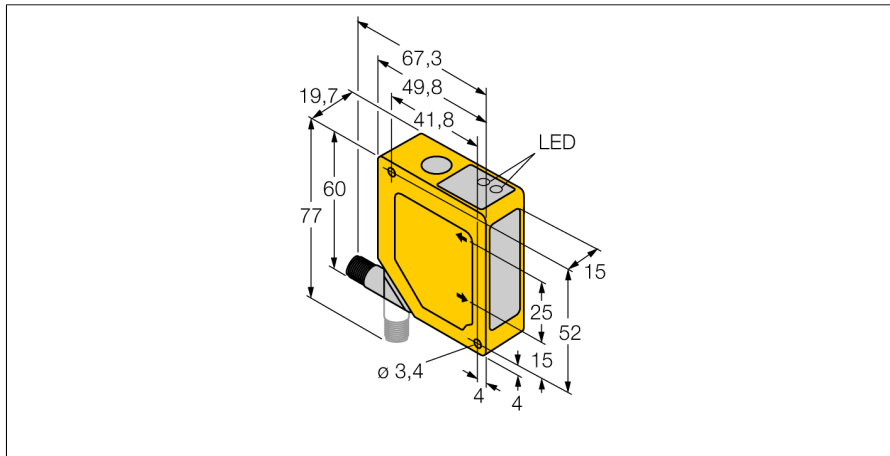
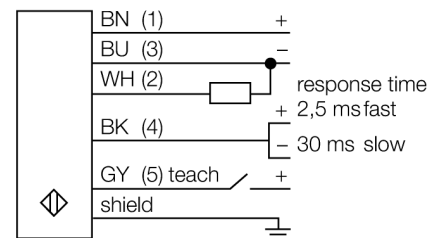


**Photoelectric sensor  
triangulation sensor with analog output  
Q50BVUQ**



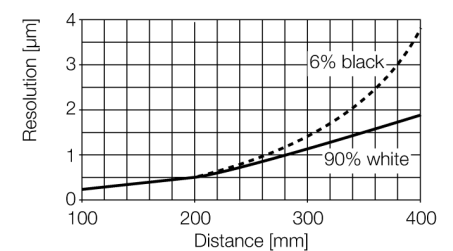
- **Foreground and background suppression**
- **Operating range 100...300 mm**
- **Male connector, rotatable by 90°**
- **Operating voltage 15...30 VDC**
- **analog voltage output 0...10 V**
- **selectable output response of 4 ms (fast) and 64 ms (slow)**

**Wiring diagram**



**Functional principle**

The function principle of the Q50 is based on optical triangulation. The emitter and the optics create a light source that is directed towards a target. The target reflects the light back to the receiver lens of the sensor, from where it then falls onto the position sensitive device (PSD). The target's distance from the receiver determines the angle at which the light meets the receiver element. The integrated microprocessor uses this angle to analyse the target position and to create a corresponding output signal.



<b>Type code</b>	Q50BVUQ
Ident no.	3065277
<b>Operating mode</b>	Diffuse mode sensor with adjustable foreground and background suppression
Light type	red
Wavelength	685 nm
Repeatability	1 mm
Range	100...300 mm
Ambient temperature	-10...+55 °C
<b>Operating voltage</b>	15...30VDC
No-load current I <sub>0</sub>	≤ 70 mA
Voltage output	0...10V
Readiness delay	≤ 2 s
<b>Design</b>	rectangular, Q50
Dimensions	49.8 x 19.7 x 60 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	male
Protection class	IP67