



Vertical & Horizontal Multistage Pumps - MV & MH Series 60Hz



C.R.I. PUMPS
Pumping trust. Worldwide.

T H E B E G I N N I N G

of C.R.I., way back in 1961, was a resolute attempt to produce a few irrigation equipments using the limited facilities of an in-house foundry. Eventually the founder's dream was coming true as the small production unit he started kept growing rapidly. Now, after more than five eventful decades, it is an enormous, widely reputed organization, which produces more than 1800 varieties of perfectly engineered pumps and motors and sells its products in numerous countries spread across 6 continents.

C . R . I . I S O N E A M O N G

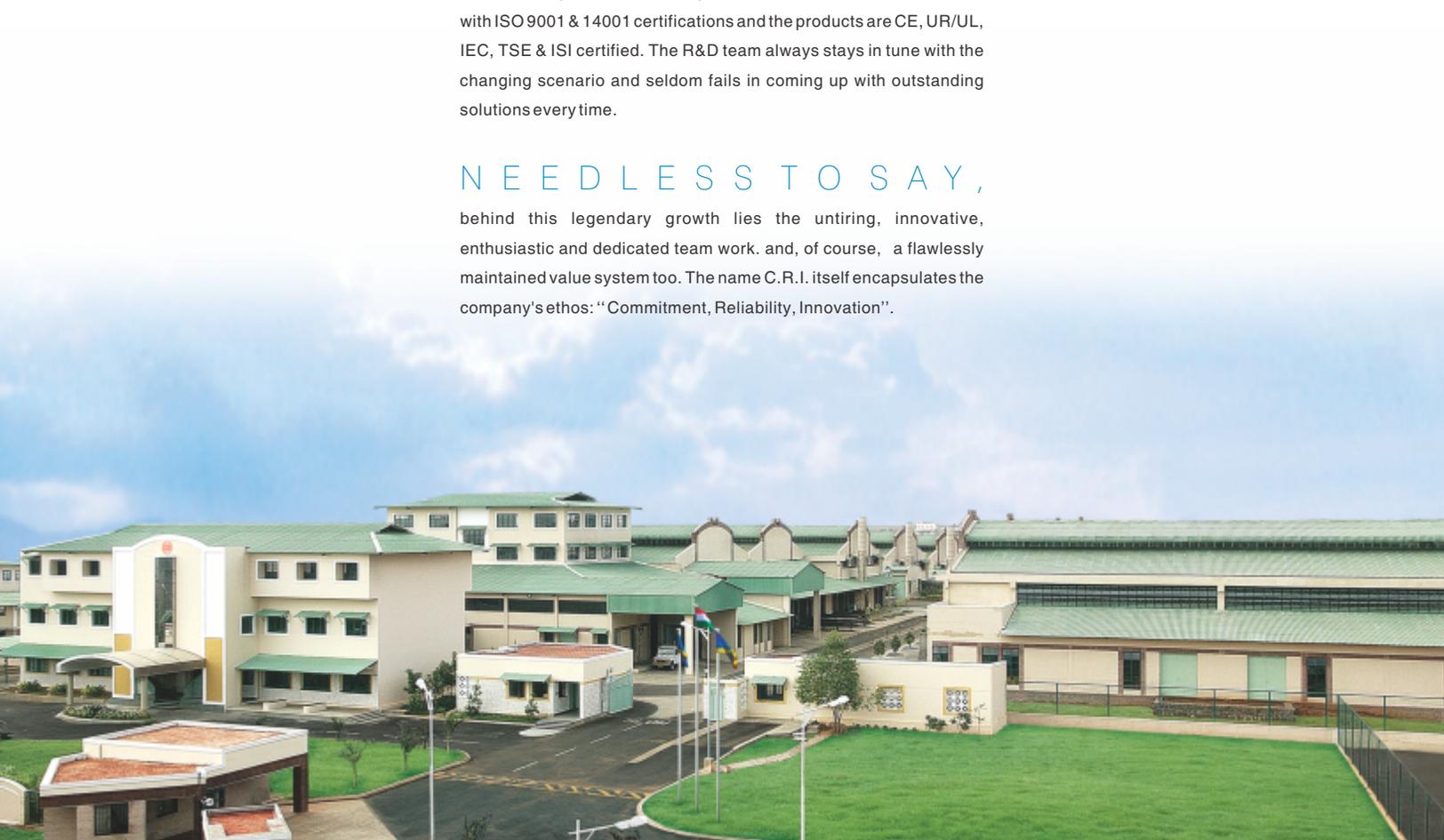
the few pioneers in the world to produce 100% stainless steel submersible pumps. Having achieved a record production capacity of over 2 million pumps per annum, today C.R.I. is rubbing its shoulders with the best brands in the world, with advanced technology and safety standards as its hallmarks.

T H E I N F R A S T R U C T U R E

of C.R.I. is pretty comprehensive with state-of-the-art machineries and high potential in-house R&D recognised by the ministry of science and technology, Govt. of India - all within its own covered area of 300,000 square metres. The production environment is accredited with ISO 9001 & 14001 certifications and the products are CE, UR/UL, IEC, TSE & ISI certified. The R&D team always stays in tune with the changing scenario and seldom fails in coming up with outstanding solutions every time.

N E E D L E S S T O S A Y ,

behind this legendary growth lies the untiring, innovative, enthusiastic and dedicated team work. and, of course, a flawlessly maintained value system too. The name C.R.I. itself encapsulates the company's ethos: "Commitment, Reliability, Innovation".





C.R.I. PUMPS
Pumping trust. Worldwide.

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.**

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G E N E R A L

C.R.I. Vertical Multistage centrifugal pumps (MV series) are non-self priming, axial suction and delivery type available with DIN 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 S.S. 304/316, 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 IEC standard and NEMA 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 | Good suction lift and operating pressure | Dynamically balanced rotating parts | Balanced and rigid construction | Available M.O.C. Type S, N & C.

IMPORTANT NOTES

| Read our operator's manual carefully before installation | Pump should not be operated dry | Install dry run prevention 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 motor 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 $\pm 10\%$ 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

M X X-XXX - XX (X) (X) X (X) (X)

Product category
M = Multi Stage Centrifugal Pumps
V = Vertical

M.O.C
Pump Outershell / Impeller / Pump Base / Suc. & Del. Ports
C = AISI 304 / AISI 304 / Cast Iron / Cast Iron
S = AISI 304 / AISI 304 / AISI 304 / AISI 304
N = AISI 316 / AISI 316 / AISI 316 / AISI 316

Flow Rate in gpm
010 = 10 gpm, 220 = 220 gpm

No. of Impellers

High Eff. Motor (applicable only when supplied with IE2 & IE3 motors)
2 for IE2 & 3 for IE3.

Voltage (This digit is applicable except 230V 1 Ph & 460V 3 Ph)

Phase / Connection / Control box / Frequency
1 = 1P / PSC / 60Hz
2 = 1P / CSCR / 60Hz
3 = 3P / D.O.L / 60Hz
6 = 3P / S.D / 60Hz

Types of Port connection (This digit is applicable only for PJE coupling)
P = PJE coupling

No of Trimmed Impellers (This digit is applicable only for pumps with trimmed impellers)
A = 1 Trimmed Impeller
B = 2 Trimmed Impellers

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) (Permanent Split Capacitor-PSC & CSCR) Incorporated with thermal over load protector. Three Phase 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	PJE / Round
Flange Standard	DIN
Pipe Connection	DN 25, DN 32, DN 40, DN 50, DN 65, DN 80 & DN 100

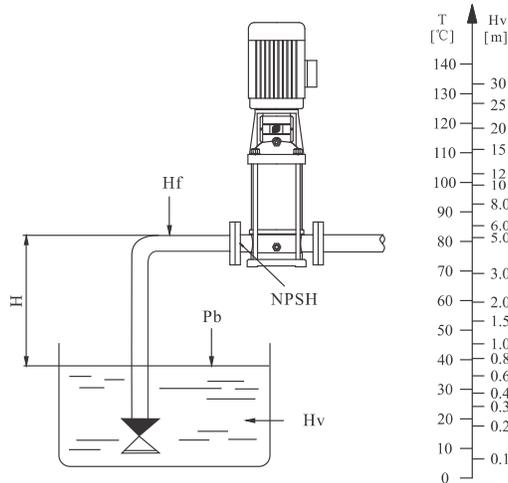
OPERATION LIMITS

Suction Lift Upto	21 Feet
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 Ips
Max. Head	980 ft / 300 mtr

INLET PRESSURE



MAXIMUM INLET PRESSURE

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

MINIMUM INLET PRESSURE

In case that the pressure in pump is lower than 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 :

$$H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$$

H : Maximum suction head (m)

P_b : Atmosphere pressure (bar)

In a closed system, P_b 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.

H_f : Pipeline loss at the inlet (m)

It is in accordance with pipeline possible Max.flow.

H_v : Stream pressure (m)

It depends on liquid temperature and system pressure value.

H_s : Safety margin (m)

Minimum 0.5m delivery head

If the calculated result H is negative, 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.

ELECTRICAL DATA (3Ph, 460V, 60Hz)

Motor		Rated Current in Amps	Motor Eff. %	PF (cosφ)
(kW)	(HP)			
0.37	0.5	0.8	80	0.75
0.55	0.75	1.2	82	0.71
0.75	1.0	1.6	82	0.71
1.1	1.5	2.0	84	0.77
1.5	2.0	2.6	85	0.83
2.2	3.0	3.9	84	0.83
3.0	4.0	4.1	86	0.77
4.0	5.5	7.0	85	0.80
5.5	7.5	9.2	87	0.89

Motor		Rated Current in Amps	Motor Eff. %	PF (cosφ)
(kW)	(HP)			
7.5	10	13.5	88	0.81
11	15	16.6	91	0.89
15	20	24.0	87	0.92
18.5	25	28.0	90	0.92
22	30	34.0	91	0.87
30	40	45.0	91	0.91
37	50	57	93	0.88
45	60	69	93.6	0.90

Other voltages 380V, 220V and Dual Voltage 220/380V, 220/440V also can be supplied on request.

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	Above 160gpm - AISI 316
Pump Head Cover	30.07	NA	AISI 304*	AISI 316*
Pump Head Stool (Only for 160gpm & above)	30.01	C.I.	C.I.	C.I.
Pump Base	29.01	C.I.	AISI 304	AISI 316
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 80gpm

** Optional Mechanical Seal MOCs

TC / TC / FKM

SiC / SiC / EPDM

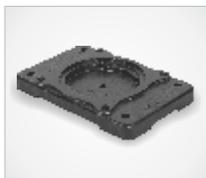
TC / CARBON / EPDM

TC / TC / EPDM

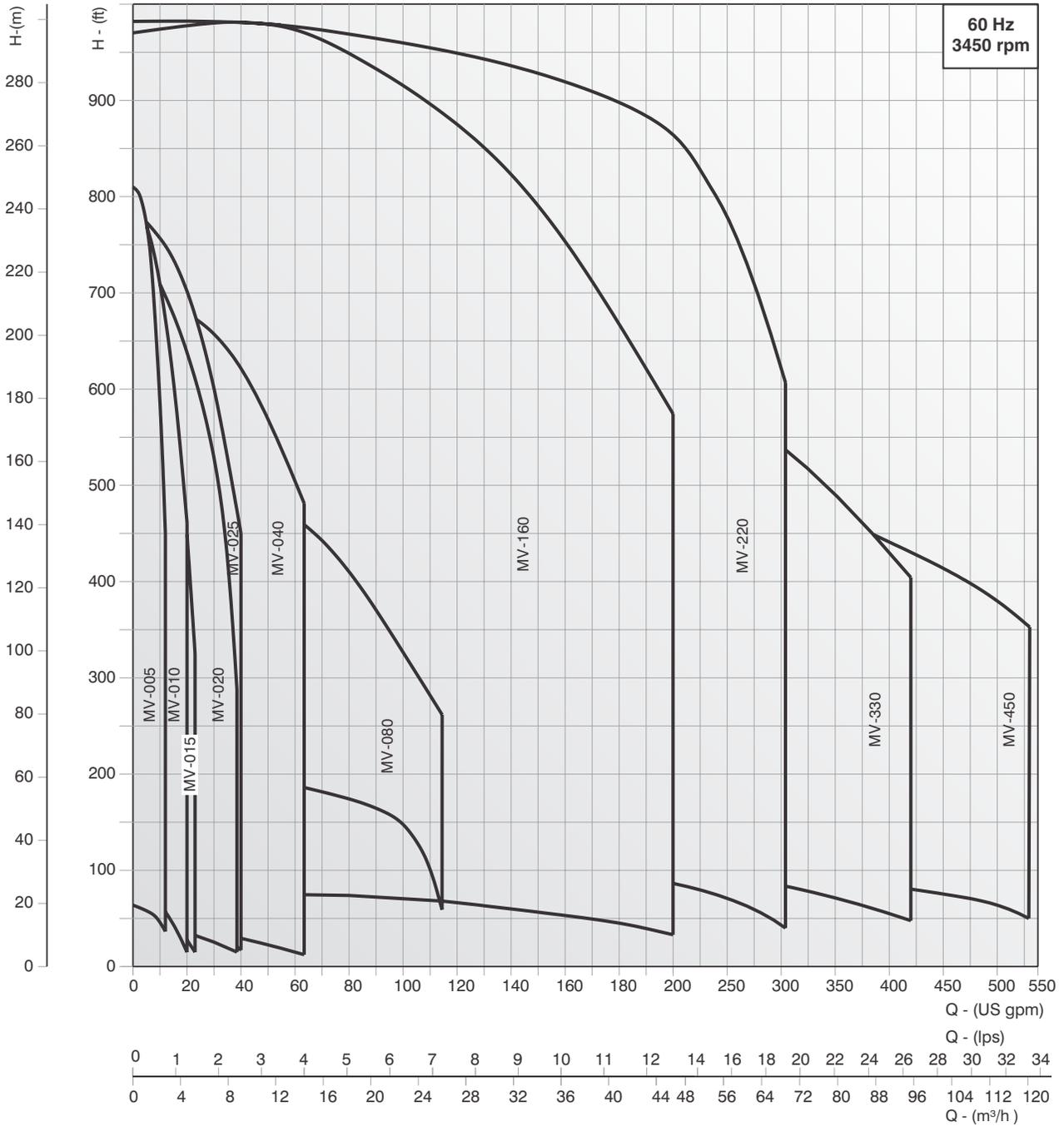
*** Optional Bush MOC

TC / TC

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



GROUP PERFORMANCE CURVE

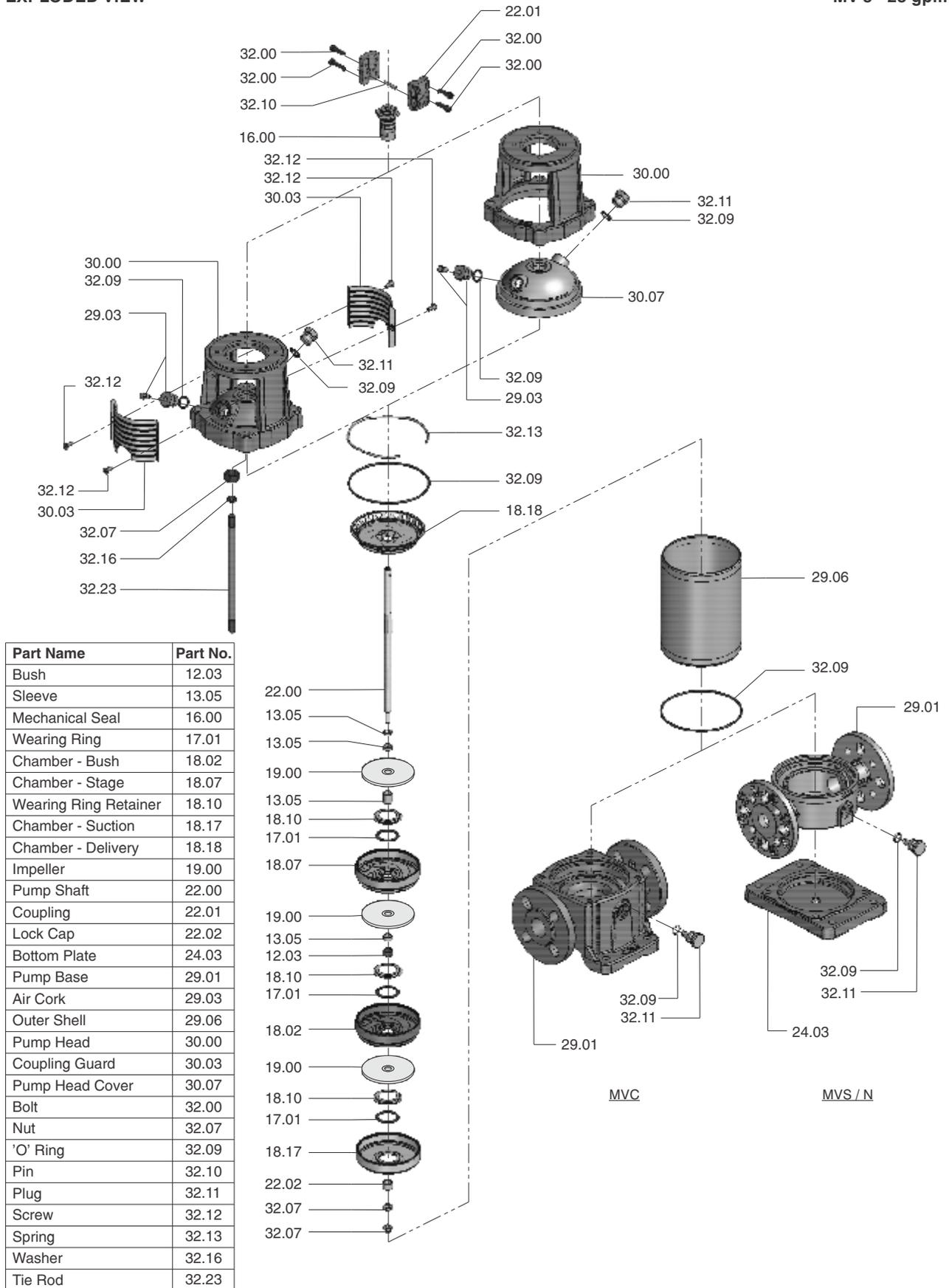


CURVE CONDITIONS

| 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.

