

# 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 at viscosity		Motor		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	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	kg	l/min	l/min	kW	kW	kW	kW	kg
<b>TFS348/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 77.4</b>		-	-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 38.7</b>		-	-	-	-	-
10	73.3	75.6	1.8	1.9	2.54	3.0	47	34.6	36.9	0.8	0.8	1.27	1.1	44
20	71.8	74.7	3.1	3.3	4.55	3.7	62	33.1	36	1.5	1.5	1.75	2.2	47
30	70.3	73.9	4.4	4.6	6.3	5.5	72	31.7	35.3	2.1	2.2	2.55	3.0	58
40	69	73.2	5.7	6.0	8.6	7.5	86	30.3	34.5	2.8	2.9	3.45	3.7	58
50	67.6	72.5	6.9	7.3	8.6	11.0	86	28.9	33.8	3.4	3.6	4.55	5.5	62
60	66.4	71.8	8.2	8.6	12.6	11.0	105	27.7	33.1	4.1	4.3	6.3	5.5	93
70	65.2	71.1	9.5	10.0	12.6	11.0	105	26.5	32.4	4.7	5.0	6.3	5.5	93
80	64	70.5	10.8	11.3	12.6	15.0	105	25.3	31.8	5.4	5.7	6.3	7.5	93
90	62.9	69.9	12.1	12.7	17.3	15.0	114	24	31.3	6.0	6.4	8.6	7.5	93
100	61.9	69.4	13.4	14.0	17.3	15.0	114	22.8	30.7	6.7	7.1	8.6	7.5	93
110	60	68.9	14.7	15.3	17.3	18.5	114	-	30.2	-	7.8	8.6	11.0	93
120	58.2	68.4	15.9	16.7	17.3	18.5	114	-	29.8	-	8.5	12.6	11.0	113
130	56.6	68	17.2	18.0	21.3	18.5	124	-	29.3	-	9.2	12.6	11.0	113
140	54.9	67.6	18.5	19.3	21.3	22.0	124	-	28.9	-	9.9	12.6	11.0	113
150	53.3	67.3	19.8	20.7	25.3	22.0	152	-	28.6	-	10.6	12.6	11.0	113
<b>TFS364/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 103.2</b>		-	-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 51.6</b>		-	-	-	-	-
10	97.5	100.7	2.2	2.4	4.55	5.5	62	45.9	49.1	1.1	1.1	1.75	1.5	47
20	95.8	99.7	3.9	4.2	6.3	5.5	72	44.2	48.1	1.9	2.0	2.55	2.2	58
30	94	98.7	5.7	6.0	8.6	7.5	86	42.4	47.1	2.8	2.9	3.45	3.7	58
40	92.3	97.8	7.4	7.7	12.6	11.0	105	40.7	46.2	3.6	3.8	4.55	5.5	62
50	90.7	96.9	9.1	9.5	12.6	11.0	105	39.1	45.3	4.5	4.7	6.3	5.5	93
60	89.1	96.1	10.8	11.3	12.6	15.0	105	37.5	44.5	5.4	5.6	6.3	7.5	93
70	87.5	95.3	12.5	13.1	17.3	15.0	114	35.9	43.7	6.2	6.5	8.6	7.5	93
80	86	94.5	14.3	14.9	17.3	18.5	114	34.4	42.9	7.1	7.4	8.6	11.0	93
90	84.6	93.8	16.0	16.7	17.3	18.5	114	32.8	42.2	7.9	8.3	8.6	11.0	93
100	83.2	93.2	17.7	18.4	21.3	22.0	124	31.2	41.6	8.8	9.2	12.6	11.0	113
110	80.9	92.5	19.4	20.2	21.3	22.0	124	-	40.9	-	10.1	12.6	11.0	113
120	78.6	91.9	21.2	22.0	25.3	22.0	152	-	40.3	-	11.0	12.6	11.0	113
130	76.4	90.4	22.9	23.8	25.3	30.0	152	-	-	-	-	-	-	-
140	74.3	89	24.6	25.6	33.5	30.0	206	-	-	-	-	-	-	-
150	72.2	87.5	26.3	27.3	33.5	30.0	206	-	-	-	-	-	-	-
<b>TFS376/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 122.5</b>		-	-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 61.3</b>		-	-	-	-	-
10	116.2	119.5	2.5	2.8	6.3	7.5	72	55	58.3	1.2	1.3	1.75	2.2	47
20	114.1	118.3	4.6	4.9	8.6	7.5	86	52.8	57.1	2.2	2.4	3.45	3.0	58
30	112	117.2	6.6	7.1	8.6	11.0	86	50.8	55.9	3.3	3.5	4.55	5.5	62
40	110	116.1	8.7	9.2	12.6	11.0	105	48.7	54.9	4.3	4.6	6.3	5.5	93
50	108	115.1	10.7	11.3	12.6	15.0	105	46.7	53.8	5.3	5.7	6.3	7.5	93
60	106	114.1	12.8	13.5	17.3	15.0	114	44.8	52.9	6.3	6.7	8.6	7.5	93
70	104.1	113.2	14.8	15.6	17.3	18.5	114	42.8	51.9	7.3	7.8	8.6	11.0	93
80	102.2	112.3	16.8	17.8	21.3	22.0	124	40.9	51	8.4	8.9	12.6	11.0	113
90	100.3	111.4	18.9	19.9	21.3	22.0	124	38.9	50.2	9.4	10.0	12.6	11.0	113
100	98.5	110.6	20.9	22.0	25.3	30.0	152	37	49.4	10.4	11.1	12.6	15.0	113
110	95.5	109.9	23.0	24.2	25.3	30.0	152	-	48.6	-	12.2	12.6	15.0	113
120	92.6	109.2	25.0	26.3	33.5	30.0	206	-	48	-	13.3	17.3	15.0	130
130	89.8	107.4	27.1	28.5	33.5	30.0	206	-	-	-	-	-	-	-
140	87	105.7	29.1	30.6	33.5	37.0	206	-	-	-	-	-	-	-
150	84.2	104	31.1	32.7	41.5	37.0	227	-	-	-	-	-	-	-

