

A rounded concept, not only economically.

Cylindrical photoelectric switches offer the benefits of very fast commissioning and compact design. Moreover, the V180-2 series is the answer to all commercial challenges requiring the use of cylindrical photoelectric switches.

Quick selection of the appropriate version: the product range is adapted to essential market requirements. Different versions are available: photoelectric proximity switches in three different scanning distance ranges, as well as photoelectric reflex switches and through-beam photoelectric switches. The matching product range allows fast and accurate selection of the correct version for the problem.

Top performance in a universal application environment: the scanning ranges and associated operating reserves provide reliable solutions for many applications. A fast response time also enables accurate detection in dynamic processes and for objects at high speeds.

Red light and visible light spot: the innovative red light sender diode assists with fast adjustment and commissioning, even in bright ambient conditions. The light spot is homogeneous and extremely bright, making alignment of the sensors to different objects very easy and comfortable in any situation.

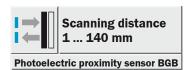
360° display: operational performance can be visualised using the two LEDs on the sensor, enabling fast and direct feedback even when mounted in a restricted space.



Benefits at a glance

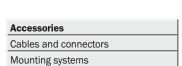
- Fast commissioning
- · Compact design
- Fast response time
- Innovative red light sender diode
- 360° LED indication





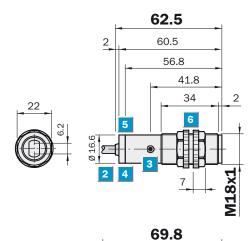
- Photoelectric proximity switches with focussed optics and background blanking (BGB)
- Red light as alignment aid
- Adjustable sensitivity
- LED indicator: switching output active and operation reserve

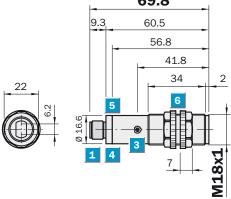




(€

Dimensional drawing





Adjustments possible All types

- M12 plug, 4-pin
 - Connector cable 2 m
- 3 Sensitivity control 270°
- 4 Orange LED indicator: switching output active
- 5 Green LED indicator, Stability indicator:
 - LED lights continuously:light reception < 0.9/> 1.1
 - LED off: light reception > 0.9 ... < 1.1
- 6 Mounting nuts (2 x); SW22, PC



 \ominus

Connection types

 VTF180-2N42417
 VTF180-2N41117

 VTF180-2P42417
 VTF180-2P41117



4-pin, M12



 $4 \times 0.18 \text{ mm}^2$

brn 1	L+	brn	- L+
blu 3	M	blu	- M
blk 4	Q	blk	- Q
wht 2	L/D	whti	- L/D

Technical data	VTF180-2	P41117 P4	12417 N41117 I	N42417		
Scanning distance SD, typ. max. 1)	1 140 mm					
Operating distance SD 1)	1 100 mm					
Light spot diameter	Approx. 8 mm at 100 mm					
Angle of dispersion sender	Focussed approx. 7 mm at 60 mm					
Light source ²⁾ , light type	LED, red light, 645 nm					
Sensitivity adjustable	Potentiometer 270°					
Orange LED indicator	Switching output active					
Green LED indicator	Stability indicator light reception					
	LED lights continuously:					
	light reception < 0.9/> 1.1					
	LED off: light reception > 0.9 < 1.1					
Supply voltage V _s	10 30 V DC ³⁾					
Residual ripple 4)	± 10 %					
Current consumption 5)	≤ 30 mA					
Switching outputs	Q: PNP, open collector					
Signal voltage PNP HIGH/LOW	V _S - 1.8 V _{max} /approx. 0 V					
	Q: NPN, open collector					
Signal voltage NPN HIGH/LOW	Approx. V _s /< 1.8 V					
Switching mode	Light-/dark-switching, selectable ⁶⁾					
Output current I _A max.	≤ 100 mA					
Response time 7)	≤ 0.5 ms					
Max. switching frequency 8)	1,000/s					
Connection type	Plug, M12, 4-pin					
	Cable ⁹⁾ , PVC, 2 m, 4 x 0.18 mm ² , Ø 3.8 mm					
VDE protection class	< ♠					
Enclosure rating	IP 67					
Circuit protection ¹⁰⁾	A, B, C					
Ambient temperature T _A	Operation -25 °C +55 °C					
	Storage -40 °C +70 °C					
Weight	With plug M12, approx. 7 g					
	With cable, 2 m, approx. 90 g					
Housing material	Housing: PBT & PC					
	Optic: PMMA					

