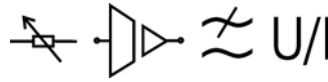


Product Information

TSA-Poti



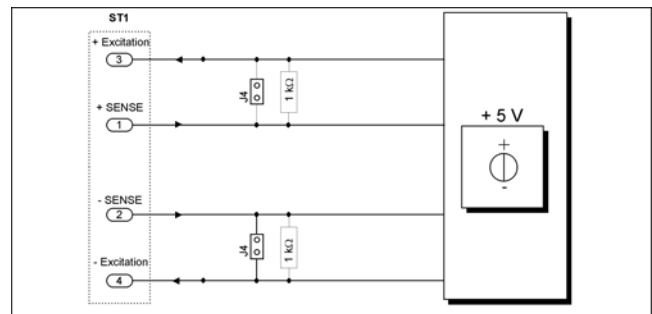
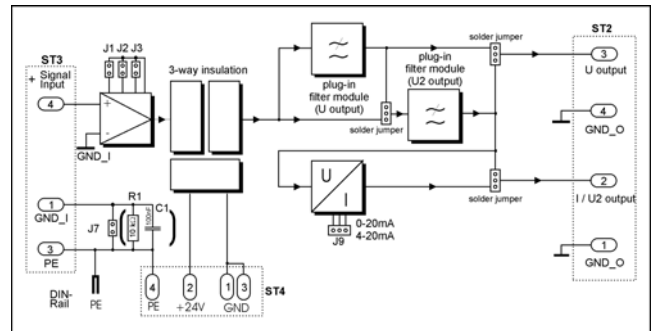
Characteristics

The **TSA-Poti Module** offers signal conditioning of potentiometers in 3-wire or 5-wire technology with resistances from 350..1000 Ω. Standard ranges are 100, 50, 25 and 12,5 %. Manual offset correction can be done with a Zero trimmer. Sensor supply (standard 5 V DC) is isolated, provided by the module. Depending on the base configuration the module has voltage and current outputs.

Technical Data

Supply voltage	24 V DC ± 10 %
Power consumption at nominal voltage (without sensor / without load)	50 mA
Electrical isolation (3-way isolation)	1000 V DC
Accuracy	0.1 %
Cut-off frequency (standard / maximum)	5 kHz / 10 kHz
Linearity (typical)	0.02 %
Input	
Sensor	Potentiometer 350 Ω ..1 kΩ unipolar, bipolar
Input resistance	10 MΩ
Output – Voltage	
Output range (V1 / V2)	± 10 V / 0..10 V
Output – Current	
Output range (A1 / A2 / A3)	± 20 mA / 0..20 mA / 4..20 mA
Max. load current (U output)	± 12 mA
Residual ripple @	
f _g = 5 kHz	Gain=1: typ. 2 mV _{pp}
f _g = 10 kHz	typ. 5 mV _{pp}
	Gain>500 3 mV _{pp} x Gain/500
Sensor supply (others on request)	5 V DC not symmetrical
Multi-wire technology	3-wire / 5-wire switchable
Gain / Measurement range	V = 1 (100 %) V = 2 (50 %) V = 4 (25 %) V = 8 (12,5 %) switchable
Environmental temperature	0..50 °C
Plug-in filter Standard frequencies in Hz	10, 30, 50, 100, 300, 500, 1 k, 3 k, 5 k, 10 k

Block Diagram



Dimensions

Housing ME 22.5:
 22.5 x 99 x 114.5 mm (WxHxD)

Ordering Code

TSA-POTI 1. - 2. - 3. - 4. - 5.

1. Model		
1	1 output	
2	2 outputs	
2. Measuring ranges in %		
PX	Enter calibrated value: 12.5, 25, 50, 100	
3. Output filter frequencies (Hz)		
XXX	Enter standard values: 10, 30, 50, 100, 300, 500, 1k, 3k, 5k, 10k	
	Enter non- standard value: 1..30k	
4. Filter characteristics		
BW	Butterworth 4th order	
BS	Bessel 4th order	
BW8	Butterworth 8th order (for 1 output only)	
BS8	Bessel 8th order (for 1 output only)	
5. Output (not all combinations feasible)		
V1	± 10 V	
V2	0..10 V	
A1	± 20 mA	
A2	0..20 mA	
A3	4..20 mA	

Example: TSA-Poti1-100-5k-BW-V1