

Retro-Reflex Sensor

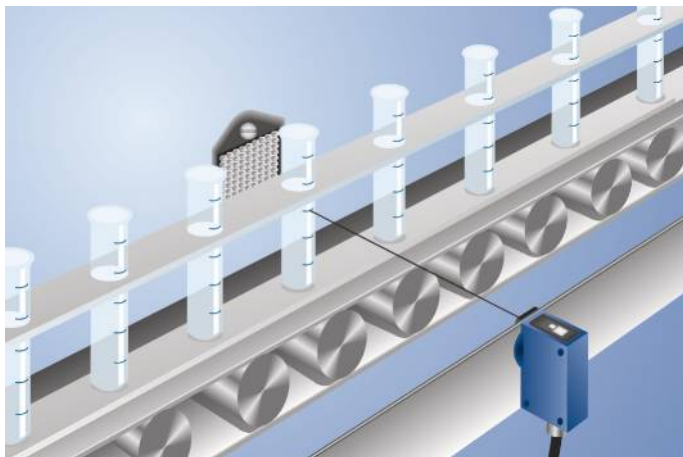
XR96PCT2 LASER

Part Number



- Simple installation
- Teach-in, external teach-in

Retro-reflex sensors require a reflector in order to function and can even reliably recognize transparent objects and sheet products. The M18 threaded fixation allows for mechanical protection and easy installation. Time delay can be activated via the RS-232 interface.

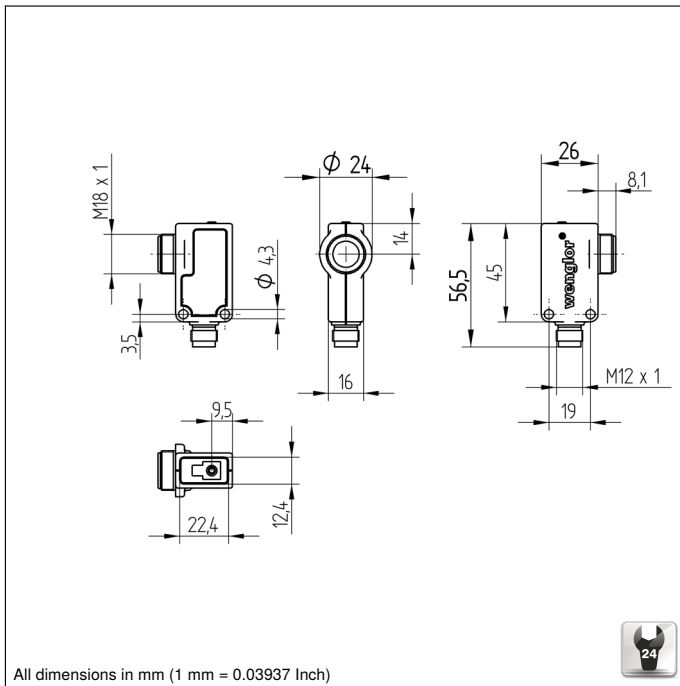


Technical Data

Optical Data	
Range	12000 mm
Reference Reflector/Reflector Foil	RQ100BA
Switching Hysteresis	< 5 %
Light Source	Laser (red)
Wavelength	655 nm
Polarization Filter	yes
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	2
Max. Ambient Light	10000 Lux
Beam Divergence	5 mrad
Focus Distance	500 mm
Single-Lens Optic	yes
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Switching Frequency	2 kHz
Response Time	250 μs
On-/Off-Delay (RS-232)	0...5 s
Temperature Drift	< 5 %
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
Lockable	yes
Teach Mode	NT, MT
Protection Class	III
FDA Accession Number	0820374-000
Mechanical Data	
Setting Method	Teach-In
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
PNP NO/NC switchable	●
RS-232 with Adapterbox	●
Connection Diagram No.	152
Control Panel No.	M3
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	150 370

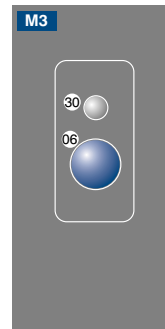
Complementary Products

Adapterbox A232
Dust Extraction Tube STAUBTUBUS-01
PNP-NPN Converter BG2V1P-N-2M
Reflector, Reflector Foil
Software



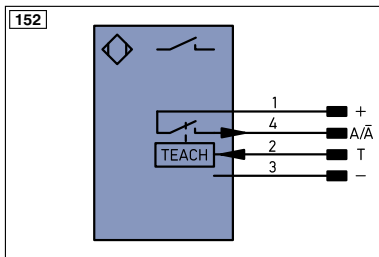
All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel



06 = Teach Button
 30 = Switching Status/Contamination Warning

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Legend

+	Supply Voltage +	PT	Platinum measuring resistor	EN ^A RS422	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN ^B RS422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN ^A	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN ^B	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	A ^{MIN}	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	A ^{MAX}	Digital output MAX
Ṽ	Contamination/Error Output (NC)	O	Analog Output	A ^{OK}	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY ⁱⁿ	Synchronization In
T	Teach Input	BZ	Block Discharge	SY ^{OUT}	Synchronization OUT
Z	Time Delay (activation)	A ^{MV}	Valve Output	OL ^T	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance reserved
RxD	Interface Receive Path	b	Valve Control Output 0 V	Wire Colors according to DIN IEC 757	
TxD	Interface Send Path	SY	Synchronization	BK	Black
RDY	Ready	SY-	Ground for the Synchronization	BN	Brown
GND	Ground	E+	Receiver-Line	RD	Red
CL	Clock	S+	Emitter-Line	OG	Orange
E/A	Output/Input programmable	±	Grounding	YE	Yellow
	IO-Link	S ⁿ R	Switching Distance Reduction	GN	Green
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	BU	Blue
IN	Safety Input	Tx+/-	Ethernet Send Path	VT	Violet
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	GY	Grey
Signal	Signal Output	L ^a	Emitted Light disengageable	WH	White
Bl ^{_D} +/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	PK	Pink
EN ⁰ RS422	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	GNVE	Green/Yellow
		EDM	Contacting Monitoring		

Feasible reflector distance

Reflector type, mounting distance

RQ100BA	0...12 m	RR25_M	0...5 m
RE18040BA	0...8 m	RR25KP	0...3 m
RQ84BA	0...10 m	RR21_M	0...3 m
RR84BA	0...15 m	ZRAE02B01	0...6 m
RE9538BA	0...6 m	ZRME01B01	0...2 m
RE6151BM	0...10 m	ZRME03B01	0...6 m
RR50_A	0...9 m	ZRMR02K01	0...3 m
RE6040BA	0...10 m	ZRMS02_01	0...2,5 m
RE8222BA	0...6 m	RF505	0...4 m
RR34_M	0...6 m	RF508	0...3 m
RE3220BM	0...5 m	RF258	0...3 m
RE6210BM	0...4,5 m	ZRDF_K01	0...8 m

