

SUBMERSIBLE ELECTRIC PUMPS & MOTORS

50 Hz

Zirantec



www.zirantec.com

CE | An ISO 9001 Company



ZIRANTEC products are manufactured by well qualified and experienced Italian Pump Engineers in state of the art manufacturing facilities in Italy

CERTIFICATION



ZIRANTEC Pumps & Motors are from the house of **Fabbrica Italiana Pompe Sommergibili S.r.l.** a four decades old Italian company of high repute, offering complete waste water solutions around the world. Its current product portfolio includes world class Waste Water Pumps of various types, Multistage Centrifugal Pressure Booster Pumps, Borehole Submersible Pumps & Motors, End Suction Centrifugal Pumps, Industrial Pumps for various applications.

Founded as early as 1978 in Rozzano, South of Milan, Italy by Mr.Orfeo Agostini, the company has witnessed steady growth and market expansion continuously ever since. In these four decades of existence, the company has carved a niche for itself in the waste water and sewage pump market in Italy and other countries. Its products are employed in Municipal, Domestic and Industrial applications. The Company is well known for the unique and robust designs of its products and their workmanship. Due to its superior quality ZIRANTEC products are also exported to many European, African and Asian countries.

ZIRANTEC's products are conceived, designed and manufactured by well qualified and experienced Italian Pump Engineers in state of the art manufacturing facilities in Italy. These manufacturing plants are accredited with UNI EN ISO 9001:2015 Certification.

Over the years, the company has metamorphosed and ventured into manufacturing of high quality water pumps, for domestic, agricultural and industrial applications. In the due process, Fabbrica Italiana Pompe Sommergibili S.r.l. has shed its image of an exclusive sewage and waste water pumps manufacturer to a complete pump production company with an ability to manufacture diverse kinds of pumps for different applications.

Zirantec



C O N T E N T S

SUBMERSIBLE PUMPS

ORION SERIES - STAINLESS STEEL SUBMERSIBLE PUMPS	Page No.
General Information	08
Group Performance Curves	09 - 11
Material of Construction	12
Exploded Views	13 - 17
Dimension & Weight / Performance Curves	18 - 85
<hr/>	
HYDRA SERIES - THERMO PLASTIC SUBMERSIBLE PUMPS	
General Information	87
Group Performance Curves	89
Material of Construction	86
Exploded Views	91 - 93
Dimension & Weight / Performance Curves	94 - 111
<hr/>	
SUBMERSIBLE MOTORS	
Model Identification Code	113
<hr/>	
OIL FILLED SUBMERSIBLE MOTORS	
Description	114
Exploded View	115
Specifications and Material Of Construction	116
Technical Data, Dimensions & Weight Table	117
<hr/>	
WATER FILLED SUBMERSIBLE MOTORS	
Exploded View	118 - 121
Specifications and Material Of Construction Technical Data, Dimensions & Weight Table	122 - 129
<hr/>	
CABLE SELECTION	
Cable Selection Table	130 - 131
Pipe friction Table	132 - 133

Submersible Pumps
Orion Series





GENERAL INFORMATION

ORION & HYDRA SERIES

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.

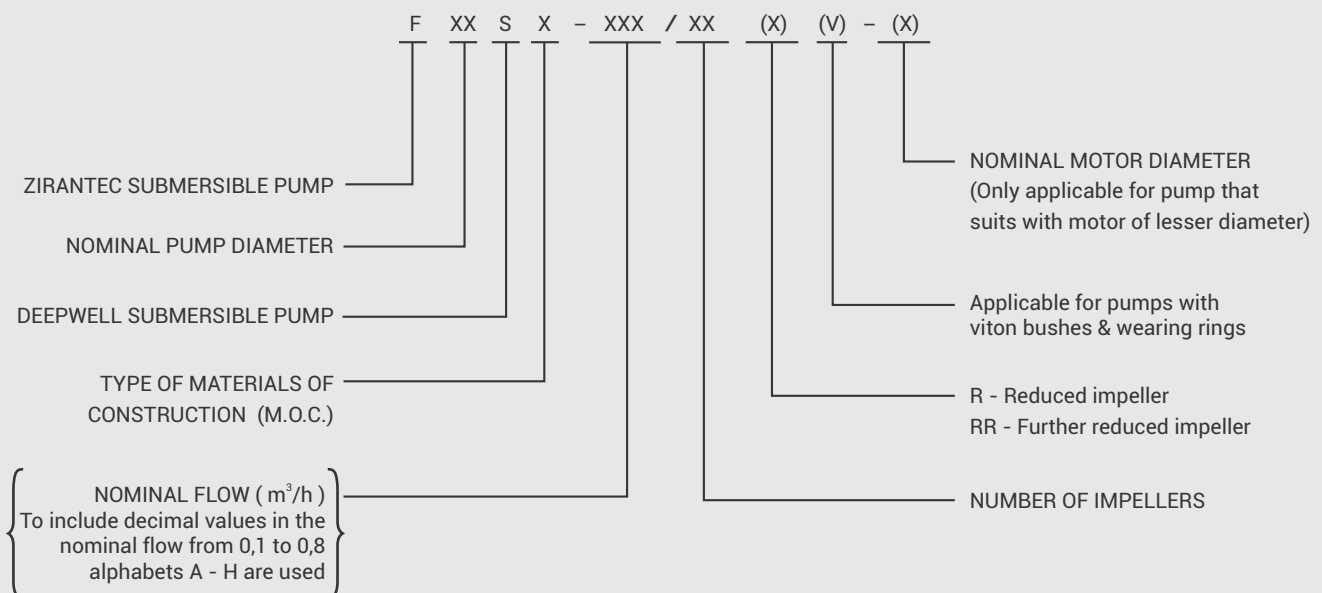
IMPORTANT NOTES

| 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.

ORION & HYDRA SERIES MODEL IDENTIFICATION CODE

DEEPWELL SUBMERSIBLE PUMP



BOREHOLE SUBMERSIBLE PUMP

PUMP MODEL	/	CODE
F XX S X - XXX / XX	/	F 04 S S - 1E / 08

PUMPED LIQUIDS

Clean, thin, non-aggressive, non explosive, clear, cold, fresh water without abrasives, solid particles or fibre having the following characteristics

- a) **Temperature (max)** ----- NBR - 45°C / VITON - 90°C
- b) **Permissible amount of sand** ----- 50g/m³ (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 (max)
- g) **Viscosity** ----- 1,75 x 10⁻⁶ m²/sec (max)
- h) **Turbidity** ----- 50 ppm silica scale (max)
- i) **pH** ----- 5 to 8,5
- j) **Altitude** ----- 3000 m.a.s.l (max)

TECHNICAL SPECIFICATION					
Nominal Diameter		4"(100mm)	6"(150mm)	8"(200mm)	10"(250mm)
Power Range		0,37 - 11 kW	2,2 - 63 kW	5,5 - 130 kW	9,3 - 220 kW
Speed		2900 rpm	2900 rpm	2900 rpm	2900 rpm
Discharge Range	m³/h	0,4 - 19	7 - 120	20 - 126	18 - 280
	lps	0,12 - 5,28	1,94 - 33,33	5,5 - 35	5 - 77,78
Total head range	m	4,0 - 535	4,5 - 850	8 - 518	6 - 488
	ft	13,0 - 1755	15 - 2788	26 - 1558	19,68 - 1600
Outlet size in inches		1¼, 1½ & 2	2, 2½, 3 & 4	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" & 6"	0,15 m/s	NBR-45°C VITON-90°C	NBR-45°C VITON-90°C
8" & 10"	0,16 m/s	VITON-90°C	VITON-90°C
4" & 10"	0,5 m/s	VITON-90°C	VITON-90°C

MAXIMUM OPERATING PRESSURE	
4" Submersible pump	5,4 Mpa (54 bar)
6" Submersible pump	7,6 Mpa (76 bar)
8" Submersible pump	4,8 Mpa (48 bar)
10" Submersible pump	5,5 Mpa (55 bar)

- Method of installation : Vertical/horizontal
- Combinations model : Combination of different sizes of pumps Designs
- Are also available according to the Hp requirements
- Ex motor/Pumps size- 4"/6",6"/8",8"/10",6"/4",8"/6",10"/8" etc...,

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

Submersible Pumps

Orion Series
50 HZ



CORROSION RESISTANCE | HIGH QUALITY

Engineered to perfection with corrosion resistance stainless steel the pump comes in four types (4", 6", 8" & 10") in accordance with NEMA standards. Matching of the ideally designed impellers and diffusers enables the best possible hydraulic efficiency. Exclusively ZIRANTEC

The pump which is a multistage centrifugal type is operated by submerging it beneath the surface of water. A highly advanced built in check valve prevents backflow, and reduces the risk of water hammer.

PREVENTS BACKFLOW | EXCELLENT OPERATION

ZIRANTEC 4", 6", 8" & 10" Stainless steel series submersible pump are products of expertise gained from over thirty years of experience, endurance and workmanship. Engineered to perfection the utmost care and stringent quality control at all stages has been taken to ensure a trouble free service.

ZIRANTEC submersible pumps can be offered with ZIRANTEC 'W' series, water filled rewindable submersible motors / ZIRANTEC 'R' series, Resin Filled encapsulated (water lubricated) submersible motors / ZIRANTEC 'L' Series, Non-toxic liquid filled submersible motors or any other NEMA standard motors.

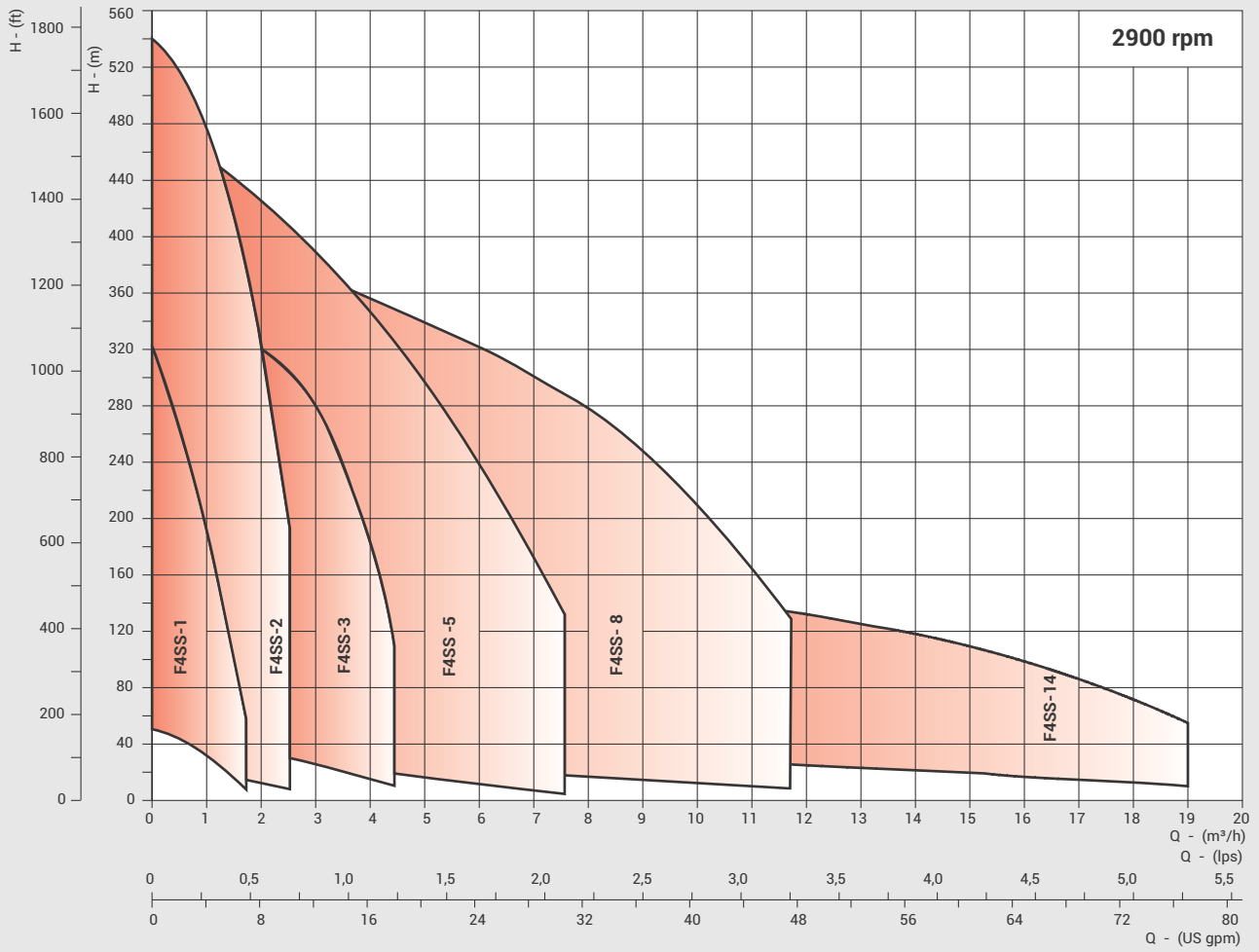
FEATURES : Best operating efficiency | Precise parts made of SS 304/316 | Highly durable & Hygiene | Good resistance to sand | Can be easily dismantled and repaired | Can handle upthrust loads | Additional intermediate bearings in higher stage pumps | Available MOC : Type S&N | Carbon thrust pad | Rubber bush bearing in all stages | SS 329 spline coupling for longer life.

APPLICATIONS : Residential | Irrigation | Civil Water supply | Fountains | Industrial & Rural water supply | Golf Course | Fire Fighting & Pressure Boosting units | Sprinkler Systems | Mining | Oil & Gas | De-watering | Food processing industry | Gardens | De-salination plants

FEATURES

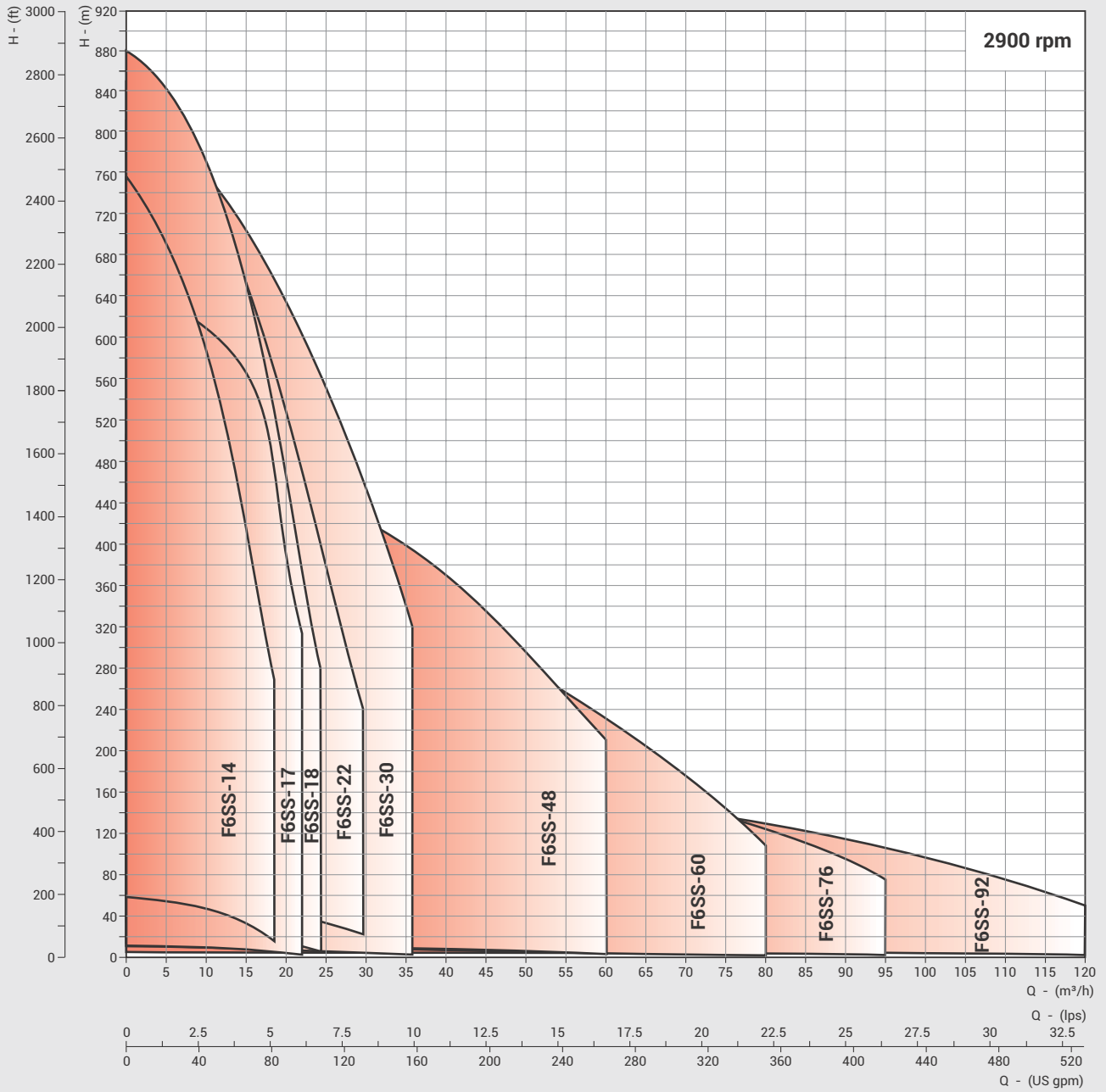
- Made of corrosion resistance stainless steel with built in check valve.
- All vital components are made of high quality 304 / 316 grade stainless steel.
- Shaft Dimension - S.S 304 / 329 / 431.
- Optimal design of impellers and diffusers enables the best possible hydraulic efficiency.
- All mounting dimensions of pumps and motors are in accordance with NEMA standards.
- Can be coupled to a submersible electric motor, which operates submerged beneath the surface of water.
- Built in check valve prevents backflow, and reduces the risk of water hammer.

HYDRAULIC GROUP PERFORMANCE CURVES - 4" STAINLESS STEEL PUMP



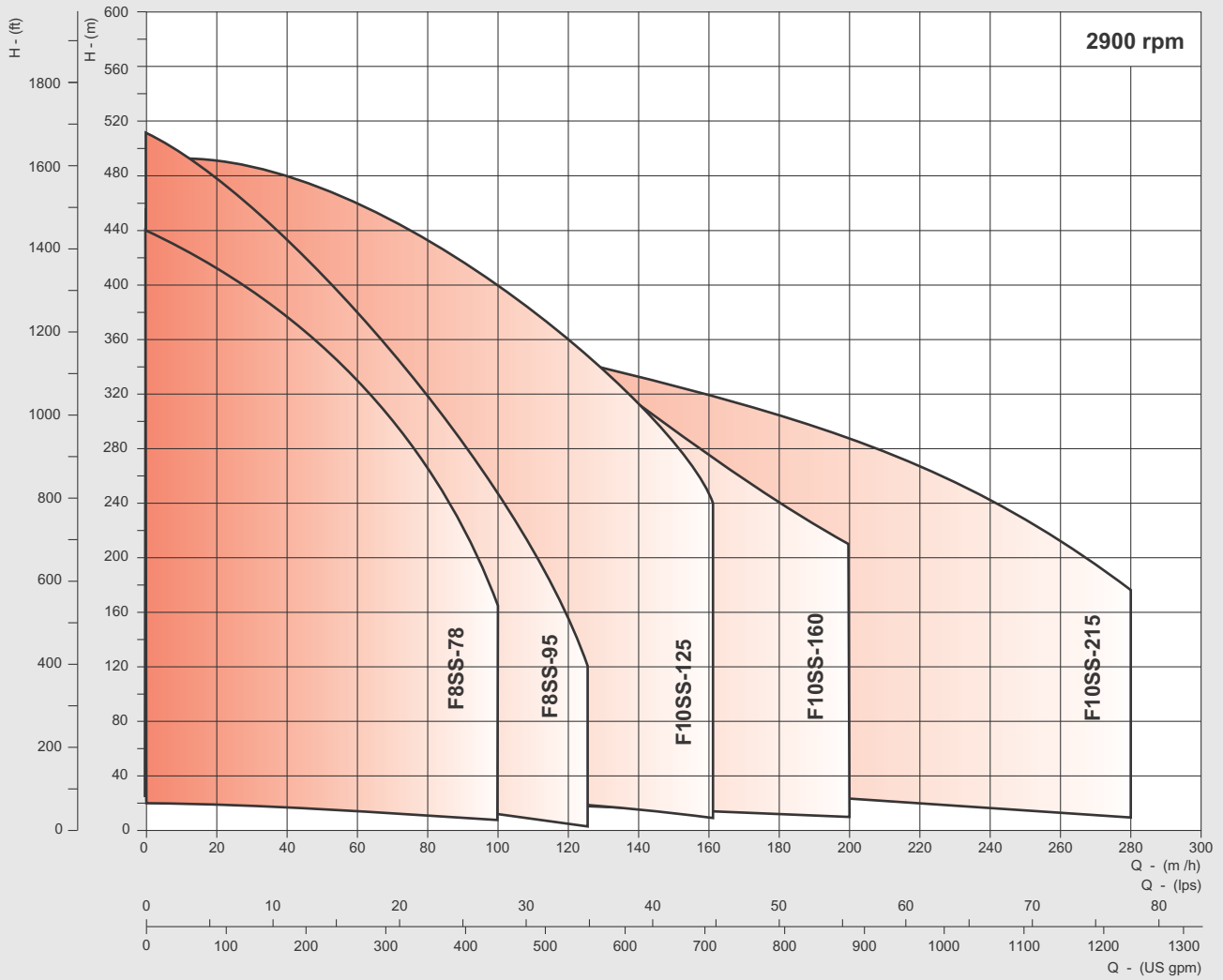
In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

HYDRAULIC GROUP PERFORMANCE CURVES - 6" STAINLESS STEEL PUMP



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

HYDRAULIC GROUP PERFORMANCE CURVES - 8" & 10" STAINLESS STEEL PUMP



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

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 / VITON	NBR / VITON	NBR / VITON	NBR / VITON
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 / VITON	NBR / VITON	NBR / VITON	NBR / VITON
Upthrust Washer / Stop Ring	13,03	S.S. - 304 / TEFLON S.S. - 420 / BRONZE	S.S. - 316 / TEFLON	S.S. - 420 / CARBON	S.S. - 329 / CARBON
Intermediate Bearing	18,07	NBR / VITON	NBR / VITON	NBR / VITON	NBR / VITON
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. - 304 / 431*	S.S. - 316 / 329*	S.S. - 431	S.S. - 329
Coupling Splines	22,01	S.S. - 329	S.S. - 329	S.S. - 329	S.S. - 329
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

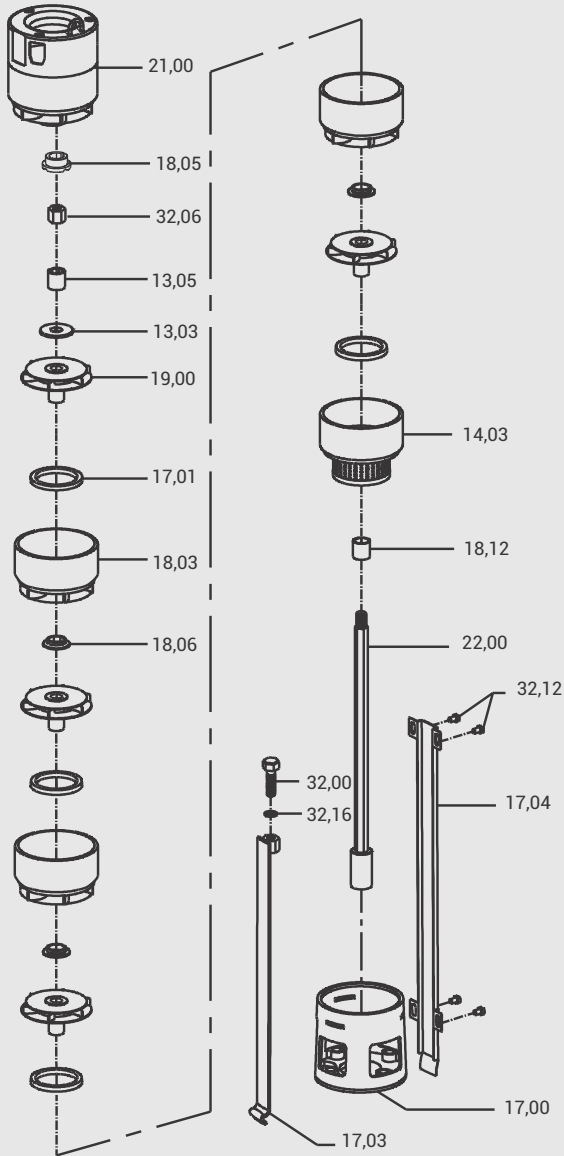
* Provided only for 4", 14m³/h

** Applicable for 4", 14m³/h and 6" 14m³/h to 10" 215m³/h pump models.

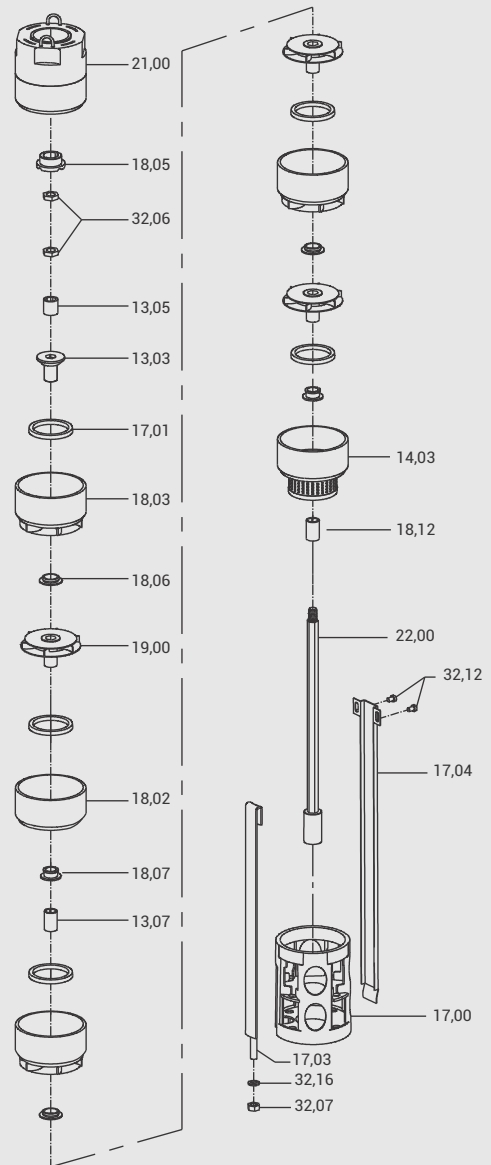
Note : 4" 1m³/h to 8m³/h pumps are provided with hexagonal shaft and other 4", 6", 8" & 10" pumps are with round shaft.
VITON Components are optional

EXPLODED VIEW - 4" STAINLESS STEEL SUBMERSIBLE PUMP

F4SS-1 / F4SS-2 / F4SS-3 (Below 29 Stages)



F4SS-1 / F4SS-2 / F4SS-3 (29 & above Stages)

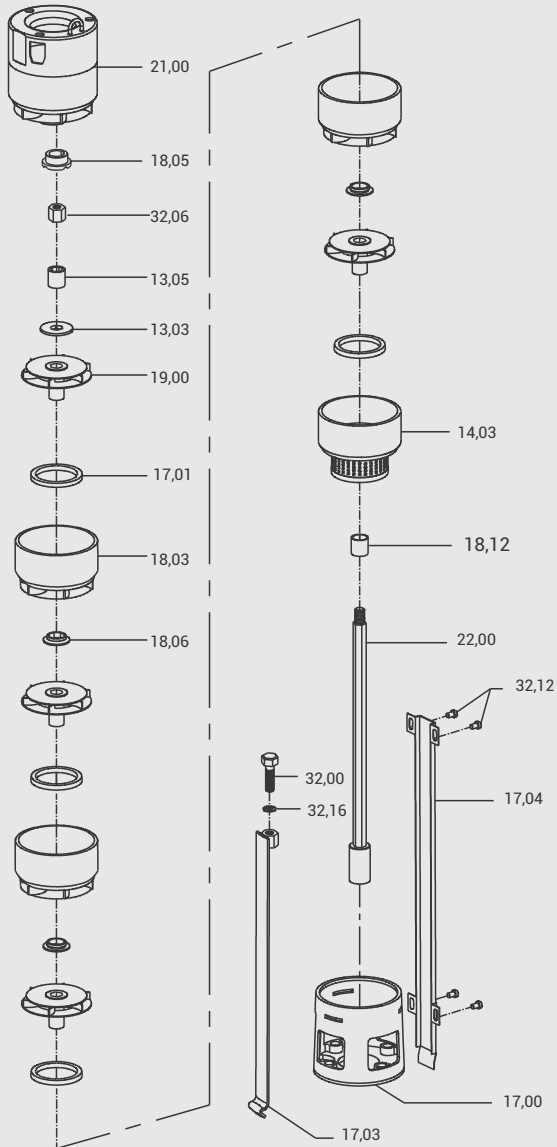


PART NO.	PART NAME	PART NO.	PART NAME
13,03	Upthrust Washer	19,00	Impeller
13,05	Sleeve	21,00	Check Valve Housing
14,03	Chamber-Inlet Screen	22,00	Pump Shaft
17,00	Suction Inter-connector	32,00	Bolt
17,01	Wearing ring	32,06	Lock Nut
17,03	Locking Strap	32,12	Screw
17,04	Cable Guard	32,16	Washer
18,03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

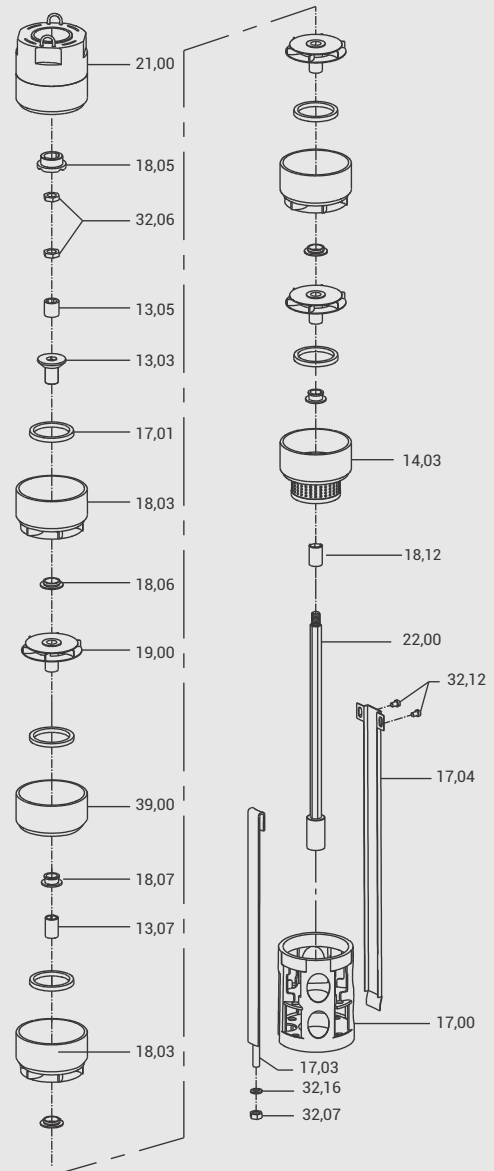
PART NO.	PART NAME	PART NO.	PART NAME
13,03	Upthrust Sleeve	18,06	Bush - Diffuser Chamber
13,07	Sleeve - Bracket	18,07	Bush - Bracket
13,05	Sleeve	18,12	Spacer Sleeve
14,03	Chamber-Inlet Screen	19,00	Impeller
17,00	Suction Inter-connector	21,00	Check Valve Housing
17,01	Wearing ring	22,00	Pump Shaft
17,03	Locking Strap	32,06	Lock Nut
17,04	Cable Guard	32,07	Nut
18,02	Chamber - Bracket	32,12	Screw
18,03	Diffuser Chamber	32,16	Washer
18,05	Bush - CT Pad		

EXPLODED VIEW - 4" STAINLESS STEEL SUBMERSIBLE PUMP

F4SS-5 (Below 25 Stages)



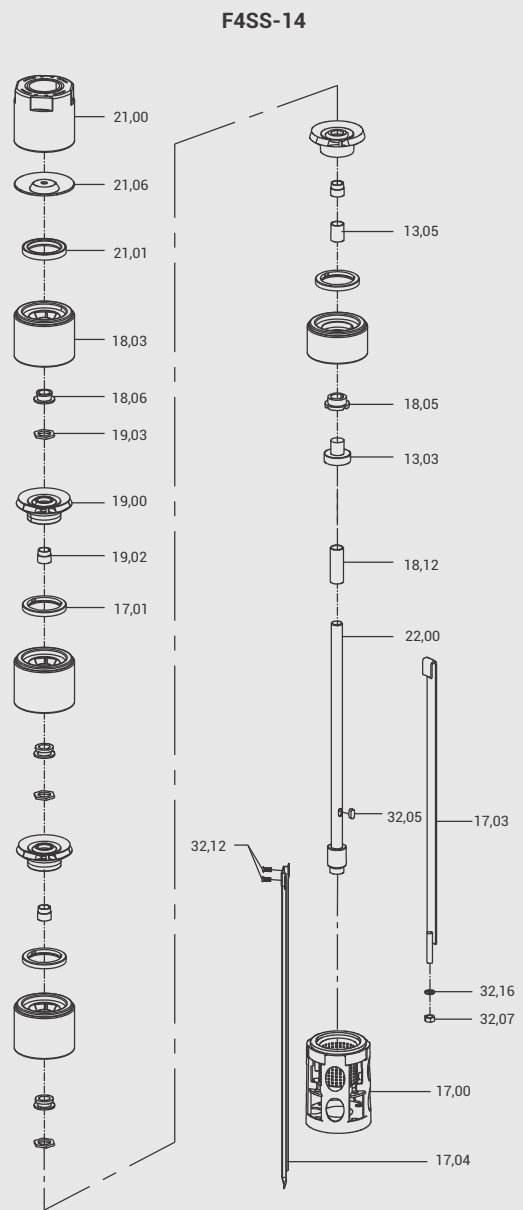
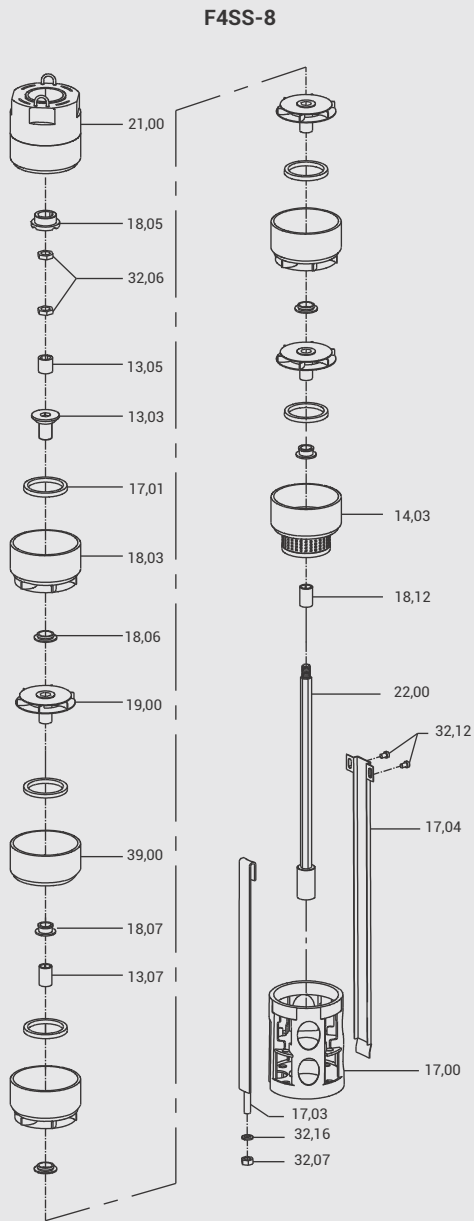
F4SS-5 (25 & Above Stages)



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

PART NO.	PART NAME	PART NO.	PART NAME
13,03	Uphrust 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	32,06	Lock Nut
17,03	Locking Strap	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

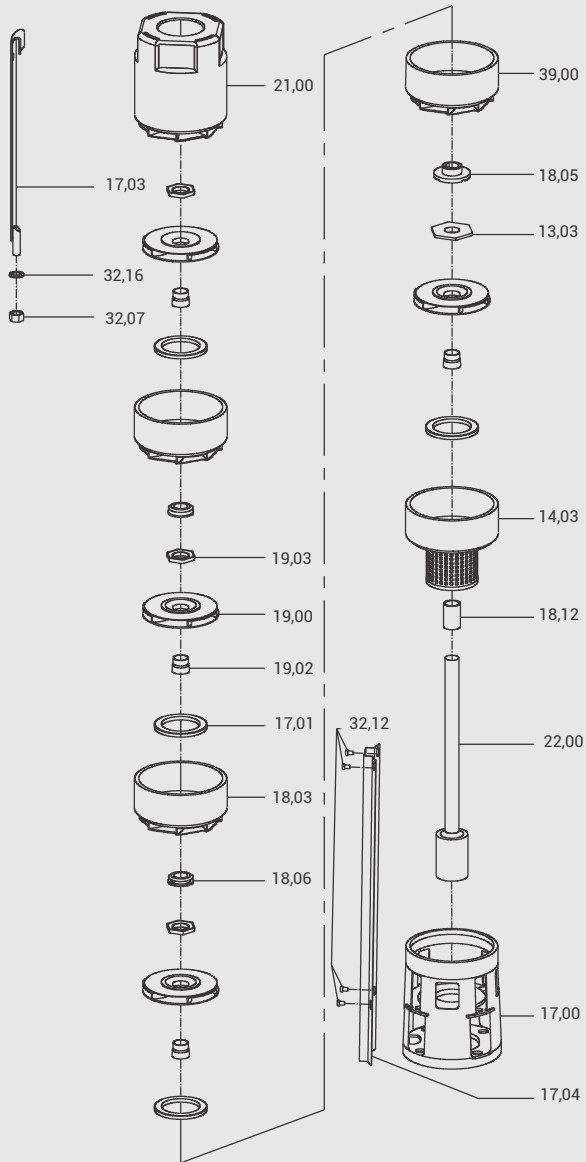


PART NO.	PART NAME	PART NO.	PART NAME
13,03	Upthrust Sleeve	18,07	Bush - Bracket
13,05	Sleeve	18,12	Spacer Sleeve
13,07	Sleeve-Bracket	19,00	Impeller
14,03	Chamber-Inlet Screen	21,00	Check Valve Housing
17,00	Suction Inter-connector	22,00	Pump Shaft
17,01	Wear ring	39,00	Chamber - Bracket
17,03	Locking Strap	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		

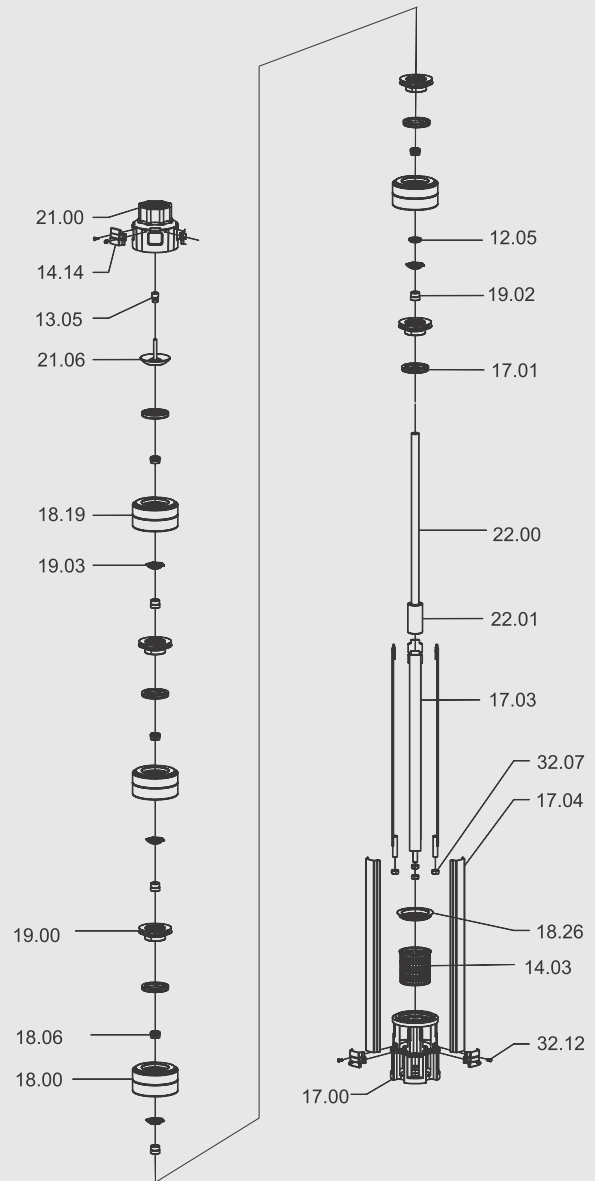
PART NO.	PART NAME	PART NO.	PART NAME
13,03	Upthrust Sleeve	19,02	Split Cone
13,05	Sleeve	19,03	Split Cone Nut
17,00	Suction Inter-connector	21,00	Check Valve Housing
17,01	Wear ring	21,01	Check Valve Seat
17,03	Locking Strap	21,06	Check Valve Disc
17,04	Cable Guard	22,00	Pump Shaft
18,03	Diffuser Chamber	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

F6SS-14 / F6SS-18 / F6SS-22



F6SS-17



PART NO.	PART NAME
13,03	Upthrust Washer
14,03	Chamber Inlet Screen
17,00	Suction Inter-connector
17,01	Wear ring
17,03	Locking Strap
17,04	Cable Guard
18,03	Diffuser Chamber
18,05	Bush - CT Pad
18,06	Bush - Diffuser Chamber
18,12	Spacer Sleeve
19,00	Impeller

PART NO.	PART NAME
19,02	Split Cone
19,03	Split Cone Nut
21,00	Check Valve Housing
22,00	Pump Shaft
32,07	Nut
32,12	Screw
32,16	Washer
39,00	Chamber - Bracket

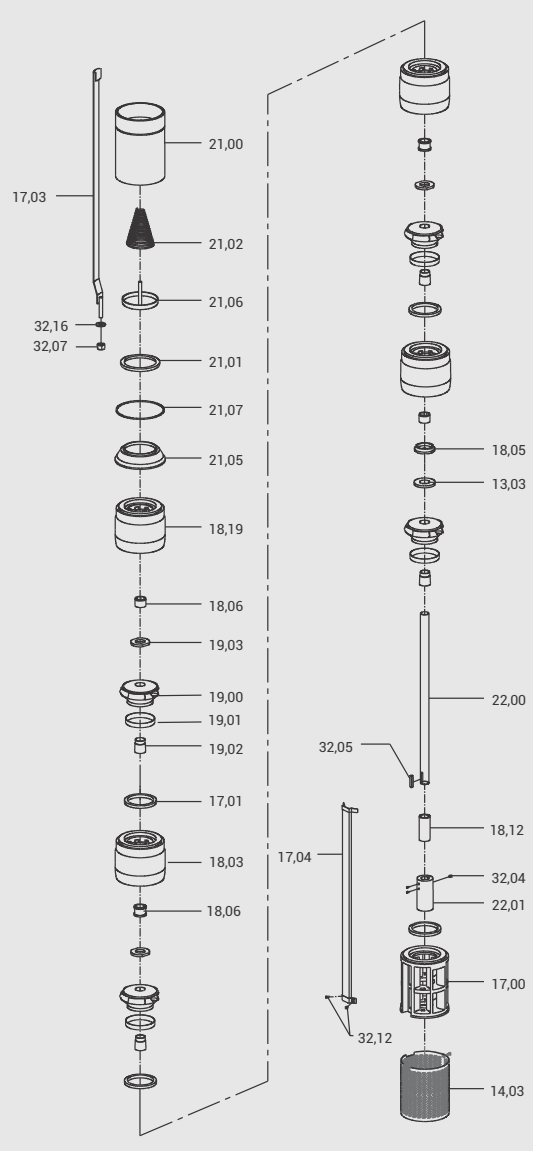
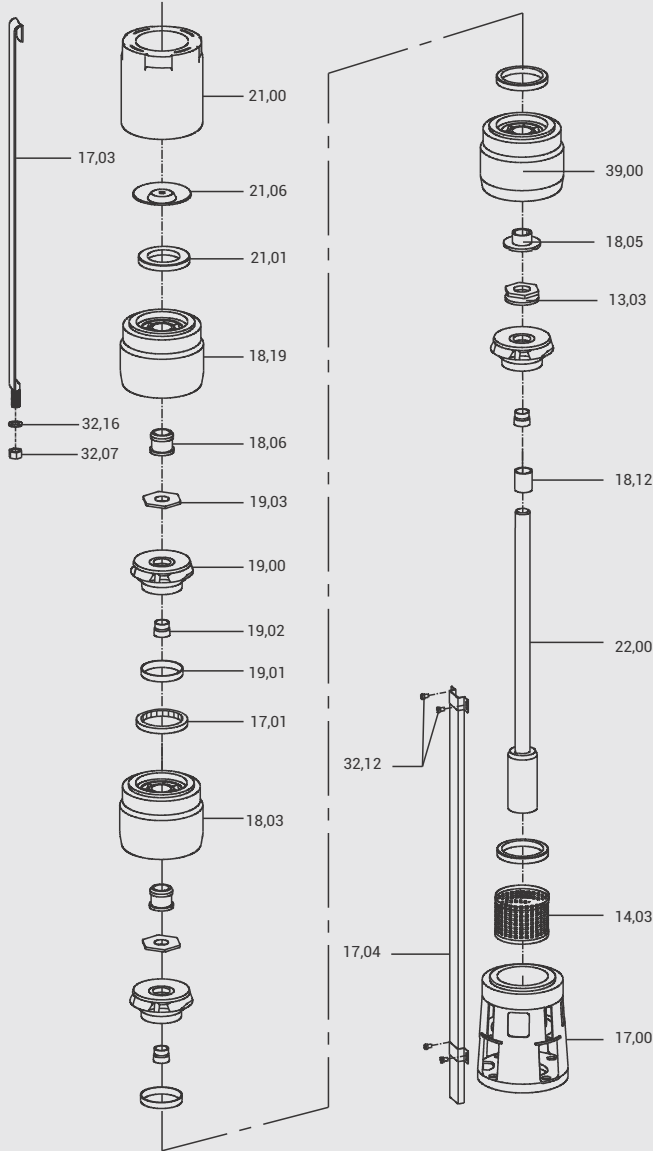
PART NO.	PART NAME
13,03	Upthrust Washer
14,03	Inlet Screen
17,00	Suction Inter-connector
17,01	Wear ring
17,03	Locking Strap
17,04	Cable Guard
18,05	Bush - CT Pad
18,06	Bush - Diffuser Chamber
18,03	Diffuser Chamber
18,12	Spacer Sleeve
18,19	Diffuser Chamber Top
19,00	Impeller

PART NO.	PART NAME
19,01	Neck Ring
19,02	Split Cone
19,03	Split Cone Nut
21,00	Check Valve Housing
21,01	Check Valve Seat
21,06	Check Valve Disc
22,00	Pump Shaft
32,07	Nut
32,12	Screw
32,16	Washer
39,00	Chamber - Bracket

EXPLODED VIEW - 8" & 10" STAINLESS STEEL SUBMERSIBLE PUMP

F6SS-30 / F6SS-48 / F6SS-60 / F6SS-76 / F6SS-92

F8SS-78 / F8SS-95 / F10SS-125 / F10SS-160 / F10SS-215



PART NO.	PART NAME
13,03	Upthrust Washer
14,03	Inlet Screen
17,00	Suction Inter-connector
17,01	Wear ring
17,03	Locking Strap
17,04	Cable Guard
18,03	Diffuser Chamber
18,05	Bush - CT Pad
18,06	Bush - Diffuser Chamber
18,12	Spacer Sleeve

PART NO.	PART NAME
18,19	Diffuser Chamber Top
19,00	Impeller
19,01	Neck Ring
19,02	Split Cone
19,03	Split Cone Nut
21,00	Check Valve Housing
21,01	Check Valve Seat
21,02	Check Valve Spring
21,05	Check Valve bracket
21,06	Check valve Disc

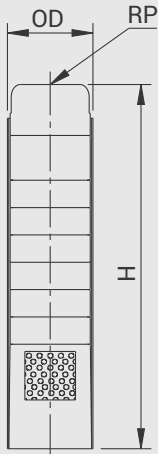
PART NO.	PART NAME
21,07	O-Ring
22,00	Pump Shaft
22,01	Coupling
32,04	Crub Screw
32,05	Key
32,07	Nut
32,12	Screw
32,16	Washer

DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 1m³/h

Outlet Size : 1½"



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SS-1/09	0,37	0,5	97	32	357	4
F4SS-1/14	0,37	0,5	97	32	467	5
F4SS-1/18	0,55	0,75	97	32	555	6
F4SS-1/21	0,55	0,75	97	32	621	7
F4SS-1/28	0,75	1	97	32	775	9
F4SS-1/36	1,1	1,5	97	32	1094	13
F4SS-1/42	1,1	1,5	97	32	1262	16
F4SS-1/50	1,5	2	97	32	1454	19
F4SS-1/57	1,5	2	97	32	1646	21

PERFORMANCE TABLE

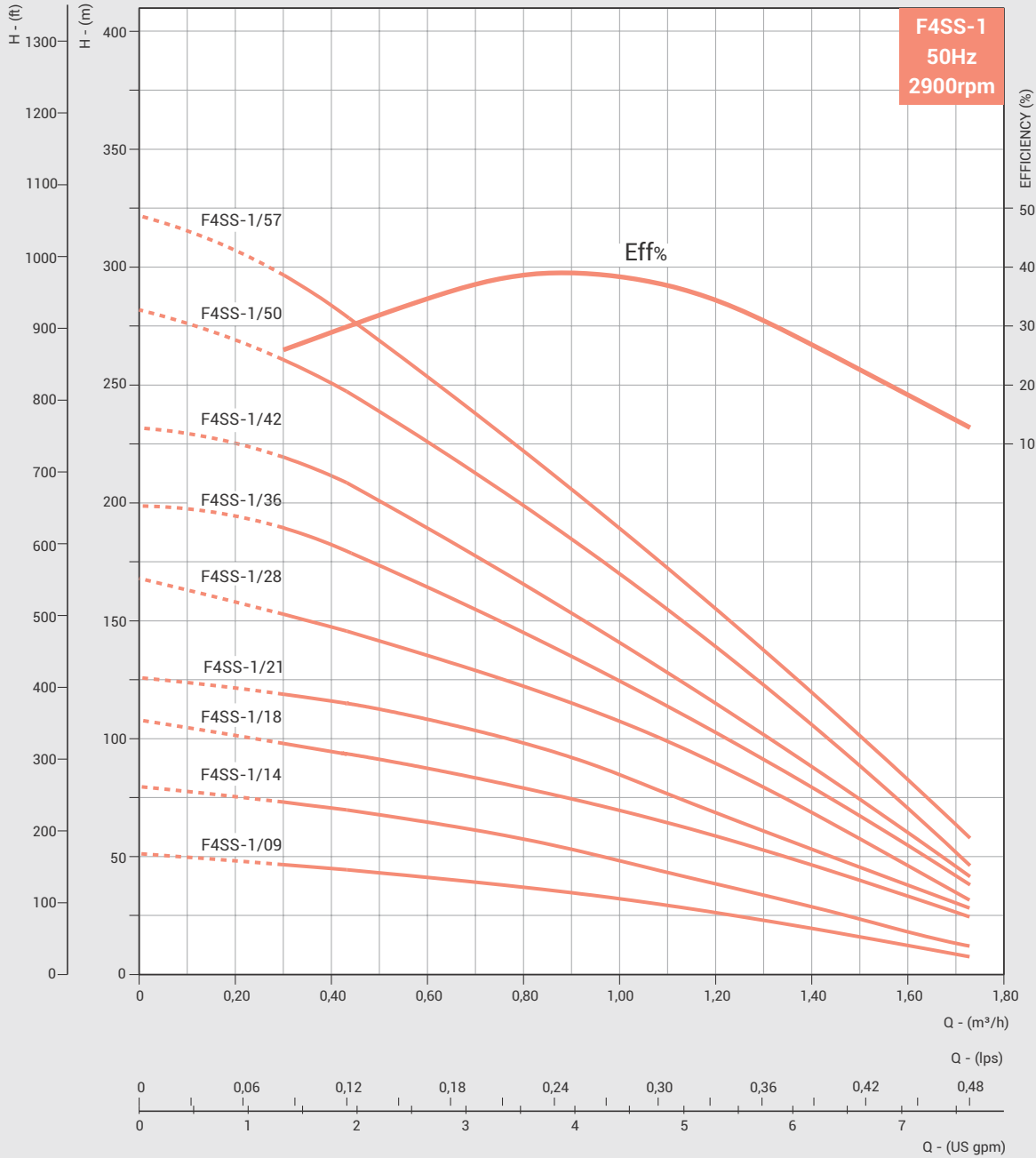
PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	0,11	0,16	0,22	0,27	0,33	0,38	0,44	0,47
			m ³ /h	0	0,40	0,60	0,80	1,0	1,2	1,4	1,6	1,7
F4SS-1/09	0,37		50	45	41	38	32	26,5	20	12	9	
F4SS-1/14	0,37		80	70,5	65	58	49	39	29	18	12,5	
F4SS-1/18	0,55		105	94	88	79,5	70	59,5	47	33	26	
F4SS-1/21	0,55		125	116,5	108,5	99	85	69,5	53	39	30	
F4SS-1/28	0,75		165	148	135	122,5	107,5	90	69	47	35	
F4SS-1/36	1,1		198	182	165	145	123	102	80	54	41	
F4SS-1/42	1,1		230	211	190	165	140	116	89	60	45	
F4SS-1/50	1,5		280	250	226	199	170	140	106	70	51	
F4SS-1/57	1,5		320	284	253	221	189	155	120	82	63	

