



F6FX SUBMERSIBLE PUMPS FOR DEEP WELLS

50 Hz, 6"

ITT Flygt

An **ITT Industries** company

F6FX SUBMERSIBLE PUMPS FOR DEEP WELLS

A combination of multistage centrifugal pumps and submersible motors, the 6" borehole pump, F6FX series, is designed for applications like:

- Water supply from deep wells
- Sprinkle irrigation schemes
- Booster systems
- Firefighting installations
- Mining applications.

Features

- Up to 410 m head
- Up to 78 m³/h flow rate
Max quantity of suspended sand in water 25 g/m³
- Ratings applied up to 30 kW (40 HP).

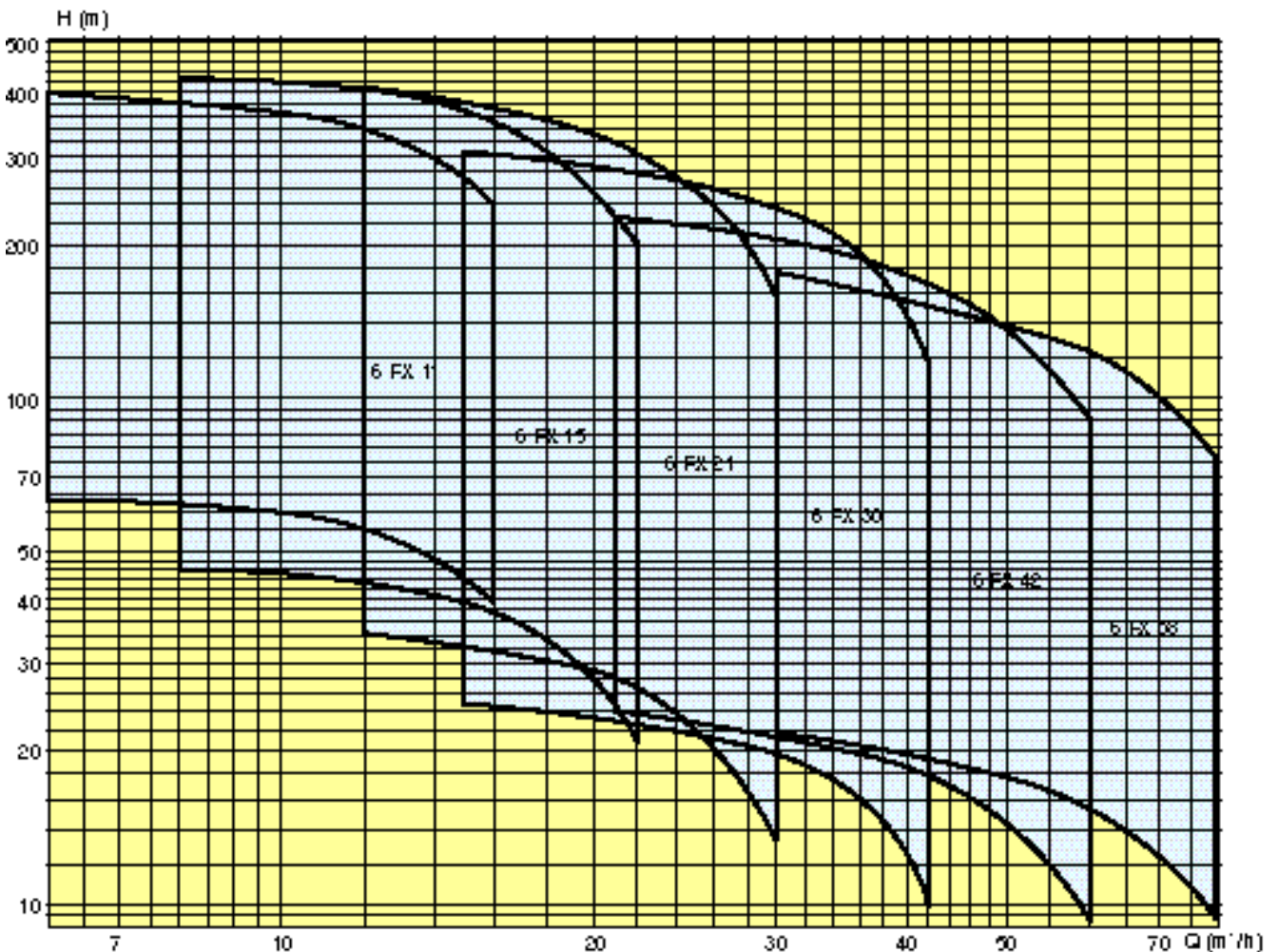
Construction, pump

Almost entirely made in stainless steel, the F6FX pumps are sturdy and light, easy to assemble and corrosion-resistant in non-aggressive environments. The guide bearings and wear rings are made of a special high-nitrile rubber to ensure stronger resistance to wear and abrasion. The surfaces in contact with the fluid have been made extremely smooth to ensure high performance and low energy consumption.

