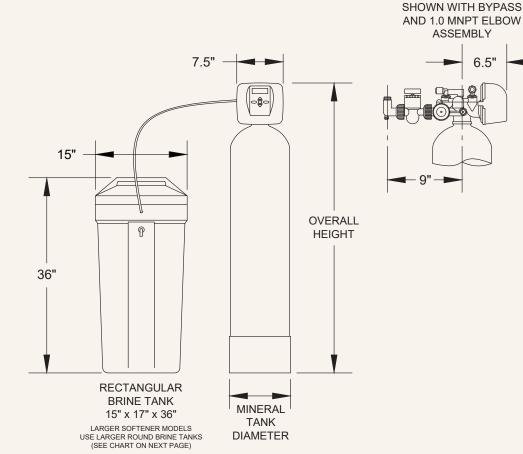


**OUTLET SIDE VIEW** 

## X-FACTOR SERIES FESLES IRONSOFT



| FESLES PROGRAM CYCLES*                    | STANDARD IRONSOFT |            |              |                   |              |               |              |             |
|---|-------------------|------------|--------------|-------------------|--------------|---------------|--------------|-------------|
| Model Number                              | 7-FESLES-24B      |            | 7-FESLES-32B |                   | 7-FESLES-45B |               | 7-FESLES-60B |             |
| Units:                                    | Minutes           | Gallons    | Minutes      | Gallons           | Minutes      | Gallons       | Minutes      | Gallons     |
| Ist Cycle: Backwash                       | 12                | 8.4        | 12           | 12                | 12           | 20.4          | 12           | 20.4        |
| 2nd Cycle: Brine & Slow Rinse             | 60                | 16.2       | 60           | 22.2              | 60           | 31.2          | 60           | 38.4        |
| 3rd Cycle: Backwash                       | 12                | 8.4        | 12           | 12                | 12           | 20.4          | 12           | 20.4        |
| 4th Cycle: Rinse                          | 20                | 14         | 20           | 20                | 20           | 34            | 20           | 34          |
| 5th Cycle: Fill - Salt Setting (LBS NaCl) | 8                 | 4 (12 LBS) | 10           | <b>5</b> (15 LBS) | 14.66        | 7.33 (22 LBS) | 20           | 10 (30 LBS) |
| Total Gallons to Drain**                  | 51.0              |            | 71.2         |                   | 113.3        |               | 123.2        |             |
| Total Regeneration Time                   | 112.0             |            | 114.0        |                   | 118.7        |               | 124.0        |             |

<sup>\*</sup>Downflow Regenerant, Post-fill Factory Program Settings \*\*Based on 50 PSI Inlet Pressure







