VUS

KAWAMOTO STAINLESS SUBMERSIBLE PUMP
4 POLES / 50 Hz
SIZE 50 ~ 100 MM
100% SOLID PASSAGE MODEL

VORTEX IMPELLER

STANDARD TYPE

W/WATER LEAK SENSOR TYPE

Kawamoto KAWAMOTO PUMP ASIA CO.,LTD.

APPLICATIONS AND FEATURES

■ APPLICATIONS

- For discharge of sewage and wastewater from buildings, factories, hospitals etc.

■ FEATURES

- All stainless steel structure (pump,motor,pedestal support) provides corrosion proof and long life.
- Excellent ability to pass foreign objects (can discharge spherical solids with a diameter which equals to the bore size) and superior pumping performance.
- Vortex type increases resistant against wearing due to sand etc., and revents start up failure due to rusted impellers.
- Equipped with a motor with built-in auto-cut to prevent motor burnout.
- Two types available : flange type and pedestal support type for easy maintenance and inspection.

STANDARD SPECIFICATIONS

Description		Model: VUS
Applicable Liquid		Waste water, Filthy water and Other miscellaneous dirty water
Liquid Temperature		0 ~ 40 °C
pH		5~9
Material	Casing	Stainless cast steel (304)
	Impeller	Stainless cast steel (304)
	Shaft	Stainless steel (304)
Motor	Speed	1500 rpm
Construction	Impeller	Vortex
	Shaft seal	Double mechanical seal Pump: SiC x SiC Motor: Ceramics x Carbon
	Motor Bearing	Sealed ball bearing
Cable length		10m
Maximum submergence		0.75kW: 5m 1.5~15kW: 8m

OPTIONAL SPECIFICATIONS

Cable extension	10m, 20m, 30m, 40m
For High temperature liquid	0~60 °C
Protection	Water leak sensor integration

SOLID PASSAGE

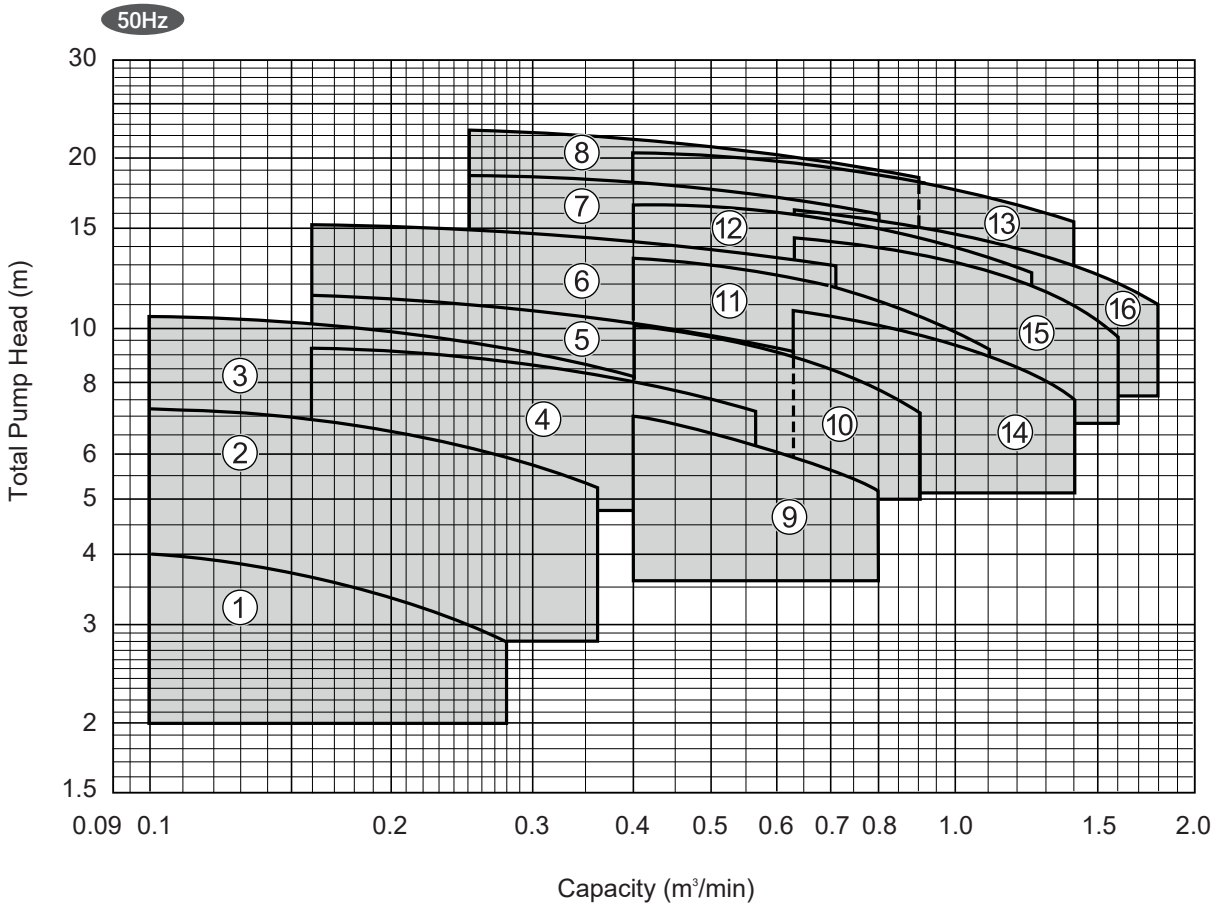
Pump Bore (mm)	Solid Diameter (mm)	Clothes (mm)
50	50	Less than 400mm
65	65	
80	80	
100	100	

