



## S30 series DC Operation

<b>Wave length</b>	880 nm
IR (infrared)	950 nm (opposed, retro)
Red	680 nm
<b>Supply</b>	
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)  
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 (DIN 40050)  
-40...+70 °C  
Cable  
2 m, PVC, 4 x 0,5 mm<sup>2</sup>  
Connector  
4-pin M12x1 Euro-style

**Indicator LED's**  
Yellow  
light sensed  
Green  
supply voltage  
Yellow flashing  
low gain  
Green flashing  
output overload

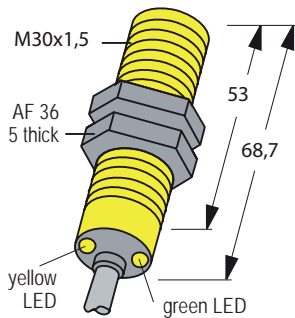
### Accessories

<b>Brackets</b>		
SMB30A	34 703 00	angle bracket
SMB30SC	30 525 21	swivel mount bracket
SMB30C	34 701 00	split clamp bracket

<b>Connectors</b>		
MQDC-406	30 451 36	straight type
MQDC-406RA	30 471 04	right-angled type

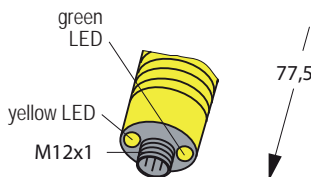
### Dimensions [mm]

#### ● Cable



S30S...6FF...

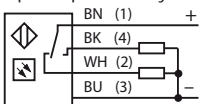
#### ● Connector



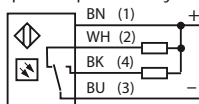
S30S...6FF...Q

### Wiring

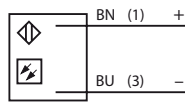
#### pnp complementary



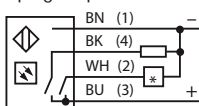
#### nnp complementary



#### emitter

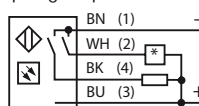


#### pnp light op. + alarm



\*alarm

#### nnp light op. + alarm



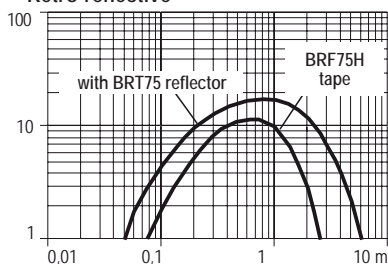
\*alarm

# S30 series

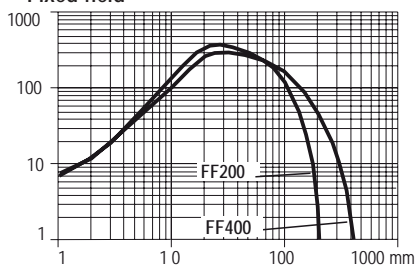
## DC Operation

Excess gain curve:  
Excess gain in relation to the distance

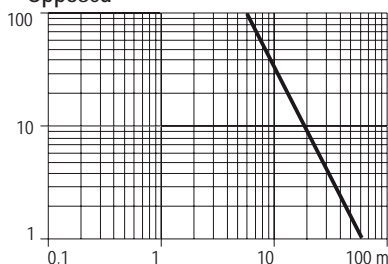
### Retro-reflective



### 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>
Retro-reflective	6 m	red	pnp	cable	with polarising filter S30SP6LP	38 604 00
	6 m	red	pnp	connector	S30SP6LPQ	38 605 00
	6 m	red	npn	cable	S30SN6LP	38 596 00
	6 m	red	npn	connector	S30SN6LPQ	38 597 00
Fixed-field	200 mm	IR	pnp	cable	S30SP6FF200	34 600 00
	200 mm	IR	pnp	connector	S30SP6FF200Q	34 601 00
	400 mm	IR	pnp	cable	S30SP6FF400	34 602 00
	400 mm	IR	pnp	connector	S30SP6FF400Q	34 603 00
	200 mm	IR	npn	cable	S30SP6FF200	34 592 00
	200 mm	IR	npn	connector	S30SP6FF200Q	34 593 00
	400 mm	IR	npn	cable	S30SN6FF400	34 594 00
	400 mm	IR	npn	connector	S30SN6FF400Q	34 595 00
Opposed	60 m	IR	(emitter) pnp	cable cable	S306E S30SP6R	34 574 00 34 606 00
	60 m	IR	npn	cable	S30SN6R	34 598 00
			(emitter) pnp	connector connector	S306EQ S30SP6RQ	34 575 00 34 607 00
			npn	connector	S30SN6RQ	34 599 00

Subject to changes without notice • Edition 06.07 • P/N ED020



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.