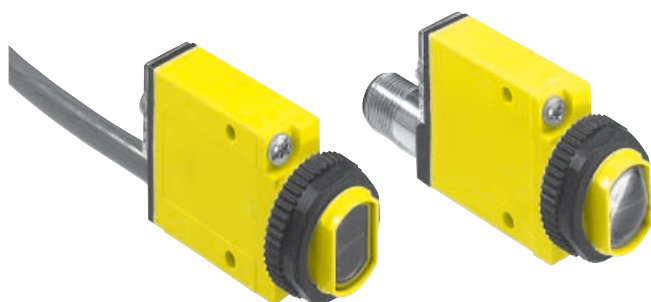




MINI-BEAM™ Series DC Operation

Wave length

IR (infrared)	880 nm
Red	650 nm
Green	525 nm
Blue	475 nm

Adjustments

Sensitivity
Light & dark operate

Supply

Supply voltage	10 VDC ...30 VDC
Ripple V_{pp}	$\leq 10\%$
No load current	$\leq 25\text{ mA}$
Delay upon power up	100 ms

Protection

Reverse polarity
Short-circuit (pulsed)

Output

Bipolar	Light/dark operate
Continuous load current	$\leq 150\text{ mA}$
Overload trip point	$\geq 220\text{ mA}$ typical at 20 °C
Switching frequency	$\leq 500\text{ Hz}$

Material

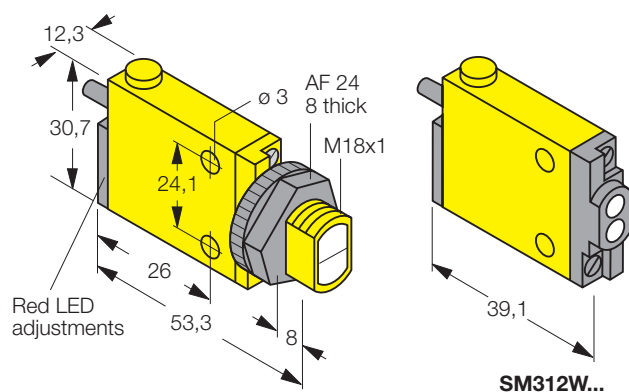
Housing	PBT
Lens	Acrylic
Protection class (IEC 60529/EN 60529)	IP67
Temperature range	-20 °C...+70 °C
Cable	2 m, PVC, 4 x 0,5 mm ²
Connector	4-pin M12x1 Euro-Style

Indicator LED's

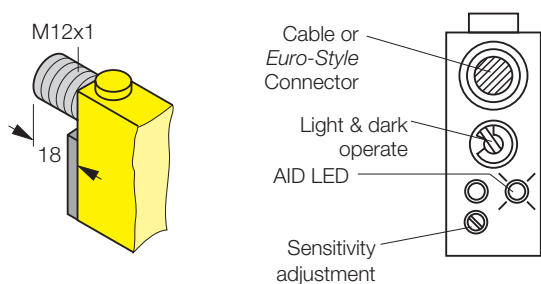
Red	Light sensed
Red flashing	AID (alignment indicating device)

Dimensions [mm]

● Cable

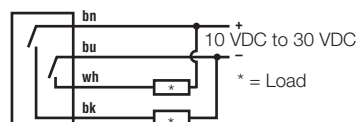


● Connector

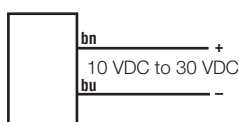


Wiring

All types except Emitter



Emitter



Accessories

Brackets

SMB312B	37 093 00	Bottom mounting
SMB312S	37 092 00	Side mounting
SMB18A	34 702 00	Front mounting
SMB18SF	30 525 19	Swivel mount bracket