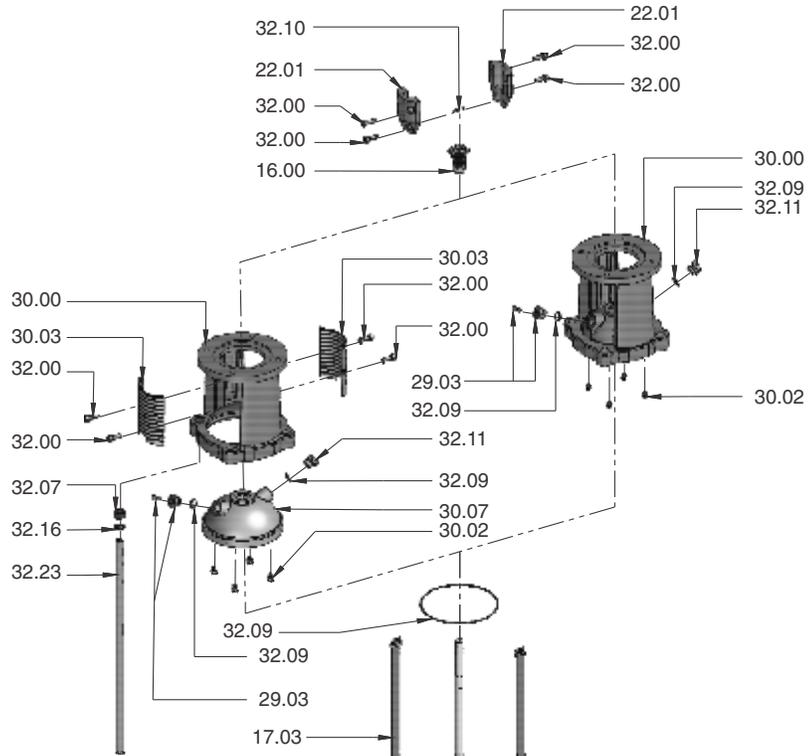
EXPLODED VIEW

MV 5 - 25 gpm

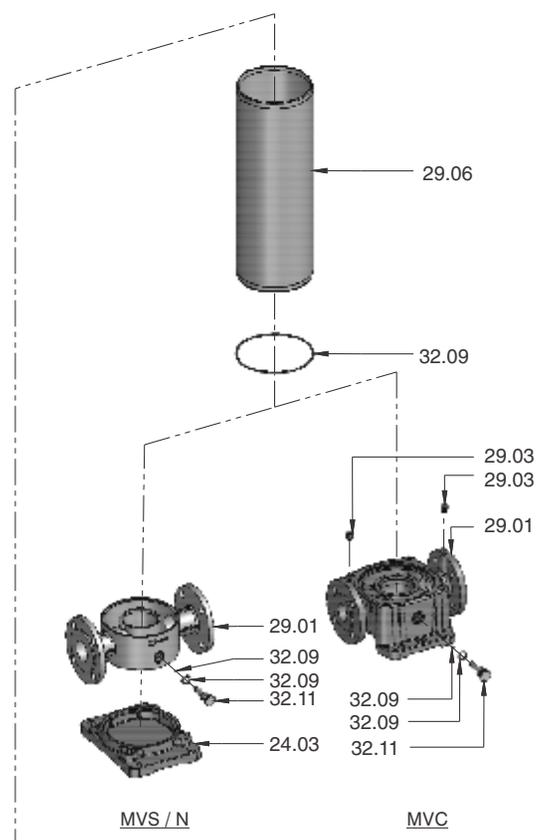
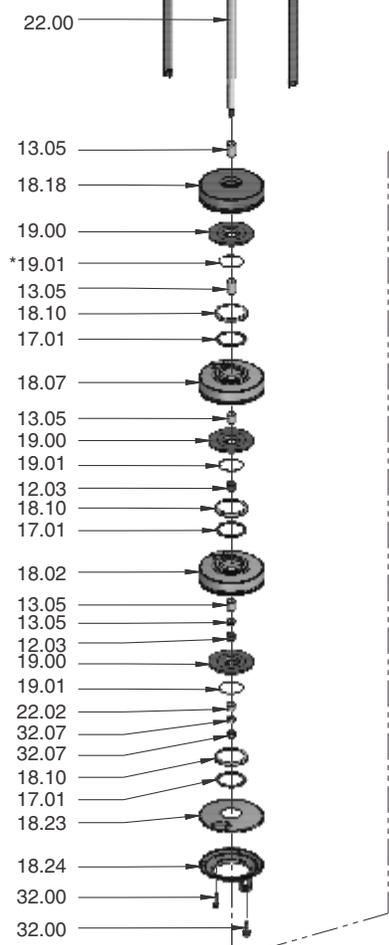


Part Name	Part No.
Bush	12.03
Sleeve	13.05
Mechanical Seal	16.00
Wearing Ring	17.01
Chamber - Bush	18.02
Chamber - Stage	18.07
Wearing Ring Retainer	18.10
Chamber - Suction	18.17
Chamber - Delivery	18.18
Impeller	19.00
Pump Shaft	22.00
Coupling	22.01
Lock Cap	22.02
Bottom Plate	24.03
Pump Base	29.01
Air Cork	29.03
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



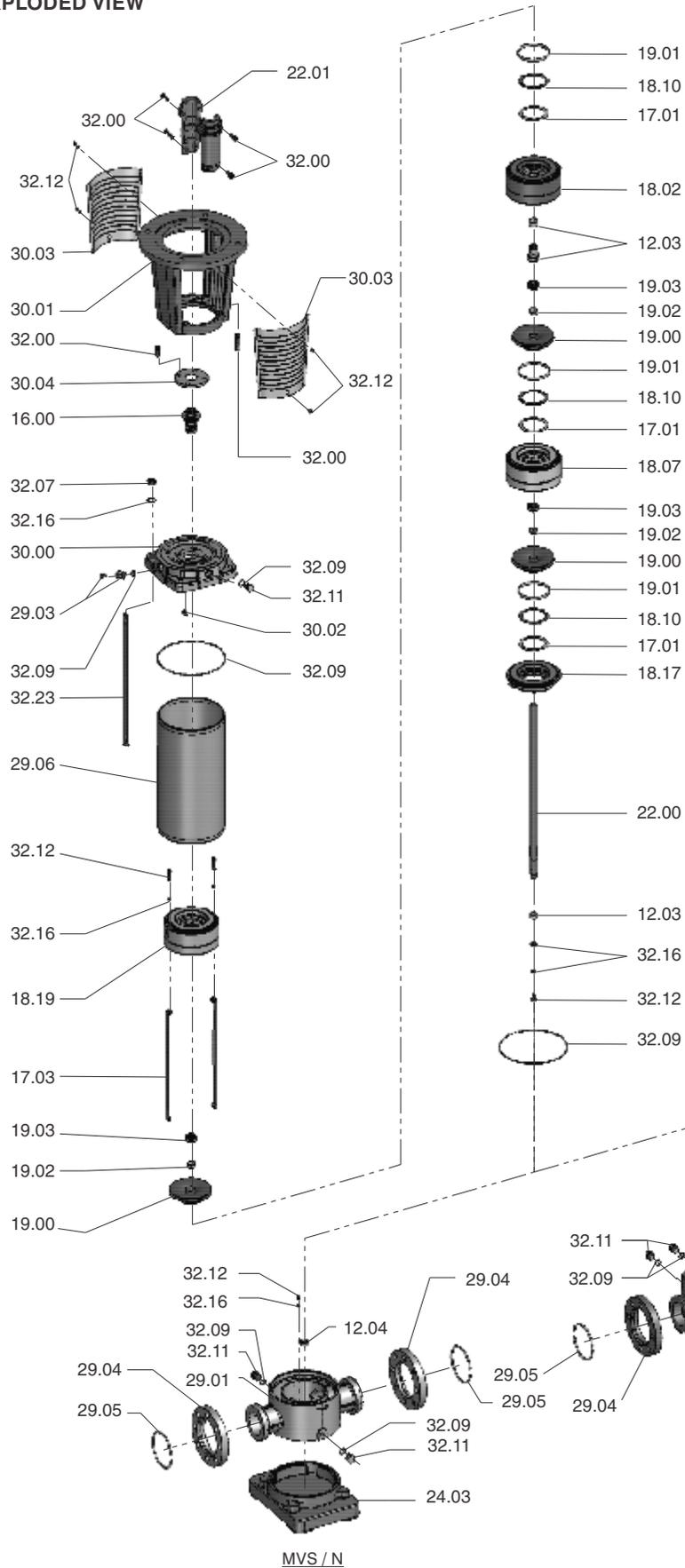
Part Name	Part No.
Bush	12.03
Sleeve	13.05
Mechanical Seal	16.00
Wearing Ring	17.01
Locking Strap - Pump	17.03
Chamber - Bush	18.02
Chamber - Stage	18.07
Wearing Ring Retainer	18.10
Chamber - Delivery	18.18
Suction Chamber Top Plate	18.23
Suction Chamber Bottom Plate	18.24
Impeller	19.00
*Neck Ring	19.01
Pump Shaft	22.00
Coupling	22.01
Lock Cap	22.02
Bottom Plate	24.03
Pump Base	29.01
Air Cork	29.03
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



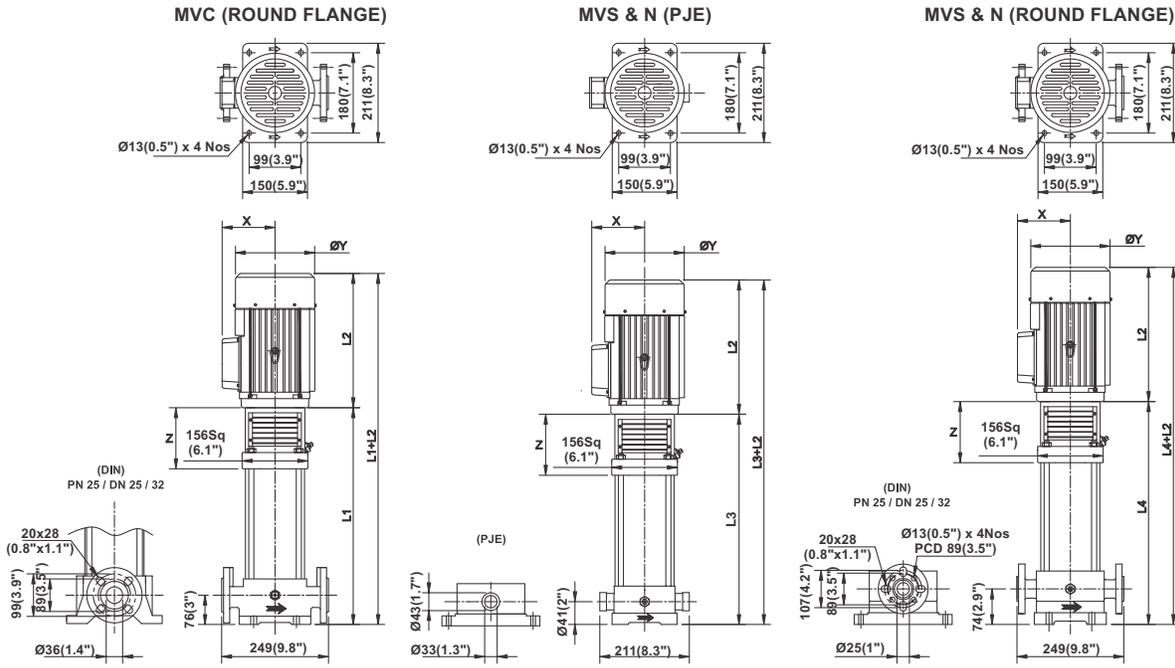
* Only for 80gpm.

MV 160 - 450 gpm

EXPLODED VIEW



Part Name	Part No.
Bush	12.03
Bush Guide	12.04
Mechanical Seal	16.00
Wearing Ring	17.01
Locking Strap - Pump	17.03
Chamber - Stage	18.07
Chamber - Bush	18.02
Wearing Ring Retainer	18.10
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
Bottom 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

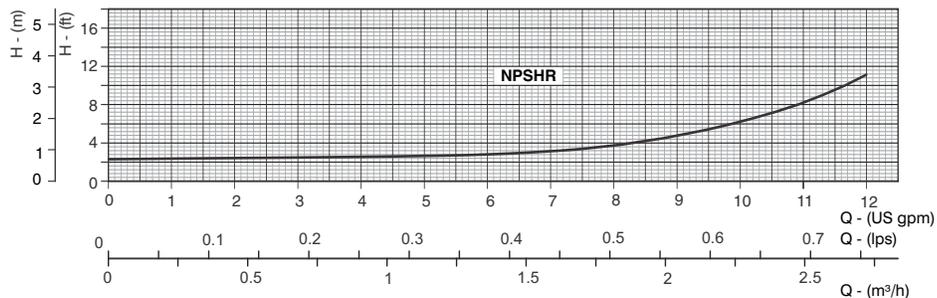


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)															APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)										
	L1 MVC		L2				L3		L4		X		Y (Ø)		Z		PUMP									
			1Ph		3Ph		MVS/N(PJE)		MVS/N								MVC		MVS/N (PJE)		MVS / N		1Ph		3Ph	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
MVS-005-02	269	10.6	222	8.7	217	8.5	249	9.8	273	10.7	113	4.4	140	5.5	145	5.7	18.6	41	13.2	29	15.0	33	9.1	20	8.2	18
MVS-005-03	287	11.3	222	8.7	217	8.5	267	10.5	291	11.5	113	4.4	140	5.5	145	5.7	19.0	42	14.1	31	15.4	34	9.1	20	8.2	18
MVS-005-04	305	12.0	222	8.7	217	8.5	285	11.2	309	12.2	113	4.4	140	5.5	145	5.7	20.0	44	14.5	32	16.3	36	9.1	20	8.2	18
MVS-005-05	323	12.7	242	9.5	232	9.1	303	11.9	327	12.9	113	4.4	140	5.5	145	5.7	20.4	45	15.0	33	16.8	37	10.0	22	9.1	20
MVS-005-06	341	13.4	242	9.5	232	9.1	321	12.6	345	13.6	113	4.4	140	5.5	145	5.7	20.9	46	15.9	35	17.2	38	10.0	22	9.1	20
MVS-005-07	359	14.1	267	10.5	252	9.9	339	13.3	363	14.3	113	4.4	140	5.5	145	5.7	21.8	48	16.3	36	18.1	40	11.8	27	14.1	31
MVS-005-08	377	14.8	267	10.5	252	9.9	357	14.1	381	15.0	113	4.4	140	5.5	145	5.7	22.2	49	16.8	37	18.6	41	11.8	27	14.1	31
MVS-005-09	395	15.6	267	10.5	252	9.9	375	14.8	399	15.7	113	4.4	140	5.5	145	5.7	22.7	50	17.7	39	19.0	42	11.8	27	14.1	31
MVS-005-10	413	16.3	284	11.2	264	10.4	393	15.5	417	16.4	118	4.6	160	6.3	145	5.7	23.6	52	18.1	40	20.0	44	15.0	33	14.1	31
MVS-005-11	431	17.0	284	11.2	264	10.4	411	16.2	435	17.1	118	4.6	160	6.3	145	5.7	24.0	53	18.6	41	20.4	45	15.0	33	14.1	31
MVS-005-12	449	17.7	284	11.2	264	10.4	429	16.9	453	17.8	118	4.6	160	6.3	145	5.7	24.5	54	19.5	43	20.9	46	15.0	33	14.1	31
MVS-005-13	467	18.4	284	11.2	264	10.4	447	17.6	471	18.5	118	4.6	160	6.3	145	5.7	24.9	56	20.0	44	21.3	47	15.0	33	14.1	31
MVS-005-15	503	19.8	294	11.6	295	11.6	483	19.0	507	20.0	136	5.4	187	7.4	163	6.4	26.3	58	21.3	47	22.7	50	20.0	44	20.0	44
MVS-005-17	539	21.2	294	11.6	295	11.6	519	20.4	543	21.4	136	5.4	187	7.4	163	6.4	27.7	61	22.2	49	24.0	53	20.0	44	20.0	44
MVS-005-19	575	22.6	320	12.6	295	11.6	555	21.9	579	22.8	136	5.4	187	7.4	163	6.4	28.6	64	23.6	52	24.9	55	24.0	53	20.0	44
MVS-005-21	611	24.1	320	12.6	295	11.6	591	23.3	615	24.2	136	5.4	187	7.4	163	6.4	29.9	66	24.9	55	26.3	58	24.0	53	20.0	44
MVS-005-23	647	25.5	320	12.6	295	11.6	627	24.7	651	25.6	136	5.4	187	7.4	163	6.4	31.3	69	25.9	57	27.7	61	24.0	53	20.0	44
MVS-005-25	701	27.6	320	12.6	295	11.6	681	26.8	705	27.8	136	5.4	187	7.4	163	6.4	32.2	71	27.2	60	28.6	63	24.0	53	20.0	44
MVS-005-27	737	29.0	-	-	320	12.6	717	28.2	741	29.2	136	5.4	187	7.4	163	6.4	33.6	74	28.1	63	29.9	66	-	-	24.0	53

