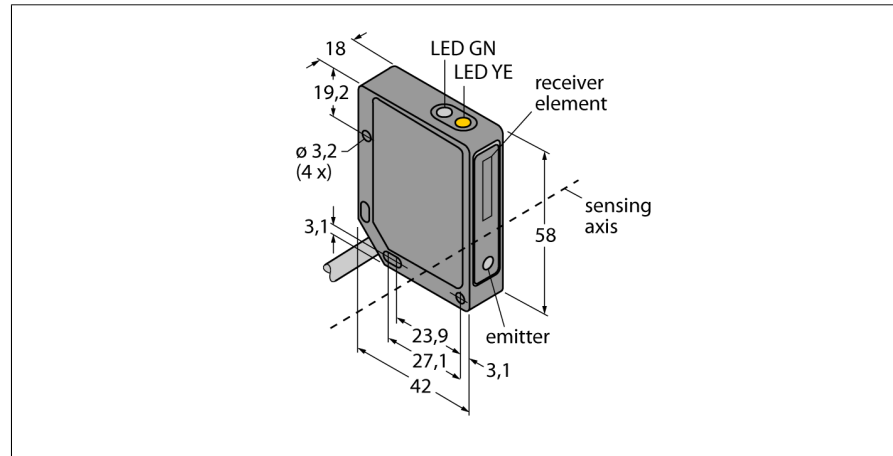
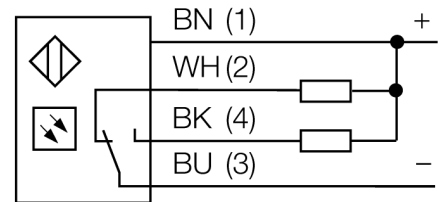


**Photoelectric sensor**  
**diffuse mode sensor with fixed-field background suppression**  
**QMT42VN6FF1000**



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

**Wiring diagram**

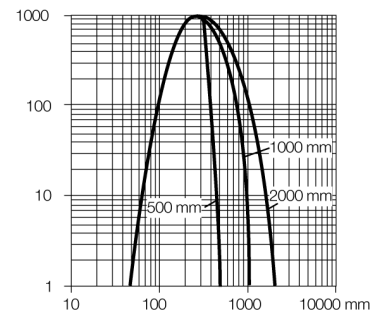


**Functional principle**

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 a fixed cut-off point.

**Excess gain curve**

Excess gain in relation to the distance



<b>Type code</b>	QMT42VN6FF1000
Ident no.	3049231
<b>Operating mode</b>	diffuse mode sensor with fixed-field background suppression
Light type	IR
Wavelength	880 nm
Range	50...1000 mm
Ambient temperature	-20...+55 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>s</sub>
DC rated operational current	≤ 100 mA
No-load current I <sub>0</sub>	≤ 50 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC , NPN
Switching frequency	≤ 500 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 150 mA
<b>Design</b>	rectangular, QMT42
Dimensions	42 x 18 x 58 mm
Housing material	metal, ZN, black lacquer
Lens	plastic, acrylic
Connection	cable, PVC
Cable length	2 m
Cable cross section	4 x 0.5 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  
diffuse mode sensor with fixed-field background suppression  
QMT42VN6FF1000**

**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, MINI-BEAM, QM42/QMT42	
SMB46L	3048747	Mounting bracket, stainless steel, for QS18, QS30, MINI-BEAM, QM42/QMT42	