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP



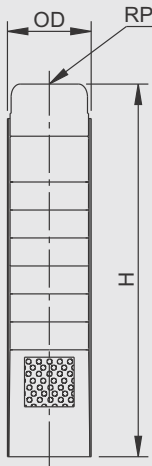
Refer General Information for performance curve conditions and for other details.
Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 2m³/h

Outlet Size : 1 1/4"



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SS-2/06	0,37	0,5	97	32	291	3
F4SS-2/09	0,37	0,5	97	32	357	3
F4SS-2/13	0,55	0,75	97	32	445	4
F4SS-2/15	0,55	0,75	97	32	489	5
F4SS-2/18	0,75	1	97	32	554	6
F4SS-2/23	1,1	1,5	97	32	665	7
F4SS-2/28	1,5	2	97	32	775	8
F4SS-2/33	1,5	2	97	32	1022	12
F4SS-2/40	2,2	3	97	32	1214	14
F4SS-2/48	2,2	3	97	32	1382	17
F4SS-2/55	3	4	97	32	1550	20
F4SS-2/65	3	4	97	32	1838	22
F4SS-2/75	4	5,5	97	32	2078	26
F4SS-2/90	4	5,5	97	32	2438	31

PERFORMANCE TABLE

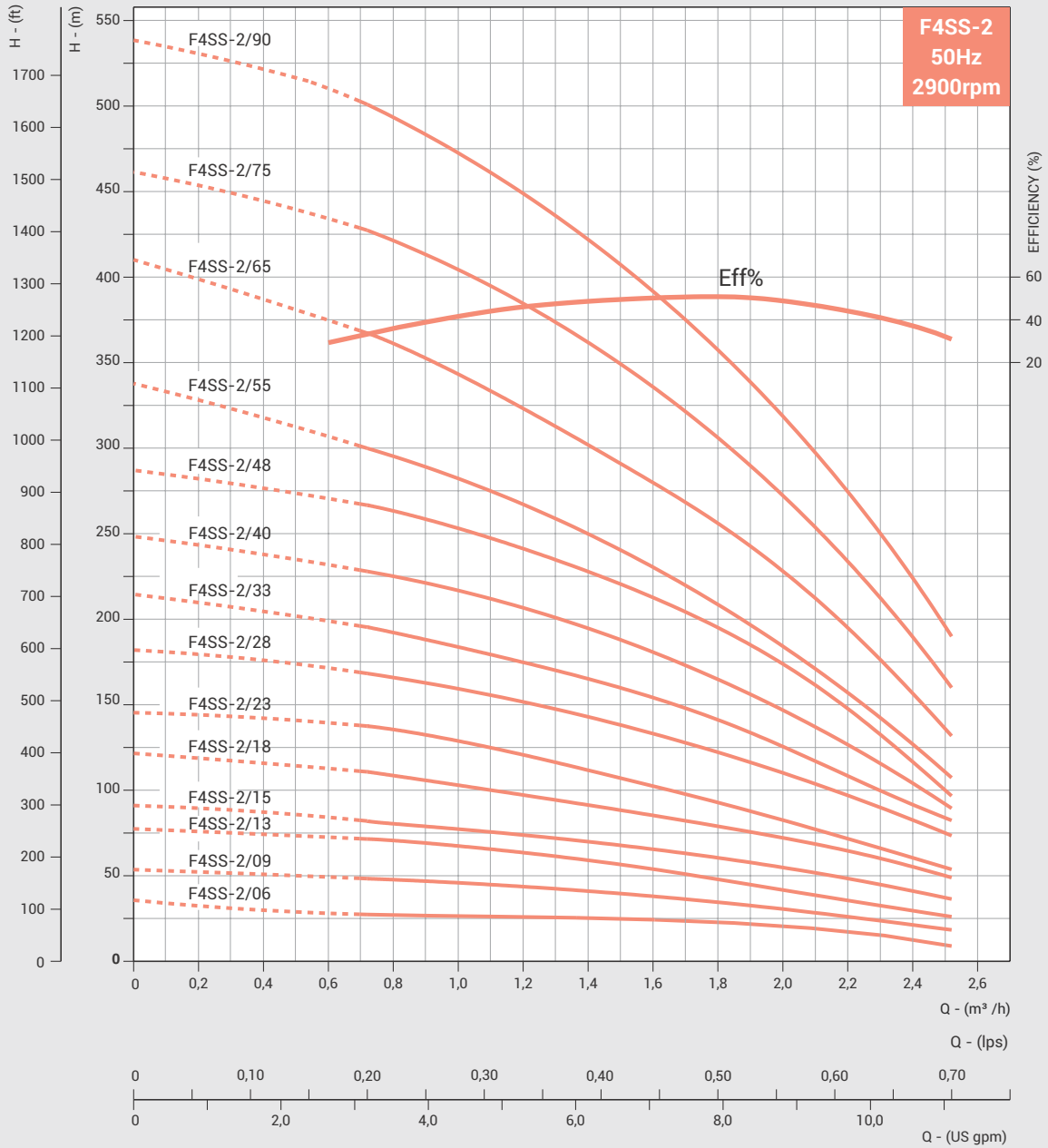
PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	0,16	0,27	0,38	0,50	0,55	0,61	0,72
			m ³ /h	0	0,6	1,0	1,4	1,8	2,0	2,2	2,5
F4SS-2/06	0,37		35	28	26.5	25	23	20	17	8	
F4SS-2/09	0,37		54	49	45	40	35	30	25	19	
F4SS-2/13	0,55		76	72	68	60	48	42	36	27	
F4SS-2/15	0,55		90	82	78	70	60	57	48	38	
F4SS-2/18	0,75		120	115	102	92	80	72	63	50	
F4SS-2/23	1,1		145	140	128	113	93	82	71	57	
F4SS-2/28	1,5		180	172	160	142	121	110	98	77	
F4SS-2/33	1,5		215	199	183	165	140	124	108	82	
F4SS-2/40	2,2		249	232	218	195	165	144	127	92	
F4SS-2/48	2,2		285	272	254	227	195	174	148	100	
F4SS-2/55	3		335	306	282	250	209	183	158	110	
F4SS-2/65	3		405	375	342	301	257	228	196	138	
F4SS-2/75	4		460	435	403	363	305	272	235	164	
F4SS-2/90	4		535	513	473	421	358	319	276	198	

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP



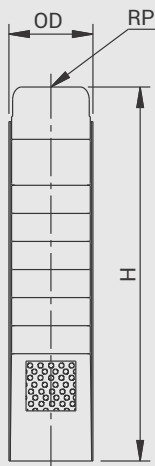
Refer General Information for performance curve conditions and for other details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 3m³/h

Outlet Size : 1 1/4"



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SS-3/06	0,37	0,5	97	32	291	3
F4SS-3/09	0,55	0,75	97	32	3567	3
F4SS-3/12	0,75	1	97	32	423	4
F4SS-3/15	1,1	1,5	97	32	489	5
F4SS-3/18	1,1	1,5	97	32	555	6
F4SS-3/22	1,5	2	97	32	643	7
F4SS-3/25	1,5	2	97	32	709	8
F4SS-3/29	2,2	3	97	32	797	8
F4SS-3/33	2,2	3	97	32	1022	12
F4SS-3/39	3	4	97	32	1166	14
F4SS-3/45	3	4	97	32	1334	16
F4SS-3/52	4	5,5	97	32	1502	18
F4SS-3/60	4	5,5	97	32	1718	21
F4SS-3/75	5,5	7,5	97	32	2148	26

PERFORMANCE TABLE

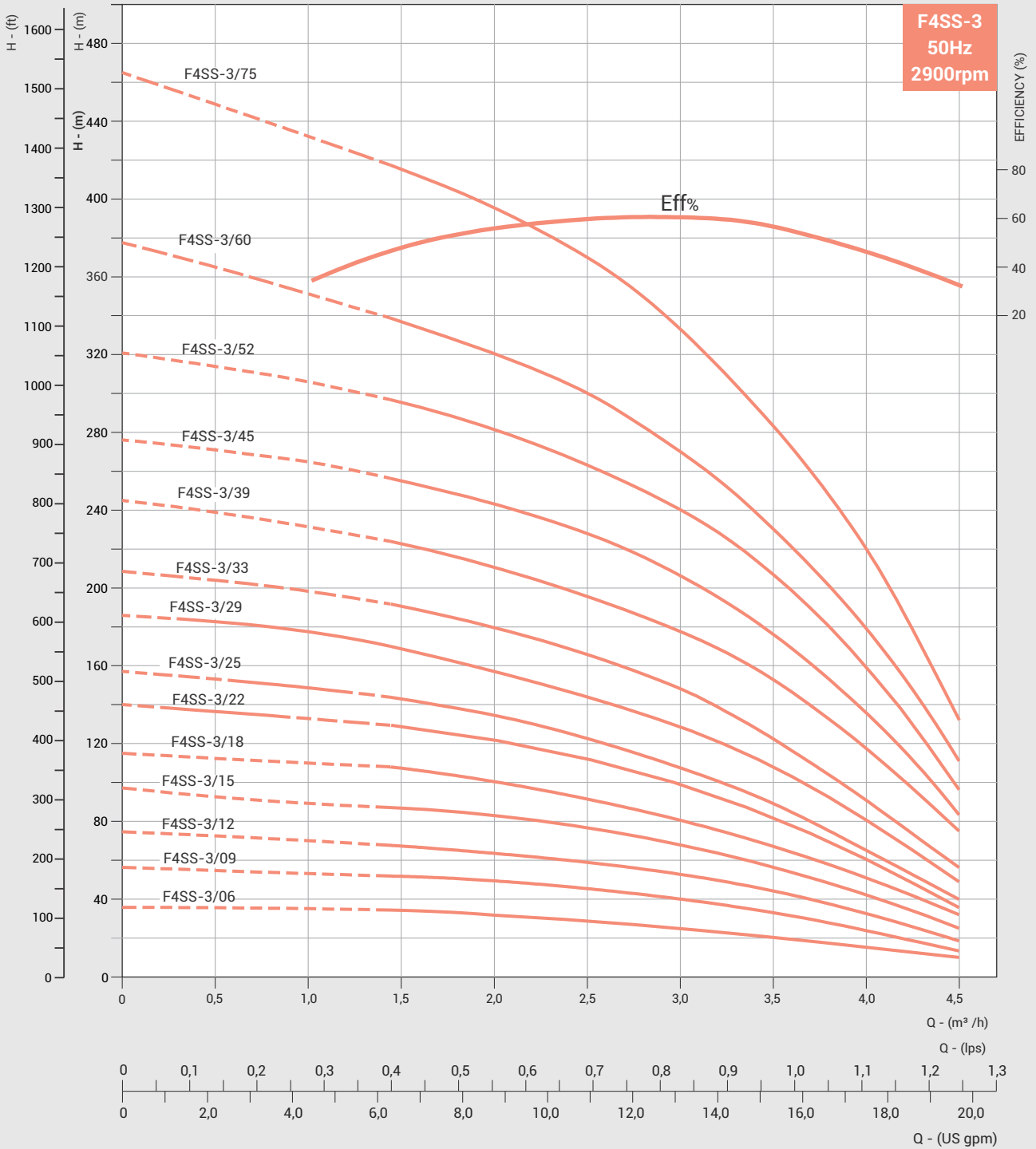
PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	0,41	0,55	0,69	0,83	0,97	1,11	1,25
			m ³ /h	0	1,5	2,0	2,5	3,0	3,5	4,0	4,5
F4SS-3/06	0,37		35	34	31	29	25	20	15	10	
F4SS-3/09	0,55		56	52	50	45	40	32	24	14	
F4SS-3/12	0,75		75	67	63	60	53	45	32	19	
F4SS-3/15	1,1		98	86	82	76	67	55	41	25	
F4SS-3/18	1,1		115	106	100	91	80	66	50	32	
F4SS-3/22	1,5		140	129	121	111	99	80	60	35	
F4SS-3/25	1,5		156	143	135	122	107	89	65	40	
F4SS-3/29	2,2		185	169	156	144	129	108	80	50	
F4SS-3/33	2,2		209	190	180	166	149	123	90	57	
F4SS-3/39	3		245	223	210	195	177	153	117	75	
F4SS-3/45	3		275	255	243	227	206	176	135	81	
F4SS-3/52	4		320	295	280	263	240	207	160	97	
F4SS-3/60	4		377	337	320	300	270	230	180	110	
F4SS-3/75	5,5		465	415	395	370	332	282	220	132	

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP



Refer General Information for performance curve conditions and for other details.

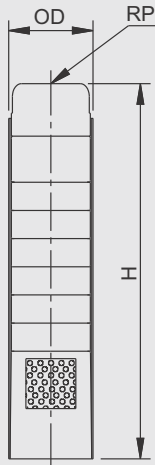
Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 5m³/h

Outlet Size : 1½"



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SS-5/04	0,37	0,5	97	40	255	2
F4SS-5/06	0,55	0,75	97	40	303	3
F4SS-5/08	0,75	1	97	40	351	4
F4SS-5/12	1,1	1,5	97	40	447	5
F4SS-5/17	1,5	2	97	40	567	6
F4SS-5/21	2,2	3	97	40	663	7
F4SS-5/25	2,2	3	97	40	759	8
F4SS-5/33	3	4	97	40	1022	12
F4SS-5/38	4	5,5	97	40	1142	13
F4SS-5/44	4	5,5	97	40	1310	16
F4SS-5/52	5,5	7,5	97	40	1502	18
F4SS-5/60	5,5	7,5	97	40	1718	21
F4SS-5/70	7,5	10	97	40	1939	25
F4SS-5/75	7,5	10	97	40	2078	27

PERFORMANCE TABLE

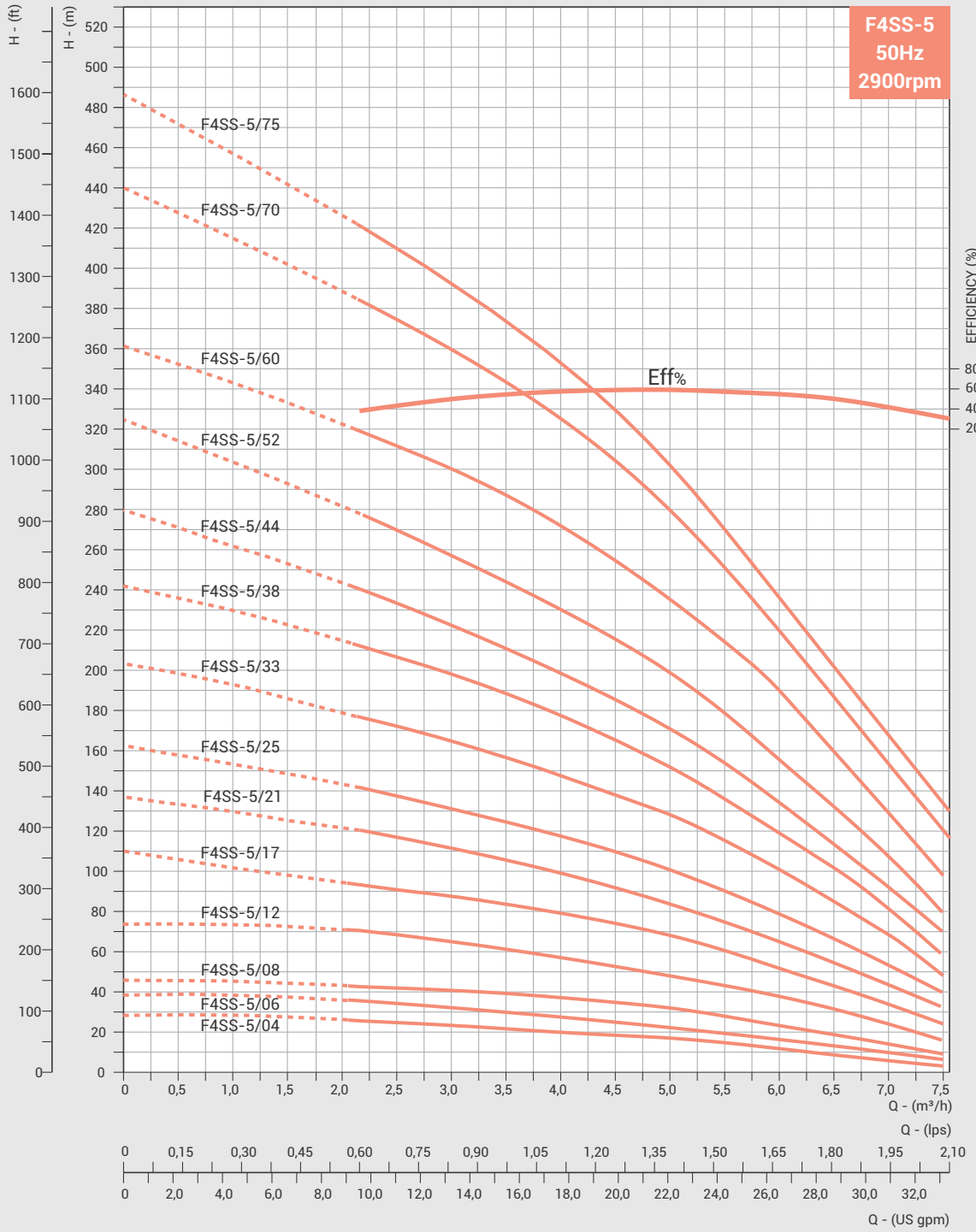
PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	0,55	0,83	1,11	1,39	1,66	1,94
			m ³ /h	0	2,0	3,0	4,0	5,0	6,0	7,0
F4SS-5/04	0,37			28	26	22,5	20	17	12	5
F4SS-5/06	0,55			39	36	32	28	22	17	10
F4SS-5/08	0,75			46	42,5	40	37	32	23	15
F4SS-5/12	1,1			75	71	65	57	48	38	24
F4SS-5/17	1,5			108	94	88	80	68	51	33
F4SS-5/21	2,2			138	121	112	99	84	65	42
F4SS-5/25	2,2			162	143	131	119	102	77	53
F4SS-5/33	3			202	179	165	147	128	100	68
F4SS-5/38	4			241	215	198	177	152	119	81
F4SS-5/44	4			280	244	223	199	170	134	92
F4SS-5/52	5,5			324	281	258	230	199	156	108
F4SS-5/60	5,5			360	322	300	262	236	190	130
F4SS-5/70	7,5			440	389	360	325	279	220	152
F4SS-5/75	7,5			487	427	392	352	302	237	168

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP



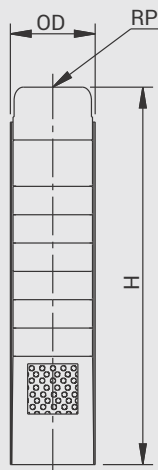
Refer General Information for performance curve conditions and for other details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 8m³/h

Outlet Size : 2"



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SS-8/05	0,75	1	97	50	410	5
F4SS-8/07	1,1	1,5	97	50	482	5
F4SS-8/09	1,5	2	97	50	554	6
F4SS-8/10	1,5	2	97	50	590	6
F4SS-8/12	2,2	3	97	50	662	7
F4SS-8/15	2,2	3	97	50	770	9
F4SS-8/18	3	4	97	50	878	10
F4SS-8/22	4	5,5	97	50	1022	12
F4SS-8/25	4	5,5	97	50	1152	13
F4SS-8/30	5,5	7,5	97	50	1332	15
F4SS-8/34	5,5	7,5	97	50	1476	17
F4SS-8/37	5,5	7,5	97	50	1606	19
F4SS-8/44	7,5	10	97	50	1860	22
F4SS-8/50	7,5	10	97	50	2076	25
F4SS-8/58	9,3	12,5	97	50	2390	30
F4SS-8/66	11	15	97	50	2678	35
F4SS-8/73	11	15	97	50	2954	39

PERFORMANCE TABLE

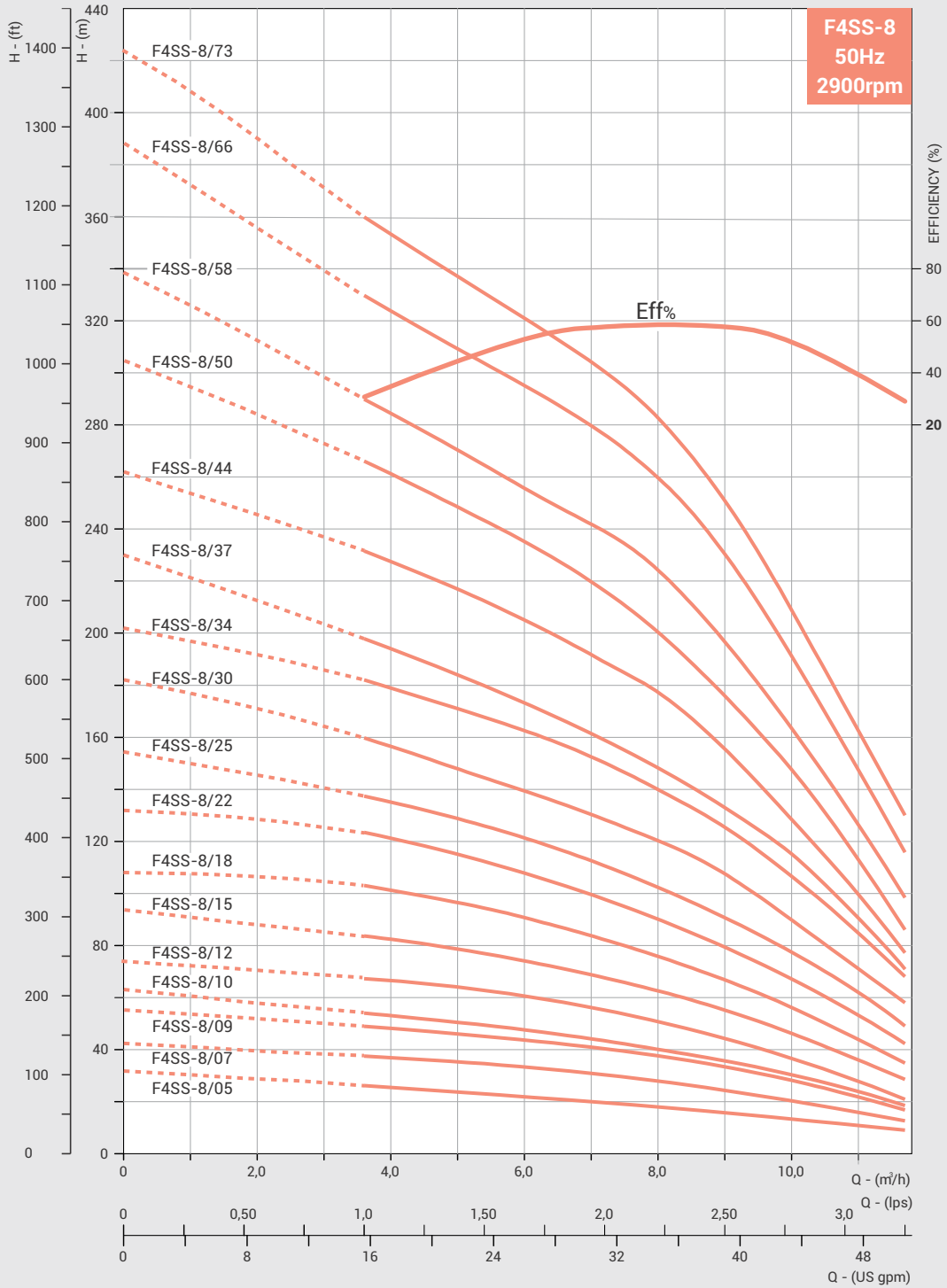
PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	0,83	1,11	1,39	1,66	1,94	2,22	2,50	2,78	3,05
			m ³ /h	0	3,0	4,0	5,0	6,0	7,0	8,0	9,0	10,0	11,0
F4SS-8/05	0,75		32	27	25	23,5	22	20	18	16	13,5	11	
F4SS-8/07	1,1		42	38,5	37	35,5	34	31,5	27	24,5	20	16	
F4SS-8/09	1,5		55	50	48,5	46	44	41,5	37,5	33,5	28	22	
F4SS-8/10	1,5		63	55	52	50	48	44	40	36	30	24	
F4SS-8/12	2,2		74	68,5	67	64	61	56	51	44,5	37	27,5	
F4SS-8/15	2,2		94	85,5	82,5	79	74,5	69	63	55	46,5	36	
F4SS-8/18	3		108	104,5	101	96	91	84	76	66,5	56	44	
F4SS-8/22	4		132	126	121	115	108	99	90	79	67	54	
F4SS-8/25	4		155	141	136	129	121,5	112	102,5	91	78	62	
F4SS-8/30	5,5		182	164	156	148	139	130	120	107	90	71	
F4SS-8/34	5,5		202	185	179	171	162,5	153	140	126	107	85	
F4SS-8/37	5,5		230	204	195	185	173	162	146	131	112	89	
F4SS-8/44	7,5		262	237	228	217	205	191	177	156	129	100	
F4SS-8/50	7,5		304	272	261	249	235	220	200	176	148	112	
F4SS-8/58	9,3		339	300	284	270	255	241	225	198	162	127	
F4SS-8/66	11		378	340	323	310	295	280	260	230	190	149	
F4SS-8/73	11		422	370	352	338	320	305	282	250	209	161	

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP



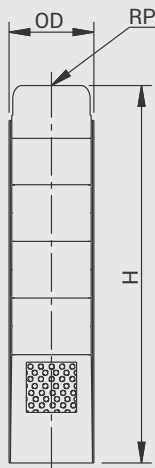
Refer General Information for performance curve conditions and for other details.
Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 4" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 4"

Nominal Flow : 14m³/h

Outlet Size : 2"



PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SS-14/05	1,5	2	97	50	573	6
F4SS-14/07	2,2	3	97	50	703	8
F4SS-14/09	3	4	97	50	833	9
F4SS-14/10	3	4	97	50	898	10
F4SS-14/11	3,7	5	97	50	963	10
F4SS-14/13	4	5,5	97	50	1093	12
F4SS-14/16	5,5	7,5	97	50	1288	14
F4SS-14/18	5,5	7,5	97	50	1418	16
F4SS-14/22	7,5	10	97	50	1678	19
F4SS-14/25	7,5	10	97	50	1873	21

PERFORMANCE TABLE

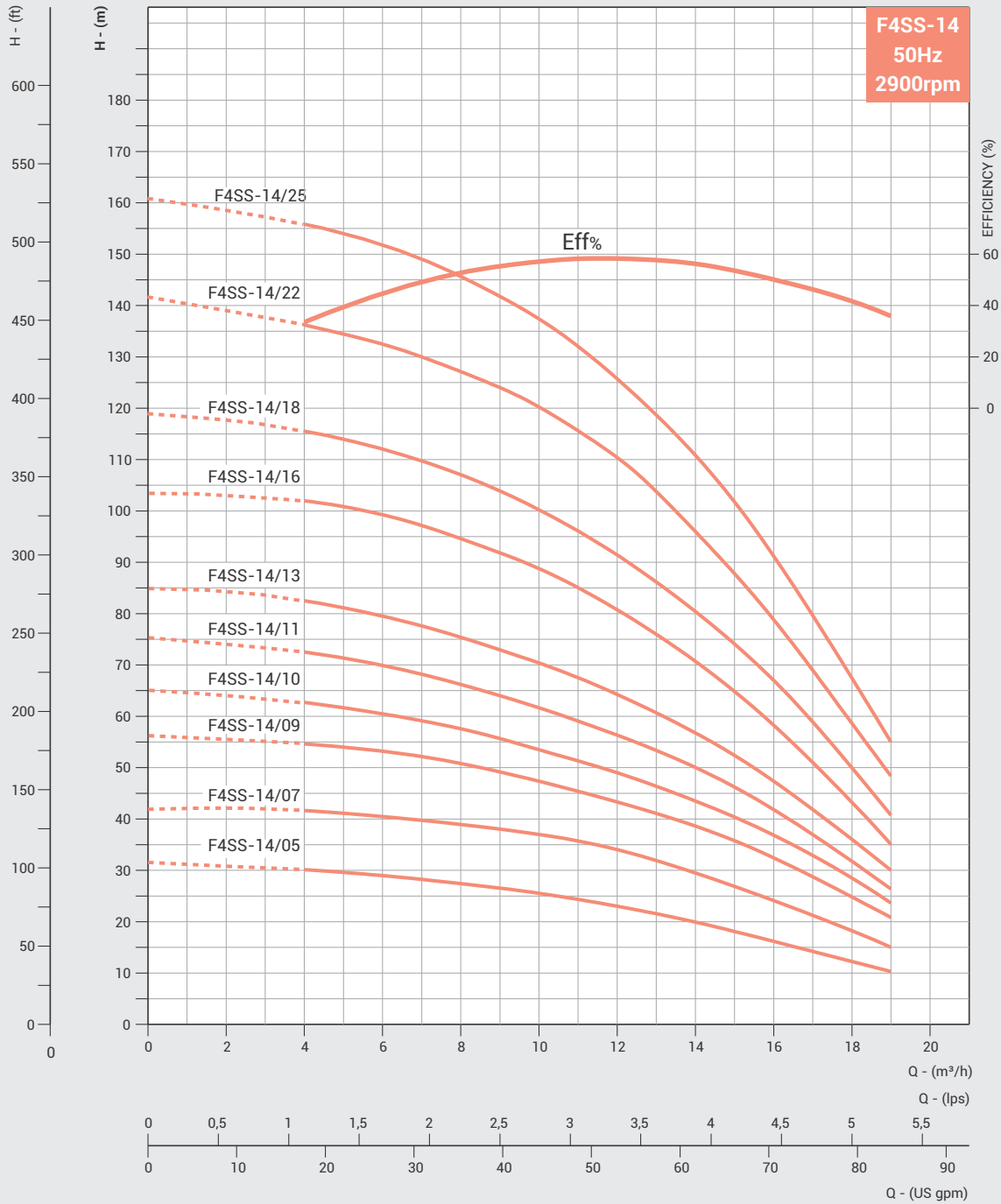
PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	1,11	1,67	2,22	2,78	3,33	3,89	4,44	5,00
			m ³ /h	0	4	6	8	10	12	14	16	18
F4SS-14/05	1,5		31	30	29	28	26	23	20	16	12	
F4SS-14/07	2,2		42	41	40	39	37	33	29	24	15	
F4SS-14/09	3		56	55	53	51	47	43	38	32	25	
F4SS-14/10	3		65	63	60	57	54	49	43	37	29	
F4SS-14/11	3,7		75	72	70	66	62	56	50	42	32	
F4SS-14/13	4		85	83	80	75	70	64	56	47	36	
F4SS-14/16	5,5		104	102	99	95	89	81	71	59	44	
F4SS-14/18	5,5		119	115	112	107	100	91	81	56	50	
F4SS-14/22	7,5		141	136	132	127	120	111	96	78	58	
F4SS-14/25	7,5		161	156	152	145	137	125	110	91	68	

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 4" STAINLESS STEEL SUBMERSIBLE PUMP



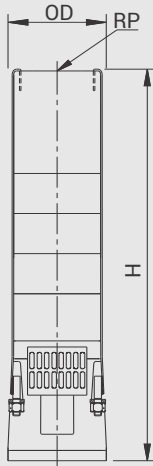
Refer General Information for performance curve conditions and for other details.
Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 14m³/h

Outlet Size : 2"/2½"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-14/05	3	4	1	139	50/65	491	12
F6SS-14/06	3,5	4	1	139	50/65	530	12
F6SS-14/07	4,4	5	1	139	50/65	569	13
F6SS-14/08	4,75	5,5	1	139	50/65	608	14
F6SS-14/09	5,5	7,5	1	139	50/65	647	15
F6SS-14/10	5,75	7,5	1/2	139/143	50/65	686	16
F6SS-14/11	6,28	7,5	1/2	139/143	50/65	725	17
F6SS-14/12	6,8	10	1/2	139/143	50/65	764	18
F6SS-14/13	7,46	10	1/2	139/143	50/65	803	19
F6SS-14/14	8,23	10	1/2	139/143	50/65	842	20
F6SS-14/15	8,44	10	1/2	139/143	50/65	881	21
F6SS-14/16	8,93	12,5	1/2	139/143	50/65	920	22
F6SS-14/17	9,41	12,5	1/2	139/143	50/65	959	23
F6SS-14/18	9,94	12,5	1/2	139/143	50/65	998	24
F6SS-14/19	10,56	12,5	1/2	139/143	50/65	1037	25
F6SS-14/20	11,46	15	1/2	139/143	50/65	1076	25
F6SS-14/21	11,55	15	1/2	139/143	50/65	1115	26
F6SS-14/22	12,87	15	1/2	139/143	50/65	1154	27
F6SS-14/23	12,63	15	1/2	139/143	50/65	1193	28
F6SS-14/24	13,12	15	1/2	139/143	50/65	1232	29
F6SS-14/25	13,68	17,5	1/2	139/143	50/65	1271	30
F6SS-14/26	13,83	17,5	1/2	139/143	50/65	1310	31
F6SS-14/27	14,9	17,5	1/2	139/143	50/65	1349	32
F6SS-14/28	15	17,5	1/2	139/143	50/65	1388	33
F6SS-14/29	15,2	17,5	1/2	139/143	50/65	1427	34
F6SS-14/30	15,88	20	1/2	139/143	50/65	1466	35
F6SS-14/31	16,53	20	1/2	139/143	50/65	1505	36
F6SS-14/32	17,61	20	1/2	139/143	50/65	1544	36

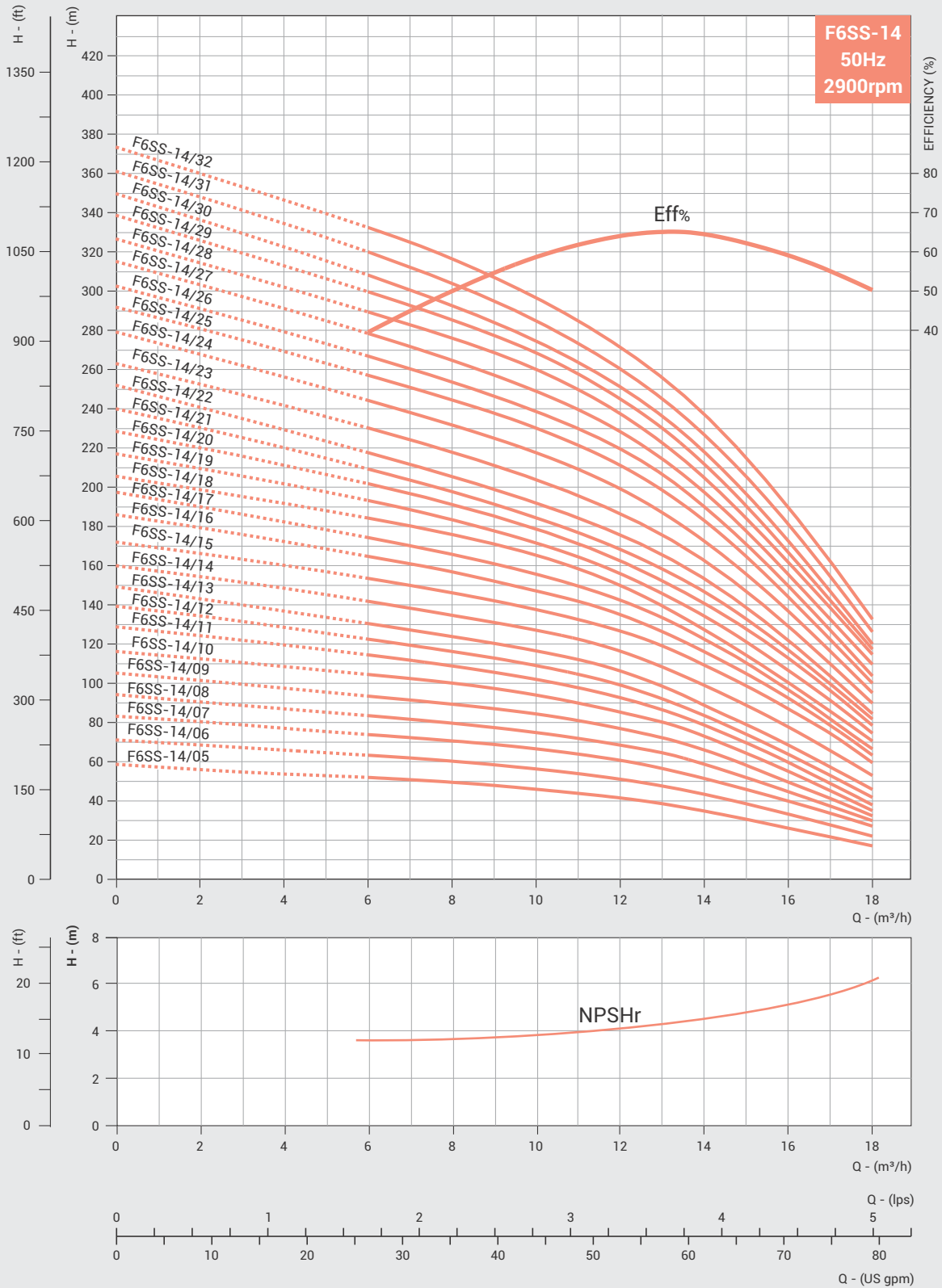
PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)								
		lps m ³ /h	0	1,66	2,22	2,78	3,33	3,89	4,44	5,00
F6SS-14/05	3		59	52	50	46	42	35	26	17
F6SS-14/06	3,5		70	64	60	56	52	44	33	22
F6SS-14/07	4,4		82	74	71	67	60	52	40	28
F6SS-14/08	4,75		94	84	80	75	68	59	45	31
F6SS-14/09	5,5		104	93	90	84	77	66	50	33
F6SS-14/10	5,75		118	104	100	94	85	72	56	36
F6SS-14/11	6,28		130	115	108	102	92	79	60	38
F6SS-14/12	6,8		140	123	116	109	99	84	64	42
F6SS-14/13	7,46		150	130	124	116	107	88	68	46
F6SS-14/14	8,23		160	142	135	127	116	99	78	53
F6SS-14/15	8,44		172	153	146	137	127	109	87	60
F6SS-14/16	8,93		184	164	156	147	135	116	92	64
F6SS-14/17	9,41		196	174	166	156	143	123	96	67
F6SS-14/18	9,94		204	184	176	166	150	128	100	71
F6SS-14/19	10,56		218	189	184	172	156	135	107	75
F6SS-14/20	11,46		228	202	191	179	163	140	112	79
F6SS-14/21	11,55		240	209	197	184	168	147	116	83
F6SS-14/22	12,87		254	219	205	192	176	153	121	90
F6SS-14/23	12,63		262	236	217	204	186	163	129	96
F6SS-14/24	13,12		280	244	232	217	199	172	136	96
F6SS-14/25	13,68		290	257	244	230	211	183	144	100
F6SS-14/26	13,83		302	267	254	239	220	190	150	104
F6SS-14/27	14,9		316	278	265	248	228	197	156	110
F6SS-14/28	15		324	290	276	260	237	204	161	116
F6SS-14/29	15,2		338	300	285	268	244	212	168	118
F6SS-14/30	15,88		350	308	292	275	252	218	172	120
F6SS-14/31	16,53		360	320	304	284	260	227	180	127
F6SS-14/32	17,61		374	332	316	296	272	236	189	132

** Optional outlet Size.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP



Refer General Information for performance curve conditions and for other details.

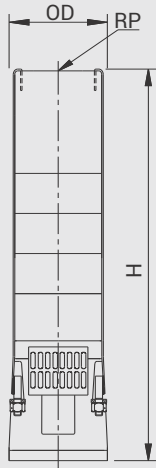
Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 14m³/h

Outlet Size : 2"/2½"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-14/33	17,62	20	1/2	139/143	50/65	1583	37
F6SS-14/34	18,22	25	1/2	139/143	50/65	1622	38
F6SS-14/35	18,44	25	1/2	139/143	50/65	1661	39
F6SS-14/36	19,55	25	1/2	139/143	50/65	1700	40
F6SS-14/37	20,27	25	1/2	139/143	50/65	1739	41
F6SS-14/38	21	25	1/2	139/143	50/65	1778	42
F6SS-14/39	18,5	25	1/2	139/143	50/65	1817	43
F6SS-14/40	18,5	25	1/2	139/143	50/65	1856	44
F6SS-14/41	18,5	25	1/2	139/143	50/65	1895	45
F6SS-14/42	18,5	25	1/2	139/143	50/65	1934	46
F6SS-14/43	22	30	1/2	139/143	50/65	1973	47
F6SS-14/44	22	30	1/2	139/143	50/65	2012	47
F6SS-14/45	22	30	1/2	139/143	50/65	2051	48
F6SS-14/46	22	30	1/2	139/143	50/65	2090	49
F6SS-14/47	22	30	1/2	139/143	50/65	2129	50
F6SS-14/48	22	30	1/2	139/143	50/65	2168	51
F6SS-14/49	22	30	1/2	139/143	50/65	2207	52
F6SS-14/50	22	30	1/2	139/143	50/65	2246	53
F6SS-14/54	26	35	1/2	139/143	65	2402	57
F6SS-14/64	45	60	1/2	139/143	65	2792	69
F6SS-14/65	45	60	1/2	139/143	65	2836	70

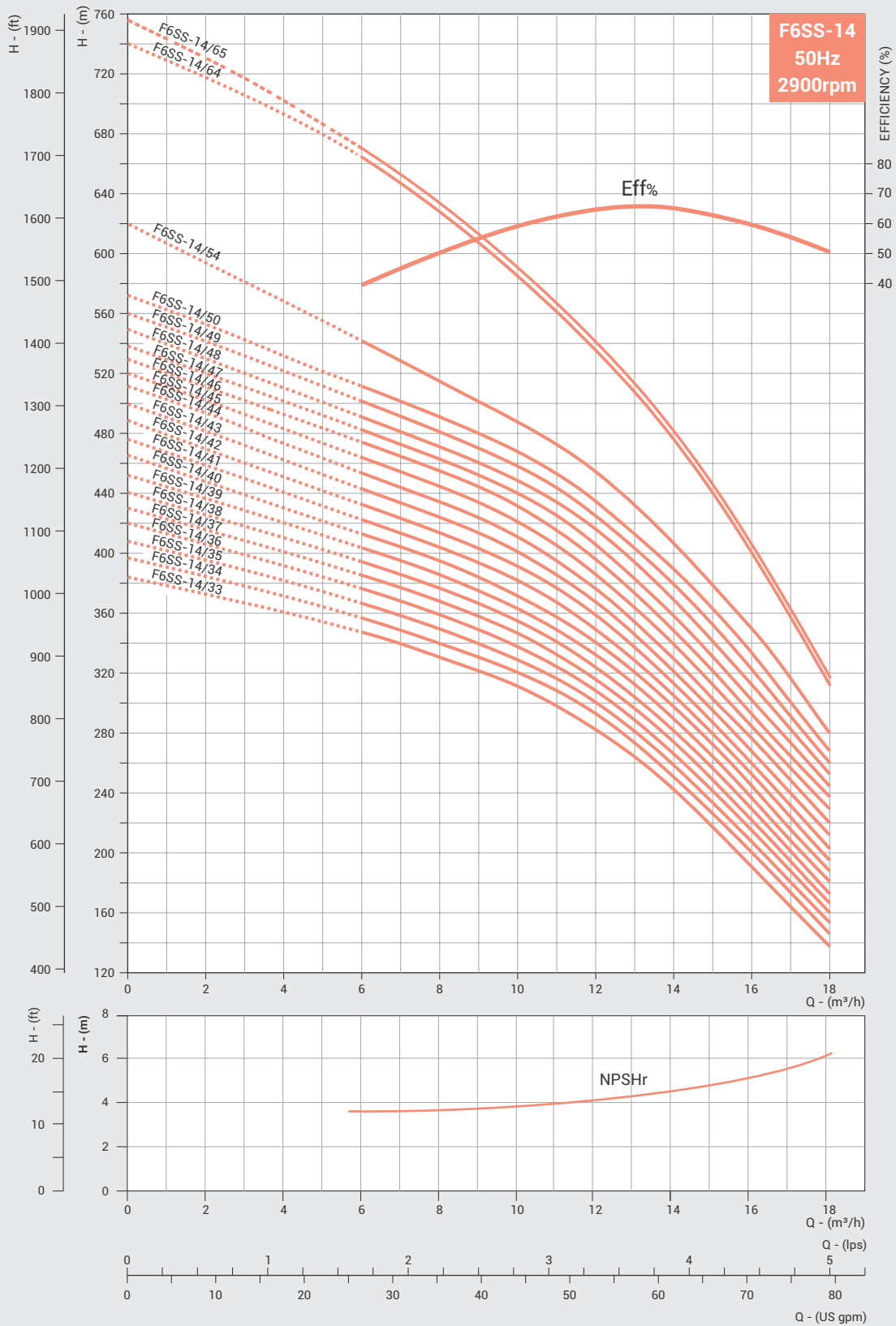
PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	1,66	2,22	2,78	3,33	3,89	4,44	5,00
			m ³ /h	0	6	8	10	12	14	16	18
F6SS-14/33	17,62		384	343	330	310	282	242	192	138	
F6SS-14/34	18,22		396	356	340	320	292	251	200	145	
F6SS-14/35	18,44		408	367	349	329	300	259	208	154	
F6SS-14/36	19,55		420	376	359	337	308	267	216	160	
F6SS-14/37	20,27		430	385	368	347	316	275	222	167	
F6SS-14/38	21		440	395	376	355	324	281	229	172	
F6SS-14/39	18,5		454	404	386	363	332	289	237	180	
F6SS-14/40	18,5		464	412	395	372	340	298	244	188	
F6SS-14/41	18,5		476	422	404	382	348	305	253	195	
F6SS-14/42	18,5		488	432	413	391	359	313	260	203	
F6SS-14/43	22		500	443	424	400	368	320	268	212	
F6SS-14/44	22		510	453	434	411	376	329	276	220	
F6SS-14/45	22		520	464	444	420	386	340	284	230	
F6SS-14/46	22		528	474	455	432	396	348	292	238	
F6SS-14/47	22		538	483	463	440	405	358	302	244	
F6SS-14/48	22		550	491	471	448	416	368	312	252	
F6SS-14/49	22		560	501	481	458	424	380	322	260	
F6SS-14/50	22		566	512	491	468	435	389	333	268	
F6SS-14/54	26		620	552	515	494	455	408	350	280	
F6SS-14/64	45		740	665	628	585	535	476	400	312	
F6SS-14/65	45		755	670	634	590	540	480	417	318	

** Optional outlet Size.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP



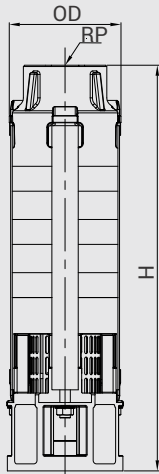
Refer General Information for performance curve conditions and for other details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 17m³/h

Outlet Size : 2½"/3"***



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-17/1	0,55	1	1	134	65	342,0	7
F6SS-17/2	1,1	1,5	1	134	65	402,5	8
F6SS-17/3	2,2	3	1	134	65	463,0	9
F6SS-17/4	2,2	3	1	134	65	525,5	11
F6SS-17/5	3	4,5	1	134	65	584,0	12
F6SS-17/6	4	5,5	1	134	65	644,5	14
F6SS-17/7	4	7,5	1	134	65	705,0	15
F6SS-17/8	5,5	7,5	1	134	65	765,5	16
F6SS-17/9	5,5	7,5	1	134	65	826,0	18
F6SS-17/10	5,5	10	1	134	65	886,5	19
F6SS-17/11	7,5	10	1	134	65	947,0	20
F6SS-17/12	7,5	10	1	134	65	1007,5	22
F6SS-17/13	7,5	5,5	1	134	65	1068,0	23
F6SS-17/14	9,3	12,5	1/2	142/144	65	1128,5	26
F6SS-17/15	9,3	12,5	1/2	142/144	65	1189,0	27
F6SS-17/16	9,3	12,5	1/2	142/144	65	1249,5	29
F6SS-17/17	9,3	15	1/2	142/144	65	1310,0	30
F6SS-17/18	11	15	1/2	142/144	65	1370,5	32

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	1,1	1,66	2,78	3,89	4,27	5,55	7,22
			m ³ /h	0	4	6	10	14	17	20	22
F6SS-17/1	0,55			11	11	11	10	8	6	5	4
F6SS-17/2	1,1			22	22	21	19	17	14	11	9
F6SS-17/3	2,2			33	33	33	30	27	23	18	15
F6SS-17/4	2,2			43	43	43	40	35	30	24	18
F6SS-17/5	3			54	54	53	50	44	38	30	24
F6SS-17/6	4			66	65	64	60	53	47	37	30
F6SS-17/7	4			76	76	75	70	62	53	43	34
F6SS-17/8	5,5			87	87	86	81	72	62	50	41
F6SS-17/9	5,5			98	98	97	91	81	70	56	45
F6SS-17/10	5,5			108	108	107	101	88	77	61	49
F6SS-17/11	7,5			120	119	118	112	99	86	70	56
F6SS-17/12	7,5			130	129	128	121	108	93	75	60
F6SS-17/13	7,5			141	140	139	131	116	100	81	64
F6SS-17/14	9,3			152	152	150	142	126	110	88	71
F6SS-17/15	9,3			163	162	161	151	134	116	94	75
F6SS-17/16	9,3			173	173	171	161	143	123	99	79
F6SS-17/17	9,3			183	183	180	170	150	130	104	82
F6SS-17/18	11			196	194	193	182	162	140	113	92

** Optional outlet Size. d (D.O.L - 3 wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

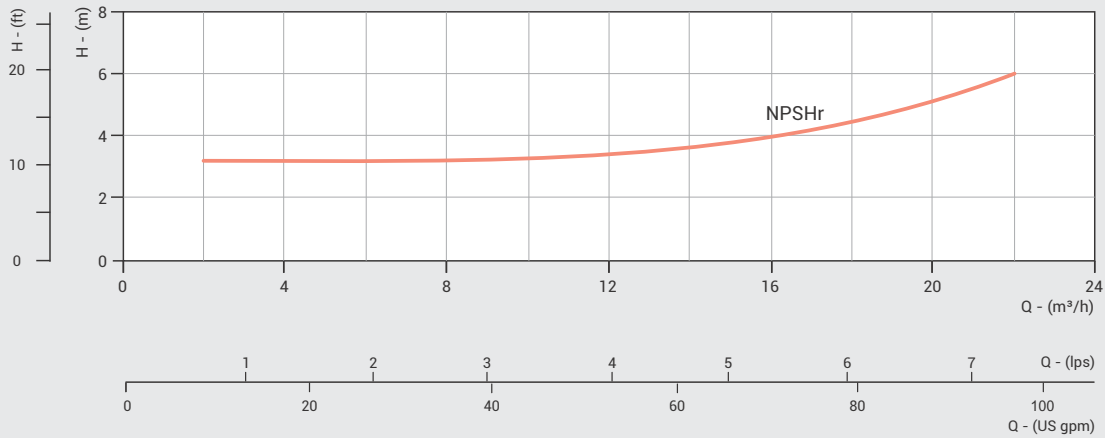
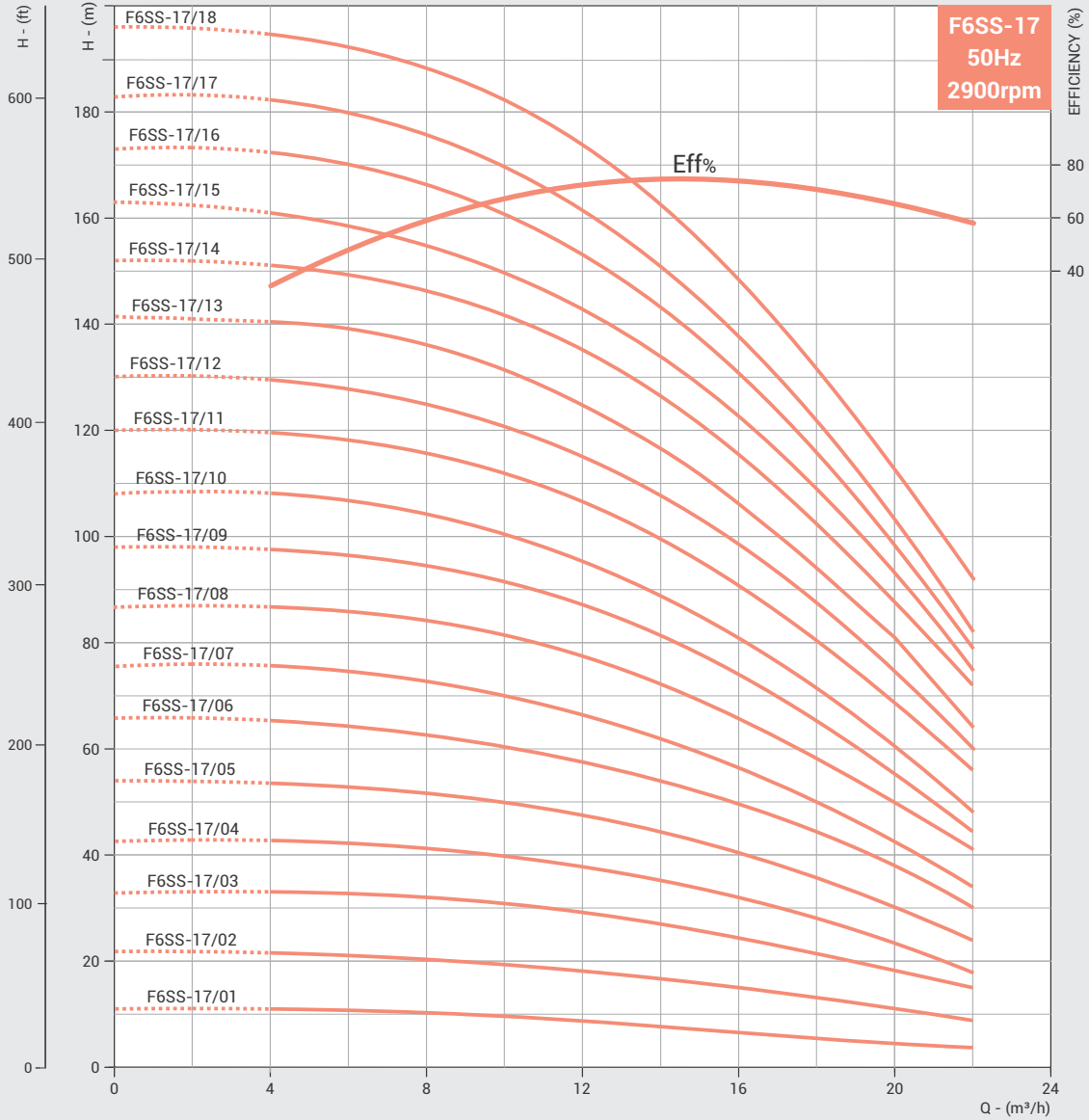
* 1 denotes Single Cable Guar

