

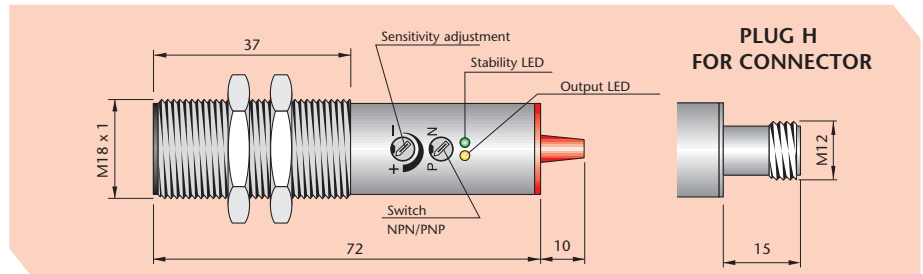
PHOTOELECTRIC SENSORS FT18M SERIES 10 ÷ 30 VDC



STAINLESS STEEL CYLINDRICAL HOUSING M18x1
 PROGRAMMABLE OUTPUT NPN/PNP
 FUNCTIONS NO + NC
 SENSITIVITY ADJUSTMENT
 AXIAL BEAM

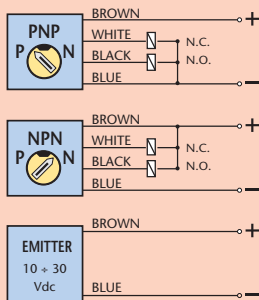
TECHNICAL CHARACTERISTICS

Dimensions mm



TYPE	DIRECT REFLECTION		REFLECTION WITH REFLECTOR	POLARIZED REFLECTION WITH REFLECTOR	THRU BEAM		
	FT18M-CP2	FT18M-CP4	FT18M-CR	FT18M-CAR	RECEIVER	EMITTER	
MODEL WITH CABLE	FT18M-CP2	FT18M-CP4	FT18M-CR	FT18M-CAR	FT18M-CBR	FT18M-CBE	
MODEL WITH H PLUG	FT18M-CP2-H	FT18M-CP4-H	FT18M-CR-H	FT18M-CAR-H	FT18M-CBR-H	FT18M-CBE-H	
Sensing range (Sn)	cm	20*	40*	250**	100**	1500	
Programmable output			NPN/PNP	NO + NC		-	
Light source	Led	Infrared		Red	Infrared		
Power ON delay	mSec	≤ 75					
Switching frequency	Hz	700			250		
Continuous voltage (Res. ripple ≤10%)	V	10 ÷ 30					
Max output current	mA	200			-		
Max current consumption at 24 Vdc	mA	≤ 50		≤ 20		≤ 35	
Voltage drop (I out = 200 mA)	V	≤ 3			-		
Short circuit protection		Incorporated			-		
Light immunity		> 10.000 Lux			-		
LED	Yellow	Operation indicator				Power supply (Red led)	
	Green	Stability					
Temperature limit	°C	Storage -20 ÷ +90°C • Working -20 ÷ +50°C					
Protection degree	IP	67					
Housing		Stainless steel AISI 303					
Cable	2m	4 x 0.25 mm ²			4 x 0,25 mm ²	2 x 0,50 mm ²	
Connector plug		H					

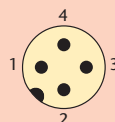
WIRING DIAGRAMS



N.B.: On request is available cable for sensors with different length 3.5 - 5 - 7.5 - 10 m.

CONNECTION WHIT H PLUG FOR CONNECTORS SEE PAGE 85

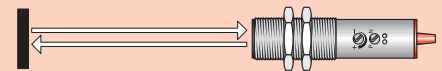
VIEW OF MALE CONNECTOR H



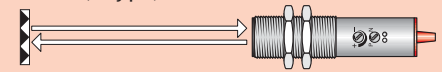
2 WIRINGS (EMITTER) 4 WIRINGS
 1 = Brown / + 1 = Brown / +
 3 = Blue / - 3 = Blue / -
 4 = Black / output NO 4 = Black / output NO
 2 = White / output NC 2 = White / output NC

TYPES

Direct reflection (P type)



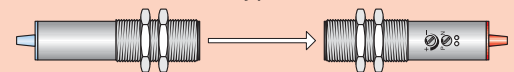
Reflection with reflector (R type)



Polarized reflection (AR type)



Thru beam emitter + receiver (B type)



*The sensing distance is related to matt white paper dim. 10 x 10 cm. **The sensing distance is related to CT80 reflector.