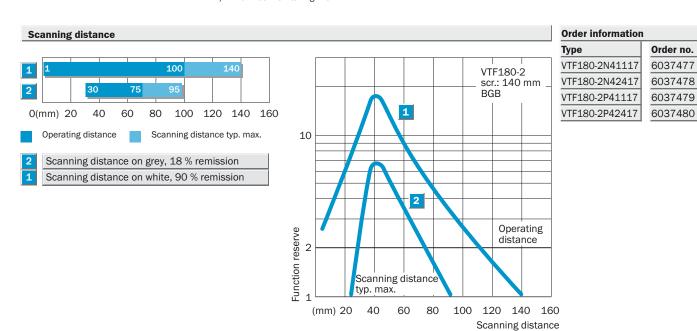
Dipect with 90 % remission (based on standard white DIN 5033); 100 x 100 mm

²⁾ Average service life 100,000 h at T_{Δ} = +25 °C

- 3) Limit values
- 4) May not exceed or fall short of V_S tolerances
- 5) Without load
- 6) L/D-switching type control line: L/D = + V_S: light-switching L.ON L/D = 0 V: dark-switching D.ON

Control line open NPN: light-switching L.ON PNP: dark-switching D.ON

- 7) Signal transit time with resistive load
- 8) With light/dark ratio 1:1
- 9) Do not bend below 0 °C
- $^{10)}$ A = V_s connections reverse-polarity protected
 - B = Inputs and outputs reverse-polarity protected
 - C = Outputs overcurrent and shortcircuit protected



2009-11-16 SICK 3



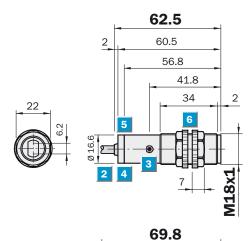
- Photoelectric proximity switches with focussed optics and background blanking (BGB)
- Red light as alignment aid
- Sensitivity adjustable
- LED indicator: switching output active and operation reserve

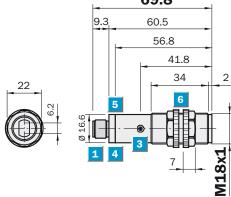




Accessories Cables and connectors Mounting systems

Dimensional drawing





Adjustments possible All types

- M12 plug, 4-pin
 - Connector cable 2 m
- 3 Sensitivity control 270°
- 4 Orange LED indicator: switching output active
- 5 Green LED indicator, Stability indicator:
 - LED lights continuously:light reception < 0.9/> 1.1
 - LED off: light reception > 0.9 ... < 1.1
- 6 Mounting nuts (2 x); SW22, PC

5 - 4 Connection types

 \ominus

VTE180-2N42447 VTE180-2N41147 VTE180-2P42447 VTE180-2P41147



4-pin, M12



 $4 \times 0.18 \text{ mm}^2$

bru 3 L+	brn l	L+ M
\rightarrow blk $\stackrel{4}{=}$ Q	blki	Q
wht 2 L/D	whti	L/D

Technical data	VTE180-2	P41147 P42447 N41147 N42447
Scanning distance SD, typ. max. 1)	1 450 mm	
Operating distance SD 1)	1 400 mm	
Light spot diameter	Approx. 20 mm at 400 mm	
Angle of dispersion sender	Approx. 1.5°	
Light source 2), light type	LED, red light, 645 nm	
Sensitivity adjustable	Potentiometer 270°	
Orange LED indicator	Switching output active	
Green LED indicator	Stability indicator light reception	
	LED lights continuously:	
	light reception < 0.9/> 1.1	
	LED off: light reception > 0.9 < 1.1	
Supply voltage V _S	10 30 V DC ³⁾	
Residual ripple 4)	± 10 %	
Current consumption 5)	≤ 30 mA	
Switching outputs	Q: PNP, open collector	
Signal voltage PNP HIGH/LOW	V _S - 1.8 V _{max} /approx. 0 V	
	Q: NPN, open collector	
Signal voltage NPN HIGH/LOW	Approx. V _s /< 1.8 V	
Switching mode	Light-/dark-switching, selectable 6)	
Output current I _A max.	≤ 100 mA	
Response time 7)	≤ 0.5 ms	
Max. switching frequency 8)	1,000/s	
Connection type	Plug, M12, 4-pin	
	Cable ⁹⁾ , PVC, 2 m, 4 x 0.18 mm ² , Ø 3.8 mm	
VDE protection class	₩	
Enclosure rating	IP 67	
Circuit protection ¹⁰⁾	A, B, C	
Ambient temperature T _A	Operation -25 °C +55 °C	
	Storage -40 °C +70 °C	
Weight	With plug M12, approx. 7 g	
	With cable, 2 m, approx. 90 g	
Housing material	Housing: PBT & PC	
	Optic: PMMA	

