C.R.I. FLUID SYSTEMS

Pumping trust. Worldwide.

Vertical Multistage Pumps

MV Series - 60Hz

An ISO 9001, ISO 14001 & OHSAS 18001 Company | CE

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About Us - Company profile

C.R.I Fluid systems USA LLC provides complete solutions where we have proven expertise in the area of Water supply, Waste water treatment, Irrigation, Agriculture, Mining, Power, Building Services and Green Energy. It has its distribution facility in Elberton, Georgia and upcoming manufacturing facility in Elberton, Georgia Texas to serve Americas.

C.R.I. – the name itself encapsulates the company's ethos: “Commitment, Reliability, Innovation”. C.R.I. has now become a household name associated with pumps, pipes, wires & cables, valves and solar system. More than 5 decades of engineering expertiseFortified global presence, CRI products are sold in over 120 countries across six continents. 10 Wholly owned subsidiary companies in South Africa, Sharjah, Spain, Brazil,

Turkey, Italy, Shanghai (China), Suzhou (China), Bangladesh & Philippines. One among the few leaders in the Industry to produce 100% stainless steel pumps and Leading manufacturers of environment friendly water filled, rewindable motors. C.R.I has extensive range of Industrial pumps that include End suction pumps, Slurry pumps, Chemical pumps, Waste water pumps, Split case pumps, Booster pumps etc.

Powered by technology and spirit of innovation, C.R.I has always set the benchmark when it comes to quality and performance. C.R.I has what it takes –experience, expertise, commitment and a clear vision – to be precursor of change, an innovator of new technologies and a standard bearer for quality.

Infrastructure

The Infrastructure of C.R.I. is pretty comprehensive with state-of-the-art machineries and a high potential R&D wing, Total production area over 3.2 million SF, fully equipped with world class, Machineries with a manufacturing capacities of more than 3 Million pumps and motors per year and over 2300 product variants

Our production facilities are accredited with international quality certifications such as NSF, ISI, CE, UR, UL, TSE, ISO 9001, ISO 14001, and OHSAS 18001. Fludyn Advanced Technology Center, a state-of-the-art R&D wing of CRI has more than 100 qualified Engineers contributing to the success of CRI. It is recognized by the Ministry of science & Technology, Govt. of India. The R&D team always stays in tune with the changing scenario and seldom fails in coming up with outstanding solutions every time.Hypress -Fully mechanized and automated Foundry with state-of-the-art technology. Needless to say, behind this renowned growth lies the determined, innovative, enthusiastic and dedicated team work. and, of course, a flawlessly maintained value system too.

C.R.I. FLUID SYSTEMS
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Vision, Mission and Values

To be the industry leader providing best - in - class fluid management solutions to individual and institutional customers and societies in our chosen markets.

We will achieve this through our dedicated efforts to enhance the welfare of all our stakeholders and by living by our values of **commitment, reliability** and **innovation.**

contents

G E N E R A L

C.R.I. Vertical Multistage centrifugal pumps (MV series) are non-self priming, Radial suction and delivery type available with ANSI standard port connections. All components like impellers, diffusers & shaft of these pumps are made of corrosion resistant AISI stainless steel and designed to deliver the best possible hydraulic efficiency. As the diffuser chambers, impellers, shaft & pump base (casing) are made of high grade stainless steel, these pumps can be used to pump clear water and are quite hygienic to use in drinking water systems too. 'O' rings and gaskets prevent leakage at the intermediate casing during high pressure. The replacement of the seal can even be done in the installed position without removing the pump from the booster system. These pumps are reliable, easily serviceable and used in water boosting units to get trouble free service for years together.

C.R.I. Multistage Vertical pumps are powered by a Totally Enclosed Fan Cooled, A.C. induction motor, suitable for continuous duty. Motor stator is made of low watt loss steel laminations assembled under pressure and rigidly locked in the frame. Dynamically balanced rotor ensures vibration and noise free operations. The varnished impregnated windings made of enamelled copper wire offer excellent resistance.

Shaft of ample size made of quality steel and precisely ground is used for transmitting the rated Horsepower. Construction of motor frames and usage of quality materials result in high performance and low temperature rise thereby increasing the life cycle of the motor. Thermal over load protector is incorporated in all single phase motors. These pumps require an adequate control system. The mounting dimensions are of NEMA standard and IEC Standard dimensions can also be supplied on request.

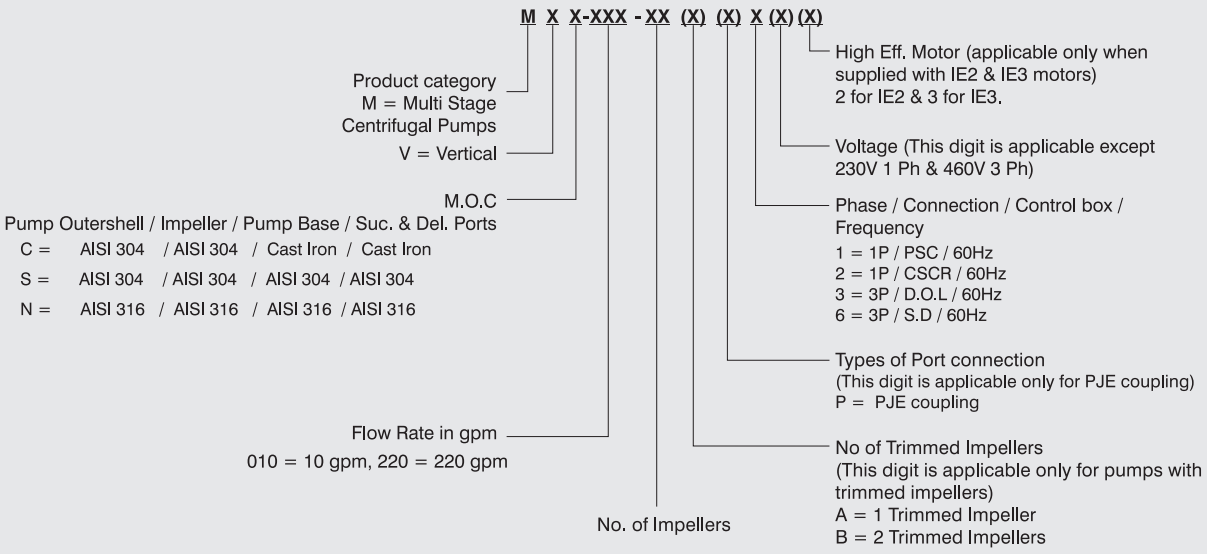
Applications : | Pressure boosting units | Industrial water supply | Fire fighting systems | Irrigation | Reverse osmosis systems | High pressure water supply | Water treatment plants | Boiler feeding | Washing systems | HVAC | Mining | Food processing industry | Golf Course.

Features : | High operating efficiency | Precise parts for hygiene | Dynamically balanced rotating parts | Balanced and rigid construction | Different type of flange options on request

IMPORTANT NOTES

| Read our operator's manual carefully before installation | Pump should not be operated dry | Install dry run preventer to protect the pumpset from dry running | Use appropriate size, good quality cable and starter / protection devices | Use low friction good quality pipes | The pipe diameters must never be smaller than the pump connections | Install pump according to our recommended Head range | Reduce number of bends, elbows, T-bends as much as possible in the pipe line | All pumpsets employ a prime mover of suitable size | Avoid fatal electrical shock or injury by disconnecting power before working on or around the pumping system | Only technically qualified personnel must perform the works complying with local electricity rules and regulations | To reduce the risk of electrical shock during operation, an appropriate earthing is mandatory | Maximum permissible supply voltage should lie between ±10% of the rated voltage | The performance data and curves are at rated voltage and only indicative | Product pictures shown are only for illustration purpose and the actual product may vary than they appear in picture | Standard pump supply is made for the maximum flange pressure rating mentioned in the dimensional drawing | Pipe sizes mentioned in inches are nominal pipe sizes and are nearest conversion of mm.

MODEL IDENTIFICATION CODE



DESCRIPTION

"MVS-160-4B62" denotes 160gpm, round flange, 4 stage with 2 trimmed impellers Vertical Multistage pump with 60Hz,3Ph, 460V IE2 motor.
"MVS-160-4B" denotes only pump end without motor.
Note : Pump is supplied with round flange by default.
Last 3 digits are applicable for pumps supplied with motor (Pumpset)

TECHNICAL DATA

Power Range	0.5 to 60 HP
Speed	3450 rpm
Degree of protection	IP 55 (Optional IP44 / IP54)
Insulation class	'F' (Optional 'B')
Versions	Single Phase 230V, 60Hz, A.C. Supply (0.5 - 3HP) (CSCR) Incorporated with thermal over load protector. Three Phase 230/460V, 60Hz, A.C. Supply (0.5 - 60HP)
Sealing	Mechanical seal - Cartridge type
Direction of rotation	Anti-clockwise viewed from driving end
Type of Duty	S1 (continuous)
Flange type	Round
Flange Standard	ANSI
Pipe Connection	ANSI 1¼, ANSI 2", ANSI 2½", ANSI 3" & ANSI 4"

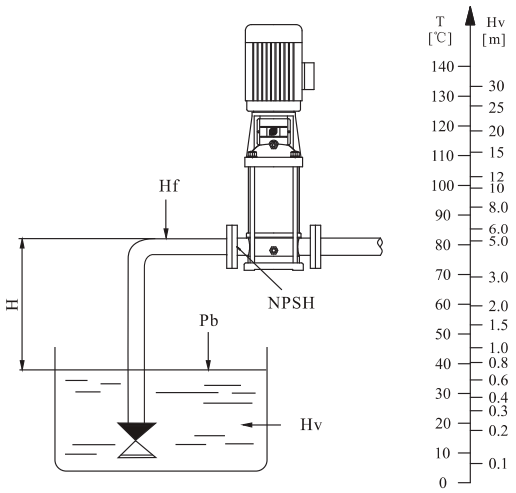
OPERATION LIMITS

Maximum Liquid Temperature	- 4° to + 248°F
Maximum Ambient Temperature	104°F
Max. Operating Pressure Range	30 Bar

PERFORMANCE RANGE

Max. Flow Rate	530 gpm / 33.4 lps
Max. Head	980 ft / 300 mtr

INLET PRESSURE



MAXIMUM INLET PRESSURE

The actual inlet pressure plus the Shutt off Pressure(Head) should always be lower than the “maximum operating pressure”.

MINIMUM INLET PRESSURE

In case that the pressure in pump is lower that steam pressure used to convey liquid, the cavitations will occur. To avoid the cavitations, and lessen the vibration and noise, you are suggested to adopt NPSH to make sure that the pump are under optimal operation condition.

The following formula can be used for calculation of minimum inlet pressure :

H = Pb x 10.2 - NPSH - Hf - Hv - Hs
H : Maximum suction head (m)
Pb : Atmosphere pressure (bar)
In a closed system, Pb means system pressure (bar)
NPSH : Net positive suction head (m)
It can be read from the point of Max.flow rate shown on NPSH curve.
Hf : Pipeline loss at the inlet (m)
It is in accordance with pipeline possible Max.flow.
Hv : Stream pressure (m)
It depends on liquid temperature and system pressure value.
Hs : Safety margin (m)
Minimum 0.5m delivery head

If the calculated result H is positive, the pump may run under the Max. suction head H. In case the calculated result H is negative, a delivery head if Min.inlet pressure is necessary.

Note: Normally, the above calculation will not be done. H is calculated in the following conditions:

1. The liquid temperature is comparatively higher.
2. Liquid flow exceeds rated value.
3. Suction head is comparatively large or inlet pipeline long.
4. System pressure is too low.
5. Bad inlet condition.

MATERIALS OF CONSTRUCTION

Part Name	Part No.	Type - C	Type - S	Type - N
Pump Outer Shell	29.06	AISI 304	AISI 304	AISI 316
Pump Head	30.00	C.I.	Upto 80gpm - C.I	Upto 80gpm - C.I.
			Above 160gpm - AISI 304 (CF8)	Above 160gpm - AISI 316(CF8m)
Pump Head Cover	30.07	NA	AISI 304* (CF8)	AISI 316* (CF8m)
Pump Head Stool (Only for 160gpm & above)	30.01	C.I.	C.I.	C.I.
Pump Base	29.01	C.I.	AISI 304 (CF8)	AISI 316 (CF8m)
Base Plate	24.03	NA	C.I.	C.I.
Impeller	19.00	AISI 304	AISI 304	AISI 316
** Mechanical Seal	16.00	SiC / SiC / FKM	SiC / SiC / FKM	SiC / SiC / FKM
*** Bush	12.03	SiC / SiC	SiC / SiC	SiC / SiC
Diffuser (Chamber)	18.07	AISI 304	AISI 304	AISI 316
Pump Shaft	22.00	AISI 304 / 431	AISI 304 / 431	AISI 316/329
Wearing Ring	17.01	Teflon	Teflon	Teflon
Flange	29.04	C.I.	AISI 304	AISI 316
Neck Ring	19.01	AISI 304	AISI 304	AISI 316
"O" Ring	32.09	EPDM / FKM	EPDM / FKM	EPDM / FKM
Coupling	22.01	M.S / C.I.	M.S / C.I.	M.S / C.I.
Split Cone	19.02	AISI 304	AISI 304	AISI 316
Split Cone Nut	19.03	AISI 304	AISI 304	AISI 316

* Provided only upto 100gpm

** Optional Mechanical Seal MOCs

TC / TC / FKM

SiC / SiC / EPDM

TC / CARBON / EPDM

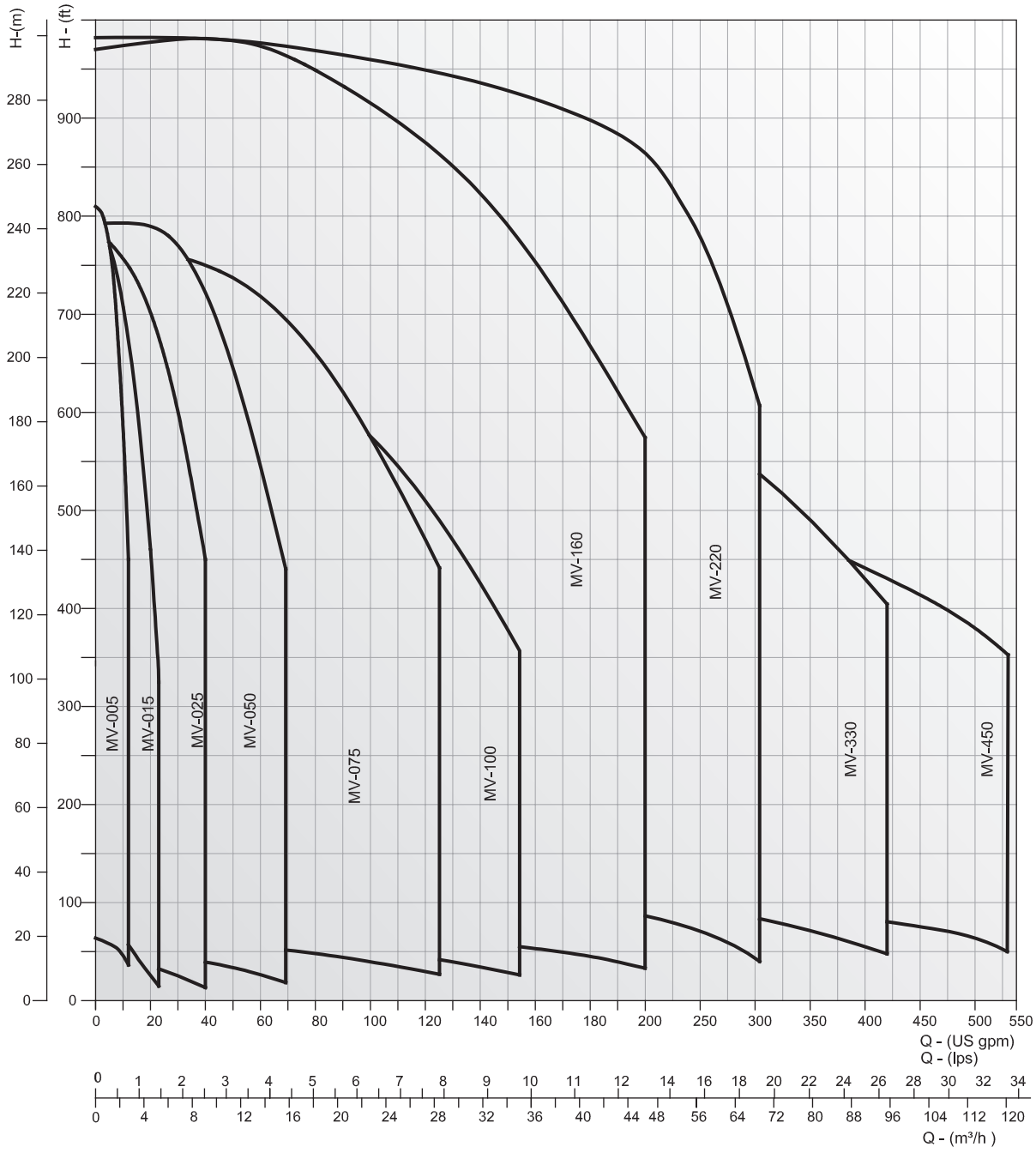
TC / TC / EPDM

*** Optional Bush MOC

TC / TC

SiC - Silicon Carbide, TC - Tungsten Carbide, FKM - Fluoroelaromer (VITON), EPDM - Ethylene Propylene Diene Monomer

