

High Pressure Pumps



BFS2, FFS2

50 Hz

Screw spindles

Pressure max.	Flow at viscosity		2-pole motor rotation speed 2900 RPM					4-pole motor rotation speed 1450 RPM					
			Power consumption of viscosity		Motor immersion version	Motor foot mounted version	Weight	Flow at viscosity		Power consumption of viscosity		Motor	Weight
			5 SSU	90 SSU				5 SSU	90 SSU	5 SSU	90 SSU		
Type / bar / PSI	GPM	GPM	HP	HP	HP	HP	Lbs	GPM	GPM	HP	HP	HP	Lbs
BFS232/	Q_{Th}¹⁾ 6.9		–	–	–	–	–	Q_{Th}¹⁾ 3.5		–	–	–	–
10 / 145	6.4	6.7	0.9	1.1	B 1.7	1.5	88	3.0	3.3	0.4	0.7	1	68
20 / 290	6.2	6.7	1.5	1.7	B 2	2	88	2.8	3.2	0.8	0.9	1.5	73
30 / 435	6.1	6.6	2.0	2.3	B 2.5	3	99	2.6	3.1	1.1	1.2	1.5	73
40 / 580	5.9	6.5	2.7	3.0	B 3.5	4	101	2.5	3.1	1.3	1.6	2	77
50 / 725	5.8	6.4	3.2	3.6	B 4	4	128	2.3	3.0	1.6	1.9	2	77
60 / 870	5.6	6.4	3.8	4.2	B 4.4	5.4	128	2.2	2.9	1.9	2.1	3	101
70 / 1015	5.4	6.3	4.4	4.8	B 5.4	5.4	130	2.0	2.9	2.3	2.5	3	101
80 / 1160	5.3	6.2	5.0	5.4	B 6.7	7.5	141	1.8	2.8	2.5	2.8	3	101
90 / 1305	5.2	6.2	5.5	6.0	B 6.7	7.5	141	1.7	2.7	2.8	3.1	4	101
100 / 1450	5.0	6.1	6.2	6.6	B 7.4	7.5	141	1.5	2.6	3.1	3.4	4	101
110 / 1595	4.9	6.1	6.7	7.2	B 7.4	10	165	–	–	–	–	–	–
120 / 1740	4.7	6.0	7.4	7.8	B 10.1	10	207	–	–	–	–	–	–
130 / 1885	4.6	5.9	7.9	8.4	B 10.1	10	207	–	–	–	–	–	–
140 / 2030	4.4	5.8	8.4	9.0	B 10.1	10	207	–	–	–	–	–	–
150 / 2175	4.3	5.8	9.1	9.7	B 10.1	10	207	–	–	–	–	–	–
BFS238/	Q_{Th}¹⁾ 8.2		–	–	–	–	–	Q_{Th}¹⁾ 4.1		–	–	–	–
10 / 145	7.6	8.0	0.9	0.9	B 1.7	1.5	88	3.5	3.9	0.5	0.5	1	68
20 / 290	7.4	7.9	1.7	1.7	B 2	2	88	3.3	3.8	0.8	0.8	1	68
30 / 435	7.2	7.8	2.4	2.4	B 2.9	3	99	3.1	3.7	1.2	1.2	1.5	73
40 / 580	7.1	7.7	3.1	3.2	B 3.5	4	101	3.0	3.6	1.6	1.6	2	77
50 / 725	6.9	7.6	3.8	3.9	B 4.4	5.4	128	2.8	3.5	1.9	2.0	3	101
60 / 870	6.7	7.6	4.4	4.7	B 5.4	5.4	130	2.6	3.5	2.3	2.4	3	101
70 / 1015	6.5	7.5	5.1	5.4	B 6.7	7.5	141	2.4	3.4	2.5	2.7	3	101
80 / 1160	6.3	7.4	5.9	6.0	B 6.7	7.5	141	2.2	3.3	3.0	3.1	4	101
90 / 1305	6.1	7.3	6.6	6.8	B 7.4	7.5	141	2.0	3.2	3.4	3.5	4	101
100 / 1450	5.9	7.3	7.2	7.5	B 8	10	192	1.8	3.2	3.6	3.9	4	101
110 / 1595	5.8	7.2	7.9	8.3	B 8.7	10	192	–	–	–	–	–	–
120 / 1740	5.6	7.1	8.6	9.1	B 10.1	10	207	–	–	–	–	–	–
130 / 1885	5.4	7.1	9.3	9.8	B 12.1	15	220	–	–	–	–	–	–
140 / 2030	5.3	7.0	10.1	10.6	B 12.1	15	220	–	–	–	–	–	–
150 / 2175	5.1	6.9	10.7	11.3	B 12.1	15	220	–	–	–	–	–	–

