

QCM50-K3D40-Q8-5

Photoelectric Sensor – Color Sensor

Technical data

Type	QCM50-K3D40-Q8-5
ID no.	3806617
Optical data	
Function	Color sensor
Light type	White
Light spot diameter	4 mm
Range	18...60 mm
Electrical data	
Operating voltage	18...30 VDC
No-load current	≤ 60 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Communication protocol	IO-Link
Output function	NO contact, PNP/NPN
Switching frequency	1.5 kHz
Response time typical	< 0.18 ms
Setting option	Push Button IO-Link
IO-Link	
IO-Link specification	V 1.1
IO-Link port type	Class A
Communication mode	COM 2 (38.4 kBaud)
Minimum cycle time	4 ms
Function Pin 4	DI
Maximum cable length	20 m
Mechanical data	
Design	Rectangular, QCM50
Dimensions	50 x 25 x 50.5 mm
Housing material	Die-cast zinc, Grey
Lens	plastic, PMMA
Electrical connection	Connectors, M12 × 1
Number of cores	5
Ambient temperature	-20...+55 °C
Storage temperature	-20...+80 °C
Protection class	IP67 IP69K
Power-on indication	LED, Green
Switching state	LED, Yellow

Features

- Protection classes IP67/IP69
- M12 × 1 male, 5-pin
- Range: 18...60 mm
- Narrow light spot
- Three PNP/NPN switching outputs and IO-Link
- Stores and compares up to seven colors

Functional principle

Depending on the variant, the QCM50 color sensor reliably detects up to 12 stored colors and is therefore suitable for various applications in which color differences, color marks, contrast, production-related deviations or specific components must be identified, differentiated or detected. The color sensor is available in three different range variants. Depending on the model, the sensor offers glare suppression, an especially narrow light spot or a very high range. The robust metal housing is suitable for use in a wide range of environments, and the digital display on the sensor shows key information at all times. IO-Link rounds off the range of functionality, allowing parameterization via the control or also via tools such as PACTware™.

Technical data

Error indication	LED, red
Tests/approvals	
Approvals	CE cULus