



**Model Number**

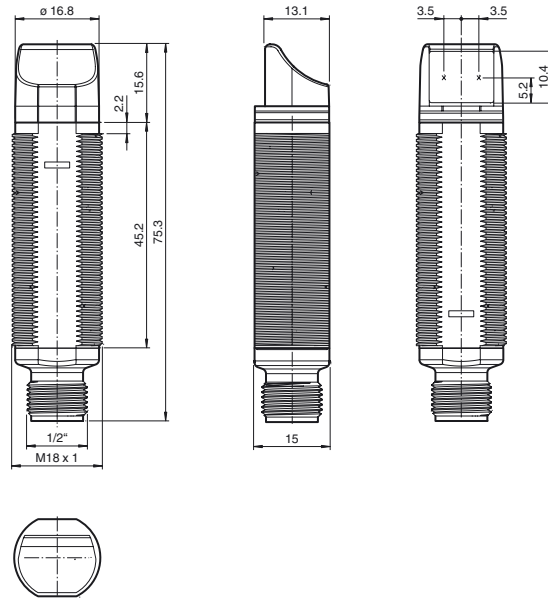
**GA18-S/GK18-S/59/161/166**

Thru-beam sensor  
Plastic connector Micro AC 1/2", 4-pin

**Features**

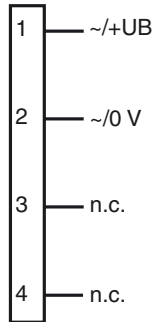
- Short design in M18 plastic housing
- Optical face lateral
- 4 LEDs indicator for 360° visibility
- Optimal price/power ratio
- AC/DC wide range supply

**Dimensions**

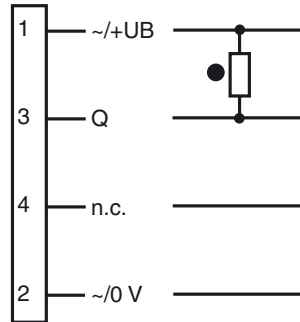


**Electrical connection**

Transmitter

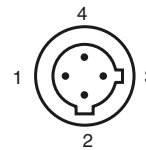


Receiver



- = Light on
- = Dark on

**Pinout**



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**Technical data****System components**

Emitter	GA18-S/166
Receiver	GK18-S/59/161/166

**General specifications**

Effective detection range	0 ... 12 m
Threshold detection range	17.5 m
Light source	LED
Light type	modulated visible red light , 640 nm
Diameter of the light spot	approx. 650 mm at 17.5 m
Angle of divergence	approx. 2 °
Optical face	lateral
Ambient light limit	30000 Lux
Accessories provided	Mounting aids

**Indicators/operating means**

Operating display	LED green, statically lit Power on
Function display	Receiver: LED yellow, lights up when light beam is free, flashes when falling short of the stability control ; OFF when light beam is interrupted

**Electrical specifications**

Operating voltage	$U_B$	20 ... 250 V AC/DC
No-load supply current	$I_0$	< 2.5 mA

**Output**

Switching type	dark on	
Signal output	N-channel MOSFET, short circuit protected	
Switching voltage	max. 250 V AC/DC	
Switching current	max. 200 mA	
Voltage drop	$U_d$	$\leq 3.5$ V AC/DC
Switching frequency	$f$	50 Hz
Response time		$\leq 10$ ms

**Ambient conditions**

Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-40 ... 75 °C (-40 ... 167 °F)

**Mechanical specifications**

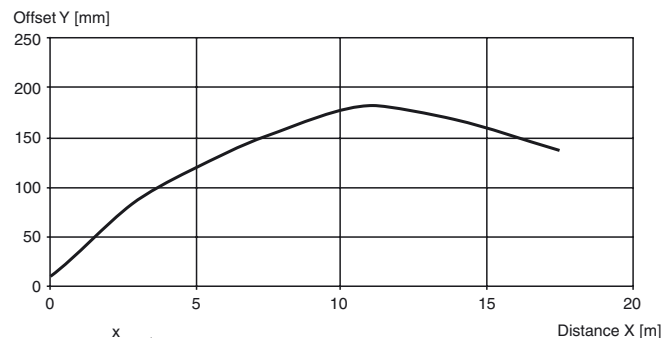
Protection degree	IP67
Connection	Micro AC connector, 1/2" V124 ; 4-pin
Material	
Housing	PC-PBT
Optical face	PMMA
Mass	approx. 20 g

**Compliance with standards and directives**

Standard conformity	
Product standard	EN 60947-5-2:2007 ; IEC 60947-5-2:2007
Standards	UL 508

**Approvals and certificates**

Protection class	II, rated insulation voltage $\leq 250$ V AC with pollution degree 1-2 according to IEC 60664-1
UL approval	cULus Listed, Type 1 enclosure

**Curves/Diagrams****Characteristic response curve****Accessories****CPZ18B03**

For Series CP18 Threaded Photoelectric Sensors

**BF 18**

Mounting flange, 18 mm

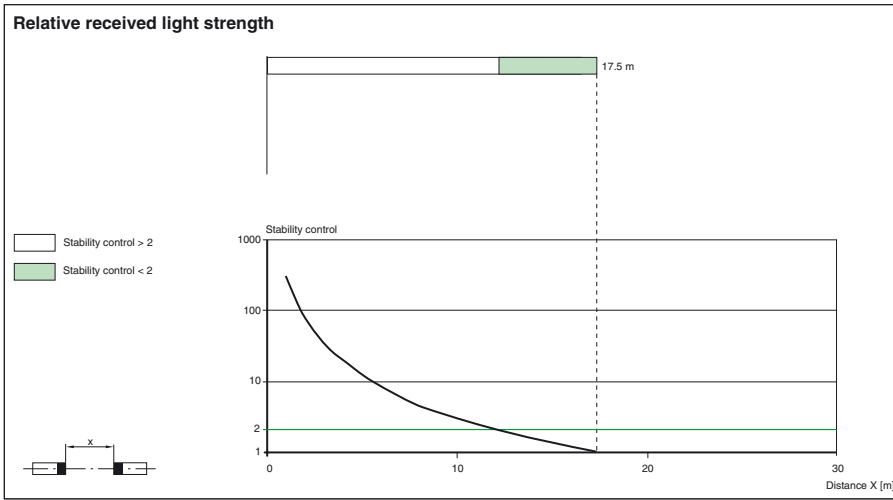
**BF 18-F**

Mounting flange with dead stop, 18 mm

**BF 5-30**

Universal mounting bracket for cylindrical sensors with a diameter of 5 ... 30 mm

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)



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Subject to modifications without notice

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