



Q45 series retro-reflective laser with transistor output

Wave length

Red	670 nm
Spot size (at lens)	2,5 mm (ellips)
Beam divergence	≈ 0,5 mrad
Laser protection class (EN 60825, IEC 60825)	II

Adjustment

sensitivity	
light/dark operate	
0...15 s (only with 45LM5/8..)	

Timing function

Supply

Supply voltage	10...30 V dc
Ripple V_{pp}	10 %
No load current	≤ 50 mA
Delay upon power up	1 s

Protection

reverse polarity	
short-circuit (pulsed)	

Output

Continuous load current	≤ 250 mA
Switching frequency	250 Hz

Material

Housing	PBT
Lens	acrylic
Cover	Lexan® (PC)
Protection class (IEC 60529/EN 60529)	IP67
Temperature range	-10...+40 °C
Cable	2 m, PVC, 5 x 0,34 mm ²
Connector	eurocon (M12 x 1)

Indicator LED's

Red	light sensed (AID - alignment indicating device)
Green	power-on
Green flashing	output overload
Yellow	output energised
7-segment bargraph display	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

Reflector

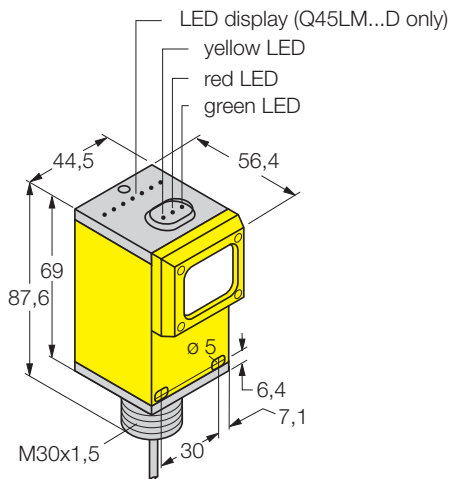
BRT46	30 400 71	included
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Connectors

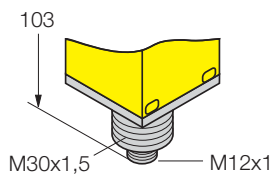
WAK4.5-2/P00	80 085 76	straight type
WWAK4.5-2/P00	80 085 83	right-angled type

Dimensions [mm]

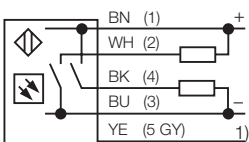
● Cable



● Connector



Wiring

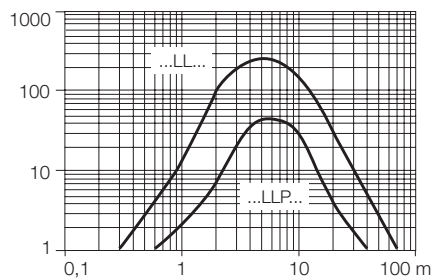


¹⁾ laser control (+ OFF, - ON)

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Excess gain curve:
Excess gain in relation to the distance

— Retro-reflective



	<i>Max. range</i>	<i>Light source</i>	<i>Output function</i>	<i>Connection</i>	<i>Type</i>	<i>Ident number</i>
	0,3...70 m	red	pnp, npn	cable	Q45BB6LL	30 372 48
	0,3...70 m	red	pnp, npn	connector	Q45BB6LLQ6 <u>with polarising filter</u>	30 410 32
	0,6...40 m	red	pnp, npn	cable	Q45BB6LLP	30 395 51
	0,6...40 m	red	pnp, npn	connector	Q45BB6LLPQ6	30 410 33



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.