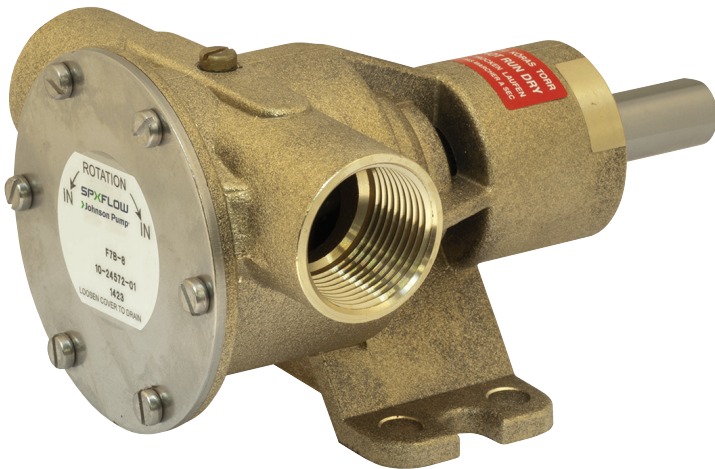


Flexible Impeller Pumps bronze, pedestal mounted

F35B-8, F4B-8, F5B-8, F7B-8, F8B-8

ORIGINAL INSTRUCTIONS/TRANSLATION OF ORIGINAL INSTRUCTIONS
READ AND UNDERSTAND THIS MANUAL PRIOR TO OPERATING OR SERVICING THIS PRODUCT



Self-priming, flexible impeller pump of bronze, pedestal mounted

Typical applications

- *Marine*
Engine cooling, bilge pump, deck-wash pump, wash-down, emptying holding tanks.
- *Industry*
Liquid circulation and transfer, emptying tanks and sump drainage, handling of solids in suspension.

Design features

Body:	Bronze
Impeller:	Neoprene, EPDM or nitrile
Shaft:	Stainless steel
	The shaft is mounted with two permanently lubricated double ball bearings
Seal:	Lip seal alt. mechanical seal
Cam:	Full or reduced
Connection:	See "Type designation", page 11

Pressure and capacity data

See page 45-47

Service instructions

See parts list page 12-16.

Disassembly

1. Remove the endcover and the o-ring.
2. Pull out the impeller using two screw drivers or other suitable implements.
3. Remove the cam and wash away any traces of sealing compound on the cam and inside the pump body. Remove the wear plate.
4. Remove the lip seal alt mechanical seal.

5. Remove the washer (pos 9 for F35B-8 - F7B-8 and pos 10 for F8B-8) by inserting a screw driver through the slot and lever out the washer.
6. Remove the retaining ring for the bearing assembly.
7. Remove the shaft with ball bearings by pressing on the shaft end from the impeller side.
8. Remove the ball bearings/retaining ring and the spacer. On F35B-8, F4B-8 and F8B-8 do not press the ball bearings over the sealing surface.
9. Remove the O-ring from the shaft.

Assembly

1. Mount the ball bearings/retaining ring and the spacer on the shaft. On F35B-8, F4B-8 and F8B-8 do not press the ball bearings over the sealing surface.
2. Mount the O-ring on the shaft (not on F8B-8)
3. Press the shaft with ball bearings into the body and fit the retaining ring and washer (pos 9 for F35B-8 - F7B-8 and pos 10 for F8B-8). Mount the o-ring pos 21 (only on the F8B-8).
4. Mount the lip seal (spring towards the impeller) alt mechanical seal. Mount the wear plate (pos 18).
5. Fasten the cam, but before doing so apply sealing compound to cam and screw in order to prevent leakage.
6. Lubricate the impeller with JP Impeller Lubricant and fit it with a rotating movement in the intended direction of rotation.
7. Fit the O-ring before mounting the endcover.

Waste handling material recycling

At the products end of life, please dispose of the product according to applicable law. Where applicable, please disassemble the product and recycle the parts material.

