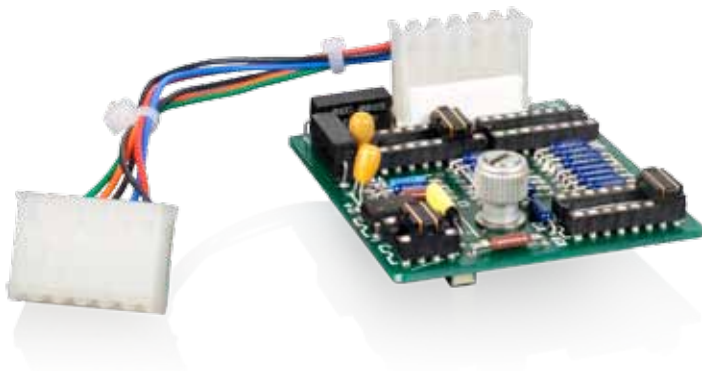




Model 42344 Programmable filter and cable

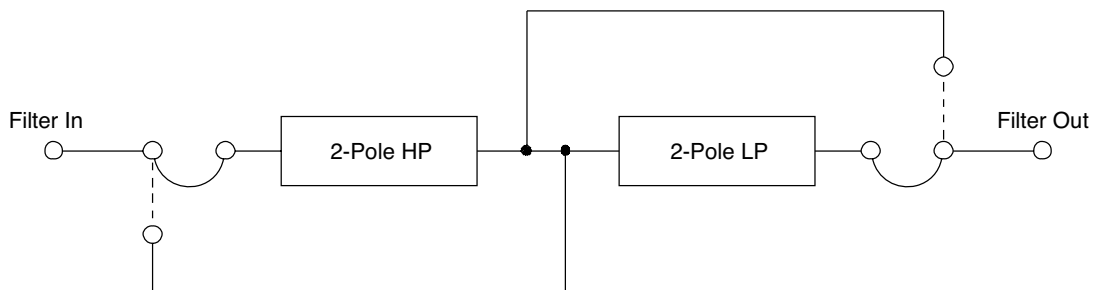
Features

- Plug in filter card
- Used in 2775B and 2775BM2
- Two pole Butterworth filtering
- Low pass, high pass or band pass
- Jumper selectable corner frequencies



Description

The Endevco model 42344 programmable filter is a plug-in filter designed for use in the Endevco models 2775B and 2775BM2 signal conditioners. It contains an active high pass (HP) two pole Butterworth filter stage, followed by an active low pass (LP) two pole Butterworth filter stage. DIP programming jumpers select any combination of these two stages; the resulting overall response is HP, LP, or band pass (BP). The corner frequencies are also selected via DIP programming jumpers. One HP corner frequency and one LP corner frequency may be established by customer-installed resistors. The remaining 2 HP and 7 LP corners are determined by factory installed components.



Model 42344

Programmable filter and cable

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smart engineering for
extreme environments

Specifications

Inputs

Type Single-ended with one side connected to signal ground
Impedance (passband only) HP mode: Capacitive (0.18 μ F \pm 1%)
LP mode: Resistive (10¹² Ω)
BP mode: Capacitive (0.18 μ F \pm 1%)

Outputs

Type Single-ended with one side connected to signal ground
Impedance 10 Ω maximum
DC offset \pm 50 mV
Load impedance 5 k Ω minimum to meet all specifications
Minimum linear output voltage 10.00 V pk to 20 kHz
Residual noise 4 μ V rms maximum

Transfer characteristics

Gain 1.0 \pm 0.5%
Frequency response .95 \pm 1% gain at corner frequency
Corner frequency options

-5% Corner [1]	Response type [2]
2 Hz	HP
10 Hz	HP
100 Hz	LP
200 Hz	LP
500 Hz	LP
1 kHz	LP
2 kHz	LP
5 kHz	LP
10 kHz	LP

Gain stability with temperature The gain will change less than \pm 0.001% referred to room temp gain over the range \pm 1°C to 52°C
Total harmonic distortion Less than 0.1% at any output level
Warm-up time 30 seconds maximum to meet all specifications

Environmental

Temperature
Operating 32°F to 158°F (0°C to 70°C)
Storage -85°F to 302°F (-65°C to 150°C)
Humidity 95% R.H. maximum

Power

Voltage \pm 15 VDC \pm 1%,
Current 10 mA maximum
Transients and ripple The maximum transient or ripple output from the amplifier over the frequency range of 0-20 kHz is 1.0 mV/V change on the supply

Physical characteristics

Dimensions 2.15" h x 2.4" w x 0.44" d
Weight 1.4 oz (40 gm)
Case Molded plastic case
Connectors Input, output and power connector is a Header 6 pin

Notes:

1. These are the HP and LP, programmable corners standard to all 35771.
2. BP frequency corners are determined by any combination of HP and LP corners, standard, or custom.
3. Accuracy of custom filtering is dependent on component tolerance and accuracy in translating values from nomogram.
4. Maintain high levels of precision and accuracy using Meggitt's factory calibration services. Call Meggitt's inside sales force at 800-982-6732 for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.



APPLIES TO CALIFORNIA FACILITY

Continued product improvement necessitates that Meggitt reserve the right to modify these specifications without notice. Meggitt maintains a program of constant surveillance over all products to ensure a high level of reliability. This program includes attention to reliability factors during product design, the support of stringent Quality Control requirements, and compulsory corrective action procedures. These measures, together with conservative specifications have made the name Endevo synonymous with reliability.

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