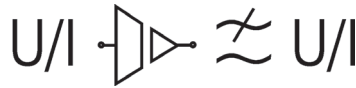


Product Information

TSA-Fil



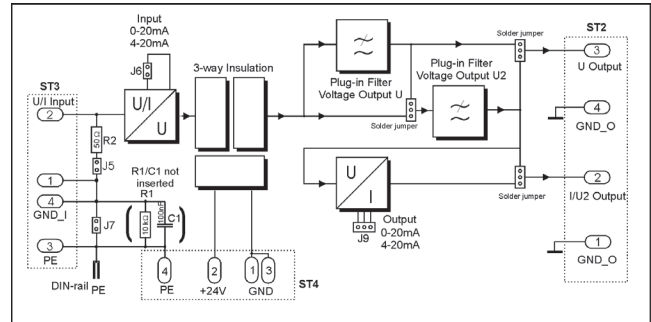
Characteristics

The **TSA-FIL Module** offers isolated signal conversion and filtering of voltage and current signals. Voltage and current inputs can be combined with voltage and current outputs. The desired configuration should be specified with order.

Technical Data

Supply voltage	24 V DC \pm 10 %
Power consumption at nominal voltage (without sensor / without load)	40 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 – Voltage Input range (V1 / V2) Input resistance	\pm 10 V / 0..10 V 10 M Ω
Input – Current Input range (A1 / A2 / A3) Input resistance	\pm 20 mA / 0..20 mA / 4..20 mA 50 Ω
Output – Voltage Output range (V1 / V2)	\pm 10 V / 0..10 V
Output – Current Output range (A1 / A2 / A3)	\pm 20 mA / 0..20 mA / 4..20 mA
Max. load current (U output)	\pm 10 mA
Residual ripple @ $f_g = 5$ kHz $f_g = 10$ kHz	typical 2 mV _{pp} typical 5 mV _{pp}
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-FIL 1. 2. 3. 4. 5.

1. Model	
1	1 output
2	2 outputs
2. Input (not all combinations with output feasible)	
V1	\pm 10 V
V2	0..10 V
A1	\pm 20 mA
A2	0..20 mA
A3	4..20 mA
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 with input feasible)	
V1	\pm 10 V
V2	0..10 V
A1	\pm 20 mA
A2	0..20 mA
A3	4..20 mA

Example: TSA-FIL1-V1-5k-BW-V1