



**VS2 series
DC operation**

Wave length

Red 660 nm
Infrared (IR) 940 nm

Supply

Supply voltage 10...30 V dc
Ripple V_{pp} $\leq 10\%$
No load current emitter ≤ 25 mA (visible red)
 ≤ 30 mA (infrared)
receiver ≤ 25 mA

Delay upon power up 100 ms
VS2...CV: 150 ms

Protection

reverse polarity
overload
short-circuit
transient voltages

Output

Switching function light or dark operate versions
Continuous load current 50 mA
Switching frequency ≤ 500 Hz

Material

Housing ABS
Lens MABS
VS2...CV: acrylic
IP67

Protection class (IEC 60529/EN 60529)

Temperature range -20...+55 °C
Cable 2 m, PVC, 3 x 0,34 mm²
Connector *picocon* (M8 x 1)

Indicator LED's

Yellow light sensed
Green supply voltage
Yellow flashing low gain
Green flashing overload

Accessories

Apertures

APVS2-0204	30 589 31	round – 0,5 and 1 mm (stainless steel)
APVS2-0608	30 589 32	round – 1,5 and 2 mm (stainless steel)
APVS2-02R	30 589 33	rectangular – 0,5 mm (stainless steel)
APVS2-04R	30 589 34	rectangular – 1 mm (stainless steel)

Bracket

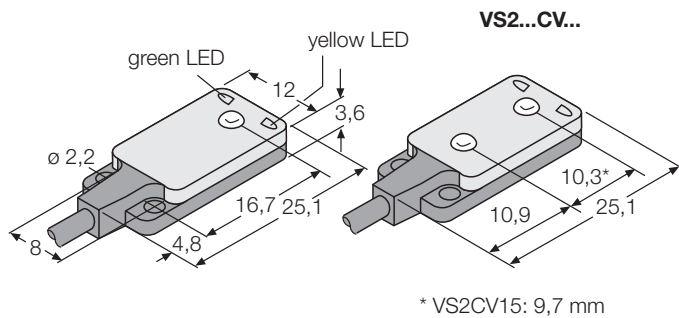
SMBVS2RA 30 586 03 right-angled bracket

Connector

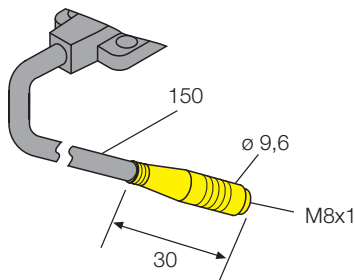
SKP3-2/S90 80 073 32 straight type, PUR
SKP3-2/P00 80 073 31 straight type, PVC

Dimensions [mm]