Type designation

F35B-8 Pump type	Part No. Lipseal	Part No. Mechanical seal	Impeller	Cam	Body	Connection
F35B-8	10-24569-13	10-24569-01	Neopren	1	01-35881-1	ISO7/1-Rp3/8
F35B-802	10-24569-15	10-24569-03	Neopren	1/2	01-35881-1	ISO7/1-Rp3/8
F35B-8007	10-24569-52	10-24569-51	Neopren	1	01-35881-2	3/8-18NPTF
F35B-8027	10-24569-21	10-24569-09	Neopren	1/2	01-35881-2	3/8-

18NPTF

F4B-8 Pump type	Part No. Lipseal	Part No. Mechanical seal	Impeller	Cam	Body	Connection
F4B-8	10-24570-13	10-24570-01	Neopren	1	01-35882-1	ISO7/1-Rp3/8
F4B-89	10-24570-14	10-24570-02	Nitril	1	01-35882-1	ISO7/1-Rp3/8
F4B-8007	10-24570-19	10-24570-07	Neopren	1	01-35882-2	3/8-18NPTF
F4B-8007	10-24570-52	10-24570-51	Neopren	1	01-35882-2	3/8-

18NPTF

F5B-8 Pump type	Part No. Lipseal	Part No. Mechanical seal	Impeller	Cam	Body	Connection
F5B-8	10-24571-13	10-24571-01	Neopren	1	01-24573-1	ISO7/1-Rp3/4
F5B-89	10-24571-14	10-24571-02	Nitril	1	01-24573-1	ISO7/1-Rp3/4
F5B-802	10-24571-15	10-24571-03	Neopren	1/2	01-24573-1	ISO7/1-Rp3/4
F5B-8007	10-24571-52	10-24571-51	Neopren	1	01-24573-2	3/4-

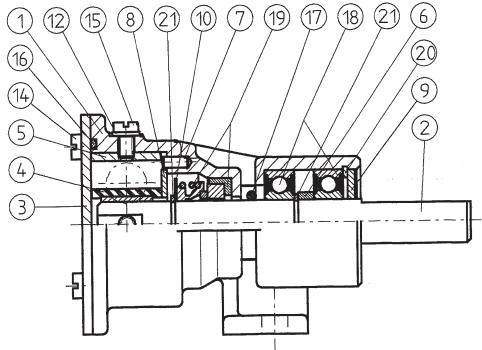
14NPTF

F7B-8 Pump type	Part No. Lipseal	Part No. Mechanical seal	Impeller	Cam	Body	Connection
F7B-8	10-24572-13	10-24572-01	EPDM	1	01-24574-3	ISO7/1-Rp1
F7B-8007	10-24572-52	10-24572-51	EPDM	1	01-24574-4	1-11 1/2NPTF

F8B-8 Pump type	Part No. Lipseal	Part No. Mechanical seal	Impeller	Cam	Body	Connection
F8B-8		10-13021-1	Neopren	1	01-13164-1	ISO7/1-Rp11/2
F8B-8007		10-13021-9	Neopren	1	01-13164-2	11/2-111/2NPTF
F8B-8007		10-13021-95	Neopren	1	01-13164-3	11/4-111/2NPTF
F8B-8007		10-13021-96	Neopren	1	01-13164-4	11/2-

