

Color Sensor

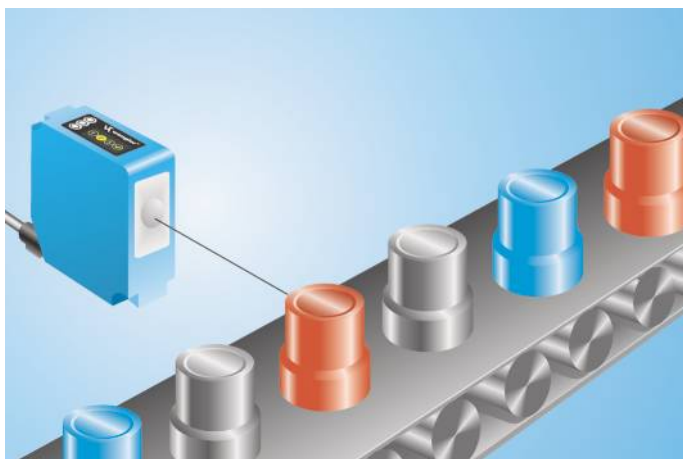
OFP401P0189

Part Number



- Extremely fine color nuances can be recognized
- Reflex mode operation
- Teach-in, external teach-in

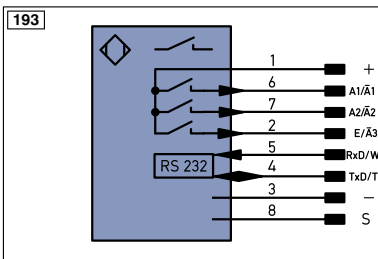
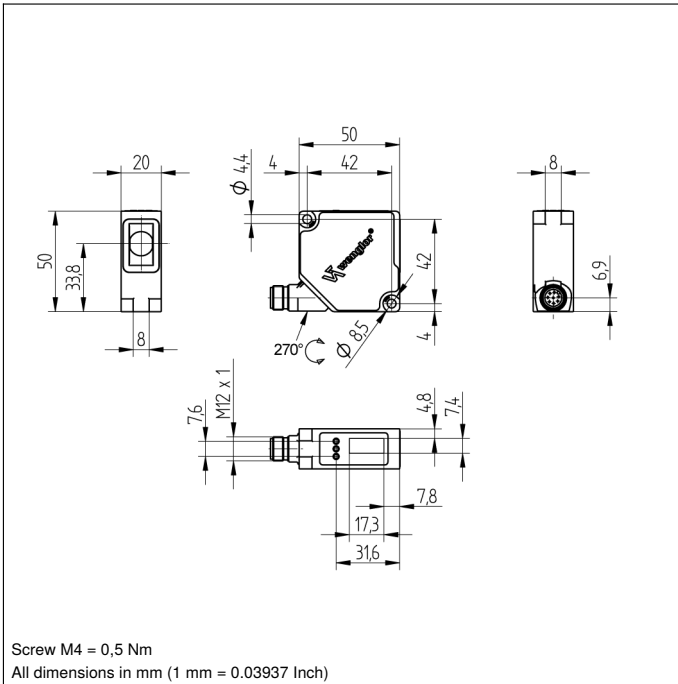
This color sensor is capable of evaluating up to three colors simultaneously. A small spot and a large working range are made possible thanks to single-lens optics. All sensor settings can be selected by means of teach-in, as well as via the RS-232 interface. Values generated by the sensor can be read out via the interface or digital switching outputs. The sensor has 3 switching outputs and supplies RGB, XYZ and HSL color values via the interface.



Technical Data

Optical Data	
Working Range	30...40 mm
Working Distance	35 mm
Light Source	White Light
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Light Spot Diameter	3 mm
Electrical Data	
Supply Voltage	10...30 V
Current Consumption (U _b = 24 V)	< 80 mA
Switching Frequency	1,8 kHz
Response Time	300 μs
Temperature Range	-25...60 °C
Switching Outputs	3
Switching Output Voltage Drop	1,5 V
PNP Switching Output/Switching Current	100 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Teach Mode	FT
Interface	RS-232
Digital Inputs	2
Protection Class	III
Mechanical Data	
Adjustment	Teach-In
Housing Material	Plastic
Degree of Protection	IP68
Connection	M12 × 1; 8-pin
NO/NC switchable	●
Configurable as PNP/NPN/Push-Pull	●
RS-232 Interface	●
Error Output	●
Contamination Output	●
Connection Diagram No.	193
Control Panel No.	X2
Suitable Connection Technology No.	89
Suitable Mounting Technology No.	380





Legend		
+	Supply Voltage +	nc not connected
-	Supply Voltage 0 V	U Test Input
~	Supply Voltage (AC Voltage)	Ū Test Input inverted
A	Switching Output (NO)	W Trigger Input
Ā	Switching Output (NC)	O Analog Output
V	Contamination/Error Output (NO)	O- Ground for the Analog Output
∇	Contamination/Error Output (NC)	BZ Block Discharge
E	Input (analog or digital)	AWV Valve Output
T	Teach Input	a Valve Control Output +
Z	Time Delay (activation)	b Valve Control Output 0 V
S	Shielding	SY Synchronization
RxD	Interface Receive Path	E+ Receiver-Line
TxD	Interface Send Path	S+ Emitter-Line
RDY	Ready	≠ Grounding
GND	Ground	S _n R Switching Distance Reduction
CL	Clock	Rx+/- Ethernet Receive Path
E/A	Output/Input programmable	Tx+/- Ethernet Send Path
	IO-Link	Bus Interfaces-Bus A(+)/B(-)
PoE	Power over Ethernet	La Emitted Light disengageable
IN	Safety Input	Mag Magnet activation
OSSD	Safety Output	RES Input confirmation
Signal	Signal Output	EDM Contactor Monitoring

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

Complementary Products

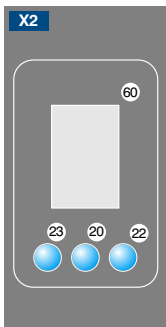
Feldbus Gateways ZAGxxxN01

Interface Cable S232W3

Protection Housing Set ZSP-NN-02

Protection Housing ZSV-0x-01

Ctrl. Panel



- 20 = Enter Button
- 22 = UP Button
- 23 = Down Button
- 60 = Display