● Cable

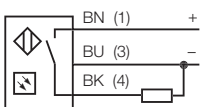


● Connector

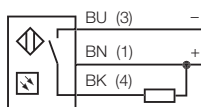


Wiring

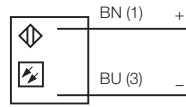
pnp



nnp



emitter

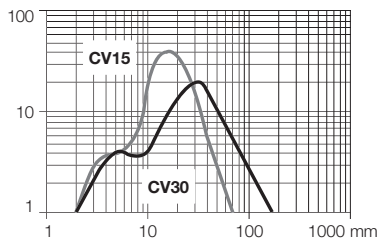


VS2 series

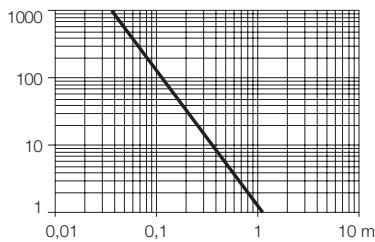
DC operation

Excess gain curve:
Excess gain in relation to the distance

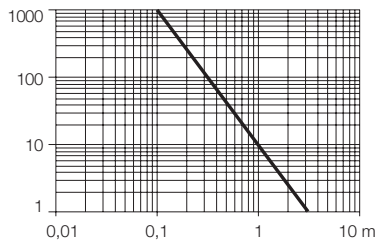
— Convergent



— Opposed Visible Red



— Opposed Infrared



	Max. range [mm]	Light source	Output function	Connection	Type	Ident number	
— Convergent	15 ± 5	red	pnP light	cable	VS2AP5CV15	30 617 45	
	15 ± 5	red	pnP light	connector	VS2AP5CV15Q	30 630 75	
	15 ± 5	red	pnP dark	cable	VS2RP5CV15	30 617 47	
	15 ± 5	red	pnP dark	connector	VS2RP5CV15Q	30 630 77	
	15 ± 5	red	npN light	cable	VS2AN5CV15	30 617 44	
	15 ± 5	red	npN light	connector	VS2AN5CV15Q	30 630 74	
	15 ± 5	red	npN dark	cable	VS2RN5CV15	30 617 46	
	15 ± 5	red	npN dark	connector	VS2RN5CV15Q	30 630 76	
	30 ± 10	red	pnP light	cable	VS2AP5CV30	30 617 49	
	30 ± 10	red	pnP light	connector	VS2AP5CV30Q	30 630 79	
	30 ± 10	red	pnP dark	cable	VS2RP5CV30	30 617 51	
	30 ± 10	red	pnP dark	connector	VS2RP5CV30Q	30 630 81	
	30 ± 10	red	npN light	cable	VS2AN5CV30	30 617 48	
	30 ± 10	red	npN light	connector	VS2AN5CV30Q	30 630 78	
	30 ± 10	red	npN dark	cable	VS2RN5CV30	30 617 50	
	30 ± 10	red	npN dark	connector	VS2RN5CV30Q	30 630 80	
	— Opposed Visible Red	1200	red	(emitter)	cable	VS25EV	30 554 01
		1200	red	(emitter)	connector	VS25EVQ	30 591 61
1200		red	pnP light	cable	VS2KAP5V (E/R)	30 582 22	
1200		red	pnP light	connector	VS2KAP5VQ (E/R)	30 631 00	
1200		red	pnP dark	cable	VS2KRP5V (E/R)	30 582 23	
1200		red	pnP dark	connector	VS2KRP5VQ (E/R)	30 608 94	
1200		red	npN light	cable	VS2KAN5V (E/R)	30 582 20	
1200		red	npN light	connector	VS2KAN5VQ (E/R)	30 630 99	
1200		red	npN dark	cable	VS2KRN5V (E/R)	30 582 21	
1200		red	npN dark	connector	VS2KRN5VQ (E/R)	30 631 01	
— Opposed Infrared		3000	IR	emitter	cable	VS25E	30 572 50
		3000	IR	emitter	connector	VS25EQ	30 694 49
	3000	IR	npN light	cable	VS2AN5R	30 554 02	
	3000	IR	npN light	connector	VS2AN5RQ	30 630 97	
	3000	IR	npN light	cable	VS2KAN5 (E/R)	30 706 68	
	3000	IR	npN light	connector	VS2KAN5Q (E/R)	30 706 69	
	3000	IR	pnP light	cable	VS2KAP5 (E/R)	30 706 62	
	3000	IR	pnP light	connector	VS2KAP5Q (E/R)	30 706 73	
	3000	IR	npN dark	cable	VS2RN5R	30 554 03	
	3000	IR	npN dark	connector	VS2RN5RQ	30 630 98	
	3000	IR	npN dark	cable	VS2KRN5 (E/R)	30 706 70	
	3000	IR	npN dark	connector	VS2KRN5Q (E/R)	30 706 71	
	3000	IR	pnP light	cable	VS2AP5R	30 554 04	
	3000	IR	pnP light	connector	VS2AP5RQ	30 615 96	
	3000	IR	pnP dark	cable	VS2RP5R	30 554 05	
	3000	IR	pnP dark	connector	VS2RP5RQ	30 591 75	
	3000	IR	pnP dark	cable	VS2KRP5 (E/R)	30 706 74	
	3000	IR	pnP dark	connector	VS2KRP5Q (E/R)	30 706 75	

Note: Opposed mode sensors are available in pairs or individually.

Subject to changes without notice • Edition rev 06.02 • P/N ED057



These sensors do not include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can result in either an energised or de-energised output condition. These products should not be used as sensing devices for personnel safety.