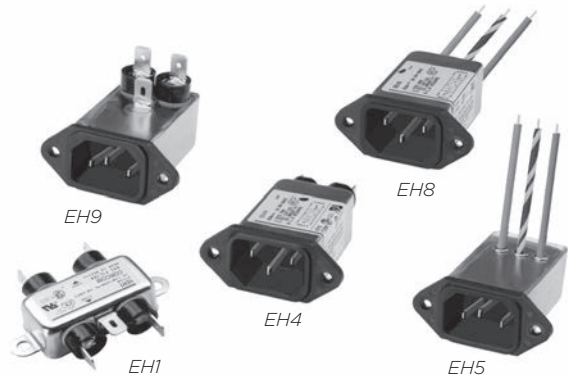


**Power Inlet Line Filter for Medical Equipment**

# H Series



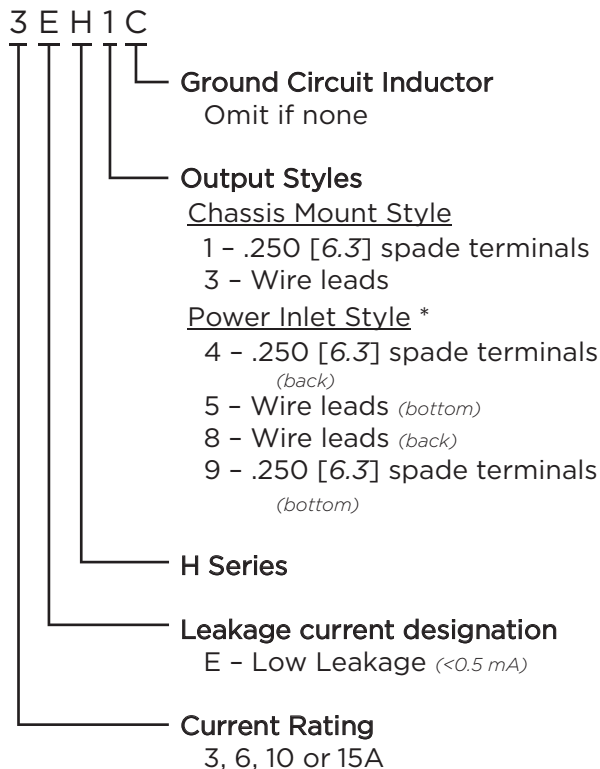
UL Recognized  
CSA Certified  
VDE Approved\*



## H Series

- Minimal leakage current suitable for medical equipment
- Two element circuit provides basic EMI attenuation above 1 MHz
- Available with an internal ground circuit inductor (C suffix versions) to isolate equipment chassis from power line ground at radio frequencies
- Flanged mounting the same as the EC, ED and EF Series
- Capacitive output (see EAH, EBH and EJH Series for capacitive input)

## Ordering Information

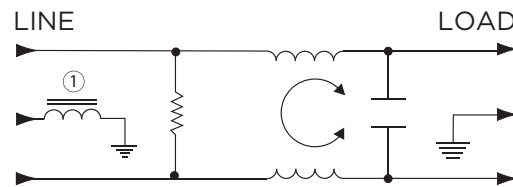


\*IEC 60320-1 C14 inlet mates with C13 connector

## Specifications

- Maximum leakage current each Line to Ground:**  
 @ 120 VAC 60 Hz: 2  $\mu$ A  
 @ 250 VAC 50 Hz: 5  $\mu$ A
- Hipot rating (one minute):**  
 Line to Ground: 2250 VDC  
 Line to Line: 1450 VDC
- Rated Voltage (max.):** 250 VAC
- Operating Frequency:** 50/60 Hz
- Rated Current:** 3 to 15A\*
- Operating Ambient Temperature Range (at rated current I<sub>r</sub>):** -10°C to +40°C  
 In an ambient temperature (T<sub>a</sub>) higher than +40°C the maximum operating current (I<sub>O</sub>) is calculated as follows:  $I_O = I_r \sqrt{(85-T_a)/45}$

