

Magnetostrictive Displacement Sensor

SODRON

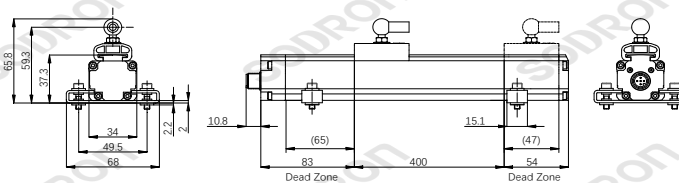
Product Performance Parameters

Model	SM-DAA-V11-MXXX-E01
Working Voltage	24VDC ± 20%
Measuring Range	50 ~ 1500mm
Maximum Detectable Speed	10m/s
Output Signal	V: Voltage 0-10V A: Current 4~20mA
Operating Current	Measuring length < 1500: 140 mA Measuring length ≥ 1500: 180 mA
Number of Magnets	1
Nonlinearity Error	± 40μm < 1000 mm ± 60μm ≥ 1000...1500mm ± 100μm > 1500mm
Repeatability Error	≤ ± 10μm
Resolution	16Bit D/A
Short-circuit Protection	To ground
Reverse Polarity Protection	Yes
Temperature Influence	< 10μm/°C (≤ 500 mm)
Storage Temperature	-30°C ~ +80°C
Operating Temperature	-25°C ~ +80°C
EN 55016-2-3, Radiation	Industrial and residential areas
EN 60068-2-27, Shock	150g
EN 60068-2-6, Vibration	10g, 10~2000 Hz
EN 61000-4-2, ESD	Severity Level 3
EN 61000-4-3, RFI	Severity Level 3
EN 61000-4-4, Burst	Severity Level 3
EN 61000-4-5, Surge	Severity Level 3
EN 61000-4-6, High-frequency Field	Severity Level 3
EN 61000-4-8, Magnetic Field	Severity Level 4
Housing Material & Surface Protection	Aluminum (Anodized)
Wiring Method	Connector 1x4Pin/M12
Protection Grade	IP65

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Product Structure Drawing

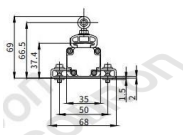
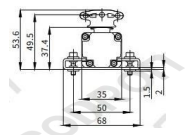


Wiring Diagram



1#	Brown	+24VDC ± 20%
2#	White	Signal+
3#	Blue	GND
4#	Black	Signal-

Magnet Information

Item	Rail Type	Floating Type
Dimension Diagram		
Material	Plastic	Plastic
Weight	≈ 30g	≈ 12g
Distance between magnet and working surface	Fixed	0.1~4mm
Lateral misalignment	Fixed	± 8mm
Operating temperature	-25°C ~ +80°C	-25°C ~ +80°C