Diject with 90 % remission (based on standard white DIN 5033); 100 x 100 mm

 $^{2)}$ Average service life 100,000 h at $\rm T_A$ = +25 $^{\circ}\rm C$

3) Limit values

 $^{\rm 4)}$ $\,$ May not exceed or fall short of $\,$ V $_{S}$ tolerances $\,$

5) Without load

6) L/D-switching type control line: L/D = + V_S: light-switching L.ON L/D = 0 V: dark-switching D.ON Control line open NPN: light-switching L.ON PNP: dark-switching D.ON

 $^{7)}\,\,$ Signal transit time with resistive load

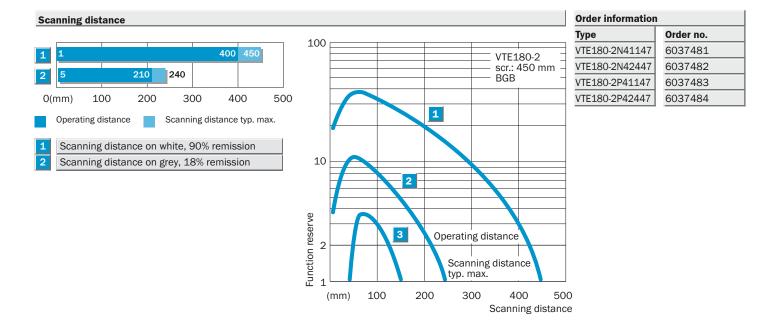
8) With light/dark ratio 1:1

9) Do not bend below 0 °C

 $^{10)}$ A = V_s connections reverse-polarity protected

B = Inputs and outputs reverse-polarity protected

C = Outputs overcurrent and shortcircuit protected





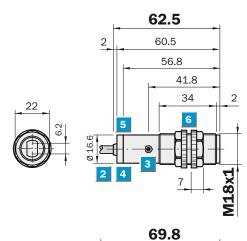
- Photoelectric proximity sensors, energetic
- Large scanning distance
- Red light as alignment aid
- Sensitivity adjustable
- LED indicator: switching output active and operation reserve

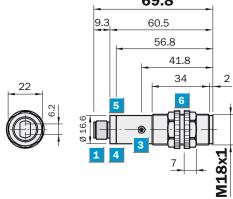




Accessories Cables and connectors Mounting systems

Dimensional drawing





Adjustments possible All types 2 4

- M12 plug, 4-pin
 - Connector cable 2 m
- Sensitivity control 270°
- Orange LED indicator: switching output active
- Green LED indicator, Stability indicator:
 - LED lights continuously:light reception < 0.9/> 1.1
- LED off: light reception > 0.9 ... < 1.1
- 6 Mounting nuts (2 x); SW22, PC

