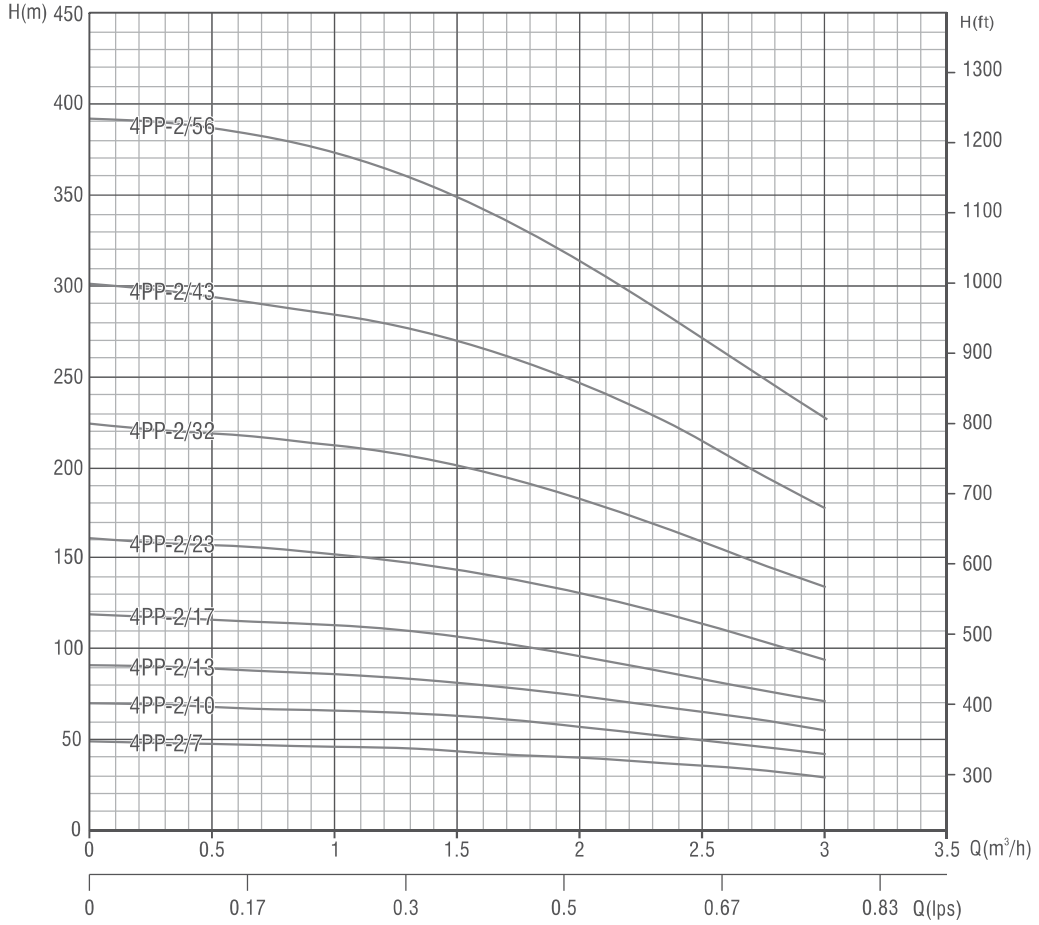
4PP - 2

Nominal Flow: 2m³/h

Outlet Size : 1¼"

Performance Curve

2900 rpm



Model	Motor Power		Q(m³/h)	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3
	kW	HP	Q(lps)	0	0.08	0.17	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.83
4PP-2/07	0.37	0.5	Head (m)	49	48	47	46	45	42	40	37	32	29	25
4PP-2/10	0.55	0.75		70	69	67	66	65	60	57	52	46	42	36
4PP-2/13	0.75	1		91	90	88	86	84	78	74	68	60	55	46
4PP-2/17	1.1	1.5		119	117	115	113	110	102	97	89	79	71	60
4PP-2/23	1.5	2		161	158	156	152	149	138	131	120	107	97	82
4PP-2/32	2.2	3		224	220	217	212	207	192	182	168	149	134	114
4PP-2/43	3	4		301	296	292	284	278	258	245	226	200	180	153
4PP-2/56	4	5.5		392	385	380	371	362	336	319	294	260	235	200

In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

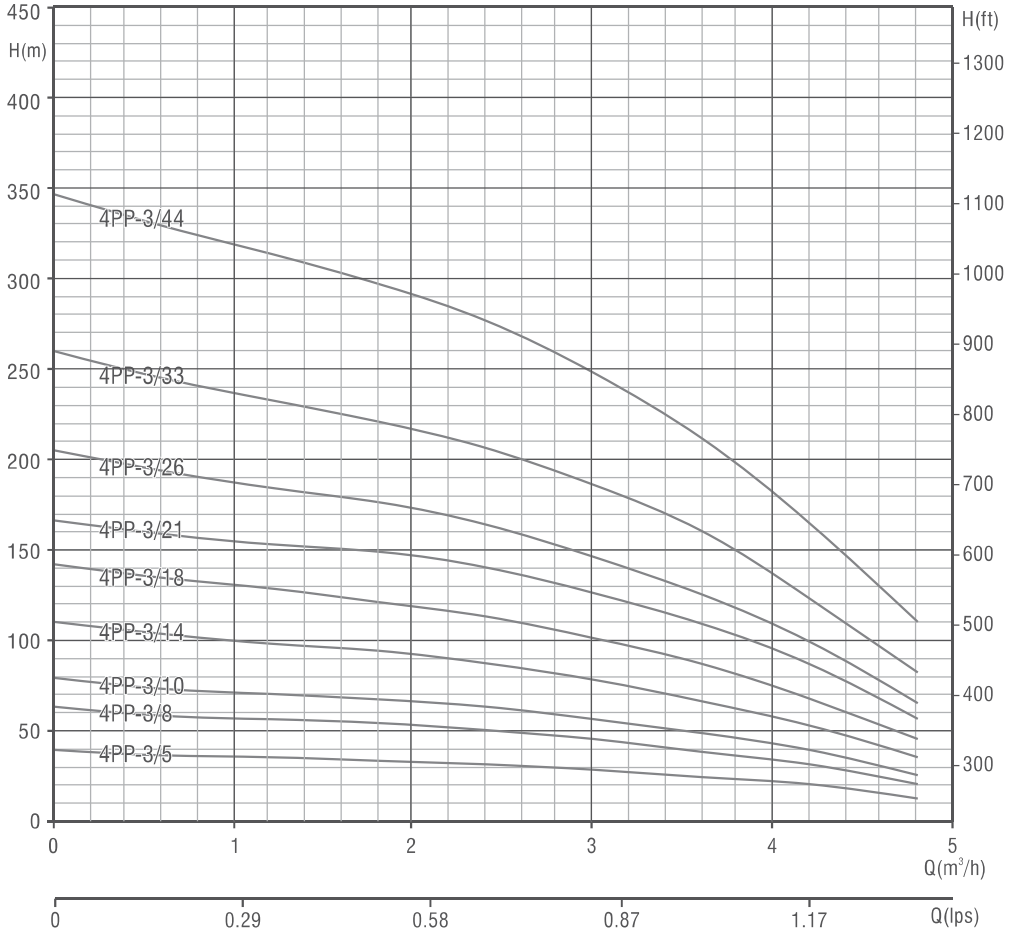
4PP - 3

Nominal Flow: 3m³/h

Outlet Size : 1¼"

Performance Curve

2900 rpm



Model	Motor Power		Q(m³/h)	0	0.6	1.2	1.8	2.4	3	3.6	4.2	4.8
	kW	HP	Q(lps)	0	0.167	0.33	0.5	0.67	0.83	1	1.17	1.33
4PP-3/05	0.37	0.5	Head (m)	39	36	35	33	31	28	24	20	12
4PP-3/08	0.55	0.75		63	58	56	54	50	45	38	31	20
4PP-3/10	0.75	1		79	73	70	67	63	56	47	39	25
4PP-3/14	1.1	1.5		110	102	98	94	88	79	66	55	35
4PP-3/18	1.5	2		142	131	126	121	113	101	85	70	45
4PP-3/21	1.5	2		166	153	147	141	132	118	99	82	53
4PP-3/26	2.2	3		205	189	182	174	164	146	122	102	65
4PP-3/33	3	4		260	240	231	221	208	186	155	129	82
4PP-3/44	4	5.5		347	320	308	295	277	248	207	172	110