GROUP PERFORMANCE CURVE

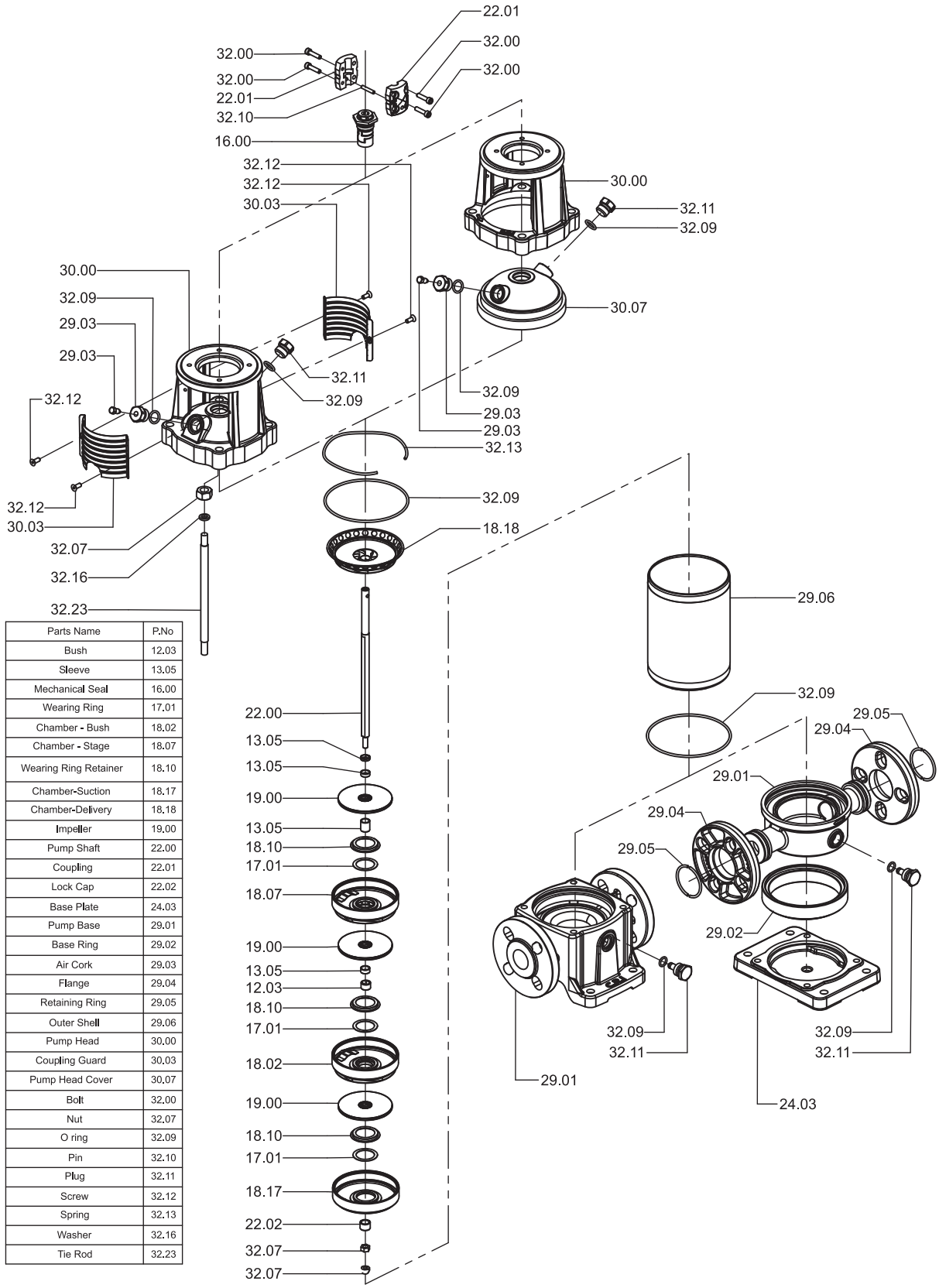


CURVE CONDITIONS

| Curve tolerance are according to ISO 9906, Grade 3B | The performance are taken at rated voltage & speed that are only indicative | Actual discharge depends on availability of water in well / tank, height of water column from the suction pipe end | The measurements were made with airless water at 68°F when pumping liquids with a density higher than of water, motors with correspondingly higher outputs must be used | The bold curves indicate the recommended performance range | Pipe friction losses have not been included in the performance curves & performance tables | The pipe connection threads are given as per BSP standard | The given performance are for specific materials of constructions | The main scales of the performance curve are “ft” and “gpm”, which have been given for head and flow respectively | The performance curves are applicable for all type of materials of construction.

EXPLODED VIEW

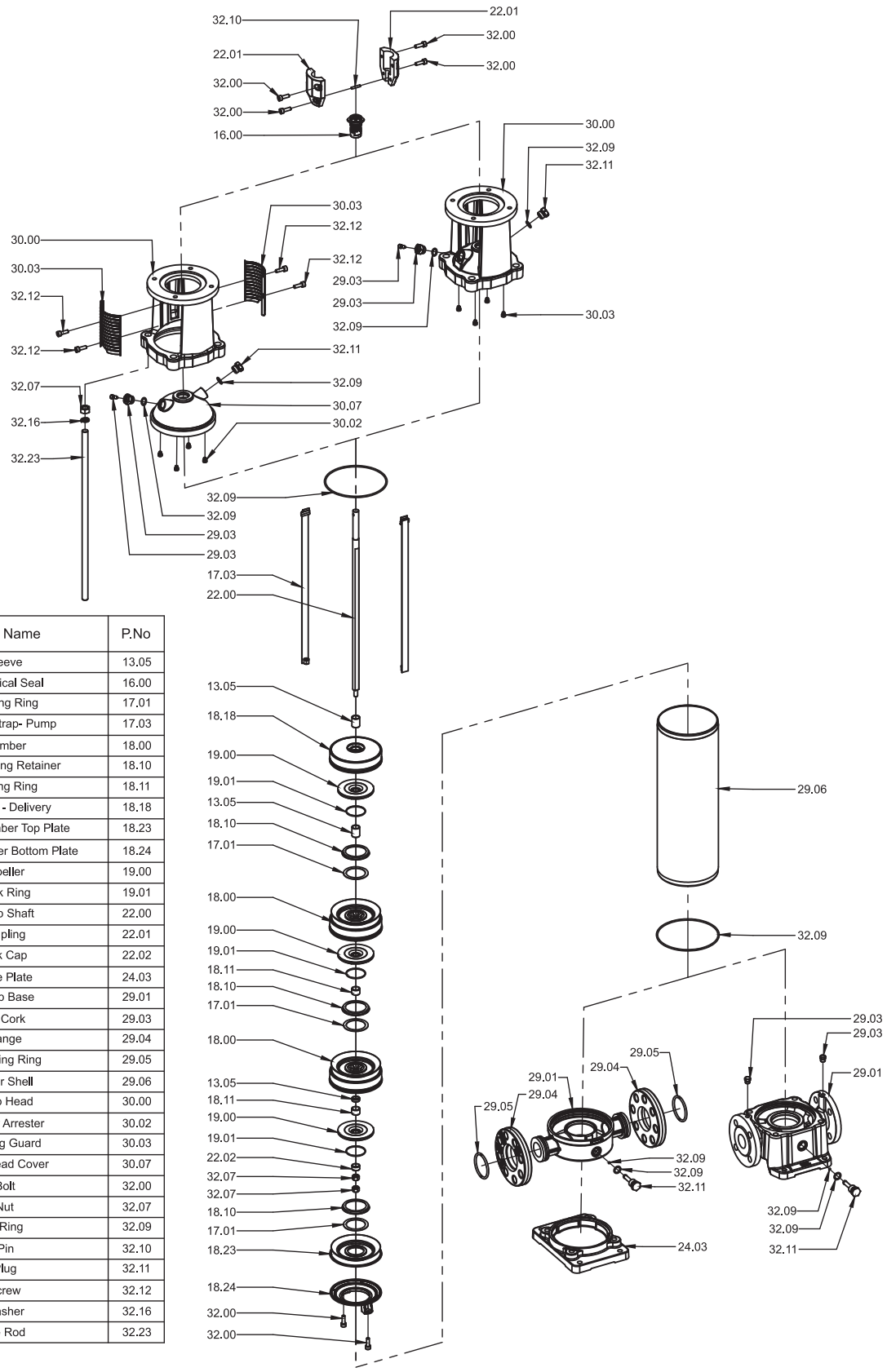
MV 5 - 25 gpm



Parts Name	P.No
Bush	12.03
Sleeve	13.05
Mechanical Seal	16.00
Wearing Ring	17.01
Chamber - Bush	18.02
Chamber - Stage	18.07
Wearing Ring Retainer	18.10
Chamber-Suction	18.17
Chamber-Delivery	18.18
Impeller	19.00
Pump Shaft	22.00
Coupling	22.01
Lock Cap	22.02
Base Plate	24.03
Pump Base	29.01
Base Ring	29.02
Air Cork	29.03
Flange	29.04
Retaining Ring	29.05
Outer Shell	29.06
Pump Head	30.00
Coupling Guard	30.03
Pump Head Cover	30.07
Bolt	32.00
Nut	32.07
O ring	32.09
Pin	32.10
Plug	32.11
Screw	32.12
Spring	32.13
Washer	32.16
Tie Rod	32.23

EXPLODED VIEW

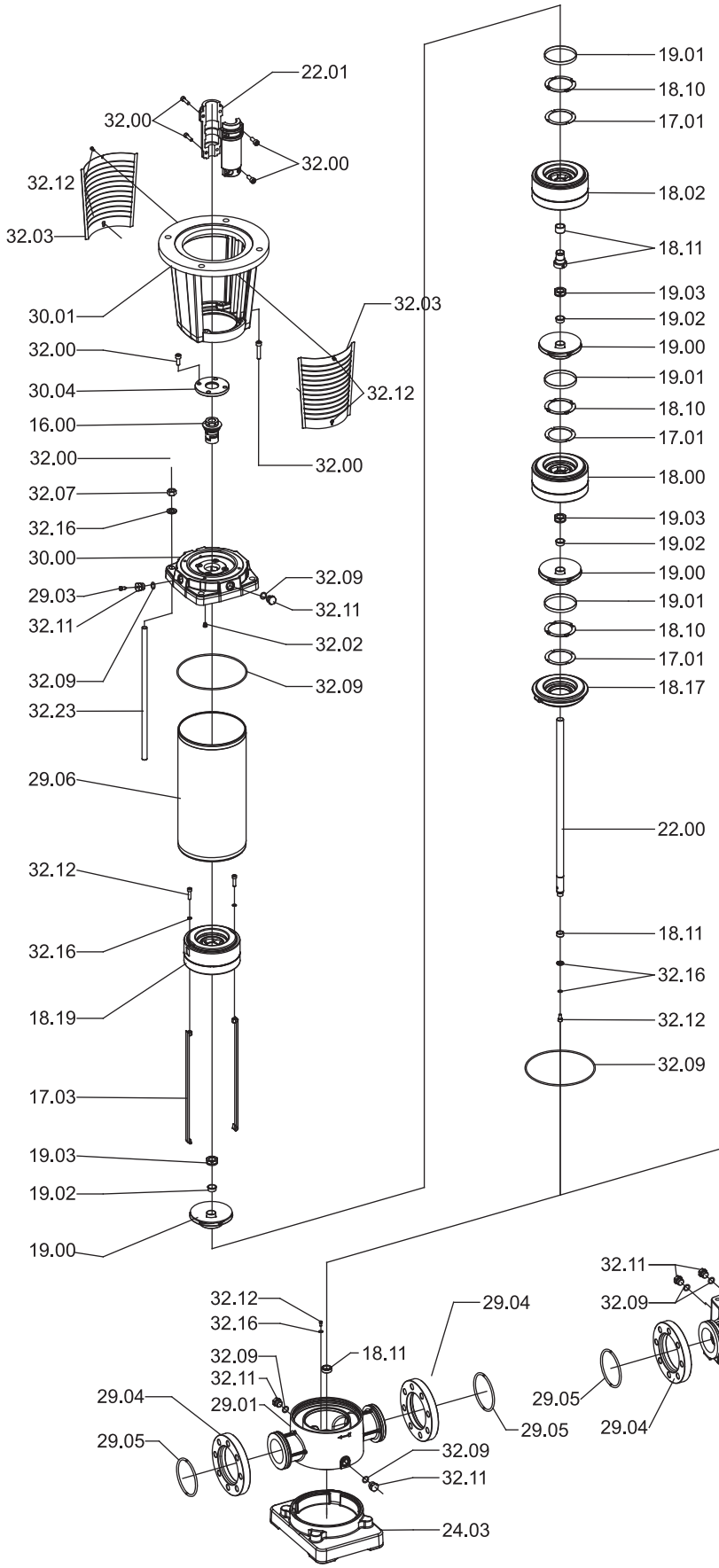
MV 50 - 100 gpm



Parts Name	P.No
Sleeve	13.05
Mechanical Seal	16.00
Wearing Ring	17.01
Locking Strap- Pump	17.03
Chamber	18.00
Wearing Ring Retainer	18.10
Bearing Ring	18.11
Chamber - Delivery	18.18
Suction Chamber Top Plate	18.23
Suction Chamber Bottom Plate	18.24
Impeller	19.00
Neck Ring	19.01
Pump Shaft	22.00
Coupling	22.01
Lock Cap	22.02
Base Plate	24.03
Pump Base	29.01
Air Cork	29.03
Flange	29.04
Retaining Ring	29.05
Outer Shell	29.06
Pump Head	30.00
Rubber Arrester	30.02
Coupling Guard	30.03
Pump Head Cover	30.07
Bolt	32.00
Nut	32.07
O-Ring	32.09
Pin	32.10
Plug	32.11
Screw	32.12
Washer	32.16
Tie Rod	32.23

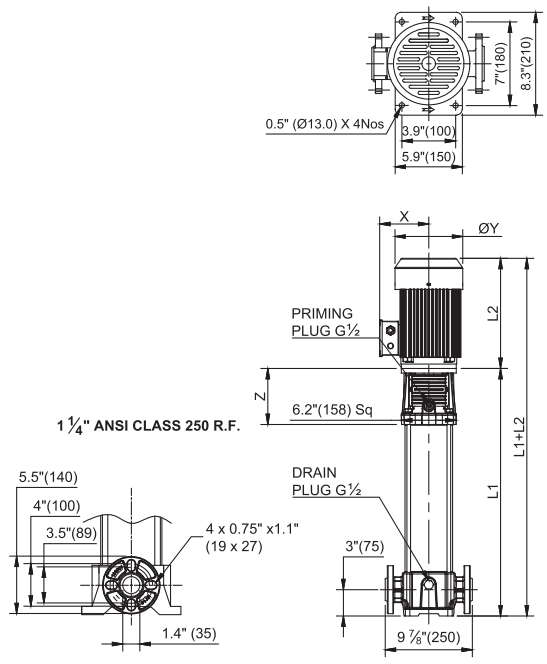
EXPLODED VIEW

MV 160 - 450 gpm

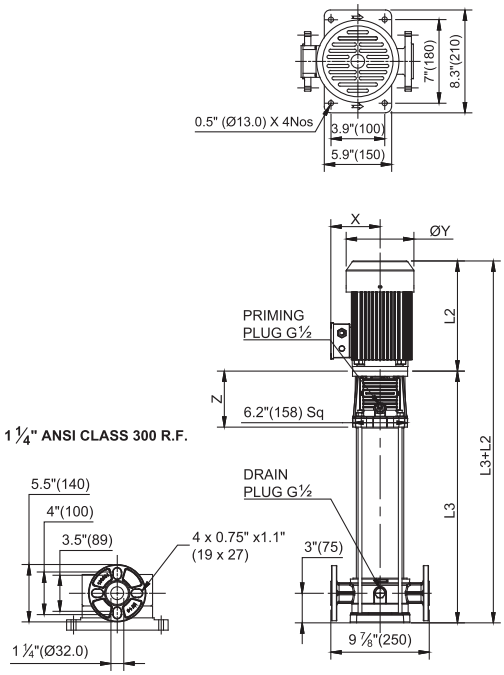


Parts Name	P.No.
Mechanical Seal	16.00
Wearing Ring	17.01
Locking Strap - Pump	17.03
Chamber	18.00
Chamber - Bearing	18.02
Wearing ring retainer	18.10
Bearing Ring	18.11
Chamber - Suction	18.17
Chamber - Top	18.19
Impeller	19.00
Neck Ring	19.01
Split cone	19.02
Split cone nut	19.03
Pump Shaft	22.00
Coupling	22.01
Base Plate	24.03
Pump Base	29.01
Air Cork	29.03
Flange	29.04
Retaining Ring	29.05
Outer Shell	29.06
Pump Head	30.00
Pump Head Stool	30.01
Rubber Arrester	30.02
Coupling Guard	30.03
Seal Lock Plate	30.04
Bolt	32.00
Nut	32.07
O - Ring	32.09
Plug	32.11
Screw	32.12
Washer	32.16
Tie Rod	32.23

MVC (ROUND FLANGE)



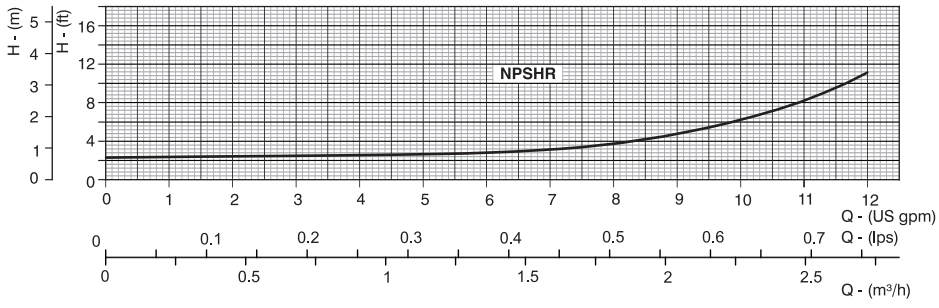
MVS & N (ROUND FLANGE)



DIMENSIONS & WEIGHT

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)												APPROXIMATE WEIGHT IN lb WITHOUT PACKING					
		NEMA FRAME				L1	L2				L3	X	ØY				Z	PUMP		MOTOR			
	HP	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph			ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVS &N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
						inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	lb	lb	lb	lb	lb	lb
MVS-005/02	0.5					11.3	9.16	9.29	9.16	9.29	11.26	5.19	6.19	6.19	6.19	6.19	6.4	34.3	26.4	21	21	19	19
MVS-005/03	0.5					12	9.16	9.29	9.16	9.29	11.97	5.19	6.19	6.19	6.19	6.19	6.4	35.6	27.7	21	21	19	19
MVS-005/04	0.5					12.7	9.16	9.29	9.16	9.29	12.68	5.19	6.19	6.19	6.19	6.19	6.4	36.9	29	21	21	19	19
MVS-005/05	0.5					13.4	9.16	9.29	9.16	9.29	13.39	5.19	6.19	6.19	6.19	6.19	6.4	38.3	30.3	21	21	19	19
MVS-005/06	0.75					14	10.79	9.91	9.16	9.29	14.09	5.19	6.19	6.19	6.19	6.19	6.4	39.6	31.6	27	29	21	21
MVS-005/07	0.75					14.8	10.79	9.91	9.16	9.29	14.80	5.19	6.19	6.19	6.19	6.19	6.4	39.6	31.6	27	29	21	21
MVS-005/08	1.0					15.5	10.66	11.19	9.16	9.29	15.51	5.74	6.19	7.19	6.19	6.19	6.4	42.1	34.3	32	40	23	23
MVS-005/09	1.0					16.3	10.66	11.19	9.16	9.29	16.22	5.74	6.19	7.19	6.19	6.19	6.4	43.5	35.6	32	40	23	23
MVS-005/10	1.50					17	10.67	11.19	10.66	9.91	16.93	5.74	6.19	7.19	6.19	6.19	6.4	44.8	36.9	32	40	30	28
MVS-005/11	1.50					17.6	10.67	11.19	10.66	9.91	17.64	5.74	6.19	7.19	6.19	6.19	6.4	46	38.3	32	40	30	28
MVS-005/12	1.50					18.4	10.67	11.19	10.66	9.91	18.35	5.74	6.19	7.19	6.19	6.19	6.4	47.5	39.6	32	40	30	28
MVS-005/13	1.50					19	10.67	11.19	10.66	9.91	19.06	5.74	6.19	7.19	6.19	6.19	6.4	48.8	40.9	32	40	30	28
MVS-005/15	2.0					20.5	11.18	12.06	11.16	10.79	20.47	5.74	7.19	7.19	6.19	6.19	6.4	51.5	43.5	43	51	32	33
MVS-005/17	2.0					22	11.18	12.06	11.16	10.79	21.89	5.74	7.19	7.19	6.19	6.19	6.4	54.2	46.2	43	51	32	33
MVS-005/19	3.0					24	11.57	13.44	11.18	11.16	24.02	5.75	6.5	7.19	7.16	7.19	7.13	56.8	48.8	49	64	41	44
MVS-005/21	3.0					25.5	11.57	13.44	11.18	11.16	25.43	5.75	6.5	7.19	7.16	7.19	7.13	59.4	51.5	49	64	41	44
MVS-005/23	3.0					26.8	11.57	13.44	11.18	11.16	26.85	5.75	6.5	7.19	7.16	7.19	7.13	62	54.1	49	64	41	44
MVS-005/25	3.0					28.3	11.57	13.44	11.18	11.16	28.27	5.75	6.5	7.19	7.16	7.19	7.13	64.7	56.8	49	64	41	44
MVS-005/27	3.0					29.7	11.57	13.44	11.18	11.16	29.68	5.75	6.5	7.19	7.16	7.19	7.13	67.4	59.4	49	64	41	44
		56C																					
		182TC																					

