

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.



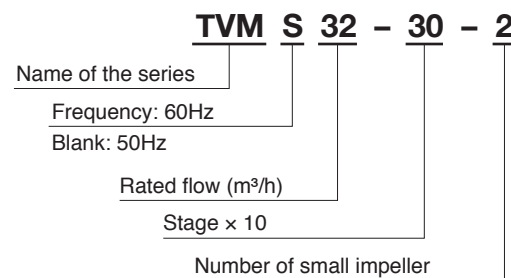
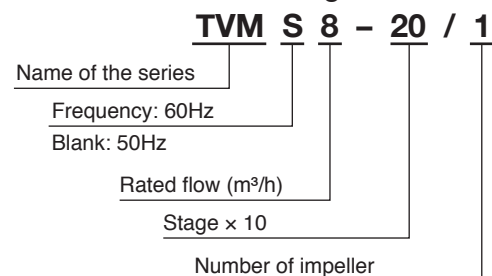
Applications

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

Major Standard Specifications

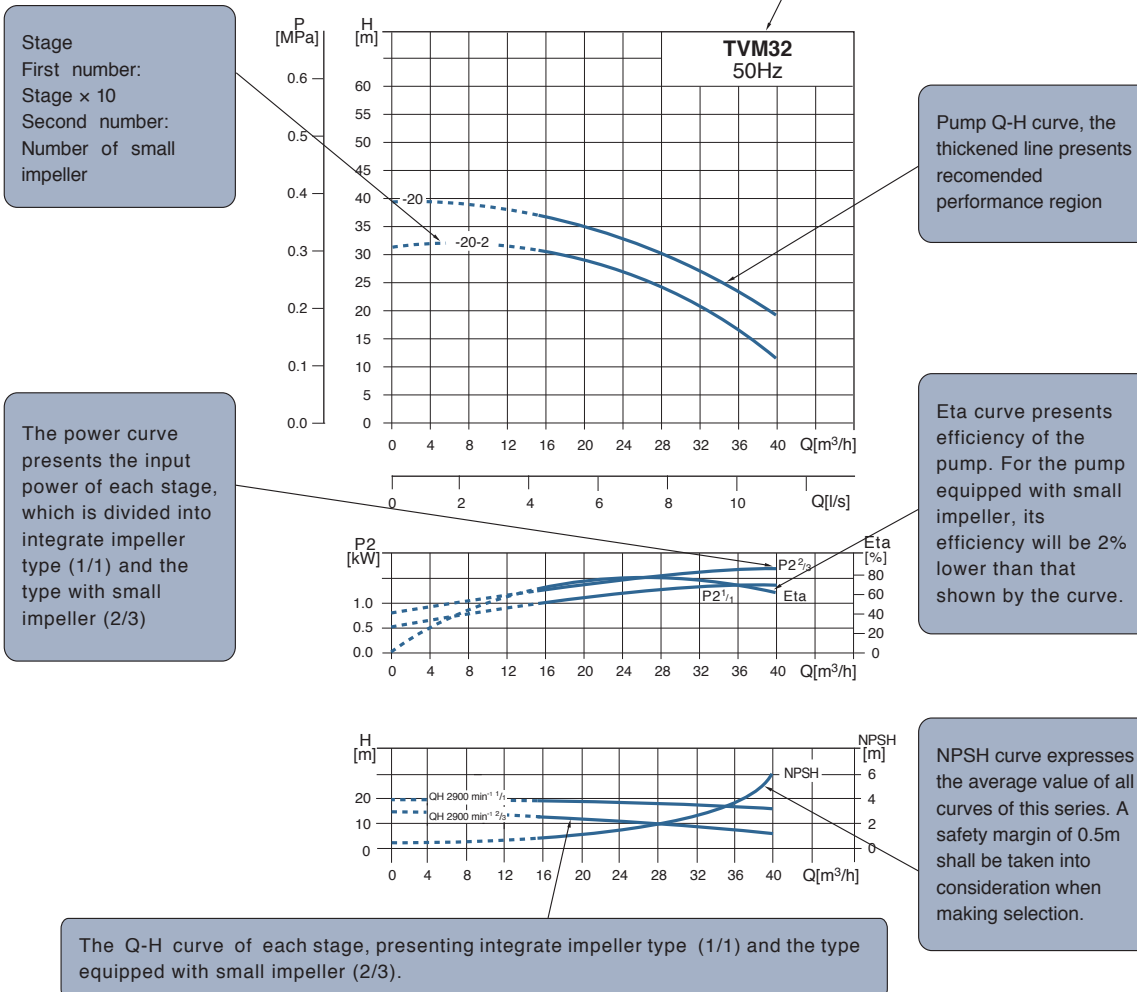
Suction × Discharge Bore mm		25 × 25	32 × 32	40 × 40	50 × 50	65 × 65	80 × 80	100 × 100
Pumping Fluid	Type of Fluid	Industrial Water and Agricultural Water						
	Fluid Temperature	0 to 70°C						
Pump	Structure	Impeller	Closed Impeller					
		Shaft Seal	Mechanical Seal					
		Bearing	Ball Bearing (11kW 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

