

### Model 3X1.5-10 & 3X1.5-10T – Frame-Mounted Configuration

#### PERFORMANCE

##### 850FM/3X1.5-10/4P

**Max. Flow Rate:** 145 gpm

**Max. Head:** 11 ft.

**Max. Working Temperature:** 120° F

**Max. Working Pressure:** 100 psi

**Max. Rated Speed:** 1800 RPM

**Max. Particle Size:** 0.5" Diameter

**Hydrotest Pressure:** 150 psi

##### 850FM/3X1.5-10T/2P

**Max. Flow Rate:** 316 gpm

**Max. Head:** 438 ft.

**Max. Working Temperature:** 120° F

**Max. Working Pressure:** 175 psi

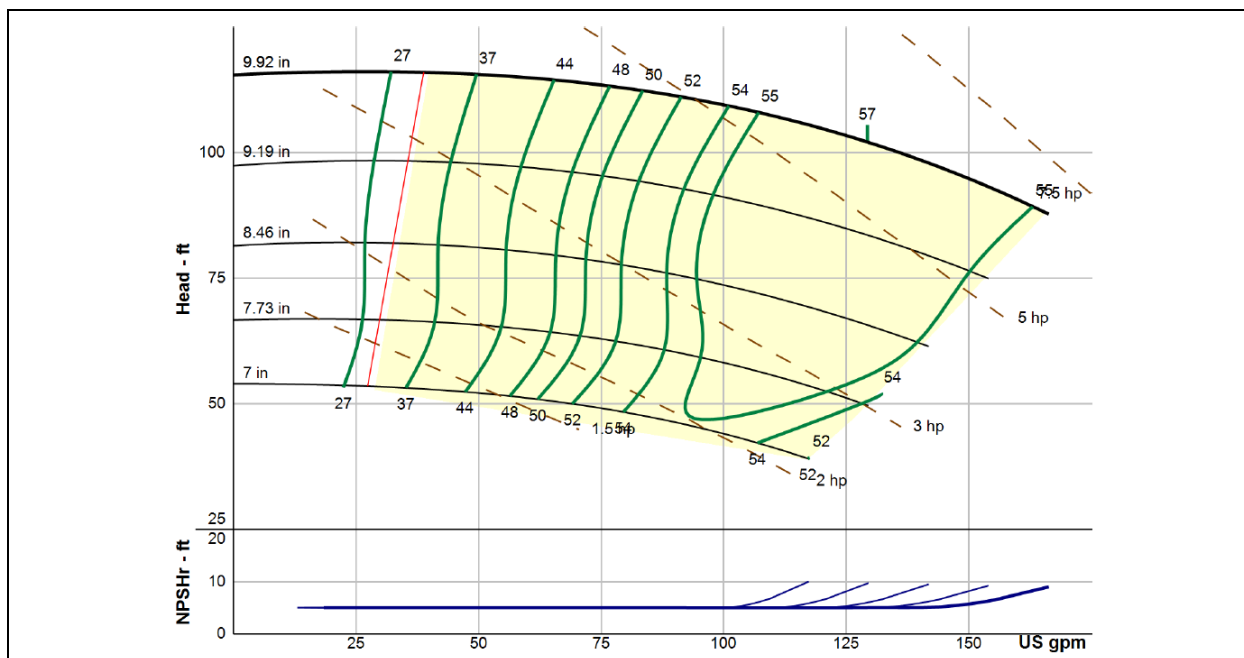
