



MS series

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 BERKELEY® 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

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.

ORDERING INFORMATION

Cat. No.	HP	Description	Max. Press. Reg. Setting	Pipe Tapping Sizes			Motor Voltage	Approx. Wt. Lbs.
				Suct.	Drive	Disch.		
10MS	1	Base Mounted Pump	60 PSI	1-1/4"	1-1/4"	1"	115/230	73
15MS	1-1/2	Base Mounted Pump	85 PSI	1-1/4"	1-1/4"	1"	230	120
20MS	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.

BERKELEY® is a registered trademark of Pentair Water. Noryl® is registered trademark of General Electric Co.

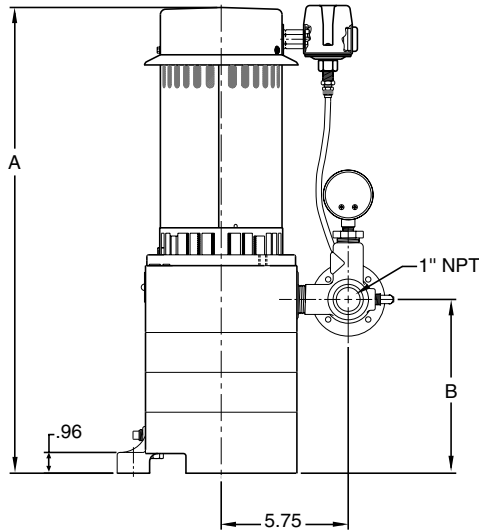
In order to provide the best products possible, specifications are subject to change.



MS series

Vertical Multi-Stage Deep Well Jet Pumps

OUTLINE DIMENSION



Cat. No.	A	B
10MS	18.94	6.20
15MS	21.53	8.04
20MS	21.53	8.04

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE (Capacity in Gallons Per Minute) DEEP WELL (40 PSI) 4" DOUBLE 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														
					30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	180'	200'	220'	240'	260'	280'	300'	320'	Depth	Depth														
10MS	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		
		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	
15MS	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	
		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	4.8	4.7	4.5	4.3	4.0	3.3	2.7															314	172	
20MS	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
		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.



MS series

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 to Water 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							
					10MS	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											
		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
15MS	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
20MS	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 to Water 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					
					10MS	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											
		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
15MS	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	
20MS	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.