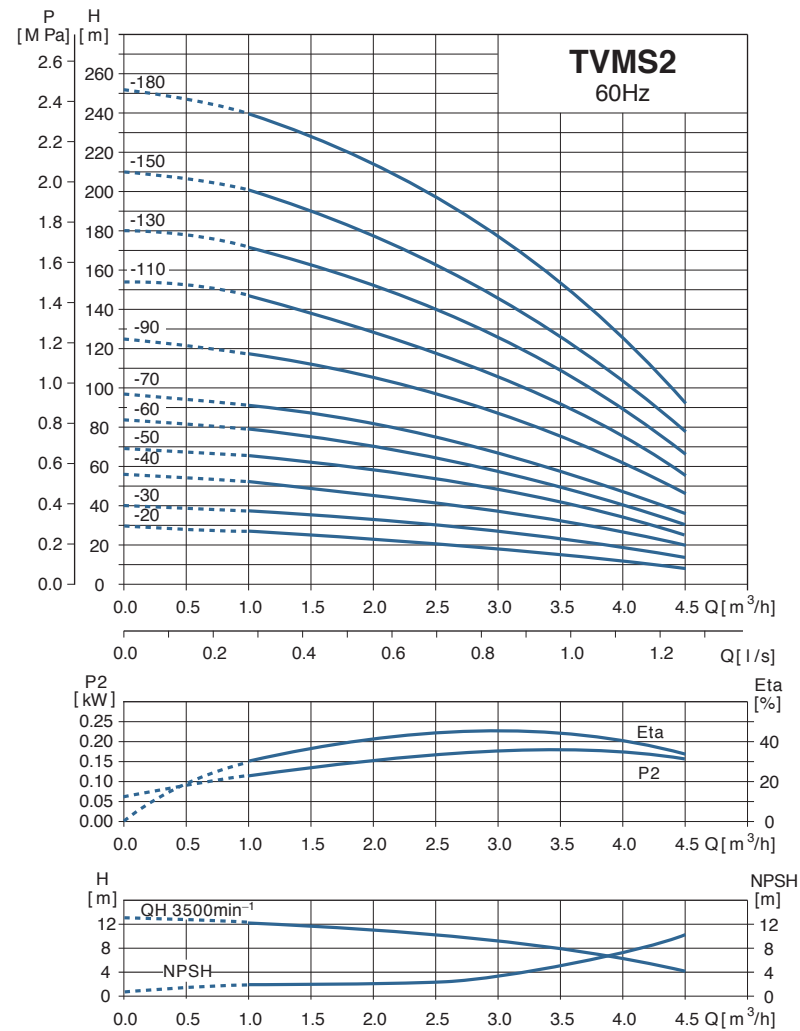
Following conditions are applied to the performance curves shown in this catalogue:

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.