In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

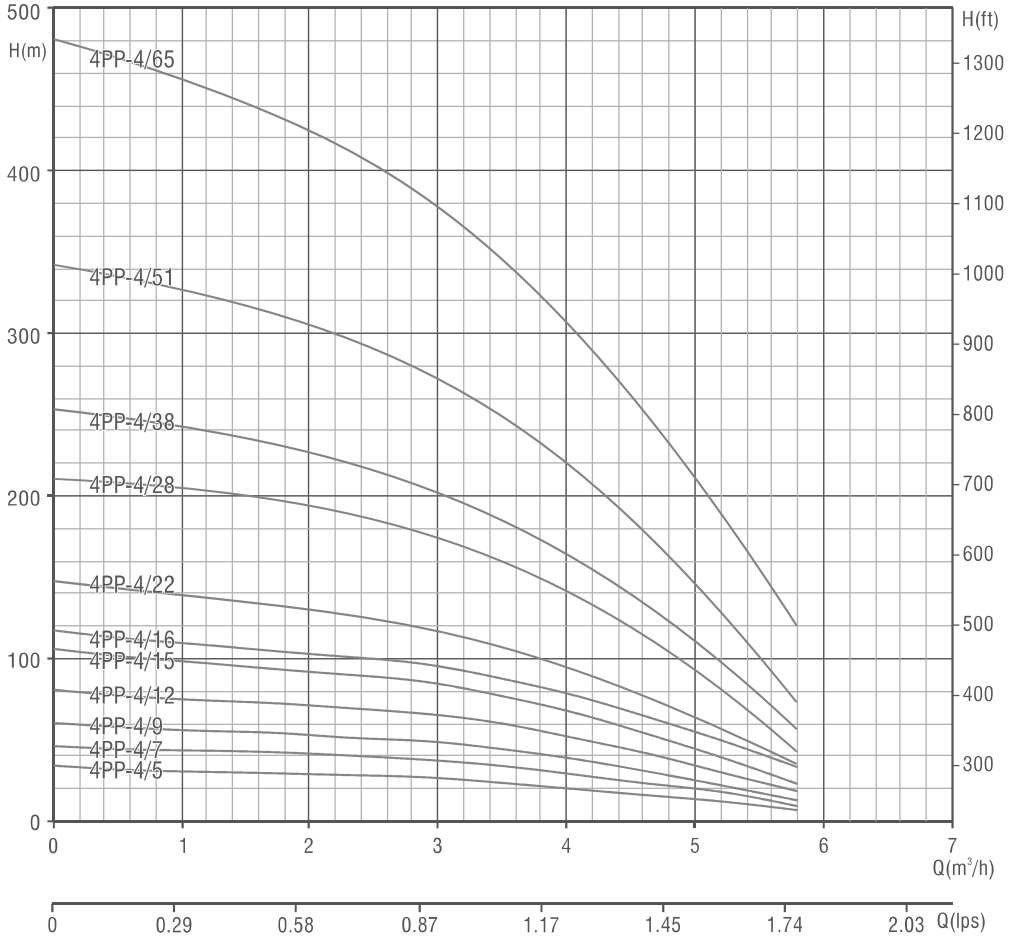
4PP - 4

Nominal Flow: 4m³/h

Outlet Size : 1¼"

Performance Curve

2900 rpm



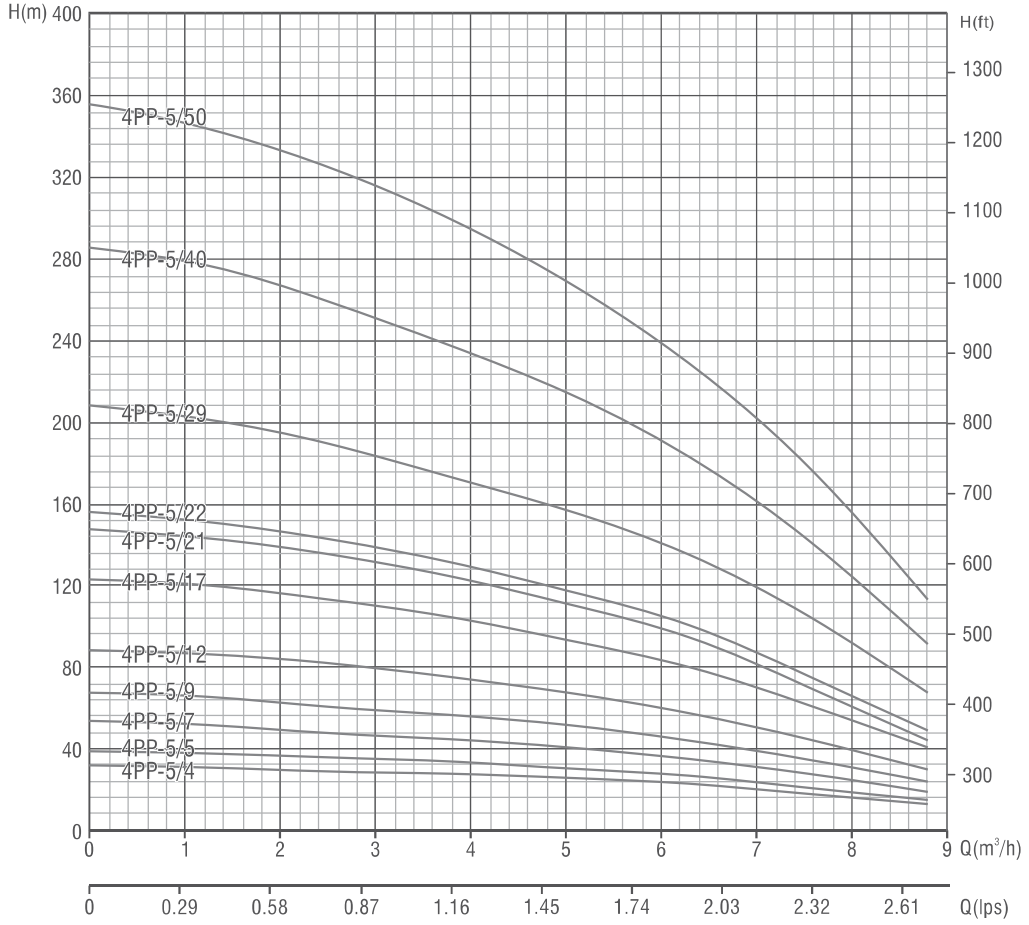
Model	Motor Power		Q(m³/h)	0	0.6	1.2	1.8	2.4	3	3.6	4.2	4.8	5.4	6
	kW	HP	Q(lps)	0	0.17	0.33	0.5	0.67	0.83	1	1.17	1.33	1.5	1.67
4PP-4/05	0.37	0.5	Head (m)	37	35	34	33	32	30	27	23	19	14	9
4PP-4/07	0.55	0.75		52	49	48	46	45	42	38	33	27	20	12
4PP-4/09	0.75	1		67	63	62	60	57	54	49	43	34	25	16
4PP-4/12	1.1	1.5		89	85	82	80	76	72	66	57	46	34	21
4PP-4/15	1.5	2		111	106	103	99	95	90	82	71	57	42	26
4PP-4/16	1.5	2		118	113	110	106	101	96	87	76	61	45	28
4PP-4/22	2.2	3		163	155	151	146	140	132	120	104	84	62	38
4PP-4/28	3	4		207	197	192	186	178	168	153	133	107	79	49
4PP-4/38	3	4		281	268	261	252	241	228	207	180	145	107	66
4PP-4/51	4	5.5		378	359	350	338	323	306	278	241	195	144	88
4PP-4/65	5.5	7.5		481	458	446	431	412	390	355	308	248	183	112

In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

4PP - 5

Nominal Flow: 5m³/h
Performance Curve

Outlet Size : 1½"
2900 rpm



Model	Motor Power		Q(m³/h)	0	1.2	2.4	3.6	4.8	6	7.2	8.4
	kW	HP	Q(lps)	0	0.33	0.67	1	1.33	1.67	2	2.33
4PP-5/04	0.37	0.5	Head (m)	28	27	25	24	21	19	14	9
4PP-5/05	0.55	0.75		35	34	32	29	26	23	17	11
4PP-5/07	0.75	1		50	48	44	41	37	33	24	15
4PP-5/09	1.1	1.5		64	62	57	53	48	42	31	20
4PP-5/12	1.5	2		85	83	75	71	64	56	41	26
4PP-5/17	2.2	3		120	117	107	100	90	80	58	37
4PP-5/21	3	4		148	145	132	124	111	99	72	46
4PP-5/22	3	4		156	151	138	130	117	103	75	48
4PP-5/29	4	5.5		206	199	183	171	154	136	98	64
4PP-5/40	5.5	7.5		284	275	252	236	212	188	136	88
4PP-5/50	7.5	10		355	344	315	295	265	235	170	110

In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

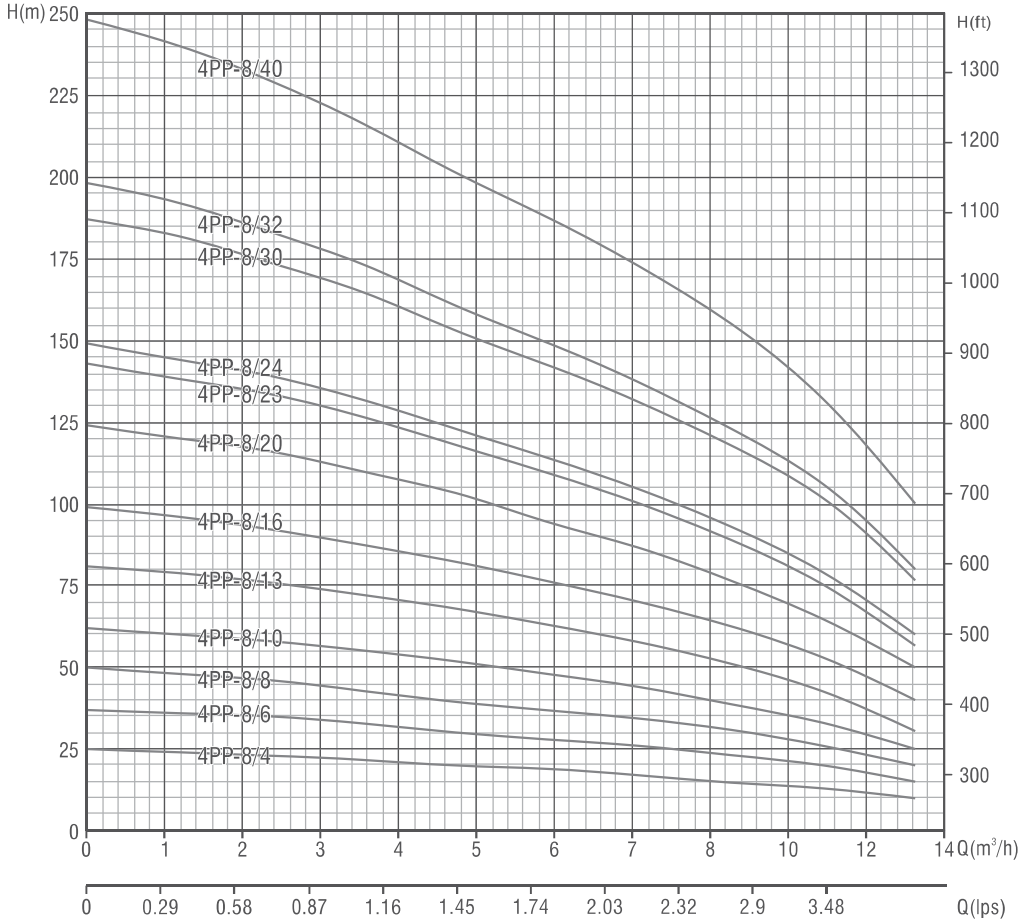
4PP - 8

Nominal Flow: 8m^3/h

Outlet Size: 2"