**Max. Rated Speed:** 3600 RPM

**Max. Particle Size:** 0.5" Diameter

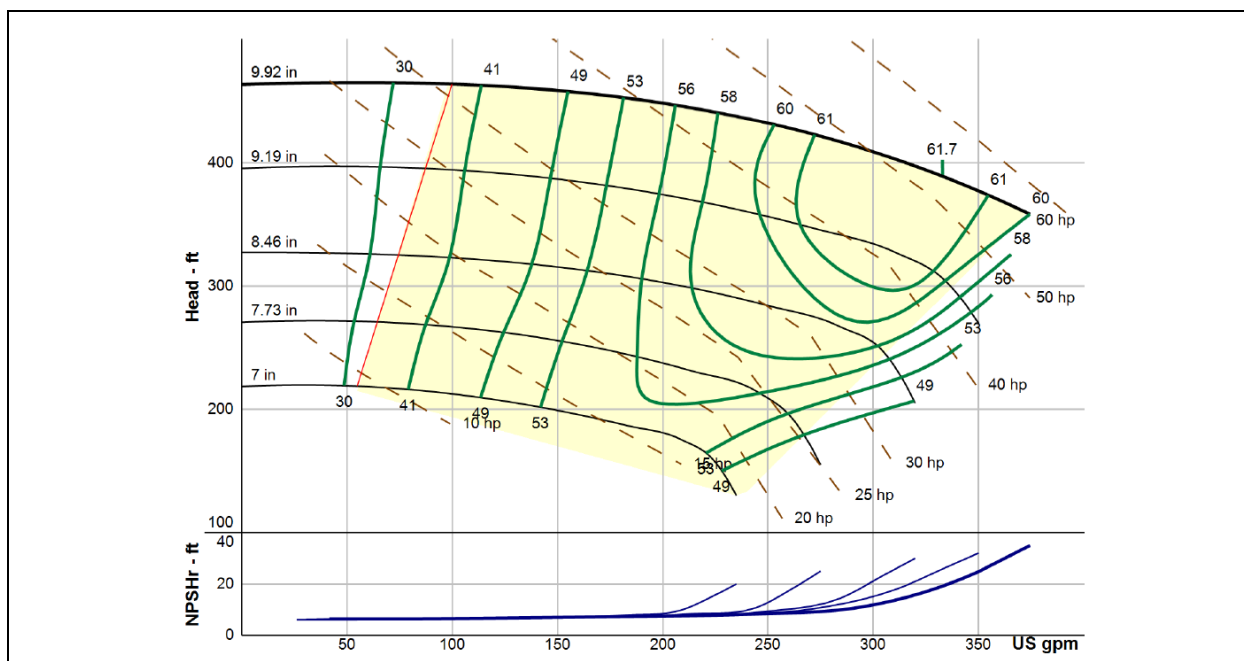
**Hydrotest Pressure:** 263 psi

|                                             |                              |                                     |
|---------------------------------------------|------------------------------|-------------------------------------|
| <b>850 Series Model: 850FM/3X1.5-10/4P</b>  | <b>PEI<sub>CL</sub> 0.92</b> | <b>Impeller Diameter: 9.920 in.</b> |
| <b>850 Series Model: 850FM/3X1.5-10T/2P</b> | <b>PEI<sub>CL</sub> 0.92</b> | <b>Impeller Diameter: 9.920 in.</b> |

