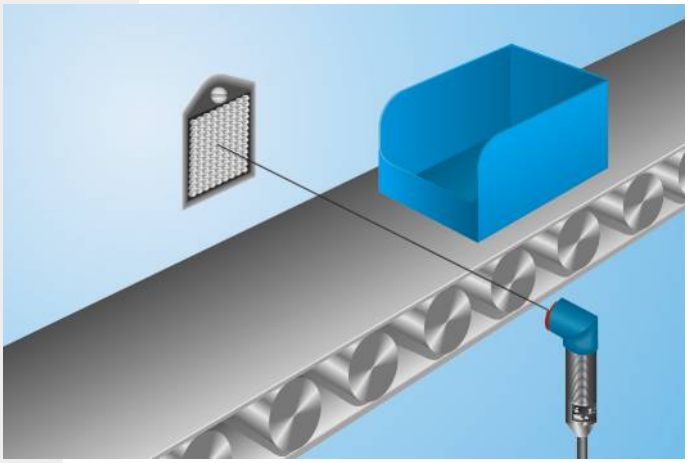
Retro-Reflex Sensor

LW86NCT3

Part Number

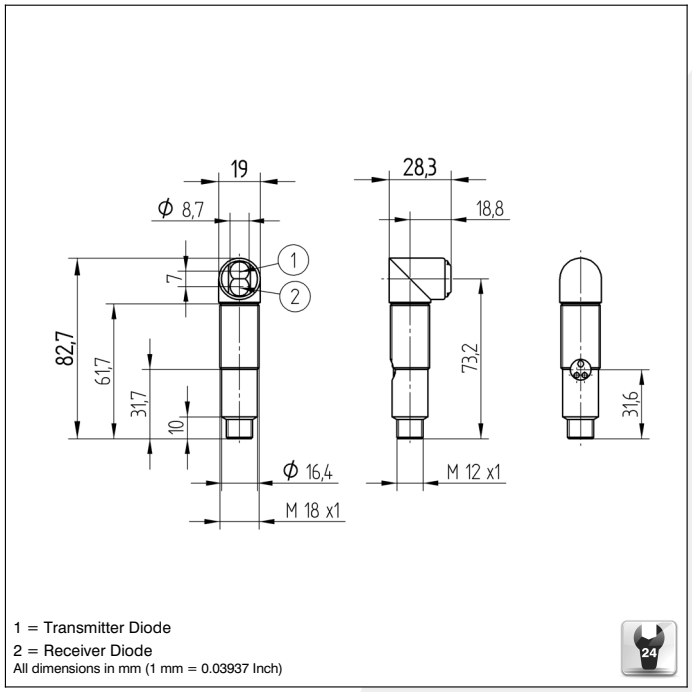
- **Stainless Steel Housing**
- **Teach-In, external Teach-In, RS-232 Interface**

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.

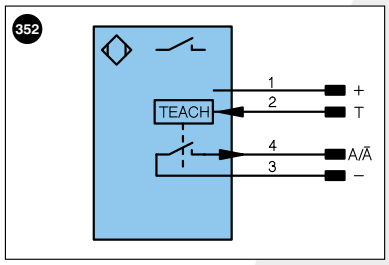


Technical Data

Optical Data	
Range	6000 mm
Reference Reflector/Reflex 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	5 °
Two-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	-25...60 °C
Switching Output Voltage Drop	< 2,5 V
NPN Switching Output/Switching Current	100 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	
Adjustment	Teach-In
Housing Material	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
NPN NO/NC switchable	●
RS-232 with Adapterbox	●
Connection Diagram No.	352
Control Panel No.	D 7
Suiting Connection Technology No.	2
Suiting Mounting Technology No.	150



1 = Transmitter Diode
2 = Receiver Diode
All dimensions in mm (1 mm = 0.03937 Inch)



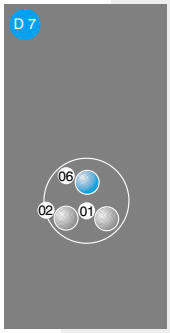
Legend

+	Supply Voltage +		U	Test Input		PoE	Power over Ethernet
–	Supply Voltage 0 V		Ū	Test Input inverted			
~	Supply Voltage (AC Voltage)		W	Trigger Input			
A	Switching Output	(NO)	O	Analog Output		Wire Colors according to DIN IEC 757	
Ā	Switching Output	(NC)	O–	Ground for the Analog Output			
V	Contamination/Error Output	(NO)	BZ	Block Discharge		BK	Black
V̄	Contamination/Error Output	(NC)	AMV	Valve Output		BN	Brown
E	Input (analog or digital)		a	Valve Control Output +		RD	Red
T	Teach Input		b	Valve Control Output 0 V		OG	Orange
Z	Time Delay (activation)		SY	Synchronization		YE	Yellow
S	Shielding		E+	Receiver-Line		GN	Green
RxD	Interface Receive Path		S+	Emitter-Line		BU	Blue
TxD	Interface Send Path		⏚	Grounding		VT	Violet
RDY	Ready		SnR	Switching Distance Reduction		GY	Grey
GND	Ground		Rx+/–	Ethernet Receive Path		WH	White
CL	Clock		Tx+/–	Ethernet Send Path		PK	Pink
E/A	Output/Input programmable		Bus	Interfaces-Bus A(+)/B(–)		GNYE	Green Yellow
	IO-Link		La	Emitted Light disengageable			

Complementary Products

Adapterbox A232
Reflector, Reflex Foil

Ctrl.Panel



01 = Switching Status Indicator
02 = Contamination Warning
06 = Teach Button

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

Specifications are subject to change without notice