



# F4FX SUBMERSIBLE PUMPS FOR DEEP WELLS

50 Hz, 4"

**ITT Flygt**

An **ITT Industries** company

# F4FX SUBMERSIBLE PUMPS FOR DEEP WELLS

Almost maintenance-free and with a remarkable resistance to wear and abrasion, the 4" borehole pump, F4FX series, are designed for applications like:

- Municipal and industrial waterwork
- Irrigation
- Automatic pressure control
- Various industrial applications.

## PUMP COMPONENTS

- 1 Upper head AISI 303, precision casting
- 2 Valve plate AISI 304
- 3 Valve seat AISI 304
- 4 Valve packing, nitrile rubber, FDAapproved
- 5 Valve check ring AISI 302
- 6 Upper bracket, glass-filled polycarbonate, FDAapproved
- 7 Upper bearing polyurethane FDAapproved
- 8 Snap ring AISI 301
- 9 Diffuser, glass-filled polycarbonate, FDA approved

## Features

- Up to 340 m head.
- Up to 21 m<sup>3</sup>/h flow rate.
- Max quantity of suspended sand in water 0.1 kg/m<sup>3</sup>.
- Max overall dimensions (cable cover included) 98.5 mm.

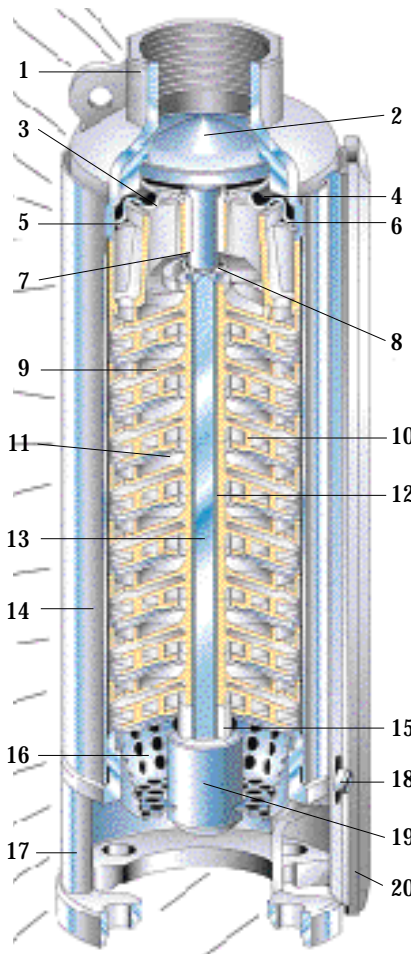
## Construction, pump

- Impellers and diffusers of polycarbonate, reinforced with fiberglass, protected on the edge by wear rings in stainless steel
- Injection moulded thermoplastic process allows optimum thickness and shape for best hydraulic efficiency
- External casing threaded and screwed on the stator.

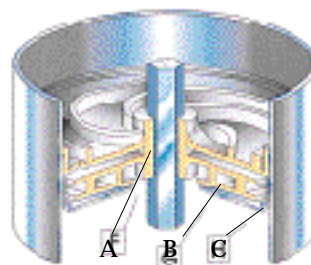
- Easy access for simple maintenance: the stator e g can be removed from the external shell for rewind.

## 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
- 4" Nema flange
- IP 58 protection
- Max numbers of starts 20 per hour
- Max cooling flow 8 cm/s
- Insulation Class B
- Power cable 1 m long



- 10 Impeller, glass-filled polycarbonate, FDAapproved
- 11 Diffuser housing AISI 304
- 12 SHIM 0.25 mm AISI 304
- 13 Shaft AISI 304
- 14 Outer casing AISI 304
- 15 Spacer AISI 304, sintered
- 16 Filter AISI 304
- 17 Lower adapter AISI 303, precision casting
- 18 Cable cover screw AISI 304
- 19 Coupling AISI 304, sintered
- 20 Outside cover



Avoiding sand abrasion. With the floating impeller (A) the pressure keeps the face clearance ring (B) pressed against the stainless steel enclosure (C). Floating upwards, the impeller lets abrasive particles through without resistance, without causing wear.