## PERFORMANCE CURVE – 850FM/3X1.5-10/4P, 1800 RPM

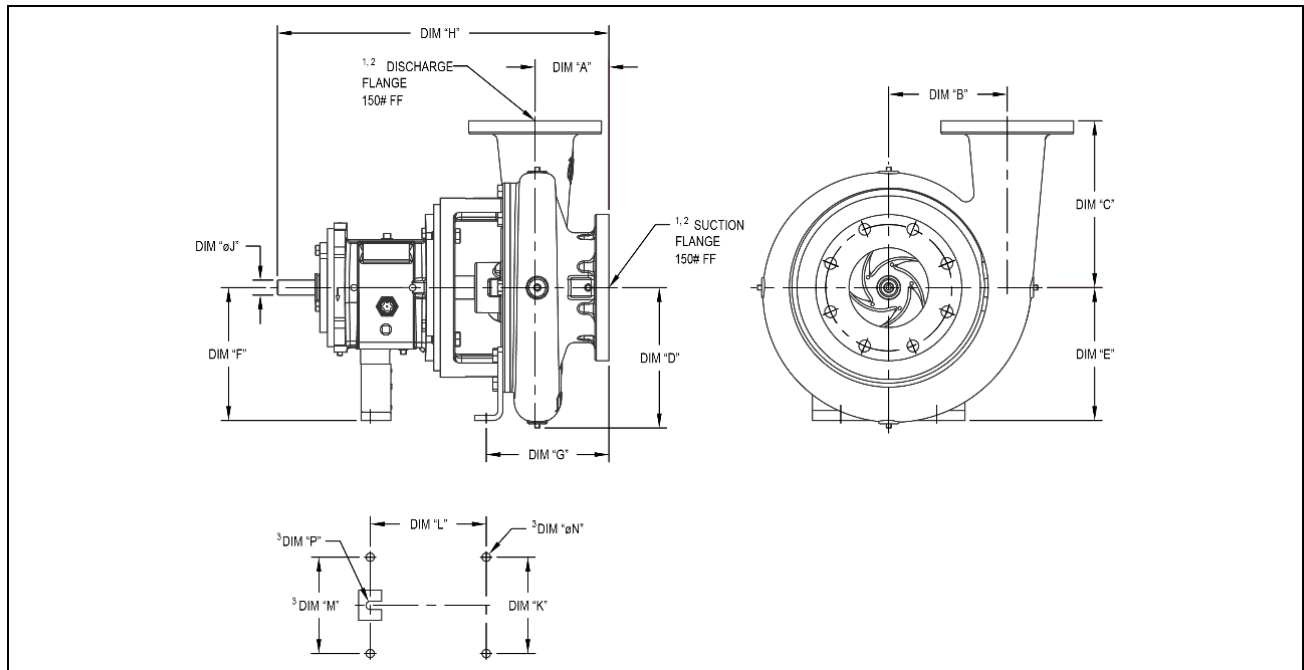


## PERFORMANCE CURVE – 850FM/3X1.5-10T/2P, 3600 RPM



|                                      |                        |                              |
|--------------------------------------|------------------------|------------------------------|
| 850 Series Model: 850FM/3X1.5-10/4P  | PEI <sub>CL</sub> 0.92 | Impeller Diameter: 9.920 in. |
| 850 Series Model: 850FM/3X1.5-10T/2P | PEI <sub>CL</sub> 0.92 | Impeller Diameter: 9.920 in. |

## DIMENSIONS (INCHES)



| Motor Frame | Suction | Discharge | DIM "A" | DIM "B" | DIM "C" | DIM "D" | DIM "E" | DIM "F" | DIM "G" | DIM "H" | Dim "ØJ" | DIM "K" | DIM "L" | DIM "M" | Dim "ØN" | DIM "P" |
|-------------|---------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|---------|---------|----------|---------|
| PFS         | 3.00    | 1.50      | 4.00    | 5.50    | 6.75    | 6.81    | 8.34    | 5.25    | 7.38    | 16.96   | 0.88     | 7.25    | 3.34    | N/A     | 0.63     | R.31    |
| PFM         | 3.00    | 1.50      | 4.00    | 5.50    | 6.75    | 6.81    | 8.34    | 8.25    | 7.44    | 24.00   | 1.13     | 7.25    | 9.56    | 7.25    | 0.63     | N/A     |