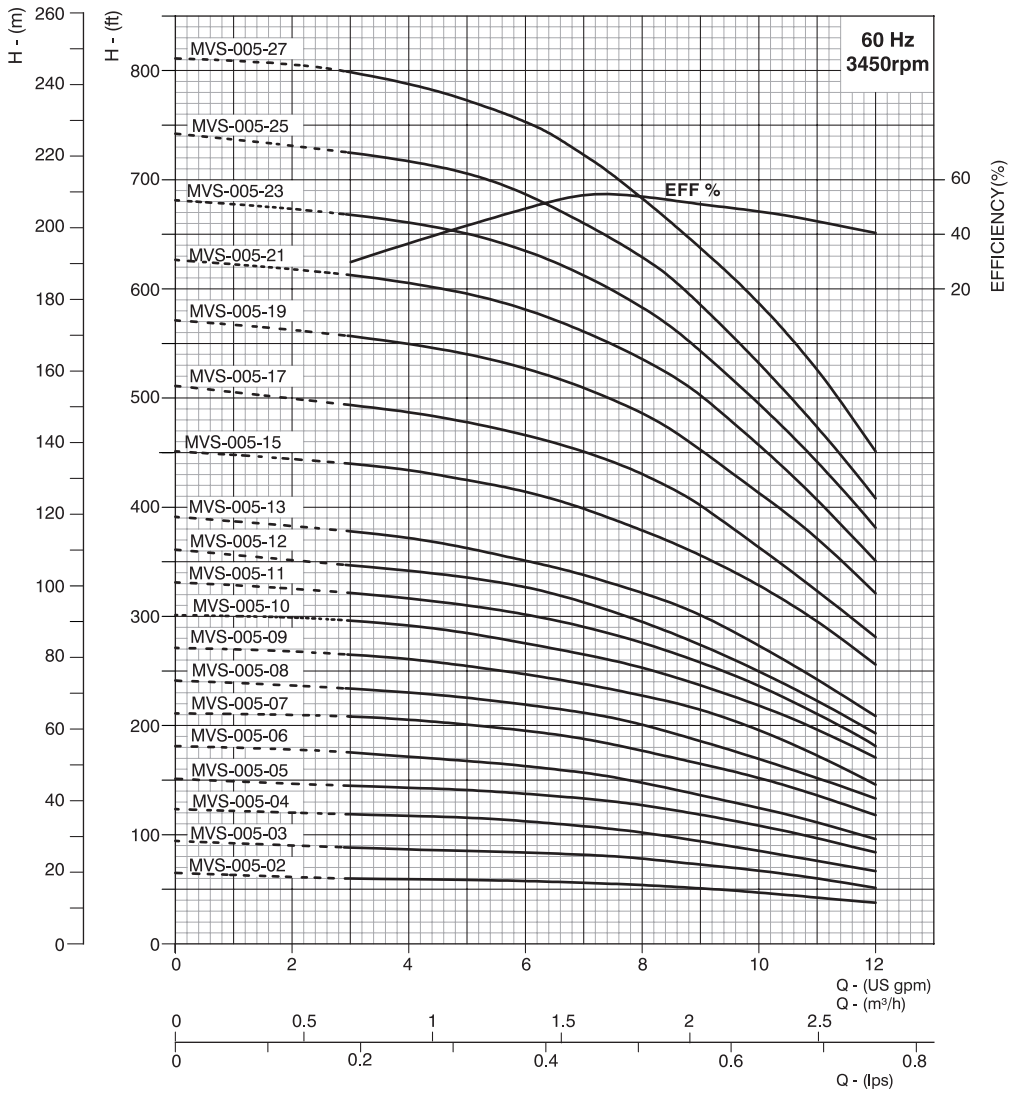
NPSHR CURVE



MV-005

PERFORMANCE CURVES

NOMINAL FLOW : 5 gpm



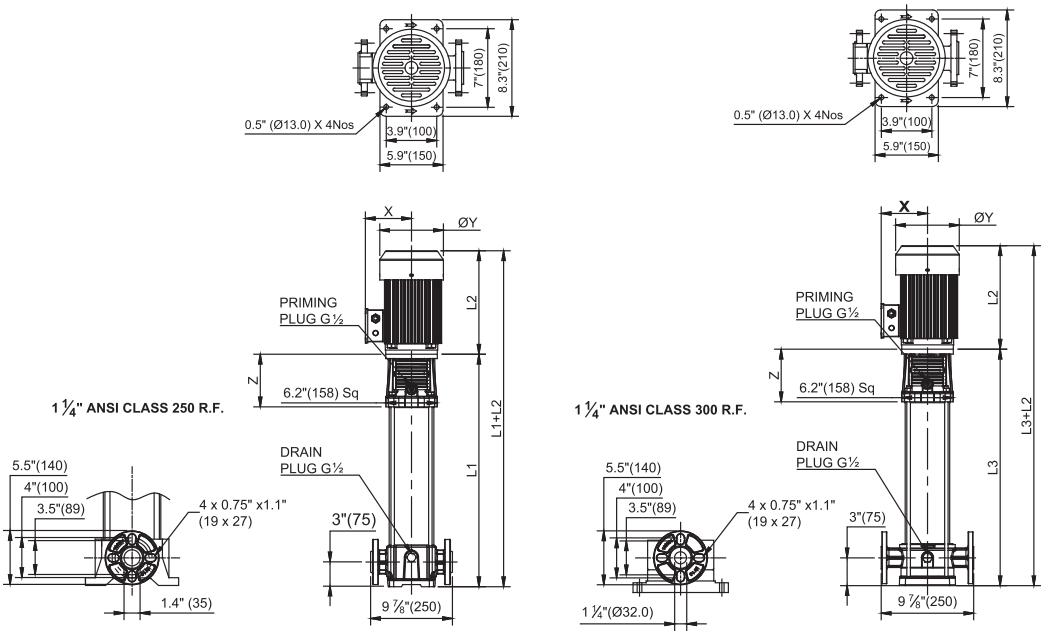
PERFORMANCE TABLE

PIPE SIZE : ANSI 1¼ X 1¼

PUMP MODEL	MOTOR POWER	DISCHARGE						
	HP	lps	0	0.25	0.38	0.50	0.63	0.76
		US gpm	0	4	6	8	10	12
MVS-005/02	0.5	TOTAL MANOMETRIC HEAD IN FEET	62	59	58	53	46	38
MVS-005/03	0.5		93	86	82	78	66	50
MVS-005/04	0.5		122	116	110	100	83	66
MVS-005/05	0.5		150	141	136	126	109	82
MVS-005/06	0.75		180	170	162	147	123	95
MVS-005/07	0.75		210	205	194	176	150	119
MVS-005/08	1.0		240	230	219	200	169	132
MVS-005/09	1.0		270	260	246	228	195	145
MVS-005/10	1.50		300	290	274	251	219	170
MVS-005/11	1.50		330	315	300	275	235	180
MVS-005/12	1.50		360	340	326	294	250	191
MVS-005/13	1.50		390	370	350	320	271	209
MVS-005/15	2.0		450	432	412	379	328	255
MVS-005/17	2.0		510	486	465	430	361	280
MVS-005/19	3.0		570	549	526	484	411	320
MVS-005/21	3.0		625	604	580	534	455	350
MVS-005/23	3.0		680	660	633	581	493	380
MVS-005/25	3.0		740	716	688	629	530	408
MVS-005/27	3.0		810	788	751	682	586	450

Replace the 3rd digit in model name as "C" for Cast Iron pump base & pump head models and "N" for AISI 316 construction.
The given performance is same for Type - C, S, N
In view of the continuous developments the Information / Descriptions / Specifications / Illustrations are subject to change without notice.

MVC (ROUND FLANGE)

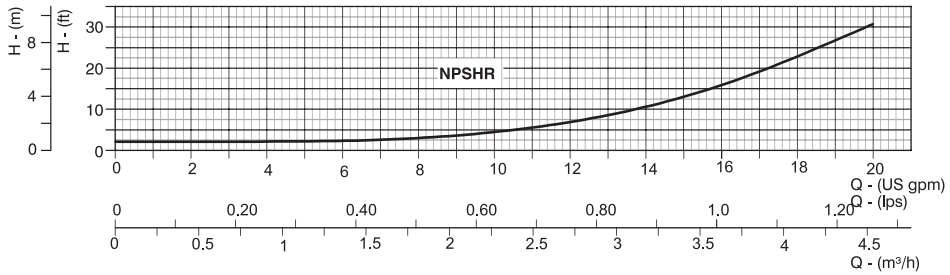


MVS & N (ROUND FLANGE)

DIMENSIONS & WEIGHT

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)												APPROXIMATE WEIGHT IN lb WITHOUT PACKING						
	HP	NEMA FRAME				L1	L2				L3	X	ØY				Z	PUMP		MOTOR				
		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph			ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVS & N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
						inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	lb	lb	lb	lb	lb	lb
MVS-015/02	0.50	56C				11.30	9.16	9.29	9.16	9.29	11.26	5.19	6.19	6.19	6.19	6.19	6.4	34.3	26.3	21	21	19	19
MVS-015/03	0.50					12.01	9.16	9.29	9.16	9.29	11.97	5.19	6.19	6.19	6.19	6.19	6.4	35.6	27.7	21	21	19	19
MVS-015/04	0.75					12.72	10.79	9.91	9.16	9.29	12.68	5.19	6.19	6.19	6.19	6.19	6.4	37	29	27	29	21	21
MVS-015/05	0.75					13.43	10.79	9.91	9.16	9.29	13.39	5.19	6.19	6.19	6.19	6.19	6.4	38.3	30.1	27	29	21	21
MVS-015/06	1.0					14.13	10.66	11.19	9.16	9.29	14.09	5.74	6.19	7.19	6.19	6.19	6.4	39.6	31.6	32	40	23	23
MVS-015/07	1.5					14.84	10.67	11.19	10.66	9.91	14.80	5.74	6.19	7.19	6.19	6.19	6.4	40.9	33	32	40	30	28
MVS-015/08	1.5					15.55	10.67	11.19	10.66	9.91	15.51	5.74	6.19	7.19	6.19	6.19	6.4	42.2	34.3	32	40	30	28
MVS-015/09	1.5					16.26	10.67	11.19	10.66	9.91	16.22	5.74	6.19	7.19	6.19	6.19	6.4	43.5	35.6	32	40	30	28
MVS-015/10	2.0					16.97	11.18	12.06	11.16	10.79	16.93	5.74	7.19	7.19	6.19	6.19	6.4	44.87	37	43	51	32	33
MVS-015/11	2.0					17.68	11.18	12.06	11.16	10.79	17.64	5.74	7.19	7.19	6.19	6.19	6.4	46.2	38.3	43	51	32	33
MVS-015/12	2.0					18.39	11.18	12.06	11.16	10.79	18.35	5.74	7.19	7.19	6.19	6.19	6.4	47.5	39.6	43	51	32	33
MVS-015/13	3.0	182TC				19.80	11.57	13.44	11.18	11.16	19.76	5.75	6.5	7.19	7.16	7.19	7.13	48.8	41	49	64	41	44
MVS-015/15	3.0					21.22	11.57	13.44	11.18	11.16	21.18	5.75	6.5	7.19	7.16	7.19	7.13	51.5	43.5	49	64	41	44
MVS-015/17	3.0					22.64	11.57	13.44	11.18	11.16	22.60	5.75	6.5	7.19	7.16	7.19	7.13	54.1	46.2	49	64	41	44
MVS-015/19	5.0	213TC		182TC		24.06	13.93	15.43	12.55	13.93	24.02	6.87	8.88	8.86	9.02	8.86	7.13	56.7	48.8	81	92	62	69
MVS-015/21	5.0					25.47	13.93	15.43	12.55	13.93	25.43	6.87	8.88	8.86	9.02	8.86	7.13	59.4	51.5	81	92	62	69
MVS-015/23	5.0					26.89	13.93	15.43	12.55	13.93	26.85	6.87	8.88	8.86	9.02	8.86	7.13	62.1	54.12	81	92	62	69
MVS-015/25	5.0					28.31	13.93	15.43	12.55	13.93	28.27	6.87	8.88	8.86	9.02	8.86	7.13	64.7	56.8	81	92	62	69

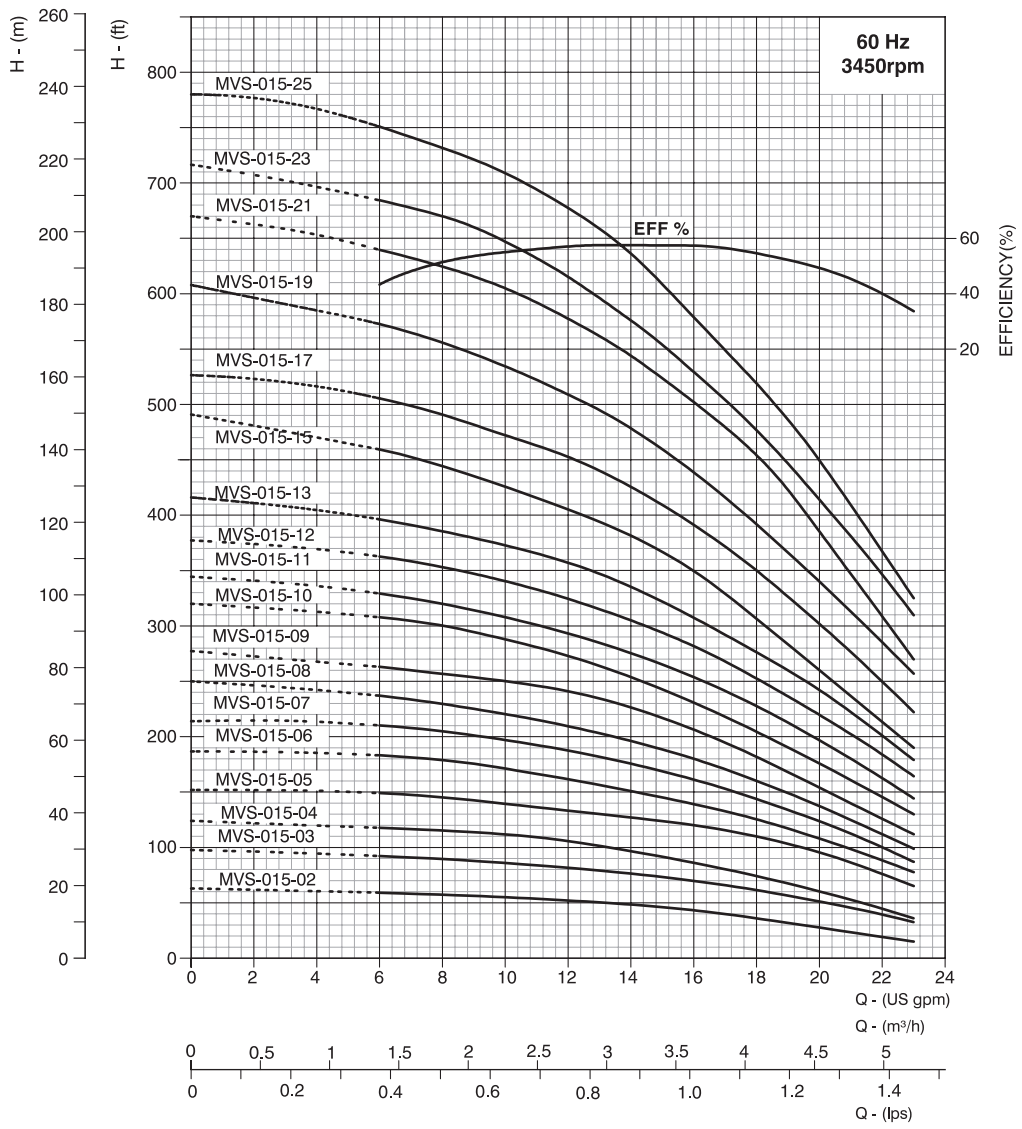
NPSHR CURVE



MV-015

PERFORMANCE CURVES

NOMINAL FLOW : 15 gpm



PERFORMANCE TABLE

PIPE SIZE : ANSI 1¼ X 1¼

PUMP MODEL	MOTOR POWER	DISCHARGE						
		m³/h	0	0.38	0.63	0.88	1.13	1.45
	HP	US gpm	0	6	10	14	18	23
MVS-015-02	0.50	TOTAL MANOMETRIC HEAD IN FEET	62	60	55	50	35	15
MVS-015-03	0.50		98	92	85	75	60	30
MVS-015-04	0.75		125	118	111	95	75	35
MVS-015-05	0.75		151	150	140	128	110	65
MVS-015-06	1.0		188	182	170	150	125	79
MVS-015-07	1.5		212	210	198	175	145	89
MVS-015-08	1.5		250	238	220	195	160	100
MVS-015-09	1.5		278	262	250	225	180	112
MVS-015-10	2.0		320	308	290	255	205	130
MVS-015-11	2.0		345	330	308	275	226	145
MVS-015-12	2.0		378	362	340	305	250	165
MVS-015-13	3.0		416	395	372	335	275	180
MVS-015-15	3.0		490	460	426	380	308	190
MVS-015-17	3.0		528	505	470	425	350	223
MVS-015-19	5.0		608	572	535	478	390	255
MVS-015-21	5.0		670	640	605	542	450	270
MVS-015-23	5.0		718	685	645	575	475	310
MVS-015-25	5.0		780	750	710	635	520	325

