

**Q85 series – Rectangular sensors**



**Q85 series  
dc operation**

**Wave length**

IR (infrared) 880 nm  
Red 680 nm

**Adjustments**

sensitivity  
light or dark operate

**Timing function**

0,1...5 s (Q85...-T9-...)

**Supply**

Supply voltage 10...48 V dc  
No load current ≤ 50 mA  
≤ 25 mA (emitter)  
Delay upon power up 100 ms

**Protection**

reverse polarity  
short-circuit (pulsed)

**Output**

Continuous load current ≤ 120 mA  
Overload trip point ≥ 270 mA typical at 20 °C  
Switching frequency ≤ 500 Hz  
≤ 250 Hz (Q85...DL...)  
≤ 60 Hz (Q85...-T9-...)

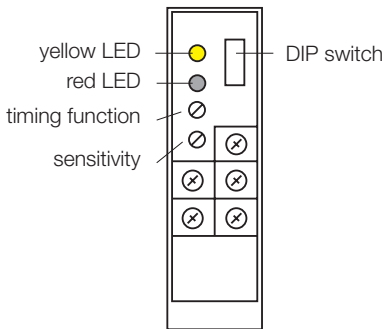
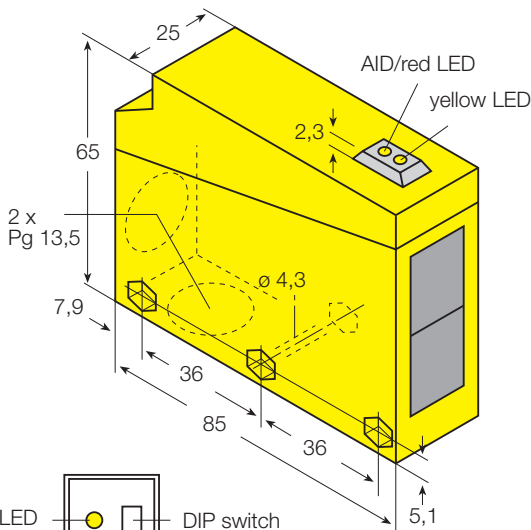
**Material**

Housing ABS  
Lens acrylic  
Protection class IP67  
(IEC 60529/EN 60529)  
Temperature range -25...+55 °C

**Indicator LED's**

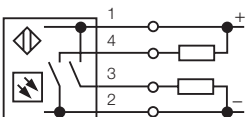
Red light sensed  
Yellow output load status  
Red flashing AID (alignment indicating device)

**Dimensions [mm]**

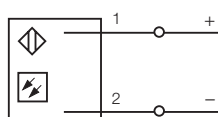


**Wiring**

all types except emitter



emitter



**Accessories**

**Brackets**

SMB85B 35 619 00 side mounting included  
SMB85R 35 618 00 rear mounting, optional

# Q85 series

## dc operation

Excess gain curve:  
Excess gain in relation to the distance

	<i>Max. range</i>	<i>Light source</i>	<i>Output function</i>	<i>Connection</i>	<i>Type</i>	<i>Ident number</i>
<p><b>Retro-reflective</b></p>	4,6 m 4,6 m	red red	pnp, npn pnp, npn	terminals terminals	with polarising filter <b>Q85BB62LP-B</b> <b>Q85BB62LP-T9-B</b>	35 616 00 35 617 00
<p><b>Diffuse</b></p>	0,25 m 0,25 m 1 m 1 m	IR IR IR IR	pnp, npn pnp, npn pnp, npn pnp, npn	terminals terminals terminals terminals	<b>Q85BB62D-B</b> <b>Q85BB62D-T9-B</b> <b>Q85BB62DL-B</b> <b>Q85BB62DL-T9-B</b>	35 609 00 35 610 00 35 611 00 35 612 00
<p><b>Opposed</b></p>	23 m	red	(emitter) pnp, npn pnp, npn	terminals terminals terminals	<b>Q8562E-B</b> <b>Q85BB62R-B</b> <b>Q85BB62R-T9-B</b>	35 613 00 35 614 00 35 615 00

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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.