

TVM TVMS

The TVM/TVMS are vertical multistage in-line pumps, available as an extended line-up from single to twenty-sixth stages by the model. All the wetted parts are made of stainless steel. It is resistant to corrosion.



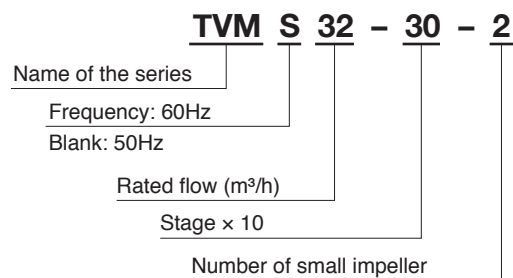
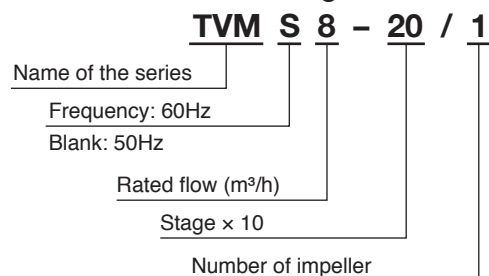
Applications

- Irrigating agricultural farm
- Supplying and distributing industrial water
- Circulating cold and warm water

Major Standard Specifications

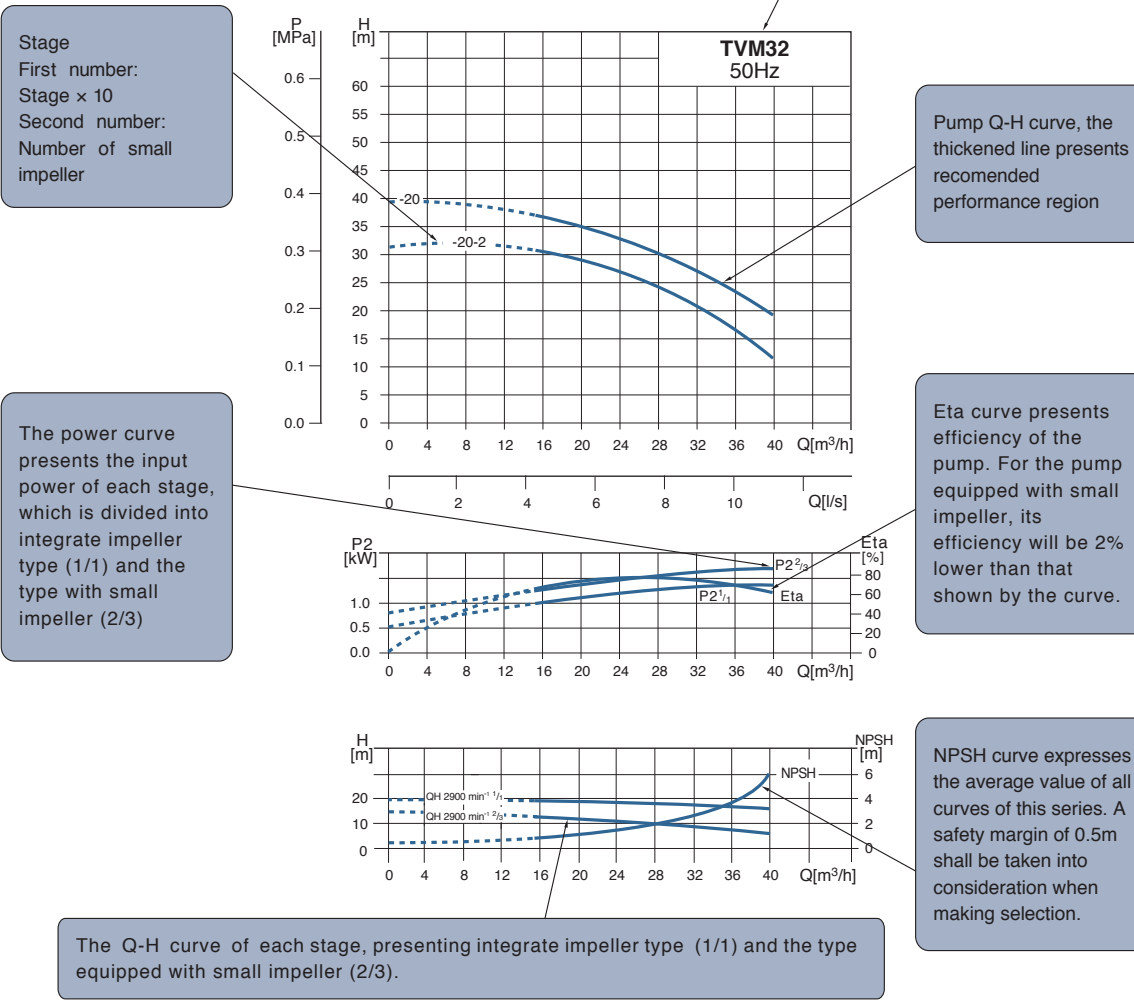
Suction × Discharge Bore mm		25 × 25	32 × 32	40 × 40	50 × 50	65 × 65	80 × 80	100 × 100
Pumping Fluid	Type of Fluid	Industrial Water and Agricultural Water						
	Fluid Temperature	0 to 70°C						
Pump	Structure	Impeller	Closed Impeller					
		Shaft Seal	Mechanical Seal					
		Bearing	Ball Bearing (11kW and below) Roller Bearing (15kW and above)					
	Materials	Impeller	304 Stainless Steel					
		Casing	304 Stainless Steel					
		Shaft Seal	Tungsten Carbide + Graphite					
Motor	Type, Pole	Full-enclosed Air-blast Standard Motor 2-pole						
	Class of Insulation	Class F						
	Phase	Single-phase (up to 2.2kW) Three-phase						
	Starting Method	Direct on Line (7.5kw and below) Star-delta (11kW and above)						
	Motor Enclosure	IP55						
	Materials	Frame	Aluminum Die Casting (7.5kW and below) Gray Iron Casting (11kW and above)					
		Shaft	316 Stainless Steel					
Discharge Connection		DIN Flange (optional victaulic connection also available up to DN50)						

Model Number Designation



How to Read the Curves

Curves on this page are for guidance only. Refer to the performance curves on each model.



