:** AC
- **Switching mode:** Light switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 22 m	TRIAC	None	Cable, 3-wire, 2 m ^{1) 2)}	VS/VE18-2T1132	6021162
			Male connector M12, 4-pin	VS/VE18-2T1430	6021163

¹⁾ Sender: 2-wire cable.

²⁾ Do not bend below 0 °C.

- **Sensor principle:** Through-beam photoelectric sensor
- **Light source:** LED
- **Voltage type:** AC
- **Switching mode:** Dark switching
- **Type of light:** Infrared light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 22 m	TRIAC	None	Cable, 3-wire, 2 m ¹⁾ ²⁾	VS/VE18-2T2132	6011380
			Male connector M12, 4-pin	VS/VE18-2T2430	6011381

¹⁾ Sender: 2-wire cable.

²⁾ Do not bend below 0 °C.

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

SICK
Sensor Intelligence.