

# High Pressure Pumps

## TFS3, FFS3

### Screw spindles



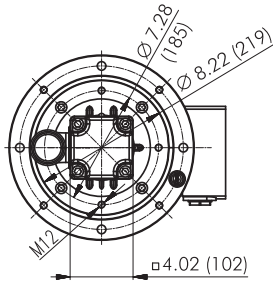
2-pole motor rotation speed 3500 RPM							4-pole motor rotation speed 1750 RPM					
Pressure max.	Flow at viscosity		Power consumption of viscosity		Motor	Weight	Flow at viscosity		Power consumption of viscosity		Motor	Weight
	5 SSU	90 SSU	5 SSU	90 SSU	NEMA		5 SSU	90 SSU	5 SSU	90 SSU	NEMA	
Type / bar / PSI	GPM	GPM	HP	HP	HP	Lbs	GPM	GPM	HP	HP	HP	Lbs
<b>TFS348/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 20.4</b>		-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 10.2</b>		-	-	-	-
10 / 145	19.4	20.0	2.4	2.5	4	121	9.1	9.7	1.1	1.1	1.5	97
20 / 290	19.0	19.7	4.2	4.4	5	137	8.7	9.5	2.0	2.0	3	104
30 / 435	18.6	19.5	5.9	6.2	7.5	159	8.4	9.3	2.8	3.0	4	128
40 / 580	18.2	19.3	7.6	8.0	10	190	8.0	9.1	3.8	3.9	5	128
50 / 725	17.9	19.2	9.3	9.8	15	232	7.6	8.9	4.6	4.8	7.5	137
60 / 870	17.5	19.0	11.0	11.5	15	232	7.3	8.7	5.5	5.8	7.5	205
70 / 1015	17.2	18.8	12.7	13.4	15	232	7.0	8.6	6.3	6.7	7.5	205
80 / 1160	16.9	18.6	14.5	15.2	20	251	6.7	8.4	7.2	7.6	10	205
90 / 1305	16.6	18.5	16.2	17.0	20	251	6.3	8.3	8.0	8.6	10	205
100 / 1450	16.4	18.3	18.0	18.8	20	251	6.0	8.1	9.0	9.5	10	205
110 / 1595	15.9	18.2	19.7	20.5	25	273	-	8.0	-	10.5	15	205
120 / 1740	15.4	18.1	21.3	22.4	25	273	-	7.9	-	11.4	15	249
130 / 1885	15.0	18.0	23.1	24.1	25	273	-	7.7	-	12.3	15	249
140 / 2030	14.5	17.9	24.8	25.9	30	351	-	7.6	-	13.3	15	351
150 / 2175	14.1	17.8	26.6	27.8	30	351	-	7.6	-	14.2	15	249
<b>TFS364/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 27.3</b>		-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 13.6</b>		-	-	-	-
10 / 145	25.8	26.6	3.0	3.2	7.5	159	12.1	13.0	1.5	1.5	2	104
20 / 290	25.3	26.3	5.2	5.6	7.5	159	11.7	12.7	2.5	2.7	3	128
30 / 435	24.8	26.1	7.6	8.0	10	190	11.2	12.4	3.8	3.9	5	128
40 / 580	24.4	25.8	9.9	10.3	15	232	10.8	12.2	4.8	5.1	7.5	137
50 / 725	24.0	25.6	12.2	12.7	15	232	10.3	12.0	6.0	6.3	7.5	205
60 / 870	23.5	25.4	14.5	15.2	20	251	9.9	11.8	7.2	7.5	10	205
70 / 1015	23.1	25.2	16.8	17.6	20	251	9.5	11.5	8.3	8.7	10	205
80 / 1160	22.7	25.0	19.2	20.0	25	273	9.1	11.3	9.5	9.9	15	205
90 / 1305	22.4	24.8	21.5	22.4	25	273	8.7	11.1	10.6	11.1	15	205
100 / 1450	22.0	24.6	23.7	24.7	30	351	8.2	11.0	11.8	12.3	15	249
110 / 1595	21.4	24.4	26.0	27.1	30	351	-	10.8	-	13.5	15	249
120 / 1740	20.8	24.3	28.4	29.5	30	351	-	10.6	-	14.8	15	249
130 / 1885	20.2	23.9	30.7	31.9	40	454	-	-	-	-	-	-
140 / 2030	19.6	23.5	33.0	34.3	40	454	-	-	-	-	-	-
150 / 2175	19.1	23.1	35.3	36.6	40	454	-	-	-	-	-	-
<b>TFS376/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 32.4</b>		-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 16.2</b>		-	-	-	-
10 / 145	30.7	31.6	3.4	3.8	10	190	14.5	15.4	1.6	1.7	3	104
20 / 290	30.1	31.3	6.2	6.6	10	190	13.9	15.1	3.0	3.2	4	128
30 / 435	29.6	31.0	8.9	9.5	15	232	13.4	14.8	4.4	4.7	7.5	137
40 / 580	29.1	30.7	11.7	12.3	15	232	12.9	14.5	5.8	6.2	7.5	205
50 / 725	28.5	30.4	14.3	15.2	20	251	12.3	14.2	7.1	7.6	10	205
60 / 870	28.0	30.1	17.2	18.1	20	251	11.8	14.0	8.4	9.0	10	205
70 / 1015	27.5	29.9	19.8	20.9	25	273	11.3	13.7	9.8	10.5	15	205
80 / 1160	27.0	29.7	22.5	23.9	30	351	10.8	13.5	11.3	11.9	15	249
90 / 1305	26.5	29.4	25.3	26.7	30	351	10.3	13.3	12.6	13.4	15	249
100 / 1450	26.0	29.2	28.0	29.5	40	454	9.8	13.1	13.9	14.9	20	249
110 / 1595	25.2	29.0	30.8	32.5	40	454	-	12.8	-	16.4	20	287
120 / 1740	24.5	28.9	33.5	35.3	40	454	-	12.7	-	17.8	20	287
130 / 1885	23.7	28.4	36.3	38.2	40	454	-	-	-	-	-	-
140 / 2030	23.0	27.9	39.0	41.0	50	501	-	-	-	-	-	-
150 / 2175	22.2	27.5	41.7	43.9	50	501	-	-	-	-	-	-