## LOW DISCHARGE PUMPS

Pump type	No. of stages	Rating kW	Total Head (m)														Rated current 230 V	Rated current 400 V	Pump Length mm 230 V	Pump Length mm 400 V	Pump Weight kg 230 V	Pump Weight kg 400 V	
			1/min 0.3	5 0.6	10 0.9	15 1.2	20 1.5	25 1.8	30 2.4	40 3	50 3.6	60 4.8	80 5.4	110 6.6	133 8								
F4FX 1-10	10	0.25	55	52	46	38	26											2.8		692		11.1	
F4FX 1-15	15	0.37	83	78	70	57	40											3.5	1.25	792	772	12.7	11.8
F4FX 1-22	22	0.55	121	114	102	84	58											5	1.65	933	903	15.1	13.9
F4FX 1-30	30	0.75	165	155	139	114	80											6.5	2.2	1120	1090	18.2	16.7
F4FX 1-44	44	1.1	242	227	204	167	117											9.6	3.1	1383	1343	20.6	20.6
F4FX 1-60	60	1.5	330	310	278	228	159											11.8	4	1689	1383	28.2	25.2
F4FX 2-5	5	0.25	33				30	28	26	20	13							2.8		619		10.2	
F4FX 2-7	7	0.37	47				42	40	36	29	19							3.5	1.25	674	654	11.6	10.7
F4FX 2-10	10	0.55	67				60	56	52	41	27							5	1.65	756	726	13.4	12.2
F4FX 2-14	14	0.75	93				83	79	73	57	37							6.5	2.2	856	826	15.5	14.1
F4FX 2-20	20	1.1	133				119	113	104	82	53							9.6	3.1	1001	961	18.5	16.5
F4FX 2-28	28	1.5	187				167	158	146	115	74							11.8	4	1230	1170	23.1	20.1
F4FX 2-40	40	2.2	267				238	226	208	164	106							15.2	5.3	1440	1440	25.8	25.4
F4FX 2-52	52	3.0	347				309	294	271	213	138							7			1855		36.8
F4FX 4-4	4	0.37	27						24	23	21	19	13	9				3.5	1.25	638	618	11.1	10.2
F4FX 4-7	7	0.55	47						42	40	37	33	22	15				5	1.65	733	703	13	11.8
F4FX 4-9	9	0.75	60						54	51	47	42	28	19				6.5	2.2	806	776	14.9	13.4
F4FX 4-14	14	1.1	94						84	80	74	66	44	30				9.6	3.1	954	914	17.8	15.7
F4FX 4-19	19	1.5	127						114	108	100	89	60	40				11.8	4	1121	1061	21.7	18.6
F4FX 4-27	27	2.2	181						162	154	142	127	85	57				15.2	5.3	1324	1324	23.8	2.4
F4FX 4-35	35	3.0	228						204	194	179	160	107	72				7			1681		34.2
F4FX 4-48	48	4.0	322						288	274	252	226	151	102				9			2053		40.4
F4FX 6-5	5	0.55	30								26	25	22	21	17	12		5	1.65	764	734	13.4	12.2
F4FX 6-7	7	0.75	43								36	35	31	29	24	16		6.5	2.2	856	826	15.5	14.1
F4FX 6-10	10	1.1	61								52	49	44	41	34	23		9.6	3.1	989	949	18.3	16.3
F4FX 6-14	14	1.5	85								72	69	62	58	48	32		11.8	4	1211	1151	22.8	19.8
F4FX 6-21	21	2.2	128								108	104	93	87	71	48		15.2	5.3	1428	1428	25.2	24.8
F4FX 6-29	29	3.0	317								268	257	230	215	177	120		-	7	-	1874	-	36.5
F4FX 6-38	38	4.0	232								196	188	168	157	129	87		-	9	-	2223	-	42.4
F4FX 6-52	52	5.5	317								268	257	230	215	177	120		-	12.8	-	2657	-	47.5

## HIGH DISCHARGE PUMPS

Pump type	Number of stages	Rating kW	Total Head (m)														Rated current 230 V	Rated current 400 V	Pump Length mm 230 V	Pump Length mm 400 V	Pump Weight kg 230 V	Pump Weight kg 400 V	
			1/min 0	60 3.6	80 4.8	100 6	120 7.2	140 8.4	160 9.6	200 12	250 15	300 18	367 22	400 24									
F4FX 8-4	4	0.75	26	24	23	22	20	18	16									6.5	2.2	765	735	14.5	13.1
F4FX 8-6	6	1.1	39	36	34	33	31	28	24									9.6	3.1	867	827	16.9	14.9
F4FX 8-8	8	1.5	52	48	46	44	41	37	32									11.8	4	989	929	20.5	17.4
F4FX 8-13	13	2.2	84	77	74	71	67	60	51									15.2	5.3	1144	1144	21.8	21.8
F4FX 8-17	17	3.0	110	101	97	93	87	78	67									7			1512		32.8
F4FX 8-23	23	4.0	149	137	132	126	118	106	91									9			1760		37.6
F4FX 8-32	32	5.5	207	191	183	175	164	147	127									12.8			2039		40.9
F4FX 8-43	43	7.5	279	256	246	235	220	198	170									17.2			2312		46.8
F4FX 12-10	10	2.2	61				53	50	47	43	36	24						15.2	5.3	1298	1299	23.6	23.2
F4FX 12-14	14	3.0	86				74	70	66	61	50	34						7			1712		34.5
F4FX 12-19	19	4.0	116				100	95	89	83	68	46						9			2042		40.1
F4FX 12-26	26	5.5	159				137	130	122	113	94	63						12.8			2398		44.4
F4FX 12-35	35	7.5	215				184	175	164	152	126	85						17.2			2797		51.2
F4FX 16-8	8	2.2	47						37	36	32	27	23	16				15.2	5.3	1247	1247	23.1	22.7
F4FX 16-11	11	3.0	65						51	49	44	38	31	22				7			1657		34
F4FX 16-15	15	4.0	89						70	67	60	51	43	30				9			1998		39.7
F4FX 16-20	20	5.5	118						94	89	80	69	57	41				12.8			2368		43.9
F4FX 16-28	28	7.5	165						131	125	112	96	80	57				17.9			2844		51.5
F4FX 20-8	8	2.2								36.5	34	30	26	21	16			15.2	5.3	1502	1502	21.2	20.8
F4FX 20-11	11	3.0								50	46	41	35	29	22			7			1930		31.2
F4FX 20-15	15	4.0								69	63	56	48	40	30			9			2296		35.5
F4FX 20-20	20	5.5								92	84	74	64	53	42			12.8			2666		38.2

Weights are without supply cable.

## OPERATING FEATURES AT 50 Hz

- F Single phase (if applicable)
- 4 Number of stages
- EX Discharge at BEP (m<sup>3</sup>/h)
- 4-27 Pump type (borehole)
- M Diameter in inch
- Franklin motor