Performance Curve

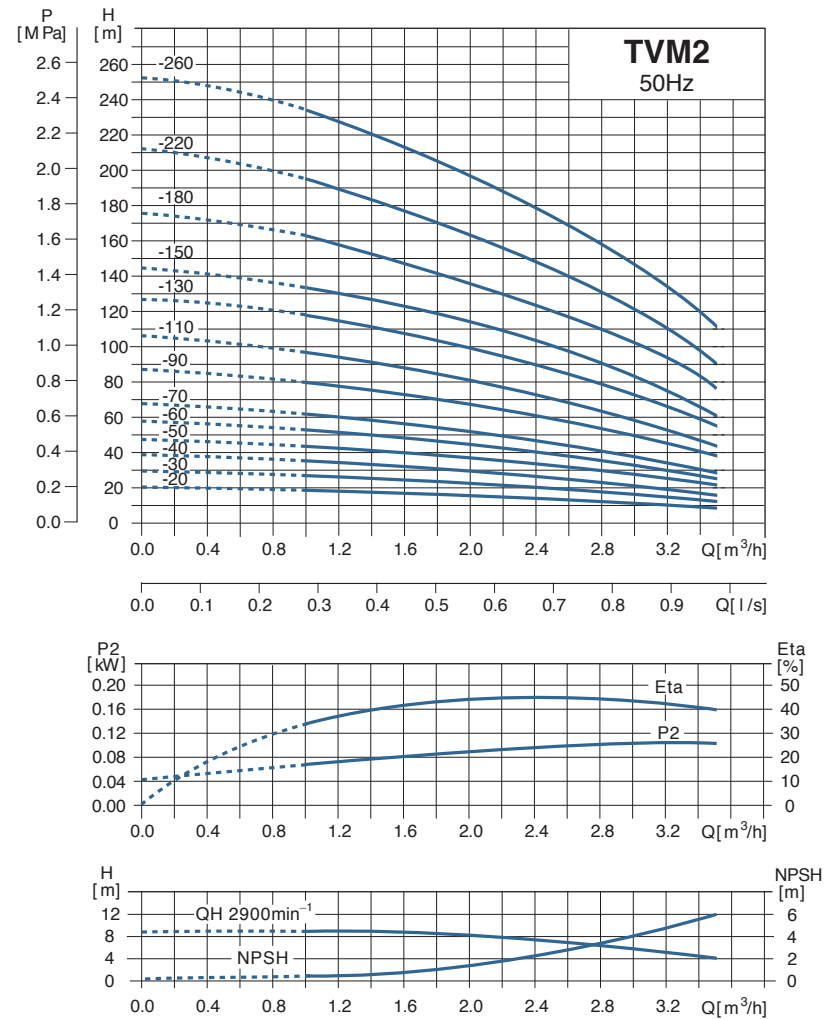
Following conditions are applied to the performance curves shown in this catalogue:

1. All the performance curves are based on the measured values of a motor at a constant speed of 2900 min⁻¹ for 50Hz and 3500 min⁻¹ for 60Hz.
2. Curve tolerance in conformity with ISO9906, appendix A.

3. Measurement is done with 20°C air-free water, kinematic viscosity of 1mm² /sec.
4. The operation of pump shall refer to the performance region indicated by the solid line to prevent overheating due to too small flow rate or overload of motor due to too large flow rate.

