



PHOTOELECTRIC SENSORS



THRU BEAM

12÷30 V DC - NPN OR PNP OUTPUT

- 18mm tubular in metal housing
- Operation LED aids installation
- Cable or M12 quick connect models
- Emitter with test input

18 Series



IDENTIFICATION CODE

	18	22	K	T	*	EX ⁽²⁾
SERIES 18						
NPN NO output		22				
NPN NC output		23				
PNP NO output		24				
PNP NC output		25				
Emitter		21				
CONNECTOR OUTPUT M12						
TEST INPUT						
ATEX GROUP II CAT. 3D						

* Option valid only for code 1821

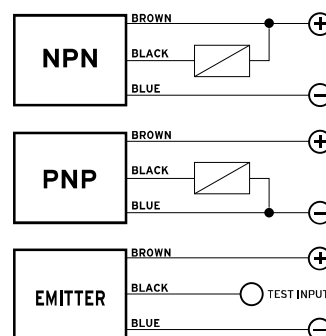
AVAILABLE	RECEIVER	EMITTER
NOMINAL SWITCHING DISTANCE (Sn)	25 m	
TOLERANCE	+10/-10 %Sn	
HYSTERESIS	10%	
EMISSION	-	Infrared (875 nm)
NOMINAL VOLTAGE	12 ÷ 30VDC (-15 /+10%)	
RESIDUAL RIPPLE	10%	
MAX. OUTPUT CURRENT	200 mA	-
ABSORPTION AT 30 VDC	15 mA	
VOLTAGE DROP (Sensor ON)	1.5V (I = 200 mA)	-
OPERATION LED	Yellow	
SWITCHING FREQUENCY	200 Hz	
RESPONSE TIME	2.5 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	> 10000 Lux ⁽¹⁾	
PROTECTION DEGREE	IP 67 (IP 65 for models with sensitivity adjustment)	
CABLE LENGTH	2 m	
CABLE SECTION	3 x 0.25 mm ²	3/2 x 0.25 mm ²
HOUSING MATERIAL	Housing: nickel plated brass - Lenses: methacrylate	
WEIGHT - cable output - (connector output)	- 110 g - (55 g)	

⁽¹⁾ Determined with halogen tungsten lamp 3000 °K.

⁽²⁾ Device marking II 3D IP67 T6X.

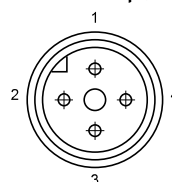
Note: for a proper use see norms at pages 18, 19, 20, 21 and 22.

WIRING DIAGRAMS



CONNECTION WITH CONNECTOR M12 (K)

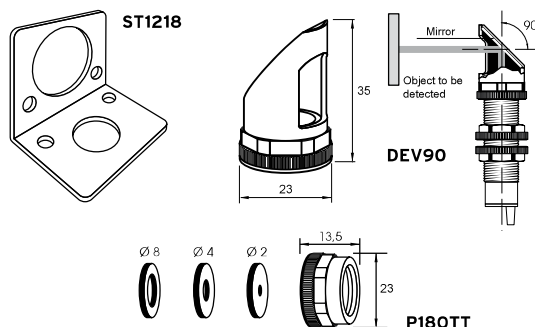
View of quadripole male connector.



CONTACTS CONFIGURATION

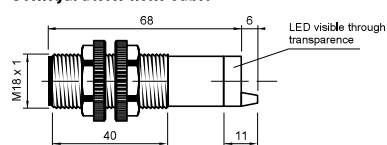
Available	Contacts numbers			
	1	2	3	4
(NO o NC)	+		-	NO/NC
Emitter	+		-	TEST

ACCESSORIES

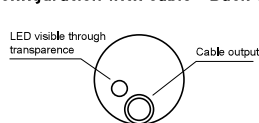


DIMENSIONS (mm)

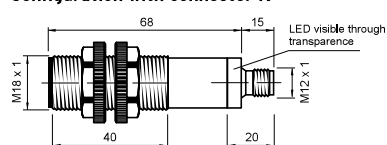
Configuration with cable



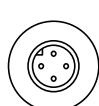
Configuration with cable - Back view



Configuration with connector K



Configuration with connector K Back view



CHARACTERISTIC CURVES

THRU BEAM
Distance X (m)

