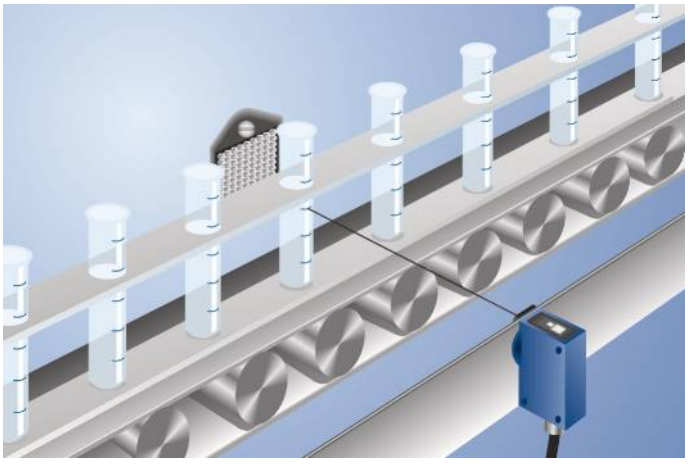
Retro-Reflex Sensor
Universal

XR96PCT2 LASER
Part Number

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

A reflector must be used in combination with these sensors. wenglor has the right retro-reflex sensor for every application. Because of the M18 threaded connector, the sensor is easy to install and protected mechanically. A time delay can only be activated via the RS-232 interface.

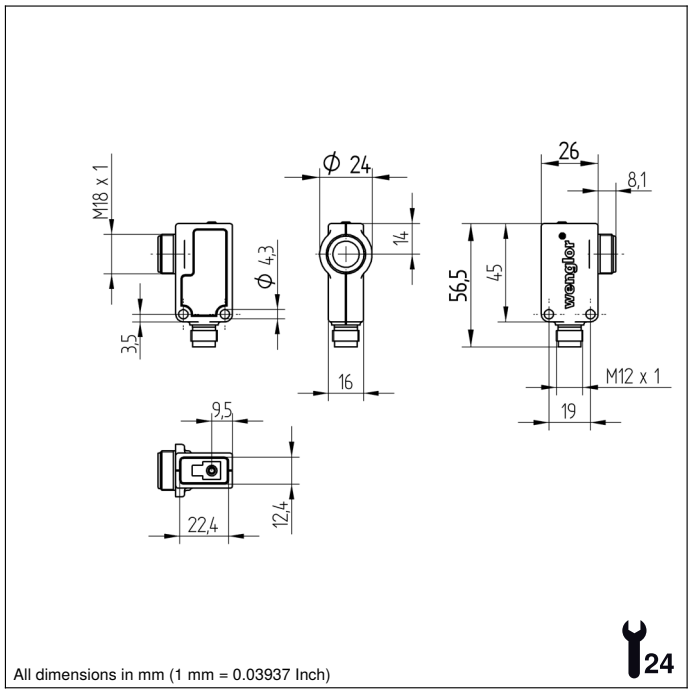


Technical Data

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 (Ub = 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

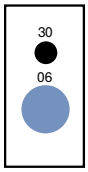
Adapterbox A232
Dust Extraction Tube STAUBTUBUS-01
PNP-NPN Converter BG2V1P-N-2M
Reflector, Reflector Foil
Software



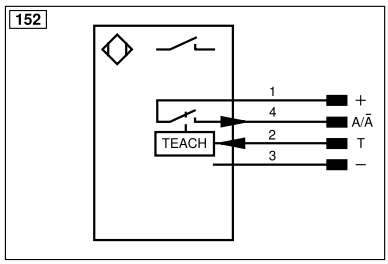
All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel

M3



06 = Teach Button
30 = Switching Status/Contamination Warning



Legend					
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B̄ (TTL)
–	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENB	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W–	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
V̄	Contamination/Error Output (NC)	O–	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	AMV	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY–	Ground for the Synchronization	BK	Black
RDY	Ready	E+	Receiver-Line	BN	Brown
GND	Ground	S+	Emitter-Line	RD	Red
CL	Clock	⏚	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow
	IO-Link	Rx+/–	Ethernet Receive Path	GN	Green
PoE	ower over Ethernet	Tx+/–	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(–)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
BI_D+/–	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
EN0 RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)		

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
RE6151BH	0...4 m	**ZRMR02K01**	0...3 m
RR50_A	0...9 m	**ZRMS02_01**	0...2,5 m
RE6040BA	0...10 m	**RF505**	0...4 m
RE8222BA	0...6 m	**RF255**	0...3,5 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