

# High Pressure Pumps



## TFS3, FFS3

50 Hz

### Screw spindles

2-pole motor rotation speed 2900 RPM							4-pole motor rotation speed 1450 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			1 mm <sup>2</sup> /s	20 mm <sup>2</sup> /s	1 mm <sup>2</sup> /s	20 mm <sup>2</sup> /s		
Type / bar	l/min	l/min	kW	kW	kW	kg	l/min	l/min	kW	kW	kW	kg
<b>TFS348/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 64.1</b>		-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 32.1</b>		-	-	-	-
10	60	62.3	1.5	1.6	2.2	47	28	30.3	0.7	0.8	1.1	44
20	58.5	61.5	2.5	2.8	4.0	62	26.5	29.4	1.2	1.3	1.5	47
30	57.1	60.7	3.6	3.9	5.5	72	25	28.6	1.8	1.9	2.2	58
40	55.7	59.9	4.7	5.1	5.5	72	23.6	27.9	2.3	2.4	3.0	58
50	54.4	59.2	5.7	6.2	7.5	86	22.3	27.1	2.8	3.0	4.0	62
60	53.1	58.5	6.8	7.3	11.0	105	21.1	26.5	3.4	3.5	4.0	62
70	51.9	57.9	7.9	8.5	11.0	105	19.8	25.8	3.9	4.1	5.5	93
80	50.7	57.3	8.9	9.6	11.0	105	18.7	25.2	4.4	4.7	5.5	93
90	49.6	56.7	10.0	10.7	15.0	114	17.4	24.6	5.0	5.2	5.5	93
100	48.6	56.1	11.1	11.8	15.0	114	16.2	24.1	5.5	5.8	7.5	93
110	46.7	55.6	12.1	13.0	15.0	114	-	-	-	-	-	-
120	45	55.2	13.2	14.2	15.0	114	-	-	-	-	-	-
130	43.3	54.7	14.3	15.3	18.5	124	-	-	-	-	-	-
140	41.6	54.4	15.3	16.4	18.5	124	-	-	-	-	-	-
150	40	54	16.4	17.6	18.5	124	-	-	-	-	-	-
<b>TFS364/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 85.5</b>		-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 42.8</b>		-	-	-	-
10	79.9	83	1.8	2.0	3.0	54	37.1	40.3	0.9	0.9	1.5	47
20	78.1	82	3.3	3.5	5.5	72	35.3	39.2	1.6	1.7	2.2	58
30	76.3	81	4.7	5.0	7.5	86	33.6	38.3	2.3	2.4	3.0	58
40	74.6	80.1	6.1	6.5	7.5	86	31.9	37.4	3.0	3.2	4.0	62
50	73	79.2	7.5	8.0	11.0	105	30.2	36.5	3.7	3.9	5.5	93
60	71.4	78.4	9.0	9.5	11.0	105	28.7	35.7	4.4	4.7	5.5	93
70	69.9	77.6	10.4	10.9	15.0	114	27.1	34.9	5.1	5.4	7.5	93
80	68.4	76.9	11.8	12.4	15.0	114	25.6	34.1	5.9	6.1	7.5	93
90	66.9	76.1	13.2	13.9	15.0	114	24	33.4	6.6	6.9	7.5	93
100	65.5	75.5	14.7	15.4	18.5	124	22.4	32.7	7.3	7.6	11.0	113
110	63.2	74.8	16.1	16.9	18.5	124	-	-	-	-	-	-
120	61	74.3	17.5	18.4	22.0	152	-	-	-	-	-	-
130	58.8	72.7	18.9	19.9	22.0	152	-	-	-	-	-	-
140	56.6	71.3	20.4	21.4	22.0	152	-	-	-	-	-	-
150	54.5	69.8	21.8	22.8	30.0	206	-	-	-	-	-	-
<b>TFS376/</b>	<b>Q<sub>Th</sub><sup>1)</sup> 101.5</b>		-	-	-	-	<b>Q<sub>Th</sub><sup>1)</sup> 50.8</b>		-	-	-	-
10	95.2	98.5	2.1	2.4	4.0	62	44.5	47.8	1.0	1.2	2.2	58
20	93.1	97.3	3.8	4.2	5.5	72	42.3	46.6	1.8	2.1	3.0	58
30	91	96.2	5.5	6.0	7.5	86	40.3	45.4	2.7	3.0	4.0	62
40	89	95.1	7.2	7.9	11.0	105	38.2	44.4	3.5	3.9	5.5	93
50	87	94.1	8.9	9.7	11.0	105	36.2	43.3	4.4	4.8	5.5	93
60	85	93.1	10.6	11.5	15.0	114	34.3	42.4	5.2	5.7	7.5	93
70	83.1	92.2	12.2	13.3	15.0	114	32.3	41.4	6.1	6.6	7.5	93
80	81.2	91.3	13.9	15.1	18.5	124	30.4	40.5	6.9	7.4	11.0	113
90	79.3	90.4	15.6	16.9	18.5	124	28.4	39.7	7.8	8.4	11.0	113
100	77.5	89.6	17.3	18.8	22.0	152	26.5	38.9	8.6	9.2	11.0	113
110	74.5	88.9	19.0	20.6	22.0	152	-	-	-	-	-	-
120	71.6	88.2	20.7	22.4	30.0	206	-	-	-	-	-	-
130	68.8	86.4	22.4	24.2	30.0	206	-	-	-	-	-	-
140	66	84.7	24.0	26.0	30.0	206	-	-	-	-	-	-
150	63.2	83	25.7	27.9	30.0	206	-	-	-	-	-	-