TVMS

TVMS2

Performance Curves

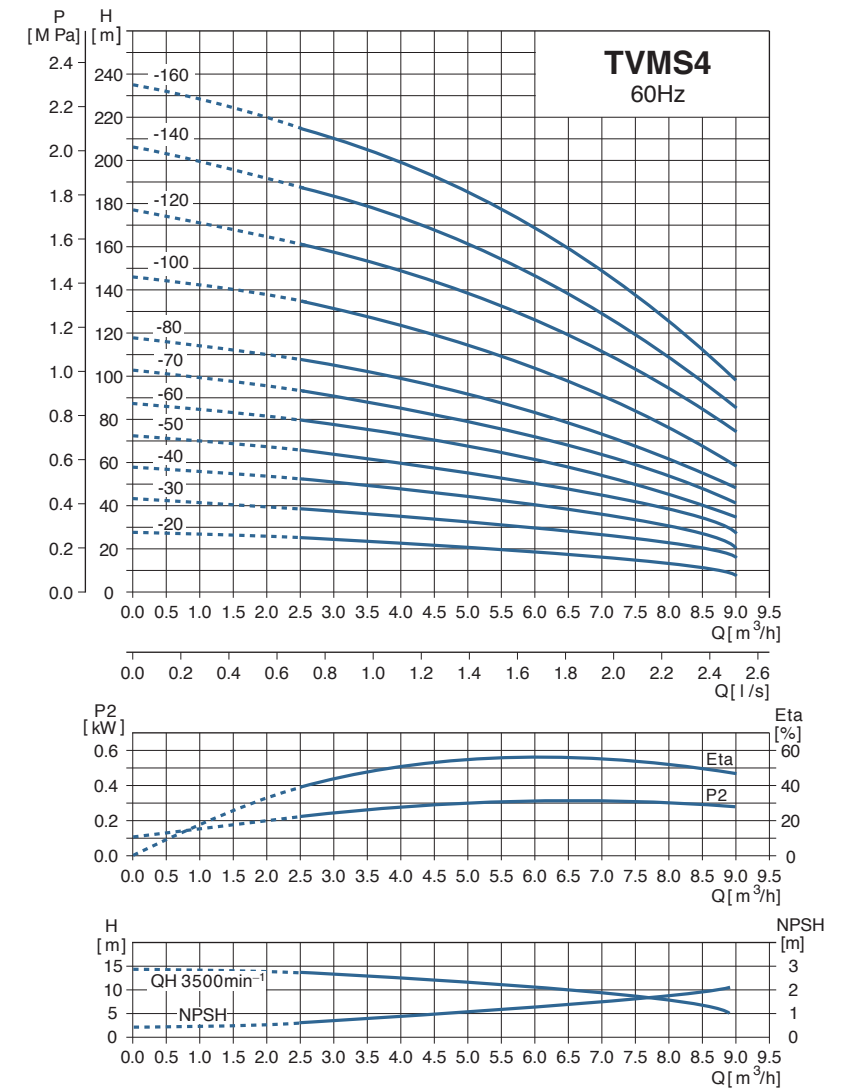


Performance Table

Model	Power (kW)	Q (m³/h)	1	1.5	2	2.5	3	3.5	4	4.5
TVMS2-20	0.55	H (m)	26	24	22	21	19	16	12	9
TVMS2-30	0.75		39	36	34	31	27	24	19	15
TVMS2-40	1.1		52	48	45	42	36	32	26	20
TVMS2-50	1.1		65	61	57	52	46	41	33	25
TVMS2-60	1.1		78	74	69	63	56	49	40	30
TVMS2-70	1.5		92	86	81	74	66	57	47	35
TVMS2-90	2.2		118	111	104	95	86	76	61	45
TVMS2-110	2.2		144	137	128	117	106	91	75	55
TVMS2-130	3		271	163	152	139	126	108	90	66
TVMS2-150	3		198	188	176	161	146	125	104	77
TVMS2-180	4		238	228	212	195	175	151	126	94

TVMS4

Performance Curves



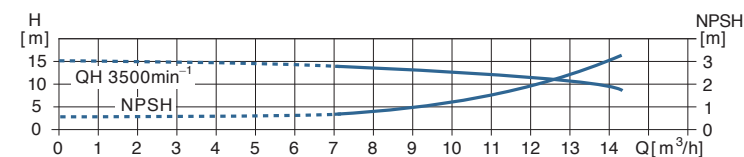
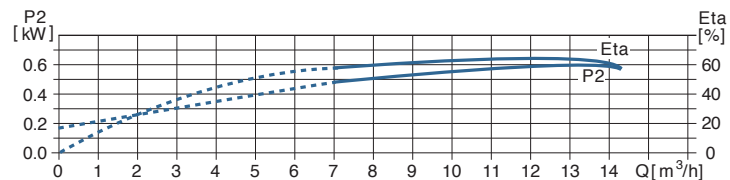
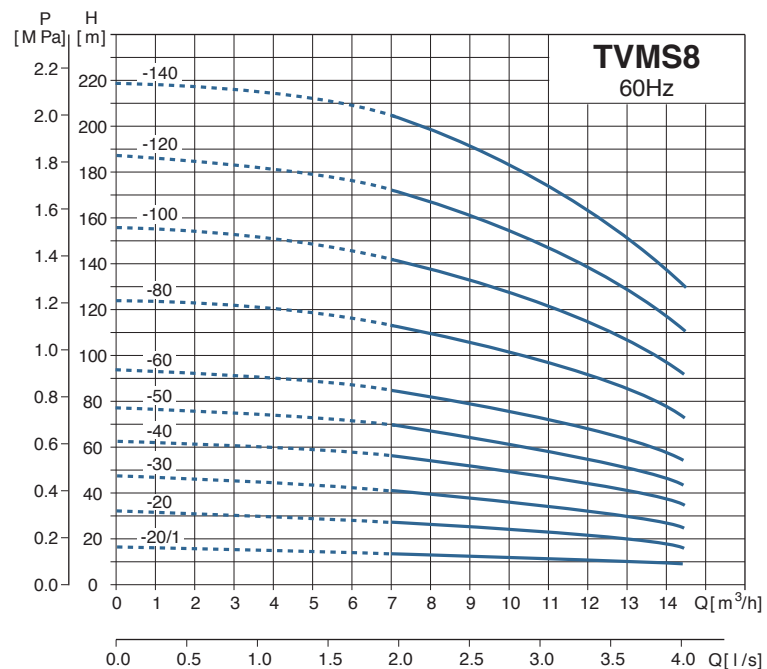
Performance Table