111/2NPTF

Parts list



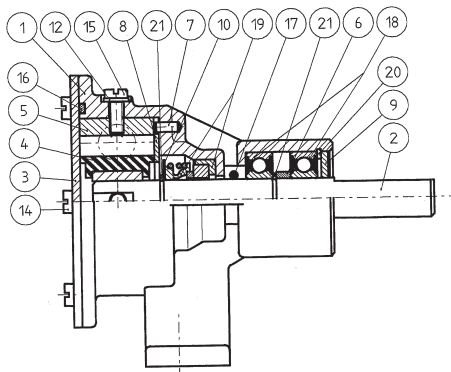
F35B-8

Pos	Nos	Description	10-24569-13	10-24569-15	10-24569-52	10-24569-21	Lipseal
			10-24569-01	10-24569-03	10-24569-51	10-24569-09	Mech. seal
1	1	Body	01-35881-1	01-35881-1	01-35881-2	01-35881-2	
2	1	Shaft	01-46735-1	01-46735-1	01-46740	01-46735-1	
3	1	Endcover	01-46739-2	01-46739-2	01-46739-2	01-46739-2	
4	1	Impeller	09-808B	09-808B	09-808B	09-808B	
5	1	Cam	01-42910	01-42415	01-42910	01-42415	
6	1	Spacer	01-45542	01-45542	01-45542	01-45542	
7	1	Pin	01-42400	01-42400	01-42400	01-42400	
8	1	Wear plate	01-46676	01-46676	01-46676	01-46676	
9	1	Washer	01-45049	01-45049	01-45049	01-45049	
10	1	Washer	01-45659	01-45659	01-45659	01-45659	
12	1	Washer	01-46790-01	01-46790-01	01-46790-01	01-46790-01	
14	4	Screw	0.0279.300	0.0279.300	0.0279.300	0.0279.300	
15	1	Screw	01-46974-03	01-46794-10	01-46794-03	01-46794-10	
16	1	O-ring	0.2173.440	0.2173.440	0.2173.440	0.2173.440	
17	1	O-ring	0.2173.432	0.2173.432	0.2173.432	0.2173.432	
18	2	Ball bearing	0.3431.748	0.3431.748	0.3431.748	0.3431.748	
19	1	Lipseal	0.2233.010	0.2233.010	0.2233.010	0.2233.010	
19	1	Mech. seal	0.2247.021	0.2247.021	0.2247.021	0.2247.021	
20	1	Retainingring	0.0371.028	0.0371.028	0.0371.028	0.0371.028	
21	1	Retainingring	0.0370.012	0.0370.012	0.0370.012	0.0370.012	
22	1	Retainingring	0.0370.512	0.0370.512	0.0370.512	0.0370.512	

Spareparts kit:

4,14,16&19	09-45589	09-45589	09-45589	09-45589	Lipseal
4,14,16&19	09-46840	09-46840	09-46840	09-46840	Mech. seal

Parts list



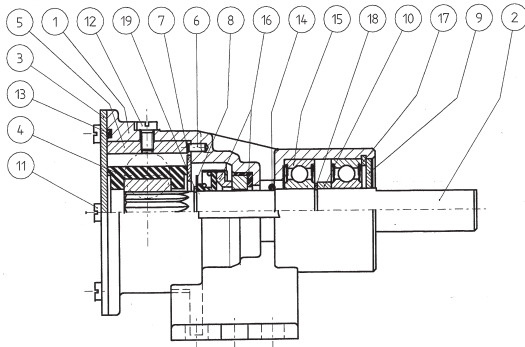
F4B-8

Pos	Nos	Description	10-24570-13	10-24570-14	10-24570-19	10-24570-52	Lipseal
			10-24570-01	10-24570-02	10-24570-07	10-24570-51	Mech. seal
1	1	Body	01-35882-1	01-35882-1	01-35882-2	01-35882-2	
2	1	Shaft	01-46735-1	01-46735-1	01-46735-1	01-46740	
3	1	Endcover	01-46007-2	01-46007-2	01-46007-2	01-46007-2	
4	1	Impeller	09-810B	09-810B-9	09-810B	09-810B	
5	1	Cam	01-42389	01-42389	01-42389	01-42389	
6	1	Spacer	01-45542	01-45542	01-45542	01-45542	
7	1	Pin	01-42400	01-42400	01-42400	01-42400	
8	1	Wearplate	01-46737-2	01-46737-2	01-46737-2	01-46737-2	
9	1	Washer	01-45049	01-45049	01-45049	01-45049	
10	1	Washer	01-45659	01-45659	01-45659	01-45659	
12	1	Washer	01-46790-01	01-46790-01	01-46790-01	01-46790-01	
14	6	Screw	0.0279.300	0.0279.300	0.0279.300	0.0279.300	
15	1	Screw	01-46794-04	01-46794-04	01-46794-04	01-46794-04	
16	1	O-ring	0.2173.476	0.2173.476	0.2173.476	0.2173.476	
17	1	O-ring	0.2173.432	0.2173.432	0.2173.432	0.2173.432	
18	2	Ball bearing	0.3431.748	0.3431.748	0.3431.748	0.3431.748	
19	1	Lipseal	0.2233.010	0.2233.010	0.2233.010	0.2233.010	
19	1	Mech. seal	0.2247.021	0.2247.021	0.2247.021	0.2247.021	
20	1	Retaining ring	0.0371.028	0.0371.028	0.0371.028	0.0371.028	
21	1	Retaining ring	0.0370.012	0.0370.012	0.0370.012	0.0370.012	
22	1	Retaining ring	0.0370.512	0.0370.512	0.0370.512	0.0370.512	