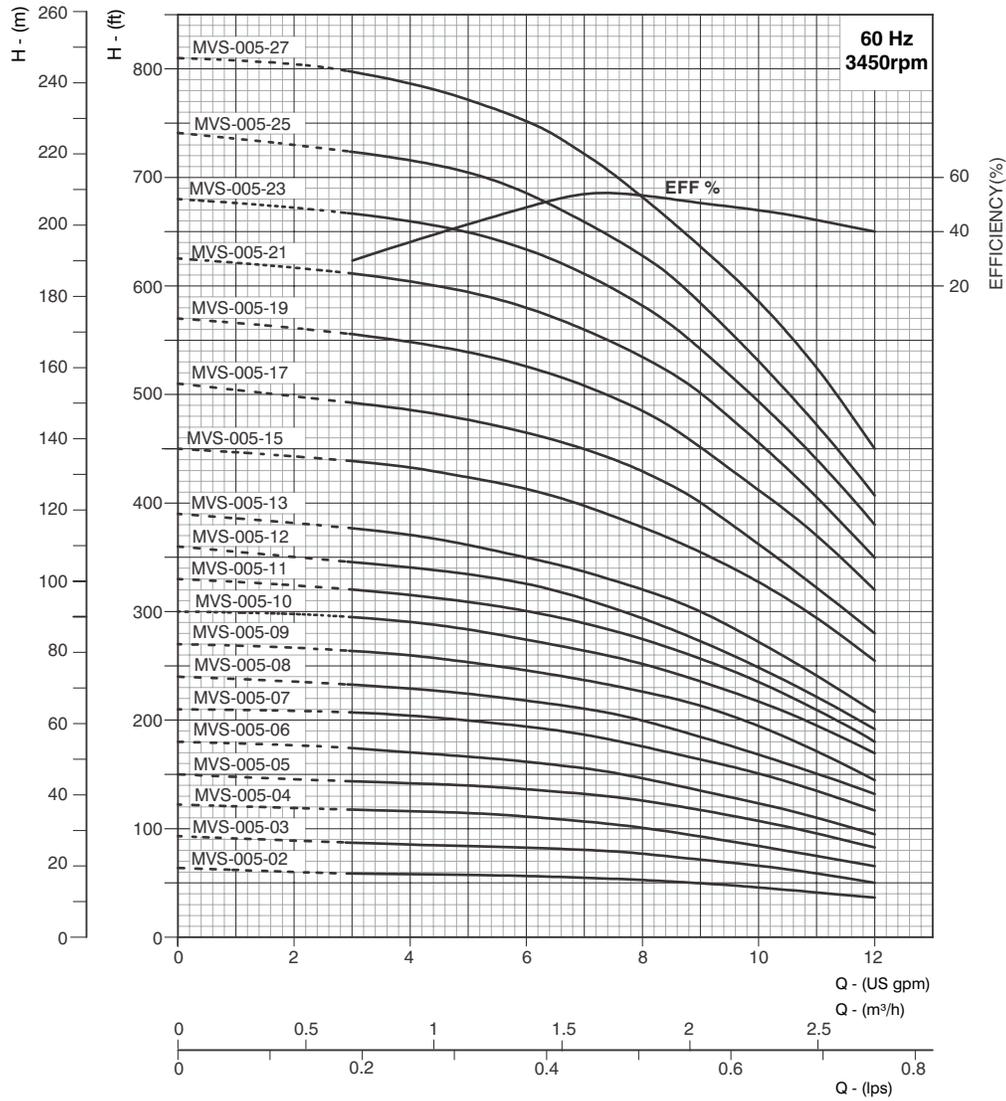
NPSHR CURVE



MV-005

PERFORMANCE CURVES

NOMINAL FLOW : 5 gpm

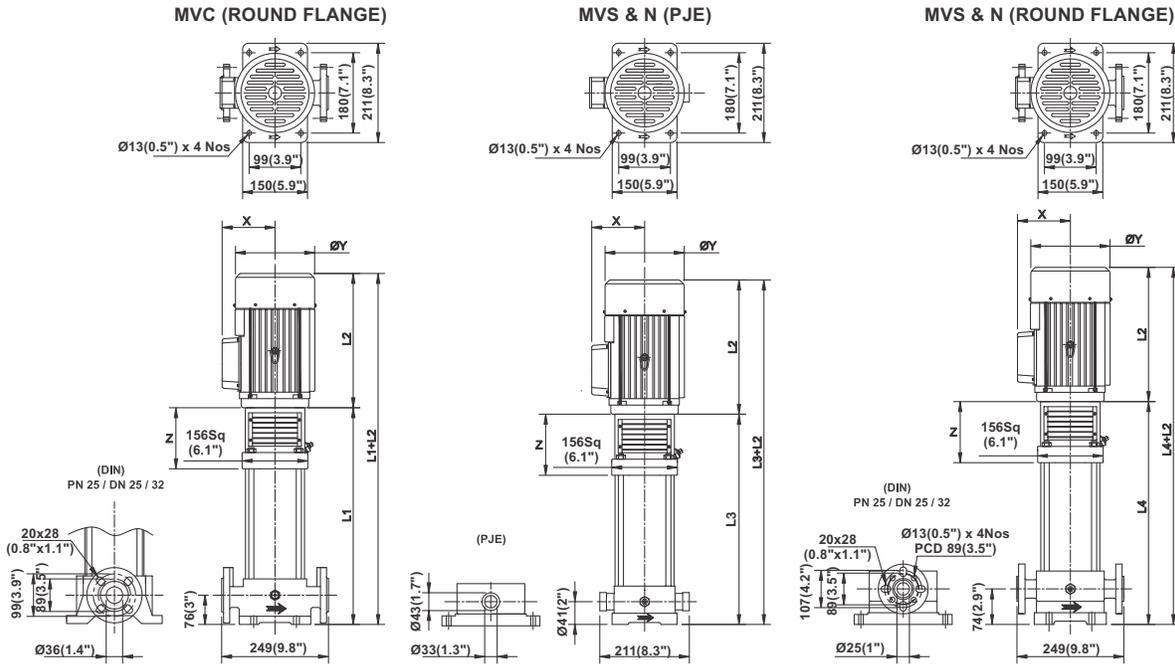


PERFORMANCE TABLE

PIPE SIZE : DN 25 / 32

PUMP MODEL	MOTOR POWER		DISCHARGE							
	kW	HP	m³/h	0	0.9	1.1	1.4	1.8	2.3	2.7
			US gpm	0	4	5	6	8	10	12
MVS-005-02	0.37	0.5	TOTAL MANOMETRIC HEAD IN FEET	62	59	58	58	53	46	38
MVS-005-03	0.37	0.5		93	86	84	82	78	66	50
MVS-005-04	0.37	0.5		122	116	114	110	100	83	66
MVS-005-05	0.55	0.75		150	141	140	139	126	109	82
MVS-005-06	0.55	0.75		180	170	168	162	147	123	95
MVS-005-07	0.75	1.0		210	205	200	194	176	150	119
MVS-005-08	0.75	1.0		240	230	224	219	200	169	132
MVS-005-09	0.75	1.0		270	260	252	246	228	195	145
MVS-005-10	1.1	1.50		300	290	283	274	251	219	170
MVS-005-11	1.1	1.50		330	315	309	300	275	235	180
MVS-005-12	1.1	1.50		360	340	335	326	294	250	191
MVS-005-13	1.1	1.50		390	370	361	350	320	271	209
MVS-005-15	1.5	2.0		450	432	422	412	379	328	255
MVS-005-17	1.5	2.0		510	486	478	465	430	361	280
MVS-005-19	2.2	3.0		570	549	540	526	484	411	320
MVS-005-21	2.2	3.0		625	604	595	580	534	455	350
MVS-005-23	2.2	3.0		680	660	650	633	581	493	380
MVS-005-25	2.2	3.0	740	716	704	688	629	530	408	
MVS-005-27	3.0	4.0	810	788	771	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.

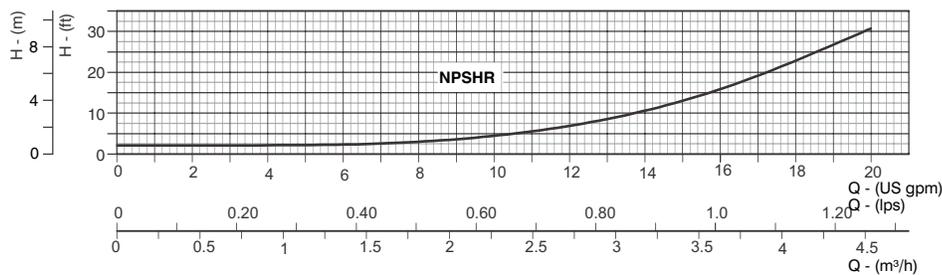


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)															APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)										
	L1 MVC		L2				L3		L4		X		Y (Ø)		Z		PUMP				MOTOR					
			1Ph		3Ph		MVS/N(PJE)		MVS/N								MVC		MVS/N (PJE)		MVS / N		1Ph		3Ph	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
MVS-010-02	269	10.6	222	8.7	217	8.5	249	9.8	273	10.7	113	4.4	140	5.5	145	5.7	18.6	41	13.2	29	15.0	33	9.1	20	8.2	18
MVS-010-03	287	11.3	242	9.5	232	9.1	267	10.5	291	11.5	113	4.4	140	5.5	145	5.7	19.0	42	14.1	31	15.9	35	10.0	22	9.1	20
MVS-010-04	305	12.0	267	10.5	252	9.9	285	11.2	309	12.2	113	4.4	140	5.5	145	5.7	20.0	44	15.0	33	16.3	36	11.8	26	14.1	31
MVS-010-05	323	12.7	284	11.2	264	10.4	303	11.9	327	12.9	118	4.6	160	6.3	145	5.7	20.9	46	15.4	34	17.2	38	15.0	33	14.1	31
MVS-010-06	341	13.4	284	11.2	264	10.4	321	12.6	345	13.6	118	4.6	160	6.3	145	5.7	21.3	47	16.3	36	17.7	39	15.0	33	14.1	31
MVS-010-07	359	14.1	294	11.6	295	11.6	339	13.3	363	14.3	136	5.4	187	7.4	163	6.4	22.7	50	17.2	38	19.0	42	20.0	44	20.0	44
MVS-010-08	377	14.8	320	12.6	295	11.6	357	14.1	381	15.0	136	5.4	187	7.4	163	6.4	23.1	51	18.1	40	19.5	43	24.0	53	24.0	53
MVS-010-09	395	15.6	320	12.6	295	11.6	375	14.8	399	15.7	136	5.4	187	7.4	163	6.4	24.0	53	18.6	41	20.4	45	24.0	53	24.0	53
MVS-010-10	413	16.3	320	12.6	295	11.6	393	15.5	417	16.4	136	5.4	187	7.4	163	6.4	24.5	54	19.5	43	20.9	46	24.0	53	24.0	53
MVS-010-11	431	17.0	320	12.6	295	11.6	411	16.2	435	17.1	136	5.4	187	7.4	163	6.4	25.4	56	20.0	44	21.8	48	24.0	53	24.0	53
MVS-010-12	449	17.7	320	12.6	295	11.6	465	18.3	489	19.3	136	5.4	187	7.4	163	6.4	25.9	57	20.9	46	22.7	50	24.0	53	24.0	53
MVS-010-13	485	19.1	-	-	320	12.6	483	19.0	507	20.0	136	5.4	187	7.4	163	6.4	26.8	59	21.8	48	23.1	51	-	-	24.0	53
MVS-010-15	521	20.5	-	-	320	12.6	501	19.7	525	20.7	136	5.4	187	7.4	163	6.4	28.1	62	23.1	51	24.5	54	-	-	24.0	53
MVS-010-18	575	22.6	-	-	354	13.9	555	21.9	579	22.8	136	5.4	187	7.4	163	6.4	30.4	67	24.9	55	26.8	59	-	-	27.7	61

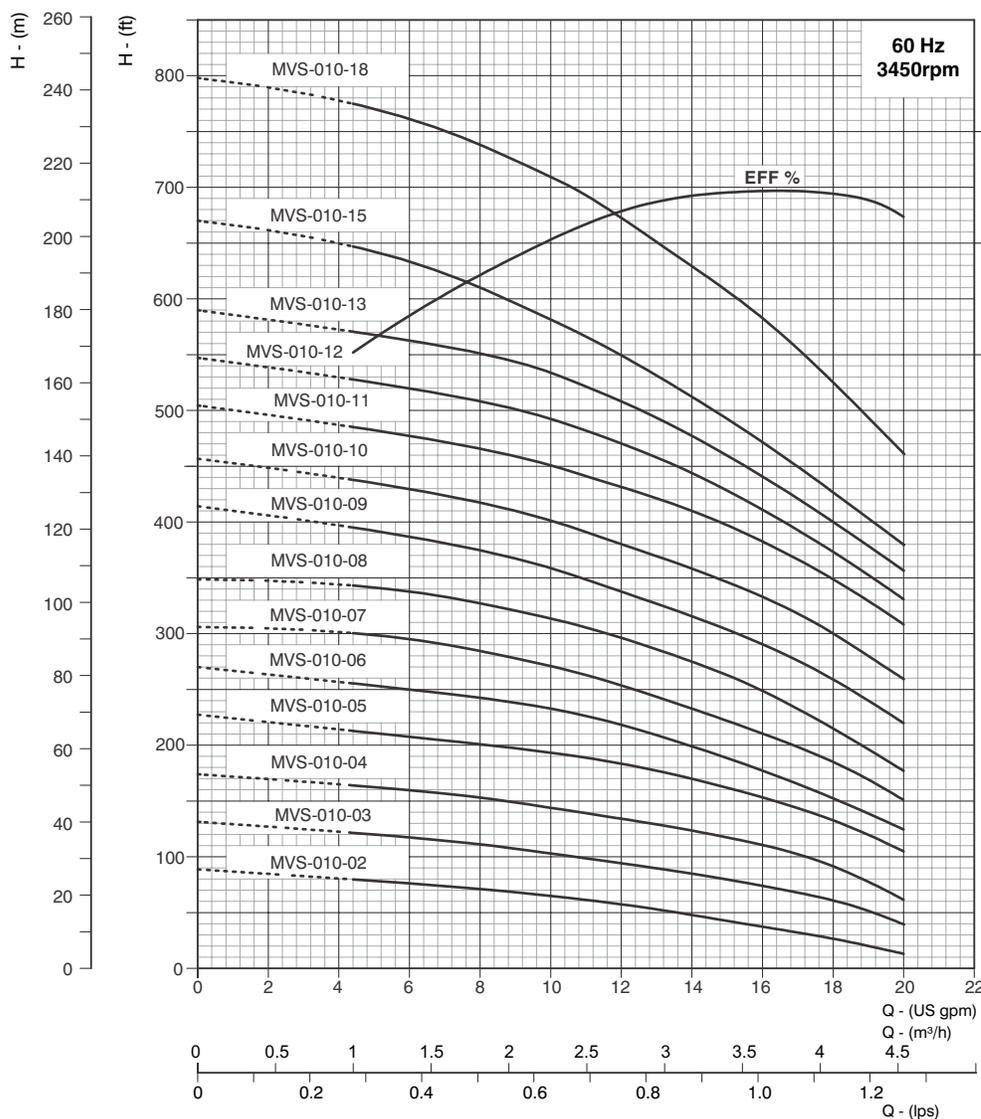
NPSHR CURVE



MV-010

PERFORMANCE CURVES

NOMINAL FLOW : 10 gpm

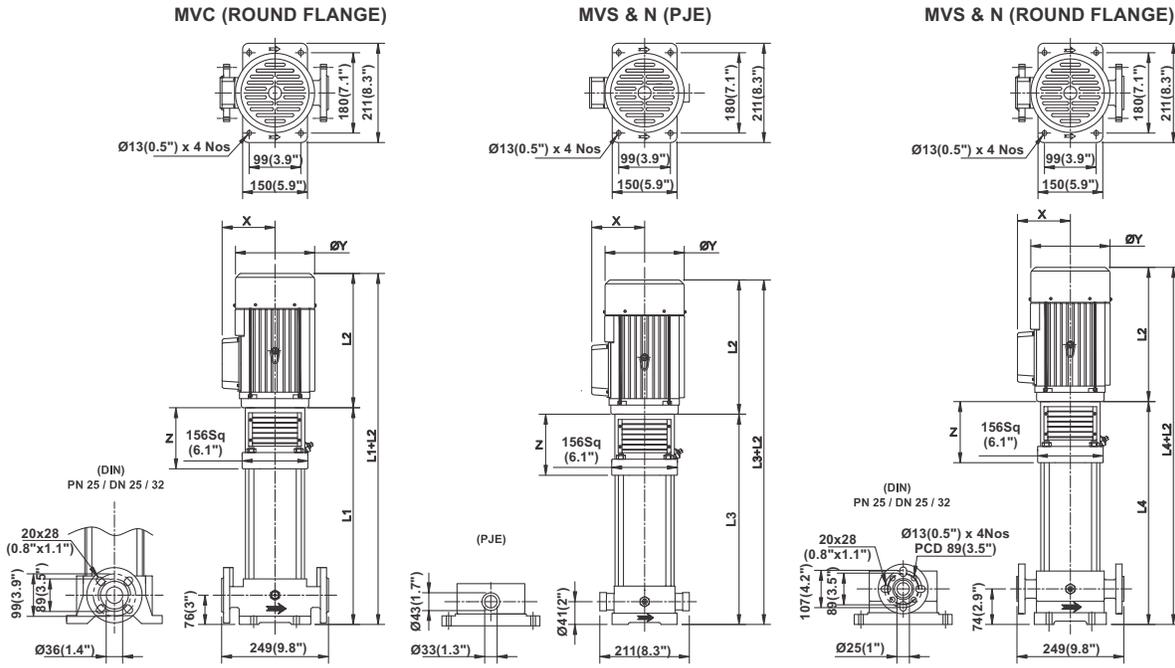


PERFORMANCE TABLE

PIPE SIZE : DN 25 / 32

PUMP MODEL	MOTOR POWER		DISCHARGE								
	kW	HP	m³/h	0	0.9	1.8	2.3	2.7	3.6	4.5	
MVS-010-02	0.37	0.5	US gpm	0	4	8	10	12	16	20	
MVS-010-03	0.55	0.75	TOTAL MANOMETRIC HEAD IN FEET	89	80	72	65	57	38	13	
MVS-010-04	0.75	1.0		132	123	111	102	95	75	40	
MVS-010-05	1.1	1.5		174	165	153	144	135	110	62	
MVS-010-06	1.1	1.5		227	215	201	192	184	153	105	
MVS-010-07	1.5	2.0		270	257	243	231	218	177	125	
MVS-010-08	2.2	3.0		306	301	285	270	254	210	151	
MVS-010-09	2.2	3.0		348	345	327	313	296	249	178	
MVS-010-10	2.2	3.0		414	397	375	360	338	290	220	
MVS-010-11	2.2	3.0		457	440	418	400	380	333	260	
MVS-010-12	2.2	3.0		505	487	466	450	432	382	308	
MVS-010-13	3	4.0		547	530	508	491	470	411	331	
MVS-010-15	3	4.0		590	573	551	533	508	441	357	
MVS-010-18	4	5.5		670	650	610	580	550	472	380	
					798	778	739	710	672	583	461

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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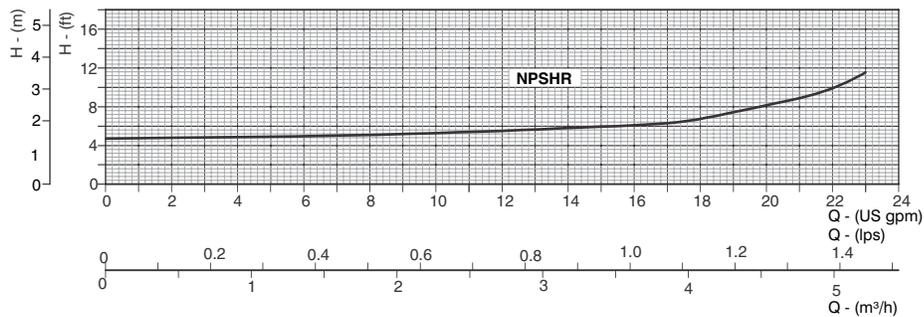