## X-FACTOR SERIES FESLES IRONSOFT

| FESLES SPECIFICATIONS STANDARD IRONSOFT                      |                              |                                       |                                       |                              |  |
|--|------------------------------|---------------------------------------|---------------------------------------|------------------------------|--|
| Model Number   | 7-FESLES-24B                 | 7-FESLES-32B                          | 7-FESLES-45B                          | 7-FESLES-60B                 |  |
| Inlet/Outlet Fitting Options (Inches)                        | 0.75 - 1.01 - 1.25 - 1.5     | 0.75 - 1.0¹ - 1.25 - 1.5              | 0.75 - 1.01 - 1.25 - 1.5              | 0.75 - 1.01 - 1.25 - 1.5     |  |
| Bypass Included  | Yes                          | Yes                                   | Yes                                   | Yes                          |  |
| Drain Fit. Elb. NPT or OD Poly Tube Size (Inches)            | 3/4 NPT or 5/8 Tube          | 3/4 NPT or 5/8 Tube                   | 3/4 NPT or 5/8 Tube                   | 3/4 NPT or 5/8 Tube          |  |
| Water Pressure Range (PSI)                                   | 20 - 100                     | 20 - 100                              | 20 - 100                              | 20 - 100                     |  |
| Water Operating Temperature Range (°F)                       | 35 - 100                     | 35 - 100                              | 35 - 100                              | 35 - 100                     |  |
| Influent Maximum Water Hardness (GPG)                        | 100                          | 100                                   | 100                                   | 100                          |  |
| Influent Maximum Ferrous Iron (PPM) <sup>2</sup>             | 10                           | 10                                    | 10                                    | 10                           |  |
| Plug-In Power Adapter Input (VAC - Hz - A)                   | 120V AC - 60Hz - 0.35A       | 120V AC - 60Hz - 0.35A                | 120V AC - 60Hz - 0.35A                | 120V AC - 60Hz - 0.35A       |  |
| Plug-In Power Adapter Output (VDC - A)                       | 15V DC - 0.5A                | 15V DC - 0.5A                         | 15V DC - 0.5A                         | 15V DC - 0.5A                |  |
| Plug-In Power Adapter Cord Length                            | 15 FT                        | 15 FT                                 | 15 FT                                 | 15 FT                        |  |
| PC Board Relay Terminal Block DC Output (V)                  | 12V DC                       | 12V DC                                | 12V DC                                | 12V DC                       |  |
| 3 Volt Lithium Coin Cell Battery (Type)                      | 2032                         | 2032                                  | 2032                                  | 2032                         |  |
| Service Flow Rate at 15 PSI Pressure Drop (GPM) <sup>3</sup> | 11                           | 13                                    | 18                                    | 20                           |  |
| Overall Height (Inches)                                      | 51.5                         | 54.5                                  | 60.1                                  | 62.3                         |  |
| Mineral Tank Size: Diameter x Height (Inches)                | 8 x 44                       | 10 x 47                               | 12 x 52                               | 13 x 54                      |  |
| Bottom Distributor Type                                      | Stack - II Segment Fine Slot | Stack - 11 Segment Fine Slot          | Stack - II Segment Fine Slot          | Stack - II Segment Fine Slot |  |
| Top Basket Distributor                                       | No                           | No                                    | No                                    | No                           |  |
| Top Deflector  | Yes                          | Yes                                   | Yes                                   | Yes                          |  |
| Amount of Resin (Cubic Feet)                                 | 0.75                         | 1.0                                   | 1.5                                   | 2.0                          |  |
| #20 Flint, Medium & Fine Garnets Support Bed                 | Yes                          | Yes                                   | Yes                                   | Yes                          |  |
| Brine Tank Size (Inches)                                     | 15 x 17 x 36 <sup>4</sup>    | 15 x 17 x 36 <sup>4</sup> (Salt Grid) | 15 x 17 x 36 <sup>4</sup> (Salt Grid) | 18 D x 40 H (Salt Grid)      |  |
| Brine Tank Capacity (LBS NaCl)                               | 275                          | 275                                   | 275                                   | 450                          |  |
| Drain Line Flow Control (GPM)                                | 0.7                          | 1.0                                   | 1.7                                   | 1.7                          |  |
| Brine Line (Re-Fill) Flow Control (GPM)                      | 0.5                          | 0.5                                   | 0.5                                   | 0.5                          |  |
| Injector (Color)   | IC - Violet                  | IE - White                            | IF - Blue                             | IG - Yellow                  |  |
| Grains Capacity (Grains @ LBS NaCl) <sup>5</sup>             | 24,000 @ 12                  | 32,000 @ 15                           | 48,000 @ 22                           | 64,000 @ 30                  |  |
| Water to Drain at 50 PSI Inlet Pressure (Gallons)            | 51.0                         | 71.2                                  | 113.3                                 | 123.2                        |  |

<sup>&</sup>lt;sup>1</sup>1.0 MNPT Elbow Standard - Options Available

<sup>&</sup>lt;sup>5</sup>Factory Program Setting





<sup>&</sup>lt;sup>2</sup>Ferrous iron ("clear-water iron"): Water comes out of the faucet clear, but turns red or brown after standing. Frequent regeneration required - Day Override factory set for 4 days between regenerations. Influent water to be treated should contain at least 1 gpg (2 gpg recommended) of hardness for each ppm or mg/L of ferrous iron, with a minimum of 3 gpg of hardness. Example 1: For 1 ppm ferrous iron, water hardness should not be less than 3 gpg.

Example 2: For 4 ppm ferrous iron, water hardness should not be less than 4 gpg (8 gpg recommended).

This allows hardness dispersion with the iron on the exhausted resin, helping facilitate the removal of iron from the resin bed during regeneration. The Fine Mesh Resin bead size provides improved kinetics where extra surface area and a short diffusion path are needed for iron removal. Ferrous iron readily converts to ferric iron in the presence of oxygen, chlorine, or other oxidants. Ferric iron is insoluble and should be removed by filtration. Even if the influent has very low oxygen (which is very likely for the iron to remain in the ferrous state), the brine tank is never sealed therefore the brine used to regenerate contains oxygen. Ferrous iron precipicates right at the surface of the resin beads, potentially plugging up the resin bead pores, coating the beads and plugging up the flow spaces between the beads. Resin cleaner added to the brine solution is recommended for cleaning the softener resin bed.

<sup>&</sup>lt;sup>3</sup>Flow rates in the table may exceed resin manufacturer's recommended maximum flow rates. Selecting a system flow rate by pressure drop alone does not guarantee that the system will provide softened water.

4See Diagram