Spareparts kit:

4,14,16 & 19	09-45587	09-45588	09-45587	09-45587	Lipseal
4,14,16 & 19	09-46841	09-46842	09-46841	09-46841	Mech. seal

Parts list



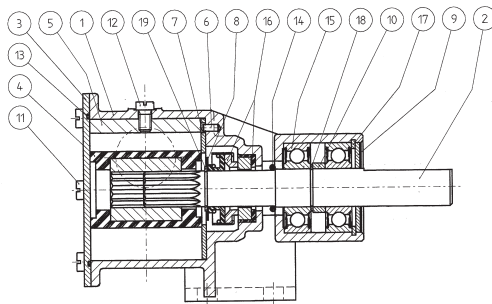
F5B-8

Pos	Nos	Description	10-24571-13	10-24571-14	10-24571-15	10-24571-52	Lipseal
			10-24571-01	10-24571-02	10-24571-03	10-24571-51	Mech. seal
1	1	Body	01-24573-1	01-24573-1	01-24573-1	01-24573-2	
2	1	Shaft	01-46744	01-46744	01-46744	01-46746	
3	1	Endcover	01-46747-2	01-46747-2	01-46747-2	01-46747-2	
4	1	Impeller	09-1027B	09-1027B-9	09-1027B	09-1027B	
5	1	Cam	01-42397	01-42397	01-45014	01-42397	
6	1	Pin	01-42400	01-42400	01-42400	01-42400	
7	1	Wearplate	01-42399-2	01-42399-2	01-42399-2	01-42399-2	
8	1	Washer	01-45680	01-45680	01-45680	01-45680	
9	1	Washer	01-45047	01-45047	01-45047	01-45047	
10	1	Spacer	01-46009	01-46009	01-46009	01-46009	
11	6	Screw	0.0279.300	0.0279.300	0.0279.300	0.0279.300	
12	1	Screw	01-46794-05	01-46794-05	0.0279.032	01-46794-05	
13	1	O-ring	0.2173.475	0.2173.475	0.2173.475	0.2173.475	
14	1	O-ring	0.2173.402	0.2173.402	0.2173.402	0.2173.402	
15	2	Ball bearing	0.3431.742	0.3431.742	0.3431.742	0.3431.742	
16	1	Lipseal	0.2233.012	0.2233.012	0.2233.012	0.2233.012	
16	1	Mech. seal	0.2247.022	0.2247.022	0.2247.022	0.2247.022	
17	1	Retaining ring	0.0371.040	0.0371.040	0.0371.040	0.0371.040	
18	1	Retaining ring	0.0370.017	0.0370.017	0.0370.017	0.0370.017	
19	1	Retaining ring	0.0370.516	0.0370.516	0.0370.516	0.0370.516	

Spareparts kit:

4,11,13 & 16	09-45585	09-45586	09-45585	09-45585	Lipseal
4,11,13 & 16	09-46843	09-46844	09-46843	09-46843	Mech. seal

