

Light Curtain

Pick-to-Light

PEBL301

Part Number



- Directional, two-tone job indication
- Error prevention during partial picking processes in shelves and storage locations
- Low mounting thanks to integrated reflector
- Rugged aluminium housing

Pick-to-light light curtains work according to the retro-reflex principle. The required reflector is already mounted on the rear of the housing and serves as a reflective surface for the adjacent light curtain, which simplifies installation. The arrow-shaped, two-tone illuminated or flashing job indication points in the direction of the respective compartment from which the part is to be removed. It signals both correct and incorrect part removal.



Technical Data

Optical Data

Range	2000 mm
Min. Distance to Reflector	100 mm
Measurement Field Height (MFH)	420 mm
Beam Distance	30 mm
Switching Hysteresis	< 15 %
Light Source	Red Light
Polarization Filter	yes
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	2,5 °
Two-Lens Optic	yes

Electrical Data

Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 80 mA
Switching Frequency	40 Hz
Response Time	12 ms
Temperature Drift	< 10 %
Temperature Range	-25...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

Setting Method	Teach-In
Display	Illuminated arrow
Housing Material	Aluminum, powder-coated
Housing Material	Plastic, PA
Optic Cover	Plastic, PMMA
Degree of Protection	IP65
Connection	M12 × 1; 4-pin
Cable length (L)	250 mm
Housing Length (L)	546 mm
Reflector Length (RL)	486 mm

Safety-relevant Data

MTTFd (EN ISO 13849-1)	377,37 a
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PNP NO/NC switchable



Connection Diagram No.

190

Control Panel No.

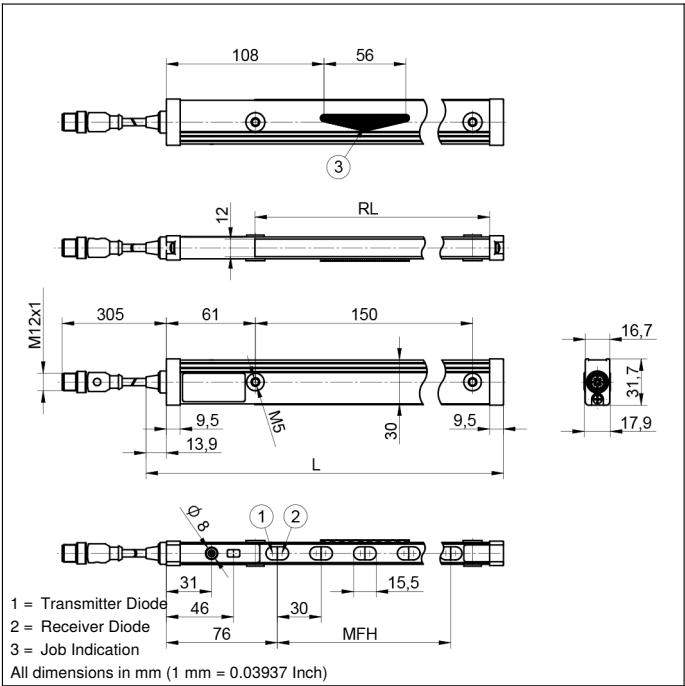
EB1

Suitable Connection Equipment No.

2

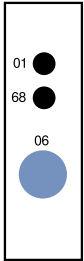
Complementary Products

PNP-NPN Converter BG2V1P-N-2M
Reflector Foil ZRDF10K01
Reflector ZRDE12B03

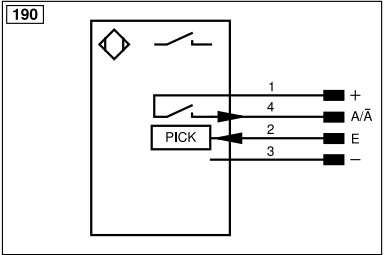


Ctrl. Panel

EB1



01 = Switching Status Indicator
06 = Teach Button
68 = Power LED



Legend					
+	Supply Voltage +	PT	Platinum measuring resistor	ENAR5422	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	Not connected	ENBR5422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	ENa	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	ENb	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
Ū	Contamination/Error Output (NC)	O	Analog Output	AOK	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY In	Synchronization In
T	Teach Input	BZ	Block Discharge	SY OUT	Synchronization OUT
R	Reset input	Amv	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
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
QSSD	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
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contact Monitoring	GNYE	Green/Yellow