Model	Power (kW)	Q (m³/h)	2.5	3	4	5	6	7	8	9
TVMS4-20	0.75	H (m)	26	25	23	21	19	16	14	11
TVMS4-30	1.1		40	39	36	32	30	26	22	18
TVMS4-40	1.5		53	52	48	44	41	35	31	24
TVMS4-50	2.2		66	65	60	55	51	44	39	30
TVMS4-60	2.2		80	78	73	67	61	54	47	36
TVMS4-70	3		93	91	85	78	71	63	55	42
TVMS4-80	3		107	104	97	90	82	73	63	49
TVMS4-100	4		134	130	121	113	103	92	80	61
TVMS4-120	4		161	156	145	136	125	111	96	74
TVMS4-140	5.5		188	183	170	159	146	130	112	86
TVMS4-160	5.5		215	210	196	183	168	149	128	99

TVMS

TVMS8

Performance Curves

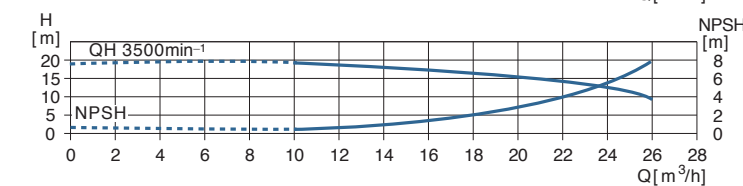
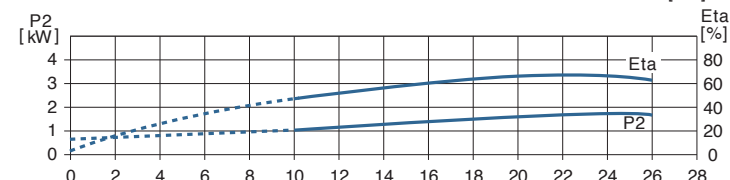
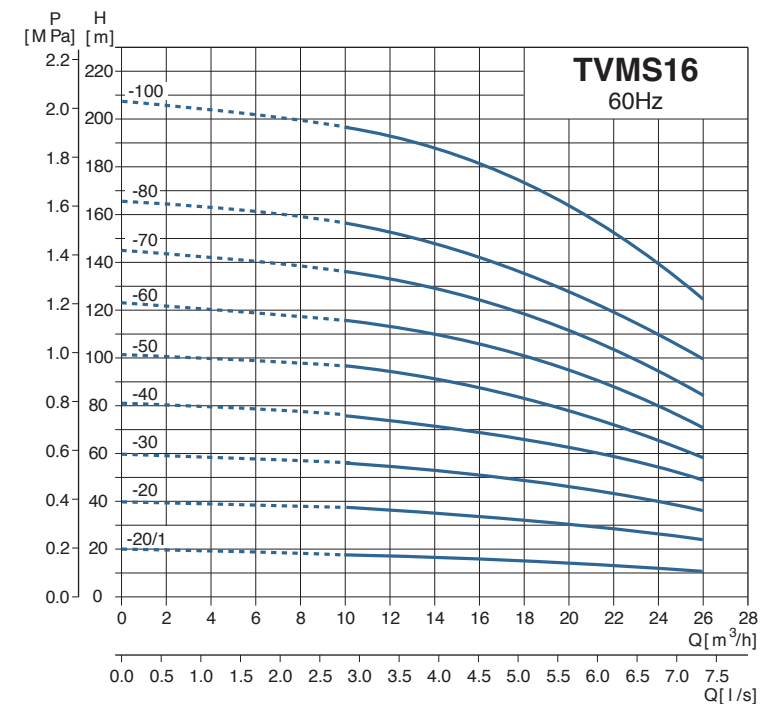


