

Retro-Reflex Sensor

LW86PCV3

Part Number

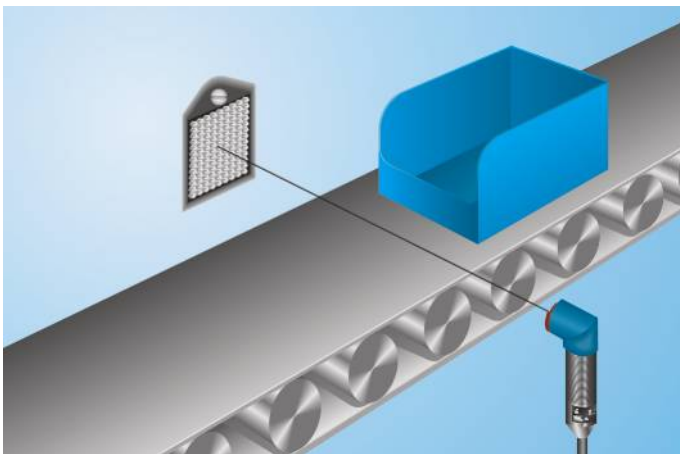


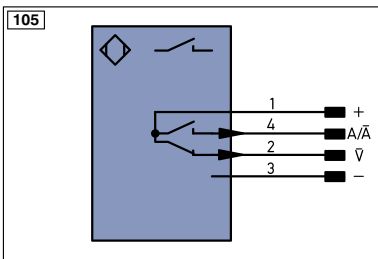
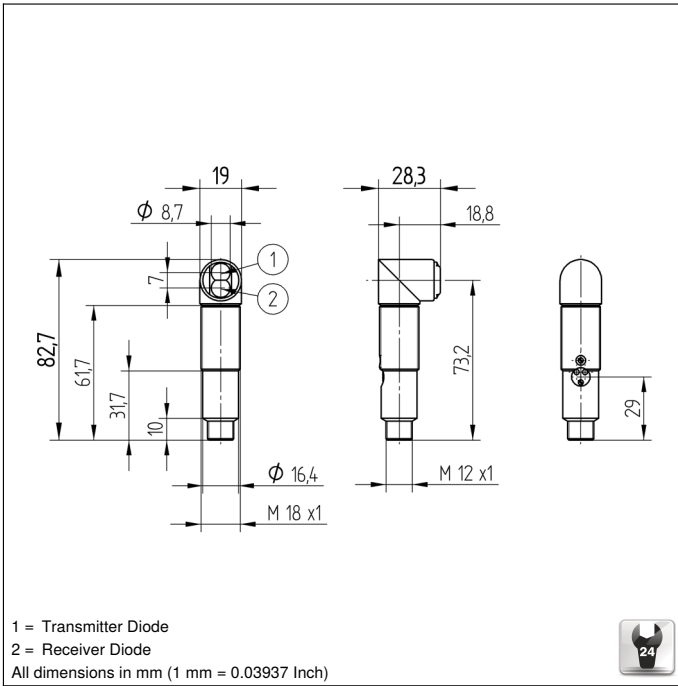
- Stainless steel housing
- Switching distance adjuster

Technical Data

Optical Data	
Range	6000 mm
Reference Reflector/Reflex 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	5 °
Two-Lens Optic	yes
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Switching Frequency	1 kHz
Response Time	500 μs
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	
Adjustment	Potentiometer
Housing Material	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
Contamination Output	●
PNP NO/NC switchable	●
Connection Diagram No.	105
Control Panel No.	D5
Suitable Connection Technology No.	2
Suitable Mounting Technology No.	150

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.





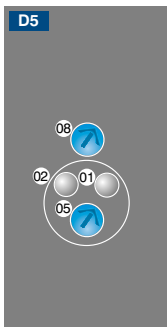
Legend		
+	Supply Voltage +	nc not connected
-	Supply Voltage 0 V	U Test Input
~	Supply Voltage (AC Voltage)	Ū Test Input inverted
A	Switching Output (NO)	W Trigger Input
Ā	Switching Output (NC)	O Analog Output
V	Contamination/Error Output (NO)	O- Ground for the Analog Output
V̄	Contamination/Error Output (NC)	BZ Block Discharge
E	Input (analog or digital)	AWV Valve Output
T	Teach Input	a Valve Control Output +
Z	Time Delay (activation)	b Valve Control Output 0 V
S	Shielding	SY Synchronization
RxD	Interface Receive Path	E+ Receiver-Line
TxD	Interface Send Path	S+ Emitter-Line
RDY	Ready	≠ Grounding
GND	Ground	S _n R Switching Distance Reduction
CL	Clock	Rx+/- Ethernet Receive Path
E/A	Output/Input programmable	Tx+/- Ethernet Send Path
	IO-Link	Bus Interfaces-Bus A(+)/B(-)
PoE	Power over Ethernet	La Emitted Light disengageable
IN	Safety Input	Mag Magnet activation
OSSD	Safety Output	RES Input confirmation
Signal	Signal Output	EDM Contactor Monitoring

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
GNYE	Green Yellow

Complementary Products

Reflector, Reflex Foil

Ctrl. Panel



- 01 = Switching Status Indicator
- 02 = Contamination Warning
- 05 = Switching Distance Adjuster
- 08 = NO/NC Switch

Feasible reflector distance

Reflector type, mounting distance

RQ100BA	0,02...6 m	RR25_M	0,02...1,6 m
RE18040BA	0,02...3,3 m	RR25KP	0,02...1,4 m
RQ84BA	0,01...4,5 m	RR21_M	0,01...1,6 m
RR84BA	0,02...4,5 m	ZRAE02B01	0,02...3 m
RE9538BA	0,02...1,5 m	ZRME01B01	0,02...1 m
RE6151BM	0,01...4,5 m	ZRME03B01	0,02...2,8 m
RR50_A	0,02...4 m	ZRMR02K01	0,02...1,1 m
RE6040BA	0,02...4 m	ZRMS02_01	0,01...1,5 m
RE8222BA	0,01...2 m	RF505	0,06...1,6 m
RR34_M	0,01...2,4 m	RF508	0,06...1,6 m
RE3220BM	0,01...1,6 m	RF258	0,06...1,2 m
RE6210BM	0,01...1,6 m	ZRDF_K01	0,06...4 m