



VS3 Series

Miniature self-contained sensor

DC operation

Wave length

Visible red 660 nm (opposed)
Visible red 680 nm (retro-reflective)

Supply

Supply voltage U_B 10...30 VDC
Ripple V_{pp} $\leq 10\%$
No load current I_0 < 25 mA
Delay upon power up 100 μ s (opposed mode)
150 ms (retro-reflective)

Protection

reverse polarity
transient voltages
short-circuit of outputs
continuous overload
false pulse on power-up

Output

Switching function light or dark operate versions
Switching frequency ≤ 500 Hz (retro-reflective)
 ≤ 660 Hz (opposed mode)
Continuous load current ≤ 50 mA
Repeatability 100 μ s (opposed)
160 μ s (retro-reflective)

Material

Housing black ABS
Cover acrylic
Lens acrylic – all models except LP (glass)
Protection class IP67
(IEC 60529/EN 60529)
Temperature range $-20...+55$ °C
Cable 2 m, PVC 3 x 0,34 mm²
Connector *picocon* (M8 x 1)

Indicator LEDs

Green supply voltage
Green flashing output overload
Yellow light sensed
Yellow flashing marginal excess gain (opposed only)

Accessories

Brackets

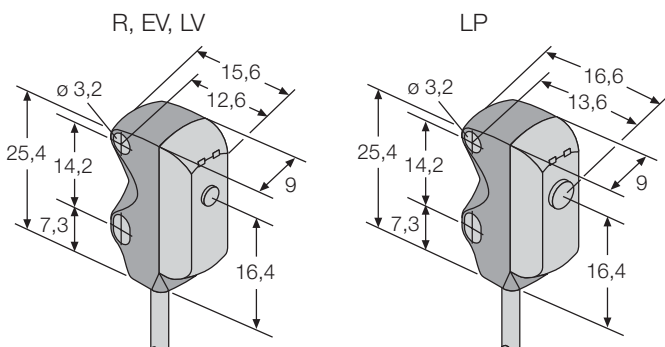
SMBVS3S 30 626 18 right-angled bracket
SMBVS3T 30 626 17 right-angled tall bracket

Connectors

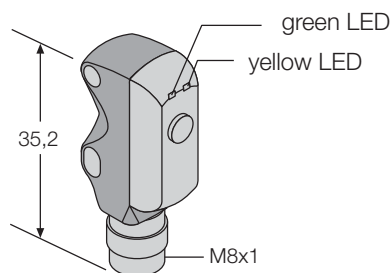
SKP3-2/S90 80 073 32 straight type, PUR
SWKP3-2/S90 80 073 68 right-angled type, PUR
SKP3-2/P00 80 073 31 straight type, PVC
SWKP3-2/P00 80 073 67 right-angled type, PVC

Dimensions [mm]

● Cable

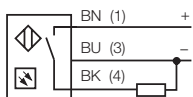


● Connector

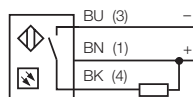


Wiring

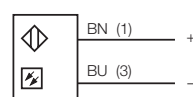
pnp



nnp



emitter

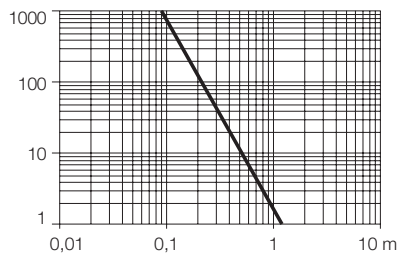


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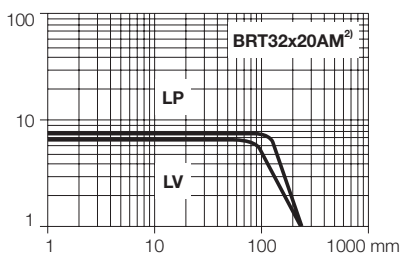
Miniature self-contained sensor

Excess gain curve:
Excess gain in relation to the distance

— Opposed



— Retro-reflective



	Max. range	Light source	Output function	Connection	Type	Ident number	
Opposed	1,2 m	red	-	cable	VS35EV	30 626 35	
	1,2 m	red	-	connector	VS35EVQ	30 626 36	
	1,2 m	red	pnp, light	cable	VS3AP5R	30 626 31	
	1,2 m	red	pnp, light	connector	VS3AP5RQ	30 626 32	
	1,2 m	red	pnp, dark	cable	VS3RP5R	30 626 33	
	1,2 m	red	pnp, dark	connector	VS3RP5RQ	30 626 34	
	1,2 m	red	npn, light	cable	VS3AN5R	30 626 27	
	1,2 m	red	npn, light	connector	VS3AN5RQ	30 626 28	
	1,2 m	red	npn, dark	cable	VS3RN5R	30 626 29	
	1,2 m	red	npn, dark	connector	VS3RN5RQ	30 626 30	
	Sensor Pairs ¹⁾						
	1,2 m	red	pnp, light	cable	VS3KAP5V	30 626 41	
	1,2 m	red	pnp, light	connector	VS3KAP5VQ	30 626 42	
	1,2 m	red	pnp, dark	cable	VS3KRP5V	30 626 43	
	1,2 m	red	pnp, dark	connector	VS3KRP5VQ	30 626 44	
	1,2 m	red	npn, light	cable	VS3KAN5V	30 626 37	
	1,2 m	red	npn, light	connector	VS3KAN5VQ	30 626 38	
	1,2 m	red	npn, dark	cable	VS3KRN5V	30 626 39	
	1,2 m	red	npn, dark	connector	VS3KRN5VQ	30 626 40	
	Retro-reflective	250 mm	red	pnp, light	cable	VS3AP5XLV	30 637 15
250 mm		red	pnp, light	connector	VS3AP5XLVQ	30 637 16	
250 mm		red	pnp, dark	cable	VS3RP5XLV	30 637 17	
250 mm		red	pnp, dark	connector	VS3RP5XLVQ	30 637 18	
with polarising filter							
250 mm		red	pnp, light	cable	VS3AP5XLP	30 626 23	
250 mm		red	pnp, light	connector	VS3AP5XLPQ	30 626 24	
250 mm		red	pnp, dark	cable	VS3RP5XLP	30 626 25	
250 mm		red	pnp, dark	connector	VS3RP5XLPQ	30 626 26	
250 mm		red	npn, light	cable	VS3AN5XLV	30 637 11	
250 mm		red	npn, light	connector	VS3AN5XLVQ	30 637 12	
250 mm		red	npn, dark	cable	VS3RN5XLV	30 637 13	
250 mm		red	npn, dark	connector	VS3RN5XLVQ	30 637 14	
with polarising filter							
250 mm		red	npn, light	cable	VS3AN5XLP	30 626 19	
250 mm		red	npn, light	connector	VS3AN5XLPQ	30 626 20	
250 mm	red	npn, dark	cable	VS3RN5XLP	30 626 21		
250 mm	red	npn, dark	connector	VS3RN5XLPQ	30 626 22		

¹⁾ Opposed mode sensors may be bought in pairs or individually.

²⁾ Retro target BRT32x20AM is included.



IMPORTANT SAFETY WARNING! 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.