Setpoint Transmitter

CE

Application
- Output of standard signals 0...10 V, 0/4...20 mA depending on potentiometer settings

Application Examples
- Transformation of angel transmitter signals into standard signals
- Fast generation of standard signal via potentiometer

Features
- CE-label
- Accurate adjustment with precise potentiometer (VSG)
- Zeropoint and gain adjustable
- Remote operating by external potentiometer (VSG-P, VSG-PE)

VSG   **VSG-PE**

Specification

Housing	DIN standard case for snap mouniting dim. (WxHxD)	made of ABS acc. to EN50022 45 x 75 x105 mm
Type of protection		IP20, terminals isolated
Ambient	operating temperature storage temperature humidity	-10...+55 °C -20...+70 °C 0...95 %
Power supply	AC DC	24, 42, 115, 230 VAC 47...63 Hz, 5 VA 24 VDC max. 80 mA, ±20 %
Stability	acc. to IEC 801	class 2, CE-label
Input	VSG VSG-P, VSG-PE	build-in potentiometer scale 0...100 %, ± 2 % ext. potentiometer 0,2...100 kOhm 3-wire connection
Output	voltage or current switchable	0...10 VDC load > 1 kOhm 0/4...20 mA burden ≤ 500 Ohm
Accuracy	linearity temperature drift	±0,2 % of full scale 0,1 % 0,01 % / K

Conntection VSG

power supply   output e.g. 0...20 mA

Conntection VSG-PE

power supply   output e.g. 0...20 mA

external potentiometer e.g. 10 kOhm
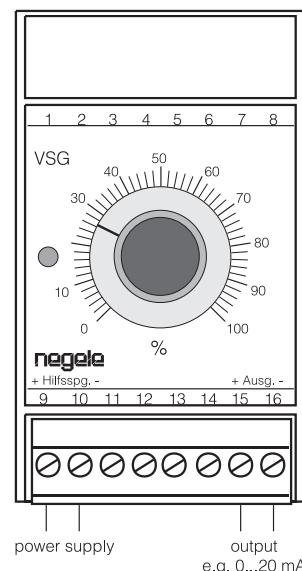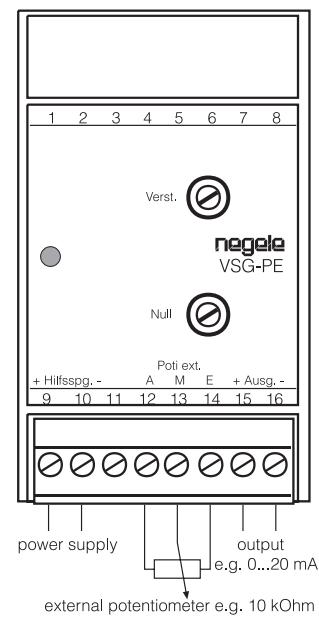
Order Code

Device	Type	Output	Power supply
VSG	build-in precise potentiometer 0...100 % zero and gain internal adjustable	X 0...10 V 0/4...20 mA	24 VAC 42 VAC 115 VAC
VSG-P	external potentiometer 0,2...100 kOhm zero and gain internal adjustable	special range (please define)	230 VAC 24 VDC
VSG-PE	external potentiometer 0,2...100 kOhm zero and gain adjustable in front		
Example:	**VSG-P / X / 230 VAC**		

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Trimmer and Switches

| Dec.	Function	Adjustment
P1	zero (N),	0...10 %
	at VSG-PE "Null" in front	0...30 %
P2	gain (V),	92...100 %
	at VSG-PE "Verst." in front	50...100 %
S1	switch output selector (I/U)	current(I) / voltage(U)
S2	switch output (Aus 0/4)	0...20 mA / 4...20 mA

Adjustment Procedure

1. Set device to desired output range with S1 and S2.
2. Loop ammeter (range 20 mA DC) in current output line or shunt voltmeter (range 10 VDC) to voltage output respectively (pins15/16).
3. Connect external potentiometer (only VSG-P and VSG-PE, pins 12/13/14).
4. Apply supply voltage (pins 9/10).
5. Adjust setpoint potentiometer to left limit.
6. Adjust trimmer P1 (zero) to right limit and turn it slowly to the left as far as the output has reached 0 mA (4 mA on output 4...20 mA) or 0 V respectively.
7. Adjust setpoint potentiometer to right limit.
8. Using trimmer P2 (Verst.) to set output to 20 mA or 10 V respectively.
10. Check intermediate values, for example 50 % of max. value.

View VSG-P and VSG-PE (cover open)
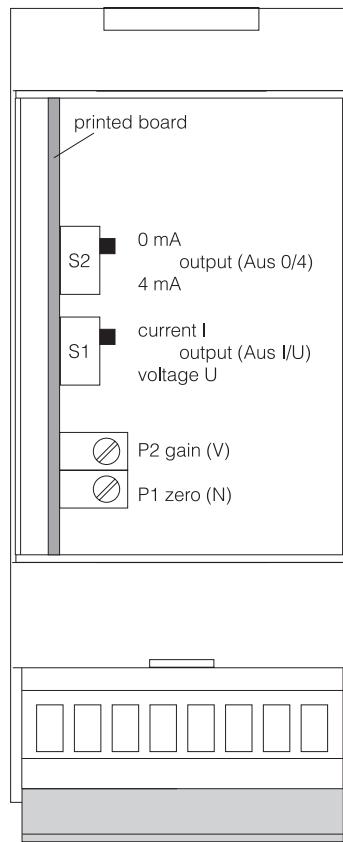
Block Diagramm VSG
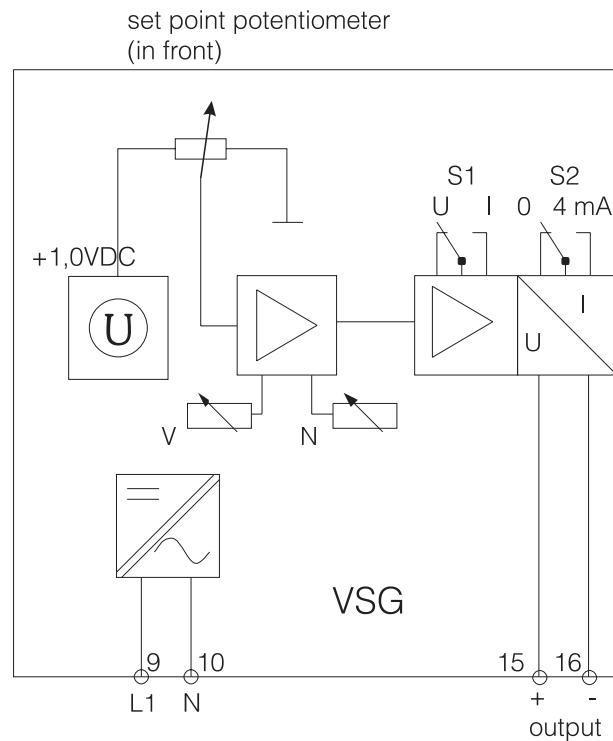
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