TVM2

Performance Curves

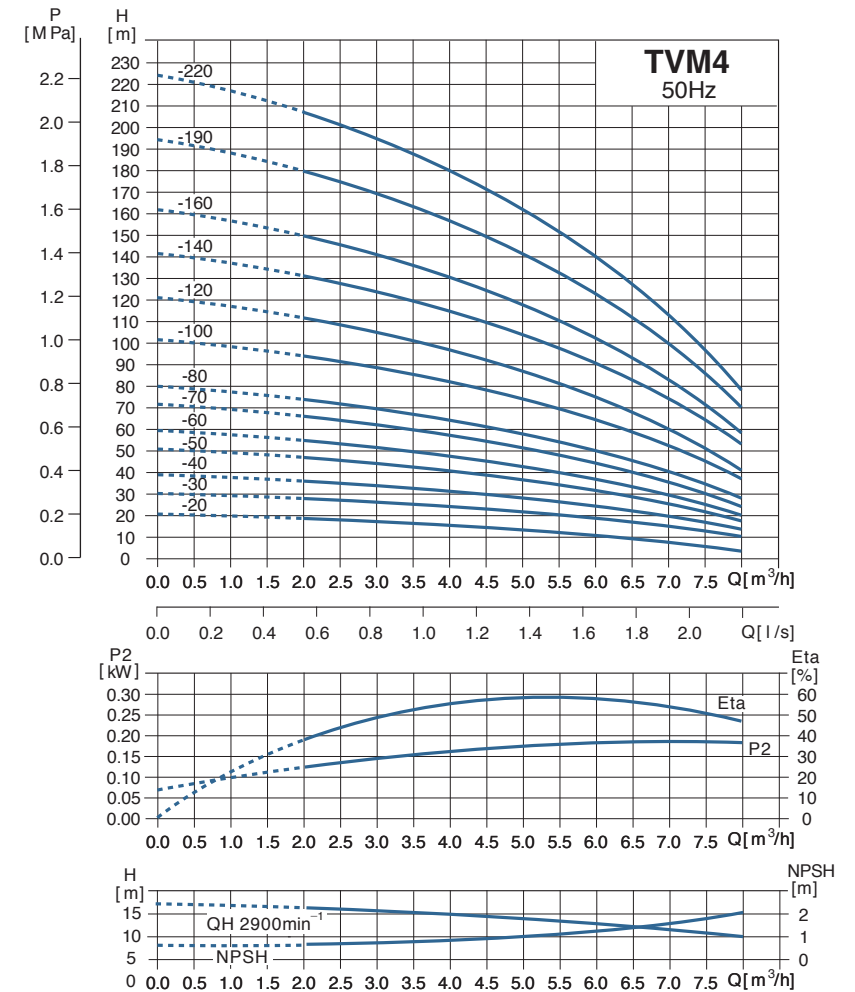


Performance Table

Model	Power (kW)	Q (m³/h)	1	1.2	1.6	2.0	2.4	2.8	3.2	3.5
TVM2-20	0.37	H (m)	18	17	16	15	13	12	10	8
TVM2-30	0.37		27	26	24	22	20	18	15	12
TVM2-40	0.55		36	35	33	30	26	24	20	16
TVM2-50	0.55		45	43	40	37	33	30	24	20
TVM2-60	0.75		53	52	50	45	40	36	30	24
TVM2-70	0.75		63	61	57	52	47	41	35	28
TVM2-90	1.1		80	78	73	67	61	54	45	37
TVM2-110	1.1		98	95	89	82	73	64	54	44
TVM2-130	1.5		116	114	106	98	89	78	65	52
TVM2-150	1.5		134	130	123	112	100	90	73	60
TVM2-180	2.2		161	157	148	136	121	108	91	76
TVM2-220	2.2		197	192	180	165	148	130	110	90
TVM2-260	3.0	232	228	214	198	179	158	130	110	