Construction, motor (FRANKLIN)

- Hermetically sealed stator
- Water-lubricated radial and thrust bearings
- Corrosion-resistant materials
- Anti-track, self-healing stator resin prevents motor burn-out
- Non-contaminating, water-filled design
- 6" Nema flange
- IP 58 protection
- Max number of starts 20 per hour
- Max cooling flow 16 cm/s
- Insulation Class F
- Power cable 4 m long
- Max depth of immersion 350 m
- Minimum temperature of filling liquid in motor, -8°C
- Max temperature of pumped liquid, +30°C

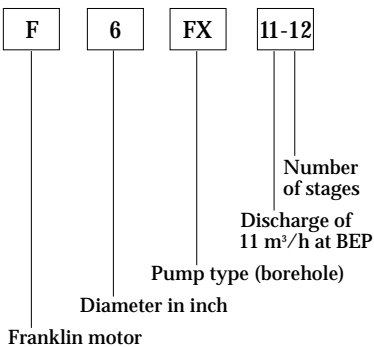
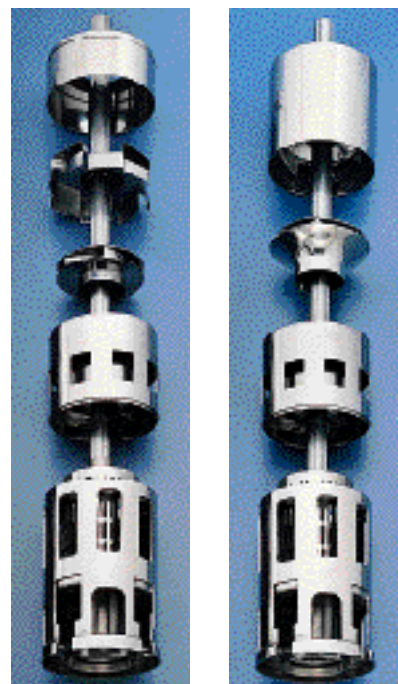
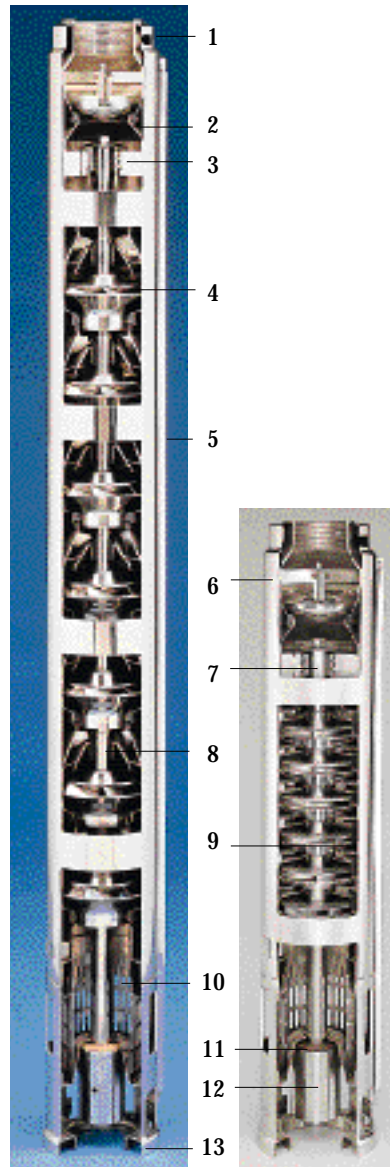
GENERAL VIEW OF THE PERFORMANCE CURVES AT 50 Hz



PUMP COMPONENTS

- 1 Grub screw preventing pipes from screwing off
- 2 Check valve
- 3 Upper bearing designed to optimize lubrication
- 4 Semi-axial impeller
- 5 Cable guard
- 6 Pump's casing & discharge connection
- 7 Upper bearing designed to optimize lubrication

- 8 4-spline shaft, transfers the drive directly without keys
- 9 Radial impeller
- 10 Suction grid
- 11 Thrust washer to protect the hydraulic elements from upthrust at the start
- 12 Splined coupling suitable for coupling with NEMA standard motors
- 13 Lower bracket in pressed stainless steel, ensuring perfect alignment

