

Through Beam Sensors



YO99VD3

Part Number

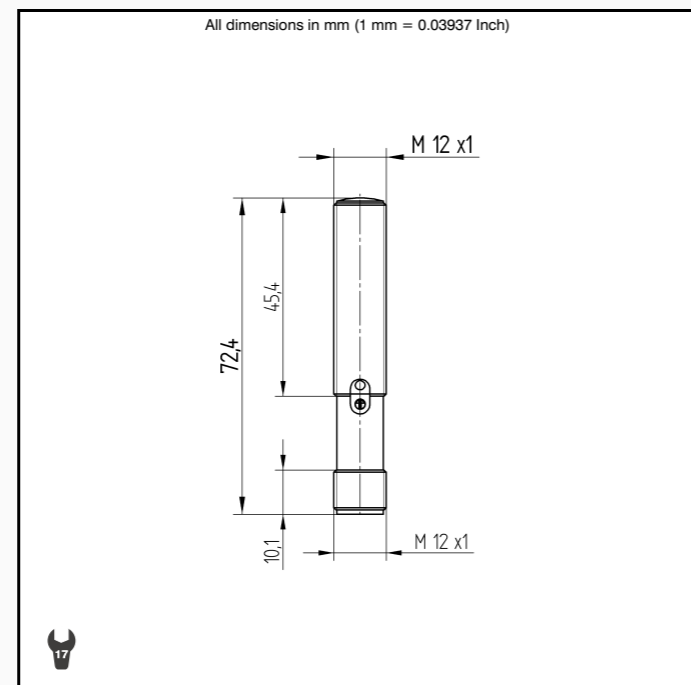
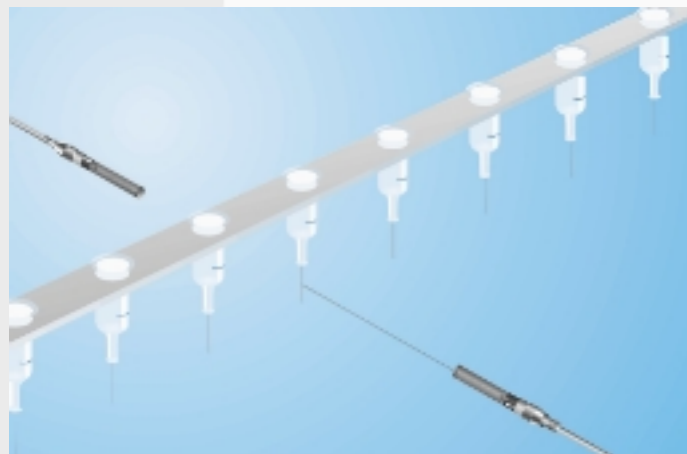


Technical Data

Optical Data	
Range	20000 mm
Smallest Recognizable Part	50 μ m
Switching Hysteresis	< 15 %
max. Ambient Light	10000 Lux
Opening Angle	8 °
Electrical Data	
Sensor Type	Receiver
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24V)	< 15 mA
Switching Frequency	5 kHz
Response Time	100 μ s
Temperature Drift	< 10 %
Temperature Range	-10...60 °C
Switching Output Voltage Drop	< 2.5 V
Switching Output/Switching Current	200 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Mechanical Data	
Housing	BrasNicPlated
Full Encapsulation	yes
Protection Mode	IP 67
Connection	M 12x1

- Smallest Recognizable Part: 0.05 mm
- Switching Frequency: 5 kHz

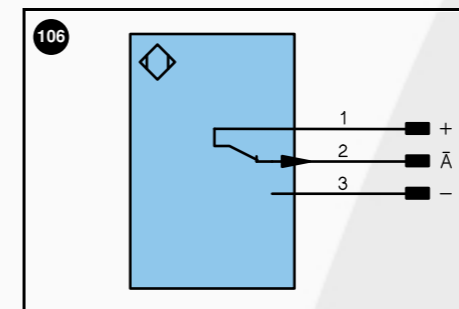
These through beam sensors are well suited for use in aggressive industrial environments. The sensor can be checked for correct functioning via the test input. Thanks to their large working range, the devices demonstrate excellent functional reliability in highly contaminated environments.



Specifications are subject to change without notice
17/03



Part Number	Plug Version
YO99VD3	
PNP NC	●
Connection Diagram No.	106
Control Panel No.	01
Suitable Plug No.	1



Legend		Wire colors according to DIN IEC 757
+	Power supply "+"	BK black
-	Power supply "0V"	BN brown
-	Power supply (AC Voltage)	RD red
A	Switching output (1,2,3...)/ NO	OG orange
Ā	Switching output (1,2,3...)/ NC	YE yellow
V	Contamination / Error output (NO)	GN green
∇	Contamination / Error output (NC)	BU blue
E	Input (analog or digital)	VT violet
T	Teach input	GY grey
Z	Time delay (activation)	WH white
S	Shielding	PK pink
RxD	RS-232 receive path	GNYE green yellow
TxD	RS-232 send path	
U	Test input	
W	Trigger input	
o	Analog output (1,2,3,...)	
o-	Ground for the analog output	
BZ	Block discharge	
Aw	Valve output	
a	Valve control output "+"	
b	Valve control output "0V"	
SY	Synchronization	
E+	Receiver-Line	
S+	Emitter-Line	
⊕	Grounding	

Accessories

- Mounting Clamp BSM12B
- Mounting Bracket W12
- Mounting Bracket W12L
- Additional Lens LA9

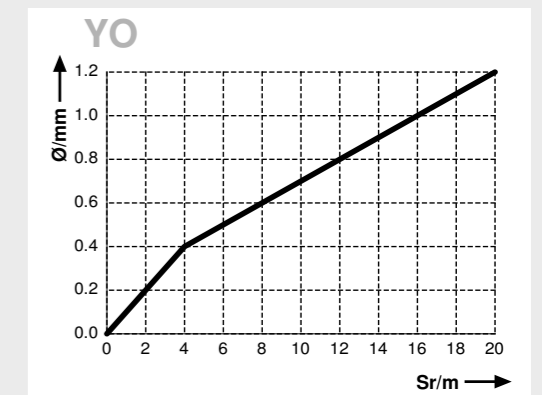
Ctrl. Panel



- 01 = Switching Status Indicator
- 05 = Switching Distance Adjuster

Smallest Recognizable Part

Based on the Distance between Emitter and Receiver



Ø = Diameter, Smallest Recognizable Part
Sr = Switching Distance