TVM4

Performance Curves

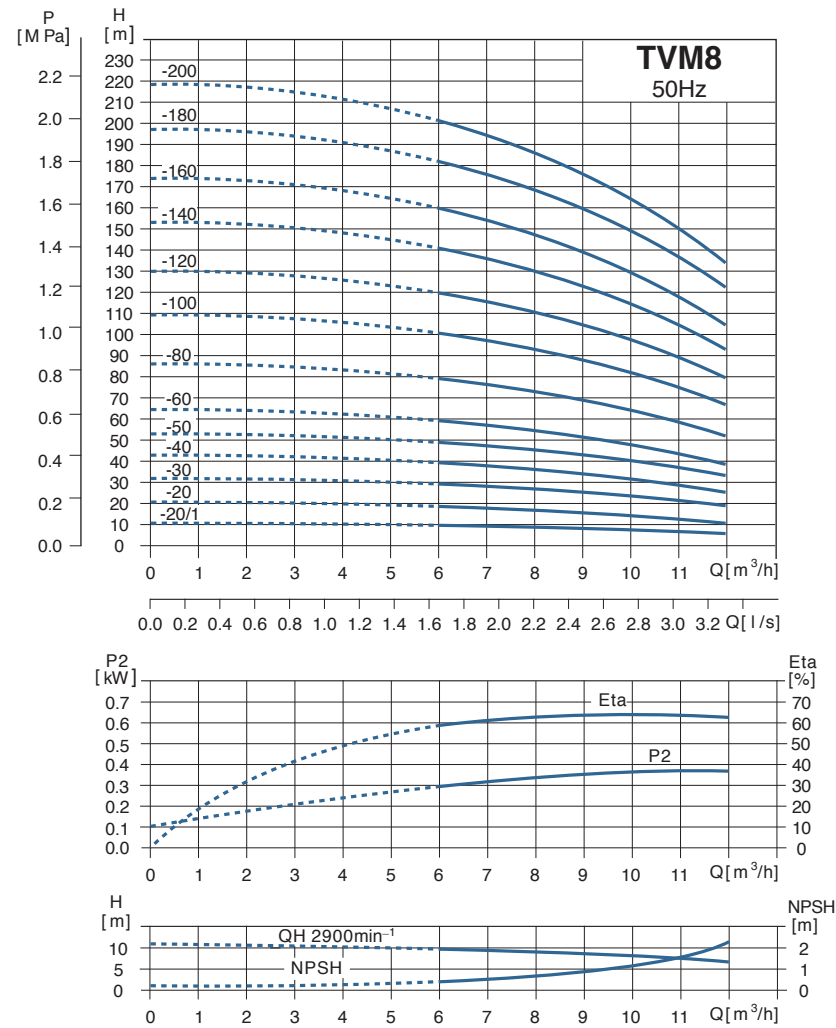


Performance Table

Model	Power (kW)	Q (m³/h)	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0
TVM4-20	0.37	H (m)	19	18	17	15	13	10	8	6
TVM4-30	0.55		28	27	26	24	20	18	13	10
TVM4-40	0.75		38	36	34	32	27	24	19	13
TVM4-50	1.1		47	45	43	40	34	31	23	17
TVM4-60	1.1		56	54	52	48	41	37	28	20
TVM4-70	1.5		66	63	61	56	48	43	33	24
TVM4-80	1.5		74	72	70	64	55	50	38	27
TVM4-100	2.2		96	90	87	81	71	62	48	34
TVM4-120	2.2		114	108	104	95	85	75	58	41
TVM4-140	3.0		136	126	122	112	101	89	68	48
TVM4-160	3.0		152	144	140	129	115	101	78	55
TVM4-190	4.0		183	171	168	153	137	122	93	67
TVM4-220	4.0	211	200	192	178	160	138	108	79	

TVM8

Performance Curves

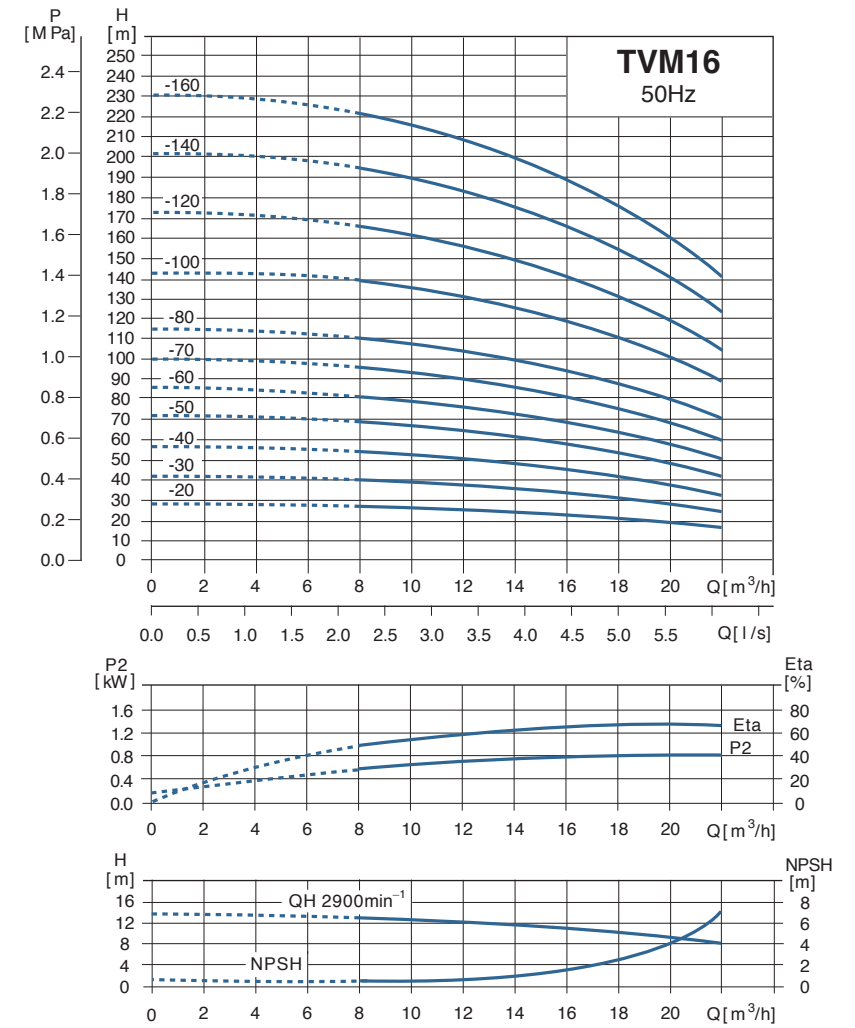


Performance Table

Model	Power (kW)	Q (m³/h)	5	6	7	8	9	10	11	12
TVM8-20/1	0.75	H (m)	10	9.5	9.3	9	8.5	8	7	6
TVM8-20	0.75		20	19.5	19	18	17	16	14	13
TVM8-30	1.1		30	29.5	28.5	27	25	24	21	19
TVM8-40	1.5		41	39.5	38	36	34	32	28	26
TVM8-50	2.2		52	50	48	45	42	40	36	32
TVM8-60	2.2		62	60	57	54	51	48	43	39
TVM8-80	3.0		83	80	77	73	69	65	58	52
TVM8-100	4.0		104	100	97	92	87	81	73	65
TVM8-120	4.0		124	120	116	111	104	92	87	78
TVM8-140	5.5		145	141	136	130	122	113	102	92
TVM8-160	5.5		166	161	156	148	139	130	118	106
TVM8-180	7.5		187	182	175	167	157	146	134	120
TVM8-200	7.5	208	202	195	186	175	163	150	135	

