



### Main features

- With high grade variable digital amplifier 268 (active)
- Direct surface strain reading like bonded strain gages, high linearity on tension and compression
- For dynamic applications
- Used on presses, injection moulding and die-casting machines
- Quick and easy mounting
- Protected against overload

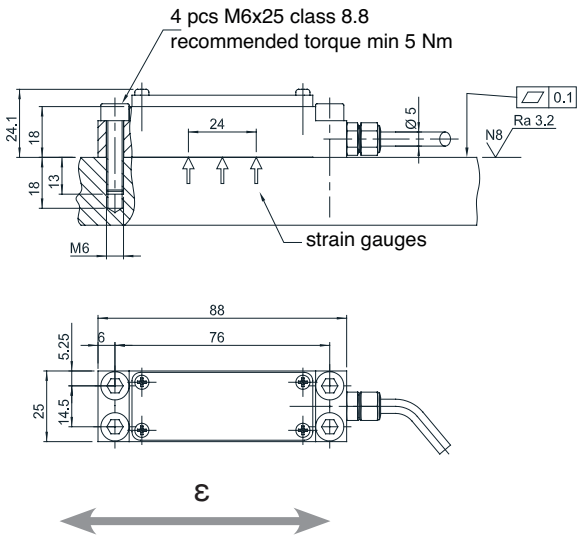
Press-on strain sensors measure the surface-strain directly at the mounting location, similar to bonded strain gages. The integrated high grade digital amplifier type 268 amplifies the signal on the spot, avoiding EMC problems. The SB76 presses strain gages under the stainless protective foil that strongly onto the surface to be measured that friction replaces the bonding normally used to fix strain gages. The mounting is very fast, and the strain gage is protected. The sensor can not be overloaded. The sensors do not need to be recalibrated once they have been replaced or remounted. They need a cyclical reset (for cycles >5min.). Our amplifier can handle the occurring large offset range.

### TECHNICAL DATA

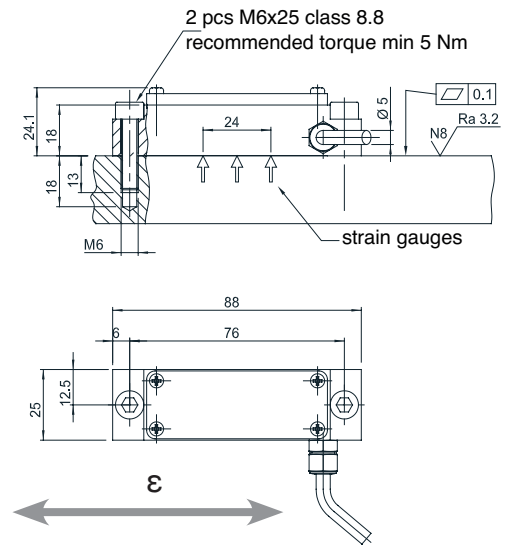
Strain gauge type	Foil (GF = 2.0)
Bridge resistance	350Ω
Measuring range	±100...±1000µε
Span adjustment	±200% FS
Zero adjustment	±500% FS
Sampling rate	8kHz
Output rate	8kHz
Low-pass filter	1kHz
Output signal	0...±10VDC, CANOpen, RS485/RS422
Noise	< 25mV
Sensitivity tolerance	± 0.2%
Accuracy	< ± 0.5% FS
Accuracy of zero point	< ± 0.1% FS
Linearity	< ± 0.3% FS
Hysteresis	< ± 0.5% FS
Repeatability	< 0.2% FS
Output resistance	0Ω
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 temperature range	0...55°C
Storage temperature range	0...55°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	Aluminium
Cover material	Aluminium
Weight, including cable	90g