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will bereplaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

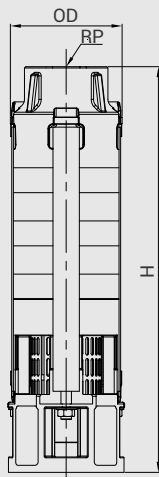


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 17m³/h

Outlet Size : 2½"/3"***



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-17/19	11	15	1/2	142/144	65	1431,0	33
F6SS-17/20	11	17,5	1/2	142/144	65	1491,5	34
F6SS-17/21	13	17,5	1/2	142/144	65	1552,0	36
F6SS-17/22	13	17,5	1/2	142/144	65	1612,5	37
F6SS-17/23	13	17,5	1/2	142/144	65	1673,0	39
F6SS-17/24	13	20	1/2	142/144	65	1733,5	40
F6SS-17/25	15	20	1/2	142/144	65	1794,0	41
F6SS-17/26	15	20	1/2	142/144	65	1854,5	43
F6SS-17/27	15	25	1/2	142/144	65	1915,0	44
F6SS-17/28	18,5	25	1/2	142/144	65	1975,5	46
F6SS-17/29	18,5	25	1/2	142/144	65	2036,0	47
F6SS-17/30	18,5	25	1/2	142/144	65	2096,5	48
F6SS-17/31	18,5	25	1/2	142/144	65	2157,0	50
F6SS-17/32	18,5	25	1/2	142/144	65	2217,5	51
F6SS-17/33	18,5	30	1/2	142/144	65	2278,0	53
F6SS-17/34	22	30	1/2	142/144	65	2338,5	54
F6SS-17/35	22	30	1/2	142/144	65	2399,0	55
F6SS-17/36	22	30	1/2	142/144	65	2459,5	57
F6SS-17/37	22	30	1/2	142/144	65	2520,0	58
F6SS-17/38	22	30	1/2	142/144	65	2580,5	60
F6SS-17/39	22	30	1/2	142/144	65	2641,0	61
F6SS-17/40	22	30	1/2	142/144	65	2701,5	62

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	1,1	1,66	2,78	3,89	4,27	5,55	7,22
		m ³ /h	0	4	6	10	14	17	20	22
F6SS-17/19	11	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	206	204	203	192	169	146	143	94
F6SS-17/20	11		215	213	212	201	178	153	147	97
F6SS-17/21	13		229	227	224	213	189	165	157	107
F6SS-17/22	13		239	238	235	223	197	171	162	110
F6SS-17/23	13		249	248	244	233	205	178	167	113
F6SS-17/24	13		259	259	255	242	312	184	179	116
F6SS-17/25	15		272	271	269	253	224	195	184	126
F6SS-17/26	15		281	281	278	263	233	203	191	131
F6SS-17/27	15		292	291	288	272	242	208	196	134
F6SS-17/28	18,5		306	304	301	286	255	223	201	146
F6SS-17/29	18,5		316	314	311	295	263	230	206	148
F6SS-17/30	18,5		327	325	321	306	272	236	215	151
F6SS-17/31	18,5		338	335	332	314	280	243	220	157
F6SS-17/32	18,5		347	346	341	324	289	251	225	161
F6SS-17/33	18,5		358	356	352	334	296	257	233	166
F6SS-17/34	22		371	369	367	347	308	269	237	175
F6SS-17/35	22		380	378	377	357	317	274	243	178
F6SS-17/36	22		391	389	387	366	325	281	246	181
F6SS-17/37	22		401	399	396	374	339	288	117	185
F6SS-17/38	22		411	408	406	385	341	295	123	188
F6SS-17/39	22	422	419	416	393	349	301	133	191	
F6SS-17/40	22	433	429	427	403	358	308	137	198	

** Optional outlet Size.

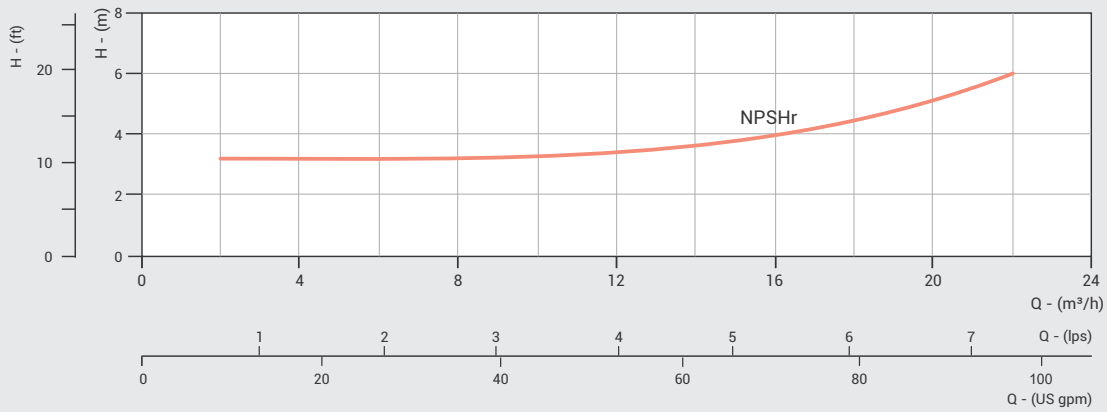
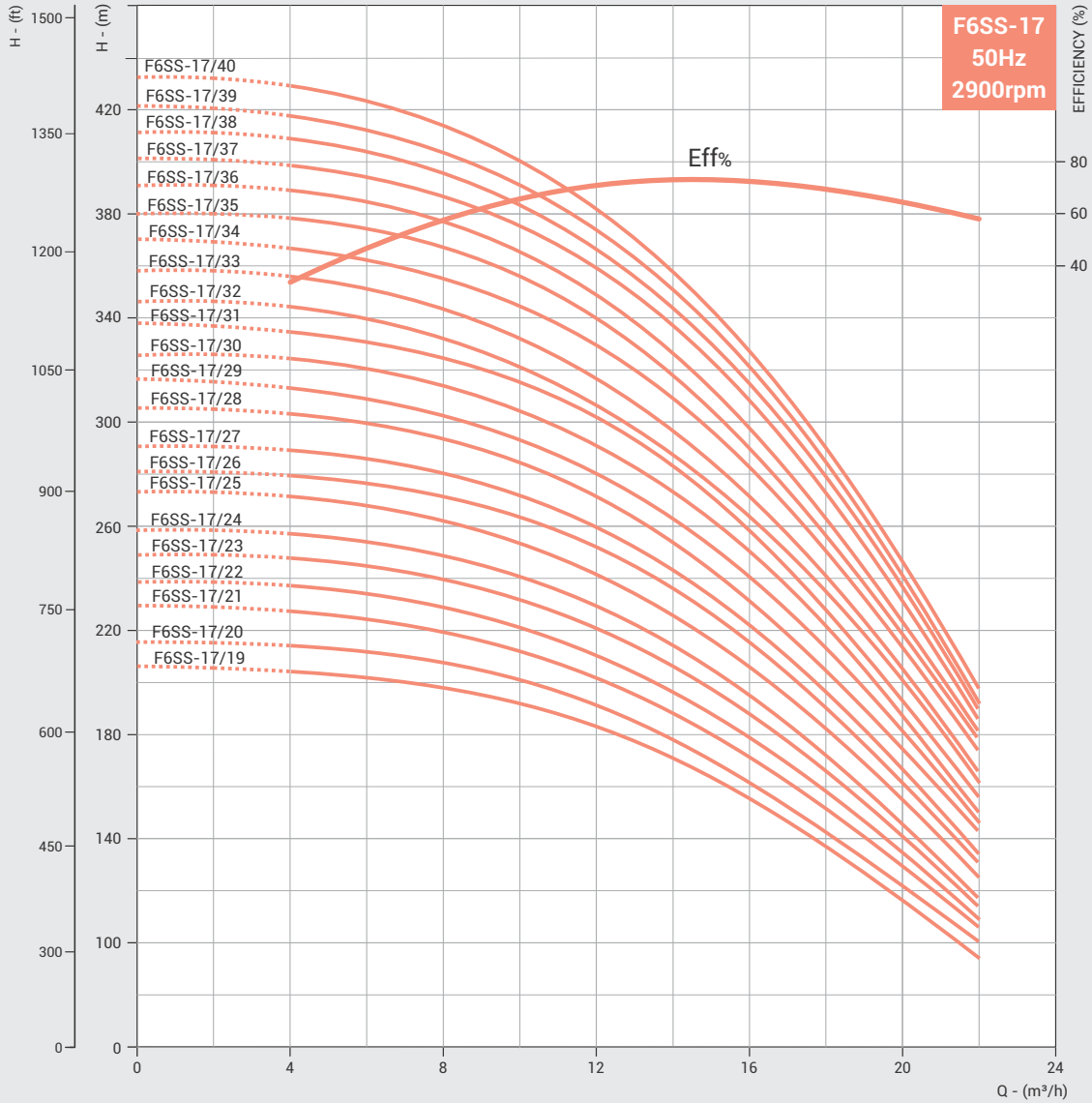
* 1 denotes Single Cable Guard (D.O.L - 3 wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

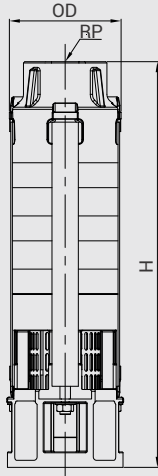


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 17m³/h

Outlet Size : 2½"/3"***



PUMP MODEL	REQUIRED MOTOR POWER		+NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		#OD	RP	H	
F6SS-17/43	26	35	1/2	142/144	65	2883	66
F6SS-17/45	26	35	1/2	142/144	65	3004	70
F6SS-17/48	26	35	1/2	142/144	65	3186	75
F6SS-17/51	30	40	1/2	142/144	65	3367	81
F6SS-17/53	30	40	1/2	142/144	65	3488	85
F6SS-17/55	37	50	1/2	142/144	65	3609	90
F6SS-17/58	37	50	1/2	142/144	65	3791	96
F6SS-17/60	37	50	1/2	142/144	65	3912	101

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	0,55	1,66	2,78	3,89	4,27	5,55	7,22
			m ³ /h	0	4	6	10	14	17	20	22
F6SS-17/43	26		467	495	461	437	388	338	272	217	
F6SS-17/45	26		487	485	481	456	405	349	281	226	
F6SS-17/48	26		518	516	511	484	427	369	298	238	
F6SS-17/51	30		551	547	543	514	456	398	320	256	
F6SS-17/53	30		570	568	563	534	474	408	330	263	
F6SS-17/55	37		599	587	592	563	502	437	358	289	
F6SS-17/58	37		631	629	622	592	527	458	362	302	
F6SS-17/60	37		651	649	640	611	544	474	386	313	

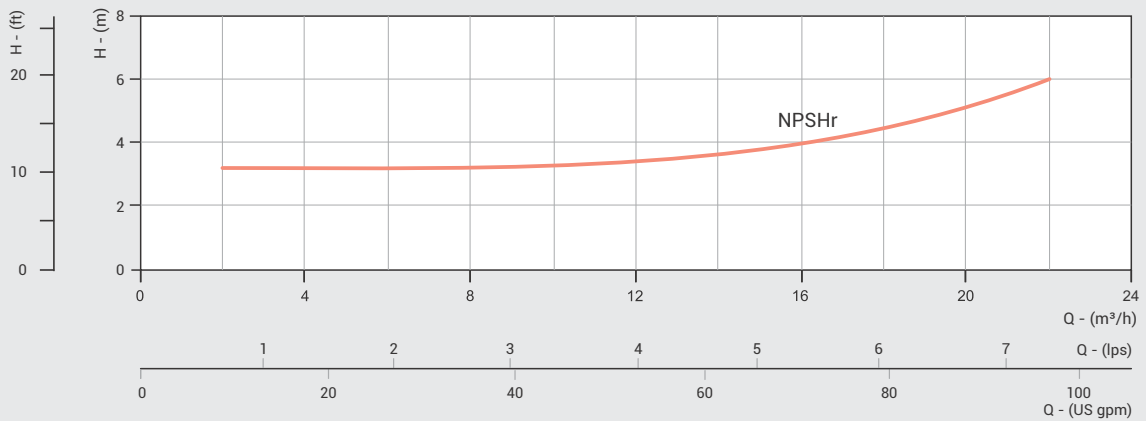
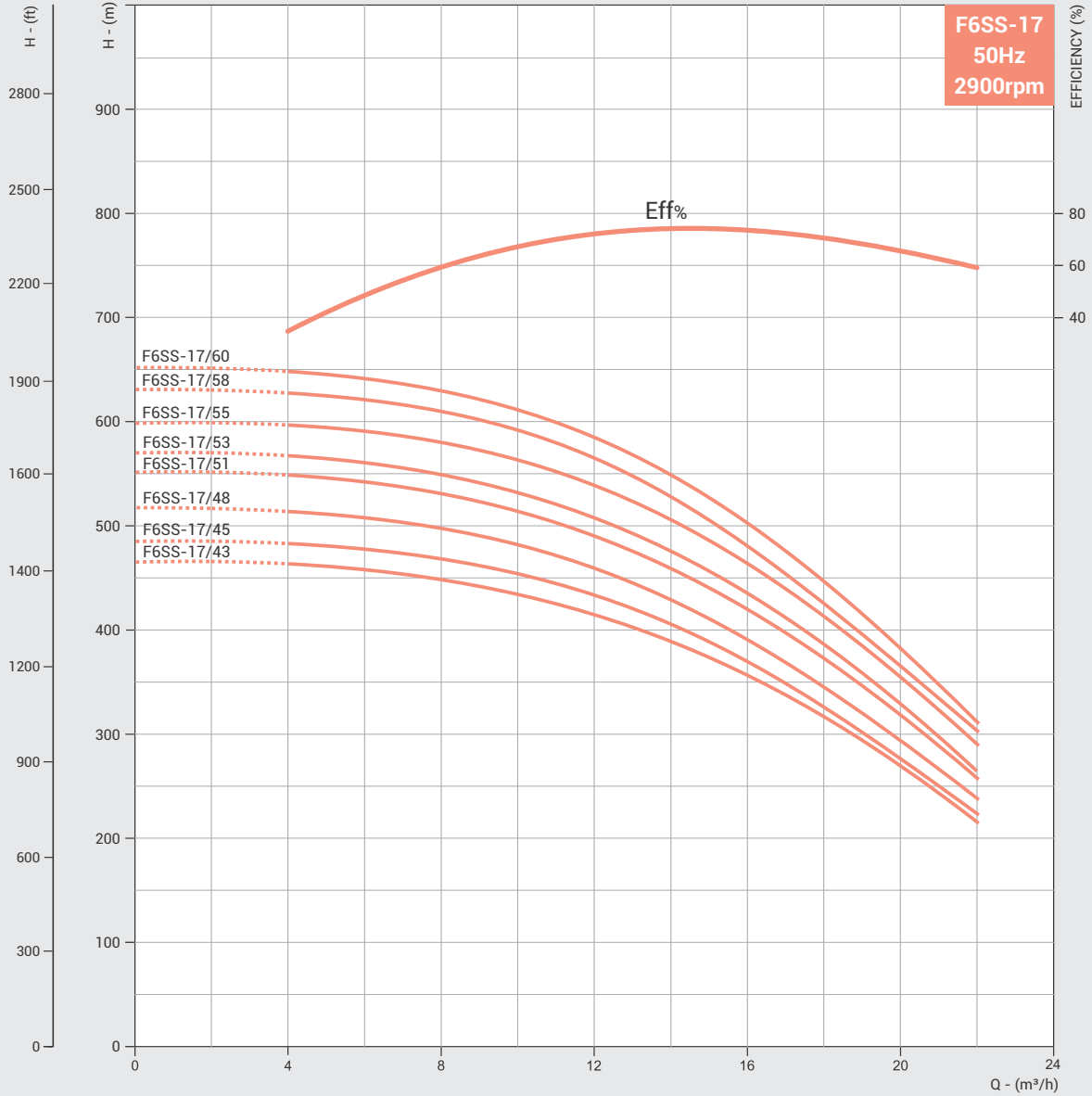
** Optional outlet Size.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

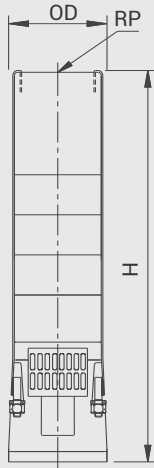


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 18m³/h

Outlet Size : 2½"



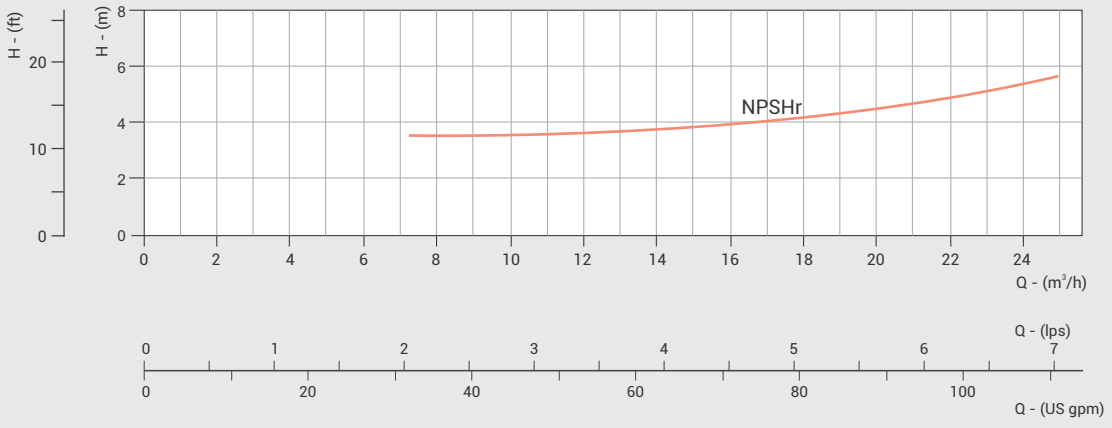
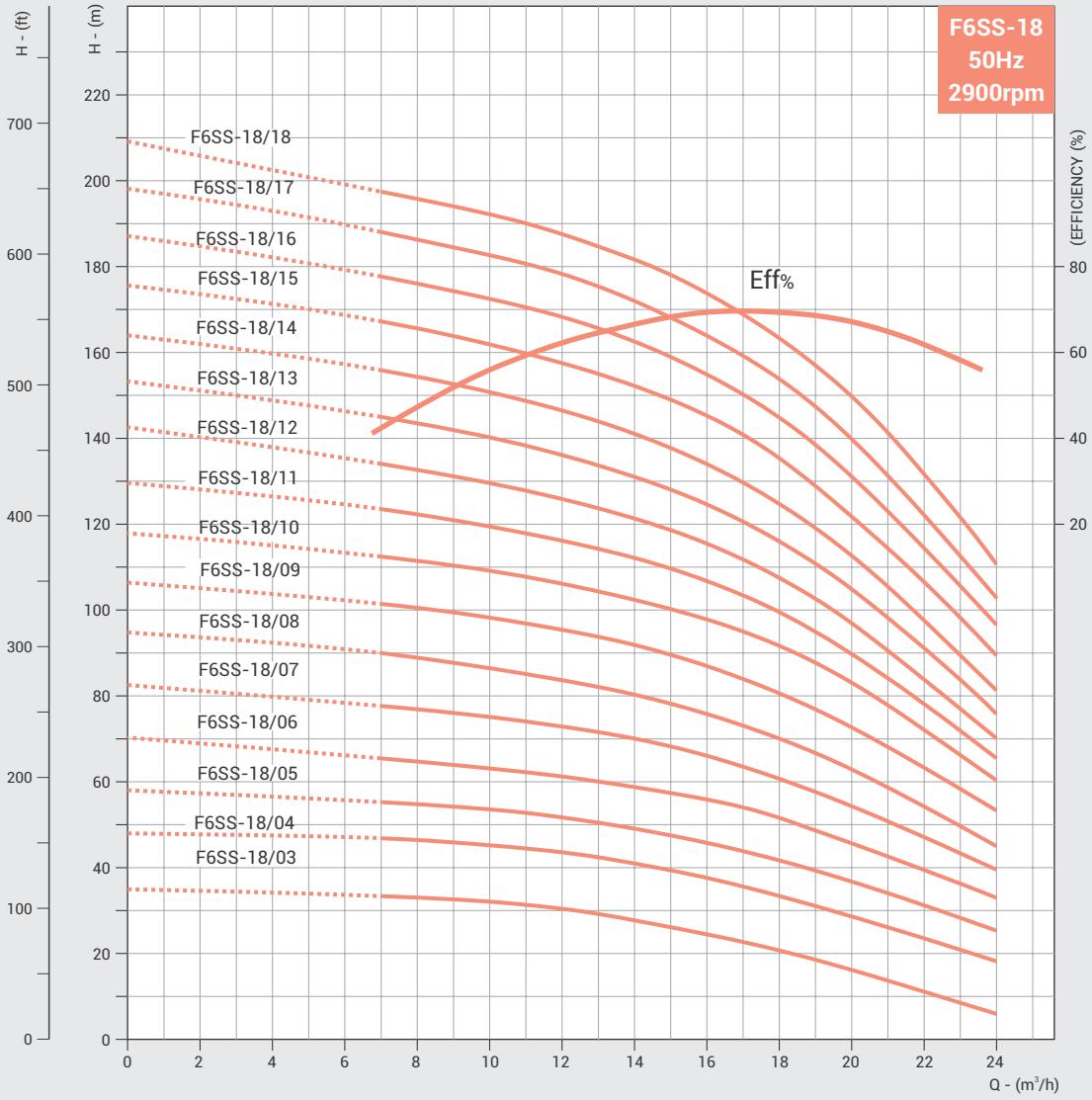
PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-18/03	2,2	3	1	139	65	427	10
F6SS-18/04	3	4	1	139	65	471	11
F6SS-18/05	4	5,5	1	139	65	515	12
F6SS-18/06	5,5	5,5	1	139	65	559	13
F6SS-18/07	5,5	7,5	1	139	65	603	14
F6SS-18/08	5,5	7,5	1/2	139/143	65	647	15
F6SS-18/09	7,5	10	1/2	139/143	65	691	16
F6SS-18/10	7,5	10	1/2	139/143	65	735	17
F6SS-18/11	9,3	12,5	1/2	139/143	65	779	18
F6SS-18/12	9,3	12,5	1/2	139/143	65	823	19
F6SS-18/13	9,3	12,5	1/2	139/143	65	867	20
F6SS-18/14	9,3	12,5	1/2	139/143	65	911	21
F6SS-18/15	11	15	1/2	139/143	65	955	22
F6SS-18/16	11	15	1/2	139/143	65	999	23
F6SS-18/17	13	17,5	1/2	139/143	65	1043	24
F6SS-18/18	13	17,5	1/2	139/143	65	1087	25

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	1,66	2,22	2,78	3,33	3,89	4,44	5,00	5,56	6,11	6,67
		m ³ /h	0	6	8	10	12	14	16	18	20	22	24
F6SS-18/03	2,2	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	35	37,5	33	32	30	18	25	20	16	11	6
F6SS-18/04	3		48	47	46	45	44	41	38	33,5	29	24	18
F6SS-18/05	4,1		58	56	55	54	52	49	46	42	37	31	25,5
F6SS-18/06	5,5		70	66	65	63	61	59	56	52	46	40	33
F6SS-18/07	5,5		82	78	77	75	73	70	66	61	54	47	40
F6SS-18/08	5,5		95	91	89	86	84	80	76	70	63	54	45
F6SS-18/09	7,5		106	102	100	98	96	92	87	80	72,5	63	54
F6SS-18/10	7,5		118	103	111,5	109	106	102	98	92	83	72	60
F6SS-18/11	9,3		130	125	122	119	116	112	107	100	90	78	66
F6SS-18/12	9,3		142	135,5	133	130	126	122	116	108	97	84	70
F6SS-18/13	9,3		152	146	144	140	136	131	124	116	105	91	76
F6SS-18/14	9,3		164	157	154	151	146,5	141	134	124	112	98	82
F6SS-18/15	11		175	169	166	162	158	152	145,5	136	122	106	90
F6SS-18/16	11		188	179	176	172	168	162	155	145	131	104	97
F6SS-18/17	13		198	190	186	183	178	172	164	154	140	122	103
F6SS-18/18	13		209	199	196	192	188	182	174	164	150	132	111

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

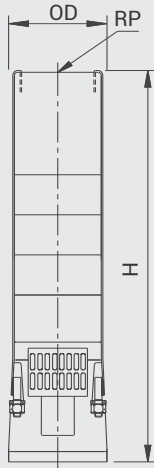


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 18m³/h

Outlet Size : 2½"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-18/19	13	17,5	1/2	139/143	65	1131	26
F6SS-18/20	15	20	1/2	139/143	65	1175	27
F6SS-18/21	15	20	1/2	139/143	65	1219	28
F6SS-18/22	15	20	1/2	139/143	65	1263	29
F6SS-18/23	18,5	25	1/2	139/143	65	1307	30
F6SS-18/24	18,5	25	1/2	139/143	65	1351	31
F6SS-18/25	18,5	25	1/2	139/143	65	1395	32
F6SS-18/26	18,5	25	1/2	139/143	65	1439	33
F6SS-18/27	18,5	25	1/2	139/143	65	1483	33
F6SS-18/28	18,5	25	1/2	139/143	65	1527	34
F6SS-18/29	18,5	25	1/2	139/143	65	1571	35
F6SS-18/30	18,5	25	1/2	139/143	65	1615	36
F6SS-18/31	22	30	1/2	139/143	65	1659	37
F6SS-18/32	22	30	1/2	139/143	65	1703	38
F6SS-18/33	26	35	1/2	139/143	65	1747	39
F6SS-18/34	26	35	1/2	139/143	65	1791	40
F6SS-18/35	26	35	1/2	139/143	65	1835	41
F6SS-18/36	26	35	1/2	139/143	65	1879	42
F6SS-18/38	26	35	1/2	139/143	65	1967	44
F6SS-18/40	30	40	1/2	139/143	65	2055	46
F6SS-18/42	30	40	1/2	139/143	65	2143	48
F6SS-18/44	30	40	1/2	139/143	65	2231	50
F6SS-18/46	30	40	1/2	139/143	65	2319	52
F6SS-18/48	37	50	1/2	139/143	65	2407	54
F6SS-18/50	37	50	1/2	139/143	65	2570	61
F6SS-18/51	37	50	1/2	139/143	65	2539	58
F6SS-18/56	45	60	1/2	139/143	65	2803	63
F6SS-18/60	45	60	1/2	139/143	65	2979	68
F6SS-18/66	45	60	1/2	139/143	65	3243	76
F6SS-18/70	45	60	1/2	139/143	65	3440	80
F6SS-18/72	45	60	1/2	139/143	65	3540	83

PERFORMANCE TABLE

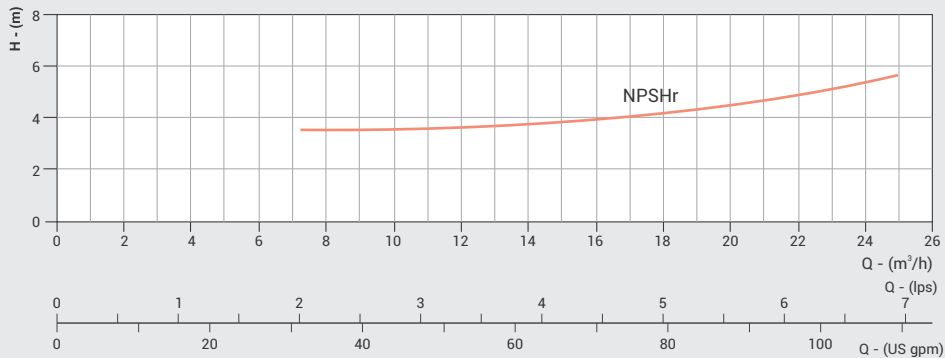
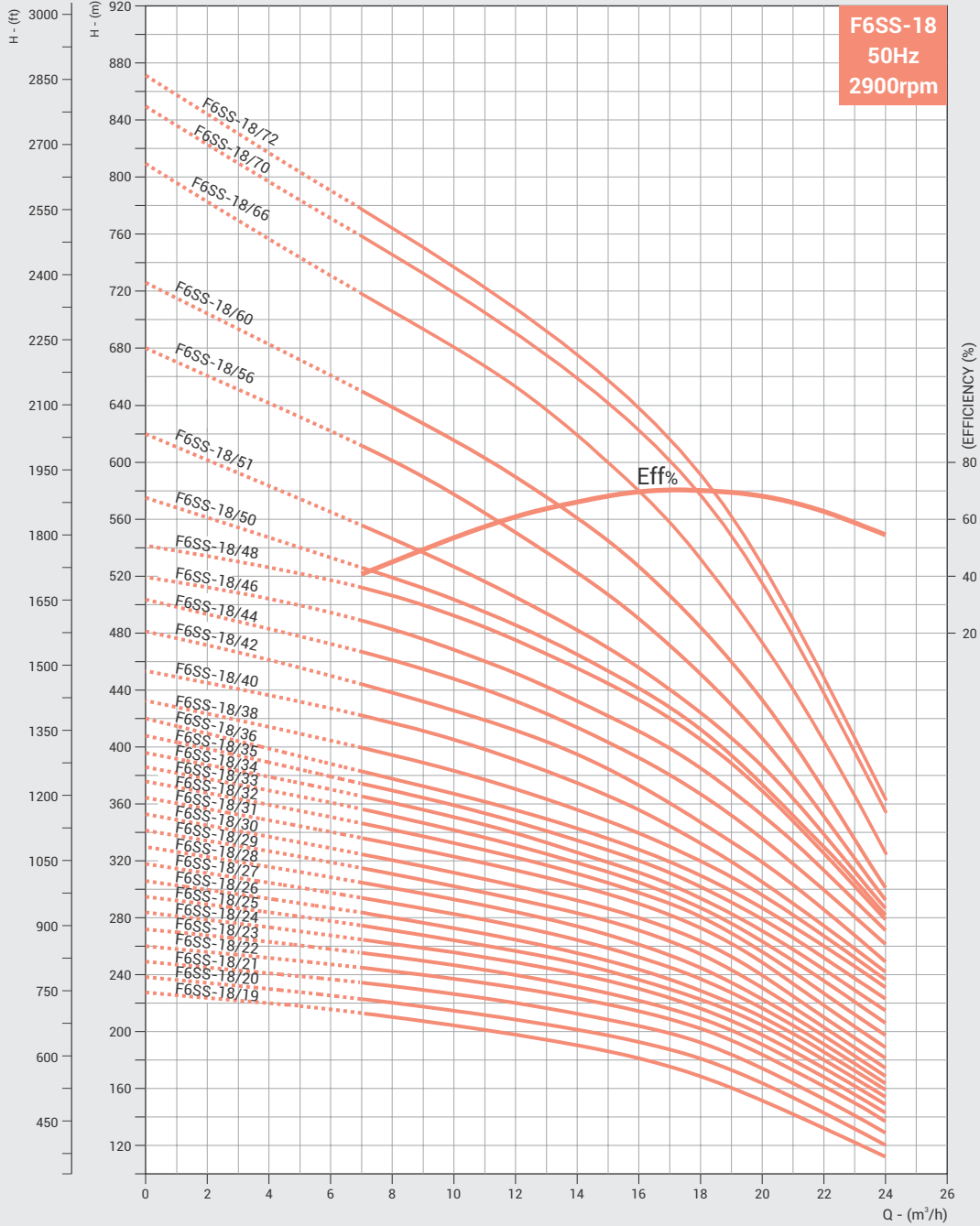
PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	1,66	2,22	2,78	3,33	3,89	4,44	5,00	5,56	6,11	6,67
			m ³ /h	0	6	8	10	12	14	16	18	20	22	24
F6SS-18/19	13		226	216	210	204	198	190	180	168	152	133	113	
F6SS-18/20	15		238	225	220	215	208	201	192	180	164	144	120	
F6SS-18/21	15		250	236	232	227	220	212	204	192	174	152	129	
F6SS-18/22	15		260	248	242	237	232	224	215	202	184	162	137	
F6SS-18/23	18,5		274	258	252	247	240	232	222	209	191	168	143	
F6SS-18/24	18,5		284	264	262	256	248	240	230	216	197	175	149	
F6SS-18/25	18,5		296	278	271	264	256	248	236	223	204	180	154	
F6SS-18/26	18,5		304	287	280	272	264	256	244	228	210	185	159	
F6SS-18/27	18,5		316	298	290	283	274	264	252	237	216	191	164	
F6SS-18/28	22		330	308	301	292	284	274	261	244	223	197	168	
F6SS-18/29	18,5		340	319	311	302	292	284	272	255	231	204	175	
F6SS-18/30	18,5		354	337	329	312	303	292	280	264	240	210	182	
F6SS-18/31	22		364	348	340	323	313	303	290	272	248	219	188	
F6SS-18/32	22		376	360	351	332	323	312	298	280	256	227	198	
F6SS-18/33	26		384	370	361	342	331	320	305	287	264	236	207	
F6SS-18/34	26		396	379	370	351	340	326	312	294	271	244	215	
F6SS-18/35	26		408	389	379	359	348	336	320	302	279	252	223	
F6SS-18/36	26		420	399	388	368	356	343	328	309	287	260	231	
F6SS-18/38	26		432	404	392	384	370	356	340	320	296	268	236	
F6SS-18/40	30		453	427	416	405	391	375	356	332	305	274	244	
F6SS-18/42	30		481	450	438	425	412	395	370	348	320	286	249	
F6SS-18/44	30		504	472	460	448	432	413	392	367	336	300	262	
F6SS-18/46	30		520	495	482	468	452	432	411	386	352	312	272	
F6SS-18/48	37		541	517	506	492	475	456	433	405	368	324	279	
F6SS-18/50	37		575	533	519	503	485	465	441	412	376	330	282	
F6SS-18/51	37		620	567	547	525	506	482	457	426	387	340	287	
F6SS-18/56	45		680	623	601	577	552	523	490	452	406	353	293	
F6SS-18/60	45		726	662	639	614	590	560	527	485	434	373	301	
F6SS-18/66	45		809	730	705	678	652	615	578	525	472	398	325	
F6SS-18/70	45		830	770	745	720	690	660	620	578	513	438	355	
F6SS-18/72	45		870	790	764	738	708	675	638	590	528	448	363	

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 18m³/h

Outlet Size : 2½"

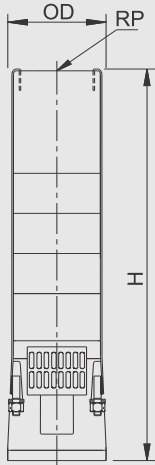


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 22m³/h

Outlet Size : 2½"/3"***



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-22/05	4	5	1	139	65/80	531	12
F6SS-22/06	5,5	6	1	139	65/80	578	13
F6SS-22/07	7,5	7,5	1/2	139/143	65/80	625	14
F6SS-22/08	7,5	7,5	1/2	139/143	65/80	672	15
F6SS-22/09	9,3	10	1/2	139/143	65/80	719	16
F6SS-22/10	9,3	10	1/2	139/143	65/80	766	17
F6SS-22/11	9,3	12,5	1/2	139/143	65/80	813	18
F6SS-22/12	11	12,5	1/2	139/143	65/80	860	19
F6SS-22/13	11	15	1/2	139/143	65/80	907	20
F6SS-22/14	13	15	1/2	139/143	65/80	954	21
F6SS-22/15	13	15	1/2	139/143	65/80	1001	22
F6SS-22/16	13	17,5	1/2	139/143	65/80	1048	23
F6SS-22/17	13	17,5	1/2	139/143	65/80	1095	24
F6SS-22/18	15	17,5	1/2	139/143	65/80	1142	25
F6SS-22/19	15	20	1/2	139/143	65/80	1189	26
F6SS-22/20	18,5	20	1/2	139/143	65/80	1236	27
F6SS-22/21	18,5	20	1/2	139/143	65/80	1283	28
F6SS-22/22	18,5	25	1/2	139/143	65/80	1330	28
F6SS-22/23	18,5	25	1/2	139/143	65/80	1377	29
F6SS-22/24	22	25	1/2	139/143	65/80	1424	30
F6SS-22/25	22	25	1/2	139/143	65/80	1471	31
F6SS-22/26	22	30	1/2	139/143	65/80	1518	32
F6SS-22/28	26	30	1/2	139/143	65/80	1612	34

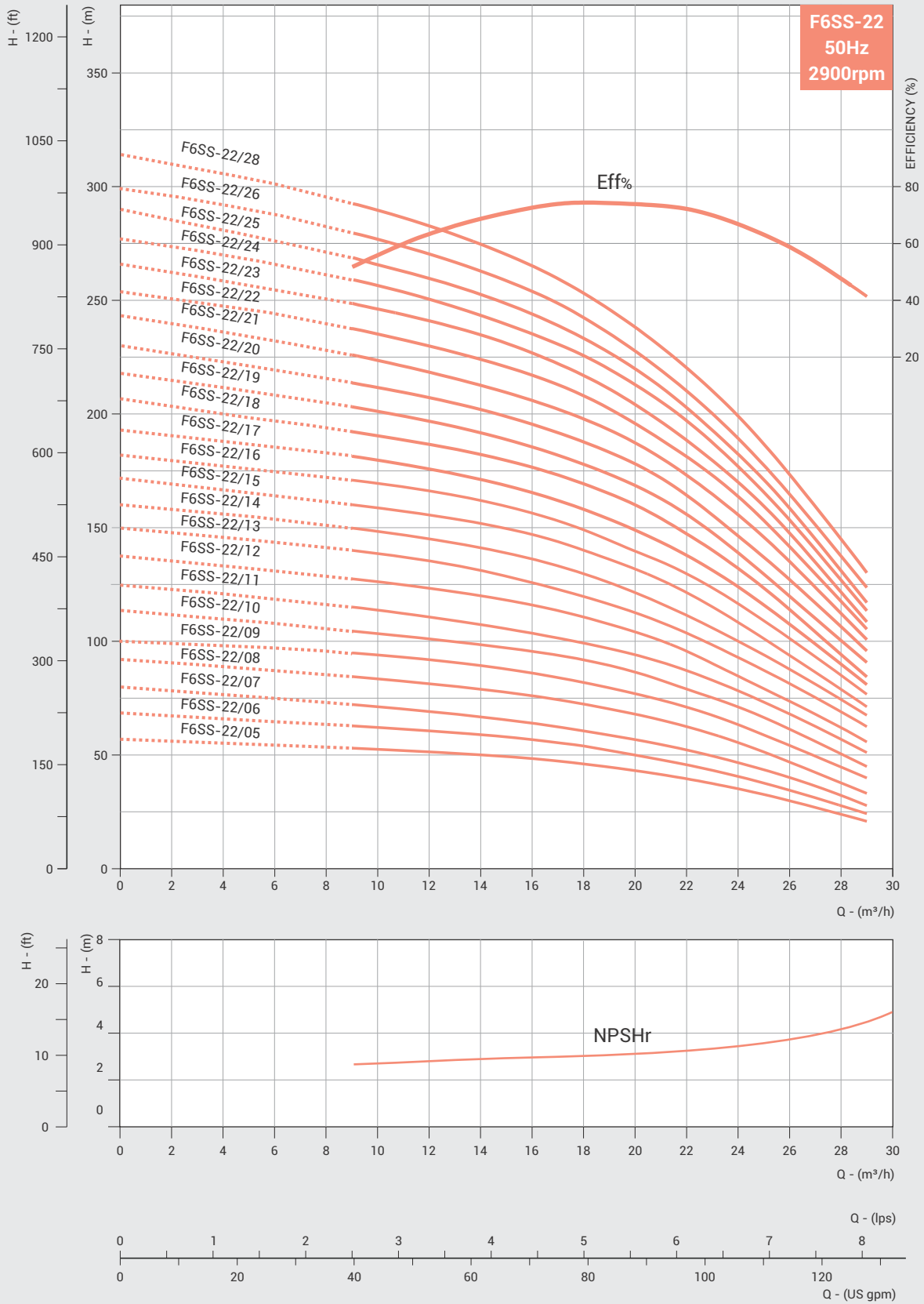
PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	2,77	3,3	3,89	4,44	5	5,55	6,11	6,67	7,22	7,77
			m ³ /h	0	10	12	14	16	18	20	22	24	26
F6SS-22/05	4	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	57	52	50	49	48	46	43	40	35	30	24
F6SS-22/06	5,5		69	62	60	58	56	54	49	45	41	35	27
F6SS-22/07	7,5		80	71	69	66	64	60	57	52	47	40	32
F6SS-22/08	7,5		92	84	81	78	76	72	68	62	55	47	38
F6SS-22/09	9,3		100	94	91	89	86	82	77	71	64	55	45
F6SS-22/10	9,3		114	104	101	98	95	92	86	79	71	61	50
F6SS-22/11	9,3		125	114	110	107	104	100	95	87	78	68	57
F6SS-22/12	11		137	126	123	120	116	110	105	95	85	74	62
F6SS-22/13	11		150	139	135	131	125	120	113	104	94	81	69
F6SS-22/14	13		160	148	145	141	136	130	121	111	100	88	75
F6SS-22/15	13		171	159	155	152	147	140	131	121	109	95	80
F6SS-22/16	13		182	169	166	162	156	150	140	130	116	101	85
F6SS-22/17	13		192	180	175	171	165	158	149	138	125	108	90
F6SS-22/18	15		207	190	186	182	176	170	160	147	132	115	95
F6SS-22/19	15		218	201	196	192	185	178	169	155	140	120	100
F6SS-22/20	18,5		230	212	207	202	195	188	178	165	146	126	106
F6SS-22/21	18,5		243	224	219	213	205	198	187	174	155	135	112
F6SS-22/22	18,5		254	235	230	224	217	208	195	181	164	142	117
F6SS-22/23	18,5		265	246	241	235	226	217	205	189	170	147	121
F6SS-22/24	22		277	256	250	244	235	225	214	197	177	154	127
F6SS-22/25	22		290	265	260	253	244	234	220	203	183	159	131
F6SS-22/26	22		299	277	270	263	254	242	228	210	190	165	137
F6SS-22/28	26		314	290	284	275	265	254	238	220	199	174	144

** Optional outlet Size.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

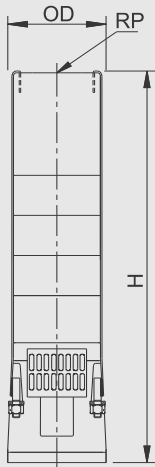


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 22m³/h

Outlet Size : 2½"/3"***



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-22/30	26	30	1/2	139/143	65/80	1706	36
F6SS-22/32	26	30	1/2	139/143	65/80	1800	38
F6SS-22/34	26	35	1/2	139/143	65/80	1894	40
F6SS-22/36	30	35	1/2	139/143	65/80	1988	42
F6SS-22/38	30	40	1/2	139/143	65/80	2082	44
F6SS-22/40	37	40	1/2	139/143	65/80	2176	46
F6SS-22/42	37	40	1/2	139/143	65/80	2270	48
F6SS-22/44	37	50	1/2	139/143	65/80	2364	50
F6SS-22/46	37	50	1/2	139/143	65/80	2458	52
F6SS-22/50	45	50	1/2	139/143	65/80	2646	56
F6SS-22/60	45	75	1/2	139/143	65	3136	67
F6SS-22/65	55	75	1/2	139/143	65	3381	72
F6SS-22/72	55	75	1/2	139/143	80	3760	79

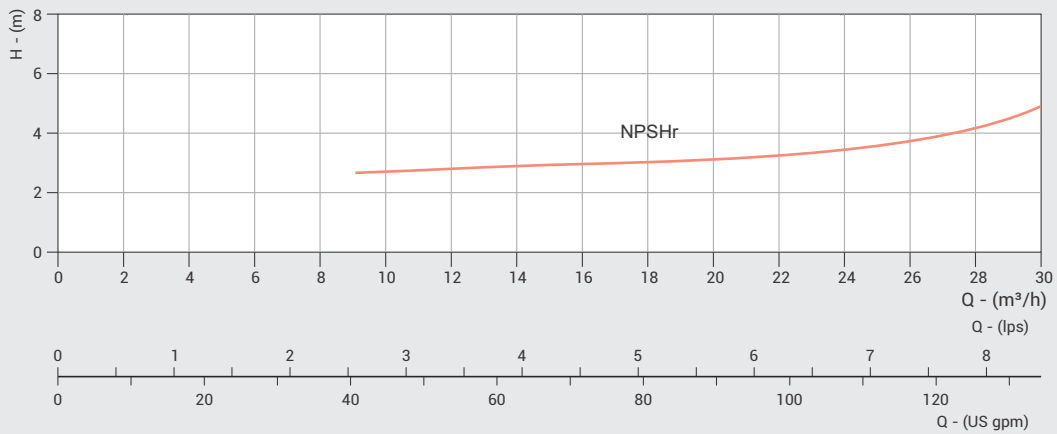
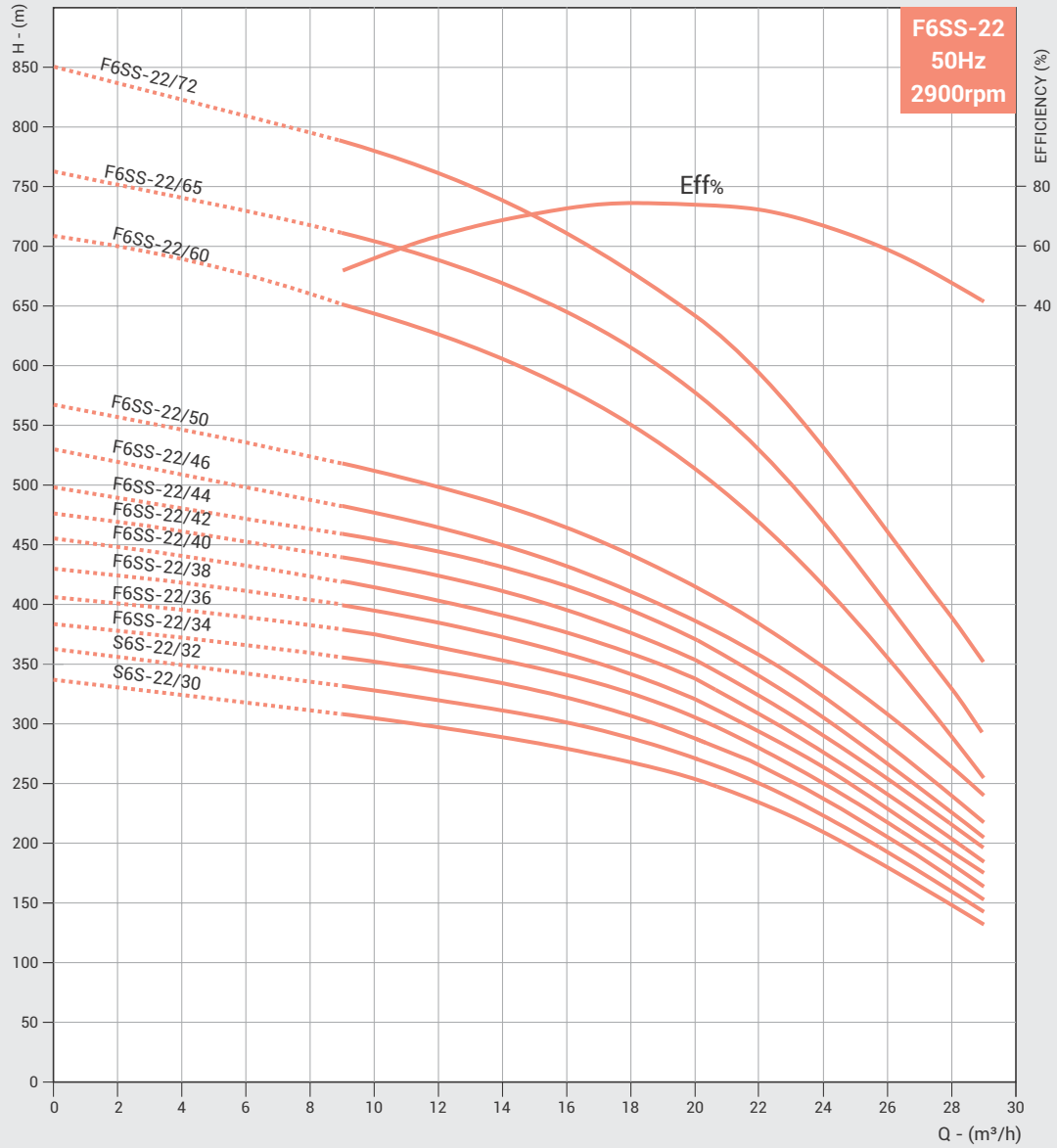
PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	2.77	3.3	3.89	4.44	5	5.55	6.11	6.67	7.22	7.77
		m ³ /h	0	10	12	14	16	18	20	22	24	26	28
F6SS-22/30	26	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	338	305	298	290	280	269	253	234	210	180	149
F6SS-22/32	26		362	329	320	310	300	289	270	250	222	192	160
F6SS-22/34	26		382	351	344	333	321	308	289	267	238	205	170
F6SS-22/36	30		406	375	364	352	340	326	305	280	250	218	181
F6SS-22/38	30		430	395	385	372	360	341	320	293	263	230	192
F6SS-22/40	37		455	414	402	390	378	360	339	309	277	240	203
F6SS-22/42	37		476	434	423	410	397	378	352	323	290	253	216
F6SS-22/44	37		498	454	444	430	415	397	370	340	305	268	228
F6SS-22/46	37		535	482	470	458	440	419	390	359	322	280	240
F6SS-22/50	45		568	511	499	482	454	440	415	383	349	309	263
F6SS-22/60	45		714	650	630	606	581	552	518	472	416	358	290
F6SS-22/65	55		762	708	690	668	645	618	583	538	480	411	330
F6SS-22/72	55		850	790	765	740	710	680	642	595	535	465	390

** Optional outlet Size.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

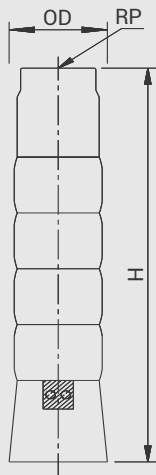


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 30m³/h

Outlet Size : 3"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-30/01	1,5	2	1	136	80	386	8
F6SS-30/02	2,2	3	1	136	80	482	10
F6SS-30/03	3	4	1	136	80	578	12
F6SS-30/04	4	5,5	1	136	80	674	14
F6SS-30/05	5,5	7,5	1/2	136/140	80	770	16
F6SS-30/06	5,5	7,5	1/2	136/140	80	866	17
F6SS-30/07	7,5	10	1/2	136/140	80	962	19
F6SS-30/08	7,5	10	1/2	136/140	80	1058	21
F6SS-30/09	9,3	12,5	1/2	136/140	80	1154	23
F6SS-30/10	9,3	12,5	1/2	136/140	80	1250	25
F6SS-30/11	9,3	12,5	1/2	136/140	80	1346	27
F6SS-30/12	11	15	1/2	136/140	80	1442	29

