

**Q45 series – Rectangular sensors**



**Q45 series  
ac/dc operation with relay output**

**Wave length**

IR (infrared)	880 nm
Red	680 nm
	660 nm (Q45...FP)
	650 nm (Q45...FV)

**Adjustments**

sensitivity  
light and dark operate

**Timing function**

0...15 s (only with 45LM5/8..)

**Supply**

Supply voltage	24...250 V ac or 12...250 V dc
No load current	≤ 1,5 W
Delay upon power up	100 ms

**Output**

Continuous load current	≤ 5 A <sup>1)</sup>
Switching frequency	33 Hz

**Material**

Housing	PBT
Lens	acrylic
Cover	Lexan® (PC)
Protection class (IEC 60529/EN 60529)	IP67
Temperature range	-40...+70 °C
Cable	2 m, PVC, 5 x 0,34 mm <sup>2</sup> 2 m, PVC, 2 x 0,5 mm <sup>2</sup> (Q45...E) <i>minicon (7/8")</i>
Connector	

**Indicator LED's**

Red	light sensed (AID, alignment indicating device)
Green	supply voltage
Yellow	output load status
7-segment red bargraph	signal strength (Q45LM...D only)

**Accessories**

**Plug-in modules for timing functions and LED-display**

45LM5	30 354 95	ON and OFF-delay
45LM8	30 354 96	one-shot
45LM5D	30 365 91	ON and OFF-delay, display
45LM8D	30 365 93	one-shot display
45LMD	30 354 97	display

**Brackets**

SMB30A	34 703 00	angle bracket
SMB30SC	30 525 21	swivel mount bracket
SMB30C	34 701 00	split clamp bracket

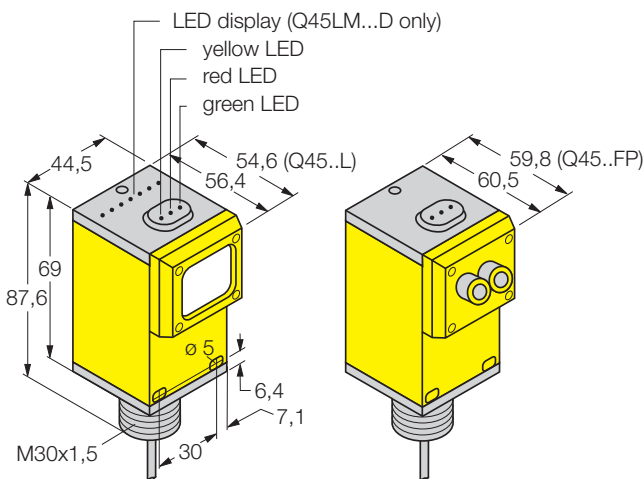
**Connectors**

RK50-2	69 166	straight type
RK30-2	69 159	straight type, 3-pin for emitter

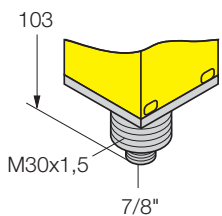
<sup>1)</sup> Also available with solid-state output.

**Dimensions [mm]**

● **Cable**



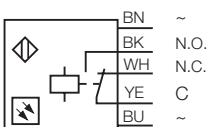
● **Connector**



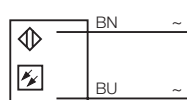
M30, AF 36 mounting nut included

**Wiring**

all types except emitter



emitter



# Q45 series

## ac/dc operation with relay output

Excess gain curve:  
Excess gain in relation to the distance

	Max. range/Fibre type	Light source	Output function	Connection	Type	Ident number
<b>Retro-reflective</b> 	0,08...9 m	red	relay	cable	<b>Q45VR3LV</b>	30 539 81
	0,08...9 m	red	relay	connector	<b>Q45VR3LVQ</b>	30 543 15
	0,15...6 m	red	relay	cable	<b>Q45VR3LP</b>	30 539 80
	0,15...6 m	red	relay	connector	<b>Q45VR3LPQ</b>	30 543 14
<b>Diffuse</b> 	0,45 m	IR	relay	cable	<b>Q45VR3D</b>	30 539 74
	0,45 m	IR	relay	connector	<b>Q45VR3DQ</b>	30 543 08
	1,8 m	IR	relay	cable	<b>Q45VR3DL</b>	30 539 75
	1,8 m	IR	relay	connector	<b>Q45VR3DLQ</b>	30 543 09
	3 m	IR	relay	cable	<b>Q45VR3DX</b>	30 539 76
	3 m	IR	relay	connector	<b>Q45VR3DXQ</b>	30 543 10
<b>Convergent*</b> 	38 mm	red	relay	cable	<b>Q45VR3CV</b>	30 539 72
	38 mm	red	relay	connector	<b>Q45VR3CVQ</b>	30 543 06
	100 mm	red	relay	cable	<b>Q45VR3CV4</b>	30 539 73
	100 mm	red	relay	connector	<b>Q45VR3CV4Q</b>	30 543 07
<b>Opposed</b> 	60 m	IR	(emitter) relay	cable	<b>Q453E</b>	30 539 94
	60 m	IR	relay	connector	<b>Q45VR3R</b>	30 539 82
<b>Fibre-optic</b> 	glass	IR	relay	cable	<b>Q45VR3F</b>	30 539 77
	glass	IR	relay	connector	<b>Q45VR3FQ</b>	30 543 11
	glass	red	relay	cable	<b>Q45VR3FV</b>	30 539 79
	glass	red	relay	connector	<b>Q45VR3FVQ</b>	30 543 13
	plastic	red	relay	cable	<b>Q45VR3FP</b>	30 539 78
	plastic	red	relay	connector	<b>Q45VR3FPQ</b>	30 543 12

\* Spot size at focus (convergent mode): Q45VR3CV:  $\varnothing$  1,3 mm, Q45VR3CV4:  $\varnothing$  1,5 mm.

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These sensors do not include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can result in either an energised or de-energised output condition. These products should not be used as sensing devices for personnel safety.