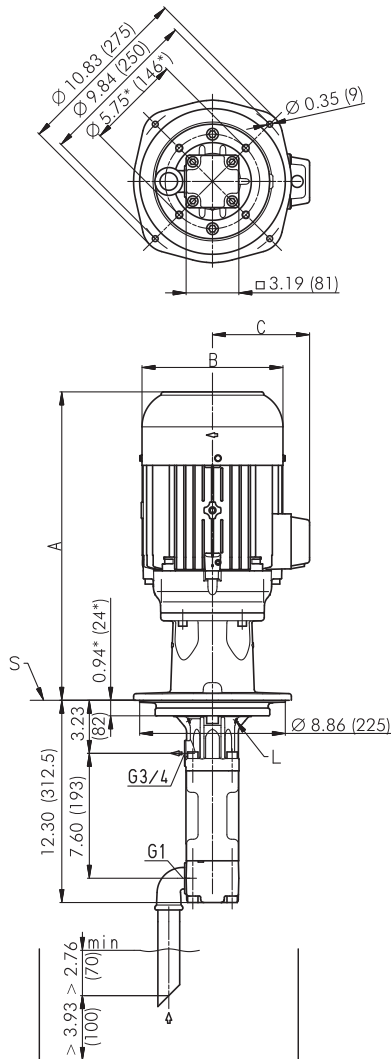
¹⁾ Q_{Th}: Theoretical flow rate ; Viscosity > 90 SSU more power consumption.

Higher pressure for water soluble coolants (up to 2900 psi / 200 bar) upon request.

Characteristics and dimensions

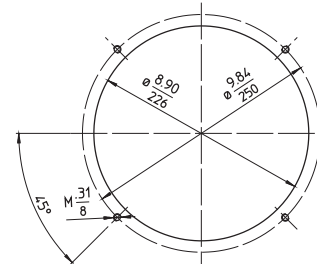
BFS2, FFS2

50 Hz

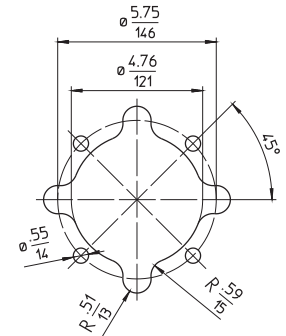


Mounting hole patterns

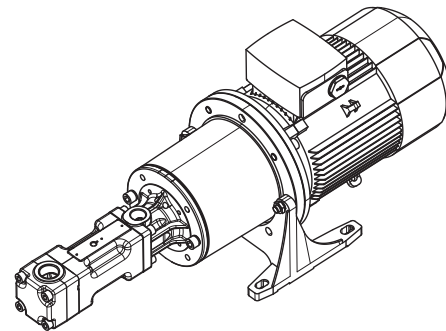
BFS1 / BFS2



TFS1 / TFS2

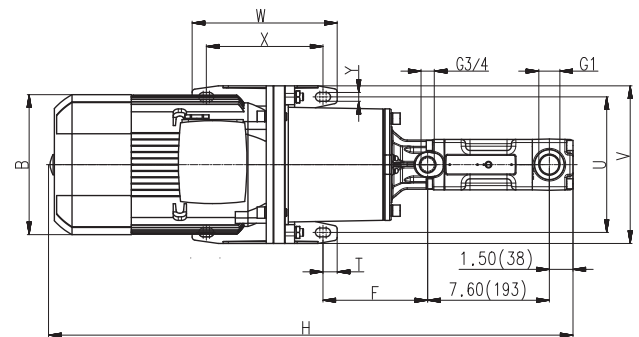
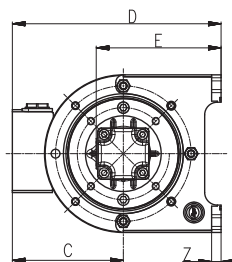


