

**Main features:**

- Amplifies the strain between the 2 mounting areas mechanically
- With high grade variable analog amplifier
- Ideal for tension and compression mode
- For dynamic applications
- Used on high speed machinery, especially injection molding and stamping press
- Quick and easy mounting
- Solid steel housing
- M12 connector

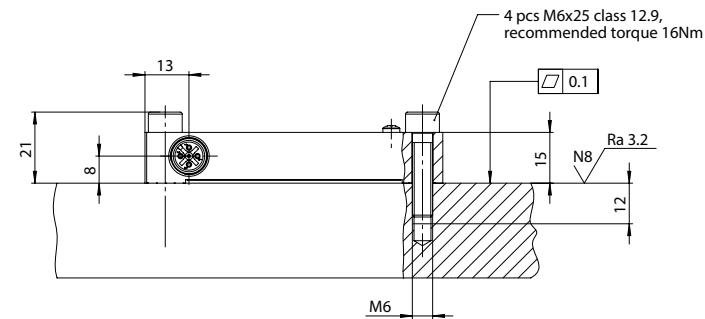
The SL-VAA strain link sensor captures surface strain between two mounting points and mechanically amplifies the strain occurring within these areas. Its built-in analogue processes the signal directly, reducing electromagnetic compatibility (EMC) issues. Designed for heavy industrial use, these rugged sensors are resilient in challenging environments. They necessitate a cyclical reset for continued accurate functioning, making them suitable for various industrial applications where precise strain measurements are essential.

TECHNICAL DATA

Measuring range	+/- 50 μ ε to +/- 800 μ ε
Output signal at 100% measuring range	+/- 10.0 V
Maximum voltage output signal	+/- 12 V
Noise on output signal	50-100 μ ε : <10mV RMS; <80 mV p.p. >100 μ ε: <3mV RMS; <30 mV p.p.
Accuracy (1)	+/- 1% FS
Linearity error	<±0.5% FS
Hysteresis	<±0.3% FS
Repeatability	< 1% FS
Low pass filter	16 kHz
Overload rating	150% FS
Rise time from 10 to 90 % of F.S.	< 30 μ s
Internal pull-down resistor at reset input	10 kOhm
Resolution	infinite
Zero offset after reset	0.2% FS
Minimum Reset pulse duration	5ms
Output protection	Output short circuit protection
Signal output voltage in case of sensor break	>11.5V always
Observation of the low voltage guideline	According to Directive 2014/30/EU
Supply voltage	18V...30V, Reverse polarity protection
Supply current	<1W (current depends on Supply voltage)
Operating temperature range	-5...+80°C
Electromagnetic compatibility (EMC)	According to Directive 2014/30/EU
Shock resistance (Shock)	100 g / 4 ms according to IEC60068-2-27
Vibration resistance	5-1000 Hz, 20g according to IEC60068-2-27
IP Protection	IP66
Production guideline	RoHS
Electric connection	M12x1, 5-pole male connector
Weight	135 g
(1) incl. Non-linearity, Hysteresis, Repeatability, Zero-offset and Span-offset	

DIMENSION

SL76 - 4 HOLES



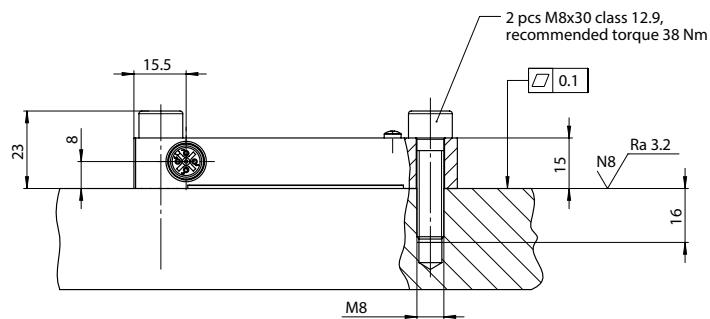
Important:

If the signal is unstable, this indicates that the sensor is not properly secured.
Adjust the sensor within the permissible range for proper tightening.

Dimensions in mm

DIMENSION

SL80 - 2 HOLES



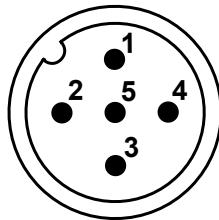
Important:

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Adjust the sensor within the permissible range for proper tightening.

Dimensions in mm

ELECTRICAL CONNECTION

M12 connector, 5 pol male

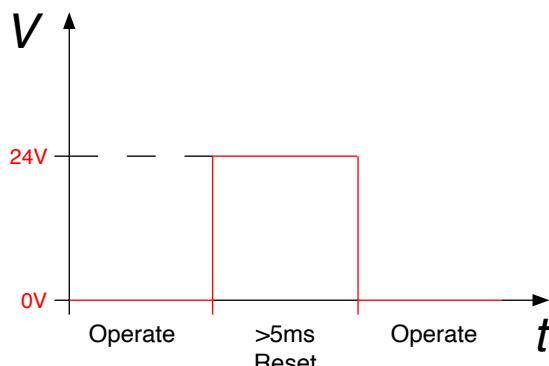


1. Power + VDC (18-30 V)
2. Power GND
3. Signal GND
4. Signal OUT
5. Reset (24V active)

Stretching (positive strain) gives positive signal.
Compression (negative strain) gives negative signal.

RESET FUNCTION

24V - TYPE



Reset control input	Reset	12V..30V
Operate	0V / open	
Minimum reset pulse duration	>5ms	

ACCESSORIES

Description	Code
Cable with female connector M12 5-pin	2 m
	5 m
	10 m
	15 m

ORDER CODE

SL - **80** - **VAA** - **2** - **C** - **M12** - **N** - **00** - **4** - **0100** - **OOOO** - **O**

Mounting holes distance

76 mm	76
80 mm	80

Numbers of holes

2 holes - M8	2
4 holes - M6	4

Connection output

Connector	C
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Connector

M12, 5pol	M12
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Output signal

0...±10 Vdc	N
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Measuring range (FS)

50 μ ϵ	0050
100 μ ϵ	0100
250 μ ϵ	0250
350 μ ϵ	0350
500 μ ϵ	0500
750 μ ϵ	0750
800 μ ϵ	0800

Example: SL80-VAA - 2 - C - M12 - N - 00 - 4 - 0100 - OOOO - O

Strain link sensor with 2 holes, full bridge, M12 connector output, voltage output signal, 100 μ ϵ at +10V

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice.

GEFRAN

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