

Borehole Submersible Pumps & Motors - 60 Hz

 **Zirantec**



www.zirantec.com



FABBRICA ITALIANA POMPE SOMMERGIBILI S.r.l

C O N T E N T S

SUBMERSIBLE PUMPS

ORION SERIES - STAINLESS STEEL SUBMERSIBLE PUMPS	Page No.
General Information	05
Model Identification Code	06
Pumped Liquids	07
Group Performance Curves	08 - 10
Material of Construction	11
Exploded Views	12 - 17
Dimension & Weight / Performance Curves	18 - 73
Pipe friction Loss Table	74
Conversion Table	75

SUBMERSIBLE MOTORS

Model Identification Code	77
---------------------------	----

OIL FILLED SUBMERSIBLE MOTORS

Description	78
Specifications and Material Of Construction - 4"	79
Exploded View - 4"	80
Technical Data, Dimensions & Weight Table - 4"	81

RESIN FILLED SUBMERSIBLE MOTORS

Description	82
Specifications and Material Of Construction - 4"	83
Exploded View - 4"	84 - 85
Technical Data, Dimensions & Weight Table - 4"	86 - 87
Specifications and Material Of Construction - 6"	88
Technical Data, Dimensions & Weight Table - 6"	89

WATER FILLED SUBMERSIBLE MOTORS

Description	90
Exploded View	91 - 96
Specifications and Material Of Construction - 4"	97
Technical Data, Dimensions & Weight Table - 4"	98
Specifications and Material Of Construction - 6"	99
Technical Data, Dimensions & Weight Table - 6"	100 - 102
Specifications and Material Of Construction - 8"	103
Technical Data, Dimensions & Weight Table - 8"	104
Specifications and Material Of Construction - 10"	105
Technical Data, Dimensions & Weight Table - 10"	106
Specifications and Material Of Construction - 12"	107
Technical Data, Dimensions & Weight Table - 12"	108
Cable Selection Table	113
Conversion Table	114

Stainless Steel Submersible Pumps

Orion Series



GENERAL INFORMATION



PERFORMANCE CURVE CONDITIONS

The conditions below apply to the curves shown on the following pages.

- a. The Performance curves show pump performance at rated speed, voltage and @ 10ft minimum submergence.
The nominal speed of motor
4" motor : n = 2900 rpm
6" motor : n = 2900 rpm
8" & 10" motor : n = 2900 rpm
- b. The measurements were made with airless water at 20°C. When pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.
- c. Pipe friction losses have not been included in the performance curves and performance tables.
- d. The bold curves indicate the recommended performance range.
- e. Q/H : The curves are inclusive of check valve and suction inter-connector losses at the actual speed.
- f. Efficiency curve: "Eff%" shows pump stage efficiency.
- g. Curve tolerance according to ISO : 9906, Grade - 3B
- h. The performances are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,.
- i. The given performances are for specific materials of construction of pump.
- j. The outlet size of the pumps are as per BSP standard.

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

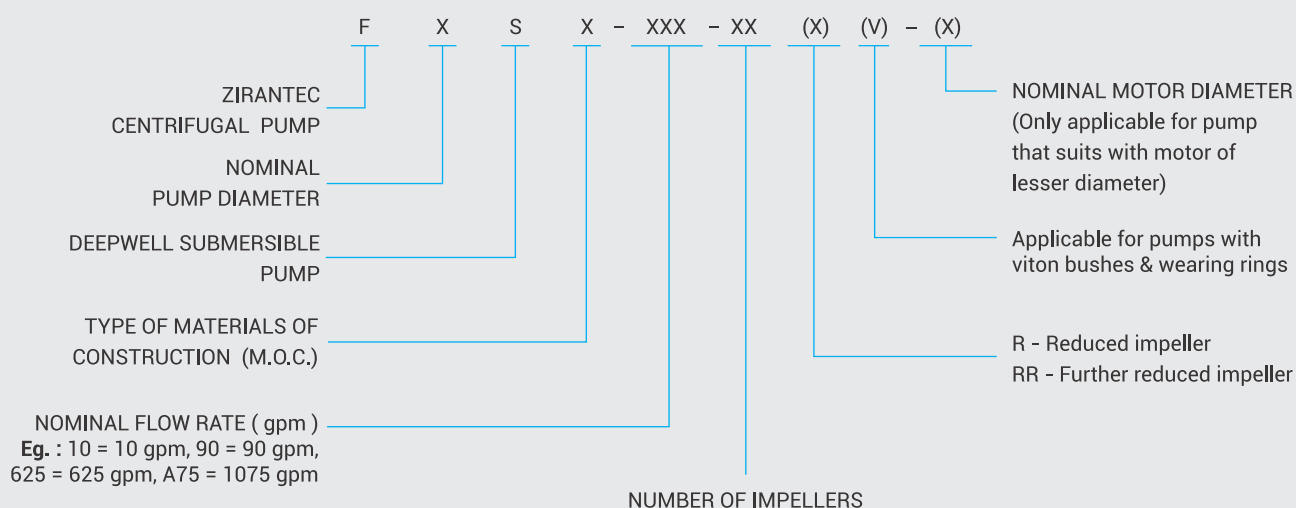
IMPORTANT NOTES

| 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

BOREHOLE SUBMERSIBLE PUMP



BOREHOLE SUBMERSIBLE PUMP

PUMP MODEL	/	CODE
FX SX - X XXX - XX	/	F4S-S10-08
		F10S-S625-05

PUMPED LIQUIDS

Clean, Thin, Non-aggressive, Non explosive, Clear, Cold, Fresh Water without abrasives, Solid particles or fibre having the following characteristics

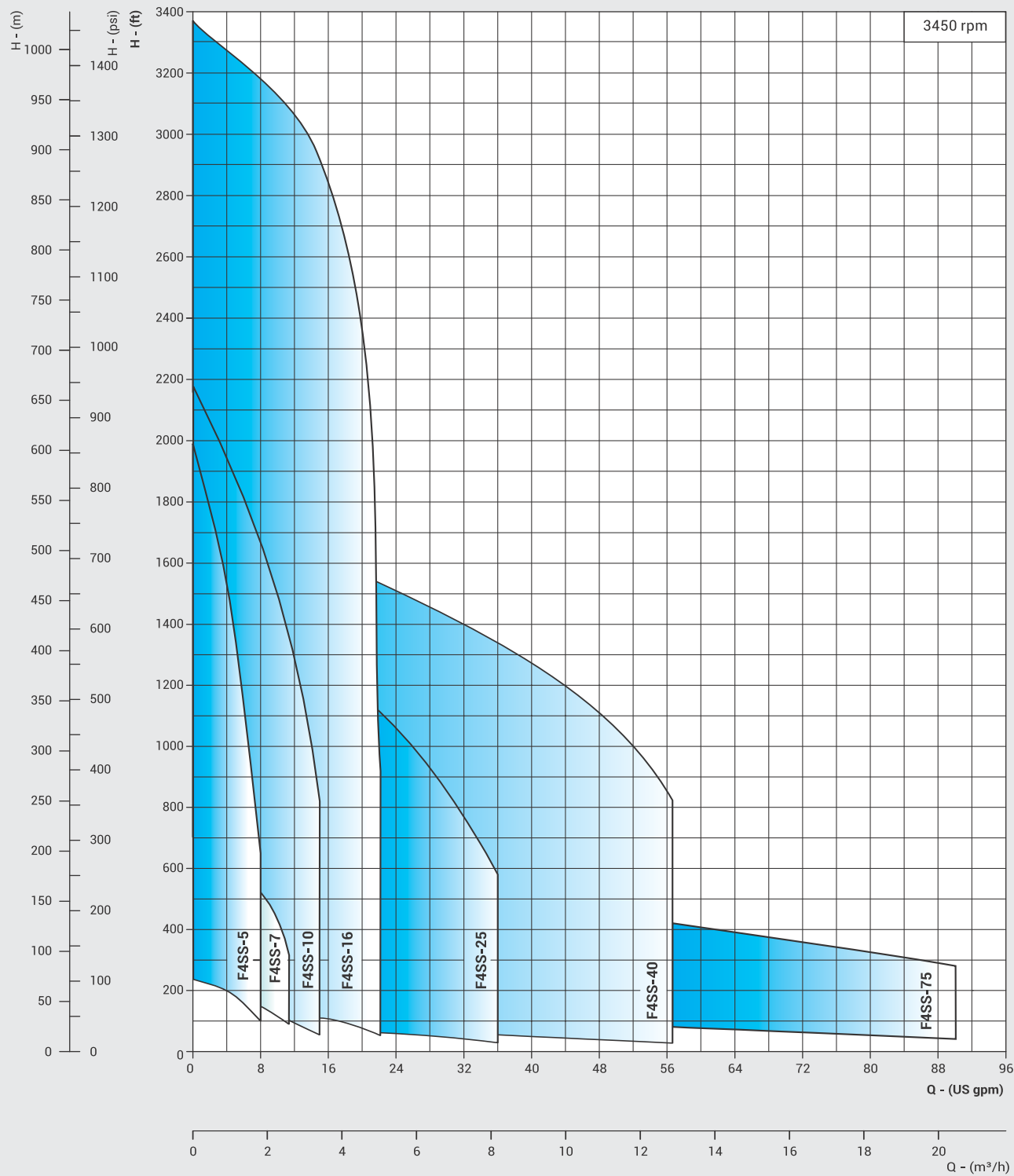
a)	Max. Temperature	NBR - 91,4°F (33°C) / VITON - 194°F (90°C)
b)	Permissible amount of sand	0,42 lb / 1000 gal (max)
c)	Chlorine ion density	500 ppm (max)
d)	Allowable solids	3000 ppm (max)
e)	Specific gravity	1,004 (max)
f)	Hardness (Drinking water)	300 ppm (max)
g)	Viscosity	1,75 x 10 ⁻⁶ m ² /sec (max)
h)	Turbidity	50 ppm silica scale(max)
i)	pH	6,5 to 8,5

PUMP OPERATING LIMITATIONS					
NOMINAL DIAMETER		4"(100mm)	6"(150mm)	8"(200mm)	10"(250mm)
POWER RANGE		0,25 - 20HP	1,5 - 85/100HP	7,5 - 125HP	15 - 300HP
SPEED		3450 rpm	3450 rpm	3450 rpm	3450 rpm
DISCHARGE RANGE	US gpm	1,5 - 90	21 - 400	150 - 635	200 - 1465
	m ³ /h	0,3 - 20	5 - 91	34 - 144	46 - 332
TOTAL HEAD RANGE	ft	20 - 3366	10 - 2110	20 - 1400	25 - 1280
	m	6 - 1026	3 - 643	6 - 427	8 - 390
OUTLET SIZE IN INCHES		(1), (1,25), (1,5) & 2	2, 3 & 4	5	6
SHAFT COUPLING		Splines	Splines	Splines	Keyway / Splines

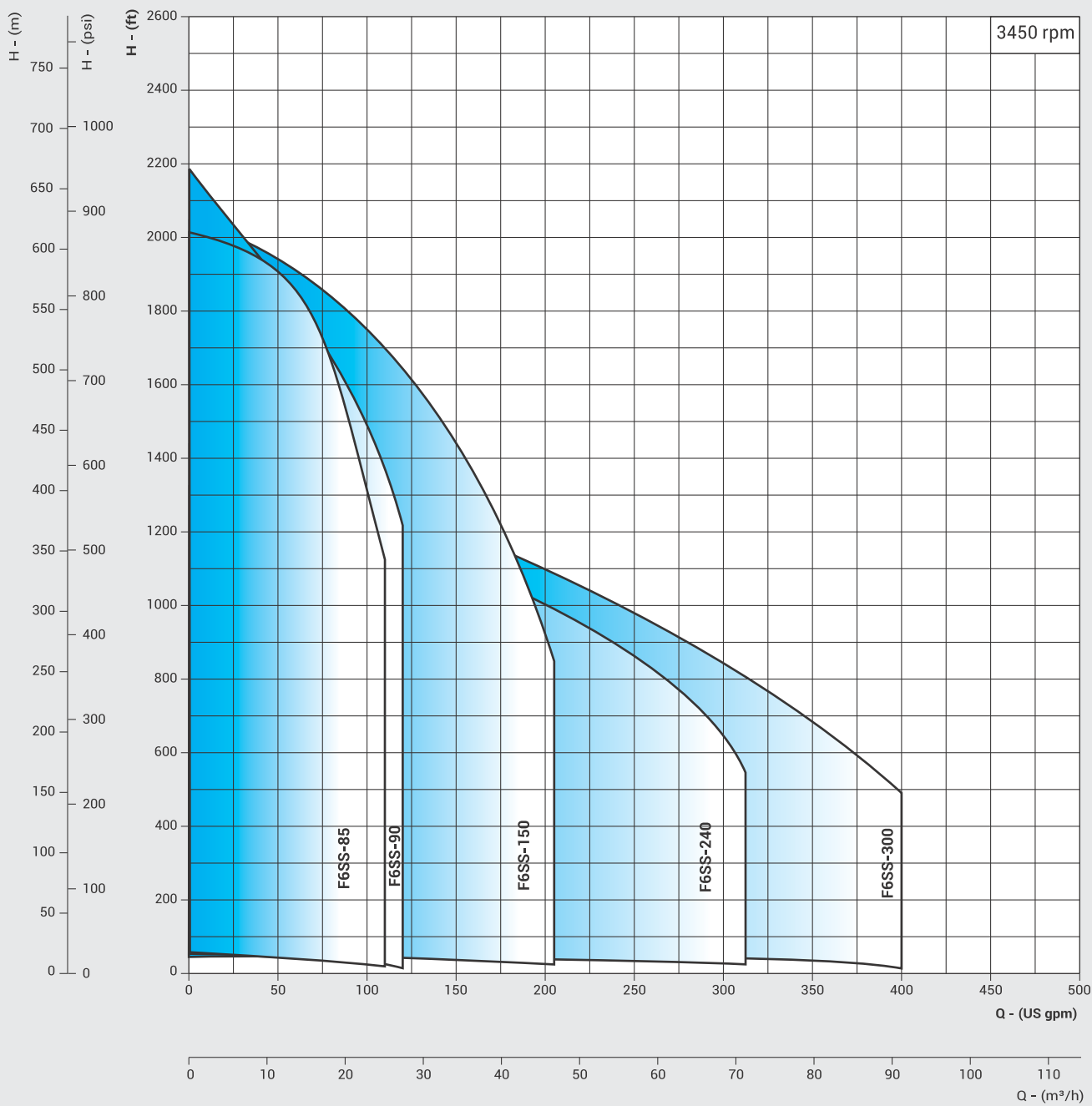
Maximum temperature of pumped liquid

Motor	Minimum cooling flow along the motor	Vertical installation	Horizontal installation minimum 30° angle
4"	0,25 ft/s	91,4°F(33°C)	91,4°F(33°C)
6" & 8"	0,5 ft/s	91,4°F(33°C)	91,4°F(33°C)
10"			

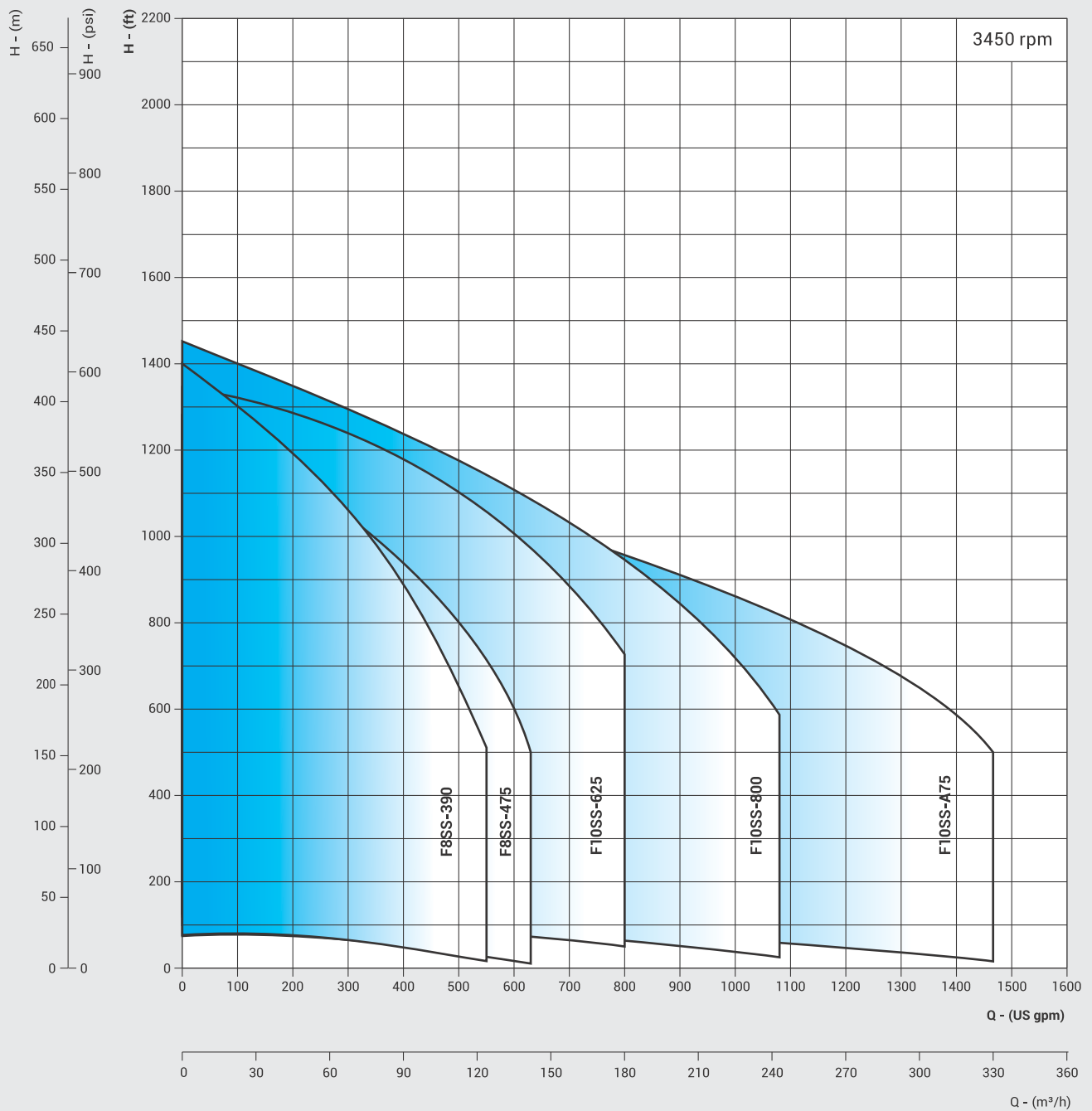
GROUP PERFORMANCE CURVE - 4"



GROUP PERFORMANCE CURVE - 6"



GROUP PERFORMANCE CURVE - 8" & 10"



MATERIALS OF CONSTRUCTION

PART NAME	PART No.	NOMINAL DIA. 4"		NOMINAL DIA . 6" , 8" & 10"	
		TYPE - S	TYPE - N	TYPE - S	TYPE - N
CHECK VALVE HOUSING	21,00	S.S - 304	S.S. - 316	S.S. - 304	S.S. - 316
CHECK VALVE DISC	21,06	S.S - 304	S.S. - 316	S.S. - 304	S.S. - 316
CHECK VALVE SEAT	21,01	NBR	NBR	NBR	NBR
DIFFUSER CHAMBER	18,03	S.S - 304	S.S. - 316	S.S. - 304	S.S. - 316
IMPELLER	19,00	S.S - 304	S.S. - 316	S.S. - 304	S.S. - 316
SPLIT CONE WITH NUT*	19,02	S.S - 304	S.S. - 316	S.S. - 304	S.S. - 316
IMPELLER WEAR RING / SEAL RING	17,01	NBR	NBR	NBR	NBR
UPTHRUST WASHER / UPTHURST SLEEVE	13,03	S.S - 420	S.S - 420	S.S 420 / S.S 431	S.S 420 / S.S 431
BUSH - CT PAD	18,05	LTB	LTB	LTB / TEFLON	LTB / TEFLON
BUSH - DIFFUSER CHAMBER	18,06	NBR	NBR	NBR	NBR
BUSH - BRACKET	18,07	LTB	LTB	LTB	LTB
SUCTION INTER CONNECTOR	17,00	S.S. - 304	S.S - 316	S.S. - 304	S.S. - 316
INLET SCREEN	14,03	S.S. - 304	S.S. - 316	S.S. - 304	S.S. - 316
PUMP SHAFT ^	22,00	S.S. - 431 [#]	S.S. - 329 [#]	S.S. - 431	S.S. - 431
COUPLING SPLINES	22,01	S.S. - 329	S.S - 329	S.S. - 431	S.S. - 431
LOCKING STRAPS	17,03	S.S. - 304	S.S - 316	S.S. - 304	S.S. - 316
CABLE GUARD	17,04	S.S. - 304	S.S - 316	S.S. - 304	S.S. - 316

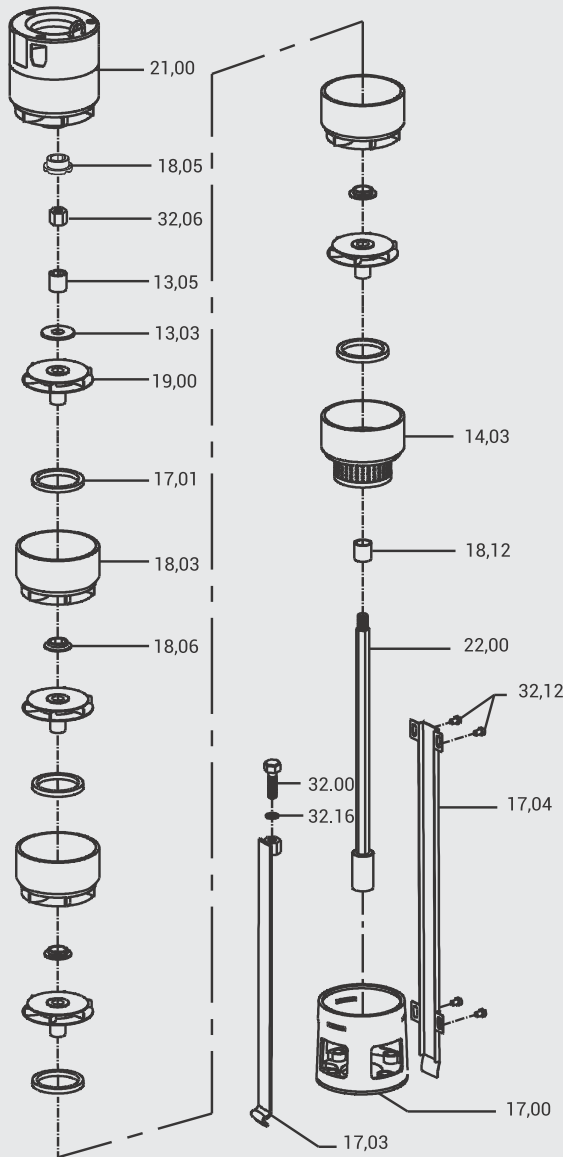
[#] Provided only for 4", 75 gpm

* Applicable for 4", 75 gpm and 6" 85 gpm to A75 gpm pump models.

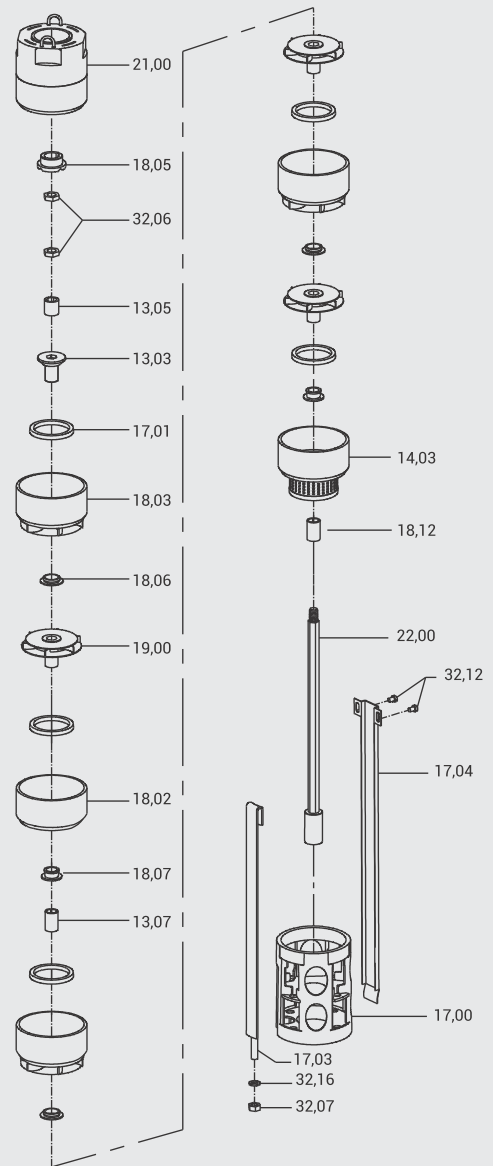
^ 4" 5 gpm to 40 gpm pumps are provided with hexagonal shaft and other 4", 6", 8" & 10" pumps are with round shaft.

EXPLODED VIEW - 4" STAINLESS STEEL SUBMERSIBLE PUMP

F4SS-5 / F4SS-10 / F4SS-16 (Upto 29 Stages)



F4SS-5 / F4SS-10 / F4SS-16 (30 & above Stages)



Part No.	Part Name
13,03	Upthrust Washer
13,05	Sleeve
14,03	Chamber-Inlet Screen
17,00	Suction Inter-connector
17,01	Wearing ring
17,03	Locking Straps
17,04	Cable Guard
18,03	Diffuser Chamber
18,05	Bush - CT Pad

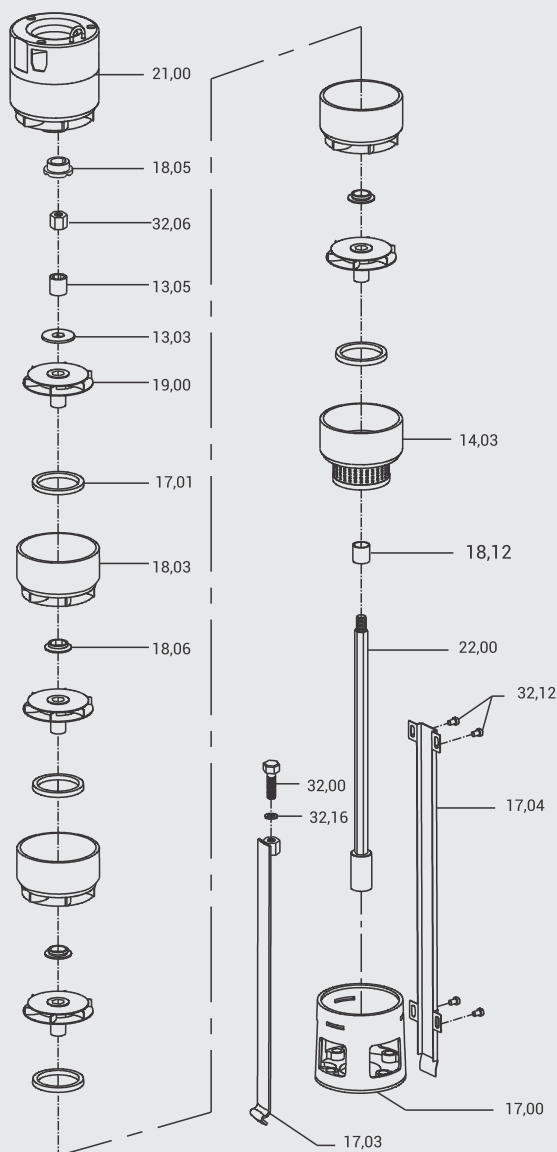
Part No.	Part Name
18,06	Bush - Diffuser Chamber
18,12	Spacer Sleeve
19,00	Impeller
21,00	Check Valve Housing
22,00	Pump Shaft
32,00	Bolt
32,06	Lock Nut
32,12	Screw
32,16	Washer

Part No.	Part Name
13,03	Upthrust Sleeve
13,07	Sleeve - Bracket
13,05	Sleeve
14,03	Chamber-Inlet Screen
17,00	Suction Inter-connector
17,01	Wearing ring
17,03	Locking Straps
17,04	Cable Guard
18,02	Chamber - Bracket
18,03	Diffuser Chamber
18,05	Bush - CT Pad

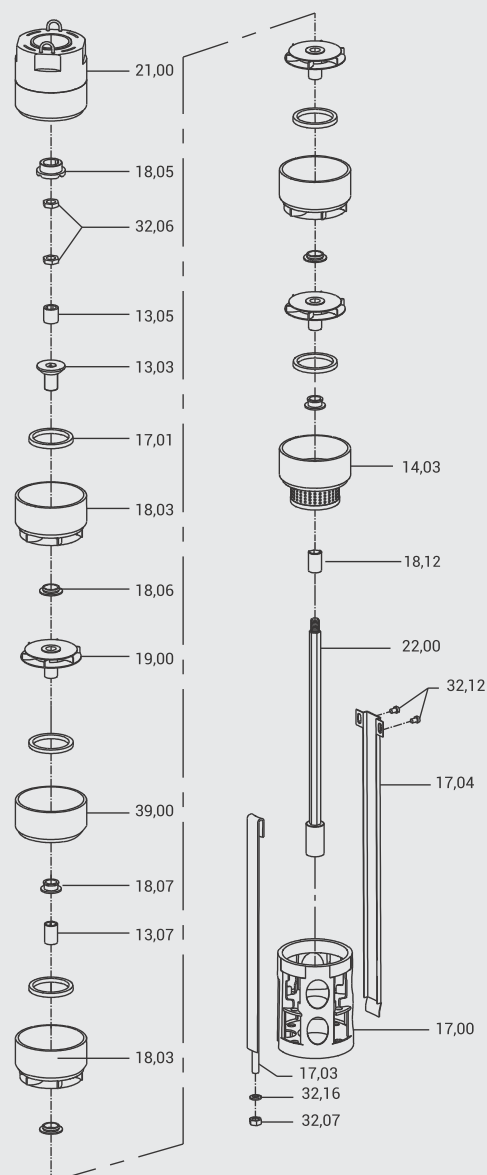
Part No.	Part Name
18,06	Bush - Diffuser Chamber
18,07	Bush - Bracket
18,12	Spacer Sleeve
19,00	Impeller
21,00	Check Valve Housing
22,00	Pump Shaft
32,06	Lock Nut
32,07	Nut
32,12	Screw
32,16	Washer

EXPLODED VIEW- 4" STAINLESS STEEL SUBMERSIBLE PUMP

F4SS-25 (Upto 25 Stages)



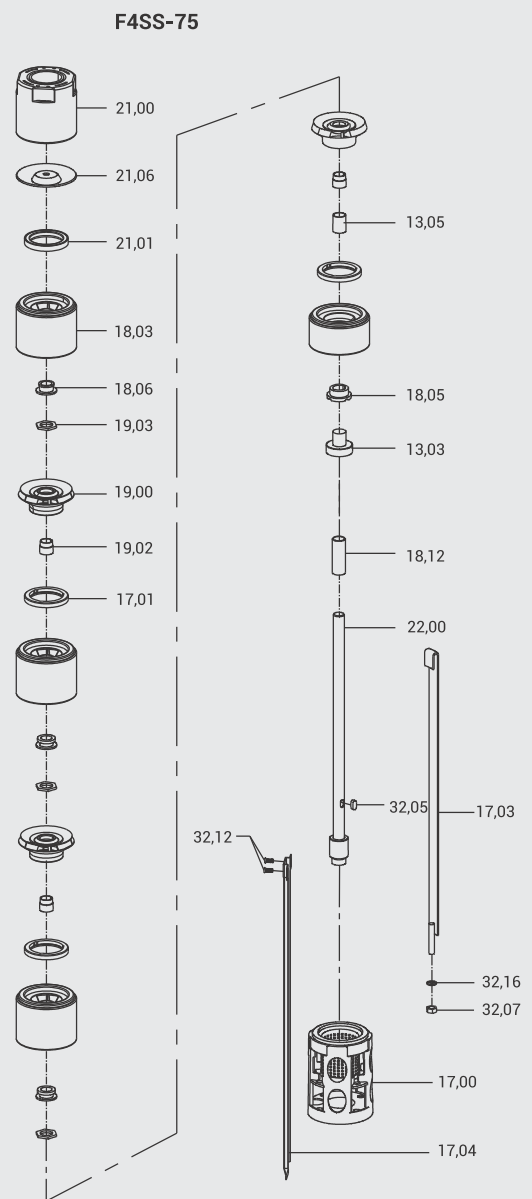
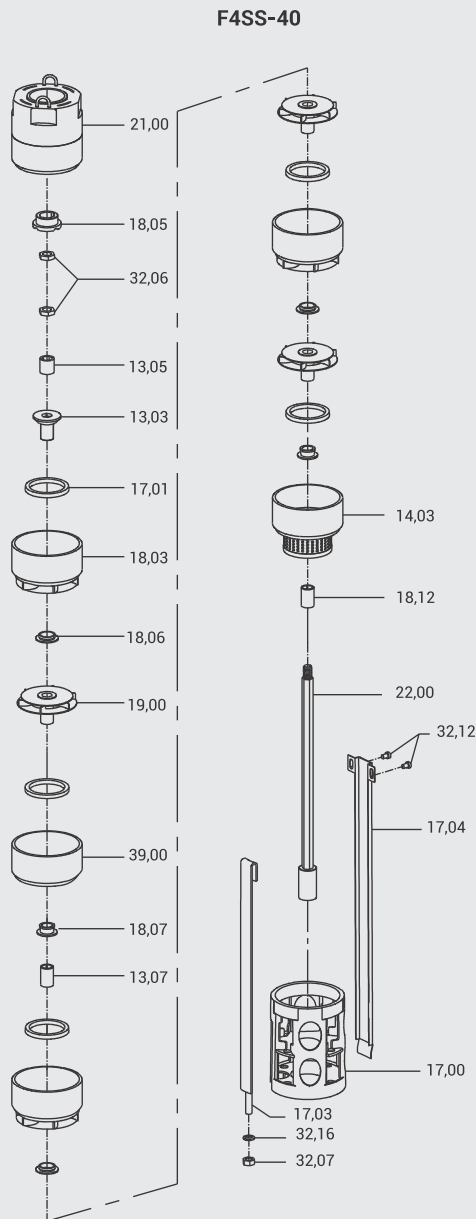
F4SS-25 (26 & Above Stages)



Part No.	Part Name	Part No.	Part Name
13,03	Upthrust Washer	18,06	Bush - Diffuser Chamber
13,05	Sleeve	18,12	Spacer Sleeve
14,03	Chamber-Inlet Screen	19,00	Impeller
17,00	Suction Inter-connector	21,00	Check Valve Housing
17,01	Wearing ring	22,00	Pump Shaft
17,03	Locking Straps	32,00	Bolt
17,04	Cable Guard	32,06	Lock Nut
18,03	Diffuser Chamber	32,12	Screw
18,05	Bush - CT Pad	32,16	Washer

Part No.	Part Name	Part No.	Part Name
13,05	Sleeve	18,07	Bush - Bracket
13,03	Upthrust Sleeve	18,12	Spacer Sleeve
13,07	Sleeve-Bracket	19,00	Impeller
14,03	Chamber-Inlet Screen	21,00	Check Valve Housing
17,00	Suction Inter-connector	22,00	Pump Shaft
17,01	Wear ring	32,06	Lock Nut
17,03	Locking Straps	32,07	Nut
17,04	Cable Guard	32,12	Screw
18,03	Diffuser Chamber	32,16	Washer
18,05	Bush - CT Pad	39,00	Chamber - Bracket
18,06	Bush - Diffuser Chamber		

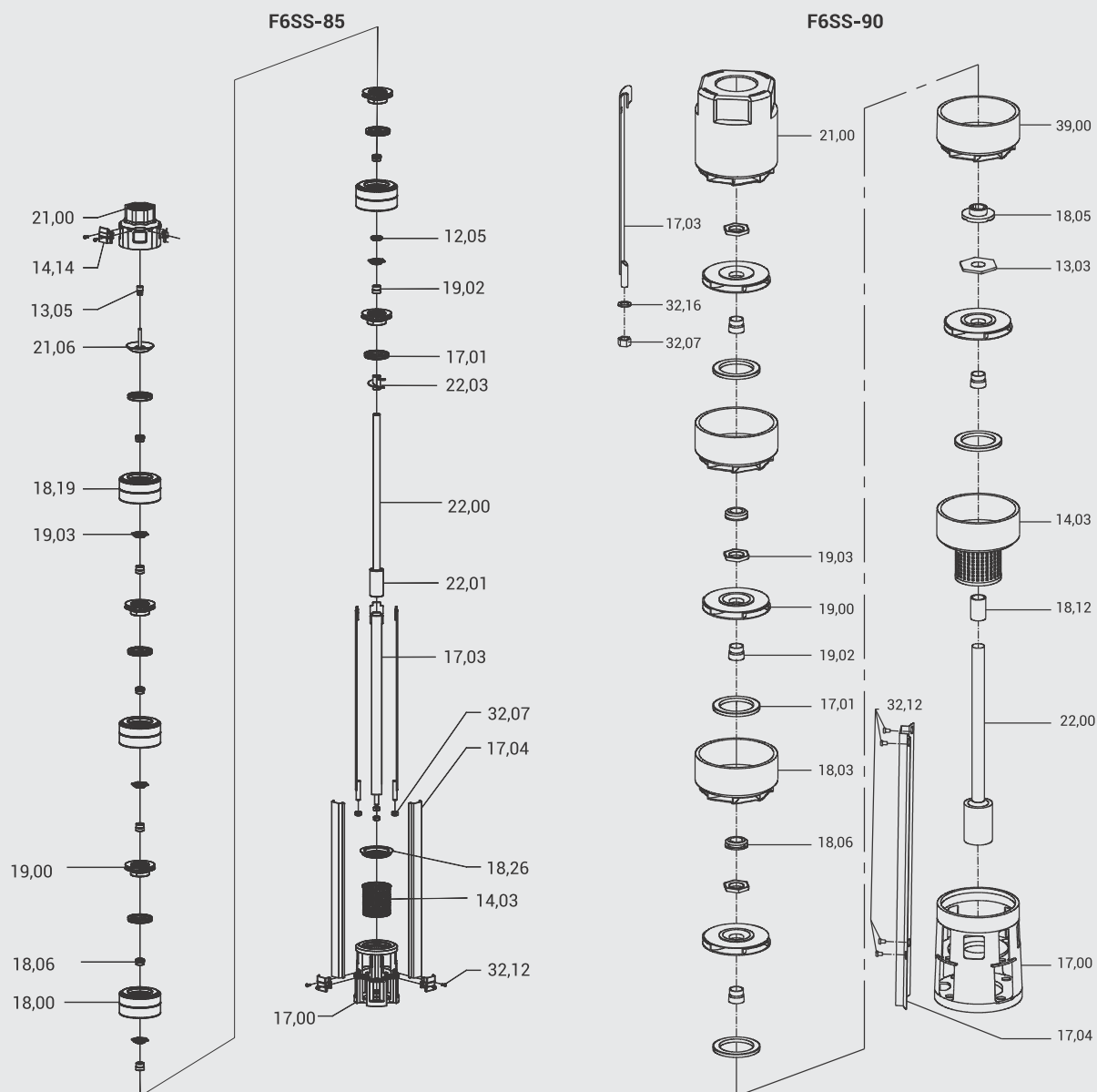
EXPLODED VIEW - 4" STAINLESS STEEL SUBMERSIBLE PUMP



Part No.	Part Name	Part No.	Part Name
13,03	Upthrust Sleeve	18,07	Bush - Bracket
13,05	Sleeve	18,12	Spacer Sleeve
13,07	Sleeve-Bracket	19,00	Impeller
14,03	Chamber-Inlet Screen	21,00	Check Valve Housing
17,00	Suction Inter-connector	22,00	Pump Shaft
17,01	Wear ring	39,00	Chamber - Bracket
17,03	Locking Straps	32,06	Lock Nut
17,04	Cable Guard	32,07	Nut
18,03	Diffuser Chamber	32,12	Screw
18,05	Bush - CT Pad	32,16	Washer
18,06	Bush - Diffuser Chamber		

Part No.	Part Name	Part No.	Part Name
13,03	Upthrust Sleeve	19,02	Split Cone
13,05	Sleeve	19,03	Split Cone Nut
17,00	Suction Inter-connector	21,00	Check Valve Housing
17,01	Wear ring	21,01	Check Valve Seat
17,03	Locking Straps	21,06	Check Valve Disc
17,04	Cable Guard	22,00	Pump Shaft
18,03	Diffuser Chamber	32,05	Key
18,05	Bush - CT Pad	32,07	Nut
18,06	Bush - Diffuser Chamber	32,12	Screw
18,12	Spacer Sleeve	32,16	Washer
19,00	Impeller		

EXPLODED VIEW - 6" STAINLESS STEEL SUBMERSIBLE PUMP

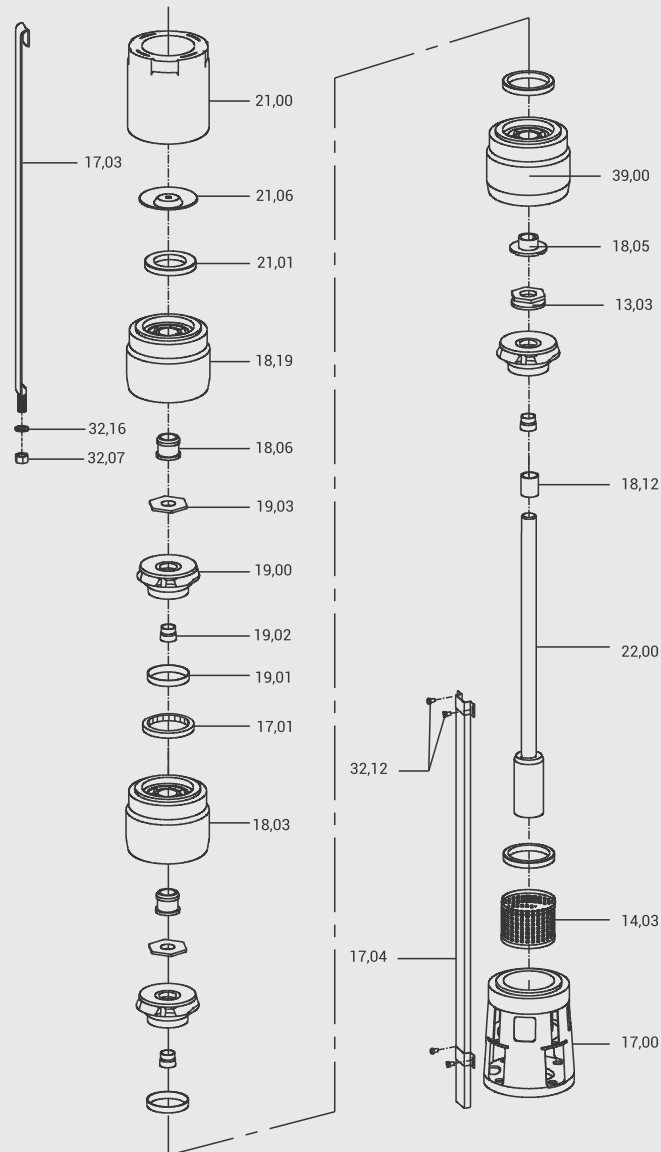


Part No.	Part Name	Part No.	Part Name
12,05	Counter Thrust Ring	18,26	Wearing ring Guide
13,05	Sleeve	19,00	Impeller
14,03	Strainer	19,02	Split Cone
14,14	Cable Clamp	19,03	Split Cone Nut
17,00	Suction Inter Connector	21,00	Valve Housing
17,01	Wearing ring	21,06	Valve Disc
17,03	Locking Strap-Pump	22,00	Pump Shaft
17,04	Cable Guard	22,01	Coupling
18,00	Chamber -Rubber bush	22,03	Priming sleeve
18,06	Bush - Rubber	32,06	Lock Nut
18,19	Chamber - Top	32,07	Nut
		32,12	Screw