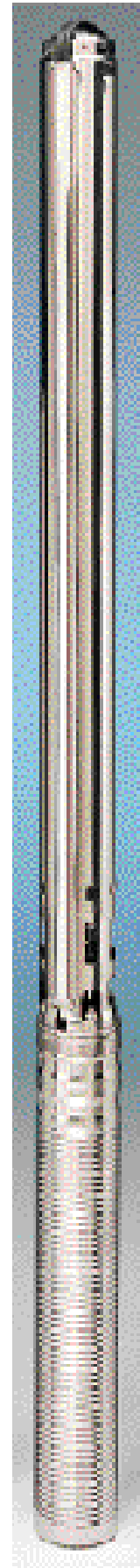


Two flow versions. The pumps are subdivided into two groups (A) radial flow for high discharge heads, up to 410 m, and low flow rates, up to 30 m³/h; (B) semi-axial flow for medium flow heads and rates, up to 270 m and 78 m³/h.

RADIAL PUMPS PERFORMANCE AT 2850 rpm

Pump type	Motor rating kW	Rated current 400 V A	m ³ /h ³ l/min ⁵⁰	6	9	12	15	18	21	24	27	30	Length mm	Weight kg (without cable)
				100	150	200	250	300	350	400	450	500		
Total head (m)														
F6FX4 11-6	3.0	7.2	66	63	60	54	44	28					1194	34.8
F6FX4 11-8	3.7	8.9	88	85	80	72	59	37					1349	40.5
F6FX4 11-12	5.5	13.2	131	128	120	109	88	56					1618	50
F6FX4 11-16	7.5	17.8	17.5	170	160	146	117	70					1845	58
F6FX 11-6	4.0	9.5	66	63	60	54	44	28					1267	50.5
F6FX 11-8	4.0	9.5	88	85	80	72	59	37					1346	52.5
F6FX 11-12	5.5	12.8	131	128	120	109	88	56					1534	59.7
F6FX 11-16	7.5	16.3	175	170	160	146	117	73					1722	66.5
F6FX 11-21	11.0	24.0	230	223	211	191	153	97					1983	78.8
F6FX 11-24	11.0	24.0	262	255	241	219	175	110					2099	81.8
F6FX 11-28	15.0	31.0	306	298	281	255	204	130					2320	92.3
F6FX 11-31	15.0	32.0	339	329	311	282	226	142					2438	95.3
F6FX 11-34	18.5	40.0	371	361	342	310	249	157					2619	104.7
F6FX 11-37	18.5	40.0	404	393	372	337	270	171					2737	107.7
F6FX4 15-4	3.0	7.2		47	45	43	39	32	21				1115	32.8
F6FX4 15-6	3.7	8.9		70	68	65	59	49	32				1270	38.5
F6FX4 15-9	5.5	13.2		104	102	98	89	73	48				1502	47
F6FX4 15-12	7.5	17.8		140	135	129	119	99	73				1689	53
F6FX 15-4	4.0	7.6		47	45	43	39	32	21				1189	48.5
F6FX 15-6	4.0	9.5		70	68	65	59	49	32				1267	50.5
F6FX 15-9	5.5	12.8		104	102	98	89	73	48				1418	56.7
F6FX 15-12	7.5	16.3		140	135	129	119	99	64				1566	61.5
F6FX 15-15	11.0	24.0		175	170	161	149	123	80				1749	72.8
F6FX 15-18	11.0	24.0		210	203	195	178	148	97				1865	75.8
F6FX 15-21	15.0	32.0		245	238	228	208	171	113				2048	85.3
F6FX 15-24	15.0	32.0		280	271	259	238	197	130				2164	88.3
F6FX 15-28	18.5	40.0		326	317	302	277	230	150				2385	98.7
F6FX 15-31	18.5	40.0		361	350	335	307	254	167				2503	101.7
F6FX 15-34	22.0	47.0		396	384	368	336	279	183				2684	110.8
F6FX 15-37	22.0	47.0		431	419	400	366	302	200				2802	113.8
F6FX4 21-3	3.0	7.2				34	32	30	28	23	20	13	1094	35.5
F6FX4 21-4	3.7	8.9				47	44	41	37	32	26	19	1177	39.5
F6FX4 21-6	5.5	13.2				69	65	61	55	48	38	28	1418	47
F6FX4 21-9	7.5	17.8				103	99	92	83	72	58	42	1621	50.5
F6FX 21-3	4.0	9.5				34	32	30	28	23	20	13	1167	47.5
F6FX 21-4	4.0	9.5				47	44	41	37	32	26	19	1211	48.5
F6FX 21-6	5.5	12.8				69	65	61	55	48	38	28	1334	54.2
F6FX 21-9	7.5	16.3				103	99	92	83	72	58	42	1500	59
F6FX 21-13	11.0	24.0				149	142	132	120	103	83	60	1743	71.3
F6FX 21-17	15.0	32.0				196	187	173	157	136	110	80	1984	82.3
F6FX 21-22	18.5	40.0				252	241	224	203	176	141	102	2274	94.2
F6FX 21-26	22.0	47.0				299	285	266	240	208	168	120	2517	105
F6FX 21-30	30.0	64.0				345	328	306	277	240	193	140	2825	122
F6FX 21-34	30.0	64.0				391	372	347	313	271	220	159	3003	126

All series FX 11, FX 15 and FX 21 pumps have a discharge connection with major diameter G 2 1/2 " The maximum outer diameter is 147 mm.



