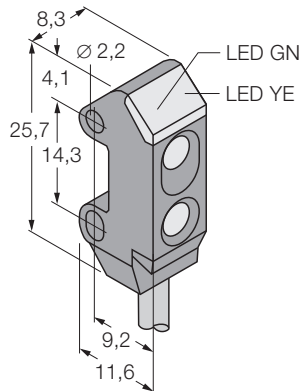
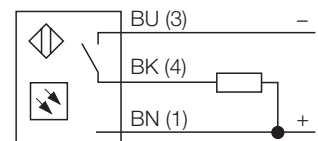


Photoelectric sensor convergent mode sensor VS1RN5CV20



- miniature sensor with extremely high excess gain
- supply voltage 10-30 VDC

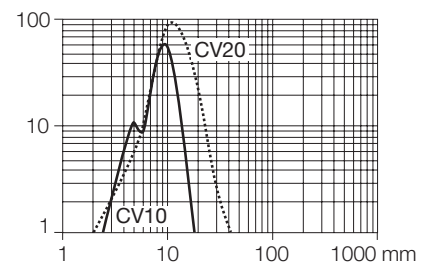
Wiring diagram



Convergent mode sensors are equipped with a lens before the emitter diode that produces a small and intense focal point at a defined distance from the sensor. Similar to diffuse mode sensors, the light reflected by the target is evaluated. Convergent mode sensors are ideal for detection of small targets or colour marks and edge guiding or positioning control of transparent materials. The targets must always be within the focal depth of the sensors. The focal depth is defined as the area before or behind the focal point within which the object can be detected. Based on the intense light concentration in the focal point, convergent mode sensors are capable of detecting targets with a low reflectivity.

Excess gain curve

Excess gain in relation to the distance



Type	VS1RN5CV20
Ident-No.	3056497
Type of light	red
Wave length	630 nm
Focal distance	20 mm
Operating temperature	-20 ...+ 55 °C
Rated operational voltage (DC) U_B	10... 30 VDC
Rated operational current (DC) I_e	≤ 50 mA
No-load current I_0	≤ 25 mA
Short-circuit protection	yes, cyclic
Reverse polarity protection	yes
Output function	normally open, NPN
Switching frequency	≤ 500 Hz
Max. switch-on delay	≤ 100 ms
Housing style	rectangular; VS1
Housing material	plastic, ABS
Lens	Kunststoff, Acryl
Wiring	cable
Cable length	2 m
Cable cross section	3 x 0,34 mm ²
Degree of protection	IP67
Supply voltage indication	LED green
Switching status indication	LED yellow
Error indication	LED green blinkend