5 - 4 Connection types

 \ominus

VTE180-2N42487 VTE180-2N41187 VTE180-2P42487 VTE180-2P41187



4-pin, M12



4 x 0.18 mm²

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				
	blu 3	M O	blu blk	M Q

Technical data	VTE180-2	P41187 P42487 N41187 N4	12487		
Scanning distance SD, typ. max. 1)	1 1,100 mm				
Operating distance SD 1)	1 800 mm				
Light spot diameter	Approx. 30 mm at 800 mm				
Angle of dispersion sender	Approx. 1.2°				
Light source ²⁾ , light type	LED, red light, 645 nm				
Sensitivity adjustable	Potentiometer 270°				
Orange LED indicator	Switching output active				
Green LED indicator	Stability indicator light reception				
dieen LLD indicator	LED lights continuously:				
	light reception < 0.9/> 1.1				
	LED off: light reception > 0.9 < 1.1				
Supply voltage V _s	10 30 V DC ³⁾				
Residual ripple 4)	± 10 %				
Current consumption 5)	≤ 30 mA				
Switching outputs	Q: PNP, open collector				
Signal voltage PNP HIGH/LOW	V _S - 1.8 V _{max} /approx. 0 V				
Signal Voltage FIVE Hildily LOW	Q: NPN, open collector				
Signal voltage NPN HIGH/LOW	Approx. V _s /< 1.8 V				
Switching mode	Light-/dark-switching, selectable ⁶⁾				
	≤ 100 mA				
Output current I _A max. Response time ⁷⁾	≤ 0.5 ms				
Max. switching frequency 8)					
	1,000/s				
Connection type	Plug, M12, 4-pin Cable ⁹⁾ , PVC, 2 m, 4 x 0.18 mm ² , Ø 3.8 mm				
VDE protection class	(i) Cable -7, PVC, 2 III, 4 x 0.16 IIIIII-, Ø 3.6 IIIIII				
Enclosure rating	IP 67				
Circuit protection 10)					
· · · · · · · · · · · · · · · · · · ·	A, B, C Operation -25 °C +55 °C				
Ambient temperature T _A	- P				
Weight	With plug M12, approx. 7 g				
	With cable, 2 m, approx. 90 g				
Housing material	Housing: PBT & PC				
	Optic: PMMA				
Object with 90 % remission (based on standard white DIN 5033):	4) May not exceed or fall short of	Control line open	1	A = V _s connect	ions reverse-pola

standard white DIN 5033); 100 x 100 mm

Average service life 100,000 h at $T_A = +25 \, ^{\circ}C$

Limit values

V_s tolerances

Without load

L/D-switching type control line: $L/D = + V_s$: light-switching L.ON L/D = 0 V: dark-switching D.ON NPN: light-switching L.ON PNP: dark-switching D.ON

Signal transit time with resistive load

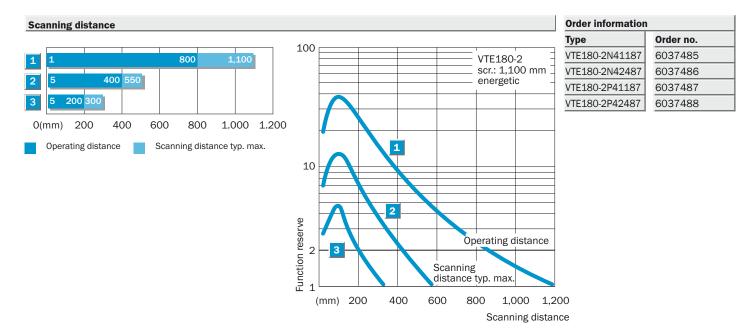
With light/dark ratio 1:1

Do not bend below 0 °C

protected

B = Inputs and outputs reverse-polarity protected

C = Outputs overcurrent and shortcircuit protected





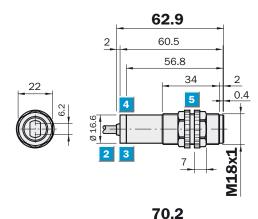
- Polarizing filter for reliable detection of shiny surfaces
- LED indicator: switching output active and operation reserve
- Large ranges
- Red light as alignment aid

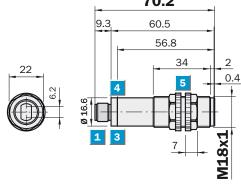




Accessories Cables and connectors Mounting systems Reflectors

Dimensional drawing





All types

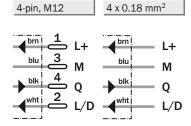
- M12 plug, 4-pin
 - Connector cable 2 m
- 3 Orange LED indicator: switching output active
- 4 Green LED indicator, Stability indicator:
 - LED lights continuously:light reception < 0.9/> 1.1
 - LED off: light reception > 0.9 ... < 1.1
- Mounting nuts (2 x); SW22, PC