Replace the 3rd digit in model name as "C" for Cast Iron pump base & pump head models and "N" for AISI 316 construction.
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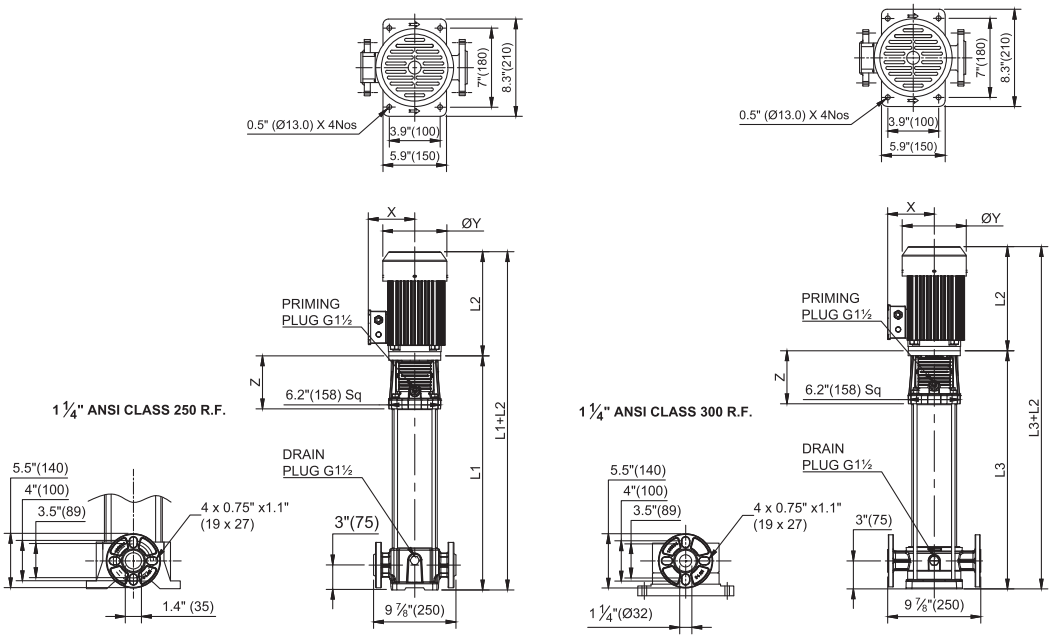
MVC (ROUND FLANGE)

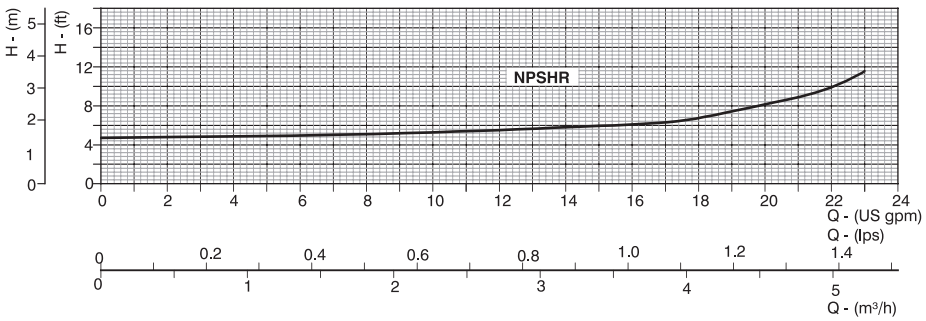


MVS & N (ROUND FLANGE)

DIMENSIONS & WEIGHT

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)												APPROXIMATE WEIGHT IN lb WITHOUT PACKING					
		NEMA FRAME				L1	L2				L3	X	ØY				Z	PUMP		MOTOR			
	HP	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph			ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVS & N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
		inch				inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	lb	lb	lb	lb	lb	lb
MVS-025/02	0.75	56C				12.4	10.79	9.91	9.16	9.29	11.97	5.19	6.19	6.19	6.19	6.19	6.4	35.4	27.5	27	29	21	21
MVS-025/03	1.0					13.4	10.66	11.19	9.16	9.29	13.03	5.74	6.19	7.19	6.19	6.19	6.4	37.5	29.5	32	40	23	23
MVS-025/04	1.5					14.5	10.67	11.19	10.66	9.91	14.09	5.74	6.19	7.19	6.19	6.19	6.4	39.5	31.5	32	40	30	28
MVS-025/05	2.0					15.6	11.18	12.06	11.16	10.79	15.16	5.74	7.19	7.19	6.19	6.19	6.4	41.4	33.5	43	51	32	33
MVS-025/06	2.0					17.3	11.18	12.06	11.16	10.79	16.22	5.74	7.19	7.19	6.19	6.19	6.4	43.4	35	43	51	32	33
MVS-025/07	3.0	182TC				18.4	11.57	13.44	11.18	11.16	17.99	5.75	6.5	7.19	7.16	7.19	7.13	45.4	37.5	49	64	41	44
MVS-025/08	3.0					19.4	11.57	13.44	11.18	11.16	19.06	5.75	6.5	7.19	7.16	7.19	7.13	47.4	39.5	49	64	41	44
MVS-025/09	3.0					20.5	11.57	13.44	11.18	11.16	20.12	5.75	6.5	7.19	7.16	7.19	7.13	49.8	41.9	49	64	41	44
MVS-025/10	5.0	213TC		182TC		21.6	13.93	15.43	12.55	13.93	21.18	6.87	8.88	8.86	9.02	8.86	7.13	51.8	43.8	81	92	62	69
MVS-025/11	5.0					22.6	13.93	15.43	12.55	13.93	22.24	6.87	8.88	8.86	9.02	8.86	7.13	53.8	45.8	81	92	62	69
MVS-025/12	5.0					23.7	13.93	15.43	12.55	13.93	23.31	6.87	8.88	8.86	9.02	8.86	7.13	55.8	47.8	81	92	62	69
MVS-025/13	5.0					24.8	13.93	15.43	12.55	13.93	24.37	6.87	8.88	8.86	9.02	8.86	7.13	57.8	49.8	81	92	62	69
MVS-025/14	5.0					25.8	13.93	15.43	12.55	13.93	25.43	6.87	8.88	8.86	9.02	8.86	7.13	59.7	51.8	81	92	62	69
MVS-025/15	5.0					26.9	13.93	15.43	12.55	13.93	26.50	6.87	8.88	8.86	9.02	8.86	7.13	61.7	53.8	81	92	62	69
MVS-025/16	5.0					28.0	13.93	15.43	12.55	13.93	27.56	6.87	8.88	8.86	9.02	8.86	7.13	63.7	55.8	81	92	62	69
MVS-025/18	7.5	213TC				31.1	13.88	15.53	13.93	15.43	30.67	8.05	8.89	10.62	8.88	8.86	8.1	67.7	59.7	100	120	75	85
MVS-025/20	7.5					33.2	13.88	15.53	13.93	15.43	32.80	8.05	8.89	10.62	8.88	8.86	8.1	71.6	63.7	100	120	75	85
MVS-025/22	7.5					35.3	13.88	15.53	13.93	15.43	34.92	8.05	8.89	10.62	8.88	8.86	8.1	75.6	67.7	100	120	75	85
MVS-025/24	7.5					37.4	13.88	15.53	13.93	15.43	37.05	8.05	8.89	10.62	8.88	8.86	8.1	79.6	71.6	100	120	75	85

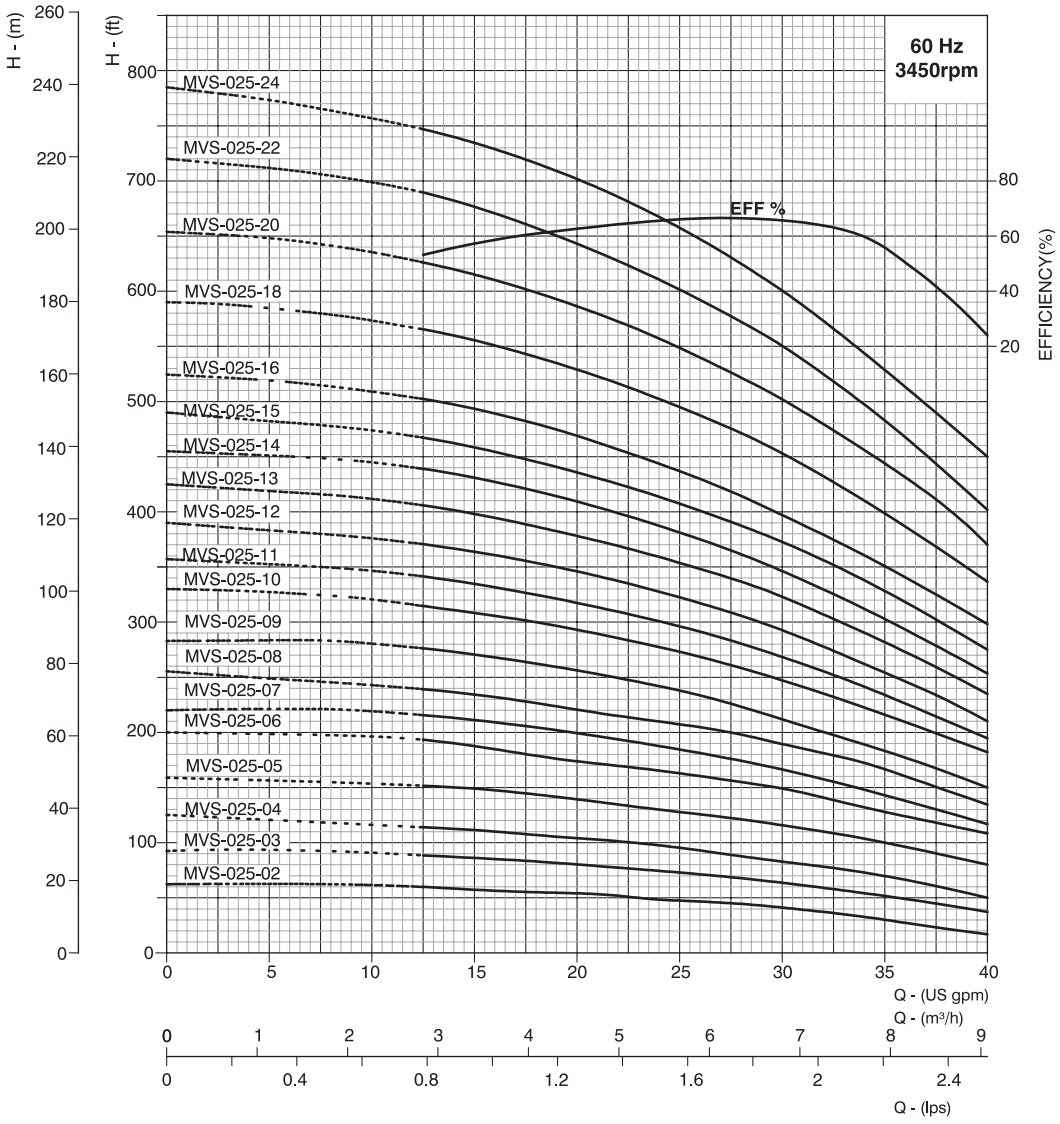
NPSHR CURVE



MV-025

PERFORMANCE CURVES

NOMINAL FLOW : 25 gpm



PERFORMANCE TABLE

PIPE SIZE : ANSI 1¼X1¼

PUMP MODEL	MOTOR POWER	DISCHARGE						
		lps	0	0.63	1.26	1.89	2.21	2.52
	HP	US gpm	0	10	20	30	35	40
MVS-025-02	0.75	TOTAL MANOMETRIC HEAD IN FEET	62	61	54	41	30	18
MVS-025-03	1.0		92	91	80	64	51	38
MVS-025-04	1.5		125	118	104	82	70	50
MVS-025-05	2.0		159	153	140	116	100	80
MVS-025-06	2.0		200	198	174	150	129	109
MVS-025-07	3.0		220	219	200	166	142	118
MVS-025-08	3.0		255	242	220	190	166	135
MVS-025-09	3.0		288	280	256	211	182	150
MVS-025-10	5.0		330	320	292	248	217	182
MVS-025-11	5.0		358	348	319	269	234	195
MVS-025-12	5.0		390	377	347	292	254	210
MVS-025-13	5.0		424	411	379	322	280	235
MVS-025-14	5.0		455	445	410	345	302	253
MVS-025-15	5.0		490	473	435	372	329	275
MVS-025-16	5.0		525	510	470	398	350	300
MVS-025-18	7.5		590	572	530	453	400	339
MVS-025-20	7.5		653	635	587	501	445	370
MVS-025-22	7.5		720	700	642	550	482	400
MVS-025-24	7.5		785	756	701	600	530	450

Replace the 3rd digit in model name as "C" for Cast Iron pump base & pump head models and "N" for AISI 316 construction.
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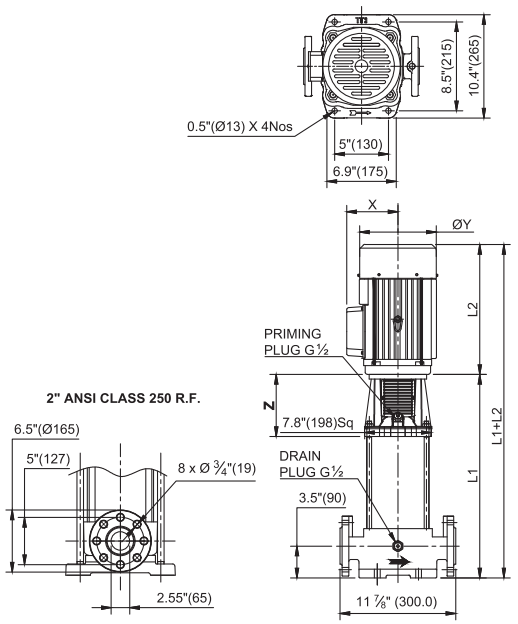
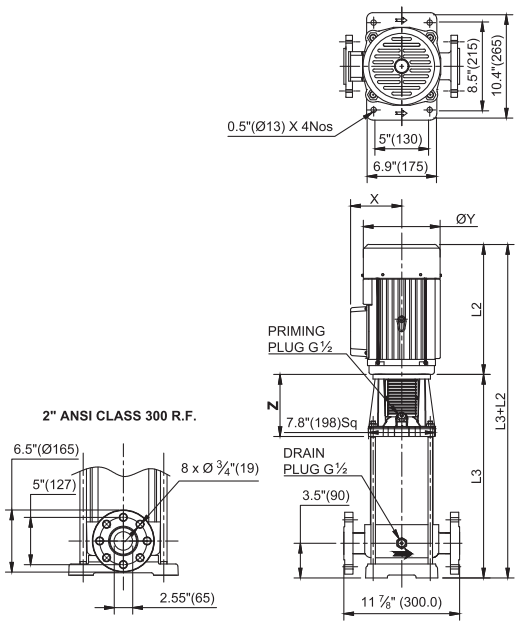
MVC (ROUND FLANGE)



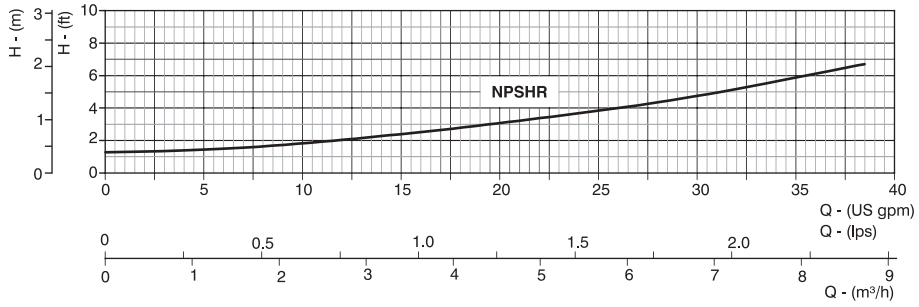
MVS & N (ROUND FLANGE)



DIMENSIONS & WEIGHT

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)												APPROXIMATE WEIGHT IN lb WITHOUT PACKING					
		NEMA FRAME				L1	L2				L3	X	ØY				Z	PUMP		MOTOR			
	HP	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph			ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVS & N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
		inch				inch	inch				inch	inch	inch				inch	lb		lb			
MVS-050/01	0.75	56C				12.7	10.79	9.91	9.16	9.29	13.11	5.19	6.19	6.19	6.19	6.19	7.13	71.7	62.8	27	29	21	21
MVS-050/02	1.5					13.8	10.67	11.19	10.66	9.91	14.29	5.74	6.19	7.19	6.19	6.19	7.13	73.5	65	32	40	30	28
MVS-050/03	3.0	182TC				15.8	11.57	13.44	11.18	11.16	16.22	5.75	6.5	7.19	7.16	7.19	8.1	76.1	67.2	49	64	41	44
MVS-050/04	3.0					17	11.57	13.44	11.18	11.16	17.40	5.75	6.5	7.19	7.16	7.19	8.1	78.3	69.4	49	64	41	44
MVS-050/05	5.0	213TC		182TC		18.2	13.93	15.43	12.55	13.93	18.58	6.87	8.88	8.86	9.02	8.86	8.1	80.5	71.7	81	92	62	69
MVS-050/06	5.0					19.3	13.93	15.43	12.55	13.93	19.76	6.87	8.88	8.86	9.02	8.86	8.1	82.7	73.9	81	92	62	69
MVS-050/07	7.5	213TC				21.2	13.88	15.53	13.93	15.43	21.65	8.05	8.89	10.62	8.88	8.86	8.8	89.3	80.5	100	120	75	85
MVS-050/08	7.5					22.4	13.88	15.53	13.93	15.43	22.83	8.05	8.89	10.62	8.88	8.86	8.8	91.5	82.8	100	120	75	85
MVS-050/09	7.5					23.6	13.88	15.53	13.93	15.43	24.02	8.05	8.89	10.62	8.88	8.86	8.8	93.7	84.8	100	120	75	85
MVS-050/10	7.5					24.8	13.88	15.53	13.93	15.43	25.20	8.05	8.89	10.62	8.88	8.86	8.8	96	87.1	100	120	75	85
MVS-050/12	10	213TC		215TC		27.2	16.63	16.68	15.55	15.51	27.56	8.77	10.62	10.18	10.18	10.28	8.8	98.1	89.3	132	145	107	122
MVS-050/14	15	-		254TC		32.7	-	-	15.55	16.57	33.11	9.22	-	-	10.18	10.28	12	140	131.2		-	125	195
MVS-050/16	15					35.1	-	-	15.55	16.57	35.47	9.22	-	-	10.18	10.28	12	144.4	135.6		-	125	195
MVS-050/17	15					36.4	-	-	15.55	16.57	36.65	9.22	-	-	10.18	10.28	12	146.6	137.8		-	125	195

