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Datasheet

Amplifier unit

DMSVE

For supplying strain gage bridges and for signal amplification

Technical Data DMSVE

Supply voltage:	12 - 28 V DC at Ua = ± 10 V
Current consumption	depending on the connected measuring bridge
Signal output:	± 5V ± 10 V
Input sensitivity:	0,2 mV/V until 5 mV/V
Ripple:	< 50 mVpp
Linearity error:	< 0,04 %
Control activation:	3,5 V until max. 28 V
Signal rise:	0,5 ms / 1 ms / 2 ms (10 % - 90 %)
Nominal temperature range:	5 - 45 °C
Working temperature range:	0 - 60 °C
Temperature error Zero point: Sensitivity:	 0,02 % / K 0,01 % / K
Load resistance at the output:	≥ 10 kΩ (short circuit-proof)
DMS-supply:	7 V (≥ 350 Ω);
Cable (standard):	2,0 m Signal input directly connected to sensor / 0,5 m Signal output with free cable ends

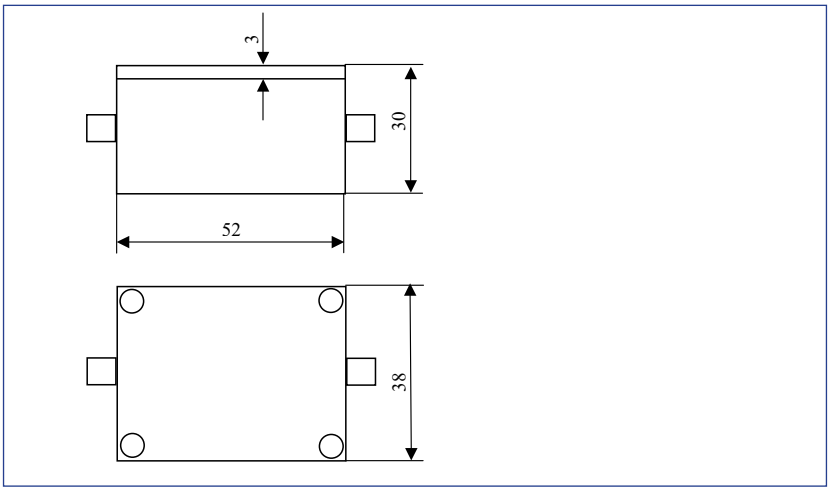
Cabling variants:

- with free cable ends (standard): DMSVE-01
  Plug 12-pol: DMSVE-02
  Plug 6-pol: DMSVE-03
- Connection about flange and flange plug upon request
- other cable lenght upon request

Customer variants:

- DMS-supply: 5 V (≤ 350 Ω)
- Memory chip to recognize the sensor data in
- Connection to GMV2 (final value, output voltage, serial number, calibration date, calibration value)
- Built-in version (only board DMSV1)

Dimensions amplifier-casing



Ordering code

DMSVE - ■ - ■ - ■ - ■ - ■

- ■ ⇨ Customized variant
- ■ (4th position)
  - 0,5 ⇨ Signal rise 0,5 ms
  - 1 ⇨ Signal rise 1 ms
  - 2 ⇨ Signal rise 2 ms
- ■ (3rd position) ⇨ Input sensitivity mV/V
- ■ (2nd position)
  - 5 ⇨ Signal output 5 V
  - 10 ⇨ Signal output 10 V
- ■ (1st position)
  - 01 ⇨ Standard
  - 02 ⇨ Plug 12-pin
  - 03 ⇨ Plug 6-pin

Available accessories

Coupling plug
Coupling sockets
Flange socket

Connection assignments for the measuring amplifier DMSVE[PH|Eg1]

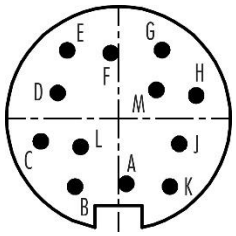
Cable: LiYCY 6 x 0,14 mm²

DMSVE-01 (standard)
Assignment of free cable ends

Colour	Assignment
Green	Supply ground
Brown	Supply + 12V – 24V
White	Measurement ground
Yellow	Measurement signal ±5 V (±10 V)
Grey	Control input (control via switch to supply +)
Pink	Memory chip (application only possible with GMV2 or ValueMaster$_{base}$.)

DMSVE-02
Assignment plug 12-pin
Use with: GMV2, ValueView, ValueMaster

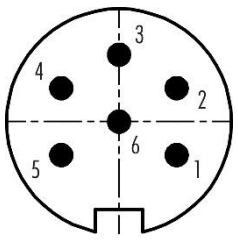
PIN	Colour	Assignment
A		NC
B		NC
C	Yellow	Measurement signal ±5 V (±10 V)
D	White	Measurement ground
E	Green	Supply ground
F	Brown	Supply + 12V – 24V
G		NC
H	Pink	Memory chip
J		NC
K	Grey	Control input
L		NC
M		NC



Connector seen from the front

DMSVE-03
Assignment plug 6-pin
Use with active, static sensors

PIN	Colour	Assignment
1	Green	Supply ground
2	Brown	Supply + 12V – 24V
3		NC
4	Yellow	Measurement signal ±5 V (±10 V)
5	White	Measurement ground



Connector seen from the front

Supply and measurement signal ground are galvanically connected