



The MS Series Vertical Jet Pumps are the industry standard deep well jet pumps for over-the-well "bolt-on" installations.

The MS Series Jet Pumps include the pre-plumbed external automatic regulator, pressure gauge, pressure switch, and a complete line of casing adapters to drive the 4" double pipe or 2" and 3" single pipe jet packages.

APPLICATIONS

• Water systems and sprinkling... for homes, farms and cottages.

SPECIFICATIONS

Body – Rugged cast iron Pump and Motor Shaft – 416 stainless steel Impellers – Noryl® Diffuser – Close-grained cast iron

| ORD | ERIN | J INFORMATION | | | | | | |
|------|-------------|----------------------|---------------------|--------|--------|--------|---------|----------|
| Cat. | | | Max. Press. | Pipe T | apping | Sizes | Motor | Approx. |
| No. | HP | Description | Reg. Setting | Suct. | Drive | Disch. | Voltage | Wt. Lbs. |
| MSD | 3/4 | Deep Well Jet | 40 PSI | 1-1/4" | 1" | 1" | 115/230 | 67 |
| MSE | 1 | Deep Well Jet | 60 PSI | 1-1/4" | 1-1/4" | 1" | 115/230 | 73 |
| MSF | 1-1/2 | Deep Well Jet | 85 PSI | 1-1/4" | 1-1/4" | 1" | 230 | 120 |
| MSG | 2 | Deep Well Jet | 95 PSI | 1-1/4" | 1-1/4" | 1" | 230 | 125 |

ADAPTER FLANGE

| Catalog Number | Description | Used With |
|----------------|-----------------|---|
| J216-26 | 1-1/4" x 1" | Offset single pipe, 4" double pipe through 3/4 HP |
| J216-27 | 1-1/4" x 1-1/4" | 4" double pipe 1, 1-1/2 and 2 HP |

Order pump from ordering information table above. A Jet Package should be ordered with every MS Series Pump. All installations require an appropriate size adapter flange or casing adapter if bolt-on feature is desired.

Noryl $^{\odot}$ is registered trademark of General Electric Co. PRO-Source^ ${}^{\rm M}$ is a trademark of Pentair Water.

In order to provide the best products possible, specifications are subject to change.

MS series

FEATURES

Automatic Pressure Regulator – Faster-acting and quieter, design eliminates "hunting" for correct drive pressure. New improved stem and guide are precisely molded to assure efficient, trouble-free performance on all deep wells.

Quality Construction – Precisionmachined, close-grained cast iron pump body and base are specially treated to resist corrosion.

Noryl® Impellers – Precision molded for perfect balance, and ultra-smooth for highest performance and efficiency.

Pressure Switch – High quality. Differential and cut-in/cut-out pressure settings are adjustable.

Motor Windings – Superior insulation materials protect against excessive moisture and contaminants to ensure prolonged motor life.

Mechanical Shaft Seal – Precision lapped and highly polished carbon-ceramic, stainless steel construction. Internal design guarantees continuous water lubrication for maximum protection.

Dustproof Cover – All electrical components are protected from dirt, dust and insects by a dustproof canopy. Ventilating air cannot contaminate vital switching components. This eliminates the most common cause of motor failure.

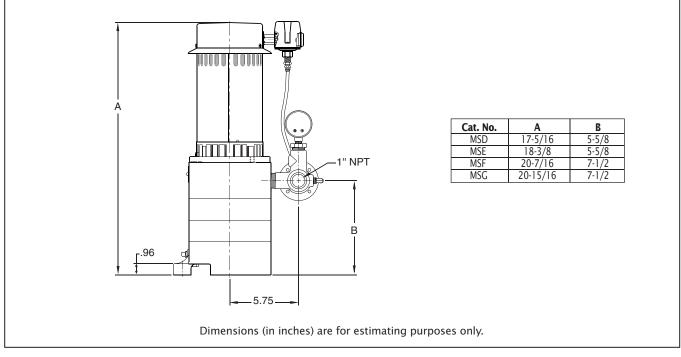
Balanced Rotor – Rotor is die cast under high pressures for uniform performance and greater efficiency; dynamically balanced.

Heavy-duty Ball Bearings – Permanently lubricated sealed bearings are extensively tested to ensure extended life and smooth, quiet operation.

Pump and Motor Shaft – One piece threaded shaft for positive impeller drive and alignment. Shaft is stainless steel for maximum corrosion resistance.