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)															APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)										
	L1 MVC		L2				L3		L4		X	Y (Ø)		Z		PUMP				MOTOR						
			1Ph		3Ph		MVS/N(PJE)		MVS/N			MVS / N				1Ph		3Ph								
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
MVS-015-02	269	10.6	222	8.7	217	8.5	249	9.8	273	10.7	113	4.4	140	5.5	145	5.7	18.6	41	13.2	29	15.0	33	9.1	20	8.2	18
MVS-015-03	287	11.3	222	8.7	217	8.5	267	10.5	291	11.5	113	4.4	140	5.5	145	5.7	19.0	42	14.1	31	15.4	34	10.0	22	9.1	20
MVS-015-04	305	12.0	242	9.5	232	9.1	285	11.2	309	12.2	113	4.4	140	5.5	145	5.7	19.5	43	14.5	32	16.3	36	10.0	22	9.1	20
MVS-015-05	323	12.7	267	10.5	252	9.9	303	11.9	327	12.9	113	4.4	140	5.5	145	5.7	20.4	45	15.0	33	16.8	37	11.8	26	14.1	31
MVS-015-06	341	13.4	284	11.2	264	10.4	321	12.6	345	13.6	118	4.6	160	6.3	145	5.7	20.9	46	15.9	35	17.2	38	15.0	33	14.1	31
MVS-015-07	359	14.1	284	11.2	264	10.4	339	13.3	363	14.3	118	4.6	160	6.3	145	5.7	21.3	47	16.3	36	17.7	39	15.0	33	14.1	31
MVS-015-08	377	14.8	284	11.2	264	10.4	357	14.1	381	15.0	118	4.6	160	6.3	145	5.7	22.2	49	16.8	37	18.6	41	15.0	33	14.1	31
MVS-015-09	395	15.6	294	11.6	295	11.6	375	14.8	399	15.7	136	5.4	187	7.4	163	6.4	23.1	51	18.1	40	19.5	43	20.0	44	20.0	44
MVS-015-10	413	16.3	294	11.6	295	11.6	393	15.5	417	16.4	136	5.4	187	7.4	163	6.4	23.6	52	18.6	41	20.4	45	20.0	44	20.0	44
MVS-015-11	431	17.0	294	11.6	295	11.6	411	16.2	435	17.1	136	5.4	187	7.4	163	6.4	24.5	54	19.0	42	20.9	46	20.0	44	20.0	44
MVS-015-12	449	17.7	320	12.6	295	11.6	429	16.9	453	17.8	136	5.4	187	7.4	163	6.4	24.9	55	20.0	44	21.3	47	24.0	53	20.0	44
MVS-015-13	467	18.4	320	12.6	295	11.6	447	17.6	471	18.5	136	5.4	187	7.4	163	6.4	25.4	56	20.4	45	22.2	49	24.0	53	20.0	44
MVS-015-15	503	19.8	320	12.6	295	11.6	483	19.0	507	20.0	136	5.4	187	7.4	163	6.4	26.8	59	21.8	48	23.1	51	24.0	53	20.0	44
MVS-015-17	557	21.9	320	12.6	295	11.6	537	21.1	561	22.1	136	5.4	187	7.4	163	6.4	28.1	62	22.7	50	24.5	54	24.0	53	20.0	44
MVS-015-19	593	23.3	-	-	320	12.6	573	22.6	597	23.5	136	5.4	187	7.4	163	6.4	29.0	64	24.0	53	25.4	56	-	-	24.0	53
MVS-015-21	629	24.8	-	-	320	12.6	609	24.0	633	24.9	136	5.4	187	7.4	163	6.4	30.4	67	25.4	56	26.8	59	-	-	24.0	53
MVS-015-23	665	26.2	-	-	320	12.6	645	25.4	669	26.3	136	5.4	187	7.4	163	6.4	31.7	70	26.3	58	28.1	62	-	-	24.0	53
MVS-015-25	701	27.6	-	-	320	12.6	681	26.8	705	27.8	136	5.4	187	7.4	163	6.4	32.7	72	27.7	61	29.0	64	-	-	24.0	53

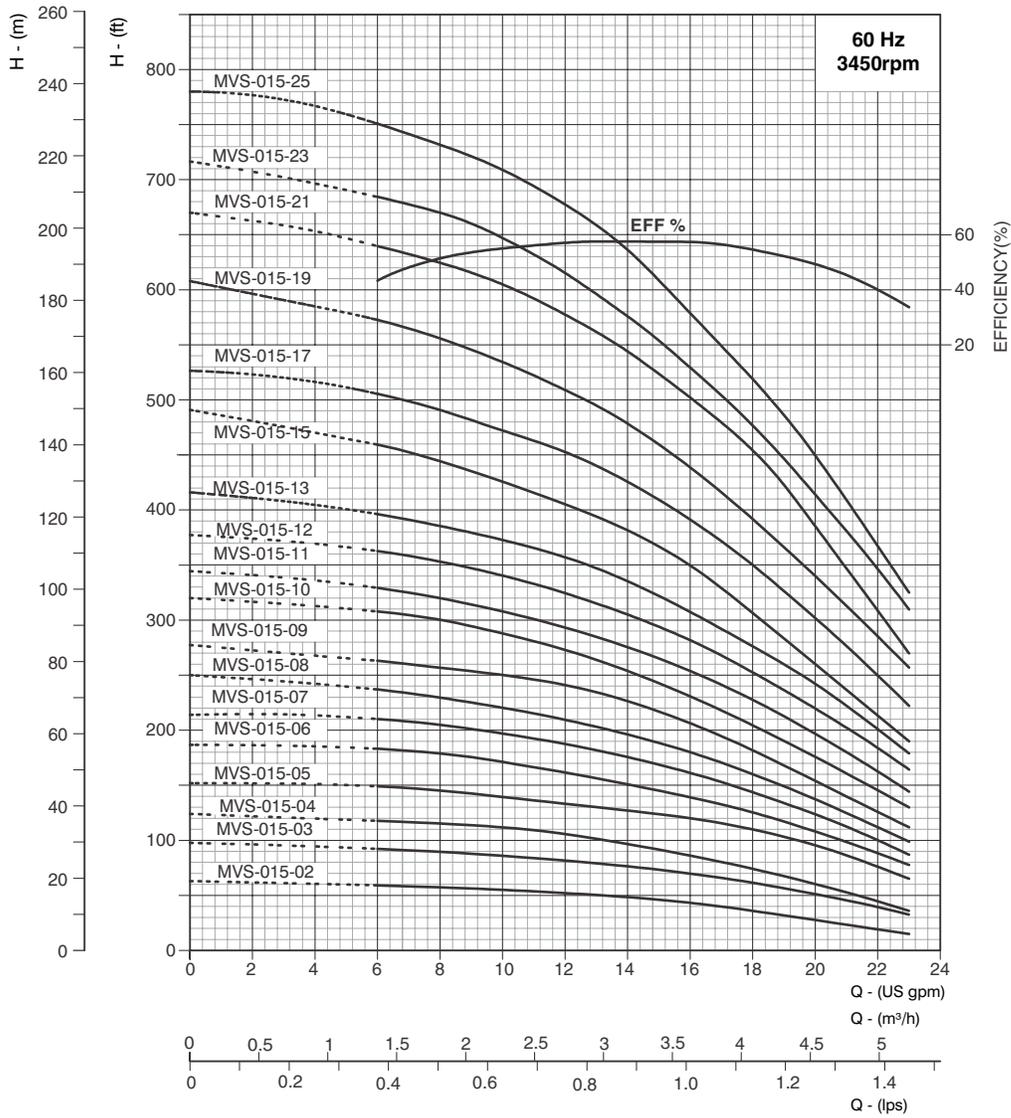
NPSHR CURVE



MV-015

PERFORMANCE CURVES

NOMINAL FLOW : 15 gpm

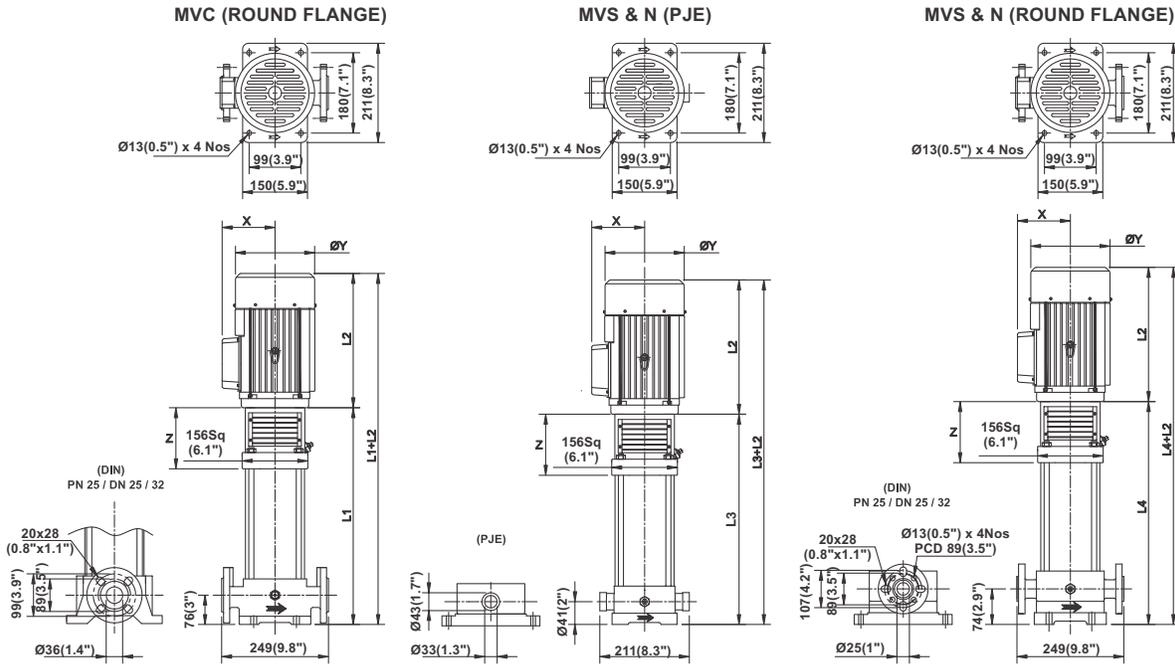


PERFORMANCE TABLE

PIPE SIZE : DN 25 / 32

PUMP MODEL	MOTOR POWER		DISCHARGE						
	kW	HP	m³/h	0	1.4	2.3	3.4	4.1	5.2
MVS-015-02	0.37	0.50	US gpm	0	6	10	15	18	23
MVS-015-03	0.55	0.75	TOTAL MANOMETRIC HEAD IN FEET	62	60	55	47	35	15
MVS-015-04	0.55	0.75		98	92	85	72	60	30
MVS-015-05	0.75	1.0		125	118	111	91	75	35
MVS-015-06	1.1	1.5		151	150	140	122	110	65
MVS-015-07	1.1	1.5		188	182	170	145	125	79
MVS-015-08	1.1	1.5		212	210	198	170	145	89
MVS-015-09	1.5	2.0		250	238	220	190	160	100
MVS-015-10	1.5	2.0		278	262	250	219	180	112
MVS-015-11	1.5	2.0		320	308	290	242	205	130
MVS-015-12	2.2	3.0		345	330	308	265	226	145
MVS-015-13	2.2	3.0		378	362	340	295	250	165
MVS-015-15	2.2	3.0		416	395	372	321	275	180
MVS-015-17	2.2	3.0		490	460	426	368	308	190
MVS-015-19	3.0	4.0		528	505	470	410	350	223
MVS-015-21	3.0	4.0		608	572	535	460	390	255
MVS-015-23	3.0	4.0		670	640	605	522	450	270
MVS-015-25	3.0	4.0		718	685	645	551	475	310
				780	750	710	608	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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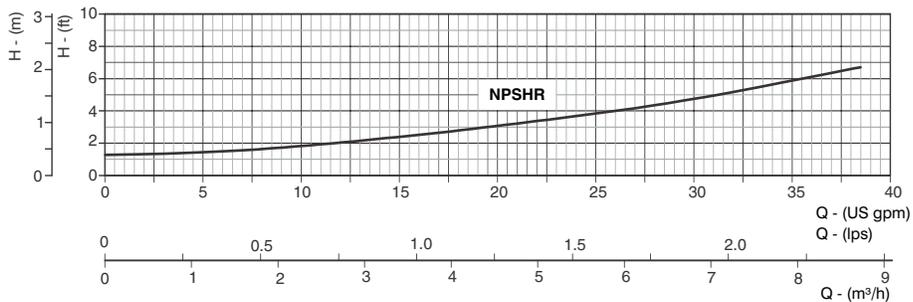


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)															APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)										
	L1 MVC		L2				L3		L4		X		Y (Ø)		Z		PUMP									
			1Ph		3Ph		MVS/N(PJE)		MVS/N								MVC		MVS/N (PJE)		MVS / N		1Ph		3Ph	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
MVS-020-01	287	11.3	222	8.7	217	8.5	267	10.5	291	11.5	113	4.4	140	5.5	145	5.7	21.8	48	16.8	37	18.1	40	9.1	20	8.2	18
MVS-020-02	287	11.3	267	10.5	252	9.9	294	11.6	318	12.5	113	4.4	140	5.5	145	5.7	22.7	50	17.2	38	19.0	42	11.8	26	14.1	31
MVS-020-03	314	12.4	267	10.5	252	9.9	321	12.6	345	13.6	113	4.4	140	5.5	145	5.7	23.1	51	18.1	40	19.5	43	11.8	26	14.1	31
MVS-020-04	341	13.4	295	11.6	295	11.6	348	13.7	372	14.6	118	4.6	187	7.4	163	6.4	24.5	54	19.0	42	20.9	46	20.0	44	20.0	44
MVS-020-05	368	14.5	320	12.6	295	11.6	375	14.8	399	15.7	118	4.6	187	7.4	163	6.4	24.9	55	20.0	44	21.8	48	24.0	53	20.0	44
MVS-020-06	395	15.6	320	12.6	295	11.6	402	15.8	426	16.8	136	5.4	187	7.4	163	6.4	25.9	57	20.9	46	22.2	49	24.0	53	20.0	44
MVS-020-07	440	17.3	-	-	320	12.6	447	17.6	471	18.5	136	5.4	187	7.4	163	6.4	26.8	59	21.3	47	23.1	51	-	-	21.3	47
MVS-020-08	467	18.4	-	-	320	12.6	474	18.7	498	19.6	136	5.4	187	7.4	163	6.4	27.2	60	22.2	49	23.6	52	-	-	21.3	47
MVS-020-10	521	20.5	-	-	354	13.9	528	20.8	552	21.7	136	5.4	187	7.4	163	6.4	28.6	63	23.6	52	24.9	55	-	-	27.7	61
MVS-020-12	575	22.6	-	-	354	13.9	582	22.9	606	23.9	136	5.4	187	7.4	163	6.4	29.9	66	24.9	55	26.3	58	-	-	27.7	61
MVS-020-14	629	24.8	-	-	385	15.2	636	25.0	660	26.0	204	8.0	204	8.0	197	7.8	32.7	72	27.2	60	29.0	64	-	-	41.3	91
MVS-020-16	683	26.9	-	-	385	15.2	690	27.2	714	28.1	204	8.0	204	8.0	197	7.8	34.0	75	28.6	63	30.4	67	-	-	41.3	91

