



Q40 series dc operation

Wave length

IR (infrared)	880 nm
IR (infrared)	950 nm (opposed)
Red	680 nm

Supply

Supply voltage	10...30 V dc
Ripple V_{pp}	≤ 10 %
No load current	≤ 25 mA
	≤ 20 mA (receiver)
	≤ 30 mA (polarised retro)
	≤ 35 mA (background suppression)

Delay upon power up 100 ms

Protection

reverse polarity
short-circuit (pulsed)

Output

Programmable (see wiring)	light and dark operate or light operate and alarm
Continuous load current	≤ 150 mA
Overload trip point	≥ 220 mA typical at 20 °C
Switching frequency	≤ 160 Hz

Material

Housing	PBT
Lens	acrylic
	Lexan® (PC) (opposed)
	IP69K

Protection class (DIN 40050)

Temperature range

-40...+70 °C

Cable

2 m, PVC, 4 x 0,5 mm²

Connector

4-pin M12x1 Euro-style

Indicator LED's

Yellow	light sensed
Green	supply voltage
Yellow flashing	low gain
Green flashing	output overload

Accessories

Brackets

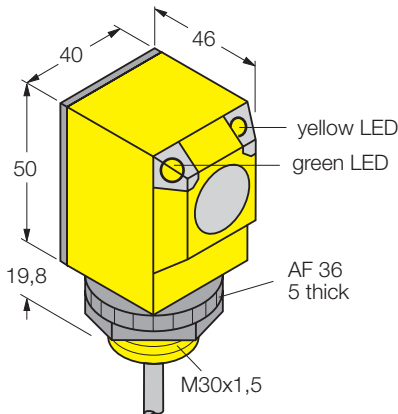
SMB30A	34 703 00	angle bracket
SMB30Q	34 705 00	angle bracket
SMB30SC	30 525 21	swivel mount bracket
SMB30C	34 701 00	split clamp bracket

Connectors

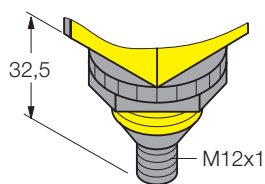
MQDC-406	30 451 36	straight type
MQDC-406RA	30 471 04	right-angled type

Dimensions [mm]

● Cable

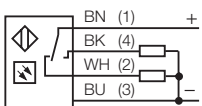


● Connector

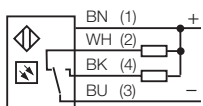


Wiring

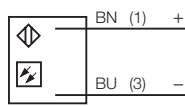
pnp complementary



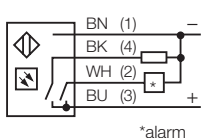
npn complementary



emitter

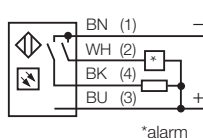


pnp light op. + alarm



*alarm

npn light op. + alarm



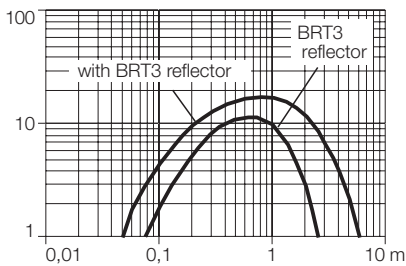
*alarm

Q40 series

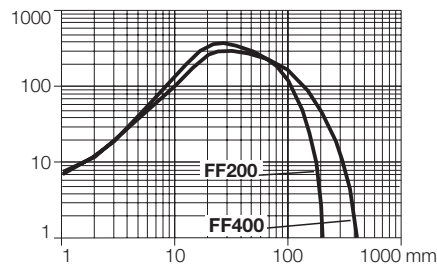
dc operation

Excess gain curve:
Excess gain in relation to the distance

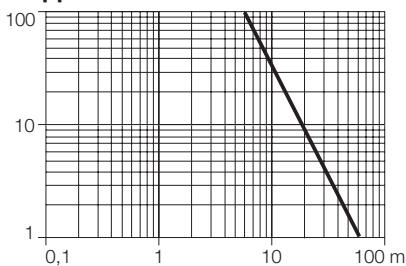
— Retro-reflective



— Fixed-field



— Opposed



	<i>Max. range</i>	<i>Light source</i>	<i>Output function</i>	<i>Connection</i>	<i>Type</i>	<i>Ident number</i>
<p>with polarising filter</p> <p>Q40SP6LP</p> <p>Q40SP6LPQ</p> <p>Q40SN6LP</p> <p>Q40SN6LPQ</p>	6 m	red	pnp	cable		34 568 00
	6 m	red	pnp	connector		34 569 00
	6 m	red	npn	cable		34 560 00
	6 m	red	npn	connector		34 561 00
<p>Q40SP6FF200</p> <p>Q40SP6FF200Q</p> <p>Q40SP6FF400</p> <p>Q40SP6FF400Q</p> <p>Q40SN6FF200</p> <p>Q40SN6FF200Q</p> <p>Q40SN6FF400</p> <p>Q40SN6FF400Q</p>	200 mm	IR	pnp	cable		34 564 00
	200 mm	IR	pnp	connector		34 565 00
	400 mm	IR	pnp	cable		34 566 00
	400 mm	IR	pnp	connector		34 567 00
	200 mm	IR	npn	cable		34 556 00
	200 mm	IR	npn	connector		34 557 00
	400 mm	IR	npn	cable		34 558 00
	400 mm	IR	npn	connector		34 559 00
<p>Q406E</p> <p>Q40SP6R</p> <p>Q40SN6R</p> <p>Q406EQ</p> <p>Q40SP6RQ</p> <p>Q40SN6RQ</p>	60 m	IR	(emitter)	cable		34 538 00
			pnp	cable		34 570 00
			npn	cable		34 562 00
	60 m	IR	(emitter)	connector		34 539 00
			pnp	connector		34 571 00
			npn	connector		34 563 00

Subject to changes without notice • Edition 07.03 • P/N ED016



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.