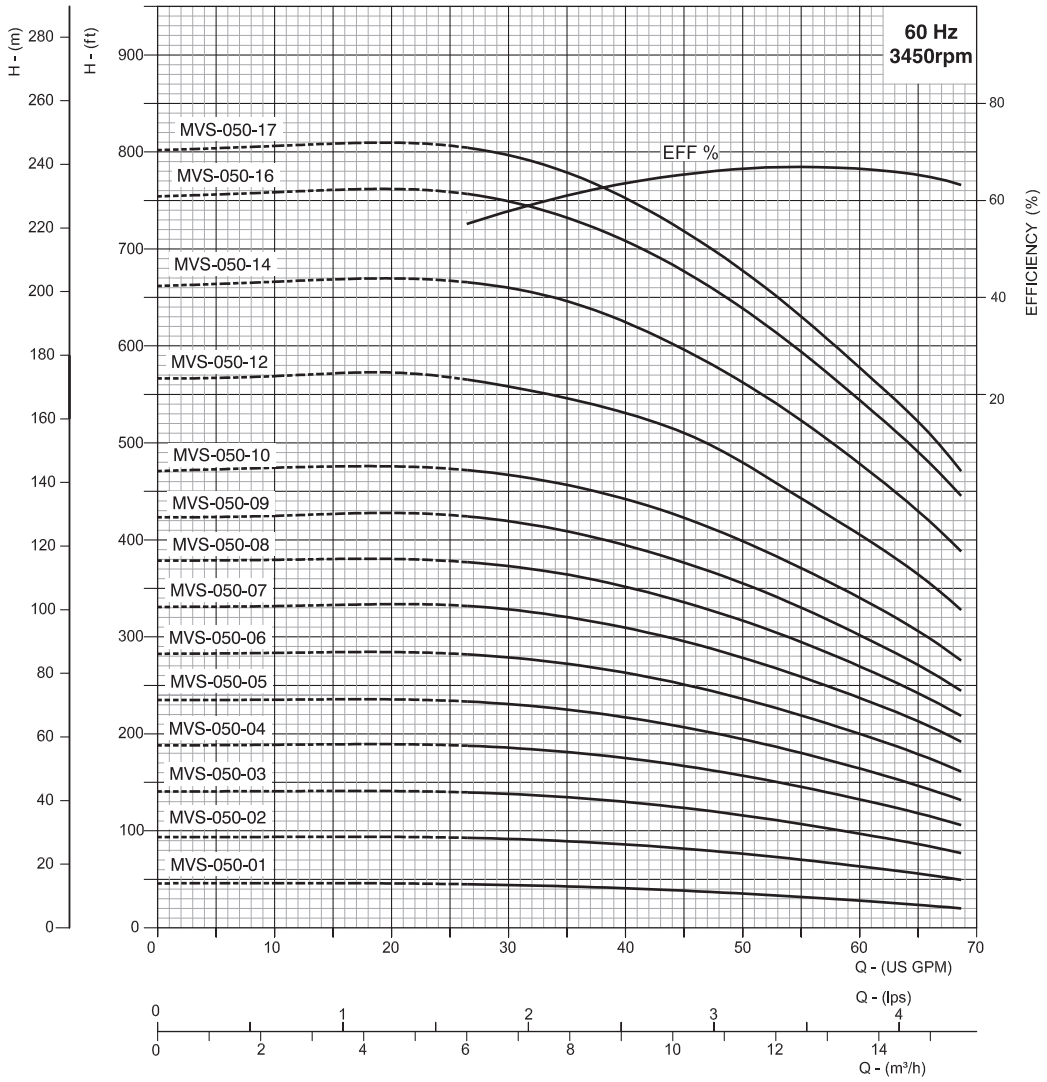
NPSHR CURVE



MV-050

PERFORMANCE CURVES

NOMINAL FLOW : 50 gpm



PERFORMANCE TABLE

PIPE SIZE : ANSI 2" X 2"

PUMP MODEL	MOTOR POWER		DISCHARGE							
	HP	lps	0	0.63	1.26	1.89	2.52	3.15	3.78	4.35
		US gpm	0	10	20	30	40	50	60	69
MVS-050/01	0.75	TOTAL MANOMETRIC HEAD IN FEET	45	45	44.5	43	39.5	34	26.7	18.5
MVS-050/02	1.5		92.5	92.5	92	90	84	74	60.5	46.5
MVS-050/03	3.0		140	140	139.5	139	130	116.5	98	71.5
MVS-050/04	3.0		187	187	186.5	183	172	152	128	101.5
MVS-050/05	5		235	235	234.5	231	217.5	194	163	131
MVS-050/06	5		280	280	279.5	276.5	258.5	231	194	155
MVS-050/07	7.5		327	327	326.5	319	299.5	267	223	178
MVS-050/08	7.5		373.5	373	372	369.5	348	311	262	210
MVS-050/09	7.5		421	421	420	413	388	346.5	293	233.7
MVS-050/10	7.5		466.5	466.5	466	457	429	387	321	257.5
MVS-050/12	10		559	559	558	544	510	455	383	306
MVS-050/14	15		650	646	645	628	588	523	436	348
MVS-050/16	15		747	747	746	731	687	614	516	418
MVS-050/17	15		792.5	793.5	793	775	725.5	650	546.5	440.5

Replace the 3rd digit in model name as "C" for Cast Iron pump base & pump head models and "N" for AISI 316 construction.
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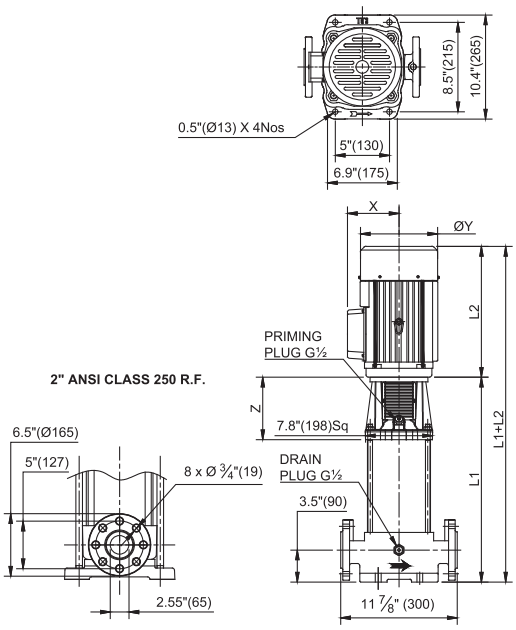
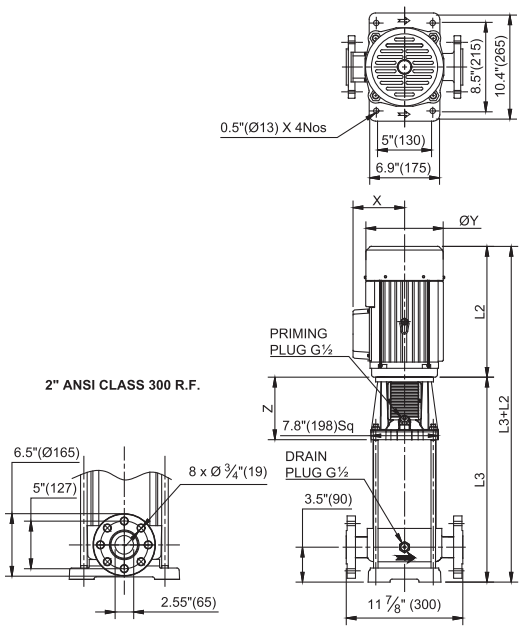
MVC (ROUND FLANGE)



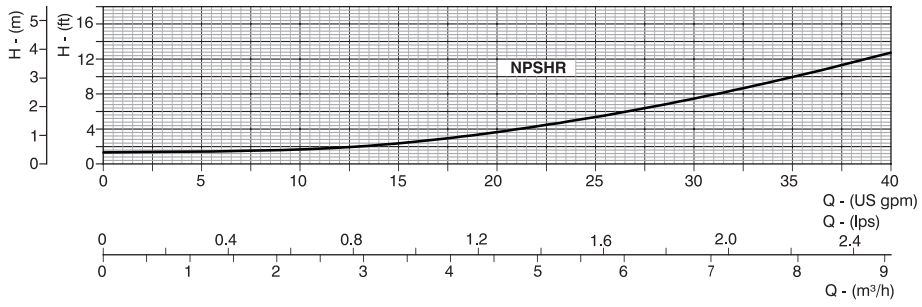
MVS & N (ROUND FLANGE)



DIMENSIONS & WEIGHT

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)												APPROXIMATE WEIGHT IN lb WITHOUT PACKING					
	HP	NEMA FRAME				L1	L2				L3	X	ØY				Z	PUMP		MOTOR			
		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph			ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVC &N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
						inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	lb	lb	lb	lb	lb	lb
MVS-075/01	2.0	56C				12.7	11.18	12.06	11.16	10.79	15.91	5.74	7.19	7.19	6.19	6.19	7.13	71.7	62.8	43	51	32	33
MVS-075/02	5.0	213TC		182TC		14.6	13.93	15.43	12.55	13.93	16.65	6.87	8.88	8.86	9.02	8.86	7.13	73.5	65	81	92	62	69
MVS-075/03	7.5	213TC				16.5	13.88	15.53	13.93	15.43	19.13	8.05	8.89	10.62	8.88	8.86	8.1	76.1	67.2	100	120	75	85
MVS-075/04	7.5					17.68	13.88	15.53	13.93	15.43	20.91	8.05	8.89	10.62	8.88	8.86	8.1	78.3	69.4	100	120	75	85
MVS-075/05	10	213TC		215TC		18.90	16.63	16.68	15.55	15.51	22.68	8.77	10.62	10.18	10.18	10.28	8.1	80.5	71.7	132	145	107	122
MVS-075/06	15	-		254TC		23.2	-	-	15.55	16.57	27.64	9.22	-	-	10.18	10.28	8.8	82.7	73.9	-	-	125	195
MVS-075/07	15					24.4	-	-	15.55	16.57	29.41	9.22	-	-	10.18	10.28	8.8	89.3	80.5	-	-	125	195
MVS-075/08	15					25.6	-	-	15.55	16.57	31.18	9.22	-	-	10.18	10.28	8.8	91.5	82.8	-	-	125	195
MVS-075/09	20					26.8	-	-	16.66	20.08	32.95	9.5	-	-	10.18	13.13	8.8	93.7	84.8	-	-	144	285
MVS-075/10	20					27.95	-	-	16.66	20.08	34.72	9.5	-	-	10.18	13.13	8.8	96	87.1	-	-	144	285
MVS-075/12	25	-		284TSC		29.1	-	-	21.44	19.54	36.50	12.94	-	-	11.63	12.94	8.8	98.1	89.3	-	-	185	283

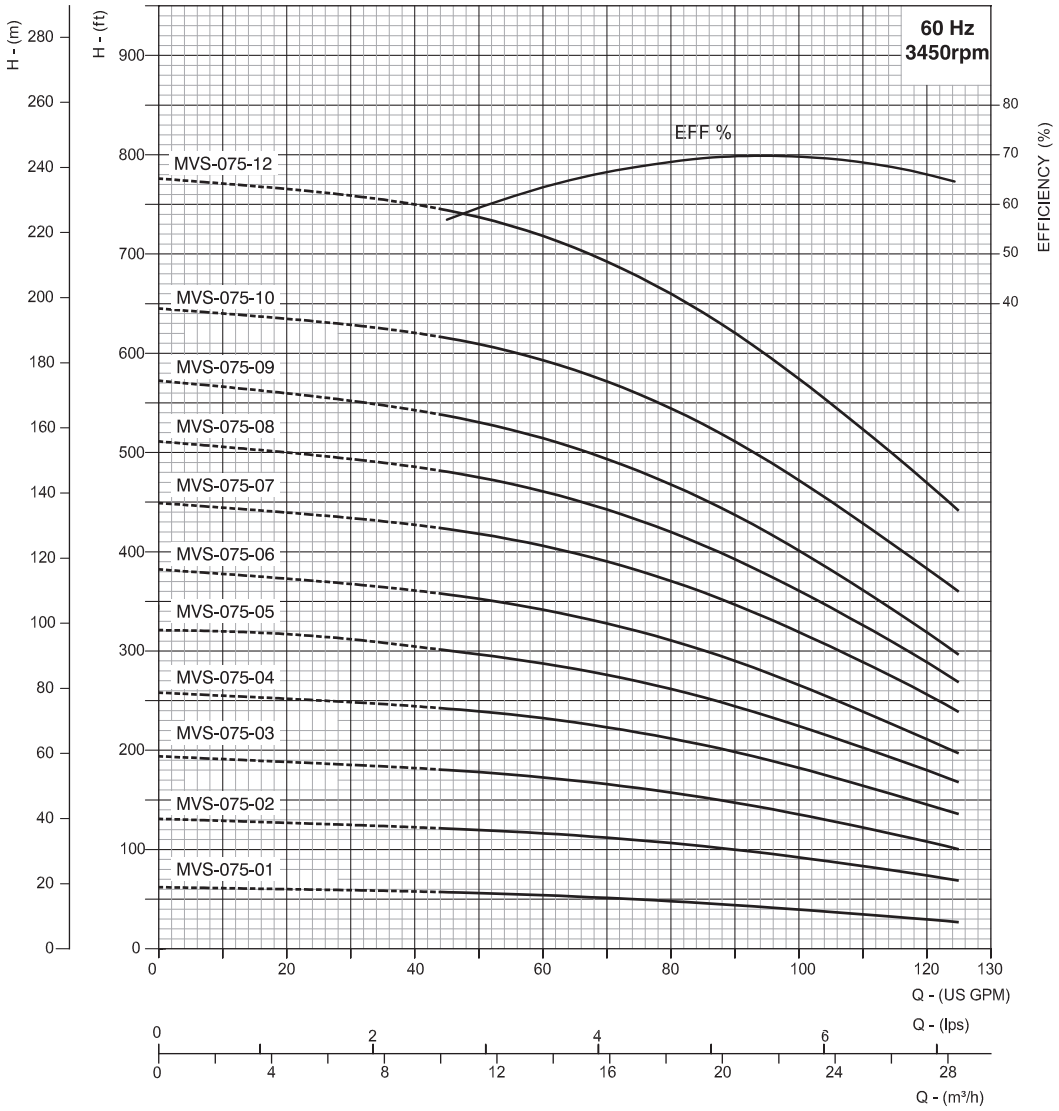
NPSHR CURVE



MV-075

PERFORMANCE CURVES

NOMINAL FLOW : 75 gpm



PERFORMANCE TABLE

PIPE SIZE : ANSI 2" X 2"

PUMP MODEL	MOTOR POWER	DISCHARGE								
	HP	lps	0	1.26	2.52	3.78	5.04	6.30	7.56	7.88
		US gpm	0	20	40	60	80	100	120	125
MVS-075/01	2.0	TOTAL MANOMETRIC HEAD IN FEET	62	60	58	54	48.5	40	30	27
MVS-075/02	5.0		131	127	123	117	107	93	74	68
MVS-075/03	7.5		194	188	183	173.5	158.5	136.5	106.5	100
MVS-075/04	7.5		258	252	245	234	213	184	145.5	136
MVS-075/05	10		321	320	304.5	289	264	226	180	168
MVS-075/06	15		382	373	363	343	313	268	211	197
MVS-075/07	15		449	440	429	408	373	321.5	257.5	238.5
MVS-075/08	15		511	500.5	488	464	423	364	290	268
MVS-075/09	20		572	560.5	545	517	471	405.5	319.5	296
MVS-075/10	20		645	635	624	596.5	548.5	476	383	360
MVS-075/12	25		776	766	753	722.5	664.5	579	470.5	441

Replace the 3rd digit in model name as "C" for Cast Iron pump base & pump head models and "N" for AISI 316 construction.
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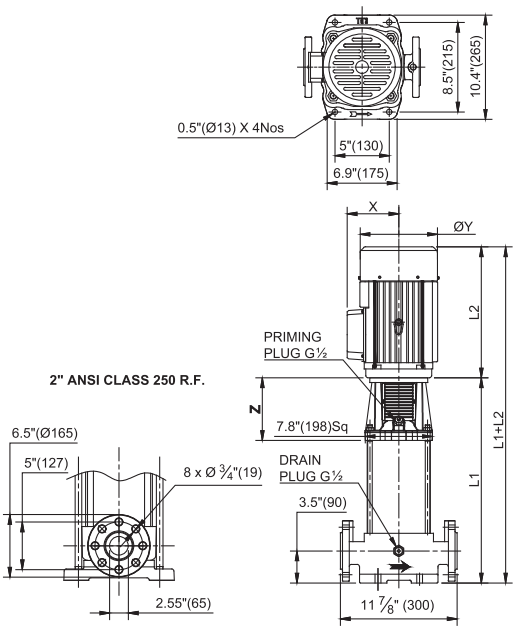
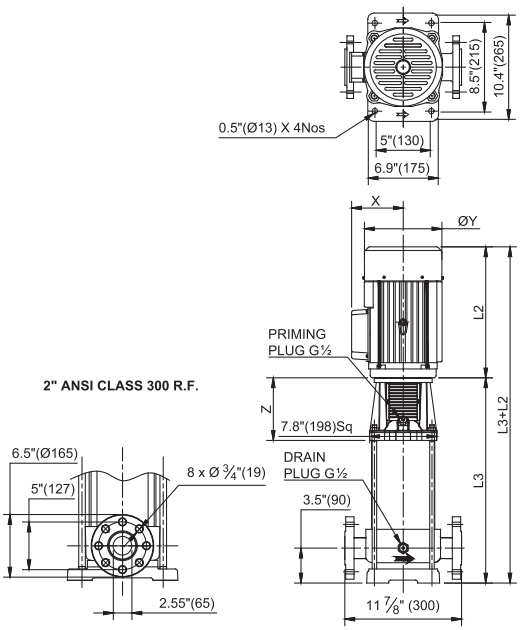
MVC (ROUND FLANGE)