Performance Curve

2900 rpm



Model	Motor Power		Q(m^3/h)	0	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	10.8
	kW	HP	Q(lps)	0	0.33	0.67	1.00	1.33	1.67	2.00	2.33	2.67	3.00
4PP-8/04	0.55	0.75	Head (m)	25	24	23	21	20	19	17	16	13	10
4PP-8/06	0.75	1		37	36	35	32	29	28	26	25	20	15
4PP-8/08	1.1	1.5		50	48	46	42	39	38	35	33	26	20
4PP-8/10	1.5	2		62	60	58	53	49	48	44	41	33	25
4PP-8/13	2.2	3		81	78	75	69	64	62	57	53	43	33
4PP-8/16	2.2	3		99	96	93	85	78	74	70	66	53	40
4PP-8/20	3	4		124	120	116	106	98	92	88	82	66	50
4PP-8/23	4	5.5		143	138	133	122	113	106	101	94	76	58
4PP-8/24	4	5.5		149	144	139	127	118	110	105	98	79	60
4PP-8/30	5.5	7.5		186	180	174	159	147	138	132	122	99	75
4PP-8/32	5.5	7.5		198	192	186	170	157	147	141	131	106	80
4PP-8/40	7.5	10		248	240	232	212	196	184	176	164	132	100

In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

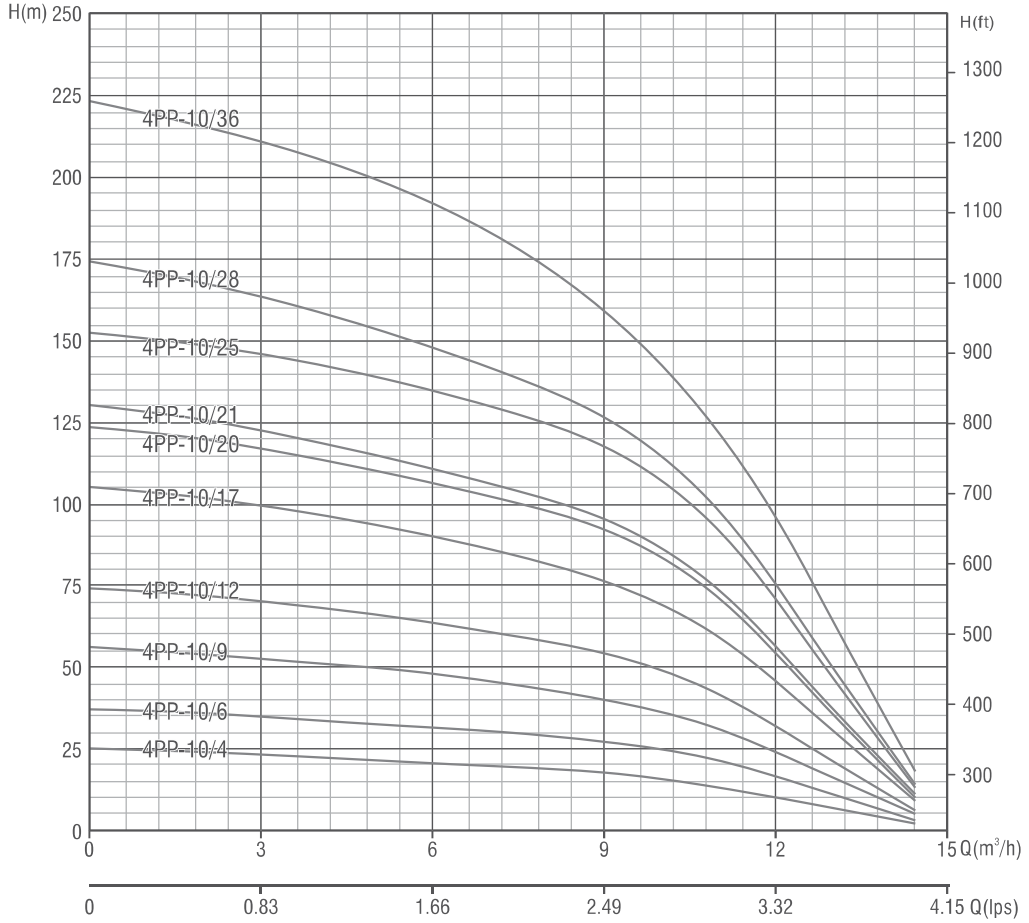
4PP - 10

Nominal Flow: 10m³/h

Outlet Size: 2"

Performance Curve

2900 rpm



Model	Motor Power		Q(m³/h)	0	1.8	3.6	5.4	7.2	9	10.8	12.6	14.4
	kW	HP	Q(lps)	0	30	60	90	120	150	180	210	240
4PP-10/04	0.75	1	Head (m)	25	24	22	21	20	18	14	8	2
4PP-10/06	1.1	1.5		37	36	34	32	30	27	22	13	3
4PP-10/09	1.5	2		56	54	50	49	45	41	32	19	5
4PP-10/12	2.2	3		74	72	67	65	60	54	43	25	6
4PP-10/17	3	4		105	102	95	92	85	76	61	36	9
4PP-10/20	4	5.5		124	120	111	108	100	90	72	42	10
4PP-10/21	4	5.5		130	126	117	113	105	95	76	44	11
4PP-10/25	5.5	7.5		155	150	140	135	125	113	90	53	13
4PP-10/28	5.5	7.5		174	168	157	151	140	126	101	59	14
4PP-10/36	7.5	10		223	216	202	194	180	162	130	76	18

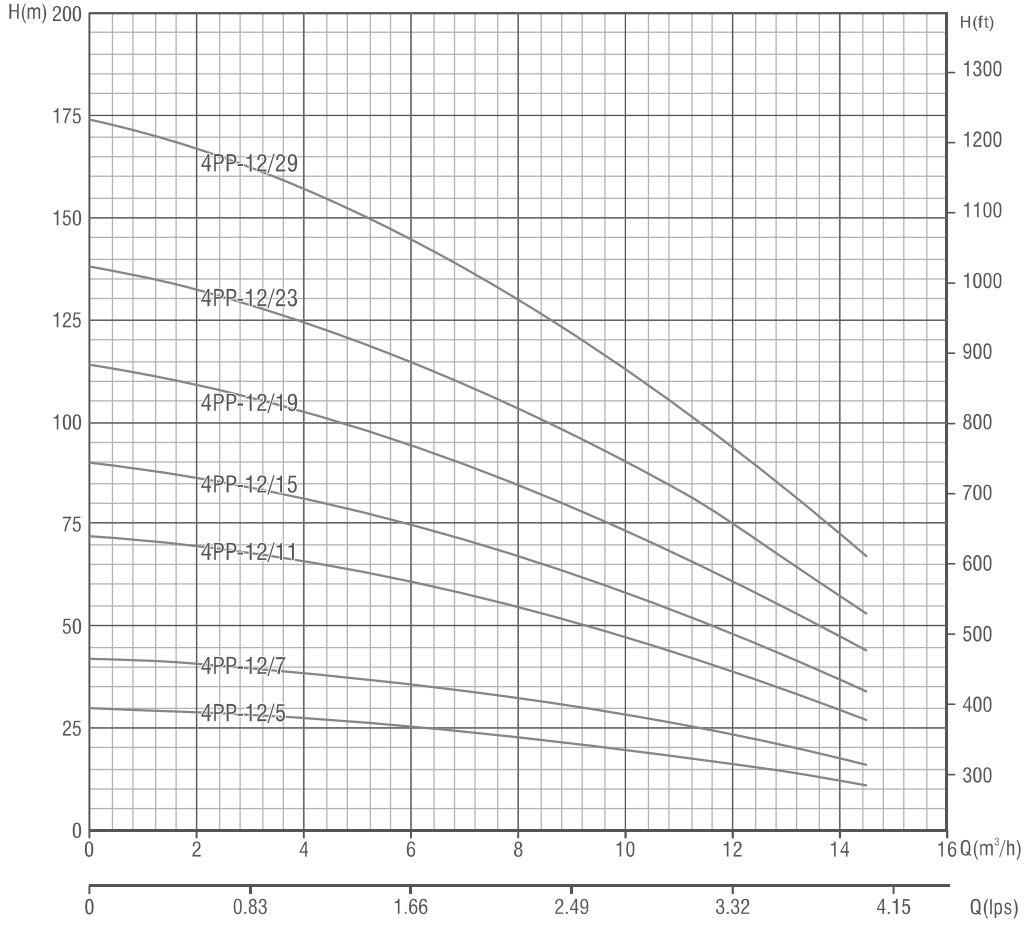
4PP - 12

Nominal Flow: 12m³/h

Outlet Size: 2"