 VL180-2N42436
 VL180-2N41136

 VL180-2P42436
 VL180-2P41136





. 7 m (PL80A)/ 6 m (P250) ¹⁾ . 6 m (PL80A)/ 6 m (P250) ¹⁾ . 400 mm at 6 m . 4.5° ed light, 645 nm ing output active ty indicator light reception this continuously: eception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 80 V DC ³⁾ in A									
. 6 m (PL80A)/ 6 m (P250) ¹⁾ 400 mm at 6 m 4.5° ed light, 645 nm ing output active ty indicator light reception this continuously: eception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 80 V DC ³⁾ hA									
400 mm at 6 m 4.5° ed light, 645 nm ing output active ty indicator light reception this continuously: eception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 BO V DC ³⁾ The									
a. 4.5° ed light, 645 nm ing output active ty indicator light reception this continuously: eception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 80 V DC 3) hA									
ed light, 645 nm ing output active ty indicator light reception this continuously: eception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 80 V DC 3) the									
ing output active ty indicator light reception thts continuously: eception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 80 V DC 3) that									
ty indicator light reception this continuously: ception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 go V DC 3) hA									
ty indicator light reception this continuously: ception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 go V DC 3) hA									
thts continuously: eception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 80 V DC ³⁾									
cception < 0.9/> 1.1 f: light reception > 0.9 < 1.1 80 V DC ³⁾									
f: light reception > 0.9 < 1.1 80 V DC ³⁾ hA									
80 V DC ³⁾									
nA									
nA									
Naman aallaatau									
, open collector									
8 V _{max} /approx. 0 V									
l, open collector									
V _S /< 1.8 V									
dark-switching, selectable ⁶⁾									
mA									
ns									
's									
/112, 4-pin									
, PVC, 2 m, 4 x 0.18 mm ² , Ø 3.8 mm									
ion -25 °C +55 °C									
e -40 °C +70 °C									
ug M12, approx. 7 g									
ig. i Di aci o									
1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	tion -25 °C +55 °C ge -40 °C +70 °C slug M12, approx. 7 g sable, 2 m, approx. 90 g ng: PBT & PC	M12, 4-pin 1), PVC, 2 m, 4 x 0.18 mm², Ø 3.8 mm 2) tion	M12, 4-pin 1), PVC, 2 m, 4 x 0.18 mm², Ø 3.8 mm 2) tion -25 °C +55 °C ge -40 °C +70 °C olug M12, approx. 7 g able, 2 m, approx. 90 g	M12, 4-pin 1), PVC, 2 m, 4 x 0.18 mm², Ø 3.8 mm 2) tion -25 °C +55 °C ge -40 °C +70 °C slug M12, approx. 7 g sable, 2 m, approx. 90 g ng: PBT & PC	M12, 4-pin (a), PVC, 2 m, 4 x 0.18 mm², Ø 3.8 mm (b) (c) (d) (e) (d) (e) (e) (e) (e) (e	M12, 4-pin 1), PVC, 2 m, 4 x 0.18 mm², Ø 3.8 mm 2) tion -25 °C +55 °C ge -40 °C +70 °C slug M12, approx. 7 g sable, 2 m, approx. 90 g ng: PBT & PC	M12, 4-pin 1), PVC, 2 m, 4 x 0.18 mm², Ø 3.8 mm 2) tion -25 °C +55 °C ge -40 °C +70 °C slug M12, approx. 7 g sable, 2 m, approx. 90 g ng: PBT & PC	M12, 4-pin 1), PVC, 2 m, 4 x 0.18 mm², Ø 3.8 mm 2) tion -25 °C +55 °C ge -40 °C +70 °C plug M12, approx. 7 g pable, 2 m, approx. 90 g ng: PBT & PC	M12, 4-pin 1), PVC, 2 m, 4 x 0.18 mm², Ø 3.8 mm 2) tion -25 °C +55 °C ge -40 °C +70 °C plug M12, approx. 7 g gable, 2 m, approx. 90 g ng: PBT & PC

Reflector P250 included with delivery VL180-2

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

3) Limit values

May not exceed or fall short of V_S tolerances

5) Without load

L/D-switching type control line:
 L/D = + V_S: light-switching L.ON
 L/D = 0 V: dark-switching D.ON

