

850 SERIES – Model 3X2-8



Model 3X2-8 – Frame-Mounted Configuration

PERFORMANCE

850FM/3X2-8/2P

Max. Flow Rate: 348 gpm

Max. Head: 253 ft.

Max. Working Temperature: 120° F

Max. Working Pressure: 175 psi

Max. Rated Speed: 3600 RPM

Max. Particle Size: 0.28" Diameter

Hydrotest Pressure: 263 psi

850FM/3X2-8/4P

Max. Flow Rate: 185 gpm

Max. Head: 65 ft.

Max. Working Temperature: 120° F

Max. Working Pressure: 175 psi

Max. Rated Speed: 1800 RPM

Max. Particle Size: 0.28" Diameter

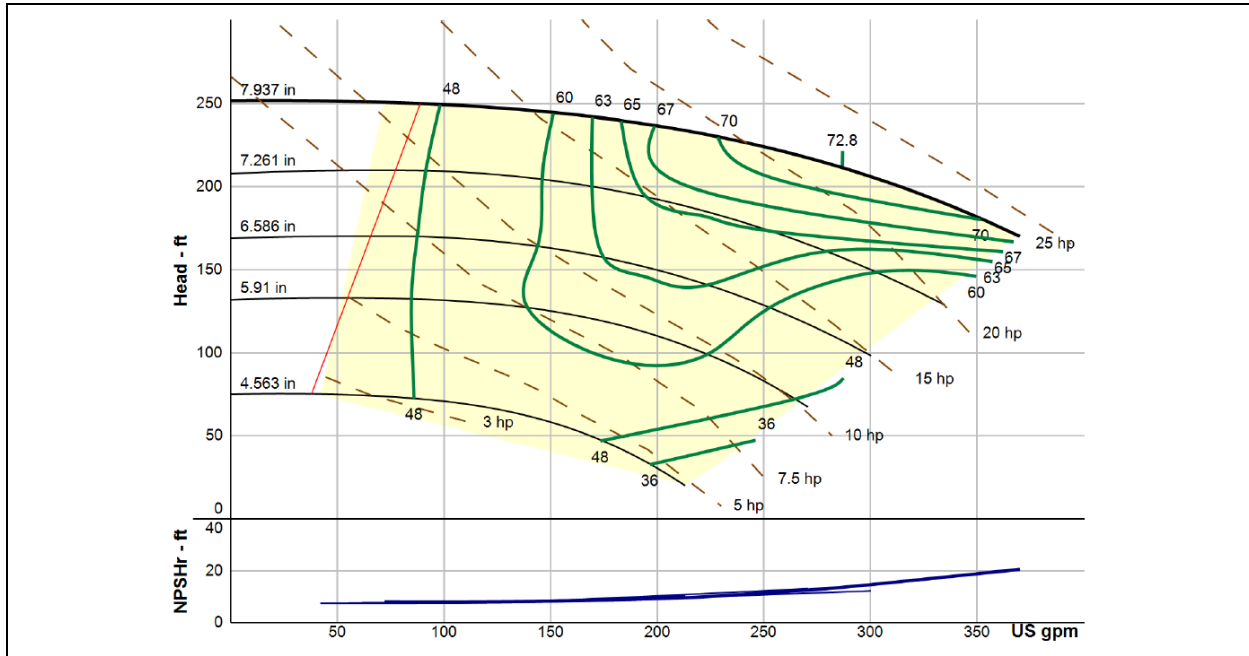
Hydrotest Pressure: 263 psi

| | | |
|---|------------------------------|-------------------------------------|
| 850 Series Model: 850FM/3X2-8/2P | PEI_{CL} 0.91 | Impeller Diameter: 7.937 in. |
| 850 Series Model: 850FM/3X2-8/4P | PEI_{CL} 0.90 | Impeller Diameter: 7.937 in. |

