Q76E-KP-ZLVC-Q5
Photoelectric Sensor –   Retroreflective Light Barrier
With Wide Light Beam
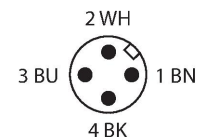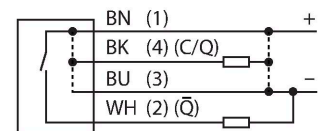
Keine Maßzeichnung
vorhanden!

No drawing available!

Technical data

Type	Q76E-KP-ZLVC-Q5
ID no.	3808858
Optical data	
Function	Retroreflective Sensor
Reflector included in delivery	no
Light type	Red
Wavelength	620 nm
Optical resolution	19 mm
Range	400…4000 mm
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	< 15 % U_{ss}
Reverse polarity protection	yes
Output function	Complementary contact, PNP/NPN
Output 2	Switching output
Switching frequency	≤ 250 Hz
Readiness delay	≤ 300 ms
Response time typical	< 2 ms
Setting option	Push Button
IO-Link	
IO-Link specification	V 1.1
IO-Link port type	Class A
Communication mode	COM 2 (38.4 kBaud)
Process data width	16 bit
Switchpoint information	1 bit
Minimum cycle time	2 ms

Features

- Protection class IP67/IP69
- 200-mm PVC cable with M12 × 1 male, 4-pin
- Range up to 4 m with reflector BRT-92X92CB
- Extra-wide light beam
- Operating voltage: 10…30 VDC
- 1 × switching output, PNP/NPN IO-Link
- 1 × switching output, dark operation PNP
- ECOLAB-certified

Wiring diagram

BN (1)	+
BK (4) (C/Q)	
BU (3)	−
WH (2) ($\overline{Q}$)	

2 WH
3 BU   1 BN
4 BK

Functional principle

Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. Retroreflective sensors feature some of the advantages of opposed mode sensors, such as good contrast and high excess gain. Furthermore, only one device has to be installed and wired. Devices without polarizing filter have a smaller sensing range and are more susceptible to disturbances caused by shiny objects.
The Q76 product series is characterized by an extra-wide beam of light, which enables the edges of objects that are not standard shapes to be reliably detected. Various sensitivity settings facilitate operation in the area of material handling.

Technical data

Function Pin 4	IO-Link
Function Pin 2	DI
Maximum cable length	20 m
Profile support	Smart Sensor Profil
Included in the SIDI GSDML	No
Mechanical data	
Design	Rectangular, Q76
Dimensions	45.3 x 20.5 x 79.3 mm
Housing material	Plastic, PC PBT
Lens	plastic, PMMA
Electrical connection	Cable with connector, M12 × 1, 0.2 m
Number of cores	4
Ambient temperature	-40…+60 °C
Storage temperature	-40…+70 °C
Protection class	IP67 IP69
Power-on indication	LED, Green
Switching state	LED, Yellow
Tests/approvals	
Approvals	ECOLAB
Approvals	CE cULus