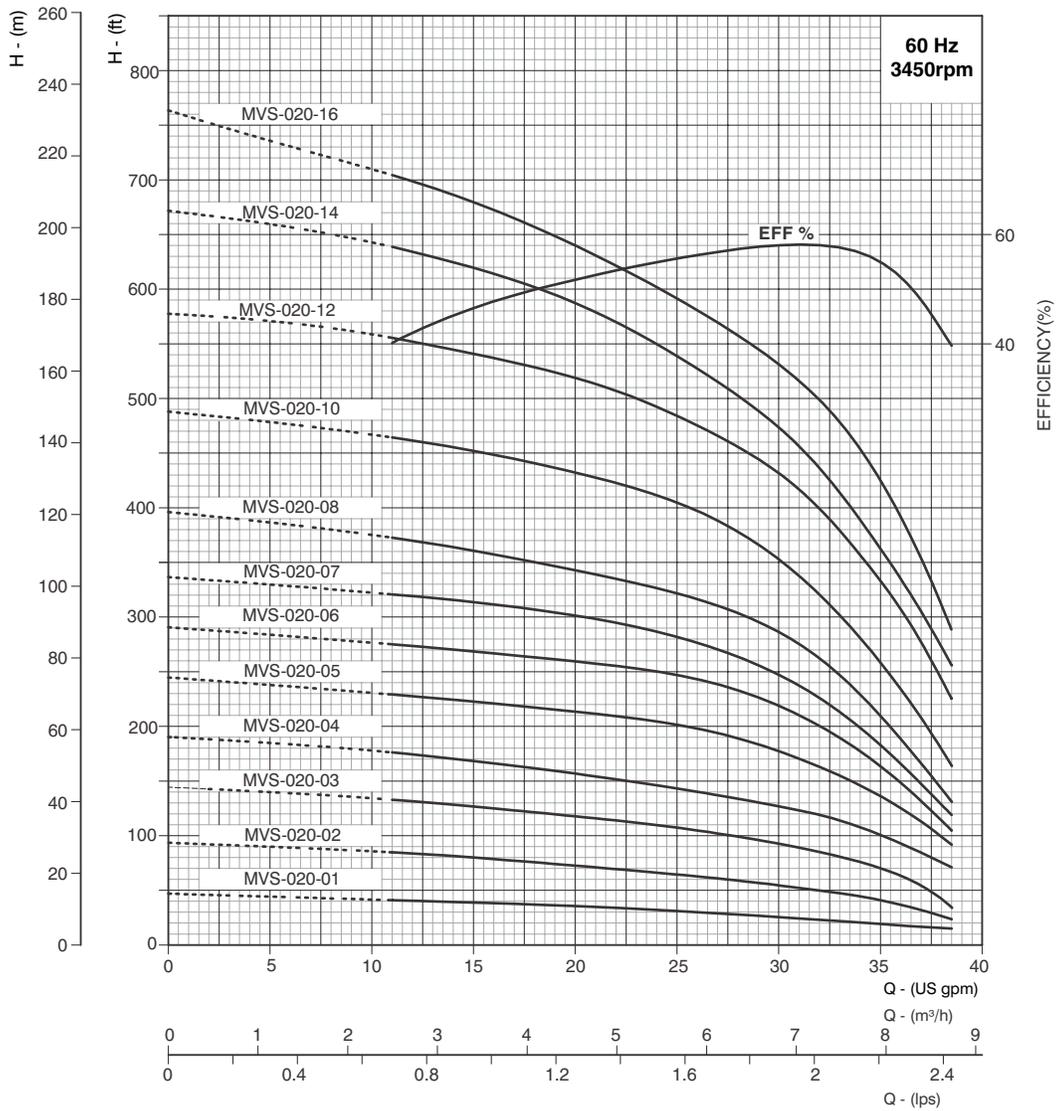
NPSHR CURVE



MV-020

PERFORMANCE CURVES

NOMINAL FLOW : 20 gpm

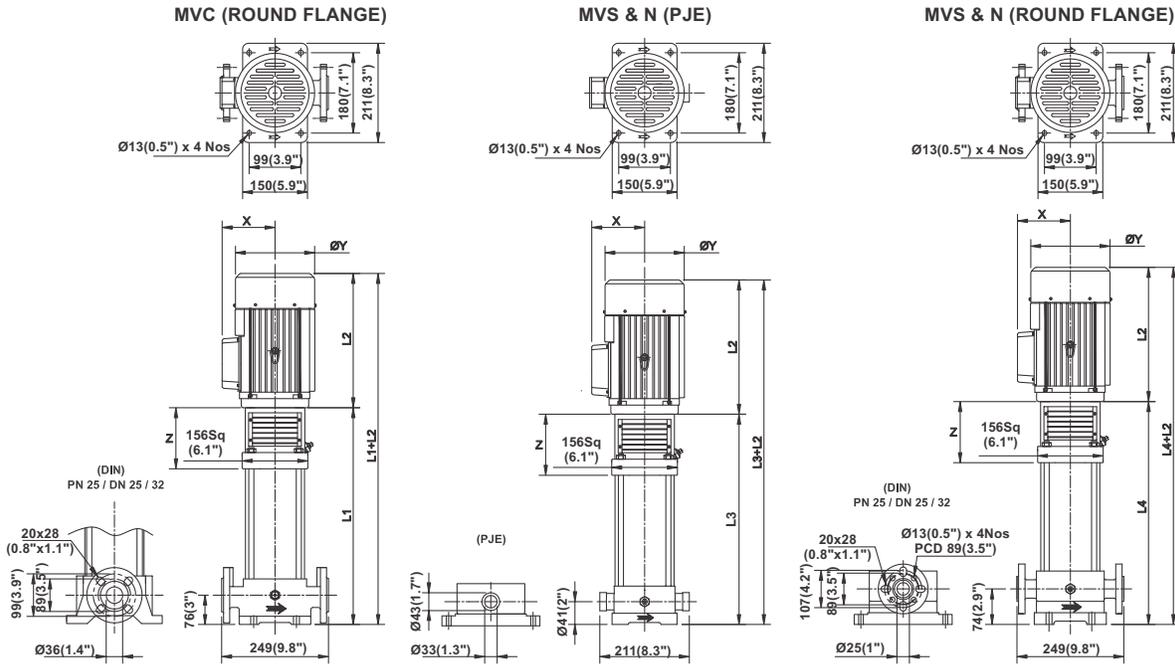


PERFORMANCE TABLE

PIPE SIZE : DN 25 / 32

PUMP MODEL	MOTOR POWER		DISCHARGE							
	kW	HP	m³/h	0	2.5	3.4	4.5	5.7	8	8.6
MVS-020-01	0.37	0.5	US gpm	0	11	15	20	25	35	38
MVS-020-02	0.75	1.0	TOTAL MANOMETRIC HEAD IN FEET	47	40	39	36	32	20	16
MVS-020-03	0.75	1.0		94	84	80	71	65	41	26
MVS-020-04	1.5	2.0		144	132	127	119	107.5	70	42
MVS020-05	2.2	3.0		190	178	168	158	144	100	75
MVS-020-06	2.2	3.0		245	230	223	202	202	137	99
MVS-020-07	3	4.0		290	276	268.5	260	247	163	113
MVS-020-08	3	4.0		337	320	314	301	282	182	128
MVS-020-10	4	5.5		395	372	360	341	322	210	143
MVS-020-12	4	5.5		488	465	452	432	405	259	180
MVS-020-14	5.5	7.5		579	555	541	520	484	333	243
MVS-020-16	5.5	7.5		671	640	620	589	539	362	272
				763	705	680	640	592	425	310

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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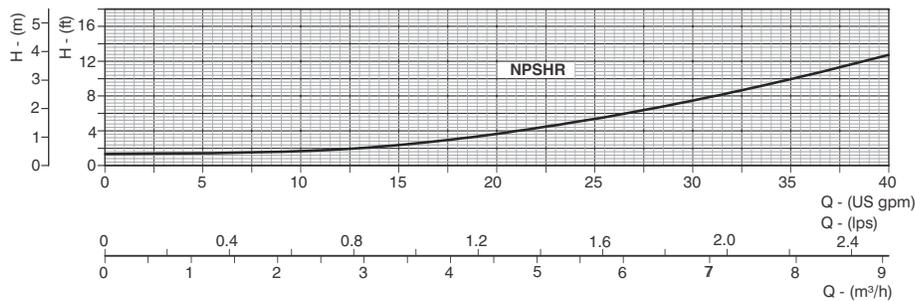


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)															APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)										
	L1 MVC		L2				L3		L4		X		Y (Ø)		Z		PUMP									
			1Ph		3Ph		MVS/N(PJE)		MVS/N								MVC		MVS/N (PJE)		MVS / N		1Ph		3Ph	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
MVS-025-02	287	11.3	242	9.5	232	9.1	267	10.5	291	11.5	113	4.4	140	5.5	145	5.7	22.7	50	17.2	38	19.0	42	10.0	22	9.1	20
MVS-025-03	314	12.4	284	11.2	264	10.4	294	11.6	318	12.5	118	4.6	160	6.3	145	5.7	23.6	52	18.1	40	20.0	44	15.0	33	14.1	31
MVS-025-04	341	13.4	284	11.2	264	10.4	321	12.6	345	13.6	118	4.6	160	6.3	145	5.7	24.5	54	19.0	42	20.9	46	15.0	33	14.1	31
MVS-025-05	368	14.5	294	11.6	295	11.6	348	13.7	372	14.6	136	5.4	187	7.4	163	6.4	25.9	57	20.4	45	22.2	49	20.0	44	20.0	44
MVS-025-06	395	15.6	320	12.6	295	11.6	375	14.8	399	15.7	136	5.4	187	7.4	163	6.4	26.8	59	21.3	47	23.1	51	24.0	53	20.0	44
MVS-025-07	422	16.6	320	12.6	295	11.6	402	15.8	426	16.8	136	5.4	187	7.4	163	6.4	27.7	61	22.2	49	24.0	53	24.0	53	20.0	44
MVS-025-08	449	17.7	320	12.6	295	11.6	429	16.9	453	17.8	136	5.4	187	7.4	163	6.4	28.6	63	23.1	51	24.9	55	24.0	53	20.0	44
MVS-025-09	494	19.4	320	12.6	295	11.6	474	18.7	498	19.6	136	5.4	187	7.4	163	6.4	29.5	65	24.0	53	25.9	57	24.0	53	20.0	44
MVS-025-10	521	20.5	-	-	320	12.6	501	19.7	525	20.7	136	5.4	187	7.4	163	6.4	30.4	67	24.9	55	26.8	59	-	-	24.0	53
MVS-025-11	548	21.6	-	-	320	12.6	528	20.8	552	21.7	136	5.4	187	7.4	163	6.4	31.3	69	25.9	57	27.7	61	-	-	24.0	53
MVS-025-12	575	22.6	-	-	320	12.6	555	21.9	579	22.8	136	5.4	187	7.4	163	6.4	32.2	71	26.8	59	28.6	63	-	-	24.0	53
MVS-025-13	602	23.7	-	-	340	13.4	582	22.9	606	23.9	136	5.4	187	7.4	163	6.4	32.7	72	27.7	61	29.5	65	-	-	27.7	61
MVS-025-14	629	24.8	-	-	340	13.4	609	24.0	633	24.9	136	5.4	187	7.4	163	6.4	33.6	74	28.6	63	30.4	67	-	-	27.7	61
MVS-025-15	656	25.8	-	-	340	13.4	636	25.0	660	26.0	136	5.4	187	7.4	163	6.4	34.5	76	29.5	65	31.3	69	-	-	27.7	61
MVS-025-16	683	26.9	-	-	340	13.4	663	26.1	687	27.0	136	5.4	187	7.4	163	6.4	35.4	78	30.4	67	32.2	71	-	-	27.7	61
MVS-025-18	737	29.0	-	-	385	15.2	717	28.2	741	29.2	204	8.0	257	10.1	197	7.8	38.5	85	33.1	73	34.9	77	-	-	41.3	91
MVS-025-20	791	31.1	-	-	385	15.2	771	30.4	795	31.3	204	8.0	257	10.1	197	7.8	40.4	89	34.9	77	36.7	81	-	-	41.3	91
MVS-025-22	845	33.3	-	-	385	15.2	825	32.5	849	33.4	204	8.0	257	10.1	197	7.8	42.2	93	36.7	81	38.5	85	-	-	41.3	91
MVS-025-24	899	35.4	-	-	424	16.7	879	34.6	903	35.6	204	8.0	257	10.1	197	7.8	43.5	96	38.5	85	40.4	89	-	-	47.6	105

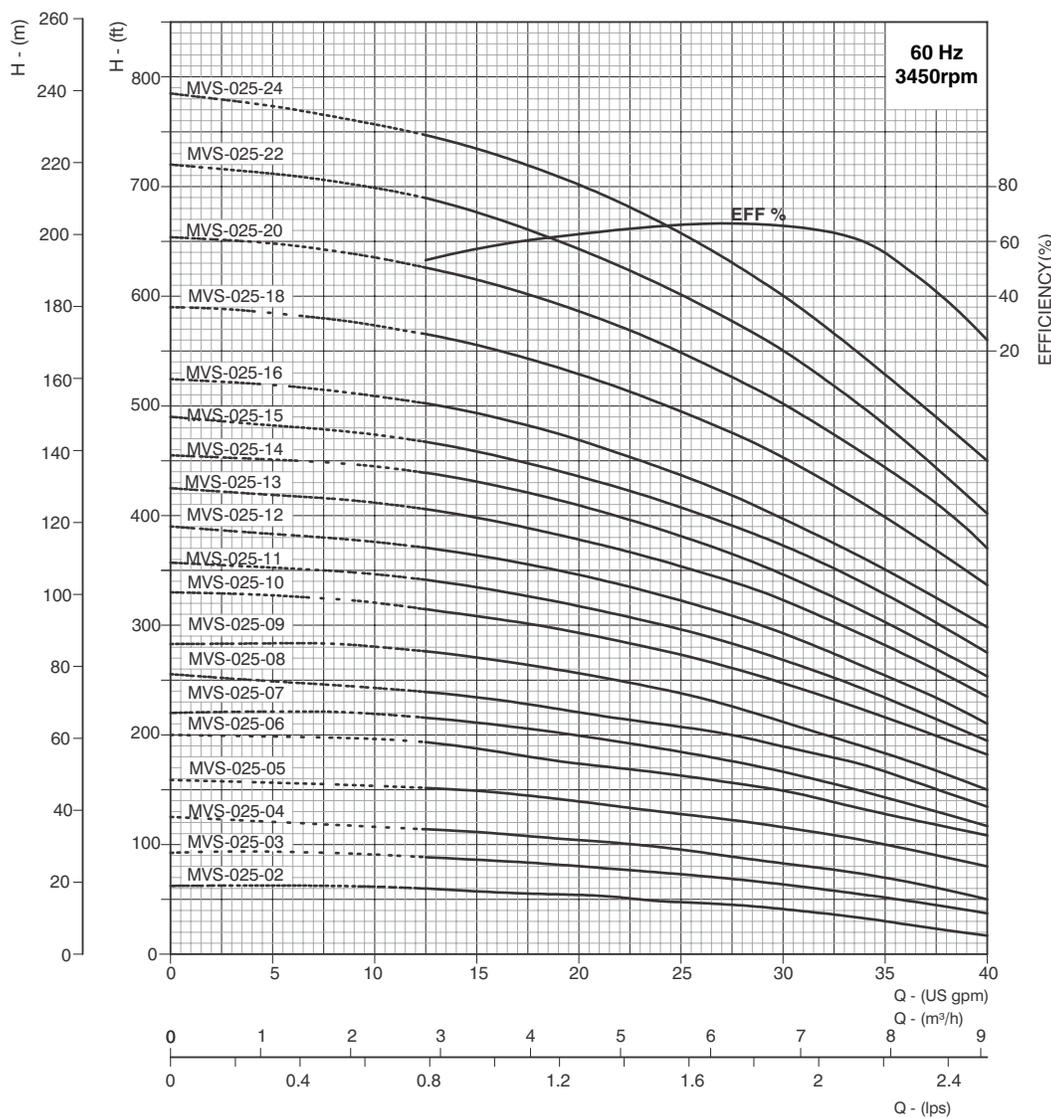
NPSHR CURVE



MV-025

PERFORMANCE CURVES

NOMINAL FLOW : 25 gpm

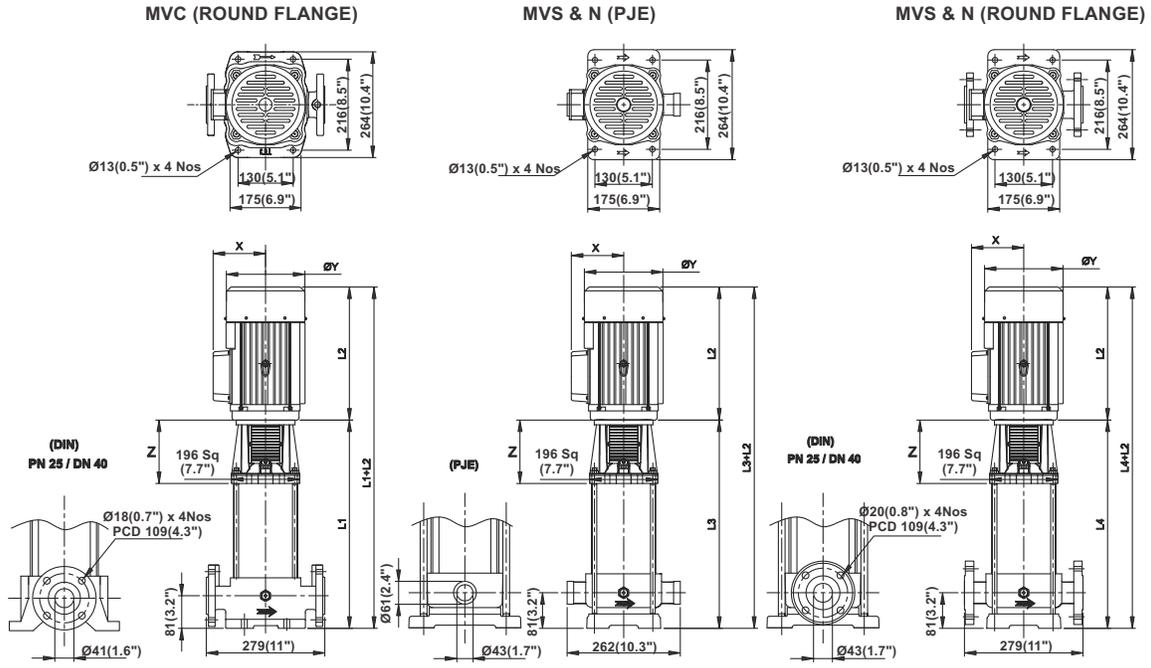


PERFORMANCE TABLE

PIPE SIZE : DN 25 / 32

PUMP MODEL	MOTOR POWER		DISCHARGE								
	kW	HP	m³/h	0	2.8	4.6	5.7	6.8	8	9.1	
MVS-025-02	0.55	0.75	US gpm	0	12.5	20	25	30	35	40	
MVS-025-03	1.1	1.5	TOTAL MANOMETRIC HEAD IN FEET	62	60	54	48	41	30	18	
MVS-025-04	1.1	1.5		92	89	80	73	64	51	38	
MVS-025-05	1.5	2.0		125	114	104	95	82	70	50	
MVS-025-06	2.2	3.0		159	156	140	129	116	100	80	
MVS-025-07	2.2	3.0		200	193	174	162	150	129	109	
MVS-025-08	2.2	3.0		220	216	200	185	166	142	118	
MVS-025-09	2.2	3.0		255	240	220	208	190	166	135	
MVS-025-10	2.2	3.0		288	277	256	239	211	182	150	
MVS-025-11	3.0	4.0		330	315	292	273	248	217	182	
MVS-025-12	3.0	4.0		358	340	319	296	269	234	195	
MVS-025-13	3.0	4.0		390	370	347	322	292	254	210	
MVS-025-14	4.0	5.5		424	407	379	353	322	280	235	
MVS-025-15	4.0	5.5		455	440	410	380	345	302	253	
MVS-025-16	4.0	5.5		490	468	435	408	372	329	275	
MVS-025-18	5.5	7.5		525	502	470	439	398	350	300	
MVS-025-20	5.5	7.5		590	567	530	495	453	400	339	
MVS-025-22	5.5	7.5		653	632	587	549	501	445	370	
MVS-025-24	7.5	10		720	690	642	600	550	482	400	
					785	748	701	658	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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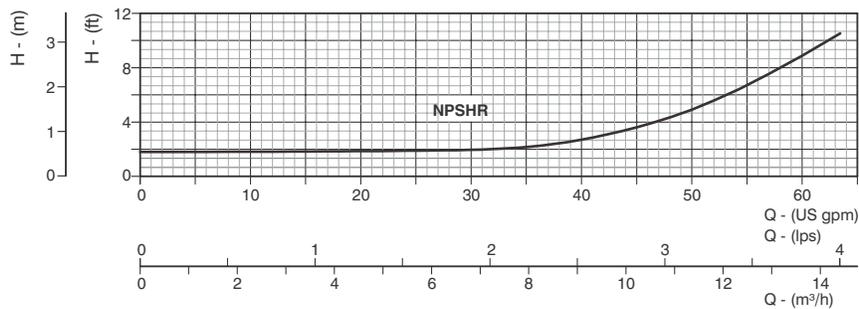