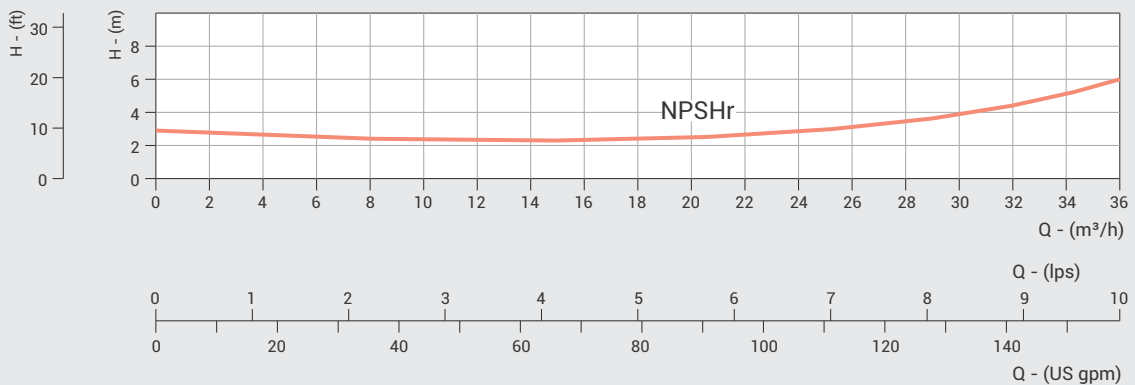
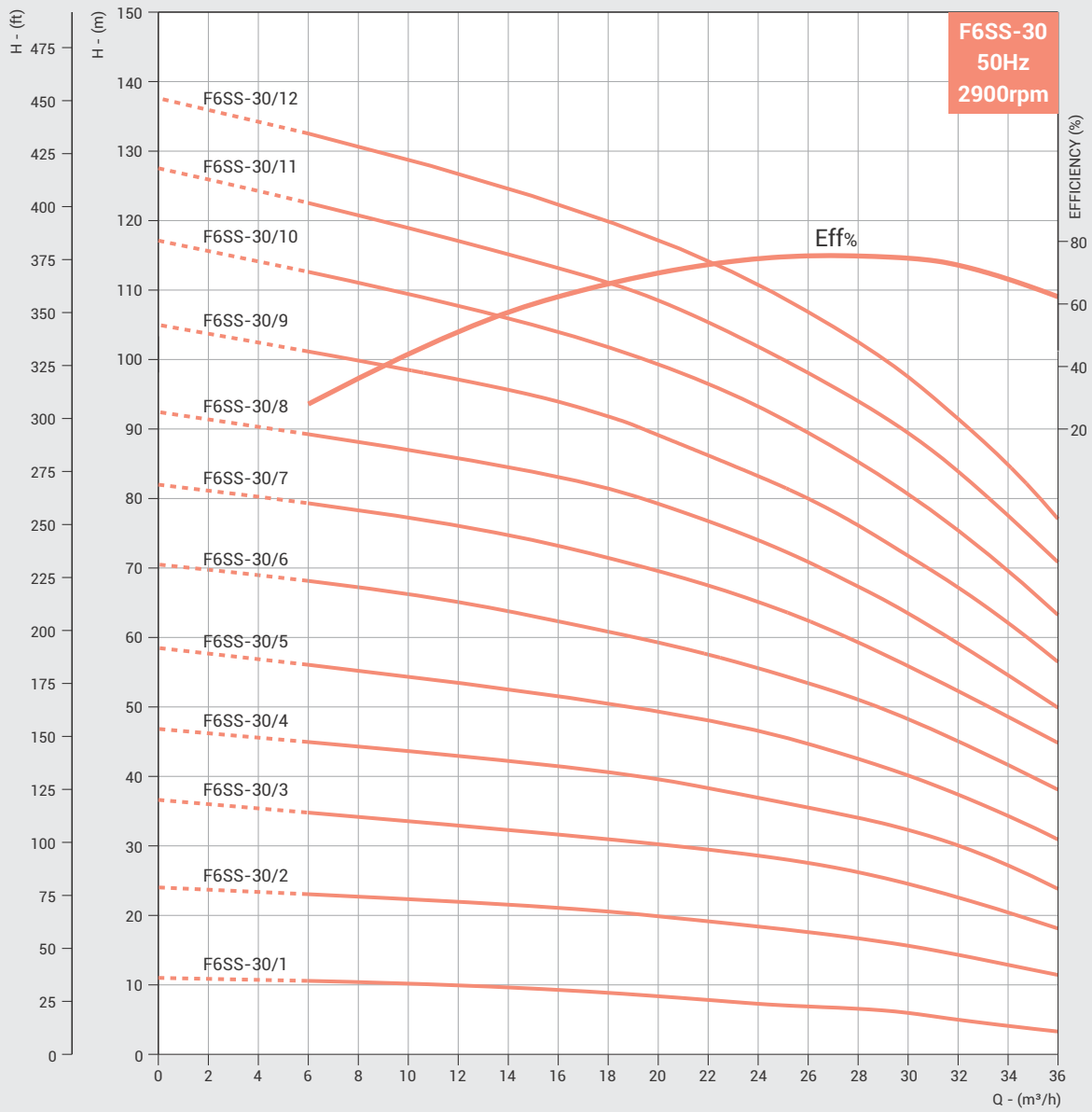
PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	2.22	3.33	4.44	5.55	6.60	7.22	8.33	8.90	9.40	10
			m ³ /h	0	8	12	16	20	24	26	30	32	34	36
F6SS-30/01	1,5		11	10,5	10	9	8	7	6,5	6	5	4	3,5	
F6SS-30/02	2,2		24	22,8	22	21	20	18,5	17,9	15,9	14	13	11	
F6SS-30/03	3		36,5	34	33	31,8	30	28,5	27,8	24,5	22,8	20,5	18	
F6SS-30/04	4		47	44	43	41,8	39,8	37	35,8	32,5	30	27	24	
F6SS-30/05	5,5		58,5	55	53,8	51,8	49	46,5	45	40	37	34	31	
F6SS-30/06	5,5		70,5	67	65	62	59	55,8	53,5	48	45	42	38	
F6SS-30/07	7,5		82	78	76	73	69	65	62	56	52	48,5	45	
F6SS-30/08	7,5		92,5	88	86	83	79	74	71	63,5	59	54,5	50	
F6SS-30/09	9,3		105	100	97	94	89	83	80	72	67	62	57	
F6SS-30/10	9,3		117	111	108	104	99	93	89,5	81	75,5	70	63	
F6SS-30/11	9,3		127	121	117	113	108,5	102	98	89,5	84	78	71	
F6SS-30/12	11		137	131	127	122,5	117	111	107	98	91,5	85	77	

** Optional outlet Size.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

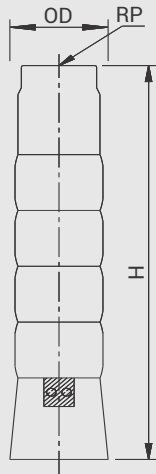


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 30m³/h

Outlet Size : 3"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-30/13	11	15	1/2	136/140	80	1538	30
F6SS-30/14	13	17,5	1/2	136/140	80	1634	33
F6SS-30/15	13	17,5	1/2	136/140	80	1730	34
F6SS-30/16	15	20	1/2	136/140	80	1826	36
F6SS-30/17	15	20	1/2	136/140	80	1922	38
F6SS-30/18	18,5	25	1/2	136/140	80	2018	40
F6SS-30/19	18,5	25	1/2	136/140	80	2114	42
F6SS-30/20	18,5	25	1/2	136/140	80	2210	44
F6SS-30/21	18,5	25	1/2	136/140	80	2306	46
F6SS-30/22	22	30	1/2	136/140	80	2402	48
F6SS-30/23	22	30	1/2	136/140	80	2498	49
F6SS-30/24	22	30	1/2	136/140	80	2594	51
F6SS-30/25	22	30	1/2	136/140	80	2690	53
F6SS-30/26	22	30	1/2	136/140	80	2786	55
F6SS-30/27	26	35	1/2	136/140	80	2882	57
F6SS-30/28	26	35	1/2	136/140	80	2978	59

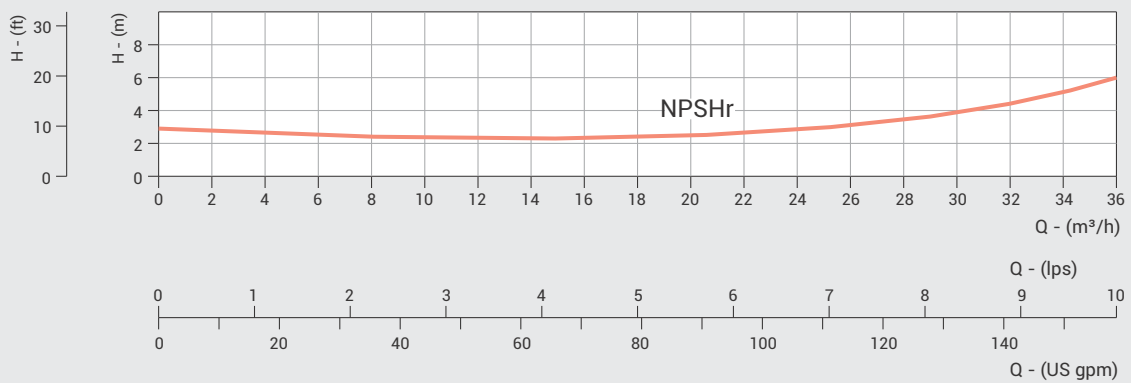
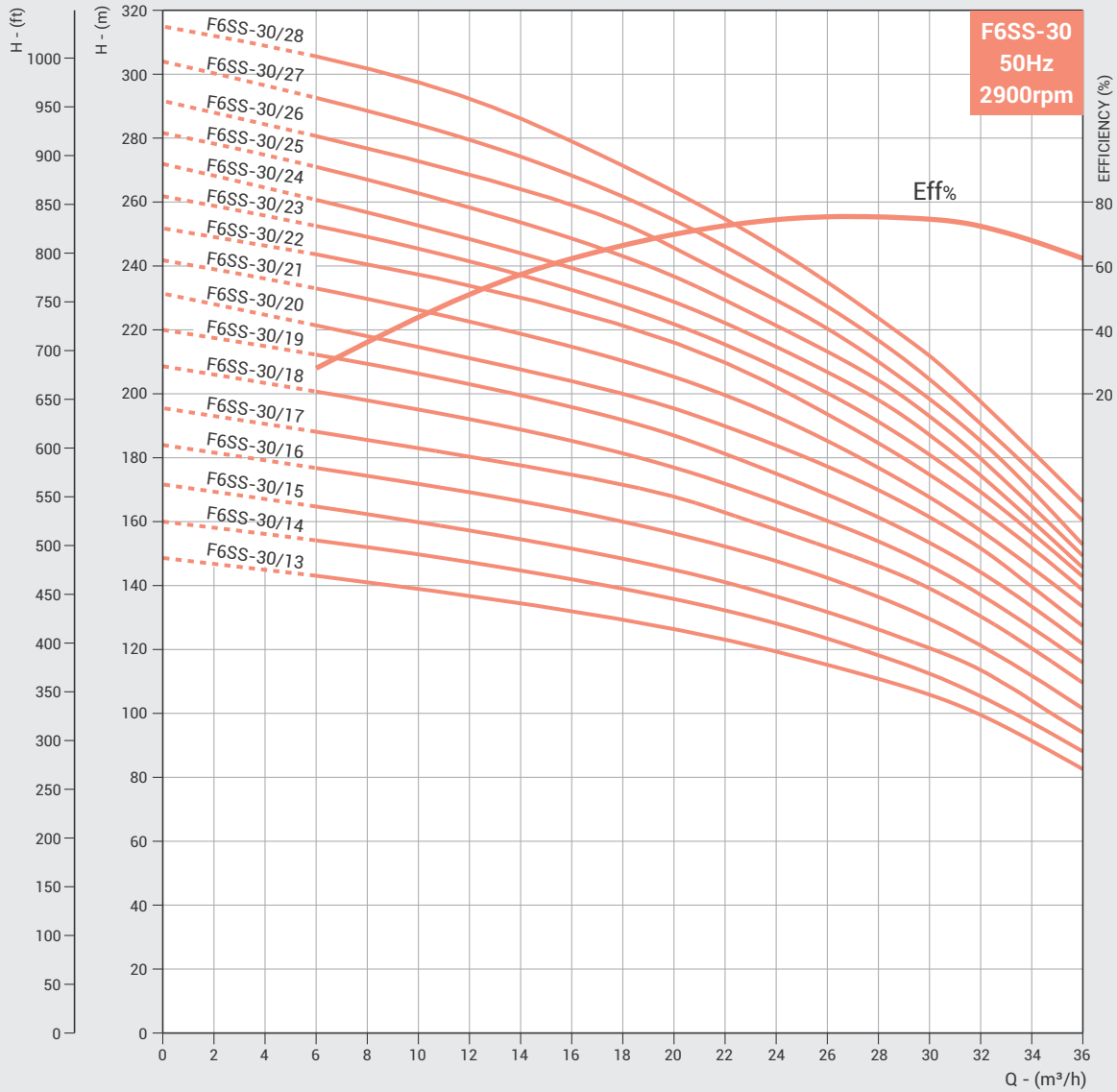
PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	2.22	3.33	4.44	5.55	6.60	7.22	8.33	8.90	9.40	10
		m ³ /h	0	8	12	16	20	24	26	30	32	34	36
F6SS-30/13	11	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	148	142	137	132	127	119	115	106	100	92	83
F6SS-30/14	13		160	152	148	142	136	128	124	112	105	97	88
F6SS-30/15	13		172	163	157	152	145	136	132	120	114	104	94
F6SS-30/16	15		184	175	169	164	156	148	143	130	121	112	102
F6SS-30/17	15		196	186	180	174	168	158	152	139	130	120	110
F6SS-30/18	18.5		208	198	192	185	177	166	160	146	137	127	116
F6SS-30/19	18.5		220	210	203	196	187	175	168	154	144	134	122
F6SS-30/20	18.5		232	218	211	204	196	184	177	162	152	140	128
F6SS-30/21	18.5		242	230	223	215	206	193	185	168	157	146	134
F6SS-30/22	22		252	240	234	226	216	202	194	175	164	152	139
F6SS-30/23	22		262	249	242	232	222	208	200	180	169	156	143
F6SS-30/24	22		272	257	248	240	228	215	207	188	175	160	146
F6SS-30/25	22		282	267	258	248	236	222	213	193	180	165	150
F6SS-30/26	22		292	277	268	259	246	230	220	199	185	170	154
F6SS-30/27	26		304	288	280	268	254	237	228	204	191	176	160
F6SS-30/28	26		315	302	292	279	264	246	235	212	198	182	166

Refer General Information for performance curve conditions and for other details.

Curve tolerance according to ISO : 9906, Grade - 3B

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP



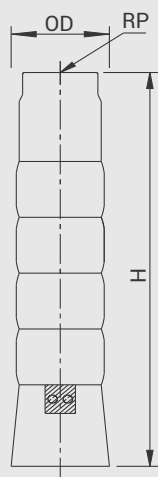
Refer General Information for performance curve conditions and for other details.
Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 30m³/h

Outlet Size : 3"



PUMP MODEL	REQUIRED MOTOR POWER		+NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-30/29	26	35	1/2	136/140	80	3074	61
F6SS-30/31	26	35	1/2	136/140	80	3266	65
F6SS-30/32	30	40	1/2	136/140	80	3362	67
F6SS-30/34	30	40	1/2	136/140	80	3554	70
F6SS-30/35	30	40	1/2	136/140	80	3650	72
F6SS-30/38	37	50	1/2	136/140	80	3938	78
F6SS-30/40	37	50	1/2	136/140	80	4130	82
F6SS-30/43	37	50	1/2	136/140	80	4418	87
F6SS-30/46	45	60	1/2	136/140	80	4706	93
F6SS-30/49	45	60	1/2	136/140	80	4994	98
F6SS-30/52	55	75	1/2	136/140	80	5282	106
F6SS-30/54	55	75	1/2	136/140	80	5474	112
F6SS-30/72	55	75	1/2	136/140	80	7299	150

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	2,22	3,33	4,44	5,55	6,60	7,22	8,33	8,90	9,40	10
			m ³ /h	0	8	12	16	20	24	26	30	32	34	36
F6SS-30/29	26		330	323	307	287	270	250	240	214	198	183	175	
F6SS-30/31	26		356	343	328	312	293	273	262	233	215	200	190	
F6SS-30/32	30		366	355	338	322	304	283	272	245	225	207	200	
F6SS-30/34	30		388	375	357	340	320	298	286	255	234	210	207	
F6SS-30/35	30		400	387	370	350	331	307	293	263	244	222	217	
F6SS-30/38	37		420	417	405	385	363	336	320	290	263	247	232	
F6SS-30/40	37		446	437	423	401	382	357	341	304	280	260	245	
F6SS-30/43	37		489	477	453	430	412	381	365	326	300	276	261	
F6SS-30/46	45		535	515	492	467	445	415	397	352	323	300	286	
F6SS-30/49	45		568	550	527	501	477	447	430	384	352	325	308	
F6SS-30/52	55		600	587	562	535	507	473	455	409	375	346	327	
F6SS-30/54	55		620	607	581	553	525	492	474	426	390	360	338	
F6SS-30/72	55		870	793	778	739	705	658	608	583	548	500	459	

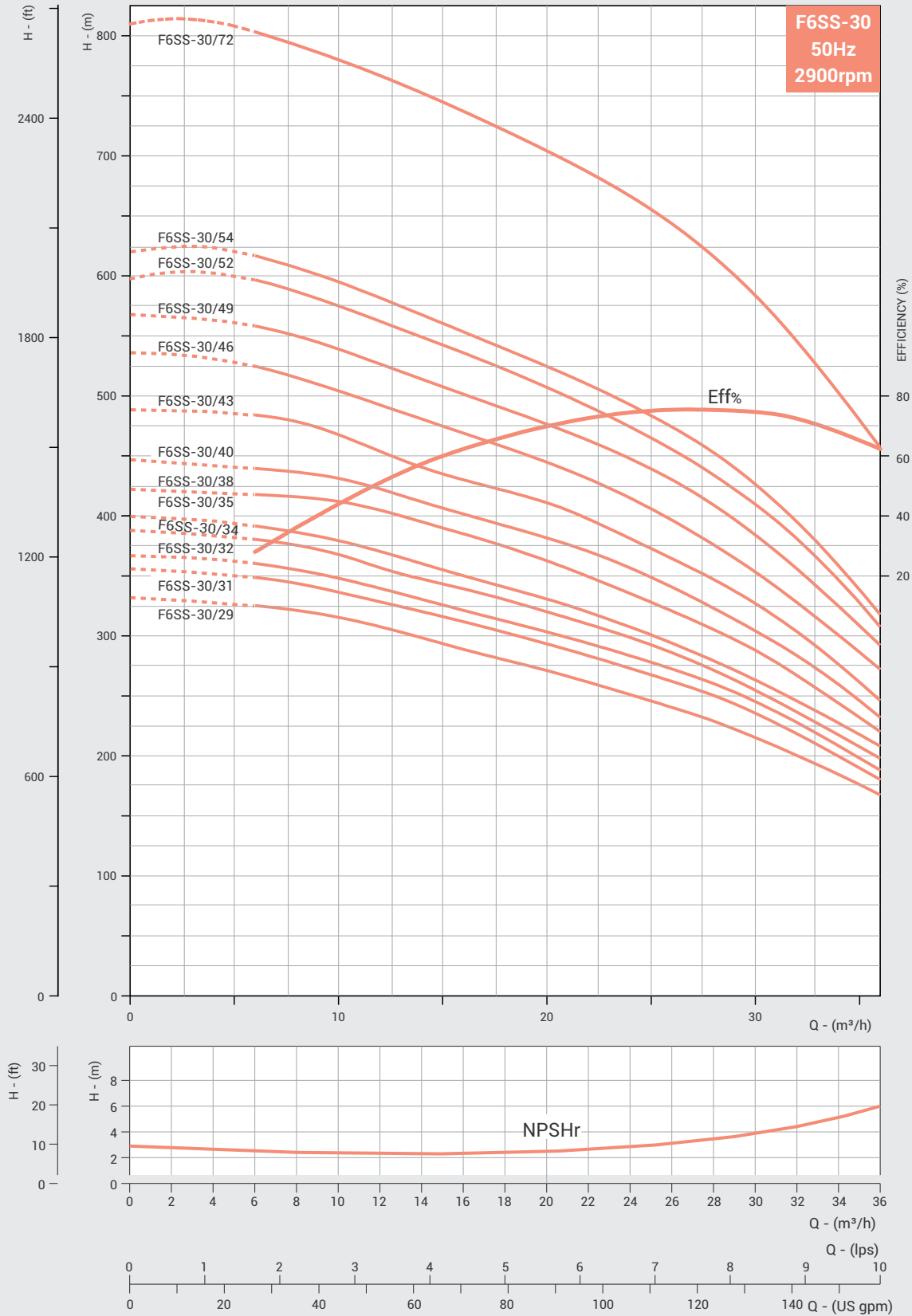
* 1 denotes Single Cable Guard (D.O.L - 3 wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP



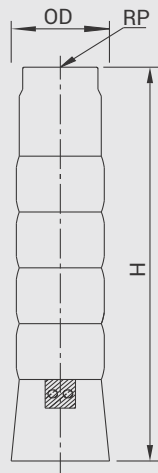
Refer General Information for performance curve conditions and for other details.
Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 48m³/h

Outlet Size : 3"/4"***



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		#OD	RP	H	
F6SS-48/01	2,2	3	1	145	80/100	403	9
F6SS-48/02	3	4	1	145	80/100	516	11
F6SS-48/03	5,5	7,5	1/2	145/149	80/100	629	13
F6SS-48/04	7,5	10	1/2	145/149	80/100	742	16
F6SS-48/05	7,5	10	1/2	145/149	80/100	855	18
F6SS-48/06	9,3	12,5	1/2	145/149	80/100	968	20
F6SS-48/07	11	15	1/2	145/149	80/100	1081	22
F6SS-48/08	13	17,5	1/2	145/149	80/100	1194	25
F6SS-48/09	15	20	1/2	145/149	80/100	1307	27
F6SS-48/10	15	20	1/2	145/149	80/100	1420	29
F6SS-48/11	18,5	25	1/2	145/149	80/100	1533	32
F6SS-48/12	18,5	25	1/2	145/149	80/100	1646	34
F6SS-48/13	22	30	1/2	145/149	80/100	1759	36

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	2,78	5,56	8,34	11,12	12,2	13,4	13,9	15,6	16,68
		m ³ /h	0	10	20	30	40	44	48	50	56	60
F6SS-48/01	2,2	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	13,5	13	12	10,5	9	8	7	6,8	5	3,8
F6SS-48/02	3		26,8	25,5	23,5	21	18	16,5	15	14	11	8,5
F6SS-48/03	5,5		40,8	39	36	32,5	28,5	26	24	23	18	14,5
F6SS-48/04	7,5		54,2	52	48,2	43,8	38	35,5	32	30,8	24	20
F6SS-48/05	7,5		67	64	59,5	53,8	47	44	40	37,8	30	24
F6SS-48/06	9,3		80,5	77	71,5	65	56,5	52	48	45,5	36	29,8
F6SS-48/07	11		94	90	84	75,8	66,2	62	56	53,5	42,5	35
F6SS-48/08	13		108	103	96	87,3	76,5	71	65	61,8	50	41
F6SS-48/09	15		121	116	108	98,2	86,2	80	74	69,8	56	46
F6SS-48/10	15		134	128	119	108	95	88	80	76	61	51
F6SS-48/11	18,5		148	142	133	120	105,5	98,5	90	85,8	68	56
F6SS-48/12	18,5		161	154	144	130	114	106	98	92,2	74	62
F6SS-48/13	22		176	168	157,5	143,5	125,8	117,5	108	102	82	67,5

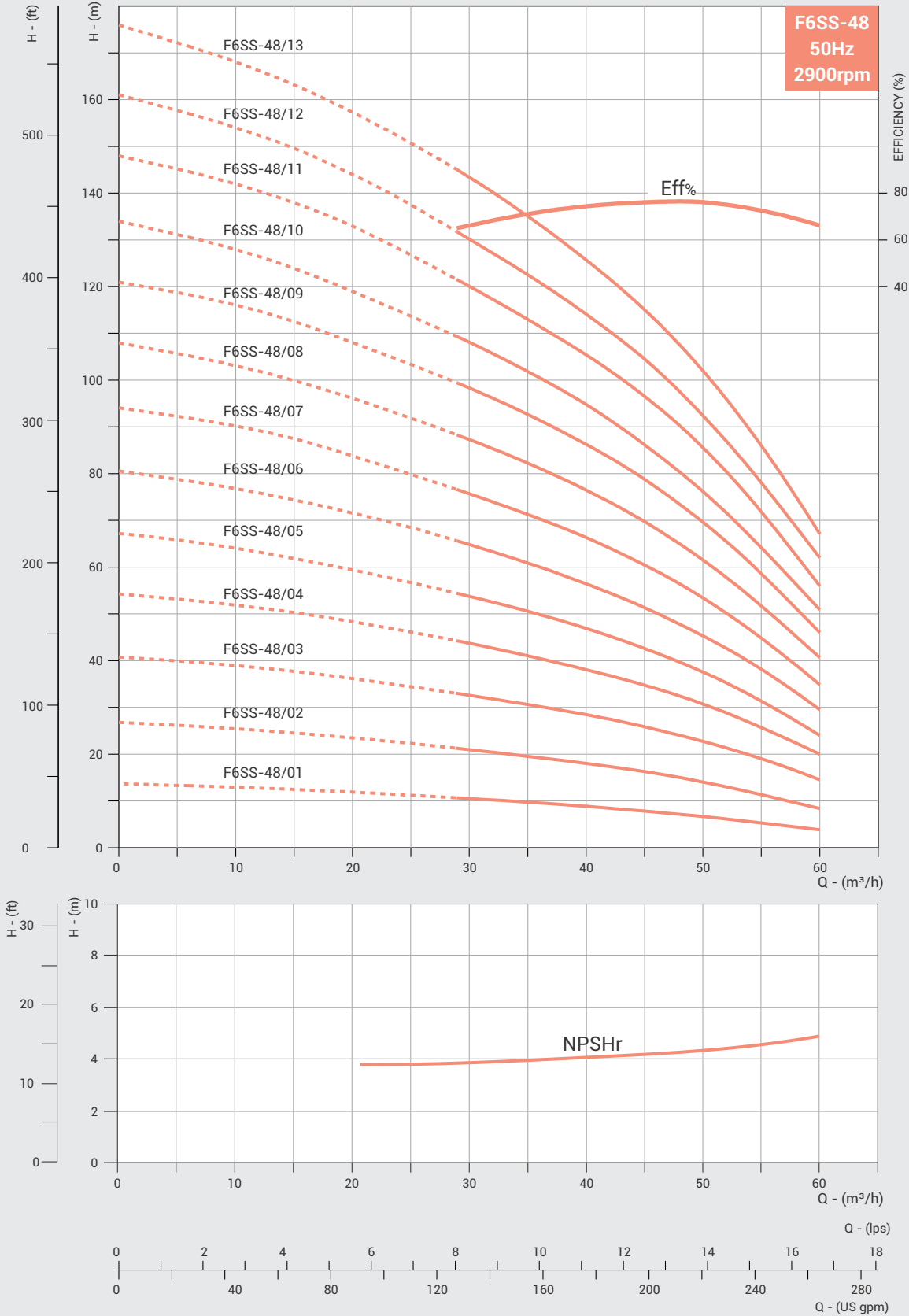
* 1 denotes Single Cable Guard (D.O.L - 3 wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

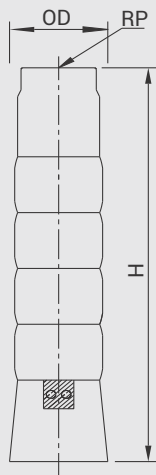


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 48m³/h

Outlet Size : 3"/4"***



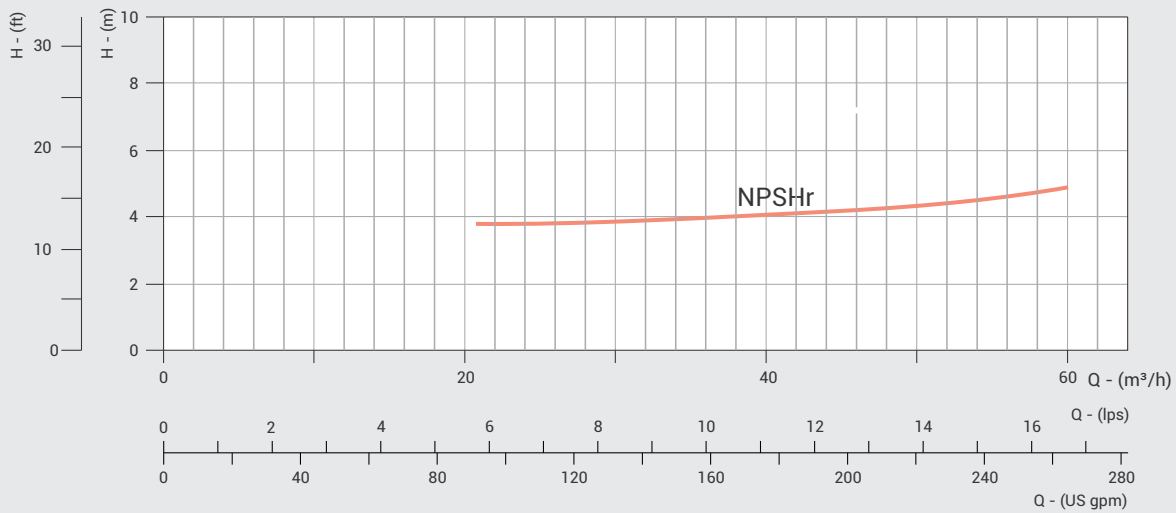
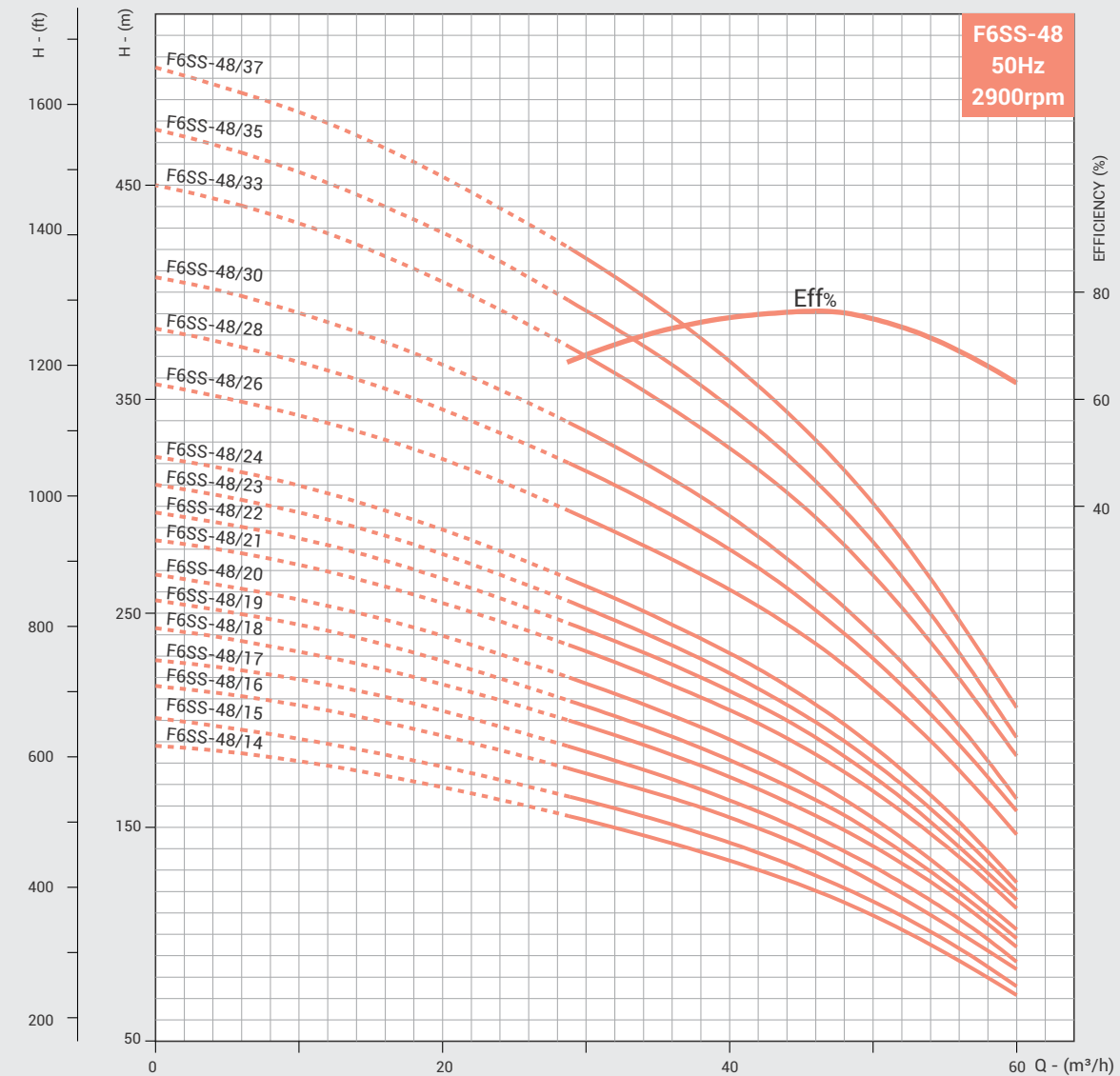
PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		#OD	RP	H	
F6SS-48/14	22	30	1/2	145/149	80/100	1872	38
F6SS-48/15	22	30	1/2	145/149	80/100	1985	41
F6SS-48/16	26	35	1/2	145/149	80/100	2098	43
F6SS-48/17	26	35	1/2	145/149	80/100	2211	45
F6SS-48/18	30	40	1/2	145/149	80/100	2324	48
F6SS-48/19	30	40	1/2	145/149	80/100	2437	50
F6SS-48/20	37	50	1/2	145/149	80/100	2550	52
F6SS-48/21	37	50	1/2	145/149	80/100	2663	54
F6SS-48/22	37	50	1/2	145/149	80/100	2776	57
F6SS-48/23	37	50	1/2	145/149	80/100	2889	59
F6SS-48/24	37	50	1/2	145/149	80/100	3002	61
F6SS-48/26	45	60	1/2	145/149	80/100	3228	66
F6SS-48/28	45	60	1/2	145/149	80/100	3454	70
F6SS-48/30	45	60	1/2	145/149	80/100	3680	75
F6SS-48/33	55	75	1/2	145/149	80/100	4019	84
F6SS-48/35	55	75	1/2	145/149	80/100	4245	89
F6SS-48/37	63	85	1/2	145/149	80/100	4471	93

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	2,78	5,56	8,34	11,12	12,2	13,4	13,9	15,6	16,68
		m ³ /h	0	10	20	30	40	44	48	50	56	60
F6SS-48/14	22	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	188	179	168	153	135	130	115	109	89	72
F6SS-48/15	22		201	192	178	163	143	132	121	115	94	76
F6SS-48/16	26		216	207	193	175	154	144	131	125	100	84
F6SS-48/17	26		228	219	204	186	162	151	139	132	109	88
F6SS-48/18	30		243	233	217	197	174	161	149	141	116	95
F6SS-48/19	30		256	245	228	206	182	170	155	148	120	99
F6SS-48/20	37		268	256	240	217	191	179	163	154	125	103
F6SS-48/21	37		284	273	255	233	205	181	176	167	136	113
F6SS-48/22	37		297	285	266	243	214	200	182	174	140	117
F6SS-48/23	37		310	297	278	253	222	207	190	180	148	121
F6SS-48/24	37		323	310	289	263	231	216	199	188	152	124
F6SS-48/26	45		357	343	323	295	261	245	226	215	179	148
F6SS-48/28	45		383	367	345	316	280	261	240	229	190	159
F6SS-48/30	45		407	390	366	335	295	276	251	240	199	164
F6SS-48/33	55		450	433	405	370	328	308	281	268	220	184
F6SS-48/35	55		476	456	428	392	347	325	299	283	231	193
F6SS-48/37	63		505	484	454	416	368	345	319	301	249	207

** Optional outlet Size.

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP



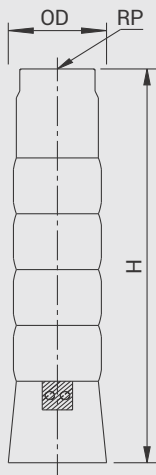
Refer General Information for performance curve conditions and for other details.
Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 60m³/h

Outlet Size : 3"/4"***



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-60/01	2,2	3	1	145	80/100	403	6
F6SS-60/02	4	5,5	1	145	80/100	516	11
F6SS-60/03	5,5	7,5	1/2	145/149	80/100	629	13
F6SS-60/04	7,5	10	1/2	145/149	80/100	742	16
F6SS-60/05	9,3	12,5	1/2	145/149	80/100	855	18
F6SS-60/06	11	15	1/2	145/149	80/100	968	21
F6SS-60/07	13	17,5	1/2	145/149	80/100	1081	23
F6SS-60/08	15	20	1/2	145/149	80/100	1194	25
F6SS-60/09	18,5	25	1/2	145/149	80/100	1307	28
F6SS-60/10	18,5	25	1/2	145/149	80/100	1420	30
F6SS-60/11	22	30	1/2	145/149	80/100	1533	32
F6SS-60/12	22	30	1/2	145/149	80/100	1646	35
F6SS-60/13	26	35	1/2	145/149	80/100	1759	37
F6SS-60/14	26	35	1/2	145/149	80/100	1872	39

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	4,16	5,55	8,33	11,11	13,88	16,66	19,44	22,22
			m ³ /h	0	15	20	30	40	50	60	70
F6SS-60/01	2,2	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	14	13	12	11	9	7	5	3	1
F6SS-60/02	4		26	25	24	23	20	17	14	10	5
F6SS-60/03	5,5		39	38	37	35	32	27	22	15	9
F6SS-60/04	7,5		52	51	50	47	42	37	31	22	13
F6SS-60/05	9,3		67	64	63	59	53	45	37	28	16
F6SS-60/06	11		82	78	76	71	63	56	47	35	21
F6SS-60/07	13		94	91	89	83	73	66	55	41	24
F6SS-60/08	15		110	104	102	97	87	76	65	48	30
F6SS-60/09	18,5		122	114	112	106	95	84	70	54	33
F6SS-60/10	18,5		138	133	128	118	105	92	76	57	35
F6SS-60/11	22		148	142	138	128	114	101	86	65	40
F6SS-60/12	22		167	156	152	141	124	109	92	69	43
F6SS-60/13	26		180	170	165	153	137	120	100	75	45
F6SS-60/14	26		195	184	179	164	144	128	110	83	48

** Optional outlet Size.

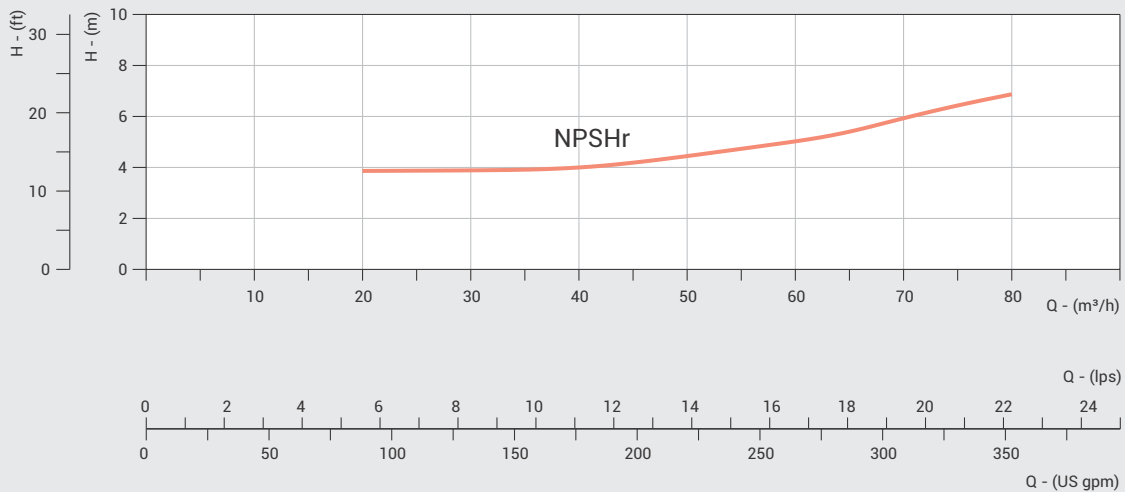
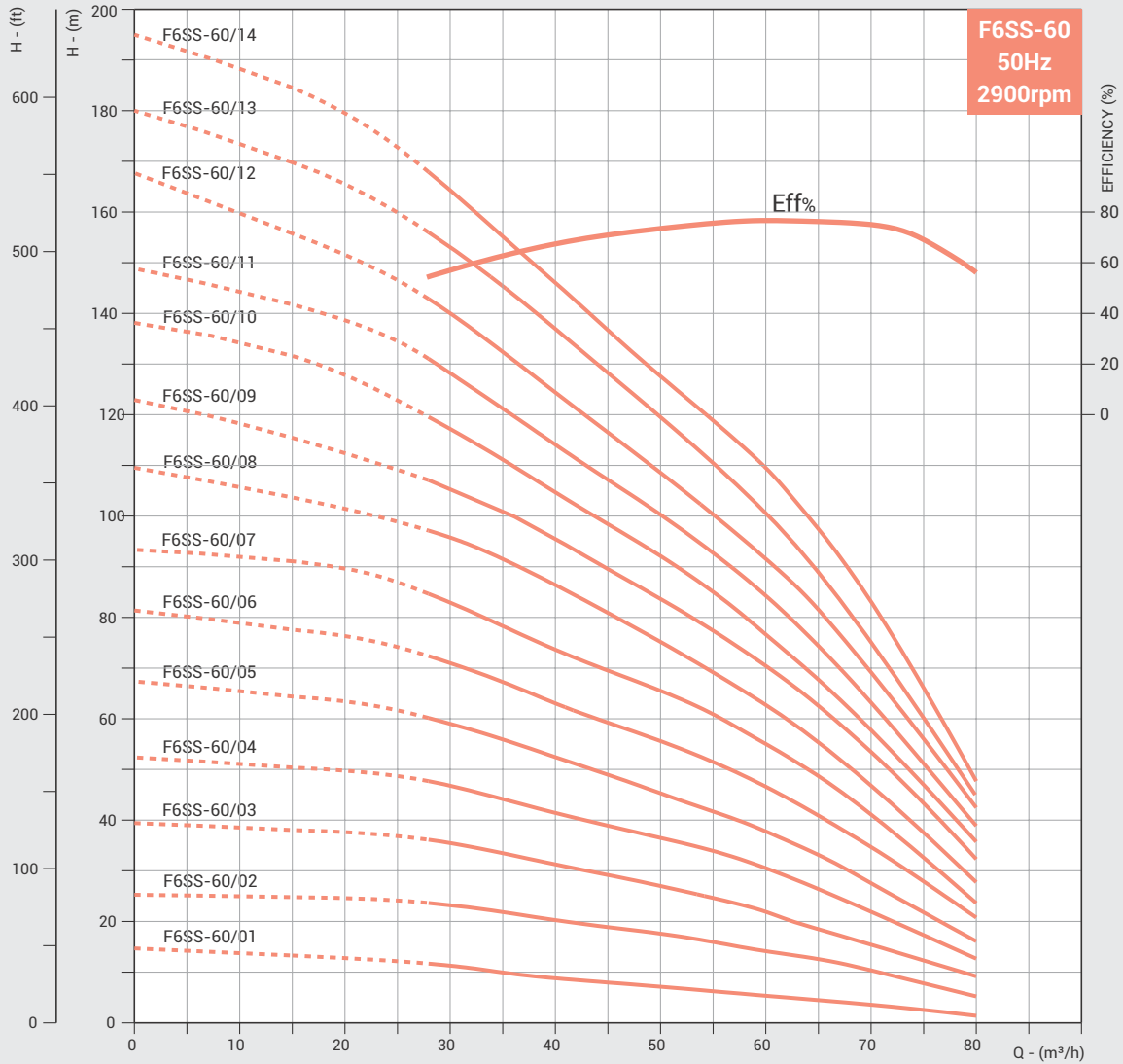
* 1 denotes Single Cable Guard (D.O.L - 3 wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

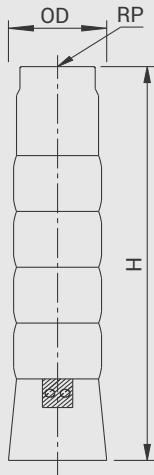


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 60m³/h

Outlet Size : 3"/4" **



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-60/15	26	35	1/2	145/149	80/100	1985	42
F6SS-60/16	30	40	1/2	145/149	80/100	2098	44
F6SS-60/17	30	40	1/2	145/149	80/100	2211	46
F6SS-60/18	37	50	1/2	145/149	80/100	2324	49
F6SS-60/19	37	50	1/2	145/149	80/100	2437	51
F6SS-60/20	37	50	1/2	145/149	80/100	2550	53
F6SS-60/21	37	50	1/2	145/149	80/100	2663	56
F6SS-60/22	45	60	1/2	145/149	80/100	2776	58
F6SS-60/24	45	60	1/2	145/149	80/100	3002	63
F6SS-60/26	55	75	1/2	145/149	80/100	3228	70
F6SS-60/28	55	75	1/2	145/149	80/100	3454	74
F6SS-60/30	55	75	1/2	145/149	80/100	3680	79

PERFORMANCE TABLE

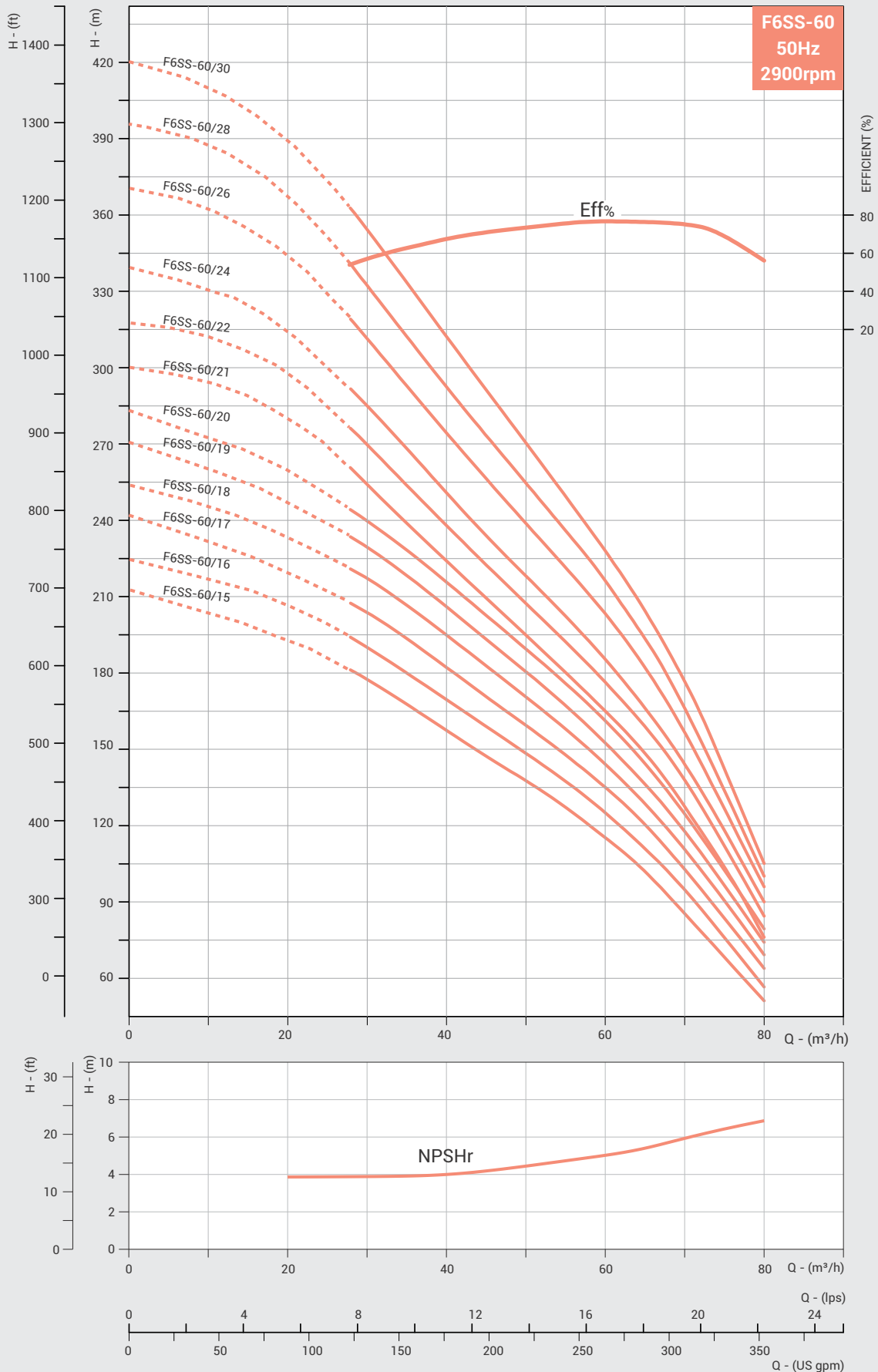
PUMP MODEL	MOTOR kW	lps	0	4,16	5,55	8,33	11,11	13,88	16,66	19,44	22,22
		m ³ /h	0	15	20	30	40	50	60	70	80
F6SS-60/15	26	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	212	198	194	177	157	137	117	85	52
F6SS-60/16	30		220	213	207	188	167	147	127	89	57
F6SS-60/17	30		242	227	222	205	183	160	138	107	63
F6SS-60/18	37		252	240	233	212	189	176	142	112	67
F6SS-60/19	37		270	254	248	231	206	181	152	116	74
F6SS-60/20	37		282	276	267	259	216	189	162	126	80
F6SS-60/21	37		300	288	281	254	223	195	165	126	77
F6SS-60/22	45		318	306	298	270	238	207	176	138	84
F6SS-60/24	45		339	324	314	285	251	218	186	144	90
F6SS-60/26	55		370	354	344	312	275	239	204	156	96
F6SS-60/28	55		396	378	367	332	293	255	216	161	101
F6SS-60/30	55		420	402	390	354	312	270	228	176	107

** Optional outlet Size.

Refer General Information for performance curve conditions and for other details.