TVM16

Performance Curves

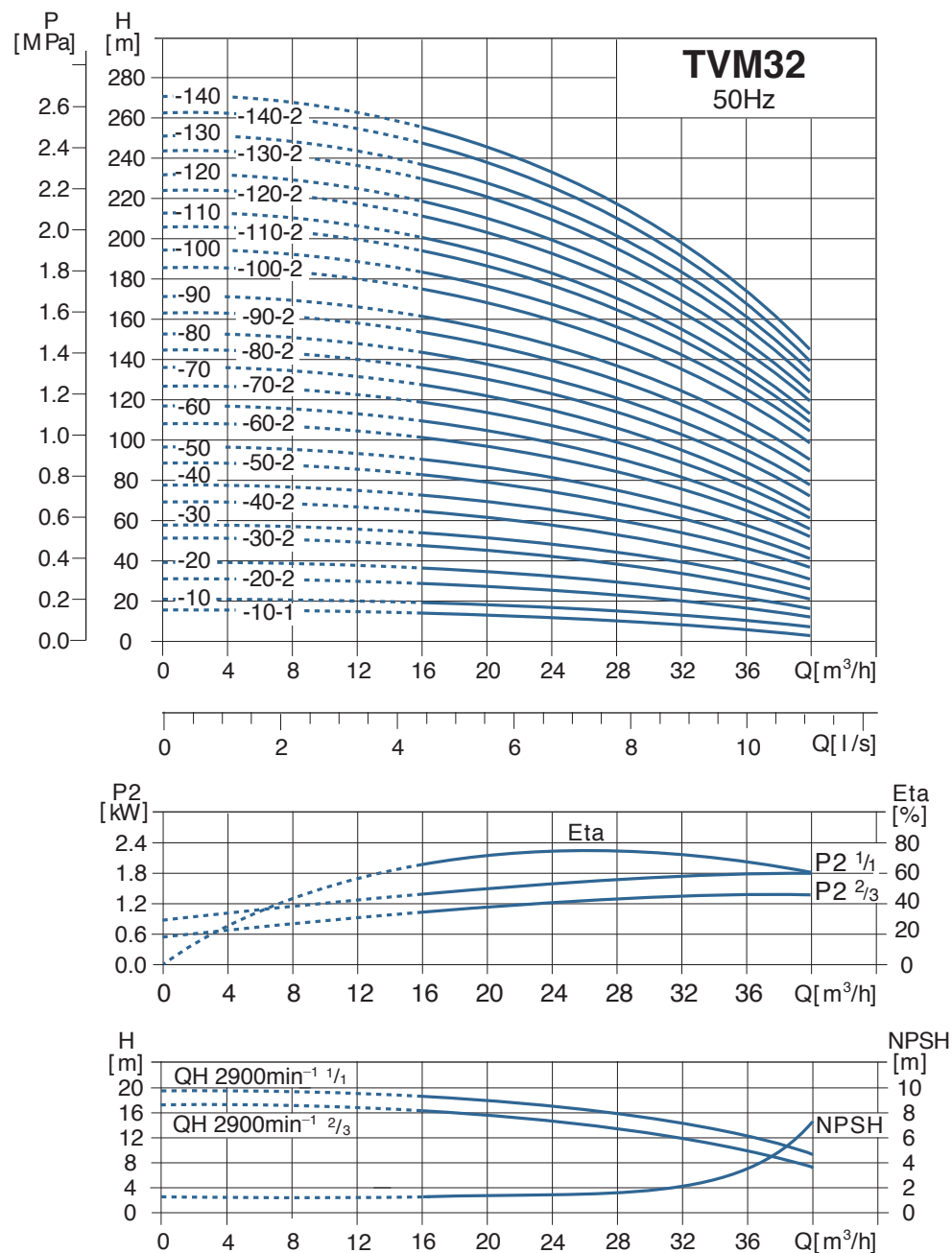


Performance Table

Model	Power (kW)	Q (m³/h)	8	10	12	14	16	18	20	22
TVM16-20	2.2	H (m)	27	26	25	24	22	21	19	16
TVM16-30	3.0		41	40	38	37	34	32	26	25
TVM16-40	4.0		54	53	52	49	46	43	38	34
TVM16-50	5.5		68	67	65	62	58	54	48	43
TVM16-60	5.5		82	80	78	74	70	64	58	52
TVM16-70	7.5		96	95	91	87	82	76	68	61
TVM16-80	7.5		110	108	104	99	94	86	77	70
TVM16-100	11		138	136	131	125	118	109	97	87
TVM16-120	11		166	162	157	150	141	130	116	105
TVM16-140	15		194	190	184	175	166	152	136	122
TVM16-160	15		222	217	210	200	189	174	156	140

