

TVS Self-priming turbine pump

4 pole

Compact multi-stage

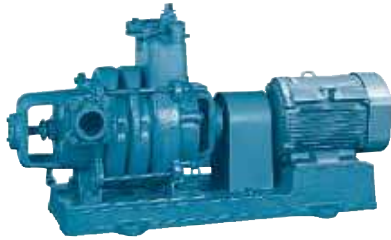
Compact self-priming

Multi-stage

High pressure

Self priming type

Submersible fresh water



Application



(Note Please inquire in case drinking water application.)

Features

- Self-priming pump construction does not require foot valve and makes priming works easier
- Various kind of models for small to large flow rate

Maximum suction total head (20°C)

-6m (Bore 150mm model: -5.5m)

Maximum back pressure

0.20MPa

Standard specifications

- Liquid Clean water 0~40°C (however there should be no freezing)
- Materials Impeller : Cast iron
Shaft : SUS403
Casing : Cast iron
- Shaft sealing Gland packing
- Motor TEFC indoor, Three phase

Standard accessories

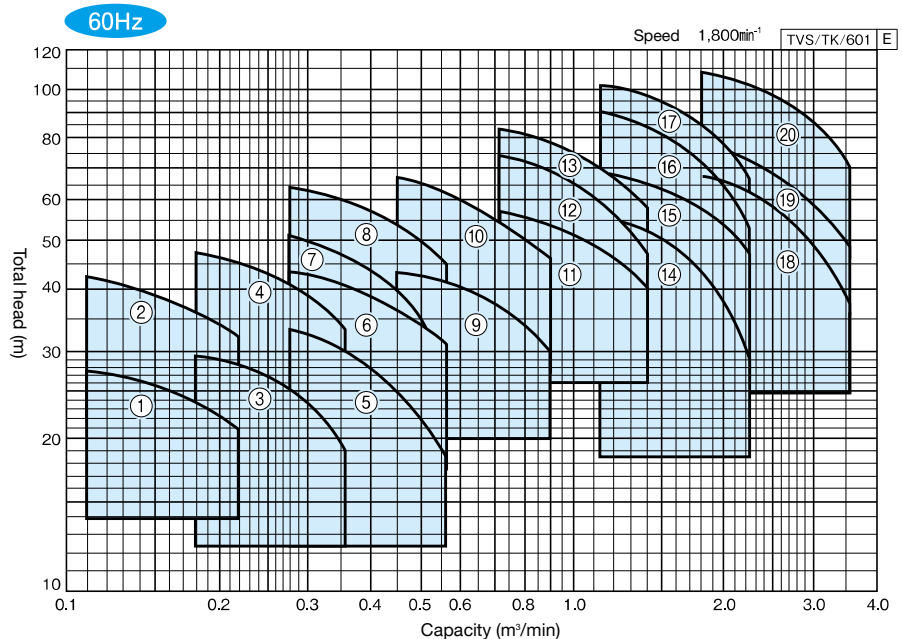
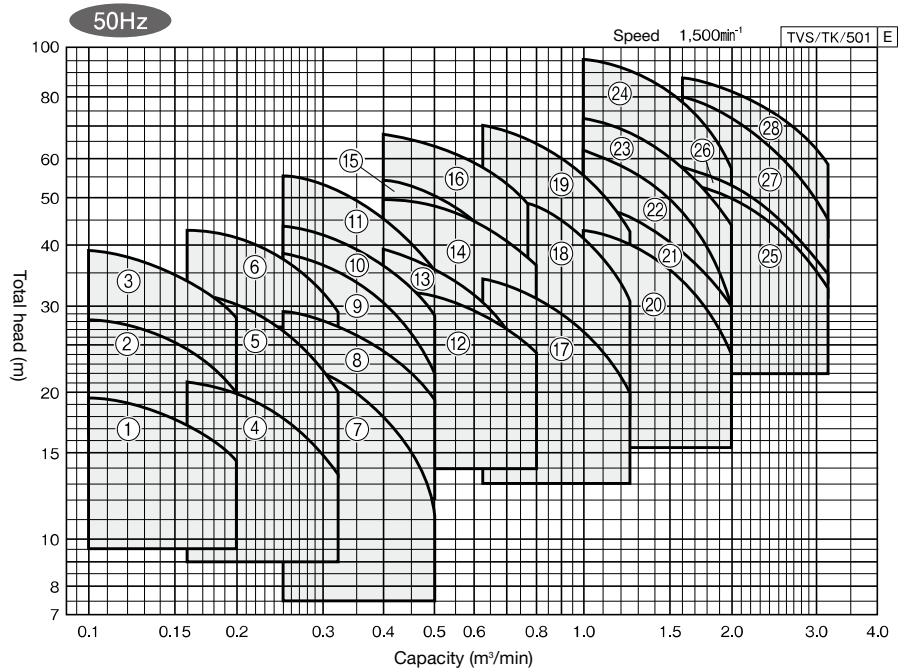
Motor, Base, Coupling, Companion flanges, Coupling cover, Priming and exhaust valve, Strainer