Dimensions in Inches / mm
All corners must be deburred!
According to ISO 2768-m



*) 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 HP	A	B	C
	Inch	Inch	Inch
B 1.7 / 2	16.34	6.93	5.12
B 2.5 / 2.9 / 3.5	18.66	6.93	5.12
B 4 / 4.4 / 5.4	20.20	8.58	5.91
B 6.7 / 7.4	21.38	10.16	7.48
B 8 / 8.7	22.99	10.16	7.60
B 10.1 / 12.1	24.49	10.16	7.60

Power 2-poles HP	Power 4-poles HP	B	C	D	E	F	H	T	U	V	W	X	Y	Z
		Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch
-	1	6.26	4.76	9.17	6.10	5.43	30.55	0.59	7.09	8.27	3.54	2.36	0.43	0.47
1.5	-	6.26	4.76	9.17	6.10	5.43	28.98	0.59	7.09	8.27	3.54	2.36	0.43	0.47
2	1.5 / 2	7.01	4.96	9.37	6.10	5.43	29.37	0.59	7.09	8.27	3.54	2.36	0.43	0.47
3	-	7.01	4.96	9.37	6.10	5.43	30.94	0.59	7.09	8.27	3.54	2.36	0.43	0.47
4	3 / 4	7.80	6.54	12.64	7.80	6.54	33.31	0.89	8.46	9.84	9.06	7.28	0.55	0.59
5.4	-	8.74	6.97	13.07	7.80	6.54	32.68	0.89	8.46	9.84	9.06	7.28	0.55	0.59
7.5	-	10.31	7.95	15.24	8.98	6.73	34.72	0.89	10.43	11.81	10.63	8.86	0.55	0.71
10	-	10.31	7.95	15.24	8.98	6.73	36.69	0.89	10.43	11.81	10.63	8.86	0.55	0.71
15	-	12.36	9.33	18.58	10.94	8.27	41.38	0.79	11.81	13.78	12.01	10.43	0.71	0.71

