

Supersedes all previous issues

| | | | | | | | | | | |
|------------------|--------------------|--------------------|----------------------|----------------|------------------|----------------|-----------------|------------------|-------------------|--------------------|
| Pump Size ① | 1.5x1.5x7F 1580 | 2.5x2.5x7F 1580 | 2.5x2.5x9.5F 1580 | 3x3x7F 1580 | 3x3x9.5F 1580 | 4x4x7F 1580 | H4x4x7F 1580 | 4x4x9.5F 1580 | H4x4x9.5F 1580 | 6x6x9.5F-L 1580 |
| Number of Stages | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Casing Design Data

| | | | | | | | | | | | |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Flange Rating ASA Standard | Suction | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 |
| | Discharge | 125 | 125 | 125 | 125 | 125 | 125 | 250 | 125 | 250 | 125 |
| Casing Material | | Cast Iron | Cast Iron | Cast Iron | Cast Iron | Cast Iron | Cast Iron | Cast Iron | Cast Iron | Cast Iron | Cast Iron |
| Max. Working Pressure | | 175 | 175 | 175 | 175 | 175 | 175 | 300 | 175 | 300 | 225 |
| Max. Hydrostatic Pressure | | 262 | 262 | 262 | 262 | 262 | 262 | 450 | 262 | 450 | 338 |
| Casing Wall Thickness | | 11/32 | 11/32 | 7/16 | 3/8 | 3/8 | 1/2 | 1/2 | 1/2 | 1/2 | 5/8 |

Impeller Design Data

| | | | | | | | | | | | |
|--|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| No. of Vanes | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 |
| Inlet Area (Sq. Inches) | | 1.77 | 1.96 | 5.96 | 4.9 | 8.94 | 15.54 | 15.54 | 15.54 | 15.54 | 22.7 |
| Maximum Diameter | | 7 | 7 | 9.5 | 7 | 9.5 | 7 | 7 | 9.5 | 9.5 | 9.5 |
| Minimum Diameter | | 5 | 4.125 | 7 | 4.125 | 7.25 | 5.5 | 5.5 | 7 | 7 | 6.85 |
| Maximum Sphere | | 0.34 | 0.31 | 0.28 | 0.47 | 0.41 | 0.56 | 0.56 | 0.59 | 0.59 | 0.78 |
| WR ² for Max Dia. (Lbs.-Ft ²) | | 0.29 | 0.22 | 0.53 | 0.37 | 0.62 | 0.37 | 0.37 | 1.04 | 1.04 | 1.33 |
| Wear Ring Clearance-Diam. | | .016-.021 | .016-.021 | .016-.021 | .016-.021 | .016-.021 | .016-.021 | .016-.021 | .016-.021 | .016-.021 | .016-.021 |

Stuffing Box Data

| | | | | | | | | | | | |
|----------------------------|-----------------------------------|----------------|----------------|---|----------------|---|---|---|---|---|---|
| 143JP-184JP Motor Frame | Bore | 1.998/2.002 | 1.998/2.002 | - | 1.998/2.002 | - | - | - | - | - | - |
| | Depth | 2.370/2.380 | 2.370/2.380 | - | 2.370/2.380 | - | - | - | - | - | - |
| | Packing:No. Rings Size Squares | 4 3/8 x 3/8 | 4 3/8 x 3/8 | - | 4 3/8 x 3/8 | - | - | - | - | - | - |
| | Seal Cage Width | 5/8 | 5/8 | - | 5/8 | - | - | - | - | - | - |
| | Shaft Sleeve O.D. | 1.251/1.249 | 1.251/1.249 | - | 1.251/1.249 | - | - | - | - | - | - |

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|----------------------------|-----------------------------------|---|----------------|---|----------------|---|----------------|----------------|---|---|---|
| 213JP-215JP Motor Frame | Bore | - | 2.373/2.377 | - | 2.373/2.377 | - | 2.373/2.377 | 2.373/2.377 | - | - | - |
| | Depth | - | 2.370/2.380 | - | 2.370/2.380 | - | 2.370/2.380 | 2.370/2.380 | - | - | - |
| | Packing:No. Rings Size Squares | - | 4 3/8 x 3/8 | - | 4 3/8 x 3/8 | - | 4 3/8 x 3/8 | 4 3/8 x 3/8 | - | - | - |
| | Seal Cage Width | - | 5/8 | - | 5/8 | - | 5/8 | 5/8 | - | - | - |
| | Shaft Sleeve O.D. | - | 1.626/1.624 | - | 1.626/1.624 | - | 1.626/1.624 | 1.626/1.624 | - | - | - |

