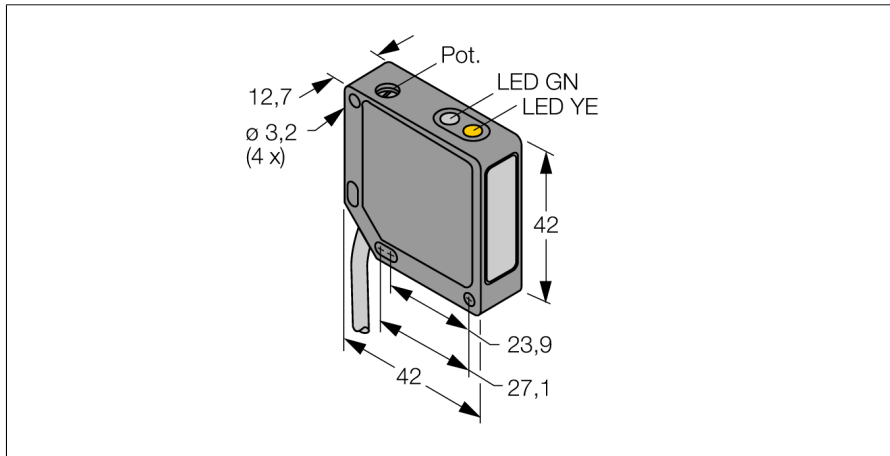
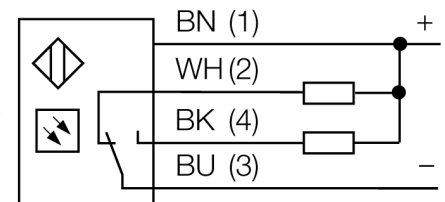


**Photoelectric sensor**  
**diffuse mode sensor with fixed-field background suppression**  
**QM42VN6AFV150**



- Cable, PVC, 2 m, 4-wire
- Metal housing, ZN, black
- Protection class IP67
- Scanning width adjusted via potentiometer
- Operating voltage 10...30 VDC
- NPN switching output
- Light/dark operation

**Wiring diagram**

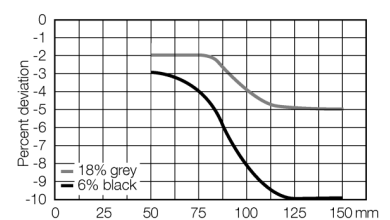


**Functional principle**

Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements. The target position and the photoelectric structure of the sensor determine which of the receiving elements receives the most light. The sensor electronics determine whether the reflecting object is within or outside the measuring range. These sensors come with an adjustable cut-off point.

**Deviation curve**

Sensing range deviation curve



<b>Type code</b>	QM42VN6AFV150
<b>Ident no.</b>	3048694
<b>Operating mode</b>	diffuse mode sensor with adjustable background suppression
<b>Light type</b>	red
<b>Wavelength</b>	680 nm
<b>Range</b>	50...150 mm
<b>Ambient temperature</b>	-20...+55 °C
<b>Operating voltage</b>	10...30VDC
<b>Residual ripple</b>	< 10 % U <sub>s</sub>
<b>DC rated operational current</b>	≤ 100 mA
<b>No-load current I<sub>0</sub></b>	≤ 30 mA
<b>Short-circuit protection</b>	yes
<b>Reverse polarity protection</b>	yes
<b>Output function</b>	NO/NC , NPN
<b>Switching frequency</b>	≤ 500 Hz
<b>Readiness delay</b>	≤ 100 ms
<b>Overcurrent release</b>	> 150 mA
<b>Design</b>	rectangular, QM42
<b>Dimensions</b>	42 x 12.7 x 42 mm
<b>Housing material</b>	metal, ZN, black lacquer
<b>Lens</b>	plastic, acrylic
<b>Connection</b>	cable, PVC
<b>Cable length</b>	2 m
<b>Cable cross section</b>	4 x 0.5 mm <sup>2</sup>
<b>Protection class</b>	IP67
<b>Power-on indication</b>	LED green
<b>Switching state</b>	LED yellow
<b>Error indication</b>	LED green flashing
<b>Alarm display</b>	LED yellow flashing

**Photoelectric sensor  
diffuse mode sensor with fixed-field background suppression  
QM42VN6AFV150**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMB30SK	3052523	Mounting bracket, PBT black, with mounting plate, stainless steel, for types with 18 mm thread, QM42/QMT42	
SMB46S	3048748	Mounting bracket, stainless steel, for QS18, QS30, MI-NI-BEAM, QM42/QMT42	
SMB46L	3048747	Mounting bracket, stainless steel, for QS18, QS30, MI-NI-BEAM, QM42/QMT42	