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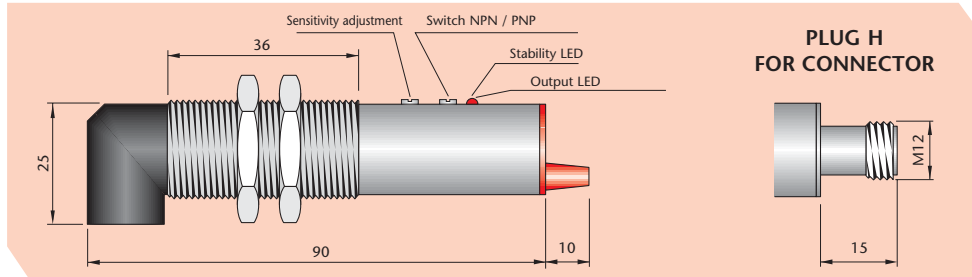
Carl-Bosch-Straße 8
 49525 Lengerich/Germany
 Internet: www.meyle.de

Tel.: (+49) 05481/9385-0
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PHOTOELECTRIC SENSORS FT18M SERIES 90° BEAM 10 ÷ 30 VDC

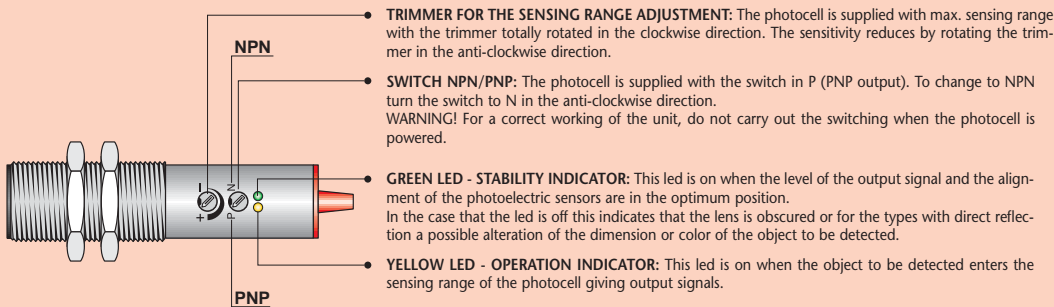


STAINLESS STEEL CYLINDRICAL HOUSING M18x1
 PROGRAMMABLE OUTPUT NPN/PNP
 FUNCTIONS NO + NC
 SENSITIVITY ADJUSTMENT
 90° BEAM



DIRECT REFLECTION		REFLECTION WITH REFLECTOR	POLARIZED REFLECTION WITH REFLECTOR	RECEIVER THRU BEAM	EMITTER
FT18M-CP2-90	FT18M-CP4-90	FT18M-CR-90	FT18M-CAR-90	FT18M-CBR-90	FT18M-CBE-90
FT18M-CP2-90-H	FT18M-CP4-90-H	FT18M-CR-90-H	FT18M-CAR-90-H	FT18M-CBR-90-H	FT18M-CBE-90-H
20*	40*	250**	100**	1500	
NPN/PNP			NO + NC	-	
Infrared			Red	Infrared	
≤ 75					
700			250		
10 ÷ 30					
200			-		
≤ 50	≤ 20			≤ 35	
≤ 3			-		
Incorporated			-		
> 10.000 Lux			-		
Operation indicator			Power supply (Red led)		
Stability			Power supply (Red led)		
Storage -20 ÷ +90°C • Working -20 ÷ +50°					
67					
Stainless steel AISI 303					
4 x 0,25 mm ²			4 x 0,25 mm ²	2 x 0,50 mm ²	
H					

INSTRUCTIONS FOR THE PROGRAMMING AND ADJUSTMENT

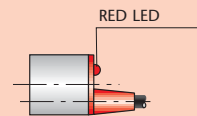


NOTE! Before giving a power supply to the photocell it is recommended that the same unit be programmed by using the switch in the required function NPN or PNP.

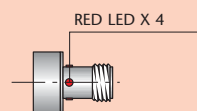
NOTE! It is recommended that the trimmer and the switch be rotated very carefully by using a proper tool otherwise these can be seriously damaged.