| | | | | | | | | | | | |
|----------------------------|-----------------------------------|---|---|----------------|----------------|---|----------------|----------------|----------------|----------------|----------------|
| 254JP-256JP Motor Frame | Bore | - | - | 2.373/2.377 | 2.373/2.377 | - | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 |
| | Depth | - | - | 2.370/2.380 | 2.370/2.380 | - | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 |
| | Packing:No. Rings Size Squares | - | - | 4 3/8 x 3/8 | 4 3/8 x 3/8 | - | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 |
| | Seal Cage Width | - | - | 5/8 | 5/8 | - | 5/8 | 5/8 | 5/8 | 5/8 | 5/8 |
| | Shaft Sleeve O.D. | - | - | 1.626/1.624 | 1.626/1.624 | - | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 |

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|----------------------------|-----------------------------------|---|---|----------------|---|----------------|----------------|----------------|----------------|----------------|----------------|
| 284JP-326JP Motor Frame | Bore | - | - | 2.373/2.377 | - | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 |
| | Depth | - | - | 2.370/2.380 | - | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 |
| | Packing:No. Rings Size Squares | - | - | 4 3/8 x 3/8 | - | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 |
| | Seal Cage Width | - | - | 5/8 | - | 5/8 | 5/8 | 5/8 | 5/8 | 5/8 | 5/8 |
| | Shaft Sleeve O.D. | - | - | 1.626/1.624 | - | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 |

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|----------------------------|-----------------------------------|---|---|---|---|---|---|---|----------------|----------------|----------------|
| 364JP-405JP Motor Frame | Bore | - | - | - | - | - | - | - | 2.998/3.002 | 2.998/3.002 | 2.998/3.002 |
| | Depth | - | - | - | - | - | - | - | 2.433/2.443 | 2.433/2.443 | 2.433/2.443 |
| | Packing:No. Rings Size Squares | - | - | - | - | - | - | - | 4 .44 x .44 | 4 .44 x .44 | 4 .44 x .44 |
| | Seal Cage Width | - | - | - | - | - | - | - | 3/8 | 3/8 | 3/8 |
| | Shaft Sleeve O.D. | - | - | - | - | - | - | - | 1.995/2.005 | 1.995/2.005 | 1.995/2.005 |

① (H) Prefix indicates high pressure casing

December, 2004

Supersedes all previous issues

| | | | | | | | | | | |
|------------------|-------------------|--------------------|-------------------|--------------------|------------------|-------------------|-------------------|--------------------|-----------------|------------------|
| Pump Size ① | 6x6x11F-S 1580 | H6x6x11F-S 1580 | 6x6x11F-L 1580 | H6x6x11F-L 1580 | 8x8x9.5F 1580 | H8x8x9.5F 1580 | 8x8x13.5F 1580 | H8x8x13.5F 1580 | 8x8x18F 1580 | H8x8x18F 1580 |
| Number of Stages | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Casing Design Data

| | | | | | | | | | | | |
|-------------------------------|-----------|-----------|--------------|-----------|--------------|-----------|-----------|-----------|-----------|--------------|--------------|
| Flange Rating ASA Standard | Suction | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 125 |
| | Discharge | 125 | 250 | 125 | 250 | 125 | 250 | 125 | 250 | 125 | 250 |
| Casing Material | | Cast Iron | Ductile Iron | Cast Iron | Ductile Iron | Cast Iron | Cast Iron | Cast Iron | Cast Iron | Ductile Iron | Ductile Iron |
| Max. Working Pressure | | 215 | 282 | 215 | 282 | 175 | 300 | 175 | 300 | 175 | 300 |
| Max. Hydrostatic Pressure | | 323 | 423 | 323 | 423 | 262 | 450 | 262 | 450 | 262 | 450 |
| Casing Wall Thickness | | 1/2 | 1/2 | 1/2 | 1/2 | 11/16 | 11/16 | 5/8 | 5/8 | 5/8 | 5/8 |