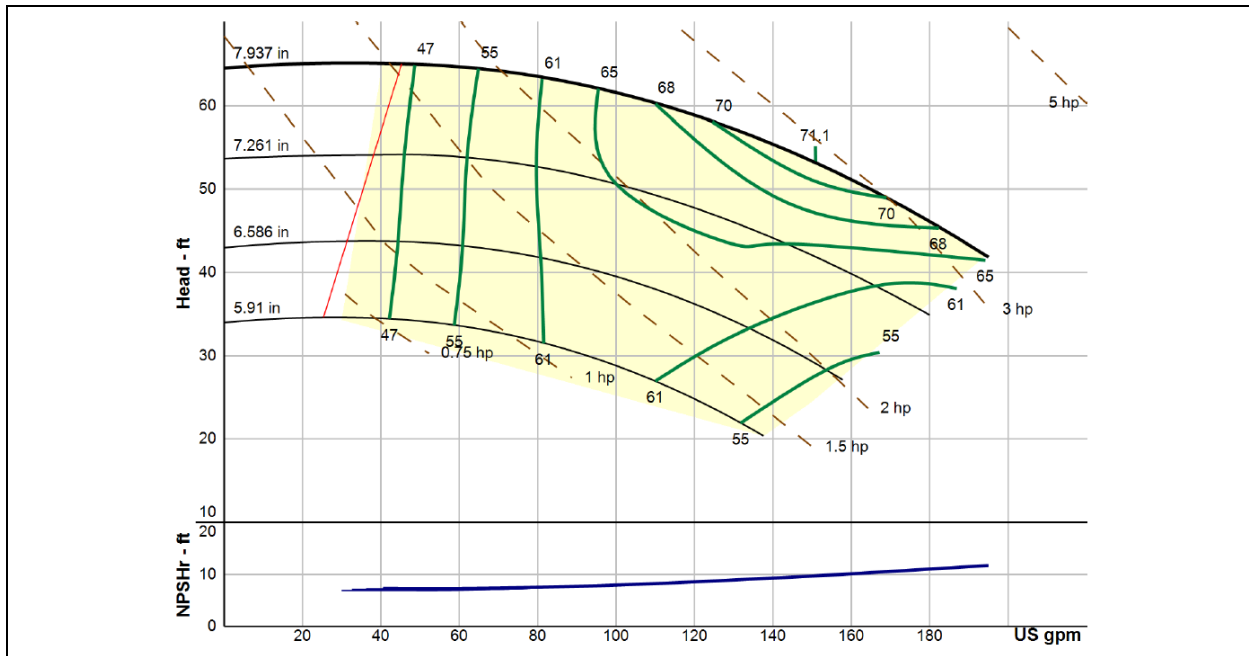
850 SERIES – Model 3X2-8



PERFORMANCE CURVE – 850FM/3X2-8/2P, 3450 RPM



PERFORMANCE CURVE – 850FM/3X2-8/4P, 1750 RPM

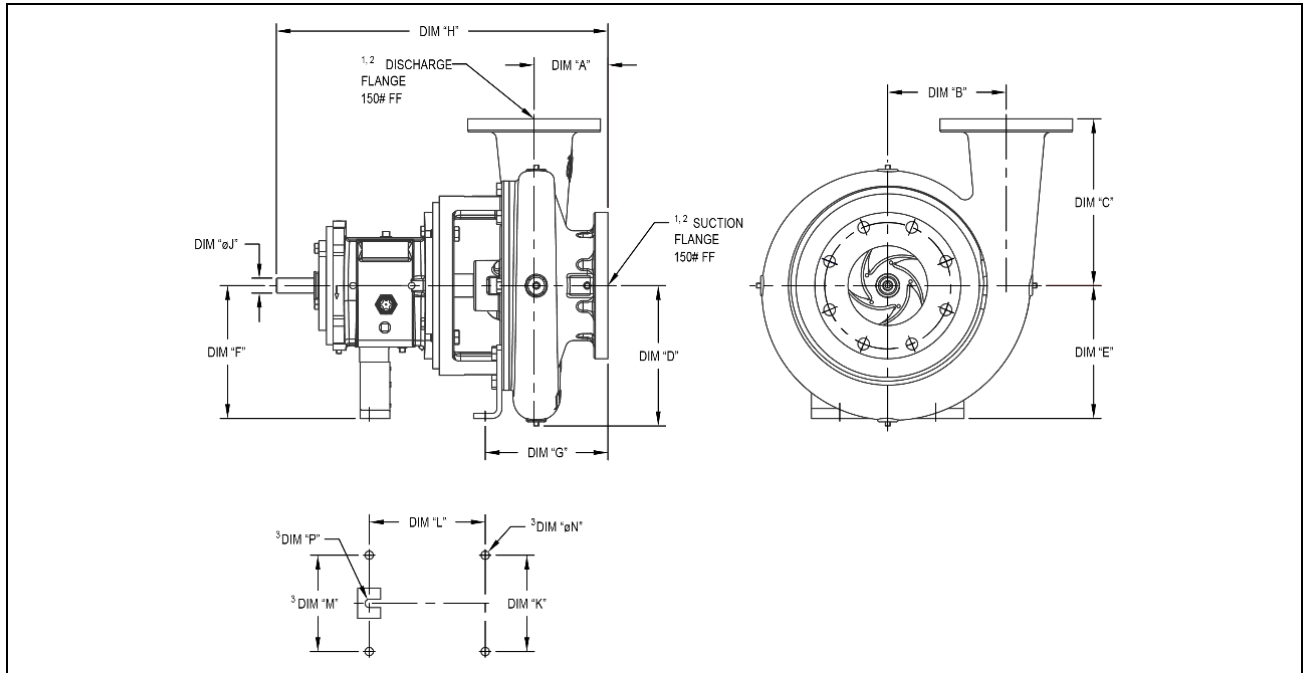


| | | |
|----------------------------------|------------------------|------------------------------|
| 850 Series Model: 850FM/3X2-8/2P | PEI _{CL} 0.91 | Impeller Diameter: 7.937 in. |
| 850 Series Model: 850FM/3X2-8/4P | PEI _{CL} 0.90 | Impeller Diameter: 7.937 in. |