Performance Table

Model	Power (kW)	Q (m³/h)	7	8	9	10	11	12	13	14
TVMS8-20/1	0.75	H (m)	13	12	11.5	11	10.5	10	9.5	9
TVMS8-20	1.5		27	26	25	24	23	22	20	18
TVMS8-30	2.2		41	40	38	37	35	33	31	28
TVMS8-40	3		55	54	52	50	47	45	42	38
TVMS8-50	3		70	68	65	63	59	56	52	48
TVMS8-60	4		85	82	78	76	72	68	63	58
TVMS8-80	5.5		115	111	105	101	97	91	85	78
TVMS8-100	7.5		145	140	132	126	122	115	107	98
TVMS8-120	7.5		175	169	160	152	148	139	129	118
TVMS8-140	11		205	198	188	179	174	163	152	139

TVMS16

Performance Curves

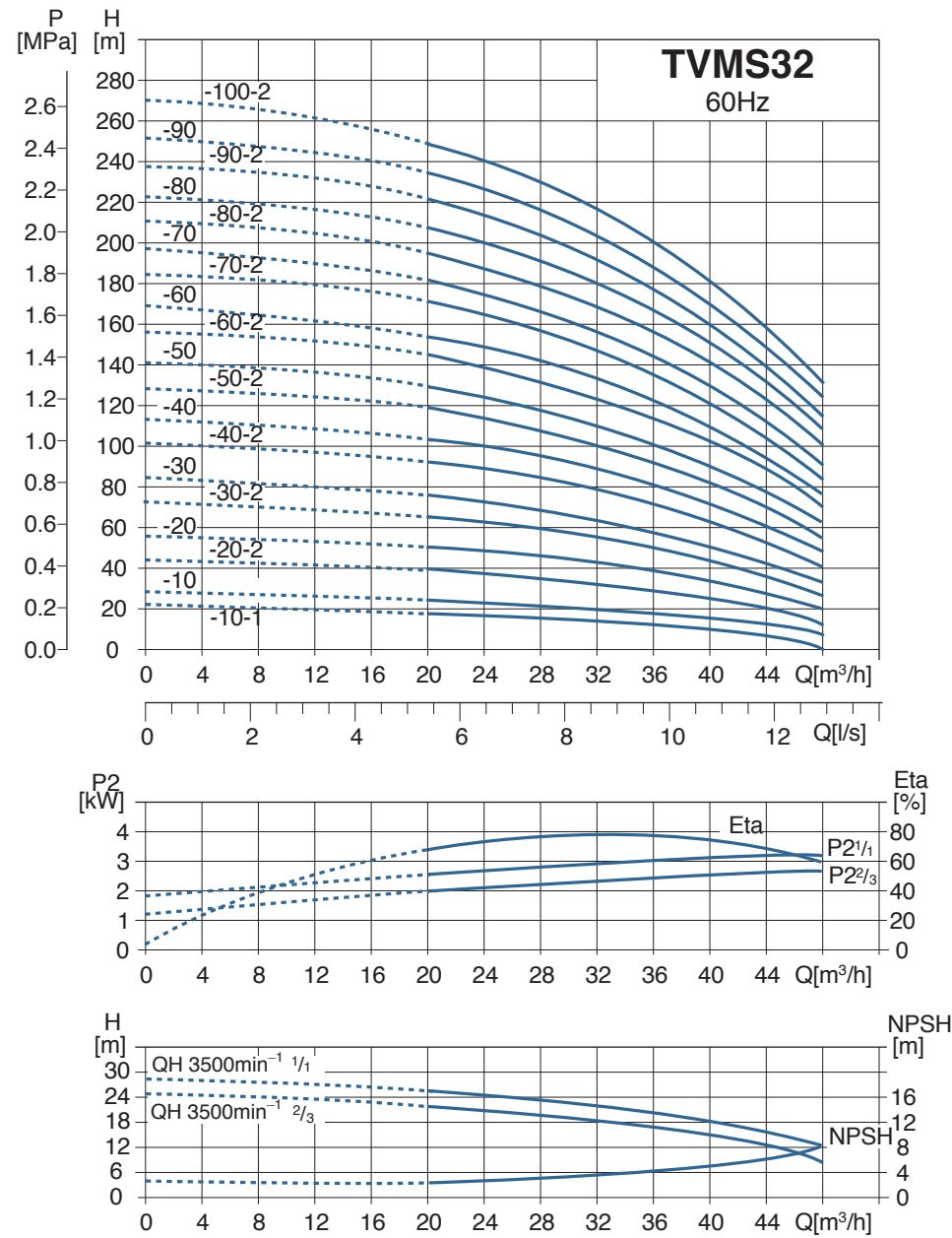


Performance Table

Model	Power (kW)	Q (m³/h)	10	12	14	16	18	20	22	24	26
TVMS16-20/1	2.2	H (m)	19	18.5	18	17	16	15	14	13	11
TVMS16-20	4		38	37.5	37	36	34	32	30	27	24
TVMS16-30	5.5		57	56	55	54	51	48	45	40	36
TVMS16-40	7.5		76	75	73	72	68	64	60	54	49
TVMS16-50	11		96	94	92	90	85	80	75	68	62
TVMS16-60	11		115	113	111	108	102	96	91	82	75
TVMS16-70	15		135	132	129	126	119	113	106	96	88
TVMS16-80	15		155	152	148	144	137	130	122	111	101