CABLE

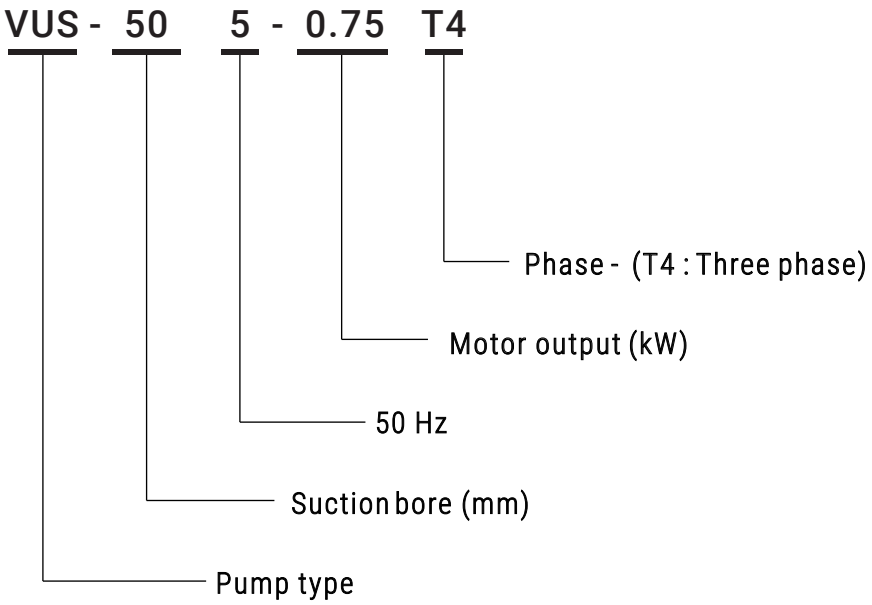
Output (kW)	Phase	Size (mm^2)	Core	Outer Diameter (mm)	Length (m)
0.75	3	1.25	4	11	6
1.5	3	1.25	4	11	10
2.2	3	1.25	4	11	10
3.7	3	2	4	11.7	10
5.5	3	3.5	4	13.8	10
7.5	3	5.5	4	16.5	10

Cable Material : 600V insulating (VCT)