Part No.	Part Name	Part No.	Part Name
13,03	Upthrust Washer	19,00	Impeller
14,03	Chamber Inlet Screen	19,02	Split Cone
17,00	Suction Inter-connector	19,03	Split Cone Nut
17,01	Wear ring	21,00	Check Valve Housing
17,03	Locking Straps	22,00	Pump Shaft
17,04	Cable Guard	32,07	Nut
18,03	Diffuser Chamber	32,12	Screw
18,05	Bush - CT Pad	32,16	Washer
18,06	Bush - Diffuser Chamber	39,00	Chamber - Bracket
18,12	Spacer Sleeve		

EXPLODED VIEW - 6" STAINLESS STEEL SUBMERSIBLE PUMP

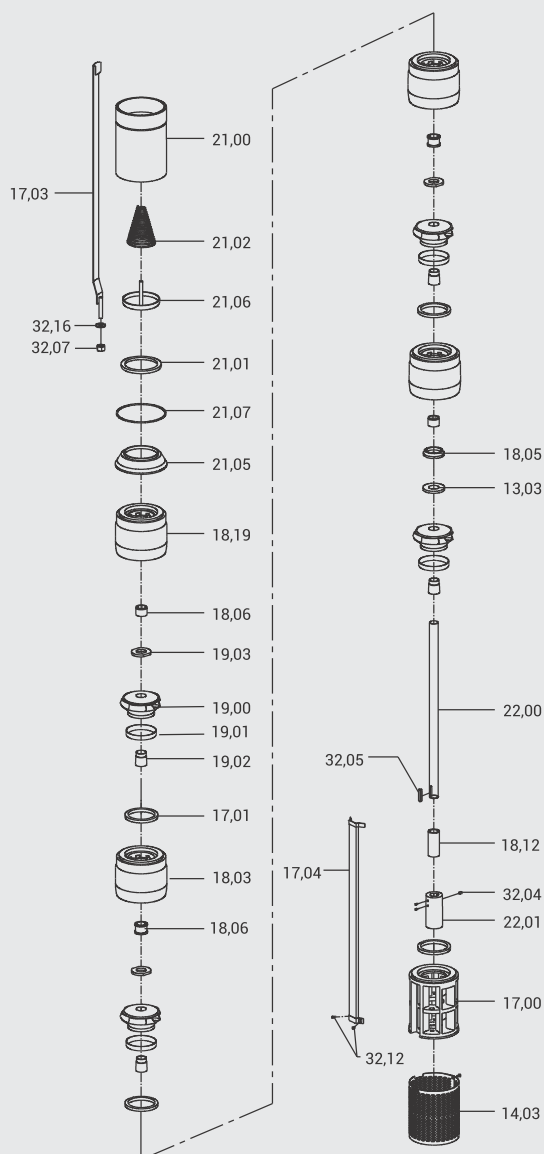
F6SS-150 / F6SS-240 / F6SS-300



Part No.	Part Name	Part No.	Part Name
13,03	Upthrust Washer	19,01	Neck Ring
14,03	Inlet Screen	19,02	Split Cone
17,00	Suction Inter-connector	19,03	Split Cone Nut
17,01	Wear ring	21,00	Check Valve Housing
17,03	Locking Straps	21,01	Check Valve Seat
17,04	Cable Guard	21,06	Check Valve Disc
18,05	Bush - CT Pad	22,00	Pump Shaft
18,06	Bush - Diffuser Chamber	32,07	Nut
18,03	Diffuser Chamber	32,12	Screw
18,12	Spacer Sleeve	32,16	Washer
18,19	Diffuser Chamber Top	39,00	Chamber - Bracket
19,00	Impeller		

EXPLODED VIEW - 6" STAINLESS STEEL SUBMERSIBLE PUMP

F8SS-390 / F8SS-475 / F10SS-625 / F10SS-800 / F10SS-A75



Part No.	Part Name	Part No.	Part Name
13,03	Upthrust Washer	19,03	Split Cone Nut
14,03	Inlet Screen	21,00	Check Valve Housing
17,00	Suction Inter-connector	21,01	Check Valve Seat
17,01	Wear ring	21,02	Check Valve Spring
17,03	Locking Straps	21,05	Check Valve bracket
17,04	Cable Guard	21,06	Check valve Disc
18,03	Diffuser Chamber	21,07	O-Ring
18,05	Bush - CT Pad	22,00	Pump Shaft
18,06	Bush - Diffuser Chamber	22,01	* Coupling
18,12	Spacer Sleeve	32,04	Crub Screw
18,19	Diffuser Chamber Top	32,05	Key
19,01	Neck Ring	32,07	Nut
19,02	Split Cone	32,12	Screw
19,00	Impeller	32,16	Washer

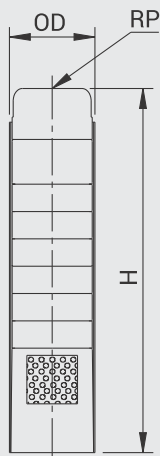
* Upto 125HP - Splines coupling
 150HP & Above - Keyway coupling (standard)
 Splines coupling (optional)

DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 5 gpm

Outlet Size : 1" NPT



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP	OD	RP	H	
F4SS-5-09	0,37	0,5	3,82	1	14,06	8,27
F4SS-5-13	0,37	0,5	3,82	1	17,52	9,68
F4SS-5-18	0,55	0,75	3,82	1	21,85	13,56
F4SS-5-22	0,75	1	3,82	1	25,31	16,54
F4SS-5-26	1,1	1,5	3,82	1	28,78	19,62
F4SS-5-31	1,1	1,5	3,82	1	38,35	22,93
F4SS-5-39	1,5	2	3,82	1	45,91	32,90
F4SS-5-48	2,2	3	3,82	1	55,35	40,35
F4SS-5-75	3,7	5	3,82	1	87,90	71,00

PERFORMANCE TABLE

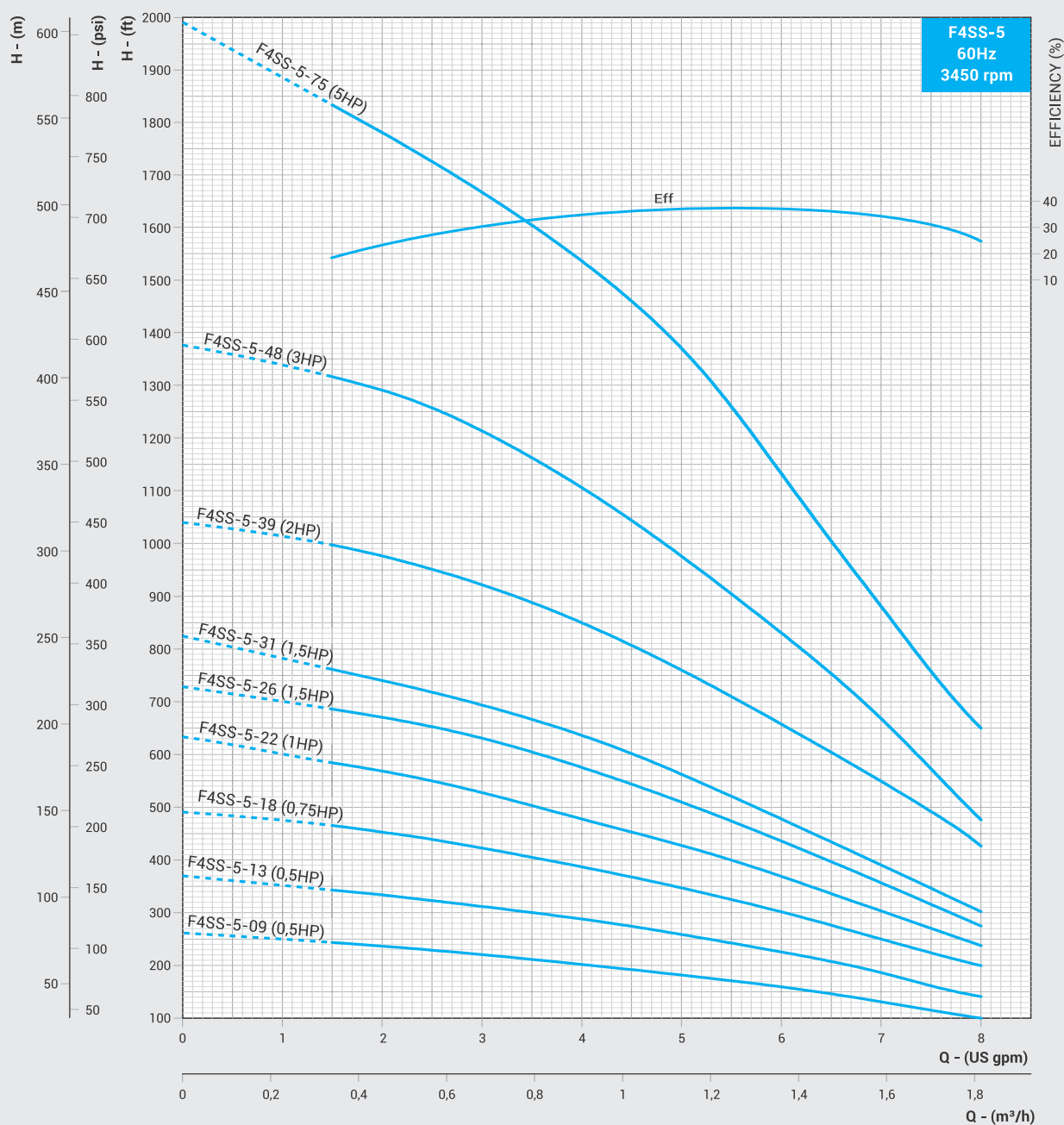
PUMP MODEL	HP	gpm	0	1,5	3	4	5	6	7	8
		m³/h	0	0,3	0,7	0,9	1,1	1,4	1,6	1,8
F4SS-5-09	0,5	HEAD IN FEET	260	241	223	201	180	160	130	100
F4SS-5-13	0,5		370	340	318	288	258	225	188	146
F4SS-5-18	0,75		496	468	423	381	359	300	250	200
F4SS-5-22	1		632	582	536	479	433	370	300	238
F4SS-5-26	1,5		729	682	636	575	510	440	358	275
F4SS-5-31	1,5		823	762	691	638	562	475	388	300
F4SS-5-39	2		1040	999	923	850	761	654	550	428
F4SS-5-48	3		1375	1321	1219	1107	977	838	670	477
F4SS-5-75	5		1990	1845	1664	1536	1370	1120	884	653

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 5 gpm

Outlet Size : 1" NPT

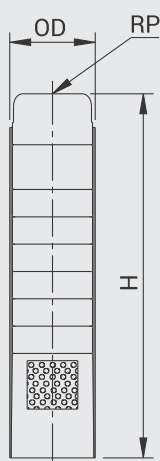


DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 7 gpm

Outlet Size : 1" NPT



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP	OD	RP	H	
F4SS-7-08	0,37	0,5	3,82	1	13,19	7,61
F4SS-7-11	0,37	0,5	3,82	1	15,79	8,71
F4SS-7-15	0,55	0,75	3,82	1	19,25	11,58
F4SS-7-19	0,75	1	3,82	1	22,72	14,22
F4SS-7-26	1,1	1,5	3,82	1	28,78	19,62
F4SS-7-32	1,5	2	3,82	1	39,29	23,70

PERFORMANCE TABLE

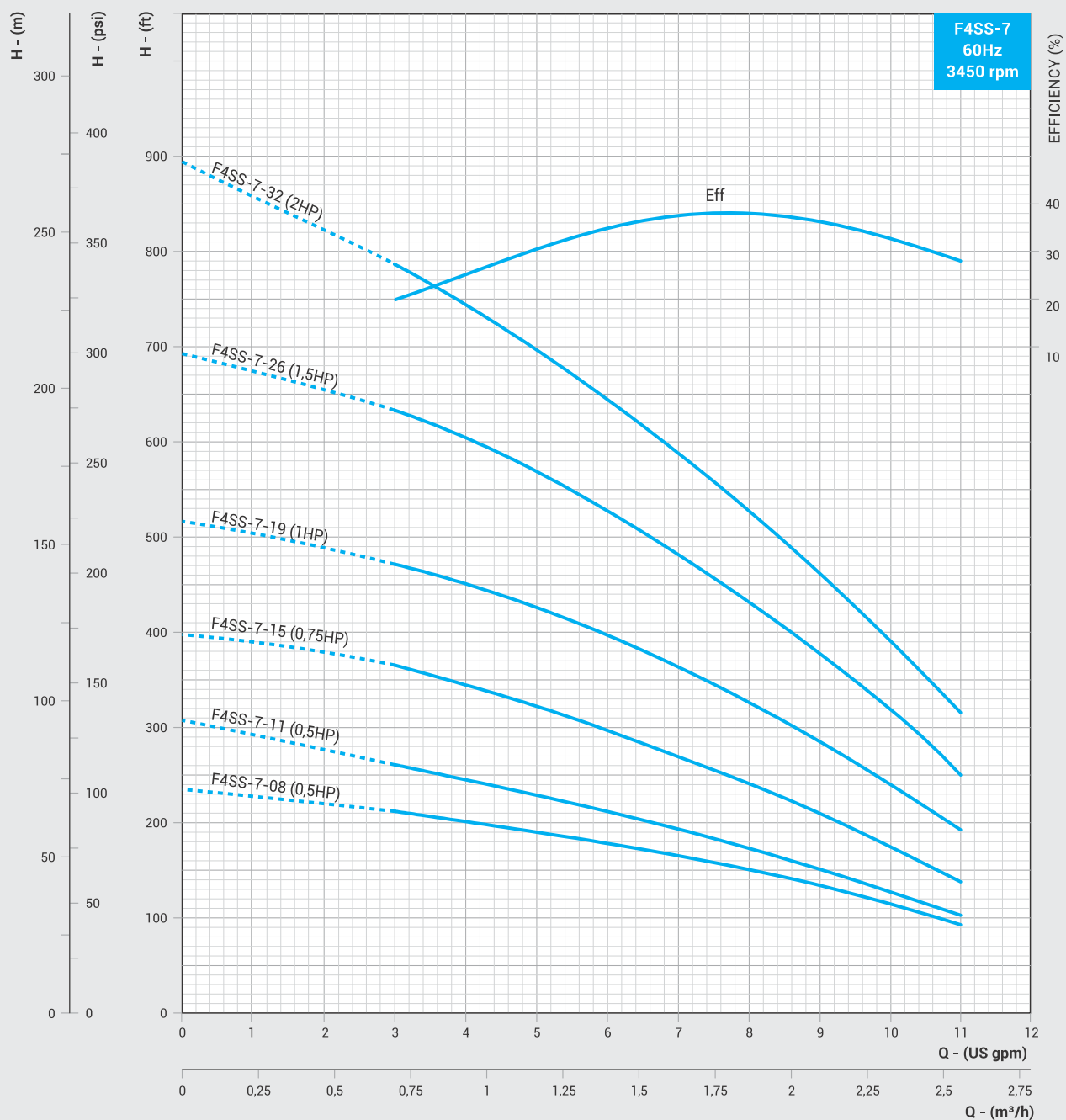
PUMP MODEL	HP	gpm	0	3	5	6	7	8	9	11
		m³/h	0	0,7	1,1	1,4	1,6	1,8	2	2,5
F4SS-7-08	0,5	HEAD IN FEET	235	212	190	180	165	150	135	92
F4SS-7-11	0,5		309	262	228	212	192	172	150	104
F4SS-7-15	0,75		398	367	320	298	270	240	210	138
F4SS-7-19	1		520	473	425	397	364	325	285	192
F4SS-7-26	1,5		690	629	567	515	482	430	379	250
F4SS-7-32	2		890	789	697	645	590	529	464	318

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 7 gpm

Outlet Size : 1" NPT

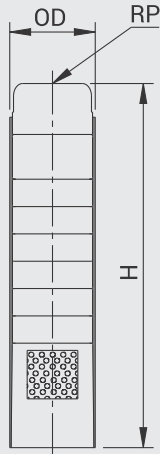


DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 10 gpm

Outlet Size : 1 ¼" NPT



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP	OD	RP	H	
F4SS-10-06	0,37	0,5	3,82	1,25	11,46	6,06
F4SS-10-09	0,37	0,5	3,82	1,25	14,06	7,17
F4SS-10-12	0,55	0,75	3,82	1,25	16,65	9,15
F4SS-10-15	0,75	1	3,82	1,25	19,25	11,14
F4SS-10-21	1,1	1,5	3,82	1,25	24,41	14,66
F4SS-10-27	1,5	2	3,82	1,25	29,65	17,09
F4SS-10-34	2,2	3	3,82	1,25	41,18	27,34
F4SS-10-48	3,7	5	3,82	1,25	54,41	37,15
F4SS-10-58	3,7	5	3,82	1,25	63,86	45,64
F4SS-10-75	5,5	7½	3,82	1,25	85,00	53,60

PERFORMANCE TABLE

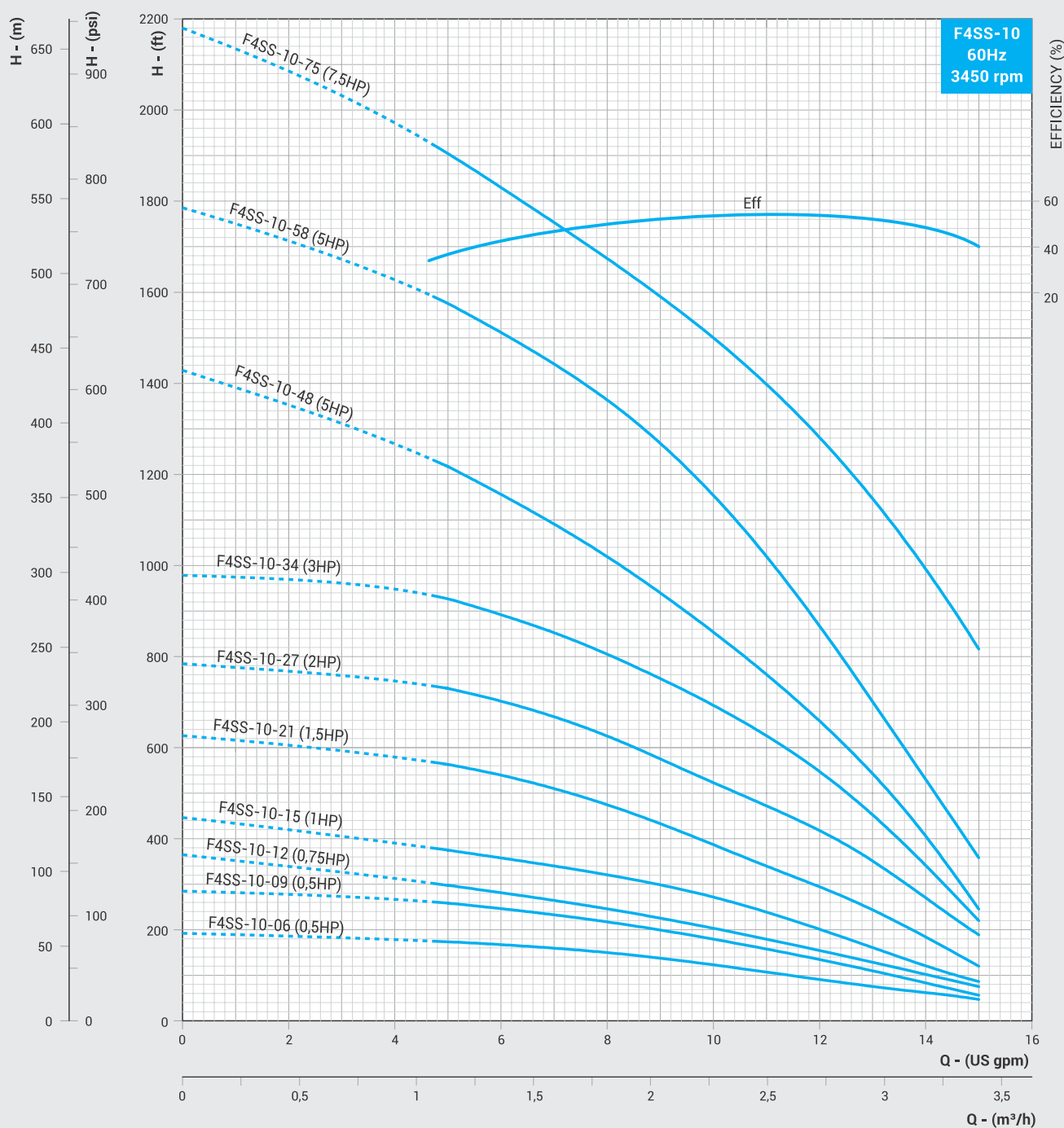
PUMP MODEL	HP	gpm	0	4,75	6	8	9	10	12	15
		m³/h	0	1,1	1,4	1,8	2	2,3	2,7	3,4
F4SS-10-06	0,5	HEAD IN FEET	191	178	169	150	143	120	90	40
F4SS-10-09	0,5		280	260	250	221	200	185	130	55
F4SS-10-12	0,75		375	300	280	247	219	200	170	70
F4SS-10-15	1		445	380	371	322	300	277	200	87
F4SS-10-21	1,5		628	564	542	478	432	386	297	125
F4SS-10-27	2		786	725	700	635	585	535	428	188
F4SS-10-34	3		975	925	895	805	750	700	550	237
F4SS-10-48	5		1435	1220	1160	1025	941	850	660	265
F4SS-10-58	5		1785	1596	1515	1375	1278	1150	865	375
F4SS-10-75	7,5		2180	1924	1829	1684	1591	1500	1280	820

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 10 gpm

Outlet Size : 1,25" NPT

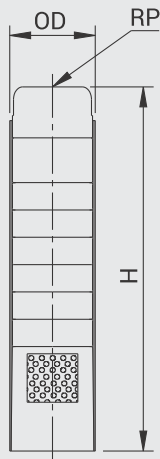


DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 16 gpm

Outlet Size : 1,25" NPT



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP	OD	RP	H	
F4SS-16-05	0,37	0,5	3,82	1,25	10,59	5,73
F4SS-16-08	0,55	0,75	3,82	1,25	13,19	6,84
F4SS-16-10	0,75	1	3,82	1,25	14,92	8,16
F4SS-16-14	1,1	1,5	3,82	1,25	18,39	11,03
F4SS-16-18	1,5	2	3,82	1,25	21,85	13,34
F4SS-16-21	2,2	3	3,82	1,25	24,45	14,66
F4SS-16-24	2,2	3	3,82	1,25	27,05	16,54
F4SS-16-29	3,7	5	3,82	1,25	31,38	18,52
F4SS-16-33	3,7	5	3,82	1,25	40,24	26,68

PERFORMANCE TABLE

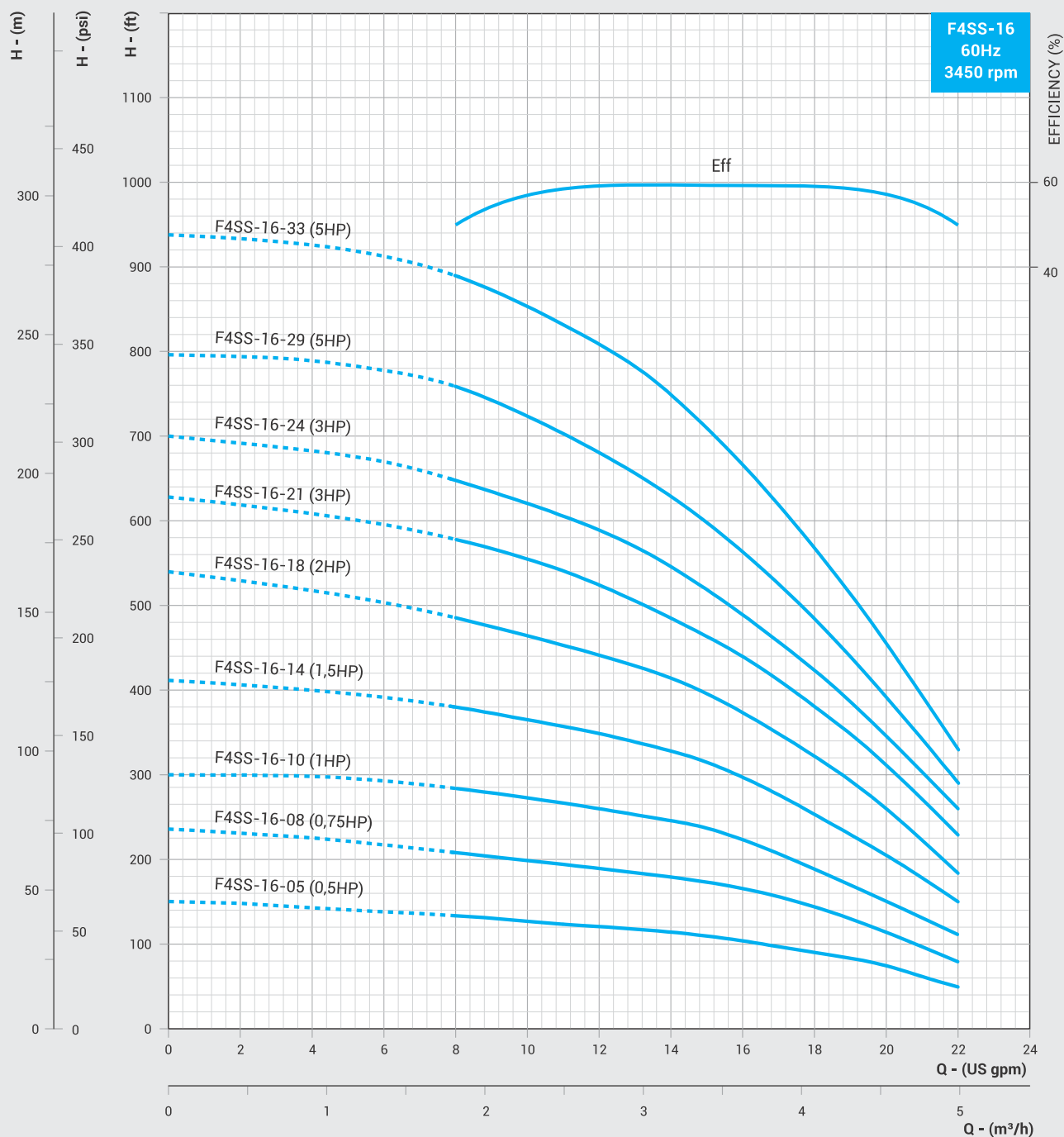
PUMP MODEL	HP	gpm	0	8	12	14	16	18	20	22
		m³/h	0	1,8	2,7	3,2	3,6	4,1	4,5	5
F4SS-16-05	0,5	HEAD IN FEET	150	137	122	115	102	90	76	50
F4SS-16-08	0,75		230	208	190	180	170	140	116	80
F4SS-16-10	1		300	280	257	242	230	190	150	110
F4SS-16-14	1,5		415	380	350	325	299	250	201	150
F4SS-16-18	2		540	483	440	418	380	320	250	180
F4SS-16-21	3		618	579	522	480	440	380	310	220
F4SS-16-24	3		700	647	590	550	490	420	340	260
F4SS-16-29	5		798	760	680	630	560	480	396	290
F4SS-16-33	5		940	890	810	750	670	570	457	340

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 16 gpm

Outlet Size : 1.25" NPT

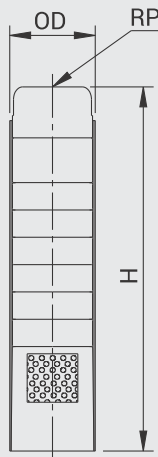


DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 16 gpm

Outlet Size : 1,25" NPT



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP	OD	RP	H	
F4SS-16-38	3,7	5	3,82	1,25	44,96	30,43
F4SS-16-42	5,5	7,5	3,82	1,25	49,69	33,74
F4SS-16-46	5,5	7,5	3,82	1,25	53,46	36,38
F4SS-16-51	5,5	7,5	3,82	1,25	58,19	39,25
F4SS-16-56	5,5	7,5	3,82	1,25	61,97	42,56
F4SS-16-60	5,5	7,5	3,82	1,25	67,64	46,08
F4SS-16-65	7,5	10	3,82	1,25	72,36	51,82
F4SS-16-70	7,5	10	3,82	1,25	77,09	55,13
F4SS-16-75	7,5	10	3,82	1,25	81,81	58,87
F4SS-16-110	11	15	3,82	1,25	120,00	86,34

PERFORMANCE TABLE

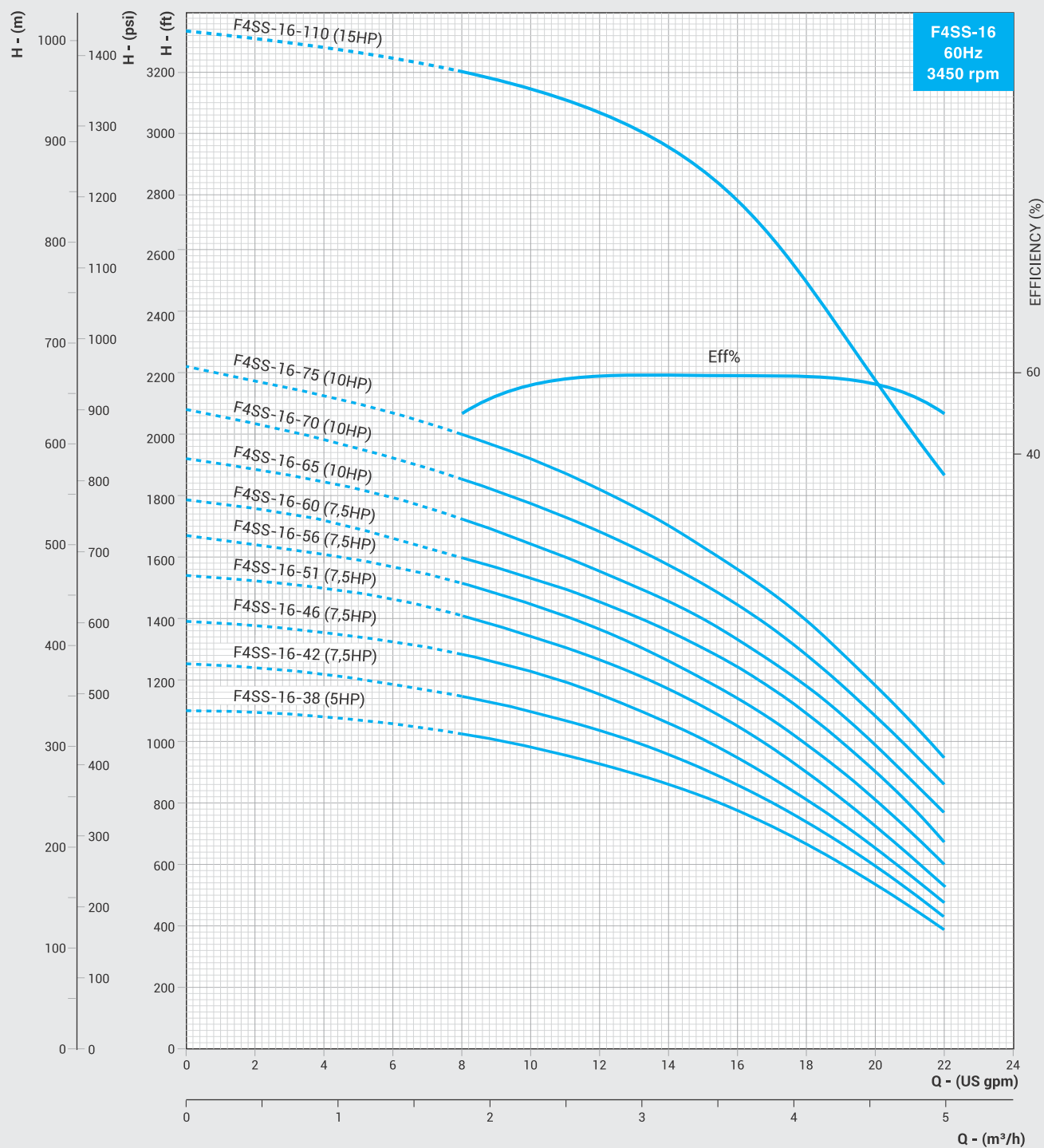
PUMP MODEL	HP	gpm	0	8	12	14	16	18	20	22
		m³/h	0	1,8	2,7	3,2	3,6	4,1	4,5	5
F4SS-16-38	5	HEAD IN FEET	1100	1023	929	860	780	668	537	389
F4SS-16-42	7,5		1254	1147	1040	950	850	740	600	436
F4SS-16-46	7,5		1392	1286	1151	1060	945	810	651	480
F4SS-16-51	7,5		1543	1400	1269	1170	1050	900	724	550
F4SS-16-56	7,5		1672	1517	1369	1260	1140	990	848	600
F4SS-16-60	7,5		1780	1600	1461	1360	1244	1095	900	680
F4SS-16-65	10		1923	1720	1544	1455	1332	1180	992	771
F4SS-16-70	10		2083	1857	1684	1574	1448	1280	1089	860
F4SS-16-75	10		2220	2000	1824	1700	1560	1400	1180	952
F4SS-16-110	15		3366	3200	3015	2957	2790	2490	2178	1864

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 16 gpm

Outlet Size : 1,25" NPT

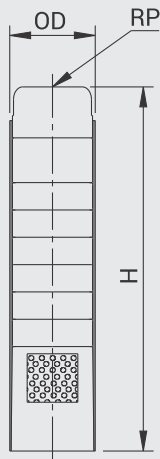


DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 25 gpm

Outlet Size : 1,5" NPT



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP	OD	RP	H	
F4SS-25-03	0,37	0,5	3,82	1,5	9,09	4,81
F4SS-25-05	0,55	0,75	3,82	1,5	10,91	6,09
F4SS-25-07	0,75	1	3,82	1,5	12,87	7,25
F4SS-25-09	1,1	1,5	3,82	1,5	14,69	8,60
F4SS-25-11	1,5	2	3,82	1,5	16,42	9,37
F4SS-25-15	2,2	3	3,82	1,5	20,20	11,58
F4SS-25-21	3,7	5	3,82	1,5	26,10	14,88
F4SS-25-26	3,7	5	3,82	1,5	33,62	21,17
F4SS-25-39	5,5	7,5	3,82	1,5	45,91	31,31
F4SS-25-52	7,5	10	3,82	1,5	59,13	40,46

PERFORMANCE TABLE

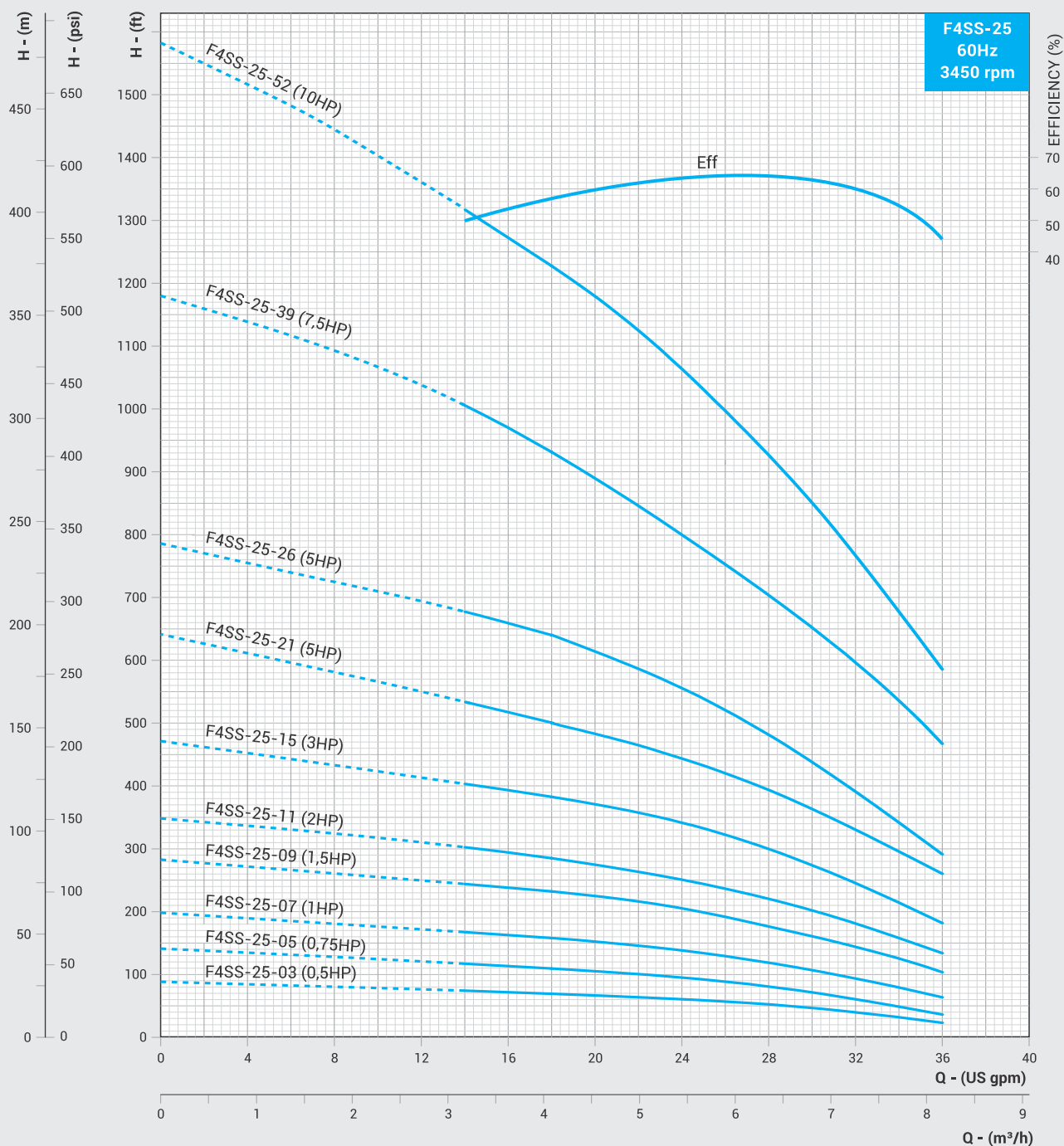
PUMP MODEL	HP	gpm	0	14	18	22	25	28	32	36
		m³/h	0	3,2	4,1	5	5,7	6,4	7,3	8,2
F4SS-25-03	0,5	HEAD IN FEET	90	75	68	64	60	50	40	25
F4SS-25-05	0,75		140	116	115	100	96	80	75	36
F4SS-25-07	1		200	172	160	148	138	122	97	65
F4SS-25-09	1,5		278	249	235	220	200	175	147	105
F4SS-25-11	2		350	300	288	270	247	223	177	136
F4SS-25-15	3		472	401	379	357	335	300	247	180
F4SS-25-21	5		640	533	500	469	434	391	336	260
F4SS-25-26	5		786	675	640	587	542	477	392	298
F4SS-25-39	7,5		1180	1006	937	847	780	704	597	469
F4SS-25-52	10		1586	1302	1230	1125	1038	930	766	585

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 25 gpm

Outlet Size : 1,5" NPT

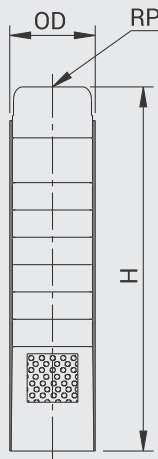


DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 40 gpm

Outlet Size : 2" NPT



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP	OD	RP	H	
F4SS-40-03	0,75	1	3,82	2	13,31	8,82
F4SS-40-05	1,1	1,5	3,82	2	16,14	9,92
F4SS-40-07	1,5	2	3,82	2	18,98	11,47
F4SS-40-09	2,2	3	3,82	2	21,81	13,01
F4SS-40-12	3,7	5	3,82	2	26,06	16,10
F4SS-40-15	3,7	5	3,82	2	30,31	18,74
F4SS-40-18	5,5	7,5	3,82	2	34,57	21,72
F4SS-40-21	5,5	7,5	3,82	2	38,74	24,92
F4SS-40-25	5,5	7,5	3,82	2	45,35	28,55
F4SS-40-30	7,5	10	3,82	2	52,44	32,85
F4SS-40-37	9,3	15	3,82	2	62,36	39,91
F4SS-40-44	11	15	3,82	2	73,23	48,95
F4SS-40-50	13	20	3,82	2	81,73	55,57
F4SS-40-58	15	20	3,82	2	93,07	60,86
F4SS-40-66	15	20	3,82	2	104,41	66,59
F4SS-40-73		25	3,82	2	115,48	73,65

PERFORMANCE TABLE

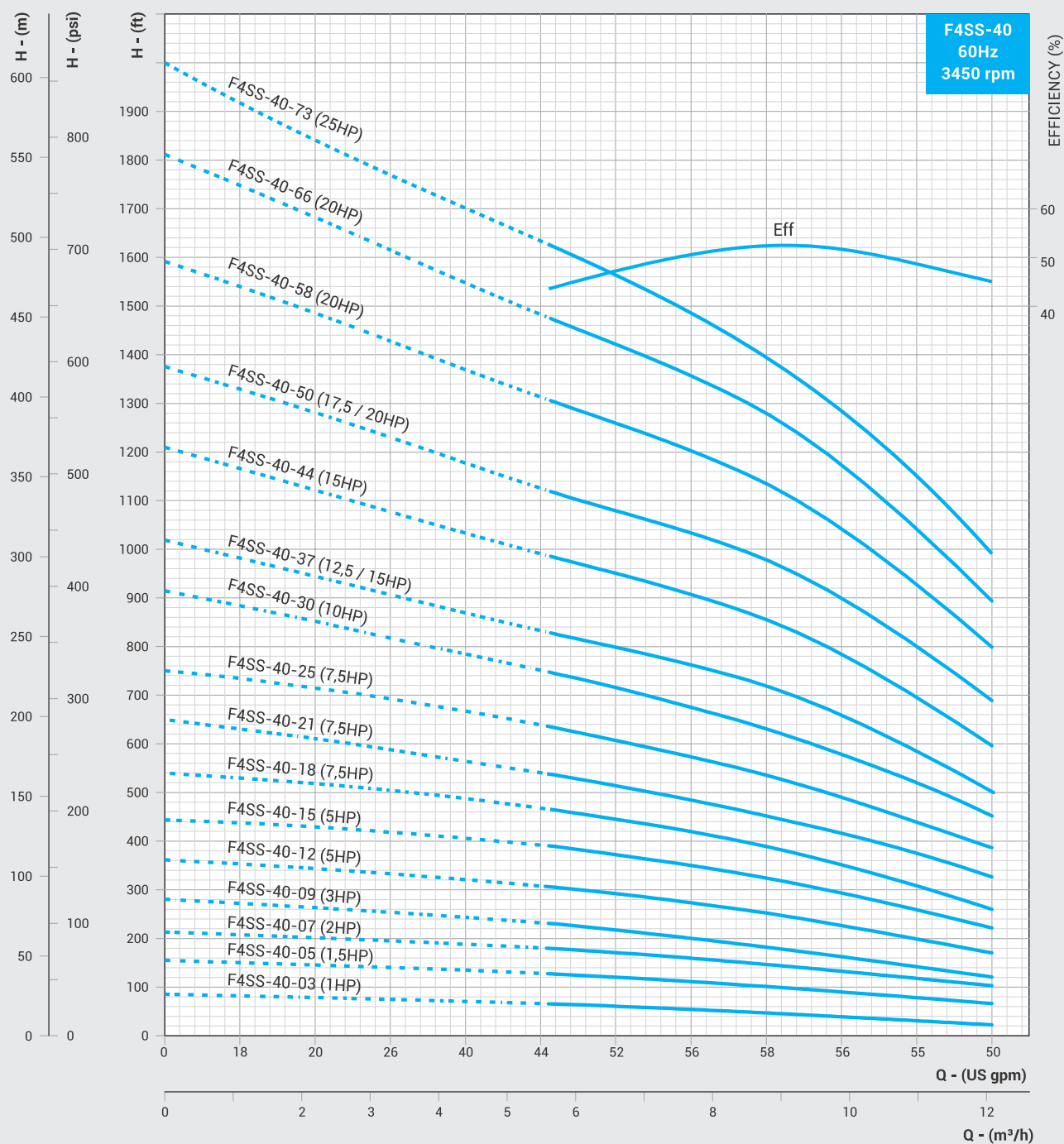
PUMP MODEL	HP	gpm	0	26	30	35	40	45	50	55
		m³/h	0	5,9	6,8	7,9	9,1	10,2	11,4	12,7
F4SS-40-03	1	HEAD IN FEET	88	70	62	58	48	40	30	20
F4SS-40-05	1,5		158	122	120	110	100	90	80	60
F4SS-40-07	2		212	184	170	160	150	135	115	100
F4SS-40-09	3		280	222	220	200	180	160	148	126
F4SS-40-12	5		370	302	296	270	260	226	200	178
F4SS-40-15	5		440	398	375	360	325	296	267	223
F4SS-40-18	7,5		540	468	448	420	390	358	310	260
F4SS-40-21	7,5		650	540	513	490	458	420	386	325
F4SS-40-25	7,5		750	640	606	577	540	496	440	390
F4SS-40-30	10		910	750	715	678	625	585	522	460
F4SS-40-37	15		1015	825	800	770	720	660	589	500
F4SS-40-44	15		1210	995	950	906	859	785	699	599
F4SS-40-50	20		1377	1121	1183	1030	977	900	800	696
F4SS-40-58	20		1590	1307	1270	1205	1130	1040	930	800
F4SS-40-66	20		1810	1515	1420	1375	1280	1179	1037	899
F4SS-40-73	25		2000	1622	1563	1494	1400	1280	1140	998