TVM32

Performance Curves

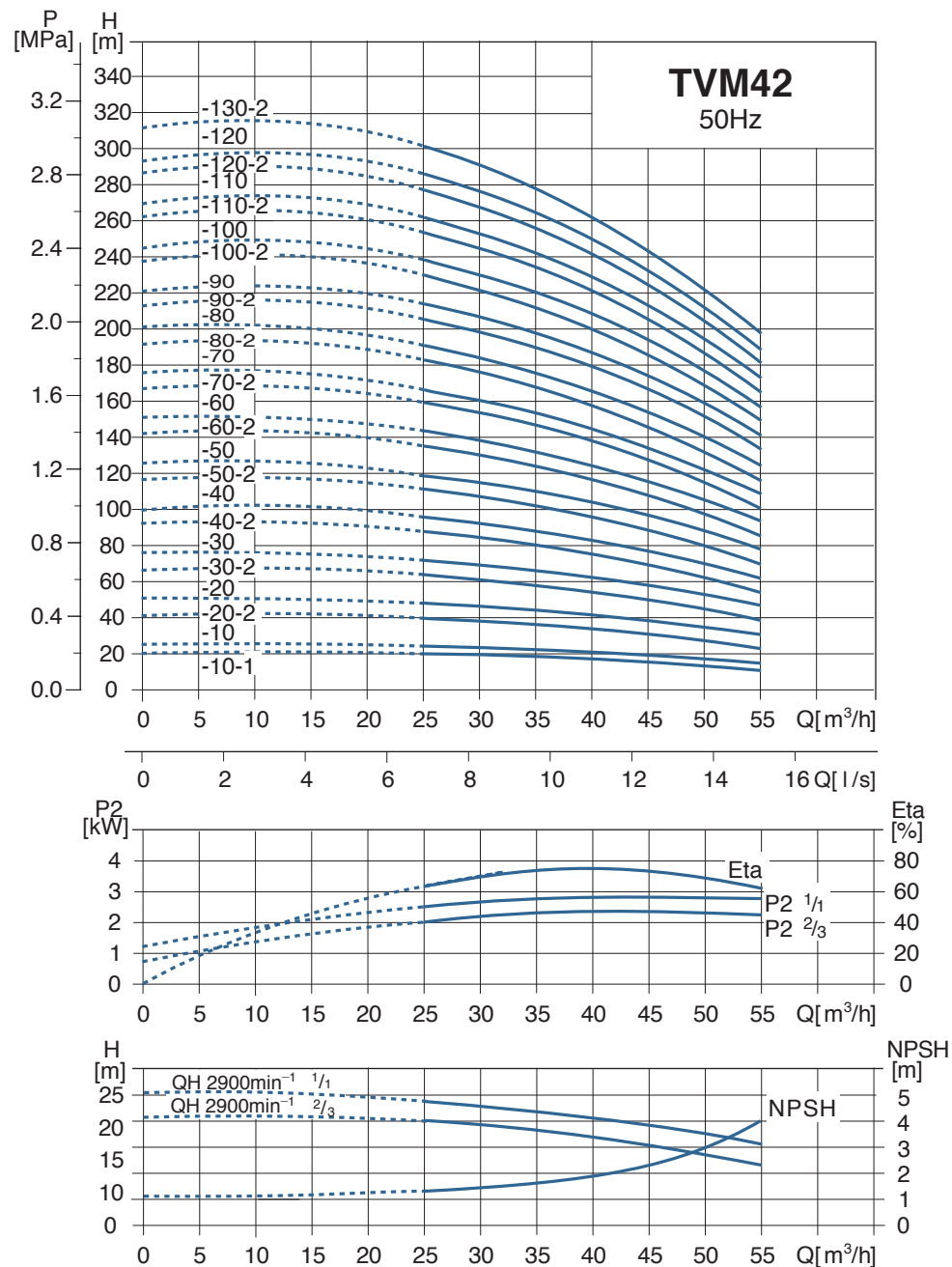


Performance Table

Model	Power (kW)	Q (m³/h)	16	20	24	28	32	36	40
TVM32-10-1	1.5	H (m)	14	13	12	11	9	7	4
TVM32-10	2.2		18	17	15	14	13	11	8
TVM32-20-2	3.0		29	28	26	23	20	16	11
TVM32-20	4.0		36	34	32	29	27	23	18
TVM32-30-2	5.5		47	44	41	38	33	28	21
TVM32-30	5.5		54	51	48	44	40	35	27
TVM32-40-2	7.5		65	62	58	53	46	40	30
TVM32-40	7.5		72	69	65	59	53	47	37
TVM32-50-2	11		83	79	74	68	60	52	41
TVM32-50	11		90	86	81	74	67	59	47
TVM32-60-2	11		101	97	90	83	74	65	51
TVM32-60	11		108	104	97	90	81	72	57
TVM32-70-2	15		119	114	107	98	88	78	60
TVM32-70	15		126	121	113	105	95	85	67
TVM32-80-2	15		136	131	123	114	102	90	71
TVM32-80	15		144	138	130	120	109	97	77
TVM32-90-2	18.5		154	148	140	129	117	102	82
TVM32-90	18.5		162	156	147	136	124	109	88
TVM32-100-2	18.5		175	166	157	146	131	115	91
TVM32-100	18.5		182	173	164	152	138	122	98
TVM32-110-2	22	193	184	173	162	146	128	102	
TVM32-110	22	200	191	180	168	153	135	109	
TVM32-120-2	22	211	201	189	178	160	140	113	
TVM32-120	22	218	208	196	184	167	147	120	
TVM32-130-2	30	230	218	206	193	174	153	124	
TVM32-130	30	237	225	213	200	181	160	131	
TVM32-140-2	30	247	235	222	210	189	165	135	
TVM32-140	30	255	242	229	216	196	172	142	

