

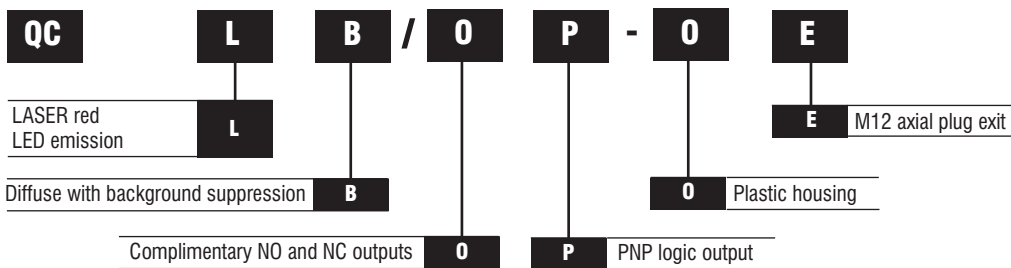
Photoelectric Switches QCLB/0P-0E



- Background suppression
- LASER red light emission 650nm
- LASER protection class 2
- Sensing distance 30 to 150mm
- Complementary NO and NC outputs
- Sensitive adjustment (2 turns) and LED display
- Connector position rotatable within 270 degree



Options & Ordering Codes

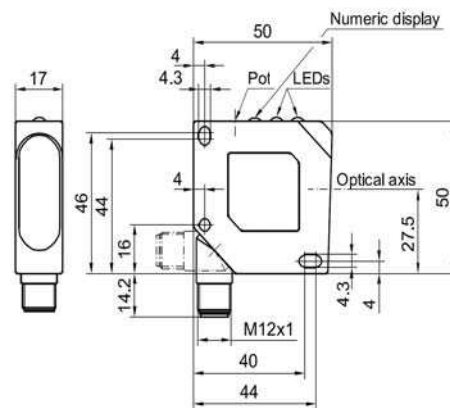


LASER Protection Class in Accordance to DIN EN 60825-1: 2008-05

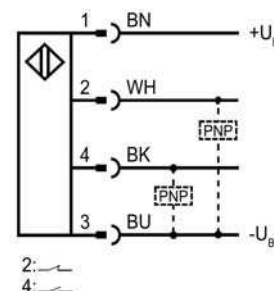
Specification

Optical	
Sensing range	30 to 150mm adjustable
Reference material	Kodak grey, 18%, 200 x 200mm
Sensitivity adjustment	2 turn potentiometer
Light emission	LASER Red 650nm, pulsed
Distance hysteresis (18%/18%)	<5%
Grey scale displacement (90% / 18%)	<8%
Light spot size at 30mm	1.8mm
Ambient light	EN 60947-5-2
Electrical	
Operating voltage U_B	10 - 30VDC
Maximum residual ripple on U_B	10%
Reverse polarity protection	Yes
Shot circuit protection	Yes
Power consumption (no load)	≤ 50 mA at 24VDC
Output current	200 mA
Voltage drop at output	≤ 2.4 V
Switching frequency (at ppp 1:1)	2500 Hz
Output signal indicator	LED Yellow
Dirty optics indicator	LED Red
Power indicator	LED Green
Protection class	
Mechanical data (typical)	
Housing material	ABS, shock-resistant
Protection degree	IP67
Ambient temperature range	-20 to +45°C
Storage temperature	-20 to +80°C
Maximum permitted cable length	100m
Connection type	M12 plug
Weight	Approximately 40g

Dimensions (mm)



Connections



LASER data

Protection Class	Class 2 (DIN EN 60825-1: 2008-1)
Pulse output	$P_p \leq 1.5$ mW
Wavelength	$\lambda = 670$ nm
Pulse width	$t = 6$ μ s
Pulse repetition frequency	$f = 14$ kHz