

## MV991425

### LINEAR AND ANGULAR MEASUREMENT • SWITCHING AMPLIFIERS

For length measurement, rotational speed or angle measurement, magnetic measuring systems are used. These systems operate in a way that the sensor moves without contact over a flexible magnetic tape, or it is situated above the rotating magnetized measuring wheel. The magnetic tape is applied to a 0.3mm thick steel strip and is located on the circumference of the various measuring wheels. The magnetization is carried out with defined pole pitches. By scanning of the magnetic poles an analog signal is generated, which is converted into digital square wave signals that can be processed by a downstream electronics and, if necessary, be displayed. The sensor detects the pitch of the strip and converts the information into a high-resolution path or rotation information. To read out the magnetic lines no direct contact is required. Magnetic sensors are insensitive to dirt, oils and moisture and relatively stable at shock and vibration. For users, this opens up a wide field of applications, e.g. for plants and systems in the timber industry, at linear axes, in outdoor areas or with machine tools.



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#### MECHANICAL DATA

Depth	115 mm
Device design	Field device
Height	19.3 mm
Housing design	Cuboid
Housing material	Metal
Length	115 mm
Mounting method	Floor fastening
Width	55 mm

#### ELECTRICAL DATA

Amplifier for position measuring systems	Yes
Galvanic isolation between input and output	No
Galvanic isolation between inputs	No
Galvanic isolation between supply voltage and all other current circuits	No
Inherently safe according to EN 60947-5-6 NAMUR	No
Malfunction message output	Yes
No-load current	70 mA
Number of channels	1
Number of output circuits, transistor npn	1
Number of output circuits, transistor pnp	1
Rated supply voltage at DC (MAX)	24 V
Rated supply voltage at DC (MIN)	24 V
Reverse polarity protection	Yes
Suitable for safety functions	No
Switching voltage	24 V
Switching voltage DC	24 V
Type of electrical connection	Plug-in connection

**ELECTRICAL DATA**

Type of switching function	Push-pull
Type of voltage supply	Active
With communication interface, RS-422	Yes
With LED display	Yes

**OTHER DATA**

Operating temperature (MAX)	70 °C
Operating temperature (MIN)	0 °C

**DIMENSIONAL DRAWING****INSTALLATION**

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

**DISPOSAL****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.