

Reflex Sensor with Analog Output

HN24MGV-P24

Part Number

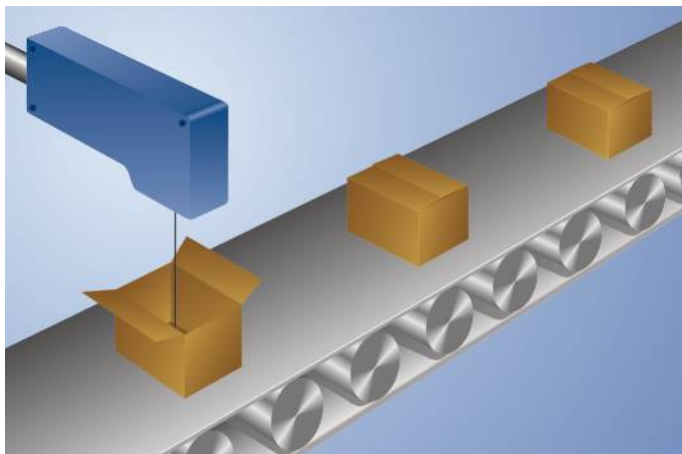


- Analog output (0...10 V DC)
- Error output
- Large measuring range
- Red light

Technical Data

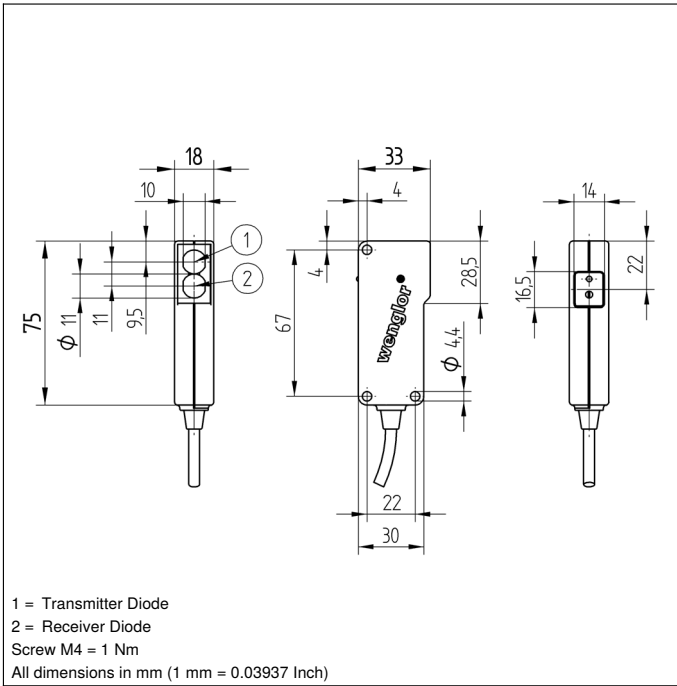
Optical Data	
Working Range	55...155 mm
Measuring Distance	105 mm
Measuring Range	100 mm
Resolution	500 μm
Linearity	1 %
Light Source	Red Light
Wavelength	660 nm
Service Life (T = +25 °C)	100000 h
Max. Ambient Light	10000 Lux
Light Spot Diameter	3 mm
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Cut-Off Frequency	100 Hz
Response Time	5 ms
Temperature Drift	50 $\mu\text{m}/\text{K}$
Temperature Range	-10...60 °C
PNP Error Output/Switching Current	200 mA
Analog Output	0...10 V
Output Current Analog Output	500 μA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	Plastic
Full Encapsulation	yes
Degree of Protection	IP67
Connection	Cable, 6-wire, 6 m
Error Output	●
Analog Output	●
Connection Diagram No.	603
Control Panel No.	N2
Suitable Mounting Technology No.	350

These sensors can measure distances and display analog output. Their high resolution and wide variety of measuring ranges allow them to be used in innumerable applications. The output signal is practically independent of the object's color.

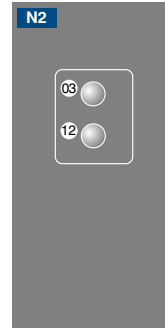


Complementary Products

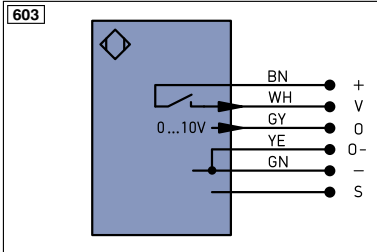
Analog Evaluation Unit AW02
Dust Extraction Tube STAUBTUBUS-03
Set Protective Housing ZSN-NN-02



Ctrl. Panel



03 = Error Indicator
 12 = Analog Output Indicator



Legend

+	Supply Voltage +	PT	Platinum measuring resistor	ENa	Encoder A
-	Supply Voltage 0 V	nc	not connected	ENb	Encoder B
~	Supply Voltage (AC Voltage)	U	Test Input	AMIN	Digital output MIN
A	Switching Output (NO)	U	Test Input inverted	AMAX	Digital output MAX
Ā	Switching Output (NC)	W	Trigger Input	AOK	Digital output OK
V	Contamination/Error Output (NO)	O	Analog Output	SY In	Synchronization In
V̄	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY OUT	Synchronization OUT
E	Input (analog or digital)	BZ	Block Discharge	Ort	Brightness output
T	Teach Input	AW	Valve Output	M	Maintenance
Z	Time Delay (activation)	a	Valve Control Output +	rsv	reserved
S	Shielding	b	Valve Control Output 0 V		
RxD	Interface Receive Path	SY	Synchronization		
TxD	Interface Send Path	E+	Receiver-Line		
RDY	Ready	S+	Emitter-Line		
GND	Ground	≡	Grounding		
CL	Clock	SnR	Switching Distance Reduction		
E/A	Output/Input programmable	Rx+/-	Ethernet Receive Path		
IO-Link	IO-Link	Tx+/-	Ethernet Send Path		
PoE	Power over Ethernet	Bus	Interfaces-Bus A(+)/B(-)		
IN	Safety Input	La	Emitted Light disengageable		
OSSD	Safety Output	Mag	Magnet activation		
Signal	Signal Output	RES	Input confirmation		
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	EDM	Contactur Monitoring		
EN0r542z	Encoder 0-pulse 0-0 (TTL)	ENAr542z	Encoder A/Ā (TTL)		
		ENBr542z	Encoder B/B̄ (TTL)		

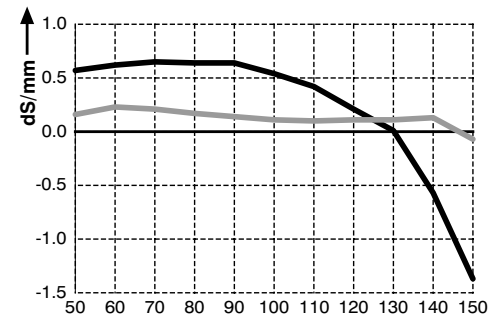
Wire Colors according to DIN IEC 757

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

Error of Measurement

Typical characteristic curve based on white, 90 % remission

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S = Measuring Distance

dS = Deviation

— black 6 % remission

— grey 18 % remission