Control line open NPN: light-switching L.ON PNP: dark-switching D.ON

7) Signal transit time with resistive load

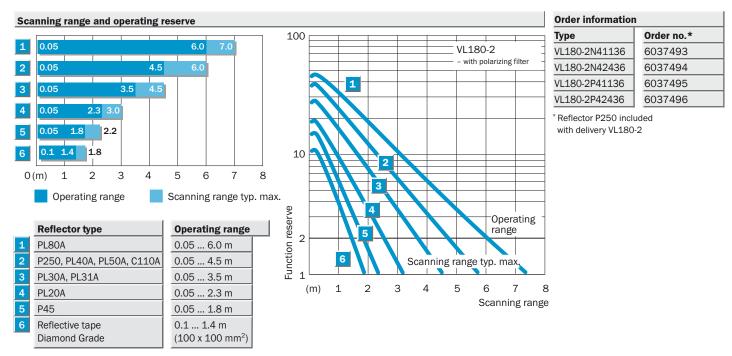
8) With light/dark ratio 1:1

9) Do not bend below 0 °C

A = V_S connections reverse-polarity protected

B = Inputs and outputs reverse-polarity protected

C = Outputs overcurrent and shortcircuit protected



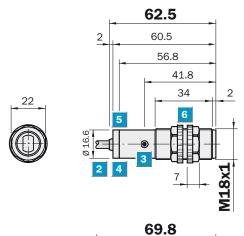


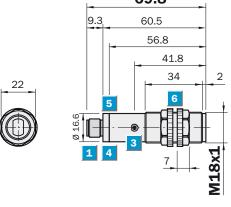
- Very large scanning ranges
- Sensitivity adjustable
- LED indicator VE180-2: switching output active and operation reserve
- Red light as alignment aid





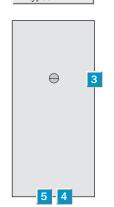
Dimensional drawing





Adjustments possible

All types



- 1 M12 plug, 4-pin
 - Connector cable 2 m
- 3 Sensitivity control 270°, only VE180-2
- 4 Orange LED indicator, only VE180-2: switching output active
- 5 Green LED indicator, only VE180-2, Stability indicator:
 - LED lights continuously:
 - light reception < 0.9/> 1.1
 LED off: light reception > 0.9 ... < 1.1
- 6 Mounting nuts (2 x); SW22, PC

Connection	types

VSE180-2N42437 VSE180-2N41137 VSE180-2P42437 VSE180-2P41137 VSE180-2N42437 VSE180-2P42437 VSE180-2N41137 VSE180-2P41137









Accessories

Cables and connectors

Mounting systems

Sender

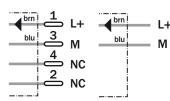
4-pin, M12

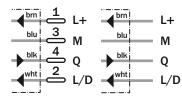


Receiver

4-pin, M12

4 x 0.18 mm²





Technical data	VSE180-2	P41137 P42437 N41137 N42437
Scanning range SR, typ. max./reflect.	0 28 m	
Operating range ¹⁾	0 20 m	
Light spot diameter	Approx. 1,100 mm at 20 m	
Angle of dispersion sender	Approx. 5°	
Light source ¹⁾ , light type	LED, red light, 645 nm	
Sensitivity adjustable	Receiver VE180-2: Potentiometer 270°	
Orange LED indicator	Switching output active	
Green LED indicator	Stability indicator light reception	
	LED lights continuously:	
	light reception < 0.9/> 1.1	
	LED off: light reception > 0.9 < 1.1	
Supply voltage V _s	10 30 V DC ²⁾	
Residual ripple 3)	± 10 %	
Stromaufnahme Sender ⁴⁾	≤ 20 mA	
Stromaufnahme Receiver 4)	≤ 15 mA	
Switching outputs	Q: PNP, open collector	
Signal voltage PNP HIGH/LOW	V _s - 1.8 V _{max} /approx. 0 V	
	Q: NPN, open collector	
Signal voltage NPN HIGH/LOW	Approx. V _s /< 1.8 V	
Switching mode Receiver	Light-/dark-switching, selectable 5)	
Output current I _A max.	≤ 100 mA	
Response time ⁶⁾	≤ 0.5 ms	
Max. switching frequency 7)	1,000/s	
Connection type	Plug, M12, 4-pin	
Sender	Cable ⁹⁾ , PVC, 2 m, 2 x 0.18 mm ² , Ø 3.8 mm	
Receiver	Cable ⁹⁾ , PVC, 2 m, 4 x 0.18 mm ² , Ø 3.8 mm	
VDE protection class	₩	
Enclosure rating	IP 67	
Circuit protection ¹⁰⁾	A, B, C	
Ambient temperature T₄	Operation -25 °C +55 °C	
	Storage -40 °C +70 °C	
Weight, Sender and Receiver, each approx.	With plug M12, 10 g	
	With cable, 2 m, 100 g	
Housing material	Housing: PBT & PC	
	Optic: PMMA	
Average service life 100,000 h at T _A = +25 °C	5) L/D-switching type control line: L/D = + V _c : light-switching L.ON	6) Signal transit time with resistive load 9) A = V _S connections reverse-polarity 7) With light/dark ratio 1:1 protected

at T_A = +25 °
Limit values

May not exceed or fall short of V_S tolerances

4) Without load

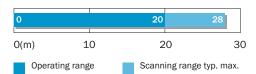
 $L/D = + V_S$: light-switching L.ON L/D = 0 V: dark-switching D.ON Control line open NPN: light-switching L.ON PNP: dark-switching D.ON