<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.

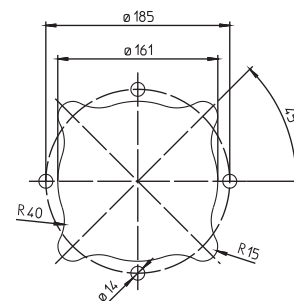
# Characteristics and dimensions

## TFS3, FFS3

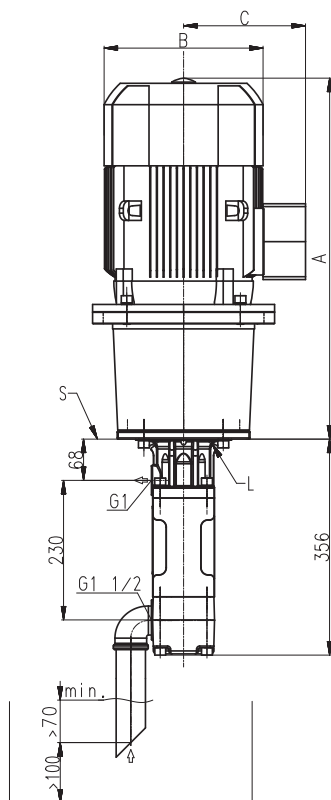
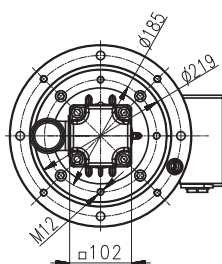
50 Hz

### Mounting hole patterns

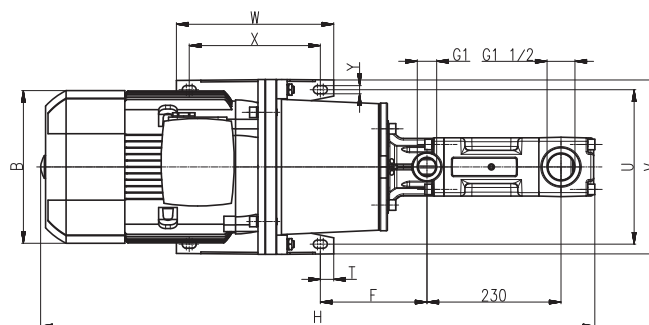
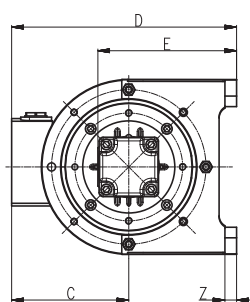
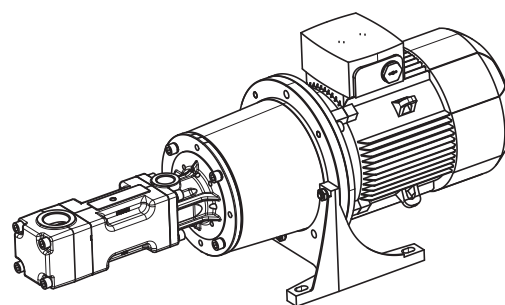
TFS3 / TFS4



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 mm	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
–	1.1 / 1.5	476	178	126	238	165	167	847	15	180	210	90	60	11	12
2.2	–	516	178	126	238	165	167	887	15	180	210	90	60	11	12
3.0	2.2 / 3.0	568	198	166	321	208	186	924	22.5	215	250	230	185	14	15
4.0	4.0	551	222	177	332	208	186	907	22.5	215	250	230	185	14	15
5.5	–	595	262	202	387	238	183	951	22.5	265	300	270	225	14	18
7.5	5.5	645	262	202	387	238	183	1001	22.5	265	300	270	225	14	18
–	7.5	654	262	202	387	238	183	1010	22.5	265	300	270	225	14	18
11.0 / 15.0	11.0	764	314	237	472	288	222	1120	20	300	350	305	265	18	18
18.5	–	824	314	237	472	288	222	1180	20	300	350	305	265	18	18
22.0	–	824	356	286	521	288	222	1180	20	300	350	305	265	18	18
30.0	–	881	396	315	575	313	212	1237	25	350	400	350	300	18	20