



Retro Ref. Photoelectric Sensors



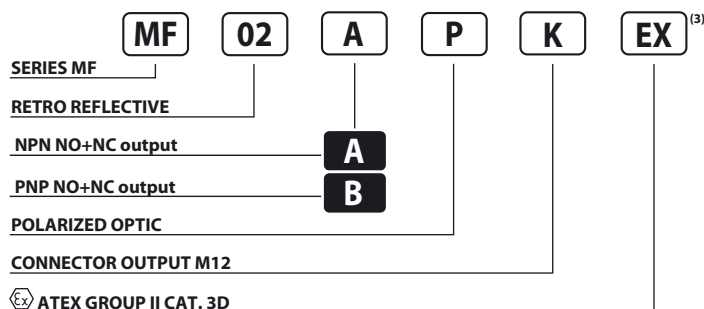
PHOTOELECTRIC SENSORS IN METAL HOUSING 12 ± 30 V DC NPN/PNP OUTPUT

- Programmable output, NPN/PNP, NC + NO
- Simple one-turn sensitivity
- Cable or M12 quick connect models
- Fast response time: 2 mS / 500 Hz
- Long working distances

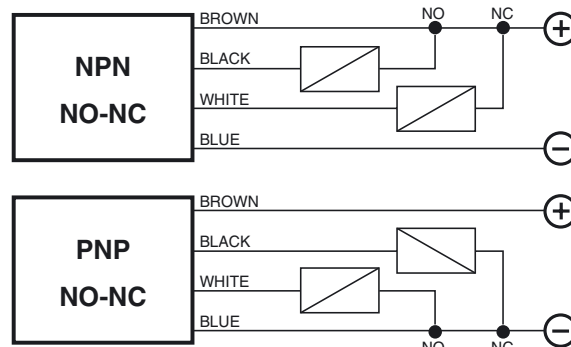
MF Series



Identification code

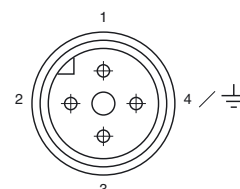


Wiring diagrams



AVAILABLE	POLARIZED	STANDARD
NOMINAL SWITCHING DISTANCE (Sn)	2 m ⁽¹⁾	6 m ⁽¹⁾
TOLERANCE	+10/-10 %Sn	
HYSTERESIS	10%	
EMISSION	Red (660 nm)	Infrared (875 nm)
NOMINAL VOLTAGE	12 ± 30VDC (-15 /+10%)	
RESIDUAL RIPPLE	≤ 10%	
MAX. OUTPUT CURRENT	200 mA	
ABSORPTION AT 30 VDC	40 mA	
VOLTAGE DROP (Sensor ON)	≤ 1,5 V (I = 100 mA)	
STATUS LED	Yellow	
SENSITIVITY ADJUSTMENT	Trimmer 1 turn	
SWITCHING FREQUENCY	500 Hz	
RESPONSE TIME	2 mS	
START UP DELAY	100 mS	
SHORT CIRCUIT PROTECTION	Present (self-resetting)	
ELECTRIC PROTECTIONS	Against polarity reversal - inductive loads	
TEMPERATURE LIMITS	-10 ± +60 °C	
LIGHT IMMUNITY	> 10.000 Lux ⁽²⁾	
PROTECTION DEGREE	IP 67	
CABLE LENGTH	2 m	
CABLE SECTION	4 x 0.25 mm ²	
HOUSING MATERIAL	Housing: nickel-plated brass - Lenses: methacrylate	
WEIGHT - cable output - (connector output)	- 130 g - (70 g)	

Connection with connector M12 (K)

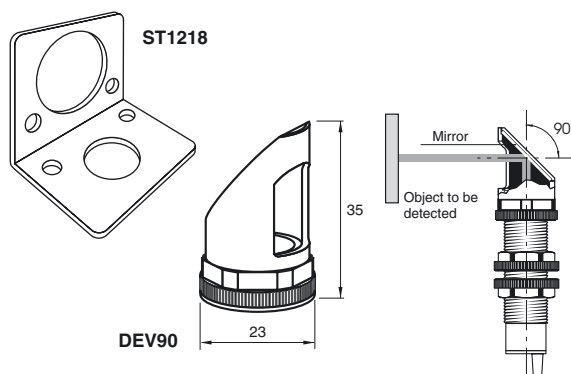


View of quadripole male connector.

CONTACTS CONFIGURATION

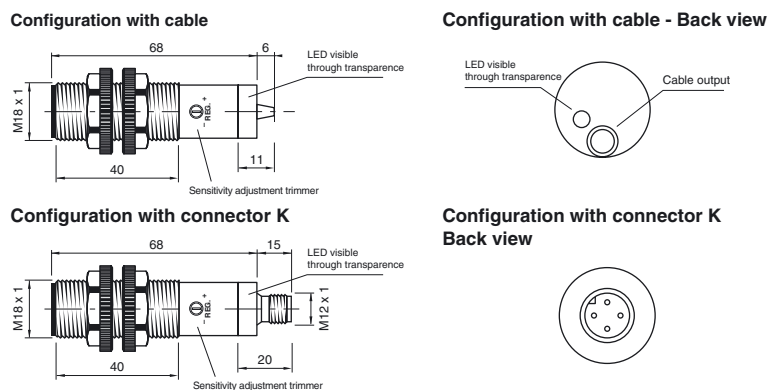
Output	Contacts numbers			
	1	2	3	4
(NO or NC)	+	NC	-	NO

Accessories



(1) Determined with CT04S reflector.
 (2) Determined with halogen tungsten lamp 3000° K.
 (3) Device marking Ex II 3D IP67 T6X.
 Note: for a proper use see norms at pages 12, 13, 14, 15 and 16.

Dimensions (mm)



Note: the trimmer just needs one turn.

Characteristic curves

