

OF510140

OPTICAL SENSORS • COLOR SENSORS

sensor optical, color, 27x50x50mm, White light, True color, Sn: 5-50, 22-26V DC, 5x PNP/NPN Push-pull, Connector M12 8pin, IP64, Aluminum Anodized, $\Delta E \geq 0.5$, 35kHz, 31 colors



MECHANICAL FEATURES

Ambient temperature	-20 °C ... 55 °C
Degree of protection (IP)	IP64
For damp environments	+
For glossy/reflecting surfaces	+
Housing coating	Anodized
Housing design	Cuboid
Housing material	Aluminum
Sensor height	27 mm
Sensor length	50 mm
Sensor width	50 mm
Storage temperature	-20 °C ... 85 °C
With fiber optics connection	-

ELECTRICAL FEATURES

Control of self-luminous objects	+
EMC test in acc. with	DIN EN 60947-5-2
Equipment protection class	Protection class 3
Max. number of measurements for averaging	32768
Measurement frequency in alternating light operation	20000 Hz
Measurement frequency in constant light operation	35000 Hz
No-load current	160 mA
Number of digital inputs	1
Number of pins	8
Number of pins of the communication interface	4
Number of switching outputs	5
Operating voltage	21.6 V ... 26.4 V
Overload protection	+
Pulse stretching (MAX)	100 ms
Rated control supply voltage U_s at DC	21.6 V ... 26.4 V
Rated switching current	100 mA
Relative repeat accuracy	0.02 %
Reverse polarity protection	+
Selectable amplifier stages	8

ELECTRICAL FEATURES

Sensing range	5 mm ... 50 mm
Setting procedure	Parameterization
Short-circuit protection	+
Standard for interfaces	RS-232
Switching frequency	35000 Hz
Temperature drift	$\Delta X/\Delta T; \Delta Y/\Delta T$ typ. 0.2 digits/°C (< 0.01% / °C)
Type of communication interface	Connector M5
Type of electrical connection	Connector M12
Type of plug-in contact, communication interface	Female (socket)
Type of switching function	Push-pull
Type of switching output	PNP/NPN
Voltage type	DC
With communication interface, RS-232	+
With external teach	+
With external trigger	+
With time function	+

OPTICAL FEATURES

Measuring method for color detection	Active tristimulus method
Light source	White light
Diffuse	+
True color	+
Max. ambient light	5000 lx
Alternating light operation	+
Constant light operation	+
Color distance	$\Delta E \geq 0.5$
Color spaces	X Y INT siM (Lab)

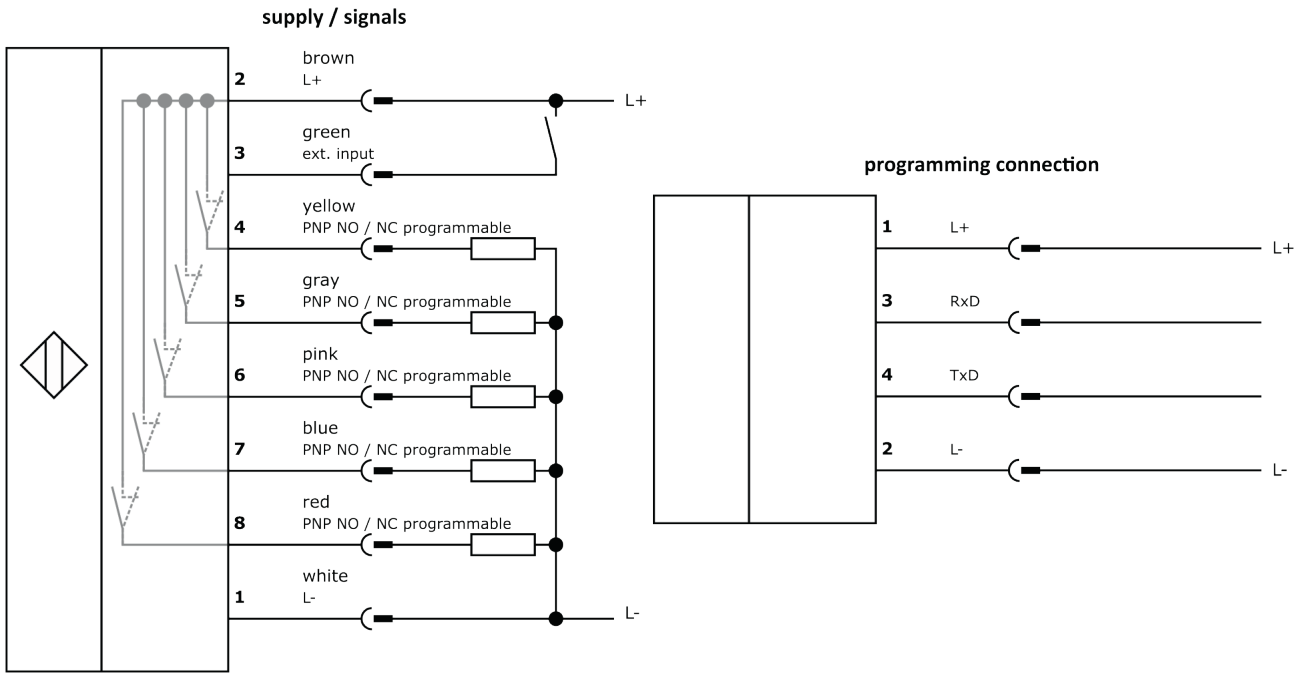
Other

Packaging dimensions	99.0mm x 60mm x 160mm
Shipping weight	0.16kg
Tariff code	85365019

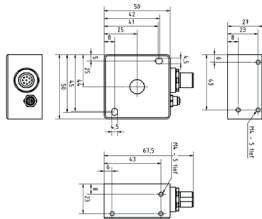
Classification

ipf product group	104
eClass 8.0	27270907
eClass 9.0	27270907
eClass 9.1	27270907
ETIM-5.0	EC001817
ETIM-6.0	EC001817
ETIM-7.0	EC001817

Connection



Dimensional drawing



Installation



Mounting / installation may only be carried out by a qualified electrician!

Disposal



Software

Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com

Safety warnings

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information. Never use these devices in applications where the safety of a person depends on their functionality. LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.