Performance Curve

2900 rpm



Model	Motor Power		Q(m³/h)	0	1.8	3.6	5.4	7.2	9	10.8	12.6	14.4
	kW	HP	Q(lps)	0	0.5	1	1.5	2	2.5	3	3.5	4
4PP-12/05	1.1	1.5	Head (m)	30	29	27	26	23	20	19	15	11
4PP-12/07	1.5	2		42	41	39	36	32	29	27	21	16
4PP-12/12	2.2	3		72	70	65	62	55	49	46	36	27
4PP-12/15	3	4		90	87	81	78	69	61	58	45	34
4PP-12/19	4	5.5		114	110	103	99	87	78	73	57	44
4PP-12/23	5.5	7.5		138	133	124	119	106	94	88	69	53
4PP-12/29	7.5	10		174	168	157	151	133	119	111	87	67

In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

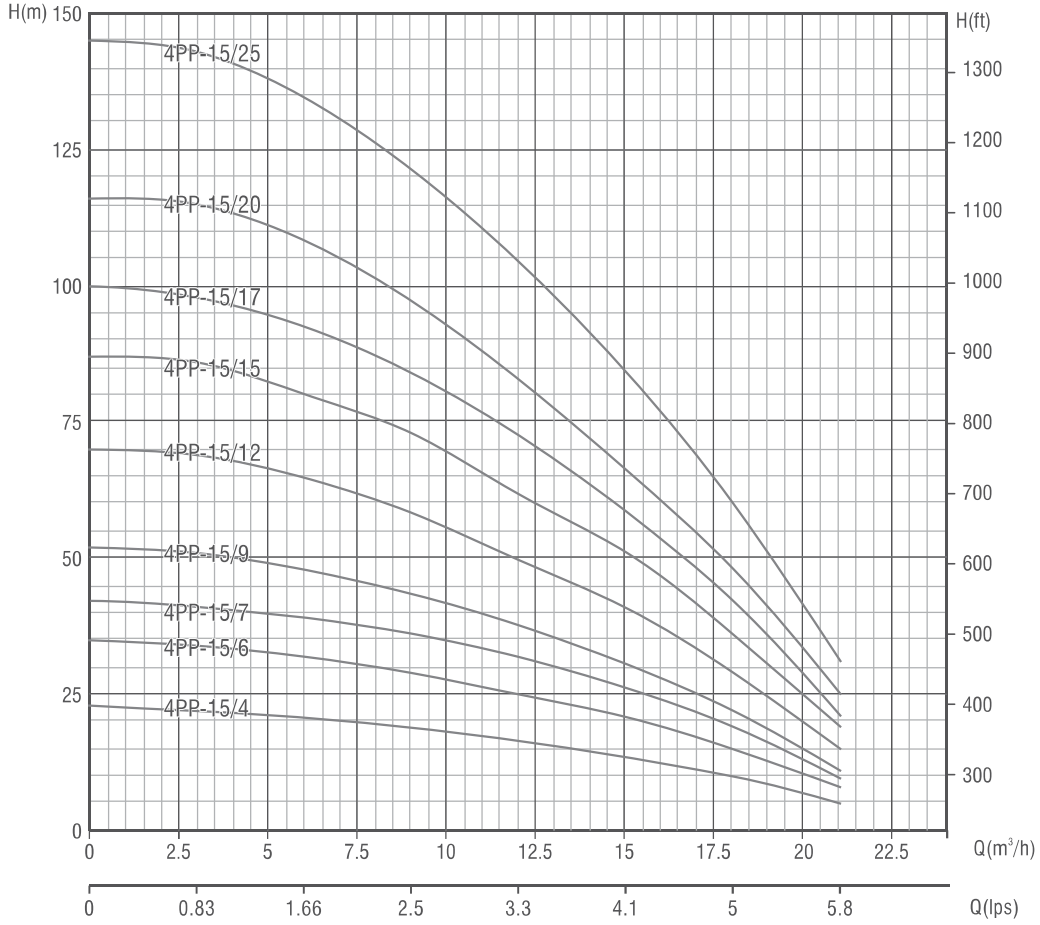
4PP - 15

Nominal Flow: 15m^3/h

Outlet Size: 2"

Performance Curve

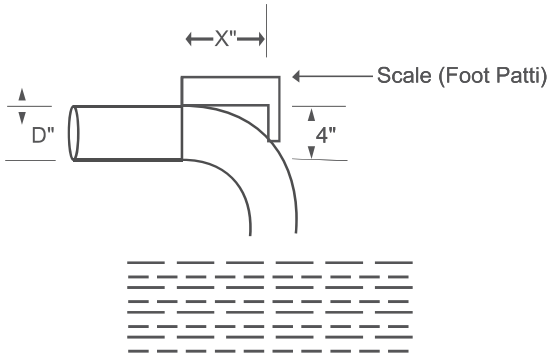
2900 rpm



Model	Motor Power		Q(m^3/h)	0	3	6	9	12	15	18.0	21.0
	kW	HP	Q(lps)	0	0.83	1.67	2.5	3.33	4.17	5	5.83
4PP-15/04	1.1	1.5	Head (m)	23	22	21	19	16	15	10	5
4PP-15/06	1.5	2		35	34	32	29	24	22	15	8
4PP-15/07	1.5	2		40	40	37	33	28	26	17	9
4PP-15/09	2.2	3		52	51	47	43	36	33	22	11
4PP-15/12	3	4		70	69	63	57	48	44	29	15
4PP-15/15	4	5.5		87	86	78	71	60	55	36	19
4PP-15/17	4	5.5		99	98	89	81	68	63	41	21
4PP-15/20	5.5	7.5		116	115	105	95	80	74	48	25
4PP-15/25	7.5	10		145	143	131	119	100	93	60	31

In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

HORIZONTAL DISTANCE (X) IN INCHES	NOMINAL PIPE DIAMETER (D)								
		1"	1¼"	1½"	2"	2½"	3"	4"	5"	6"
4	DISCHRGE IN LPM	2	3	4	6	8	13	23	35	52
5		2	3	5	8	11	17	28	45	65
6		2	4	5	9	13	20	34	53	78
7		3	5	6	11	15	23	40	63	91
8		3	5	7	12	17	27	45	71	104
9		3	6	8	14	19	30	51	80	117
10		4	7	9	15	21	33	57	89	129
11		4	7	10	17	23	37	62	98	143
12		5	8	11	18	26	40	68	106	155
13		5	9	12	20	28	43	74	116	169
14		5	9	13	21	30	47	79	123	181
15		6	10	14	23	32	50	85	133	193
16		6	11	14	24	34	53	91	142	207
17		7	11	15	26	36	57	96	151	221
18		7	12	16	27	38	60	102	161	233
19		7	13	17	29	40	63	108	169	247
20		8	13	18	30	42	66	113	177	259
21		8	14	19	32	45	70	119	187	272
22		8	15	20	33	47	73	124	196	286
23		9	15	21	35	49	77	130	204	298
24		9	16	22	36	51	80	136	212	311
25		10	17	23	38	53	83	142	222	324
26		10	17	23	39	55	87	147	230	336
27		10	18	24	41	57	90	153	240	350
28		11	19	25	42	59	93	159	0	0
29		11	19	26	44	62	96	164	0	0
30		12	20	27	45	64	100	170	0	0
31		0	0	28	47	66	103	0	0	0
32		0	0	29	48	68	107	0	0	0
33		0	0	30	50	70	110	0	0	0
34		0	0	31	51	72	113	0	0	0
35		0	0	32	53	74	117	0	0	0



Example :
Horizontal Distance X" = 20"
Nominal Pipe Diameter D" = 2"
Discharge = 504

SUBMERSIBLE MOTORS

4" Oil Filled Motors

Technical Specification		50Hz
Nominal Dia		4" Motor (100mm)
Max. Outer Dia		95mm
Power Range	1Ph	0.37 to 2.2 kW
	3Ph	0.37 to 7.5 kW
Version	1Ph	220 - 230V / 50Hz
	3Ph	380 - 415V / 50Hz
Nominal Speed		2850 rpm
Direction of rotation		Counter Clockwise
Protection		IP 68
Insulation		Class F
Duty		S1 continuous
Max. Submergence Depth		150m
Max. Liquid Temp.		33 °C
Min. cooling flow		0.15 m/s
Max. Starts per hour		20 times
Starting method	1Ph	CSR
	3Ph	DOL
Shaft & Mounting		NEMA Standard
Cable leadout		Permanently Connected 3 & 4 Core flat cable

Features

- SS304 Motor body to prevent corrosion
- Low power consumption and high operating efficiency
- Pre-filled with food grade oil
- Easy to dismantle and service
- Mounting dimensions as per NEMA standard
- Carbon ceramic Mechanical seal
- Angular contact type lower bearings