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 40 gpm

Outlet Size : 2" NPT

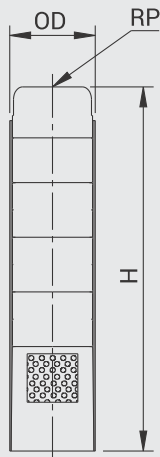


DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 75 gpm

Outlet Size : 2" NPT



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP	OD	RP	H	
F4SS-75-03	1,5	2	3,82	2	17,44	10,54
F4SS-75-05	2,2	3	3,82	2	22,56	13,67
F4SS-75-07	3,7	5	3,82	2	27,68	16,80
F4SS-75-08	3,7	5	3,82	2	30,24	18,37
F4SS-75-10	5,5	7,5	3,82	2	35,35	21,50
F4SS-75-12	5,5	7,5	3,82	2	40,47	24,74
F4SS-75-14	7,5	10	3,82	2	45,59	27,83
F4SS-75-16	7,5	10	3,82	2	50,71	30,91

PERFORMANCE TABLE

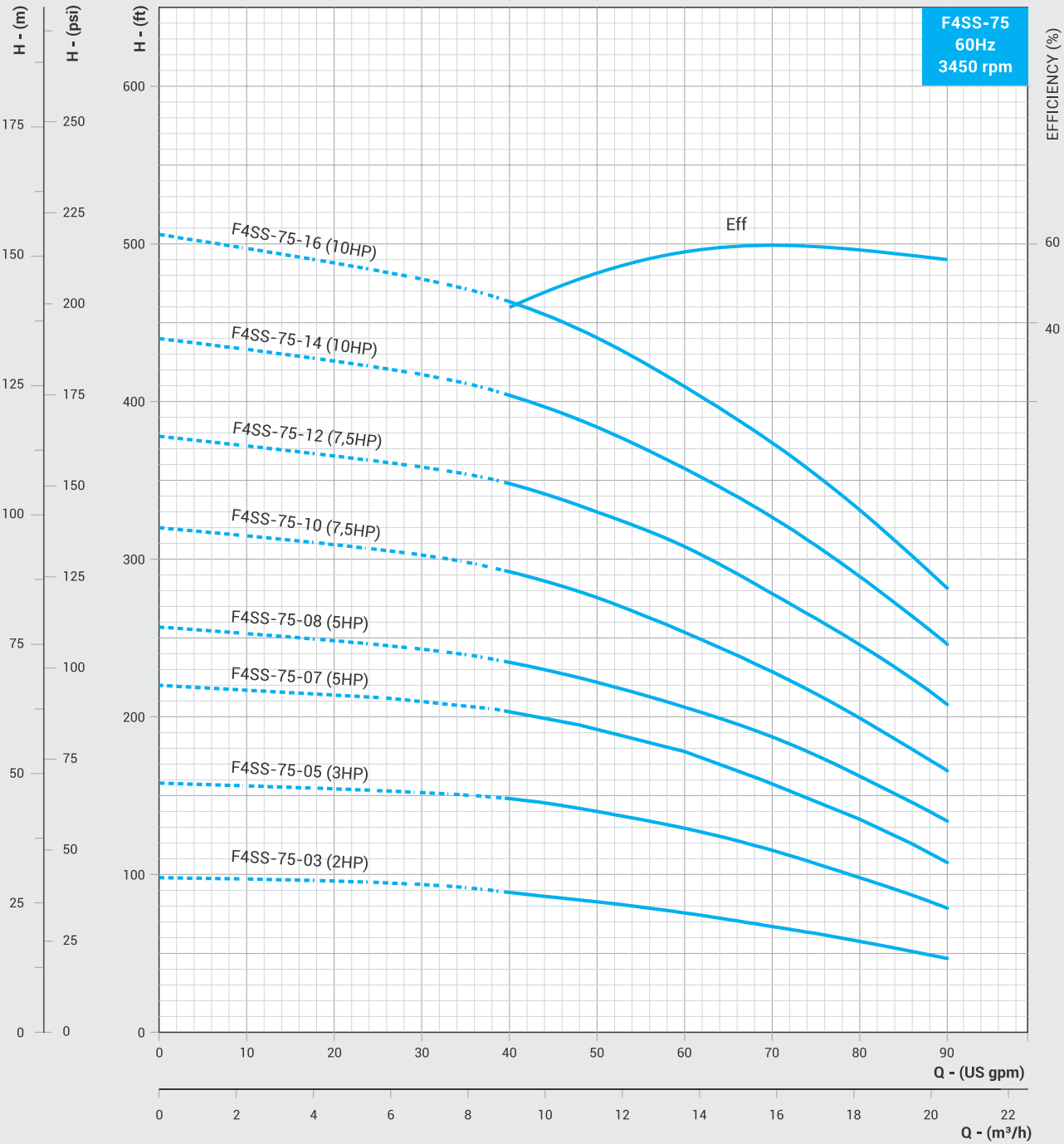
PUMP MODEL	HP	gpm	0	40	50	60	70	75	80	90
		m³/h	0	9,1	11,4	13,6	15,9	17	18,2	20,4
F4SS-75-03	2	HEAD IN FEET	99	87	82	77	68	62	57	47
F4SS-75-05	3		158	149	140	130	115	107	98	80
F4SS-75-07	5		220	202	192	173	158	149	130	108
F4SS-75-08	5		258	235	222	208	188	178	162	135
F4SS-75-10	7,5		320	292	276	254	229	216	200	167
F4SS-75-12	7,5		379	349	330	308	278	264	247	210
F4SS-75-14	10		440	404	383	357	327	310	288	248
F4SS-75-16	10		507	463	440	410	373	355	332	281

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 75 gpm

Outlet Size : 2" NPT

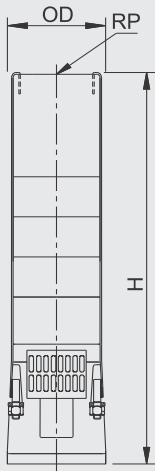


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 85 gpm

Outlet Size : 2,5",3" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-85-01	1,1	1,5	1	5,7	2,5	13	27
F6SS-85-02	2,2	3	1	5,7	2,5	15	35
F6SS-85-03	3,7	5	1	5,7	2,5	17	34
F6SS-85-04	3,7	5	1	5,7	2,5	20	44
F6SS-85-05	5,5	7,5	1 / 2	5,7	2,5	22	48
F6SS-85-06	5,5	7,5	1 / 2	5,7	2,5	24	53
F6SS-85-07	7,5	10	1 / 2	5,7	2,5	27	63
F6SS-85-08	7,5	10	1 / 2	5,7	2,5	30	68
F6SS-85-09	7,5	10	1 / 2	5,7	2,5	32	77
F6SS-85-10	11	15	1 / 2	5,7	2,5	34	82
F6SS-85-11	11	15	1 / 2	5,7	2,5	37	92
F6SS-85-12	11	15	1 / 2	5,7	2,5	39	97
F6SS-85-13	11	15	1 / 2	5,7	2,5	41	106
F6SS-85-14	15	20	1 / 2	5,7	2,5	44	114
F6SS-85-15	15	20	1 / 2	5,7	2,5	46	119
F6SS-85-16	15	20	1 / 2	5,7	2,5	48	123

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	30	50	60	70	80	90	110
		m³/h	0	7	11	14	16	18	20	25
F6SS-85-01	1,5	HEAD IN FEET	56	54	49	46	39	38	35	20
F6SS-85-02	3		106	103	97	94	86	78	74	50
F6SS-85-03	5		156	152	146	136	128	118	108	75
F6SS-85-04	5		210	208	194	186	175	159	126	107
F6SS-85-05	7,5		261	257	245	233	221	204	186	137
F6SS-85-06	7,5		310	308	291	277	262	241	220	161
F6SS-85-07	10		364	358	334	329	308	284	271	190
F6SS-85-08	10		412	407	388	371	349	326	293	210
F6SS-85-09	10		461	454	431	410	388	363	328	255
F6SS-85-10	15		518	509	485	466	456	407	369	274
F6SS-85-11	15		566	560	532	507	477	425	404	298
F6SS-85-12	15		620	612	582	559	526	487	444	320
F6SS85-13	15		668	660	629	601	566	524	475	355
F6SS-85-14	20		722	717	681	654	619	572	502	380
F6SS-85-15	20		774	762	721	698	659	609	553	414
F6SS-85-16	20		822	817	783	751	707	658	600	447
F6SS-85-17	20		876	868	829	793	749	696	632	471
F6SS-85-18	20		926	915	873	836	789	734	662	494

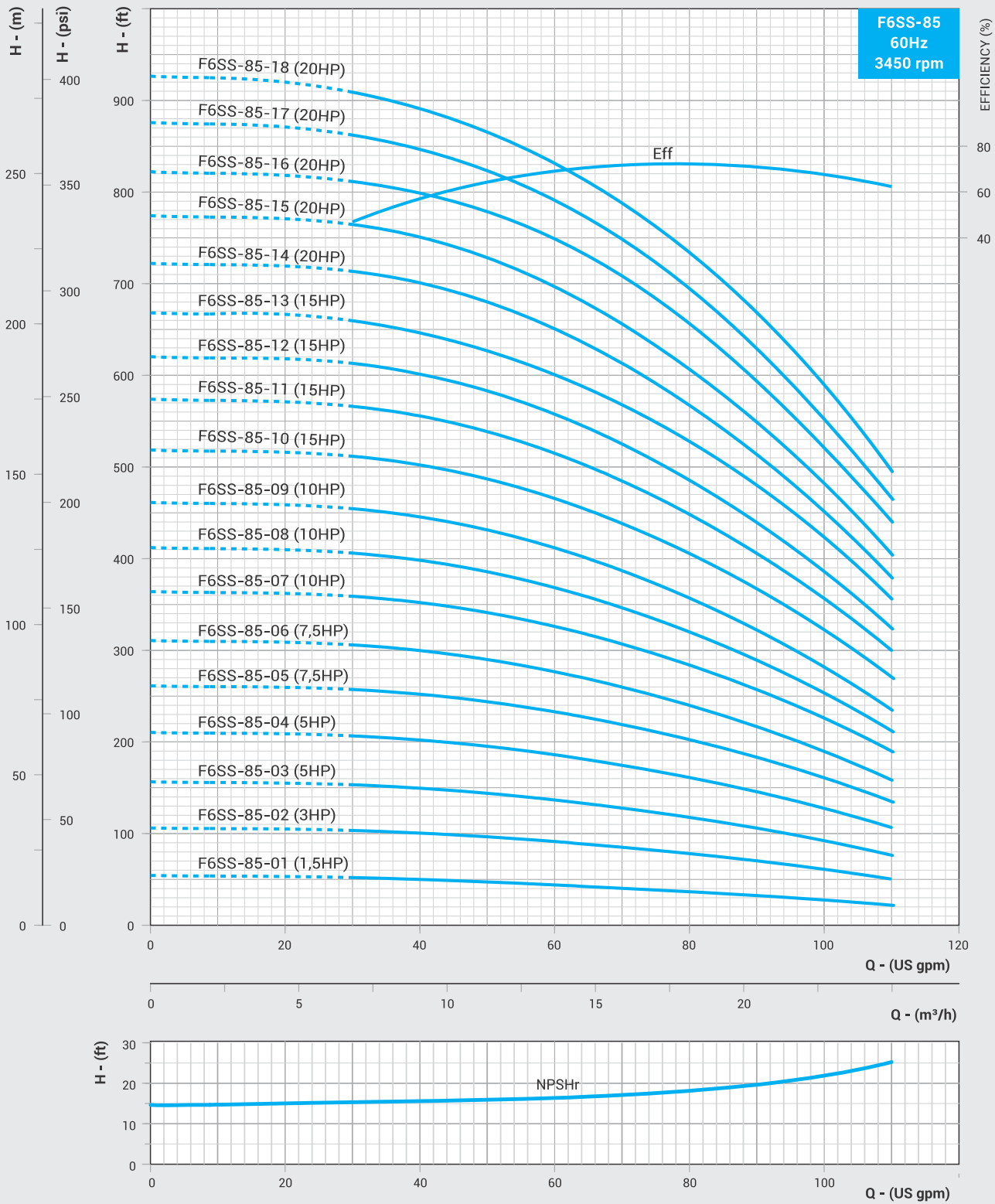
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

** Optional Outlet size

OD for 4/6 combination - 5.3 inches

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6" Nominal Flow : 85 gpm Outlet Size : 2,5",3" NPT

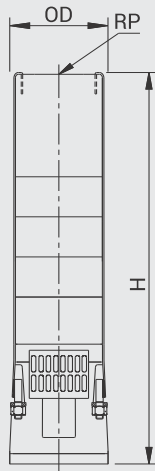


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 85 gpm

Outlet Size : 2,5",3" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-85-17	15	20	1 / 2	5,7	2,5	51	128
F6SS-85-18	15	20	1 / 2	5,7	2,5	53	133
F6SS-85-19	18,5	25	1 / 2	5,7	2,5	55	143
F6SS-85-20	18,5	25	1 / 2	5,7	2,5	58	152
F6SS-85-21	18,5	25	1 / 2	5,7	2,5	60	162
F6SS-85-22	18,5	25	1 / 2	5,7	2,5	63	167
F6SS-85-23	22	30	1 / 2	5,7	2,5	65	172
F6SS-85-24	22	30	1 / 2	5,7	2,5	67	182
F6SS-85-25	22	30	1 / 2	5,7	2,5	70	186
F6SS-85-26	22	30	1 / 2	5,7	2,5	72	191
F6SS-85-27	30	40	1 / 2	5,7	2,5	74	201
F6SS-85-28	30	40	1 / 2	5,7	2,5	77	208
F6SS-85-29	30	40	1 / 2	5,7	2,5	79	213
F6SS-85-30	30	40	1 / 2	5,7	2,5	81	218
F6SS-85-33	30	40	1 / 2	5,7	2,5	88	242
F6SS-85-36	30	40	1 / 2	5,7	2,5	95	261
F6SS-85-39	37	50	1 / 2	5,7	2,5	102	281

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	30	50	60	70	80	90	110
			m³/h	7	11	14	16	18	20	25
F6SS-85-19	25	HEAD IN FEET	990	972	937	897	847	785	722	534
F6SS-85-20	25		1037	1022	980	935	888	825	752	574
F6SS-85-21	25		1088	1071	1020	990	924	864	786	593
F6SS-85-22	25		1139	1119	1067	1020	970	899	822	620
F6SS-85-23	30		1188	1165	1120	1080	1019	948	870	639
F6SS-85-24	30		1237	1221	1171	1124	1065	987	897	678
F6SS-85-25	30		1286	1281	1213	1164	1104	1019	925	701
F6SS-85-26	30		1336	1319	1261	1212	1141	1064	963	726
F6SS-85-27	40		1405	1395	1333	1278	1211	1118	1021	775
F6SS-85-28	40		1454	1436	1379	1318	1251	1164	1065	800
F6SS-85-29	40		1503	1492	1427	1368	1298	1211	1092	825
F6SS-85-30	40		1552	1535	1474	1407	1331	1236	1119	851
F6SS-85-33	40		1700	1695	1613	1549	1457	1358	1237	920
F6SS-85-36	40		1849	1838	1746	1673	1577	1466	1333	996
F6SS-85-39	50		2013	1989	1913	1840	1740	1612	1473	1116

* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

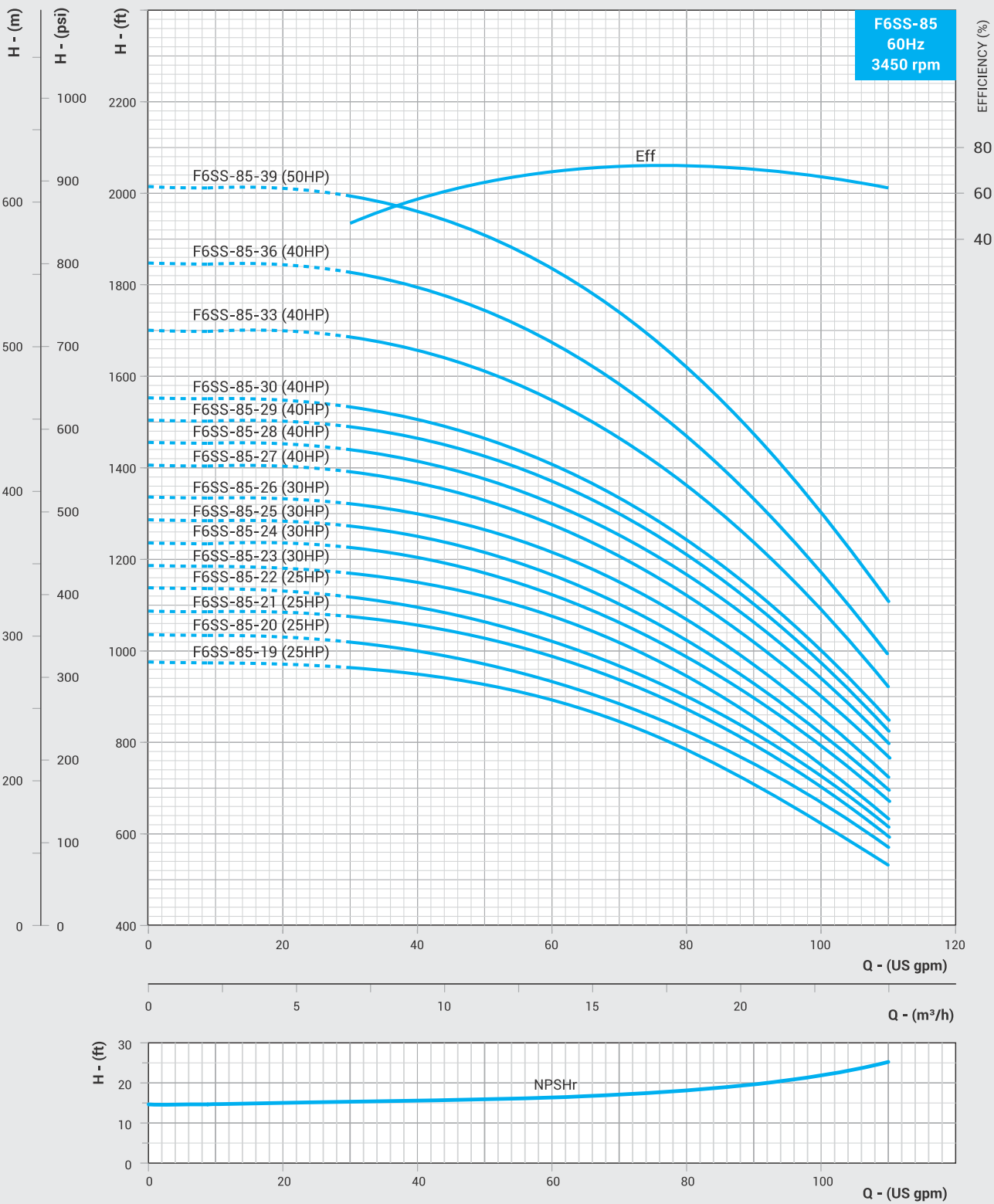
** Optional Outlet size

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 85 gpm

Outlet Size : 2,5", 3" NPT

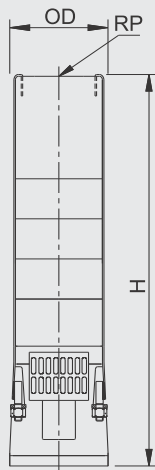


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 90 gpm

Outlet Size : 3" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-90-01	1,1	1½	1	5,4	3	12,95	18,94
F6SS-90-02	2,2	3	1	5,4	3	14,69	19,91
F6SS-90-03	3	4	1	5,4	3	16,81	22,07
F6SS-90-04	4	5,5/6	1	5,4	3	18,54	24,22
F6SS-90-05	5,5	7,5	1 / 2	5,4 / 5,7	3	20,28	26,38
F6SS-90-06	7,5	10	1 / 2	5,4 / 5,7	3	22,01	28,54
F6SS-90-07	7,5	10	1 / 2	5,4 / 5,7	3	23,74	30,69
F6SS-90-08	9,3	12,5	1 / 2	5,4 / 5,7	3	25,47	32,85
F6SS-90-09	9,3/11	12,5/15	1 / 2	5,4 / 5,7	3	27,20	35,01
F6SS-90-10	11	15	1 / 2	5,4 / 5,7	3	28,94	37,17
F6SS-90-11	11	15	1 / 2	5,4 / 5,7	3	30,67	39,32
F6SS-90-12	13	17,5	1 / 2	5,4 / 5,7	3	32,40	41,48
F6SS-90-13	13	17,5/20	1 / 2	5,4 / 5,7	3	34,13	43,64
F6SS-90-14	15	20	1 / 2	5,4 / 5,7	3	35,87	45,80
F6SS-90-15	15	20	1 / 2	5,4 / 5,7	3	37,60	47,95
F6SS-90-16	18,5	25	1 / 2	5,4 / 5,7	3	39,33	50,11

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	50	60	70	80	90	100	120
		m³/h	0	11	14	16	18	20	23	27
F6SS-90-01	1,5	HEAD IN FEET	52	50	49	47	45	40	35	22
F6SS-90-02	3		117	100	98	97	93	86	74	50
F6SS-90-03	4		173	150	148	142	137	125	120	70
F6SS-90-04	5,5/6		235	200	196	180	173	160	140	96
F6SS-90-05	7,5		280	248	236	228	222	200	180	128
F6SS-90-06	10		331	298	287	278	264	251	235	175
F6SS-90-07	10		389	350	337	330	313	299	280	215
F6SS-90-08	12,5		448	402	390	379	362	344	316	250
F6SS-90-09	12,5/15		500	454	445	425	410	385	353	283
F6SS-90-10	15		552	511	497	480	459	435	404	322
F6SS-90-11	15		622	563	549	534	510	477	448	352
F6SS-90-12	17,5		675	620	598	577	552	544	489	386
F6SS-90-13	17,5/20		733	671	651	627	600	570	525	403
F6SS-90-14	20		796	723	695	664	637	602	556	425
F6SS-90-15	20		840	759	732	700	670	637	584	450
F6SS-90-16	25		883	798	768	735	700	663	612	475

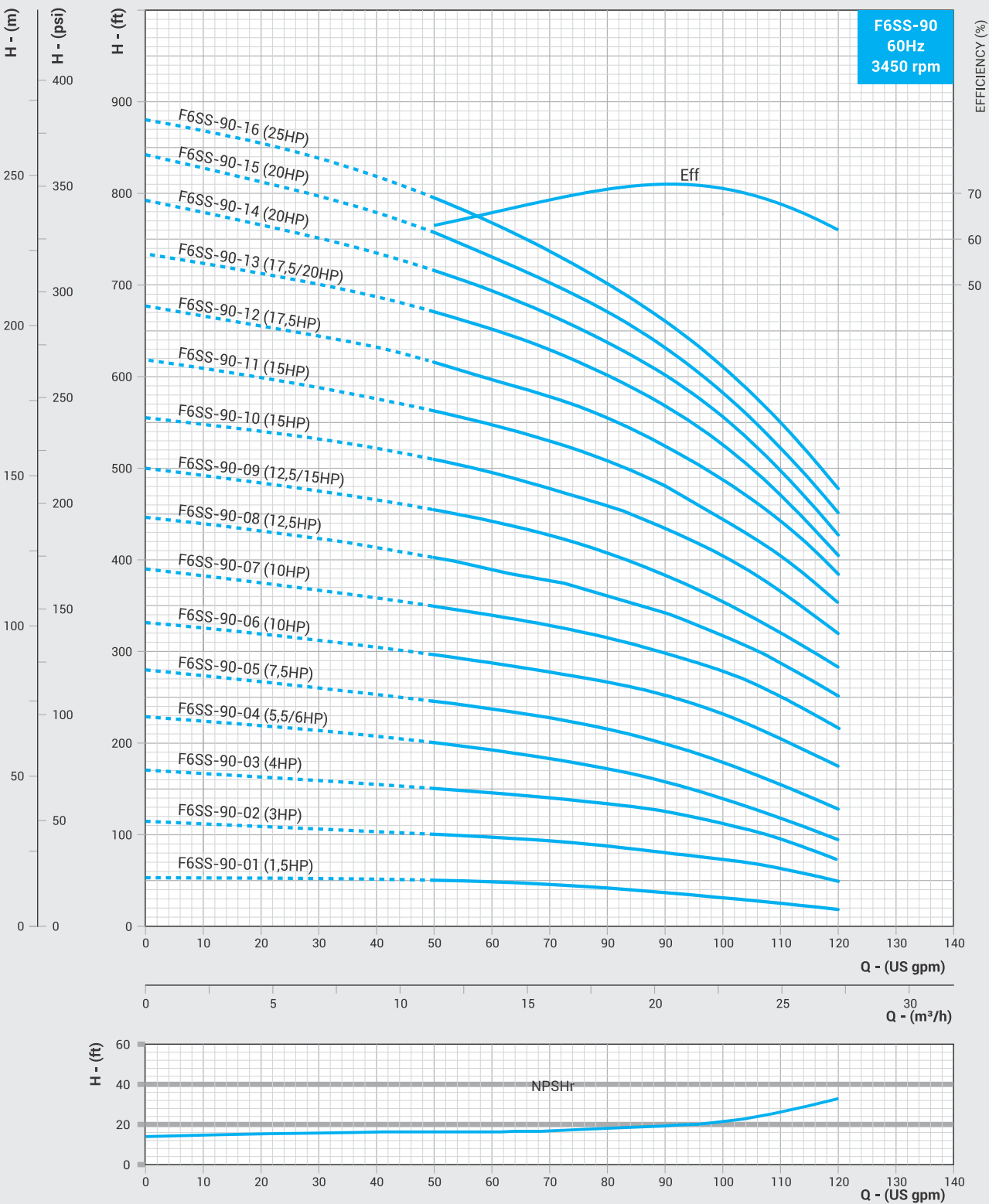
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 90 gpm

Outlet Size : 3" NPT

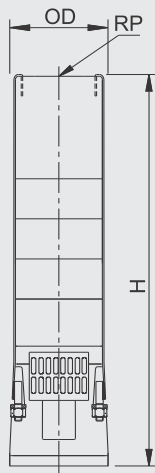


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 90 gpm

Outlet Size : 3" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-90-17	18,5	25	1 / 2	5,4 / 5,7	3	41,06	52,27
F6SS-90-18	18,5	25	1 / 2	5,4 / 5,7	3	42,80	54,42
F6SS-90-19	22	30	1 / 2	5,4 / 5,7	3	44,53	56,58
F6SS-90-20	22	30	1 / 2	5,4 / 5,7	3	46,26	58,74
F6SS-90-21	22	30	1 / 2	5,4 / 5,7	3	47,99	60,90
F6SS-90-22	26	35	1 / 2	5,4 / 5,7	3	49,72	63,05
F6SS-90-23	26	35	1 / 2	5,4 / 5,7	3	51,46	65,21
F6SS-90-24	26	35	1 / 2	5,4 / 5,7	3	53,19	67,37
F6SS-90-26	26	35/40	1 / 2	5,4 / 5,7	3	56,65	71,68
F6SS-90-27	26	35/40	1 / 2	5,4 / 5,7	3	58,39	73,84

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	50	60	70	80	90	100	120
		m³/h	0	11	14	16	18	20	23	27
F6SS-90-17	25	HEAD IN FEET	975	859	838	810	775	726	661	520
F6SS-90-18	25		1031	918	896	871	829	781	716	563
F6SS-90-19	30		1080	965	947	914	870	819	750	607
F6SS-90-20	30		1132	1017	990	953	912	859	797	620
F6SS-90-21	30		1175	1060	1038	997	950	899	827	655
F6SS-90-22	35		1231	1107	1078	1039	987	929	859	676
F6SS-90-23	35		1280	1163	1125	1083	1035	969	880	700
F6SS-90-24	35		1345	1220	1189	1145	1089	1013	925	726
F6SS-90-26	35/40		1445	1305	1261	1230	1164	1087	984	765
F6SS-90-27	35/40		1491	1345	1306	1258	1200	1116	1022	797

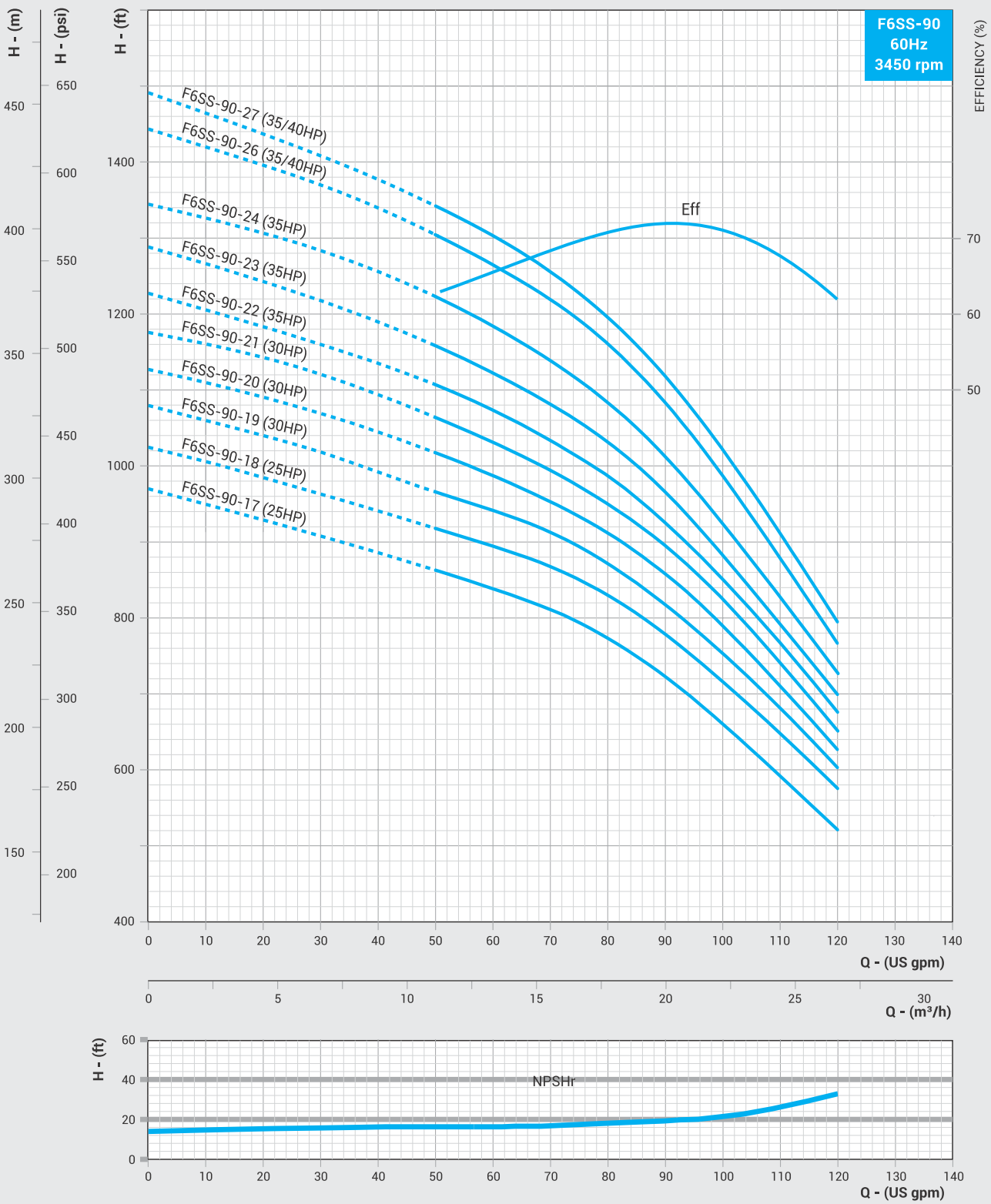
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 90 gpm

Outlet Size : 3" NPT

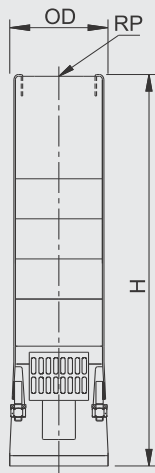


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 90 gpm

Outlet Size : 3" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No. OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-90-28	26	35/40	1 / 2	5,4 / 5,7	3	60,12	76,00
F6SS-90-29	30	40	1 / 2	5,4 / 5,7	3	61,85	78,16
F6SS-90-30	37	50	1 / 2	5,4 / 5,7	3	63,58	80,31
F6SS-90-31	37	50	1 / 2	5,4 / 5,7	3	65,31	82,47
F6SS-90-32	37	50	1 / 2	5,4 / 5,7	3	67,05	84,63
F6SS-90-34	37	50	1 / 2	5,4 / 5,7	3	70,51	88,94
F6SS-90-35	37	50	1 / 2	5,4 / 5,7	3	72,24	91,10
F6SS-90-36	40	60	1 / 2	5,4 / 5,7	3	73,98	93,26
F6SS-90-37	40	60	1 / 2	5,4 / 5,7	3	75,71	95,41

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	50	60	70	80	90	100	120
		m³/h	0	11	14	16	18	20	23	27
F6SS-90-28	35/40	HEAD IN FEET	1520	1390	1345	1297	1230	1152	1050	815
F6SS-90-29	40		1600	1462	1415	1369	1300	1220	1123	890
F6SS-90-30	50		1674	1524	1489	1426	1360	1288	1198	946
F6SS-90-31	50		1714	1575	1523	1462	1410	1321	1223	985
F6SS-90-32	50		1790	1620	1581	1517	1445	1372	1275	1010
F6SS-90-34	50		1900	1698	1640	1585	1510	1422	1332	1060
F6SS-90-35	50		1950	1752	1700	1636	1574	1492	1398	1113
F6SS-90-36	60		1996	1812	1760	1697	1615	1536	1445	1172
F6SS-90-37	60		2184	1854	1803	1750	1680	1596	1499	1216

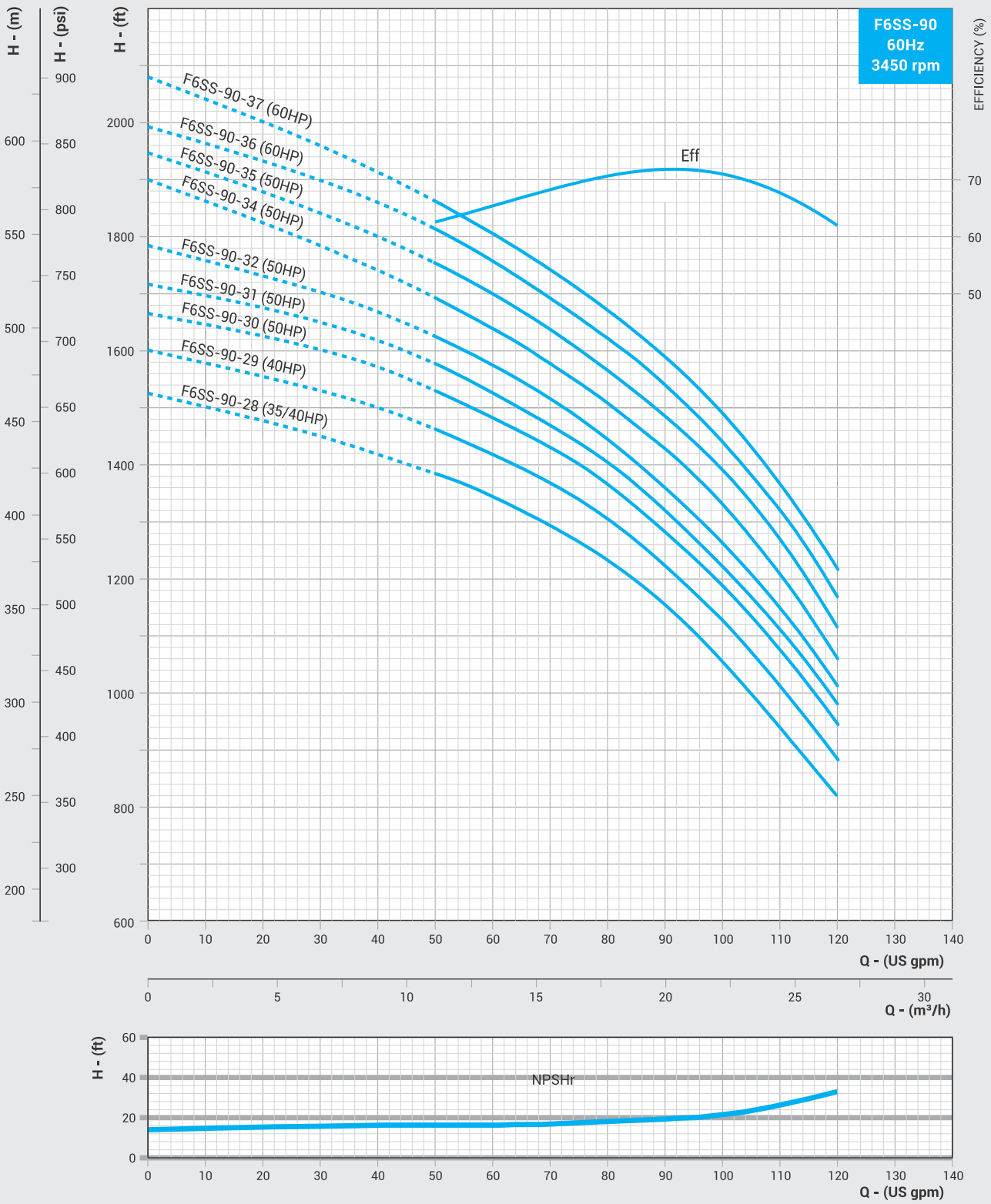
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 90 gpm

Outlet Size : 3" NPT

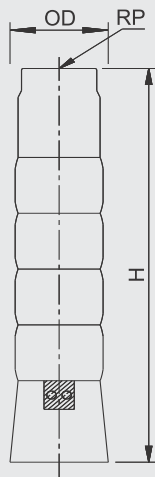


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 150 gpm

Outlet Size : 3" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-150-01	1,5	2	1	5,4	3	15,20	17,87
F6SS-150-02	3,0	4	1	5,4	3	18,98	22,00
F6SS-150-03	5,5	7,5	1	5,4	3	22,76	26,13
F6SS-150-04	5,5	7,5	1 / 2	5,4 / 5,7	3	26,54	30,27
F6SS-150-05	7,5	10	1 / 2	5,4 / 5,7	3	30,31	34,41
F6SS-150-06	9,3	12,5/15	1 / 2	5,4 / 5,7	3	34,09	38,55
F6SS-150-07	9,3	12,5/15	1 / 2	5,4 / 5,7	3	37,87	42,70
F6SS-150-08	11,0	15	1 / 2	5,4 / 5,7	3	41,65	46,84
F6SS-150-09	13,0	17,5/20	1 / 2	5,4 / 5,7	3	45,43	50,98
F6SS-150-10	15,0	20	1 / 2	5,4 / 5,7	3	49,21	55,13
F6SS-150-11	15,0	20	1 / 2	5,4 / 5,7	3	52,99	59,26
F6SS-150-12	18,5	25	1 / 2	5,4 / 5,7	3	56,77	63,41
F6SS-150-13	18,5	25	1 / 2	5,4 / 5,7	3	60,55	67,12
F6SS-150-14	18,5	25	1 / 2	5,4 / 5,7	3	64,33	71,69
F6SS-150-15	22,0	30	1 / 2	5,4 / 5,7	3	68,11	75,84
F6SS-150-16	22,0	30	1 / 2	5,4 / 5,7	3	71,89	79,97
F6SS-150-17	22,0	30	1 / 2	5,4 / 5,7	3	75,67	84,12
F6SS-150-18	26,0	35/40	1 / 2	5,4 / 5,7	3	79,45	88,26

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	50	75	100	125	150	175	200
		m³/h	0	11	17	23	28	34	40	45
F6SS-150-01	2	HEAD IN FEET	55	50	49	48	45	39	31	25
F6SS-150-02	4		107	103	100	97	88	78	68	45
F6SS-150-03	7,5		158	146	141	138	129	118	97	59
F6SS-150-04	7,5		213	200	190	184	174	153	125	95
F6SS-150-05	10		283	263	252	236	217	191	160	125
F6SS-150-06	12,5/15		335	313	300	288	270	236	195	145
F6SS-150-07	12,5/15		375	367	344	324	300	278	232	172
F6SS-150-08	15		435	407	391	374	348	310	260	190
F6SS-150-09	17,5/20		497	467	441	419	389	350	297	223
F6SS-150-10	20		548	515	497	469	432	390	328	250
F6SS-150-11	20		600	564	545	513	478	432	368	272
F6SS-150-12	25		655	614	590	565	519	468	400	300
F6SS-150-13	25		700	660	631	597	554	500	433	334
F6SS-150-14	25		760	719	688	650	600	543	463	350
F6SS-150-15	30		813	769	742	697	645	569	490	378
F6SS-150-16	30		872	804	773	736	677	604	523	406
F6SS-150-17	30		912	862	823	777	722	648	553	432
F6SS-150-18	35/40		982	940	891	836	776	697	586	453