# MECHANICAL DIMENSIONS

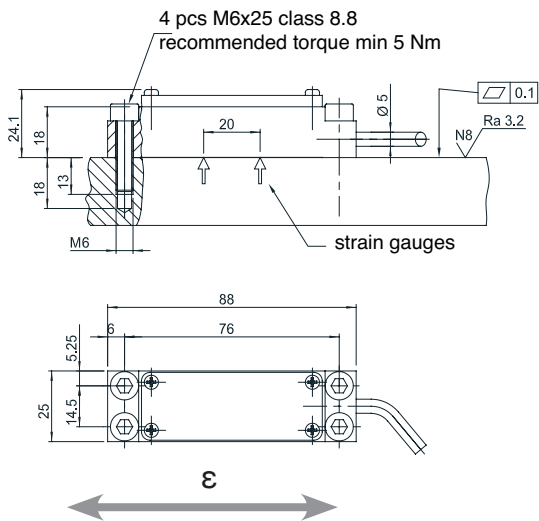
## 4 Strain gauges / 4 Holes



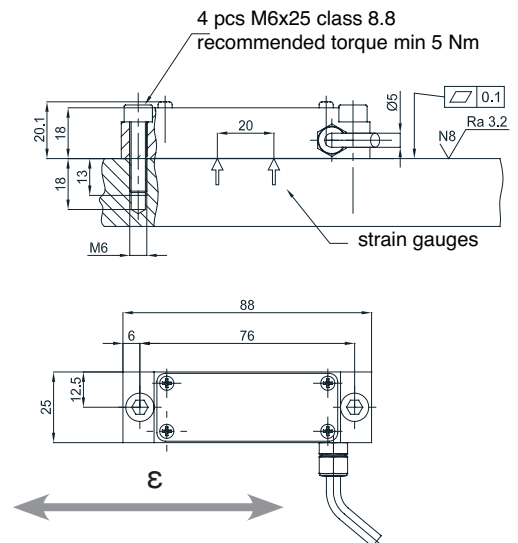
## 4 Strain gauges / 2 Holes



## 2 Strain gauges / 4 Holes



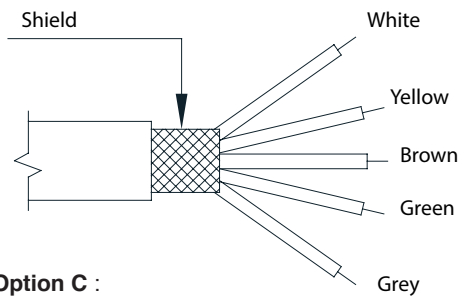
## 2 Strain gauges / 2 Holes



## ELECTRICAL CONNECTIONS

### Option O :

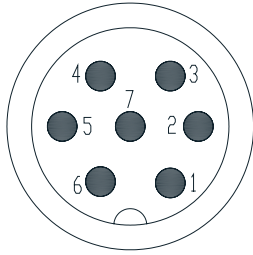
PUR screened cable (standard); 5 x 0.14; Ø 5mm; bending 10xØ



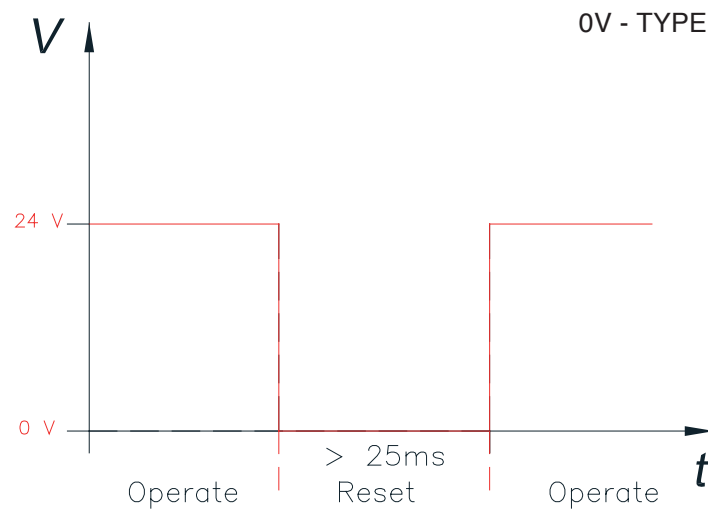
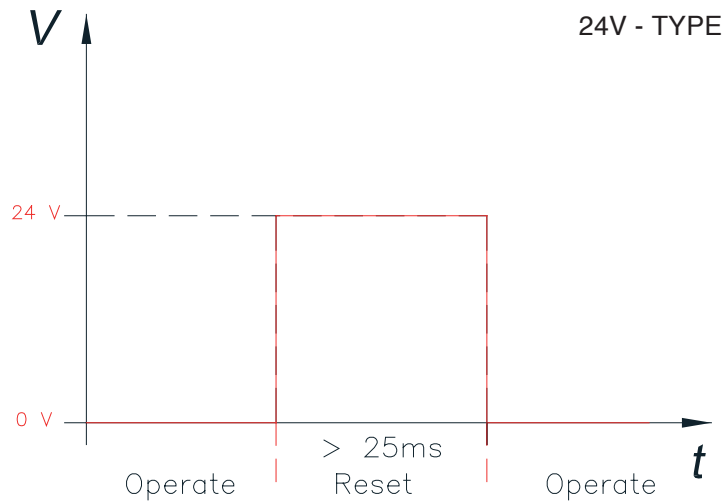
OPTION O (CABLE EXIT)	OPTION C (CONNECTOR OUTPUT)	FUNCTION
White	1	Power (24V)
Grey	5	Signal +
Green	4	Reset
Yellow	3-7	GND (0V)
Brown	6	Signal -

### Option C :

connector 7 Pin



## RESET FUNCTION



## ORDER CODE

Press-on strain sensor

**SB76-VDA268 -**

Housing	
Aluminium housing with two holes	<b>A2</b>
Aluminium housing with four holes	<b>A4</b>

Measurement range	
100 $\mu\epsilon$	<b>0100</b>
250 $\mu\epsilon$	<b>0250</b>
500 $\mu\epsilon$	<b>0500</b>
750 $\mu\epsilon$	<b>0750</b>
1000 $\mu\epsilon$	<b>1000</b>

STRAIN GAUGES	
2 strain gauges (for cyclical applications)	<b>2</b>
4 strain gauges (for cyclical applications and static measurements)	<b>4</b>

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

Connection	
Cable	<b>O</b>
Cable and connector	<b>C</b>

Feature	
<b>N</b>	peak-hold negative
<b>P</b>	peak-hold positive
<b>C</b>	CANOpen-Interface
<b>R</b>	RS485-Interface
<b>O</b>	no features

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

Example: **SB76-VDA268-A4-1000-2-030-O-ST-P**

It is an SB76-VDA press-on strain 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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