Maximum back pressures

- TVS: Suction direction is left side (viewing from motor)
- TVS-R: Right side suction

Selection chart

These charts show the performance in case of Kawamoto standard motor. Inquire specification sheets and drawings in case of actual work planing.



Specification table 50Hz

Bore d mm	Ref	Model	Motor kW	No. of stage	Performance						Vibration isolator application table			
					Capacity		Total head		Capacity				Total head	
					m ³ /min	m	m ³ /min	m	m ³ /min	m			m ³ /min	m
40	1	TVS405×2ME1.5	1.5	2	0.1	19.5	0.14	18	0.2	14.5	QRE-02A	PX-85Z		
	2	TVS405×3ME1.5	1.5	3	0.1	28	0.14	26	0.2	20	QRE-02A	PX-85Z		
	3	TVS405×4ME2.2	2.2	4	0.1	39	0.14	36	0.2	28.5	QRE-04A	PX-95Z		
50	4	TVS505×2ME1.5	1.5	2	0.16	21	0.22	19	0.32	13.5	QRE-02A	PX-85Z		
	5	TVS505×3ME2.2	2.2	3	0.16	32	0.22	29	0.32	20	QRE-04A	PX-95Z		
	6	TVS505×4ME3.7	3.7	4	0.16	43	0.22	40	0.32	29	QRE-05A	PX-110Z		
65	7	TVS655×2ME2.2	2.2	2	0.25	23	0.36	19.2	0.5	11.5	QRE-04A	PX-95Z		
	8	TVS655×2ME3.7	3.7	2	0.25	29	0.36	25.5	0.5	19.5	QRE-05A	PX-95Z		
	9	TVS655×3ME3.7	3.7	3	0.25	38.5	0.36	33	0.5	22	QRE-05A	PX-110Z		
	10	TVS655×3ME5.5	5.5	3	0.25	44	0.36	38.5	0.5	29	QRE-05D	PX-110Z		
	11	TVS655×4ME5.5	5.5	4	0.25	55	0.36	48.5	0.5	35.5	QRE-06D	PX-110Z		
80	12	TVS805×2ME5.5	5.5	2	0.4	33	0.56	30	0.8	24	QRE-06D	PX-110Z		
	13	TVS805×3ME5.5	5.5	3	0.4	38.5	0.56	33.5	0.8	21	QRE-08B	PX-130Z		
	14	TVS805×3ME7.5	7.5	3	0.4	50	0.56	46	0.8	36.5	QRE-08B	PX-130Z		
	15	TVS805×4ME7.5	7.5	4	0.4	54	0.56	47	0.8	30	QRE-08B	PX-130Z		
	16	TVS805×4ME11	11	4	0.4	67	0.56	60.5	0.8	47	QRE-09B	PX-130Z		
100	17	TVS1005×2ME7.5	7.5	2	0.63	34.5	0.9	29	1.25	19.5	QRE-09B	PX-120Z		
	18	TVS1005×3ME11	11	3	0.63	52	0.9	45	1.25	31	QRE-12D	PX-S146Z		
	19	TVS1005×4ME15	15	4	0.63	70	0.9	60.5	1.25	42	QRE-12D	PX-S146Z		
125	20	TVS1255×2ME15	15	2	1.0	43	1.4	37.5	2.0	23.5	QRE-13F	PX-S146Z		
	21	TVS1255×2ME18	18.5	2	1.0	48	1.4	42.5	2.0	29.5	QRE-13F	PX-S161Z		
	22	TVS1255×3ME22	22	3	1.0	62	1.4	52.5	2.0	29.5	QRE-13F	PX-S161Z		
	23	TVS1255×3ME30	30	3	1.0	72	1.4	63	2.0	43	Inquire			
	24	TVS1255×4ME37	37	4	1.0	95	1.4	86	2.0	57				
150	25	TVS1505×2ME30	30	2	1.6	54	2.24	47	3.15	33				
	26	TVS1505×2ME37	37	2	1.6	57	2.24	49	3.15	35				
	27	TVS1505×3ME45	45	3	1.6	80	2.24	67	3.15	45				
28	TVS1505×3ME55	55	3	1.6	88	2.24	78	3.15	59					

