



PHOTOELECTRIC SENSORS



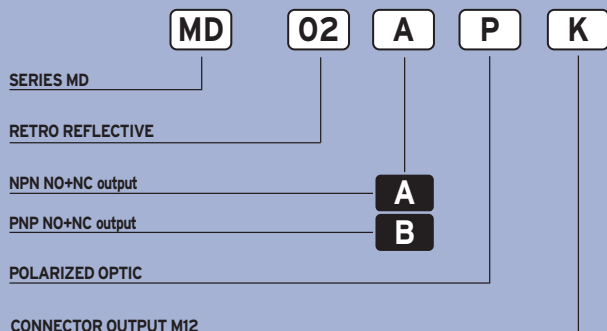
RETRO REFLECTIVE 12÷30 V DC NPN/PNP OUTPUT

- 18mm tubular in metal housing
- Programmable output, NPN/PNP, NC + NO
- Simple one-turn sensitivity
- Cable or M12 quick connect models
- Fast response time: 2 ms / 0,5 ms/1KHz
- Long working distance
- Device marking II 3D

MD Series



IDENTIFICATION CODE



AVAILABLE	POLARIZED	STANDARD
NOMINAL SWITCHING DISTANCE (Sn)	0.1 ÷ 4.5 m ⁽¹⁾	0.1 ÷ 5 m ⁽²⁾
TOLERANCE	+ 10 / - 10 % Sn	
HYSTERESIS	< 10%	
EMISSION	Infrared (880 nm)	
NOMINAL VOLTAGE	10 ÷ 30 VDC	
RESIDUAL RIPPLE	≤ 2 Vpp	
MAX. OUTPUT CURRENT	100 mA	
CONSUMPTION	≤ 35 mA	
VOLTAGE DROP	≤ 2 V	
STATUS LED	Yellow	
STABILITY LED	Green	Not present
SENSITIVITY ADJUSTMENT	Single turn trimmer	Not present
SWITCHING FREQUENCY	1 kHz	
RESPONSE TIME	0.5 ms	
START UP DELAY	≤ 300 ms	
SHORT CIRCUIT PROTECTION	Present (Self resetting)	
ELECTRIC PROTECTIONS	Reverse polarity protection	
TEMPERATURE LIMITS	-25 ÷ +55 °C	
LIGHT IMMUNITY	> 5,000 Lux ⁽³⁾	
PROTECTION DEGREE	IP67	
CABLE LENGTH	2m	
CABLE SECTION	4 x 0.14 mm ²	
HOUSING MATERIAL	Housing: nickel plated brass Lenses: PMMA	
WEIGHT - cable output - (connector output)	110g (60g)	

⁽¹⁾ Determined with a white mat paper (cm 10 x 10).

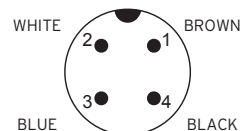
⁽²⁾ Determined with a white mat paper (cm 20 x 20).

⁽³⁾ Determined with halogen tungsten lamp 3000 °K.

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

WIRING DIAGRAMS

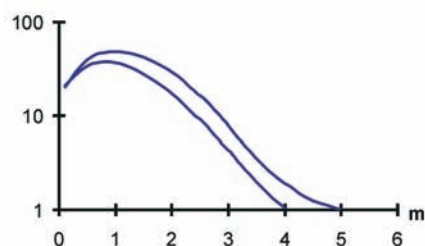
View of quadripole male connector



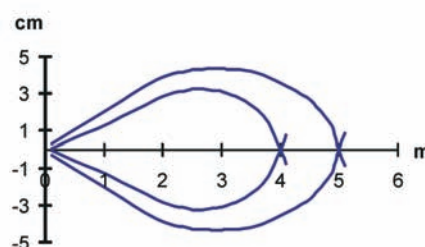
CONTACTS CONFIGURATION

	1	2	3	4
Output	+	NC	-	NO

DETECTION DIAGRAM



EXCESS GAIN



DETECTION AREA

DIMENSIONS (mm)