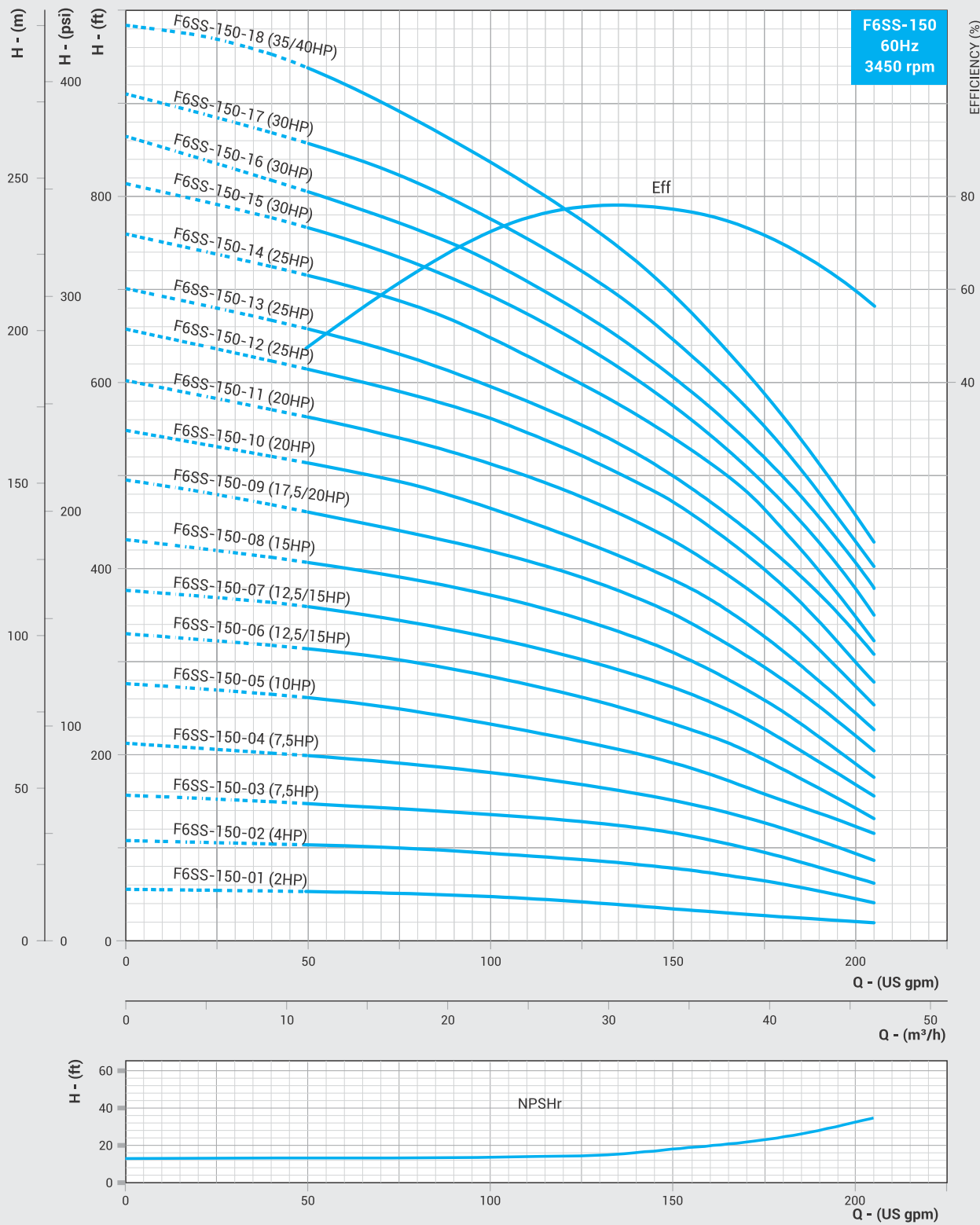
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 150 gpm

Outlet Size : 3" NPT

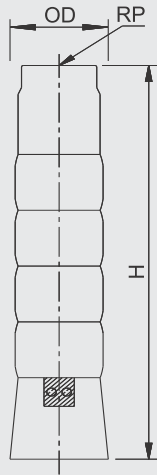


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 150 gpm

Outlet Size : 3" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-150-19	26	35/40	1 / 2	5,4 / 5,7	3	83,23	92,40
F6SS-150-20	26	35/40	1 / 2	5,4 / 5,7	3	87,01	96,54
F6SS-150-21	30	40	1 / 2	5,4 / 5,7	3	90,79	100,69
F6SS-150-22	30	40	1 / 2	5,4 / 5,7	3	94,57	104,83
F6SS-150-23	30	40	1 / 2	5,4 / 5,7	3	98,35	108,97
F6SS-150-24	37	50	1 / 2	5,4 / 5,7	3	102,13	113,11
F6SS-150-25	37	50	1 / 2	5,4 / 5,7	3	105,91	117,25
F6SS-150-26	37	50	1 / 2	5,4 / 5,7	3	109,69	121,80
F6SS-150-27	37	50	1 / 2	5,4 / 5,7	3	113,46	125,95
F6SS-150-28	37	50	1 / 2	5,4 / 5,7	3	117,24	130,09
F6SS-150-29	45	60	1 / 2	5,4 / 5,7	3	121,02	134,23
F6SS-150-31	45	60	1 / 2	5,4 / 5,7	3	128,58	142,51
F6SS-150-33	45	60	1 / 2	5,4 / 5,7	3	136,14	150,80
F6SS-150-36	55	75	1 / 2	5,4 / 5,7	3	147,48	165,86
F6SS-150-39	55	75	1 / 2	5,4 / 5,7	3	158,82	178,29

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	50	75	100	125	150	175	200
		m³/h	0	11	17	23	28	34	40	45
F6SS-150-19	35/40	HEAD IN FEET	1013	968	918	870	802	722	618	468
F6SS-150-20	35/40		1071	1011	971	910	845	764	654	481
F6SS-150-21	40		1133	1066	1022	960	890	801	689	513
F6SS-150-22	40		1199	1112	1061	1000	932	848	721	540
F6SS-150-23	40		1268	1168	1110	1043	971	885	750	550
F6SS-150-24	50		1304	1212	1150	1085	1001	912	765	561
F6SS-150-25	50		1338	1265	1200	1124	1048	947	795	583
F6SS-150-26	50		1403	1315	1249	1176	1099	988	822	600
F6SS-150-27	50		1443	1370	1300	1223	1132	1014	860	621
F6SS-150-28	50		1500	1417	1353	1275	1183	1069	896	667
F6SS-150-29	60		1579	1498	1416	1335	1243	1109	934	690
F6SS-150-31	60		1625	1571	1475	1380	1280	1150	970	720
F6SS-150-33	60		1725	1624	1560	1471	1369	1222	1025	775
F6SS-150-36	75		1891	1820	1720	1608	1500	1345	1120	825
F6SS-150-39	75		2045	1957	1835	1730	1605	1430	1200	880

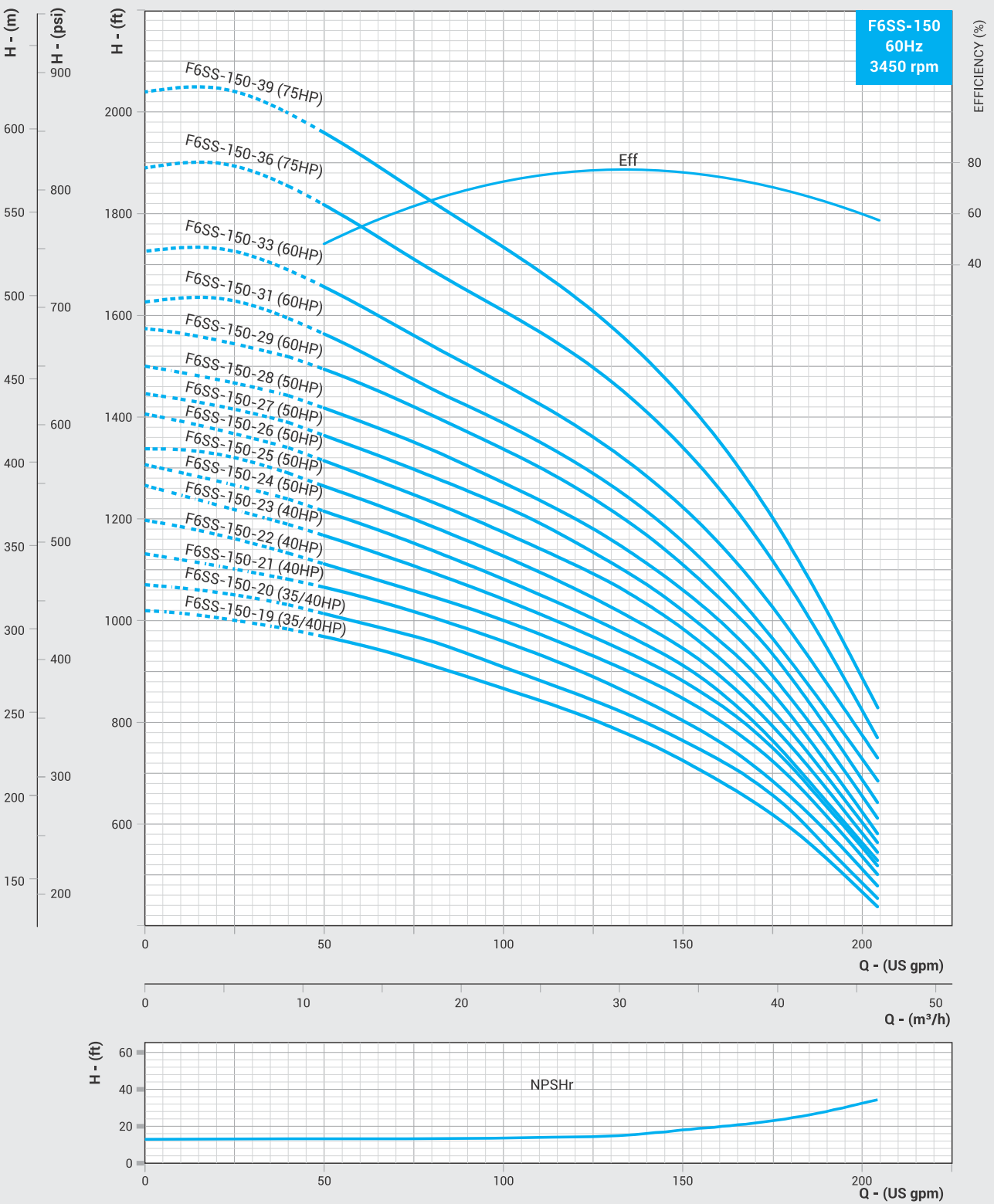
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 150 gpm

Outlet Size : 3" NPT

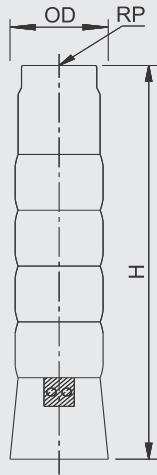


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 240 gpm

Outlet Size : 3" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-240-01R	2,2	3	1	6,0	3	15,87	19,16
F6SS-240-01	3	4	1	6,0	3	15,87	19,16
F6SS-240-02R	4/4,5	5,5/6	1 / 2	6,0	3	20,31	24,20
F6SS-240-02	5,5	7,5	1 / 2	5,8 / 5,9	3	20,31	24,20
F6SS-240-3RR	5,5	7,5	1 / 2	5,8 / 5,9	3	24,76	29,24
F6SS-240-03	7,5	10	1 / 2	5,8 / 5,9	3	24,76	29,24
F6SS-240-4RR	7,5	10	1 / 2	5,8 / 5,9	3	29,21	34,28
F6SS-240-04	9,3	12,5/15	1 / 2	5,8 / 5,9	3	29,21	34,28
F6SS-240-5R	11	15	1 / 2	5,8 / 5,9	3	33,66	39,47
F6SS-240-05	13	17,5/20	1 / 2	5,8 / 5,9	3	33,66	39,47
F6SS-240-06	11	20	1 / 2	5,8 / 5,9	3	38,11	44,51
F6SS-240-7R	15	20	1 / 2	5,8 / 5,9	3	42,56	49,56
F6SS-240-07	18,5	25	1 / 2	5,8 / 5,9	3	42,56	49,56
F6SS-240-08	18,5	25	1 / 2	5,8 / 5,9	3	47,01	54,59
F6SS-240-09	22	30	1 / 2	5,8 / 5,9	3	51,46	59,63

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	50	100	150	200	250	300	325
		m³/h	0	11	23	34	45	57	68	74
F6SS-240-01R	3	HEAD IN FEET	49	45	43	35	25	19	10	
F6SS-240-01	4		53	60	57	49	40	33	23	15
F6SS-240-02R	5,5/6		102	100	93	80	67	50	28	18
F6SS-240-02	7,5		125	122	117	104	92	80	47	40
F6SS-240-3RR	7,5		151	145	137	120	106	86	46	32
F6SS-240-03	10		197	188	177	160	140	120	80	66
F6SS-240-4RR	10		206	200	193	178	153	123	87	55
F6SS-240-04	12,5/15		261	247	230	203	182	160	117	83
F6SS-240-5R	15		289	281	265	242	212	176	126	95
F6SS-240-05	17,5/20		323	317	296	264	230	193	143	113
F6SS-240-06	20		390	368	345	322	280	239	179	138
F6SS-240-7R	20		424	400	372	340	303	247	187	150
F6SS-240-07	25		458	442	412	373	320	280	197	172
F6SS-240-08	25		520	503	467	423	372	322	242	194
F6SS-240-09	30		583	560	527	483	422	363	277	221

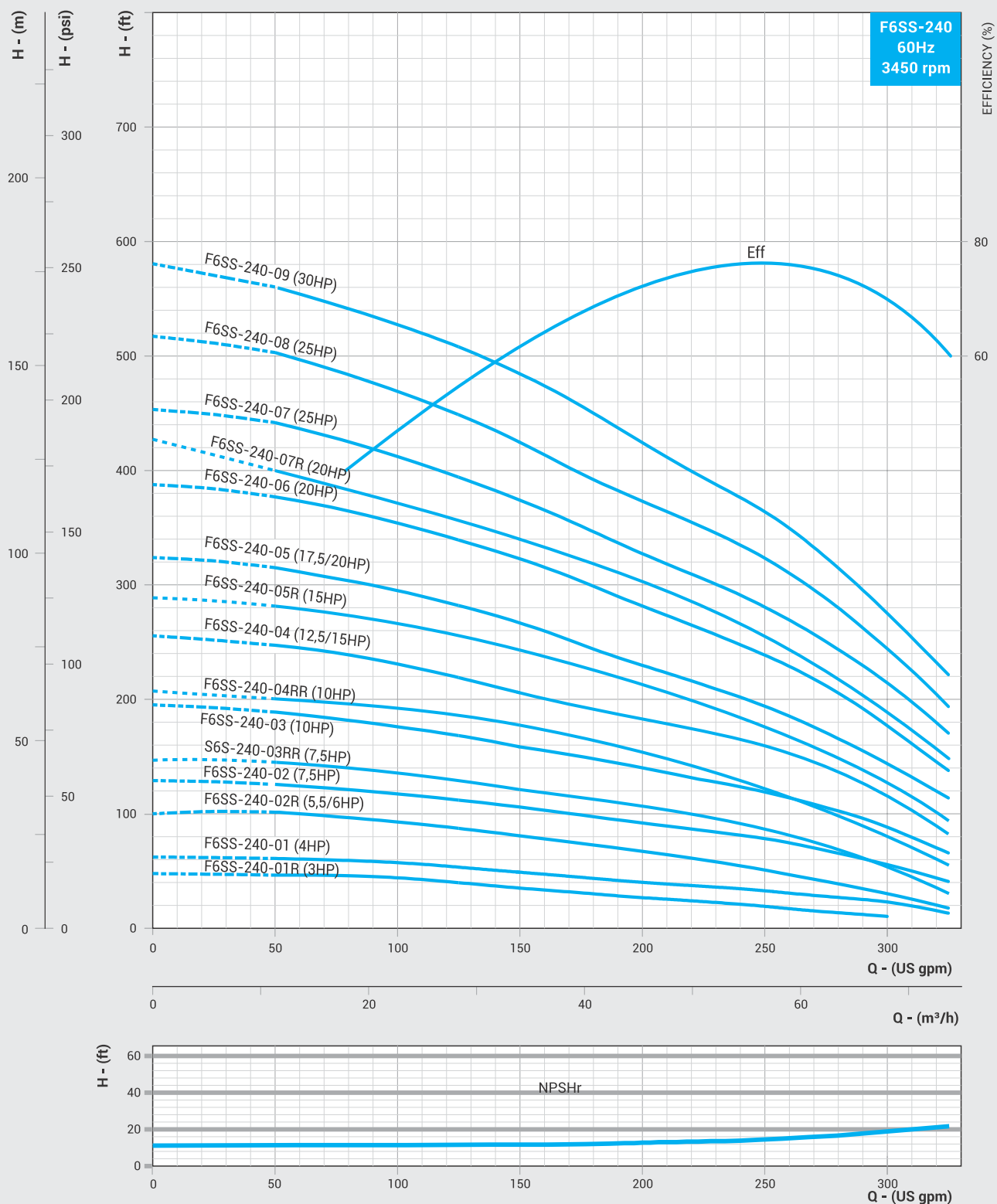
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 240 gpm

Outlet Size : 3" NPT

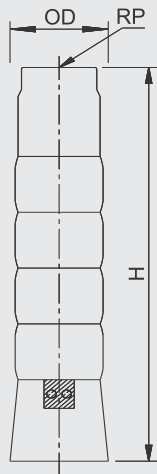


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 240 gpm

Outlet Size : 3" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-240-10	22	30	1 / 2	5,8 / 5,9	3	55,91	64,68
F6SS-240-11	26	35/40	1 / 2	5,8 / 5,9	3	60,35	69,72
F6SS-240-12	30	40	1 / 2	5,8 / 5,9	3	64,80	74,77
F6SS-240-13	30	40	1 / 2	5,8 / 5,9	3	69,25	79,80
F6SS-240-14	37	50	1 / 2	5,8 / 5,9	3	73,70	84,85
F6SS-240-15	37	50	1 / 2	5,8 / 5,9	3	78,15	89,89
F6SS-240-16	37	50	1 / 2	5,8 / 5,9	3	82,60	94,93
F6SS-240-17	37	50	1 / 2	5,8 / 5,9	3	87,05	99,98
F6SS-240-18	45	60	1 / 2	5,8 / 5,9	3	91,50	105,01
F6SS-240-19	45	60	1 / 2	5,8 / 5,9	3	95,94	110,06
F6SS-240-20	45	60	1 / 2	5,8 / 5,9	3	100,39	115,10
F6SS-240-21	55	75	1 / 2	5,8 / 5,9	3	104,84	122,75
F6SS-240-22	55	75	1 / 2	5,8 / 5,9	3	200,00	123,00

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	50	100	150	200	250	300	325
		m³/h	0	11	23	34	45	57	68	74
F6SS-240-10	30	HEAD IN FEET	642	530	593	540	480	410	302	249
F6SS-240-11	35/40		704	686	650	598	530	450	340	269
F6SS-240-12	40		775	756	717	648	570	490	370	296
F6SS-240-13	40		842	808	760	700	620	530	400	325
F6SS-240-14	50		896	865	814	750	660	570	431	356
F6SS-240-15	50		960	932	877	810	730	620	460	378
F6SS-240-16	50		1028	997	933	860	765	650	500	410
F6SS-240-17	50		1086	1068	1010	920	820	690	530	453
F6SS-240-18	60		1140	1117	1065	980	860	740	580	496
F6SS-240-19	60		1218	1163	1106	1020	910	790	600	523
F6SS-240-20	60		1280	1237	1164	1070	960	810	640	552
F6SS-240-21	75		1335	1283	1220	1130	1010	860	680	575
F6SS-240-22	75		1397	1320	1260	1170	1049	890	700	590

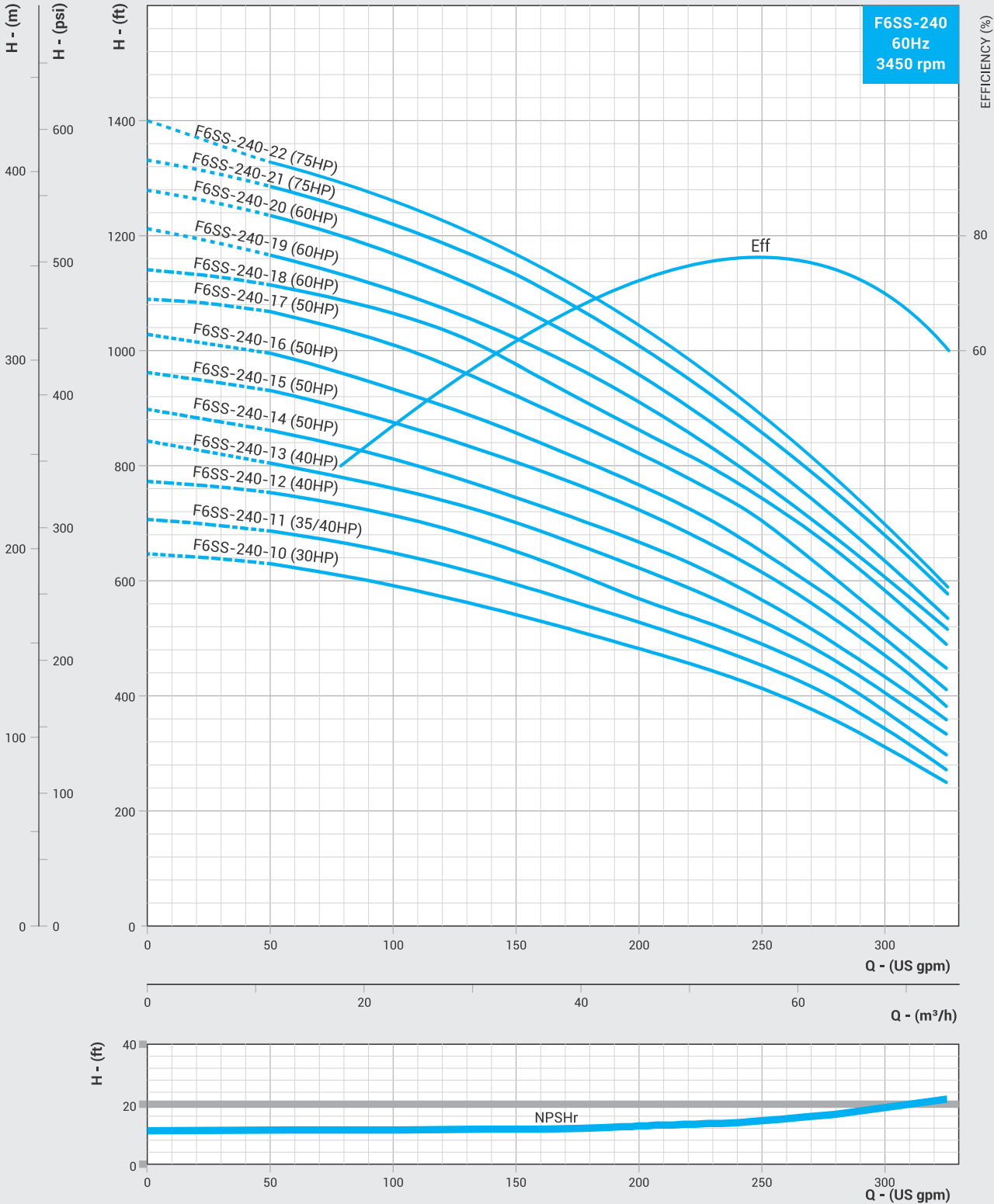
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 240 gpm

Outlet Size : 3" NPT

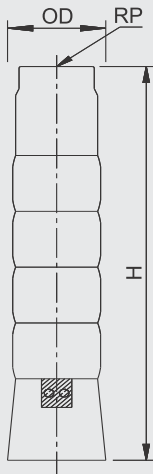


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 300 gpm

Outlet Size : 3"/4" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-300-01R	2,2	3	1	5,8	3	15,87	19,29
F6SS-300-01	4	5,5	1	5,8	3	15,87	19,29
F6SS-300-02RR	3,7	5	1 / 2	5,8 / 5,9	3	20,31	24,47
F6SS-300-02	5,5	7,5	1 / 2	5,8 / 5,9	3	20,31	24,47
F6SS-300-03R	7,5	10	1 / 2	5,8 / 5,9	3	24,76	29,64
F6SS-300-03	9,3	12,5/15	1 / 2	5,8 / 5,9	3	24,76	29,64
F6SS-300-04RR	11	15	1 / 2	5,8 / 5,9	3	29,21	34,81
F6SS-300-04	11	15	1 / 2	5,8 / 5,9	3	29,21	34,81
F6SS-300-05RR	15	20	1 / 2	5,8 / 5,9	3	33,66	40,13
F6SS-300-05	13	17,5/20	1 / 2	5,8 / 5,9	3	33,66	40,13
F6SS-300-06R	15	20	1 / 2	5,8 / 5,9	3	38,11	45,30
F6SS-300-06	18,5	25	1 / 2	5,8 / 5,9	3	38,11	45,30
F6SS-300-07	22	30	1 / 2	5,8 / 5,9	3	42,56	50,48
F6SS-300-08	22	30	1 / 2	5,8 / 5,9	3	47,01	55,65
F6SS-300-09R	22	30	1 / 2	5,8 / 5,9	3	51,46	60,84
F6SS-300-09	26	35/40	1 / 2	5,8 / 5,9	3	51,46	60,84
F6SS-300-10	26	35/40	1 / 2	5,8 / 5,9	3	55,91	66,00

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	150	200	250	275	300	350	400
		m³/h	0	34	46	57	63	68	80	91
F6SS-300-01R	3	HEAD IN FEET	51	37	35	33	25	20	12	0
F6SS-300-01	5,5		71	50	43	39	38	30	20	8
F6SS-300-02RR	5		87	70	63	54	49	42	24	0
F6SS-300-02	7,5		123	111	100	87	77	73	50	36
F6SS-300-03R	10		173	146	138	120	105	95	72	39
F6SS-300-03	12,5/15		190	172	154	137	125	119	87	48
F6SS-300-04RR	15		218	186	165	144	132	121	91	57
F6SS-300-04	15		251	231	209	180	170	158	122	70
F6SS-300-05RR	20		286	247	221	194	177	161	124	68
F6SS-300-05	17,5/20		323	285	261	230	213	199	153	95
F6SS-300-06R	20		372	320	291	260	238	220	175	104
F6SS-300-06	25		389	350	321	281	264	248	198	110
F6SS-300-07	30		451	402	365	327	309	282	232	140
F6SS-300-08	30		521	452	414	367	347	322	262	169
F6SS-300-09R	30		562	481	427	377	354	330	210	174
F6SS-300-09	35/40		599	517	467	412	380	350	278	197
F6SS-300-10	35/40		663	562	500	440	410	376	300	212

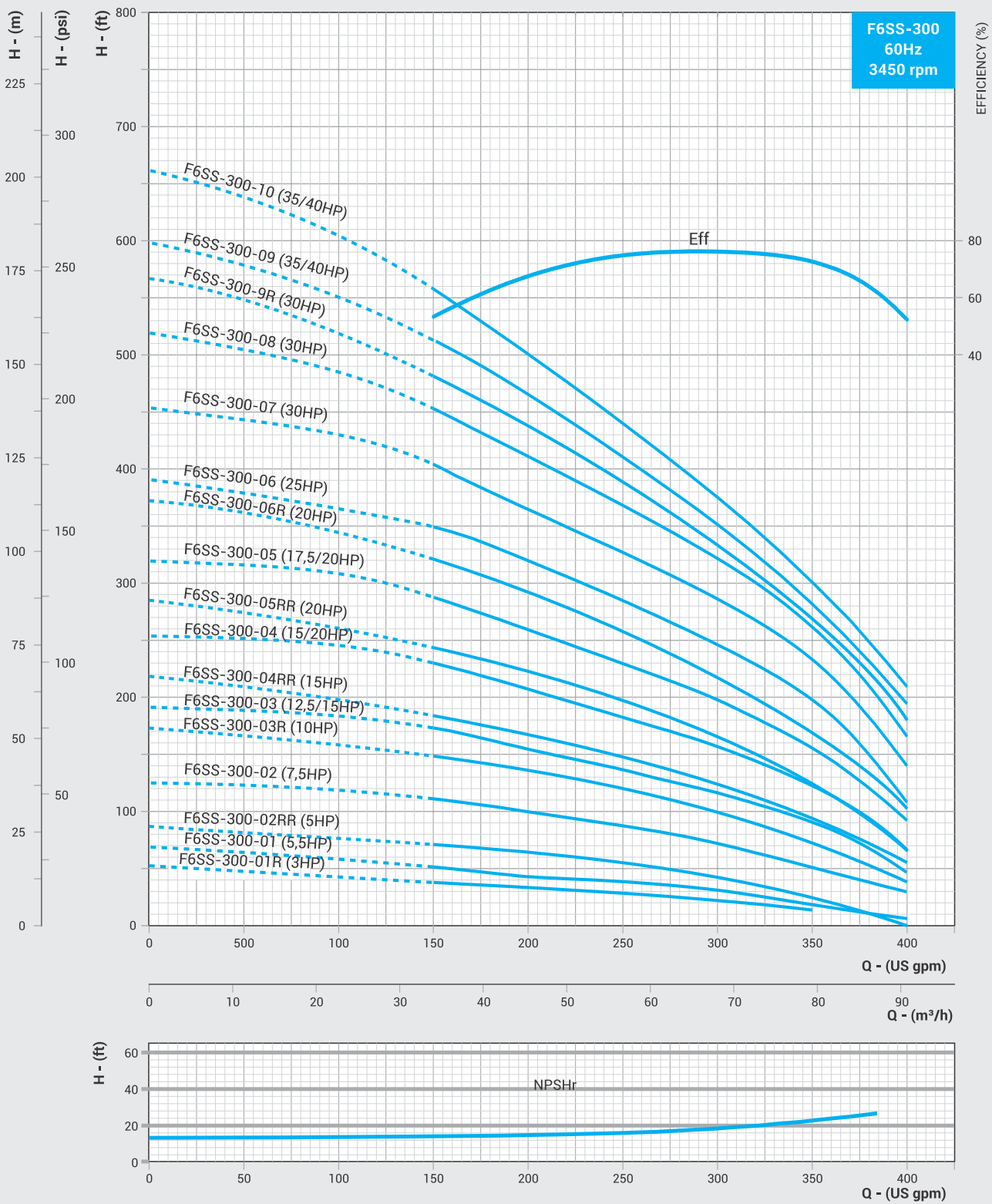
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 300 gpm

Outlet Size : 3"/4" NPT

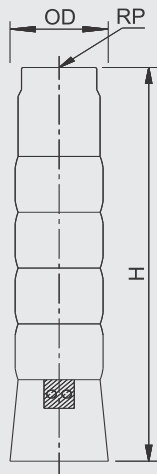


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 300 gpm

Outlet Size : 3"/4" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F6SS-300-11	30	40	1 / 2	5,8 / 5,9	3	60,35	71,18
F6SS-300-12	37	50	1 / 2	5,8 / 5,9	3	64,80	76,35
F6SS-300-13	37	50	1 / 2	5,8 / 5,9	3	69,25	81,52
F6SS-300-14	45	60	1 / 2	5,8 / 5,9	3	73,70	86,70
F6SS-300-15	45	60	1 / 2	5,8 / 5,9	3	78,15	91,87
F6SS-300-16	45	60	1 / 2	5,8 / 5,9	3	82,60	97,05
F6SS-300-17	55	75	1 / 2	5,8 / 5,9	3	87,05	102,23
F6SS-300-18	55	75	1 / 2	5,8 / 5,9	3	91,50	110,04
F6SS-300-19	55	75	1 / 2	5,8 / 5,9	3	95,94	115,22
F6SS-300-20	55	75	1 / 2	5,8 / 5,9	3	100,39	120,39
F6SS-300-21	63	85/100	1 / 2	5,8 / 5,9	3	104,84	125,57

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	150	200	250	275	300	350	400
		m³/h	0	34	46	57	63	68	80	91
F6SS-300-11	40	HEAD IN FEET	729	617	551	486	450	414	331	236
F6SS-300-12	50		800	680	615	540	500	461	371	264
F6SS-300-13	50		863	730	653	580	535	488	398	279
F6SS-300-14	60		930	778	700	616	573	525	420	300
F6SS-300-15	60		1004	861	764	673	630	584	480	329
F6SS-300-16	60		1071	919	816	718	672	618	500	343
F6SS-300-17	75		1136	970	865	763	709	670	541	363
F6SS-300-18	75		1212	1040	925	814	750	700	578	399
F6SS-300-19	75		1293	1113	990	864	812	760	621	433
F6SS-300-20	75		1358	1177	948	923	876	798	653	448
F6SS-300-21	85/100		1439	1244	1100	973	904	846	697	497

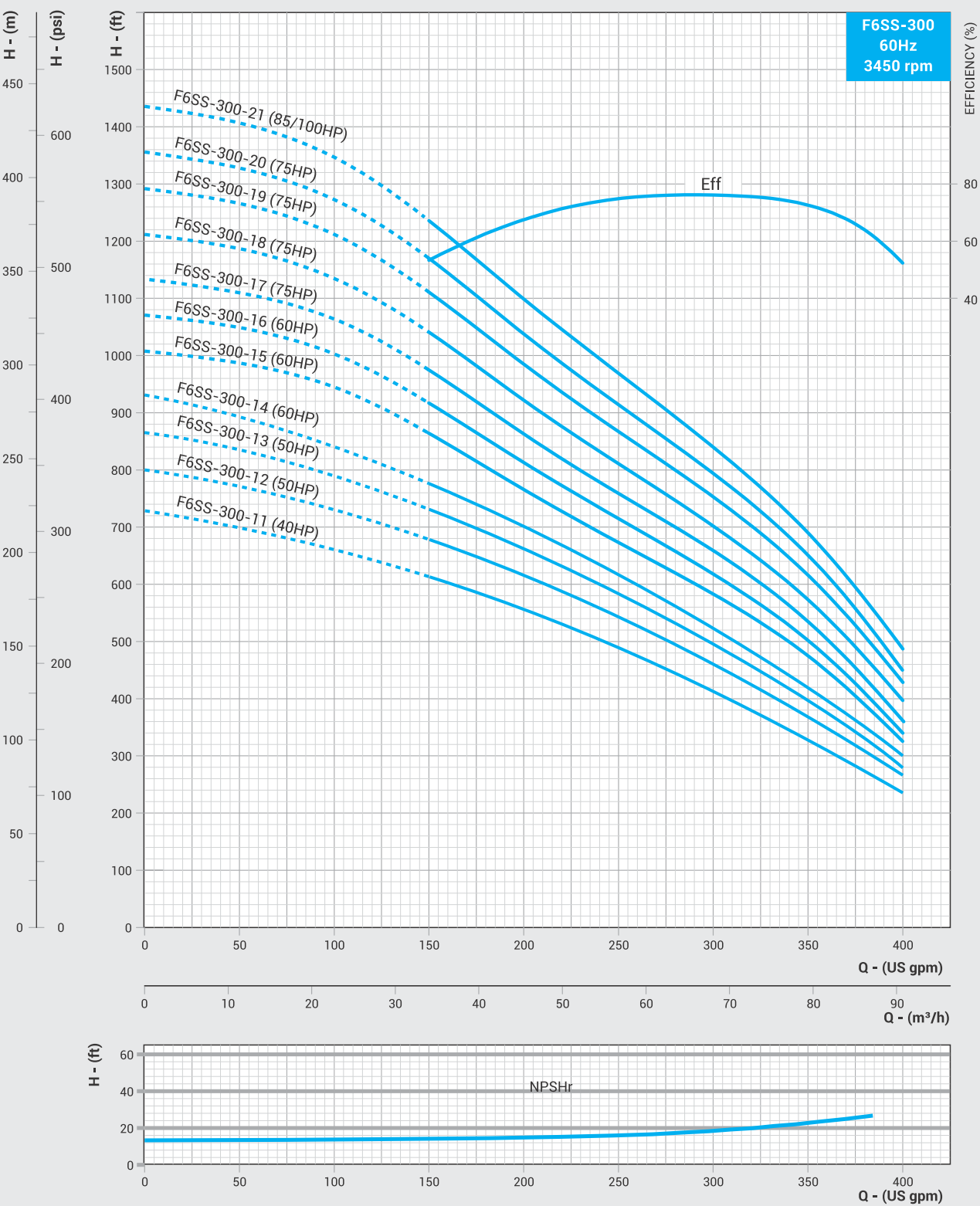
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 300 gpm

Outlet Size : 3"/4" NPT

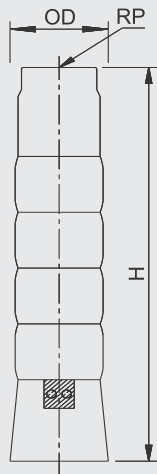


DIMENSIONS & WEIGHT - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 390 gpm

Outlet Size : 5" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F8SS-390-01R	5,5	7,5	1 / 2	6,8 / 7,0	5	21,81	48,38
F8SS-390-01	5,5	7,5	1 / 2	6,8 / 7,0	5	21,81	48,38
F8SS-390-02RR	7,5	10	1 / 2	6,8 / 7,0	5	26,85	56,48
F8SS-390-02R	11,0	15	1 / 2	6,8 / 7,0	5	26,85	56,48
F8SS-390-02	11,0	15	1 / 2	6,8 / 7,0	5	26,85	56,48
F8SS-390-03R	15	20	1 / 2	6,8 / 7,0	5	31,89	64,50
F8SS-390-03	18,5	25	1 / 2	6,8 / 7,0	5	31,89	64,50
F8SS-390-04R	18,5	25	1 / 2	6,8 / 7,0	5	36,93	72,50
F8SS-390-04	22,0	30	1 / 2	6,8 / 7,0	5	36,93	72,50
F8SS-390-05RR	22,0	30	1 / 2	6,8 / 7,0	5	41,97	80,52
F8SS-390-05	30,0	40	1 / 2	6,8 / 7,0	5	41,97	80,52
F8SS-390-06R	30,0	40	1 / 2	6,8 / 7,0	5	47,01	90,12

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	150	250	300	350	400	450	500
		m³/h	0	34	57	68	80	91	102	114
F8SS-390-01R	7,5	HEAD IN FEET	81	75	69	63	59	52	42	29
F8SS-390-01	7,5		100	90	80	74	70	63	51	40
F8SS-390-02RR	10		129	118	104	95	85	72	60	43
F8SS-390-02R	15		141	139	127	118	105	90	74	52
F8SS-390-02	15		190	178	160	148	135	121	108	87
F8SS-390-03R	20		250	228	200	184	167	146	120	92
F8SS-390-03	25		282	260	238	220	200	180	155	128
F8SS-390-04R	25		335	304	269	245	220	192	163	131
F8SS-390-04	30		385	348	308	284	258	227	192	160
F8SS-390-05RR	30		400	368	325	300	270	238	200	159
F8SS-390-05	40		470	442	389	360	328	290	250	202
F8SS-390-06R	40		520	472	424	396	362	322	280	228

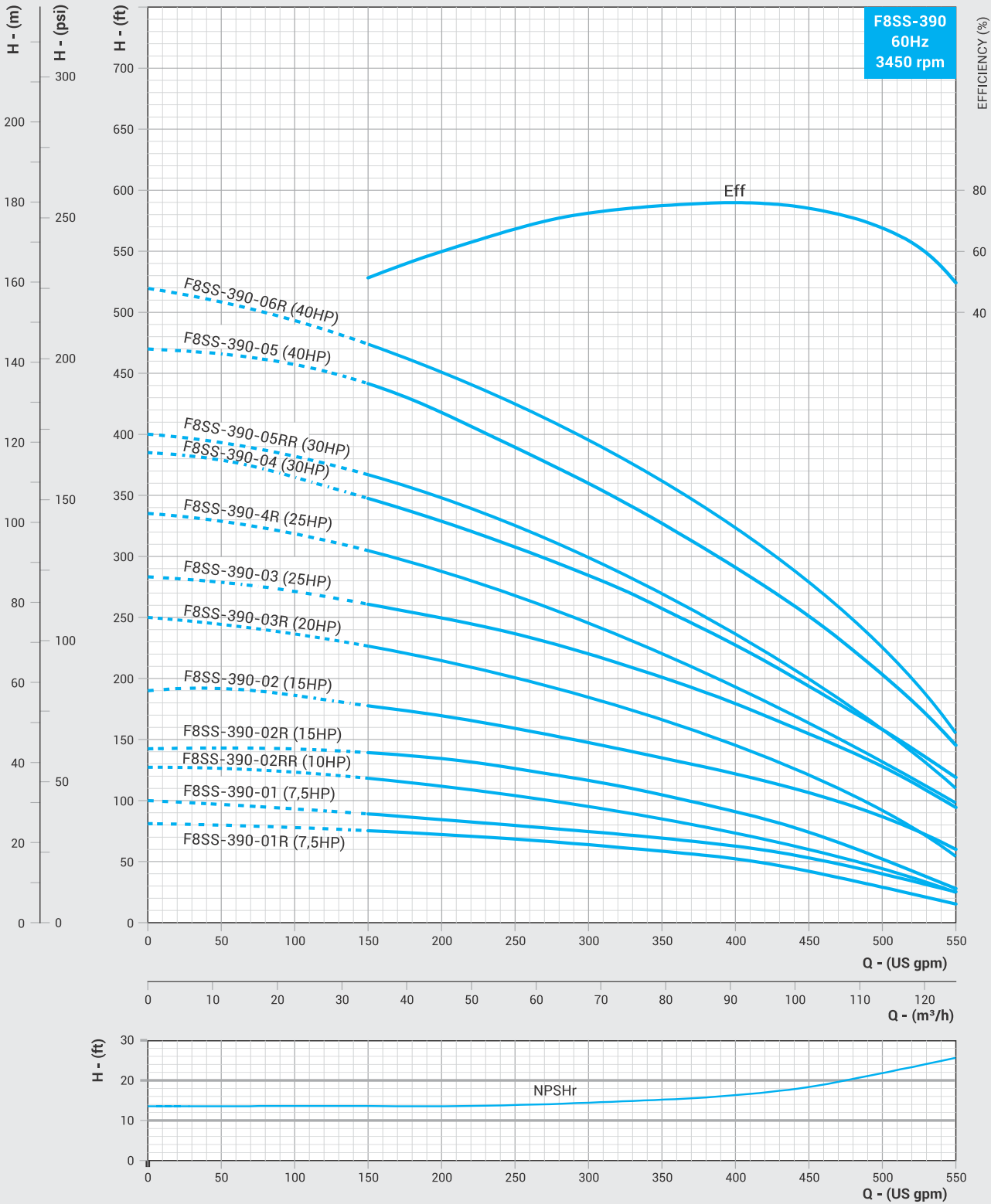
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 390 gpm

Outlet Size : 5" NPT

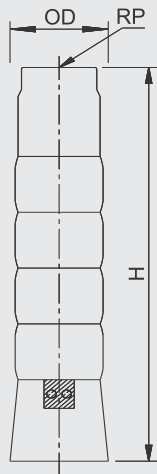


DIMENSIONS & WEIGHT - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 390 gpm

Outlet Size : 5" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F8SS-390-06	37	50	1 / 2	6,8 / 7,0	5	47,01	90,12
F8SS-390-07	45	60	1 / 2	6,8 / 7,0	5	52,05	98,30
F8SS-390-08	45	60	1 / 2	6,8 / 7,0	5	57,09	106,50
F8SS-390-09	55	75	1 / 2	6,8 / 7,0	5	62,13	114,68
F8SS-390-10	55	75	1 / 2	6,8 / 7,0	5	67,17	122,86
F8SS-390-11	63	85/100	1 / 2	6,8 / 7,0	5	72,20	131,07
F8SS-390-12	75	100	1 / 2	6,8 / 7,0	5	77,24	139,24
F8SS-390-13	75	100	1 / 2	6,8 / 7,0	5	82,28	147,48
F8SS-390-14	93	125	1 / 2	6,8 / 7,0	5	87,32	155,63
F8SS-390-15	93	125	1 / 2	6,8 / 7,0	5	92,36	163,70

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	150	250	300	350	400	450	500
		m³/h	0	34	57	68	80	91	102	114
F8SS-390-06	50	HEAD IN FEET	534	500	432	400	374	318	275	220
F8SS-390-07	60		638	585	517	475	436	396	342	276
F8SS-390-08	60		716	683	600	555	503	450	397	325
F8SS-390-09	75		844	776	699	648	597	523	457	379
F8SS-390-10	75		939	868	779	737	685	612	539	448
F8SS-390-11	85/100		1041	969	862	810	750	686	597	497
F8SS-390-12	100		1124	1022	918	868	797	714	623	525
F8SS-390-13	100		1202	1120	1000	930	854	772	673	560
F8SS-390-14	125		1303	1225	1075	999	921	841	722	600
F8SS-390-15	125		1400	1320	1150	1060	984	887	772	648