850 SERIES – Model 3X2-8



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 | 2.00 | 3.63 | 4.75 | 6.13 | 6.18 | 6.99 | 5.25 | 6.26 | 16.21 | 0.88 | 6.19 | 3.71 | N/A | 0.44 | R.313 |

¹150# Flange is dimensionally identical to a 125# Flange

²Bolt holes straddle pump centerlines

³Mounting 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.

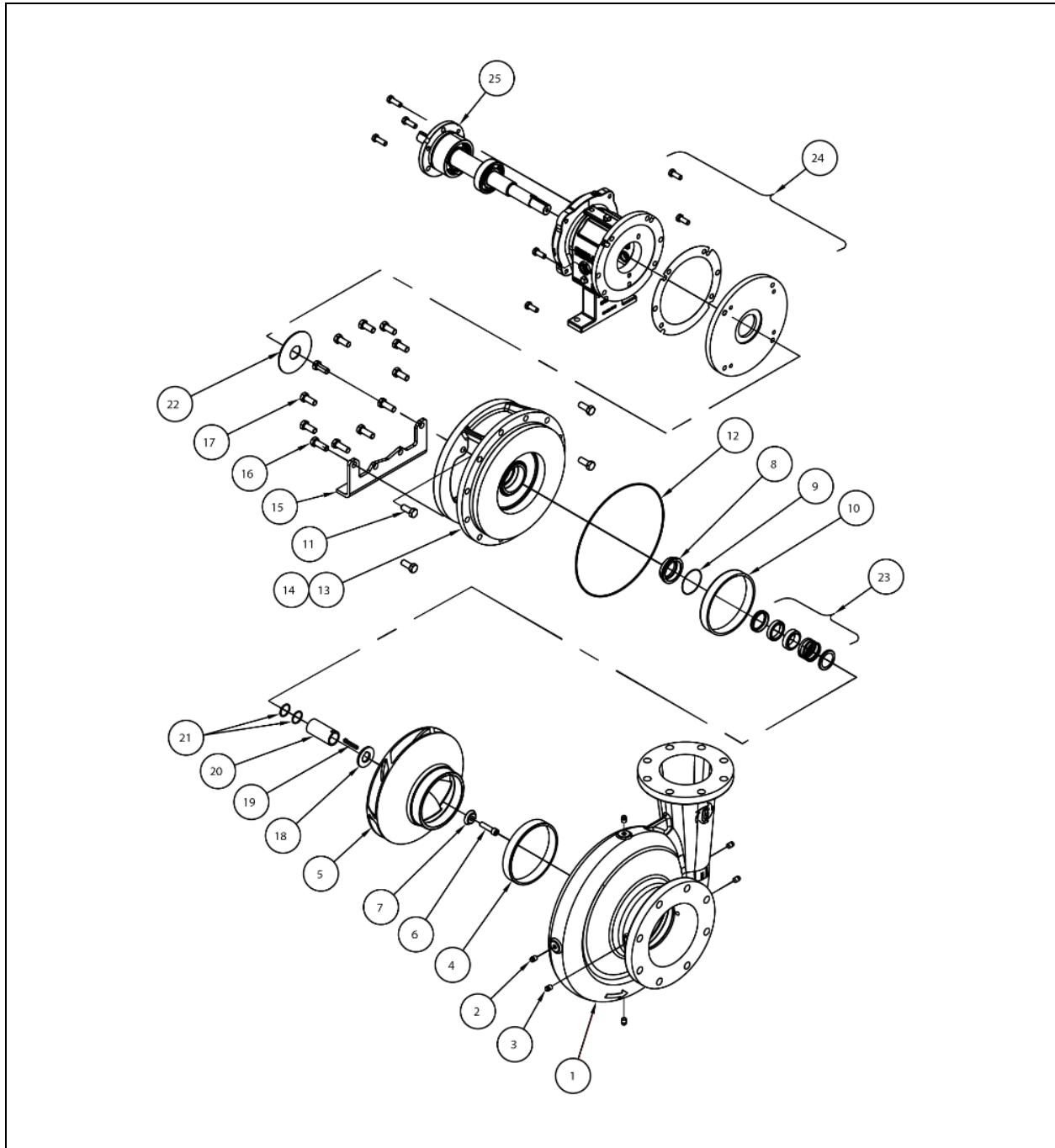
LG1861 REV. A

| | | |
|---|------------------------------|-------------------------------------|
| 850 Series Model: 850FM/3X2-8/2P | PEI_{CL} 0.91 | Impeller Diameter: 7.937 in. |
| 850 Series Model: 850FM/3X2-8/4P | PEI_{CL} 0.90 | Impeller Diameter: 7.937 in. |

