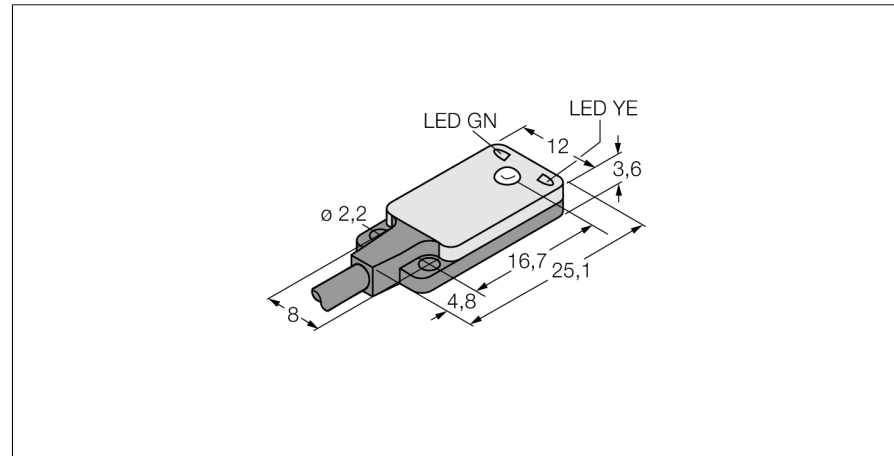
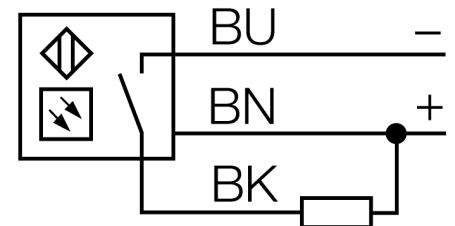


**Photoelectric sensor  
opposed mode sensor (receiver)  
miniature sensor  
VS2RN5R**



- Cable, 2 m, 3-wire
- Operating voltage: 10...30 VDC
- Ultraflat design
- NPN switching output, dark operation

**Wiring diagram**

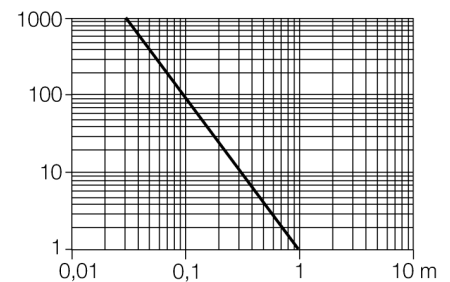


**Functional principle**

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. An excellent contrast between light and dark conditions and an extremely high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.

**Excess gain curve**

Excess gain in relation to the distance



<b>Type code</b>	VS2RN5R
Ident no.	3055403
<b>Operating mode</b>	opposed mode sensor (receiver)
Range	0...1200 mm
Ambient temperature	-20...+55 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>n</sub>
DC rated operational current	≤ 50 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, NPN
Switching frequency	≤ 500 Hz
Readiness delay	≤ 100 ms
<b>Design</b>	rectangular, VS2
Dimensions	4.7 x 12 x 25.1 mm
Housing material	plastic, ABS
Lens	plastic, MABS
Connection	cable, PVC
Cable length	2 m
Cable cross section	3 x 0.34 mm <sup>2</sup>
Protection class	IP67
<b>Power-on indication</b>	LED green
Switching state	LED yellow
Error indication	LED green flashing
Alarm display	LED yellow flashing

Photoelectric sensor  
opposed mode sensor (receiver)  
miniature sensor  
VS2RN5R

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMBVS2RA	3058603	mounting bracket, straight	