This above models notation are in case TVS, TVS-R has same specification

60Hz

Bore d mm	Ref	Model	Motor kW	No. of stage	Performance						Vibration isolator application table			
					Capacity		Total head		Capacity				Total head	
					m ³ /min	m	m ³ /min	m	m ³ /min	m			m ³ /min	m
40	1	TVS406×2ME1.5	1.5	2	0.11	27.5	0.16	25	0.22	21	QRE-02A	PX-85Z		
	2	TVS406×3ME2.2	2.2	3	0.11	42	0.16	38.5	0.22	32	QRE-02A	PX-95Z		
50	3	TVS506×2ME2.2	2.2	2	0.18	29.5	0.25	27	0.36	19	QRE-04A	PX-95Z		
	4	TVS506×3ME3.7	3.7	3	0.18	47	0.25	43	0.36	33	QRE-05A	PX-110Z		
65	5	TVS656×2ME3.7	3.7	2	0.28	33	0.4	28	0.56	18.5	QRE-05A	PX-95Z		
	6	TVS656×2ME5.5	5.5	2	0.28	42.5	0.4	38.5	0.56	31	QRE-05D	PX-95Z		
	7	TVS656×3ME5.5	5.5	3	0.28	50.5	0.4	43	0.56	29	QRE-05D	PX-110Z		
	8	TVS656×3ME7.5	7.5	3	0.28	64	0.4	57	0.56	45	QRE-06D	PX-110Z		
80	9	TVS806×2ME7.5	7.5	2	0.45	43	0.63	39.5	0.9	30	QRE-06D	PX-110Z		
	10	TVS806×3ME11	11	3	0.45	66	0.63	59	0.9	45	QRE-09B	PX-130Z		
100	11	TVS1006×2ME15	15	2	0.71	57.5	1.0	51.5	1.4	40	QRE-10B	PX-S146Z		
	12	TVS1006×3ME18	18.5	3	0.71	74.5	1.0	65	1.4	46	Inquire			
	13	TVS1006×3ME22	22	3	0.71	83.5	1.0	75	1.4	58				
125	14	TVS1256×2ME22	22	2	1.12	56	1.6	48	2.24	28		QRE-13F	PX-S161Z	
	15	TVS1256×2ME30	30	2	1.12	69	1.6	62	2.24	47.5	Inquire			
	16	TVS1256×3ME37	37	3	1.12	90	1.6	78	2.24	53				
	17	TVS1256×3ME45	45	3	1.12	102	1.6	92	2.24	66				
150	18	TVS1506×2ME45	45	2	1.8	68	2.5	58	3.55	37		Inquire		
	19	TVS1506×2ME55	55	2	1.8	78	2.5	68	3.55	48				
	20	TVS1506×3ME75	75	3	1.8	109	2.5	98	3.55	70	PBKV-170-20012-13		OMT-P11553	