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)														APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)											
	L1		L2				L3		L4		X		Y (Ø)		Z		PUMP				MOTOR					
	MVC		1Ph		3Ph		MVS/N(PJE)		MVS/N								MVC		MVS/N (PJE)		MVS / N		1Ph		3Ph	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb
MVS-040-01	347	13.7	267	10.5	252	9.9	353	13.9	353	13.9	113	4.4	140	5.5	145	5.7	32.7	72	27.7	61	28.6	63	11.8	26	14.1	31
MVS-040-02	379	14.9	294	11.6	295	11.6	385	15.2	385	15.2	136	5.4	187	7.4	163	6.4	34.0	75	29.0	64	29.9	66	20.0	44	20.0	44
MVS-040-03	411	16.2	320	12.6	295	11.6	417	16.4	417	16.4	136	5.4	187	7.4	163	6.4	34.9	77	29.9	66	30.8	68	24.0	53	20.0	44
MVS-040-04	454	17.9	-	-	320	12.6	460	18.1	460	18.1	136	5.4	187	7.4	163	6.4	35.8	79	30.8	68	31.7	70	-	-	24.0	53
MVS-040-05	486	19.1	-	-	320	12.6	492	19.4	492	19.4	136	5.4	187	7.4	163	6.4	36.7	81	31.7	70	33.1	73	-	-	24.0	53
MVS-040-06	518	20.4	-	-	354	13.9	524	20.6	524	20.6	136	5.4	187	7.4	163	6.4	38.1	84	33.1	73	34.0	75	-	-	27.7	61
MVS-040-08	582	22.9	-	-	385	15.2	588	23.1	588	23.1	204	8.0	257	10.1	197	7.8	44.0	97	39.0	86	39.9	88	-	-	41.3	91
MVS-040-10	656	25.8	-	-	385	15.2	662	26.1	662	26.1	204	8.0	257	10.1	197	7.8	45.8	101	40.8	90	41.7	92	-	-	41.3	91
MVS-040-12	720	28.3	-	-	424	16.7	726	28.6	726	28.6	204	8.0	257	10.1	197	7.8	48.1	106	43.1	95	44.0	97	-	-	47.6	105
MVS-040-14	784	30.9	-	-	424	16.7	790	31.1	790	31.1	204	8.0	257	10.1	197	7.8	49.9	110	44.9	99	45.8	101	-	-	47.6	105

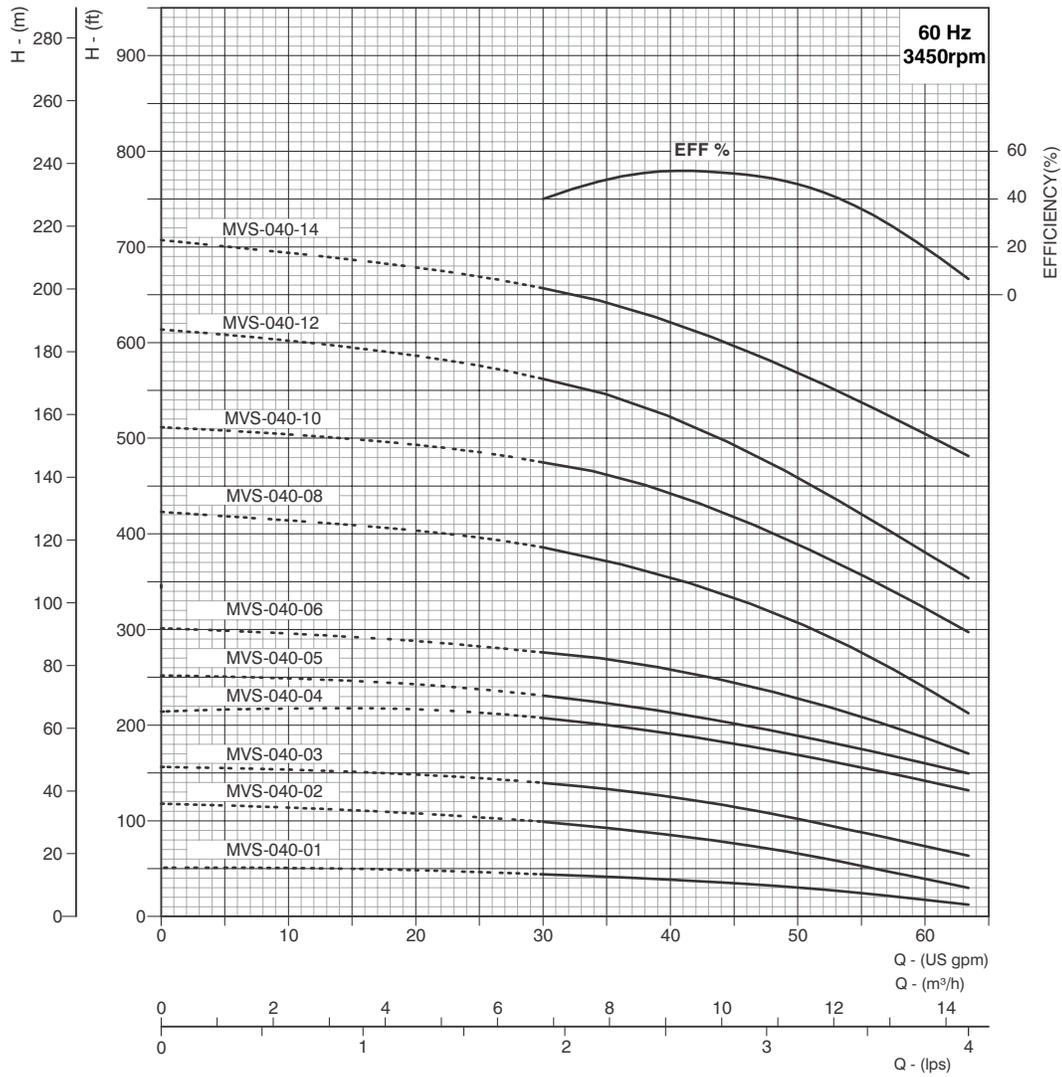
NPSHR CURVE



MV-040

PERFORMANCE CURVES

NOMINAL FLOW : 40 gpm



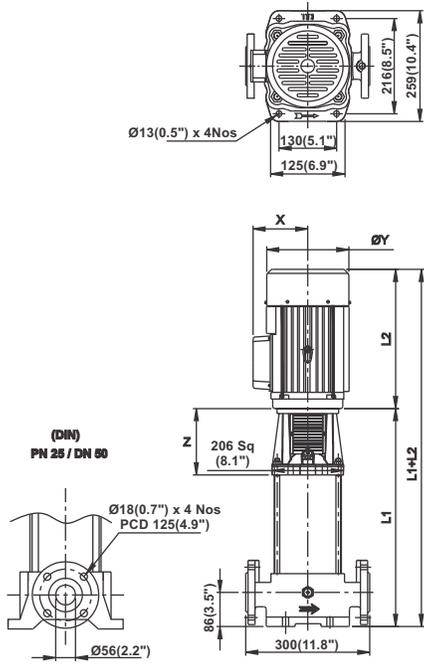
PERFORMANCE TABLE

PIPE SIZE : DN 40

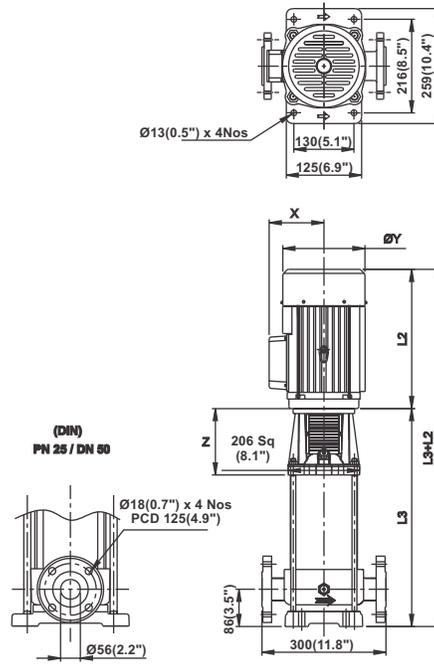
PUMP MODEL	MOTOR POWER		DISCHARGE	TOTAL MANOMETRIC HEAD IN FEET					
	kW	HP		0	6.8	9.1	10.3	11.4	13.6
			US gpm	0	30	40	45	50	60
MVS-040-01	0.75	1.0	52	44	39	35	30	18	
MVS-040-02	1.5	2.0	118	99	85	79	66	40	
MVS-040-03	2.2	3.0	157	140	125	115	101	73	
MVS-040-04	3.0	4.0	214	208	191	180	170	142	
MVS-040-05	3.0	4.0	252	231	213	202	189	160	
MVS-040-06	4.0	5.5	301	277	258	245	229	187	
MVS-040-08	5.5	7.5	423	387	354	332	309	240	
MVS-040-10	5.5	7.5	511	475	442	420	389	322	
MVS-040-12	7.5	10	613	562	522	490	460	380	
MVS-040-14	7.5	10	707	657	621	595	569	505	

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)

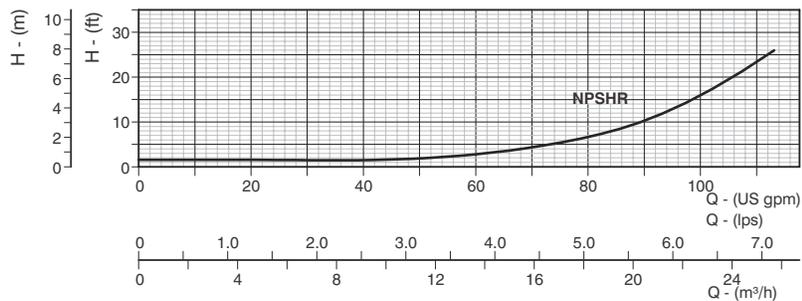


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)												APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)					
	L1 MVC (R)		L2		L3 MVC (R)		X		Y (Ø)		Z		PUMP				MOTOR	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb
MVS-080-03	477	18.8	385	15.2	473	18.6	204	8.0	257	10.1	197	7.8	45.4	100	40.4	89	41.3	91
MVS-080-04	522	20.6	424	16.7	518	20.4	204	8.0	257	10.1	197	7.8	46.3	102	41.3	91	47.6	105
MVS-080-05	567	22.3	424	16.7	563	22.2	204	8.0	257	10.1	197	7.8	47.6	105	42.6	94	47.6	105
MVS-080-06	612	24.1	495	19.5	608	23.9	223	8.8	312	12.3	225	8.9	64.9	143	59.9	132	121.5	268
MVS-080-07	657	25.9	495	19.5	653	25.7	223	8.8	312	12.3	225	8.9	65.8	145	60.8	134	121.5	268
MVS-080-08	702	27.6	495	19.5	698	27.5	223	8.8	312	12.3	225	8.9	66.7	147	61.7	136	130.6	288

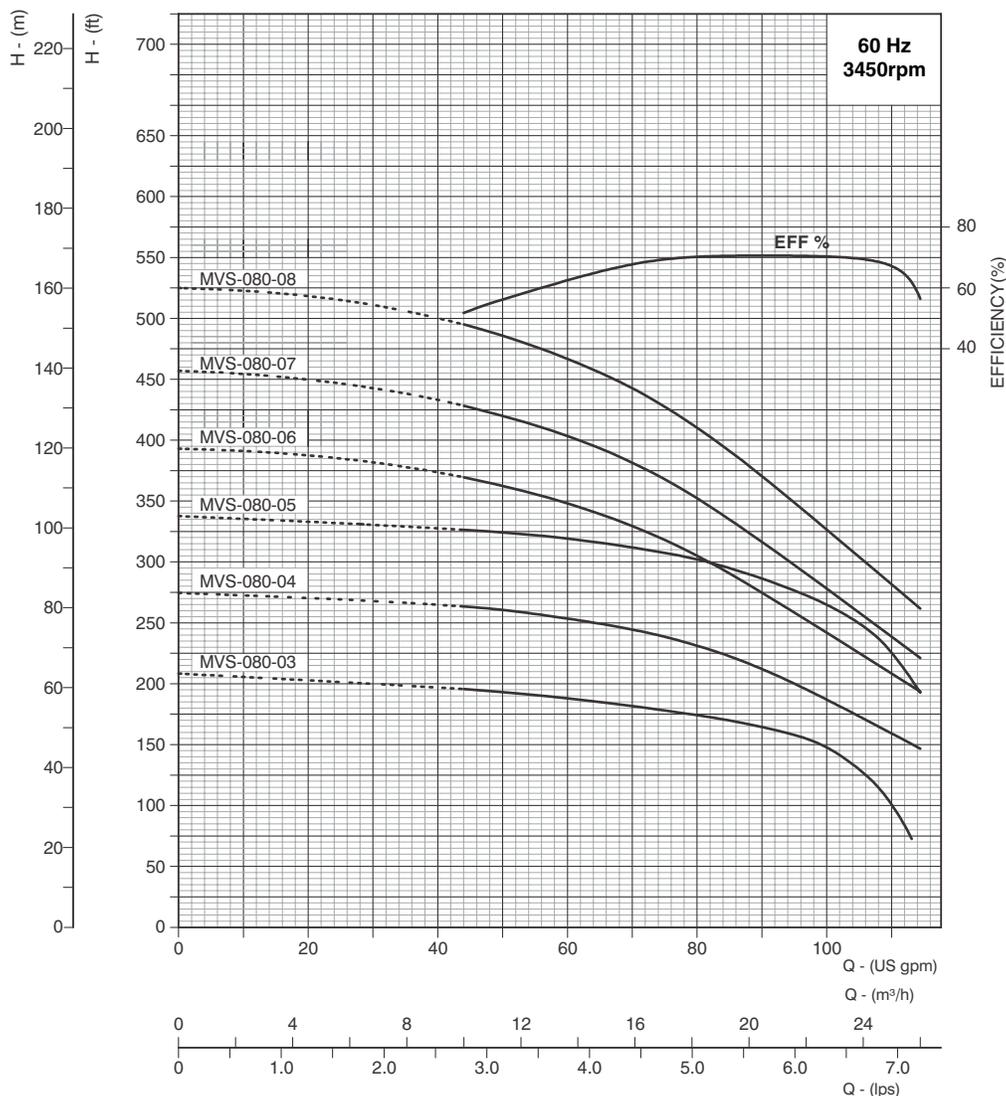
NPSHR CURVE



MV-080

PERFORMANCE CURVES

NOMINAL FLOW : 80 gpm



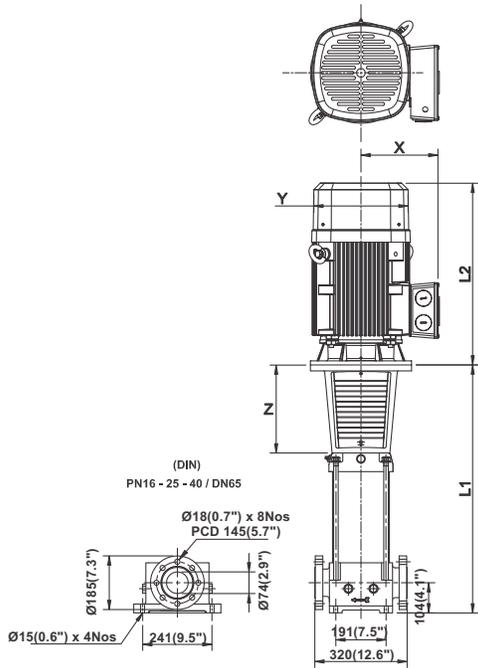
PERFORMANCE TABLE

PIPE SIZE : DN 50

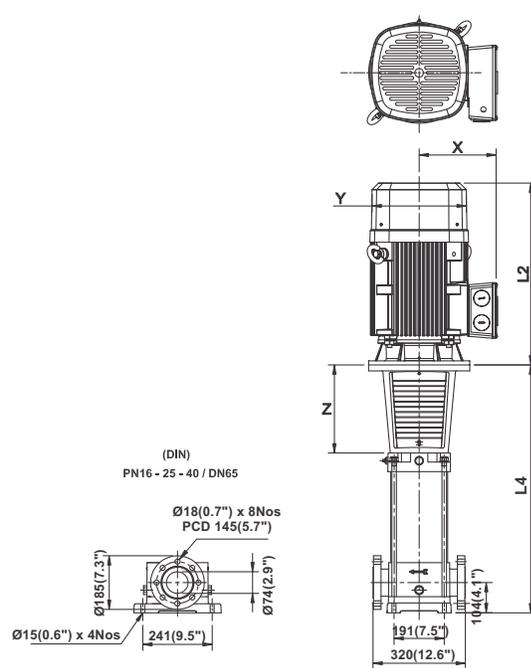
PUMP MODEL	MOTOR POWER		DISCHARGE							
	kW	HP	m³/h US gpm	0	10	13.6	18.2	20.5	22.7	25
MVS-080-03	5.5	7.5	TOTAL MANOMETRIC HEAD IN FEET	208	195	188.5	174.5	165	147.5	100
MVS-080-04	7.5	10.0		274.5	264	254	231	218	187	160
MVS-080-05	7.5	10.0		337.5	326	319	302.5	290	265	225
MVS-080-06	11.0	15.0		393	370	348	305	275	242	208.5
MVS-080-07	11.0	15.0		457	429	404	352.5	315	278.5	239
MVS-080-08	15.0	20.0		525	495	466.5	410	370	327	281.5

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)