<sup>1</sup>150# Flange is dimensionally identical to a 125# Flange

<sup>2</sup>Bolt holes straddle pump centerlines

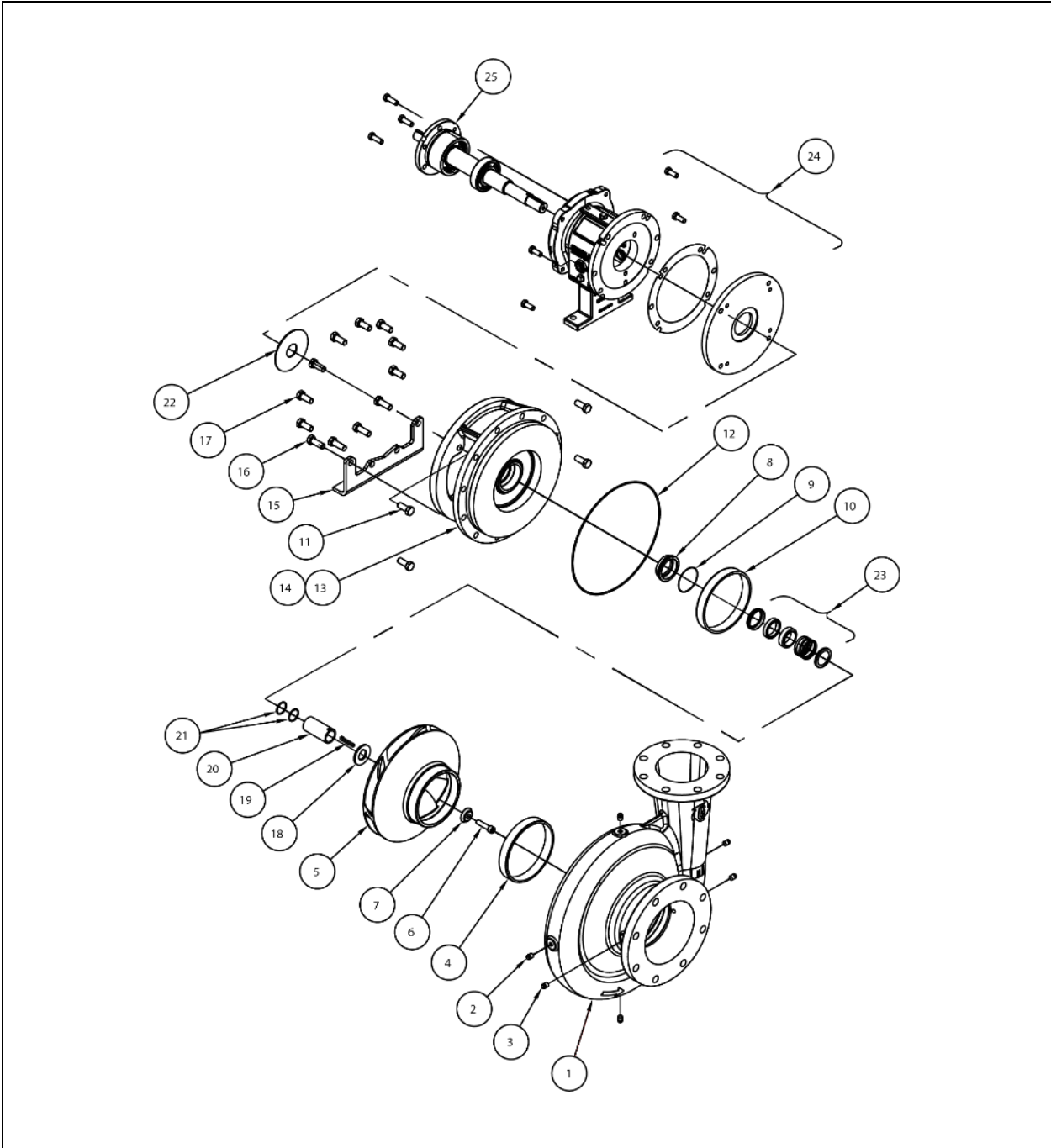
<sup>3</sup>Mounting bolt hold patterns vary with power frames used.

Pumps fitted with small power frames use 3 holes, while pumps fitted with medium or large power frames use 4 holes.

LG1863 REV. A

|                                      |                        |                              |
|--------------------------------------|------------------------|------------------------------|
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EXPLODED VIEW



LG1819 REV. A

|                                      |                        |                              |
|--------------------------------------|------------------------|------------------------------|
| 850 Series Model: 850FM/3X1.5-10/4P  | PEI <sub>CL</sub> 0.92 | Impeller Diameter: 9.920 in. |
| 850 Series Model: 850FM/3X1.5-10T/2P | PEI <sub>CL</sub> 0.92 | Impeller Diameter: 9.920 in. |