This above models notation are in case TVS, TVS-R has same specification

Compact multi-stage
Compact self-priming
Multi-stage
High pressure
Self priming type
Submersible fresh water

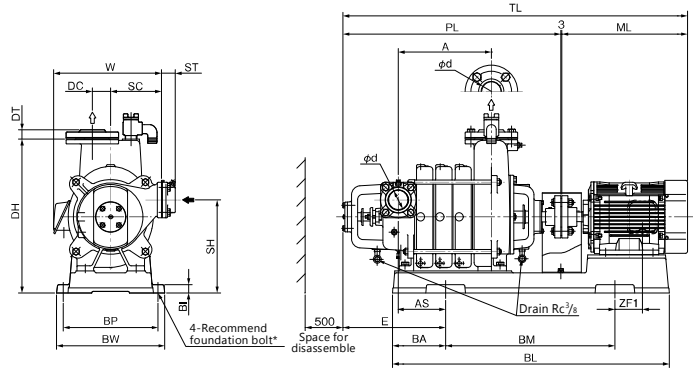
TVS Type

Outline dimension table Inquire specification sheets and drawings in case of actual work planing

● Bore: 40~65mm

Flange: Suction side : Exclusive flange with valve seat
Discharge side : JIS 10K Standard type

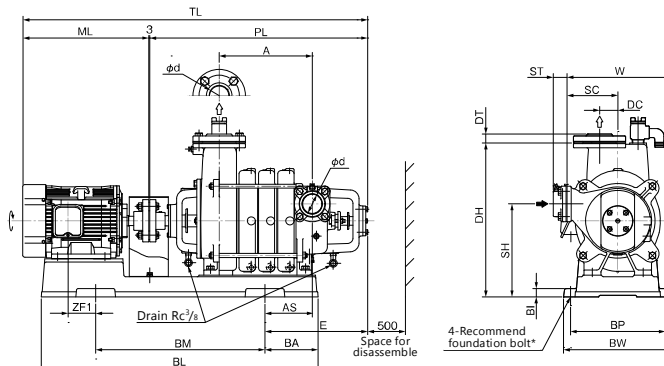
TVS



Unit : mm

Bore d	SC	DC	ST	DT
40	135	54	39	25
50	150	54	39	27
65	200	50	43	31

TVS-R



* Foundation bolts are optional accessories.
· Recommend foundation bolt size: M12×160 (5.5kW or more: M16×200)

50Hz

Unit : mm

Bore d	Model	Motor kW	Pump		Base				Combinations							Mass kg		
			A	PL	BI	BL	BA	BM	BP	BW	DH	SH	TL	E	AS		W	ML
40	TVS (R) 405×2ME1.5	1.5	149	460	20	646	121	400	253	293	410	250	796	222	77	304	333	99
	TVS (R) 405×3ME1.5	1.5	201	522	20	646	121	400	253	293	410	250	858	257	112	304	333	111
	TVS (R) 405×4ME2.2	2.2	253	574	20	736	161	400	255	295	410	250	951	297	152	328	375	136
50	TVS (R) 505×2ME1.5	1.5	161	529	20	648	121	400	251	291	445	265	865	274	110	303	333	105
	TVS (R) 505×3ME2.2	2.2	218	586	20	728	161	400	259	299	445	265	964	314	150	330	375	140
	TVS (R) 505×4ME3.7	3.7	275	643	25	818	157	500	280	320	455	275	1038	304	140	349	392	169
65	TVS (R) 655×2ME2.2	2.2	159	529	20	732	167	400	310	344	465	300	907	267	112	380(372)	375	131
	TVS (R) 655×2ME3.7	3.7	159	529	20	751	174	400	310	348	465	300	923	261	106	389(374)	392	140
	TVS (R) 655×3ME3.7	3.7	224	594	25	821	161	500	310	348	478	313	988	243	88	389(374)	392	162
	TVS (R) 655×3ME5.5	5.5	224	594	25	846	173	500	340	388	478	313	1051	272	117	425(419)	454	182
	TVS (R) 655×4ME5.5	5.5	289	659	25	921	211	500	340	388	478	313	1113	300	145	425(419)	454	199

() shows value in case of TVS-R Note) If the motor end is within the base, TL ≥ PL+3+ML applies.

