

Fiber-optic amplifier

UF55MG3

Part Number



- Analog output (0...10 V DC)
- Linear output signal proportional to distance
- Usable with or without glass fiber-optic cable

Technical Data

Optical Data

Working Range	50...500 mm
Measuring Range	450 mm
Resolution	10 mm
Linearity	5 %
Light Source	Infrared Light
Wavelength	880 nm
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Opening Angle	12 °

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	1 mm/K
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

Analog Output



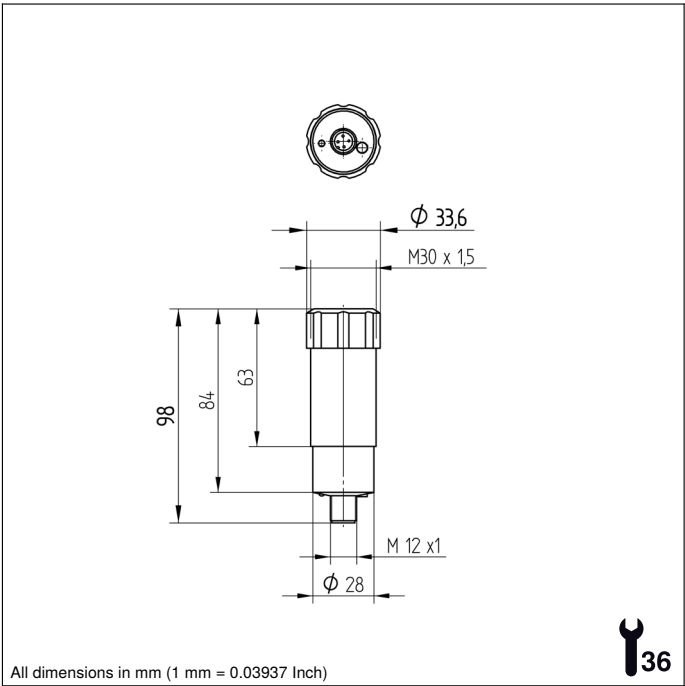
Connection Diagram No.	501
Control Panel No.	F7
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	130
Suitable Fiber-Optic Cable Adapter No.	001

This sensor is suitable for analog distance measurements and can be used with or without a glass fiber cable. The output voltage is dependent upon the brightness of the object to be measured, as bright objects reflect transmitted light better than dark objects.



Complementary Products

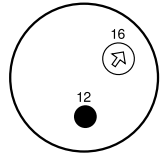
Glass Fiber-Optic Cable



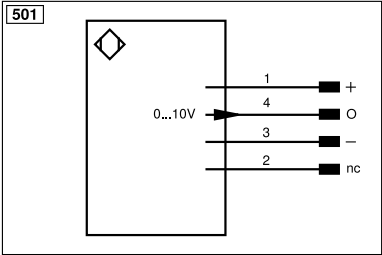
All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel

F7



12 = Analog Output Indicator
16 = Working Distance Adjustment



Legend					
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted	ENB	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ä	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
Ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach 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	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
BL_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
PT	Platinum measuring resistor	ENARS422	Encoder A/A (TTL)		

