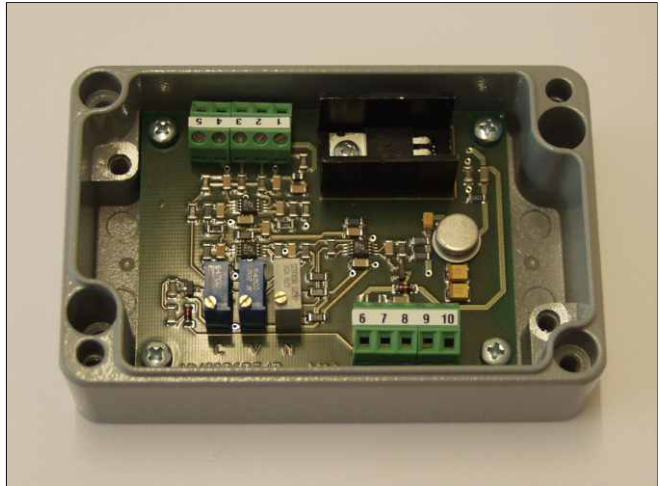


measurement amplifier VMV-0026.05 (VX31040249)

description

- measurement amplifier for strain gauge-sensors
- modular, space saving device at a compact aluminium-diecast box
- zero correction with potentiometer
- electronic full load simulation
- low current consumption
- current output 4...20 mA



application:

The VMV-0026.05 is a measurement amplifier for strain gauges-full straps with 350...1000 Ω straps. The strap sensitivity is at the basic version for 1,5 mV / V dimensioned. It can be adjusted factory-made according to the sensitivity of the connected force transducer with an other resistor mounting. The fine comparison is done by the potentiometer P2 (V).

The amplifier provide a current output of 4...20 mA according to the load of the force transducer within the load range.

The potentiometer P1 (N) allows a zero correction.

A special feature of the amplifier is the ability to make an electronic full-load simulation. If you switch the connection cable at claim 9 to ground, the amplifier give a measurement current, which is confirm to the nominal load of the loaded force transducer. In the process there is no mechanical load on the force transducer. The fine comparison of the value is done by potentiometer P3 (C). The adjustment is made exclusive by the manufacturer.

technical data

measurement range	$\pm 1,5$ mV / V
lockable full straps	1 x 350 Ω till 1 x 1.000 Ω
strap supply voltage	5 V
input impedance	> 20 M Ω / 300 pF
resolution	> 4.000 particles
analogue output	
nominal range	4..20 mA
zero point	4 mA
nominal force	20 mA
load resistor	≤ 470 Ω
operating voltage	
nominal range	24 V DC
current consumption	approx. 20 mA + current output with 350 Ω full strap
general	
housing	aluminium-diecast box
dimensions (l x w x h)	96 mm x 64 mm x 36 mm

terminal pin assignment

input:

connection clamp for strain gauge strap 350...1000 Ω:

port	function	cable colour
1	B+ - positive strap voltage supply	
2	S+ - positive strap output voltage	
3	S- - negative strap output voltage	
4	B- - negative strap voltage supply	
5	screen	

output:

The sensor amplifier have the standard configuration at the output pin for sensors of the company VELOMAT.

port	function	cable colour
6	PLUS of current supply 24V DC	brown
7	MINUS of current supply	green
8	output signal 4 – 20mA	yellow
9	calibration check	white
10	screen	blue