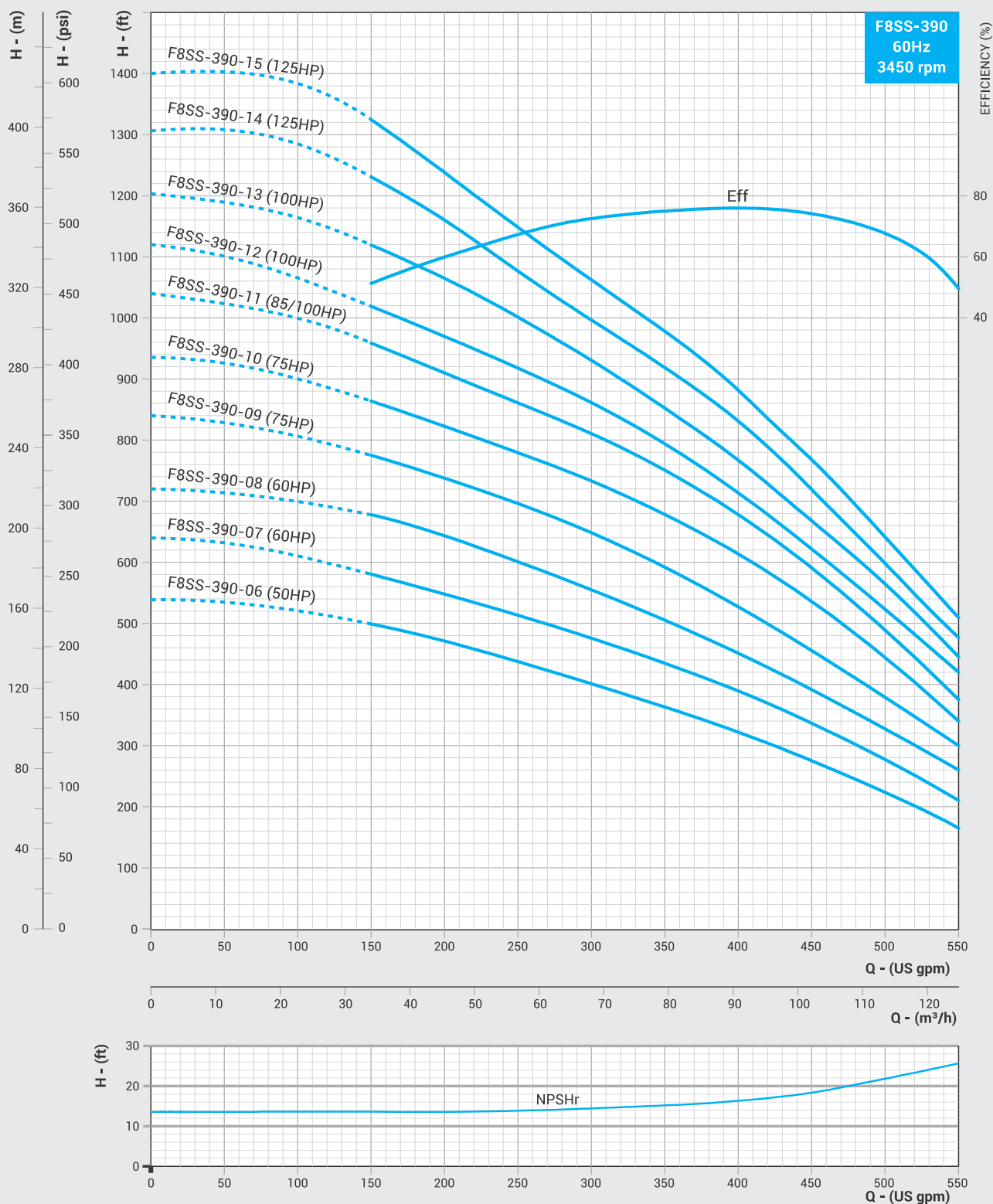
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 390 gpm

Outlet Size : 5" NPT

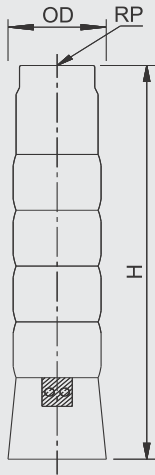


DIMENSIONS & WEIGHT - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 475 gpm

Outlet Size : 5" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F8SS-475-01R	5,5	7,5	1 / 2	6,8 / 7,0	5	21,81	48,55
F8SS-475-01	7,5	10	1 / 2	6,8 / 7,0	5	21,81	48,55
F8SS-475-02R	13	17,5/20	1 / 2	6,8 / 7,0	5	26,85	56,88
F8SS-475-02	13	17,5/20	1 / 2	6,8 / 7,0	5	26,85	56,88
F8SS-475-03	22	30	1 / 2	6,8 / 7,0	5	31,89	65,15
F8SS-475-04RR	22	30	1 / 2	6,8 / 7,0	5	36,93	73,40
F8SS-475-04	30	40	1 / 2	6,8 / 7,0	5	36,93	73,40
F8SS-475-05R	30	40	1 / 2	6,8 / 7,0	5	41,97	81,66
F8SS-475-05	37	50	1 / 2	6,8 / 7,0	5	41,97	81,66
F8SS-475-06	45	60	1 / 2	6,8 / 7,0	5	47,01	91,49

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	200	300	350	400	450	500	600
		m³/h	0	46	68	80	91	102	114	136
F8SS-475-01R	7,5	HEAD IN FEET	78	74	67	56	54	49	40	20
F8SS-475-01	10		102	90	78	71	70	62	59	29
F8SS-475-02R	17,5/20		188	167	148	135	128	119	99	61
F8SS-475-02	17,5/20		207	179	168	150	139	130	120	75
F8SS-475-03	30		310	279	248	226	212	192	171	122
F8SS-475-04RR	30		338	288	252	237	222	203	169	107
F8SS-475-04	40		416	361	323	300	280	257	227	163
F8SS-475-05R	40		455	392	343	332	294	278	248	175
F8SS-475-05	50		504	440	392	366	348	322	289	204
F8SS-475-06	60		610	538	478	450	422	387	340	250

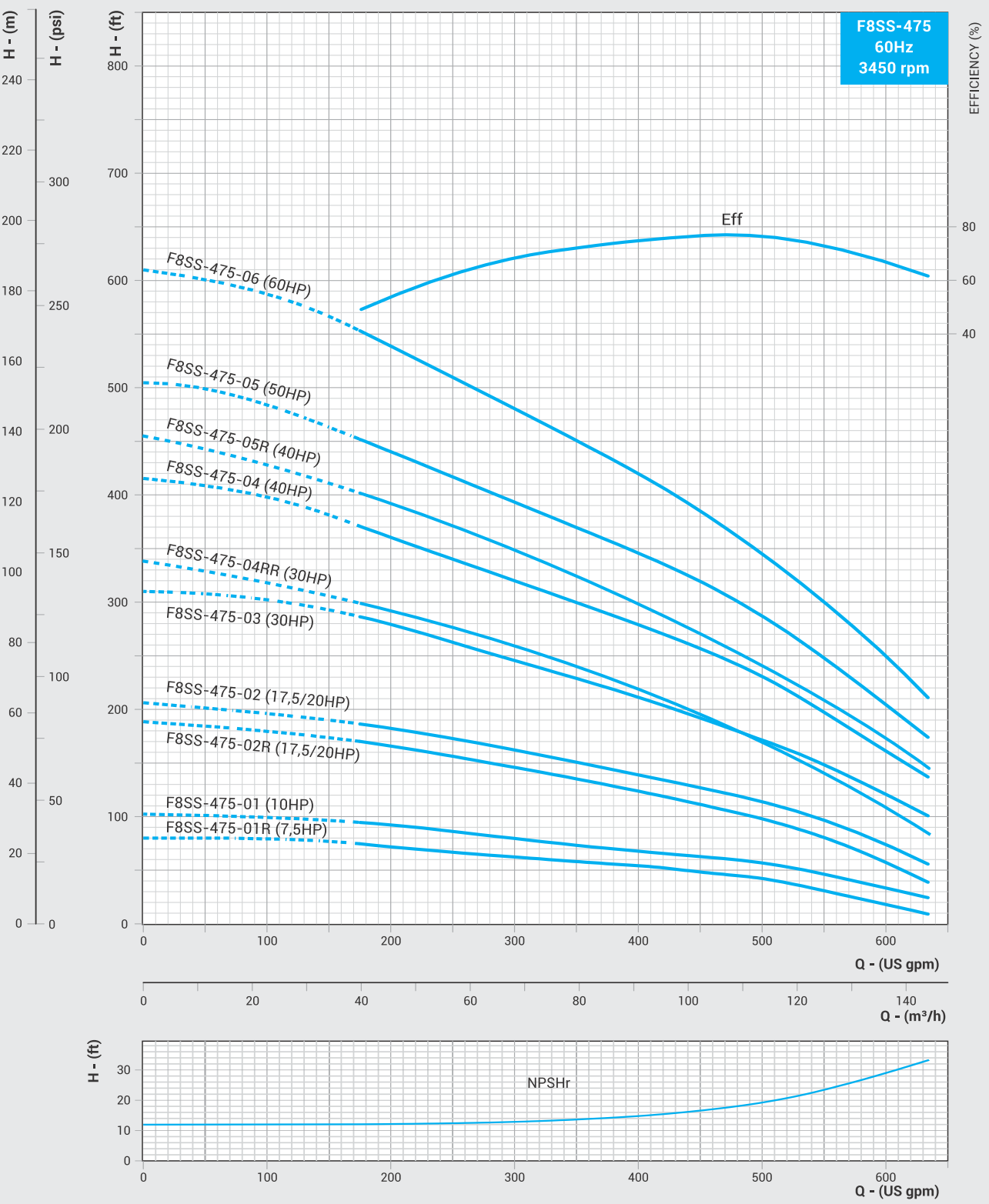
1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.
Optional Outlet size

PERFORMANCE CURVES - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 475 gpm

Outlet Size : 5" NPT

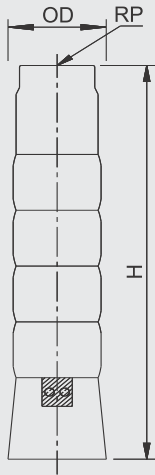


DIMENSIONS & WEIGHT - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 475 gpm

Outlet Size : 5" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F8SS-475-07	45	60	1 / 2	6,8 / 7,0	5	52,05	99,93
F8SS-475-08	55	75	1 / 2	6,8 / 7,0	5	57,09	108,37
F8SS-475-09	75	100	1 / 2	6,8 / 7,0	5	62,13	116,79
F8SS-475-10	75	100	1 / 2	6,8 / 7,0	5	67,17	125,21
F8SS-475-11	75	100	1 / 2	6,8 / 7,0	5	72,20	133,65
F8SS-475-12	93	125	1 / 2	6,8 / 7,0	5	77,24	142,08
F8SS-475-13	93	125	1 / 2	6,8 / 7,0	5	82,28	150,55

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	200	300	350	400	450	500	600
		m³/h	0	46	68	80	91	102	114	136
F8SS-475-07	60	HEAD IN FEET	718	613	540	512	475	441	398	283
F8SS-475-08	75		817	726	642	600	567	522	477	348
F8SS-475-09	100		913	816	724	675	638	589	541	403
F8SS-475-10	100		1011	900	804	750	708	666	610	450
F8SS-475-11	100		1100	995	879	827	776	723	671	498
F8SS-475-12	125		1188	1081	972	909	850	793	725	547
F8SS-475-13	125		1278	1169	1039	975	914	852	778	598

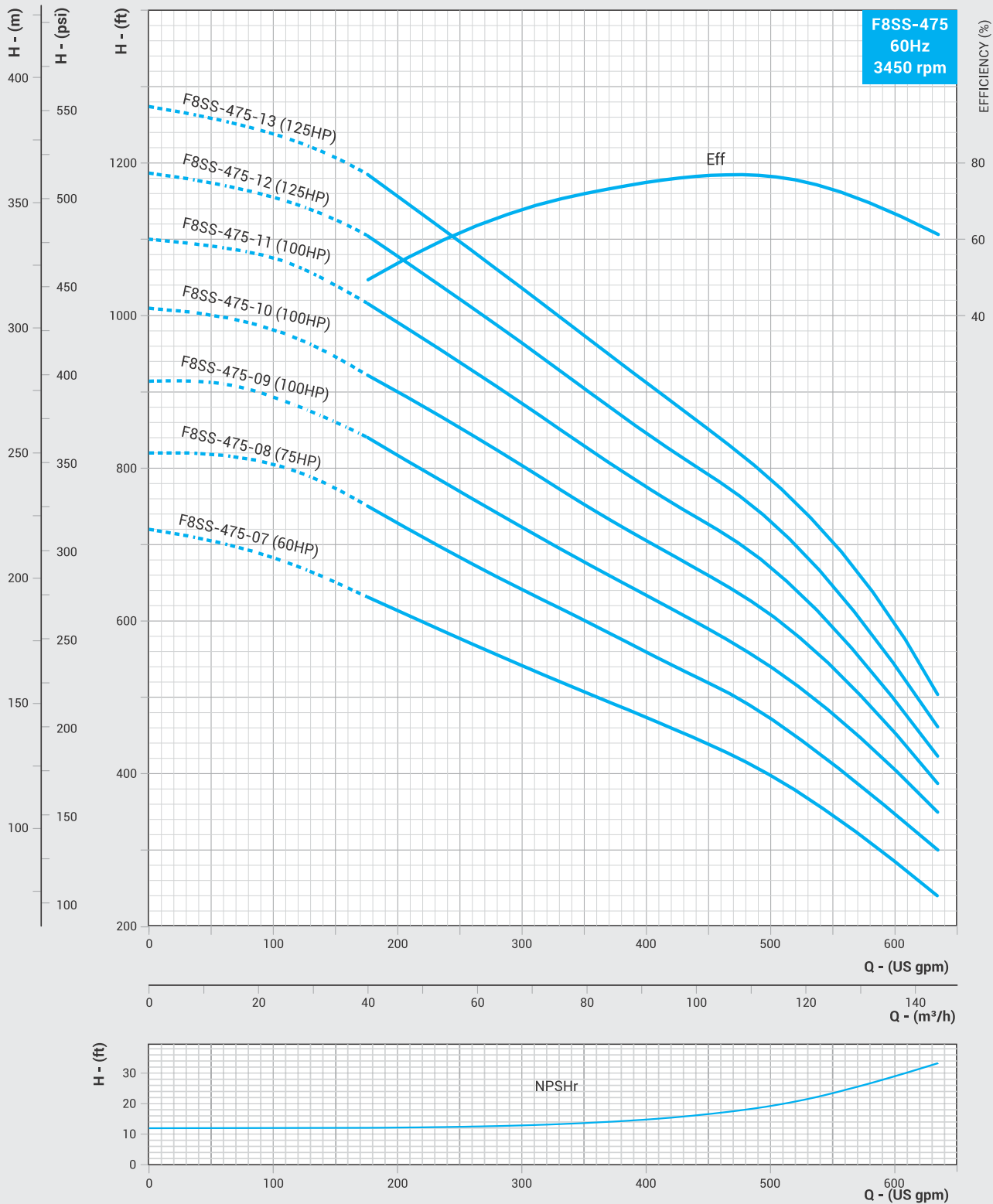
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 475 gpm

Outlet Size : 5" NPT

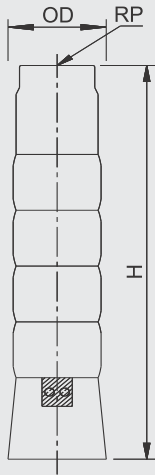


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 625 gpm

Outlet Size : 6" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F10SS-625-01R	15	20	1 / 2	8,3 / 8,5	6	25,35	67,52
F10SS-625-01	18,5	25	1 / 2	8,3 / 8,5	6	25,35	67,52
F10SS-625-02RR	22	30	1 / 2	8,3 / 8,5	6	31,42	81,08
F10SS-625-02R	22	30	1 / 2	8,3 / 8,5	6	31,42	81,08
F10SS-625-02	30	40	1 / 2	8,3 / 8,5	6	31,42	81,08
F10SS-625-03RR	37	50	1 / 2	8,3 / 8,5	6	37,48	94,62
F10SS-625-03R	37	50	1 / 2	8,3 / 8,5	6	37,48	94,62
F10SS-625-03	45	60	1 / 2	8,3 / 8,5	6	37,48	94,62
F10SS-625-04RR	55	75	1 / 2	8,3 / 8,5	6	43,54	108,16
F10SS-625-04R	55	75	1 / 2	8,3 / 8,5	6	43,54	108,16
F10SS-625-04	63	85/100	1 / 2	8,3 / 8,5	6	43,54	108,16

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	200	300	400	500	600	700	800
		m³/h	0	46	68	91	114	136	159	182
F10SS-625-01R	20	HEAD IN FEET	100	96	90	88	77	67	57	47
F10SS-625-01	25		160	146	136	125	113	102	86	61
F10SS-625-02RR	30		191	190	180	169	156	139	113	85
F10SS-625-02R	30		230	225	213	198	184	165	141	107
F10SS-625-02	40		298	275	265	248	230	210	182	142
F10SS-625-03RR	50		335	315	299	280	259	233	200	155
F10SS-625-03R	50		364	358	337	314	292	265	229	178
F10SS-625-03	60		410	394	380	352	327	300	260	200
F10SS-625-04RR	75		477	453	431	406	377	334	271	187
F10SS-625-04R	75		540	505	479	449	418	373	305	220
F10SS-625-04	85/100		570	543	520	493	462	418	355	250

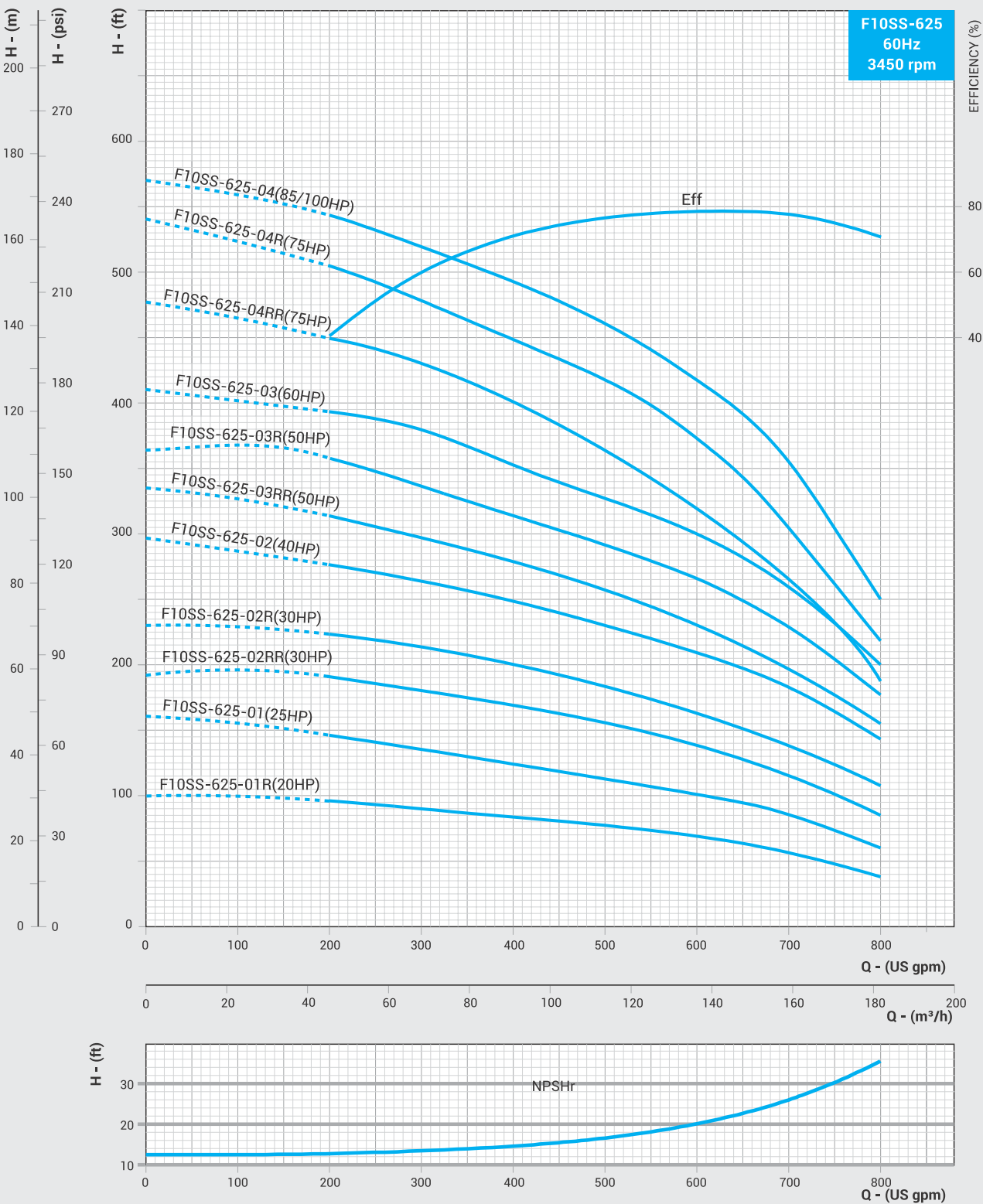
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 625 gpm

Outlet Size : 6" NPT

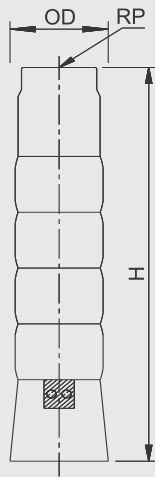


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 625 gpm

Outlet Size : 6" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F10SS-625-05RR	75	100	1 / 2	8,3 / 8,5	6	49,61	121,71
F10SS-625-05R	75	100	1 / 2	8,3 / 8,5	6	49,61	121,71
F10SS-625-05	75	100	1 / 2	8,3 / 8,5	6	49,61	121,71
F10SS-625-06RR	75	100	1 / 2	8,3 / 8,5	6	55,67	135,24
F10SS-625-06	93	125	1 / 2	8,3 / 8,5	6	55,67	135,24
F10SS-625-07RR	93	125	1 / 2	8,3 / 8,5	6	61,73	148,79
F10SS-625-07R	110	150	1 / 2	8,3 / 8,5	6	61,73	148,79
F10SS-625-07	110	150	1 / 2	8,3 / 8,5	6	61,73	148,79
F10SS-625-08	132	175	1 / 2	8,3 / 8,5	6	67,80	162,33
F10SS-625-09	132	175	1 / 2	8,3 / 8,5	6	73,86	175,88
F10SS-625-10	150	200	1 / 2	8,3 / 8,5	6	79,92	189,41

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	200	300	400	500	600	700	800
		m³/h	0	46	68	91	114	136	159	182
F10SS-625-05RR	100	HEAD IN FEET	586	584	560	524	488	446	388	307
F10SS-625-05R	100		629	625	597	559	545	485	412	315
F10SS-625-05	100		695	660	635	603	567	520	444	326
F10SS-625-06RR	100		718	703	675	632	590	539	460	350
F10SS-625-06	125		810	794	758	710	662	610	530	430
F10SS-625-07RR	125		858	840	806	754	700	638	550	438
F10SS-625-07R	150		884	870	834	783	728	668	590	446
F10SS-625-07	150		945	926	881	827	772	710	623	510
F10SS-625-08	175		1090	1073	1034	972	900	815	713	540
F10SS-625-09	175		1210	1184	1135	1060	987	910	806	650
F10SS-625-10	200		1342	1308	1256	1180	1098	1008	890	725

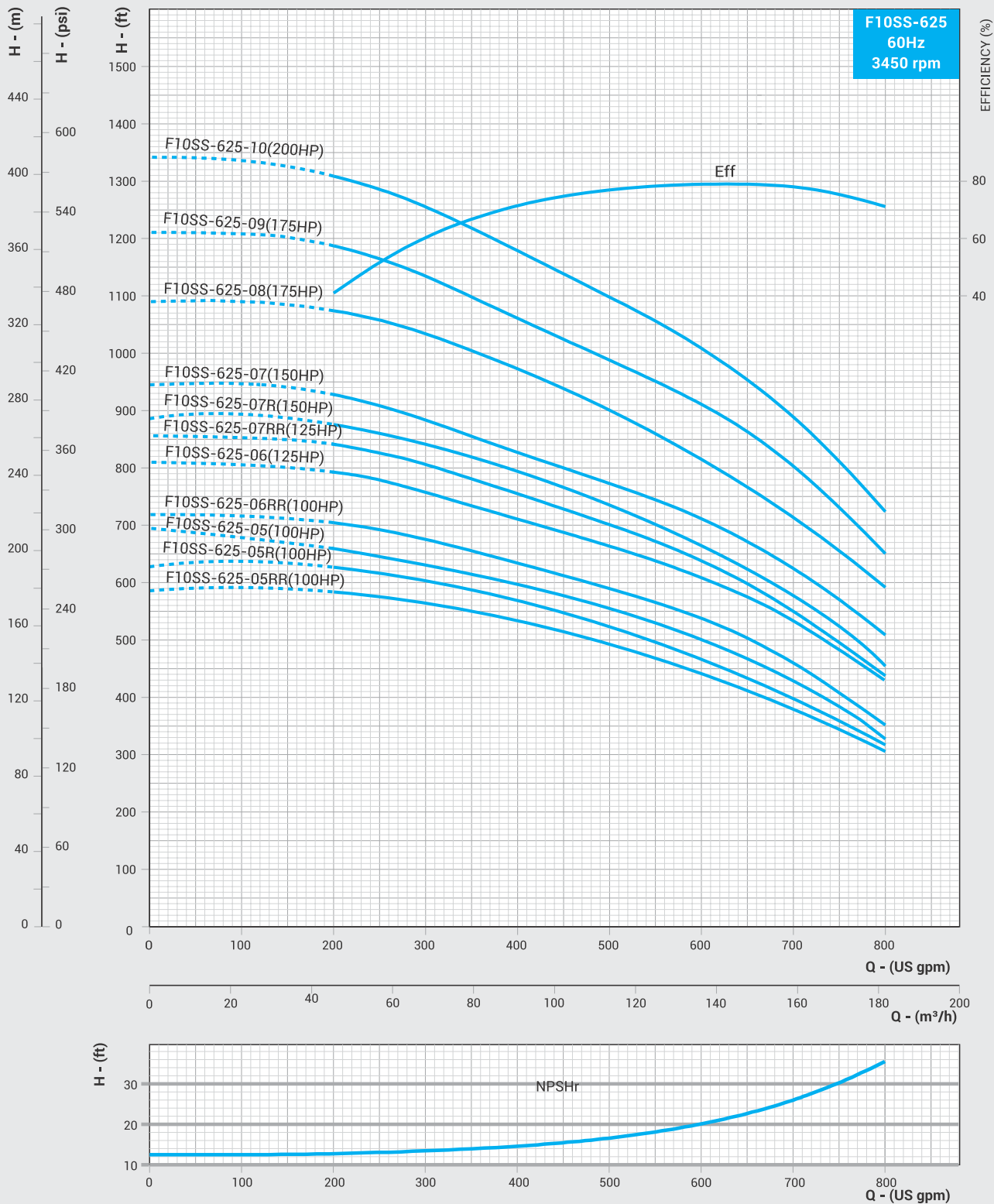
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 625 gpm

Outlet Size : 6" NPT

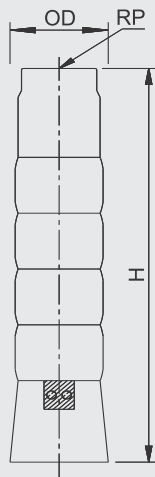


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 800 gpm

Outlet Size : 6" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F10SS-800-01R	15	20	1 / 2	8,3 / 8,6	6	25,43	66,68
F10SS-800-01	22	30	1 / 2	8,3 / 8,6	6	25,43	66,68
F10SS-800-02RR	26	35/40	1 / 2	8,3 / 8,6	6	31,57	80,43
F10SS-800-02R	37	50	1 / 2	8,3 / 8,6	6	31,57	80,43
F10SS-800-02	37	50	1 / 2	8,3 / 8,6	6	31,57	80,43
F10SS-800-03RR	45	60	1 / 2	8,3 / 8,6	6	37,72	94,17
F10SS-800-03R	55	75	1 / 2	8,3 / 8,6	6	37,72	94,17
F10SS-800-03	55	75	1 / 2	8,3 / 8,6	6	37,72	94,17
F10SS-800-04RR	75	100	1 / 2	8,3 / 8,6	6	43,86	107,90
F10SS-800-04R	75	100	1 / 2	8,3 / 8,6	6	43,86	107,90
F10SS-800-04	75	100	1 / 2	8,3 / 8,6	6	43,86	107,90
F10SS-800-05RR	93	125	1 / 2	8,3 / 8,6	6	50,00	122,72
F10SS-800-05R	93	125	1 / 2	8,3 / 8,6	6	50,00	122,72
F10SS-800-05	93	125	1 / 2	8,3 / 8,6	6	50,00	122,72

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	200	400	600	800	900	1000	1080
		m³/h	0	46	91	136	182	205	227	246
F10SS-800-01R	20	HEAD IN FEET	120	108	92	80	67	55	40	25
F10SS-800-01	30		161	156	134	113	100	93	77	63
F10SS-800-02RR	35/40		223	212	188	165	135	114	80	54
F10SS-800-02R	50		262	253	226	195	165	146	118	90
F10SS-800-02	50		287	288	252	215	189	171	148	118
F10SS-800-03RR	60		370	363	330	292	238	206	165	125
F10SS-800-03R	75		410	403	360	310	266	239	199	150
F10SS-800-03	75		449	442	392	338	295	270	230	182
F10SS-800-04RR	100		509	500	444	387	328	287	230	175
F10SS-800-04R	100		545	538	478	415	357	314	260	207
F10SS-800-04	100		588	580	510	440	383	343	290	238
F10SS-800-05RR	125		650	642	572	500	426	373	300	232
F10SS-800-05R	125		690	680	605	522	450	400	330	247
F10SS-800-05	125		733	720	638	552	480	430	364	300

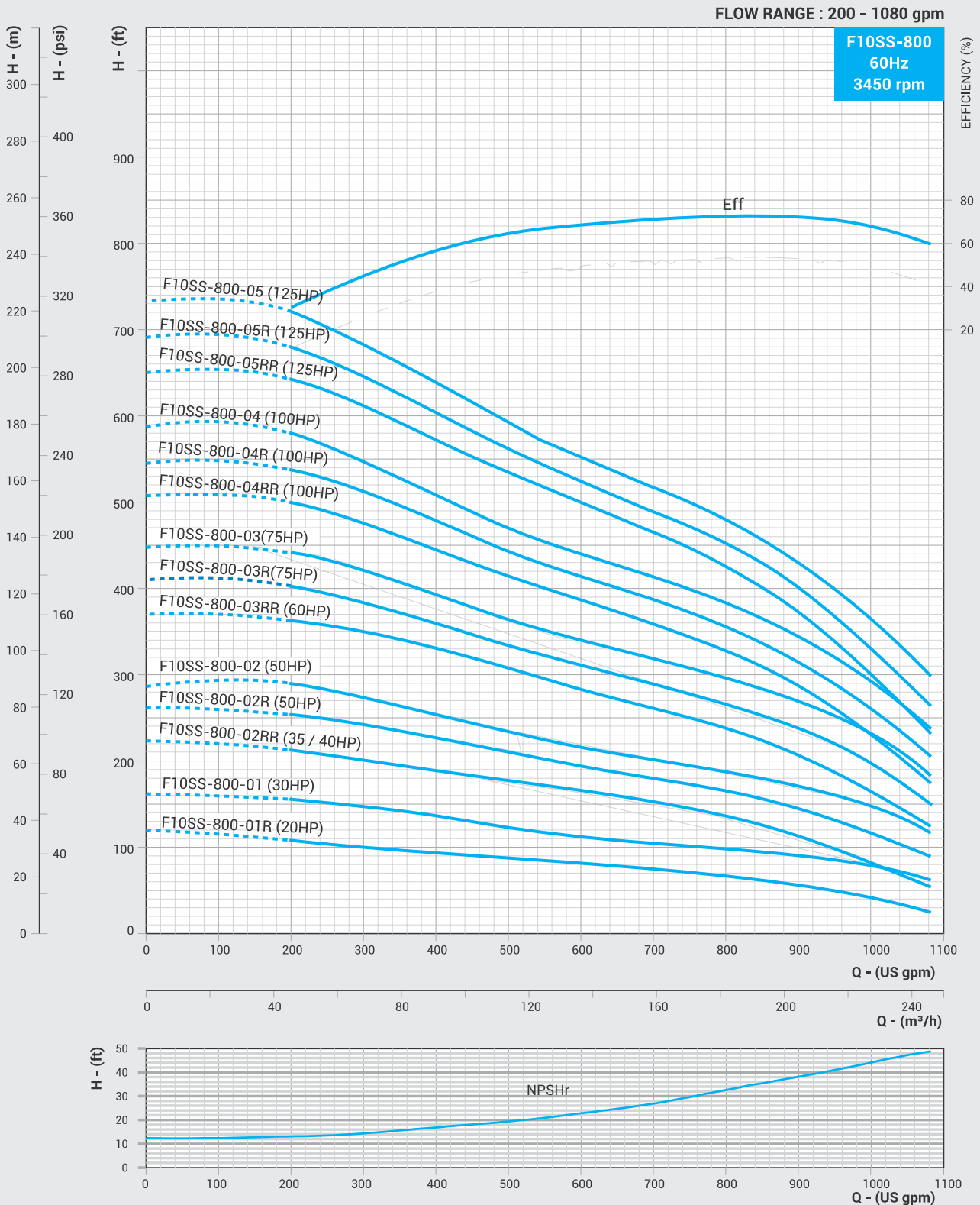
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 800 gpm

Outlet Size : 6" NPT

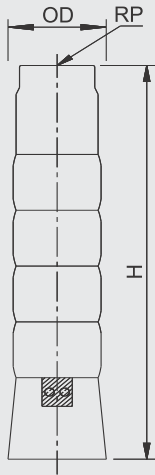


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : **10"**

Nominal Flow : **800 gpm**

Outlet Size : **6" NPT**



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F10SS-800-06	110	150	1 / 2	8,3 / 8,6	6	56,14	136,44
F10SS-800-07	132	175	1 / 2	8,3 / 8,6	6	62,28	150,14
F10SS-800-08	150	200	1 / 2	8,3 / 8,6	6	68,43	163,87
F10SS-800-09	170	225/250	1 / 2	8,3 / 8,6	6	74,57	184,08
F10SS-800-10	187	250	1 / 2	8,3 / 8,6	6	80,71	197,81

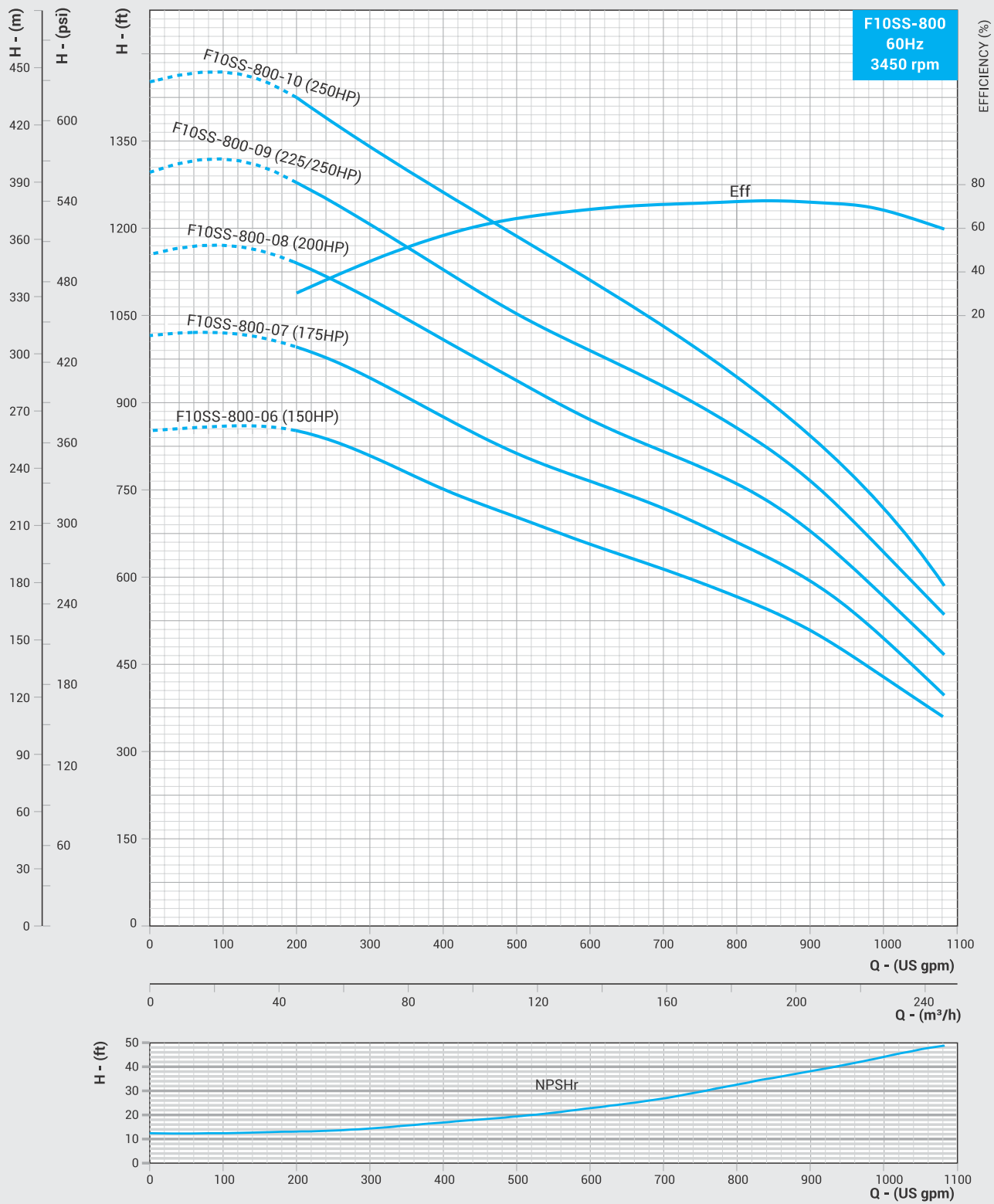
PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	200	400	600	800	900	1000	1080
		m³/h	0	46	91	136	182	205	227	246
F10SS-800-06	150	HEAD IN FEET	854	850	748	662	565	515	425	364
F10SS-800-07	175		1017	998	868	768	688	583	495	400
F10SS-800-08	200		1155	1138	1011	858	765	675	563	469
F10SS-800-09	225/250		1290	1270	1126	985	859	765	645	513
F10SS-800-10	250		1454	1425	1262	1110	945	825	720	585

* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10" Nominal Flow : 800 gpm Outlet Size : 6" NPT

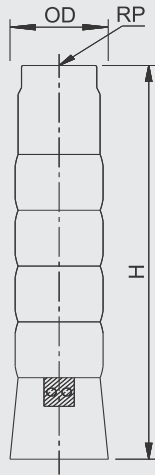


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : A75 gpm

Outlet Size : 6" NPT



PUMP MODEL	REQUIRED MOTOR POWER		No OF CABLE GUARD	DIMENSIONS (Inches)			APPROX NETT. WEIGHT (lbs)
	kW	HP		OD	RP	H	
F10SS-A75-01R	22	30	1 / 2	9,7 / 10,0	6	31	118
F10SS-A75-01	30	40	1 / 2	9,7 / 10,0	6	31	118
F10SS-A75-02RR	45	60	1 / 2	9,7 / 10,0	6	38	145
F10SS-A75-02R	55	75	1 / 2	9,7 / 10,0	6	38	145
F10SS-A75-02	75	100	1 / 2	9,7 / 10,0	6	38	145
F10SS-A75-03RR	75	100	1 / 2	9,7 / 10,0	6	45	173
F10SS-A75-03R	93	125	1 / 2	9,7 / 10,0	6	45	173
F10SS-A75-03	93	125	1 / 2	9,7 / 10,0	6	45	173
F10SS-A75-04RR	110	150	1 / 2	9,7 / 10,0	6	52	201
F10SS-A75-04R	110	150	1 / 2	9,7 / 10,0	6	52	201
F10SS-A75-04	110	150	1 / 2	9,7 / 10,0	6	52	201
F10SS-A75-05RR	130	175	1 / 2	9,7 / 10,0	6	59	228
F10SS-A75-05R	130	175	1 / 2	9,7 / 10,0	6	59	228
F10SS-A75-05	150	200	1 / 2	9,7 / 10,0	6	59	228
F10SS-A75-06RR	170	225/250	1 / 2	9,7 / 10,0	6	66	256
F10SS-A75-06R	187	250	1 / 2	9,7 / 10,0	6	66	256
F10SS-A75-06	187	250	1 / 2	9,7 / 10,0	6	66	256
F10SS-A75-07	220	300	1 / 2	9,7 / 10,0	6	73	283

PERFORMANCE TABLE

PUMP MODEL	HP	gpm	0	300	400	600	800	1000	1200	1400
		m³/h	0	68	91	136	182	227	273	318
F10SS- A75-01R	30	HEAD IN FEET	123	119	115	105	90	79	53	25
F10SS- A75-01	40		180	170	160	140	130	117	100	70
F10SS- A75-02RR	60		250	242	235	222	199	170	130	70
F10SS- A75-02R	75		303	290	280	258	232	210	175	110
F10SS- A75-02	100		361	342	330	295	266	240	210	156
F10SS- A75-03RR	100		431	415	400	370	338	304	250	157
F10SS- A75-03R	125		485	468	450	410	371	335	286	200
F10SS- A75-03	125		538	512	490	445	400	364	315	236
F10SS- A75-04RR	150		610	588	560	520	475	430	360	250
F10SS- A75-04R	150		660	634	613	556	505	453	390	275
F10SS- A75-04	150		710	680	654	592	534	484	420	315
F10SS- A75-05RR	175		788	759	734	670	610	550	478	318
F10SS- A75-05R	175		836	802	770	704	638	580	498	365
F10SS- A75-05	200		894	854	822	743	670	608	530	405
F10SS- A75-06RR	225/250		970	928	890	820	753	679	575	415
F10SS- A75-06R	250		1020	980	943	858	775	704	605	445
F10SS- A75-06	250		1070	1023	986	890	804	732	638	484
F10SS- A75-07	300		1280	1180	1135	1036	942	865	756	573

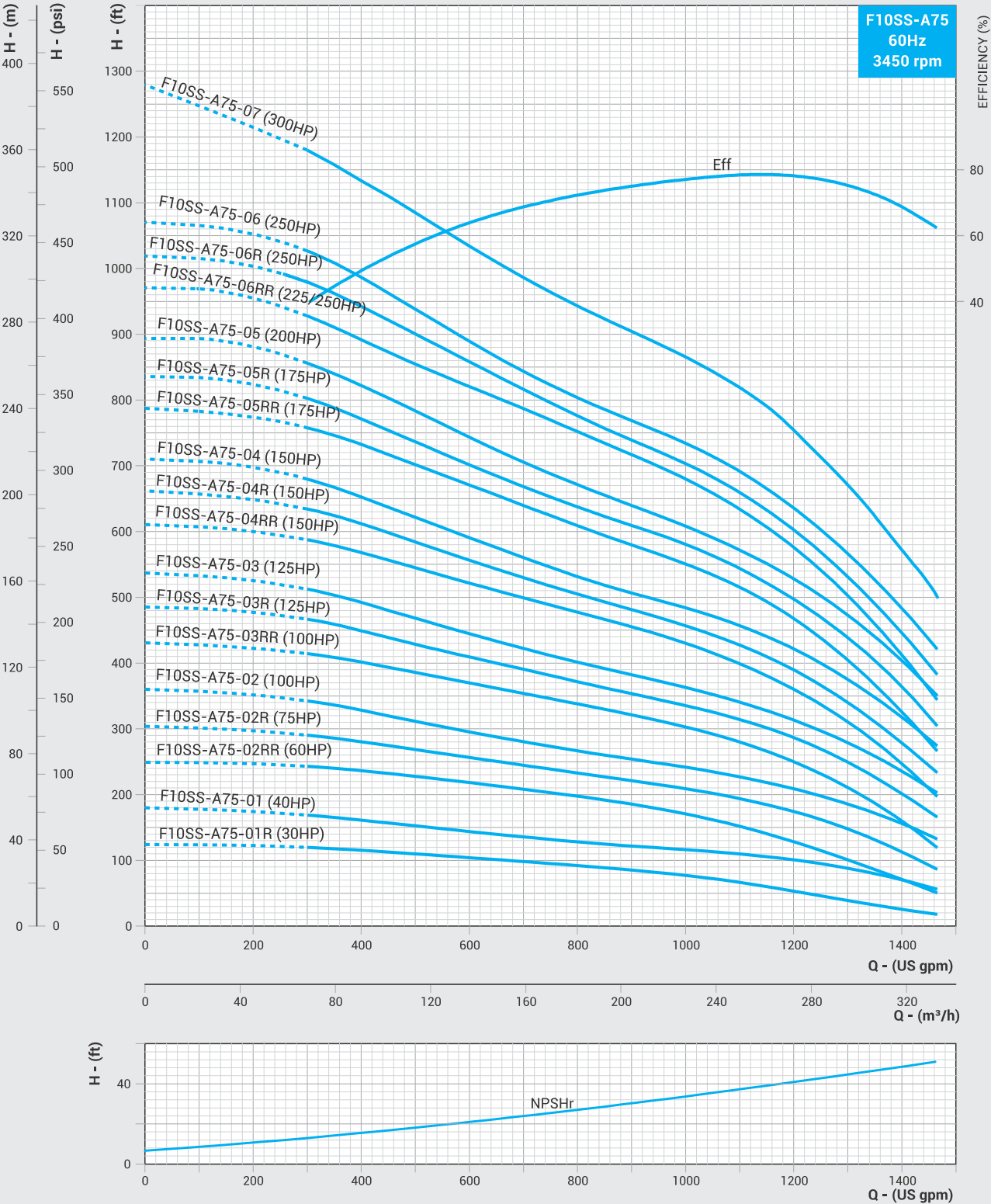
* 1 denote Single Cable Guard (D.O.L - 3wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : A75 gpm