Parts list



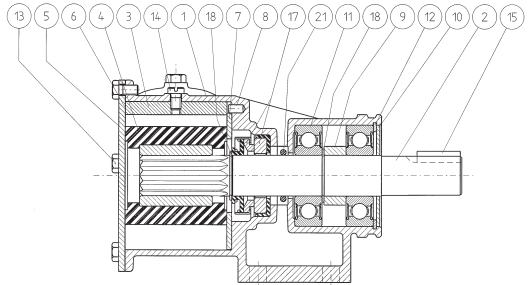
F7B-8

Pos	Nos	Benämning	10-24572-13	10-24572-52	Lipseal
			10-24572-01	10-24572-51	Mech. seal
1	1	Body	01-24574-3	01-24574-4	
2	1	Shaft	01-46744	01-46746	
3	1	Endcover	01-46648-3	01-46648-3	
4	1	Impeller	09-1028BT-1	09-1028BT-1	
5	1	Cam	01-42679	01-42679	
6	1	Pin	01-42400	01-42400	
7	1	Wearplate	01-46798-2	01-46798-2	
8	1	Washer	01-45680	01-45680	
9	1	Washer	01-45047	01-45047	
10	1	Spacer	01-46009	01-46009	
11	6	Screw	0.0279.301	0.0279.301	
12	1	Screw	01-46794-01	01-46794-01	
13	1	O-ring	0.2172.012	0.2172.012	
14	1	O-ring	0.2173.402	0.2173.402	
15	2	Ball bearing	0.3431.742	0.3431.742	
16	1	Lipseal	0.2233.012	0.2233.012	
16	1	Mech. seal	0.2247.022	0.2247.022	
17	1	Retaining ring	0.0371.040	0.0371.040	
18	1	Retaining ring	0.0370.017	0.0370.017	
19	1	Retaining ring	0.0370.516	0.0370.516	

Spareparts kit:

4,11,13 & 16	09-47426	09-47426	Lipseal
4,11,13 & 16	09-47427	09-47427	Mech. seal

Parts list



8007

			F8B-8	F8B-8007	F8B-8007	F8B-
Pos	Nos	Description	10-13021-1	10-13021-9	10-13021-95	10-13021-96
1	1	Body	01-13164-1	01-13164-2	01-13164-3	01-13164-42
1		Shaft 01-35132	01-35132	01-35746	01-35746	
3	1	Cam	01-42680	01-42680	01-42680	01-42680
4	1	Impeller	09-819B	09-819B	09-819B	09-819B
5	1	Endcover	01-42422-1	01-42422-1	01-42422-1	01-42422-1
6	1	Gasket	01-42424	01-42424	01-42424	01-42424
7	1	Wear plate	01-42423	01-42423	01-42423	01-42423
8	1	Pin	01-42426	01-42426	01-42426	01-42426
9	1	Spacer	01-45374	01-45374	01-45374	01-45374
10	1	Washer	01-45380	01-45380	01-45380	01-45380
11	2	Ball bearing	0.3431.780	0.3431.780	0.3431.780	0.3431.780
12	1	Retaining ring	0.0371.062	0.0371.062	0.0371.062	0.0371.062
13	5	Screw	0.0138.134	0.0138.134	0.0138.134	0.0138.134
14	1	Screw	01-46794-02	01-46794-02	01-46794-02	01-46794-
15	1	Key	0.0502.231	0.0502.231	-	-
17	1	Mech. seal	0.2247.008	0.2247.008	0.2247.008	0.2247.008
18	2	Lipseal	0.0370.525	0.0370.525	0.0370.525	0.0370.525
21	1	O-ring	0.2172.573	0.2172.573	0.2172.573	0.2172.573
Spareparts kit:						
	4,6,13,17 & 18		09-45575	09-45575	09-45575	09-45575

Pressure and capacity data

(based on water at 20°C/68°F, full cam and impeller neoprene)

			700 rpm			900 rpm			1,400 rpm			1,750 rpm			2,000 rpm			2,500 rpm		
Bar	kPa	ft	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM
0.3	30	10.1	0.06	5.2	1.4	0.09	6.8	1.8	0.13	11.2	3.0	0.16	14.0	3.7	0.18	16.0	4.2	0.18	20.5	5.4
0.6	60	20.1	0.09	4.6	1.2	0.09	6.2	1.6	0.13	10.6	2.8	0.16	13.7	3.6	0.18	15.8	4.1	0.18	19.6	5.2
1.0	100	33.5	0.09	4.0	1.1	0.09	5.6	1.5	0.18	9.2	2.4	0.18	11.8	3.1	0.18	13.6	3.6	0.18	17.0	4.5

Reduced cam - 40-50% lower capacity.