Curve tolerance according to ISO : 9906, Grade - 3B

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

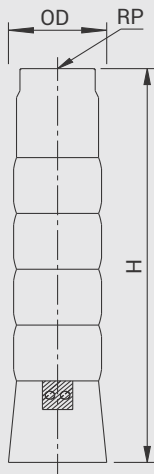


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 76m³/h

Outlet Size : 4"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-76/01	3	4	1/2	149/153	100	457	11
F6SS-76/02	5.5	7.5	1/2	149/153	100	601	14
F6SS-76/03	7.5	10	1/2	149/153	100	745	17
F6SS-76/04	11	15	1/2	149/153	100	889	20
F6SS-76/05	13	17.5	1/2	149/153	100	1033	23
F6SS-76/06	15	20	1/2	149/153	100	1177	26
F6SS-76/07	18.5	25	1/2	149/153	100	1321	29
F6SS-76/08	18.5	25	1/2	149/153	100	1465	32
F6SS-76/09	22	30	1/2	149/153	100	1609	35
F6SS-76/10	25	35	1/2	149/153	100	1753	38
F6SS-76/11	30	40	1/2	149/153	100	1897	41
F6SS-76/12	30	40	1/2	149/153	100	2041	44
F6SS-76/13	37	50	1/2	149/153	100	2185	47
F6SS-76/14	37	50	1/2	149/153	100	2329	50
F6SS-76/15	37	50	1/2	149/153	100	2473	54
F6SS-76/16	45	60	1/2	149/153	100	2617	57
F6SS-76/17	45	60	1/2	149/153	100	2761	60
F6SS-76/18	45	60	1/2	149/153	100	2905	63

PERFORMANCE TABLE

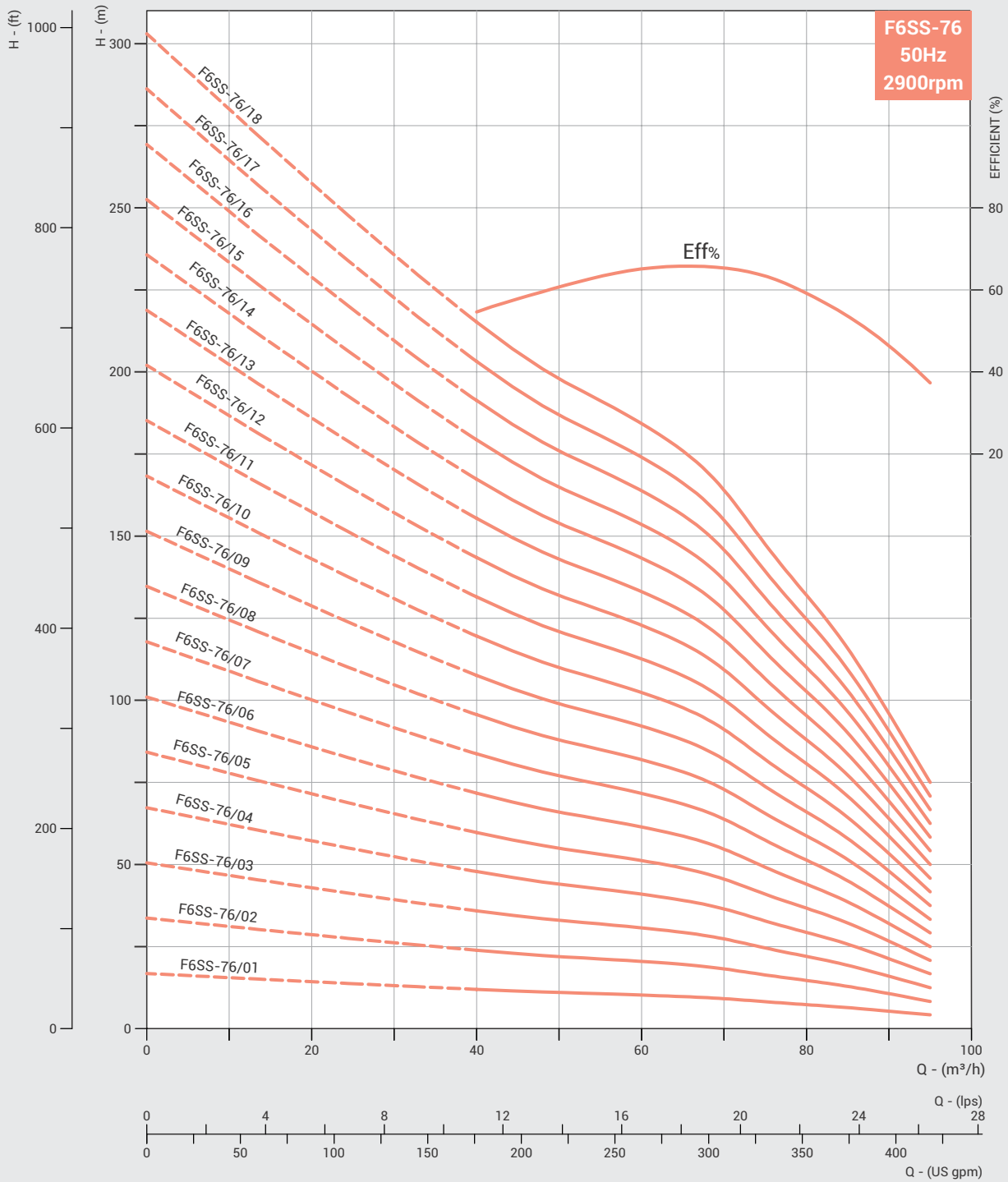
PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	11,1	15,3	18,1	19,4	20,8	22,2	23,6	25,0	26,4
			m ³ /h	0	40	55	65	70	75	80	85	90	95
F6SS-76/01	3		17	12	11	10	9	8	7	7	5	4	
F6SS-76/02	5.5		34	23	21	20	18	16	15	13	11	8	
F6SS-76/03	7.5		51	35	32	30	28	25	22	20	16	13	
F6SS-76/04	11		67	47	43	39	37	33	29	26	21	17	
F6SS-76/05	13		84	58	53	49	46	41	37	33	27	21	
F6SS-76/06	15		101	70	64	59	55	49	44	39	32	25	
F6SS-76/07	18.5		118	82	75	69	64	57	51	46	37	29	
F6SS-76/08	18.5		135	93	85	79	73	65	59	52	43	33	
F6SS-76/09	22		152	105	96	89	83	74	66	59	48	38	
F6SS-76/10	25		168	117	107	98	92	82	73	65	53	42	
F6SS-76/11	30		185	128	117	108	101	90	81	72	59	46	
F6SS-76/12	30		202	140	128	118	110	98	88	78	64	50	
F6SS-76/13	37		219	152	139	128	119	106	95	85	69	54	
F6SS-76/14	37		236	163	149	138	128	114	103	91	75	58	
F6SS-76/15	37		253	175	160	148	138	123	110	98	80	63	
F6SS-76/16	45		269	187	171	157	147	131	117	104	85	67	
F6SS-76/17	45		286	198	181	167	156	139	125	111	91	71	
F6SS-76/18	45		303	210	192	177	165	147	132	117	96	75	

** Optional outlet Size.

Refer General Information for performance curve conditions and for other details.

Curve tolerance according to ISO : 9906, Grade - 3B

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

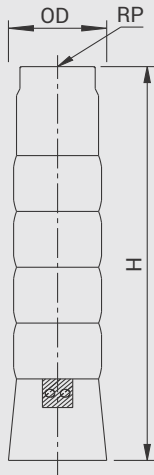


DIMENSIONS & WEIGHT - 6" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 6"

Nominal Flow : 92m³/h

Outlet Size : 4"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F6SS-92/01	4	5.5	1/2	149/153	100	457	11
F6SS-92/02	7.5	10	1/2	149/153	100	601	14
F6SS-92/03	11	15	1/2	149/153	100	745	17
F6SS-92/04	15	20	1/2	149/153	100	889	20
F6SS-92/05	18.5	25	1/2	149/153	100	1033	23
F6SS-92/06	22	30	1/2	149/153	100	1177	26
F6SS-92/07	26	35	1/2	149/153	100	1321	29
F6SS-92/08	30	40	1/2	149/153	100	1465	32
F6SS-92/09	37	50	1/2	149/153	100	1609	35
F6SS-92/10	37	50	1/2	149/153	100	1753	38
F6SS-92/11	45	60	1/2	149/153	100	1897	41
F6SS-92/12	45	60	1/2	149/153	100	2041	44

PERFORMANCE TABLE

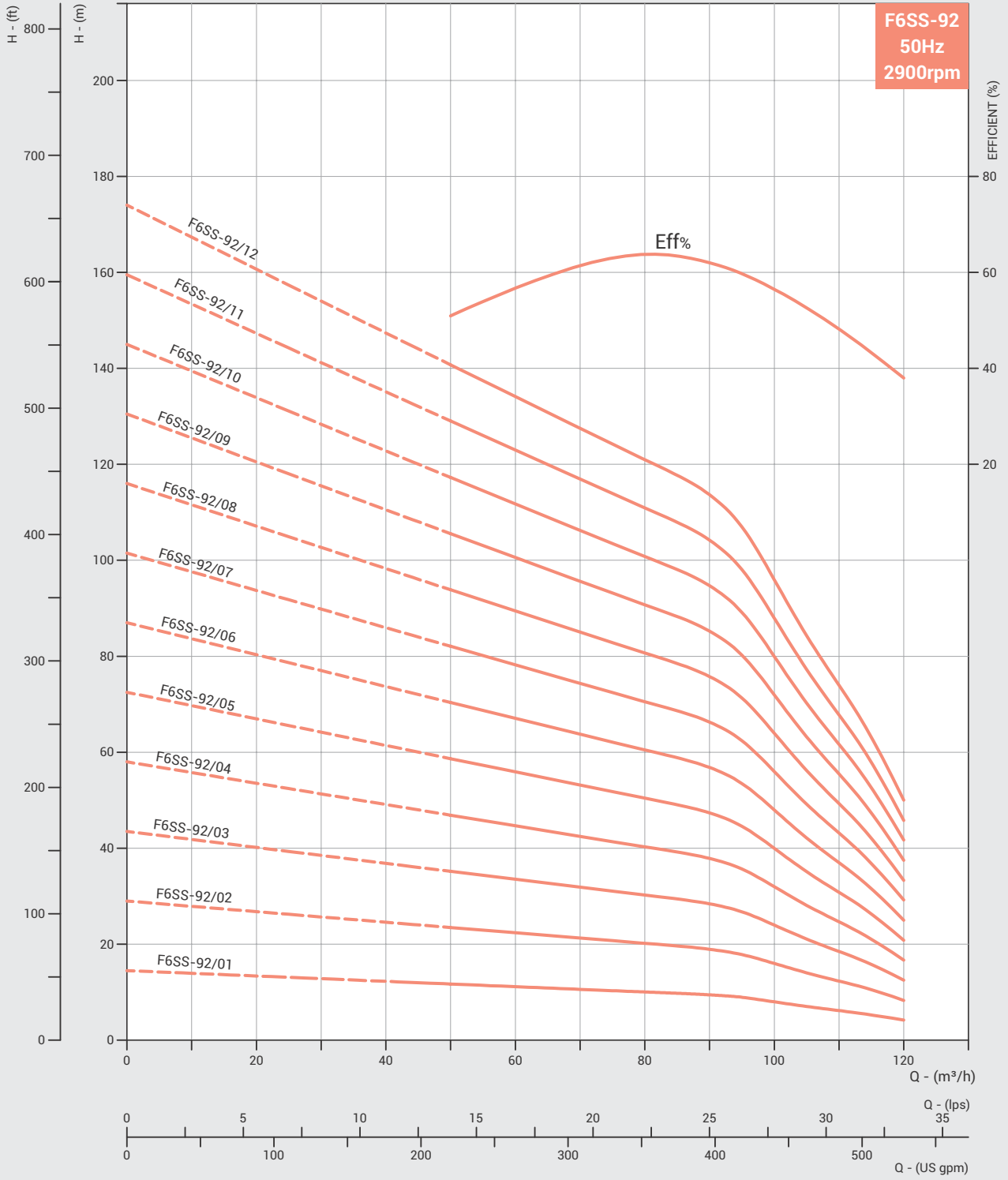
PUMP MODEL	MOTOR kW	lps	0	20,8	23,6	25,0	26,4	27,8	29,2	30,6	31,9	33,3
		m ³ /h	0	75	85	90	95	100	105	110	115	120
F6SS-92/01	4	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	15	10	10	10	9	8	7	6	5	4
F6SS-92/02	7.5		29	21	20	19	18	16	14	12	11	8
F6SS-92/03	11		44	31	30	29	27	24	21	19	16	13
F6SS-92/04	15		58	41	39	38	36	32	28	25	21	17
F6SS-92/05	18.5		73	52	49	48	45	40	35	31	27	21
F6SS-92/06	22		87	62	59	57	54	48	42	37	32	25
F6SS-92/07	26		102	72	69	67	63	56	49	43	37	29
F6SS-92/08	30		116	83	79	76	72	64	56	49	43	33
F6SS-92/09	37		131	93	89	86	81	72	63	56	48	38
F6SS-92/10	37		145	103	98	95	90	80	70	62	53	42
F6SS-92/11	45		160	114	108	105	99	88	77	68	59	46
F6SS-92/12	45		174	124	118	114	108	96	84	74	64	50

** Optional outlet Size.

Refer General Information for performance curve conditions and for other details.

Curve tolerance according to ISO : 9906, Grade - 3B

PERFORMANCE CURVES - 6" STAINLESS STEEL SUBMERSIBLE PUMP

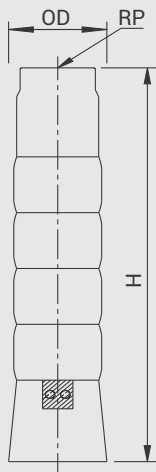


DIMENSIONS & WEIGHT - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 78m³/h

Outlet Size : 4"/5"***



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F8SS-78/01	5,5	7,5	1	193	100 / 125	554	22
F8SS-78/02	7,5	10	1/2	193/195	100 / 125	682	26
F8SS-78/03	11	15	1/2	193/195	100 / 125	810	29
F8SS-78/04	15	20	1/2	193/195	100 / 125	938	33
F8SS-78/05	18,5	25	1/2	193/195	100 / 125	1066	37
F8SS-78/06	22	30	1/2	193/195	100 / 125	1194	41
F8SS-78/07	26	35	1/2	193/195	100 / 125	1322	45
F8SS-78/08	30	40	1/2	193/195	100 / 125	1450	48
F8SS-78/09	30	40	1/2	193/195	100 / 125	1578	52
F8SS-78/10	37	50	1/2	193/195	100 / 125	1706	56

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	5,56	8,34	11,11	13,88	16,66	22,22	27,78
		m ³ /h	0	20	30	40	50	60	80	100
F8SS-78/01	5,5	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	20	19,7	18	16,8	15,5	14,2	12	7,5
F8SS-78/02	7,5		39	38,5	37	34	31,5	29,5	24	15,5
F8SS-78/03	11		59	59	55,5	51,5	47,5	43,7	34,5	22
F8SS-78/04	15		81.5	80	76	70	65	59,5	48	31
F8SS-78/05	18,5		102	99	94	87	80,5	75	60,5	37,5
F8SS-78/06	22		121	118,5	112,5	104	96,5	89	72	44
F8SS-78/07	26		142	138	131,5	122,5	112,5	103,5	84,5	72
F8SS-78/08	30		162	157,5	150,5	139	128	118	96	58
F8SS-78/09	30		182	177	167,5	155	143,5	132,5	107	64,5
F8SS-78/10	37		202	197	188	174	160,5	148	120	74

** Optional outlet Size.

OD for 8/8 - Combination of Motor & Pump

OD for 6/8 - Combination 173mm (single cable guard) 177mm (Double cable guar)

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

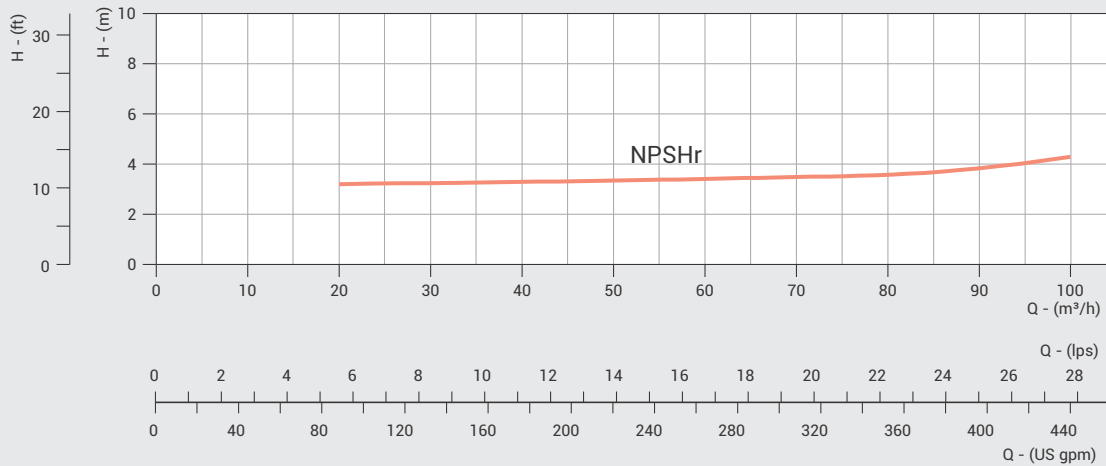
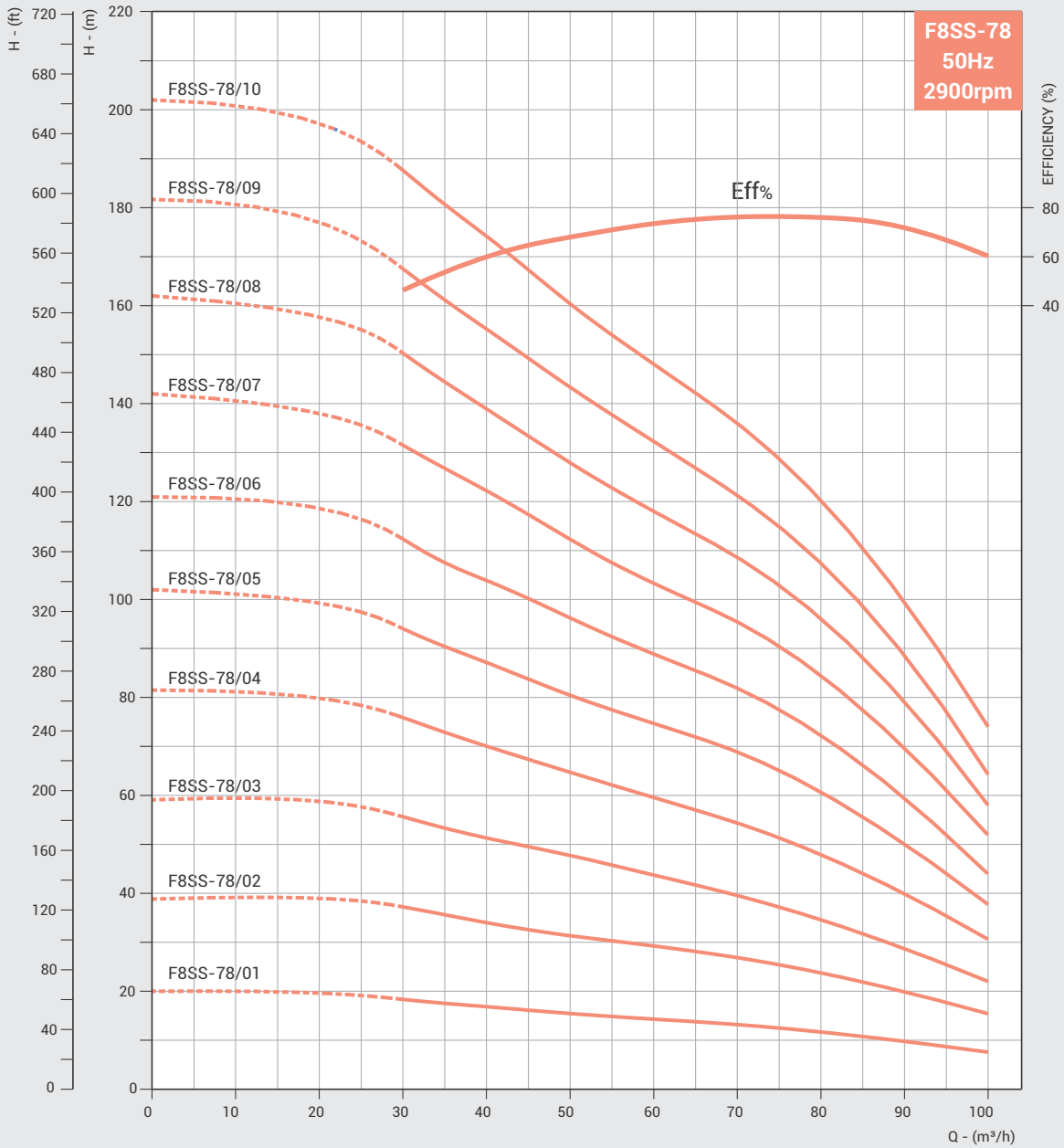
** Optional outlet Size.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 8" STAINLESS STEEL SUBMERSIBLE PUMP

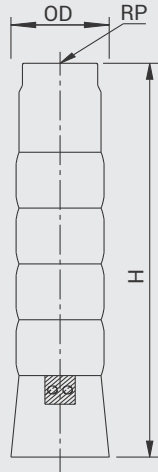


DIMENSIONS & WEIGHT - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 78m³/h

Outlet Size : 4"/5"**



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		OD	RP	H	
F8SS-78/11	45	60	1/2	193/195	100 / 125	1834	60
F8SS-78/12	45	60	1/2	193/195	100 / 125	1962	63
F8SS-78/13	55	75	1/2	193/195	100 / 125	2090	67
F8SS-78/14	55	75	1/2	193/195	100 / 125	2218	71
F8SS-78/15	55	75	1/2	193/195	100 / 125	2346	76
F8SS-78/16	63	85	1/2	193/195	100 / 125	2474	78
F8SS-78/17	63	85	1/2	193/195	100 / 125	2602	82
F8SS-78/18	63	85	1/2	193/195	100 / 125	2730	85
F8SS-78/19	75	100	1/2	193/195	100 / 125	2858	89
F8SS-78/20	75	100	1/2	193/195	100 / 125	2986	93
F8SS-78/21	75	100	1/2	193/195	100 / 125	3114	97
F8SS-78/22	93	125	1/2	193/195	100 / 125	3242	100

PERFORMANCE TABLE

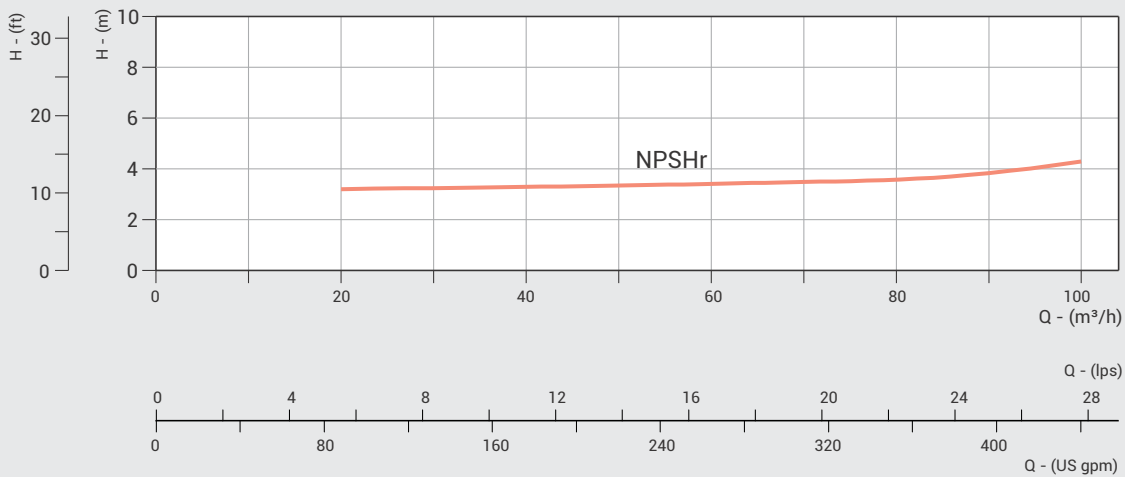
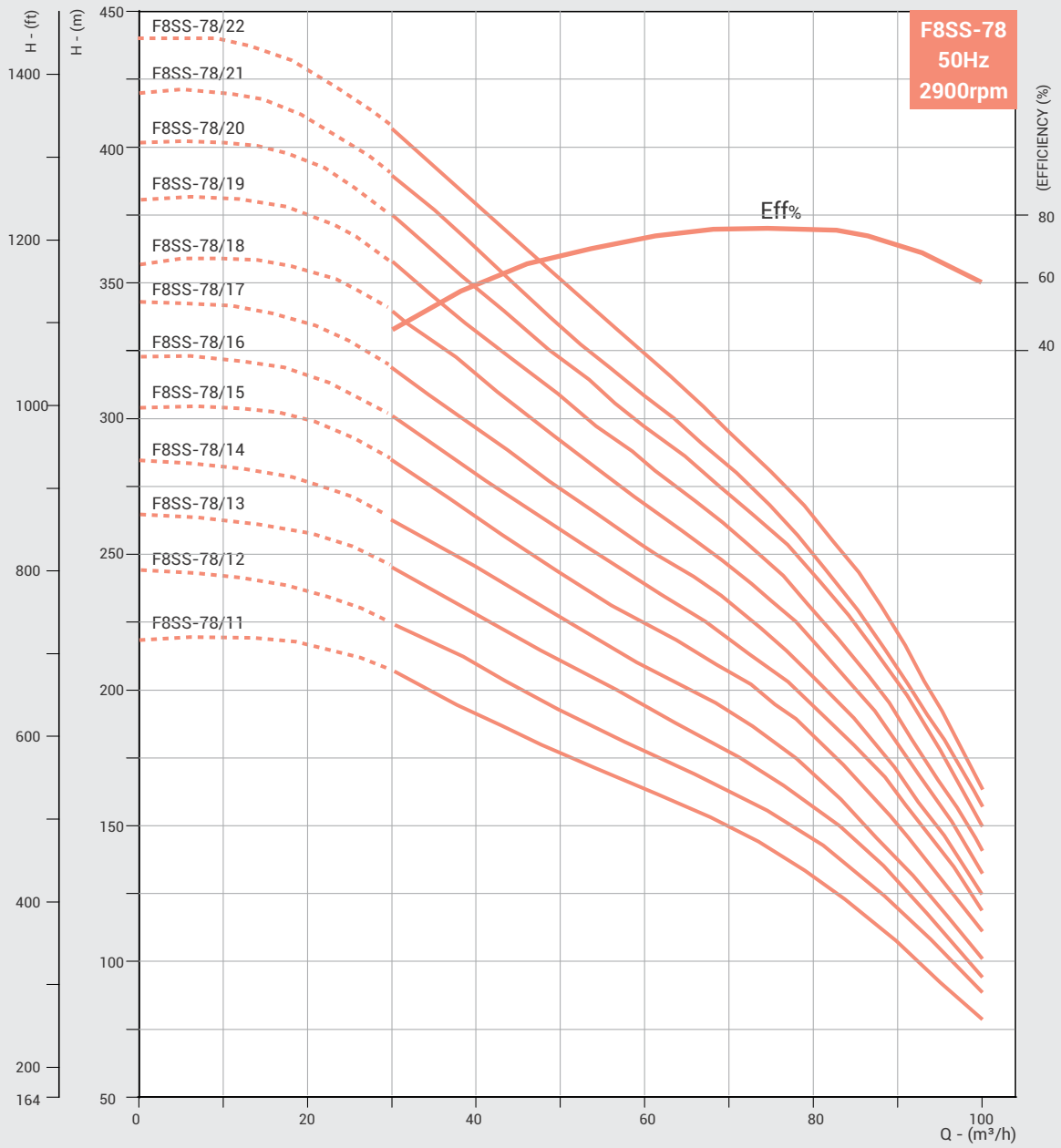
PUMP MODEL	MOTOR kW	lps	0	5,56	8,34	11,11	13,88	16,66	22,22	27,78
		m ³ /h	0	20	30	40	50	60	80	100
F8SS-78/11	45	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	218	217	207	191,5	177	163	132	78
F8SS-78/12	45		244	237	225	209,5	192,5	178	145	89
F8SS-78/13	55		265	258	245,5	228	211	194	157,5	94,5
F8SS-78/14	55		285	277	263	245	226,5	209	169	101
F8SS-78/15	55		304	300	285	264	243	224	184,5	111,5
F8SS-78/16	63		323	316,5	300,5	280	259	239	195	119
F8SS-78/17	63		343	336	319	297	274,5	253,5	205,5	125
F8SS-78/18	63		357	355	339,5	317	292	269	218,5	133
F8SS-78/19	75		381	376	357,5	332,5	308	284	230	141,5
F8SS-78/20	75		404	395	375	346	322	297	242	150
F8SS-78/21	75		420	410	390	368	335	309	250	157
F8SS-78/22	93		440	429	407	380	350	324	265	164

** Optional outlet Size.

Refer General Information for performance curve conditions and for other details.

Curve tolerance according to ISO : 9906, Grade - 3B

PERFORMANCE CURVES - 8" STAINLESS STEEL SUBMERSIBLE PUMP

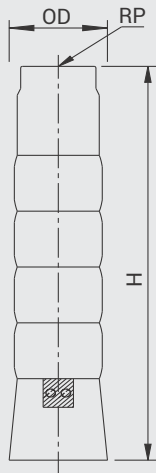


DIMENSIONS & WEIGHT - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 95m³/h

Outlet Size : 5"***



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT, WEIGHT (kg)
	kW	HP		OD	RP	H	
F8SS-95/01	5,5	7,5	1	193	125	554	22
F8SS-95/02	9,3	12,5	1/2	193/195	125	682	26
F8SS-95/03	13	17,5	1/2	193/195	125	810	30
F8SS-95/04	18,5	25	1/2	193/195	125	938	33
F8SS-95/05	22	30	1/2	193/195	125	1066	37
F8SS-95/06	26	35	1/2	193/195	125	1194	41
F8SS-95/07	30	45	1/2	193/195	125	1322	45
F8SS-95/08	37	50	1/2	193/195	125	1450	49
F8SS-95/09	37	50	1/2	193/195	125	1578	53
F8SS-95/10	45	60	1/2	193/195	125	1706	57

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	5,56	11,11	16,66	22,22	27,78	33,33	35
		m ³ /h	0	20	40	60	80	100	120	126
F8SS-95/01	5,5	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	22	21	18	15,5	13,5	11,5	6	2
F8SS-95/02	9,3		44	41,5	36	31,5	28	22,5	13	8,5
F8SS-95/03	13		68	62,5	55,3	48,5	42,5	32,5	19,5	12,5
F8SS-95/04	18,5		90	83,5	74	65	56,5	44	26	17
F8SS-95/05	22		111	103	93	80,5	70,5	55,5	33	24
F8SS-95/06	26		131	124	111,5	97	84,5	67	40	29
F8SS-95/07	30		151	144	129,5	113	98	78	47	34,5
F8SS-95/08	37		173	165	148,5	130	114	91,5	54,5	40
F8SS-95/09	37		194	184	165,5	144	126	100,5	60,5	47
F8SS-95/10	45		211	200	181,5	162	140	113	68,5	51

** Optional outlet Size.

OD for 8/8 - Combination of Motor & Pump

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

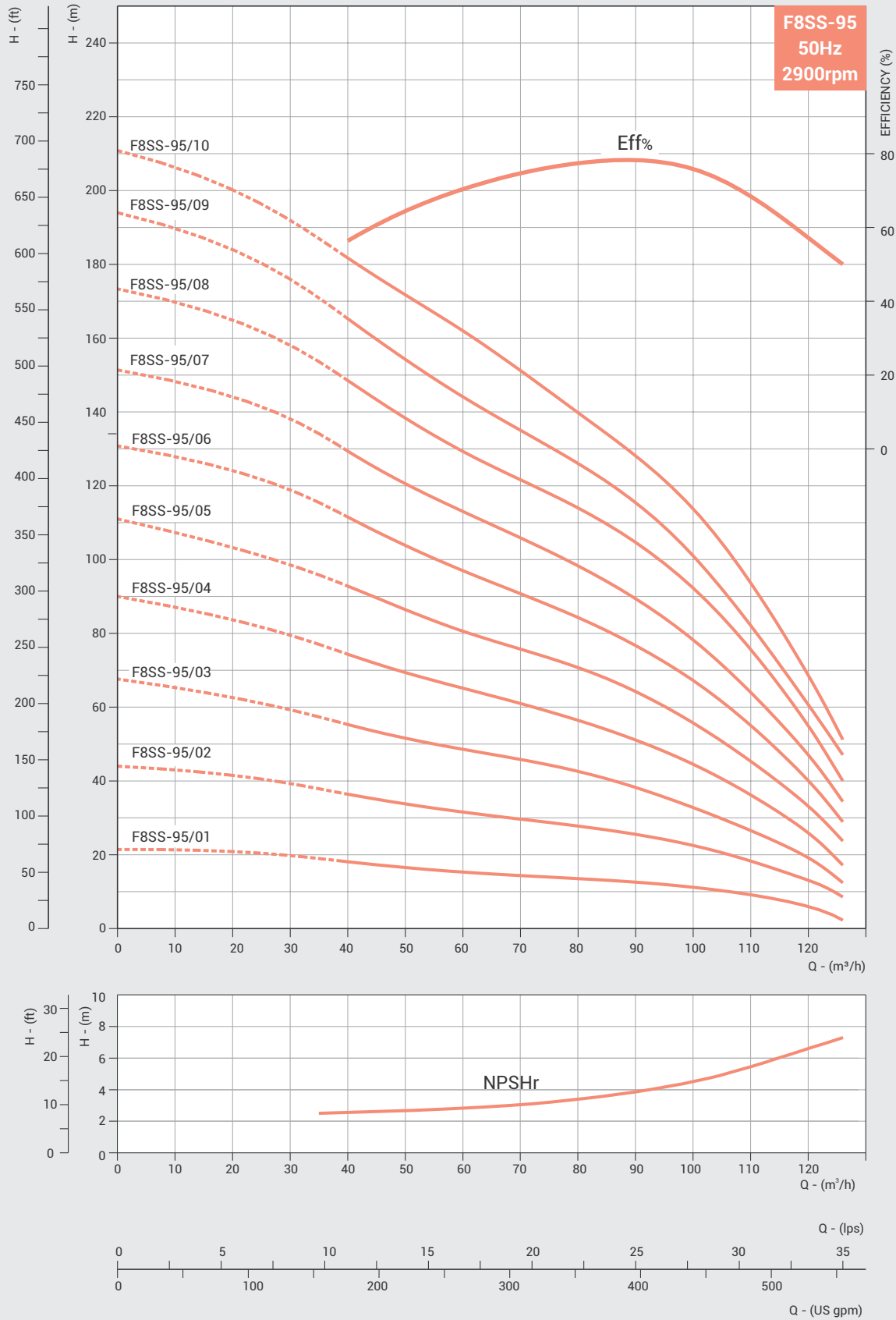
** Optional outlet Size.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 8" STAINLESS STEEL SUBMERSIBLE PUMP

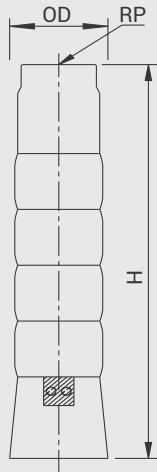


DIMENSIONS & WEIGHT - 8" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 8"

Nominal Flow : 95m³/h

Outlet Size : 5" **



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT, WEIGHT (kg)
	kW	HP		OD	RP	H	
F8SS-95/11	55	75	1/2	193/195	125	1834	61
F8SS-95/12	55	75	1/2	193/195	125	1962	64
F8SS-95/13	55	75	1/2	193/195	125	2090	68
F8SS-95/14	63	85	1/2	193/195	125	2294	72
F8SS-95/15	75	100	1/2	193/195	125	2423	76
F8SS-95/16	75	100	1/2	193/195	125	2552	80
F8SS-95/17	93	100	1/2	193/195	125	2681	84
F8SS-95/18	93	125	1/2	193/195	125	2810	88
F8SS-95/19	93	125	1/2	193/195	125	2939	91
F8SS-95/20	93	125	1/2	193/195	125	3068	95
F8SS-95/22	110	150	1/2	193/195	125	3242	104
F8SS-95/24	130	175	1/2	193/195	125	3370	111

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	5,56	11,11	16,66	22,22	27,78	33,33	35
		m ³ /h	0	20	40	60	80	100	120	126
F8SS-95/11	55	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	237,5	227,5	204,5	179,5	158	126,5	77	60,5
F8SS-95/12	55		262,5	248	222	194,5	170	137,5	83	64
F8SS-95/13	55		285	268	241,5	210,5	185,5	151	90,5	69
F8SS-95/14	63		306	291	262	229,5	202	164,5	100	78
F8SS-95/15	75		326	310	280	246	216	176	106,5	57
F8SS-95/16	75		347,5	331	296,5	261	229	186	112,5	89,5
F8SS-95/17	93		367,5	350	314	275,5	241,5	196	119	95
F8SS-95/18	93		393	373	336	294	259	211	128	99
F8SS-95/19	93		410	391,5	355	310,5	274	220	133	105
F8SS-95/20	93		435	416	376,5	325,5	286	231,5	145	112
F8SS-95/22	110		475	452	416,5	351	307	250	156	120
F8SS-95/24	130		518	490	453	383	332	270	176	132

** Optional outlet Size.

OD for 8/8 - Combination of Motor & Pump

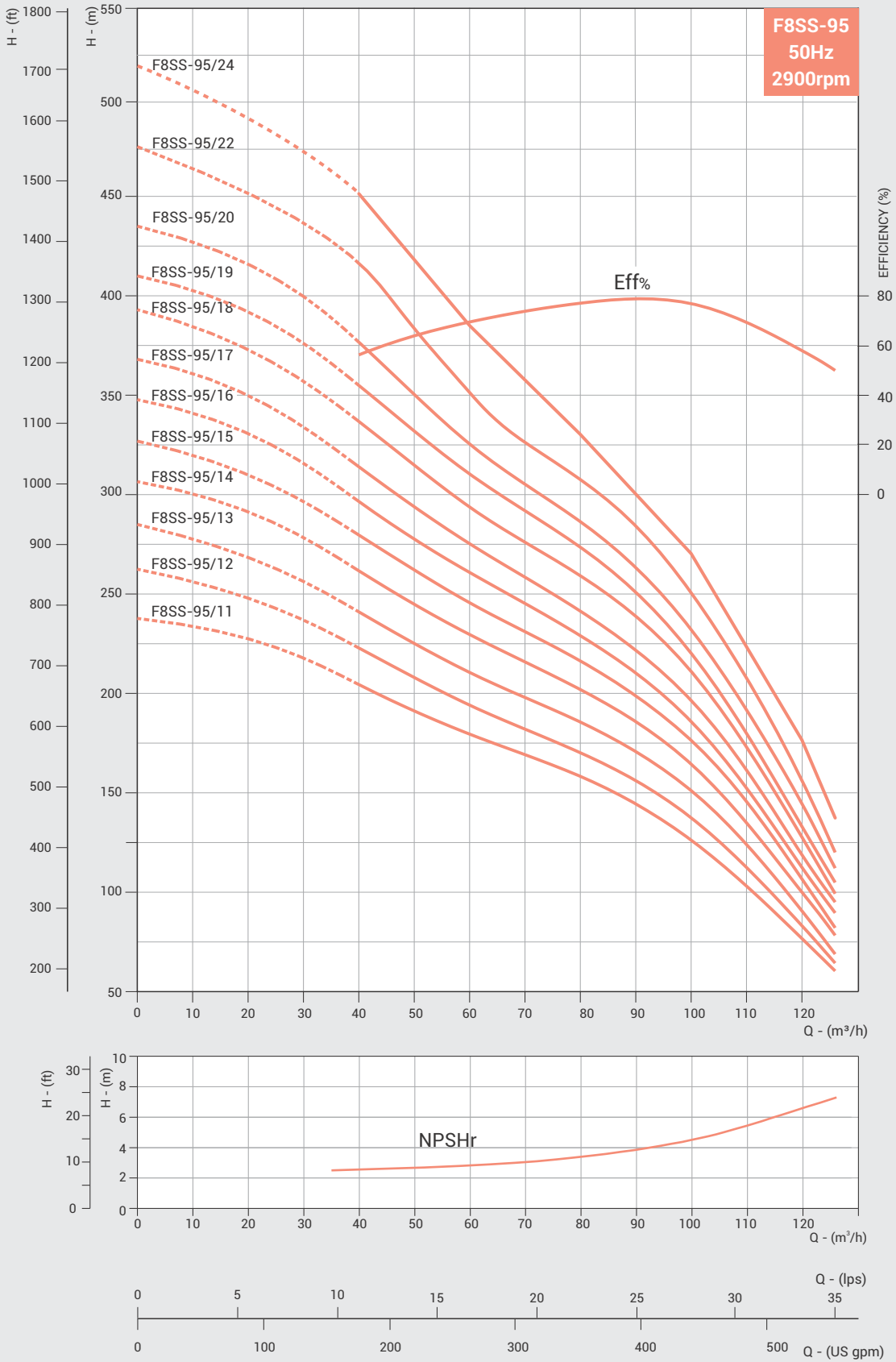
OD for 6/8 - Combination 173mm (single cable guard) 177mm (Double cable guard)

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 8" STAINLESS STEEL SUBMERSIBLE PUMP

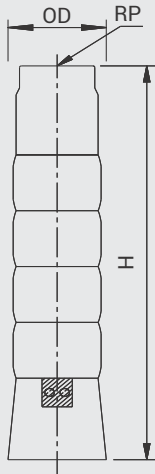


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 125m³/h

Outlet Size : 6"



PUMP MODEL	REQUIRED MOTOR POWER		+NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		#OD	RP	H	
F10SS-125/01	11	15	1/2	225	150	644	31
F10SS-125/02	22	30	1/2	225	150	798	37
F10SS-125/03	30	40	1/2	225	150	952	43
F10SS-125/04R	37	50	1/2	225	150	1106	49
F10SS-125/04	45	60	1/2	225	150	1106	49
F10SS-125/05R	45	60	1/2	225	150	1260	55
F10SS-125/05	55	75	1/2	225	150	1260	55
F10SS-125/06	63	85	1/2	225	150	1414	61
F10SS-125/07	75	100	1/2	225	150	1568	67
F10SS-125/08RR	75	100	1/2	225	150	1722	74
F10SS-125/08R	75	100	1/2	225	150	1722	74
F10SS-125/08	75	100	1/2	225	150	1722	74
F10SS-125/09	93	125	1/2	225	150	1876	80
F10SS-125/10R	93	125	1/2	225	150	2030	86
F10SS-125/10	93	125	1/2	225	150	2030	86

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	13,88	20,83	27,77	34,72	41,66	45
		m ³ /h	0	50	75	100	125	150	162
F10SS-125/01	11	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	29	26	24	21	18	14	12
F10SS-125/02	22		58	56	49	44	38	30	25
F10SS-125/03	30		86	81	74	66	56	45	37
F10SS-125/04R	37		105	100	92	83	70	52	43
F10SS-125/04	45		114	108	99	90	78	60	50
F10SS-125/05R	45		135	129	119	108	93	70	58
F10SS-125/05	55		144	134	127	116	102	80	68
F10SS-125/06	63		174	166	154	140	123	97	93
F10SS-125/07	75		202	194	180	164	144	114	97
F10SS-125/08RR	75		213	204	190	172	148	114	94
F10SS-125/08R	75		220	212	194	176	152	117	97
F10SS-125/08	75		228	219	202	183	160	124	106
F10SS-125/09	93		259	238	228	208	182	142	122
F10SS-125/10R	93		279	268	247	226	195	152	127
F10SS-125/10	93		287	274	254	231	204	158	132

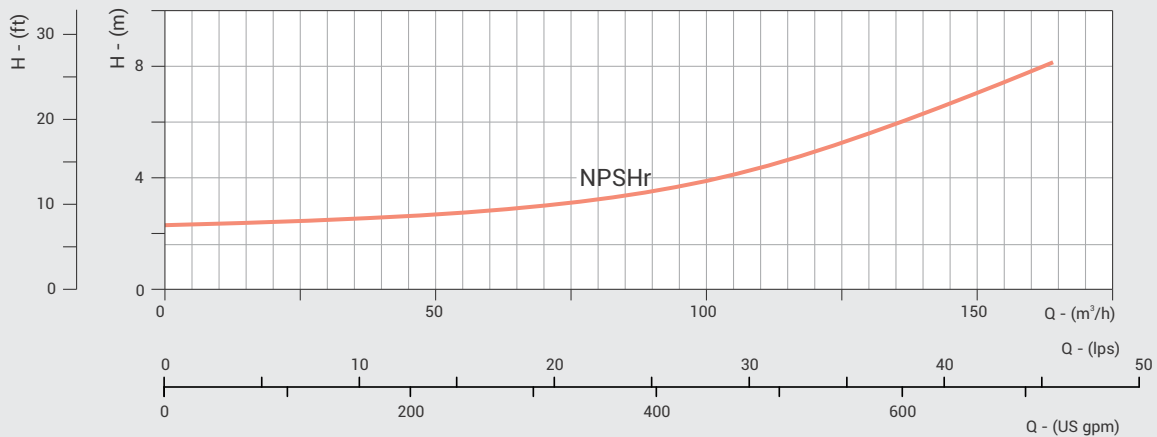
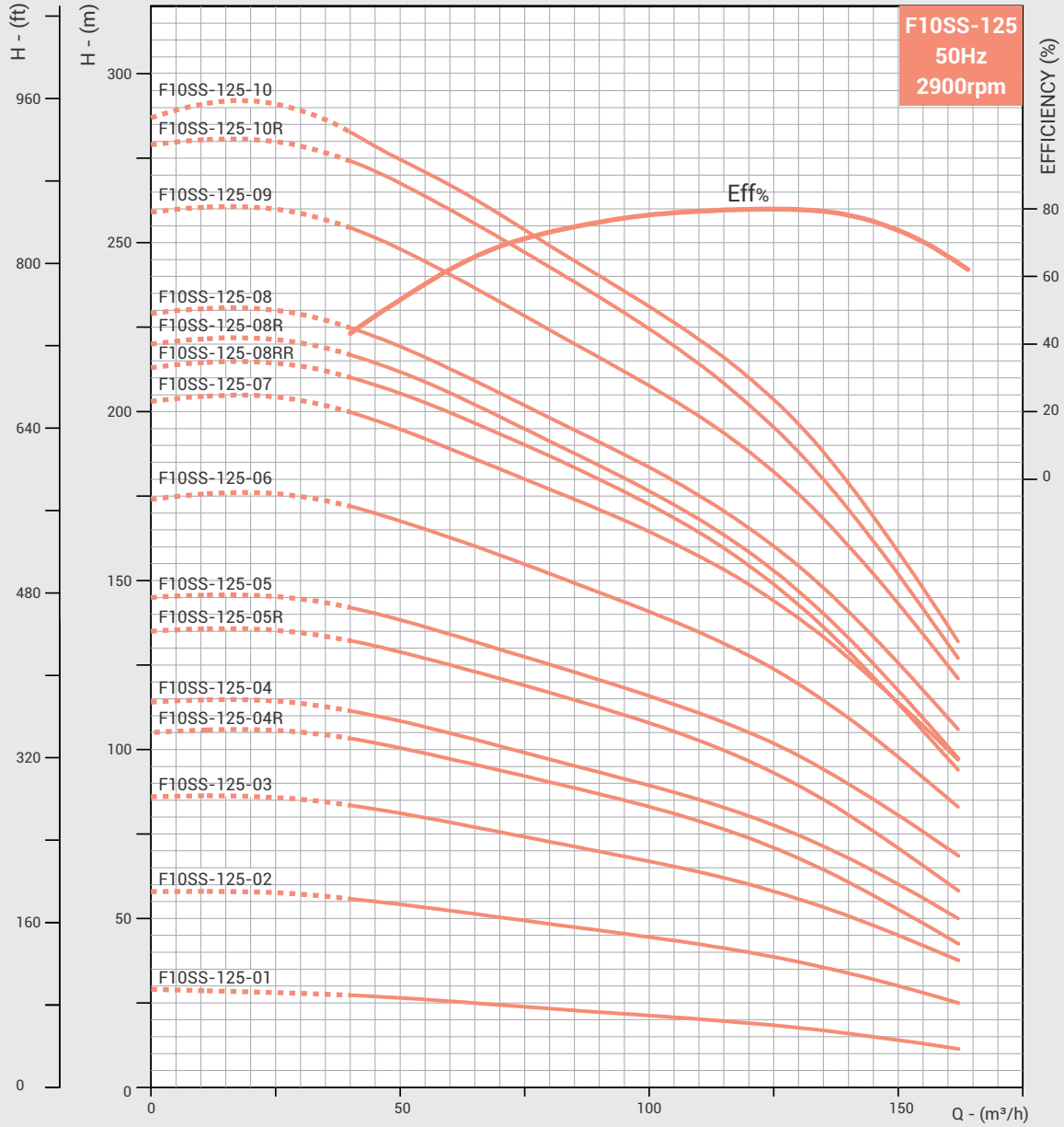
* 1 denotes Single Cable Guard (D.O.L - 3 wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

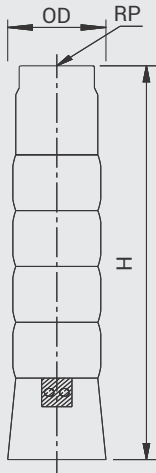


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 125m³/h

Outlet Size : 6"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		#OD	RP	H	
F10SS-125/11	110	150	1/2	225	150	2184	92
F10SS-125/12	132	175	1/2	225	150	2338	98
F10SS-125/13	132	175	1/2	225	150	2492	109
F10SS-125/14	150	200	1/2	225	150	2646	120
F10SS-125/15	150	200	1/2	225	150	2800	131
F10SS-125/16	170	225	1/2	225	150	2954	142
F10SS-125/17	170	225	1/2	225	150	3108	152

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES (COLUMN WATER)	lps	0	13,88	20,83	27,77	34,72	41,66	45
			m ³ /h	0	50	75	100	125	150	162
F10SS-125/11	110			308	300	274	249	219	170	140
F10SS-125/12	132		343	330	305	278	246	192	162	
F10SS-125/13	132		372	358	328	299	264	210	177	
F10SS-125/14	150		400	390	360	328	292	232	192	
F10SS-125/15	150		426	416	384	351	310	248	209	
F10SS-125/16	170		456	443	410	376	330	265	225	
F10SS-125/17	170		488	473	440	400	352	286	240	

OD for 10/10 combination of motor & pump

OD for 8/10 & 6/10 combination - 204mm (Single cable guard) 207mm (Double cable guard)

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

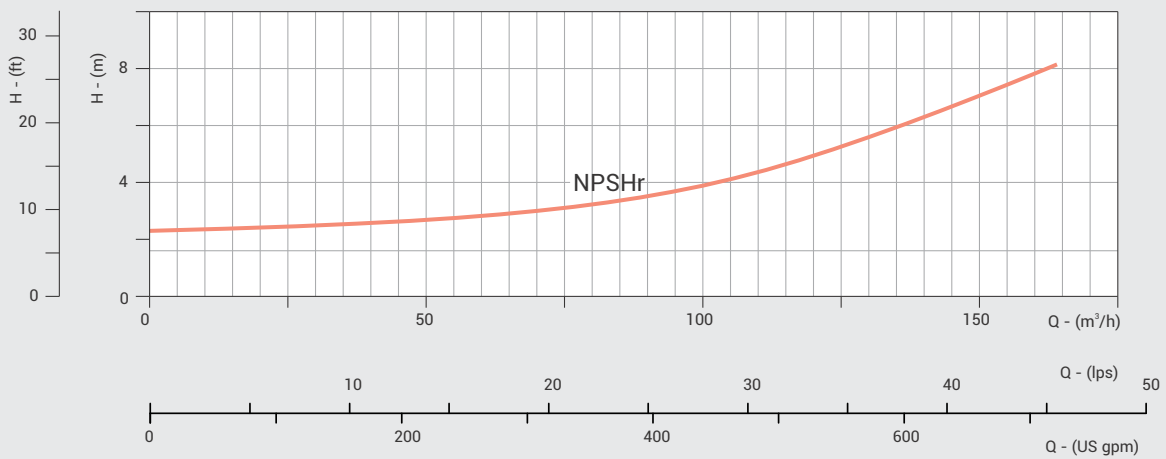
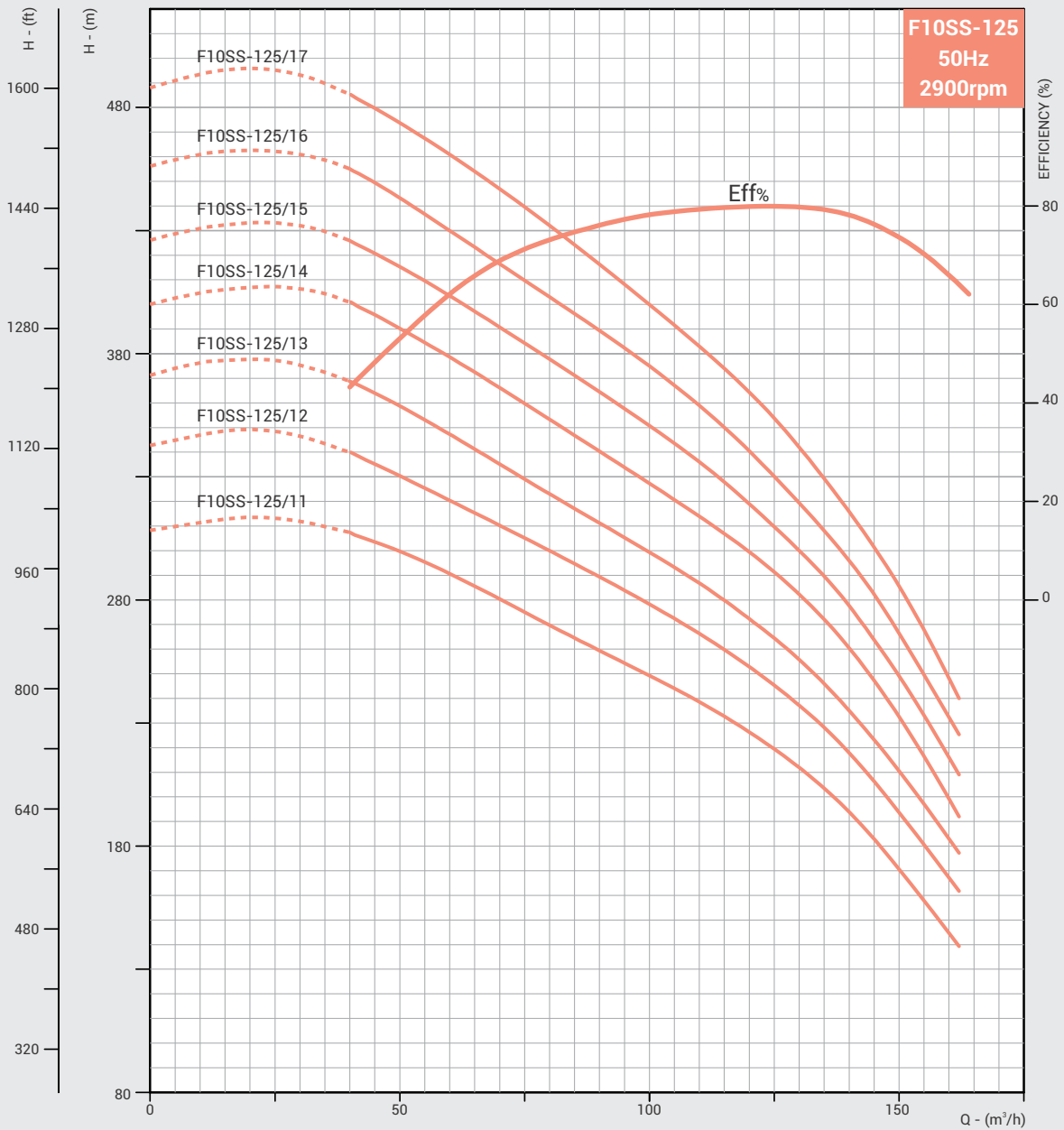
** In pump model last digit R denotes reduced impeller O.D and RR denotes further reduced impeller O.D.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