PERFORMANCE CHART



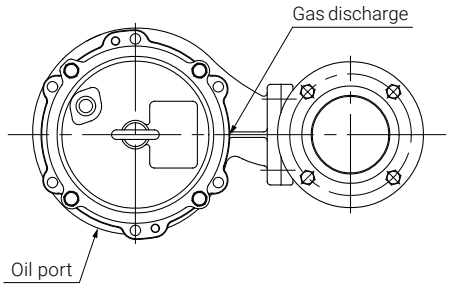
MODEL CODE

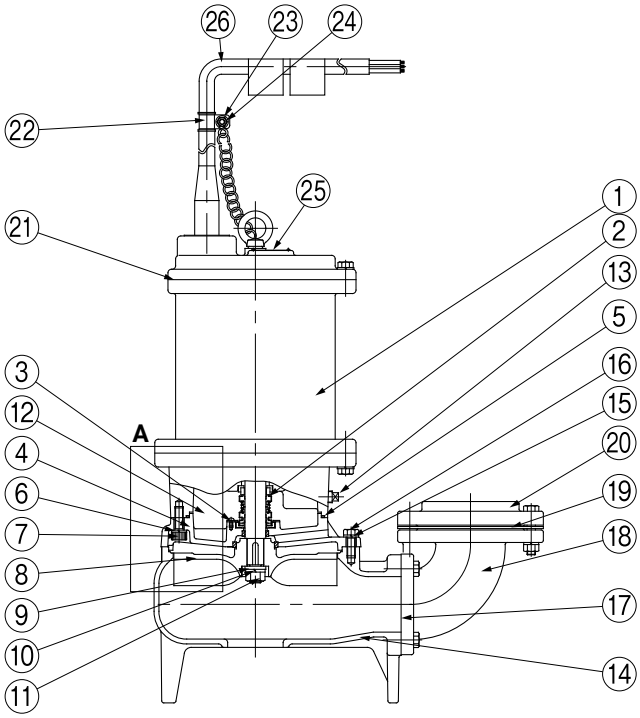


PUMP DATA - VUS

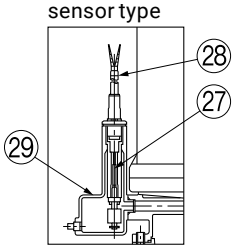
No.	Bore (mm)	Model	Motor (kW)	Performance			
				Capacity (m^3/min)	Total Head (m)	Capacity (m^3/min)	Total Head (m)
1	50	VUS-505-0.4T4	0.4	0.1	4.0	0.28	2.8
2		VUS-505-0.75T4	0.75	0.1	7.2	0.36	5.2
3		VUS-505-1.5T4	1.5	0.1	10.5	0.4	8.2
4	65	VUS-655-1.5T4	1.5	0.16	9.2	0.56	7.2
5		VUS-655-2.2T4	2.2	0.16	11.5	0.63	9.2
6		VUS-655-3.7T4	3.7	0.16	15.2	0.71	13.0
7		VUS-655-5.5T4	5.5	0.25	18.8	0.8	16
8		VUS-655-7.5T4	7.5	0.25	22.5	0.9	18.8
9	80	VUS-805-1.5T4	1.5	0.4	7	0.8	5.2
10		VUS-805-2.2T4	2.2	0.4	10.2	0.9	7.2
11		VUS-805-3.7T4	3.7	0.4	13.5	1.1	9.2
12		VUS-805-5.5T4	5.5	0.4	16.5	1.25	12.5
13		VUS-805-7.5T4	7.5	0.4	20.2	1.4	15.5
14	100	VUS-1005-3.7T4	3.7	0.63	10.8	1.4	7.5
15		VUS-1005-5.5T4	5.5	0.63	14.5	1.6	9.8
16		VUS-1005-7.5T4	7.5	0.63	16.2	1.8	11