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

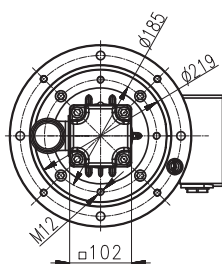
Higher pressures (up to 200 bar) upon request.

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

# Characteristics and dimensions

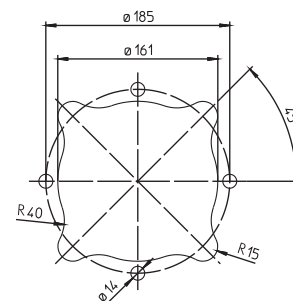
## TFS3, FFS3

60 Hz

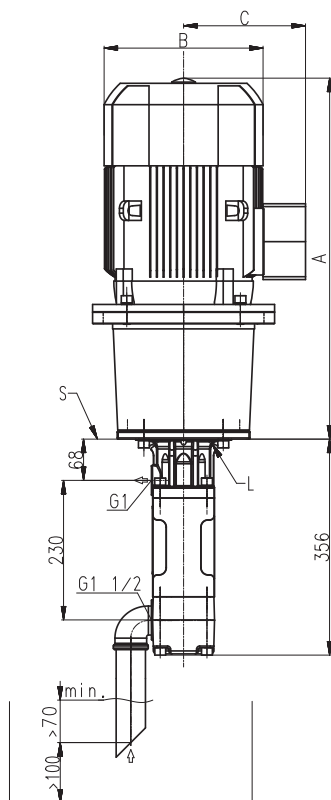


Mounting hole patterns

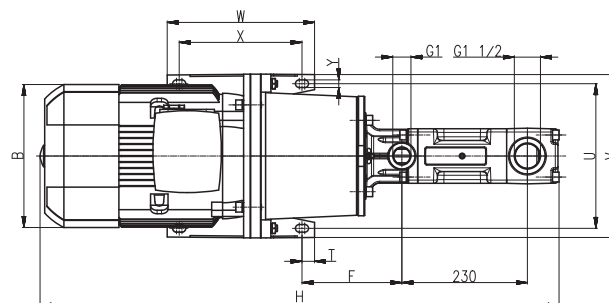
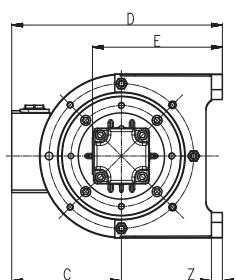
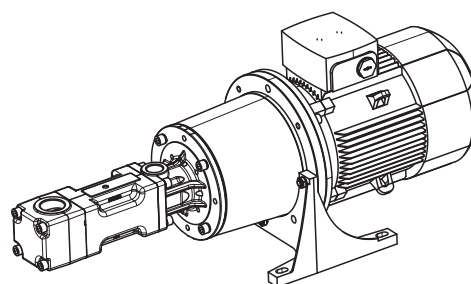
TFS3 / TFS4



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



L = Leakage hole  
S = Mounting plate, please refer to the cut-out of mounting hole



Power 2-poles kW	Power 4-poles kW	A	B	C	D	E	F	H	T	U	V	W	X	Y	Z
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
–	1.1 / 1.27 / 1.5 / 1.75	476	178	126	238	165	167	847	15	180	210	90	60	11	12
3.0	2.2 / 2.55 / 3.0 / 3.45	568	198	166	321	208	186	924	22.5	215	250	230	185	14	15
2.54	–	516	178	126	238	165	167	887	15	180	210	90	60	11	12
3.7 / 4.55	3.7 / 4.55	551	222	177	332	208	186	907	22.5	215	250	230	185	14	15
5.5 / 6.3	–	595	262	202	387	238	183	951	22.5	265	300	270	225	14	18
7.5 / 8.6	5.5 / 6.3	645	262	202	387	238	183	1001	22.5	265	300	270	225	14	18
–	7.5 / 8.6	654	262	202	387	238	183	1010	22.5	265	300	270	225	14	18
11.0 / 12.6 / 15.0 / 17.3	11.0 / 12.6	764	314	237	472	288	222	1120	20	300	350	305	265	18	18
18.5 / 21.3	15.0 / 17.3	824	314	237	472	288	222	1180	20	300	350	305	265	18	18
22.0 / 25.3	–	824	356	286	521	288	222	1180	20	300	350	305	265	18	18
30.0 / 33.5	–	881	396	315	575	313	212	1237	25	350	400	350	300	18	20
37.0 / 41.5	–	906	396	315	575	313	212	1262	25	350	400	350	300	18	20