OUTLINE DIMENSION



| | | | | ANCE 51) 4" D | | | | | Per l | Minu | te) | | | | | | | | | | | | | | | |
|-------|-------|------|---------|------------------|------|------|------|------|-------|------|------|------|------|-------|------|-------|------|------|------|------|------|------|------|------|------------------------------|----------------|
| | | | | | | | | | | | | | | | | | | | | | | | | | Max. I Shut Pre (P: | t-Off ss. |
| Cat. | | let | Uses | Uses | | | | | | | | Pu | mpin | ig De | pth | in Fe | et | | | | | | | | - | Jet at Max. |
| No. | HP | No. | Venturi | Nozzle | 30' | 40' | 50' | 60' | 70' | 80' | 90' | 100' | 110' | 120' | 130' | 140' | 180' | 200' | 220' | 240' | 260' | 280' | 300' | 320' | Depth | |
| MSD | 3/4 | 23SD | J32P-24 | J34P-42 | 10.2 | 8.4 | 6.8 | 5.8 | 4.5 | 3.1 | 2.1 | 1.1 | | | | | | | | | | | | | 80 | 46 |
| IVID | J/ T | 15SD | J32P-18 | J34P-42 | 5.5 | 5.4 | 5.3 | 5.2 | 4.7 | 4.3 | 4.1 | 3.7 | 3.1 | 2.7 | 2.3 | 1.9 | | | | | | | | | 137 | 75 |
| MSE | 1 | 23SD | J32P-24 | J34P-42 | 12.1 | 11.7 | 11.6 | 11.1 | 10.2 | 9.2 | 7.8 | 6.4 | 5.0 | 4.0 | 3.0 | | | | | | | | | | 120 | 76 |
| MJL | 1 | 15SD | J32P-18 | J34P-42 | 5.5 | 5.5 | 5.5 | 5.4 | 5.3 | 5.3 | 5.2 | 5.1 | 5.1 | 5.0 | 4.8 | 4.5 | 3.3 | 2.7 | 2.0 | 1.3 | 1.0 | | | | 200 | 97 |
| MSF | 1.1/2 | 23SD | J32P-24 | J34P-42 | 12.2 | 12.2 | 12.2 | 12.2 | 11.7 | 11.3 | 10.7 | 9.9 | 9.0 | 8.3 | 7.0 | 4.0 | 1.3 | | | | | | | | 164 | 95 |
| MOF | 1-1/2 | | J32P-18 | J34P-42 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.3 | 5.3 | 5.2 | 5.1 | 5.1 | 5.0 | 4.8 | 4.7 | 4.5 | 4.3 | 4.0 | 3.3 | 2.7 | | 314 | 172 |
| MSG | 2 | 23SD | J32P-24 | J34P-42 | 12.2 | 12.2 | 12.2 | 12.2 | 11.8 | 11.3 | 11.2 | 11.1 | 11.0 | 10.0 | 8.7 | 7.0 | 4.0 | 2.0 | | | | | | | 195 | 110 |
| DCIAI | 2 | 15SD | J32P-18 | J34P-42 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.3 | 5.3 | 5.2 | 5.1 | 5.1 | 5.0 | 5.0 | 4.8 | 4.8 | 4.5 | 4.3 | 4.0 | 3.3 | 2.7 | 314 | 172 |

Tested and rated in accordance with Water Systems Council Standards.

NOTE: Pumps installed with a PRO-Source[™] tank require a 100 PSI relief valve. Pumps installed with a conventional tank require a 75 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.



| | | | | ICE (Ca | | | | : Per l | Minut | e) | | | | | | | | | | | | | |
|-------------|-------|------------|-----------------|----------------|------|------|------|---------|-------|------|------------|---------------|--------------|-----|--------------|------|------|------|------|------|------|------------------------------|-------------------------|
| DEE | P WE | LL (4 | 40 PSI) | 2" SINC | JLE | PIPE | | | | | | | | | | | | | | | | Max. I Shut Pre (PS | Off ss. |
| Cat. No. | НР | Jet No. | Uses Venturi | Uses Nozzle | 30' | 40' | 50' | 60' | 70' | 80' | Pun 90' | nping 100' | Dept 110' | 1 | Feet 130' | 140' | 180' | 200' | 220' | 240' | 260' | Jet at Min. Depth | Jet at Max. Depth |
| | | - | J32P-24 | | 10.0 | | | 4.7 | 3.8 | 2.0 | 1.4 | 100 | | 120 | 150 | 110 | 100 | 200 | | - 10 | 200 | 79 | 50 |
| MSD | 3/4 | 8AP | J32P-18 | J34P-42 | 5.5 | 5.4 | 5.2 | 5.0 | 4.4 | 4.3 | 4.1 | 3.7 | 3.1 | 2.4 | 2.1 | 1.4 | | | | | | 135 | 73 |
| MSE | 1 | 12AP | J32P-24 | J34P-42 | 12.1 | 11.3 | 11.2 | 10.0 | 8.8 | 7.6 | 6.5 | 5.6 | 3.3 | 1.8 | | | | | | | | 118 | 80 |
| MJL | ' | 8AP | J32P-18 | J34P-42 | 5.5 | 5.5 | 5.3 | 5.3 | 5.2 | 5.1 | 5.0 | 5.0 | 5.0 | 5.0 | 4.5 | 4.2 | 2.0 | | | | | 198 | 126 |
| MSF | 1-1/2 | 12AP | J32P-24 | J34P-42 | 12.2 | 12.0 | 12.0 | 12.0 | 11.5 | 11.2 | 9.7 | 8.3 | 6.8 | 5.5 | 4.2 | 3.3 | | | | | | 162 | 110 |
| NI JI | 1 1/2 | 8AP | J32P-18 | J34P-42 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.3 | 5.2 | 5.1 | 5.0 | 5.0 | 5.0 | 4.8 | 4.3 | 3.5 | 2.7 | 1.7 | | 266 | 158 |
| MSG | 2 | 12AP | J32P-24 | J34P-42 | 12.2 | 12.0 | 12.0 | 12.0 | 11.7 | 11.2 | 11.0 | 10.3 | 8.3 | 7.5 | 6.3 | 5.3 | | | | | | 193 | 139 |
| 14150 | 2 | 8AP | J32P-18 | J34P-42 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.3 | 5.2 | 5.2 | 5.1 | 5.1 | 5.0 | 4.8 | 4.7 | 4.3 | 3.7 | 3.2 | 2.5 | 312 | 192 |