TVM42

Performance Curves

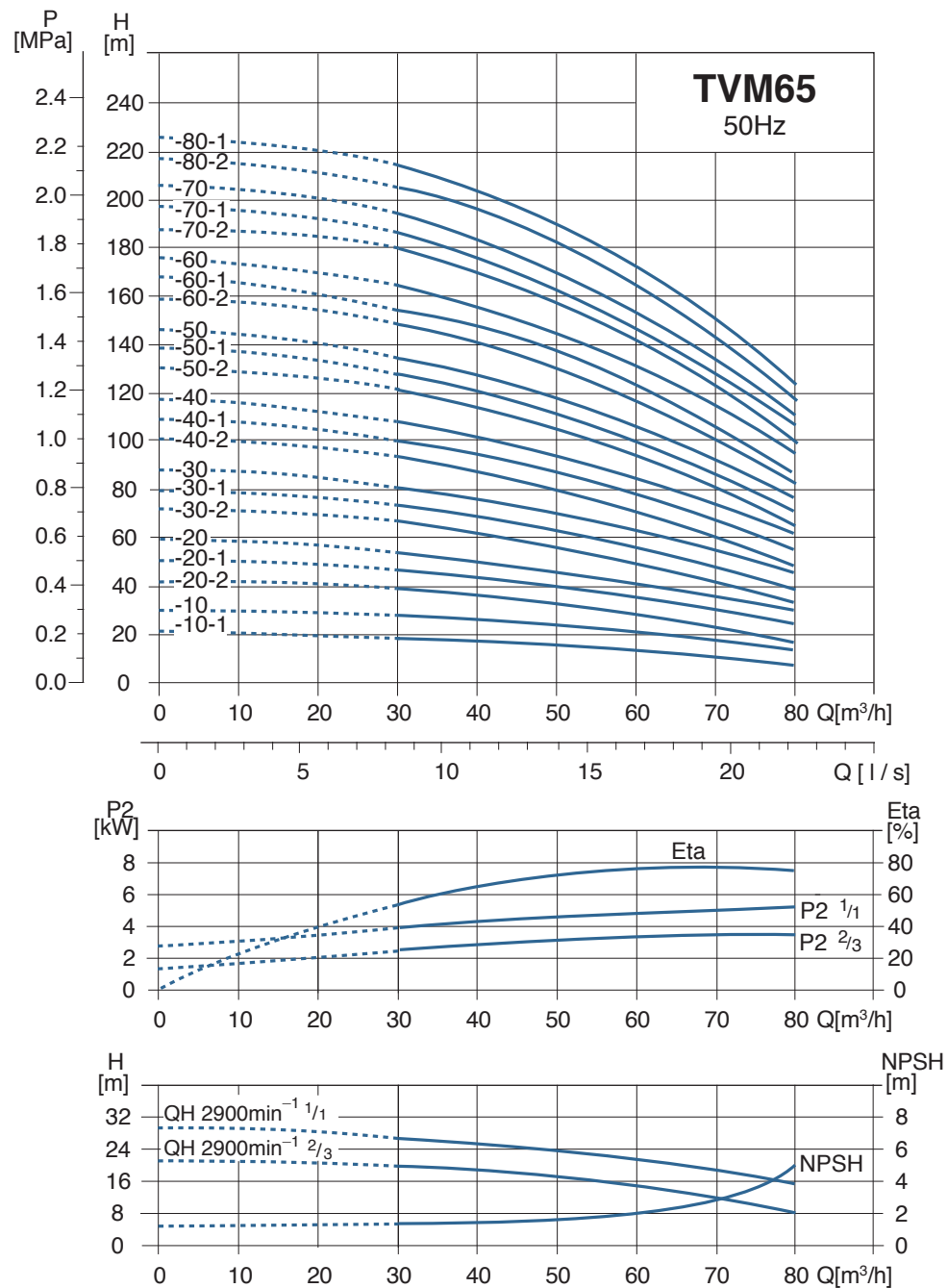


Performance Table

Model	Power (kW)	Q (m³/h)	25	30	35	40	42	45	50	55
TVM42-10-1	3.0	H (m)	20	19	18	17	16	15	13	11
TVM42-10	4.0		24	23	22	21	20	19	18	16
TVM42-20-2	5.5		40	38	36	33	32	30	27	23
TVM42-20	7.5		48	46	44	42	41	39	35	31
TVM42-30-2	11		63	61	58	54	52	50	44	38
TVM42-30	11		71	69	66	63	61	58	53	47
TVM42-40-2	15		87	84	80	75	73	69	62	54
TVM42-40	15		95	92	88	84	81	78	71	62
TVM42-50-2	18.5		111	107	102	96	93	88	80	69
TVM42-50	18.5		119	115	110	105	101	97	88	78
TVM42-60-2	22		135	130	124	117	113	108	97	85
TVM42-60	22		143	138	132	125	122	116	106	93
TVM42-70-2	30		158	152	146	138	134	127	115	100
TVM42-70	30		166	161	154	146	142	135	124	109
TVM42-80-2	30		182	175	168	159	154	146	133	116
TVM42-80	30		190	184	176	167	162	154	141	124
TVM42-90-2	30		205	198	190	180	174	166	150	132
TVM42-90	37		214	207	198	188	183	174	159	140
TVM42-100-2	37		230	221	212	200	194	185	168	147
TVM42-100	37		238	230	220	209	203	193	177	155
TVM42-110-2	45	255	246	236	223	217	206	188	165	
TVM42-110	45	263	255	244	232	225	214	196	173	
TVM42-120-2	45	280	270	259	245	238	226	206	181	
TVM42-120	45	289	280	268	255	247	236	216	190	
TVM42-130-2	45	305	294	282	267	259	247	225	198	