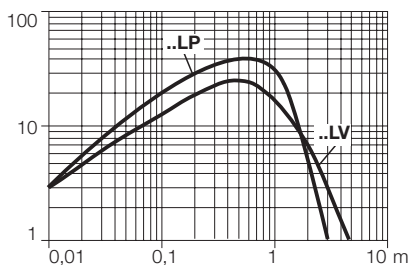
Connectors

MQDC-406	30 451 36	Straight type
MQDC-406RA	30 451 36	Right-angled type

MINI-BEAM™ Series

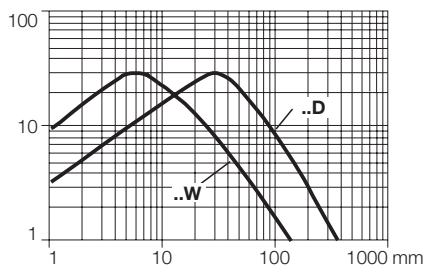
DC Operation

— Retro-reflective



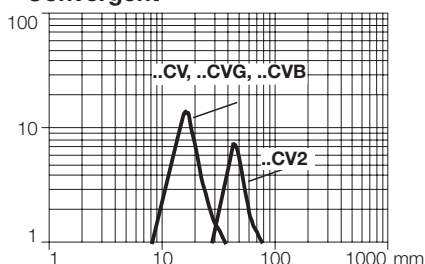
5 m	red	pnnp, npnp	cable	SM312LV	38 032 00
5 m	red	pnnp, npnp	connector	SM312LVQD	38 055 00
3 m	red	pnnp, npnp	cable	SM312LP	30 497 69
3 m	red	pnnp, npnp	connector	SM312LPQD	30 497 71

— Diffuse



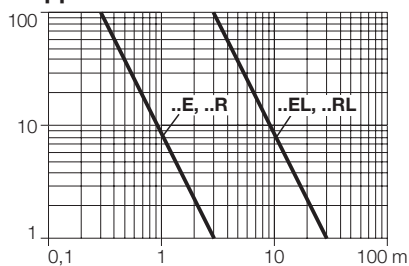
380 mm	IR	pnnp, npnp	cable	SM312D	38 049 00
380 mm	IR	pnnp, npnp	connector	SM312DQD	38 025 00
130 mm	IR	pnnp, npnp	cable	SM312W	37 314 00
130 mm	IR	pnnp, npnp	connector	SM312WQD	37 312 00

— Convergent ¹⁾



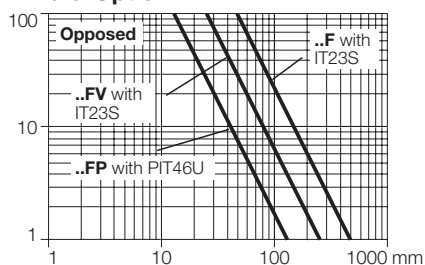
16 mm	red	pnnp, npnp	cable	SM312CV	38 050 00
16 mm	red	pnnp, npnp	connector	SM312CVQD	30 268 32
16 mm	green	pnnp, npnp	cable	SM312CVG	30 509 66
16 mm	green	pnnp, npnp	connector	SM312CVGQD	30 509 85
16 mm	blue	pnnp, npnp	cable	SM312CVB	30 472 71
16 mm	blue	pnnp, npnp	connector	SM312CVBQD	30 472 77
43 mm	red	pnnp, npnp	cable	SM312CV2	30 261 59
43 mm	red	pnnp, npnp	connector	SM312CV2QD	38 056 00

— Opposed



3 m	IR	(emitter) pnnp, npnp	cable	SM31E	38 002 00
3 m	IR	(emitter) pnnp, npnp	connector	SM31R	38 022 00
30 m	IR	(emitter) pnnp, npnp	connector	SM31EQD	30 268 35
30 m	IR	(emitter) pnnp, npnp	cable	SM31RQD	30 268 39
30 m	IR	(emitter) pnnp, npnp	cable	SM31EL	38 005 00
30 m	IR	(emitter) pnnp, npnp	connector	SM31RL	38 006 00
30 m	IR	(emitter) pnnp, npnp	connector	SM31ELQD	30 269 52
30 m	IR	(emitter) pnnp, npnp	connector	SM31RLQD	30 269 51

— Fibre-Optic



glass ²⁾	IR	pnnp, npnp	cable	SM312F	38 051 00
glass ²⁾	IR	pnnp, npnp	connector	SM312FQD	38 052 00
glass ²⁾	red	pnnp, npnp	cable	SM312FV	30 256 49
glass ²⁾	red	pnnp, npnp	connector	SM312FVQD	38 057 00
plastic ³⁾	red	pnnp, npnp	cable	SM312FP	37 194 00
plastic ³⁾	red	pnnp, npnp	connector	SM312FPQD	37 302 00

¹⁾ Spot size at focus (convergent mode): SM312CV: ø 1,3 mm, SM312CVG: ø 1 mm, SM312CVB: ø 1,8 mm, SM312CV2: ø 3 mm.

²⁾ Available LED colours: infrared, red, green and blue. ³⁾ Available LED colours: red, green and blue.



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.