High Pressure Pumps



BFS2, FFS2

50 Hz

Screw spindles

Pressure max.	Flow at viscosity		2-pole motor rotation speed 2900 RPM					4-pole motor rotation speed 1450 RPM					
			Power consumption of viscosity		Motor immersion version	Motor foot mounted version	Weight	Flow at viscosity		Power consumption of viscosity		Motor	Weight
			5 SSU	90 SSU				5 SSU	90 SSU	5 SSU	90 SSU		
Type / bar / PSI	GPM	GPM	HP	HP	HP	HP	Lbs	GPM	GPM	HP	HP	HP	Lbs
BFS250/	Q_{Th}¹⁾ 10.8		–	–	–	–	–	Q_{Th}¹⁾ 5.4		–	–	–	–
10 / 145	10.0	10.5	1.2	1.2	B 1.7	2	88	4.6	5.1	0.7	0.7	1	68
20 / 290	9.8	10.4	2.1	2.1	B 2.5	3	99	4.4	5.0	1.1	1.1	1.5	73
30 / 435	9.5	10.3	3.1	3.1	B 3.5	4	101	4.1	4.9	1.6	1.6	2	77
40 / 580	9.3	10.2	4.0	4.2	B 4.4	5.4	128	3.9	4.8	2.0	2.1	3	101
50 / 725	9.1	10.1	4.8	5.1	B 5.4	5.4	130	3.7	4.7	2.4	2.5	3	101
60 / 870	8.9	10.0	5.8	6.0	B 6.7	7.5	141	3.5	4.6	3.0	3.1	4	101
70 / 1015	8.6	9.9	6.7	7.0	B 7.4	7.5	141	3.2	4.5	3.4	3.5	4	101
80 / 1160	8.4	9.8	7.6	7.9	B 8.7	10	192	3.0	4.4	3.9	4.0	5.4	110
90 / 1305	8.2	9.7	8.6	8.9	B 10.1	10	207	2.8	4.3	4.3	4.4	5.4	110
100 / 1450	8.1	9.6	9.4	9.9	B 12.1	15	220	2.6	4.2	4.7	5.0	5.4	110
110 / 1595	7.7	9.5	10.3	10.9	B 12.1	15	220	–	–	–	–	–	–
120 / 1740	7.4	9.4	11.3	11.8	B 14.7	15	269	–	–	–	–	–	–
130 / 1885	7.0	9.3	12.2	12.7	B 14.7	15	269	–	–	–	–	–	–
140 / 2030	6.7	9.2	13.1	13.7	B 14.7	15	269	–	–	–	–	–	–
150 / 2175	6.4	9.1	13.9	14.8	B 17.4	20	269	–	–	–	–	–	–
BFS260/	Q_{Th}¹⁾ 12.9		–	–	–	–	–	Q_{Th}¹⁾ 6.5		–	–	–	–
10 / 145	12.0	12.5	1.3	1.5	B 2.3	3	90	5.5	6.1	0.7	0.8	1	68
20 / 290	11.7	12.4	2.5	2.7	B 3.5	4	101	5.3	5.9	1.2	1.3	2	77
30 / 435	11.4	12.2	3.6	3.9	B 4.4	5.4	128	4.9	5.8	1.9	1.9	3	101
40 / 580	11.1	12.1	4.7	5.1	B 6.7	7.5	141	4.6	5.6	2.4	2.5	3	101
50 / 725	10.8	11.9	5.8	6.2	B 6.7	7.5	141	4.3	5.5	3.0	3.1	4	101
60 / 870	10.5	11.8	6.8	7.4	B 8	10	192	4.0	5.3	3.5	3.8	4	101
70 / 1015	10.2	11.6	7.9	8.6	B 10.1	10	207	3.7	5.1	4.0	4.3	5.4	110
80 / 1160	9.9	11.4	9.1	9.8	B 12.1	15	220	3.4	5.0	4.6	5.0	5.4	110
90 / 1305	9.6	11.3	10.2	10.9	B 12.1	15	220	3.1	4.8	5.1	5.5	7.5	181
100 / 1450	9.2	11.1	11.4	12.1	B 14.7	15	269	2.8	4.6	5.8	6.0	7.5	181
110 / 1595	8.8	10.9	12.5	13.3	B 14.7	15	269	–	–	–	–	–	–
120 / 1740	8.4	10.8	13.4	14.5	B 14.7	15	269	–	–	–	–	–	–
130 / 1885	8.0	10.4	14.6	15.7	B 17.4	20	269	–	–	–	–	–	–
140 / 2030	7.5	10.1	15.7	16.8	B 17.4	20	269	–	–	–	–	–	–
150 / 2175	7.1	9.8	16.8	18.0	–	20	227	–	–	–	–	–	–

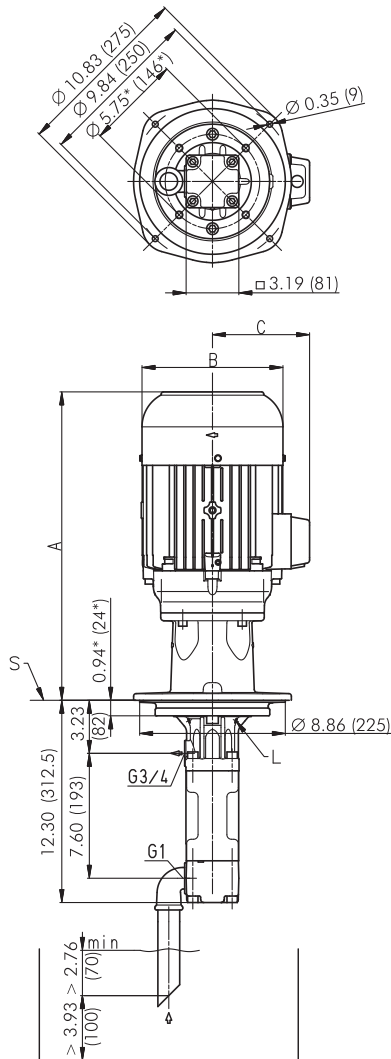
¹⁾ Q_{Th}: Theoretical flow rate ; Viscosity > 90 SSU more power consumption.

Higher pressure for water soluble coolants (up to 2900 psi / 200 bar) upon request.

