



Main features

- Amplifies the strain between the 2 mounting areas mechanically
- Ideal for tension mode
- With high end digital amplifier (active)
- Mainly for dynamic applications
- Use don presses and injection moulding machines
- Solid steel housing (IP54)

Strain link sensors picks up surface-strain between the 2 mounting locations.

The strain occuring between the mounting areas is mechanically amplified inside of the sensor. The integrated digital amplifier processes the signal on the spot, avoiding EMC problems.

Thanks to the rugged design, this sensors are used in heavy industrial environment. In case of overload, this sensor may get an offset. After replacing a SL-Sensor, they need to be recalibrated. They need a cyclical reset (for cycles >1 min.).

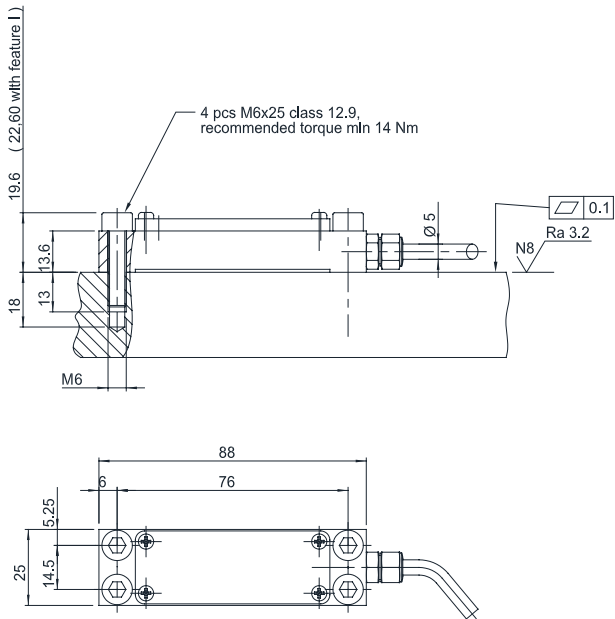
Our amplifier can handle the occuring large offset range.

TECHNICAL DATA

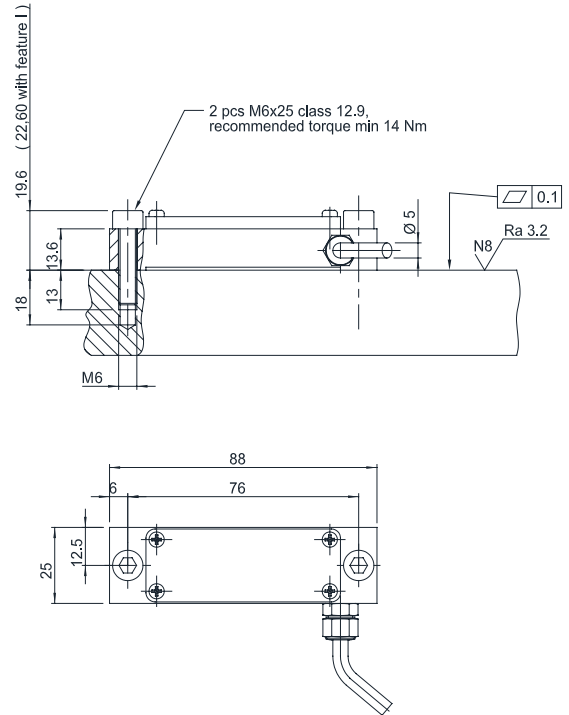
Strain gauge type	Foil (GF = 2.0)
Bridge resistance	350Ω
Measuring range	100...800με,-100...-250με
Span adjustment	±200% FS
Zero adjustment	±500% FS
Sampling rate	8kHz
Output rate	800Hz
Low-pass filter	100Hz
Output signal	0...±10VDC, 4...20mA
Noise	< 10mV
Sensitivity tolerance	± 1%
Accuracy	< ± 0.5% FS
Accuracy of zero point	< ± 0.1% FS
Linearity	< ± 0.5% FS
Hysteresis	< ± 0.3% FS
Repeatability	< 1% (max 2%)
Output resistance	10Ω
Reset time	> 25ms
Reset voltage	15...28VDC, 0VDC
Supply voltage	20...28VDC
Supply current	< 60mA
Inverse polarity protection	Yes
Accidental short-circuit protection	Yes
Operating temperatur range	-10...65°C
Storage temperatur range	-10...65°C
Temperature coefficient at 10°C	< 0.1 (0.05 typical)
Overload capability	indefinite (offset occurs)
Protection class	IP54
EMC	2014/30/EU
Case material	Steel
Cover material	Aluminium
Weight, including cable	110g

