Through-Beam Sensor

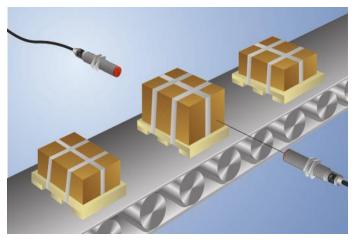
ED98PCV3

Part Number



Simple adjustment with special alignment optic

These through-beam sensors are best suited for use in industrial environments. Thanks to their large working range, the devices demonstrate excellent functional reliability in highly contaminated environments. The sensors can be checked for correct functioning via the test input.



Technical Data

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Optical Data					
Range	10000 mm				
Switching Hysteresis	< 15 %				
Light Source	Red Light				
Service Life (T = +25 °C)	100000 h				
Max. Ambient Light	10000 Lux				
Opening Angle	6 °				
Electrical Data					
Sensor Type	Receiver				
Supply Voltage	1030 V DC				
Current Consumption (Ub = 24 V)	< 40 mA				
Switching Frequency	150 Hz				
Response Time	3300 <i>μ</i> s				
Temperature Drift	< 10 %				
Temperature Range	-1060 °C				
Switching Output Voltage Drop	< 2,5 V				
PNP Switching Output/Switching Current	200 mA				
Residual Current Switching Output	< 50 µA				
PNP Contamination Output/Switching Current	200 mA				
Short Circuit and Overload Protection	yes				
Reverse Polarity Protection	yes				
Protection Class	III				
Mechanical Data					
Setting Method	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 Equipment No.	2				
Suitable Mounting Technology No.	150				

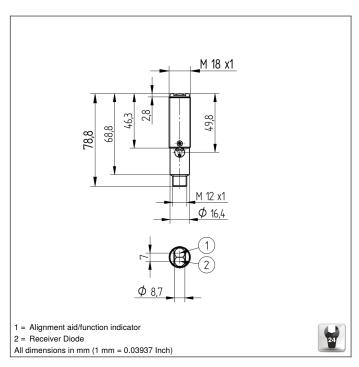
Suitable Emitter

SD983

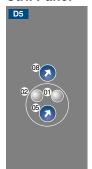
Complementary Products

Dust Extraction Tube STAUBTUBUS-01
PNP-NPN Converter BG2V1P-N-2M

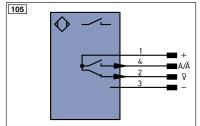




Ctrl. Panel



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



Legen	nd		PT	Platinum measuring resistor	ENARS42	₂ Encoder A/Ā (TTL)
+	Supply Voltage +		nc	not connected	ENBR542	Encoder B/B (TTL)
-	Supply Voltage 0 V		U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)		Ū	Test Input inverted	ENB	Encoder B
Α	Switching Output	(NO)	W	Trigger Input	Amin	Digital output MIN
Ā	Switching Output	(NC)	W -	Ground for the Trigger Input	Амах	Digital output MAX
V	Contamination/Error Output	(NO)	0	Analog Output	Аок	Digital output OK
V	Contamination/Error Output	(NC)	0-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)		BZ	Block Discharge	SY OUT	Synchronization OUT
Т	Teach Input		Awv	Valve Output	OLT	Brightness output
Z	Time Delay (activation)		а	Valve Control Output +	М	Maintenance
S	Shielding		b	Valve Control Output 0 V	rsv	reserved
RxD	Interface Receive Path		SY	Synchronization	Wire C	olors according to DIN IEC 757
TxD	Interface Send Path		SY-	Ground for the Synchronization	BK	Black
RDY	Ready		E+	Receiver-Line	BN	Brown
GND	Ground		S+	Emitter-Line	RD	Red
CL	Clock		±	Grounding	OG	Orange
E/A	Output/Input programmable		SnR	Switching Distance Reduction	YE	Yellow
•	IO-Link		Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power over Ethernet		Tx+/-	Ethernet Send Path	BU	Blue
IN	Safety Input		Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
OSSD	Safety Output		La	Emitted Light disengageable	GY	Grey
Signal	Signal Output		Mag	Magnet activation	WH	White
BI_D+/-	Ethernet Gigabit bidirect, data	line (A-D)	RES	Input confirmation	PK	Pink
	Encoder 0-pulse 0-0 (TTL)	, ,	EDM	Contactor Monitoring	GNYE	Green/Yellow