Characteristics and dimensions

BFS2, FFS2

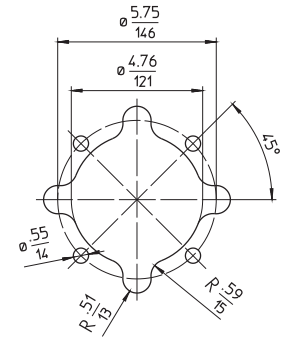
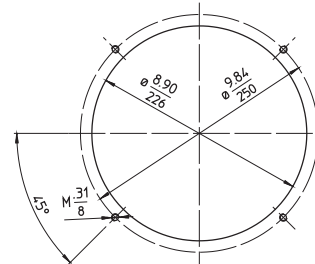
50 Hz



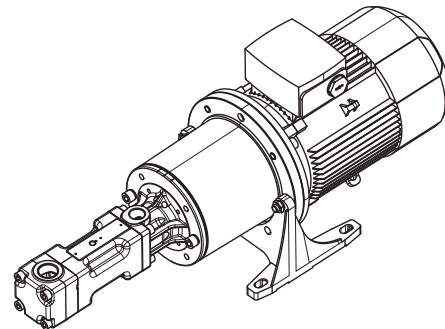
Mounting hole patterns

BFS1 / BFS2

TFS1 / TFS2

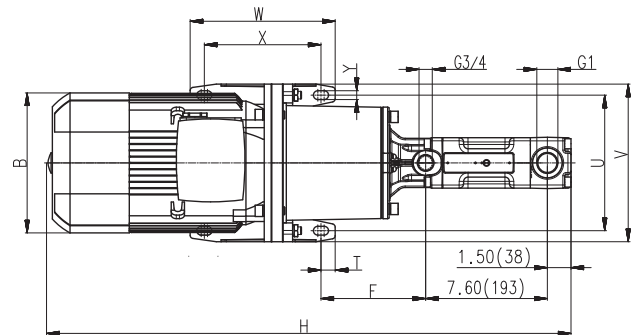
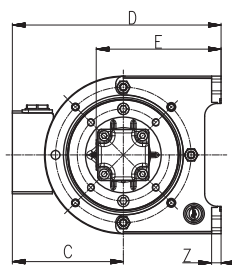


Dimensions in Inches / mm
All corners must be deburred!
According to ISO 2768-m



*) 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 HP	A Inch	B Inch	C Inch
B 1.7	16.34	6.93	5.12
B 2.3	17.36	6.93	5.12
B 2.5 / 3.5	18.66	6.93	5.12
B 4.4 / 5.4	20.20	8.58	5.91
B 6.7 / 7.4	21.38	10.16	7.48
B 8 / 8.7	22.99	10.16	7.60
B 10.1 / 12.1	24.49	10.16	7.60
B 14.7 / 17.4	24.80	12.20	9.45

Power 2-poles HP	Power 4-poles HP	B Inch	C Inch	D Inch	E Inch	F Inch	H Inch	T Inch	U Inch	V Inch	W Inch	X Inch	Y Inch	Z Inch
-	1	6.26	4.76	9.17	6.10	5.43	30.55	0.59	7.09	8.27	3.54	2.36	0.43	0.47
2	1.5 / 2	7.01	4.96	9.37	6.10	5.43	29.37	0.59	7.09	8.27	3.54	2.36	0.43	0.47
3	-	7.01	4.96	9.37	6.10	5.43	30.94	0.59	7.09	8.27	3.54	2.36	0.43	0.47
4	3 / 4	7.80	6.54	12.64	7.80	6.54	33.31	0.89	8.46	9.84	9.06	7.28	0.55	0.59
5.4	5.4	8.74	6.97	13.07	7.80	6.54	32.68	0.89	8.46	9.84	9.06	7.28	0.55	0.59
7.5	-	10.31	7.95	15.24	8.98	6.73	34.72	0.89	10.43	11.81	10.63	8.86	0.55	0.71
10	7.5	10.31	7.95	15.24	8.98	6.73	36.69	0.89	10.43	11.81	10.63	8.86	0.55	0.71
15 / 20	-	12.36	9.33	18.58	10.94	8.27	41.38	0.79	11.81	13.78	12.01	10.43	0.71	0.71