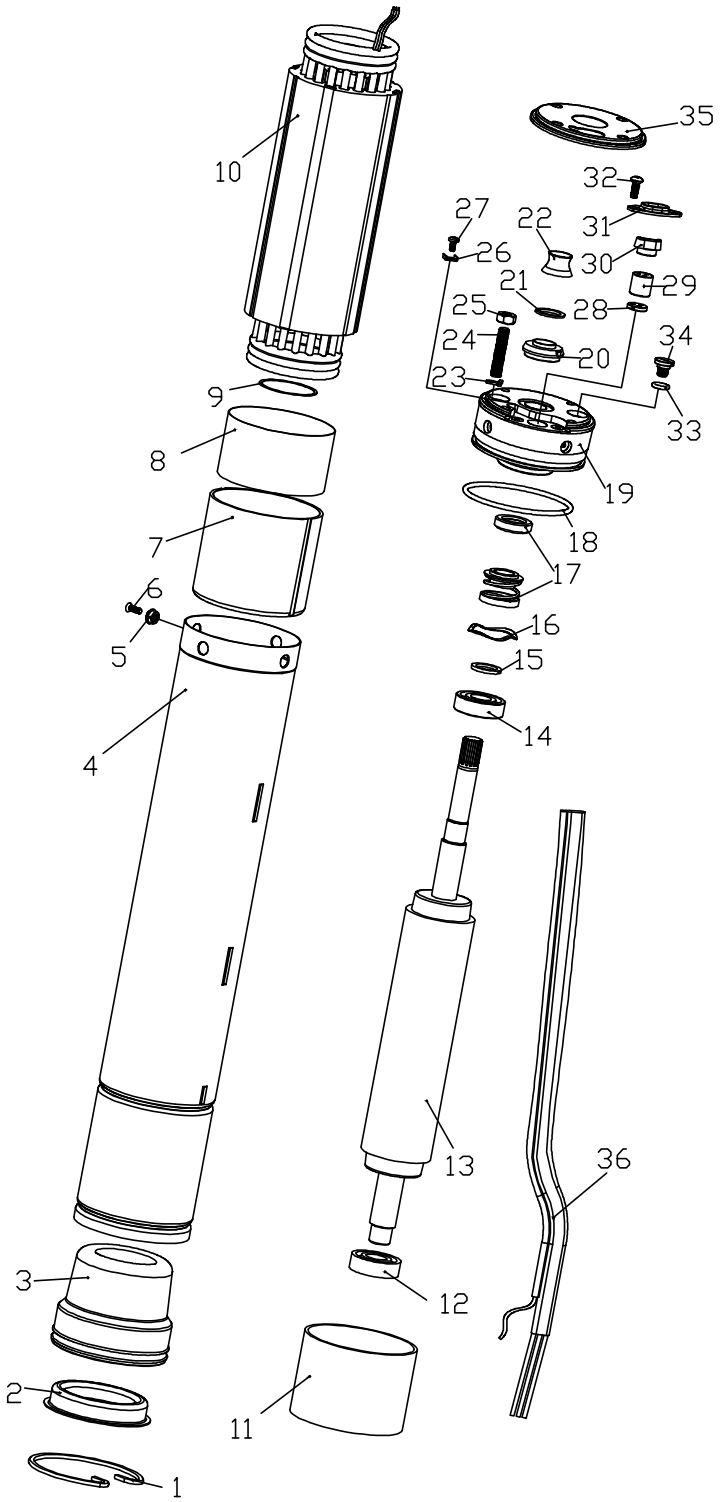
Applications

- Domestic, Irrigation, Industries, Sprinkler, Mining, Booster systems, Gardens, Fountains, etc...

Materials of Construction

Part	Material
Motor Shell	SS304
Motor Shaft	SS410
Upper Bearing	Ball Bearing
Lower Bearings	Angular Contact Bearing
Lead Cable	PVC/EPDM Rubber Cable
Oil Seal	NBR
Diaphragm	NBR
Mechanical Seal	Carbon / Ceramic

Exploded View



Part No.	Part Name
1	Snap Ring
2	Bottom Cover
3	Diaphragm
4	Motor Shell
5	Washer
6	Screw
7	Lower Bracket
8	Insulating Paper
9	O ring
10	Stator
11	Insulating Paper
12	Lower Bearing
13	Rotor
14	Upper bearing
15	Washer
16	Spring Washer
17	Mechanical Seal
18	0 ring
19	Upper Housing
20	Sand Guard
21	Washer
22	Sand Slinger
23	Spring Washer
24	Stud
25	Nut
26	Washer
27	Earth Screw
28	O ring
29	Cable Grommet
30	Cable Grommet Nut
31	Cable Clamp
32	Screw
33	O ring
34	Drain Plug
35	Upper Shell
36	Cable

Technical Details

50Hz, Single Phase 230V, 3 Wire Motor (CSR)

Model	kW	HP	Full load Current (A)	Starting Current (A)	Eff. (%)	P.F. cosØ	Capacitor (MFD)	Torque (Nm)	Thrust Load (N)	Height (mm)	Weight (kg)	Cable Size (Sq mm)	Cable Length (m)
V4K-03M	0.37	0.5	3.6	10.4	53	0.88	15	1.24	1500	357	8	1.5	1.5
V4K-05M	0.55	0.75	4.8	13.6	58	0.89	20	1.84	1500	377	8	1.5	1.5
V4K-07M	0.75	1	6.3	17.6	60	0.9	30	2.5	1500	402	10	1.5	1.5
V4K-11M	1.1	1.5	8.6	21.1	64	0.9	40	3.6	2500	432	11	1.5	1.5
V4K-15M	1.5	2	10	26.4	70	0.94	50	5	2500	475	11	2	1.5
V4K-22M	2.2	3	14	39.9	74	0.96	60	7.35	2500	520	14	2.3	2

50Hz, Three Phase 380V, Motor (D.O.L)

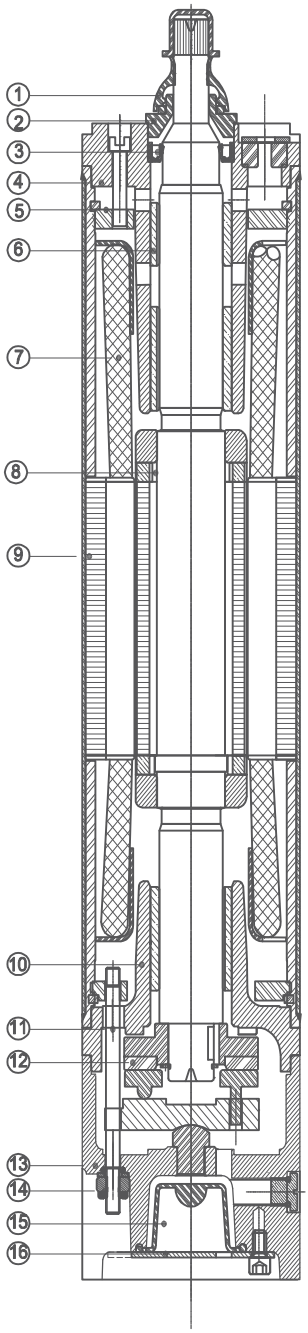
Model	kW	HP	Full load Current (A)	Starting Current (A)	Eff. (%)	P.F. cosØ	Torque (Nm)	Thrust Load (N)	Height (mm)	Weight (kg)	Cable Size (Sq mm)	Cable Length (m)
V4K-03T	0.37	0.5	1.07	5.2	63	0.8	1.24	1500	392	8	1.5	1.5
V4K-05T	0.5	0.75	1.9	9.3	63	0.8	1.84	1500	407	8	1.5	1.5
V4K-07T	0.75	1	2.4	11.1	64	0.81	2.5	1500	427	10	1.5	1.5
V4K-11T	1.1	1.5	3.15	13	88	0.82	3.6	2500	447	11	1.5	1.5
V4K-15T	1.5	2	4.2	19.5	72	0.82	5	2500	482	11	1.5	1.5
V4K-22T	2.2	3	6	28	72	0.83	7.35	2500	542	14	1.5	2
V4K-30T	3	4	7.8	40.2	75	0.83	10	2500	602	19	2	2
V4K-37T	3.7	5	9.6	48	75	0.83	13.4	2500	602	19	2	2
V4K-40T	4	5.5	10	51	77	0.83	13.4	2500	642	21	2	2
V4K-55T	5.5	7.5	13.6	71.1	78	0.85	18.4	4500	762	25	2.3	3
V4K-75T	7.5	10	17.6	87.8	79	0.85	25	4500	882	31	2.3	3

Technical Specification		50Hz
Nominal Dia		4" Motor (100mm)
Max. Outer Dia		95mm
Power Range	1Ph	0.37 to 2.2 kW
	3Ph	0.37 to 7.5 kW
Version	1Ph	220 - 230V / 50Hz
	3Ph	380 - 415V / 50Hz
Nominal Speed		2900 rpm
Class of Insulation		Y
Degree of protection		IP 58
Direction of rotation		Counter-clock wise
Type of duty		S1 continuous
Minimum cooling flow		0.15 m/sec
Max. Liquid Temp.		33 °C
Starts per hour		20 Times
Method of starting	1Ph	Capacitor Start Capacitor Run (CSCR)
	3Ph	Direct On Line (DOL)
Cable leadout		Permanently Connected 3 & 4 Core PVC Flat Cable

Materials of Construction	A4C	A4S
Upper & Lower Housing	CI, FG 200	Casted SS304
Stator Shell	SS202	SS304
Thrust Pad	CARBON / TEFLON	CARBON / TEFLON
Thrust Bearing	CI, FG 200 / SS420	SS304 / SS420
Diaphragm	NITRILE RUBBER	NITRILE RUBBER
Motor Base	CI, FG 200	SS304
Upper housing shell	CI, FG 200	SS304
Shaft	SS420/431	SS420 / 431
Sleeve	SS410	SS410

Features
• Easy to dismantle & repair
• High Operating Efficiency
• Specially designed 3 layered Insulation (Polyster+2BOPP) winding wire for better thermal protection
• Spl. Magnet provision at motor base to prevent from free metal particles
• Mounting dimensions as per NEMA standard
• Kingsburry type Thrust bearing to withstand high axial loads
• Spring action pressure compensating Diaphragm
• Specially designed forged MS stator end rings
• Low Voltage motors can be supplied, on request

Cross Sectional View



NO.	PART NAME	MATERIAL
1	SAND SLINGER	NITRILE RUBBER
2	SAND COVER	SS304
3	OIL SEAL	NITRILE RUBBER
4	ADAPTOR	SS304
5	FLANGE	MILD STEEL
6	BEARING BUSH	BRONZE LTB-4
7	WINDING WIRE	PVC+BOPP+COPPER
8	ROTOR	STAMPING-CRNO M47 SHAFT- SS
9	STATOR	STAMPING-CRNO M47 PIPE- SS304
10	LOWER HOUSING	SS304
11	STUD	SS304
12	THRUST BEARING WITH LOOSE SEGMEMT	CARBON + SS
13	MOTOR BASE	SS304
14	FASTENERS	SS304
15	DIAPHRAGM	NITRILE RUBBER
16	MOTOR BASE PLATE	SS410