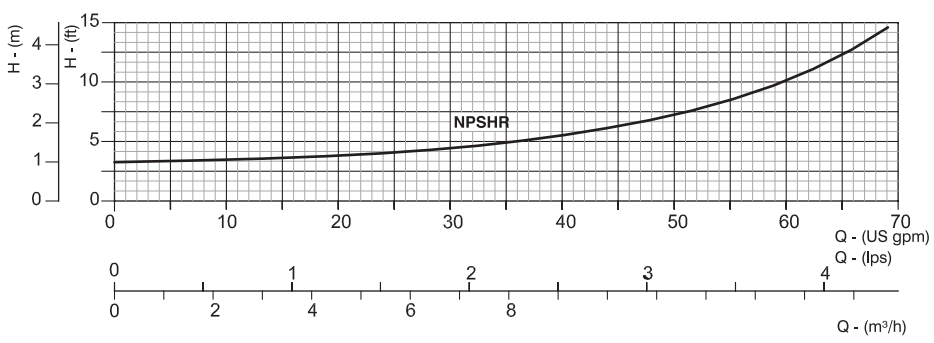
MVS & N (ROUND FLANGE)



DIMENSIONS & WEIGHT

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)												APPROXIMATE WEIGHT IN lb WITHOUT PACKING					
	HP	NEMA FRAME				L1	L2				L3	X	ØY				Z	PUMP		MOTOR			
		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph			ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVS & N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
						inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	lb	lb	lb	lb	lb	lb
MVS-100/01	3.0	182TC				15	11.57	13.44	11.18	11.16	16.65	5.75	6.5	7.19	7.16	7.19	8.1	83.7	72.8	49	64	41	44
MVS-100/02	5.0	213TC		182TC		16.7	13.93	15.43	12.55	13.93	16.65	6.87	8.88	8.86	9.02	8.86	8.1	86	75	81	92	62	69
MVS-100/03	7.5	213TC				19.3	13.88	15.53	13.93	15.43	19.13	8.05	8.89	10.62	8.88	8.86	8.8	92.6	81.6	100	120	75	85
MVS-100/04	10	213TC		215TC		21.1	16.63	16.68	15.55	15.51	20.91	8.77	10.62	10.18	10.18	10.28	8.8	94.7	83.7	132	145	107	122
MVS-100/05	15	-		254TC		26	-	-	15.55	16.57	25.87	9.22	-	-	10.18	10.28	12	136.7	125.7	-	-	125	195
MVS-100/06	15					27.8	-	-	15.55	16.57	27.64	9.22	-	-	10.18	10.28	12	138.8	127.8	-	-	125	195
MVS-100/07	20					29.5	-	-	16.66	20.08	29.41	9.5	-	-	10.18	13.13	12	141.1	130.1	-	-	144	285
MVS-100/08	20					31.4	-	-	16.66	20.08	31.18	9.5	-	-	10.18	13.13	12	143.3	132.3	-	-	144	285
MVS-100/10	25	-		284TSC		34.8	-	-	21.44	19.54	34.72	12.94	-	-	11.63	12.94	12	147.7	136.7	-	-	185	283

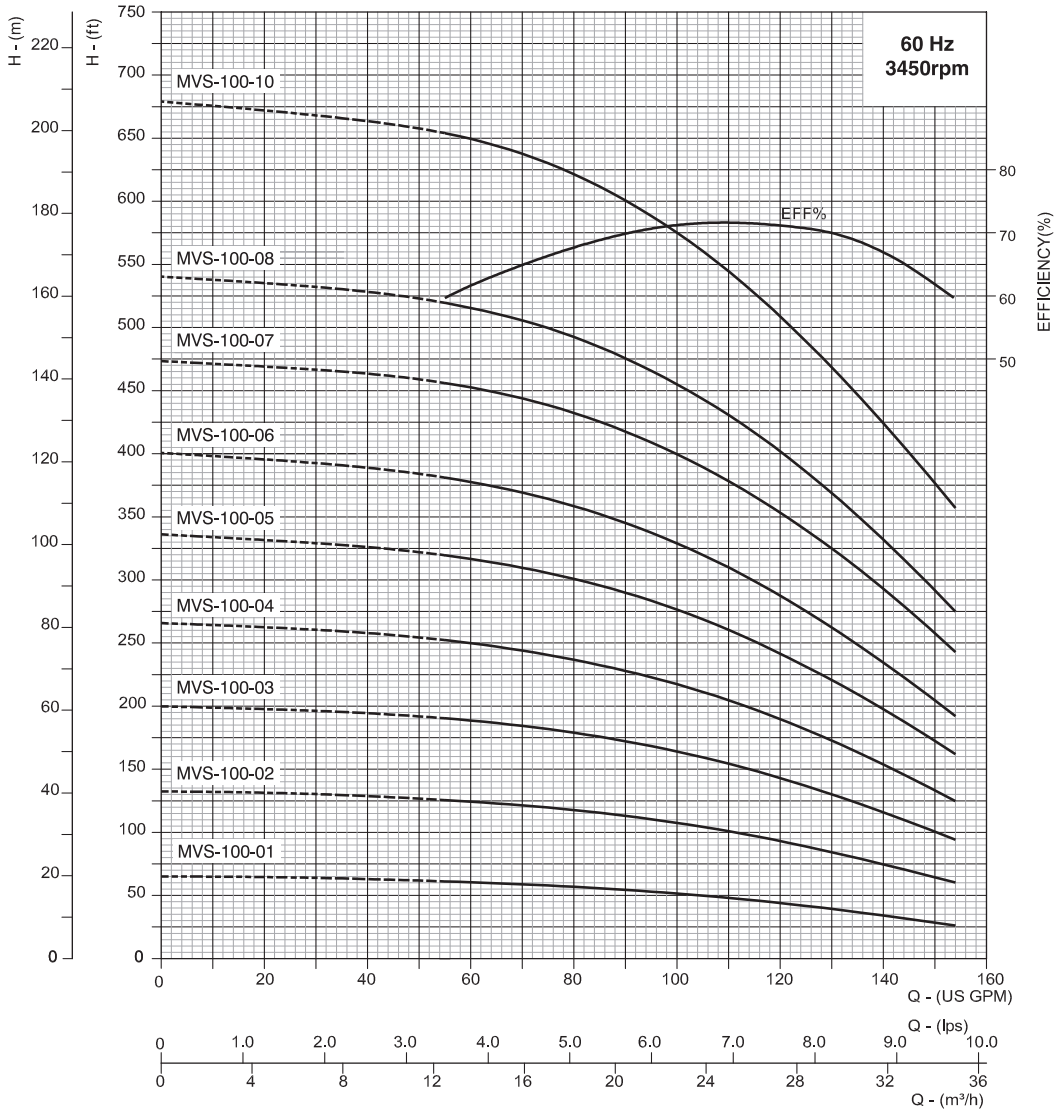
NPSHR CURVE



MV-100

PERFORMANCE CURVES

NOMINAL FLOW : 100 gpm



PERFORMANCE TABLE

PIPE SIZE : ANSI 2" X 2"

PUMP MODEL	MOTOR POWER	DISCHARGE									
	HP	lps	0	1.26	2.52	3.78	5.04	6.30	7.56	8.82	9.70
		US gpm	0	20	40	60	80	100	120	140	154
MVS-100/01	3.0	TOTAL MANOMETRIC HEAD IN FEET	65.0	65.0	63.0	60.5	57.0	52.0	44.5	34.5	26.0
MVS-100/02	5.0		132.5	132.0	129.0	124.5	118.0	108.0	94.0	75.0	60.0
MVS-100/03	7.5		200.0	198.0	195.0	189.0	180.0	165.0	144.5	116.5	94.0
MVS-100/04	10		266.0	263.0	258.5	251.0	237.5	218.5	191.5	155.0	124.5
MVS-100/05	15		336.0	332.0	327.0	318.0	302.0	278.0	243.5	199.0	162.0
MVS-100/06	15		400.5	396.0	390.0	379.0	360.0	331.0	290.0	236.0	192.0
MVS-100/07	20		473.5	468.5	464.5	454.0	434.5	401.5	356.5	296.0	243.0
MVS-100/08	20		540.5	535.5	530.0	517.0	495.0	457.0	406.0	334.5	275.0
MVS-100/10	25		679.0	672.0	664.5	652.0	624.5	578.0	513.0	427.0	357.0

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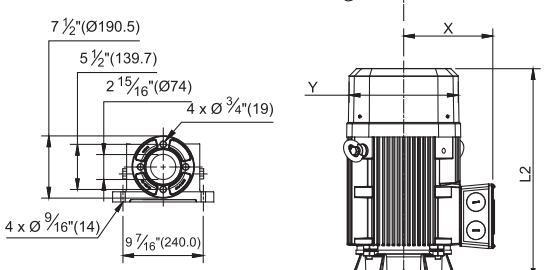
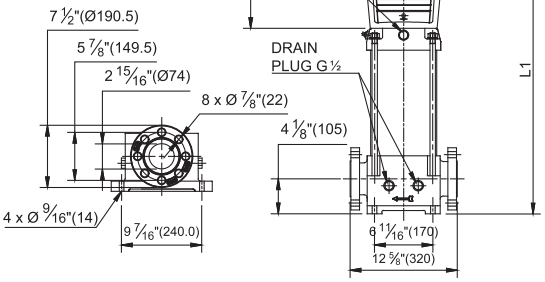
MVC (ROUND FLANGE)

2 ½" ANSI CLASS 125 R.F.
(1-5 STAGES)

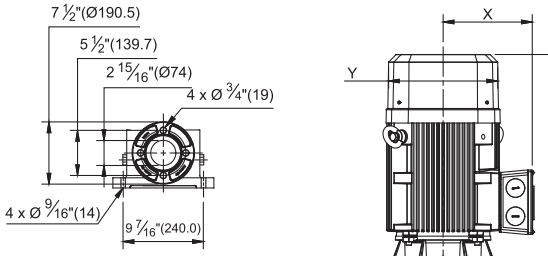


2 ½" ANSI CLASS 250 R.F.
(6-11 STAGES)

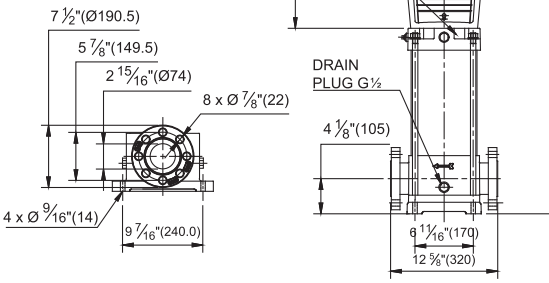


MVS & N (ROUND FLANGE)

2 ½" ANSI CLASS 150 R.F.
(1-5 STAGES)



2 ½" ANSI CLASS 300 R.F.
(6-11 STAGES)



DIMENSIONS & WEIGHT

MV - 160

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)											APPROXIMATE WEIGHT IN lb WITHOUT PACKING					
	HP	NEMA FRAME				L1	L2				X	ØY				Z	PUMP		MOTOR			
		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVS & N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
		inch				inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	lb	lb	lb	lb	lb	lb
MVS-160/01A	5.0	213TC		182TC		20.2	13.93	15.43	12.55	13.93	6.87	8.88	8.86	9.02	8.86	8.1	121.3	112.4	81	92	62	69
MVS-160/01	5.0					20.2	13.93	15.43	12.55	13.93	6.87	8.88	8.86	9.02	8.86	8.1	121.3	112.4	81	92	62	69
MVS-160/2B	7.5	213TC				23	13.88	15.53	13.93	15.43	8.05	8.89	10.62	8.88	8.86	8.1	125.6	119	100	120	75	85
MVS-160/2A	7.5					23	13.88	15.53	13.93	15.43	8.05	8.89	10.62	8.88	8.86	8.1	127.8	119	100	120	75	85
MVS-160/2	10	213TC		215TC		23	16.63	16.68	15.55	15.51	8.77	10.62	10.18	10.18	10.28	8.1	127.8	119	132	145	107	122
MVS-160/03B	10					25.7	16.63	16.68	15.55	15.51	8.77	10.62	10.18	10.18	10.28	8.1	132.3	121.3	132	145	107	122
MVS-160/03	15	-		254TC		29.6	-	-	15.55	16.57	9.22	-	-	10.18	10.28	12	132.3	121.3	-	-	125	195
MVS-160/4B	15					32.4	-	-	15.55	16.57	9.22	-	-	10.18	10.28	12	138.9	130.1	-	-	125	195
MVS-160/4	20					32.4	-	-	16.66	20.08	9.5	-	-	10.18	13.13	12	138.9	130.1	-	-	144	285
MVS-160/5B	20					35.2	-	-	16.66	20.08	9.5	-	-	10.18	13.13	12	169.8	161	-	-	144	285
MVS-160/5	20					35.2	-	-	16.66	20.08	9.5	-	-	10.18	13.13	12	169.8	161	-	-	144	285
MVS-160/6B	25	-		284TSC		38.1	-	-	21.44	19.54	12.94	-	-	11.63	12.94	12.2	176.4	167.6	-	-	185	283
MVS-160/6	25					38.1	-	-	21.44	19.54	12.94	-	-	11.63	12.94	12.2	176.4	167.6	-	-	185	283
MVS-160/7B	30	-		286TSC		41	-	-	21.75	19.54	12.21	-	-	13.25	12.94	12.2	180.8	172	-	-	296	382
MVS-160/7	30					41	-	-	21.75	19.54	12.21	-	-	13.25	12.94	12.2	180.8	172	-	-	296	382
MVS-160/8B	30					43.6	-	-	21.75	19.54	12.21	-	-	13.25	12.94	12.2	187.4	178.5	-	-	296	382
MVS-160/8	40					43.6	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	187.4	178.5	-	-	315	446
MVS-160/9B	40					46.4	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	194	185.2	-	-	315	446
MVS-160/9	40					46.4	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	194	185.2	-	-	315	446
MVS-160/10B	40					49.2	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	200.6	191.8	-	-	315	446
MVS-160/10	40					49.2	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	200.6	191.8	-	-	315	446
MVS-160/11B	50	-		326TSC		51.9	-	-	22.75	23.19	12.21	-	-	13.03	15.69	12.2	205	196.2	-	-	320	450

PERFORMANCE TABLE

ANSI 2½" X ½"

PUMP MODEL	MOTOR POWER	DISCHARGE						
	HP	lps	0	2.52	5.04	7.56	10.08	11.34	12.60
		US gpm	0	40	80	120	160	180	200
MVS-160/01A	5.0	TOTAL MANOMETRIC HEAD IN FEET	75	75	76	65	52	45	32
MVS-160/01	5.0		85	82	79	71	65	58	48
MVS-160/02B	7.5		147	148	145	132	105	87	69
MVS-160/02A	7.5		165	165	160	149	120	103	85
MVS-160/02	10		175	179	172	165	140	121	100
MVS-160/03B	10		230	234	230	210	170	150	119
MVS-160/03	15		271	272	251	240	201	180	155
MVS-160/04B	15		325	325	320	295	245	211	179
MVS-160/04	20		359	359	345	321	270	240	209
MVS-160/05B	20		410	419	409	380	315	271	239
MVS-160/05	20		450	450	436	404	350	325	274
MVS-160/06B	25		508	511	498	459	385	345	279
MVS-160/06	25		541	540	527	490	420	370	319
MVS-160/07B	30		596	600	585	540	457	400	335
MVS-160/07	30		622	625	610	570	490	431	379
MVS-160/08B	30		690	700	687	631	540	480	410
MVS-160/08	40		731	739	715	659	572	512	442
MVS-160/09B	40		789	795	771	710	610	541	462
MVS-160/09	40		813	819	793	735	632	570	492
MVS-160/10B	40		885	885	861	795	680	601	510
MVS-160/10	40		920	928	890	820	710	640	551
MVS-160/11B	50		970	981	950	877	751	670	572

Replace the 3rd digit in model name as “C” for Cast Iron pump base & pump head models and “N” for AISI 316 construction.
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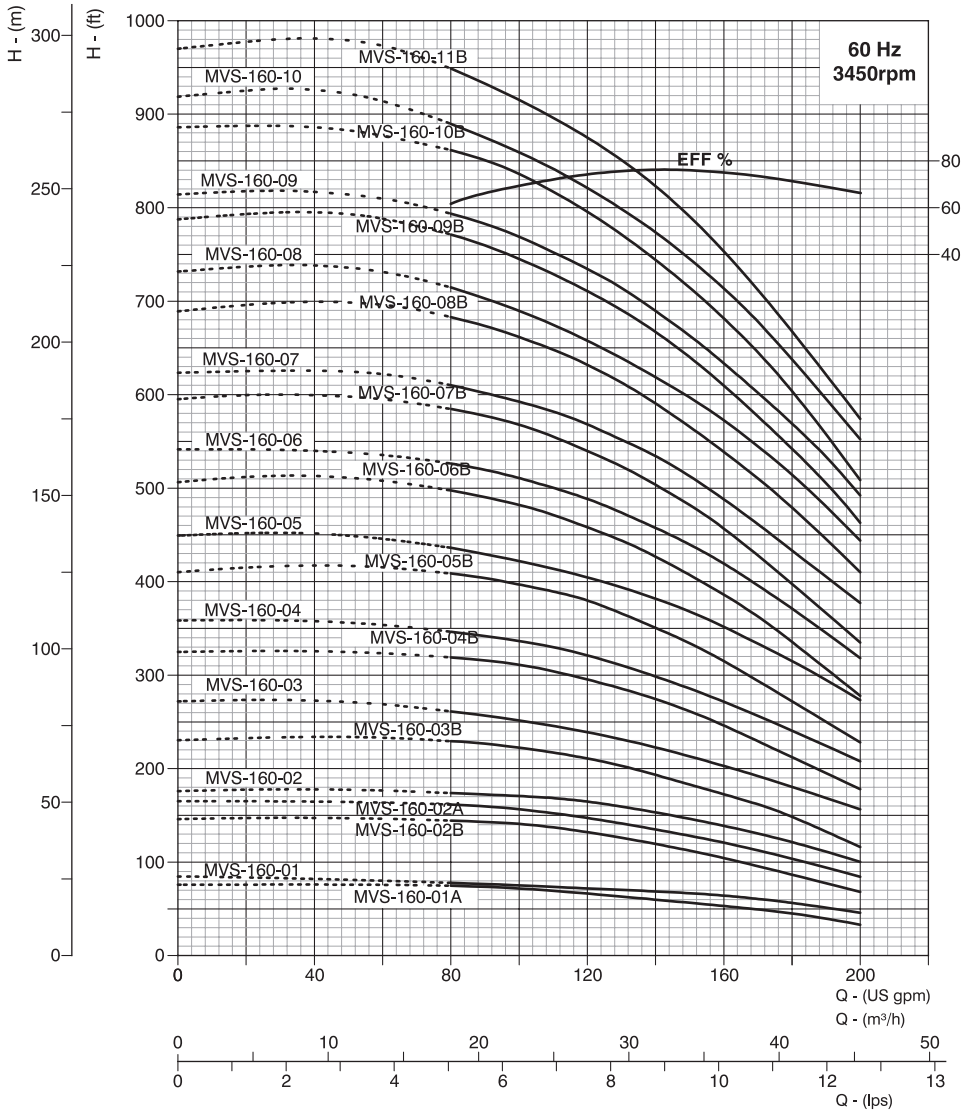
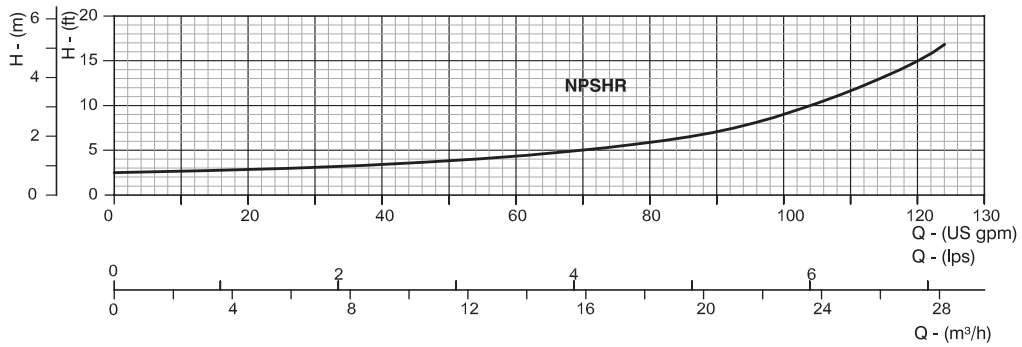
MV-160