SECTION VIEW - FLANGE TYPE





View A
In case of w/Water leak sensor type



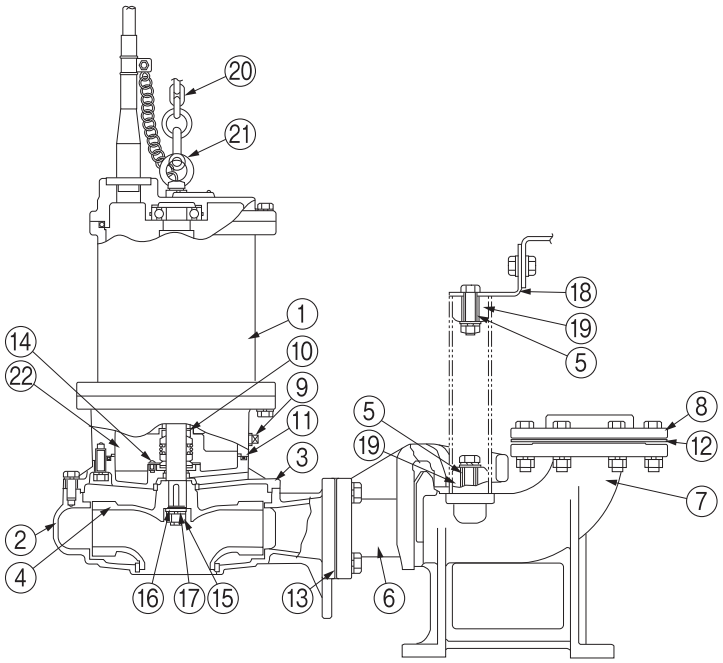
This is special spec

Specification

Item	Note
Contact capacity	50VA DC/AC
Maximum switching voltage	300V DC/AC
Maximum switching current	0.5A DC/AC
Working contact	B Contact
Cable	VCT 2 x 0.75mm^2

No.	Part Name	Material	No.	Part Name	Material
1	Motor	-	16	Bolt	SUS304
2	Mechanical seal	-	17	Packing	Paper
3	Screw	SWRM10	18	Bend	SCS13
4	Casing cover	SCS13	19	Flange packing	Rubber
5	O-Ring	Rubber	20	Flange	SCS13
6	Spring washer	SUS304	21	Packing	Rubber
7	Bolt	SUS304	22	Clamp	SUS304
8	Impeller	SCS13	23	Bolt	SUS304
9	Plane washer	SUS304	24	Nut	SUS304
10	Spring washer	SUS304	25	Nameplate	SUS304-CP
11	Nut	SUS304	26	Cable	VCT
12	Turbine oil	-	27	Water leak sensor	-
13	Plug	SCS13	28	Cable	VCT
14	Casing	SCS13	29	Case	SCS13
15	Spring washer	SUS304			

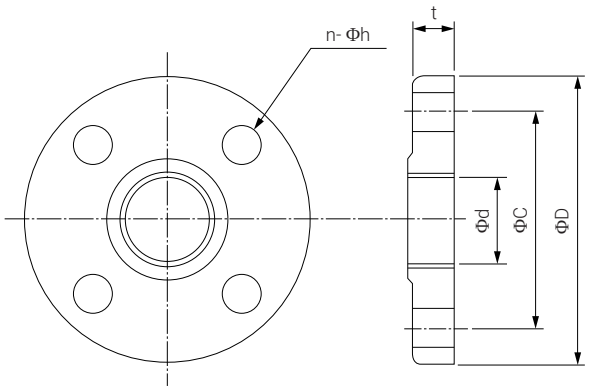
SECTION VIEW - WITH Q.D.C TYPE



No.	Part name	Material	Note
1	Motor		
2	Casing	SCS13	
3	Casing cover	SCS13	
4	Impeller	SCS13	
5	Pipe	SUS304-TP	
6	Connecting pipe	SCS13	
7	Connecting bend with baseplate	SCS13	
8	Flange	SCS13	
9	Plug	SCS13	
10	Mechanical seal	-	
11	O-Ring	Rubber	
12	Flange packing	Rubber	
13	Flange packing	Paper	
14	Screw	SWRM10	
15	Nut	SUS304	
16	Plane washer	SUS304	
17	Spring washer	SUS304	
18	Supporter	SUS304-TP	
19	Cushion	Rubber	
20	Chain	Stainless steel (SUS304)	
21	Shackle	Stainless steel (SUS304)	
22	Turbine oil	VG32	