TVM65

Performance Curves

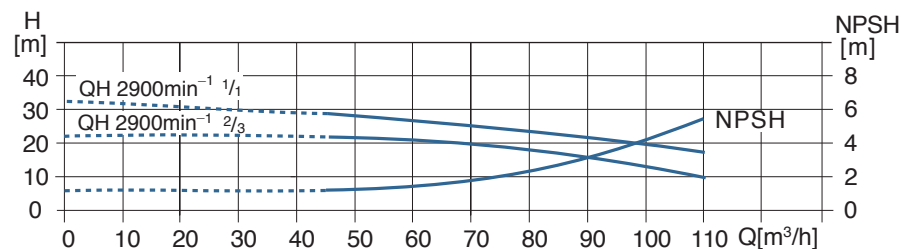
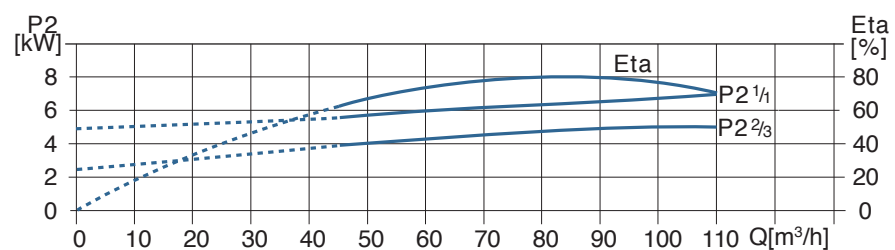
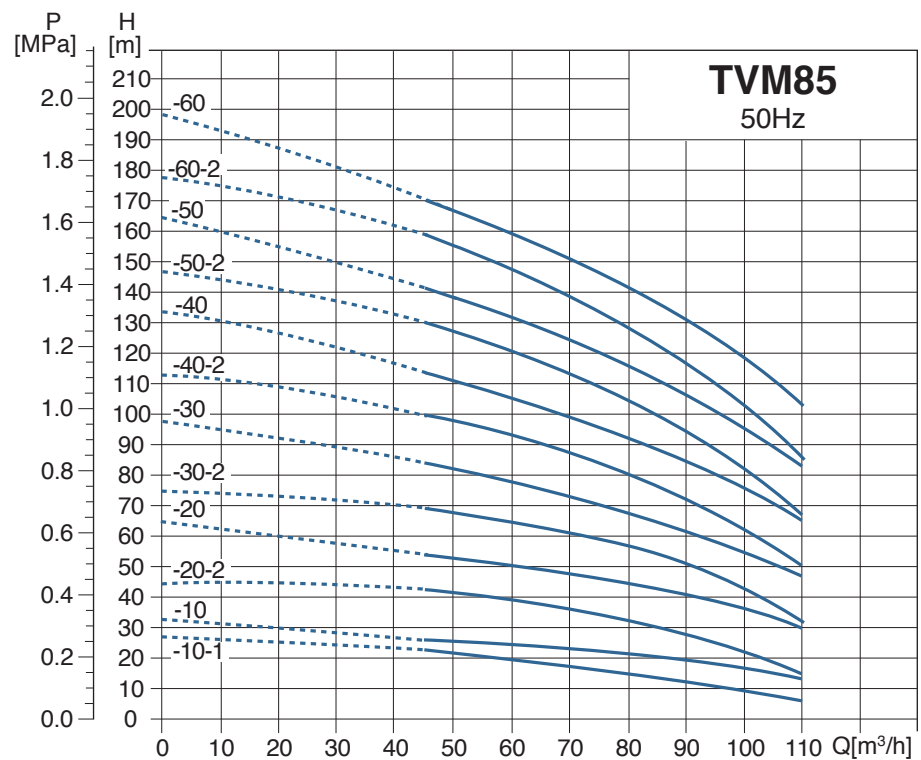


Performance Table

Model	Power (kW)	Q (m^3/h)	30	40	50	60	65	70	80
TVM65-10-1	4.0	H (m)	19	18	16	14	13	11	8
TVM65-10	5.5		27	25	23	21	20	18	15
TVM65-20-2	7.5		39	36	33	29	26	23	17
TVM65-20-1	11		46	44	40	36	33	30	24
TVM65-20	11		53	51	47	43	40	37	30
TVM65-30-2	15		66	62	56	50	46	41	32
TVM65-30-1	15		73	69	63	57	53	48	39
TVM65-30	18.5		80	76	70	64	60	55	46
TVM65-40-2	18.5		92	87	80	71	66	60	47
TVM65-40-1	22		100	94	87	78	73	67	54
TVM65-40	22		107	101	94	85	80	74	61
TVM65-50-2	30		121	114	105	95	88	80	64
TVM65-50-1	30		128	121	112	102	95	87	71
TVM65-50	30		136	129	119	109	102	94	78
TVM65-60-2	30		150	142	131	118	110	101	81
TVM65-60-1	37		157	149	138	125	117	108	88
TVM65-60	37		164	156	145	132	124	115	95
TVM65-70-2	37		179	169	156	141	132	121	99
TVM65-70-1	37		186	176	163	148	139	128	106
TVM65-70	45		193	183	170	155	146	135	112
TVM65-80-2	45	207	196	182	164	154	142	116	
TVM65-80-1	45	215	203	189	171	161	149	123	

TVM85

Performance Curves



Performance Table

Model	Power (kW)	Q (m³/h)	50	60	70	80	85	90	100	110
TVM85-10-1	5.5	H (m)	22	19	17	16	14	13	10	6
TVM85-10	7.5		25	24	22	21	20	19	16	12
TVM85-20-2	11		41	39	36	32	30	28	22	15
TVM85-20	15		53	50	47	44	41	40	36	30
TVM85-30-2	18.5		68	65	60	55	52	49	41	32
TVM85-30	22		81	77	72	67	64	62	55	48
TVM85-40-2	30		98	93	87	80	75	72	62	50
TVM85-40	30		110	105	100	92	86	84	76	66
TVM85-50-2	37		126	120	113	104	98	93	81	68
TVM85-50	37		139	131	124	115	110	106	94	83
TVM85-60-2	45		155	148	139	129	122	117	102	86
TVM85-60	45		168	160	150	141	134	130	117	103