

# Reflex Sensor for Roller Conveyor Systems



## OPT123

Part Number

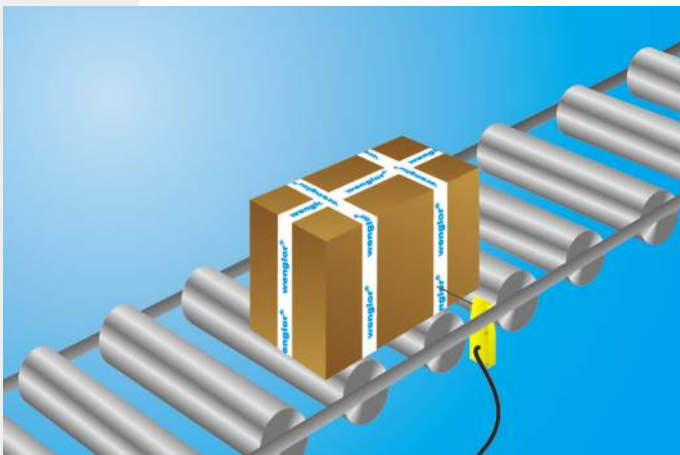


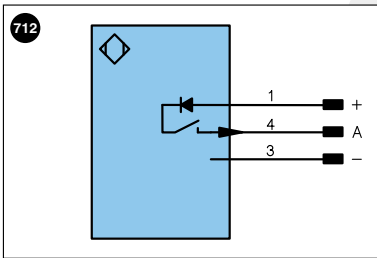
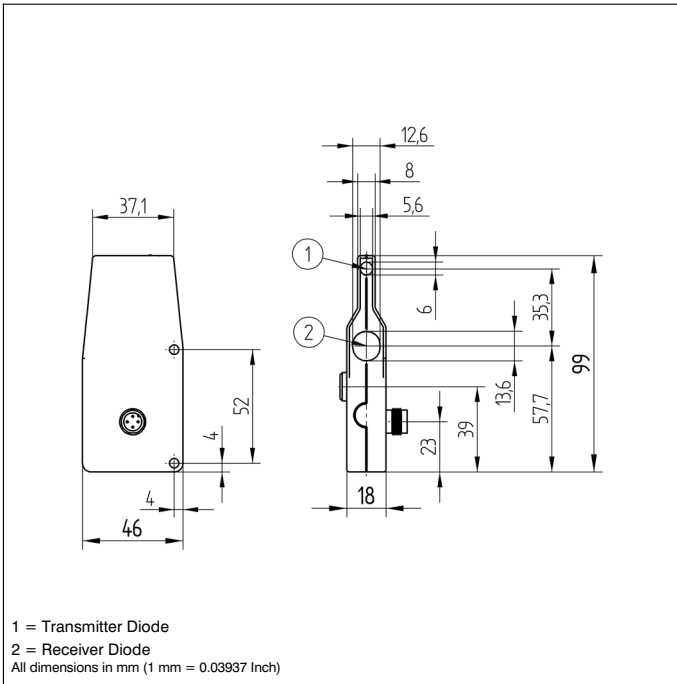
- Electronic Background Suppression
- Fully Encapsulated
- Scaled switching Distance Adjuster

### Technical Data

Optical Data	
Range	550 mm
Potentiometer min	220...270 mm
Potentiometer center	320...400 mm
Potentiometer max	550...630 mm
Switching Hysteresis	< 15 %
Light Source	Infrared Light
Wave Length	880 nm
Service Life (T = +25 °C)	100000 h
Risk Group (EN 62471)	1
Max. Ambient Light	10000 Lux
Opening Angle	5 °
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption Sensor (U <sub>b</sub> = 24 V)	< 30 mA
Switching Frequency	100 Hz
Response Time	5 ms
Temperature Drift	< 10 %
Temperature Range	-25...60 °C
Switching Outputs	1
Switching Output Voltage Drop	< 1,5 V
PNP Switching Output/Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Logic	no
Protection Class	III
Mechanical Data	
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP65
Connection	M12 × 1; 4-pin
PNP NO	
Connection Diagram No.	
Control Panel No.	
Suiting Connection Technology No.	
Suiting Mounting Technology No.	

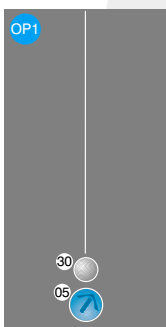
These sensors have been specially designed for use in accumulation roller conveyors. Their compact design allows for installation between rollers below the transport level. They are thus protected against mechanical damage.





Legend			
+	Supply Voltage +	U	Test Input
-	Supply Voltage 0 V	Ū	Test Input inverted
~	Supply Voltage (AC Voltage)	W	Trigger Input
A	Switching Output (NO)	O	Analog Output
Ā	Switching Output (NC)	O-	Ground for the Analog Output
V	Contamination/Error Output (NO)	BZ	Block Discharge
V̄	Contamination/Error Output (NC)	AwV	Valve Output
E	Input (analog or digital)	a	Valve Control Output +
T	Teach Input	b	Valve Control Output 0 V
Z	Time Delay (activation)	SY	Synchronization
S	Shielding	E+	Receiver-Line
RxD	Interface Receive Path	S+	Emitter-Line
TxD	Interface Send Path	±	Grounding
RDY	Ready	SnR	Switching Distance Reduction
GND	Ground	Rx +/-	Ethernet Receive Path
CL	Clock	Tx +/-	Ethernet Send Path
E/A	Output/Input programmable	Bus	Interfaces-Bus A(+)/B(-)
	IO-Link	La	Emitted Light disengageable
		PoE	Power over Ethernet
		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

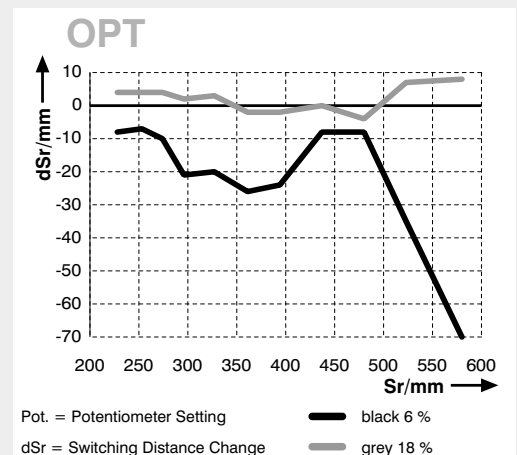
### Ctrl.Panel



05 = Switching Distance Adjuster  
30 = Switching Status/Contamination Warning

### Switching Distance Deviation

Typical characteristic curve based on Kodak white, 90 %



Specifications are subject to change without notice