

Retro-Reflex Sensor

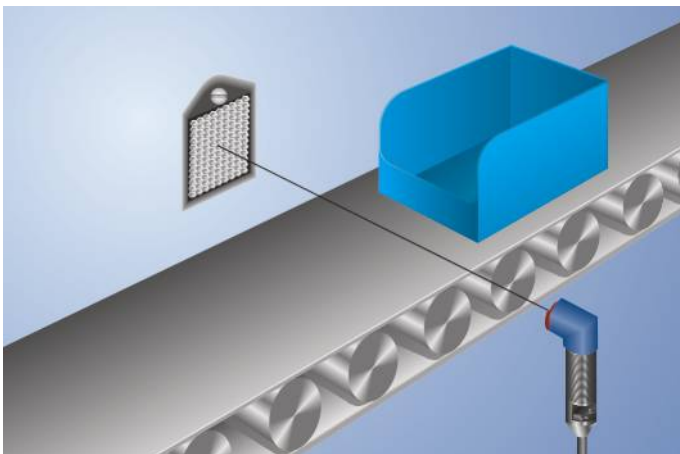
LW86NCT3

Part Number



- Stainless steel housing
- 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	6000 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	5 °
Two-Lens Optic	yes

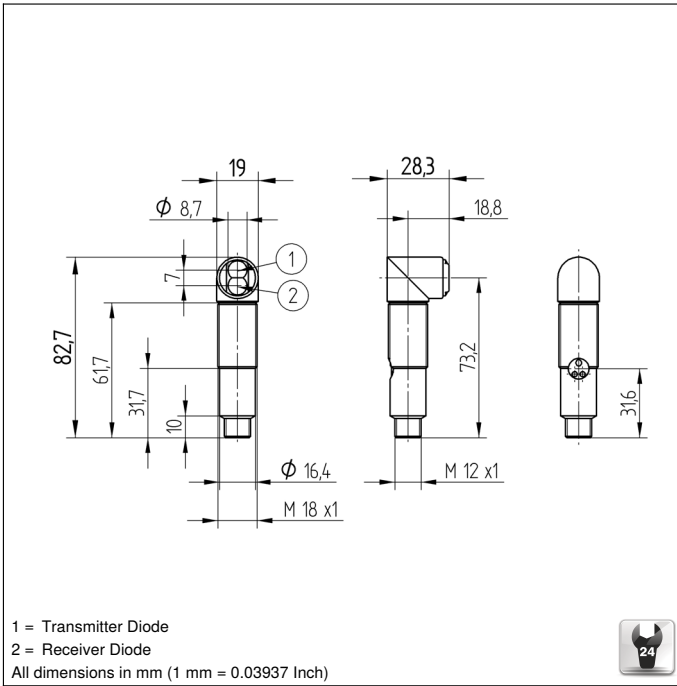
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Switching Frequency	2 kHz
Response Time	250 μs
On-/Off-Delay (RS-232)	0...5 s
Temperature Drift	< 5 %
Temperature Range	-25...60 °C
Switching Output Voltage Drop	< 2,5 V
NPN Switching Output/Switching Current	100 mA
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	
Setting Method	Teach-In
Housing Material	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin

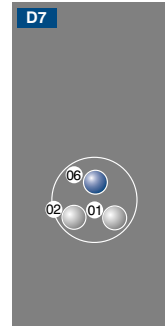
NPN NO/NC switchable	●
RS-232 with Adapterbox	●
Connection Diagram No.	352
Control Panel No.	D7
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	150

Complementary Products

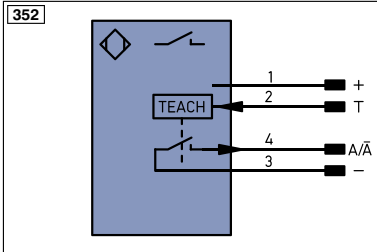
Adapterbox A232
Reflector, Reflector Foil
Software



Ctrl. Panel



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



Legend	
+	Supply Voltage +
-	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
Ā	Switching Output (NC)
V	Contamination/Error Output (NO)
ṽ	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
	IO-Link
PoE	Power over Ethernet
IN	Safety Input
OSSD	Safety Output
Signal	Signal Output
Bl..D +/-	Ethernet Gigabit bidirect. data line (A-D)
EN0..5422	Encoder 0-pulse 0-0 (TTL)
PT	Platinum measuring resistor
nc	not connected
U	Test Input
Ū	Test Input inverted
W	Trigger Input
W-	Ground for the Trigger Input
O	Analog Output
O-	Ground for the Analog Output
BZ	Block Discharge
AWV	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
SY-	Ground for the Synchronization
E+	Receiver-Line
S+	Emitter-Line
±	Grounding
SnR	Switching Distance Reduction
Rx+/-	Ethernet Receive Path
Tx+/-	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(-)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactur Monitoring
EN0..5422	Encoder A/Ā (TTL)
EN0..5422	Encoder B/B̄ (TTL)
ENa	Encoder A
ENb	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
AOK	Digital output OK
SY_in	Synchronization In
SY_OUT	Synchronization OUT
OLt	Brightness output
M	Maintenance reserved
rsv	reserved
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
GNVE	Green/Yellow

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