# 850 SERIES – Model 3X1.5-10 & 3X1.5-10T



## PARTS LISTING

| Compatible Motor Frame Family |                                               |      | 3x1.5-10                         | 3x1.5-10T                | Material of Construction       |
|-------------------------------|-----------------------------------------------|------|----------------------------------|--------------------------|--------------------------------|
| Item                          | Description                                   | Qty. | PFS (Power Frame Small)          | PFM (Power Frame Medium) |                                |
|                               |                                               |      | P/N                              |                          |                                |
| Case Kit                      |                                               |      |                                  |                          |                                |
| 1                             | Case Kit <sup>1,3</sup>                       | 1    | 3300000K                         |                          | Ductile Iron, ASTM A395        |
| 2                             | Case Plugs 1/4" MNPT                          | 6    | 31005911                         |                          | Steel                          |
| 3                             | Case Plugs 1/2" MNPT                          |      |                                  |                          |                                |
| 4                             | Case Wear Ring                                | 1    | 8030100                          |                          | Bismuth Tin Bronze (Lead Free) |
| Impeller Kit                  |                                               |      |                                  |                          |                                |
| 5                             | Impeller, Only <sup>4</sup>                   | 1    | 5300200                          | 5305400                  | Aluminum Bronze, ASTM B148     |
|                               | Impeller, Kit <sup>4,5</sup>                  | 1    | 5300200K                         | 5305400K                 | Aluminum Bronze, ASTM B148     |
| Back Pull Out Kit             |                                               |      |                                  |                          |                                |
| 6                             | Impeller Bolt<br>SHCS, 3/8-16 x 2.00 Lg       | 1    | ALLEN37516X200U                  |                          | Steel                          |
|                               | Impeller Bolt<br>SHCS, 3/8-16 x 1.25 Lg       | 1    |                                  | ALLEN50013X125U          | Steel                          |
| 7                             | Impeller Washer                               | 1    | 14412209                         | 14412308                 | 300 Series Stainless Steel     |
| 8                             | Seal Adapter Kit <sup>7</sup>                 |      |                                  |                          |                                |
| 9                             | Seal Adapter O-Ring                           |      |                                  |                          |                                |
| 10                            | Bracket Wear Ring                             | 1    |                                  | 8030200                  | Bismuth Tin Bronze (Lead Free) |
| 11                            | Bracket/Motor Bolts<br>HHCS, 3/8-16 x .75 Lg  | 4    | S01C375750WA2A2                  |                          | Steel – Grade 5                |
|                               | Bracket/Motor Bolts<br>HHCS, 5/8-11 x 1.50 Lg | 4    |                                  | 14135008                 | Steel – Grade 5                |
| 12                            | Case/Bracket O-Ring<br>-279 Buna              | 1    | 47027404                         |                          | Buna-N                         |
| 13                            | Bracket <sup>2,3</sup>                        | 1    | 24342EFGK                        | 2384800K                 | Ductile Iron, ASTM A395        |
| 14                            | Bracket Plug 1/2" MNPT                        | 1    |                                  | 31006117                 | Steel                          |
| 15                            | Bracket, Foot                                 | 1    | 2049613                          |                          | Steel                          |
| 16                            | Case/Bracket Bolts<br>HHCS, 1/2-13 x 1.00 Lg  | 6    | 14178701                         |                          | Steel – Grade 5                |
| 17                            | Case/Bracket Bolts<br>HHCS, 1/2-13 x 1.50 Lg  | 2    | 14073316                         |                          | Steel – Grade 5                |
| 18                            | Impeller Spacer                               | 1    |                                  | 14034607                 | 300 Series Stainless Steel     |
| 19                            | Impeller Key                                  | 1    | 14412407                         | 22056006                 | Steel                          |
| 20                            | Sleeve, Kit <sup>6</sup>                      | 1    | 8222400K                         | 8243600K                 | Bismuth Tin Bronze (Lead Free) |
| 21                            | Sleeve O-Ring -022 Buna                       | 2    | 47002209                         |                          | Buna-N                         |
|                               | Sleeve O-Ring -126 Buna                       | 2    |                                  | 47012604                 | Buna-N                         |
| 22                            | Deflector                                     | 1    | 22020408                         | 22020507                 | Neoprene                       |
| 23                            | Mechanical Seal                               | 1    | See mechanical seal list for P/N |                          |                                |
| 24                            | Assembly, Power Frame                         | 1    | PFS-850-K                        | PFMA-850-K               |                                |
| 25                            | Assembly, Rotating                            | 1    | 24000-04-41A-RO                  | 24001-04-41A-RO          |                                |

LG1862 REV. B

<sup>1</sup>Case Kit includes item 2, 3, 4, 12, and 17

<sup>2</sup>Bracket Kit includes item 11, 14 and 22

<sup>3</sup>Part is available with epoxy coating of interior or interior + exterior. Specified part number is for uncoated part, contact factory for part numbers.

<sup>4</sup>Part is available with epoxy coating. Append 'PC' to the indicated part number when referring to the coated part

<sup>5</sup>Impeller Kit includes item 6, 7, 10, 18 and 19

<sup>6</sup>Sleeve Kit includes item 21

<sup>7</sup>Seal Adapter Kit includes item 9

|                                             |                              |                                     |
|---------------------------------------------|------------------------------|-------------------------------------|
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GRS-17201-T-01

PAGE 5 OF 5



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