MECHANICAL DIMENSIONS

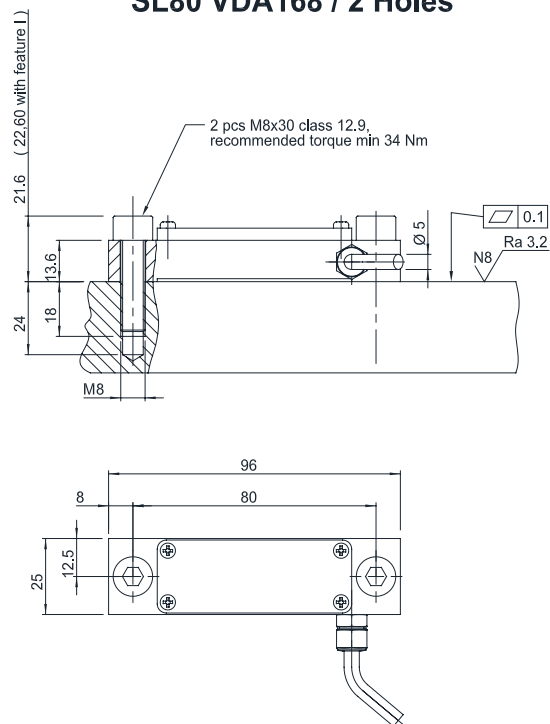
SL76 VDA168 / 4 Holes



SL76 VDA168 / 2 Holes



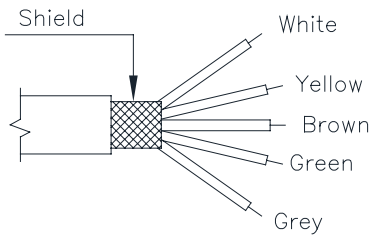
SL80 VDA168 / 2 Holes



ELECTRICAL CONNECTIONS

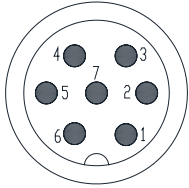
Option O :

PUR screened cable (standard); 5 x 0.14; Ø 5mm; bending 10xØ



Option C :

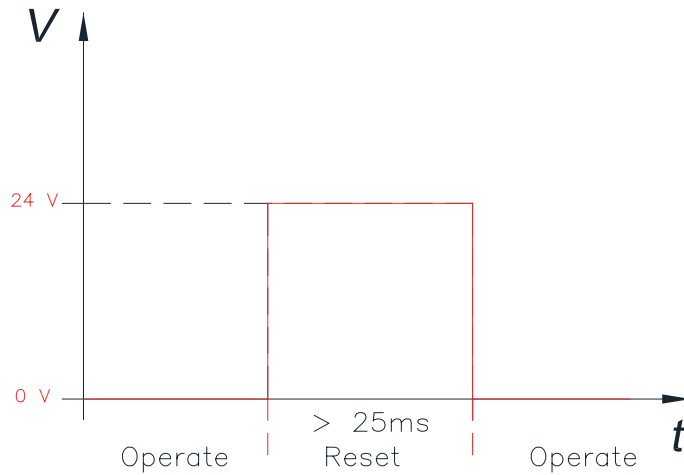
connector 7 Pin



OPTION O (CABLE EXIT)	OPTION C (CONNECTOR OUTPUT)	FUNCTION
White	1	Power (24V)
Grey	5	Signal +
Green	4	Reset
Yellow	3-7	GND
Brown	6	Signal -

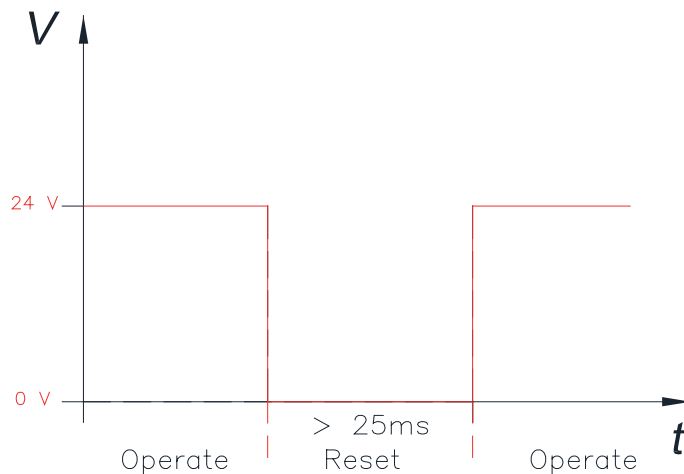
RESET FUNCTION

24V - TYPE



Reset control input	Reset	15...28V
	Operate	0V/open
Minimum reset pulse duration	>25ms	

0V - TYPE



Reset control input	Reset	0V
	Operate	5...28V/open
Minimum reset pulse duration	>25ms	

ORDER CODE

Strain ring sensor

SL -VDA168- - - - - - - -

Screw distance	
76 mm	76
80 mm	80

Mounting hole	
Two holes	2
Four holes	4

Measurement range	
100 $\mu\epsilon$	0100
250 $\mu\epsilon$	0250
500 $\mu\epsilon$	0500
800 $\mu\epsilon$	0800
Define your own range (100 $\mu\epsilon$..800 $\mu\epsilon$)	XXXX

Strain gauges	
2 strain gauges (for cyclical applications)	2
4 strain gauges (for cyclical applications and static measurements)	4

Cable length	
0.5m	005
3m	030
5m	050
10m	100
Define your own length (0,5m..15m)	XXX

Feature	
N	peak-hold negative
P	peak-hold positive
I	Output 4mA..20mA (instead of 0... \pm 10V)
O	no features

Reset	
HO	External reset (24V), without power-on reset (5·10 ⁵ reset cycles allowed)
HR	External reset (24V), with power-on reset (infinite reset cycles allowed)
LO	External reset (0V), without power-on reset (5·10 ⁵ reset cycles allowed)
LR	External reset (0V), with power-on reset (infinite reset cycles allowed)
ST	Static (no external reset)

Connection	
O	Cable
C	Cable and connector

Example: **SL76-VDA168-4-0800-2-030- O -ST - P**

It is an SL76-VDA strain link sensor with 4 holes, 2/4 bridge and 3m cable length.

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



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DTS_SL76-VDA168_04-2016_ENG