TVMS16-100	18.5		197	192	187	181	174	165	153	141	127

TVMS

TVMS32 Performance Curves

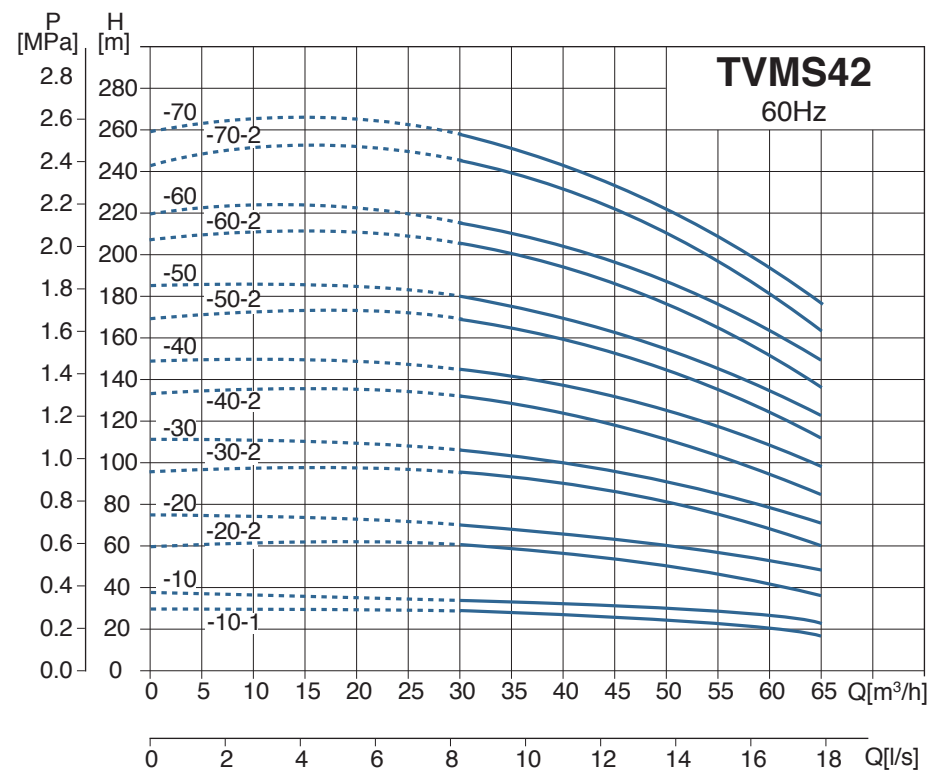


Performance Table

Model	Power (kW)	Q (m³/h)	20	24	28	32	36	40	44	48
TVMS32-10-1	3.0	H (m)	20	19	18	17	15	13	10	7
TVMS32-10	4.0		26	25	24	23	21	19	17	14
TVMS32-20-2	5.5		41	40	38	35	31	27	22	17
TVMS32-20	7.5		52	50	48	45	41	37	33	27
TVMS32-30-2	7.5		67	64	61	57	52	46	39	31
TVMS32-30	11		78	75	71	67	62	56	50	40
TVMS32-40-2	11		94	91	87	81	73	65	56	45
TVMS32-40	15		104	101	96	91	83	75	66	55
TVMS32-50-2	15		119	115	109	102	94	84	73	59
TVMS32-50	18.5		130	125	119	112	104	94	83	69
TVMS32-60-2	18.5		105	140	134	126	116	104	90	74
TVMS32-60	18.5		155	150	144	136	126	114	100	81
TVMS32-70-2	22		172	166	158	149	137	123	106	86
TVMS32-70	22		182	176	168	159	148	133	118	97
TVMS32-80-2	22		196	190	182	172	159	143	124	102
TVMS32-80	30		208	201	192	181	167	152	132	111
TVMS32-90-2	30	223	216	206	194	179	162	142	117	
TVMS32-90	30	234	226	216	204	189	172	152	127	
TVMS32-100-2	30	248	241	231	217	201	181	159	133	