Impeller Design Data

| | | | | | | | | | | | |
|--|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| No. of Vanes | | 7 | 7 | 5 | 5 | 5 | 5 | 7 | 7 | 6 | 6 |
| Inlet Area (Sq. Inches) | | 20.63 | 20.63 | 20.63 | 20.63 | 28.26 | 28.26 | 35.78 | 35.78 | 44.18 | 44.18 |
| Maximum Diameter | | 11 | 11 | 11 | 11 | 9.5 | 9.5 | 13.5 | 13.5 | 18.25 | 18.25 |
| Minimum Diameter | | 9.84 | 9.84 | 7 | 7 | 5.75 | 5.75 | 12.1 | 12.1 | 14.5 | 14.5 |
| Maximum Sphere | | 0.53 | 0.53 | 0.75 | 0.75 | 0.94 | 0.94 | 0.81 | 0.81 | 0.67 | 0.67 |
| WR ² for Max Dia. (Lbs.-Ft ²) | | 2.13 | 2.13 | 1.97 | 1.97 | 2.05 | 2.05 | 2.11 | 2.11 | 2.61 | 2.61 |
| Wear Ring Clearance-Diam. | | .016-.021 | .016-.021 | .016-.021 | .016-.021 | .026-.036 | .026-.036 | .015-.022 | .015-.022 | .015-.022 | .015-.022 |

Stuffing Box Data

| | | | | | | | | | | | |
|----------------------------|-----------------------------------|---|---|---|---|---|---|---|---|---|---|
| 143JP-184JP Motor Frame | Bore | - | - | - | - | - | - | - | - | - | - |
| | Depth | - | - | - | - | - | - | - | - | - | - |
| | Packing:No. Rings Size Squares | - | - | - | - | - | - | - | - | - | - |
| | Seal Cage Width | - | - | - | - | - | - | - | - | - | - |
| | Shaft Sleeve O.D. | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | |
|----------------------------|-----------------------------------|---|---|---|---|---|---|---|---|---|---|
| 213JP-215JP Motor Frame | Bore | - | - | - | - | - | - | - | - | - | - |
| | Depth | - | - | - | - | - | - | - | - | - | - |
| | Packing:No. Rings Size Squares | - | - | - | - | - | - | - | - | - | - |
| | Seal Cage Width | - | - | - | - | - | - | - | - | - | - |
| | Shaft Sleeve O.D. | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | |
|----------------------------|-----------------------------------|-------------|-------------|---|---|---|---|---|---|---|---|
| 254JP-256JP Motor Frame | Bore | 2.373/2.377 | 2.373/2.377 | - | - | - | - | - | - | - | - |
| | Depth | 2.370/2.380 | 2.370/2.380 | - | - | - | - | - | - | - | - |
| | Packing:No. Rings Size Squares | 4 3/8 x 3/8 | 4 3/8 x 3/8 | - | - | - | - | - | - | - | - |
| | Seal Cage Width | 5/8 | 5/8 | - | - | - | - | - | - | - | - |
| | Shaft Sleeve O.D. | 1.626/1.624 | 1.626/1.624 | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | |
|----------------------------|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---|---|---|
| 284JP-326JP Motor Frame | Bore | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 | 2.373/2.377 | - | - | - | - |
| | Depth | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 | 2.370/2.380 | - | - | - | - |
| | Packing:No. Rings Size Squares | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 | 4 3/8 x 3/8 | - | - | - | - |
| | Seal Cage Width | 5/8 | 5/8 | 5/8 | 5/8 | 5/8 | 5/8 | - | - | - | - |
| | Shaft Sleeve O.D. | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | 1.626/1.624 | - | - | - |

| | | | | | | | | | | | |
|----------------------------|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 364JP-405JP Motor Frame | Bore | 2.998/3.002 | 2.998/3.002 | 2.998/3.002 | 2.998/3.002 | 2.998/3.002 | 2.998/3.002 | 2.998/3.002 | 2.998/3.002 | 2.998/3.002 | 2.998/3.002 |
| | Depth | 2.433/2.443 | 2.433/2.443 | 2.433/2.443 | 2.433/2.443 | 2.433/2.443 | 2.433/2.443 | 2.433/2.443 | 2.433/2.443 | 2.433/2.443 | 2.433/2.443 |
| | Packing:No. Rings Size Squares | 4 .44 x .44 | 4 .44 x .44 | 4 .44 x .44 | 4 .44 x .44 | 4 .44 x .44 | 4 .44 x .44 | 4 .44 x .44 | 4 .44 x .44 | 4 .44 x .44 | 4 .44 x .44 |
| | Seal Cage Width | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 |
| | Shaft Sleeve O.D. | 1.995/2.005 | 1.995/2.005 | 1.995/2.005 | 1.995/2.005 | 1.995/2.005 | 1.995/2.005 | 1.995/2.005 | 1.995/2.005 | 1.995/2.005 | 1.995/2.005 |

① (H) Prefix indicates high pressure casing