PERFORMANCE CURVES

NOMINAL FLOW : 160 gpm



NPSHR CURVE



Replace the 3rd digit in model name as "C" for Cast Iron pump base & pump head models and "N" for AISI 316 construction.
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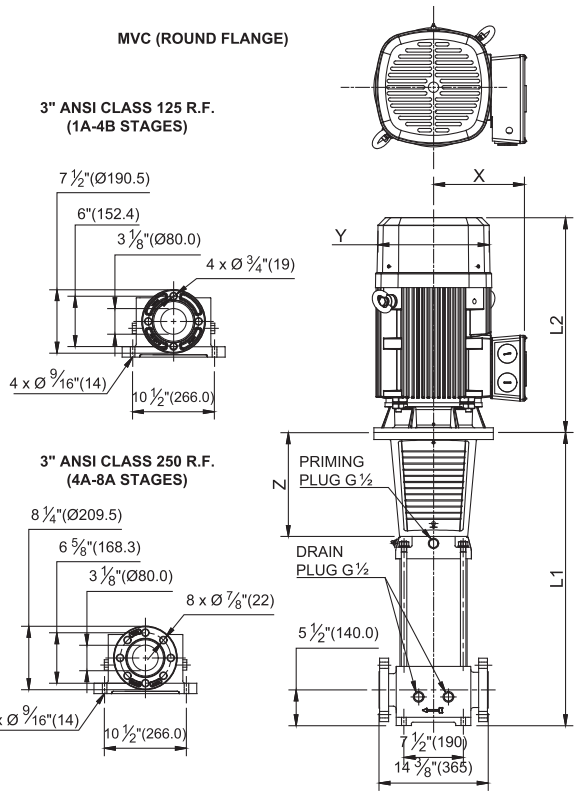
MVC (ROUND FLANGE)

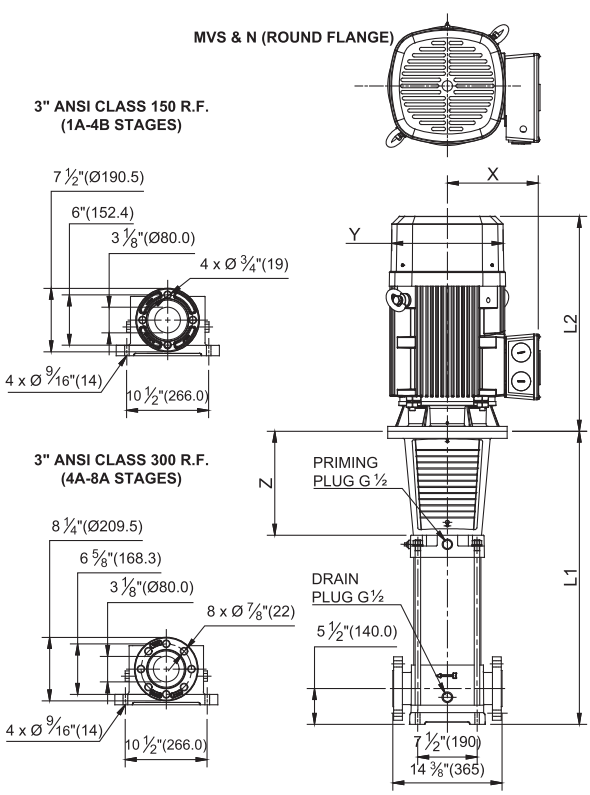
3" ANSI CLASS 125 R.F.
(1A-4B STAGES)



3" ANSI CLASS 250 R.F.
(4A-8A STAGES)

MVS & N (ROUND FLANGE)

3" ANSI CLASS 150 R.F.
(1A-4B STAGES)



3" ANSI CLASS 300 R.F.
(4A-8A STAGES)

DIMENSIONS & WEIGHT

MV - 220

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)											APPROXIMATE WEIGHT IN lb WITHOUT PACKING					
	HP	NEMA FRAME				L1	L2				X	ØY				Z	PUMP		MOTOR			
		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVS & N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
		inch				inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	lb	lb	lb	lb	lb	lb
MVS-220/01A	7.5	213TC				22.4	13.88	15.53	13.93	15.43	8.05	8.89	10.62	8.88	8.86	8.1	143.3	136.7	100	120	75	85
MVS-220/01	10	213TC		215TC		22.4	16.63	16.68	15.55	15.51	8.77	10.62	10.18	10.18	10.28	8.1	143.3	136.7	132	145	107	122
MVS-220/02B	15	-		254TC		29.4	-	-	15.55	16.57	9.22	-	-	10.18	10.28	12	152.1	145.5	-	-	125	195
MVS-220/02A	15					29.4	-	-	15.55	16.57	9.22	-	-	10.18	10.28	12	152.1	145.5	-	-	125	195
MVS-220/02	15					29.4	-	-	15.55	16.57	9.22	-	-	10.18	10.28	12	152.1	145.5	-	-	125	195
MVS-220/03B	20					32.6	-	-	16.66	20.08	9.5	-	-	10.18	13.13	12	189.6	183.0	-	-	144	285
MVS-220/03A	25	-		284TSC		32.8	-	-	21.44	19.54	12.94	-	-	11.63	12.94	12.2	189.6	183.0	-	-	185	283
MVS-220/03	25					32.8	-	-	21.44	19.54	12.94	-	-	11.63	12.94	12.2	189.6	183.0	-	-	185	283
MVS-220/04B	30	-		286TSC		35.9	-	-	21.75	19.54	12.21	-	-	13.25	12.94	12.2	198.4	191.8	-	-	296	382
MVS-220/04A	30					35.9	-	-	21.75	19.54	12.21	-	-	13.25	12.94	12.2	198.4	191.8	-	-	296	382
MVS-220/04	30					35.9	-	-	21.75	19.54	12.21	-	-	13.25	12.94	12.2	198.4	191.8	-	-	296	382
MVS-220/05B	40					39.1	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	207.3	200.6	-	-	315	446
MVS-220/05A	40					39.1	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	207.3	200.6	-	-	315	446
MVS-220/05	40					39.1	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	207.3	200.6	-	-	315	446
MVS-220/06B	50	-		326TSC		43.5	-	-	22.75	23.19	12.21	-	-	13.03	15.69	12.2	218.3	211.6	-	-	320	450
MVS-220/06	50					43.5	-	-	22.75	23.19	12.21	-	-	13.03	15.69	12.2	218.3	211.6	-	-	320	450
MVS-220/07B	50					46.6	-	-	22.75	23.19	12.21	-	-	13.03	15.69	12.2	235.9	229.3	-	-	320	450
MVS-220/07	60	-		364TSC		46.6	-	-	22.75	30.69	14.95	-	-	13.03	19.25	13.4	235.9	229.3	-	-	372	689
MVS-220/08A	60					49.8	-	-	22.75	30.69	14.95	-	-	13.03	19.25	13.4	244.7	238.1	-	-	372	689

PERFORMANCE TABLE

PIPE SIZE : ANSI " 3" X 3"

PUMP MODEL	MOTOR POWER	DISCHARGE							
	HP	lps	0	5.04	7.56	10.08	12.60	15.12	19.15
		US gpm	0	80	120	160	200	240	304
MVS-220/01A	7.5	TOTAL MANOMETRIC HEAD IN FEET	116	107	102	97	87	75	40
MVS-220/01	10		130	124	120	110	101	91	70
MVS-220/02B	15		220	210	203	192	179	155	90
MVS-220/02A	15		237	228	220	205	190	168	105
MVS-220/02	15		250	246	237	221	205	182	135
MVS-220/03B	20		328	330	323	308	284	255	170
MVS-220/03A	25		358	348	340	322	300	270	200
MVS-220/03	25		370	368	359	341	320	290	208
MVS-220/04B	30		440	450	442	422	392	350	250
MVS-220/04A	30		479	475	460	440	410	364	270
MVS-220/04	30		496	480	470	450	420	380	285
MVS-220/05B	40		565	575	562	540	500	442	325
MVS-220/05A	40		587	595	580	555	518	460	345
MVS-220/05	40		612	610	598	568	530	478	365
MVS-220/06B	50		685	695	684	658	612	555	410
MVS-220/06	50		728	735	720	691	658	608	480
MVS-220/07B	50		805	838	823	787	730	658	490
MVS-220/07	60		855	875	858	822	770	700	537
MVS-220/08A	60		982	970	950	920	870	798	610

Replace the 3rd digit in model name as “C” for Cast Iron pump base & pump head models and “N” for AISI 316 construction.
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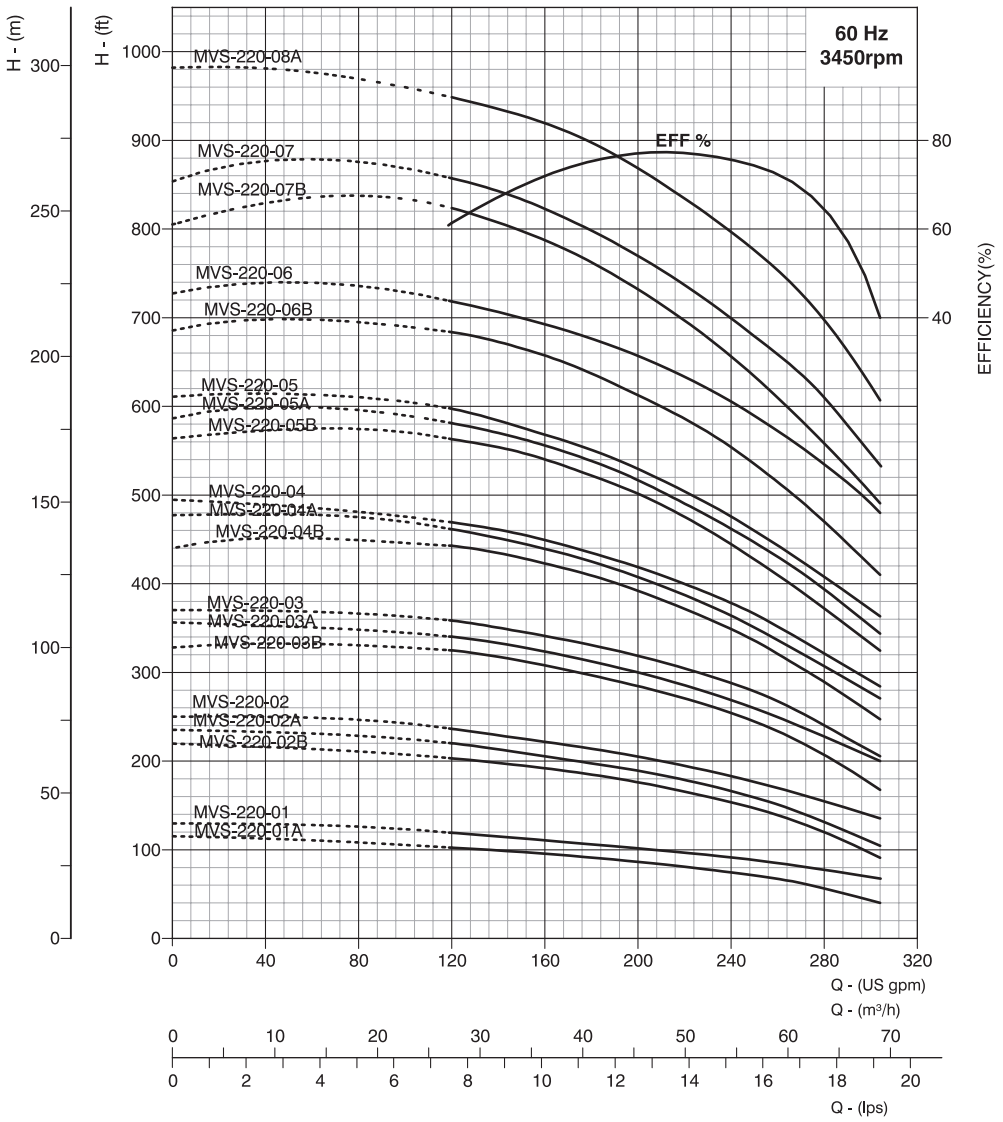
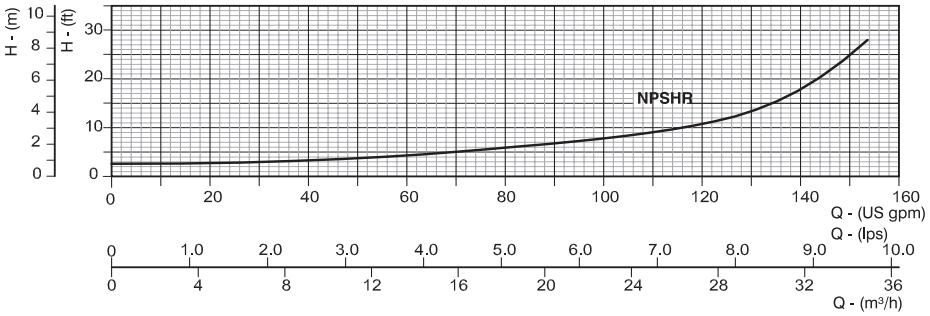
MV-220

PERFORMANCE CURVES

NOMINAL FLOW : 220 gpm



NPSHR CURVE



Replace the 3rd digit in model name as "C" for Cast Iron pump base & pump head models and "N" for AISI 316 construction.
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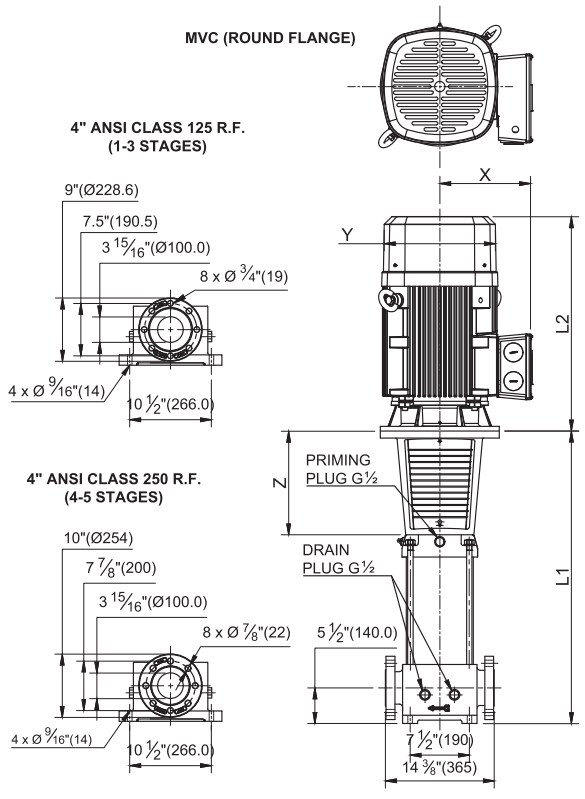
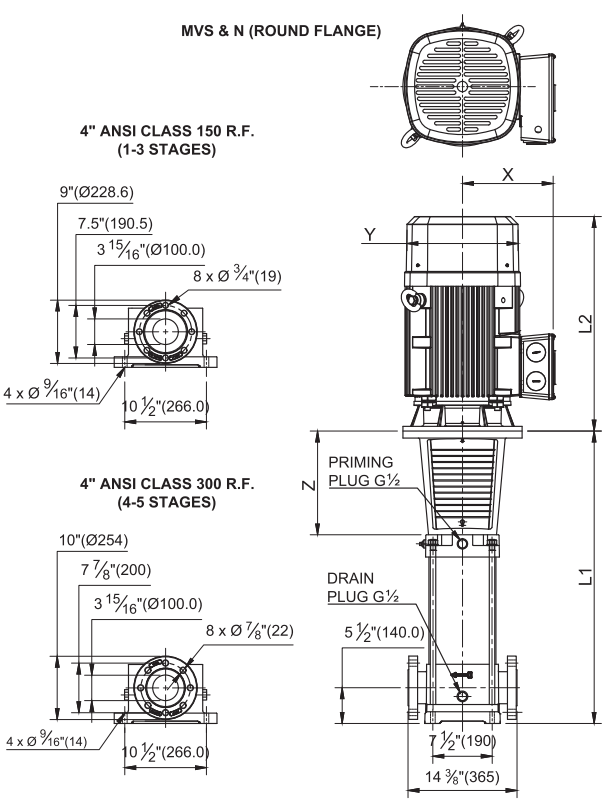

MVC (ROUND FLANGE)
4" ANSI CLASS 125 R.F.
(1-3 STAGES)
9"(Ø228.6)
7.5"(190.5)
3 15/16"(Ø100.0)
8 x Ø 3/4"(19)
4 x Ø 9/16"(14)
10 1/2"(266.0)
4" ANSI CLASS 250 R.F.
(4-5 STAGES)
10"(Ø254)
7 7/8"(200)
3 15/16"(Ø100.0)
8 x Ø 7/8"(22)
4 x Ø 9/16"(14)
10 1/2"(266.0)
X
Y
L2
L1
Z
PRIMING
PLUG G1/2
DRAIN
PLUG G1/2
5 1/2"(140.0)
7 1/2"(190)
14 3/8"(365)