Technical Details

50Hz, Single Phase 230V, Water Filled Motor (CSCR)

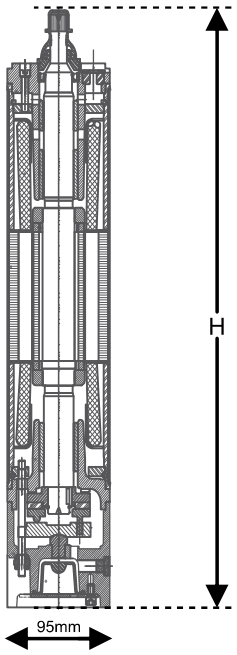
Model	kW	HP	Full load Current (A)	Starting Current (A)	Eff. (%)	P.F. cosØ	Max. Down thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
A4S-03S	0.37	0.5	5.3	10.4	42	0.80	3000	2	1.2
A4S-05S	0.55	0.75	6.2	13.6	45	0.80	3000	2.9	1.8
A4S-07S	0.75	1	7.5	17.6	50	0.90	3000	4.1	2.5
A4S-11S	1.1	1.5	10.5	21.1	53	0.90	3000	6.1	3.7
A4S-15S	1.5	2	13.8	26.4	55	0.90	3000	8.3	4.9
A4S-22S	2.2	3	19.8	39.9	60	0.90	6500	13.3	7.4

50Hz, Three Phase 380 - 415V Water Filled Motor (D.O.L.)

Model	kW	HP	Full load Current (A)	Starting Current (A)	Eff. (%)	P.F. cosØ	Max. Down thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
A4S-03T	0.37	0.5	3.25	5.2	60	0.75	3000	2.2	1.2
A4S-05T	0.55	0.75	3.5	9.3	60	0.75	3000	3.4	1.9
A4S-07T	0.75	1	3.75	11.1	61	0.75	3000	4.5	2.5
A4S-11T	1.1	1.5	4	13	63	0.75	3000	6.7	3.7
A4S-15T	1.5	2	4.8	19.5	67	0.80	3000	9	5
A4S-22T	2.2	3	6.9	28	69	0.80	6500	14.1	7.5
A4S-30T	3	4	9	40.2	70	0.80	6500	19	10
A4S-37T	3.7	5	10.6	48	70	0.82	6500	22	12.4
A4S-40T	4	5.5	11	51	71	0.82	6500	23	13.1
A4S-55T	5.5	7.5	15.5	87.8	72	0.82	6500	33.7	18.7
A4S-75T	7.5	10	19.8	119	72	0.82	6500	45.5	25

Dimensional Details

Model	kW	HP	Cable Size (mm)	Cable Length (m)	Height (mm)	Net Weight (kg)
A4S-03S	0.37	0.5	1.0	2.75	472.5	16.6
A4S-05S	0.55	0.75	1.5	2.75	492.5	17.4
A4S-07S	0.75	1	1.5	2.75	512.5	19
A4S-11S	1.1	1.5	12.5	2.75	547.5	20
A4S-15S	1.5	2	12.5	2.75	639.5	22
A4S-22S	2.2	3	12.5	2.75	662.5	25.4
A4S-03T	0.37	0.5	1.0	2.75	472.5	15.5
A4S-05T	0.55	0.75	1.0	2.75	492.5	18
A4S-07T	0.75	1	1.0	2.75	512.5	19.5
A4S-11T	1.1	1.5	1.0	2.75	547.5	20.5
A4S-15T	1.5	2	1.0	2.75	639.5	22.5
A4S-22T	2.2	3	1.5	2.75	662.5	26
A4S-30T	3	4	1.5	2.75	722.5	28
A4S-37T	3.7	5	12.5	2.75	762.5	31
A4S-40T	4	5.5	2.5	2.75	762.5	31
A4S-55T	5.5	7.5	2.5	3.20	852.5	36
A4S-75T	7.5	10	2.5	3.20	1120.0	43



Replace the 3rd digit in model name with 'C' Cast Iron Construction.

In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

6" Water Filled Rewindable Motors

Technical Specification	50Hz
Nominal Dia	6" Motor (100mm)
Max. Outer Dia	144mm
Power Range	4 to 45 kW
Version	3Ph 380 - 415V / 50Hz, A.C. Supply
Nominal Speed	2900 rpm
Class of Insulation	Y
Degree of protection	IP 58 / IP68
Direction of rotation	Counter-clock wise
Type of duty	S1 continuous
Minimum cooling flow	0.15 m/sec
Max. Liquid Temp.	33°C / 70°C (PE2-PA Winding)
Starts per hour	20 Times
Method of starting	4.0kW to 45kW Direct On Line (D.O.L.)
	5.5kW to 45kW Star Delta (S.D.)
Cable leadout	Permanently Connected 3 & 4 Core PVC Flat Cable

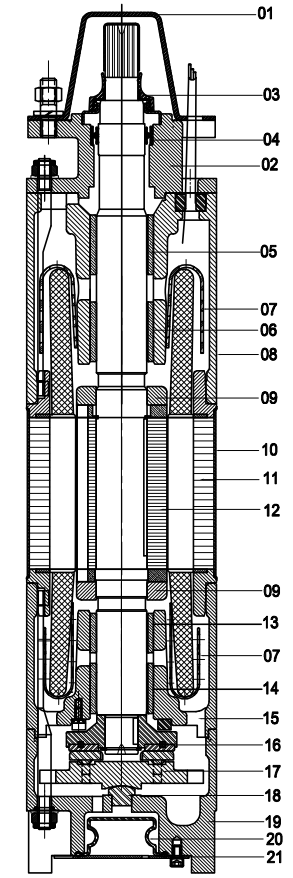
Materials of Construction	A6C / A6CF	A6S / A6SF	A6N / A6NF
Upper & Lower Housing	CI, FG 200 / 260	Casted SS304	Casted SS316
Stator Shell	SS202	SS304	SS316
Thrust Pad	CARBON / TEFLON	CARBON / TEFLON	CARBON / TEFLON
Thrust Bearing	CI, FG 200 / SS420	SS304 / SS420	SS316 / SS420
Diaphragm	NITRILE RUBBER	NITRILE RUBBER	NITRILE RUBBER
Motor Base	CI, FG 200 / 260	SS304	SS316
Upper housing shell	CI, FG 200 / 260	CI, FG 200 / 260	CI, FG 200 / 260
Shaft	SS420 / 431	SS420 / 431	SS420 / 431
Sleeve	SS410	SS410	SS410

Features

- Easy to dismantle & repair
- High Operating Efficiency
- Specially designed 3 layered Insulation (Polyster+2BOPP) winding wire for better thermal protection
- Spl. Magnet provision at motor base to prevent from free metal particles
- Mounting dimensions as per NEMA standard
- Kingsburry type Thrust bearing to withstand high axial loads
- Spring action pressure compensating Diaphragm
- Specially designed forged MS stator end rings
- On request, Motors can be supplied with PE2-PA winding wire for high temp. applications.
- Motors with Mechanical Seal & PT sensors available, on request

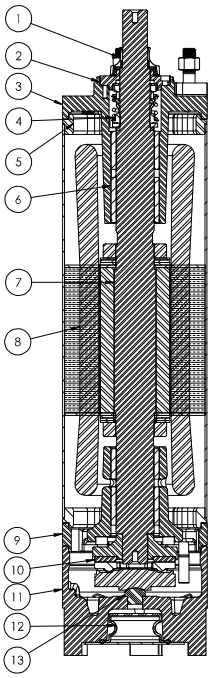
A6S A6SF A6C A6CF

Cross Sectional Drawing



A6C / A6S Type Motor

No.	Part Name	Material
1	Protection Clamp	MS
2	Adaptor	CI,FG-260
3	Sand Slinger	Nitrile Rubber
4	Oil Seal	Nitrile Rubber+SS
5	Rubber Bush	Nitrile Rubber+SS
6	Bearing Bush	LTB-4
7	Winding Cap	LDPE
8	Upper Housing	CI,FG-260
9	Balance Ring	CI,FG-250
10	Stator Tube	SS-202
11	Stator	Stamping-Crno M-47
12	Rotor	Stamping-Crno M-47
13	Rubber Bush	Nitrile Rubber+SS
14	Bearing Bush	LTB-4
15	Lower Housing	CI,FG-260
16	T.B.Patel	CI+Carbon
17	Thrust Bearing Base	SS420
18	Rocker Support	SS410
19	Motor Base	CI,FG-260
20	Daiphragm	Nitrile Rubber
21	Motor Base Plate	SS410



A6CF / A6SF Flange Type Motor

No.	Part Name	Material
1	Sand Guard	NBR
2	Sand Cover	SS304
3	Upper Housing	CI FG 200/SS304/SS316
4	Mechanical Seal	NBR+SS+Ceramic
5	Stator Flange	SS304
6	Carbon Bush	Carbon
7	Rotor	SS420+CRNO M47
8	Stator	SS J4/304+CRNO M47
9	Lower Housing	CI FG 200/SS304/SS316
10	Thrust Bearing Set	SS+Carbon
11	Motor Base	CI FG 200/SS304/SS316
12	Diaphargm	NBR
13	Rocker Nut	SS410

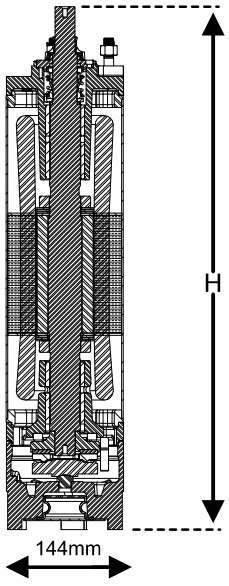
Technical Details

50Hz, Three Phase 380-415V, Water Filled Motor (D.O.L. & S.D.)