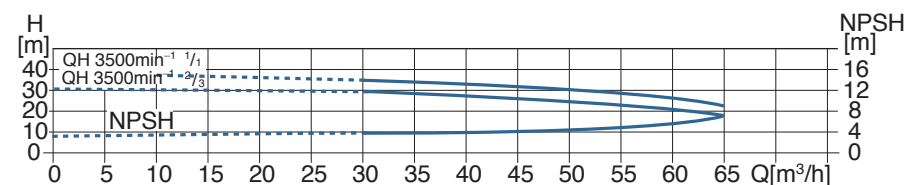
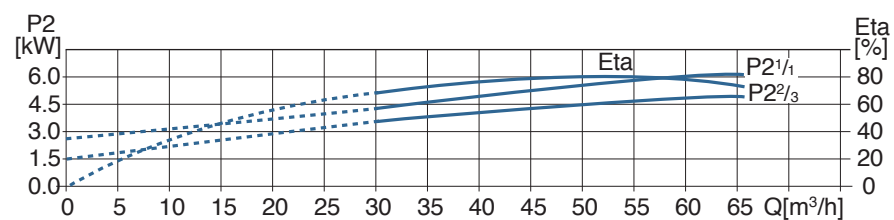
TVMS

TVMS42 Performance Curves



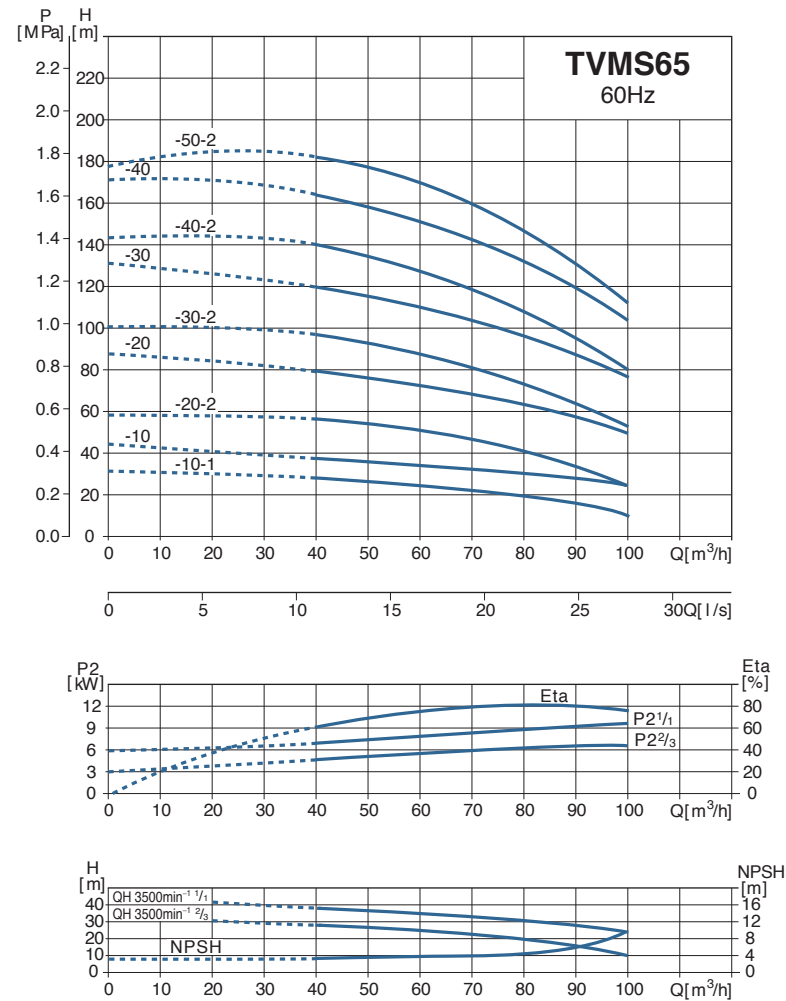
Performance Table

Model	Power (kW)	Q (m³/h)	30	35	40	45	50	55	60	65
TVMS42-10-1	5.5	H (m)	29	28	27	26	24	21	19	16
TVMS42-10	7.5		34	33	32	31	29	27	25	22
TVMS42-20-2	11		60	58	56	53	50	45	40	35
TVMS42-20	15		70	68	66	63	60	56	52	47
TVMS42-30-2	18.5		95	93	89	85	80	74	67	59
TVMS42-30	18.5		106	104	100	96	90	84	78	70
TVMS42-40-2	22		131	128	123	117	110	102	93	83
TVMS42-40	30		144	141	136	130	124	116	107	97
TVMS42-50-2	30		169	164	159	152	143	133	122	110
TVMS42-50	30		180	175	169	162	154	144	134	121
TVMS42-60-2	37		205	200	193	184	174	163	149	134
TVMS42-60	37		215	210	203	195	185	174	161	147
TVMS42-70-2	45		245	239	231	221	209	195	180	162
TVMS42-70	45		257	250	242	232	220	207	191	174



