

Retro-Reflex Sensor

RO88PD3

Part Number

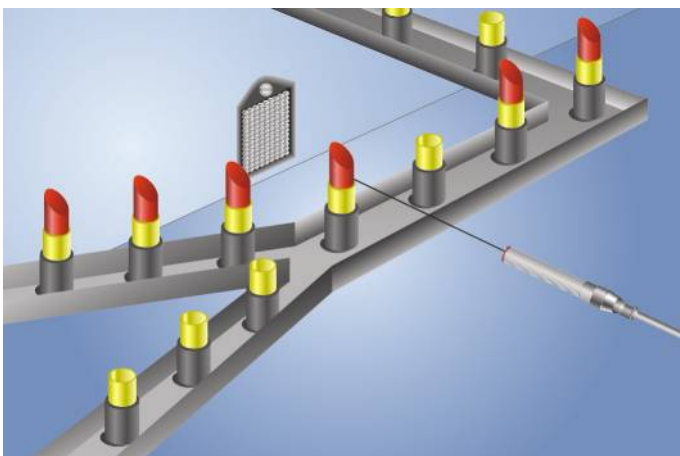


- Compact housing
- Red light

Technical Data

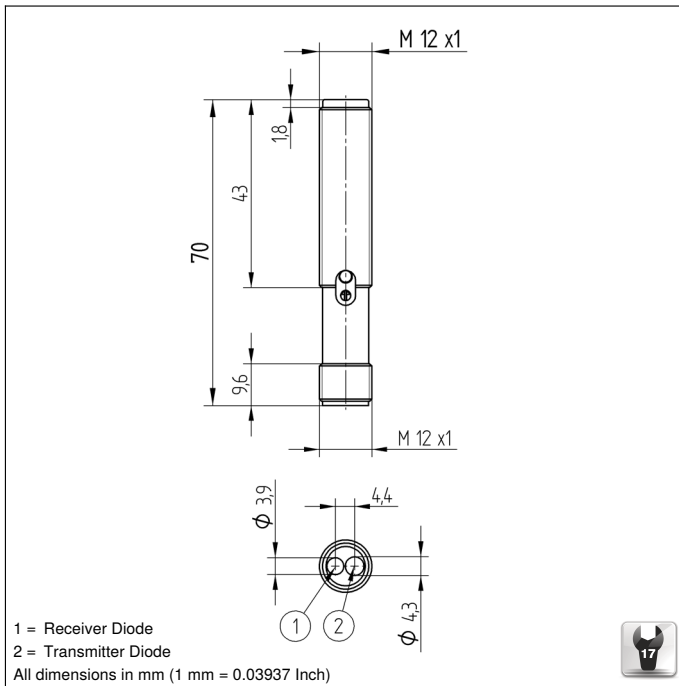
Optical Data	
Range	2500 mm
Reference Reflector/Reflector Foil	RQ100BA
Switching Hysteresis	< 15 %
Light Source	Red Light
Polarization Filter	yes
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	8 °
Two-Lens Optic	yes
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Switching Frequency	500 Hz
Response Time	1 ms
Temperature Drift	< 10 %
Temperature Range	-10...60 °C
Switching Output Voltage Drop	< 2,5 V
PNP Switching Output/Switching Current	200 mA
Residual Current Switching Output	< 50 μA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III
Mechanical Data	
Setting Method	Potentiometer
Housing Material	CuZn, nickel-plated
Full Encapsulation	yes
Degree of Protection	IP65
Connection	M12 × 1; 4-pin
PNP NC	●
Connection Diagram No.	106
Control Panel No.	O2
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	170

A reflector must be used in combination with these sensors. They can be installed in all kinds of industrial environments thanks to ample functional reserve.



Complementary Products

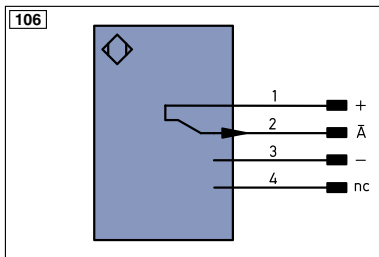
Path-Folding Mirror LA9	
PNP-NPN Converter BG2V1P-N-2M	
Reflector, Reflector Foil	



Ctrl. Panel



05 = Switching Distance Adjuster
 30 = Switching Status/Contamination Warning



Legend			
+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	Ū	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ṽ	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
Z	Time Delay (activation)	AWV	Valve Output
S	Shielding	a	Valve Control Output +
RxD	Interface Receive Path	b	Valve Control Output 0 V
TxD	Interface Send Path	SY	Synchronization
RDY	Ready	SY-	Ground for the Synchronization
GND	Ground	E+	Receiver-Line
CL	Clock	S+	Emitter-Line
E/A	Output/Input programmable	±	Grounding
	IO-Link	S _n R	Switching Distance Reduction
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path
IN	Safety Input	Tx+/-	Ethernet Send Path
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)
Signal	Signal Output	L _a	Emitted Light disengageable
Bl..D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation
EN0..5A2Z	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation
		EDM	Contactor Monitoring
		EN _A 0..5A2Z	Encoder A/Ā (TTL)
		EN _B 0..5A2Z	Encoder B/B̄ (TTL)
		EN _A	Encoder A
		EN _B	Encoder B
		A _{MIN}	Digital output MIN
		A _{MAX}	Digital output MAX
		A _{OK}	Digital output OK
		SY _{in}	Synchronization In
		SY _{OUT}	Synchronization OUT
		OL _T	Brightness output
		M	Maintenance reserved
		rsv	reserved
			Wire Colors according to DIN IEC 757
		BK	Black
		BN	Brown
		RD	Red
		OG	Orange
		YE	Yellow
		GN	Green
		BU	Blue
		VT	Violet
		GY	Grey
		WH	White
		PK	Pink
		GNVE	Green/Yellow

Feasible reflector distance

Reflector type, mounting distance

RQ100BA	0,02...2,5 m	RR25_M	0,05...0,7 m
RE18040BA	0,02...1,8 m	RR25KP	0,05...0,3 m
RQ84BA	0,02...2,2 m	RR21_M	0,05...0,6 m
RR84BA	0,02...2 m	ZRAE02B01	0,02...1 m
RE9538BA	0,02...0,9 m	ZRME01B01	0,05...0,3 m
RE6151BM	0,05...2 m	ZRME03B01	0,02...0,8 m
RR50_A	0,02...1,5 m	ZRMR02K01	0,02...0,4 m
RE6040BA	0,02...1,5 m	ZRMS02_01	0,02...0,4 m
RE8222BA	0,02...1 m	RF505	0,06...0,8 m
RR34_M	0,05...1 m	RF508	0,06...0,8 m
RE3220BM	0,05...0,7 m	RF258	0,06...0,6 m
RE6210BM	0,05...0,6 m	ZRDF_K01	0,06...1 m

