

vertical multi-stage deep well jet pumps



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 STA-RITE 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

ORDERING INFORMATION

| Cat. No. | HP | Description | Max. Press. Reg. Setting | Pipe Tapping Sizes | | | Motor Voltage | Approx. Wt. Lbs. |
|----------|-------|-------------------|--------------------------|--------------------|--------|--------|---------------|------------------|
| | | | | Suct. | Drive | Disch. | | |
| MSD | 3/4 | Base Mounted Pump | 40 PSI | 1-1/4" | 1" | 1" | 115/230 | 67 |
| MSE | 1 | Base Mounted Pump | 60 PSI | 1-1/4" | 1-1/4" | 1" | 115/230 | 73 |
| MSF | 1-1/2 | Base Mounted Pump | 85 PSI | 1-1/4" | 1-1/4" | 1" | 230 | 120 |
| MSG | 2 | Base Mounted Pump | 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 Series MS Pump. All installations require an appropriate size adapter flange or casing adapter if bolt-on feature is desired.

Noryl® is registered trademark of General Electric Co. PRO-Source™ is a trademark of WICOR Industries.

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 – Precision-machined, 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.



vertical multi-stage deep well jet pumps

| PUMP PERFORMANCE (Capacity in Gallons Per Minute) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------|---------|--------------|-------------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------------|-------------------|--|---------------------------------|--|-----|-----|
| DEEP WELL (40 PSI) 2" SINGLE PIPE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cat. No. | HP | Jet No. | Uses Venturi | Uses Nozzle | Pumping Depth in Feet | | | | | | | | | | | | | | | | | | | | Max. Pump Shut Off Press. (PSI) | | | |
| | | | | | 30' | 40' | 50' | 60' | 70' | 80' | 90' | 100' | 110' | 120' | 130' | 140' | 180' | 200' | 220' | 240' | 260' | Jet at Min. Depth | Jet at Max. Depth | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MSD | 3/4 | 12AP | J32P-24 | J34P-42 | 10.0 | 8.3 | 6.1 | 4.7 | 3.8 | 2.0 | 1.4 | | | | | | | | | | | | | | | | 79 | 50 |
| | | 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 |
| 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 |
| | | 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 |
| | | 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 |
| | | 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 |

| PUMP PERFORMANCE (Capacity in Gallons Per Minute) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------|---------|--------------|-------------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------------------------|-------------------|-----|-----|----|
| DEEP WELL (40 PSI) 3" SINGLE PIPE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cat. No. | HP | Jet No. | Uses Venturi | Uses Nozzle | Pumping Depth in Feet | | | | | | | | | | | | | | | | | | | | Max. Pump Shut Off Press. (PSI) | | | | |
| | | | | | 30' | 40' | 50' | 60' | 70' | 80' | 90' | 100' | 110' | 120' | 130' | 140' | 180' | 200' | 220' | 240' | 260' | 280' | 300' | 320' | Jet at Min. Depth | Jet at Max. Depth | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MSD | 3/4 | 23CP | J32P-24 | J34P-42 | 10.2 | 8.4 | 6.8 | 5.8 | 4.5 | 3.1 | 2.1 | 1.1 | | | | | | | | | | | | | | | 80 | 46 | |
| | | 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 |
| MSE | 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 | |
| | | 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 | |
| MSF | 1-1/2 | 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 | |
| | | 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 | |
| MSG | 2 | 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 | |
| | | 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 | |

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.



vertical multi-stage deep well jet pumps