Model	kW	HP	Full load Current (A)	Starting Current (A)	Eff. (%)	P.F. cosØ	Max. Down thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
A6SF-40T	4	5.5	10	43	73	0.75	15500	20	14
A6SF-45T	4.5	6	12	48	75	0.75	15500	21	15
A6SF-55T	5.5	7.5	14.5	52	77	0.75	15500	24	181
A6SF-75T	7.5	10	19.5	70	78	0.78	15500	27	25
A6SF-93T	9.3	12.5	25	84	79	0.78	15500	35	31
A6SF-110T	11	15	29	102	80	0.80	15500	43	37
A6SF-130T	13	17.5	34	118	80.5	0.80	15500	51	43
A6SF-150T	15	20	39	148	81	0.80	15500	62	49
A6SF-185T	18.5	25	45	188	82	0.82	15500	98	61
A6SF-220T	22	30	54	225	82	0.82	15500	118	74
A6SF-260T	26	35	66	270	82	0.83	27500	138	86
A6SF-300T	30	40	72	355	82	0.83	27500	196	98
A6SF-370T	37	50	85	420	82	0.82	27500	242	122
A6SF-450T	45	60	96	464	82	0.82	27500	393	150

Dimensional Details

Model	kW	HP	Cable Size D.O.L. (sq. mm)	Cable Size S.D. (sq. mm)	Cable Length (m)	Height (mm)	Net Weight (kg)
A6SF-40T	4	5.5	4	-	2.75	642	46
A6SF-45T	4.5	6	4	-	2.75	657	47
A6SF-55T	5.5	7.5	4	2.5	2.75	677	50
A6SF-75T	7.5	10	4	2.5	2.75	727	55
A6SF-93T	9.3	12.5	6	2.5	2.75	762	60
A6SF-110T	11	15	6	4	2.75	807	65
A6SF-130T	13	17.5	10	4	3.25	857	70
A6SF-150T	15	20	10	4	3.25	877	73
A6SF-185T	18.5	25	10	4	3.25	932	80
A6SF-220T	22	30	10	4	3.25	987	89
A6SF-260T	26	35	10	6	4.25	1057	95
A6SF-300T	30	40	16	6	4.25	1132	117
A6SF-370T	37	50	16	6	5.25	1237	127
A6SF-450T	45	60	16	10	5.25	1312	138



Replace 3rd digit in model name with 'C' for Complete CI and 'N' for Complete SS316 Construction.

Technical Details

50Hz, Three Phase 380-415V, Water Filled Motor (D.O.L. & S.D.)

Model	kW	HP	Full load Current (A)	Starting Current (A)	Eff. (%)	P.F. cosØ	Max. Down thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
A6C-40T	4	5.5	10	43	73	0.75	15500	20	14
A6C-45T	4.5	6	12	48	75	0.75	15500	21	15
A6C-55T	5.5	7.5	14.5	52	77	0.75	15500	24	18
A6C-75T	7.5	10	19.5	70	78	0.78	15500	27	25
A6C-93T	9.3	12.5	25	84	79	0.78	15500	35	31
A6C-110T	11	15	29	102	80	0.80	15500	43	37
A6C-130T	13	17.5	34	118	80.5	0.80	15500	51	43
A6C-150T	15	20	39	148	81	0.80	15500	62	49
A6C-185T	18.5	25	45	188	82	0.82	15500	98	61
A6C-220T	22	30	54	225	82	0.82	15500	118	74
A6C-260T	26	35	66	270	82	0.83	27500	146	86
A6C-300T	30	40	72	355	82	0.83	27500	196	98
A6C-370T	37	50	85	420	82	0.82	27500	242	122
A6C-450T	45	60	96	464	82	0.82	27500	393	150

Dimensional Details

						A6C / A6S	
Model	kW	HP	Cable Size D.O.L. (sq. mm)	Cable Size S.D. (sq. mm)	Cable Length (m)	Height (mm)	Net Weight (kg)
A6C-40T	4	5.5	4	-	2.75	646	51.0
A6C-45T	4.5	6	4	-	2.75	661	53.0
A6C-55T	5.5	7.5	4	2.5	2.75	716	59.0
A6C-75T	7.5	10	4	2.5	2.75	761	65.0
A6C-93T	9.3	12.5	6	2.5	2.75	791	69.0
A6C-110T	11	15	6	4	2.75	851	76.0
A6C-130T	13	17.5	10	4	3.25	881	79.0
A6C-150T	15	20	10	4	3.25	931	85.0
A6C-185T	18.5	25	10	4	3.25	981	92.0
A6C-220T	22	30	10	4	3.25	1071	100.0
A6C-260T	26	35	10	6	4.25	1185	105
A6C-300T	30	40	16	6	4.25	1236	110
A6C-370T	37	50	16	6	5.25	1312	112
A6C-450T	45	60	16	10	5.25	1387	120

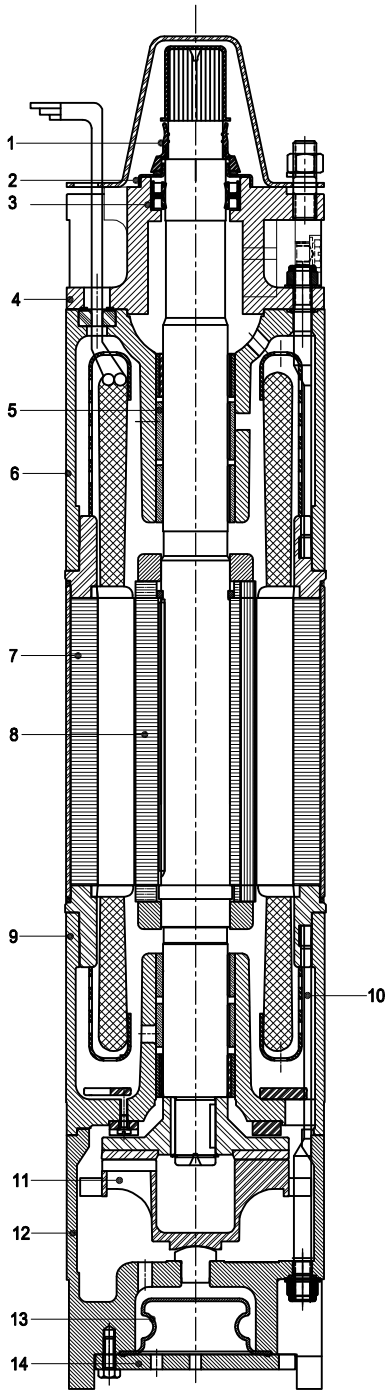
Replace 3rd digit in model name with 'S' for Complete SS304 and 'N' for Complete SS316 Construction.

Technical Specification	50Hz
Nominal Dia	8" Motor (100mm)
Max. Outer Dia	190mm
Power Range	37 to 93 kW
Version	3Ph 380 - 415V / 525V 50Hz, A.C. Supply
Nominal Speed	2900 rpm
Class of Insulation	Y
Degree of protection	IP68
Direction of rotation	Counter-clock wise
Type of duty	S1 continuous
Minimum cooling flow	0.5 m/sec
Max. Liquid Temp.	33°C
Starts per hour	10 Times
Method of starting	37kW to 93kW (DOL & S.D.)
Cable leadout	3 & 4 Core PVC Flat Cable

Materials of Construction	A8C	A8S	A8N
Upper & Lower Housing	CI, FG 200 / 260	Casted SS304	Casted SS316
Stator Shell	SS202	SS304	SS316
Thrust Pad	CARBON / TEFLON	CARBON / TEFLON	CARBON / TEFLON
Thrust Bearing	CI, FG 200 / SS420	SS304 / SS420	SS316 / SS420
Diaphragm	NITRILE RUBBER	NITRILE RUBBER	NITRILE RUBBER
Motor Base	CI, FG 200 / 260	SS304	SS316
Upper housing shell	CI, FG 200 / 260	SS304	SS316
Shaft	SS420 / 431	SS420 / 431	SS420 / 431
Sleeve	SS410	SS410	SS410

Features
• Easy to dismantle & repair
• High Operating Efficiency
• Specially designed 3 layered Insulation (Polyster+2BOPP) winding wire for better thermal protection
• Spl. Magnet provision at motor base to prevent from free metal particles
• Mounting dimensions as per NEMA standard
• Kingsburry type Thrust bearing to withstand high axial loads
• Spring action pressure compensating Diaphragm
• Specially designed forged MS stator end rings
• On request, Motors can be supplied with PE2-PA winding wire for high temp. applications.
• Motors with Mechanical Seal & PT sensors available, on request

Cross Sectional View



NO.	PART NAME	NO.	MATERIAL
1	SAND SLINGER	8	ROTOR
2	SAND COVER	9	LOWER HOUSING
3	OIL SEAL	10	T-BOLT
4	ADAPTOR	11	THRUST BEARING
5	BEARING BUSH	12	MOTOR BASE
6	UPPER HOUSING	13	DIAPHRAGM
7	STATOR	14	MOTOR BASE PLATE

A8S A8C A8CF

Technical Details

50Hz, Three Phase 380-415V, Water Filled Motor

Model	kW	HP	Full load Current (A)	Starting Current (A)	Eff. (%)	P.F. cosø	Max. down thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
A8C-370T	37	50	85	400	82	0.84	45500	200	122
A8C-450T	45	60	100	520	82	0.84	45500	268	146
A8C-550T	55	75	120	660	83	0.84	45500	370	180
A8C-630T	63	85	135	720	83	0.84	45500	410	206
A8C-750T	75	100	156	935	84	0.85	45500	520	246
A8C-930T	93	125	190	1265	86	0.85	45500	680	306
A8C-A10T	110	150	198	560	85	0.85	60000	35	4

Dimensional Details

Model	kW	HP	Cable Size D.O.L. (sq. mm)	Cable Size S.D. (sq. mm)	Cable Length (m)	Height (mm)	Net Weight (kg)
A8C-370T	37	50	16.0	10	3.5	1236.5	166.0
A8C-450T	45	60	16.0	10	3.5	1351.5	188.0
A8C-550T	55	75	25.0	25	4.0	1431.5	203.0
A8C-630T	63	85	25.0	25	4.0	1491.5	213.0
A8C-750T	75	100	35.0	25	5.0	1561	230
A8C-930T	93	125	35	35	5.0	1634	245
A8C-A109	110	150	35	35	5.0	1750	265

Replace the 3rd digit in model name with 'S' SS304 'T' SS316 Construction.
In view of continuous improvements in our design and process, the information, dimensions and specifications given herein are subject to change without notice.

