

Contrast Sensor

YP11MVV80

LASER

Part Number



- Analog output (0...10 V DC)
- Switching frequency: 10 kHz

Technical Data

Optical Data

Working Range	50...100 mm
Measuring Range	50 mm
Resolution	20 mV
Switching Hysteresis	200 mV
Light Source	Laser (red)
Wavelength	660 nm
Service Life (T = +25 °C)	100000 h
Laser Class (EN 60825-1)	2
Max. Ambient Light	10000 Lux
Light Spot Diameter at a Distance of	0,5 mm 100 mm

Electrical Data

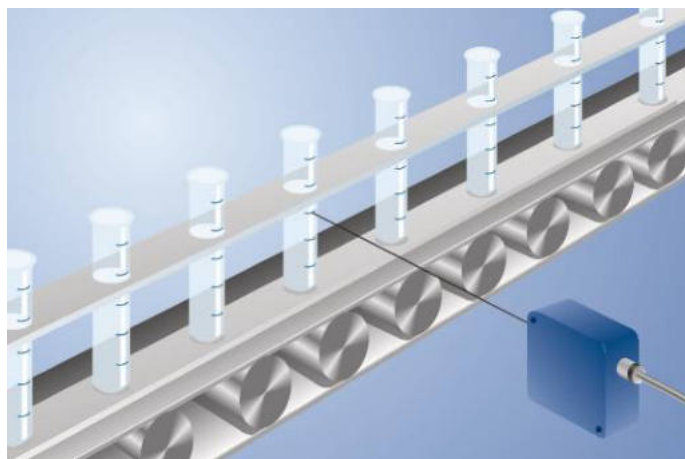
Supply Voltage	18...30 V DC
Cut-Off Frequency	10 kHz
Response Time	50 µs
Temperature Drift	10 mV/K
Temperature Range	-10...60 °C
Switching Output Voltage Drop	1,5 V DC
PNP Switching Output/Switching Current	200 mA
Analog Output	0...10 V
Short Circuit Protection	yes
Overload Protection	yes
Protection Class	III

Mechanical Data

Setting Method	Potentiometer
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 8-pin

PNP NO	●
Analog Output	●
Connection Diagram No.	504
Control Panel No.	P1
Suitable Connection Equipment No.	80
Suitable Mounting Technology No.	380

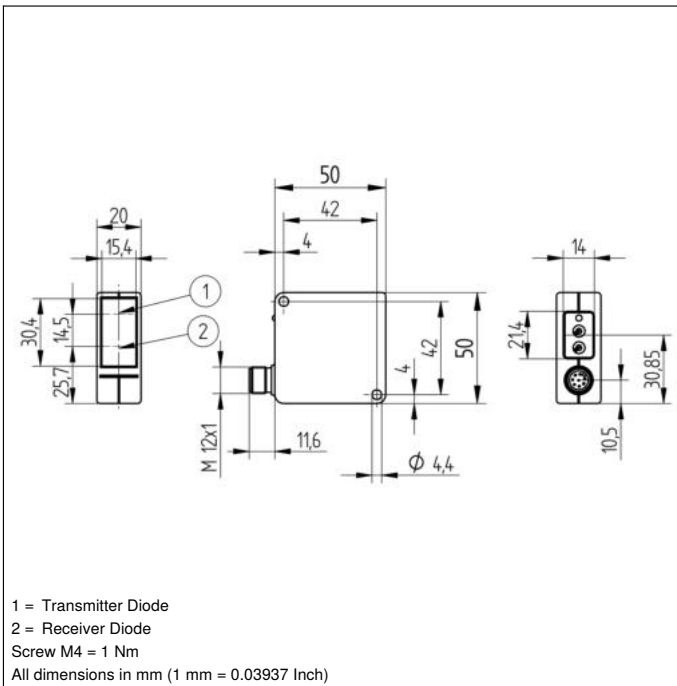
These sensors are especially well suited for high speed indication of contrast differences by means of an analog output voltage.



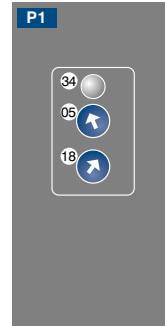
Complementary Products

Protective Housing ZSV-0x-01

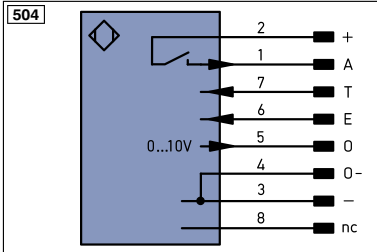
Set Protective Housing ZSP-NN-02



Ctrl. Panel



05 = Switching Distance Adjuster
18 = Light Adjustment
34 = Analog Voltage Output-/Switching Status



Legend

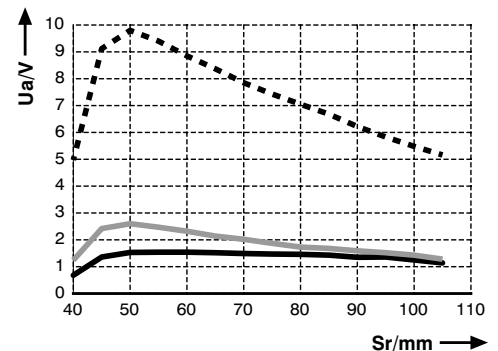
+	Supply Voltage +
-	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
$\bar{A}$	Switching Output (NC)
V	Contamination/Error Output (NO)
$\bar{V}$	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
	IO-Link
PoE	Power over Ethernet
IN	Safety Input
OSSD	Safety Output
Signal	Signal Output
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)
EN0.95422	Encoder 0-pulse 0-0 (TTL)

PT	Platinum measuring resistor
nc	not connected
U	Test Input
$\bar{U}$	Test Input inverted
W	Trigger Input
W-	Ground for the Trigger Input
O	Analog Output
O-	Ground for the Analog Output
BZ	Block Discharge
AWV	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
SY-	Ground for the Synchronization
E+	Receiver-Line
S+	Emitter-Line
$\pm$	Grounding
SrR	Switching Distance Reduction
Rx+/-	Ethernet Receive Path
Tx+/-	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(-)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactur Monitoring

EN0.95422	Encoder A/ $\bar{A}$ (TTL)
EN0.95422	Encoder B/ $\bar{B}$ (TTL)
ENa	Encoder A
ENb	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
AOK	Digital output OK
SY_in	Synchronization In
SY_OUT	Synchronization OUT
OLT	Brightness output
M	Maintenance
rsv	reserved
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

Output Graph

YP11MxV



Sr = Switching Distance
Ua = Output Voltage

— black 6 % remission
- - - grey 18 % remission
... white