Outlet Size : 6" NPT



PIPE FRICTION LOSS TABLE

Grade	Light	Medium	Heavy
Nominal Dia in Inches	Rate of Flow in gpm	Rate of Flow in gpm	Rate of Flow in gpm
1,5	30 - 43	28 - 42	25 - 38
2	44 - 83	43 - 79	39 - 72
2,5	84 - 158	80 - 156	73 - 146
3	159 - 247	157 - 238	147 - 226
4	248 - 490	239 - 476	227 - 455
5	-	477 - 834	456 - 816
6	-	835 - 1337	817 - 1312

Note : Permissible Range of Volume Rate of Flow in GPM through **Galvanized Steel** Pipe to limit Friction losses to 10% of the Pipe Length

Grade	Class (36.25 psi)	Class (58 psi)	Class (87 psi)
Nominal Dia in Inches	Rate of Flow in gpm	Rate of Flow in gpm	Rate of Flow in gpm
1,5	-	-	Up to 32
2	-	-	33 - 59
2,5	-	60 - 115	60 - 108
3	-	116 - 182	109 - 171
3,5	183 - 311	183 - 294	172 - 276
4	312 - 528	295 - 504	277 - 472
5	529 - 740	505 - 704	473 - 658
5,5	741 - 999	705 - 946	659 - 889
6,5	1000 - 1418	947 - 1349	892 - 1267

Note : Permissible Range of Volume Rate of Flow in GPM through **RPVC** Pipe to limit Friction losses to 10% of the Pipe Length

CONVERSION TABLE

FLOW RATE

US-gpm	lps	lpm	m³/h	ft³/h	ft³/min	imp - gpm	US - barrel / day
1	0,063	3,785	0,2271	8,0209	0,1337	0,833	34,286
15,850	1	60	3,6	127,133	2,1189	13,2	543,439
0,264	0,017	1	0,06	2,1189	0,0353	0,22	9,057
4,403	0,278	16,667	1	35,3147	0,5886	3,666	150,955
0,125	0,008	0,472	0,0283	1	0,0167	0,104	4,275
7,48	0,472	28,317	1,6990	60	1	6,229	256,475
1,201	0,076	4,546	0,2728	9,6326	0,1605	1	41,175
0,029	0,002	0,110	0,0066	0,2339	0,0039	0,024	1

LIQUID

US-gallon	m³	liter (l)	milliliter (ml)	Imp. gallon	ft³
1	0,00378	3,785	3785	0,8327	0,1337
264,2	1	1000	1X10 ⁶	220	35,3147
0,2642	0,001	1	1000	0,22	0,0353
2,642X10 ⁻⁴	1X10 ⁻⁶	0,001	1	2,2X10 ⁻⁴	3,53X10 ⁻⁵
1,201	0,00455	4,546	4546	1	0,1605
7,4805	0,0283	28,317	28,317	6,2288	1

LIQUID HEAD AND PRESSURE

Psi	N/m² (Pa)	kPa	bar	Kgf/cm²	foot for water ft H ₂ O	Meter of water m H ₂ O	Millimeter of Mercury mm Hg	Inch of Mercury in Hg
1	6895	6,895	0,069	0,0703	2,31	0,703	51,72	2,036
1,45X10 ⁻⁴	1	0,001	1X10 ⁻⁵	1,02X10 ⁻⁵	3,35X10 ⁻⁴	1,02X10 ⁻⁴	0,0075	2,95X10 ⁻⁴
0,145	1000	1	0,01	0,0102	0,335	0,102	7,5	0,295
0,145	1X10 ⁵	100	1	1,02	33,52	10,2	750,1	29,53
14,22	98,067	98,070	0,981	1	32,81	10	735,6	28,96
0,433	2984	2,984	0,030	0,0305	1	0,305	22,42	0,882
1,42	9789	9,789	0,098	0,1	3,28	1	73,42	2,891
0,019	133,3	0,133	0,0013	0,0014	0,045	0,014	1	0,039
0,491	3386	3,386	0,0338	0,0345	1,133	0,0345	25,4	1

LENGTH

Inch (in)	Millimeter (mm)	Centimeter (cm)	Meter (m)	Foot (ft)	Yard (yd)
1	25,4	2,54	0,0254	0,0833	0,0278
0,0394	1	0,10	0,001	0,0033	0,0011
0,3937	10	1	0,01	0,0328	0,0109
39,3701	1000	100	1	3,2808	1,0936
12	304,8	30,48	0,3048	1	0,3333
36	914,4	91,44	0,9144	3	1

1 kilometer = 1000 metre = 0,62137 mile; 1 mile = 1609,34 metre = 1,60934 kilometre

MASS

Pound (lb)	Kilogram (kg)	Hundred Weight (cwt)	Tonne (t)	Ton long (tn)	short Ton (sh tn)
Pound (lb)	Kilogram (kg)	Hundred Weight (cwt)	Tonne (t)	Ton long (tn)	short Ton (sh tn)
1	0,454	0,0089	4,54x10 ⁻⁴	4,46x10 ⁻⁴	5,0x10 ⁻⁴
2,205	1	0,0197	0,001	9,84x10 ⁻⁴	0,0011
112	50,802	1	0,0508	0,05	0,056
2204,6	1000	19,684	1	0,9842	1,1023
2240	1016	20	1,0161	1	1,1020
2000	907,2	17,857	0,9072	0,8929	1

TEMPERATURE

To Convert From	To	Use Formula
Celsius, tC	Kelvin, tK	tK = tC + 273,15
Fahrenheit, tF	Kelvin, tK	tK = (tF + 459,67) / 1,8
Celsius, tC	Fahrenheit, tF	tF = 1,8 tC + 32
Fahrenheit, tF	Celsius, tC	tC = (tF - 32) / 1,8
Kelvin, tK	Celsius, tC	tC = tK - 273,15
Kelvin, tK	Fahrenheit, tF	tF = 1,8 tK - 459,67

Submersible Motors





MODEL IDENTIFICATION CODE

BOREHOLE SUBMERSIBLE MOTOR

X X X S - XXX XX - X X M (H)(P)

ZIRANTEC ELECTRIC MOTOR

NOMINAL MOTOR DIAMETER

DEEPWELL SUBMERSIBLE MOTOR

W - Water filled
O - Non-toxic fluid filled
R - Resin filled encapsulated

This digit is only applicable for
1-phase 'R' Series motors without
lightning arrester.

MOTOR POWER (HP)
Decimals values are marked in European standards
(05 = 0,5), (10 = 1,0), (75 = 7,5), (A00 = 100)

(Applicable for special models)

P - Motor with PT sensor

H - High temperature motor with
XLPE / PA Winding

This digit will be applicable only when
the Motor is supplied with Mechanical Seal

VOLTAGE (This digit is applicable
except 230V 1Ph)

A = 110, D = 220, E = 230, I = 380

K = 440, M = 460, P = 575, T = 690V

V = 220/380, W = 230/380

X = 110/220, Z = 115/230

PHASE / CONNECTION /
CONTROL BOX / FREQUENCY

2 = 1Ph / PSC type / 2 wire / 60Hz

3 = 1 Ph / CSCR / 3 wire / 60Hz

4 = 3 Ph / DOL / 3 wire / 60Hz

6 = 3 Ph / STAR-DELTA / 6 wire / 60Hz

TYPE OF MATERIALS OF
CONSTRUCTION (M.O.C)
A / B / N / S / T

BOREHOLE SUBMERSIBLE MOTOR

MOTOR MODEL	/	CODE
FM XX X - XXX X - X	/	FM6W-150S-5DMPH

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

OIL FILLED SUBMERSIBLE MOTORS

These oil filled motors are one among the proven & successful products from the house of ZIRANTEC. These motors are developed with due diligence complying with all safety standards and giving importance to the customer's need. All the components that are in contact with water are made of AISI 304 stainless steel and the motor is pre-filled with edible grade oil, which acts as coolant media as well as lubricant. The freezing point of the oil used is -10°C.

Ball bearings are used to withstand the high axial load and the lower ball bearings are of angular contact type.

High quality carbon/ceramic mechanical seal and oil seal made of Nitrile rubber are used to ensure better sealing system. Pressure equalizing rubber diaphragm is provided to balance the pressure and volume variations due to thermal expansion of the oil inside the motor. Motor sealing are made by means of 'O' rings. Shaft seals and sand guard prevents ingress of well water.

Sand and fiber particles into the motor. Care should be taken to ensure that the motor does not run when it is not submerged in the water. To prevent the motor from dry running, install water level monitor / dry run prevent. The motor needs a constant flow of water passed over it's body to keep it at correct operating temperature. Ideally the motors should be set just above the final yield point of bore well and when the level is not ascertained, fit a "flow inducer pipe" over the pumpset to ensure adequate cooling. It is mandatory to use ZIRANTEC Control boxes for all motors with adequate protection & control systems. Mounting dimensions of these motors are in accordance with NEMA standard.

FEATURES

- High operating efficiency and lesser power consumption
- Extremely hardwearing ball & angular contact bearings
- Corrosive resistance stainless steel body
- Filled with non-toxic oil
- Can be easily dismantled and repaired

APPLICATIONS

These prime mover submersible motors are suitable to couple with deepwell submersible pump ends used for

- Residential
- Irrigation
- Fountains
- Gardens
- Industrial water supply
- Sprinkler systems
- Pressure boosting units
- Ponds
- Mining
- CBM (coal bed methane)

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

OIL FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 4"

SPECIFICATIONS

Nominal Dia	4" (100mm)
Maximum Outer Diameter	3,74"
Power Range	0,5 HP to 3 HP - Single Phase 0,5 HP to 10 HP - Three Phase
Speed	3450 rpm
Version	Single Phase - 110 V & 220 V, 60 Hz, A.C Supply Three Phase - 220 V, 380 V & 460 V, 60 Hz, A.C Supply
Class of Insulation	F
Degree of Protection	IP 68
Direction of Rotation	CCW - Single Phase Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	0,5 HP to 1 HP - 337 lbs 1,5 HP to 3 HP - 562 lbs 7,5 HP to 10 HP - 1011 lbs
Minimum Cooling Flow Along the Motor	0,5 ft/sec
Maximum Liquid Temperature	91,4°F
Maximum Immersion Depth	492 ft
Starts per Hour	30 Times
Shaft Type	Splines
Mounting Standard	NEMA
Method of Starting	Single Phase - Permanent Split Capacitor (PSC) Three Phase - Direct On Line (DOL)
Cable Lead out	3 Wire Permanent Type TPE/EPDM Rubber Flat Cable



Type - A

MATERIALS OF CONSTRUCTION

Part Name	Type - A
Outer Shell	SS - 304
Shaft Extension	SS - 420
'O' Ring	High Nitrile Rubber
Mechanical Seal	Carbon / Ceramic
Diaphragm	High Nitrile Rubber
Cable	TPE / EPDM

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

Part No.	Part Name
29,06	Outer shell
32,07	Nut
32,09	O-Ring
32,11	Plug
32,12	Screw
32,14	Spring Washer
32,15	Stud
32,16	Washer
32,17	Wave washer
32,18	Bearing

80 | BOREHOLE SUBMERSIBLE MOTORS

OIL FILLED SUBMERSIBLE MOTORS

110V, SINGLE PHASE

ELECTRICAL & DIMENSIONAL DATA

Models	kW	HP	S.F.	PF Cosf	EFF.%	Capacitor MFD		Amps		Max Down Thrust load (lbs)	Height H1		Nett Weight		Cable Size (sq.mm)
						Starting	Running	F.L	Starting		mm	Inches	kg	lbs	
FM40-10A-3A	0,75	1	1,5	0,98	65	-	60	12,9	46	337	381	15	8	17,6	1,5
FM40-15A-3A	1,1	1,5	1,4	0,98	67	-	80	14,9	58	562	399	15,7	9	19,8	1,5

220V, SINGLE PHASE

ELECTRICAL & DIMENSIONAL DATA

Models	kW	HP	S.F.	PF Cosf	EFF.%	Capacitor MFD		Amps		Max Down Thrust load (lbs)	Height H1		Nett Weight		Cable Size (sq.mm)
						Starting	Running	F.L	Starting		mm	Inches	kg	lbs	
FM40-05A-3D	0,37	0,5	1,6	0,90	48	80-100	15	5,5	22,5	337	361	14,2	7,3	16,1	1,5
FM40-07A-3D	0,55	0,75	1,5	0,94	53	80-100	20	6,3	28	337	381	15	8,1	17,9	1,5
FM40-10A-3D	0,75	1	1,4	0,93	54	80-100	25	7,6	36	337	399	15,7	9,2	20,3	1,5
FM40-15A-3D	1,1	1,5	1,3	0,96	58	100-120	35	9,4	46	562	429	16,9	10,4	22,9	1,5
FM40-20A-3D	1,5	2	1,25	0,97	63	120-150	45	12	59	562	480	18,9	12,2	26,9	2
FM40-30A-3D	2,2	3	1,15	0,98	69	200-250	50	15,6	90	562	521	20,5	14,4	31,8	2,3

220V, THREE PHASE

ELECTRICAL & DIMENSIONAL DATA

Model	kW	HP	S.F.	Current (Amps)		Eff. (%)	PF Cosf	Max Down Thrust Load	Height H1		Nett Weight		Cable size (Sq.mm)
				F. L	Starting				mm	Inches	kg	lbs	
FM40-05A-4D	0,37	0,5	1,6	2	10	62	0,7	337	409	16,1	7,8	17,2	1,5
FM40-07A-4D	0,55	0,75	1,5	3,2	16	65	0,71	337	409	16,1	7,8	17,2	1,5
FM40-10A-4D	0,75	1	1,4	4,4	20,0	70	0,72	337	429	16,9	8,8	19,4	1,5
FM40-15A-4D	1,1	1,5	1,3	6,5	28,0	71	0,7	562	450	17,7	9,6	21,2	1,5
FM40-20A-4D	1,5	2	1,25	7,6	34	72	0,7	562	480	18,9	11,4	25,1	1,5
FM40-30A-4D	2,2	3	1,15	10,5	45	75	0,72	562	541	21,3	13,8	30,4	1,5
FM40-40A-4D	3	4	1,15	14,2	63	76	0,76	562	602	23,7	18,1	39,9	1,5
FM40-50A-4D	3,7	5	1,15	16,2	71	77	0,76	562	650	25,6	20,1	44,3	2
FM40-55A-4D	4	5,5	1,15	18	82	78	0,76	1011	650	25,6	20,1	44,3	2
FM40-75A-4D	5,5	7,5	1,15	23,5	104	78	0,78	1011	762	30	26,2	57,8	2,3
FM40-100A-4D	7,5	10	1,15	31,5	140	80	0,86	1011	879	34,6	32,6	71,8	2,3

380V, THREE PHASE

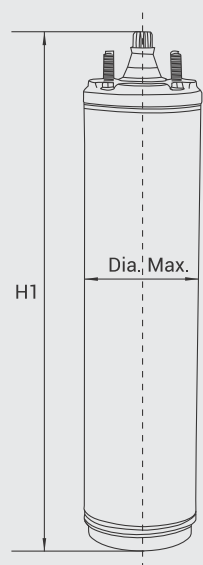
ELECTRICAL & DIMENSIONAL DATA

Model	kW	HP	S.F.	Current (Amps)		Eff. (%)	PF Cosf	Max Down Thrust Load	Height H1		Nett Weight		Cable size (Sq.mm)
				F. L	Starting				mm	Inches	kg	lbs	
FM40-05A-4I	0,37	0,5	1,6	1,3	6,5	62	0,7	337	409	16,1	7,8	17,2	1,5
FM40-07A-4I	0,55	0,75	1,5	2	11	65	0,71	337	409	16,1	7,8	17,2	1,5
FM40-10A-4I	0,75	1	1,4	2,6	14	70	0,72	337	429	16,9	8,8	19,4	1,5
FM40-15A-4I	1,1	1,5	1,3	3,6	20	71	0,7	562	450	17,7	9,6	21,2	1,5
FM40-20A-4I	1,5	2	1,25	4,9	25	72	0,7	562	480	18,9	11,4	25,1	1,5
FM40-30A-4I	2,2	3	1,15	6	30	75	0,72	562	541	21,3	13,8	30,4	1,5
FM40-40A-4I	3	4	1,15	8,2	37	76	0,76	562	602	23,7	18,1	39,9	2
FM40-50A-4I	3,7	5	1,15	9,3	42	77	0,76	562	650	25,6	20,1	44,3	2
FM40-55A-4I	4	5,5	1,15	10,4	47	78	0,76	1011	650	25,6	20,1	44,3	2
FM40-75A-4I	5,5	7,5	1,15	13,7	65	78	0,78	1011	762	30	26,2	57,8	2,3
FM40-100A-4I	7,5	10	1,15	18,2	102	80	0,86	1011	879	34,6	32,6	71,8	2,3

460V, THREE PHASE

ELECTRICAL & DIMENSIONAL DATA

Model	kW	HP	S.F.	Current (Amps)		Eff. (%)	PF Cosf	Max Down Thrust Load	Height H1		Nett Weight		Cable size (Sq.mm)
				F. L	Starting				mm	Inches	kg	lbs	
FM40-05A-4M	0,37	0,5	1,6	1,1	5,5	62	0,76	337	409	16,1	7,8	17,2	1,5
FM40-07A-4M	0,55	0,75	1,5	1,6	8	66	0,75	337	409	16,1	7,8	17,2	1,5
FM40-10A-4M	0,75	1	1,4	2	10	70	0,75	337	429	16,9	8,8	19,4	1,5
FM40-15A-4M	1,1	1,5	1,3	2,8	14	72	0,74	562	450	17,7	9,6	21,2	1,5
FM40-20A-4M	1,5	2	1,25	3,8	19	74	0,73	562	480	18,9	11,4	25,1	2
FM40-30A-4M	2,2	3	1,15	5,5	26	74	0,74	562	541	21,3	13,8	30,4	2,3
FM40-40A-4M	3	4	1,15	6,9	34	76	0,74	562	602	23,7	18,1	39,9	2,3
FM40-50A-4M	3,7	5	1,15	8,7	43	75	0,77	562	650	25,6	20,1	44,3	2,3
FM40-55A-4M	4	5,5	1,15	10	50	76	0,78	1011	650	25,6	20,1	44,3	2,3
FM40-75A-4M	5,5	7,5	1,15	12,8	65	78	0,78	1011	762	30	26,2	57,8	2,3



Splined shaft 14 Teeth - module 1,5875 Pressure angle 30°
A.N.S.I.B - 92 - 1 - 1970
Coupling Class 5

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

RESIN FILLED ENCAPSULATED SUBMERSIBLE MOTORS

Nominal Diameter : 4" & 6"

These motors are hermetically sealed, encapsulated and water lubricated type with removable cable lead out. The stator windings are of enameled copper wire and the wound stator is mounted in a stainless steel shell and is completely protected by a stainless steel cylinder and stator room is pre-filled with resin. The resin filled in the space between the stator & the stainless steel cylinder dissipates heat quickly resulting in longer motor life. Except stator, other portions of the motor is pre-filled with deionised water containing propylene glycol (anti-freeze agent) which serves as coolant & lubricant for rotor, bushes and thrust bearing. Dynamically balanced rotors of these motors maintain uniform clearance thereby giving better efficiency and increase the life cycle of the water lubricated bush bearings. Specially designed high performance thrust bearings are used that can withstand high axial thrust loads and upthrust loads with minimum wear and tear.

The unique design of thrust bearings creates a wedge of water between the shoe and the disc and thereby providing better water lubrication and increases the life cycle of the thrust bearings. Pressure equalizing rubber diaphragm is provided to guard the pressure and volume variations due to thermal expansion of the water inside the motor. Motor sealing are made by means of 'O' rings. Shaft seals and sand guard prevents ingress of well water, sand and fiber particles into the motor. Care should be taken to ensure that the motor does not run when it is not submerged in the water. To prevent the motor dry running, install water level monitor / dry run preventor. The motor needs a constant flow of water past its body to keep it at correct operating temperature. Ideally, the motor should be set just below the level at which water enters the bore well. When this level is not ascertained, fit a "flow inducer sleeve" over the pumpset to ensure adequate cooling. It is mandatory to install ZIRANTEC Control box for all single phase 3 wire motors. All 3 Ph motors require an adequate motor protection control panel. Mounting dimensions of motors are in accordance with NEMA standards.

FEATURES

- Corrosive resistant stainless steel body.
- Specially designed thrust bearing to withstand high axial thrust loads.
- Low watt loss silicon steel laminations for better starting torque.
- Higher power factor resulting in lesser power consumption.
- Better heat dissipation for prolonged life cycle.
- All single phase two wire motors are supplied with in-built permanent split capacitor.
- Optional : All single phase models are also available with lightning arrester.

APPLICATIONS

These prime mover submersible motors are suitable to couple with deepwell submersible pump ends used for

- Residential
- Irrigation
- Fountains
- Gardens
- Industrial water supply
- Sprinkler systems
- Pressure boosting units
- Mining
- Oil & Gas
- De-watering

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

RESIN FILLED ENCAPSULATED SUBMERSIBLE MOTORS

Nominal Diameter : 4"

SPECIFICATIONS

Nominal Dia	4"
Maximum Outer Diameter	3,85"
Power Range	0,5 HP to 1.5 HP - Single Phase 2 Wire 0,5 HP to 5 HP - Three Phase 3 Wire 0,5 HP to 10 HP - Three Phase 3 Wire
Speed	3450 rpm
Version	Single Phase - 110 V, 220 V, 60 Hz, A.C Supply Three Phase - 220 V, 380 V & 460 V, 60 Hz, A.C Supply
Class of Insulation	B
Degree of Protection	IP 68
Direction of Rotation	CCW - Single Phase Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	0,5 HP to 0,75 HP - 300 lbs 1 HP to 2 HP - 650 lbs 3 HP to 10 HP - 1500 lbs
Minimum Cooling Flow Along the Motor	0,25 ft/sec
Maximum Liquid Temperature	91,4°F
Starts per Hour	20 Times
Shaft Type	Splines
Mounting Standard	NEMA
Method of Starting	Single Phase-3 Wire - Capacitor Start Capacitor Run (CSCR) Single Phase-2 Wire - Permanent Split Capacitor (PSC) Three Phase - Direct On Line (DOL)
Cable Lead out	2 & 3 Wire Removable Type TPE Flat Cable



MATERIALS OF CONSTRUCTION

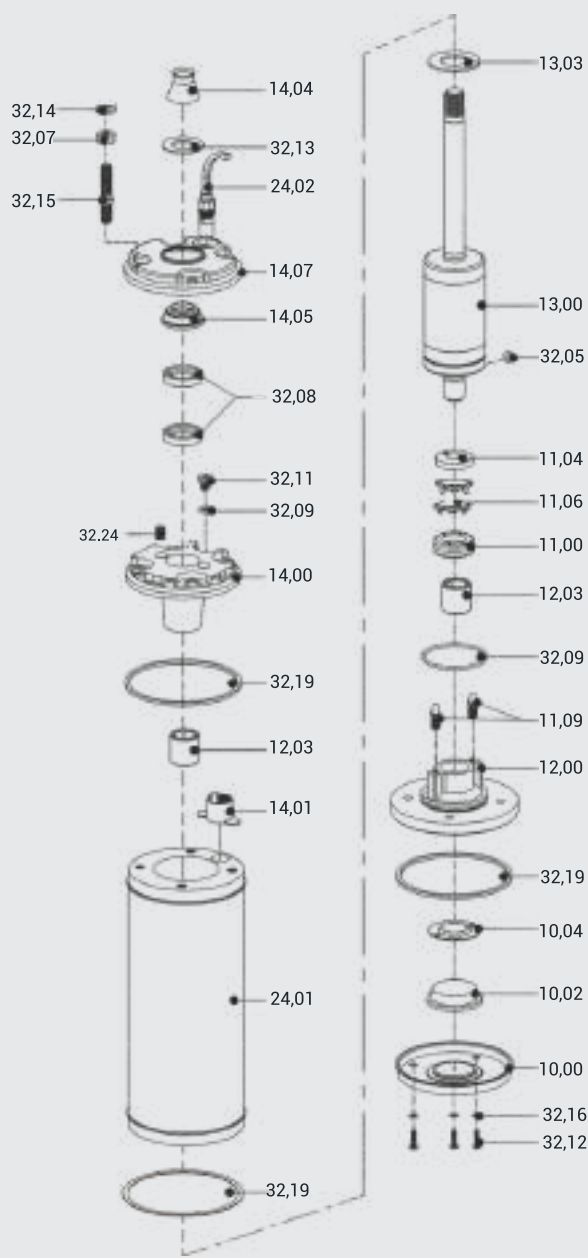
Part Name	Type - A
Housings Shell	SS - 304
Stator Shell	SS - 304
Thrust Pad	Carbon Graphite
Thrust Bearing	SS - 420
'O' Ring	Nitrile Rubber (NBR)
Diaphragm	Nitrile Rubber (NBR)
Motor Base	SS - 304
Cable	TPE

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

EXPLODED VIEW

Nominal Diameter : 4"

(0.5 to 3HP)
(*2 wire & 3 wire)



Part No.	Part Name
10,00	Motor base
10,02	Diaphragm
10,04	Diaphragm guide plate
11,00	Thrust Base
11,04	Thrust Pad
11,06	Thrust segment
11,09	Rocker screw
12,00	Lower housing
12,03	Bush
13,00	Rotor
13,03	Upthrust washer
14,00	Upper housing
14,01	Cable grommet clamp
14,04	Rubber sand guard
14,05	Sand guard
14,07	Upper housing shell
21,01	Wound stator
24,02	Lead out cable
32,05	Pad key
32,07	Nut
32,08	Oil seal
32,09	O - Ring
32,11	Drain Plug
32,12	Screw
32,13	Sand guard washer
32,14	Spring washer
32,15	Stud
32,16	Washer
32,19	Gasket
32,24	Vent plug

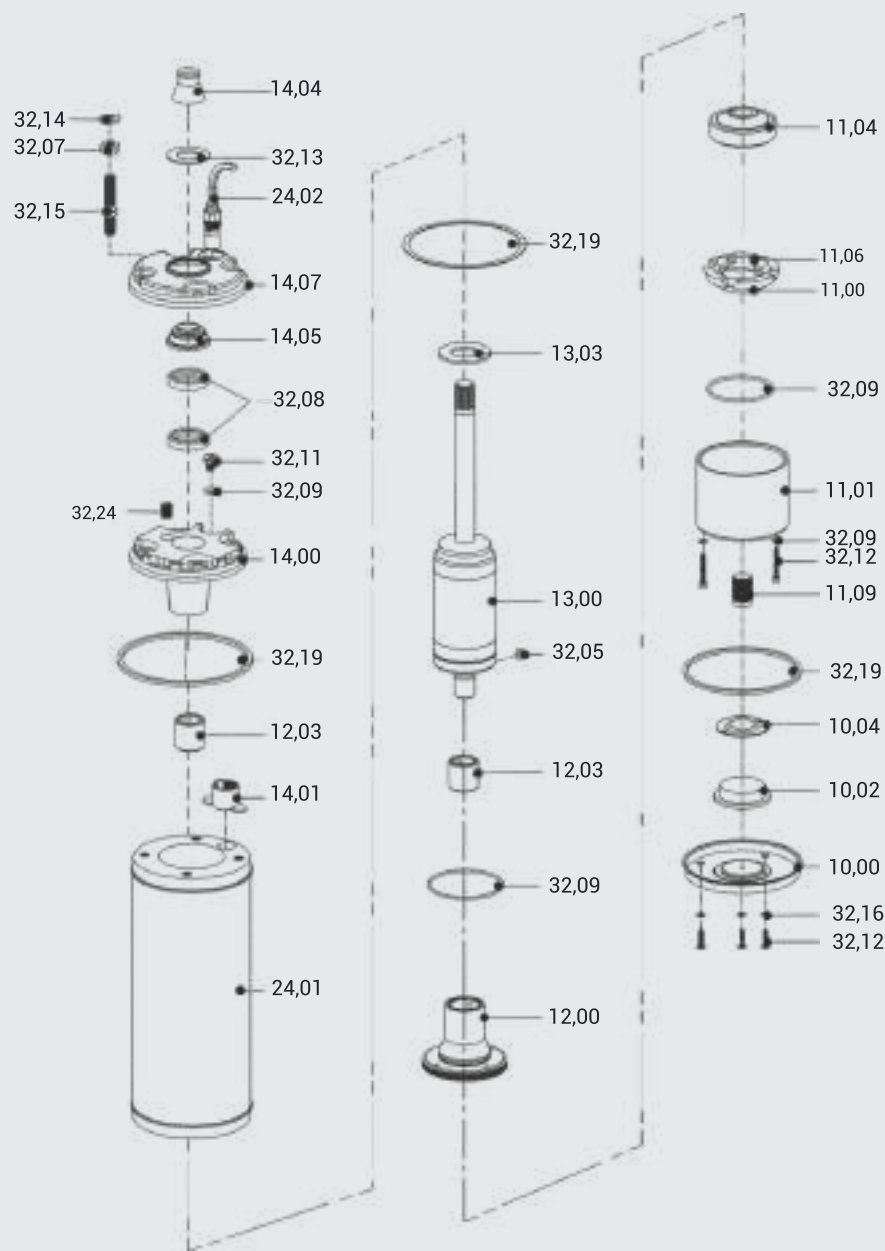
* 2 wire motor's stator is in-built with permanent split capacitor

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

EXPLODED VIEW

Nominal Diameter : 4"

(4HP and above)



Part No.	Part Name
10,00	Motor base
10,02	Diaphragm
10,04	Diaphragm guide plate
11,00	Thrust Base
11,01	Thrust base housing
11,04	Thrust Pad
11,06	Thrust segment
11,09	Rocker screw
12,00	Lower housing
12,03	Bush
13,00	Rotor
13,03	Upthrust washer
14,00	Upper housing
14,01	Cable grommet clamp
14,04	Rubber sand guard
14,07	Upper housing shell
24,01	Wound stator
24,02	Lead out cable
32,05	Pad key
32,07	Nut
32,08	Oil seal
32,09	O - ring
32,11	Drain plug
32,12	Screw
32,13	Sand guard washer
32,14	Spring washer
32,15	Stud
32,16	Washer
32,19	Gasket
32,24	Vent plug

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

RESIN FILLED ENCAPSULATED SUBMERSIBLE MOTORS

Nominal Diameter : 4"

110 V & 220V, SINGLE PHASE, 2 WIRE MOTORS

TECHNICAL & ELECTRICAL DATA

Models	Voltage	HP	S.F.	Rated (F.L.)		Maximum (S.F.)		Eff. %		P.F. %		Locked Rotor Amps	Max. Down Thrust Load (lbs)	Capacitor Value µf
				Amps	Watts	Amps	Watts	S.F.	F.L.	S.F.	F.L.			
FM4RS-05A-2A	110V	0,5	1,6	7,1	753	9,2	980	60	50	97	97	32	300	50
FM4RS-07A-2A	110V	0,75	1,5	10	1100	12,7	1395	61	52	99	99	43	300	60
FM4RS-10A-2A	110V	1	1,4	12,1	1313	15	1640	64	57	98	99	55	650	80
FM4RS-05A-2D	220V	0,5	1,6	3,4	730	4,3	960	62	51	97	92	18	300	25
FM4RS-07A-2D	220V	0,75	1,5	4,7	998	5,8	1300	61	56	95	92	25	300	30
FM4RS-10A-2D	220V	1	1,4	6,2	1306	7,5	1650	63	57	95	91	33	650	35
FM4RS-15A-2D	220V	1,5	1,3	9	1931	10,5	2300	65	62	97	95	45	650	45

110 V & 220V, SINGLE PHASE, 3 WIRE MOTORS

TECHNICAL & ELECTRICAL DATA

Models	Voltage	HP	S.F.	Rated (F.L.)		Maximum (S.F.)		Eff. %		P.F. %		Locked Rotor Amps	Max. Down Thrust Load (lbs)	Capacitor Value µf	
				Amps	Watts	Amps	Watts	S.F.	F.L.	S.F.	F.L.			Start	Run
FM4RS-05A-3A	110V	0,5	1,6	8,5	760	11,5	1120	54	50	88	82	36	300	125	20
FM4RS-07A-3A	110V	0,75	1,5	10,3	1027	14,5	1450	57	55	91	90	46	300	125	30
FM4RS-10A-3A	110V	1	1,4	12	1186	16	1620	64	63	93	90	58	650	150	40
FM4RS-05A-3D	220V	0,5	1,6	4,2	796	5,5	1120	54	50	76	62	23	300	60	10
FM4RS-07A-3D	220V	0,75	1,5	5,3	1141	6,9	1550	61	56	75	64	32	300	60	15
FM4RS-10A-3D	220V	1	1,4	6,4	1412	8,3	1825	63	57	73	62	39	650	100	20
FM4RS-15A-3D	220V	1,5	1,3	8,8	1994	11,5	2390	65	62	86	82	46	650	100	20
FM4RS-20A-3D	220V	2	1,15	10,7	2236	12,3	2453	70	66	93	92	54	650	125	30
FM4RS-30A-3D	220V	3	1,15	15,5	3530	18,5	4035	69	69	97	97	85	1500	150	45
FM4RS-50A-3D	220V	5	1,15	25,5	5770	31	6634	69	69	98	98	120	1500	250	80

220V, THREE PHASE, 3 WIRE MOTORS

TECHNICAL & ELECTRICAL DATA

Models	HP	S.F.	Rated (F.L.)		Maximum (S.F.)		Eff. %		P.F. %		Locked Rotor Amps	Max. Down Thrust Load (lbs)
			Amps	Watts	Amps	Watts	S.F.	F.L.	S.F.	F.L.		
FM4R-05A-4D	0,5	1,6	2,5	590	3	870	68	63	76	62	15,5	300
FM4R-07A-4D	0,75	1,5	3,2	825	3,9	1170	70	68	78	66	20	300
FM4R-10A-4D	1	1,4	4	1100	4,8	1460	71	71	80	70	26,9	650
FM4R-15A-4D	1,5	1,3	5	1490	6	1910	74	74	83	76	34	650
FM4R-20A-4D	2	1,25	6,8	2180	8,2	2720	73	73	86	80	45	650
FM4R-30A-4D	3	1,15	9,5	3010	11	3450	74	74	81	78	62	1500
FM4R-50A-4D	5	1,15	16	5100	18	5830	73	73	84	81	105	1500
FM4R-55A-4D	5,5	1,15	18,2	5650	20,6	6540	73	73	80	78	115	1500
FM4R-75A-4D	7,5	1,15	23	7400	26,8	8460	75	75	83	81	165	1500
FM4R-100A-4D	10	1,15	31	10000	35	11450	75	74	88	86	230	1500

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

RESIN FILLED ENCAPSULATED SUBMERSIBLE MOTORS

Nominal Diameter : 4"

380V, THREE PHASE, 3 WIRE MOTORS

TECHNICAL & ELECTRICAL DATA

Models	HP	S.F.	Rated (F.L.)		Maximum (S.F.)		Eff. %		P.F. %		Locked Rotor Amps	Max. Down Thrust Load (lbs)
			Amps	Watts	Amps	Watts	S.F.	F.L.	S.F.	F.L.		
FM4R-05-4I	0,5	1,6	1,5	590	2,2	870	68	63	76	62	9,7	300
FM4R-07-4I	0,75	1,5	2	825	2,6	1170	70	68	78	66	12	300
FM4R-10-4I	1	1,4	2,4	1100	2,9	1460	71	71	80	70	16,5	650
FM4R-15-4I	1,5	1,3	3	1490	3,7	1910	74	74	83	76	20	650
FM4R-20-4I	2	1,25	4,1	2180	5	2720	73	73	86	80	28,5	650
FM4R-30-4I	3	1,15	5,9	3010	6,8	3450	74	74	81	78	38	1500
FM4R-50-4I	5	1,15	9,8	5100	11	5830	73	73	84	81	65	1500
FM4R-55-4I	5,5	1,15	11	5650	12,2	6450	73	73	80	78	70	1500
FM4R-75-4I	7,5	1,15	14	7400	16	8460	75	75	83	81	98	1500
FM4R-100-4I	10	1,15	19,5	10000	21,2	11500	75	74	88	86	140	1500

460V, THREE PHASE, 3 WIRE MOTORS

TECHNICAL & ELECTRICAL DATA

Models	HP	S.F.	Rated (F.L.)		Maximum (S.F.)		Eff. %		P.F. %		Locked Rotor Amps	Max. Down Thrust Load (lbs)
			Amps	Watts	Amps	Watts	S.F.	F.L.	S.F.	F.L.		
FM4R-05-4M	0,5	1,6	1,3	590	1,6	870	68	63	76	62	7,5	300
FM4R-07-4M	0,75	1,5	1,7	825	2	1170	70	68	78	66	11	300
FM4R-10-4M	1	1,4	2	1100	2,5	1460	71	71	80	70	13,5	650
FM4R-15-4M	1,5	1,3	2,5	1490	3,2	1910	74	74	83	76	16,8	650
FM4R-20-4M	2	1,25	3,4	2180	4,2	2720	73	73	86	80	23,5	650
FM4R-30-4M	3	1,15	4,9	3010	5,6	3450	74	74	81	78	32	1500
FM4R-50-4M	5	1,15	8	5100	9	5830	73	73	84	81	55	1500
FM4R-55-4M	5,5	1,15	9,3	5650	10,2	6540	73	73	80	78	60	1500
FM4R-75-4M	7,5	1,15	11,5	7400	13,5	8460	75	75	83	81	80	1500
FM4R-100-4M	10	1,15	16	10000	17,4	11500	75	74	88	86	115	1500

SINGLE PHASE 2 & 3 WIRE MOTORS

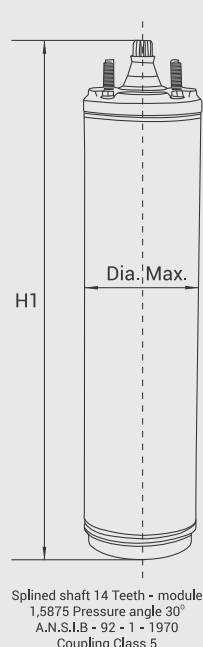
DIMENSIONS & WEIGHT DATA

Models		HP	Leadout Cable Size (Sq.mm)	Height H1				Nett Weight (Approx.)			
2 wire	3 wire			2 wire		3 wire		2 wire		3 wire	
				mm	Inch	mm	Inch	kg	lbs	kg	lbs
FM4RS-05-2	R4AS-05-3	0,5	2	292	11,5	241	9,5	44	19,8	39	17,8
FM4RS-07-2	R4AS-07-3	0,75	2	320	12,6	270	10,6	50	22,7	44	19,8
FM4RS-10-2	R4AS-10-3	1	2	348	13,7	297	11,7	55	24,9	50	22,9
FM4RS-15-2	R4AS-15-3	1,5	2	396	15,6	345	13,6	68	30,9	64	29,1
NA	R4AS-20-3	2	2	-	-	383	15,1	-	-	71	32,2
NA	R4AS-30-3	3	2	-	-	531	20,9	-	-	112	50,7
NA	R4AS-50-3	5	2	-	-	686	27	-	-	145	66,1

THREE PHASE 3 WIRE MOTORS

DIMENSIONS & WEIGHT DATA

Models	HP	Leadout Cable Size (Sq.mm)	Height H1		Nett Weight (Approx.)	
			mm	Inch	kg	lbs
FM4R-05-4	0,5	2	241	9,5	39	17,8
FM4R-07-4	0,75	2	270	10,6	44	19,8
FM4R-10-4	1	2	297	11,7	50	22,9
FM4R-15-4	1,5	2	297	11,7	50	22,9
FM4R-20-4	2	2	345	13,6	64	29,1
FM4R-30-4	3	2	455	17,9	88	40,1
FM4R-50-4	5	2	530	20,9	112	50,7
FM4R-55-4	5,5	2	556	21,9	116	52,9
FM4R-75-4	7,5	2	686	27	145	66,1
FM4R-100-4	10	2	757	29,8	165	75



In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

RESIN FILLED ENCAPSULATED SUBMERSIBLE MOTORS

Nominal Diameter : 6"

SPECIFICATIONS

Nominal Dia	6"
Maximum Outer Diameter	5,62"
Power Range	5 HP to 60 HP - Three Phase
Speed	3450 rpm
Version	Three Phase - 230 V, 380 V & 460 V, 60 Hz, A.C Supply
Class of Insulation	F
Degree of Protection	IP 68
Direction of Rotation	Electrically Reversible
Type of Duty	S1 (Continuous)
Down Thrust Load	5 HP to 30 HP - 3485 lbs 40 HP to 60 HP - 6182 lbs
Minimum Cooling Flow Along the Motor	0,52 ft/sec
Maximum Liquid Temperature	5 HP to 40 HP - 86°F, 50 HP & 60 HP - 122°F
Starts per Hour	20 Times
Shaft Type	Splines
Mounting Standard	NEMA
Method of Starting	Three Phase - Direct On Line (DOL) Three Phase - Star Delta (SD)
Cable Lead out	3 Wire Removable Type TPE Flat Cable



MATERIALS OF CONSTRUCTION

Part Name	Type - A	Type - N	Type - B	Type - S	Type - T
Shaft Seal / Mechanical Seal	Nitrile Rubber (NBR) / Ceramic - Carbon	Nitrile Rubber (NBR) / Ceramic - Carbon	Nitrile Rubber (NBR) / Ceramic - Carbon	Nitrile Rubber (NBR) / Ceramic - Carbon	Nitrile Rubber (NBR) / Ceramic - Carbon
Upper & Lower Housings	Cast Iron	Cast Iron	Cast Iron	Casted SS - 304	Casted SS - 316
Stator Shell	SS - 304	SS - 316	SS - 304	SS - 304	SS - 316
Thrust Pad	Carbon Graphite	Carbon Graphite	Carbon Graphite	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420	SS - 420	SS - 420	SS - 420
Diaphragm	High Nitrile Rubber	High Nitrile Rubber	High Nitrile Rubber	High Nitrile Rubber	High Nitrile Rubber
Motor Base	SS - 304	SS - 316	Cast Iron	SS - 304	SS - 316
Upper Housing Shell	SS - 304	SS - 316	Nil	Nil	Nil
Shaft	Upto 22kW : SS-431 26 to 37kW : EN8	Upto 22kW : SS - 431 26 to 37 kW : EN8	Upto 22kW : SS - 431 26 to 37 kW : EN8	Upto 22kW : SS - 431 26 to 37 kW : EN8	Upto 22kW : SS - 431 26 to 37 kW : EN8
Shaft Extension	Upto 22kW : SS-431 26 to 37kW : 17,4 ph	Upto 22kW : SS-431 26 to 37kW : 17,4 ph	Upto 22kW : SS-431 26 to 37kW : 17,4 ph	Upto 22kW : SS-431 26 to 37kW : 17,4 ph	Upto 22kW : SS-431 26 to 37kW : 17,4 ph
Sleeves	Upto 22kW : NA 26 to 37kW : SS-431	Upto 22kW : NA 26 to 37kW : SS-431	Upto 22kW : NA 26 to 37kW : SS-431	Upto 22kW : NA 26 to 37kW : SS-431	Upto 22kW : NA 26 to 37kW : SS-431

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

RESIN FILLED ENCAPSULATED SUBMERSIBLE MOTORS

Nominal Diameter : 6"

230V, THREE PHASE

TECHNICAL & ELECTRICAL DATA

Models	HP	S.F.	Rated (F.L.)		Maximum (S.F.)		Eff. %		P.F. %		Locked Rotor Amps	Max. Down Thrust Load (lbs)
			Amps	Watts	Amps	Watts	S.F.	F.L.	S.F.	F.L.		
FM6R-55-4E	5	1,15	15	4700	17,6	5400	79	79	79	79	86	3485
FM6R-75-4E	7,5	1,15	21,8	7000	24,6	8000	80	80	80	80	130	3485
FM6R-100-4E	10	1,15	28,4	9400	32,2	10800	79	79	79	79	172	3485
FM6R-150-4E	15	1,15	41,6	13700	47,4	15800	81	81	81	81	266	3485
FM6R-200-4E	20	1,15	53,8	18100	60,6	20900	82	82	82	82	362	3485
FM6R-225-4E	25	1,15	67	22500	75	25700	83	83	83	83	480	3485
FM6R-300-4E	30	1,15	79	26900	90,4	31100	83	83	83	83	568	3485

380V, THREE PHASE

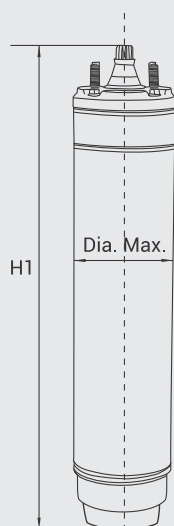
TECHNICAL & ELECTRICAL DATA

Models	HP	S.F.	Rated (F.L.)		Maximum (S.F.)		Eff. %		P.F. %		Locked Rotor Amps	Max. Down Thrust Load (lbs)
			Amps	Watts	Amps	Watts	S.F.	F.L.	S.F.	F.L.		
FM6R-55-4I	5	1,15	9,1	4700	10,7	5400	79	79	79	79	52	3485
FM6R-75-4I	7,5	1,15	13,4	7000	15	8000	80	80	80	80	79	3485
FM6R-100-4I	10	1,15	17,6	9400	19,6	10800	79	79	79	79	104	3485
FM6R-150-4I	15	1,15	25,8	13700	28,9	15800	81	81	81	81	161	3485
FM6R-200-4I	20	1,15	33	18100	37,3	20900	82	82	82	82	219	3485
FM6R-225-4I	25	1,15	41	22500	46	25700	83	83	83	83	291	3485
FM6R-300-4I	30	1,15	48,8	26900	55,4	31100	83	83	83	83	317	3485
FM6R-400-4I	40	1,15	66,5	35600	74,6	42400	83	83	83	83	481	6182
FM6R-500-4I	50	1,15	83,5	45100	95	52200	83	83	83	83	501	6182
FM6R-600-4I	60	1,15	98,7	53500	111	61700	84	84	84	84	627	6182

460V, THREE PHASE

TECHNICAL & ELECTRICAL DATA

Models	HP	S.F.	Rated (F.L.)		Maximum (S.F.)		Eff. %		P.F. %		Locked Rotor Amps	Max. Down Thrust Load (lbs)
			Amps	Watts	Amps	Watts	S.F.	F.L.	S.F.	F.L.		
FM6R-55-4M	5	1,15	7,5	4700	8,8	5400	79	79	79	79	43	3485
FM6R-75-4M	7,5	1,15	10,9	7000	12,3	8000	80	80	80	80	65	3485
FM6R-100-4M	10	1,15	14,2	9400	16,1	10800	79	79	79	79	86	3485
FM6R-150-4M	15	1,15	20,8	13700	23,7	15800	81	81	81	81	133	3485
FM6R-200-4M	20	1,15	26,9	18100	30,3	20900	82	82	82	82	181	3485
FM6R-225-4M	25	1,15	33,5	22500	37,5	25700	83	83	83	83	240	3485
FM6R-300-4M	30	1,15	39,5	26900	45,2	31100	83	83	83	83	284	3485
FM6R-400-4M	40	1,15	54,9	35600	61,6	42400	83	83	83	83	397	6182
FM6R-500-4M	50	1,15	67,7	45100	77	52200	83	83	83	83	414	6182
FM6R-600-4M	60	1,15	80,5	53500	91	61700	84	84	84	84	518	6182



THREE PHASE, 3 WIRE MOTORS

DIMENSIONS & WEIGHT DATA

Models	HP	Height H1		Nett Weight (Approx.)	
		mm	Inches	kg	lbs
FM6R-50-4M	5	645	25,4	25,5	56
FM6R-75-4M	7,5	579	22,8	22,7	50
FM6R-100-4M	10	610	24	24	53
FM6R-150-4M	15	676	26,6	26,4	58
FM6R-200-4M	20	739	29,1	29	64
FM6R-250-4M	25	805	31,7	31,8	70
FM6R-300-4M	30	869	34,2	34	75
FM6R-400-4M	40	998	39,3	39,5	87
FM6R-500-4M	50	1336	52,6	52,7	116
FM6R-600-4M	60	1638	64,5	64,5	142

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 4", 6", 8", 10" & 12"

These motors are eco-friendly, wet type, water filled and rewindable. The stator windings are of water proof synthetic film insulated copper winding wires. It features water lubricated thrust and journal bearings. Motor is pre-filled with clear, cold, pure, fresh, filtered propylene glycon (anti-freeze agent) mixed water. Before commissioning, ensure the pre-filled level of water inside the motor. If any loss of volume is noticed, refill with clear, cold, pure, fresh, filtered water, through water filling plugs / valves provided in the upper housing. Where the use of anti-freeze agent mixed water is not be allowed for special applications, these motors can also be filled with clear, cold, pure, fresh, filtered water and operated. Dynamically balanced rotors maintains uniform clearance thereby giving better efficiency and increase the life cycle of the water lubricated bush bearings. Specially designed high performance thrust bearings are used to withstand high axial thrust loads and up thrust loads with minimum wear and tear.

