

#### Main features:

- Small press-on sensor with one-hole mounting
- Direct measurement of surface strain
- Without amplifier (passiv)
- High accuracy and linearity in tension and pressure (like bonded strain gauges)
- For dynamic applications
- Used on presses, injection moulding and die-casting machines
- Quick and easy mounting
- Protected against overload
- Optional accessories:
  - Signal amplifier VDA
  - Monitor DU-1D

The strain gauge sensor SB46 measure the surface-strain directly at the mounting location in the same quality as bonded strain gages. The press-on technology, developed by Sensormate AG, presses the strain gauges under the stainless protective film so strongly against the surface to be measured that frictional contact occurs.

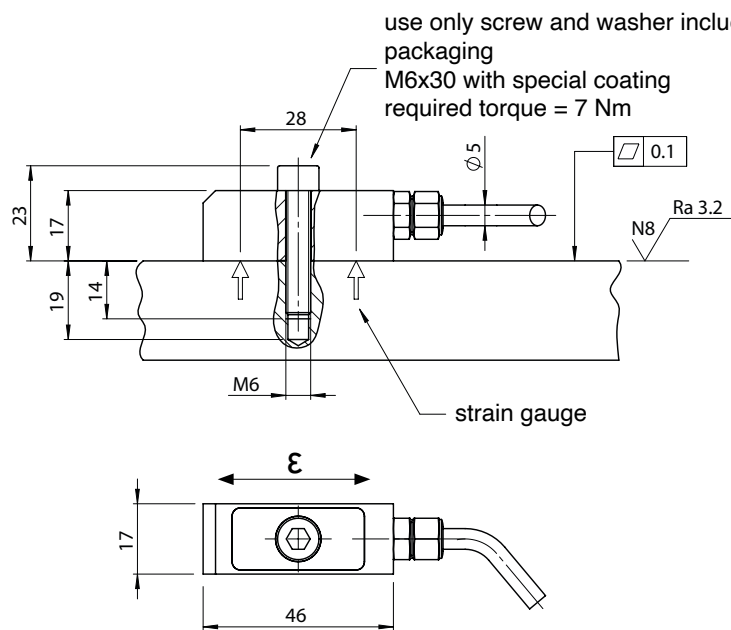
The sensor can not be overloaded. The mounting is easy and very fast. The sensor do not need a recalibration when it replaced or remounted. The sensor need a cyclical reset.

#### TECHNICAL DATA

Strain gauge type	Foil (GF = 2.0)
Bridge resistance	350Ω
Measuring range	±100...±1000μɛ
Sensitivity tolerance	± 0.2%
Accuracy	<± 0,5% FS
Linearity	<± 0,5% FS
Hysteresis	<± 0,2% FS
Repeatability	< 0,2% FS
Supply voltage	5VDC (max 8VDC)
Supply current	< 15mA
Operating temperatur range	0...55°C
Storage temperatur range	0...55°C
Overload capability	indefinite (offset occurs)
Protection class	IP54
Case material	Aluminum
Weight, including cable	80g

DIMENSIONS

SB46

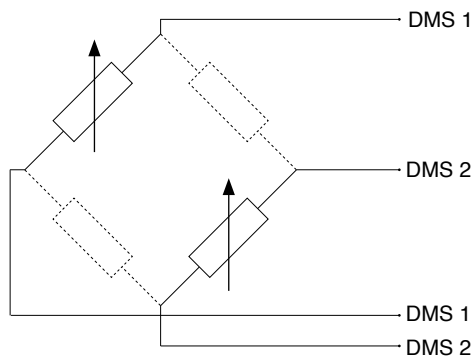


**Accessories include:**  
M6x30 with special coating, washer

Dimensions in mm

ELECTRICAL CONNECTIONS

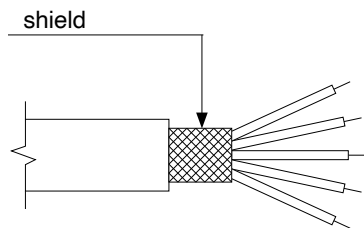
Half-bridge configuration



Option O: Open leads	Option C Connection pin	Function
white	1	DMS 1
brown	2	DMS 1
grey	3	n.a.
green	4	DMS 2
yellow	5	DMS 2
-	6	n.c.

**Option O:**

PUR screened cable (standard);  
5 x 0,14mm<sup>2</sup>; Ø 5mm; bending 10x Ø



**Option C:**

M16, 6 pol, male connector



## ORDER CODE

Press-on-strain sensor  
without amplifier

**SB46**

-  -  -  -

Housing	
Aluminum housing with one hole	<b>A1</b>

Bridge	
2/4 bridge	<b>2</b>

Cable lenght	
0.5 m	<b>005</b>
3 m	<b>030</b>
5 m	<b>050</b>
10 m	<b>100</b>

Connection	
Open leads	<b>O</b>
Cable with connector	<b>C</b>

Example: SB46 - A1 - 2 - 030 - O

Press-on-strain sensor SB46, aluminum housing, 2/4 bridge, cable lenght = 3m, open leads

## ACCESSORIES

### Description

Variable digital amplifier VDA (see amplifier's datasheet for ordering information)

# **GEFRAN**

**GEFRAN spa**

via Sebina, 74 - 25050 Provaglio d'Iseo  
(BS) - ITALIEN  
Tel.: +39 030 9888.1 - Fax: +39 030 9839063  
Internet: [www.gefran.com](http://www.gefran.com)

**Gefran Schweiz AG**

Steigweg 8, - CH-8355 Aadorf, Schweiz  
Tel.: +41 52 523 25 00  
Fax: +41(0)52-3661884  
Internet: [www.gefran.com](http://www.gefran.com)

DTS\_SB46\_06-2025\_ENG