

# High Pressure Pumps

## BFS1, FFS1

### Screw spindles

60 Hz

2-pole motor rotation speed 3500 RPM									4-pole motor rotation speed 1750 RPM						
Pressure max.	Flow at viscosity		Power consumption at viscosity		Motor immersion version			Weight	Flow at viscosity		Power consumption at viscosity		Motor		Weight
	1 mm <sup>2</sup> /s	20 mm <sup>2</sup> /s	1 mm <sup>2</sup> /s	20 mm <sup>2</sup> /s	IE3 / NEMA	IE3	NEMA		IE3	1 mm <sup>2</sup> /s	20 mm <sup>2</sup> /s	1 mm <sup>2</sup> /s	20 mm <sup>2</sup> /s	IE3	
Type / bar	l/min	l/min	kW	kW	kW	kW	kW	kg	l/min	l/min	kW	kW	kW	kW	kg
<b>BFS130/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 18.8</b>		-	-	-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 9.4</b>		-	-	-	-	-
10	17.3	18.2	0.6	0.6	B 1.49	0.86	0.75	39	7.9	8.8	0.3	0.3	0.86	0.75	30
20	16.3	17.8	0.9	0.9	B 1.49	1.27	1.1	39	6.9	8.4	0.4	0.4	0.86	0.75	30
30	15.4	17.5	1.2	1.2	B 1.49	1.75	1.5	39	5.9	8	0.6	0.6	0.86	0.75	30
40	14.5	17.1	1.5	1.5	B 1.75	1.75	2.2	39	5	7.7	0.7	0.8	1.27	1.1	32
50	13.6	16.7	1.8	1.9	B 2.18	2.54	2.2	44	4	7.3	0.9	1.0	1.27	1.1	32
60	12.7	16.4	2.1	2.2	B 2.55	2.54	3.0	44	3.2	7	1.0	1.1	1.27	1.5	32
70	11.9	16	2.4	2.5	B 2.94	3.45	3.0	45	-	6.6	-	1.3	1.75	1.5	34
80	11.1	15.7	2.8	2.9	B 3.45	3.45	3.7	57	-	6.3	-	1.5	1.75	2.2	34
90	10.4	15.4	3.1	3.2	B 3.45	3.45	3.7	57	-	6	-	1.6	1.75	2.2	34
100	9.6	15.1	3.4	3.5	B 3.8	4.55	3.7	57	-	5.6	-	1.8	2.55	2.2	45
110	8.7	14.7	3.7	3.9	B 4.55	4.55	5.5	58	-	5.3	-	2.0	2.55	2.2	45
120	7.8	14.4	4.0	4.2	B 4.55	4.55	5.5	58	-	5	-	2.1	2.55	2.2	45
130	-	14.1	-	4.5	B 5.75	6.3	5.5	63	-	-	-	-	-	-	-
140	-	13.8	-	4.9	B 5.75	6.3	5.5	63	-	-	-	-	-	-	-
150	-	13.5	-	5.2	B 5.75	6.3	5.5	63	-	-	-	-	-	-	-
<b>BFS140/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 25.2</b>		-	-	-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 12.6</b>		-	-	-	-	-
10	23.1	24.4	0.7	0.7	B 1.49	1.27	1.1	39	10.5	11.8	0.3	0.4	0.86	0.75	30
20	21.8	23.9	1.1	1.2	B 1.49	1.75	1.5	39	9.2	11.3	0.5	0.6	0.86	0.75	30
30	20.6	23.4	1.5	1.6	B 1.75	1.75	2.2	39	8	10.7	0.7	0.8	1.27	1.1	32
40	19.5	22.9	1.9	2.0	B 2.18	2.54	2.2	44	6.9	10.2	0.9	1.0	1.27	1.1	32
50	18.4	22.4	2.4	2.5	B 2.94	3.45	3.0	45	5.8	9.8	1.1	1.2	1.75	1.5	34
60	17.3	21.9	2.8	2.9	B 3.45	3.45	3.0	57	4.7	9.3	1.3	1.5	1.75	1.5	34
70	16.4	21.4	3.2	3.3	B 3.8	4.55	3.7	57	3.8	8.8	1.5	1.7	2.55	2.2	45
80	15.4	20.9	3.6	3.8	B 4.55	4.55	5.5	58	-	8.3	-	1.9	2.55	2.2	45
90	14.6	20.5	4.0	4.2	B 4.55	4.55	5.5	58	-	7.9	-	2.1	2.55	2.2	45
100	13.8	20	4.5	4.7	B 5.75	6.3	5.5	63	-	7.4	-	2.3	2.55	3.0	45
110	12.6	19.6	4.9	5.1	B 5.75	6.3	5.5	63	-	7	-	2.5	3.45	3.0	45
120	11.6	19.2	5.3	5.5	B 5.75	6.3	5.5	63	-	6.5	-	2.7	3.45	3.0	45
130	10.6	18.7	5.7	6.0	B 6.3	6.3	7.5	63	-	-	-	-	-	-	-
140	9.7	18.3	6.1	6.4	B 6.9	8.6	7.5	87	-	-	-	-	-	-	-
150	8.8	17.9	6.6	6.9	B 7.48	8.6	7.5	87	-	-	-	-	-	-	-