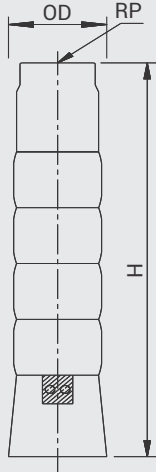


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 160m³/h

Outlet Size : 6"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		#OD	RP	H	
F10SS - 160/01R	9,3	12,5	1/2	225	150	646	30
F10SS - 160/01	13	18,5	1/2	225	150	646	30
F10SS - 160/02RR	18,5	25	1/2	225	150	802	36
F10SS - 160/02R	22	30	1/2	225	150	802	36
F10SS - 160/02	26	35	1/2	225	150	802	36
F10SS - 160/03RR	30	40	1/2	225	150	958	43
F10SS - 160/03R	37	50	1/2	225	150	958	43
F10SS - 160/03	37	50	1/2	225	150	958	43
F10SS - 160/04RR	45	60	1/2	225	150	1114	49
F10SS - 160/04R	45	60	1/2	225	150	1114	49
F10SS - 160/04	55	75	1/2	225	150	1114	49
F10SS - 160/05RR	55	75	1/2	225	150	1270	56
F10SS - 160/05R	55	75	1/2	225	150	1270	56
F10SS - 160/05	63	85	1/2	225	150	1270	56
F10SS - 160/06RR	63	85	1/2	225	150	1426	62
F10SS - 160/06R	75	100	1/2	225	150	1426	62
F10SS - 160/06	75	100	1/2	225	150	1426	62
F10SS - 160/07RR	75	100	1/2	225	150	1582	68
F10SS - 160/07R	93	125	1/2	225	150	1582	68
F10SS - 160/07	93	125	1/2	225	150	1582	68
F10SS - 160/08RR	93	125	1/2	225	150	1738	74
F10SS - 160/08R	93	125	1/2	225	150	1738	74
F10SS - 160/08	93	125	1/2	225	150	1738	74

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	ips m ³ /hr	0	13,89	22,24	33,36	44,48	55,6
			0	50	80	120	160	200
F10SS - 160/1R	9,3	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	25	22	20,5	17	13	6
F10SS - 160/1	13		33	30	26,5	23	20	14,5
F10SS - 160/2RR	18,5		48	44	39	34	27	14
F10SS - 160/2R	22		55	52	47	40	33	20,5
F10SS - 160/2	26		61	60	54	46	39	27
F10SS - 160/3RR	30		77	75	69	59	47	28
F10SS - 160/3R	37		87,5	84	76	65	55	36
F10SS - 160/3	37		95,5	91	80,5	70	60	41
F10SS - 160/4RR	45		111	106	96	83	70	44
F10SS - 160/4R	45		117	114	103	88,5	76	50
F10SS - 160/4	55		124,5	120	110	95	80	59
F10SS - 160/5RR	55		140	186	123	107	90	59,5
F10SS - 160/5R	55		148	144	129	111	95	64
F10SS - 160/5	63		155	150	136,5	118	100	71
F10SS - 160/6RR	63		169	163	150	129	108,5	72
F10SS - 160/6R	75		177	170	155	135	113	76
F10SS - 160/6	75		186	180	165	142	119	84
F10SS - 160/7RR	75		200	193	177	153	127	86
F10SS - 160/7R	93		208	203	184	159	136	92
F10SS - 160/7	93		220	209	188,5	163	138	96
F10SS - 160/8RR	93	230	223	203	175	147	97	
F10SS - 160/8R	93	240	231	209	180	153	104	
F10SS - 160/8	93	247,5	239	216	188,5	156,5	108	

OD for 10/10 combination of motor & pump

OD for 8/10 & 6/10 combination - 208mm (Single cable guard) 211mm (Double cable guard)

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

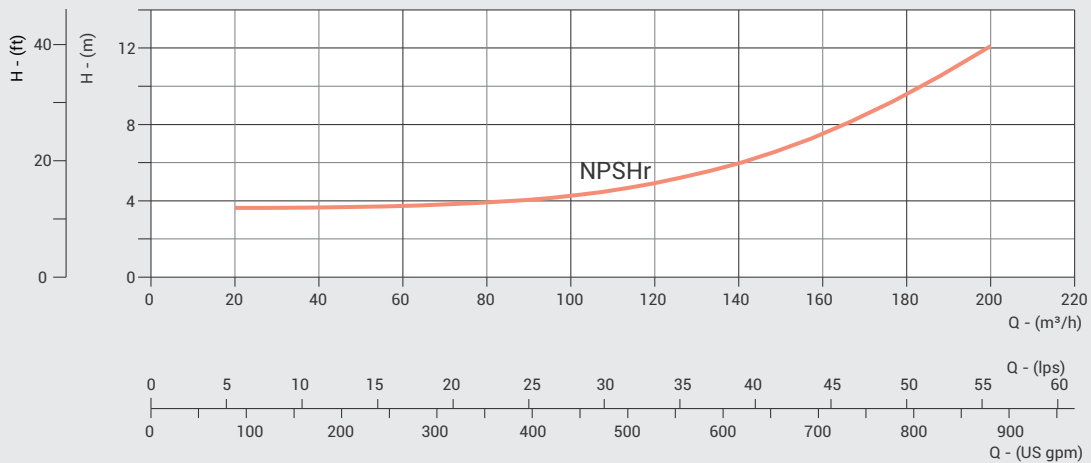
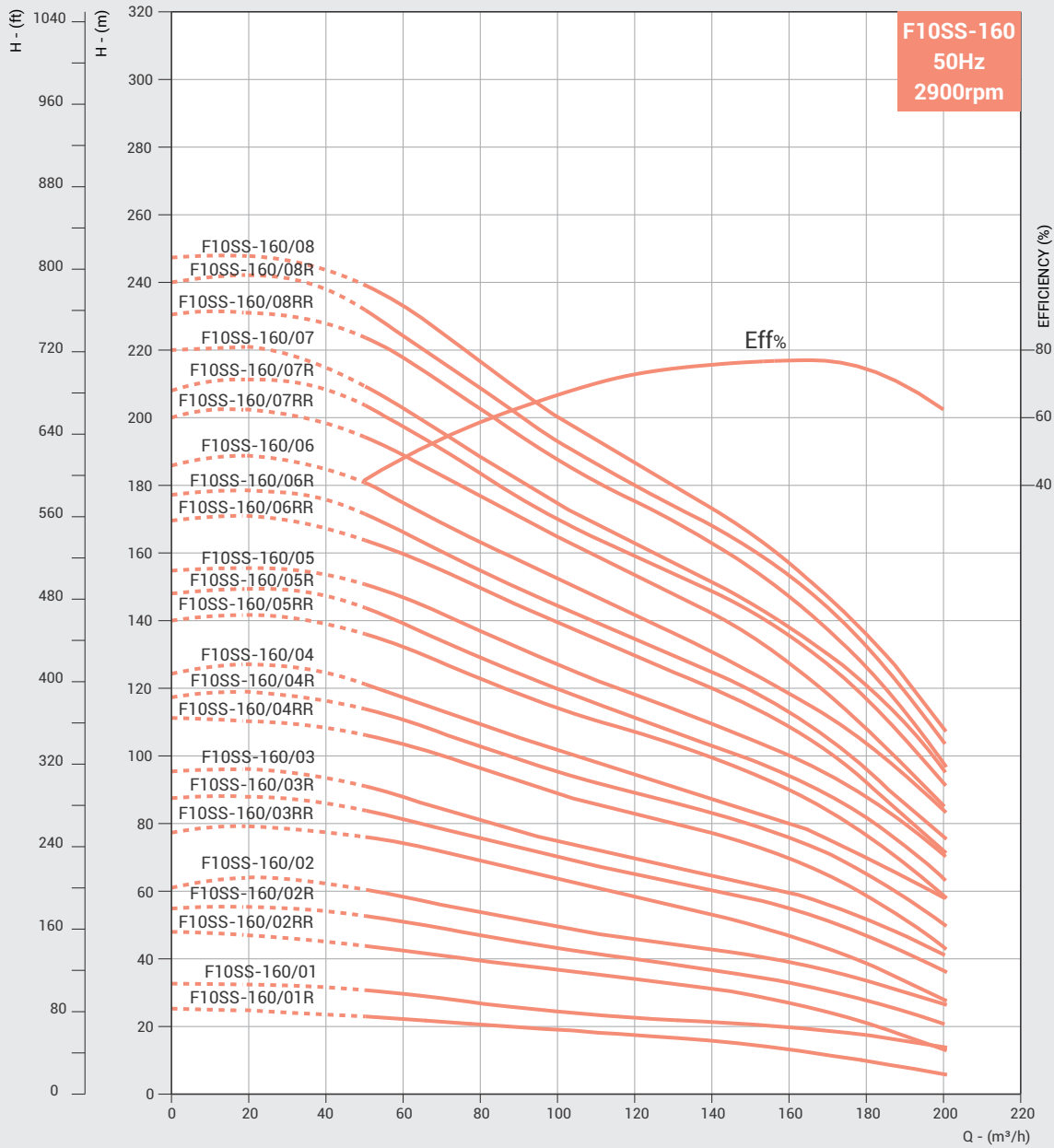
** In pump model last digit R denotes reduced impeller O.D and RR denotes further reduced impeller O.D.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

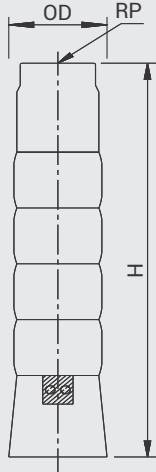


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 160m³/h

Outlet Size : 6"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP		#OD	RP	H	
F10SS - 160/09RR	110	150	1/2	225	150	1894	83
F10SS - 160/09R	110	150	1/2	225	150	1894	83
F10SS - 160/09	110	150	1/2	225	150	1894	83
F10SS - 160/10RR	110	150	1/2	225	150	2050	90
F10SS - 160/10R	132	175	1/2	225	150	2050	90
F10SS - 160/10	132	175	1/2	225	150	2050	90
F10SS - 160/11	132	175	1/2	225	150	2206	96
F10SS - 160/12	150	200	1/2	225	150	2362	107
F10SS - 160/13	170	225	1/2	225	150	2518	113
F10SS - 160/14	170	225	1/2	225	150	2674	119
F10SS - 160/15	187	250	1/2	225	150	2830	125

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	13,89	22,24	33,36	44,48	55,6
		m ³ /hr	0	50	80	120	160	200
F10SS - 160/9RR	110	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	255	251	229	193	160	105
F10SS - 160/9R	110		265	263	238	200	167	112
F10SS - 160/9	110		275	273	249	207	176	120
F10SS - 160/10RR	110		294	283	260	218	185	178
F10SS - 160/10R	132		304	289	270	228	195	138
F10SS - 160/10	132		310	300	280	233	200	140
F10SS - 160/11	132		333	328	309	255	220	156
F10SS - 160/12	150		360	358	338	279	235	173
F10SS - 160/13	170		392	389	362	304	255	190
F10SS - 160/14	170		423	418	389	324	274	208
F10SS - 160/15	187		453	450	419	350	292	220

OD for 10/10 combination of motor & pump

OD for 8/10 & 6/10 combination - 208mm (Single cable guard) 211mm (Double cable guard)

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

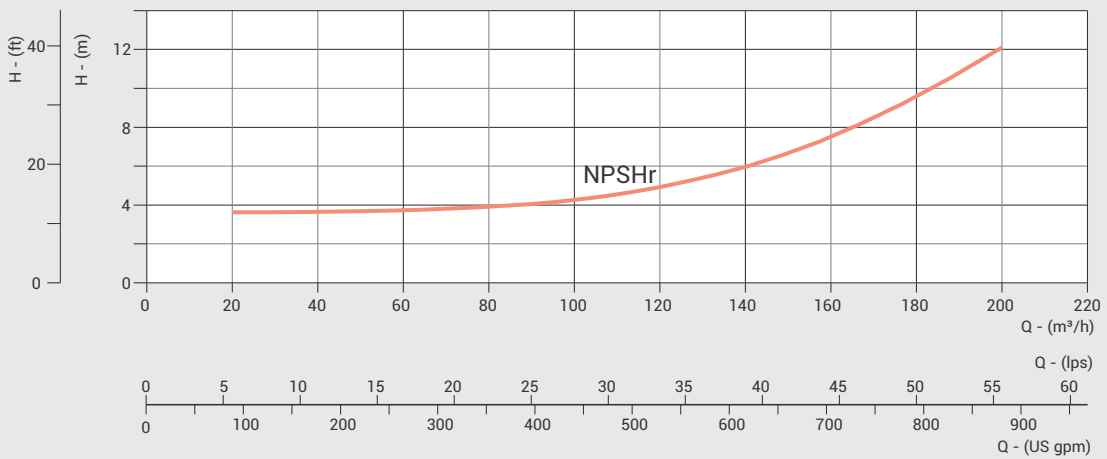
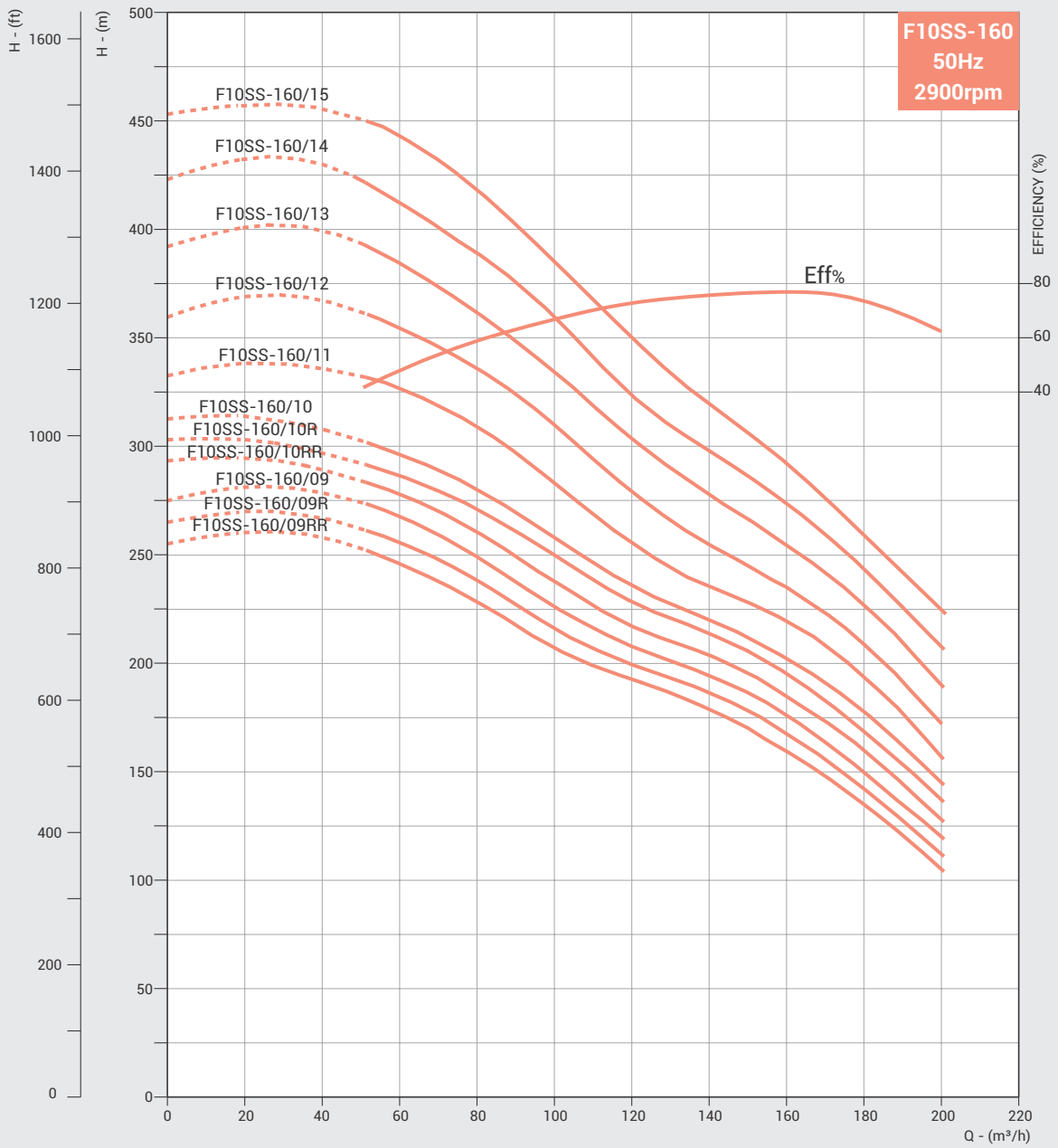
** In pump model last digit R denotes reduced impeller O.D and RR denotes further reduced impeller O.D.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

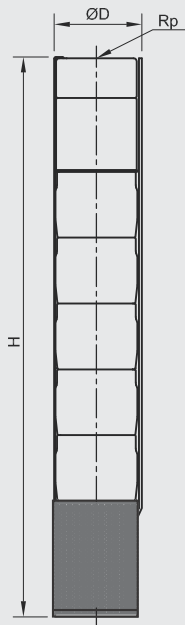


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 215m³/h

Outlet Size : 6"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)				APPROX NETT. WEIGHT (kg)
	kW	HP		OD	#OD	RP	H	
F10SS - 215/1R	15	20	1/2	247	255	150	794	47
F10SS - 215/1	18,5	25	1/2	247	255	150	794	47
F10SS - 215/2RR	30	40	1/2	247	255	150	670	60
F10SS - 215/2R	37	50	1/2	247	255	150	670	60
F10SS - 215/2	45	60	1/2	247	255	150	670	60
F10SS - 215/3RR	55	75	1/2	247	255	150	1146	80
F10SS - 215/3R	55	75	1/2	247	255	150	1146	80
F10SS - 215/3	63	85	1/2	247	255	150	1146	80
F10SS - 215/4RR	75	100	1/2	247	255	150	1322	92
F10SS - 215/4R	75	100	1/2	247	255	150	1322	92
F10SS - 215/4	75	100	1/2	247	255	150	1322	92
F10SS - 215/5RR	93	125	1/2	247	255	150	1498	105
F10SS - 215/5R	93	125	1/2	247	255	150	1498	105
F10SS - 215/5	93	125	1/2	247	255	150	1498	105
F10SS - 215/6RR	110	150	1/2	247	255	150	1674	117
F10SS - 215/6R	110	150	1/2	247	255	150	1674	117
F10SS - 215/6	110	150	1/2	247	255	150	1674	117

PERFORMANCE TABLE

PUMP MODEL	MOTOR POWER		lps	0	13,89	27,78	41,67	55,56	59,72	69,44	77,78
	kW	HP	m ³ /h	0	50	100	150	200	215	250	280
F10SS - 215/1R	15	20	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	26	25	23	19	15	13	7	4
F10SS - 215/1	18,5	25		38	36	32	27	23,5	22	16,5	10,5
F10SS - 215/2RR	30	40		53	52	49	42	35	31	21	11
F10SS - 215/2R	37	50		64	61	55	49	42	40	30	18
F10SS - 215/2	45	60		82	76	68	58	50	48	41	29,50
F10SS - 215/3RR	55	75		90	88	80	71	61	58	43	24
F10SS - 215/3R	55	75		101	97	88	76	66	63	49	33
F10SS - 215/3	63	85		120	112	102	87	74	70	56	32
F10SS - 215/4RR	75	100		127	125	114	101	86	81	64	40
F10SS - 215/4R	75	100		138	134	121	106	92	87	70	48
F10SS - 215/4	75	100		156	147	137	120	102	97	80	52
F10SS - 215/5RR	93	125		165	161	146	129	111	105	83	55
F10SS - 215/5R	93	125		175	170	153	134	118	110	89	63
F10SS - 215/5	93	125		196	185	172	150	128	123	100	69
F10SS - 215/6RR	110	150		201	196	178	156	136	128	101	70
F10SS - 215/6R	110	150		212	206	186	163	141	134	109	78
F10SS - 215/6	110	150		225	218	195	170	148	140	115	86

OD for 8/10 & 6/10 combination - 208mm (Single cable guard) 211mm (Double cable guard)

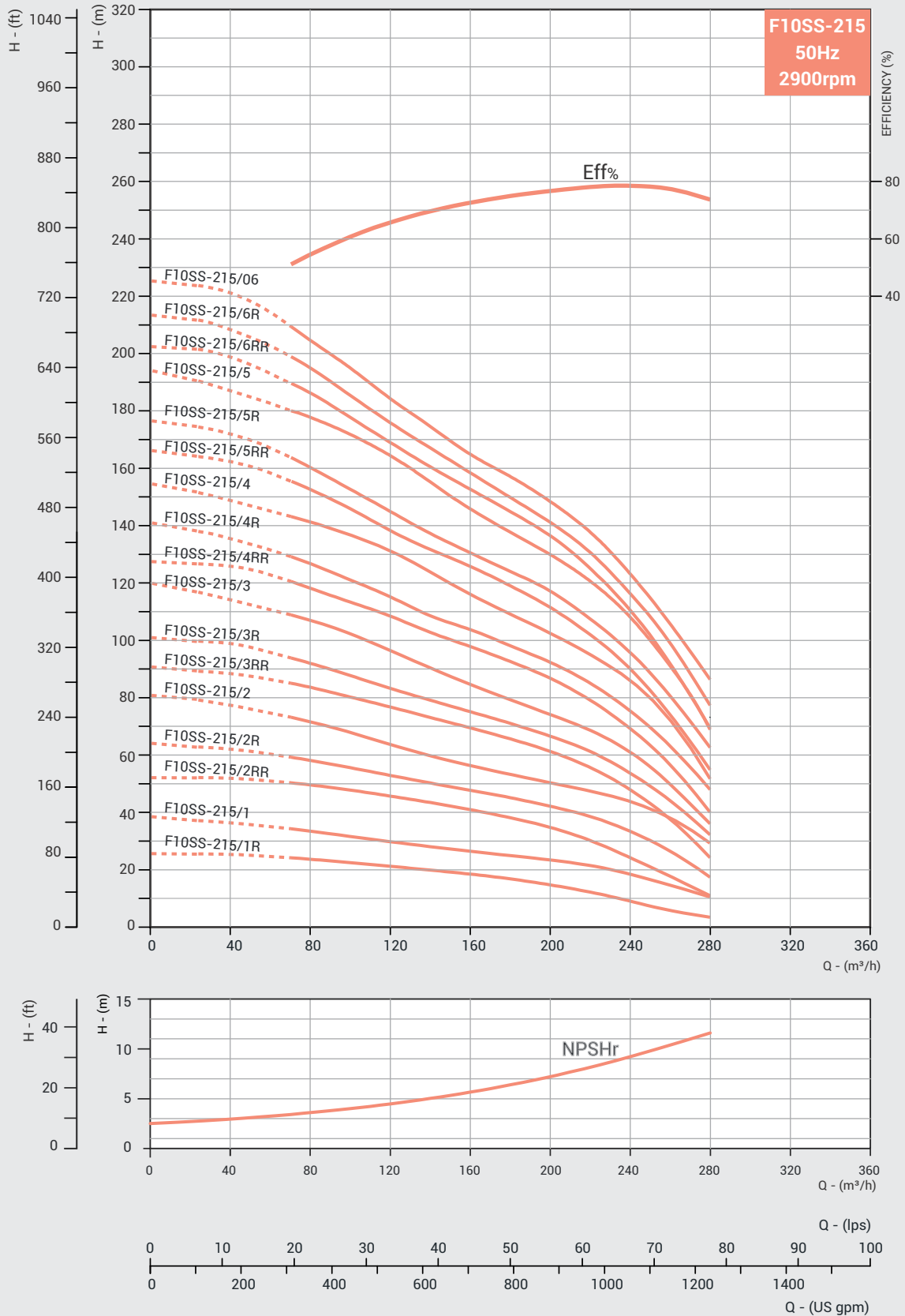
* 1 denotes Single Cable Guard (D.O.L - 3 wire) and 2 denotes Double Cable Guard (S.D - 6 wire). Please specify preference, while placing order.

Available types of materials of construction : S (S.S.-304) and N (S.S.-316). In case of M.O.C Type - N the fourth digit of the pump model "S" will be replaced with "N".

The given performance ranges are same for Type - S & N.

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

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP

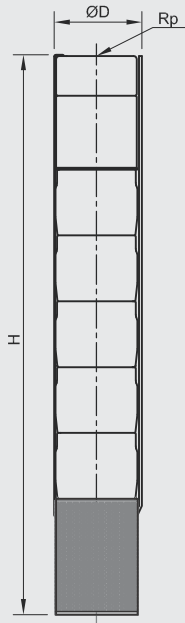


DIMENSIONS & WEIGHT - 10" STAINLESS STEEL SUBMERSIBLE PUMP

Nominal Diameter : 10"

Nominal Flow : 215m³/h

Outlet Size : 6"



PUMP MODEL	REQUIRED MOTOR POWER		*NO OF CABLE GUARD	DIMENSIONS (mm)				APPROX NETT. WEIGHT (kg)
	kW	HP		OD	#OD	RP	H	
F10SS - 215/7RR	130	175	1/2	247	255	150	1850	130
F10SS - 215/7R	130	175	1/2	247	255	150	1850	130
F10SS - 215/7	130	175	1/2	247	255	150	1850	130
F10SS - 215/8RR	150	200	1/2	247	255	150	2026	142
F10SS - 215/8R	150	200	1/2	247	255	150	2026	142
F10SS - 215/8	150	200	1/2	247	255	150	2026	142
F10SS - 215/9RR	170	225	1/2	247	255	150	2202	155
F10SS - 215/9R	170	225	1/2	247	255	150	2202	155
F10SS - 215/9	170	225	1/2	247	255	150	2202	155
F10SS - 215/10RR	187	250	1/2	247	255	150	2378	167
F10SS - 215/10R	187	250	1/2	247	255	150	2378	167
F10SS - 215/10	187	250	1/2	247	255	150	2378	167
F10SS - 215/11	220	300	1/2	247	255	150	2554	180

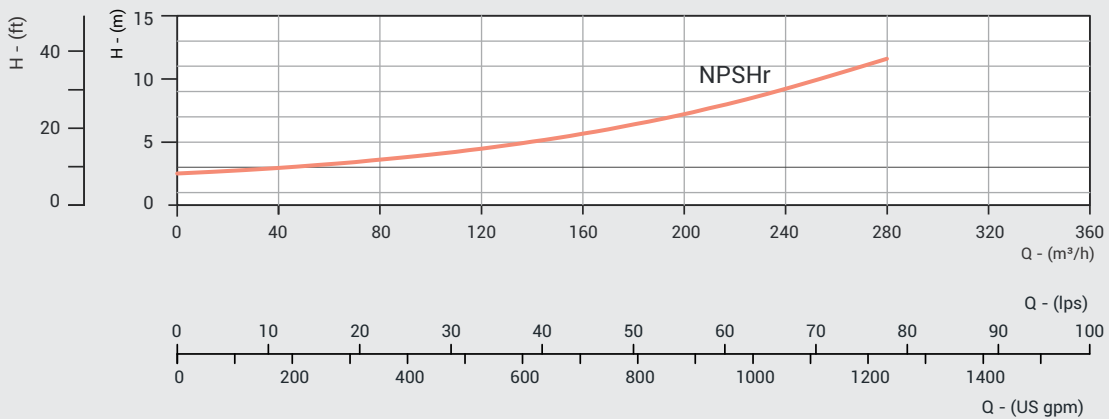
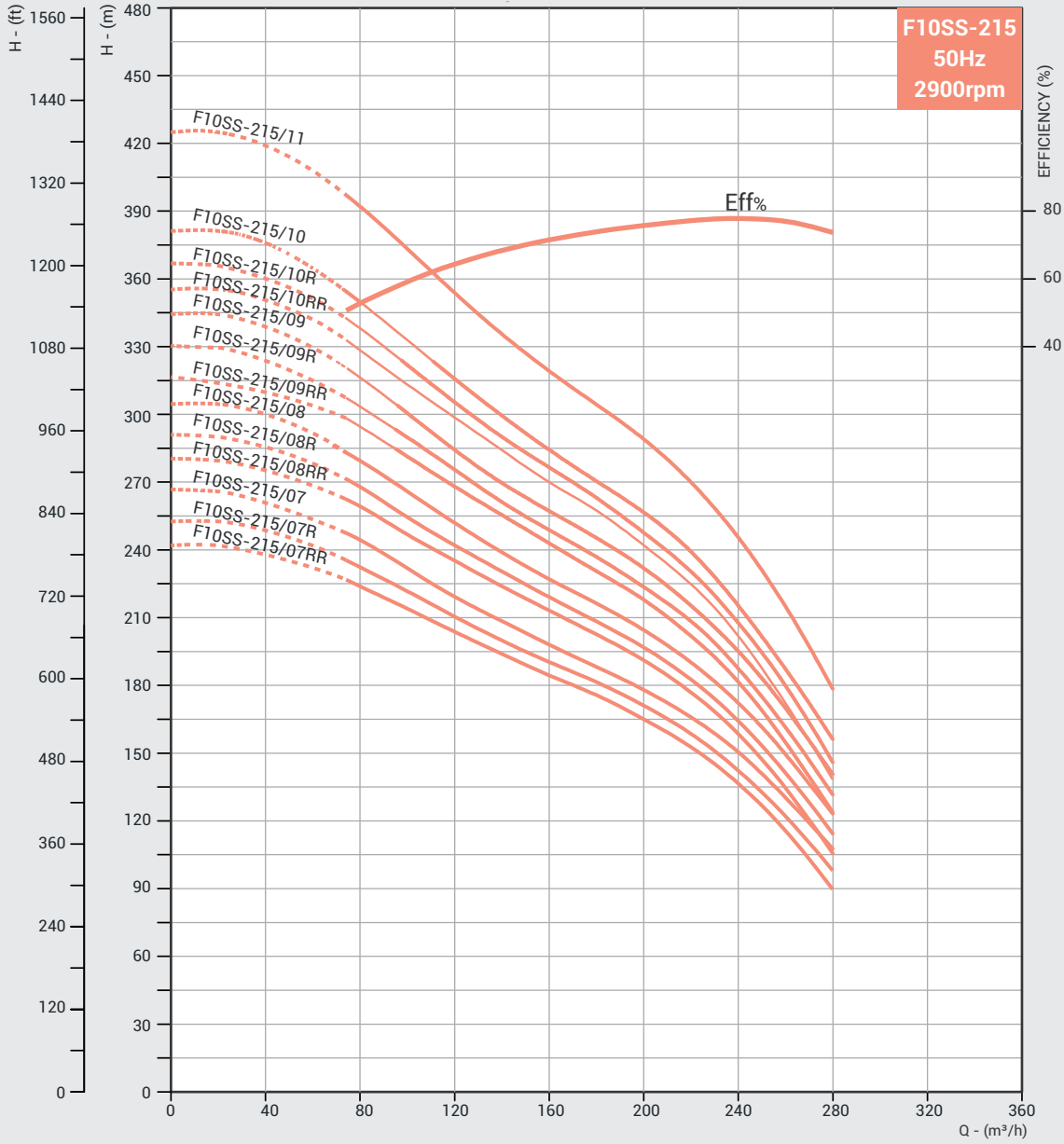
PERFORMANCE TABLE

PUMP MODEL	MOTOR POWER		TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	13,89	27,78	41,67	55,56	59,72	69,44	77,78
	kW	HP		m ³ /h	0	50	100	150	200	215	250	280
F10SS - 215/7RR	130	175	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	242	236	214	189	165	156	126	90	
F10SS - 215/7R	130	175		252	246	222	195	171	162	33	99	
F10SS - 215/7	130	175		267	258	232	203	178	169	140	107	
F10SS - 215/8RR	150	200		281	273	248	218	191	181	148	106	
F10SS - 215/8R	150	200		286	282	255	225	197	186	153	114	
F10SS - 215/8	150	200		308	295	265	232	204	194	161	12.4	
F10SS - 215/9RR	170	225		319	311	281	249	218	206	169	124	
F10SS - 215/9R	170	225		330	321	290	255	224	213	175	132	
F10SS - 215/9	170	225		344	335	300	263	231	219	183	140	
F10SS - 215/10RR	187	250		355	346	314	277	242	230	183	138	
F10SS - 215/10R	187	250		367	356	322	283	248	235	195	146	
F10SS - 215/10	187	250		381	370	338	291	256	245	201	156	
F10SS - 215/11	220	300		425	414	373	327	290	275	230	179	

Refer General Information for performance curve conditions and for other details.


Curve tolerance according to ISO : 9906, Grade - 3B

PERFORMANCE CURVES - 10" STAINLESS STEEL SUBMERSIBLE PUMP



Submersible Pumps
Hydra Series - Thermo Plastic Floating Impellers





Submersible Pumps

Hydra Series
50 HZ

DESCRIPTION

ZIRANTEC Hydra series submersible pumps are built with thermoplastic impellers, diffusers and inbuilt check valve. All vital components of these pumps are made of corrosive resistance thermoplastic and the shaft is of AISI 304 / 33. Pumps are multistage centrifugal type. The optimal design of impellers and diffusers enables the best possible hydraulic efficiency.

The pumps is firmly coupled with electric motor which operates submerged beneath the surface of water. Built in check valve prevents backflow and reduces the risk of water hammer. All mounting dimensions of pumps are in accordance with NEMA standard.

FEATURES

- Residential
- Irrigation
- Civil Water Supply
- Fountains
- Industrial and Rural Water Supply
- Fire Fighting
- Pressure Boosting Units | Gardens | Sprinkler Systems

APPLICATIONS

- Best operating efficiency
- Floating Impeller design to handle sand
- S.S. 304/Ceramic top bearing
- Highly durable
- Can be easily dismantled and repaired
- Can handle more upthrust loads
- Wearing ring in diffuser for long life.

PUMPED LIQUIDS

Clean, thin, non-aggressive, non explosive, clear, cold, fresh water without abrasives, solid particles or fibre having the following characteristics

- a) Temperature (max) 33 °C (max.)
- b) Permissible amount of sand 3" - 25g/m³
- c) Chlorine ion density 500 ppm (max.)
- d) Allowable solids 3000 ppm (max.)
- e) Specific gravity 1,004 (max.)
- f) Hardness (Drinking water) 300 (max.)
- g) Viscosity 1,75 x 10⁻⁶m²/sec (max.)
- h) Turbidity 50 ppm silica scale(max.)
- i) pH 6,5 to 8,5

PUMP OPERATING LIMITATIONS		
Nominal Diameter		4"(100mm)
Power Range		0,37 - 7,5 kW
Speed		2900 rpm
Discharge Range	m³/h	0,75 - 24
	lps	0,20 - 6,66
Total head range	m	4,0 - 250
	ft	13,0 - 820
Outlet size in inches		1 ¼, 1 ½ & 2

Maximum temperature of Pumped liquid

Motor	Minimum cooling flow along the motor	Vertical installation	Horizontal installation (minimum 30° angle)
4"	0,15 m/s	40°C / 45°C	40°C / 45°C

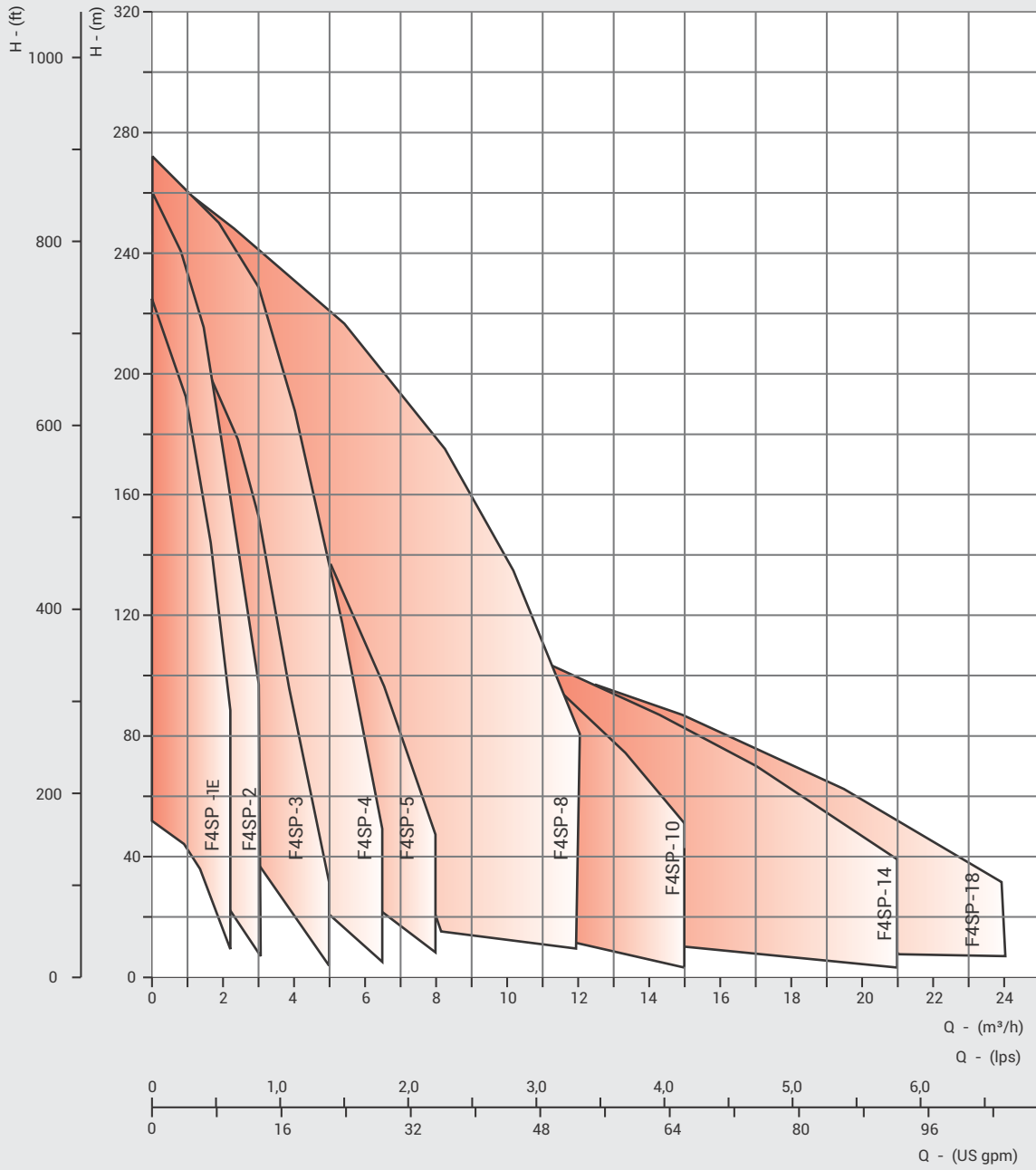
MAXIMUM OPERATING PRESSURE

4" Submersible pump	2,5 Mpa (25 bar)
---------------------	------------------

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

HYDRAULIC GROUP PERFORMANCE CURVES - 4" (Floating Impeller Model)

2900 rpm



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

MATERIAL OF CONSTRUCTION

PART NAME	PART No.	NOMINAL DIA. 4"
		TYPE - P
Check Valve Housing	21,00	S.S. - 304
Check Valve	21,07	DELRIN
Check Valve Seat	21,01	NBR
Outer Shell	21,04	S.S. - 304
Impeller	19,00	NORYL*/ DELRIN/ LEXAN**
Diffuser Chamber	18,03	NORYL*/ LEXAN**
Stop Ring	13,03	HYLEM
Intermediate Bearing (Sleeve / Bush)	18,06	S.S. - 304 / NBR BRONZE
Suction Inter Connector	17,00	S.S. - 304
Inlet Screen	14,03	S.S. - 304
Pump Shaft Hexagonal	22,00	S.S. - 431
Cable Guard	17,04	S.S. - 304
*Coupling Splines	--	S.S. - 329

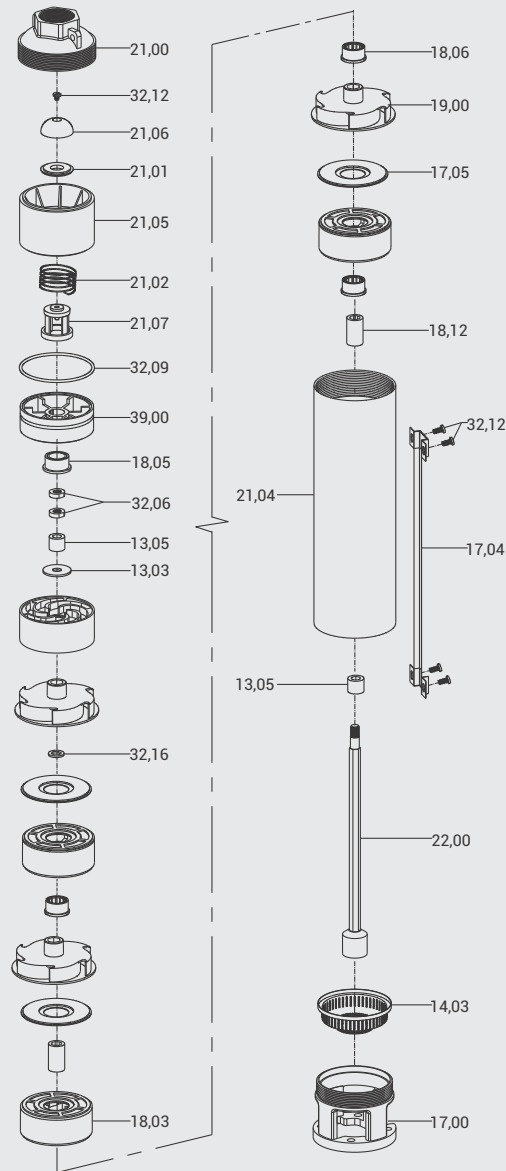
*Friction welded with shaft

DELRIN is Registered Trade Mark of Dupont.

*NORYL and **LEXAN are Registered Trade Mark of G.E Plastics.

EXPLODED VIEW

F4SP (1-5m/h)



PART NO.	PART NAME
13,03	Upthrust Washer / Stop Ring
13,05	Sleeve
14,03	Inlet Screen
17,00	Suction Inter-Connector
17,04	Cable Guard
17,05	Diffuser Plate
18,03	Diffuser Chamber
18,05	Bush - CT Pad

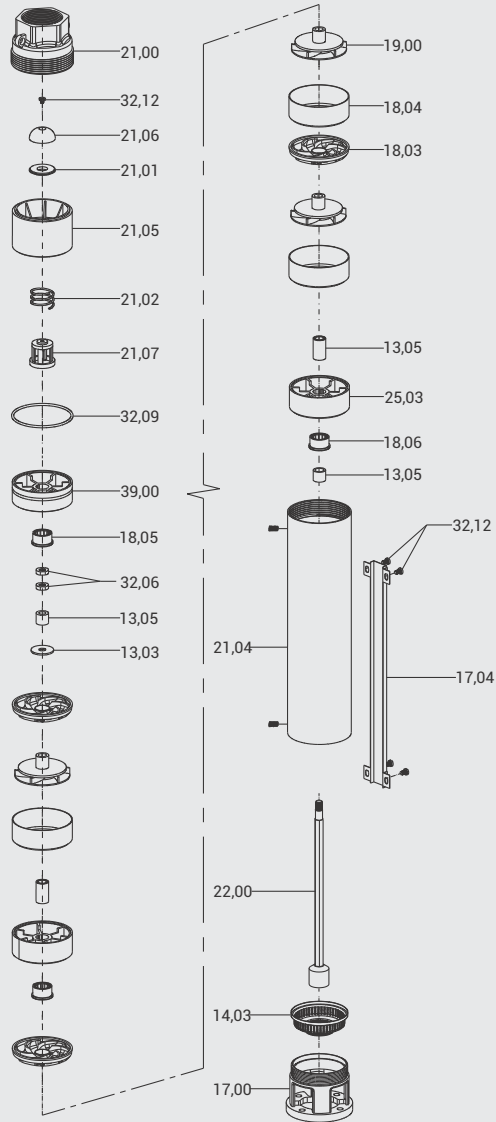
PART NO.	PART NAME
18,06	Bush-Diffuser Chamber
18,12	Spacer Sleeve
19,00	Impeller
21,00	Check Valve Housing
21,01	Check Valve Seat
21,02	Check Valve Spring
21,04	Outer Shell
21,05	Check Valve Bracket

PART NO.	PART NAME
21,06	Check Valve Disc
21,07	Check valve
22,00	Pump Shaft with Coupling
32,06	Lock Nut
32,09	O-Ring
32,12	Screw
32,16	Washer
39,00	Chamber-Bracket

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

EXPLODED VIEW

F4SP - 8



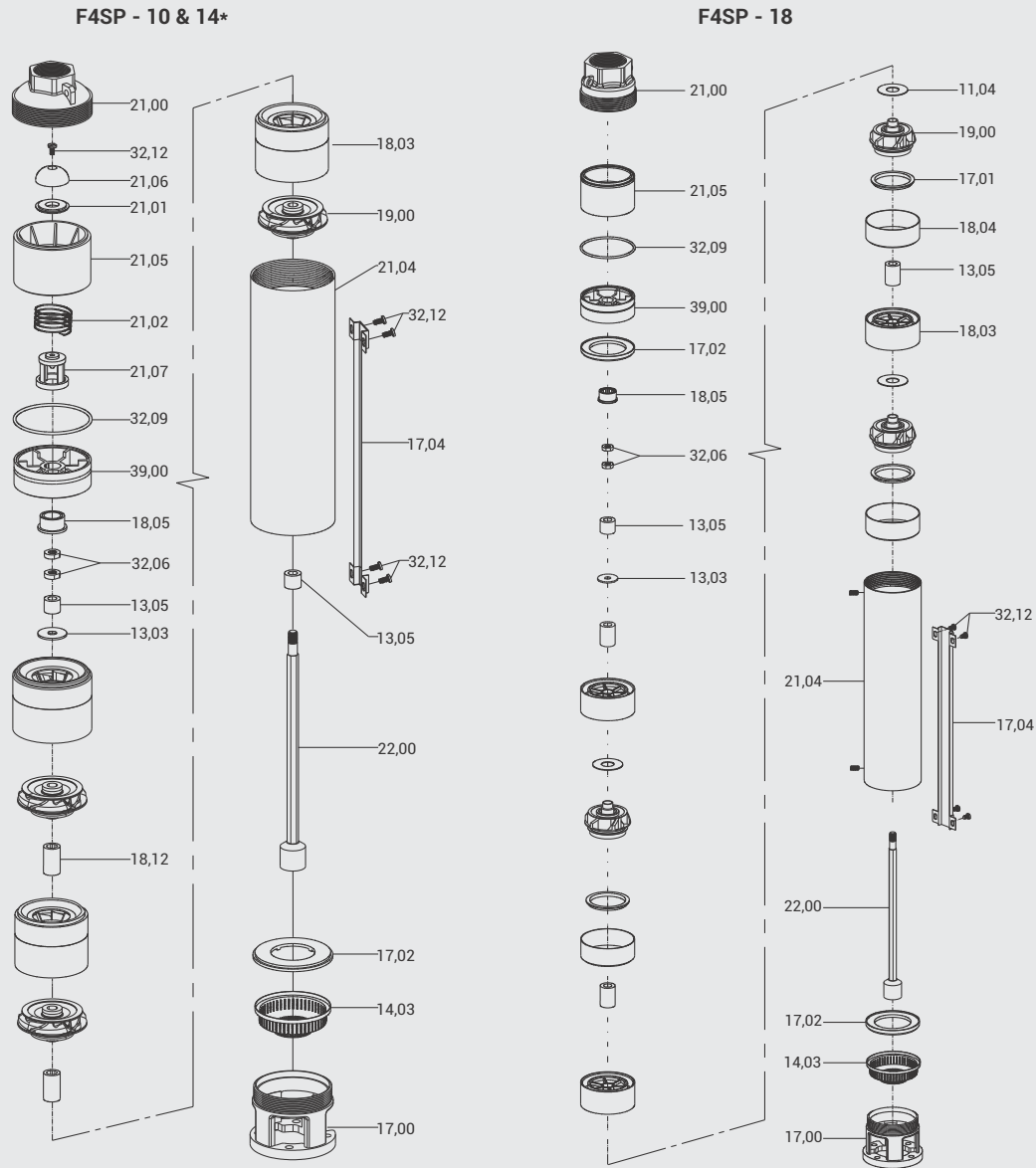
PART NO.	PART NAME
13,03	upthrust Washer / Stop Ring
13,05	Spacer Sleeve
14,03	Inlet Screen
17,00	Suction Inter-connector
17,04	Cable Guard
18,03	Diffuser
18,04	Chamber
18,05	Bush - CT Pad

PART NO.	PART NAME
18,06	Bush-Diffuser Chamber
19,00	Impeller
21,00	Check Valve Housing
21,01	Check Valve Seat
21,02	Check Valve Spring
21,04	Outer Shell
21,05	Check Valve Bracket
21,06	Check Valve Disc

PART NO.	PART NAME
21,07	Check Valve
22,00	Pump Shaft with Coupling
39,00	Chamber-Bracket
32,06	Lock Nut
32,09	O-Ring
32,12	Screw
32,16	Washer

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

EXPLODED VIEW



PART NO.	PART NAME
11,04	Thrust Pad
13,01	Bush - CT Pad
13,03	Upthrust Washer / Stop Ring
13,05	Sleeve
14,03	Inlet Screen
17,00	Suction Inter-Connector
17,01	Wear ring / Seal
17,02	Suction Inter-Connector plate
17,04	Cable Guard

PART NO.	PART NAME
18,03	Diffuser Chamber
18,04	Chamber
18,05	Bush-Diffuser Chamber
18,12	Spacer Sleeve
19,00	Impeller
21,00	Check Valve Housing
21,01	Check Valve Seat
21,02	Check Valve Spring
21,04	Outer Shell

PART NO.	PART NAME
21,05	Check Valve Bracket
21,06	Check Valve Disc
21,07	Check Valve
22,00	Pump Shaft with Coupling
39,00	Chamber Bracket
32,06	Lock Nut
32,09	O-Ring
32,12	Screw
32,16	Washer

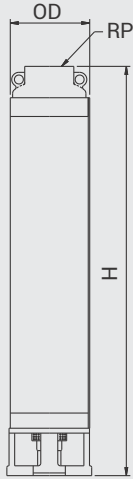
In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

DIMENSIONS & WEIGHT 4" HYDRA SERIES

Nominal Diameter : 4"

Nominal Flow : 1,5m³/h

Outlet Size : 1 ¼"



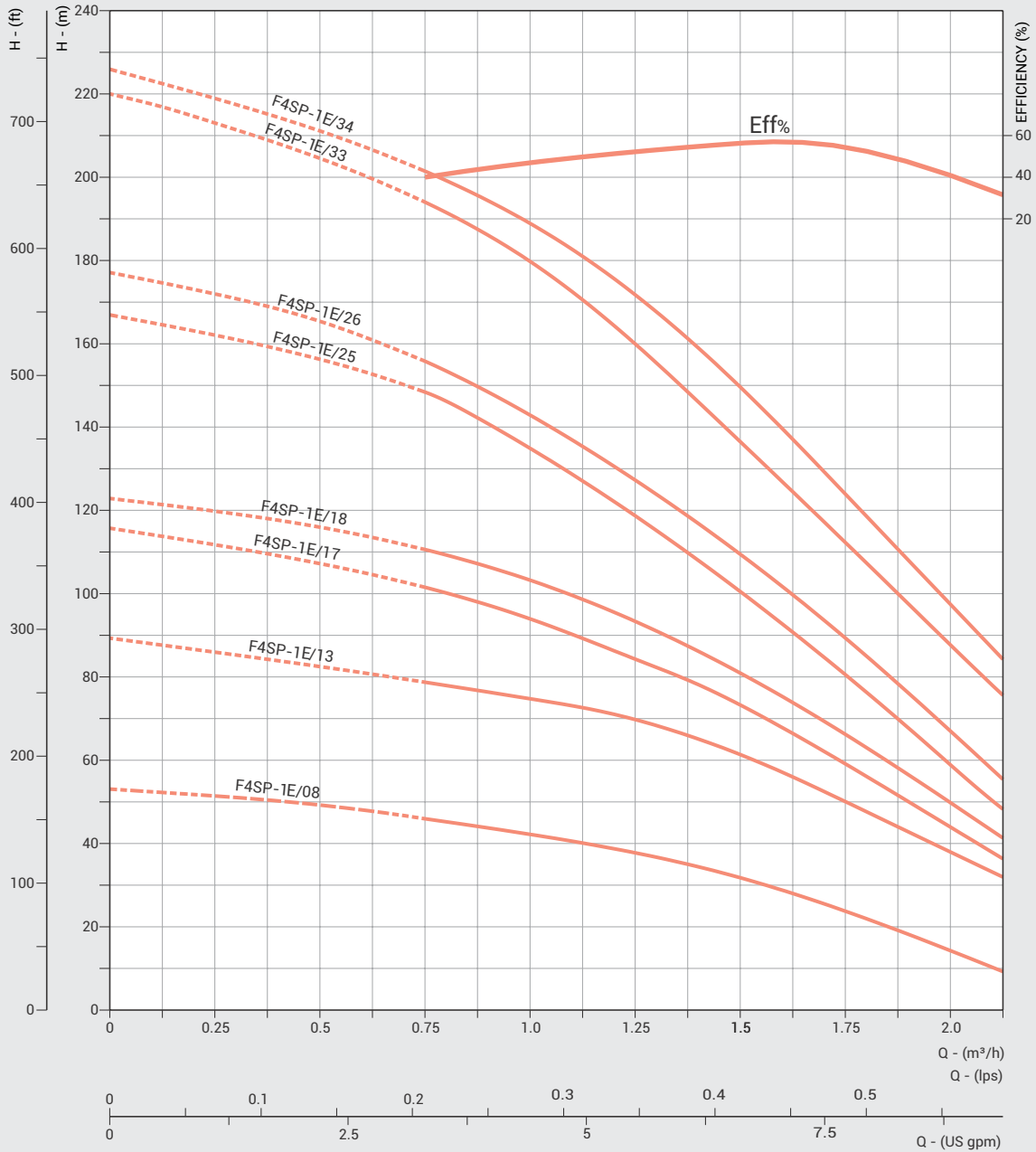
PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	#OD	RP	H	
F4SP-1E/08	0,37	0,5	98	32	414	3,3
F4SP-1E/13	0,55	0,75	98	32	524	4,2
F4SP-1E/17	0,75	1	98	32	654	5,0
F4SP-1E/18	0,75	1	98	32	679	5,3
F4SP-1E/25	1,1	1,5	98	32	860	8,8
F4SP-1E/26	1,1	1,5	98	32	882	9,0
F4SP-1E/33	1,5	2	98	32	1036	11,6
F4SP-1E/34	1,5	2	98	32	1058	12,0