EMITTER FT18M-CBE

POWER SUPPLY LED POSITION



TYPES WITH CABLE



TYPES WITH CONNECTOR

Meyer Industrie-Electronic GmbH - MEYLE

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PHOTOELECTRIC

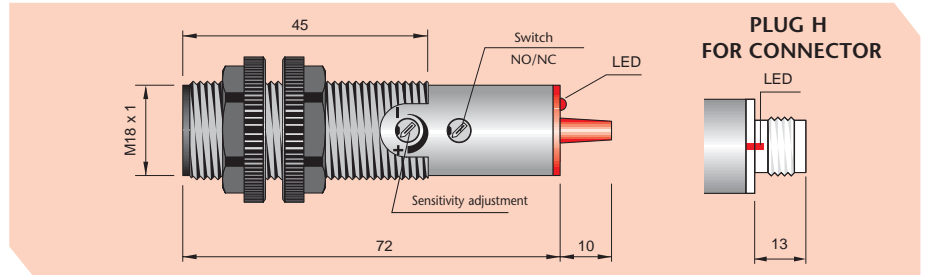
PHOTOELECTRIC SENSORS FT18 SERIES 20 ÷ 250 VAC



CYLINDRICAL HOUSING M18x1
 3 WIRES A.C.
 PROGRAMMABLE OUTPUT NO/NC
 SENSITIVITY ADJUSTMENT
 AXIAL BEAM

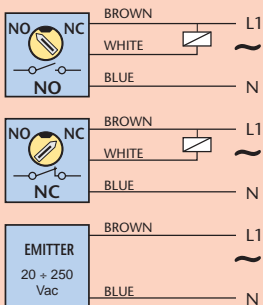
TECHNICAL CHARACTERISTICS

Dimensions mm



TYPE	DIRECT REFLECTION		REFLECTION WITH REFLECTOR	POLARIZED REFLECTION WITH REFLECTOR	THRU BEAM		
	FT18-AP2	FT18-AP4	FT18-AR	FT18-AAR	RECEIVER FT18-ABR	EMITTER FT18-ABE	
MODEL WITH CABLE	FT18-AP2	FT18-AP4	FT18-AR	FT18-AAR	FT18-ABR	FT18-ABE	
MODEL WITH H PLUG	FT18-AP2-H	FT18-AP4-H	FT18-AR-H	FT18-AAR-H	FT18-ABR-H	FT18-ABE-H	
Sensing range (Sn)	cm	20*	40*	250**	100**	1500	
Programmable output	NO or NC					-	
Light source	Led	Infrared		Red	Infrared		
Power ON delay	mSec	≤ 75					
Switching frequency	Hz	15					
Alternating voltage 50 ÷ 60 Hz	V	20 ÷ 250					
Max output current	mA	300					
Max peak current for 20 ms	A	3					
Max current consumption	mA	≤10					
Voltage drop (Sensor ON) (Max)	V	1.5					
Short circuit protection		Incorporated					
Light immunity		> 10.000 Lux					
Led		Operation indicator					Power supply
Temperature limit	°C	Storage -20 ÷ +90°C • Working -20 ÷ +50°C					
Protection degree	IP	67					
Plastic housing		Gray makrolon (On request stainless steel AISI 303)					
Cable	2m	3 x 0.35 mm ²					2 x 0,50 mm ²
Connector plug		H					

WIRING DIAGRAMS

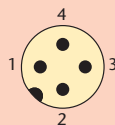


N.B.: On request is available cable for sensors with different length 3.5 - 5 - 7.5 - 10 m.

CONNECTIONS WITH H PLUG

FOR CONNECTORS SEE PAGE 85

VIEW OF MALE CONNECTOR H

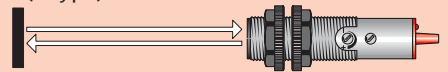


2 WIRINGS (EMITTER) 4 WIRINGS
 1 = L1 1 = Brown / L1
 3 = N 3 = Blue / N
 4 = White / NO - NC Programmable

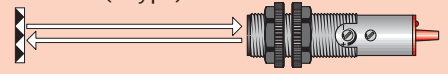
N.B.: Use female connector without led.

