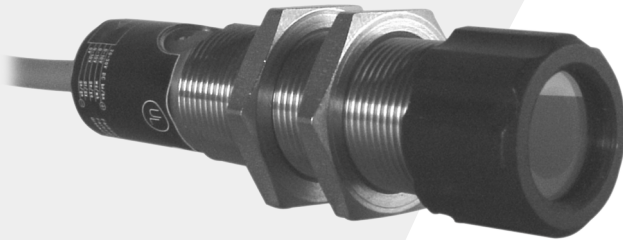


Color Sensor



FD01

Part Number



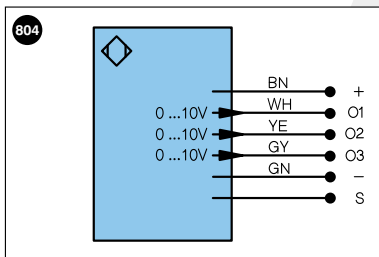
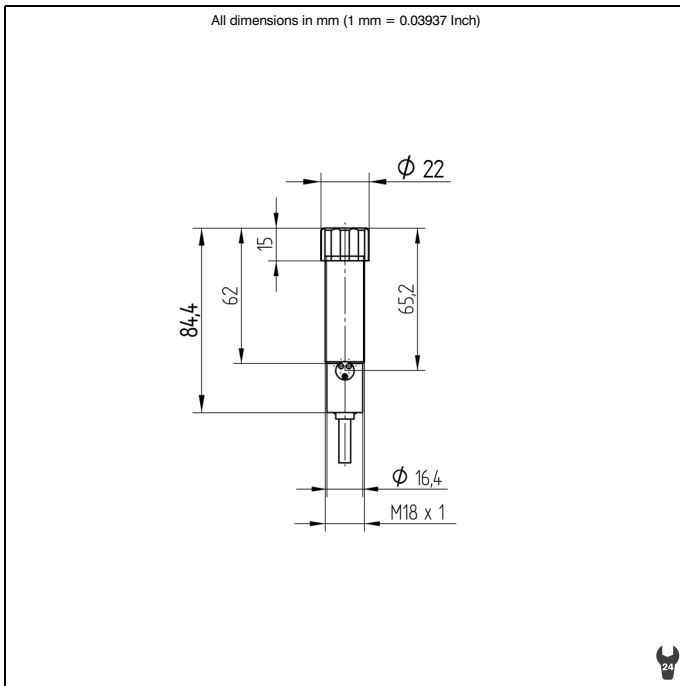
- Adaptable for Glass Fiber Optic Cable
- Recognizes any number of colors
- Reflex and barrier operation mode are possible
- Three Analog Outputs

Technical Data

Optical Data	
Spectral Sensitivity	400...700 nm
Switching Hysteresis	< 15 %
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 = 24V)	< 50 mA
Cut-Off Frequency	1 kHz
Response Time	500 μs
Temperature Drift	< 10 %
Temperature Range	-10...60 °C
Color Outputs	3
Analog Color Ratio Blue/Green	yes
Analog Color Ratio Red/Green	yes
Analog Gray Value	yes
Analog Output	0...10 V
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Mechanical Data	
Housing	Stainless Steel
Full Encapsulation	yes
Degree of Protection	IP67
Connection	Prewired
Protective Insulation, Rated Voltage	50 V
Analog Output	
Connection Diagram No.	
Control Panel No.	
Suiting Mounting Technology No.	

The FD01 is part of a modular color sensor system, which can be adapted to any application with the help of glass fiber optic cable.





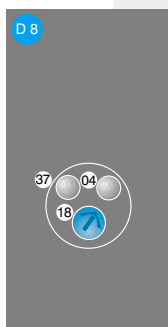
Legend			
+	Supply Voltage +	U	Test Input
-	Supply Voltage 0V	Ū	Test Input inverted
~	Supply Voltage (AC Voltage)	W	Trigger Input
A	Switching Output (1,2,3...)/NO	O	Analog Output
Ā	Switching Output (1,2,3...)/NC	O-	Ground for the Analog Output
V	Contamination/Error Output (NO)	BZ	Block Discharge
V̄	Contamination/Error Output (NC)	Awv	Valve Output
E	Input (analog or digital)	a	Valve Control Output +
T	Teach Input	b	Valve Control Output 0V
Z	Time Delay (activation)	SY	Synchronization
S	Shielding	E+	Receiver-Line
RxD	RS-232 Receive Path	S+	Emitter-Line
TxD	RS-232 Send Path	±	Grounding
RDY	Ready	SnR	Switching Distance Reduction
GND	Ground	USBD+	USB data +
CL	Clock	USBD-	USB data -
E/A	Output/Input programmable	Bus	Interfaces-Bus A(+)/B(-)
	IO-Link	La	Emitted Light disengageable

Wire Colors according to DIN IEC 757	
BK	Black
BN	Brown
RD	Red
OG	Orange
YE	Yellow
GN	Green
BU	Blue
VT	Violet
GY	Grey
WH	White
PK	Pink
GNYE	Green Yellow

Complimentary Products

- Dust extraction tube STAUBTUBUS-01
- Evaluation Unit FN04
- Glass Fiber Optic Cable FL
- White Light Source FW

Ctrl. Panel



- 04 = Function Indicator
- 18 = Light Adjustment
- 37 = Light Indicator