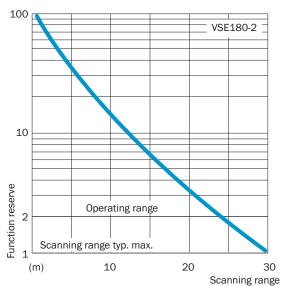
8) Do not bend below 0 °C

B = Inputs and outputs reverse-polarity protected

C = Outputs overcurrent and shortcircuit protected

Scanning range and operating reserve





Order information Order no.10) Туре VSE180-2N41137 6037497 VSE180-2N42437 6037498 VSE180-2P41137 6037499 VSE180-2P42437 6037500

10) Order no. includes sender and receiver (pair)

2009-11-16 SICK 11

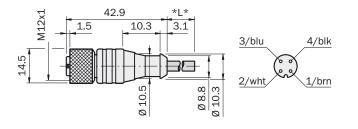
SENSICK screw-in system M12, 4-pin, Enclosure rating IP 67

Female connector M12, 4-pin, straight¹⁾

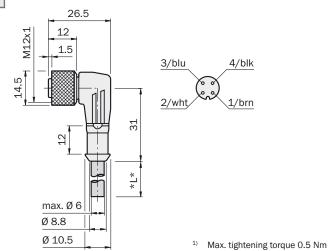
Cable diameter 5 mm, 4 x 0.25 mm², sheath PVC Type Order no. Contacts

Туре	Order no.	Contacts	Cable length *L*
DOL-1204-G02M	6009382	4	2 m
DOL-1204-G05M	6009866	4	5 m
DOL-1204-G10M	6010543	4	10 m
DOL-1204-G15M	6010753	4	15 m

Female connector M12, 4-pin, angled-					
Cable diameter 5 mm, 4 x 0.25 mm ² , sheath PVC					
Туре	Order no.	Contacts	Cable length *L*		
DOL-1204-W02M	6009383	4	2 m		
DOL-1204-W05M	6009867	4	5 m		
DOL-1204-W10M	6010541	4	10 m		



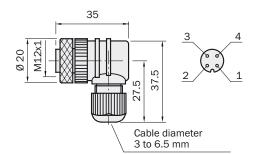
1) Max. tightening torque 0.5 Nm



Female connector M12, 4-pin, straight2)

Туре	Order no.	Contacts	Can be adapted
DOS-1204-G	6007302	4	for cables Ø 4.5 to

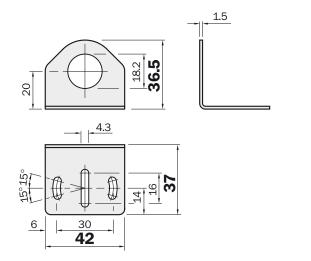
52.5	
20	3 4
M12X1	2 1
M12X1	Cable diameter 3 to 6.5 mm



Mounting systems

Mounting bracket

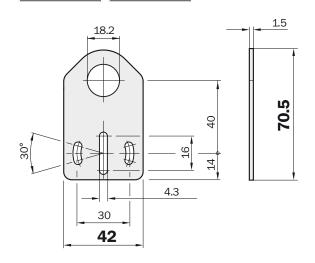
Туре	Order no.
BEF-WN-M18	5308446



Universal bracket (rod mounting) for sensors Distance Z: bar centre – inner plate surface Order no. Bar-Ø (mm) Distance Z (mm) Туре 2022465 BEF-KHS-H01 12 15.0 14 16.4 42.8 15 17.1 19.2 18 20 20.7 Locking screw ø28

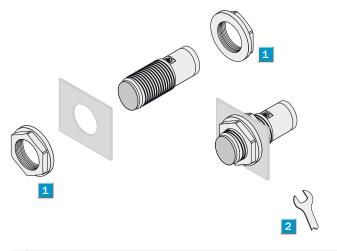
Mounting plate, steel, galvanised

Туре	Order no.
BEF-WG-M18	5321870
DE: TTG IIIE	



Mounting kit for V180-2 (included with delivery)