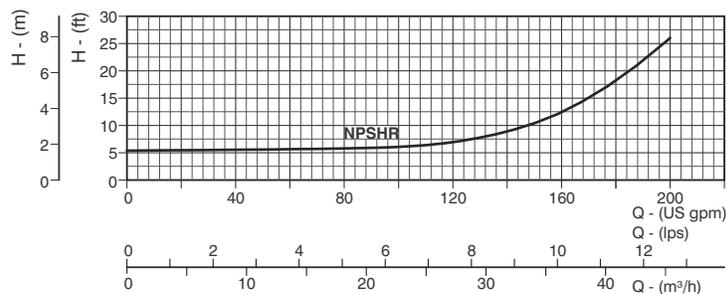


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)												APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)							
	L1 & L4 MVC / S / N		L2				X		Y (Ø)		Z		PUMP				MOTOR			
			1 Ph		3 Ph								MVC		MVS / N		1Ph		3Ph	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb	kg	lb
MVS-160-01A	510	20.1	294	11.6	295	11.6	136	5.4	187	7.4	201	7.9	58.5	129	63.5	140	24	53	20.0	44
MVS-160-01	510	20.1	-	-	354	13.9	136	5.4	187	7.4	201	7.9	58.5	129	63.5	140	-	-	27.7	61
MVS-160-02B	580	22.8	-	-	385	15.2	204	8.0	257	10.1	201	7.9	61.2	135	66.2	146	-	-	41.3	91
MVS-160-02A	580	22.8	-	-	385	15.2	204	8.0	257	10.1	201	7.9	61.2	135	66.2	146	-	-	41.3	91
MVS-160-02	580	22.8	-	-	385	15.2	204	8.0	257	10.1	201	7.9	61.2	135	66.2	146	-	-	41.3	91
MVS-160-03B	650	25.6	-	-	424	16.7	204	8.0	257	10.1	201	7.9	63.5	140	68.5	151	-	-	47.6	105
MVS-160-03	650	25.6	-	-	495	19.5	223	8.8	312	12.3	305	12.0	76.2	168	81.2	179	-	-	121.5	268
MVS-160-04B	720	28.3	-	-	495	19.5	223	8.8	312	12.3	305	12.0	79.4	175	84.4	186	-	-	121.5	268
MVS-160-04	720	28.3	-	-	495	19.5	223	8.8	312	12.3	305	12.0	79.4	175	84.4	186	-	-	121.5	268
MVS-160-05B	895	35.2	-	-	495	19.5	223	8.8	312	12.3	305	12.0	82.5	182	87.5	193	-	-	130.6	288
MVS-160-05	895	35.2	-	-	495	19.5	223	8.8	312	12.3	305	12.0	82.5	182	87.5	193	-	-	130.6	288
MVS-160-06B	965	38.0	-	-	495	19.5	223	8.8	312	12.3	305	12.0	85.3	188	90.2	199	-	-	150.6	332
MVS-160-06	965	38.0	-	-	495	19.5	223	8.8	312	12.3	305	12.0	85.3	188	90.2	199	-	-	150.6	332
MVS-160-07B	1035	40.7	-	-	495	19.5	223	8.8	312	12.3	305	12.0	88.4	195	93.4	206	-	-	150.6	332
MVS-160-07	1035	40.7	-	-	630	24.8	271	10.7	340	13.4	305	12.0	88.4	195	93.4	206	-	-	179.6	396
MVS-160-08B	1105	43.5	-	-	630	24.8	271	10.7	340	13.4	305	12.0	88.4	201	96.1	206	-	-	179.6	396
MVS-160-08	1105	43.5	-	-	630	24.8	271	10.7	340	13.4	305	12.0	91.2	201	96.1	212	-	-	179.6	396
MVS-160-09B	1175	46.3	-	-	630	24.8	271	10.7	340	13.4	305	12.0	94.3	208	99.3	219	-	-	241.3	532
MVS-160-09	1175	46.3	-	-	630	24.8	271	10.7	340	13.4	305	12.0	94.3	208	99.3	219	-	-	241.3	532
MVS-160-10B	1245	49.0	-	-	630	24.8	271	10.7	340	13.4	305	12.0	97.5	215	102.5	226	-	-	241.3	532
MVS-160-10	1245	49.0	-	-	630	24.8	271	10.7	340	13.4	305	12.0	97.5	215	102.5	226	-	-	241.3	532
MVS-160-11B	1319	51.9	-	-	630	24.8	271	10.7	340	13.4	305	12.0	100.2	221	105.2	232	-	-	241.3	532

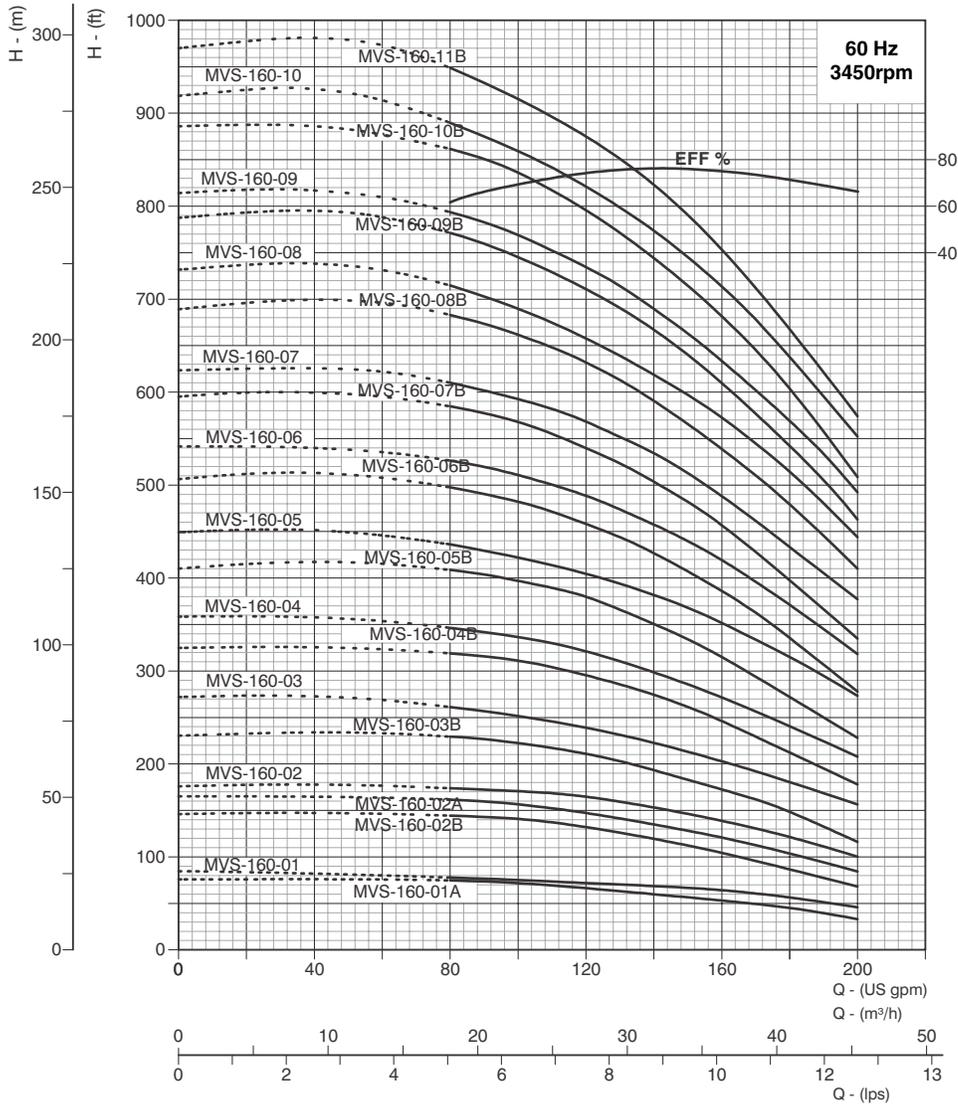
NPSHR CURVE



MV-160

PERFORMANCE CURVES

NOMINAL FLOW : 160 gpm



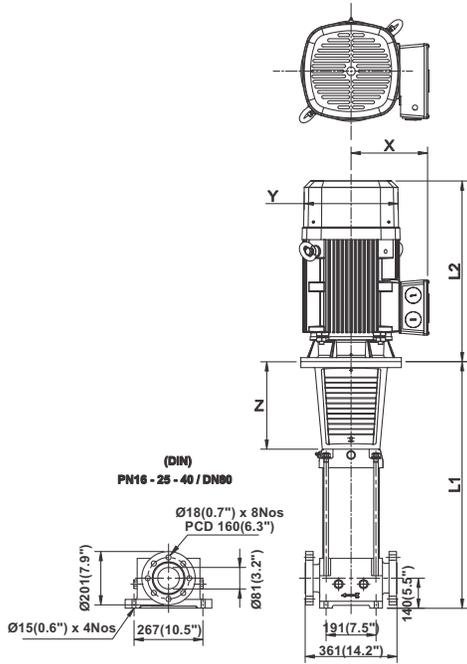
PERFORMANCE TABLE

PIPE SIZE : DN 65

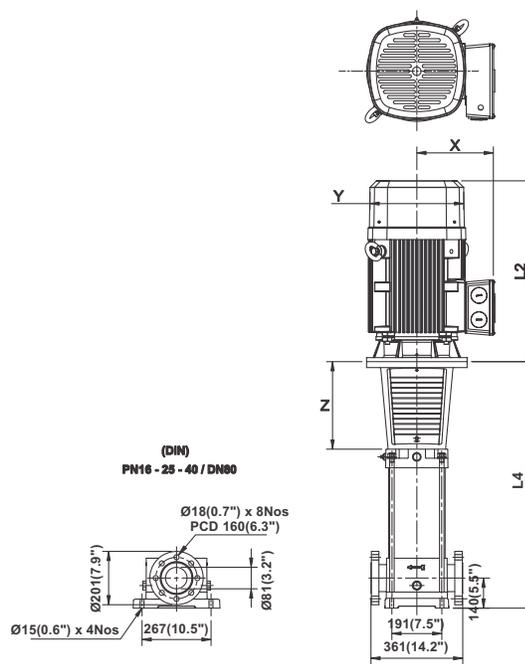
PUMP MODEL	MOTOR POWER		DISCHARGE						
	kW	HP	m³/h	0	18.2	27.3	36.4	40.9	45.6
MVS-160-01A	2.2	3	US gpm	0	80	120	160	180	200
MVS-160-01	4	5.5	TOTAL MANOMETRIC HEAD IN FEET	75	74	65	52	45	32
MVS-160-02B	5	7.5		85	79	71	65	58	48
MVS-160-02A	5	7.5		147	145	132	105	87	69
MVS-160-02	5	7.5		165	160	149	120	103	85
MVS-160-03B	7.5	10		175	172	165	140	121	100
MVS-160-03	11	15		231	230	210	170	150	119
MVS-160-04B	11	15		271	251	240	201	180	155
MVS-160-04	11	15		325	320	295	245	211	179
MVS-160-05B	15	20		359	345	321	270	240	209
MVS-160-05	15	20		410	409	380	315	271	239
MVS-160-06B	18.5	25		450	436	404	350	325	274
MVS-160-06	18.5	25		508	498	459	385	345	279
MVS-160-07B	18.5	25		541	527	490	420	370	319
MVS-160-07	22	30		596	585	540	457	400	335
MVS-160-08B	22	30		622	610	570	490	431	379
MVS-160-08	22	30		690	687	631	540	480	410
MVS-160-09B	30	40		731	715	659	572	512	442
MVS-160-09	30	40		789	771	710	610	541	462
MVS-160-10B	30	40		813	793	735	632	570	492
MVS-160-10	30	40	885	861	795	680	601	510	
MVS-160-11B	30	40	920	890	820	710	640	551	
			970	950	877	751	670	572	

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MVC (ROUND FLANGE)



MVS & N (ROUND FLANGE)

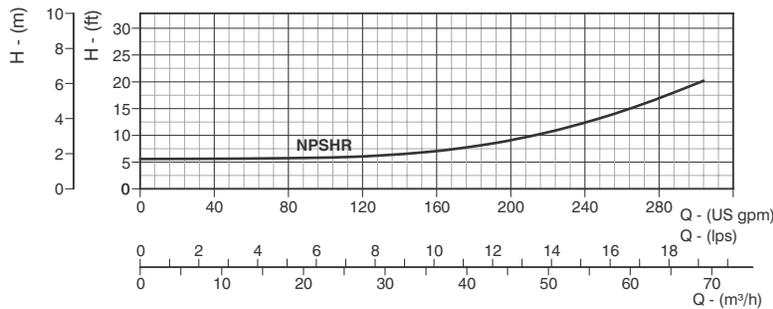


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)										APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)					
	L1 & L4 MVC / S / N		L2 3 Ph		X		Y (Ø)		Z		PUMP		MOTOR 3Ph			
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb
MVS-220-01A	564	22.2	385	15.2	204	8.0	257	10.1	201	7.9	30.4	67	29.0	64	18.7	41.3
MVS-220-01	564	22.2	385	15.2	204	8.0	257	10.1	201	7.9	30.4	67	29.0	64	18.7	41.3
MVS-220-02B	644	25.4	495	19.5	223	8.8	312	12.3	305	12.0	38.1	84	36.7	81	55.3	122
MVS-220-02A	644	25.4	495	19.5	223	8.8	312	12.3	305	12.0	38.1	84	36.7	81	55.3	122
MVS-220-02	644	25.4	495	19.5	223	8.8	312	12.3	305	12.0	38.1	84	36.7	81	55.3	122
MVS-220-03B	828	32.6	495	19.5	223	8.8	312	12.3	305	12.0	40.4	89	39.0	86	59.4	131
MVS-220-03A	828	32.6	495	19.5	223	8.8	312	12.3	305	12.0	40.4	89	39.0	86	68.5	151
MVS-220-03	828	32.6	495	19.5	223	8.8	312	12.3	305	12.0	40.4	89	39.0	86	68.5	151
MVS-220-04B	908	35.7	630	24.8	271	10.7	340	13.4	305	12.0	42.2	93	40.8	90	81.6	180
MVS-220-04A	908	35.7	630	24.8	271	10.7	340	13.4	305	12.0	42.2	93	40.8	90	81.6	180
MVS-220-04	908	35.7	630	24.8	271	10.7	340	13.4	305	12.0	42.2	93	40.8	90	81.6	180
MVS-220-05B	988	38.9	630	24.8	271	10.7	340	13.4	305	12.0	44.0	97	42.6	94	109.8	242
MVS-220-05A	988	38.9	630	24.8	271	10.7	340	13.4	305	12.0	44.0	97	42.6	94	109.8	242
MVS-220-05	988	38.9	630	24.8	271	10.7	340	13.4	305	12.0	44.0	97	42.6	94	109.8	242
MVS-220-06B	1068	42.0	650	25.6	276	10.9	395	15.6	305	12.0	47.2	104	45.8	101	117.0	258
MVS-220-06	1068	42.0	650	25.6	276	10.9	395	15.6	305	12.0	47.2	104	45.8	101	117.0	258
MVS-220-07B	1148	45.2	650	25.6	276	10.9	395	15.6	305	12.0	49.4	109	48.1	106	117.0	258
MVS-220-07	1148	45.2	695	27.4	297	11.7	435	17.1	305	12.0	49.4	109	48.1	106	145.1	320
MVS-220-08A	1228	48.3	695	27.4	297	11.7	435	17.1	305	12.0	51.2	113	49.9	110	145.1	320

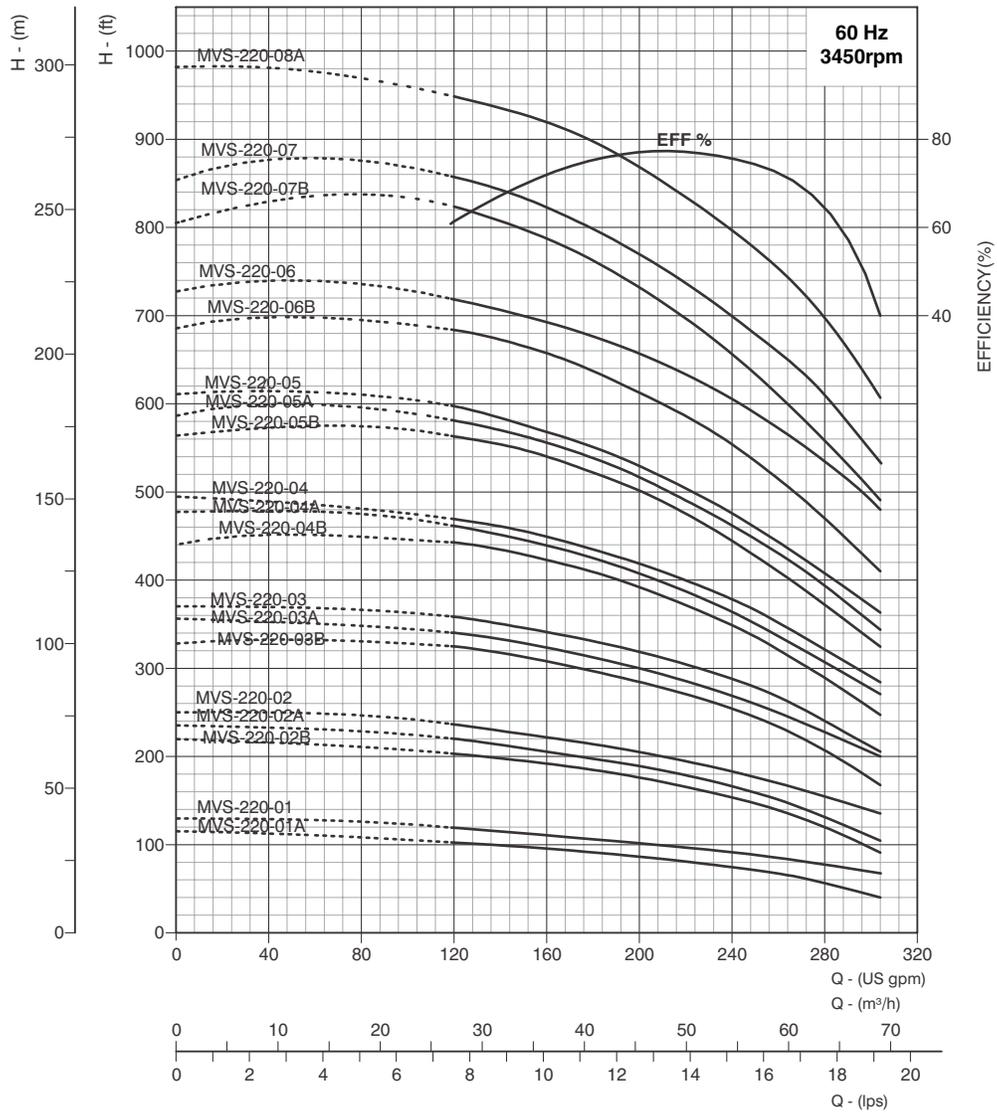
NPSHR CURVE



MV-220

PERFORMANCE CURVES

NOMINAL FLOW : 220 gpm



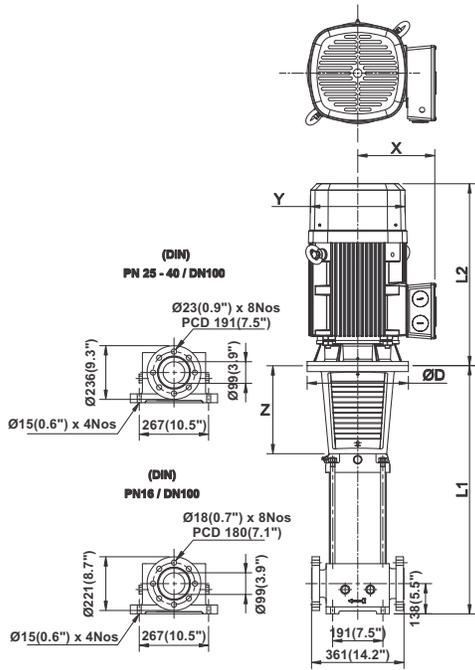
PERFORMANCE TABLE

PIPE SIZE : DN 80

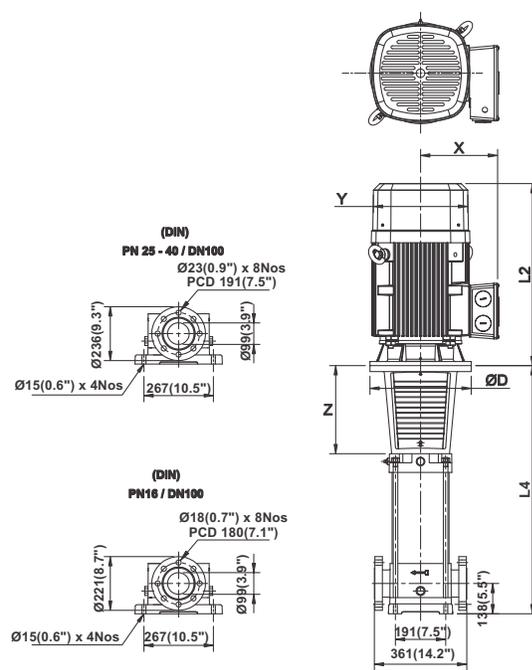
PUMP MODEL	MOTOR POWER		DISCHARGE							
	kW	HP	m³/h	0	23.3	36.4	45.5	50	54.6	69.1
MVS-220-01A	5.5	7.5	US gpm	0	120	160	200	220	240	304
MVS-220-01	5.5	7.5	TOTAL MANOMETRIC HEAD IN FEET	116	102	97	87	80	75	40
MVS-220-02B	11	15		130	120	110	101	98	91	70
MVS-220-02A	11	15		220	203	192	179	166	155	90
MVS-220-02	11	15		237	220	205	190	180	168	105
MVS-220-03B	15	20		250	237	221	205	194	182	135
MVS-220-03A	18.5	25		328	323	308	284	271	255	170
MVS-220-03	18.5	25		358	340	322	300	286	270	200
MVS-220-04B	22	30		370	359	341	320	304	290	208
MVS-220-04A	22	30		440	442	422	392	371	350	250
MVS-220-04	22	30		479	460	440	410	390	364	270
MVS-220-05B	30	40		496	470	450	420	400	380	285
MVS-220-05A	30	40		565	562	540	500	476	442	325
MVS-220-05	30	40		587	580	555	518	491	460	345
MVS-220-06B	37	50		612	598	568	530	504	478	365
MVS-220-06	37	50		685	684	658	612	587	555	410
MVS-220-07B	37	50		728	720	691	658	632	608	480
MVS-220-07	45	60		805	823	787	730	698	658	490
MVS-220-08A	45	60		855	858	822	770	739	700	537
			982	950	920	870	834	798	610	