* Shaft : SUS304

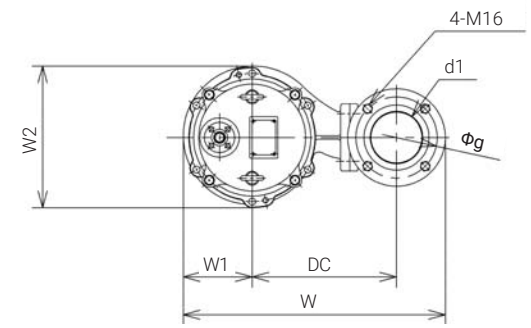
FLANGE DIMENSION

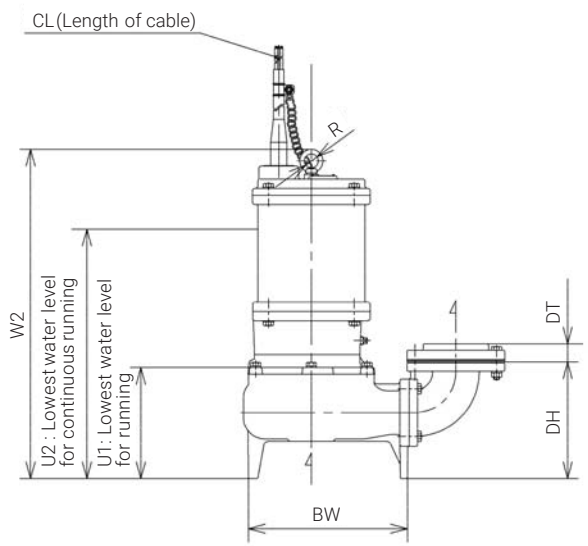


Unit:mm

Bore a	d	C	D	t	n	h (Bolt)
50	Rc2	120	155	14	4	19(M16)
65	Rc2 ½	140	175	16	4	19(M16)
80	Rc3	150	185	16	8	19(M16)
100	Rc4	175	210	16	8	19(M16)

