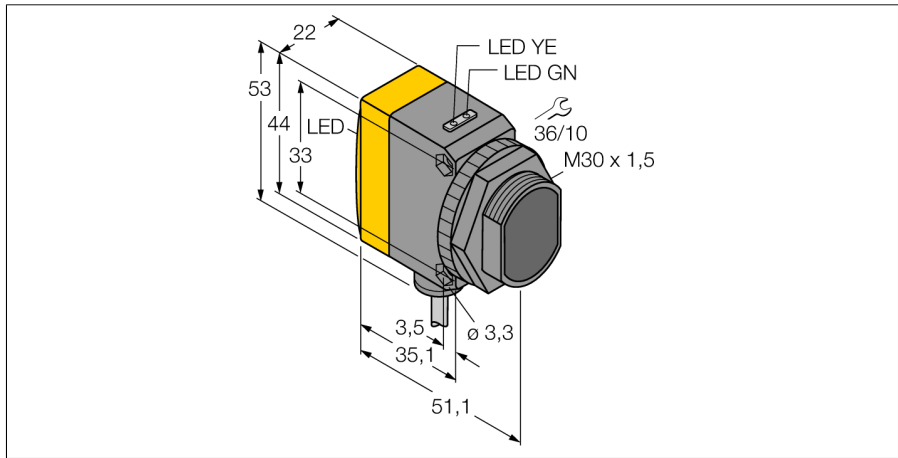
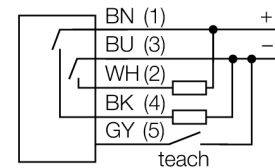


**Photoelectric sensor**  
**diffuse mode sensor with adjustable background suppression**  
**QS30AF600**



- Cable, PVC, 2 m
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via potentiometer
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light or dark operation

**Wiring diagram**



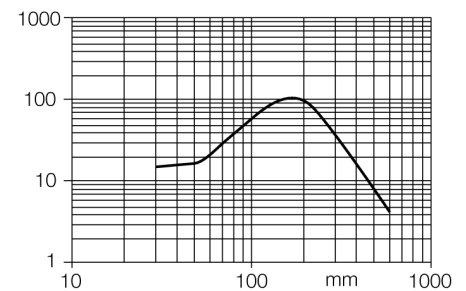
<b>Type code</b>	QS30AF600
Ident no.	3011977
<b>Operating mode</b>	diffuse mode sensor with adjustable background suppression
Light type	red
Wavelength	660 nm
Range	50...600 mm
Ambient temperature	-10...+55 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	< 10 % U <sub>s</sub>
DC rated operational current	≤ 150 mA
No-load current I <sub>0</sub>	≤ 45 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	≤ 500 Hz
Readiness delay	≤ 250 ms
<b>Design</b>	rectangular, QS30
Dimensions	35 x 22 x 53 mm
Housing material	plastic, ABS, yellow
Lens	plastic, acrylic
Connection	cable, PVC
Cable length	2 m
Cable cross section	5 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
Excess gain indication	LED red flashing

**Functional principle**

Diffuse mode sensors with background suppression operate with a single emitter and several receiver elements. The target's position and the optical structure of the sensor determine which receiver element gets the most light. The sensor electronics then determines whether the reflecting target is in or outside the measuring range. The sensors are available with adjustable or fixed cut-off point.

**Excess gain curve**

Excess gain in relation to distance



**Photoelectric sensor  
diffuse mode sensor with adjustable background suppression  
QS30AF600**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
SMB30A	3032723	Mounting bracket, stainless steel, for sensors with 30 mm thread	
SMBQS30L	3002809	Mounting bracket, stainless steel, for QS30 series	
SMBQS30Y	3002811	Protective housing, stainless steel, for QS30 series	
SMBQS30YL	3072741	Protective housing with safety glass panel, stainless steel, for QS30 series	