ø12-20



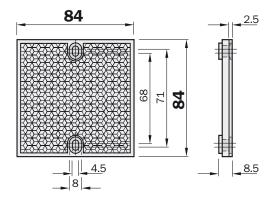
- 1 2 x locknuts, RDL M18x1 (SW22) (4040270) supplied with V180-2
- 2 Maximum torque 1.5 Nm

2009-11-16 SICK 13

Reflectors for V180-2, plastic design for temperatures up to 65 $^{\circ}\text{C}$

Reflector 80 x 80 mm, screwable

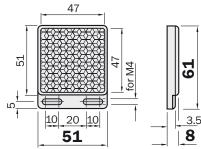
Туре	Order no.	
PL80A	1003865	



Reflector 47 x 47 mm, screwable

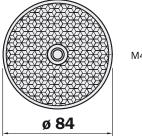
Туре	Order no.
P250	5304812*

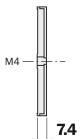
* included with delivery VL180-2



Reflector, diameter 83 mm, center hole mounting

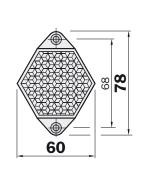
Туре	Order no.
C110A	5304549

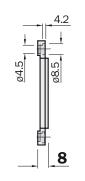




Reflector, 6-sided, width across flats 48 mm

Туре	Order no.
PL50A	1000132



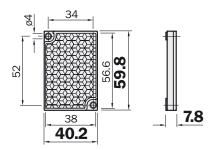


Also available in heatable model: Permanent heating: PL50HI

Permanent heating: PL50HK, Order no. 1001545 Controlled heating: PL50HS Order no. 1009871

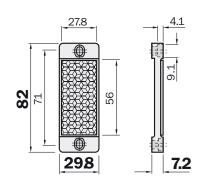
Reflector 38 x 56 mm, screwable

Туре	Order no.
PL40A	1012720



Reflector 28 x 56 mm, screwable

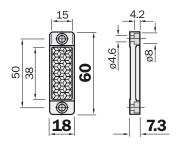
, , , , , , , , , , , , , , , , , , , ,	
Туре	Order no.
PL30A	1002314



Reflectors for V180-2, plastic design for temperatures up to 65 $^{\circ}\text{C}$

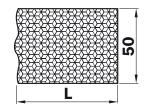
Reflector 15 x 38 mm, screwable

Туре	Order no.
PL20A	1012719



Reflective tape

Туре	Order no.	
REF-Plus-R50	5319981	Roll: 50 mm x 22.8 m
REF-Plus-R50-K	4051185	Cut to size: 50 mm x L (mm)



2009-11-16 SICK **15**

Australia

Phone +61 3 9497 4100 1800 33 48 02 - tollfree E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66 E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900 E-Mail sac@sick.com.br

Ceská Republika

Phone +420 2 57 91 18 50 E-Mail sick@sick.cz

China

Phone +852-2763 6966 E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00 E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301 E-Mail kundenservice@sick.de

España

Phone +34 93 480 31 00 E-Mail info@sick.es

France

Phone +33 1 64 62 35 00 E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121 E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333 E-Mail info@sick-india.com

Israel

Phone +972-4-999-0590 E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41 E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341 E-Mail support@sick.jp

Nederlands

Phone +31 (0)30 229 25 44 E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00 E-Mail austefjord@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0 E-Mail office@sick.at

Polska

Phone +48 22 837 40 50 E-Mail info@sick.pl

Republic of Korea

Phone +82-2 786 6321/4 E-Mail kang@sickkorea.net

Republika Slovenija

Phone +386 (0)1-47 69 990 E-Mail office@sick.si

România

Phone +40 356 171 120 E-Mail office@sick.ro

Russia

Phone +7 495 775 05 34 E-Mail info@sick-automation.ru

Schweiz

Phone +41 41 619 29 39 E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732 E-Mail admin@sicksgp.com.sg

Suom

Phone +358-9-25 15 800 E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00 E-Mail info@sick.se

Taiwa

Phone +886 2 2375-6288 E-Mail sales@sick.com.tw

Türkiye

Phone +90 216 587 74 00 E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 4 8865 878 E-Mail info@sick.ae

USA/Canada/México

Phone +1(952) 941-6780 1 800-325-7425 - tollfree E-Mail info@sickusa.com

More representatives and agencies in all major industrial nations at

www.sick.com

