

Retro-Reflex Sensor

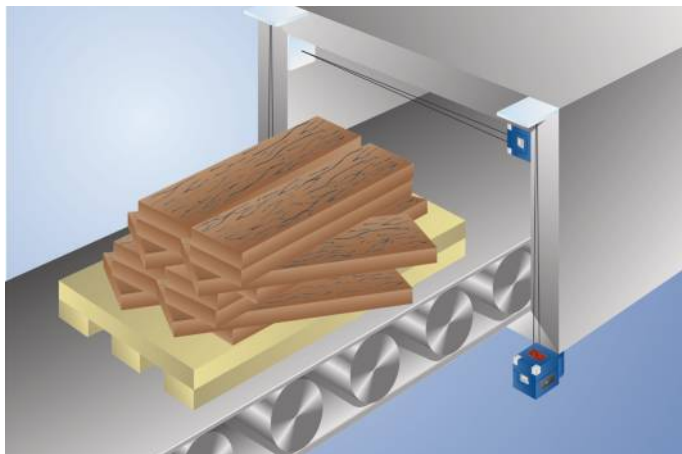
LQ40PCT3

Part Number



- Ample functional reserves
- Large working range
- Optics adjustable in 5 directions
- Teach-in, external teach-in

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. Even reflective objects can be reliably recognized through the use of polarized light.

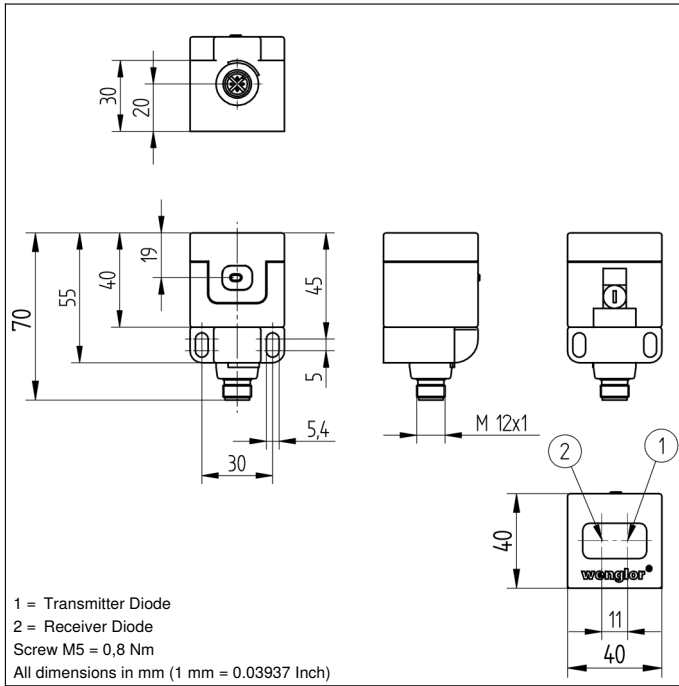


Technical Data

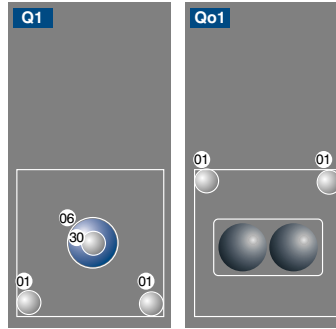
Optical Data	
Range	11000 mm
Reference Reflector/Reflector Foil	RQ100BA
Switching Hysteresis	< 5 %
Light Source	Red Light
Polarization Filter	yes
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	4 °
Two-Lens Optic	yes
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (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	-25...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
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.	Q1 Qo1
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	390

Complementary Products

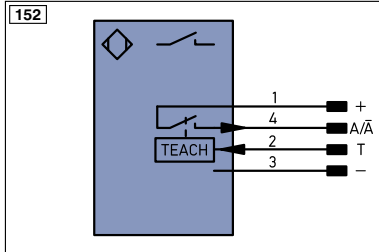
Adapterbox A232
PNP-NPN Converter BG2V1P-N-2M
Reflector, Reflector Foil
Software



Ctrl. Panel Optic



01 = Switching Status Indicator
 06 = Teach Button
 30 = Switching Status/Contamination Warning



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	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
ṽ	Contamination/Error Output (NC)	O	Analog Output	AOK	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)	AWV	Valve Output	OLT	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance reserved
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to DIN IEC 757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	±	Grounding	OG	Orange
	IO-Link	S _n R	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	La	Emitted Light disengageable	GY	Grey
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN ₀ RS422	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GNVE	Green/Yellow

Feasible reflector distance

Reflector type, mounting distance

RQ100BA	0,04...11 m	RR25KP	0,1...2 m
RE18040BA	0,04...7 m	RR21_M	0,15...3 m
RQ84BA	0,04...7 m	ZRAE02B01	0,08...5 m
RR84BA	0,04...8,5 m	ZRME01B01	0,15...1,5 m
RE9538BA	0,04...4 m	ZRME03B01	0,15...5,2 m
RE6151BM	0,1...9 m	ZRMR02K01	0,15...2 m
RR50_A	0,04...6,5 m	ZRMS02_01	0,1...2,2 m
RE6040BA	0,04...8 m	RF505	0,12...3,5 m
RE8222BA	0,04...4,9 m	RF508	0,12...2,4 m
RR34_M	0,1...2,5 m	RF258	0,12...2,3 m
RE3220BM	0,1...3 m	ZRDF03K01	0,1...7,5 m
RE6210BM	0,2...2,2 m	ZRDF10K01	0,1...8,5 m
RR25_M	0,15...2,5 m		