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	0,20	0,27	0,34	0,41	0,48	0,55
			m ³ /h	0	0,75	1,0	1,25	1,50	1,75	2,0
F4SP-1E/08	0,37		54	46	42	38	32	24	15	
F4SP-1E/13	0,55		89	78	75	70	61	50	38	
F4SP-1E/17	0,75		116	101	94	84	73	59	43	
F4SP-1E/18	0,75		122	111	102	93	81	67	49	
F4SP-1E/25	1,1		166	148	135	118	101	81	59	
F4SP-1E/26	1,1		177	156	143	127	109	89	68	
F4SP-1E/33	1,5		220	199	179	160	136	112	88	
F4SP-1E/34	1,5		226	202	188	172	149	124	98	

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

PERFORMANCE CURVES 4" HYDRA SERIES



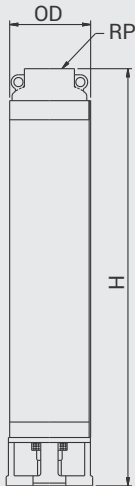
Refer General Information for performance curve conditions and for more details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT 4" HYDRA SERIES

Nominal Diameter : 4"

Nominal Flow : 2m³/h

Outlet Size : 1¼"



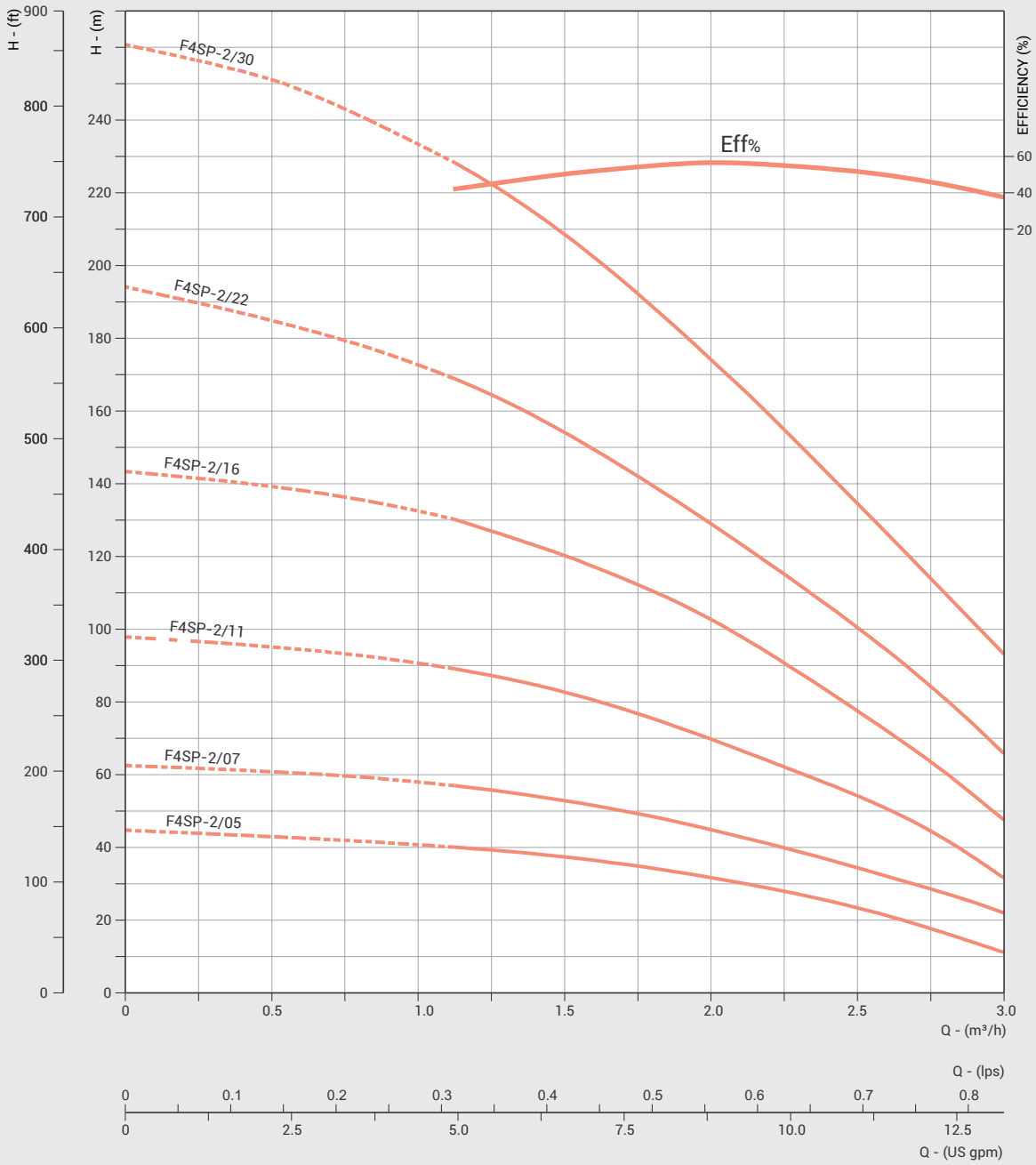
PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT, WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SP-2/05	0,37	0,5	98	32	354	2,8
F4SP-2/07	0,55	0,75	98	32	400	3,1
F4SP-2/11	0,75	1	98	32	493	3,8
F4SP-2/16	1,1	1,5	98	32	651	6,5
F4SP-2/22	1,5	2	98	32	790	7,7
F4SP-2/30	2,2	3	98	32	1006	10,5

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	0,27	0,41	0,55	0,69	0,83
			m ³ /h	0	1,0	1,5	2,0	2,5	3,0
F4SP-2/05	0,37		44	40	38	31	25	13	
F4SP-2/07	0,55		62	59	52	45	34	22	
F4SP-2/11	0,75		98	90	82	70	53	35	
F4SP-2/16	1,1		143	131	119	100	78	48	
F4SP-2/22	1,5		194	172	153	129	100	65	
F4SP-2/30	2,2		260	232	209	172	135	92	

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

PERFORMANCE CURVES 4" HYDRA SERIES



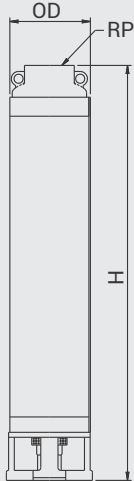
Refer General Information for performance curve conditions and for more details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT 4" HYDRA SERIES

Nominal Diameter : 4"

Nominal Flow : 3m³/h

Outlet Size : 1 1/4"



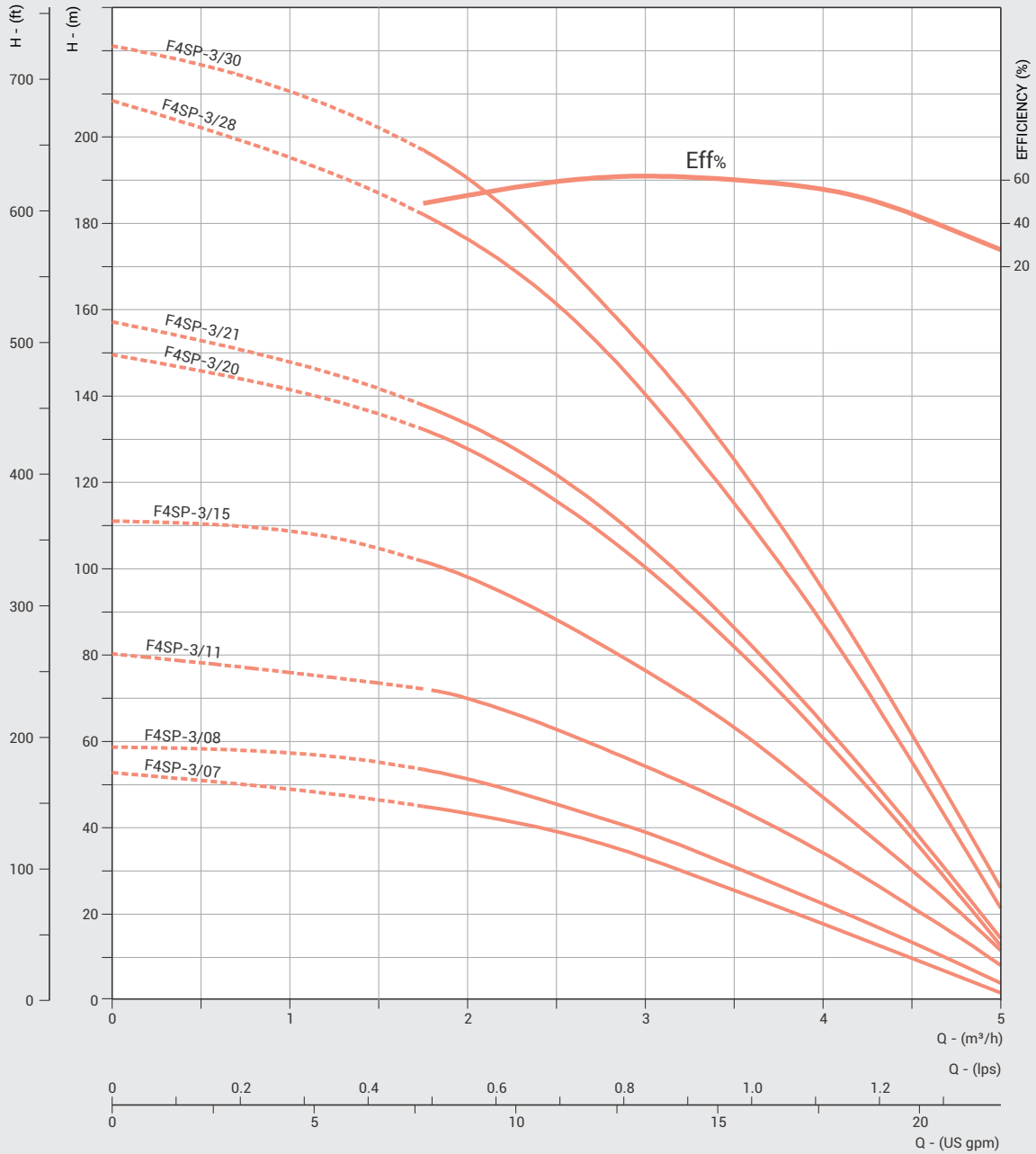
PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SP-3/07	0,55	0,75	98	32	426	2,8
F4SP-3/08	0,55	0,75	98	32	453	3,4
F4SP-3/11	0,75	1	98	32	533	3,9
F4SP-3/15	1,1	1,5	98	32	671	4,9
F4SP-3/20	1,5	2	98	32	818	7,9
F4SP-3/21	1,5	2	98	32	844	8,2
F4SP-3/28	2,2	3	98	32	1063	10,9
F4SP-3/30	2,2	3	98	32	1117	11,7

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	0,55	0,69	0,83	0,97	1,11	1,25
		m ³ /h	0	2,0	2,5	3,0	3,5	4,0	4,5
F4SP-3/07	0,55	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	52	42	38	33	26	18	10
F4SP-3/08	0,55		59	52	45	39	31	22	13
F4SP-3/11	0,75		80	70	62	54	45	34	22
F4SP-3/15	1,1		111	98	88	77	63	48	30
F4SP-3/20	1,5		150	128	116	101	82	61	38
F4SP-3/21	1,5		157	133	121	107	86	63	40
F4SP-3/28	2,2		208	177	161	141	115	88	55
F4SP-3/30	2,2		221	190	172	151	125	96	62

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

PERFORMANCE CURVES 4" HYDRA SERIES



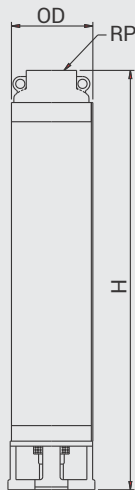
Refer General Information for performance curve conditions and for more details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT 4" HYDRA SERIES

Nominal Diameter : 4"

Nominal Flow : 4m³/h

Outlet Size : 1½"



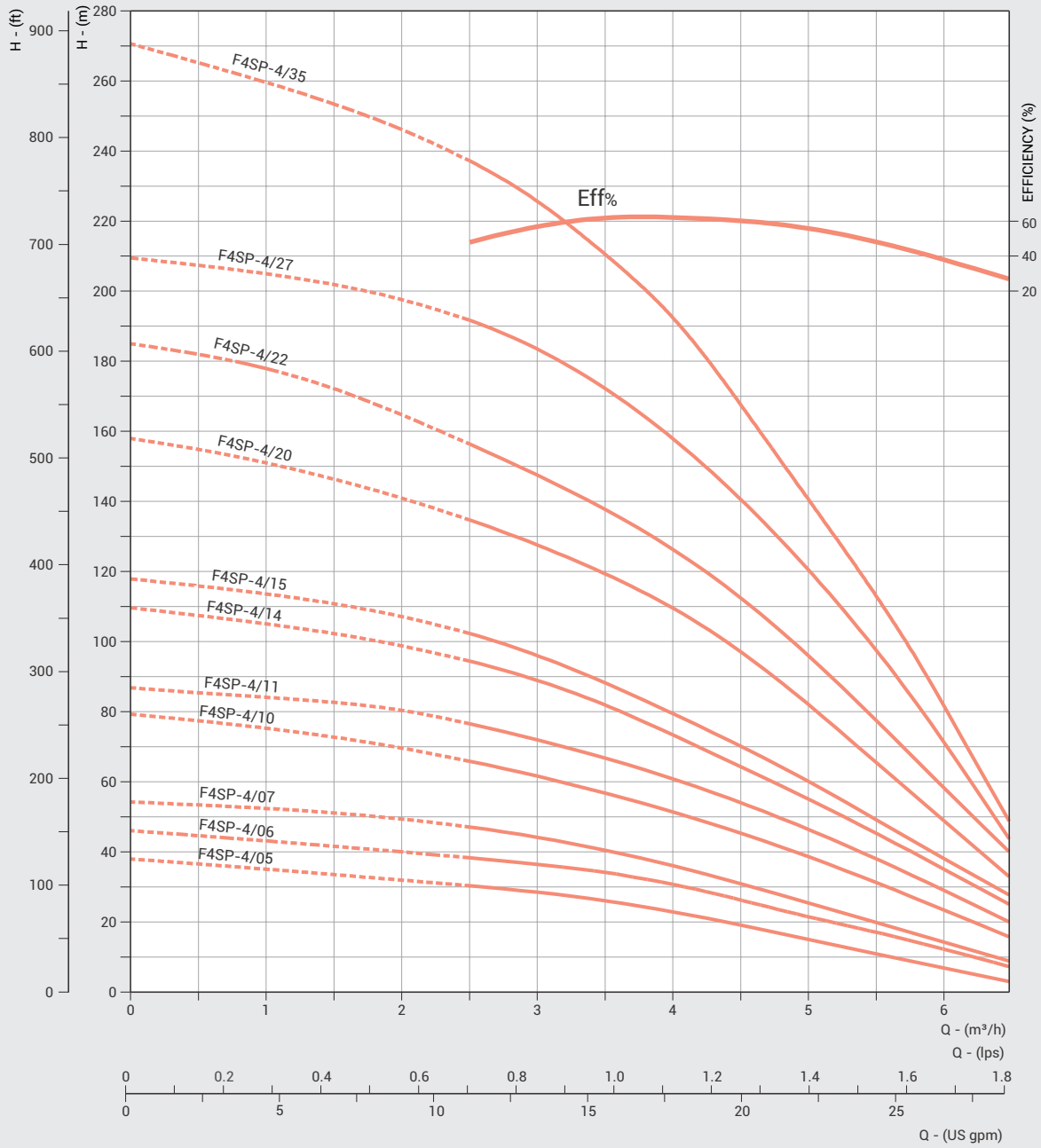
PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SP-4/05	0,55	0,75	98	32	383	1,9
F4SP-4/06	0,55	0,75	98	32	412	2,4
F4SP-4/07	0,75	1	98	32	441	3,3
F4SP-4/10	1,1	1,5	98	32	528	4,0
F4SP-4/11	1,1	1,5	98	32	557	4,4
F4SP-4/14	1,5	2	98	32	674	5,6
F4SP-4/15	1,5	2	98	32	703	6,0
F4SP-4/20	2,2	3	98	32	860	8,0
F4SP-4/22	2,2	3	98	32	918	8,8
F4SP-4/27	3	4	98	32	1093	10,8
F4SP-4/35	3,7	5	98	32	1325	14,0

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps m ³ /h	0	0,55	0,83	1,11	1,39	1,66	1,80
			0	2	3	4	5	6	6,5
F4SP-4/05	0,55	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	38	32	28	22	15	8	4
F4SP-4/06	0,55		46	40	37	31	21	12	8
F4SP-4/07	0,75		54	49	44	37	25	14	9
F4SP-4/10	1,1		79	69	62	51	39	22	16
F4SP-4/11	1,1		86	77	72	61	47	29	20
F4SP-4/14	1,5		110	99	89	73	55	35	26
F4SP-4/15	1,5		118	108	96	79	60	38	28
F4SP-4/20	2,2		158	141	128	110	82	49	34
F4SP-4/22	2,2		185	165	148	128	98	58	40
F4SP-4/27	3		210	198	183	159	120	71	44
F4SP-4/35	3,7		270	248	228	192	140	81	49

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

PERFORMANCE CURVES 4" HYDRA SERIES



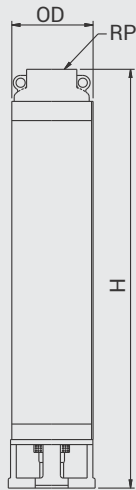
Refer General Information for performance curve conditions and for more details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT 4" HYDRA SERIES

Nominal Diameter : 4"

Nominal Flow : 5m³/h

Outlet Size : 1½"



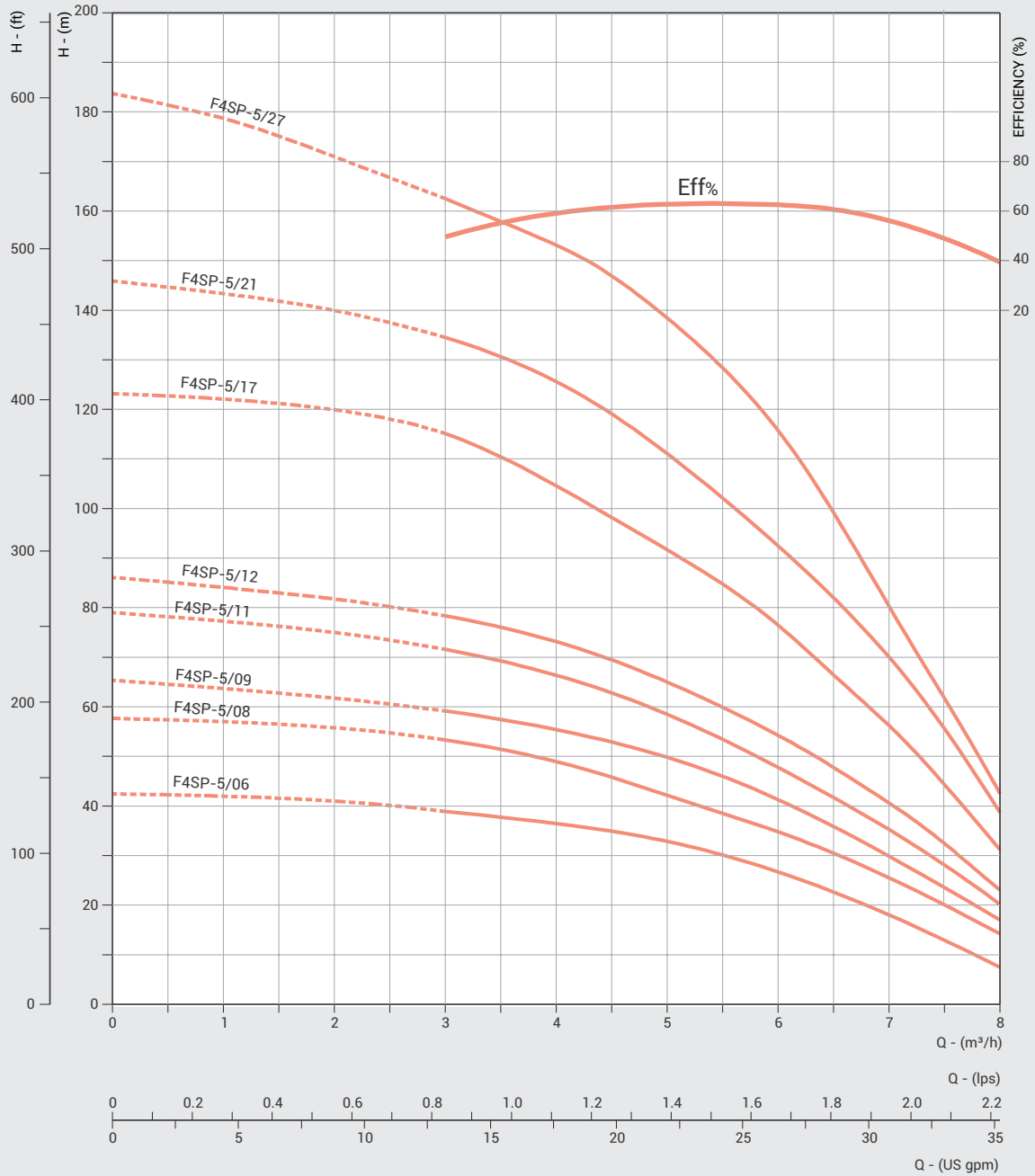
PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SP-5/06	0,75	1	98	40	459	3,4
F4SP-5/08	1,1	1,5	98	40	533	3,0
F4SP-5/09	1,1	1,5	98	40	570	3,5
F4SP-5/11	1,5	2	98	40	643	4,3
F4SP-5/12	1,5	2	98	40	680	4,8
F4SP-5/17	2,2	3	98	40	907	6,6
F4SP-5/21	3,0	4	98	40	1054	8,2
F4SP-5/27	3,7	5	98	40	1306	10,5

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	0,83	1,11	1,39	1,66	1,94	2,22
			m ³ /h	0	3	4	5	6	7	8
F4SP-5/06	0,75			42	39	37	32	27	18	9
F4SP-5/08	1,1		58	53	49	42	34	25	15	
F4SP-5/09	1,1		65	59	55	50	41	31	17	
F4SP-5/11	1,5		79	72	67	58	48	35	20	
F4SP-5/12	1,5		86	78	73	65	55	42	25	
F4SP-5/17	2,2		123	115	105	91	76	57	31	
F4SP-5/21	3,0		145	135	126	111	92	70	39	
F4SP-5/27	3,7		184	163	158	138	116	80	42	

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

PERFORMANCE CURVES 4" HYDRA SERIES



Refer General Information for performance curve conditions and for more details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT 4" HYDRA SERIES

Nominal Diameter : 4"

Nominal Flow : 8m³/h

Outlet Size : 2"



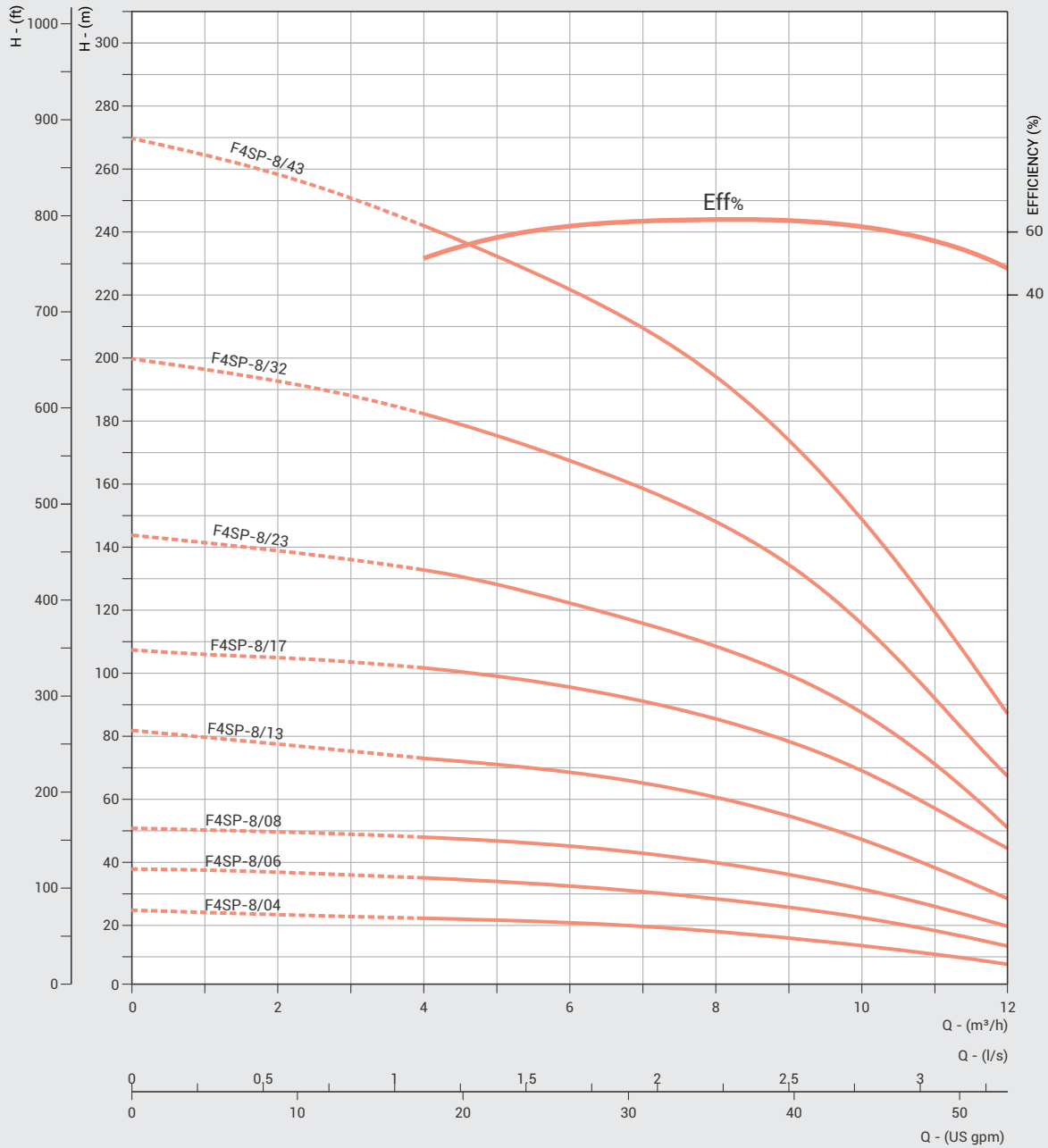
PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	#OD	RP	H	
F4SP-8/04	0,75	1,0	98	50	374	3,8
F4SP-8/06	1,1	1,5	98	50	436	4,4
F4SP-8/08	1,5	2,0	98	50	498	3,2
F4SP-8/13	2,2	3,0	98	50	653	6,5
F4SP-8/17	3,0	4,0	98	50	807	7,9
F4SP-8/23	4,0	5,5	98	50	993	10,0
F4SP-8/32	5,5	7,5	98	50	1302	13,0
F4SP-8/43	7,5	10	98	50	1643	17,5

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	1,11	1,66	2,22	2,78	3,33
			m ³ /h	0	4	6	8	10	12
F4SP-8/04	0,75			25	21	20	19	14	8
F4SP-8/06	1,1		38	35	32	28	22	13	
F4SP-8/08	1,5		51	48	45	40	31	20	
F4SP-8/13	2,2		82	72	69	61	48	29	
F4SP-8/17	3,0		108	101	96	85	69	43	
F4SP-8/23	4,0		143	132	122	109	88	52	
F4SP-8/32	5,5		200	182	168	148	116	68	
F4SP-8/43	7,5		270	242	221	193	149	88	

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

PERFORMANCE CURVES 4" HYDRA SERIES



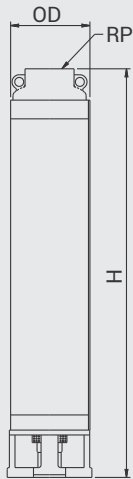
Refer General Information for performance curve conditions and for more details.
Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT 4" HYDRA SERIES

Nominal Diameter : 4"

Nominal Flow : 10m³/h

Outlet Size : 2"



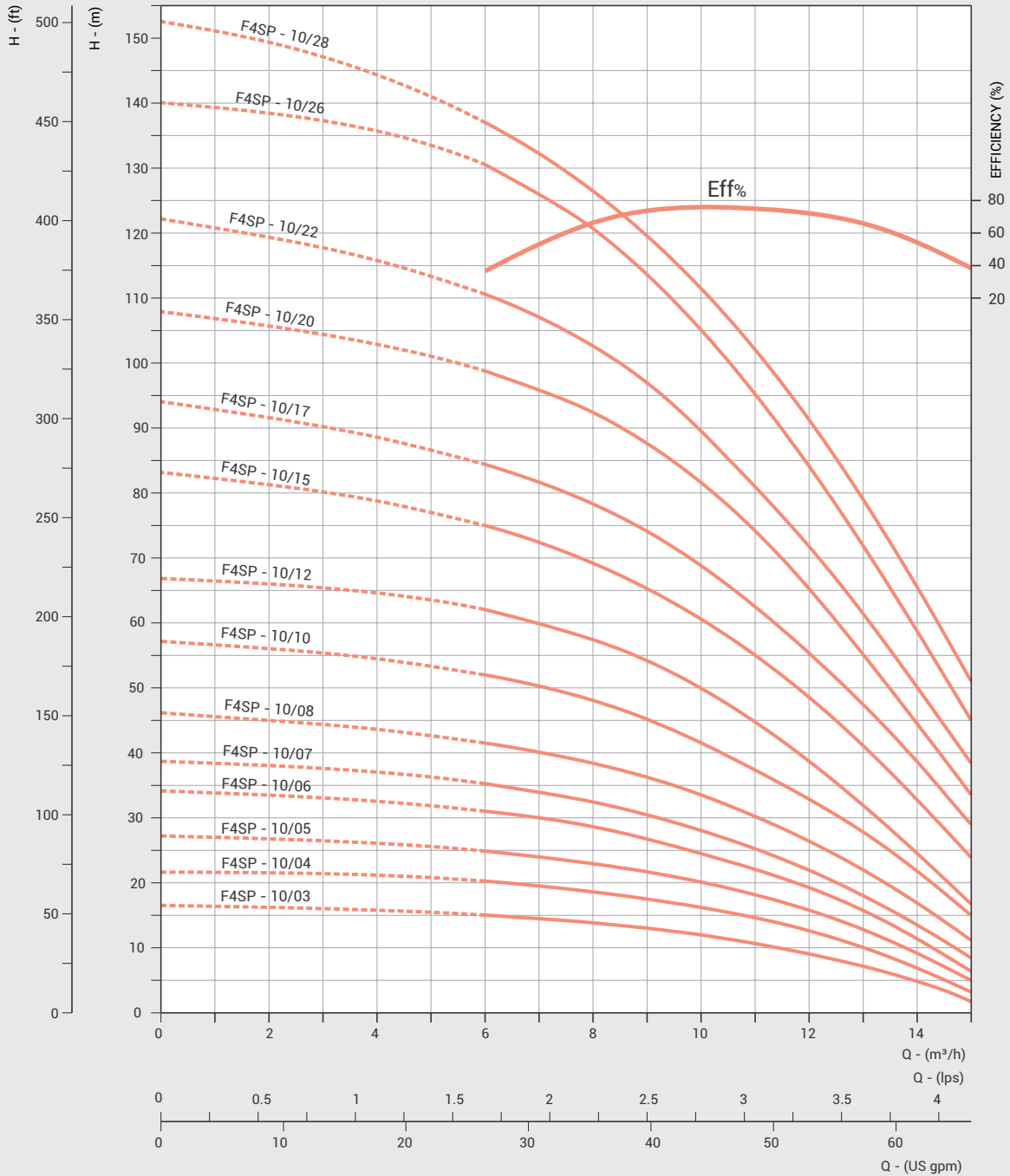
PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SP-10/03	0,75	1	98	50	448	2,7
F4SP-10/04	0,75	1	98	50	450	3,0
F4SP-10/05	1,1	1,5	98	50	562	3,8
F4SP-10/06	1,1	1,5	98	50	570	4,5
F4SP-10/07	1,5	2	98	50	676	5,3
F4SP-10/08	1,5	2	98	50	690	6,0
F4SP-10/10	2,2	3	98	50	790	7,6
F4SP-10/12	2,2	3	98	50	904	9,1
F4SP-10/15	3	4	98	50	1075	11,3
F4SP-10/17	3	4	98	50	1189	12,8
F4SP-10/20	4	5,5	98	50	1360	15,0
F4SP-10/22	4	5,5	98	50	1474	16,6
F4SP-10/26	5,5	7,5	98	50	1702	19,6
F4SP-10/28	5,5	7,5	98	50	1816	21,1

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps	0	1,11	1,66	2,22	2,78	3,33	3,89
		m ³ /h	0	4	6	8	10	12	14
F4SP-10/03	0,75	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	17	16	15	14	12	9	5
F4SP-10/04	0,75		22	21	20	18	16	13	7
F4SP-10/05	1,1		27	26	25	23	20	16	9
F4SP-10/06	1,1		34	33	31	28	24	19	12
F4SP-10/07	1,5		39	37	35	33	28	22	14
F4SP-10/08	1,5		46	43	42	38	33	27	12
F4SP-10/10	2,2		57	54	52,5	48	42	33	22
F4SP-10/12	2,2		66	64	62,5	57	50	39	25
F4SP-10/15	3		83	78	75	69	61	48	33
F4SP-10/17	3		94	88	84	78	69	55	39
F4SP-10/20	4		107	102	98	92,5	82	65	45
F4SP-10/22	4		122	116	111	102,5	90	72	50
F4SP-10/26	5,5		140	136	130	122	107	85	59
F4SP-10/28	5,5		153	144	137	127	112	91	65

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

PERFORMANCE CURVES 4" HYDRA SERIES



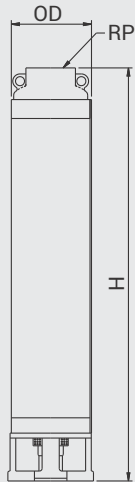
Refer General Information for performance curve conditions and for more details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT 4" HYDRA SERIES

Nominal Diameter : 4"

Nominal Flow : 14m³/h

Outlet Size : 2"



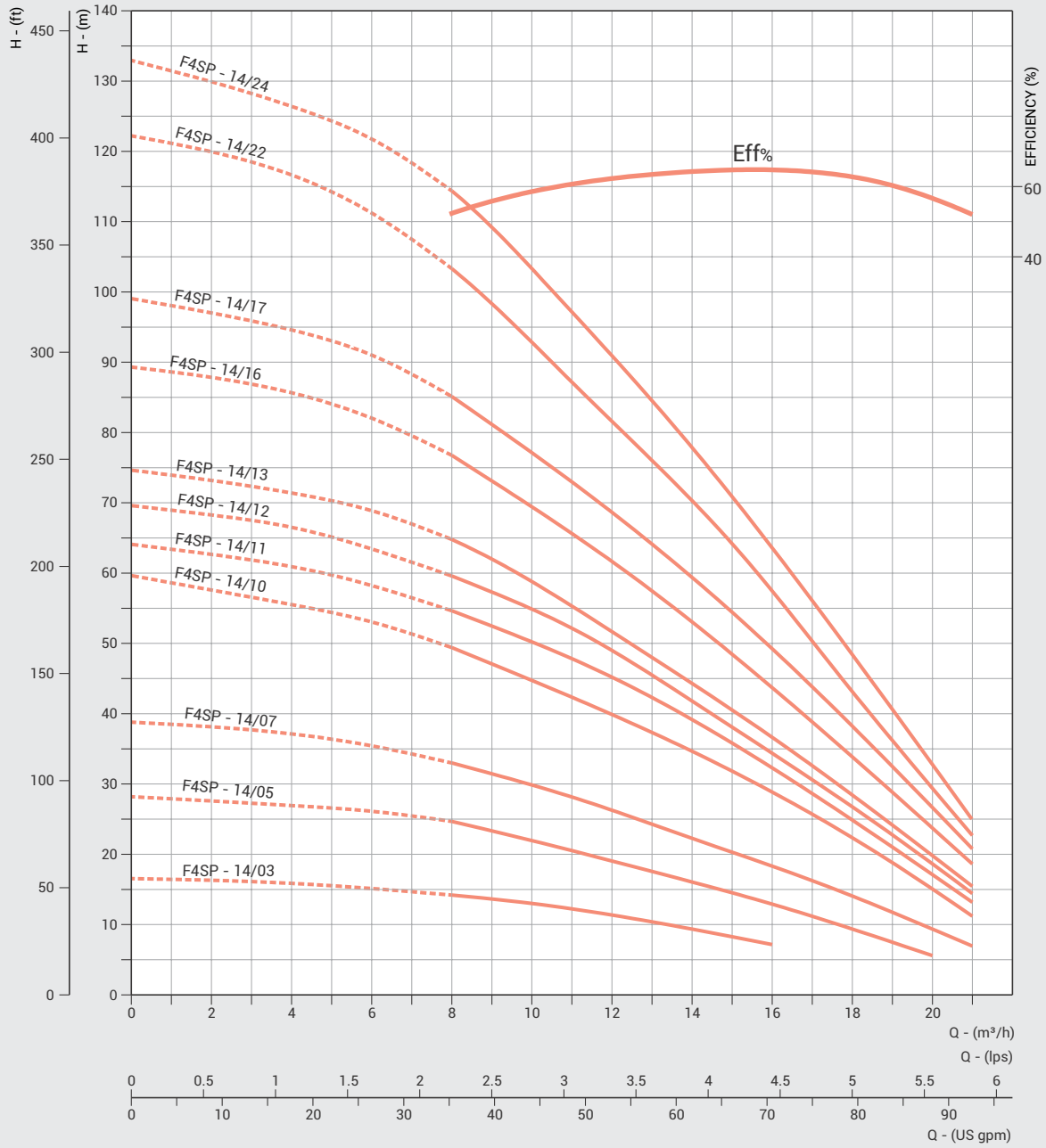
PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SP-14/03	0,75	1	98	50	463	2,6
F4SP-14/05	1,1	1,5	98	50	610	4,3
F4SP-14/07	1,5	2	98	50	775	6,0
F4SP-14/10	2,2	3	98	50	1009	8,5
F4SP-14/11	2,2	3	98	50	1087	9,7
F4SP-14/12	3,0	4	98	50	1165	10,2
F4SP-14/13	3,0	4	98	50	1243	11,0
F4SP-14/16	3,7	5	98	50	1477	13,6
F4SP-14/17	3,7	5	98	50	1555	14,4
F4SP-14/22	5,5	7,5	98	50	1945	29,0
F4SP-14/24	5,5	7,5	98	50	2101	33,0

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	lps m ³ /h	0	2,22	2,78	3,33	3,89	4,44	5,00	5,56
			0	8	10	12	14	16	18	20
F4SP-14/03	0,75	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	17	14	13	12	9	7	-	-
F4SP-14/05	1,1		28	24	22	19	16	14	9	6
F4SP-14/07	1,5		38	33	30	26	22	18	14	9
F4SP-14/10	2,2		59	49	45	40	34	29	22	15
F4SP-14/11	2,2		64	59	50	45	39	33	25	17
F4SP-14/12	3		69	59	55	48	43	34	27	18
F4SP-14/13	3		74	65	58	52	44	36	29	20
F4SP-14/16	3,7		89	77	69	62	53	44	34	24
F4SP-14/17	3,7		98	85	77	68	59	49	38	27
F4SP-14/22	5,5		123	104	93	82	70	57	43	29
F4SP-14/24	5,5		134	114	104	92	78	64	49	33

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

PERFORMANCE CURVES 4" HYDRA SERIES



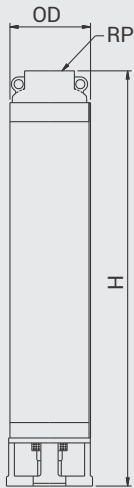
Refer General Information for performance curve conditions and for more details.
 Curve tolerance according to ISO : 9906, Grade - 3B

DIMENSIONS & WEIGHT 4" HYDRA SERIES

Nominal Diameter : 4"

Nominal Flow : 18m³/h

Outlet Size : 2"



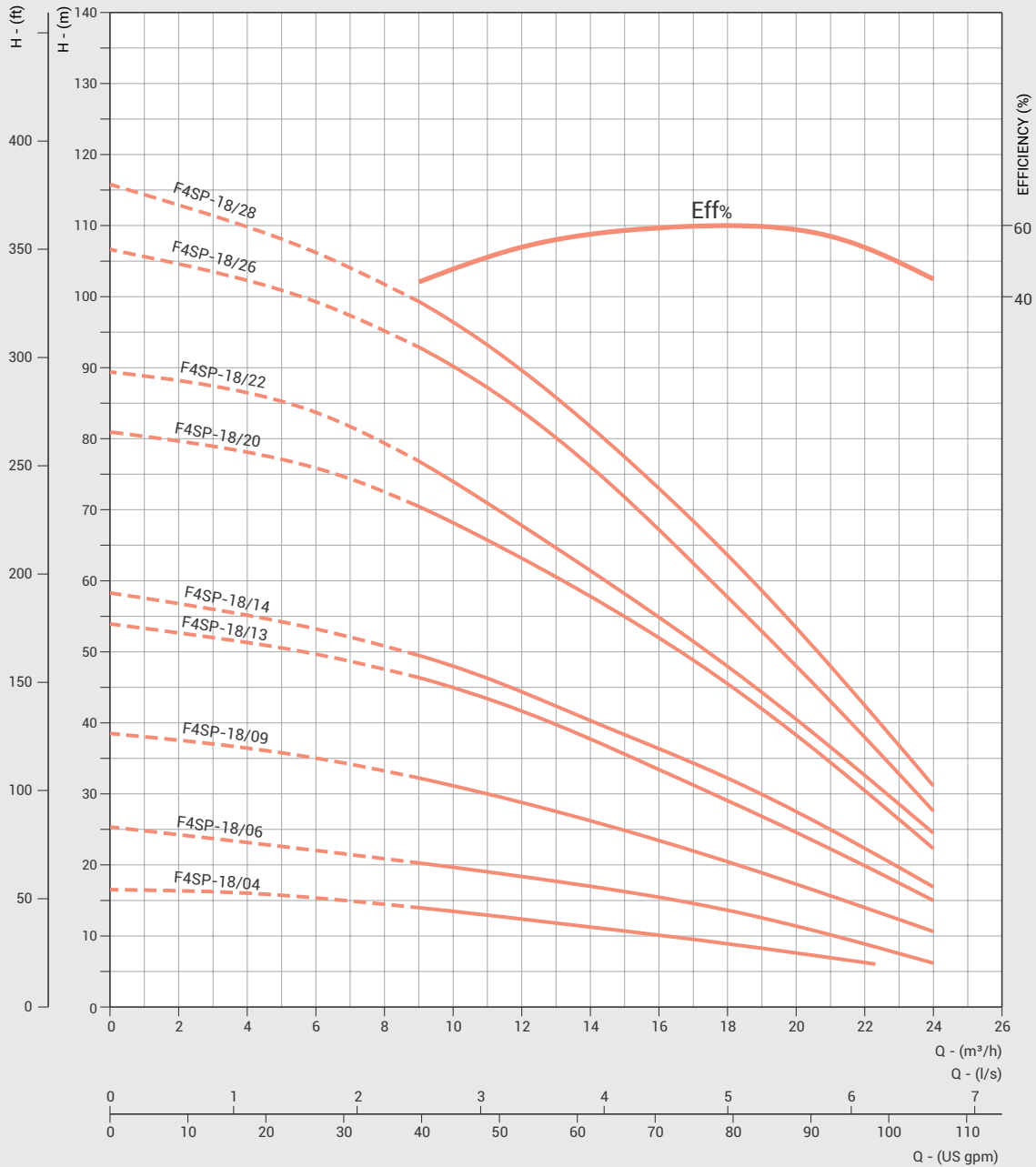
PUMP MODEL	REQUIRED MOTOR POWER		DIMENSIONS (mm)			APPROX NETT. WEIGHT (kg)
	kW	HP	OD	RP	H	
F4SP-18/04	1,1	1,5	98	50	407	3,8
F4SP-18/06	1,5	2,0	98	50	648	5,0
F4SP-18/09	2,2	3,0	98	50	860	6,5
F4SP-18/13	3,7	5,0	98	50	1142	9,8
F4SP-18/14	4,0	5,5	98	50	1213	10,5
F4SP-18/20	5,5	7,5	98	50	1637	15,5
F4SP-18/22	5,5	7,5	98	50	1778	18,0
F4SP-18/26	7,5	10,0	98	50	2060	19,1
F4SP-18/28	7,5	10,0	98	50	2201	22,0

PERFORMANCE TABLE

PUMP MODEL	MOTOR kW	TOTAL MANOMETRIC HEAD IN METRES - (COLUMN WATER)	lps	0	2,78	3,33	3,86	4,44	5	5,56	6,11
			m ³ /h	0	10	12	14	16	18	20	22
F4SP-18/04	1,1			17	14	13	11	10	9	8	6
F4SP-18/06	1,5		26	19	18	17	16	14	11	9	
F4SP-18/09	2,2		38	31	29	27	24	21	17	14	
F4SP-18/13	3,7		54	45	42	38	34	28	24	20	
F4SP-18/14	4,0		58	48	44	41	37	33	27	23	
F4SP-18/20	5,5		81	68	63	57	52	46	38	30	
F4SP-18/22	5,5		89	74	71	61	55	48	41	32	
F4SP-18/26	7,5		106	90	84	76	67	57	47	38	
F4SP-18/28	7,5		116	97	89	82	73	64	54	43	

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

PERFORMANCE CURVES 4" HYDRA SERIES



Refer General Information for performance curve conditions and for more details.
 Curve tolerance according to ISO : 9906, Grade - 3B

Submersible Motors - 50Hz





MODEL IDENTIFICATION CODE

BOREHOLE SUBMERSIBLE MOTOR

FM XX X - XXX X X

ZIRANTEC ELECTRIC MOTOR

NOMINAL MOTOR DIAMETER

DEEPWELL SUBMERSIBLE MOTOR

W - Water filled

O - Non-toxic fluid filled

MOTOR POWER (kW)

03 = 0,37 05 = 0,55 11 = 1,1 75 = 7,5
110 = 11 185 = 18,5 A10 = 110 A85 = 185

PHASE / CONNECTION / CONTROL BOX / FREQUENCY

S = 1Ph / CSCR type / 3 wire / 50Hz

N = 1Ph / PSC / 3 wire / 50Hz

M = 1Ph / PSC / 2 wire / 50Hz

D = 3Ph / S.D. / 50Hz

T = 3Ph / DOL / 50Hz

TYPE OF MATERIALS OF CONSTRUCTION (M.O.C)

A / B / N / S / T

DEEPWELL SUBMERSIBLE PUMP SET (Pump + Motor)

MOTOR MODEL

+

CODE

FM XX X - XXX X X

+

FM 4 W - 03 A T

OIL FILLED SUBMERSIBLE MOTORS

Oil filled motors are one among the proven & successful products from the house of FIPS. These motors are developed with due diligence complying with all safety standards and giving importance to the customers' 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.

Dynamically balanced rotors equipped with quality ball bearings maintain uniform clearance, thereby giving better efficiency and increase the life cycle. Ball bearings are used to withstand the high axial load and the lower ball bearings are of angular contact type. The shaft extension is made of 300 series stainless steel to increase life.

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 preventer. 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
- Ball & Angular contact bearings to handle maximum radial and axial rust loads
- Inbuilt TOP for single phase motors
- Can be easily dismantled and repaired

Applications

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

- Residential
- Industrial water supply
- Ponds
- Agricultural & Irrigation
- Sprinkler irrigation systems
- De-watering
- Fountains
- Pressure boosting units
- CBM (coal bed methane)
- Gardens

WATER FILLED SUBMERSIBLE MOTORS

Water filled motors are Rewindable Water Cooled type stators are wound with polywrapped or XLPE wires. These motors are provided with water lubricated journal and thrust bearings to minimize the friction. The motor must be filled with clear cold fresh water mixed with propylene glycol before commissioning. All rotating parts are dynamically balanced to ensure the bearing life. The pressure equalizing diaphragm is provided to balance the pressure & volume variation due to thermal expansion inside the motors. All single phase motors are fitted with thermal overload protector. All mounting dimensions of these motors are in accordance with NEMA/ International Standards.

Features

- High Operating efficiency
- Water cooled Re-windable motor
- Can be easily dismantled and repaired
- Specially designed thrust bearing to withstand high axial loads.
- 17.4PH motor shaft extension for longer life.

Features

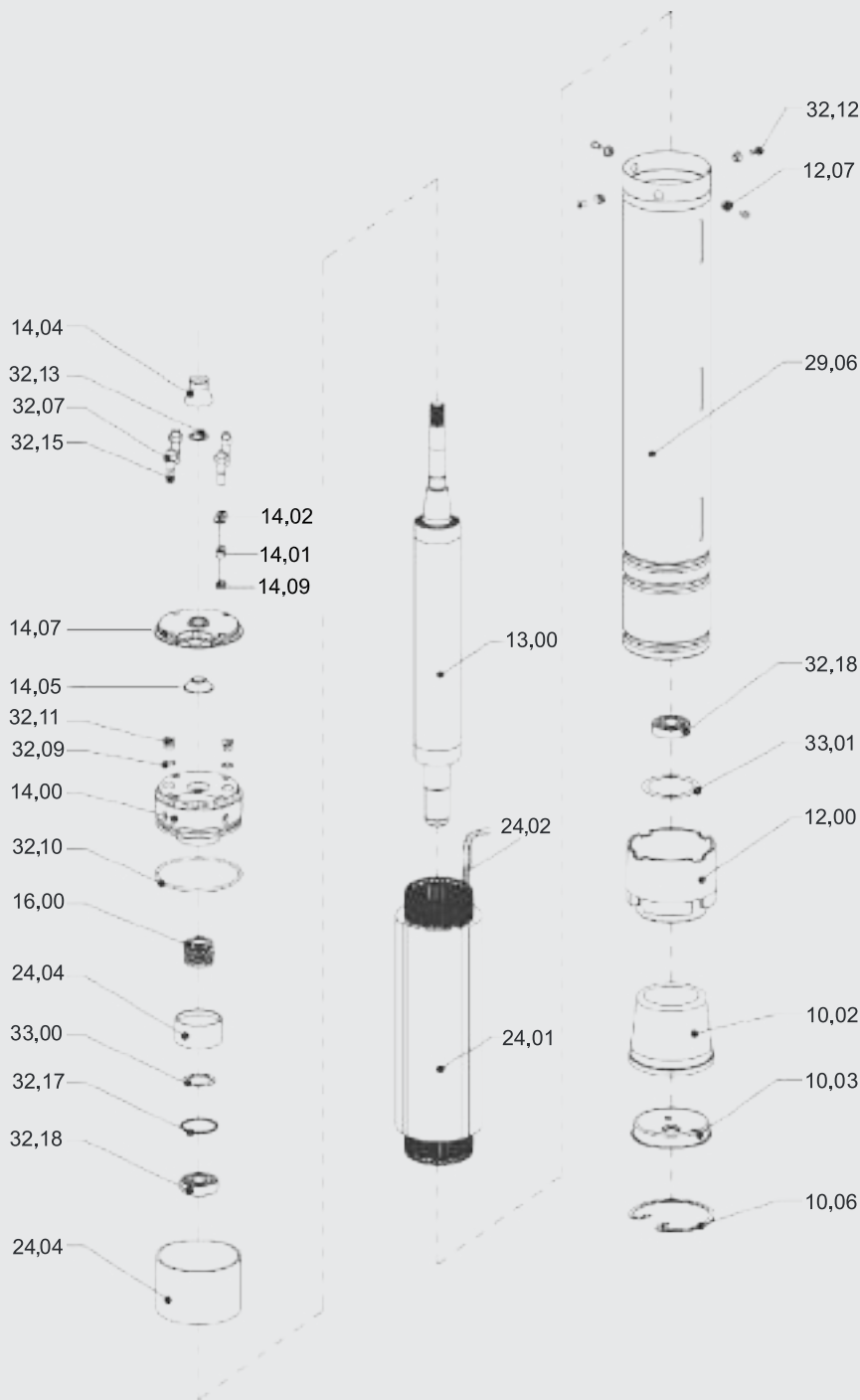
- Residential
- Irrigation
- Fountains
- Pressure Boosting units
- Gardens
- Sprinkler systems



OIL FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 4"

Exploded View



Part No.	Part Name
10,03	Diaphragm Bottom plate
10,02	Diaphragm
10,06	Snap ring
12,00	Lower housing
12,07	Guide bush
13,00	Rotor
14,00	Upper Housing
14,01	Cable Grommet
14,02	Grommet locking plate
14,04	Rubber sand guard
14,05	Sand guard
14,07	Upper housing shell
14,09	Grommet washer
16,00	Mechanical seal
24,01	Wound stator
24,02	Lead out cable
24,04	Winding guard
29,06	Outer shell
32,07	Nut
32,09	O-Ring
32,11	Drain plug
32,12	Screw
32,13	Sand guard washer
32,15	Stud
32,17	Wave washer
32,18	Bearing

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	98 mm
Power range	0,37 kW to 2,2 kW Single Phase 0,37 kW to 7,5 kW Three Phase
Speed	2900 rpm
Version	Single Phase 230 V, 50 Hz, A.C Supply Three Phase 380 V, 50 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	1500 N (0,37 to 0,75 kW) 2500 N (1,1 to 4,0 kW) 4500 N (5,5 to 7,5 kW)
Minimum cooling flow along the motor	0,15 m/sec
Maximum liquid temperature	45°C
Maximum immersion depth	150 m
Starts per hour	30
Shaft Type	Splined as per NEMA
Mounting Standard	NEMA Standard
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



Materials of Construction

Part Name	Material (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.