TVS/d/510 E

60Hz

Unit : mm

Bore d	Model	Motor kW	Pump		Base				Combinations							Mass kg		
			A	PL	BI	BL	BA	BM	BP	BW	DH	SH	TL	E	AS		W	ML
40	TVS (R) 406×2ME1.5	1.5	149	460	20	646	121	400	253	293	410	250	796	222	77	304(304)	333	111
	TVS (R) 406×3ME2.2	2.2	201	522	20	726	161	400	255	295	410	250	900	270	125	328(328)	375	127
50	TVS (R) 506×2ME2.2	2.2	161	529	20	728	161	400	259	299	445	265	907	284	120	330(330)	375	124
	TVS (R) 506×3ME3.7	3.7	218	586	25	818	157	500	280	320	445	275	981	274	110	349(349)	392	158
65	TVS (R) 656×2ME3.7	3.7	159	529	20	751	174	400	310	348	465	300	923	261	106	389(374)	392	140
	TVS (R) 656×2ME5.5	5.5	159	529	25	796	148	500	340	388	478	313	986	232	77	419(419)	454	168
	TVS (R) 656×3ME5.5	5.5	224	594	25	846	173	500	340	388	478	313	1051	272	117	425(419)	454	182
	TVS (R) 656×3ME7.5	7.5	224	594	25	896	198	500	340	388	478	313	1089	285	130	425(419)	492	196

() shows value in case of TVS-R Note) If the motor end is within the base, TL ≥ PL+3+ML applies.

TVS/d/610 E

Compact
multi-stage

Compact
self-priming

Multi-stage

High
pressure

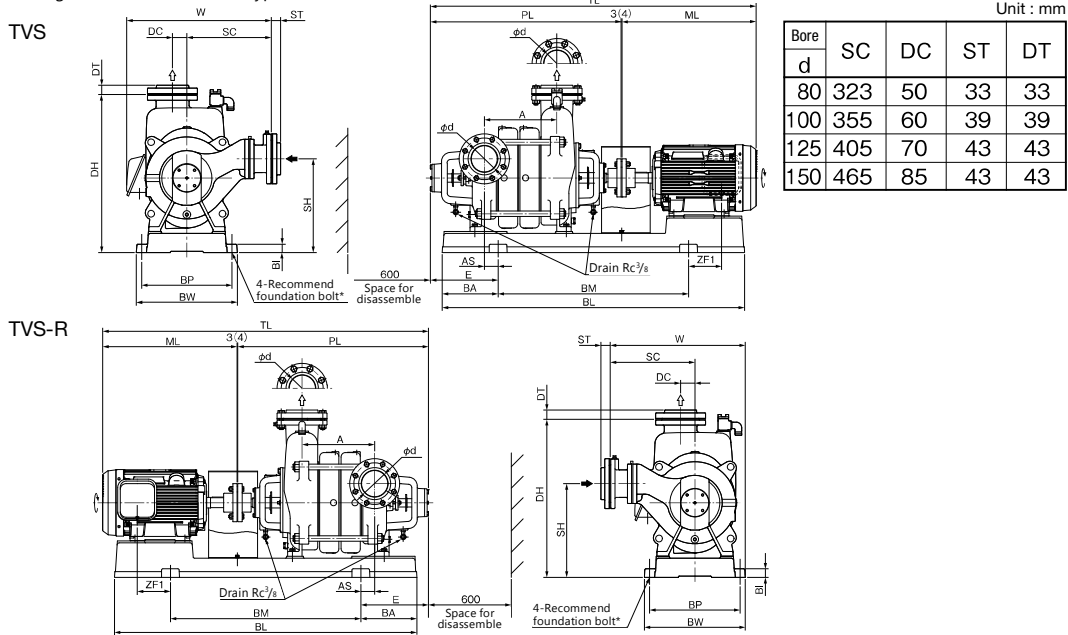
Self priming
type

Submersible
fresh water

● Bore: 80~150mm

Flange: Suction side JIS 10K Thin type

Discharge side JIS 10K standard type (bore: 80~150mm)