850 SERIES – Model 3X2-8



EXPLODED VIEW



LG1819 REV. A

| | | |
|----------------------------------|------------------------|------------------------------|
| 850 Series Model: 850FM/3X2-8/2P | PEI _{CL} 0.91 | Impeller Diameter: 7.937 in. |
| 850 Series Model: 850FM/3X2-8/4P | PEI _{CL} 0.90 | Impeller Diameter: 7.937 in. |

850 SERIES – Model 3X2-8



PARTS LISTING

| Compatible Frame Family | | | PFS (POWER FRAME SMALL) | Material of Construction |
|--------------------------|--|------|----------------------------------|--------------------------------|
| Item | Description | Qty. | P/N | |
| Case Kit | | | | |
| 1 | Case Kit ^{1,3} | 1 | 3078409K | Cast Iron, ASTM A48 Class 30 |
| 2 | Pipe Plugs 1/4" MNPT | 5 | 31005911 | Steel |
| 3 | Pipe Plugs 1/2" MNPT | | | |
| 4 | Case Wear Ring | 1 | 8015100 | Bismuth Tin Bronze (Lead Free) |
| Impeller Kit | | | | |
| 5 | Impeller, Only ⁴ | 1 | 5100200 | Aluminum Bronze, ASTM B148 |
| | Impeller, Kit ^{4,5} | 1 | 5100200K | Aluminum Bronze, ASTM B148 |
| Back Pull Out Kit | | | | |
| 6 | Impeller Bolt SHCS, 3/8-16 x 1.25 Lg | 1 | S14C375A25SH8A1 | Stainless Steel |
| 7 | Impeller Washer | 1 | 14412209 | 300 Series Stainless Steel |
| 8 | Seal Adapter Kit ⁷ | | | |
| 9 | Seal Adapter O-Ring | | | |
| 10 | Bracket Wear Ring | | | |
| 11 | Bracket/Power Frame Bolts HHCS, 3/8-16 x .75 Lg | 4 | S01C375750WA2A2 | Steel – Grade 5 |
| 12 | Case/Bracket O-Ring -171 Buna | 1 | 47017108 | Steel – Grade 5 |
| 13 | Bracket ^{2,3} | 1 | 24341EFGK | Cast Iron, ASTM A48 Class 30 |
| 14 | Bracket Plug 1/2" MNPT | | | |
| 15 | Foot, Bracket | 1 | 2049616 | Steel |
| 16 | Case/Bracket Bolts HHCS, 3/8-16 x 1.00 Lg | 3 | 14129423 | Steel – Grade 5 |
| 17 | Case/Bracket Bolts HHCS, 3/8-16 x .75 Lg | 5 | S01C375750WA2A2 | Steel – Grade 5 |
| 18 | Impeller Spacer | | | |
| 19 | Impeller Key | 1 | 14412407 | Stainless Steel |
| 20 | Sleeve, Kit ⁶ | 1 | 8222400K | Bismuth Tin Bronze (Lead Free) |
| 21 | Sleeve O-Ring -022 Buna | 1 | 47002209 | Buna-N |
| 22 | Deflector | 1 | 22020408 | Neoprene |
| 23 | Mechanical Seal | 1 | See mechanical seal list for P/N | |
| 24 | Assembly, Power Frame | 1 | PFS-850-K | |
| 25 | Assembly, Rotating | 1 | 24000-04-41A-RO | |

LG1860 REV. B

¹Case Kit includes item 2, 3, 4, 12, and 17

²Bracket Kit includes item 11, 14 and 22

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

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

⁵Impeller Kit includes item 6, 7, 10, 18 and 19

⁶Sleeve Kit includes item 21

⁷Seal Adapter Kit includes item 9

| | | |
|---|------------------------------|-------------------------------------|
| 850 Series Model: 850FM/3X2-8/2P | PEI_{CL} 0.91 | Impeller Diameter: 7.937 in. |
| 850 Series Model: 850FM/3X2-8/4P | PEI_{CL} 0.90 | Impeller Diameter: 7.937 in. |