OIL FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 4"

Technical Data

Single Phase, 50Hz, 230V

Model	kW	HP	F.L. Current (A)	Starting Current (A)	Efficiency (%)	Power Factor	Capacitor (MFD)	Thrust Load (N)
FM40-03AN	0,37	0,5	3,6	10,4	53	0,92	15	1500
FM40-05AN	0,55	0,75	4,8	13,6	58	0,92	20	1500
FM40-07AN	0,75	1	6,3	17,6	60	0,96	30	1500
FM40-11AN	1,1	1,5	8,6	21,1	64	0,98	40	2500
FM40-15AN	1,5	2	11,5	35	72	0,98	50	2500
FM40-22AN	2,2	3	57	57	70	0,95	60	2500

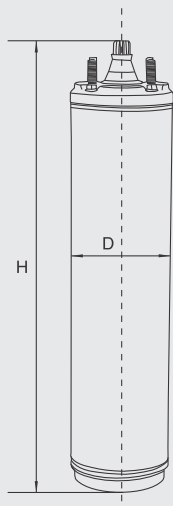
Three Phase, 50Hz, 380V

Model	kW	HP	F.L. Current (A)	Starting Current (A)	Efficiency (%)	Power Factor	Thrust Load (N)
FM40-03AT	0,37	0,5	1,07	5,2	63	0,80	1500
FM40-05AT	0,5	0,75	1,9	9,3	63	0,80	1500
FM40-07AT	0,75	1,0	2,4	11,1	64	0,81	1500
FM40-11AT	1,1	1,5	3,15	13	68	0,82	2500
FM40-15AT	1,5	2,0	4,2	19,5	72	0,82	2500
FM40-22AT	2,2	3,0	6	28	72	0,83	2500
FM40-30AT	3,0	4,0	7,8	40,2	75	0,83	2500
FM40-37AT	3,7	5,0	9,6	48	75	0,83	2500
FM40-40AT	4,0	5,5	10	51	77	0,83	2500
FM40-55AT	5,5	7,5	13,6	71,1	78	0,85	4500
FM40-75AT	7,5	10,0	17,6	87,8	79	0,85	4500

Three Phase, 50Hz, 415V

Model	kW	HP	F.L. Current (A)	Starting Current (A)	Efficiency (%)	Power Factor	Thrust Load (N)
FM40-03AT	0,37	0,5	1,3	7	63	0,74	1500
FM40-05AT	0,55	0,75	2,1	11,2	66	0,73	1500
FM40-07AT	0,75	1,0	2,7	13,8	71	0,75	1500
FM40-11AT	1,1	1,5	3,7	19	72	0,72	2500
FM40-15AT	1,5	2,0	4,9	25	73	0,72	2500
FM40-22AT	2,2	3,0	6,1	30	73	0,73	2500
FM40-30AT	3	4,0	8,0	41	73	0,73	2500
FM40-37AT	3,7	5,0	9,9	49	74	0,73	4500
FM40-40AT	4	5,5	10,5	56	75	0,73	4500
FM40-55AT	5,5	7,5	14,5	73	75	0,74	4500

Dimensions & Weight



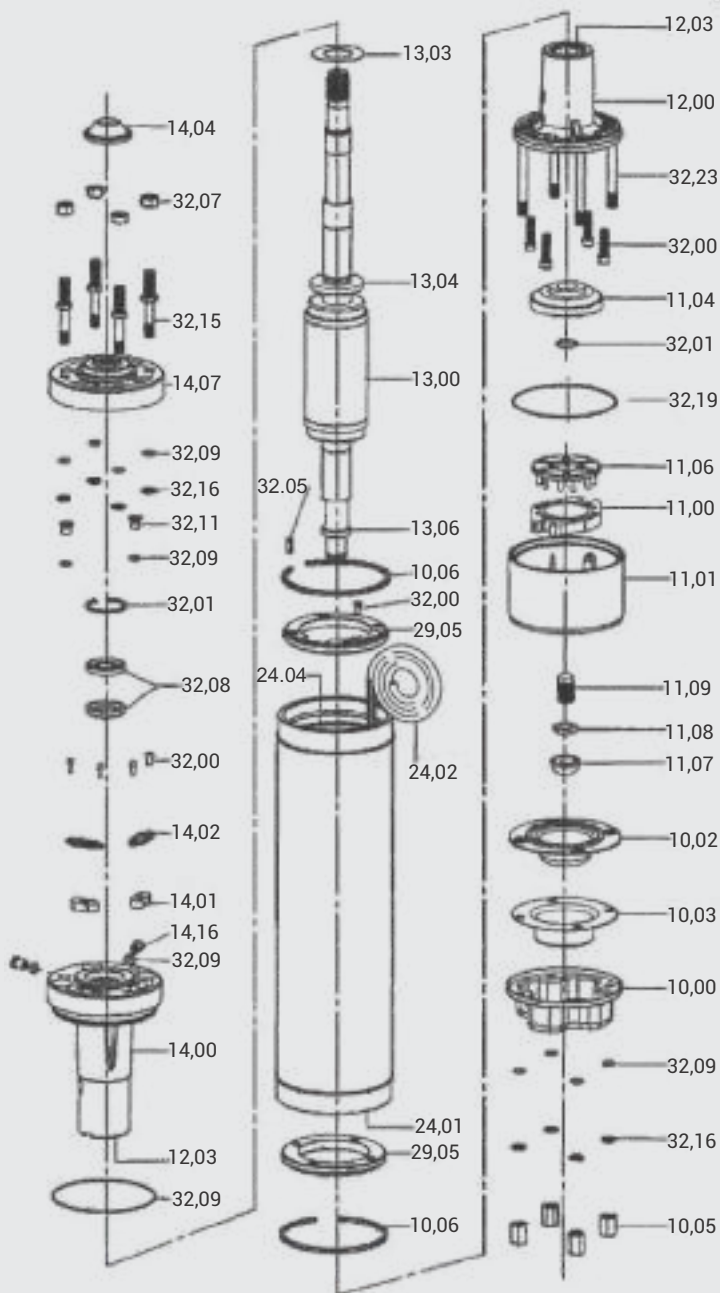
Model	kW	HP	Phase	Dia (mm) D	Height (mm) H	Weight (kg)	Cable Leadouts	
							Cable Size (Sq mm)	Cable Length (m)
FM40-03AN	0,37	0,5	Single	95	357	8	1,5	1,5
FM40-05AN	0,55	0,75	Single	95	377	8	1,5	1,5
FM40-07AN	0,75	1,0	Single	95	402	9	1,5	1,5
FM40-11AN	1,1	1,5	Single	95	432	11	1,5	1,5
FM40-15AN	1,5	2,0	Single	95	475	12	2,0	1,5
FM40-22AN	2,2	3,0	Single	95	520	14	2,3	2,0
FM40-03AT	0,37	0,5	Three	95	392	8	1,5	1,5
FM40-05AT	0,55	0,75	Three	95	407	8	1,5	1,5
FM40-07AT	0,75	1,0	Three	95	427	9	1,5	1,5
FM40-11AT	1,1	1,5	Three	95	447	10	1,5	1,5
FM40-15AT	1,5	2,0	Three	95	482	11	1,5	1,5
FM40-22AT	2,2	3,0	Three	95	542	14	1,5	2,0
FM40-30AT	3,0	4,0	Three	95	602	19	2,0	2,0
FM40-37AT	3,7	5,0	Three	95	602	19	2,0	2,0
FM40-40AT	4,0	5,5	Three	95	642	21	2,0	2,0
FM40-55AT	5,5	7,5	Three	95	762	25	2,3	3,0
FM40-75AT	7,5	10,0	Three	95	882	31	2,3	3,0

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

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 6"

Exploded view



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
24,02	Cable
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

Applicable only for Type - B motors

* Applicable only for Type - A motors

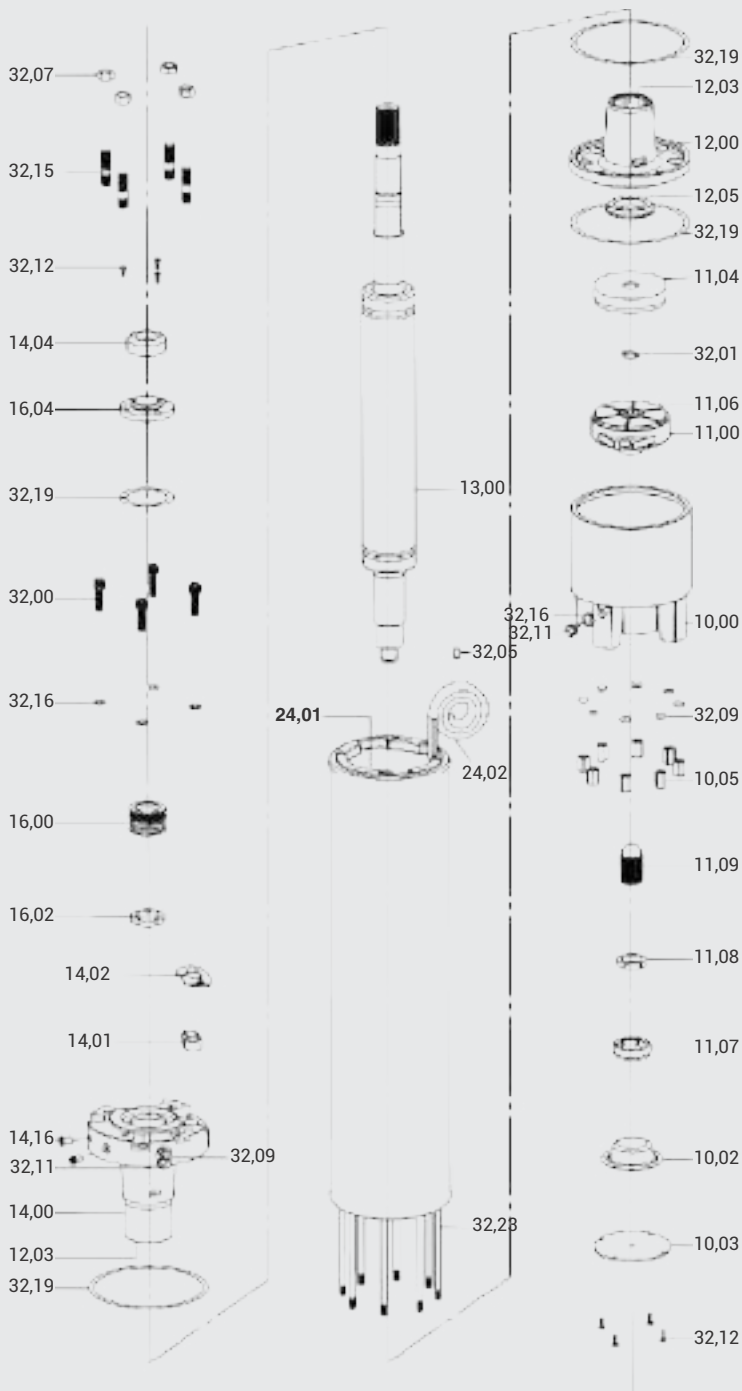
Note : No of bushes varies according to the HP of motor

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

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 8"

Exploded view



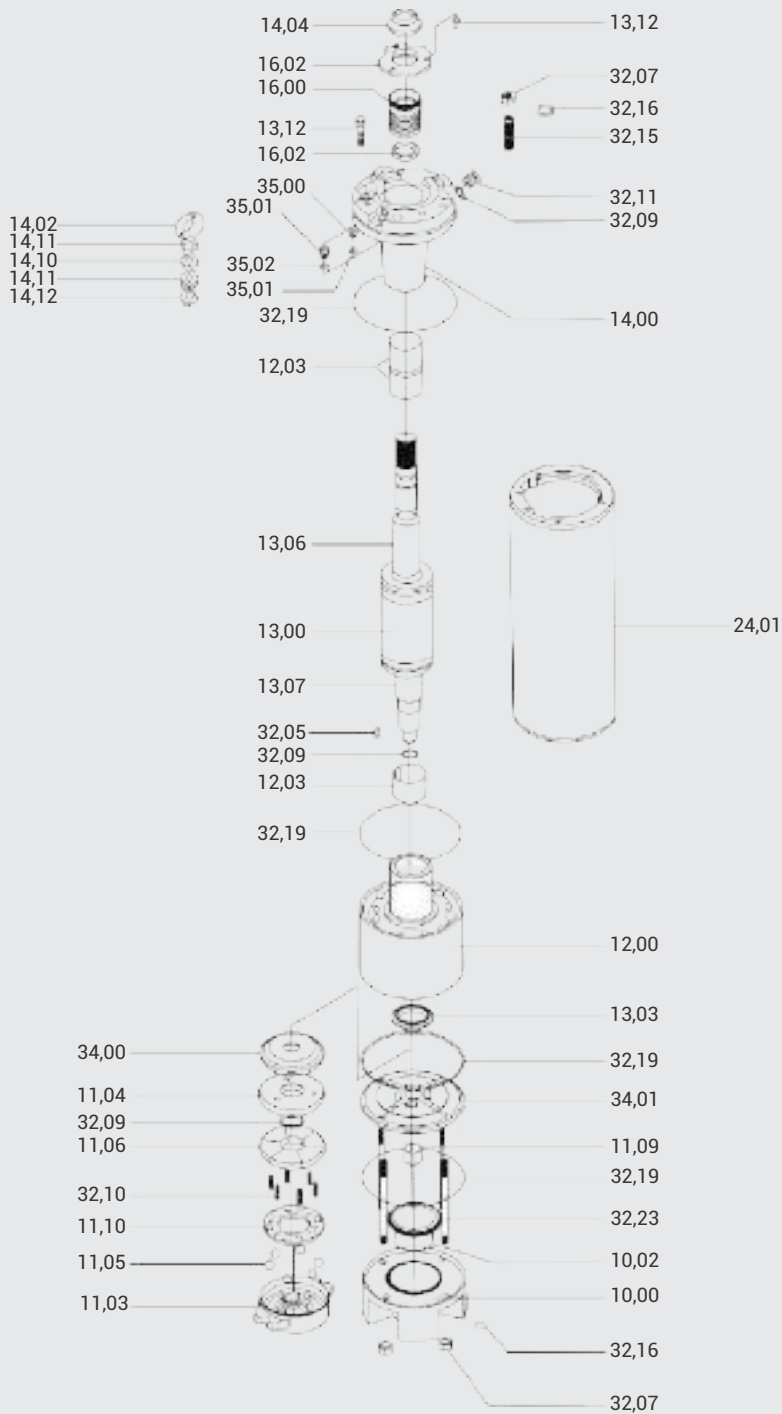
Part No.	Part Name
10,00	Motor Base
10,02	Diaphragm
10,03	Diaphragm Bottom Plate
10,05	Doom Nut
11,00	Thrust Base
11,04	Thrust pad
11,06	Thrust Segment
11,07	Rocker cap
11,08	Rocker Lock Nut
11,09	Rocker Screw
12,00	Lower Housing
12,03	Bush-Carbo
12,05	Counter Thrust ring
13,00	Rotor
14,00	Upper Housing
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	Washer
32,19	Gasket
32,23	Tie Rod

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

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 10"

Exploded View



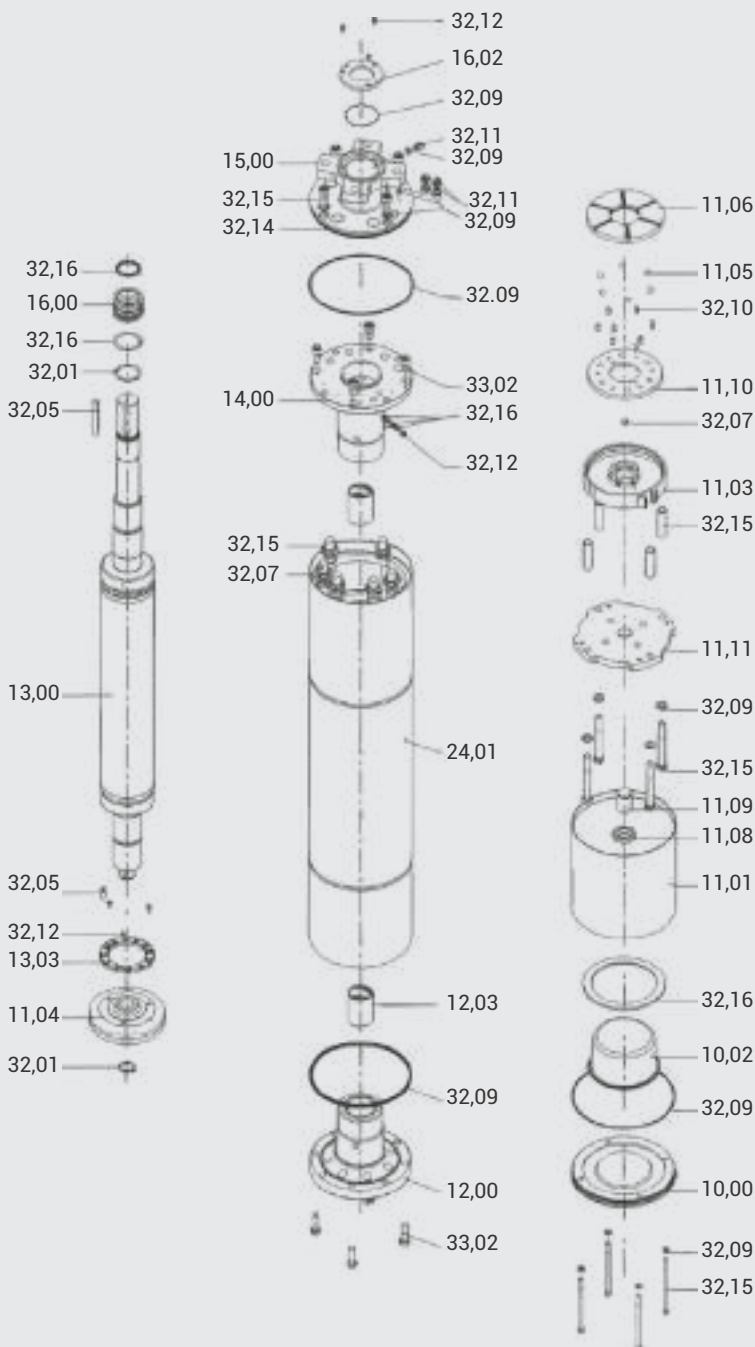
Part No.	Part Name
10,00	Motor Base
10,02	Diaphragm
11,03	Thrust Bearing Bottom
11,04	Thrust Pad
11,05	Ball
11,09	Rocker Screw
12,00	Lower Housing
12,03	Bush
13,00	Rotor
13,03	Upthrust Washer
13,06	Rotor Sleeve
13,07	Rotor Sleeve
14,00	Upper Housing
14,02	Grommat Locking Plate
14,04	Rubber Sand Guard
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.

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 12"

Exploded View



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 SUBMERSIBLE MOTORS

Nominal Diameter : 6"

Specifications

Nominal Dia	6" (150mm)
Maximum Outer Diameter	145mm
Power Range	4 kW to 45 kW - 3 Phase
Type of Motor	Asynchronous, Squirrel Cage Induction Motor
Speed	2900 rpm
Versions	400 V & 525 V, 50 Hz, A.C. Supply, ±10%
Class of Insulation	Y / B (PE2 + PA)
Type of Winding	Wet, Rewindable
Insulation Material	Polywrap / PVC / XLPE / PE2 (or) Equivalent
Conductivity	$5,8 \times 10^7$ Siemens / m (at 20°C)
Degree of Protection	IP 58 / IP 68
Direction of Rotation	Electrical Reversible
Type of Duty	S1 (continuous)
Maximum Down Thrust Load	4 kW to 22 kW - 15500 N 26 kW to 45 kW - 27500 N
Minimum cooling flow	0,15 m/sec / 0.5 m/sec
Maximum Liquid Temperature	45°C / 70°C
Starts per Hour	20 times
Shaft Type	Splined as per NEMA
Mounting Standard	NEMA Standard
Method of Starting	DOL / SD / impedance / Auto-Transformer / Soft Starter
Cable Leadout	Permanently Connected and Sealed 3/4 core TPE / EPDM Flat Cable
Thermal Protection	PT Sensor - Optional



Materials of Construction

Part Name	Type - A	Type - B
Shaft Seal	Oil Seal (Nitrile Rubber)	Oil Seal (Nitrile Rubber)
Upper & Lower Housings	Cast Iron	Cast Iron
Stator Shell	SS - 304 / SS - 441	SS - 304 / SS - 441
Thrust Pad	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420
Diaphragm	High Nitrile Rubber	High Nitrile Rubber
Motor Base	SS - 304	SS - 304
Upper Housing	SS - 304 Shell Type	NA
Shaft	EN - 8	EN - 8
Shaft Extension	17.4 Ph	17.4 Ph
Sleeves	SS - 431	SS - 431

*Motor 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.

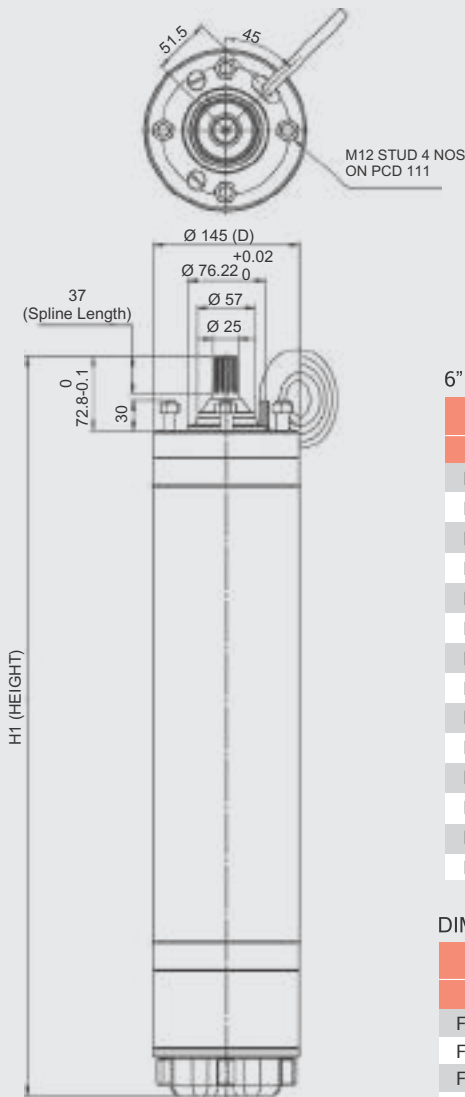
WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 6"

Technical Data

6" THREE PHASE 380V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Eff.%	Power Factor	Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	kW	HP							
FM6W-40AT	-	4,0	5,5	11	41	76	0,72	15500N	20	14
FM6W-45AT	-	4,5	6	12,5	46	76	0,77	15500N	21	15
FM6W-55AT	FM6W-55AD	5,5	7,5	13,7	50	78	0,78	15500N	24	18
FM6W-75AT	FM6W-75AD	7,5	10	19	67	82	0,76	15500N	27	25
FM6W-93AT	FM6W-93AD	9,3	12,5	22	81	82	0,8	15500N	35	31
FM6W-110AT	FM6W-110AD	11,0	15	26	99	82	0,81	15500N	43	37
FM6W-130AT	FM6W-130AD	13	17,5	30	115	83	0,81	15500N	51	43
FM6W-150AT	FM6W-150AD	15	20	34	145	83	0,82	15500N	62	49
FM6W-185AT	FM6W-185AD	18,5	25	43	185	83	0,82	15500N	98	61
FM6W-220AT	FM6W-220AD	22	30	50	222	83	0,82	15500N	115	73
FM6W-260AT	FM6W-260AD	26	35	57	267	83	0,83	27500N	130	85
FM6W-300AT	FM6W-300AD	30	40	68	352	83	0,83	27500N	190	97
FM6W-370AT	FM6W-370AD	37	50	84	416	82	0,82	27500N	240	122
FM6W-450AT	FM6W-450AD	45	60	95	461	82	0,82	27500N	390	150



Dimensional Drawing

All dimensions are in mm

Splined shaft 15 Teeth - module 1.5875
Pressure angle 30° A.N.S.I.B - 92 - 1 - 1970
Coupling Class 5

6" THREE PHASE 415V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	(kW)	HP			Eff.%	Power Factor			
FM6W-40AT	-	4	5,5	10,8	43	76	0,70	15500	20	14
FM6W-45AT	-	4,5	6,0	12	48	76	0,75	15500	21	15
FM6W-55AT	FM6W-55AD	5,5	7,5	13,5	52	78	0,77	15500	24	18
FM6W-75AT	FM6W-75AD	7,5	10,0	18,5	70	82	0,75	15500	27	25
FM6W-93AT	FM6W-93AD	9,3	12,5	21	84	82	0,79	15500	35	31
FM6W-110AT	FM6W-110AD	11	15,0	25	102	82	0,80	15500	43	37
FM6W-130AT	FM6W-130AD	13	17,5	29,5	118	83	0,80	15500	51	43
FM6W-150AT	FM6W-150AD	15	20,0	33	148	83	0,81	15500	62	49
FM6W-185AT	FM6W-185AD	18,5	25,0	42,5	188	83	0,81	15500	98	61
FM6W-220AT	FM6W-220AD	22	30,0	49,2	225	83	0,81	15500	118	74
FM6W-260AT	FM6W-260AD	26	35,0	56,5	270	83	0,82	27500	138	86
FM6W-300AT	FM6W-300AD	30	40,0	67,2	355	83	0,82	27500	196	98
FM6W-370AT	FM6W-370AD	37	50,0	83	420	82	0,83	27500	245	123
FM6W-450AT	FM6W-450AD	45	60,0	93	465	82	0,83	27500	396	151

DIMENSIONS AND WEIGHT

Models		Motor Power		*Method of Starting	Dimension (mm)		Nett Weight (Kg) (Approx.)	Cable leadouts		
D.O.L	S.D	kW	HP		D	H1		Cable Size (Sq.mm)		Cable Length (m)
								D.O.L	S.D	
FM6W-40AT	-	4	5,5	T	143	734	42	2,5	-	3
FM6W-45AT	-	4,5	6,0	T	143	754	44	2,5	-	3
FM6W-55AT	FM6W-55AD	5,5	7,5	T / D	143	804	50	4,0	2,5	3
FM6W-75AT	FM6W-75AD	7,5	10,0	T / D	143	854	55	4,0	2,5	3
FM6W-93AT	FM6W-93AD	9,3	12,5	T / D	143	884	58	6,0	2,5	3
FM6W-110AT	FM6W-110AD	11	15,0	T / D	143	924	63	6,0	4,0	3
FM6W-130AT	FM6W-130AD	13	17,5	T / D	143	964	67	6,0	4,0	3
FM6W-150AT	FM6W-150AD	15	20,0	T / D	143	1004	71	10,0	4,0	3
FM6W-185AT	FM6W-185AD	18,5	25,0	T / D	143	1084	80	10,0	4,0	3,5
FM6W-220AT	FM6W-220AD	22	30,0	T / D	143	1154	86	10,0	4,0	3,5
FM6W-260AT	FM6W-260AD	26	35,0	T / D	143	1174	89	10,0	6,0	4,25
FM6W-300AT	FM6W-300AD	30	40,0	T / D	143	1229	94	10,0	6,0	4,25
FM6W-370AT	FM6W-370AD	37	50,0	T / D	143	1304	98	16,0	6,0	5,25
FM4W-450AT	FM6W-450AD	45	60,0	T / D	143	1379	105	16,0	10	5,25

* METHOD OF STARTING : T - 3P / DOL / 50Hz D - 3P / SD / 50Hz

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

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 8"

Specifications

Nominal Dia	8" (200mm)
Maximum Outer Diameter	195mm
Power Range	37 kW to 93 kW - 3 Phase
Type of Motor	Asynchronous, Squirrel Cage Induction Motor
Speed	2900 rpm
Versions	400 V & 525 V, 50 Hz, A.C. Supply, ±10%
Class of Insulation	Y / B (PE2 + PA)
Type of Winding	Wet, Rewindable
Insulation Material	PVC / XLPE / PE2 (or) Equivalent
Conductivity	$5,8 \times 10^7$ Siemens / m (at 20°C)
Degree of Protection	IP 68
Direction of Rotation	Electrical Reversible
Type of Duty	S1 (continuous)
Maximum Down Thrust Load	45500 N
Minimum cooling flow	0,15 m/sec / 0.5 m/sec
Maximum Liquid Temperature	45°C / 70°C
Starts per Hour	15 times
Shaft Type	Splined as per NEMA
Mounting Standard	NEMA Standard
Method of Starting	DOL / SD / impedance / Auto-Transformer / Soft Starter
Cable Leadout	Permanently Connected and Sealed 3/4 core TPE / EPDM Flat Cable
Thermal Protection	PT Sensor - Optional



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	17.4 Ph	17.4 Ph
Sleeves	SS - 431	SS - 431

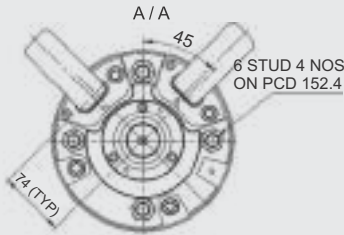
*Motor with SS casted housings also can be supplied in SS 304 & SS 316

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

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 8"

Technical Data



All Dimensions are in mm
 Splined Shaft : 23 teeth -
 Module 1.5875 Pressure Angle 30°
 A.N.S.I.B92-1 Tolerance Class 5

8" THREE PHASE 380V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	kW	HP			Eff. %	Power Factor			
FM8W-370BT	FM8W-370BD	37	50	69	380	83,6	0,86	45500	160	122
FM8W-450BT	FM8W-450BD	45	60	94,5	480	84	0,87	45500	225	148
FM8W-550BT	FM8W-550BD	55	75	116	620	84,5	0,87	45500	310	182
FM8W-630BT	FM8W-630BD	63	85	130	710	85	0,87	45500	350	208
FM8W-750BT	FM8W-750BD	75	100	156	855	85	0,88	45500	420	248
FM8W-930BT	FM8W-930BD	93	125	186	1050	87	0,87	45500	570	308
FM8W-A10BT	FM8W-A10BD	110	150	230	1125	87	0,86	45500	-	-

8" THREE PHASE 400V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	kW	HP			Eff. %	Power Factor			
FM8W-370BT	FM8W-370BD	37	50	75	390	84,5	0,85	45500	180	122
FM8W-450BT	FM8W-450BD	45	60	90	490	85	0,86	45500	250	148
FM8W-550BT	FM8W-550BD	55	75	114	650	85,8	0,86	45500	348	181
FM8W-630BT	FM8W-630BD	63	85	127	715	86	0,86	45500	380	207
FM8W-750BT	FM8W-750BD	75	100	148	900	85	0,88	45500	480	247
FM8W-930BT	FM8W-930BD	93	125	188	1200	87	0,88	45500	660	307
FM8W-A10BT	FM8W-A10BD	110	150	227	1135	87	0,83	45500	-	-

8" THREE PHASE 415V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	kW	HP			Eff. %	Power Factor			
FM8W-370BT	FM8W-370BD	37	50	80	400	86	0,84	45500	200	122
FM8W-450BT	FM8W-450BD	45	60	92	520	85	0,84	45500	268	149
FM8W-550BT	FM8W-550BD	55	75	112	660	87	0,84	45500	370	180
FM8W-630BT	FM8W-630BD	63	85	126	720	88	0,86	45500	410	206
FM8W-750BT	FM8W-750BD	75	100	151	930	89	0,86	45500	520	246
FM8W-930BT	FM8W-930BD	93	125	188	1250	88	0,86	45500	680	306
FM8W-A10BT	FM8W-A10BD	110	150	225	1150	87	0,81	45500	-	-

8" THREE PHASE 525V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	kW	HP			Eff. %	Power Factor			
FM8W-450BTN	FM8W-450BDN	45	60	80	320	85	0,82	45500	320	154
FM8W-550BTN	FM8W-550BDN	55	75	92	365	85	0,84	45500	450	185
FM8W-630BTN	FM8W-630BDN	63	85	103	410	86	0,88	45500	500	211
FM8W-750BTN	FM8W-750BDN	75	100	118	470	87	0,9	45500	620	251
FM8W-930BTN	FM8W-930BDN	93	125	145	580	87	0,88	45500	685	311

DIMENSIONS AND WEIGHT

Models	Motor Power		*Method of Starting	Dimension (mm)		Nett Weight (Kg) (Approx.)	Cable leadouts		
	kW	HP		D	H1		Cable Size (Sq.mm)		Cable Length (m)
	D.O.L	S.D					D.O.L	S.D	
FM8W-370BT	37	50	T / D	194	1181	153	16	10	4
FM8W-450BT	45	60	T / D	194	1231	164	16	10	4
FM8W-550BT	55	75	T / D	194	1281	180	35	25	5
FM8W-630BT	63	85	T / D	194	1351	193	35	25	5
FM8W-750BT	75	100	T / D	194	1466	215	35	25	5
FM8W-930BT	93	125	T / D	194	1556	235	35	35	5
FM8W-A10BT	110	150	T / D	194	1656	256	35	35	5

* METHOD OF STARTING : T - 3P / DOL / 50Hz D - 3P / SD / 50Hz

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

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 10"

Specifications

Nominal Dia	10" (250mm)
Maximum Outer Diameter	Upto 185 kW - 236 mm / 220 kW - 240 mm
Power Range	81 kW to 220 kW - 3 Phase
Type of Motor	Asynchronous, Squirrel Cage Induction Motor
Speed	2900 rpm
Versions	380 V & 415 V, 50 Hz, A.C. Supply
Class of Insulation	Y / B (PE2 + PA)
Type of Winding	Wet, Rewindable
Insulation Material	PVC / XLPE / PE2 (or) Equivalent
Conductivity	$5,8 \times 10^7$ Siemens / m (at 20°C)
Degree of Protection	IP 68
Direction of Rotation	Electrical Reversible
Type of Duty	S1 (continuous)
Maximum Down Thrust Load	60000 N
Minimum cooling flow	0,15 m/sec / 0.5 m/sec
Maximum Liquid Temperature	45°C / 70°C
Starts per Hour	15 times
Shaft Type	Splined as per NEMA / Keyway
Mounting Standard	NEMA Standard / International
Method of Starting	DOL / SD / impedance / Auto-Transformer / Soft Starter
Cable Leadout	Permanently Connected and Sealed 3/4 core TPE / EPDM Flat Cable
Thermal Protection	PT Sensor - Optional



Type - A/N

Type - B

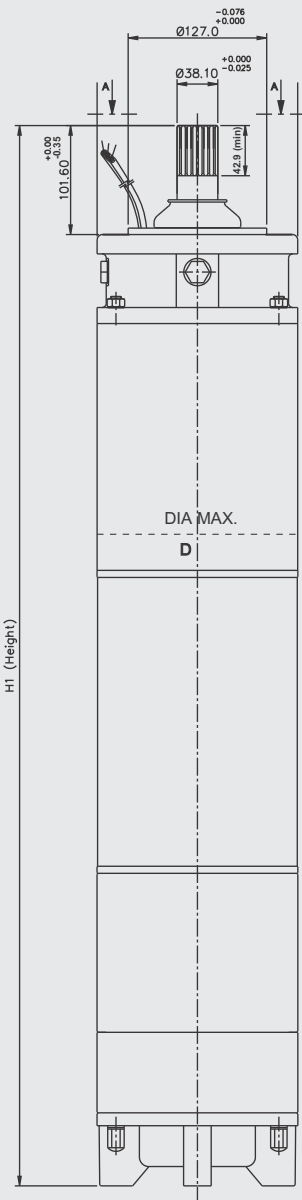
Materials of Construction

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

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 10"

10" THREE PHASE - 380 V - 415 V DOL & SD MOTORS



Model		Motor Power		Full Load Max (A)	Starting Current (A)	Eff.%	Power Factor	Max. Down Thrust Load (N)
DOL	SD	kW	HP					
FM10W-750BT	FM10W-750BD	75	100	150	1500	86	0,87	60000
FM10W-810BT	FM10W-810BD	81	110	166	1600	86	0,87	60000
FM10W-930BT	FM10W-930BD	93	125	181	1810	87	0,89	60000
FM10W-A10BT	FM10W-A10BD	110	150	220	2200	87	0,89	60000
FM10W-A30BT	FM10W-A30BD	130	175	255	2550	87	0,89	60000
FM10W-A50BT	FM10W-A50BD	150	200	290	2900	88	0,89	60000
FM10W-A65BT	FM10W-A65BD	165	225	325	3250	88	0,89	60000
FM10W-A85BT	FM10W-A85BD	185	250	355	3550	89	0,90	60000
FM10W-B22BT	-	220	300	425	4250	88	0,86	60000

DIMENSIONS AND WEIGHT

Model		Motor Power		Method of Starting	Dimension (mm)		Nett Weight (Kg) (Approx.)	Cable Leadouts				
DOL	SD	kW	HP		D	H1		Cable Size(Sq.mm)			Cable Length (m)	
								D.O.L	No. of Leadouts	S.D		
FM10W-750BT	FM10W-750BD	75	100	T/D	236	1226	240	25	1	16	4	
FM10W-810BT	FM10W-810BD	81	110	T/D	236	1266	260	25	1	16	4	
FM10W-930BT	FM10W-930BD	93	125	T/D	236	1316	274	25	1	16	4	
FM10W-A10BT	FM10W-A10BD	110	150	T/D	236	1446	314	25	2	25	4	
FM10W-A30BT	FM10W-A30BD	130	175	T/D	236	1546	343	25	2	25	4	
FM10W-A50BT	FM10W-A50BD	150	200	T/D	236	1736	366	35	2	35	4	
FM10W-A65BT	FM10W-A65BD	165	225	T/D	236	1856	409	35	2	35	4	
FM10W-A85BT	FM10W-A85BD	185	250	T/D	236	1956	439	35	2	35	4	
FM10W-B20BT	FM10W-B20BD	220	300	T/D	240	2183	500	70	6	70	-	

* METHOD OF STARTING : T - 3P / DOL / 50Hz

D - 3P / SD / 50Hz

Applicable for only DOL Motor.

ALL DIMENSIONS ARE IN mm.

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 12"

Specifications

Nominal Dia	12" (300mm)
Maximum Outer Diameter	273 mm
Power Range	150 kW to 300 kW - Three Phase
Speed	2850 rpm
Version	Three Phase - 380 V, 400 V & 415 V, 50 Hz, A.C Supply
Class of Insulation	Y/B
Degree of Protection	IP 68
Direction of Rotation	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	60000 N
Minimum Cooling Flow Along the Motor	0,5 m/sec (30°C), 2 m/sec (50°C)
Maximum Liquid Temperature	Standard - 45°C High temp - 50°C Beyond 50°C - Can be supplied with derated motor
Starts per Hour	10 Times
Shaft Type	Key Way Type
Mounting Standard	International Standard
Method of Starting	Direct On Line (DOL) 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

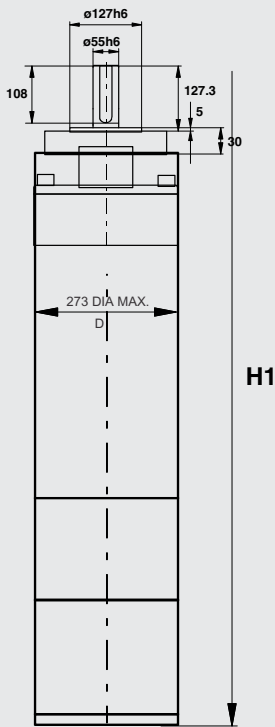
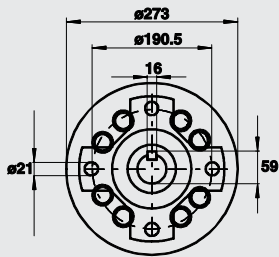
Materials of Construction

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	NBR	NBR	NBR
Motor Base	SS - 304	SS - 316	Cast Iron
Shaft	SS - 304	Duplex Steel	SS - 304

* Optional

WATER FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 12"



ALL DIMENSIONS ARE IN mm.

8" THREE PHASE 380V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Torque Ratio Ma/Mn	Torque Ratio Mk/Mn
D.O.L	S.D	kW	HP			Eff. %	Power Factor			
FM12W-A50BT	-	150	200	308	1571	87	0,85	60000	1,0	2,5
FM12W-A85BT	-	185	250	380	1862	87	0,85	60000	1,0	2,5
FM12W-B25BT	-	225	300	462	2217	87	0,85	60000	1,0	2,6
FM12W-B60BT	FM12W-B60BD	260	350	540	2700	86	0,85	60000	1,1	2,5
FM12W-C00BT	FM12W-C00BD	300	400	624	2995	86	0,85	60000	1,0	2,6

8" THREE PHASE 415V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Torque Ratio Ma/Mn	Torque Ratio Mk/Mn
D.O.L	S.D	kW	HP			Eff. %	Power Factor			
FM12W-A50BT	-	150	200	282	1438	87	0,85	60000	1,0	2,5
FM12W-A85BT	-	185	250	348	1705	87	0,85	60000	1,0	2,5
FM12W-B25BT	-	225	300	423	2030	87	0,85	60000	1,0	2,6
FM12W-B60BT	FM12W-B60BD	260	350	495	2475	86	0,85	60000	1,1	2,5
FM12W-C00BT	FM12W-C00BD	300	400	571	2741	86	0,85	60000	1,0	2,6

DIMENSIONS AND WEIGHT

Models		Motor Power		*Method of Starting	Dimension (mm)		Nett Weight (Kg) (Approx.)	Cable leadouts			
D.O.L	S.D	kW	HP		D	H1		Cable Size (Sq.mm)		Cable Length (m)	
						D.O.L	*No of Leadouts	S.D			
FM12W-A50BT	-	150	200	T	273	1699	414	70	3	-	7
FM12W-A85BT	-	185	250	T	273	1769	449	95	3	-	7
FM12W-B25BT	-	225	300	T	273	1859	495	120	3	-	7
FM12W-B60BT	FM12W-B60BD	260	350	T/D	273	1934	534	70	6	70	7
FM12W-C00BT	FM12W-C00BD	300	400	T/D	273	2034	585	70	6	95	7

* METHOD OF STARTING : T - 3P / DOL / 50Hz D - 3P / SD / 50Hz

* Applicable for only DOL Motor.

CABLE SELECTION TABLE

FOR SINGLE PHASE 3 WIRE (D.O.L) MOTOR MAXIMUM LENGTH OF COPPER CABLE

Motor Rating			Cable Size in Square Millimetres						MAXIMUM LENGTH IN METRES
VOLTS	kW	HP	1.5	2.5	4	6	10	16	
230 VOLT 50Hz	0.37	0.5	120	200	320	480	810		
	0.55	0.75	80	130	220	320	550		
	0.75	1	60	100	170	250	430		
	1.1	1.5	40	70	120	180	300		
	1.5	2	30	60	90	130	230	360	
	2.2	3		40	60	90	150	230	

FOR THREE PHASE 6WIRE (S/D) MOTOR MAXIMUM LENGTH OF COPPER CABLE

Voltage drop - 3%

Motor Rating			Cable Size in Square Millimetres																	MAXIMUM LENGTH IN METRES					
VOLTS	kW	HP	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400		500	630			
380-415 VOLT 50Hz	5.5	7.5	91	143	234	351	572	896	1377	1884															
	7.5	10	65	104	169	260	403	650	974	1338															
	9.3	12.5		91	143	221	364	572	870	1182	1624														
	11	15		78	130	182	299	481	714	974	1377	1832													
	13	17.5			104	143	260	403	611	844	1156	1533													
	15	20			91	130	221	351	533	740	1026	1364	1741												
	18.5	25				104	182	273	429	585	799	1065	1364	1624											
	22	30					156	234	364	494	688	922	1169	1403	1650										
	26	35						130	195	299	403	572	792	1000	1221	1429	1650								
	30	40							117	169	273	364	520	675	870	1013	1208	1390	1624						
	37	50								143	221	299	416	546	701	831	974	1117	1312	1494					
	45	60									182	247	338	468	598	727	870	1013	1208	1377					
	55	75										208	286	377	494	611	714	831	987	1137					
	63	85											188	260	299	442	546	637	740	870	1000				
	75	100												208	286	377	455	533	611	727	831	974			
	93	125													234	299	364	429	494	585	662	779			
	110	150														260	312	377	429	520	598	701	786		
	130	175															221	266	325	377	442	520	598	688	760
	150	200																234	279	325	390	455	539	604	669
	166	225																	234	286	338	390	455	520	578
185	250																		260	312	364	429	481	539	
220	300																			247	286	331	372	410	
260	350																				247	286	325	357	
300	400																					214	247	273	312

These are maximum length of cable in METRES from POWER SOURCE to MOTOR. Exceeding these length will void warranty.

CABLE SELECTION TABLE

FOR THREE PHASE 3 WIRE (D.O.L.) MOTOR MAXIMUM LENGTH OF COPPER CABLE

Voltage drop - 3%

Motor Rating			Cable Size in Square Millimetres																		MAXIMUM LENGTH IN METRES	
VOLTS	kW	HP	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	500		630
380-415 VOLT 50Hz	0.37	0.5	473	788	1260																	
	0.55	0.75	398	660	1050																	
	0.75	1	311	518	825																	
	1.1	1.5	203	338	533	795																
	1.5	2	161	270	428	638																
	2.2	3	113	188	300	450	731															
	3	4	86	143	233	345	566	885														
	3.7	5	71	120	188	285	465	735														
	4	5.5	67	113	176	263	435	683	1043													
	4.5	6	64	105	169	255	420	653	998	1358												
	5.5	7.5	53	83	135	203	330	518	795	1088												
	7.5	10	38	60	98	150	233	375	563	773												
	9.3	12.5		53	83	128	210	330	503	683	938											
	11	15		45	75	105	173	278	413	563	795	1058										
	13	17.5			60	83	150	233	353	488	668	885										
	15	20			53	75	128	203	308	428	593	788	1005									
	18.5	25				60	105	158	248	338	461	615	788	938								
	22	30					90	135	210	285	398	533	675	810	953							
	26	35					75	113	173	233	330	458	578	705	825	953						
	30	40					68	98	158	210	300	390	503	585	698	803	938					
	37	50						83	128	173	240	315	405	480	563	645	758	863				
	45	60							105	143	195	270	345	420	503	585	698	795				
	55	75								120	165	218	285	353	413	480	570	656				
	63	85								109	150	173	255	315	368	428	503	578				
	75	100									120	165	218	263	308	353	420	480	563			
	93	125										135	173	210	248	285	338	383	450			
	110	150											150	180	218	248	300	345	405	454		
	130	175												128	154	188	218	255	300	345	398	439
	150	200													135	161	188	225	263	311	349	386
	166	225														135	165	195	225	263	300	334
185	250															150	180	210	248	278	311	
220	300																143	165	191	215	237	
260	350																	143	165	188	206	
300	400																		124	143	158	180

These are maximum length of cable in METRES from POWER SOURCE to MOTOR. Exceeding these length will void warranty.

PIPE FRICTION LOSS TABLE

FRICITION LOSS IN METERS FOR 10 METERS LONG NEW STEEL GALVANIZED PIPE (C = 140)

Nominal Pipe Outer dia In mm / inches	25/ 1"	32/ 1 1/4"	40/ 1 1/2"	50/ 2"	65/ 2 1/2"	80/ 3"	100/ 4"	125/ 5"	150/ 6"
0,50	0,364								
1,00	1,315	0,341							
1,25	1,988	0,516	0,246						
1,60	3,140	0,814	0,388						
2,00		1,231	0,587						
2,50		1,861	0,888	0,282					
3,2		2,940	1,402	0,446	0,126				
4,0			2,120	0,674	0,190				
5,0			3,205	1,019	0,288				
8,0				2,433	0,887	0,313			
10,0				3,678	1,038	0,474	0,131		
12,5					1,570	0,716	0,198		
16					2,479	1,131	0,312	0,111	
20					3,747	1,710	0,472	0,167	
25						2,585	0,713	0,253	0,106
32						4,033	1,127	0,400	0,157
40							1,704	0,605	0,252
50							2,576	0,914	0,351
60								1,281	0,534
80								0,182	0,910
100								3,299	1,376
125									0,051

FRICITION LOSS IN METERS FOR 10 METERS LONG NEW RPVC PIPE (C = 150)

Nominal Pipe Outer dia In mm / inches	40/ 1 1/2"	50/ 2"	63/ 2 1/2"	75/ 3"	90/ 3 1/2"	110/ 4 1/4"	125/ 5"	140/ 5 1/2"	160/ 6 1/4"
0,50	0,074								
1,00	0,268								
1,25	0,405	0,131							
1,60	0,640	0,211							
2,00	0,967	0,310							
2,50	1,462	0,483	0,150						
3,20	2,309	0,762	0,250	0,106					
4,0	3,491	1,153	0,377	0,160					
5,0		1,742	0,571	0,242					
8,0		4,161	1,363	0,577	0,237				
10,0			2,060	0,873	0,358	0,133			
12,5			3,114	1,319	0,542	0,201			
16			4,919	2,084	0,856	0,317	0,172		
20				3,151	1,293	0,479	0,260		
25					1,955	0,725	0,392	0,225	0,117
32					3,089	1,145	0,020	0,355	0,184
40						1,731	0,937	0,537	0,279
50						2,617	1,416	0,812	0,421
60						3,008	1,985	1,138	0,590
80							3,382	1,939	1,006
100								2,931	1,521
125									2,299

PIPE FRICTION LOSS TABLE

PERMISSIBLE RANGE OF VOLUME RATES OF FLOW IN I/S THROUGH GALVANIZED STEEL PIPE TO LIMIT FRICTION LOSSES TO 10 PERCENT OF THE PIPE LENGTH

Grade →	Light	Medium	Heavy
Nominal pipe dia in mm ↓	Rate of flow in Ips	Rate of flow in Ips	Rate of flow in Ips
40	1,90 - 2,74	1,79 - 2,67	1,59 - 2,41
50	2,74 - 5,24	2,67 - 4,95	2,41 - 4,54
65	5,24 - 9,97	4,95 - 9,80	4,54 - 9,17
80	9,97 - 15,54	9,80 - 14,97	9,17 - 14,20
100	15,54 - 30,84	14,97 - 30,0	14,20 - 28,67
125	-	30,0 - 52,50	28,67 - 51,37
150	-	52,50 - 84,18	51,37 - 82,63

PERMISSIBLE RANGE OF VOLUME RATES OF FLOW IN I/S THROUGH RPVC PIPE TO LIMIT FRICTION LOSSES TO 10 PERCENT OF THE PIPE LENGTH

Grade →	Class (0.25Mpa)	Class (0.4Mpa)	Class (0.6Mpa)
Nominal pipe dia in mm ↓	Rate of flow in Ips	Rate of flow in Ips	Rate of flow in Ips
40	-	-	Up to 2,04
50	-	-	2,04 - 3,70
63	-	3,80 - 7,24	3,70 - 6,77
75	-	7,24 - 11,47	6,77 - 10,76
90	11,50 - 19,58	11,47 - 18,50	10,76 - 17,41
110	19,58 - 33,25	18,59 - 31,71	17,41 - 29,75
125	33,25 - 46,63	31,71 - 44,33	29,75 - 41,44
140	46,63 - 62,92	44,33 - 59,79	41,44 - 55,97
160	62,92 - 89,28	59,79 - 84,95	55,97 - 79,76



FABBRICA ITALIANA POMPE SOMMERSIBILI S.r.l.

Via dell' Artigianato, 16 - 20090 Pieve Emanuele (MI)-Italy

Tel. + 39 (0) 2 49708488 | Fax +39 (0) 2 37908126

E-mail: info@fips-pumps.it | www.zirantec.com