The unique design of thrust bearings create a wedge of water between the shoe and the disc, and thereby providing better water lubrication and increases the life cycle of the thrust bearings. Pressure equalizing rubber diaphragm is provided to balance the pressure and volume variations of the water inside the motor. Motor sealing are made by means of 'O' rings. Shaft seals and sand guard prevents ingress of well water, sand and fiber particles into the motor. Care should be taken to ensure that the motor does not run when it is not submerged in the water, To prevent the motor from dry running, install water level monitor/dry run preventor. The motor needs a constant flow of water passed over it's body to keep it at correct operating temperature. Ideally the motors should be set just above the final yield point of bore well and when the level is not ascertained, fit a "flow inducer pipe" over the pumpset to ensure adequate cooling. It is mandatory to use ZIRANTEC Control boxes for all motors with adequate protection & control systems. Mounting dimensions of these motors are in accordance with NEMA standard.

FEATURES

- Water cooled Re-windable motor
- Can be easily dismantled and repaired
- High operating efficiency
- Extremely hardwearing and water lubricated bearings
- Specially designed thrust bearing to withstand high axial loads.
- AISI 630 (17.4 PH) motor shaft extension for longer life.

APPLICATIONS

These prime mover submersible motors are suitable to couple with deepwell submersible pump ends used for

- Residential
- Irrigation
- Fountains
- Gardens
- Industrial water supply
- Sprinkler systems
- Pressure boosting units
- Mining
- Oil & Gas
- De-watering
- CBM (Coal bed methane)

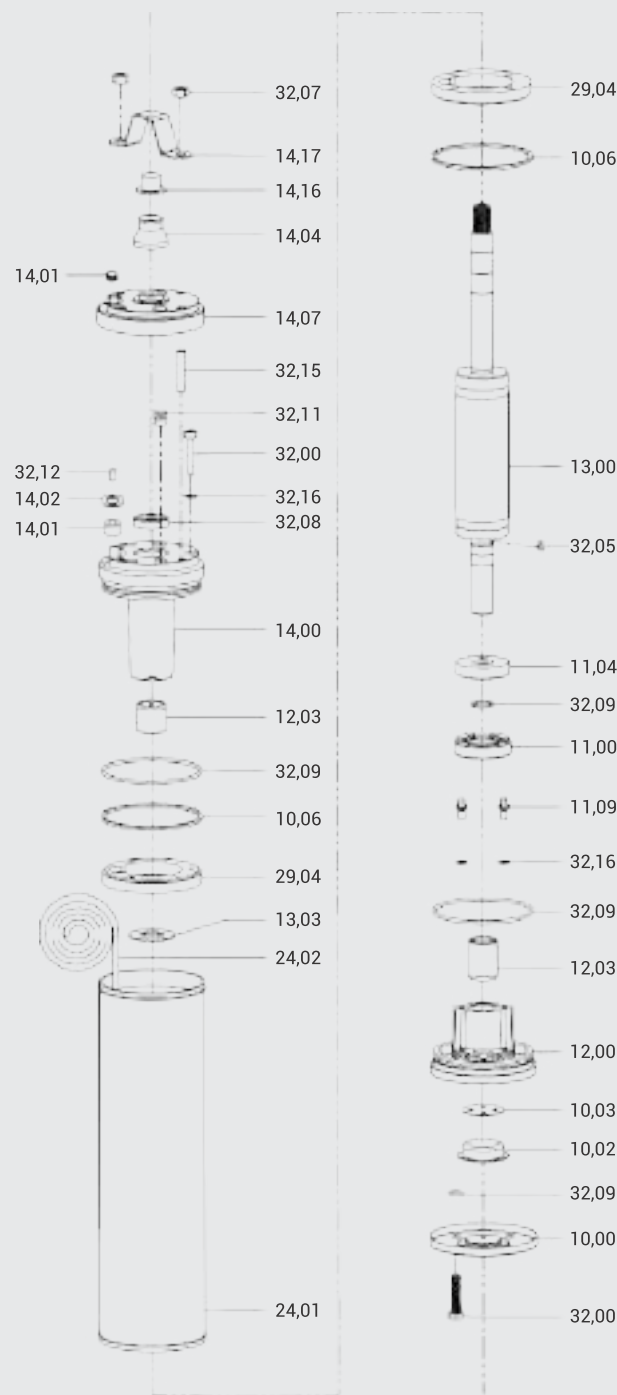


In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

EXPLODED VIEW

Nominal Diameter : 4"

Upto 2HP



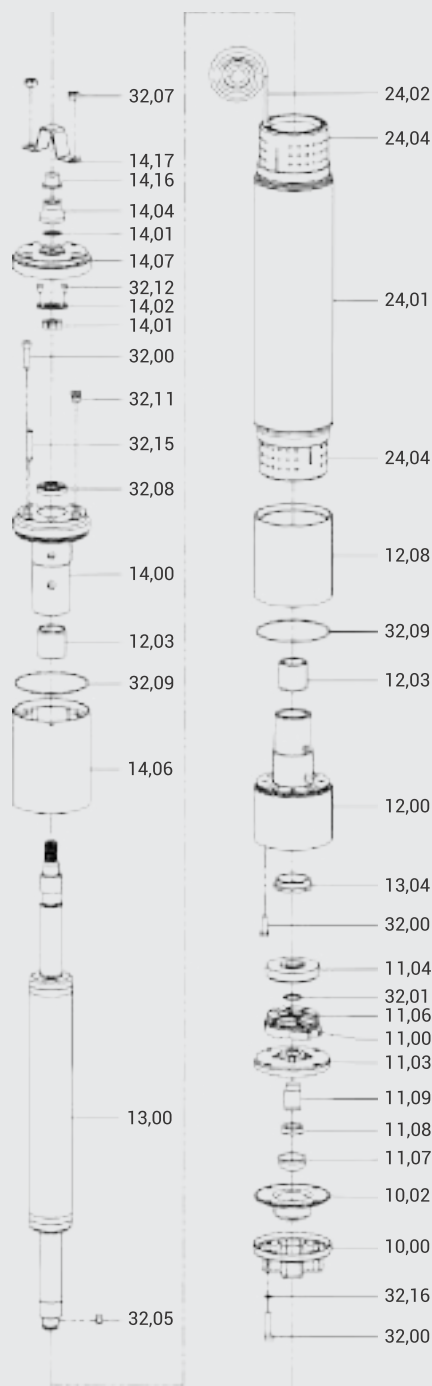
Part No.	Part Name
10,00	Motor Base
10,02	Diaphragm
10,03	Diaphragm Plate
10,06	Snap Ring
11,00	Thrust Base
11,04	Thrust Pad
11,09	Rocker Screw
12,00	Lower Housing
12,03	Bush
13,00	Rotor
13,03	Up Thrust Washer
14,00	Upper Housing
14,01	Cable Grommet
14,02	Grommet Clamp
14,04	Rubber Sand Guard
14,07	Upper Housing Shell
14,16	Motor Cap
14,17	Motor Clamp
24,01	Wound Stator
24,02	Lead Out Cable
29,04	Flange
32,00	Bolt
32,05	Key
32,07	Nut
32,08	Oil Seal
32,09	O Ring
32,11	Drain Plug
32,12	Screw
32,15	Stud
32,16	Washer

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

EXPLODED VIEW

Nominal Diameter : 4"

(3HP & Above)

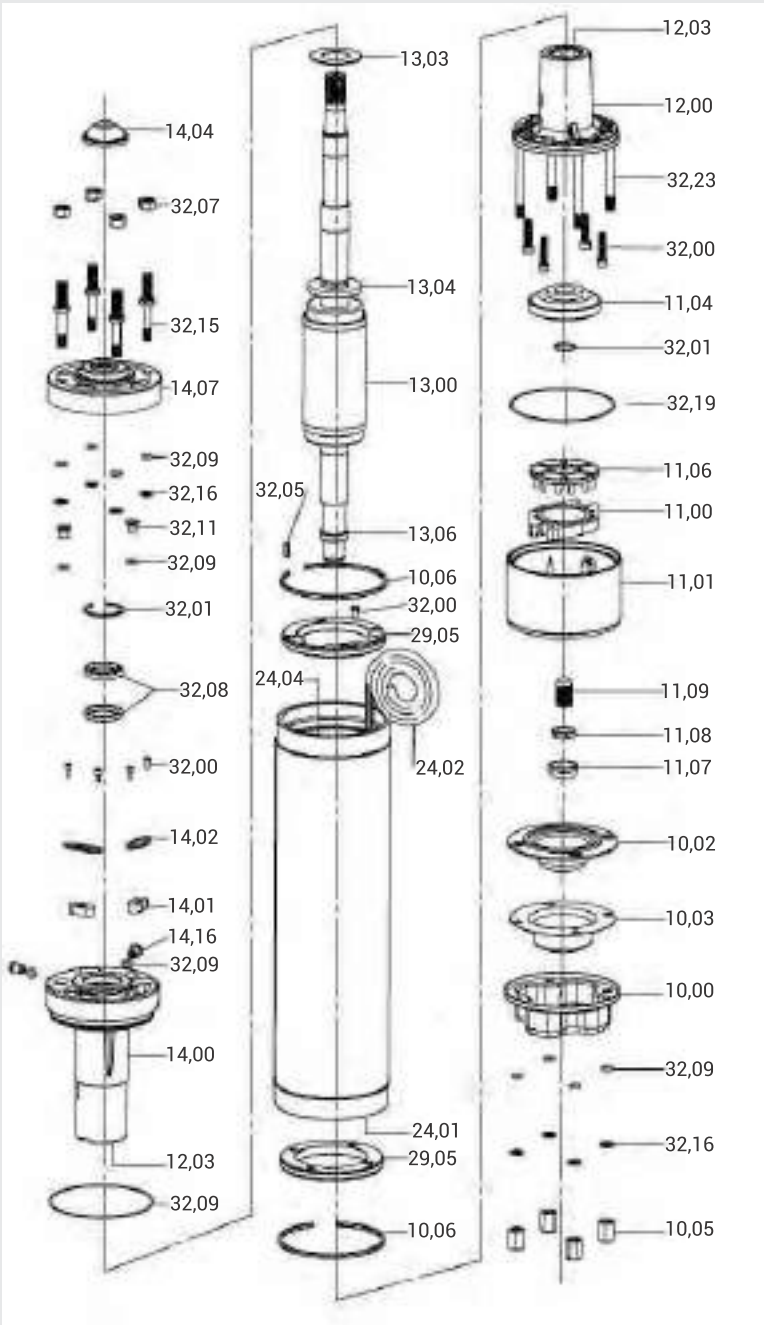


Part No.	Part Name
10,00	Motor Base
10,02	Diaphragm
11,00	Thrust Base
11,03	Thrust Base Plate
11,04	Thrust Pad
11,06	Thrust Segment
11,07	Rocker Screw Cap
11,08	Rocker Screw Nut
11,09	Rocker Screw
12,00	Lower Housing
12,03	Bush
12,08	Lower Pipe
13,00	Rotor
13,04	Counter Thrust Pad
14,00	Upper Housing
14,01	Cable Grommet
14,02	Grommet Clamp
14,04	Rubber Sand Guard
14,06	Upper Pipe
14,07	Upper Housing Shell
14,16	Motor Cap
14,17	Motor Clamp
24,01	Wound Stator
24,02	Lead Out Cable
24,04	Winding Guard
32,00	Bolt
32,01	Circlip
32,05	Key
32,07	Nut
32,08	Oil Seal
32,09	O Ring
32,11	Drain Plug
32,12	Screw
32,15	Stud
32,16	Washer

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

EXPLODED VIEW

Nominal Diameter : 6"

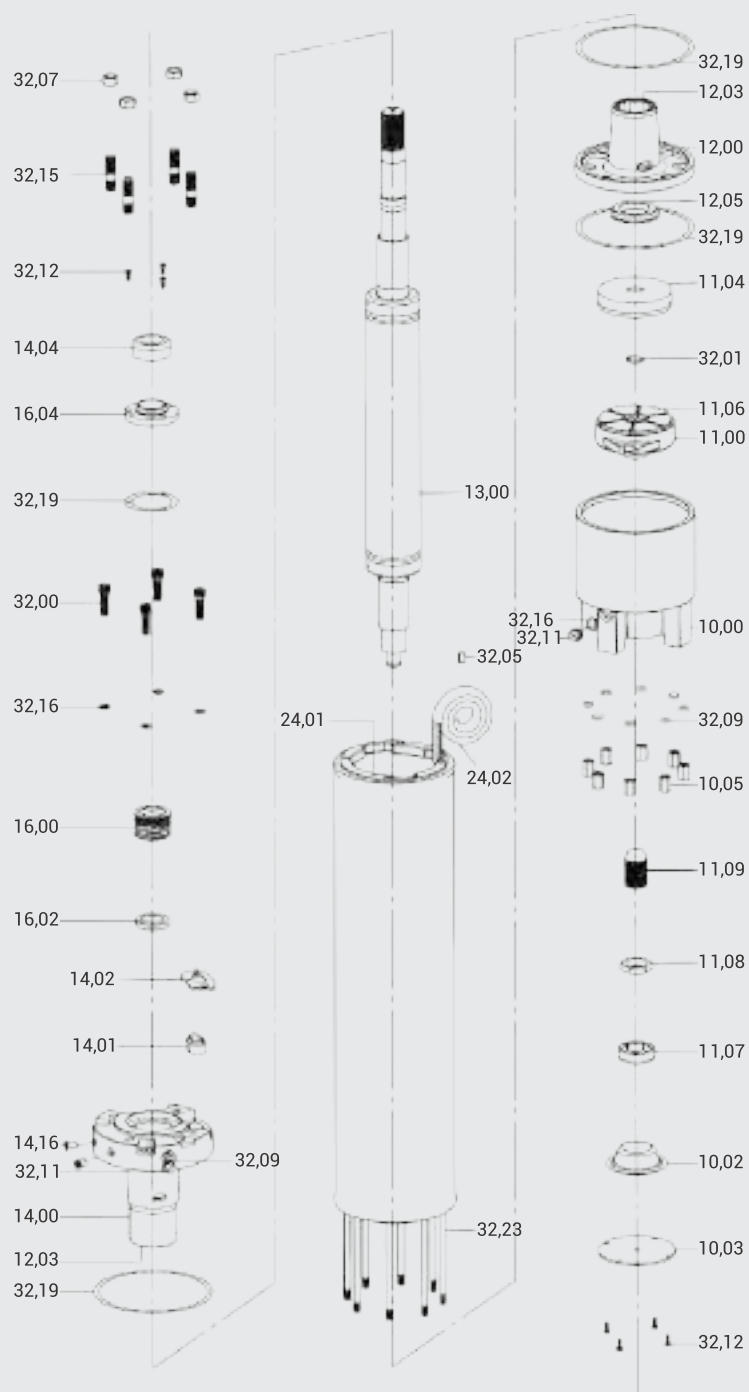


Part No.	Part Name
10,00	Motor Base
10,02	Diaphragm
10,03	Diaphragm Bottom Plate
10,05	Doom Nut
10,06	Snap Ring
11,00	Thrust Base
11,01	Thrust Base Housing
11,04	Thrust pad
11,06	Thrust Segment
11,07	Rocker cap
11,08	Rocker Lock Nut
11,09	Rocker Screw
12,00	Lower Housing
12,03	Bush-Carbon
13,00	Rotor
13,03	Up Thrust Washer
13,04	Counter Thrust Pad
13,06	Pad Supporting Ring
14,00	Upper Housing
14,01	Cable Grommet
14,02	Cable Grommet Lock Plate
14,04	Sand Guard Rubber
14,07	Upper Housing Shell
14,16	Inlet / Outlet Valve
24,01	Wound Stator
24,04	Winding Guard
29,05	Retaining Ring
32,00	Bolt
32,01	Circlip
32,05	Key
32,07	Nut
32,08	Oil Seal
32,09	O-Ring
32,11	Plug
32,15	Stud
32,16	Washer
32,19	Gasket
32,23	Tie Rod

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

EXPLODED VIEW

Nominal Diameter : 8"

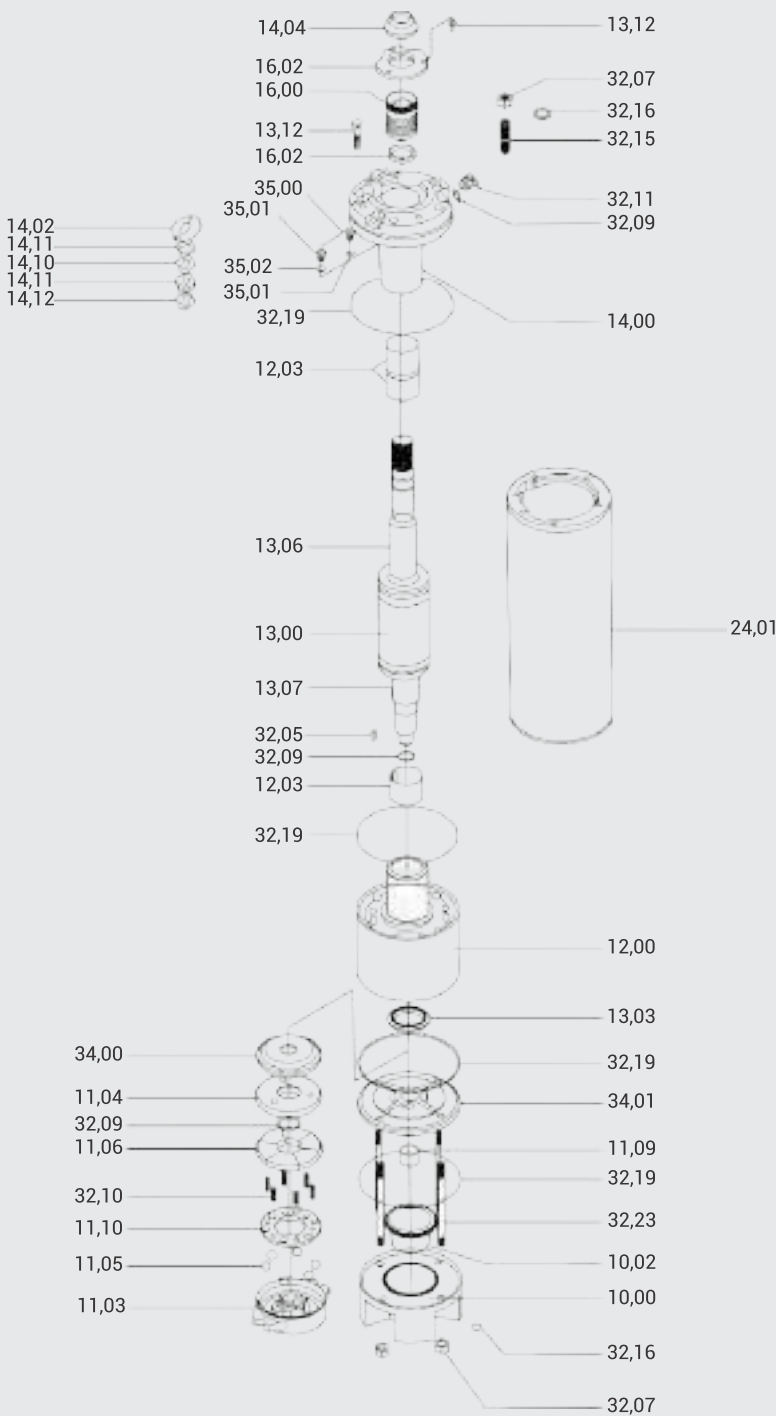


Part No.	Part Name
10,00	Motor Base
10,02	Diaphragm
10,03	Diaphragm Bottom Plate
10,05	Doom nut
11,00	Thrust Base
11,04	Thrust Pad
11,06	Thrust Segment
11,07	Rocker Cap
11,08	Rocker Lock nut
11,09	Rocker Screw
12,00	Lower Housing
12,03	Bush-Carbon
12,05	Counter Thrust Ring
13,00	Rotor
14,00	Upper Housing
14,01	Cable Grommet
14,02	Cable Grommet Lock Plate
14,04	Sand Guard-Rubber
14,16	Inlet / Outlet Valve
16,00	Mechanical Seal
16,02	Mechanical Seal Rest Washer
16,04	Mechanical Seal Guide Plate
24,01	Wound Stator
24,02	Cable
32,00	Bolt
32,01	Circlip
32,05	Key
32,07	Nut
32,09	O-ring
32,11	Plug
32,12	Screw
32,15	Stud
32,16	'O' Ring
32,19	Gasket
32,23	Tie Rod

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

EXPLODED VIEW

Nominal Diameter : 10"

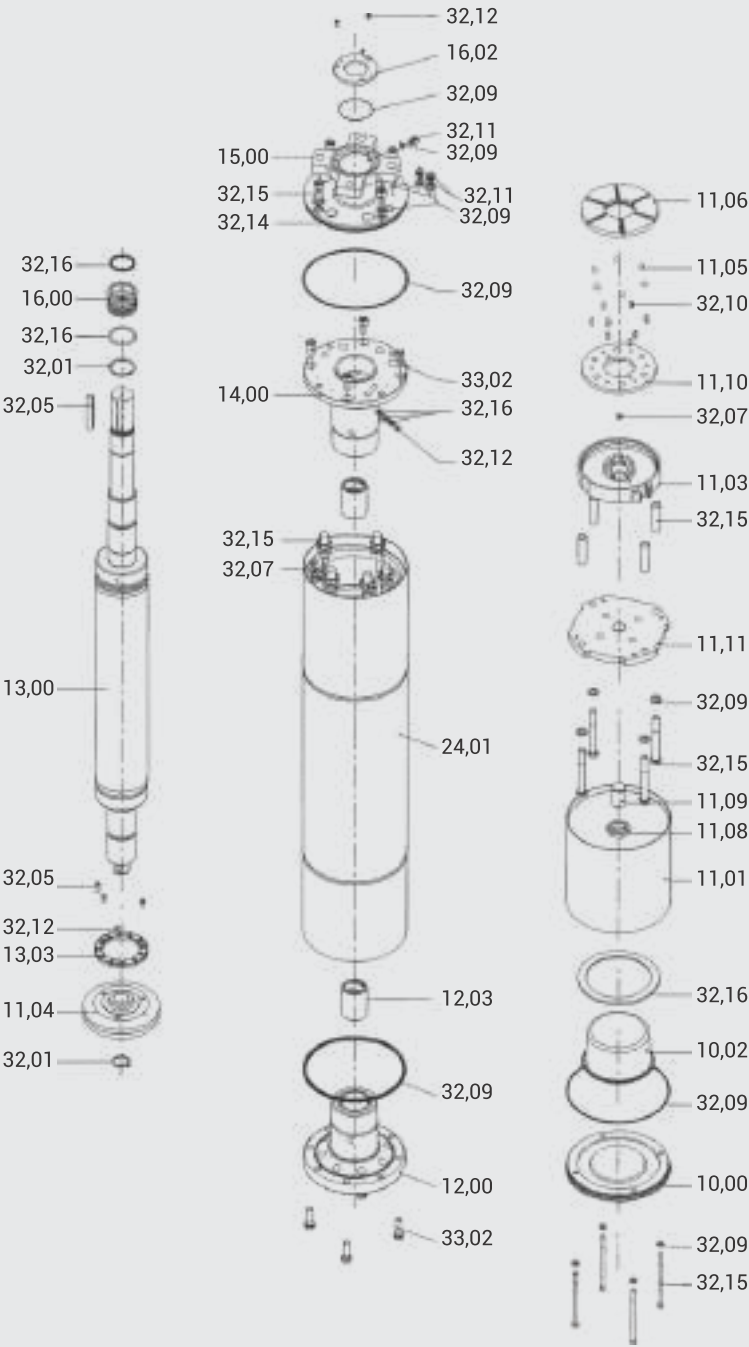


Part No.	Part Name
10,00	Motor Base
10,02	Diaphragm
11,03	Thrust Bearing Bottom
11,04	Thrust Pad
11,05	Ball
11,09	Rocker Screw
12,00	Lower Housing
12,03	Bush
13,00	Rotor
13,03	Upthrust Washer
13,06	Rotor Sleeve
13,07	Rotor Sleeve
14,00	Upper Housing
14,02	Grommet Locking Plate
14,04	Rubber Sand Guard
14,10	Cable clamping Plate
14,11	Cable clamping Plastic
14,12	Cable Clamping Washer
16,00	Mechanical Seal
16,02	Mechanical Seal Clamp Plate
24,01	Wound Stator
32,01	Circlip
32,05	Pad Key
32,07	Nut
32,09	"O" Ring
32,10	Segment Guide Pin
32,11	Drain Plug
32,12	Screw
32,15	Stud
32,16	Washer
32,19	Gasket
32,23	Tie Rod
34,00	Thrust Pad Holder
34,01	Adjustment Cover
35,00	PT Sensor Cap
35,01	PT Sensor Dummy
35,02	' O " Ring

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

EXPLODED VIEW

Nominal Diameter : 12"



Part No.	Part Name
10,00	Motor base
10,02	Diaphragm
11,01	Thrust base housing
11,03	Thrust bearing bottom
11,04	Thrust Pad
11,05	Ball
11,06	Thrust segment
11,08	Rocker screw nut
11,09	Rocker screw
11,10	Ball guide ring
11,11	Thrust bearing base plate
12,00	Lower housing
12,03	Bush
13,00	Rotor
13,03	Upthrust Washer
14,00	Upper housing
15,00	Seal housing
16,00	Mechanical seal
16,02	Mechanical seal clamp plate
24,01	Wound stator
32,01	Circlip
32,05	Key
32,07	Nut
32,09	O - Ring
32,10	Segment guide pin
32,11	Drain plug
32,12	Screw
32,15	Stud
32,16	Washer
32,23	Tie rod
33,02	Bolt

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 4"

SPECIFICATIONS

Nominal Dia	4"
Maximum Outer Diameter	3,85"
Power Range	0,5 HP to 10 HP - Three Phase
Speed	3450 rpm
Version	Three Phase - 220 V, 380 V & 460 V, 60 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 58
Direction of Rotation	Electrically Reversible
Type of Duty	S1 (Continuous)
Down Thrust Load	0,5 HP to 2 HP - 800 lbs 3 HP to 10 HP - 1500 lbs
Minimum Cooling Flow Along the Motor	0,25 ft/sec
Maximum Liquid Temperature	91,4°F
Starts per Hour	20 Times
Shaft Type	Splines
Mounting Standard	NEMA
Method of Starting	Three Phase - Direct On Line (DOL)
Cable Lead out	Permanently Connected and Sealed 3/4 Core TPE/EPDM Rubber Flat Cable



Type - A/N

MATERIALS OF CONSTRUCTION

Part Name	Type - A	Type - N
Shaft Seal	Nitrile Rubber (NBR)	Nitrile Rubber (NBR)
Housing Shell	SS - 304	SS - 316
Stator Shell	SS - 304 / 441	SS - 316
Thrust Pad	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420
Diaphragm	High Nitrile Rubber	High Nitrile Rubber
Motor Base	SS - 304	SS - 316
Bush	Carbon	Carbon

220, 380 & 460V, THREE PHASE

DIMENSIONS & WEIGHT DATA

Motor Model	HP	Lead Out Cable (Sq.mm)			Height H1		Nett Weight Approx.	
		220 V	380 V	460 V	mm	Inches	kg	lbs
FM4W-05A-4	0,5	1,5	1,5	-	432	17,0	14,2	31,4
FM4W-07A-4	0,75	1,5	1,5	-	472	18,6	16,3	35,9
FM4W-10A-4	1	1,5	1,5	-	502	19,8	17,8	39,2
FM4W-15A-4	1,5	2,5	1,5	-	560	22,0	20,8	45,8
FM4W-20A-4	2	2,5	1,5	-	715	28,1	27	59,2
FM4W-30A-4	3	2,5	1,5	1,5	725	28,5	32	70,4
FM4W-40A-4	4	2,5	1,5	1,5	890	35,0	36	79,0
FM4W-50A-4	5	4,0	2,5	2,5	965	37,9	39,7	87,4
FM4W-60A-4	6	4,0	2,5	2,5	1143	45,0	43,2	95,2
FM4W-75A-4	7,5	4,0	2,5	2,5	1320	52,0	46,8	103,0
FM4W-100A-4	10	4,0	2,5	2,5	1422	56,0	47,7	105,0

The last digit of the model number denotes voltage (D = 220V, E = 230V, I = 380V, M = 460V).

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 4"

220V, THREE PHASE

TECHNICAL & ELECTRICAL DATA

MODEL	HP	SF	RATED		MAX. S.F.		Efficiency %			Power Factor%			Locked Rotor Amps	Thrust Capacity (lbs)
			Amps	W	Amps	W	S.F	F.L.	3/4	S.F	F.L	3/4		
FM4W-05-4D	0,5	1,6	2,3	664	3,1	928	59	56	51	80	75	70	15	800
FM4W-07-4D	0,75	1,5	3,6	928	4,3	1264	65	63	57	79	75	64	21	800
FM4W-10-4D	1	1,4	4	1136	5,5	1600	68	66	60	80	75	68	25	800
FM4W-15-4D	1,5	1,3	5,5	1648	7,3	2032	70	69	65	80	77	71	34	800
FM4W-20-4D	2	1,25	8	2280	9,6	2600	71	69	66	78	75	71	44	800
FM4W-30-4D	3	1,15	10,4	3120	12	3720	72	72	68	80	78	74	58	1500
FM4W-40-4D	4	1,15	15	4160	16,8	4720	71	73	70	78	73	70	75	1500
FM4W-50-4D	5	1,15	16,3	4880	19,5	6200	76	75	71	81	79	72	97	1500
FM4W-60-4D	6	1,15	19,4	6040	23	6820	76	75	73	82	80	70	115	1500
FM4W-75-4D	7,5	1,15	22	7280	27,5	8400	76	75	74	83	80	78	137	1500

380V, THREE PHASE

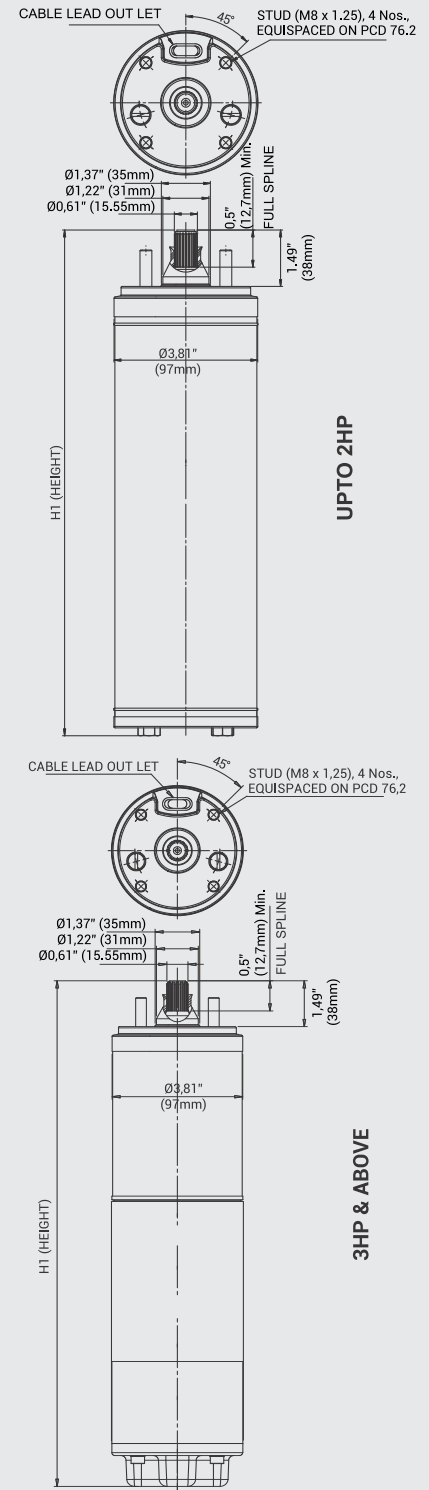
TECHNICAL & ELECTRICAL DATA

MODEL	HP	SF	RATED		MAX. S.F.		Efficiency %			Power Factor%			Locked Rotor Amps	Thrust Capacity (lbs)
			Amps	W	Amps	W	S.F	F.L.	3/4	S.F	F.L	3/4		
FM4W-05-4I	0,5	1,6	1,6	720	1,9	960	50	47	43	78	77	70	10	800
FM4W-07-4I	0,75	1,5	1,9	912	2,4	1296	65	63	57	81	75	65	12	800
FM4W-10-4I	1	1,4	2,5	1248	3,6	1600	66	64	59	82	75	65	18	800
FM4W-15-4I	1,5	1,3	3,4	1728	4,8	2200	67	65	61	81	78	71	24	800
FM4W-20-4I	2	1,25	4,2	2256	5,8	2600	69	67	64	81	80	76	29	800
FM4W-30-4I	3	1,15	5,6	3024	7,2	3808	74	72	69	83	82	74	36	1500
FM4W-40-4I	4	1,15	7,8	4000	9,5	4704	76	75	72	80	78	72	47	1500
FM4W-50-4I	5	1,15	9,1	4840	11	5960	76	75	74	82	81	73	55	1500
FM4W-60-4I	6	1,15	11,3	6000	13	6780	76	75	74	82	81	72	65	1500
FM4W-75-4I	7,5	1,15	13,3	7480	16	8600	75	74	72	83	80	75	80	1500
FM4W-100-4I	10	1,15	17,3	9340	20	13165	80	80	79	84	82	78	87	1500

460V, THREE PHASE

TECHNICAL & ELECTRICAL DATA

MODEL	HP	SF	RATED		MAX. S.F.		Efficiency %			Power Factor%			Locked Rotor Amps	Thrust Capacity (lbs)
			Amps	W	Amps	W	S.F	F.L.	3/4	S.F	F.L	3/4		
FM4W-30-4M	3	1,15	5,1	3140	5,6	3530	72	70,7	67	79	77	73	26	1500
FM4W-40-4M	4	1,15	6,6	3950	7,3	4500	76,8	76	73,5	78	76	70	35	1500
FM4W-50-4M	5	1,15	8,1	4800	8,8	5450	78,1	77,4	74,7	77	75	70	42	1500
FM4W-60-4M	6	1,15	9,7	5770	10,7	6660	78,3	77,9	75,5	78	75	70	52	1500
FM4W-75-4M	7,5	1,15	10,9	6880	12,2	7910	80,4	80,3	79	81	79	73	60	1500
FM4W-100-4M	10	1,15	14,8	9240	16,6	10630	81,2	81,3	80	81	79	75	82	1500



All Dimensions are in Inches & mm
 Splined Shaft : 14 Teeth - Module 1,5875
 Pressure Angle 30°, A.N.S.I. B-92-1-1970 Coupling Class 5

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 6"

SPECIFICATIONS

Nominal Dia	6"
Maximum Outer Diameter	5,7"
Power Range	5 HP to 60 HP - Three Phase
Speed	3450 rpm
Version	Three Phase - 220 V, 380 V & 460 V, 60 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 58 / IP 68
Direction of Rotation	CCW - Single Phase Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	5 HP to 30 HP - 3500 lbs 35 HP to 60 HP - 6000 lbs
Minimum Cooling Flow Along the Motor	0,5 ft/sec
Maximum Liquid Temperature	Standard 91.4°F, High Temp 122°F Beyond 122°F can be supplied with derated motor
Starts per Hour	20 Times
Shaft Type	Splines
Mounting Standard	NEMA
Method of Starting	Three Phase - 5 HP to 60 HP - Direct On Line (DOL) Three Phase - 7,5 HP to 60 HP - Star Delta (SD)
Cable Lead out	Permanently Connected and Sealed 3/4 Core PVC / Rubber Insulated Flat Cable
Thermal Protection	Optional - PT Sensor

* On request motors 440 & 690V can be supplied.