## Electrical Schematic



## Available Part Numbers

|                                  |       |
|----------------------------------|-------|
| 3EH1                             | 6EH8  |
| 3EH3                             | 6EH9  |
| 6EH1                             | 10EH1 |
| 6EH3                             | 10EH3 |
| 6EH4                             | 10EH4 |
| 6EH5                             | 15EH4 |
| Ground Circuit Inductor Versions |       |
| 10EH4C                           |       |

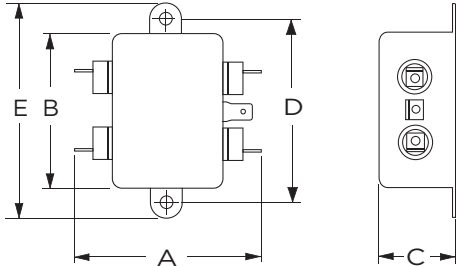
\*15A versions are tested by Underwriters Laboratories to US and Canadian requirements and are VDE approved at 10A, 250VAC

**Power Inlet Line Filter for Medical Equipment** *(continued)*

# H Series

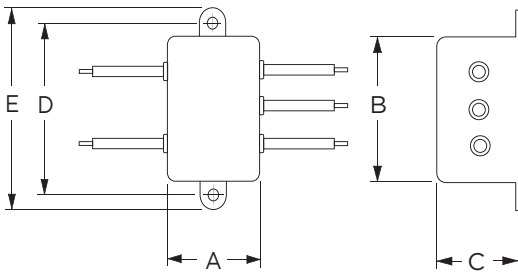
## Case Styles

### H1 (Chassis Mount)



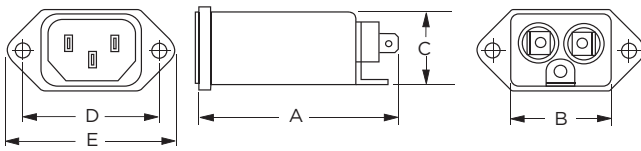
Typical Dimensions:  
 Mounting Holes: .188 [4.78] Dia.  
 Line / Load Terminals (4): 250 [6.3] with .07 [1.8] Dia. hole  
 Ground Terminal (1): 250 [6.3] with .07 x .16 [1.8 x 3.8] slot

### H3 (Chassis Mount)



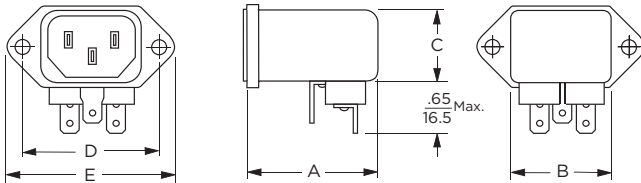
Typical Dimensions:  
 Mounting Holes: .188 [4.78] Dia.  
 Wire Leads(5): 4.0 [101.6] Min., 18AWG, UL1015

### H4 & H4C



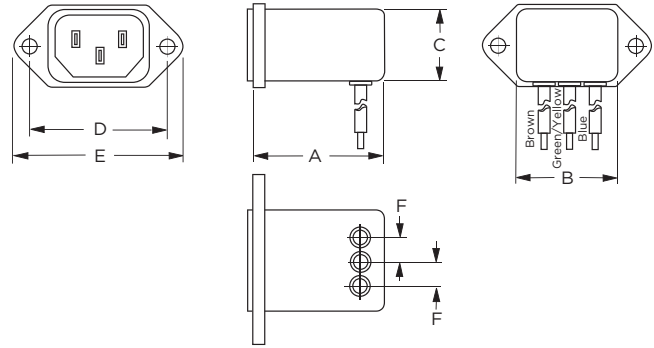
Typical Dimensions:  
 Line Inlet (1): IEC 60320-1 C14  
 Load Terminals (2): 250 [6.3] with .07 [1.8] Dia. hole  
 Ground Terminal (1): 250 [6.3] with .07 x .16 [1.8 x 3.8] slot