TVMS

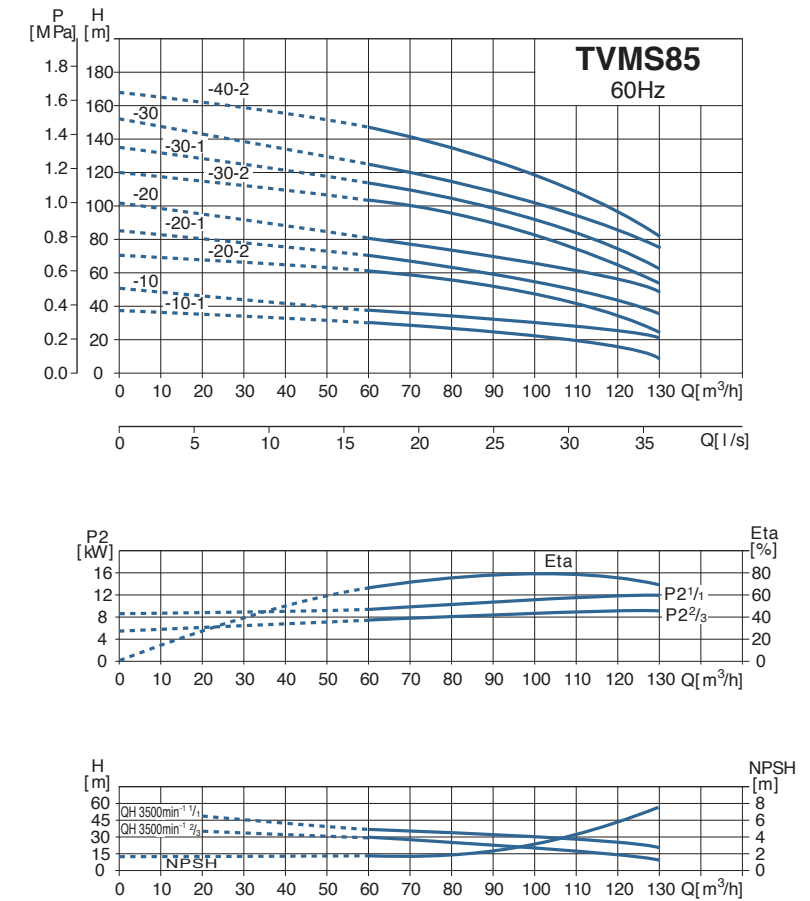
TVMS65 Performance Curves



Performance Table

Model	Power (kW)	Q (m³/h)	40	50	60	65	70	80	90	100
TVMS65-10-1	7.5	H (m)	28	27	25	24	23	19	15	10
TVMS65-10	11		38	37	35	34	33	30	27	24
TVMS65-20-2	15		57	55	52	50	47	41	33	25
TVMS65-20	22		79	75	72	70	68	63	57	50
TVMS65-30-2	22		97	93	88	85	81	73	64	53
TVMS65-30	30		120	115	110	107	104	96	87	77
TVMS65-40-2	37		139	134	127	123	118	108	96	81
TVMS65-40	45		164	158	151	147	142	131	119	104
TVMS65-50-2	45		182	177	169	164	159	146	130	112

TVMS85 Performance Curves



Performance Table

Model	Power (kW)	Q (m³/h)	60	70	80	85	90	100	110	120	130
TVMS85-10-1	11	H (m)	31	29	28	27	26	23	20	16	10
TVMS85-10	15		38	36	35	34	33	31	29	26	22
TVMS85-20-2	18.5		62	60	56	54	52	48	41	35	26
TVMS85-20-1	22		71	68	65	63	61	56	50	44	37
TVMS85-20	30		81	77	74	72	70	66	62	56	50
TVMS85-30-2	37		104	100	95	92	89	83	75	65	55
TVMS85-30-1	37		114	110	104	101	98	91	83	75	64
TVMS85-30	45		125	120	115	112	109	102	94	86	76
TVMS85-40-2	45		147	142	135	131	127	118	108	96	83