Technical Specification	50Hz
Nominal Dia	10" Motor (250mm)
Max. Outer Dia	231mm
Power Range	81 to 185 kW
Version	3Ph 380 - 415V / 50Hz, A.C. Supply
Nominal Speed	2900 rpm
Class of Insulation	Y
Degree of protection	IP68
Direction of rotation	Counter-clock wise
Type of duty	S1 continuous
Minimum cooling flow	0.5 m/sec
Max. Liquid Temp.	33°C
Starts per hour	10 Times
Method of starting	81kW to 185kW (DOL & S.D.)
Cable leadout type	3 & 4 Core PVC Flat Cable

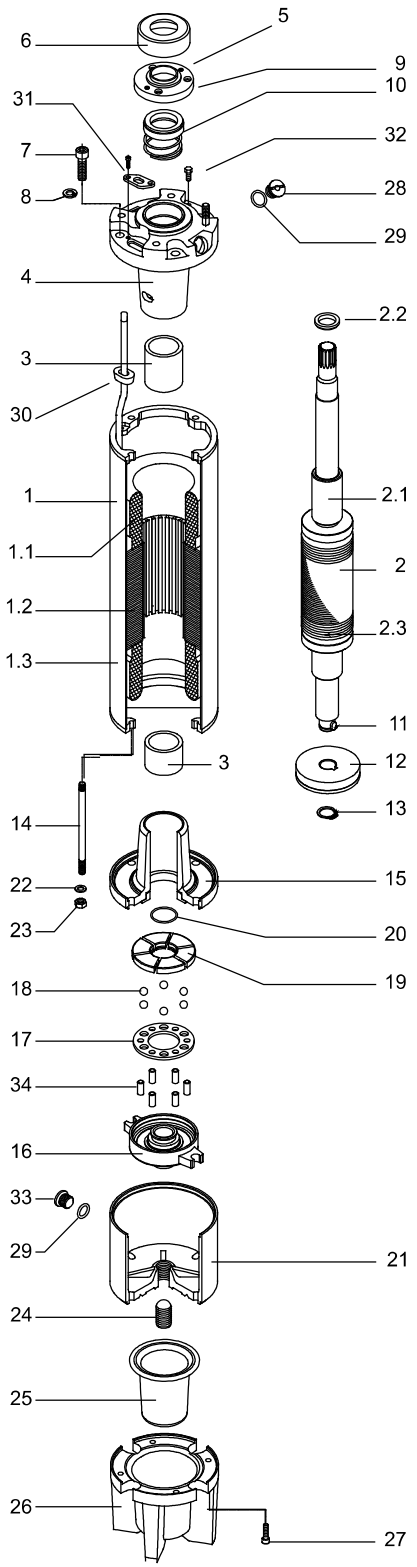
Materials of Construction	A10C	A10S	A10T
Upper & Lower Housing	CI, FG 200 / 260	Casted SS304	Casted SS316
Stator Shell	SS202	SS304	SS316
Thrust Pad	CARBON / TEFLON	CARBON / TEFLON	CARBON / TEFLON
Thrust Bearing	CI, FG 200 / SS420	SS304 / SS420	SS316 / SS420
Diaphragm	NITRILE RUBBER	NITRILE RUBBER	NITRILE RUBBER
Motor Base	CI, FG 200 / 260	SS304	SS316
Upper housing shell	CI, FG 200 / 260	SS304	SS316
Shaft	SS420 / 431	SS420 / 431	SS420 / 431
Sleeve	SS410	SS410	SS410

Features
• Easy to dismantle & repair
• High Operating Efficiency
• Mounting dimensions as per NEMA standard
• Kingsburry type Thrust bearing to withstand high axial loads
• Spring action pressure compensating Diaphragm
• On request, Motors can be supplied with PE2-PA winding wire for high temp. applications.
• Motors with Mechanical Seal & PT sensors available, on request

Technical Details

50Hz, Three Phase 380-415V, Water Filled Motor

Model	kW	HP	Full load Current (A)	Starting Current (A)	Eff. (%)	P.F. cosØ	Max. Down thrust Load (N)	Cable Size D.O.L (sq.mm)	Cable Size S.D. (sq.mm)	Cable Length (m)	Height (mm)	Net Weight (kg)
A10C-810T	81	110	153	590	85	0.89	75000	25	16	4	1370	225
A10C-930T	93	125	174	671	85	0.89	75000	25	16	4	1430	274
A10C-A10T	110	150	210	811	85	0.88	75000	25(2)	25	4	1510	299
A10C-A30T	130	175	238	919	87	0.89	75000	25(2)	25	4	1610	328
A10C-A50T	150	200	274	1059	87	0.89	75000	35(2)	35	4	1740	368
A10C-A65T	165	225	309	1196	86	0.89	75000	35(2)	35	4	1820	402
A10C-A85T	185	250	349	1348	85	0.89	75000	35(2)	35	4	1820	436



Part No.	Part Name
1	Stator
1.1	Winding wire
1.2	Stator package
1.3	Stator shell
2	Rotor
2.1	Shaft sleeve
2.2	Balance ring
2.3	Copper ring
3	Radial bearing
4	Upper bearing body
5	Bushing
6	Slinger (sand guard)
7	Hexagon socket cap screws
8	Copper ring
9	Cover seal
10	Mechanical seal
11	Axial thrust bearing key
12	Axial thrst bearing
13	Retaining ring
14	Tie rod
15	Lower bearing body
16	Thrust bearing support
17	Ball holder
18	Thrust bearing ball
19	Tilting pads
20	O-ring
21	Thrust bearing body
22	Copper ring
23	Nut
24	Screw (thrust bearing base)
25	Membrane
26	Membrane body
27	Hexagon socket cap screws
28	Check-valve
29	O-ring
30	Cable seal
31	Seal cover
32	Nut
33	Plush ® 3/8"
34	Ball holder pins

FEATURES

- Suitable for size of 100 mm (4"), 150 mm (6") & above bore well respectively.
- Up to 90% Motor Efficiency
- 20 to 30% Higher Efficiency than Star Rated Pump sets.
- Easy Rewindable & Repairable Water Filled Submersible Motor.
- Smooth Starting Using VFD Controller and can be Used Low Voltage Area.
- Virtually NO Maintenance Cost.
- Premium Material SS/CI Robust Construction
- Nema Standards,
- Suitable for 110 to 415 Voltages for 3-phase.
- Frequency: Upto 110 Hz/145 Hz
- Speed: 3300 RPM/4350 RPM

Technical Specifications

Norminal Dia		4" & 6"
Max. Outer Diameter		4" : 3.74" (95 mm) 6" : 5.67"& 144mm
Power Range	3Ph	1 HP to 15 HP
Nominal Speed		3300 RPM & 4500 RPM
Voltage Range	3Ph	110V to 450V / 60 Hz, A.C Supply
Class of Insulation		F
Degree of protection		IP 58
Direction of rotation		Anti-Clock wise
Type of duty		S1 (continues)
Minimum cooling flow		0.15 m/sec
Max. Liquid temp.		92° F / 120° F (33° C / 50° C)
Starts per hour		20 Times
Method of starting		1 HP to 15 HP (VFD)
Cable lead out type		3 Core Flat Cable

Technical Details

Model	Motor Rated Power - P_2 (kW)	Motor Rated Power - P_2 (HP)	Motor input Power - P_1 (W)	Motor Nominal Voltsge	Max. PV Panel Power Voltage - Vmp	Current at Vmp - Imp (A)	Full Load Efflciency (%)	Full Load Power Factor	Height (mm)	Net Weight (kg)
PM4-07T	0.75	1	1200	80	111	9	79	0.83	390	12
PM4-07T	0.75	1	1200	110	148	10	79	0.83	390	12
PM4-15T	1.5	2	1800	160	222	9	81	0.83	410	12.5
PM4-22T	2.2	3	3000	230	370	10	85	0.82	440	15
PM4-37T	3.7	5	4800	380	555	10	85	0.82	490	18
PM4-55T	5.5	7.5	6750	280	407	18	87	0.84	540	20
PM4-75T	7.5	10	9000	380	555	18	87	0.84	600	24

Model	Motor Rated Power - P_2 (kW)	Motor Rated Power - P_2 (HP)	Motor input Power - P_1 (W)	Motor Nominal Voltsge	Max. PV Panel Power Voltage - Vmp	Current at Vmp - Imp (A)	Full Load Efflciency (%)	Full Load Power Factor	Height (mm)	Net Weight (kg)
PM6-110T	11	15	14400	380	555	27	90	0.85	769	57
PM6-150T	15	20	18000	380	555	36	90	0.86	841	65