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MVC (ROUND FLANGE)



MVS & N (ROUND FLANGE)

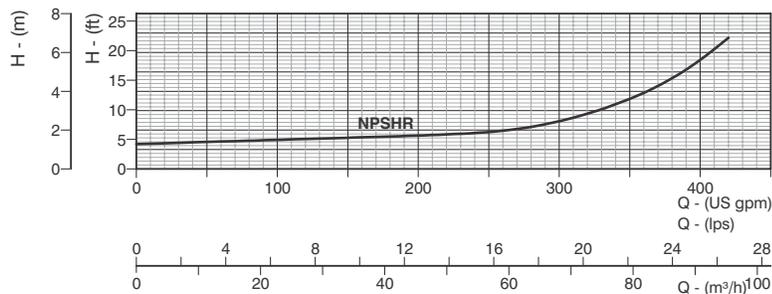


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)										APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)					
	L1 & L4 MVC / S / N		L2 3 Ph		X		Y (Ø)		Z		PUMP				MOTOR 3Ph	
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb
MVS-330-01A	564	22.2	424	16.7	204	8.0	257	10.1	201	7.9	97.5	215	80.3	177	41.3	91
MVS-330-01	564	22.2	495	19.5	223	8.8	312	12.3	305	12.0	97.5	215	94.3	208	121.5	268
MVS-330-02B	644	25.4	495	19.5	223	8.8	312	12.3	305	12.0	100.2	221	97.5	215	130.6	288
MVS-330-02A	644	25.4	495	19.5	223	8.8	312	12.3	305	12.0	100.2	221	97.5	215	150.6	332
MVS-330-02	644	25.4	630	24.8	271	10.7	340	13.4	305	12.0	100.2	221	97.5	215	179.6	396
MVS-330-03B	828	32.6	630	24.8	271	10.7	340	13.4	305	12.0	104.3	230	101.1	223	179.6	396
MVS-330-03A	828	32.6	630	24.8	271	10.7	340	13.4	305	12.0	104.3	230	101.1	223	241.3	532
MVS-330-03	828	32.6	630	24.8	271	10.7	340	13.4	305	12.0	104.3	230	101.1	223	241.3	532
MVS-330-04B	908	35.7	630	24.8	271	10.7	340	13.4	305	12.0	111.1	245	108.4	239	257.6	568
MVS-330-04A	908	35.7	650	25.6	276	10.9	395	15.6	305	12.0	111.1	245	108.4	239	257.6	568
MVS-330-04	908	35.7	650	25.6	276	10.9	395	15.6	305	12.0	111.1	245	108.4	239	319.3	704
MVS-330-05B	988	38.9	695	27.4	276	10.9	435	17.1	305	12.0	115.2	254	112.5	248	319.3	704

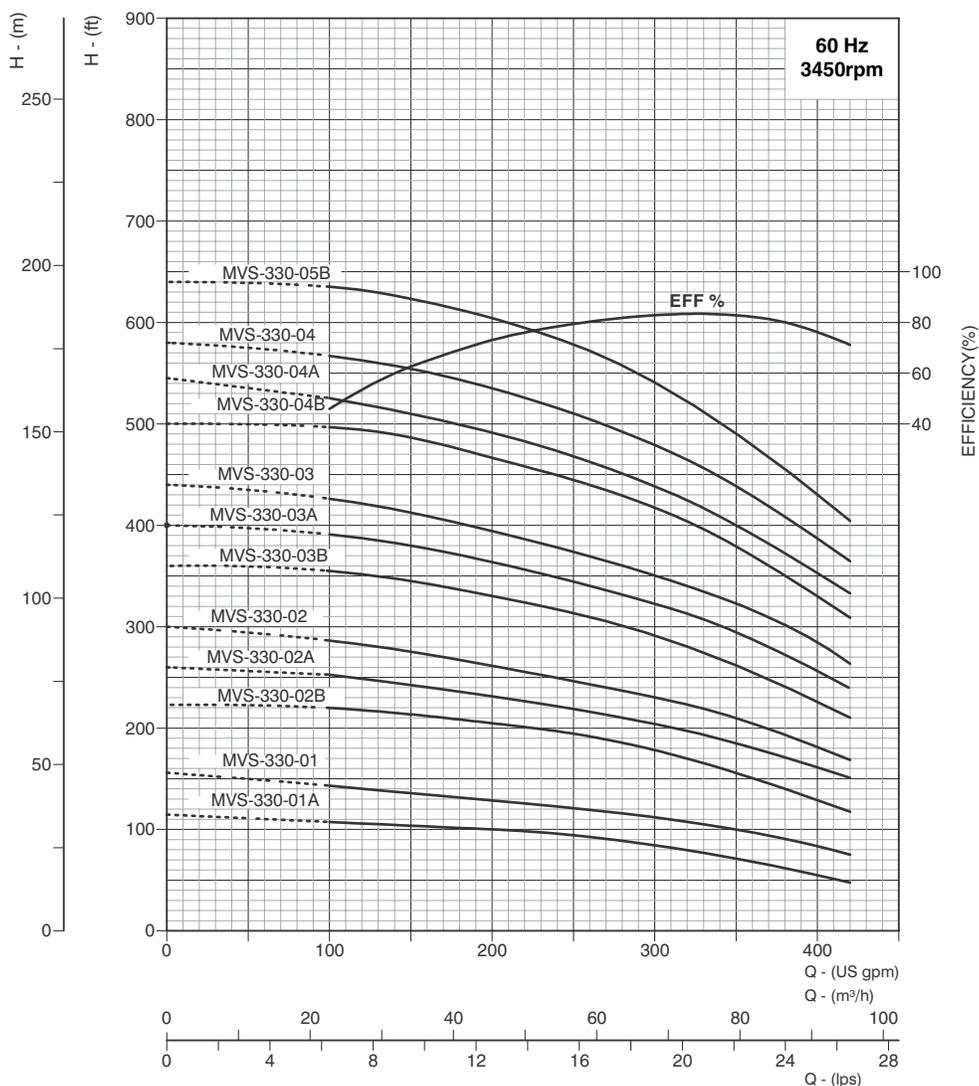
NPSHR CURVE



MV-330

PERFORMANCE CURVES

NOMINAL FLOW : 330 gpm



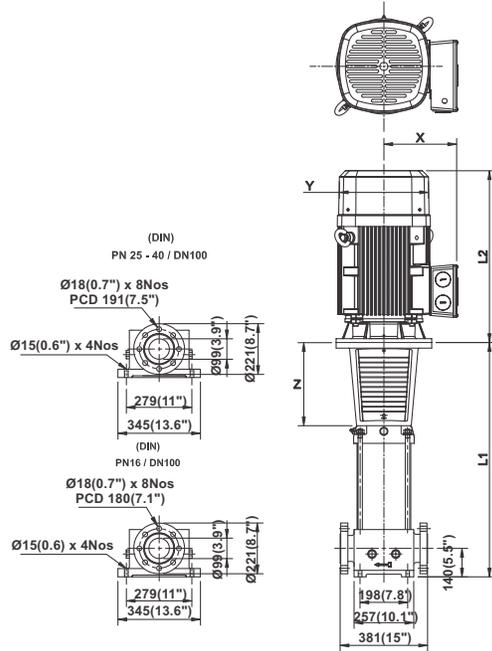
PERFORMANCE TABLE

PIPE SIZE : DN 100

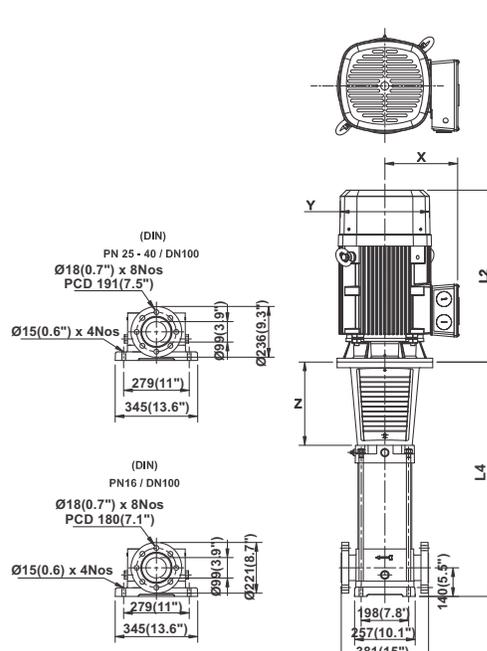
PUMP MODEL	MOTOR POWER		DISCHARGE							
	kW	HP	m³/h	0	22.7	45.6	68.2	75	90.9	95.6
MVS-330-01A	7.5	10	US gpm	0	100	200	300	330	400	420
MVS-330-01	11	15	TOTAL MANOMETRIC HEAD IN FEET	116	108	100	88	78	55	48
MVS-330-02B	15	20		157	143	128	112	105	82	78
MVS-330-02A	18.5	25		224	220	204	178	165	130	118
MVS-330-02	22	30		260	252	234	203	193	160	150
MVS-330-03B	22	30		300	284	260	230	220	180	170
MVS-330-03A	30	40		360	353	330	291	272	224	210
MVS-330-03	30	40		400	390	363	322	309	255	240
MVS-330-04B	37	50		440	426	392	350	334	284	262
MVS-330-04A	37	50		500	496	468	417	396	330	310
MVS-330-04	45	60		546	525	494	439	419	352	332
MVS-330-05B	45	60	580	565	536	480	458	384	364	
			640	636	605	540	511	430	402	

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MVC (ROUND FLANGE)



MVS & N (ROUND FLANGE)

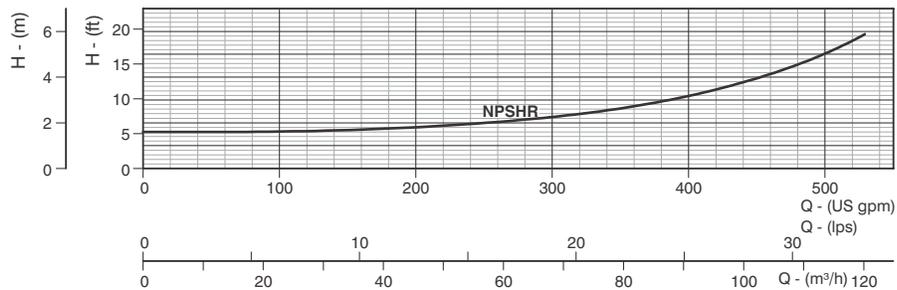


All Dimensions are in mm & Inches

DIMENSIONS & WEIGHT

PUMP MODEL	APPROX. DIMENSIONS (mm / Inch)										APPROX. NETT WEIGHT WITHOUT PACKING (kg / lb)					
	L1 & L4 MVC / S / N		L2 3 Ph		X		Y (Ø)		Z		PUMP		MOTOR			
	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	kg	lb	kg	lb	kg	lb
MVS-450-01A	572	22.5	495	19.5	223	8.8	312	12.3	305	12.0	42.6	94	41.7	92	55.3	122
MVS-450-01	572	22.5	495	19.5	223	8.8	312	12.3	305	12.0	42.6	94	41.7	92	59.4	131
MVS-450-02B	768	30.2	495	19.5	223	8.8	312	12.3	305	12.0	46.3	102	45.4	100	68.5	151
MVS-450-02A	768	30.2	630	24.8	271	10.7	340	13.4	305	12.0	46.3	102	45.4	100	81.6	180
MVS-450-02	768	30.2	630	24.8	271	10.7	340	13.4	305	12.0	46.3	102	45.4	100	109.8	242
MVS-450-03B	860	33.9	630	24.8	271	10.7	340	13.4	305	12.0	51.2	113	50.3	111	109.8	242
MVS-450-03A	860	33.9	650	25.6	276	10.9	395	15.6	305	12.0	51.2	113	50.3	111	117.0	258
MVS-450-03	860	33.9	650	25.6	276	10.9	395	15.6	305	12.0	51.2	113	50.3	111	117.0	258
MVS-450-04B	952	37.5	695	27.4	297	11.7	435	17.1	305	12.0	54.9	121	54.0	119	145.1	320
MVS-450-04A	952	37.5	695	27.4	297	11.7	435	17.1	305	12.0	54.9	121	54.0	119	145.1	320

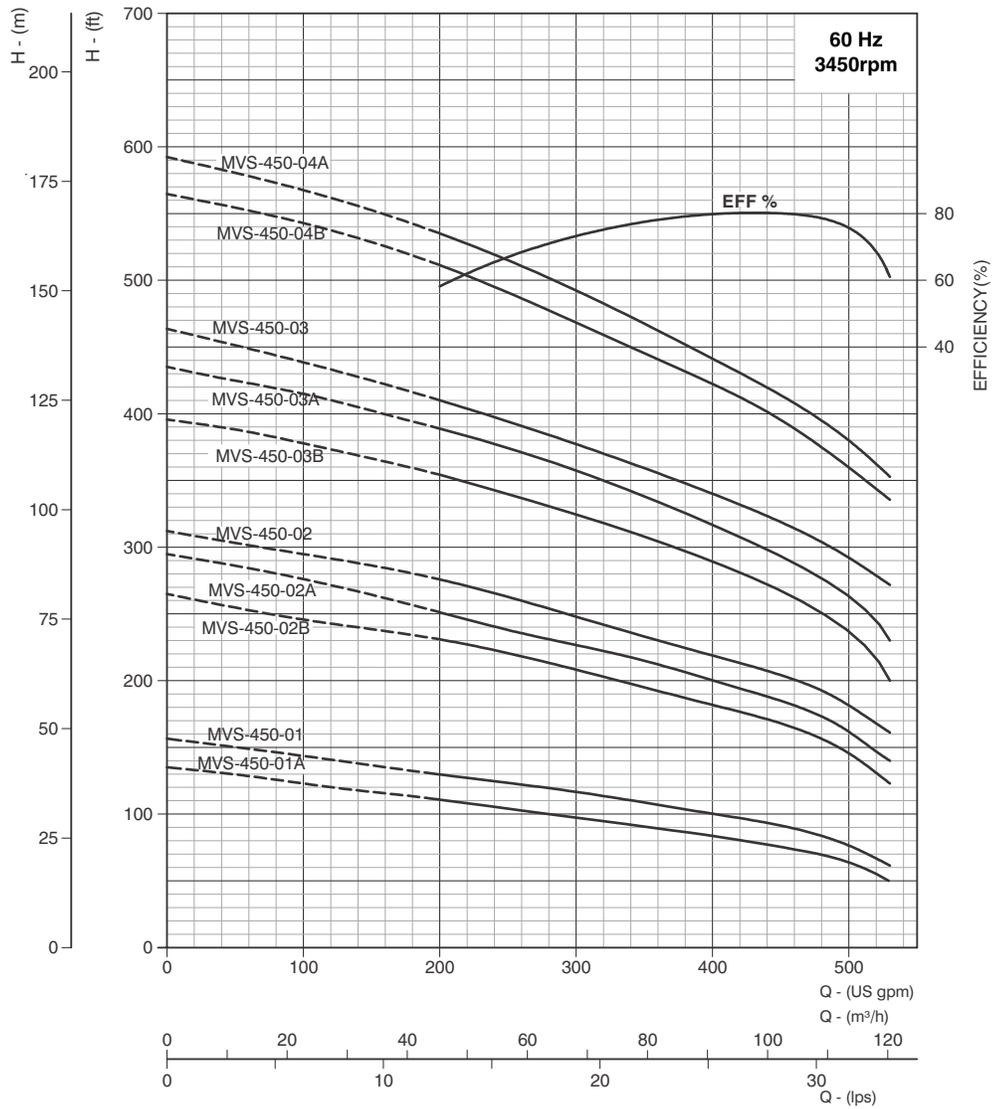
NPSHR CURVE



MV-450

PERFORMANCE CURVES

NOMINAL FLOW : 450 gpm



PERFORMANCE TABLE

PIPE SIZE : DN 100

PUMP MODEL	MOTOR POWER		DISCHARGE	DISCHARGE							
	kW	HP		m³/h	0	45.6	68.2	90.9	102.3	113.6	120.5
			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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