PUMP DIMENSION - WITH FLANGE TYPE

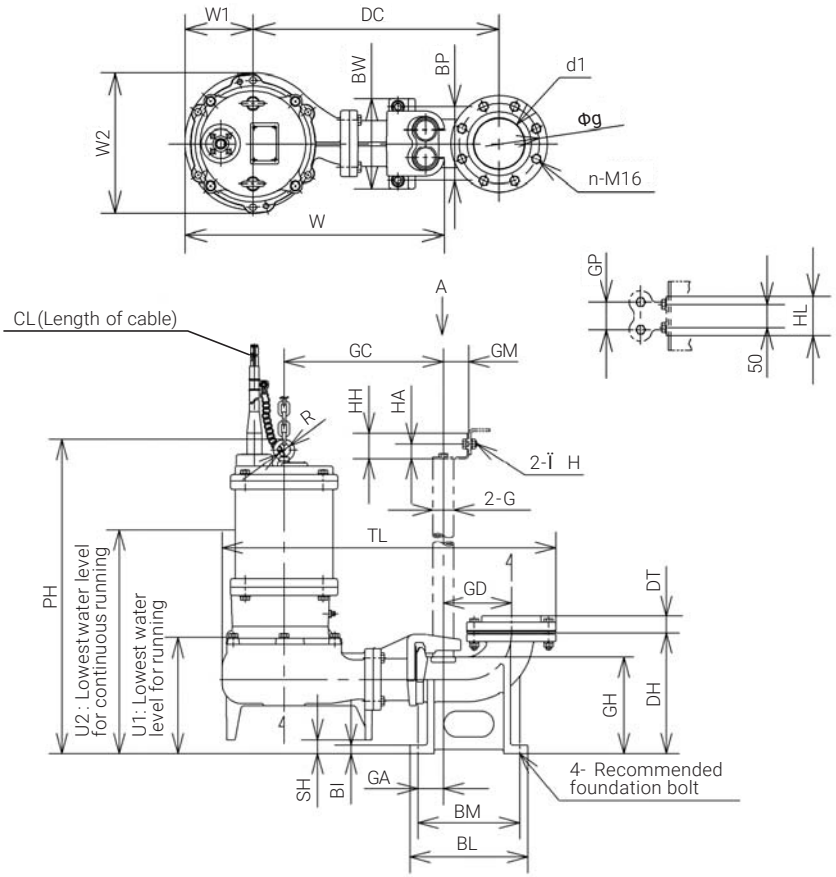




Unit : mm

Discharge Bore (mm)	Model	Motor (kW)	Pump Combination							Water Level		Other	Weight (kg)	
			PH	DH	BW	W	W1	W2	DC	U1	U2	R	PG	TG
50	VUS-505-0.4T4	0.4	503	198	189	377	104	232	195	190	345	25	33	39
	VUS-505-0.75T4	0.75	503	198	189	377	104	232	195	190	345	25	33	39
	VUS-505-1.5T4	1.5	543	198	223	416	122	262	215	190	385	25	41	47
65	VUS-655-1.5T4	1.5	580	231	239	456	122	262	245	230	425	25	44	53
	VUS-655-2.2T4	2.2	669	231	239	456	122	262	245	235	485	30	53	62
	VUS-655-3.7T4	3.7	669	231	277	500	147	302	265	235	485	30	64	73
	VUS-655-5.5T4	5.5	681	231	371	548	165	332	295	240	590	30	96	106
	VUS-655-7.5T4	7.5	681	231	371	548	165	332	295	240	590	30	104	114
80	VUS-805-1.5T4	1.5	617	262	246	451	109	232	250	255	450	25	40	52
	VUS-805-2.2T4	2.2	698	262	286	495	132	267	270	260	510	30	52	64
	VUS-805-3.7T4	3.7	698	262	286	495	132	267	270	260	510	30	58	70
	VUS-805-5.5T4	5.5	710	262	341	551	148	304	310	270	615	30	93	105
	VUS-805-7.5T4	7.5	710	262	381	589	166	336	330	270	615	30	105	117
100	VUS-1005-3.7T4	3.7	737	299	316	527	132	266	290	300	550	30	62	74
	VUS-1005-5.5T4	5.5	749	301	351	570	155	311	310	310	655	30	97	109
	VUS-1005-7.5T4	7.5	749	301	351	570	155	311	310	310	655	30	105	117