TYPES

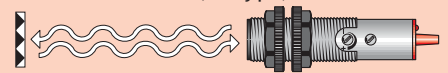
Direct reflection (P type)



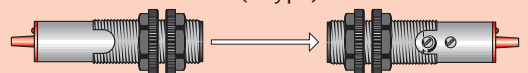
Reflection with reflector (R type)



Polarized reflection with reflector (AR type)



Thru beam emitter + receiver (B type)



*The sensing distance is related to matt white paper dim. 10 x 10 cm. **The sensing distance is related to CT80 reflector.

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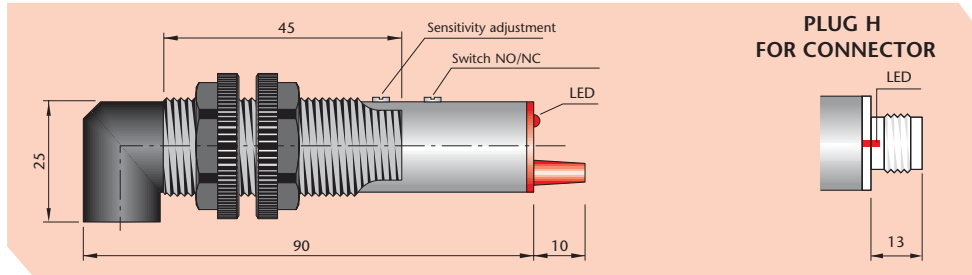
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PHOTOELECTRIC SENSORS FT18 SERIES 90° BEAM 20 ÷ 250 VAC

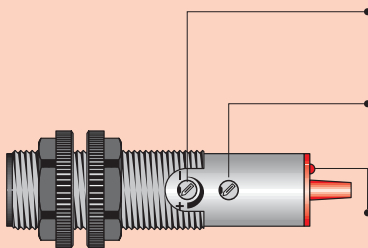


CYLINDRICAL HOUSING M18x1
 3 WIRES A.C.
 PROGRAMMABLE OUTPUT NO/NC
 SENSITIVITY ADJUSTMENT
 90° BEAM



DIRECT REFLECTION		REFLECTION WITH REFLECTOR	POLARIZED REFLECTION WITH REFLECTOR	RECEIVER THRU BEAM	EMITTER
FT18-AP2-90	FT18-AP4-90	FT18-AR-90	FT18-AAR-90	FT18-ABR-90	FT18-ABE-90
FT18-AP2-90-H	FT18-AP4-90-H	FT18-AR-90-H	FT18-AAR-90-H	FT18-ABR-90-H	FT18-ABE-90-H
20*	40*	250**	100**	1500	
NO or NC					-
Infrared			Red	Infrared	
≤ 75					
15					-
20 ÷ 250					
300					-
3					-
≤ 10					
1.5					-
Incorporated					-
> 10.000 Lux					-
Operation indicator					Power supply
Storage -20 ÷ +90°C • Working -20 ÷ +50°C					
67					
Gray makrolon (On request stainless steel AISI 303)					
3 x 0.35 mm ²					2 x 0,50 mm ²
H					

INSTRUCTIONS FOR THE PROGRAMMING AND ADJUSTMENT



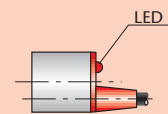
- TRIMMER FOR THE SENSING RANGE ADJUSTMENT:** The photocell is supplied with max. sensing range with the trimmer totally rotated in the clockwise direction. The sensitivity reduces by rotating the trimmer in the anti-clockwise direction.
- SWITCH NO/NC:** The photocell is supplied with switch in NO position (in absence of the object to be detected the output is deactivated). To change to N.C. (in absence of the object to be sensed the output is activated) turn the switch to N.C. in the anti-clockwise direction.
- LED FOR INDICATION OF OPERATION:** This indicates the output of the photocell, in the absence of the object to be sensed it is off with output N.O. and is on with output N.C. this changes state when the object to be sensed enters into the sensing area of the photocell.

NOTE! Before giving a power supply to the photocell it is recommended that the same unit be programmed by using the switch in the required function NO or NC.

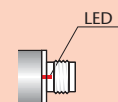
NOTE! It is recommended that the trimmer and the switch be rotated very carefully by using a proper tool otherwise these can be seriously damaged.

EMITTER FT18-ABE

POSITION OF POWER SUPPLY LED



TYPES WITH CABLE



TYPES WITH CONNECTOR

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