### H9



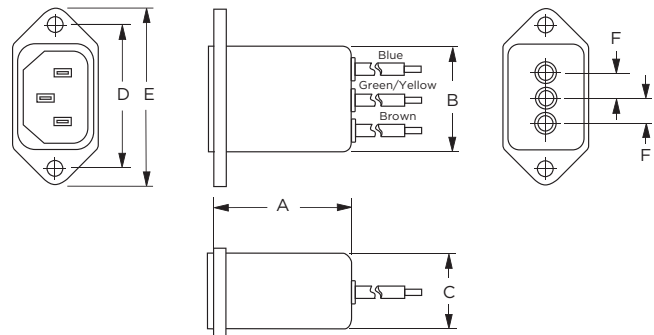
Typical Dimensions:  
 Line Inlet (1): IEC 60320-1 C14  
 Load Terminals (2): 250 [6.3] with .07 [1.8] Dia. hole  
 Ground Terminal (1): 250 [6.3] with .07 x .16 [1.8 x 3.8] slot

### H5



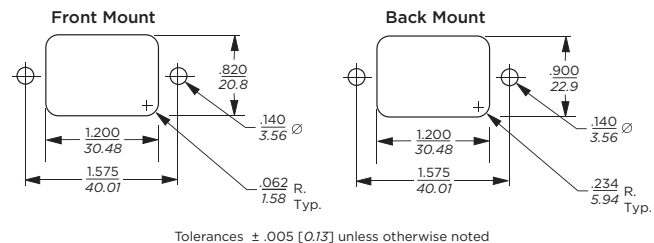
Typical Dimensions:  
 Line Inlet (1): IEC 60320-1 C14  
 Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

### H8



Typical Dimensions:  
 Line Inlet (1): IEC 60320-1 C14  
 Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

## Recommended Panel Cutouts



Note 1: H4, H4C and H8 allow for front or back mounting  
 Note 2: H5 and H9 allow for back mounting only

