

Fiber-Optic Cable Sensor

UF55MV3

Part Number



- Adjustable slope
- Analog output (0...10 V DC)
- Linear output signal proportional to obstruction of glass fiber

Technical Data

Optical Data

Working Range	150...600 mm
Measuring Range	450 mm
Resolution	2 %
Light Source	Infrared Light
Wavelength	880 nm
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux

Electrical Data

Supply Voltage	20...30 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Switching Frequency	50 Hz
Response Time	10 ms
Temperature Drift	3 %
Temperature Range	-10...60 °C
Analog Output	0...10 V
Output Resistance Analog Output	1 kOhm
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III

Mechanical Data

Setting Method	Potentiometer
Housing Material	CuZn, nickel-plated
Full Encapsulation	yes
Degree of Protection	IP65
Connection	M12 × 1; 4-pin

Safety-relevant Data

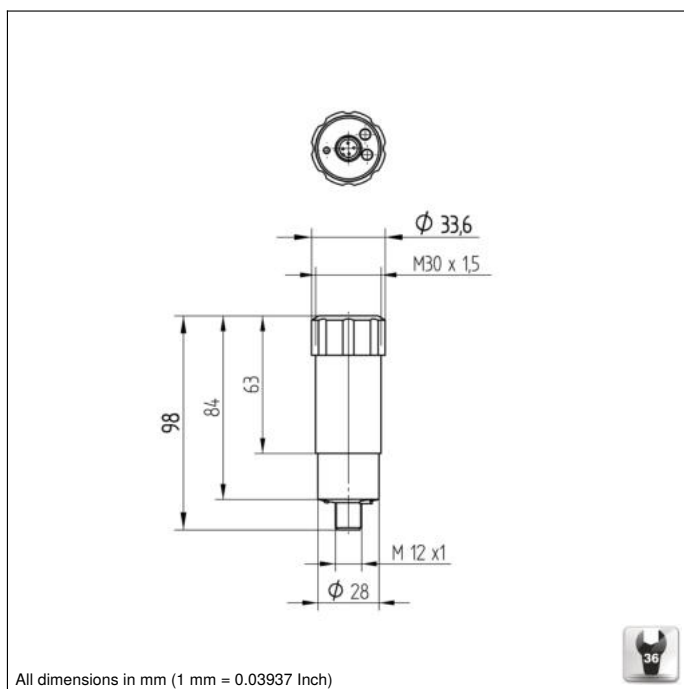
MTTFd (EN ISO 13849-1)	1590,02 a
Analog Output	●
Connection Diagram No.	501
Control Panel No.	F6
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	130
Suitable Fiber-Optic Cable Adapter No.	01

This sensor is especially well suited for applications with glass fiber optic cable curtains.

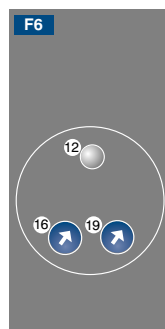


Complementary Products

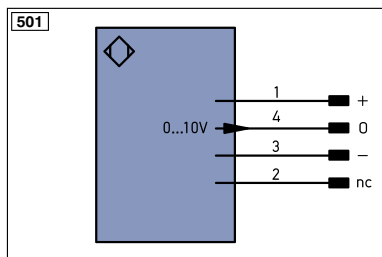
Glass Fiber-Optic Light Curtain



Ctrl. Panel



12 = Analog Output Indicator
16 = Working Distance Adjustment
19 = Zero Adjustment



Legend

+	Supply Voltage +	PT	Platinum measuring resistor	ENAR5422	Encoder A/Ä (TTL)
-	Supply Voltage 0 V	nc	not connected	ENB5422	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
Ä	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
Z	Time Delay (activation)	AMV	Valve Output	OLt	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to DIN IEC 757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	±	Grounding	OG	Orange
IO-Link	IO-Link	SnR	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	La	Emitted Light disengageable	GY	Grey
BI-D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN05422	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactor Monitoring	GNYE	Green/Yellow