SEMI-AXIAL PUMPS PERFORMANCE AT 2850 rpm

Pump type	Motor rating kW	Rated current 400 V A	Q m ³ /h 6												Length mm	Weight kg (without cable)						
			l/min 100 400 V	12 200	18 300	24 400	30 500	36 600	42 700	48 800	54 900	60 1000	68 1300	Total head (m)								
F6FX4 30-2	3.0	7.2	29	27	23	21	20	16	6								1292	33.5				
F6FX4 30-3	3.7	8.9	43	40	36	33	29	24	9								1467	38.5				
F6FX4 30-4	5.5	13.2	58	53	48	44	39	31	12								1668	47.5				
F6FX4 30-6	7.5	17.8	87	79	72	66	58	48	30								1919	55.5				
F6FX 30-2	4.0	9.5	29	27	23	21	20	16	10								1284	49				
F6FX 30-3	4.0	9.5	43	40	36	33	29	24	15								1396	51.5				
FF6FX 30-4	5.5	12.8	58	53	48	44	39	31	20								1541	57				
F6FX 30-6	7.5	16.3	87	79	72	66	58	48	30								1797	64				
F6FX 30-9	11.0	24.0	130	118	108	99	87	71	43								2198	80				
F6FX 30-12	15.0	32.0	174	158	144	132	117	95	59								2599	94				
F6FX 30-15	18.5	40.0	217	198	180	165	146	119	73								3001	108				
F6FX 30-18	22.0	47.0	260	237	216	198	174	142	88								3402	121				
F6FX 30-21	30.0	64.0	304	276	262	230	204	167	102								3868	142				
F6FX 30-24	30.0	64.0	348	315	288	263	233	190	118								4202	149				
F6FX4 42-2	3.7	5				23	21	19	18	15	12	9					1249	36				
F6FX4 42-3	5.5	7.5				34	31	29	26	22	18	13					1513	45				
F6FX4 42-5	7.5	--				57	53	49	43	38	30	23					1807	53				
F6FX 42-2	4.0	9.5				23	21	19	18	15	12	9					1284	49				
F6FX 42-3	5.5	12.8				34	31	29	26	22	18	13					1429	54.7				
F6FX 42-5	7.5	16.3				57	53	49	43	38	30	23					1685	61.5				
F6FX 42-7	11.0	24.0				80	74	68	60	52	43	32					1974	73.8				
F6FX 42-9	15.0	32.0				103	96	87	78	67	55	41					2263	86.3				
F6FX 42-10	15.0	32.0				114	106	97	86	75	60	47					2375	88.8				
F6FX 42-12	18.5	40.0				137	127	116	103	90	74	55					2665	100				
F6FX 42-15	22.0	47.0				171	159	145	130	111	92	70					3066	114				
F6FX 42-17	30.0	64.0				194	180	164	148	128	103	79					3420	132				
F6FX 42-19	30.0	64.0				217	201	184	165	142	117	89					3644	137				
F6FX4 58-2	3.7	8.9						20	18	17	16	15	9				1249	36				
F6FX4 58-3	5.5	13.2						30	28	26	25	13	14				1513	45				
F6FX4 58-4	7.5	17.8						40	37	35	33	30	19				1695	50.5				
F6FX 58-2	4.0	9.5						20	18	17	16	15	9				1284	49				
F6FX 58-3	5.5	12.8						30	28	26	25	23	14				1429	54.7				
F6FX 58-4	7.5	16.3						40	37	35	33	30	19				1573	59				
F6FX 58-6	11.0	24.0						60	56	52	49	46	20				1862	71.3				
F6FX 58-8	15.0	32.0						80	74	70	58	61	37				2151	84				
F6FX 58-10	18.5	40.0						100	93	87	81	76	47				2441	96				
F6FX 58-12	22.0	47.0						120	111	104	99	91	57				2730	107				
F6FX 58-14	30.0	64.0						140	130	122	110	106	66				3084	124				
6FFX 58-16	30.0	64.0						160	148	139	141	121	76				3308	129				

All series F6FX 30, F6FX 42, and F6FX 58 pumps have a discharge connection with major diameter G3".
The maximum outer diameter is 147 mm.