MATERIALS OF CONSTRUCTION

Part Name	Type - A	Type - N
Shaft Seal / Mechanical Seal	Nitrile Rubber (NBR) / Ceramic - Carbon	Nitrile Rubber (NBR) / Ceramic - Carbon
Upper & Lower Housings	Cast Iron	Cast Iron
Stator Shell	SS - 304 / SS - 441	SS - 316
Thrust Pad	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420
Diaphragm	High Nitrile Rubber	High Nitrile Rubber
Motor Base	SS - 304	SS - 316
Upper Housing Shell	SS - 304	SS - 316
Shaft	SS - 431	SS - 431
Shaft Extension	17,4 Ph	17,4 Ph
Sleeves	SS - 431	SS - 431

* Motors with SS casted housings also can be supplied in SS 304 & SS 316

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

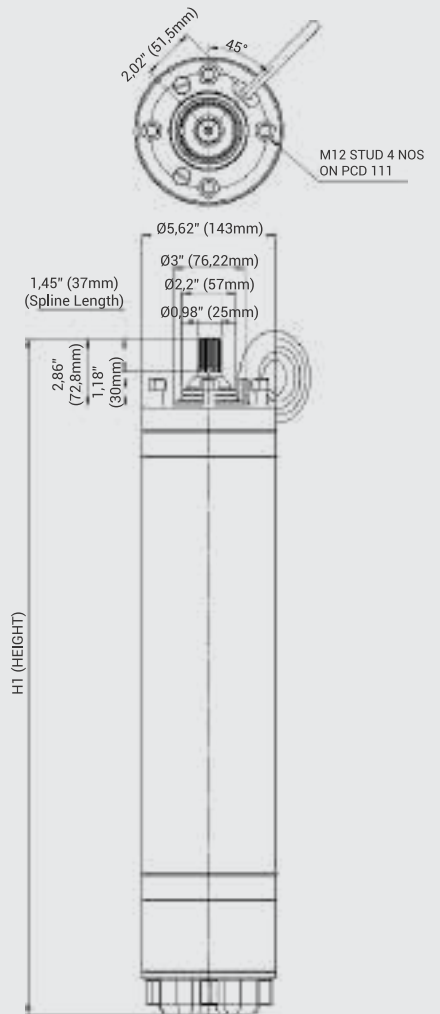
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 6"

220V, THREE PHASE

DIMENSIONS & WEIGHT DATA

Motor Model	HP	Lead Out Cable Size (Sq.mm)	Height H1	Nett Weight Approx.	
			Inches	kg	lbs
FM6W-50-4D	5	4	28,8	40,8	89,9
FM6W-75-4D	7,5	6	31,6	50,9	112
FM6W-100-4D	10	6	33,6	53,6	118
FM6W-125-4D	12,5	10	34,7	55,9	123
FM6W-150-4D	15	10	36,3	63,6	140
FM6W-200-4D	20	10	39,5	72,7	160
FM6W-250-4D	25	16	42,6	81,3	179
FM6W-300-4D	30	16	45,4	90,9	200
FM6W-400-4D	40	16	48,3	93,6	206



220V, THREE PHASE

TECHNICAL & ELECTRICAL DATA

MODEL	HP	SF	RATED		MAX. S.F.		EFF. %			Power Factor %			Locked Rotor Amps	Max. Down Thrust Load (lbs)
			A	W	A	W	S.F.	F.L.	3/4	S.F.	F.L.	3/4		
FM6W-50-4D	5	1,15	16	4840	18,5	5480	77,5	76,6	76,5	80,9	78,6	76,1	88	3500
FM6W-75-4D	7,5	1,15	22	6850	25	7860	80	80,5	79,6	82,5	81,7	77	130	3500
FM6W-100-4D	10	1,15	29,5	9280	33,9	10640	82	81,5	80	82,5	82,5	79	175	3500
FM6W-125-4D	12,5	1,15	36	11360	41	13020	80,5	81,8	80,6	83,3	82,8	80	216	3500
FM6W-150-4D	15	1,15	44	13620	49	15400	80,5	80,8	80,2	82,5	81,2	80,5	265	3500
FM6W-200-4D	20	1,15	56	18180	64,4	20940	82	82,5	80	85,3	85,2	82	348	3500
FM6W-250-4D	25	1,15	68	22680	78,2	26000	82,5	82,2	81,5	87,2	87,5	83	468	3500
FM6W-300-4D	30	1,15	80,5	26880	92	30600	82,5	82	82	83,5	84	82	547	3500
FM6W-400-4D	40	1,15	116	36240	133	41700	82,5	82,8	80	82,3	82	80	750	6000

The above mentioned electrical data are applicable for Star-Delta motors also
Note: Star-Delta motors are available from 7.5 H.P. onwards.

All Dimensions are in Inches & mm
Splined Shaft : 15 Teeth -
Module 1,5875
Pressure Angle 30°
A.N.S.I. B-92-1-1970
Tolerance Class 5

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

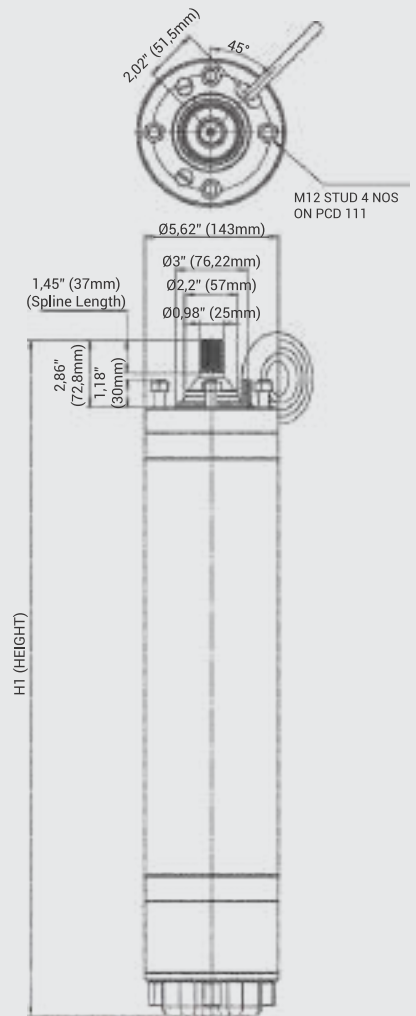
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 6"

380V, THREE PHASE

DIMENSIONS & WEIGHT DATA

Model	HP	Lead Out Cable Size (Sq.mm)	Height H1	Nett Weight Approx.	
			Inches	kg	lbs
FM6W-60-4I	6,0	2,5	29,6	44,3	97,66
FM6W-75-4I	7,5	4	31,6	49,7	109,52
FM6W-100-4I	10	4	33,6	54,7	120,69
FM6W-125-4I	12,5	6	34,7	58	127,91
FM6W-150-4I	15	6	36,3	62,8	138,38
FM6W-175-4I	17,5	6	37,9	67	147,58
FM6W-200-4I	20	10	39,5	71,2	157,04
FM6W-250-4I	25	10	42,6	79,6	175,47
FM6W-300-4I	30	10	45,4	85,5	188,43
FM6W-400-4I	40	10	48,3	93,7	206,76
FM6W-500-4I	50	16	51,2	97,9	215,75
FM6W-600-4I	60	16	54,2	99,7	220



380V, THREE PHASE

TECHNICAL & ELECTRICAL DATA

MODEL	HP	SF	RATED		MAX. S.F.		Efficiency %			Power Factor%			Locked Rotor Amps	Thrust Capacity (lbs)
			Amps	W	Amps	W	S.F.	F.L.	3/4	S.F.	F.L.	3/4		
FM6W-60-4I	6	1,15	11	6000	13	6900	76	75	74	83	82	82	55	3500
FM6W-75-4I	7,5	1,15	13,5	7200	15,5	8520	77	76	76	86	85	85	66	3500
FM6W-100-4I	10	1,15	17,1	9640	19,5	10900	79	78	78	88	87	85	84	3500
FM6W-125-4I	12,5	1,15	20,2	11800	23	13580	80	79	79	89	87	87	104	3500
FM6W-150-4I	15	1,15	24,6	13680	28	15500	82	81	80	84	83	82	132	3500
FM6W-175-4I	17,5	1,15	24,6	13680	34	15500	82	81	80	84	83	82	132	3500
FM6W-200-4I	20	1,15	33	18850	37,5	21580	80	80	80	87	86	85	180	3500
FM6W-250-4I	25	1,15	37,5	21760	43	25000	85	86	85	90	91	89	230	3500
FM6W-300-4I	30	1,15	47,5	25920	54,6	29600	85	86	85	84	84	83	300	3500
FM6W-400-4I	40	1,15	65	36000	75	41300	83,5	84	83,6	83,5	84	81	380	6000
FM6W-500-4I	50	1,15	83	44640	95	51320	83	83	82,5	82	82	81	450	6000
FM6W-600-4I	60	1,15	97	54200	112	63200	82	83	82	85	84	84	530	6000

The above mentioned electrical data are applicable for Star-Delta motors also
Note: Star-Delta motors are available from 7.5 H.P. onwards.

All Dimensions are in Inches & mm
Splined Shaft : 15 Teeth -
Module 1,5875
Pressure Angle 30°
A.N.S.I. B-92-1-1970
Tolerance Class 5

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 6"

460V, THREE PHASE

DIMENSIONS & WEIGHT DATA

Motor Model	HP	Lead Out Cable Size (Sq.mm)	Height H1	Nett Weight Approx.	
			Inches	kg	lbs
FM6W-50-4M	5	2,5	28,8	42,1	93
FM6W-60-4M	6	4	29,6	45	99
FM6W-75-4M	7,5	4	31,6	50,3	111
FM6W-100-4M	10	4	33,6	55,8	123
FM6W-125-4M	12,5	6	34,7	58,5	129
FM6W-150-4M	15	6	36,3	64	141
FM6W-200-4M	20	10	39,5	72,1	159
FM6W-250-4M	25	10	42,6	80,2	177
FM6W-300-4M	30	10	45,4	86,1	190
FM6W-350-4M	35	16	46,1	89	196
FM6W-400-4M	40	16	48,3	94	208
FM6W-500-4M	50	16	51,2	98,4	217
FM6W-600-4M	60	16	54,2	103,4	228



460V, THREE PHASE

TECHNICAL & ELECTRICAL DATA

MODEL	HP	SF	RATED		MAX. S.F.		EFF. %			Power Factor %			Locked Rotor Amps	Max. Down Thrust Load (lbs)
			Amps	W	Amps	W	S.F	F.L.	3/4	S.F	F.L	3/4		
FM6W-50-4M	5	1,15	7,9	4680	8,5	5120	80,5	79	77,5	76	78,5	75,9	38	3500
FM6W-60-4M	6	1,15	9	5900	10,5	6720	81	82	80	83	82	78	48	3500
FM6W-75-4M	7,5	1,15	11	7000	12,5	8050	78	79	78,5	81	80	79,5	60	3500
FM6W-100-4M	10	1,15	14	9260	16	10600	80	81	80	82	78	77	78	3500
FM6W-125-4M	12,5	1,15	17,6	11680	19,8	13400	79,8	80	79,5	84	82	81,5	90	3500
FM6W-150-4M	15	1,15	21	13200	23,5	15300	82,5	83	82	81,7	80	79	120	3500
FM6W-200-4M	20	1,15	27	18200	31	20800	82	82,5	82	88	86	85,5	165	3500
FM6W-250-4M	25	1,15	33	22320	37	25600	82,5	83	82,2	86,8	82,5	82	220	3500
FM6W-300-4M	30	1,15	38,8	26750	44,5	30750	82,5	83,5	82	86,5	85	82	260	3500
FM6W-350-4M	35	1,15	48	31200	55	35800	82	84	82	82	82	81,5	290	6000
FM6W-400-4M	40	1,15	53,5	35760	61,5	41160	83,5	84	83,5	83,3	83,8	83	330	6000
FM6W-500-4M	50	1,15	67	44160	77	51500	83	84,5	84	84	83	80	390	6000
FM6W-600-4M	60	1,15	85	56400	96	65000	80,5	81	80,5	85	83	79	425	6000

The above mentioned electrical data are applicable for Star-Delta motors also

Note: Star-Delta motors are available from 7.5 H.P. onwards.

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 8"

SPECIFICATIONS

Nominal Dia	8"
Maximum Outer Diameter	7,75"
Power Range	50 HP to 125 HP - Three Phase
Speed	3450 rpm
Version	Three Phase - 380 V & 460 V, 60 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 58 / IP 68
Direction of Rotation	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	50 HP to 60 HP - 10000 lbs 75 HP to 125 HP - 12500 lbs
Minimum Cooling Flow Along the Motor	0,5 ft/sec
Maximum Liquid Temperature	Standard 91,4°F, High Temp 122°F Beyond 122°F can be supplied with derated motor
Starts per Hour	10 Times
Shaft Type	Splines
Mounting Standard	NEMA
Method of Starting	Three Phase - 50 HP to 125 HP - Direct On Line (DOL) Three Phase - 50 HP to 125 HP - Star Delta (SD)
Cable Lead out	Permanently Connected and Sealed 3/4 Core PVC / Rubber Insulated Flat Cable
Thermal Protection	Optional - PT Sensor

* On request motors 440V & 690V can be supplied.



MATERIALS OF CONSTRUCTION

Part Name	Type - B	Type - S
Shaft Seal Housing	Cast Iron	SS - 304 Casted
Shaft Seal / Mechanical Seal	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC
Upper & Lower Housings	Cast Iron	SS - 304 Casted
Stator Shell	SS - 304	SS - 304
Thrust Pad	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420
Diaphragm	High Nitrile Rubber	High Nitrile Rubber
Motor Base	Cast Iron	SS - 304 Casted
Shaft	EN-8	EN-8
Shaft Extension	SS - 410	SS - 410
Sleeves	SS - 431	SS - 431

* Motors with SS casted housings also can be supplied in SS 304 & SS 316.

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

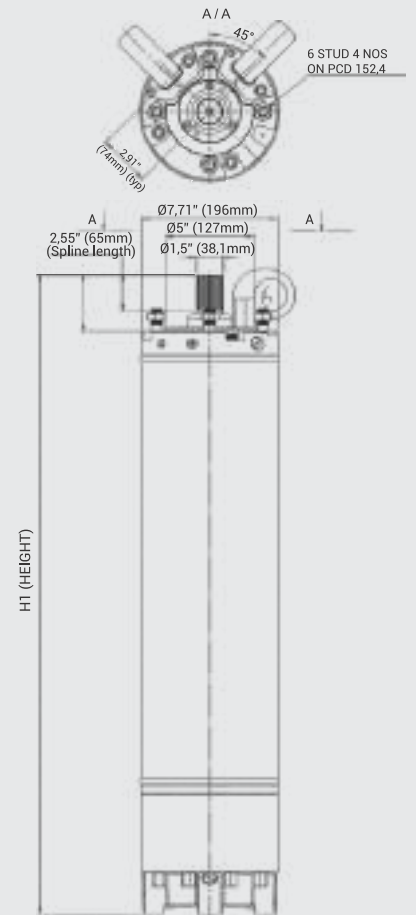
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 8"

380V & 460V, THREE PHASE

DIMENSIONS & WEIGHT DATA

Motor Model	HP	Lead Out Cable Size (Sq.mm)	Height H1	Nett Weight Approx.	
			Inches	kg	lbs
FM8W-500-4M	50	16	46,4	153,3	338
FM8W-600-4M	60	16	48,4	164,2	362
FM8W-750-4M	75	35	50,3	179,1	395
FM8W-850-4M	85	35	53,1	192,7	425
FM8W-A00-4M	100	35	57,6	214,5	473
FM8W-A25-4M	125	35	61,2	234	516



380V, THREE PHASE

TECHNICAL & ELECTRICAL DATA

MODEL	HP	SF	RATED		MAX. S.F.		Efficiency %			Power Factor%			Locked Rotor Amps	Thrust Capacity (lbs)
			Amps	W	Amps	W	S.F.	F.L.	3/4	S.F.	F.L.	3/4		
FM8W-500-4M	50	1,15	84	43100	93	49300	86	86	85	80	79	74	500	10000
FM8W-600-4M	60	1,15	98	51940	109	59900	87	87	86	83	82	76	590	10000
FM8W-750-4M	75	1,15	116	63500	131	73300	86	86	85	85	83	78	710	12500
FM8W-850-4M	85	1,15	135	73500	152	84900	87	87	84	85	83	79	820	12500
FM8W-A00-4M	100	1,15	155	84850	175	97850	88	88	88	85	83	78	945	12500
FM8W-A25-4M	125	1,15	198	107200	223	123000	86	86	86	84	82	76	1200	12500

460V, THREE PHASE

TECHNICAL & ELECTRICAL DATA

MODEL	HP	SF	RATED		MAX. S.F.		Efficiency %			Power Factor%			Locked Rotor Amps	Thrust Capacity (lbs)
			Amps	W	Amps	W	S.F.	F.L.	3/4	S.F.	F.L.	3/4		
FM8W-500-4M	50	1,15	66	43100	75	49800	86	86	85	83	82	80	450	10000
FM8W-600-4M	60	1,15	78	52400	88,5	60200	88	87	86	85	85	83	530	10000
FM8W-750-4M	75	1,15	96	64400	110	74200	86	85	84	85	84	82	720	12500
FM8W-850-4M	85	1,15	106	72500	122	84000	87	87	85	86	85	83	790	12500
FM8W-A00-4M	100	1,15	126	85400	145	99200	87	88	86	85	85	83	940	12500
FM8W-A25-4M	125	1,15	155	105600	177	122800	88	88	86	87	86	84	1150	12500

The above mentioned electrical data are applicable for Star-Delta motors also.

All Dimensions are in Inches & mm
Splined Shaft : 23 Teeth -
Module 1,5875 Pressure Angle 30°
A.N.S.I. B92-1 Tolerance Class 5

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 10"

SPECIFICATIONS

Nominal Dia	10"
Maximum Outer Diameter	9,1"
Power Range	100 HP to 250 HP - Three Phase
Speed	3490 rpm
Version	Three Phase - 380 V & 460 V, 60 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 68
Direction of Rotation	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	100 HP to 250 HP - 16860 lbs
Minimum Cooling Flow Along the Motor	0,5 ft/sec
Maximum Liquid Temperature	Standard 91,4°F, High Temp 122°F Beyond 122°F can be supplied with derated motor
Starts per Hour	10 Times
Shaft Type	Splines
Mounting Standard	NEMA
Method of Starting	Three Phase - Direct On Line (DOL) Three Phase - Star Delta (SD)
Cable Lead out	Permanently Connected and Sealed 3/4 Core Rubber Insulated Flat Cable
Thermal Protection	Optional - PT Sensor



* On request motors 440V & 690V can be supplied.

MATERIALS OF CONSTRUCTION

Part Name	Type - A	Type - N	Type - B
Shaft Seal Housing	SS - 304	SS - 316	Cast Iron
Shaft Seal / Mechanical Seal	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC
Upper & Lower Housings	SS - 304	SS - 316	Cast Iron
Stator Shell	SS - 304	SS - 316	SS - 304
Thrust Pad	Carbon Graphite	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420	SS - 420
Diaphragm	Nitrile Rubber (NBR)	Nitrile Rubber (NBR)	Nitrile Rubber (NBR)
Motor Base	SS - 304	SS - 316	Cast Iron

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 10"

380V & 460V - THREE PHASE

DIMENSIONS & WEIGHT DATA

Motor Models	Motor Power	Lead Out Cable Size (Sq.mm)		Height H1	Nett Weight Approx.	
	HP	DOL	SD	Inches	kg	lbs
FM10W-A00-4	100	25	16	18,9	239,4	528
FM10W-A10-4	110	25	16	19,6	259,4	572
FM10W-A25-4	125	25	16	20,3	273,5	603
FM10W-A50-4	150	25	25	22,3	313,4	691
FM10W-A75-4	175	25	25	23,9	341,1	752
FM10W-B00-4	200	35	35	26,8	364,2	803
FM10W-B25-4	225	35	35	28,7	408,2	900
FM10W-B50-4	250	35	35	30,2	439,0	968

380V DOL & SD MOTORS - THREE PHASE

TECHNICAL & ELECTRICAL DATA

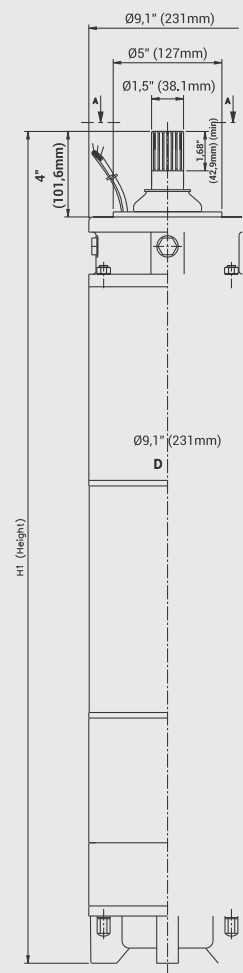
Model	Motor Power	Method of Starting	Full Load Current (A)	Starting Current (A)	Efficiency (%)	Power Factor	Max. Down Thrust Load (lbs)	Cable Size (Sq.mm)	
	HP							DOL No. of Leadouts	SD No. of Leadouts
FM10W-A00-4I	100	T / D	150	225	86	0,87	16860	1	2
FM10W-A10-4I	110	T / D	166	249	86	0,87	16860	1	2
FM10W-A25-4I	125	T / D	181	272	87	0,89	16860	1	2
FM10W-A50-4I	150	T / D	220	330	87	0,89	16860	2	2
FM10W-A75-4I	175	T / D	255	383	87	0,89	16860	2	2
FM10W-B00-4I	200	T / D	290	435	88	0,89	16860	2	2
FM10W-B25-4I	225	T / D	325	488	88	0,89	16860	2	2
FM10W-B50-4I	250	T / D	355	533	89	0,90	16860	2	2

460V DOL & SD MOTORS - THREE PHASE

TECHNICAL & ELECTRICAL DATA

Motor Model	Motor Power	Method of Starting	Full Load Current (A)	Starting Current (A)	Efficiency (%)	Power Factor	Max. Down Thrust Load (lbs)	Cable Size (Sq.mm)	
	HP							DOL No. of Leadouts	SD No. of Leadouts
FM10W-A00-4M	100	T / D	130	194	86	0,87	16860	1	2
FM10W-A10-4M	110	T / D	143	215	86	0,87	16860	1	2
FM10W-A25-4M	125	T / D	156	234	87	0,89	16860	1	2
FM10W-A50-4M	150	T / D	190	285	87	0,89	16860	2	2
FM10W-A75-4M	175	T / D	220	330	87	0,89	16860	2	2
FM10W-B00-4M	200	T / D	250	376	88	0,89	16860	2	2
FM10W-B25-4M	225	T / D	281	421	88	0,89	16860	2	2

METHOD OF STARTING : T - 3P / DOL / 60Hz D - 3P / SD / 60Hz



WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 12"

SPECIFICATIONS

Nominal Dia	12"
Maximum Outer Diameter	10,7"
Power Range	250 HP to 600 HP - Three Phase
Speed	3460 rpm
Version	Three Phase - 380 V & 460 V, 60 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 68
Direction of Rotation	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	250 HP to 600 HP - 13500 lbs
Minimum Cooling Flow Along the Motor	1,64 ft/sec (86°F), 2 ft/sec (122°F)
Maximum Liquid Temperature	Standard 91,4°F, High Temp 122°F Beyond 122°F can be supplied with derated motor
Starts per Hour	10 Times
Shaft Type	Key Way
Mounting Standard	International Standard
Method of Starting	Three Phase - Direct On Line (DOL) Three Phase - Star Delta (SD)
Cable Lead out	Permanently Connected and Sealed 3/4 Core Rubber Insulated Flat Cable
Thermal Protection	Optional PT Sensor



Type - A/N Type - B

* On request motors 440V & 690V can be supplied.

MATERIALS OF CONSTRUCTION

Part Name	Type - A	Type - N	Type - B
Seal Housing	SS - 304	SS - 316	Cast Iron
Mechanical Seal	Carbon / Ceramic SiC - SiC*	SiC - SiC	Carbon / Ceramic SiC - SiC*
Upper & Lower Housings	SS - 304	SS - 316	Cast Iron
Stator Shell	SS - 304	SS - 316	SS - 304
Thrust Pad	SS / Carbon	SS / Carbon	SS / Carbon
Thrust Bearing	SS / Carbon	SS / Carbon	SS / Carbon
Diaphragm	Nitrile Rubber (NBR)	Nitrile Rubber (NBR)	Nitrile Rubber (NBR)
Motor Base	SS - 304	SS - 316	Cast Iron
Shaft	SS - 304	Duplex Steel	SS - 304

* Optional.

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

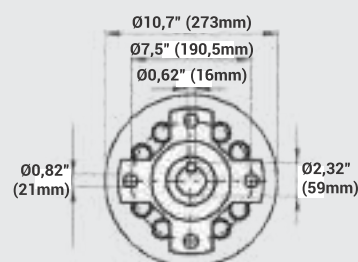
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : 12"

380V & 460V - THREE PHASE

DIMENSIONS & WEIGHT DATA

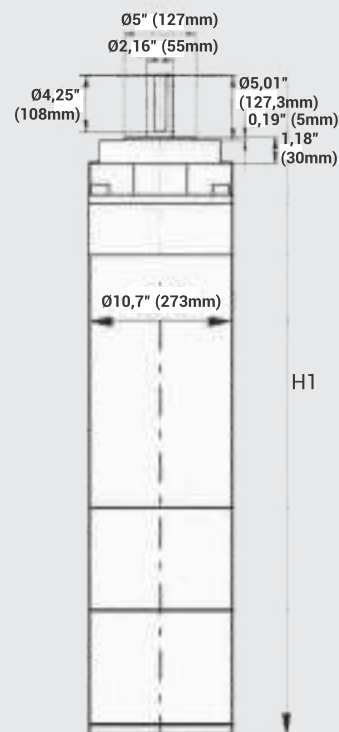
Model	Motor Power	Lead Out Cable Size (Sq.mm)		Height H1	Nett Weight Approx.	
	HP	380V	460V	Inches	kg	lbs
FM12W-B50-4	250	95	70	69,4	413	970
FM12W-C00-4	300	70	95	72,2	461,3	1017
FM12W-C50-4	350	70	120	75,6	497,1	1096
FM12W-D00-4	400	95	70	78,6	526,1	1160
FM12W-D50-4	450	95	95	82,3	566	1248
FM12W-E00-4	500	120	95	84,5	585,1	1290
FM12W-E50-4	550	150	120	87,0	611	1347
FM12W-F00-4	600	150	120	89,4	636,8	1404



380 V - THREE PHASE

TECHNICAL & ELECTRICAL DATA

Model	Motor Power	Method of Starting	Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (lbs)	No. of Leadouts
	HP				Eff. %	Power Factor		
FM12W-B50-4I	250	T	380	1938	87	85	13500	3
FM12W-C00-4I	300	T / D	465	2279	87	85	13500	6
FM12W-C50-4I	350	T / D	535	2568	87	85	13500	6
FM12W-D00-4I	400	T / D	625	3125	86	85	13500	6
FM12W-D50-4I	450	T / D	690	3312	86	85	13500	6
FM12W-E00-4I	500	T / D	780	3900	86	85	13500	6
FM12W-E50-4I	550	T / D	855	4446	85	84	13500	6
FM12W-F00-4I	600	T / D	960	5088	85	84	13500	6



460 V - THREE PHASE

TECHNICAL & ELECTRICAL DATA

Model	Motor Power	Method of Starting	Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (lbs)	No. of Leadouts
	HP				Eff. %	Power Factor		
FM12W-B50-4M	250	T	314	1601	87	85	13500	3
FM12W-C00-4M	300	T	384	1882	87	85	13500	3
FM12W-C50-4M	350	T	442	2122	87	85	13500	3
FM12W-D00-4M	400	T / D	516	2580	86	85	13500	6
FM12W-D50-4M	450	T / D	570	2736	86	85	13500	6
FM12W-E00-4M	500	T / D	644	3220	86	85	13500	6
FM12W-E50-4M	550	T / D	706	3671	85	84	13500	6
FM12W-F00-4M	600	T / D	793	4203	85	84	13500	6

ALL DIMENSIONS ARE
IN Inches & mm.

METHOD OF STARTING : T - 3P / DOL / 60Hz D - 3P / SD / 60Hz

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

CABLE SELECTION TABLE

1Ph, 2/3 WIRE MOTORS, MAXIMUM LENGTH OF COPPER CABLE IN FEET															
	Motor Rating	CABLE SIZE IN AMERICAN WIRE GAGE													
VOLT	HP		14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0
110V	0,5	Calculate Cable Length (FEET)	95	151	239	381	604	963	1213	1529	1928	2429	3065	3865	4873
	0,75		75	119	190	302	479	764	962	1213	1529	1926	2431	3065	3865
	1		68	108	172	274	434	692	872	1099	1386	1746	2203	2778	3503
	1,5		54	87	138	219	347	554	697	879	1108	1397	1762	2222	2802
220V	0,5		345	550	1390	2203	3515	4427	5584	7038	8868				
	0,75		262	417	1055	1672	2668	3360	4238	5342	6731	8493			
	1		203	324	819	1297	2069	2607	3288	4144	5221	6588			
	1,5		177	282	712	1129	1800	2268	2860	3605	4542	5731			
	2		165	262	664	1052	1677	2113	2665	3359	4232	5340			
	3		122	195	492	780	1244	1567	1976	2491	3139	3960			
	5				313	496	791	996	1256	1583	1995	2518			

THREE PHASE 3 WIRE (D.O.L.) MOTORMAXIMUM LENGTH OF COPPER CABLE - SINGLE CABLE PER PHASE															
	Motor Rating	CABLE SIZE IN AMERICAN WIRE GAGE													
VOLT	HP		14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0
220V	0,5	Calculate Cable Length (FEET)	842	1341	2130	3391	5373	6179							
	0,8		607	967	1535	2445	3874	4831							
	1,0		475	756	1200	1911	3029	3640	6085						
	1,5		358	569	904	1440	2282	2768	4585	5782					
	2,0		272	433	688	1095	1735	2214	3486	4397	5542				
	3,0		218	346	550	876	1388	1582	2789	3518	4434	5587	7049		
	4,0		155	247	393	626	992	1135	1992	2513	3167	3991	5035		
	5,0		112	178	282	449	712	963	1430	1804	2274	2865	3615	4559	5748
	6,0		95	151	239	381	604	805	1213	1529	1928	2429	3065	3865	4873
	7,5			126	200	319	505	633	1014	1279	1612	2032	2563	3233	4076
	10,0			99	157	250	397	540	797	1005	1267	1596	2014	2540	3202
	12,5				134	214	339	452	680	858	1081	1363	1719	2168	2734
	15,0				112	179	283	388	569	718	905	1140	1439	1814	2287
	17,5				97	154	244	344	489	617	778	980	1237	1560	1966
	20,0					136	216	283	433	546	688	868	1095	1380	1740
	25,0					112	178	241	357	450	567	714	901	1137	1433
	30,0						151	172	303	382	482	607	766	966	1218
	35,0						108	147	217	274	345	435	549	692	873
	40,0							130	185	233	293	370	466	588	742
	50,0								164	206	260	328	414	522	658

CABLE SELECTION TABLE

THREE PHASE 3 WIRE (S.D) MOTOR MAXIMUM LENGTH OF COPPER CABLE															
VOLT	Motor Rating	CABLE SIZE IN AMERICAN WIRE GAGE													
	HP		14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0
220V	0,5	Calculate Cable Length (FEET)	1769	2816	4472	7121	11284								
	0,8		1275	2030	3224	5134	8135	12976							
	1,0		997	1587	2521	4014	6360	10145	12779						
	1,5		751	1196	1899	3024	4792	7643	9628	12143					
	2,0		571	909	1444	2299	3644	5812	7321	9234	11639				
	3,0		457	727	1155	1840	2915	4650	5857	7387	9311	11732	14803		
	4,0		326	520	825	1314	2082	3321	4184	5276	6651	8380	10574		
	5,0		234	373	592	943	1495	2384	3004	3788	4775	6017	7591	9573	12071
	6,0		199	316	502	800	1267	2022	2547	3212	4048	5101	6436	8116	10234
	7,5			264	420	669	1060	1691	2130	2686	3386	4266	5383	6788	8559
	10,0			208	330	526	833	1329	1673	2111	2660	3352	4229	5334	6725
	12,5				282	449	711	1134	1429	1802	2271	2862	3610	4553	5741
	15,0				236	375	595	949	1195	1508	1900	2394	3021	3810	4804
	17,5				203	323	511	816	1028	1296	1633	2058	2597	3275	4129
	20,0					286	453	722	909	1147	1446	1822	2299	2899	3655
	25,0					235	373	595	749	945	1191	1500	1893	2387	3010
	30,0						317	505	637	803	1012	1275	1609	2029	2558
	35,0						227	362	456	575	725	914	1153	1454	1833
	40,0							308	388	489	616	776	979	1235	1557
	50,0							273	344	433	546	688	868	1095	1381

	THREE PHASE 3 WIRE (D.O.L.) MOTOR MAXIMUM LENGTH OF COPPER CABLE - SINGLE CABLE PER PHASE																				
	Motor Rating	CABLE SIZE IN AMERICAN WIRE GAGE														MCM Copper wire size					
VOLT	HP		14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500	
380V	0,5	Calculate Cable Length (FEET)	2374	3779	6002	9556	15143														
	0,8		1879	2991	4751	7565	11988														
	1,0		1253	1994	3168	5044	7992														
	1,5		940	1496	2376	3783	5994														
	2,0		778	1238	1966	3131	4961														
	3,0		626	997	1584	2522	3996														
	4,0		475	756	1200	1911	3029														
	5,0			544	864	1376	2180														
	6,0			460	731	1164	1844	2942													
	7,5			374	594	946	1499	2390													
	10,0			288	457	727	1153	1839													
	12,5			239	380	605	959	1530													
	15,0				322	513	813	1296	1633												
	17,5				291	463	733	1170	1587												
	20,0					362	573	954	1301	1894											
	25,0					321	509	812	983	1240	1563										
	30,0						426	680	922	1163	1466	1848									
	35,0							603	818	1031	1300	1638									
	40,0							503	634	799	887	1117	1410	1778							
	50,0							403	507	640	806	894	1128	1293	1630						
	60,0								477	602	618	779	983	1183	1421						
	75,0									558	552	696	798	1007	1270						
	85,0									516	511	643	738	931	1173						
	100,0										438	551	696	877	974	886					
	125,0											442	558	704	887	807	1145				
	150,0												534	673	849	748	1061				
	175,0														660	661	937	994			
	200,0																500	709	745		
	225,0																	647	754	798	1078
	250,0																	492	574	607	820
	300,0																		552	584	788
	350,0																			507	685
	400,0																			434	586

CABLE SELECTION TABLE

THREE PHASE 3 WIRE (S.D) MOTOR MAXIMUM LENGTH OF COPPER CABLE																			
VOLT	Motor Rating	CABLE SIZE IN AMERICAN WIRE GAGE													MCM Copper wire size				
	HP	14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500
380V	0,5	4985	7935	12604	20068	31800													
	0,8	3946	6282	9978	15887	25175													
	1,0	2631	4188	6652	10592	16784													
	1,5	1973	3141	4989	7944	12588													
	2,0	1633	2599	4129	6574	10417													
	3,0	1315	2094	3326	5296	8392													
	4,0	997	1587	2521	4014	6360													
	5,0		1142	1814	2889	4577													
	6,0		966	1535	2444	3873	6178												
	7,5		785	1247	1986	3147	5020												
	10,0		604	959	1528	2421	3861												
	12,5		503	798	1271	2014	3213												
	15,0			676	1077	1707	2723	3429											
	17,5			610	972	1540	2457	3333											
	20,0				759	1203	2003	2733	3977										
	25,0				674	1069	1705	2065	2604	3282									
	30,0					895	1428	1937	2443	3079	3880								
	35,0						1266	1717	2165	2729	3439								
	40,0						1057	1331	1679	1862	2346	2961	3734						
	50,0						845	1065	1343	1693	1877	2368	2715	3424					
	60,0							1002	1264	1298	1636	2064	2485	2984					
	75,0								1171	1160	1462	1677	2114	2666					
	85,0								1083	1072	1351	1550	1954	2464					
	100,0									919	1158	1461	1843	2044	1860				
	125,0										929	1172	1478	1863	1695	2405			
	150,0											1121	1414	1783	1570	2228			
	175,0													1387	1388	1969	2088		
	200,0														1050	1489	1564		
	225,0															1358	1584	1677	2264
	250,0															1033	1205	1275	1722
	300,0																1158	1226	1655
	350,0																	1066	1439
	400,0																	912	1231

CABLE SELECTION TABLE

3Ph, 460V, 3 WIRE (DOL) MOTORS, MAXIMUM LENGTH OF COPPER CABLE IN FEET																			
VOLT	Motor Rating	CABLE SIZE IN AMERICAN WIRE GAGE													MCM Copper wire size				
	HP	14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500
460V	0,5	3770	6020	9460															
	0,75	2730	4350	6850															
	1	2300	3670	5770	9070														
	1,5	1700	3710	4270	6730														
	2	1300	2070	3270	5150	8050													
	3	1000	1600	2520	3970	6200													
	4	748	1190	1891	3011	4771													
	5	590	950	1500	2360	3700	5750												
	5,5	557	887	1409	2243	3554	5669												
	6	510	812	1290	2054	3255	4933												
	7,5	420	680	1070	1690	2640	4100	5100	6260	7180									
	10	310	500	790	1250	1960	3050	3800	4680	5750	7050								
	12,5		410	651	1036	1642	2619	3299	4086	4963	6136	7593							
	15		340	540	850	1340	2090	2600	3200	3930	4810	5900	7110						
	20			410	650	1030	1610	2000	2470	3040	3730	4580	5530						
	25				530	830	1300	1620	1990	2450	3010	3700	4470	5430					
	30				430	680	1070	1330	1640	2030	2490	3060	3700	4500	5128	5850			
	35					580	926	1145	1418	1753	2124	2680	3177	3835	4264	4960			
	40					500	790	980	1210	1490	1830	2250	2710	3192	3720	4242			
	50						640	800	980	1210	1480	1810	2190	2650	2998	3409	3830	4171	4842
	60						540	670	830	1020	1250	1540	1850	2240	2532	2881	3230	3529	4188
	75								680	840	1030	1260	1520	1850	2088	2390	2688	2940	3428
	85									745	919	1136	1371	1652	1884	2127	2291	2491	2909
	100									620	760	940	1130	1380	1550	1782	2000	2182	2540
	110											696	877	1048	1107	1364	1447	1531	1860
	125											740	890	1000	1209	1381	1549	1691	1949
	150												760	920	1040	1182	1330	1452	1680
	175													810	921	1052	1181	1292	1501
	200														802	910	1018	1122	1300
	225															764	886	984	1132
	250																755	886	984
	300																623	755	837
	350																492	623	689
	400																361	492	525
	450																327	346	467
	500																289	306	413
	550																264	279	377
	600																235	249	336

CABLE SELECTION TABLE

	3Ph, 460V, 3 WIRE (DOL) MOTORS, MAXIMUM LENGTH OF COPPER CABLE IN FEET																					
	Motor Rating	CABLE SIZE IN AMERICAN WIRE GAGE														MCM Copper wire size						
VOLT	HP		14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500		
460V	0,5	Calculate Cable Length (FEET)	880	1420	2250	3450	5550	8620														
	0,75		743	1182	1878	2990	4739	7559														
	1		681	1083	1720	2739	4340	6923														
	1,5		630	1020	1600	2530	3960	6150	7650	9390												
	2		460	750	1180	1870	2940	4570	5700	7020	8620											
	3		368	585	930	1480	2345	3741	4713	5943	7491											
	4		310	510	810	1270	2010	3130	3900	4800	5800	7210	8850									
	5		230	380	610	970	1540	2410	3000	3700	4560	5590	6870	8290								
	5,5		190	310	490	790	1240	1950	2430	2980	3670	4510	5550	6700								
	6			250	410	640	1020	1600	1990	2460	3040	3730	4590	5550								
	7,5				335	533	844	1347	1697	2140	2697	3398	4288	5002								
	10				300	480	750	1180	1470	1810	2230	2740	3370	4080								
	12,5					370	590	960	1200	1470	1810	2220	2710	3280								
	15						320	500	810	1000	1240	1530	1870	2310	2770							
	20							420	660	810	1020	1260	1540	1890	2280							
	25								577	727	916	1155	1341	1691	2133	8140						
	30								500	610	760	930	1140	1410	1690	6750	7690	8730				
	35									507	640	806	1016	1282	1478	5965	6822	7259				
	40									470	590	730	880	1110	1330	4930	5590	6370				
	50										510	630	770	950	1140	3970	4510	5130	5740	6270	7270	
	60											550	680	830	1000	3360	3810	4330	4860	5310	6510	
	75												590	730	880	2770	3150	3600	4050	4420	5160	
	85													623	755	2459	2691	3272	3563	3771	4909	
	100														591	2070	2340	2680	3010	3280	3820	
	110															1863	2039	2480	2893	3061	3307	
	125															1500	1830	2080	2340	2550	2940	
	150															1380	1570	1790	2000	2180	2530	
	175															1220	1390	1580	1780	1950	2270	
	200															1070	1210	1380	1550	1690	1970	
	225															919	1050	1247	1411	1558	1837	
	250															820	951	1116	1280	1427	1706	
	300															722	853	984	1116	1296	1575	
	350															623	722	853	951	1148	1444	
	400																623	722	787	1017	1312	
	450																	411	584	681	721	973
	500																	364	517	603	638	861
	550																	332	471	550	582	785
	600																	296	420	489	518	699

CONVERSION TABLE

FLOW RATE

US-GPM	lps	lpm	m ³ /h	ft ³ /h	ft ³ /min	imp - GPM	US - barrel / day
1	0,063	3,785	0,2271	8,0209	0,1337	0,833	34,286
15,850	1	60	3,6	127,133	2,1189	13,2	543,439
0,264	0,017	1	0,06	2,1189	0,0353	0,22	9,057
4,403	0,278	16,667	1	35,3147	0,5886	3,666	150,955
0,125	0,008	0,472	0,0283	1	0,0167	0,104	4,275
7,48	0,472	28,317	1,6990	60	1	6,229	256,475
1,201	0,076	4,546	0,2728	9,6326	0,1605	1	41,175
0,029	0,002	0,110	0,0066	0,2339	0,0039	0,024	1

LIQUID

US-Gallon	m ³	Litre (L)	Milliliter (ml)	Imp. Gallon	ft ³
1	0,00378	3,785	3785	0,8327	0,1337
264,2	1	1000	1X10 ⁶	220	35,3147
0,2642	0,001	1	1000	0,22	0,0353
2,642X10 ⁻⁴	1X10 ⁻⁵	0,001	1	2,2X10 ⁻⁴	3,53X10 ⁻⁵
1.201	0,00455	4,546	4546	1	0,1605
7,4805	0,0283	28,317	28317	6,2288	1

LIQUID HEAD AND PRESSURE

Psi	N/m ² (Pa)	kPa	bar	Kgf/cm ²	foot for water ft H ₂ O	Meter of water m H ₂ O	Millimeter of Mercury mm Hg	Inch of Mercury in Hg
1	6895	6,895	0,069	0,0703	2,31	0,703	51,72	2,036
1,45X10 ⁻⁴	1	0,001	1X10 ⁻⁵	1,02X10 ⁻⁵	3,35X10 ⁻⁴	1,02X10 ⁻⁴	0,0075	2,95X10 ⁻⁴
0,145	1000	1	0,01	0,0102	0,335	0,102	7,5	0,295
14,5	1X10 ⁵	100	1	1,02	33,52	10,2	750,1	29,53
14,22	98,067	98,07	0,981	1	32,81	10	735,6	28,96
0,433	2984	2,984	0,030	0,0305	1	0,305	22,42	0,882
1,42	9789	9,789	0,098	0,1	3,28	1	73,42	2,891
0,019	133,3	0,133	0,0013	0,0014	0,045	0,014	1	0,039
0,491	3386	3,386	0,0338	0,0345	1,133	0,0345	25,4	1

LENGTH

Inch (in)	Millimeter (mm)	Centimeter (cm)	Meter (m)	Foot (ft)	Yard (yd)
1	25,4	2,54	0,0254	0,0833	0,0278
0,0394	1	0,10	0,001	0,0033	0,0011
0,3937	10	1	0,01	0,0328	0,0109
39,3701	1000	100	1	3,2808	1,0936
12	304,8	30,48	0,3048	1	0,3333
36	914,4	91,44	0,9144	3	1

MASS

1 kilometer = 1000 metre = 0.62137 mile; 1 mile = 1609.34 metre = 1.60934 kilometre

Pound (lb)	Kilogram (kg)	Hundred Weight (cwt)	Tonne (t)	Ton long (tn)	short Ton (sh tn)
1	0,454	0,0089	4,54x10 ⁻⁴	4,46x10 ⁻⁴	5,0x10 ⁻⁴
2,205	1	0,0197	0,001	9,84x10 ⁻⁴	0,0011
112	50,802	1	0,0508	0,05	0,056
2204,6	1000	19,684	1	0,9842	1,1023
2240	1016	20	1,0161	1	1,1020
2000	907,2	17,857	0,9072	0,8929	1

TEMPERATURE

To Convert From	To	Use Formula
Celsius, tC	Kelvin, tK	tK = tC + 273,15
Fahrenheit, tF	Kelvin, tK	tK = (tF + 459,67) / 1,8
Celsius, tC	Fahrenheit, tF	tF = 1,8 tC + 32
Fahrenheit, tF	Celsius, tC	tC = (tF - 32) / 1,8
Kelvin, tK	Celsius, tC	tC = tK - 273,15
Kelvin, tK	Fahrenheit, tF	tF = 1,8 tK - 459,67

[illegible]

NOTES



FABBRICA ITALIANA POMPE SOMMERGIBILI S.r.l.

Via Artigianato, 16 - 20072 Pieve Emanuele (MI) - Italy

Tel : +39 02 49708488 | E-mail : info@fips-pumps.it | www.zirantec.com