MVS & N (ROUND FLANGE)
4" ANSI CLASS 150 R.F.
(1-3 STAGES)
9"(Ø228.6)
7.5"(190.5)
3 15/16"(Ø100.0)
8 x Ø 3/4"(19)
4 x Ø 9/16"(14)
10 1/2"(266.0)
4" ANSI CLASS 300 R.F.
(4-5 STAGES)
10"(Ø254)
7 7/8"(200)
3 15/16"(Ø100.0)
8 x Ø 7/8"(22)
4 x Ø 9/16"(14)
10 1/2"(266.0)
X
Y
L2
L1
Z
PRIMING
PLUG G1/2
DRAIN
PLUG G1/2
5 1/2"(140.0)
7 1/2"(190)
14 3/8"(365)

DIMENSIONS & WEIGHT

MV - 330

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)											APPROXIMATE WEIGHT IN lb WITHOUT PACKING					
	HP	NEMA FRAME				L1	L2				X	ØY				Z	PUMP		MOTOR			
		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVS & N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
						inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	lb	lb	lb	lb	lb	lb
MVS-330/01A	10	213TC		215TC		22.4	16.63	16.68	15.55	15.51	8.77	10.62	10.18	10.18	10.28	8.1	158.7	152.0	132	145	107	122
MVS-330/01	15	-		254TC		26.3	-	-	15.55	16.57	9.22	-	-	10.18	10.28	12	187.4	180.7	-	-	125	195
MVS-330/02B	20					29.4	-	-	16.66	20.08	9.5	-	-	10.18	13.13	12	196.2	189.6	-	-	144	285
MVS-330/02A	20					29.4	-	-	16.66	20.08	9.5	-	-	10.18	13.13	12.2	196.2	189.6	-	-	144	285
MVS-330/02	25	-		284TSC		29.6	-	-	21.44	19.54	12.94	-	-	11.63	12.94	12.2	196.2	189.6	-	-	185	283
MVS-330/03B	30	-		286TSC		32.8	-	-	21.75	19.54	12.21	-	-	13.25	12.94	12.2	207.3	200.6	-	-	296	382
MVS-330/03A	40					32.8	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	216	209.4	-	-	315	446
MVS-330/03	40					32.8	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	216	209.4	-	-	315	446
MVS-330/04B	40					35.9	-	-	21.75	23.18	13.11	-	-	13.25	15.56	12.2	224.8	218.3	-	-	315	446
MVS-330/04A	50	-		326TSC		37.2	-	-	22.75	23.19	12.21	-	-	13.03	15.69	12.2	229.3	222.7	-	-	320	450
MVS-330/04	50					37.2	-	-	22.75	23.19	12.21	-	-	13.03	15.69	13.4	229.3	222.7	-	-	320	450
MVS-330/05B	60	-		364TSC		40.3	-	-	22.75	30.69	14.95	-	-	13.03	19.25	13.4	238.1	231.5	-	-	372	689

PERFORMANCE TABLE

PIPE SIZE : ANSI 4" X 4"

PUMP MODEL	MOTOR POWER	DISCHARGE						
	HP	lps	0	6.30	12.60	18.90	25.20	26.46
		US gpm	0	100	200	300	400	420
MVS-330/01A	10	TOTAL MANOMETRIC HEAD IN FEET	116	108	100	88	55	48
MVS-330/01	15		157	143	128	112	82	78
MVS-330/02B	20		224	220	204	178	130	118
MVS-330/02A	20		260	252	234	203	160	150
MVS-330/02	25		300	284	260	230	180	170
MVS-330/03B	30		360	353	330	291	224	210
MVS-330/03A	40		400	390	363	322	255	240
MVS-330/03	40		440	426	392	350	284	262
MVS-330/04B	40		500	496	468	417	330	310
MVS-330/04A	50		546	525	494	439	352	332
MVS-330/04	50		580	565	536	480	384	364
MVS-330/05B	60		640	636	605	540	430	402

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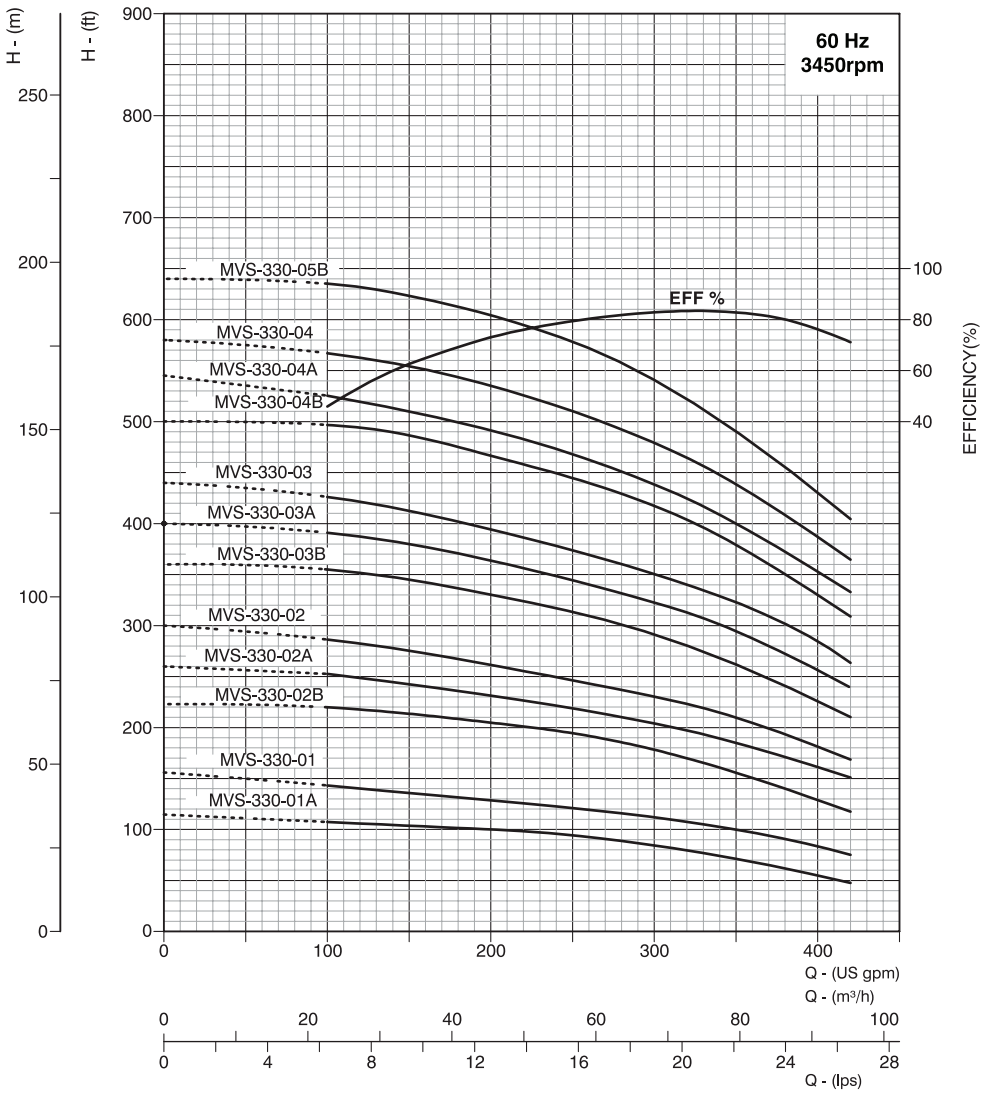
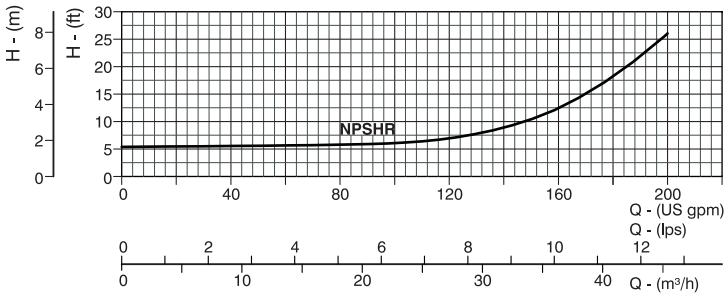
MV-330

PERFORMANCE CURVES

NOMINAL FLOW : 330 gpm



NPSHR CURVE



Replace the 3rd digit in model name as "C" for Cast Iron pump base & pump head models and "N" for AISI 316 construction.
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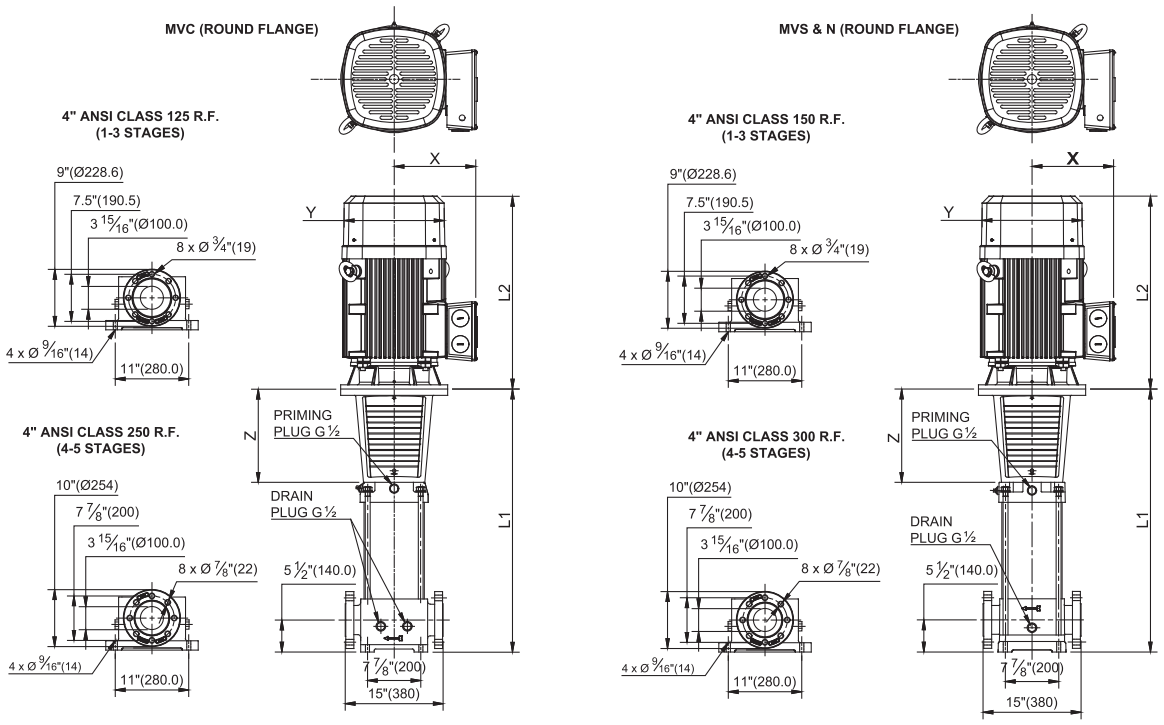
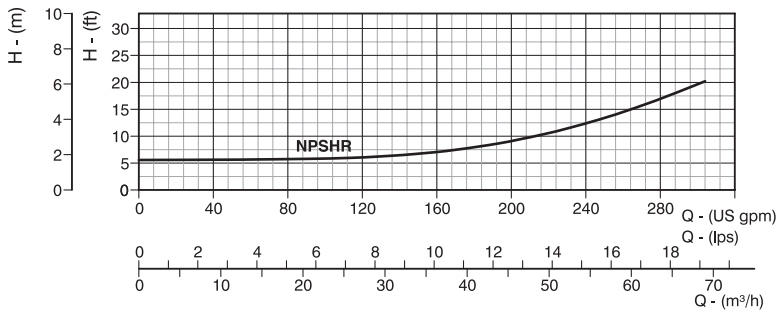


DIMENSIONS & WEIGHT

PUMP MODEL	MOTOR POWER	MOTOR				DIMENSION IN mm (Approx)									APPROXIMATE WEIGHT IN lb WITHOUT PACKING						
		NEMA FRAME				L1	L2				ØY				Z	PUMP		MOTOR			
	HP	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph		MVC R	MVS & N(R)	ODP 1Ph	TEFC 1Ph	ODP 3Ph	TEFC 3Ph
		inch				inch	inch				inch				inch	lb		lb			
MVS-450/01A	15	-		254TC		22.5	-	-	15.55	16.57	-	-	10.18	10.28	12	175.3	170.8	-	-	125	195
MVS-450/01	20					22.5	-	-	16.66	20.08	-	-	10.18	10.13	12	175.3	170.5	-	-	144	285
MVS-450/02B	25	-		284TSC		26.3	-	-	21.44	19.54	-	-	11.63	12.94	12.2	187.2	191.6	-	-	185	283
MVS-450/02A	30	-		286TSC		26.3	-	-	21.75	19.54	-	-	13.25	12.94	12.2	187.2	191.6	-	-	296	382
MVS-450/02	40					26.3	-	-	21.75	23.18	-	-	13.25	15.56	12.2	187.2	191.6	-	-	315	446
MVS-450/03B	40					30.0	-	-	21.75	23.18	-	-	13.25	15.56	12.2	200.4	196.0	-	-	315	446
MVS-450/03A	50	-		326TSC		31.2	-	-	22.75	23.19	-	-	13.03	15.69	12.2	200.4	196.0	-	-	320	450
MVS-450/03	50					31.2	-	-	22.75	23.19	-	-	13.03	15.69	12.2	200.4	196.0	-	-	320	450
MVS-450/04B	60	-		364TSC		34.8	-	-	22.75	30.69	-	-	13.03	19.25	13.4	218.3	213.8	-	-	372	689
MVS-450/04A	60					34.8	-	-	22.75	30.69	-	-	13.03	19.25	13.4	218.3	213.8	-	-	372	689

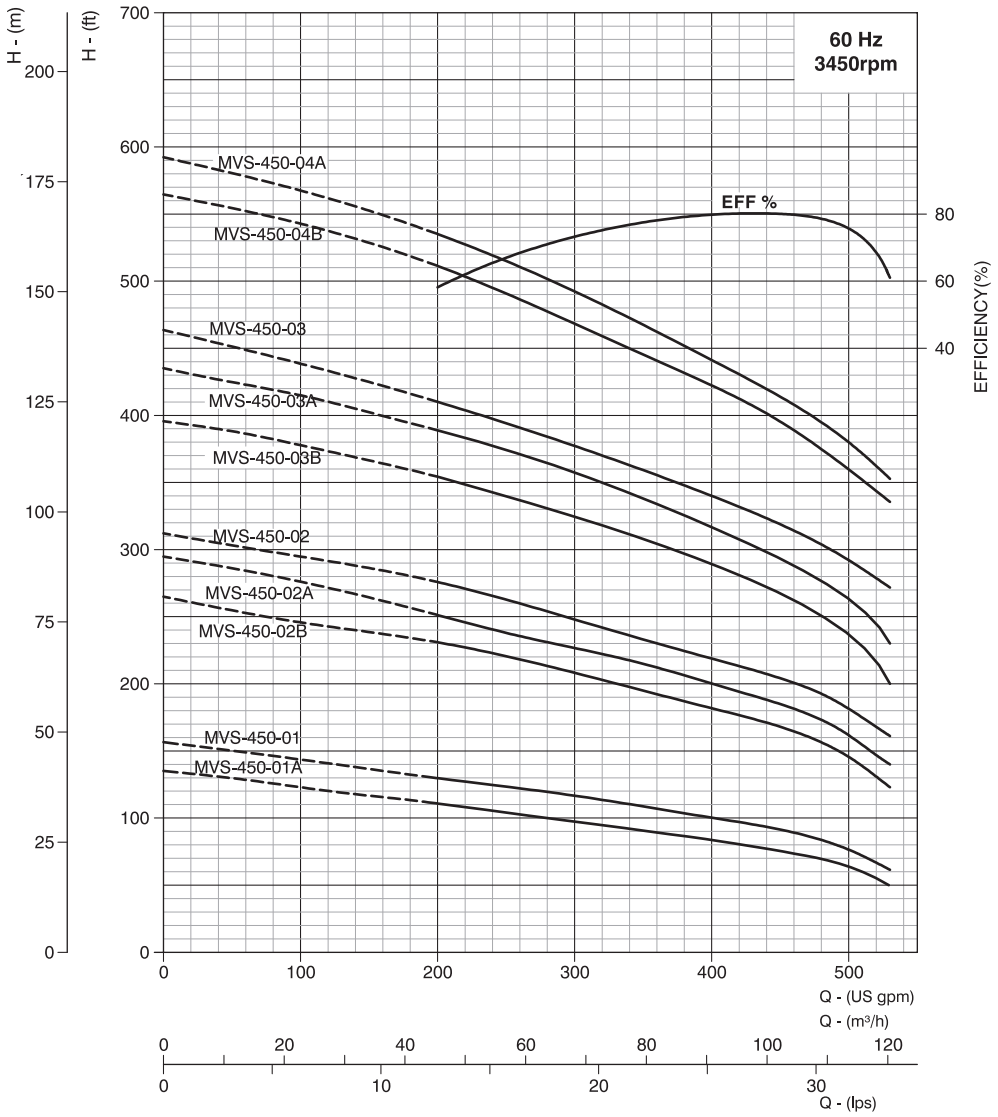
NPSHR CURVE



MV-450

PERFORMANCE CURVES

NOMINAL FLOW : 450 gpm



PERFORMANCE TABLE

PIPE SIZE : ANSI 4"x4"

PUMP MODEL	MOTOR POWER		DISCHARGE							
			m³/h	0	45.6	68.2	90.9	102.3	113.6	120.5
	kW	HP	US gpm	0	200	300	400	450	500	530
MVS-450-01A	11	15	TOTAL MANOMETRIC HEAD IN FEET	135	111	97	83	75	64	50
MVS-450-01	15	20		157	130	117	100	91	78	61
MVS-450-02B	18.5	25		265	231	208	182	169	146	122
MVS-450-02A	22	30		295	251	227	200	185	161	140
MVS-450-02	30	40		312	276	247	220	204	180	161
MVS-450-03B	30	40		395	354	324	290	268	238	200
MVS-450-03A	37	50		435	389	358	317	292	263	230
MVS-450-03	37	50		464	410	378	340	320	291	270
MVS-450-04B	45	60		564	511	469	423	395	360	335
MVS-450-04A	45	60		592	535	493	440	414	380	352

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NOTES

NOTES

W I N N I N G W A Y S

When you have a good thing going it is quite in the fitting of things that recognitions come our way. Several prestigious awards, which decorate our shelf, say it all. These rewards not only acknowledge our position as a leader in the water pump industry but also serve as reminders about what the customer expects from a winner. And we, as ever, have our ears perfectly tuned to customer expectations.