**Power Inlet Line Filter for Medical Equipment** *(continued)*

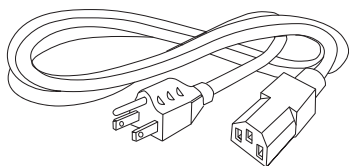
# H Series

## Case Dimensions

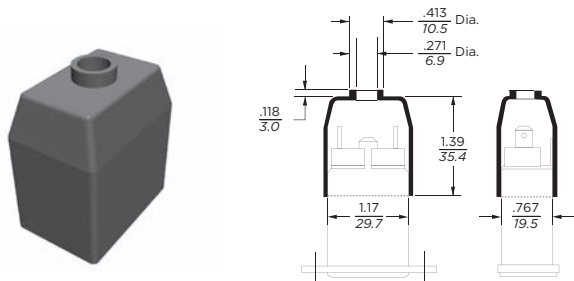
| Part No.         | A<br>(max.)                | B<br>(max.)                | C<br>(max.)                | D<br>$\pm .015$<br>$\pm .38$ | E<br>(max.)                | F<br>(ref.)               |
|------------------|----------------------------|----------------------------|----------------------------|------------------------------|----------------------------|---------------------------|
| H1               | <b>2.25</b><br><i>57.2</i> | <b>1.82</b><br><i>46.1</i> | <b>0.66</b><br><i>16.7</i> | <b>2.125</b><br><i>53.98</i> | <b>2.53</b><br><i>64.2</i> | -                         |
| H3               | <b>.96</b><br><i>24.40</i> | <b>1.82</b><br><i>46.1</i> | <b>0.66</b><br><i>16.7</i> | <b>2.125</b><br><i>53.98</i> | <b>2.53</b><br><i>64.2</i> | -                         |
| 6EH4             | <b>2.20</b><br><i>55.9</i> | <b>1.19</b><br><i>30.2</i> | <b>0.81</b><br><i>20.6</i> | <b>1.575</b><br><i>40.01</i> | <b>1.98</b><br><i>50.3</i> | -                         |
| 10EH4,<br>10EH4C | <b>2.62</b><br><i>66.5</i> | <b>1.19</b><br><i>30.2</i> | <b>0.81</b><br><i>20.6</i> | <b>1.575</b><br><i>40.01</i> | <b>1.98</b><br><i>50.3</i> | -                         |
| 15EH4            | <b>2.62</b><br><i>66.5</i> | <b>1.19</b><br><i>30.2</i> | <b>0.81</b><br><i>20.6</i> | <b>1.575</b><br><i>40.01</i> | <b>1.98</b><br><i>50.3</i> | -                         |
| H5               | <b>1.55</b><br><i>39.4</i> | <b>1.19</b><br><i>30.2</i> | <b>0.85</b><br><i>21.6</i> | <b>1.575</b><br><i>40.01</i> | <b>1.98</b><br><i>50.3</i> | <b>.295</b><br><i>7.5</i> |
| H8               | <b>1.56</b><br><i>39.7</i> | <b>1.19</b><br><i>30.2</i> | <b>0.81</b><br><i>20.6</i> | <b>1.575</b><br><i>40.01</i> | <b>1.98</b><br><i>50.3</i> | <b>.295</b><br><i>7.5</i> |
| H9               | <b>1.55</b><br><i>39.4</i> | <b>1.19</b><br><i>30.2</i> | <b>0.85</b><br><i>21.6</i> | <b>1.575</b><br><i>40.01</i> | <b>1.98</b><br><i>50.3</i> | -                         |

## Accessories

GA400: NEMA 5-15P to IEC 60320-1 C-13 line cord



FA601: Insulating Shroud

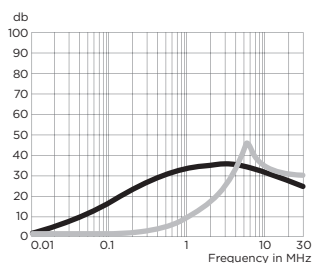


## Performance Data

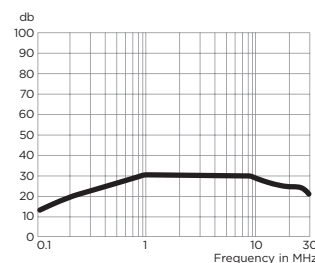
### Typical Insertion Loss

Measured in closed 50 Ohm system

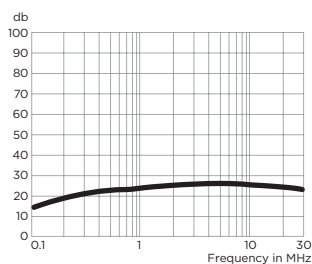
**3EH**



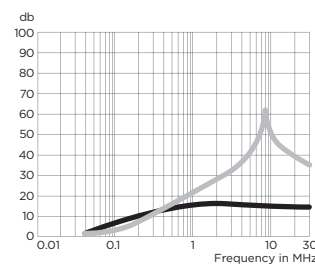
**6EH**



**10EH**



**15EH**



— Common Mode / Asymmetrical (L-G)  
— Differential Mode / Symmetrical (L-L)

### Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

| Current Rating | Frequency – MHz |    |    |    |    |    |
|----------------|-----------------|----|----|----|----|----|
|                | .15             | .5 | 1  | 5  | 10 | 30 |
| 3A             | 18              | 27 | 30 | 30 | 27 | 18 |
| 6A             | 9               | 16 | 20 | 26 | 23 | 18 |
| 10A            | 7               | 13 | 15 | 17 | 16 | 14 |
| 15A            | 5               | 9  | 11 | 12 | 11 | 9  |