<sup>1)</sup> Q<sub>Th</sub>: Theoretical flow rate ; Viscosity > 90 SSU more power consumption.

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

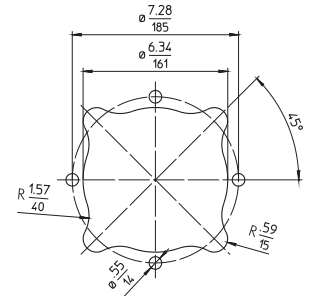
# Characteristics and dimensions

## TFS3, FFS3

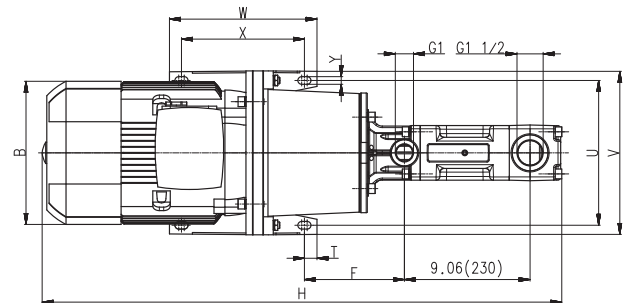
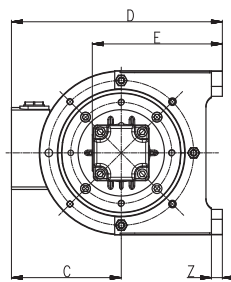
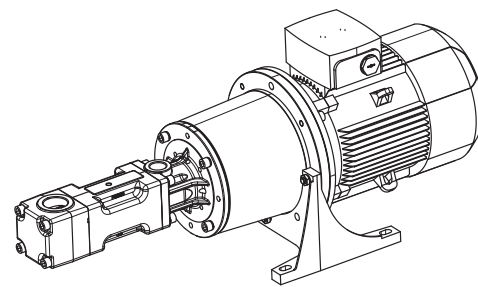
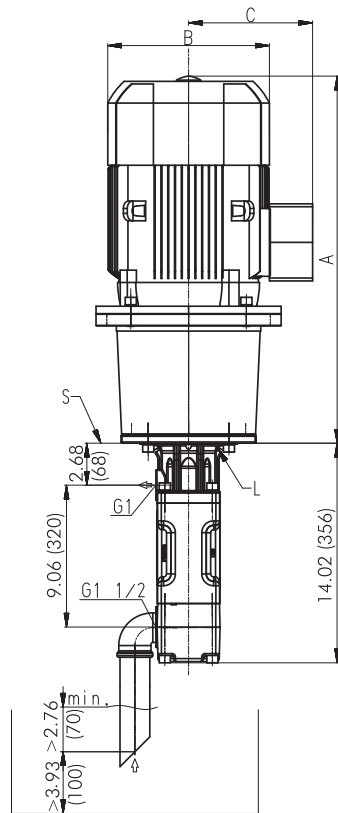


Mounting hole patterns

TFS3 / TFS4



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	Power 4-poles HP	A	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	Inch
–	1.5 / 2	18.74	7.01	4.96	9.37	6.50	6.57	33.35	0.59	7.09	8.27	3.54	2.36	0.43	0.47
4	3 / 4	22.36	7.80	6.54	12.64	8.19	7.32	36.38	0.89	8.46	9.84	9.06	7.28	0.55	0.59
5	5	21.69	8.74	6.97	13.07	8.19	7.32	35.71	0.89	8.46	9.84	9.06	7.28	0.55	0.59
7.5	–	23.43	10.31	7.95	15.24	9.37	7.20	37.44	0.89	10.43	11.81	10.63	8.86	0.55	0.71
10	7.5	25.39	10.31	7.95	15.24	9.37	7.20	39.41	0.89	10.43	11.81	10.63	8.86	0.55	0.71
–	10	25.75	10.31	7.95	15.24	9.37	7.20	39.76	0.89	10.43	11.81	10.63	8.86	0.55	0.71
15 / 20	15	30.08	12.36	9.33	18.58	11.34	8.74	44.09	0.79	11.81	13.78	12.01	10.43	0.71	0.71
25	20	32.44	12.36	9.33	18.58	11.34	8.74	46.46	0.79	11.81	13.78	12.01	10.43	0.71	0.71
30	–	32.44	14.02	11.26	20.51	11.34	8.74	46.46	0.79	11.81	13.78	12.01	10.43	0.71	0.71
40	–	34.68	15.59	12.40	22.64	12.32	8.35	48.70	0.98	13.78	15.75	13.78	11.81	0.71	0.79
50	–	35.67	15.59	12.40	22.64	12.32	8.35	49.68	0.98	13.78	15.75	13.78	11.81	0.71	0.79