F4B-8

			700 rpm			900 rpm			1,400 rpm			1,750 rpm			2,000 rpm			2,500 rpm		
Bar	kPa	ft	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM
0.3	30	10.1	0.06	12.0	3.2	0.09	15.0	4.0	0.13	23.0	6.0	0.17	27.0	7.1	0.18	30.5	8.1	0.18	34.5	9.1
0.6	60	20.1	0.09	11.0	2.9	0.09	14.0	3.7	0.13	21.0	5.5	0.17	25.0	6.6	0.18	28.0	7.4	0.18	33.0	8.7
1.0	100	33.5	0.09	9.0	2.4	0.09	11.0	2.9	0.18	18.0	4.8	0.18	22.0	5.8	0.18	25.0	6.6	0.18	29.5	7.8
1.5	150	50.3	0.09	4.5	1.2	0.09	7.0	1.8	0.18	13.5	3.6	0.18	17.0	4.5	0.18	20.0	5.3	0.24	25.0	6.6

Pressure and capacity data

F5B-8

			700 rpm			900 rpm			1,400 rpm			1,750 rpm			2,000 rpm		
Bar	kPa	ft	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM
0.3	30	10.1	0.13	16.0	4.2	0.18	21.0	5.5	0.37	33.0	8.7	0.37	41.0	10.8	0.37	46.0	12.2
0.6	60	20.1	0.13	15.0	4.0	0.18	20.0	5.3	0.37	32.0	8.5	0.37	39.5	10.4	0.37	45.0	11.9
1.0	100	33.5	0.13	14.0	3.7	0.18	19.0	5.0	0.37	30.0	7.9	0.37	37.0	9.8	0.37	42.0	11.1
1.5	150	50.3	0.13	13.0	3.4	0.18	17.0	4.5	0.37	27.0	7.1	0.37	33.5	8.9	0.37	38.0	10.0
2.0	200	67.1	-	-	-	-	-	-	0.37	22.0	5.8	0.37	28.5	7.5	0.37	33.0	8.7

F7B-8

			700 rpm			900 rpm			1,400 rpm			1,750 rpm			2,000 rpm		
Bar	kPa	ft	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM
0.3	30	10.1	0.37	36.0	9.5	0.37	46.0	12.2	0.75	74.0	19.6	0.75	98.0	25.9	0.75	107.0	28.3
0.6	60	20.1	0.37	34.0	9.0	0.37	44.0	11.6	0.75	72.0	19.0	0.75	96.0	25.4	0.75	104.0	27.5
1.0	100	33.5	0.37	29.0	7.7	0.37	40.0	10.6	0.75	67.0	17.7	0.75	87.0	23.0	0.75	98.0	25.9
1.8	180	60.4	0.37	21.0	5.5	0.37	30.0	7.9	0.75	57.0	15.1	0.75	73.0	19.3	0.75	84.0	22.2
2.5	250	83.8	-	-	-	-	-	-	0.75	37.0	9.8	1.1	52.0	13.7	1.1	63.0	16.6

Pressure and capacity data

(based on water at 20°C/68°F, full cam and impeller neoprene)

F8B-8

			700 rpm			900 rpm			1,400 rpm			1,750 rpm			2,000 rpm		
Bar	kPa	ft	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM	kW	l/min	USGPM
0.3	30	10.1	0.37	87.0	23.0	0.75	114.0	30.1	1.1	188.0	50.0	1.5	241.0	63.7	1.5	279.0	73.7
0.6	60	20.1	0.55	80.0	21.1	0.75	107.0	28.3	1.1	180.0	47.6	1.5	233.0	61.6	1.5	270.0	71.3
1.0	100	33.5	0.55	73.0	19.3	0.75	101.0	26.7	1.1	177.0	46.8	1.5	228.0	60.2	1.5	264.0	69.7
1.8	180	60.4	-	-	-	1.1	70.0	18.5	1.1	148.0	39.1	2.2	203.0	53.6	2.2	242.0	63.4
2.5	250	83.8	-	-	-	-	-	-	1.1	108.0	28.5	2.2	166.0	43.9	2.2	208.0	55.0

[View other boat pumps made by Johnson Pump on our website.](#)