<sup>1)</sup> Q<sub>Th</sub>: Theoretical flow rate

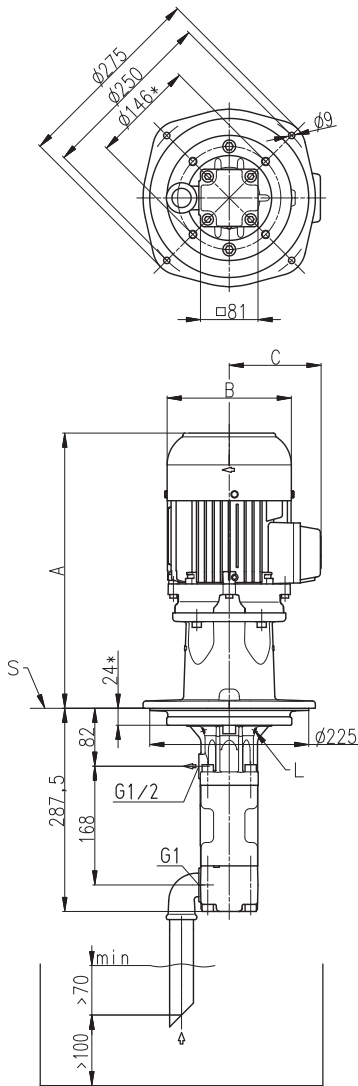
Higher pressures (up to 200 bar) upon request.

Viscosity > 20 mm<sup>2</sup>/s more power consumption.

# Characteristics and dimensions

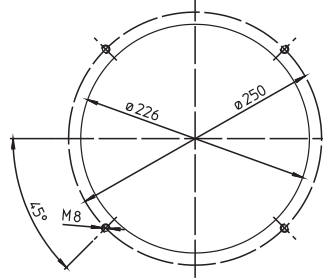
## BFS1, FFS1

60 Hz

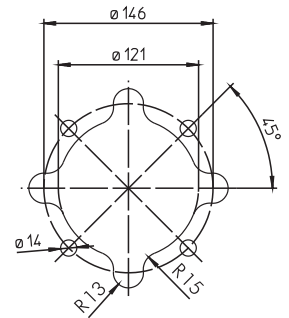


### Mounting hole patterns

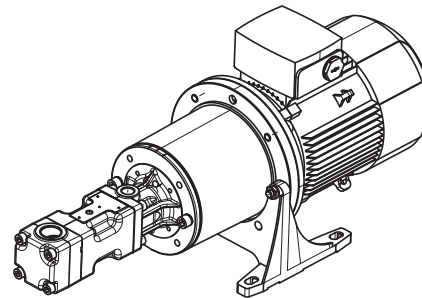
#### BFS1 / BFS2



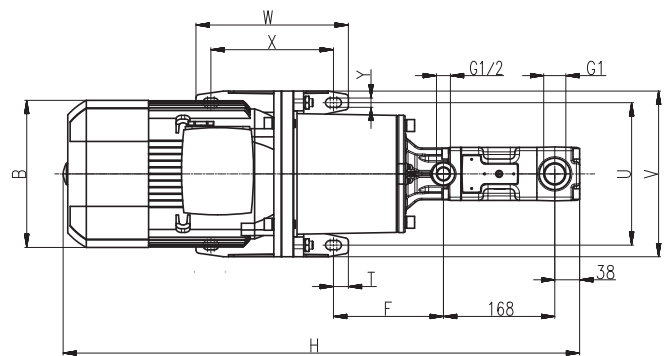
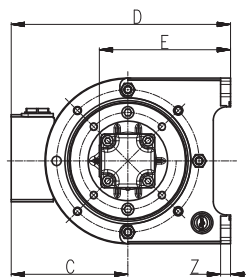
#### TFS1 / TFS2



All corners must be deburred! According to ISO 2768-m



\*) Dimensions for 4-pole standard motor upon request  
 L = Leakage hole  
 S = Mounting plate, please refer to the cut-out of mounting hole



Power 2-poles kW	A mm	B mm	C mm
B 1.49 / 1.75	415	176	130
B 2.18 / 2.55 / 2.94	474	176	130
B 3.45 / 3.8 / 4.55	513	218	150
B 5.75 / 6.3	543	218	150
B 6.9 / 7.48	584	258	193

Power 2-poles kW	Power 4-poles kW	B mm	C mm	D mm	E mm	F mm	H mm	T mm	U mm	V mm	W mm	X mm	Y mm	Z mm
0.75 / 0.86	-	159	121	233	155	138	676	15	180	210	90	60	11	12
-	0.75 / 0.86	159	121	233	155	138	751	15	180	210	90	60	11	12
1.1 / 1.27	-	159	121	233	155	138	711	15	180	210	90	60	11	12
1.5 / 1.75	1.1 / 1.27 / 1.5 / 1.75	178	126	238	155	138	721	15	180	210	90	60	11	12
2.2 / 2.54	-	178	126	238	155	138	761	15	180	210	90	60	11	12
3.0 / 3.45	2.2 / 2.55 / 3.0 / 3.45	198	166	321	198	166	821	22.5	215	250	230	185	14	15
3.7 / 4.55	-	222	177	332	198	166	805	22.5	215	250	230	185	14	15
5.5 / 6.3	-	262	202	387	228	171	857	22.5	265	300	270	225	14	18
7.5 / 8.6	-	262	202	387	228	171	907	22.5	265	300	270	225	14	18