| | | | | ANCE | | | | llons | Fer l | Minu | te) | | | | | | | | | | | | | | | |
|------|-------|------|-----------------|----------|-----------------------|------|------|-------|-------|------|------------|------|------|------|------|------|------|------|------|------|------|--------|------|------|----------------------------|------------|
| DE | EP V | VELL | (40 PS | 5I) 3" S | ING | | TPE | | | | | | | | | | | | | | | | | | Max. Shut Pre (P: | Off ss. |
| Cat. | | let | llcoc | Uses | Pumping Depth in Feet | | | | | | | | | | | | | | | | - | Jet at | | | | |
| No. | HP | No. | Uses Venturi | Nozzle | 30' | 40' | 50' | 60' | 70' | 80' | 90' | 100' | 110' | 120' | 130' | 140' | 180' | 200' | 220' | 240' | 260' | 280' | 300' | 320' | Min. Depth[| |
| | | 23CP | J32P-24 | J34P-42 | 10.2 | 8.4 | 6.8 | 5.8 | 4.5 | 3.1 | 2.1 | 1.1 | | | | | | | | | | | | | 80 | 46 |
| MSD | 3/4 | 17CP | J32P-29 | J34P-44 | 12.0 | 10.4 | 8.5 | 6.6 | 4.3 | 2.1 | | | | | | | | | | | | | | | 77 | 50 |
| | | 16CP | J32P-18 | J34P-42 | 5.5 | 5.4 | 5.3 | 5.2 | 4.7 | 4.3 | 4.1 | 3.7 | 3.1 | 2.7 | 2.3 | 1.9 | | | | | | | | | 137 | 75 |
| MCE | 1 | 23CP | J32P-24 | J34P-42 | 12.1 | 11.7 | 11.6 | 11.1 | 10.2 | 9.2 | 7.8 | 6.4 | 5.0 | 4.0 | 3.0 | | | | | | | | | | 120 | 76 |
| MSE | I | 16CP | J32P-18 | J34P-42 | 5.5 | 5.5 | 5.5 | 5.4 | 5.3 | 5.3 | 5.2 | 5.1 | 5.1 | 5.0 | 4.8 | 4.5 | 3.3 | 2.7 | 2.0 | 1.3 | 1.0 | | | | 200 | 97 |
| | | 23CP | J32P-24 | J34P-42 | 12.2 | 12.2 | 12.2 | 12.2 | 11.7 | 11.3 | 10.7 | 9.9 | 9.0 | 8.3 | 7.0 | 4.0 | 1.3 | | | | | | | | 164 | 95 |
| MSF | 1-1/2 | 22CP | J32P-20 | J34P-42 | 7.7 | 7.7 | 7.7 | 7.5 | 7.5 | 7.4 | 7.3 | 7.3 | 7.2 | 7.2 | 7.0 | 7.0 | 4.3 | 4.0 | 3.2 | 2.2 | | | | | 210 | 110 |
| | | 16CP | J32P-18 | J34P-42 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.3 | 5.2 | 5.2 | 5.1 | 5.0 | 5.0 | 4.9 | 4.7 | 4.0 | 3.8 | 3.0 | 2.3 | 1.7 | | 268 | 132 |
| | | 23CP | J32P-24 | J34P-42 | 12.2 | 12.2 | 12.2 | 12.2 | 11.8 | 11.3 | 11.2 | 11.1 | 11.0 | 10.0 | 8.7 | 7.0 | 4.0 | 2.0 | | | | | | | 195 | 110 |
| MSG | 2 | 22CP | J32P-20 | J34P-42 | 7.7 | 7.7 | 7.7 | 7.5 | 7.5 | 7.4 | 7.3 | 7.3 | 7.2 | 7.2 | 7.0 | 7.0 | 5.3 | 5.0 | 4.7 | 4.0 | 3.0 | 2.2 | | | 250 | 128 |
| | | 16CP | J32P-18 | J34P-42 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.3 | 5.3 | 5.2 | 5.1 | 5.1 | 5.0 | 5.0 | 4.8 | 4.7 | 4.5 | 4.3 | 4.0 | 3.3 | 2.7 | 314 | 172 |

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