Unit : mm

Bore d	SC	DC	ST	DT
80	323	50	33	33
100	355	60	39	39
125	405	70	43	43
150	465	85	43	43

* Foundation bolts are optional accessories.
 * Recommend foundation bolt size: M16×200 (M20×250)

50Hz

Unit : mm

Bore d	Model	Motor kW	Pump		Base						Combinations						Mass kg	
			A	PL	BI	BL	BA	BM	BP	BW	DH	SH	TL	E	AS	W		ML
80	TVS (R) 805×2ME5.5	5.5	190	614	30	895	198	500	340	384	568	338	1071	302	132	548(515)	454	209
	TVS (R) 805×3ME5.5	5.5	270	694	30	1080	225	630	340	384	568	338	1151	224	54	548(515)	454	231
	TVS (R) 805×3ME7.5	7.5	270	694	30	1080	225	630	340	384	568	338	1189	224	54	548(515)	492	244
	TVS (R) 805×4ME7.5	7.5	350	774	30	1080	225	630	340	384	568	338	1269	304	134	548(515)	492	264
	TVS (R) 805×4ME11	11	350	774	30	1142	256	630	375	419	568	338	1385	358	188	586(533)	608	314
100	TVS (R) 1005×2ME7.5	7.5	215	712	35	970	170	630	380	424	663	393	1208	300	73	580(567)	492	281
	TVS (R) 1005×3ME11	11	305	802	35	1270	235	800	380	424	663	393	1414	285	58	618(567)	608	367
	TVS (R) 1005×4ME15	15	395	892	35	1270	235	800	380	424	663	393	1548	375	148	618(567)	652	428
125	TVS (R) 1255×2ME15	15	260	798	50	1174	185	800	435	503	788	473	1454	329	86	668(657)	652	470
	TVS (R) 1255×2ME18	18.5	260	798	50	1427	313	800	435	503	788	493	1565	260	17	710(657)	710	573
	TVS (R) 1255×3ME22	22	365	913	50	1427	313	800	435	503	788	493	1627	365	122	710(657)	710	649
	TVS (R) 1255×3ME30	30																
150	TVS (R) 1505×2ME30	30																
	TVS (R) 1505×2ME37	37																
	TVS (R) 1505×3ME45	45																
	TVS (R) 1505×3ME55	55																

() shows value in case of TVS-R type Note) If the motor end is within the base, TL≥PL+3(4)+ML applies.

TVS/d/520 E

60Hz

Unit : mm

Bore d	Model	Motor kW	Pump		Base						Combinations						Mass kg	
			A	PL	BI	BL	BA	BM	BP	BW	DH	SH	TL	E	AS	W		ML
80	TVS (R) 806×2ME7.5	7.5	190	614	30	895	198	500	340	384	568	338	1109	302	132	548(515)	492	223
	TVS (R) 806×3ME11	11	270	694	30	1142	256	630	375	419	568	338	1305	278	108	586(533)	608	301
100	TVS (R) 1006×2ME15	15	215	712	35	1170	185	800	380	424	663	393	1368	245	18	618(567)	652	365
	TVS (R) 1006×3ME18	18.5																
	TVS (R) 1006×3ME22	22																
125	TVS (R) 1256×2ME22	22	260	798	50	1427	313	800	435	503	788	493	1565	260	17	710(657)	710	556
	TVS (R) 1256×2ME30	30																
	TVS (R) 1256×3ME37	37																
	TVS (R) 1256×3ME45	45																
150	TVS (R) 1506×2ME45	45																
	TVS (R) 1506×2ME55	55																
	TVS (R) 1506×3ME75	75	420	1040	60	1629	315	1000	595	663	893	563	1927	494	218	964(831)	883	1099

() shows value in case of TVS-R type Note) If the motor end is within the base, TL≥PL+3(4)+ML applies.

TVS/d/620 E

Compact multi-stage

Compact self-priming

Multi-stage

High pressure

Self-priming type

Submersible fresh water