PUMP DIMENSION - WITH Q.D.C TYPE



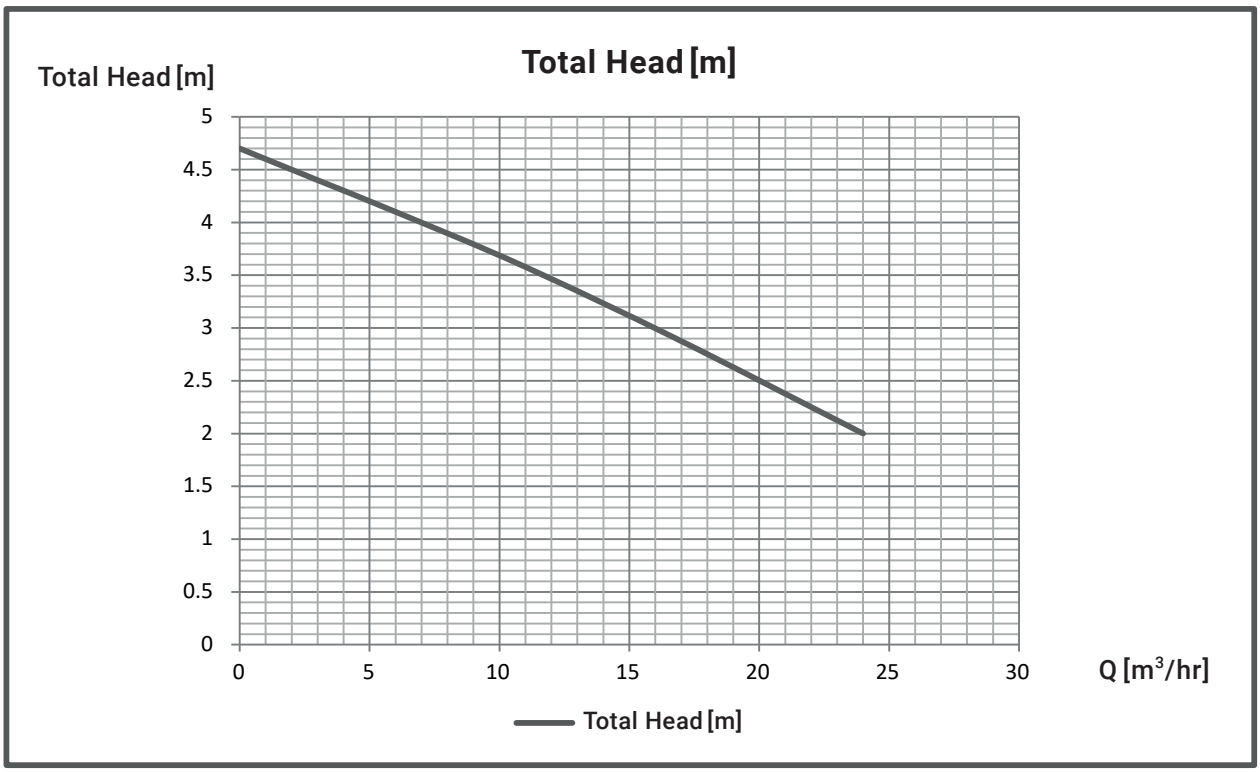
Unit : mm

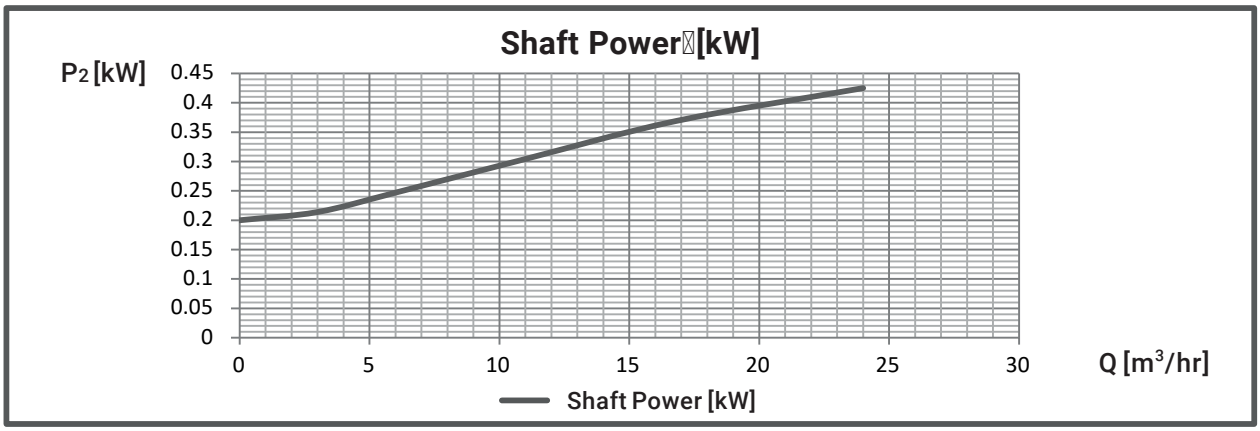
Discharge Bore (mm)	Model	Motor (kW)	Pump			Combination				Water Level		Other	Weight (kg)		Recommended Foundation Bolt
			W	W1	W2	PH	SH	DC	TL	U1	U2	R	PG	TG	
50	VUS-505-0.4T4	0.4	405	104	232	530	27	395	577	220	375	25	33	51	M12x160
	VUS-505-0.75T4	0.75	405	104	232	530	27	395	577	220	375	25	33	51	M12x160
	VUS-505-1.5T4	1.5	444	123	262	570	27	415	615	220	415	25	41	59	M12x160
65	VUS-655-1.5T4	1.5	489	123	262	609	29	465	676	255	450	25	44	67	M16x200
	VUS-655-2.2T4	2.2	489	123	262	698	29	465	676	260	510	30	53	76	M16x200
	VUS-655-3.7T4	3.7	533	147	302	698	29	485	718	260	510	30	64	87	M16x200
	VUS-655-5.5T4	5.5	581	165	332	710	29	515	767	270	615	30	96	119	M16x200
	VUS-655-7.5T4	7.5	581	165	332	710	29	515	767	270	615	30	104	127	M16x200
80	VUS-805-1.5T4	1.5	455	109	232	643	33	465	666	290	485	25	40	71	M16x200
	VUS-805-2.2T4	2.2	498	132	267	731	33	485	711	295	545	30	52	83	M16x200
	VUS-805-3.7T4	3.7	498	132	267	731	33	485	711	295	545	30	58	89	M16x200
	VUS-805-5.5T4	5.5	554	148	304	743	33	525	766	300	650	30	93	124	M16x200
	VUS-805-7.5T4	7.5	592	166	336	743	33	545	804	300	650	30	105	136	M16x200
100	VUS-1005-3.7T4	3.7	545	131	266	766	29	555	791	330	580	30	62	106	M20x250
	VUS-1005-5.5T4	5.5	589	155	311	778	29	575	835	335	685	30	97	141	M20x250
	VUS-1005-7.5T4	7.5	589	155	311	778	29	575	835	335	685	30	105	149	M20x250

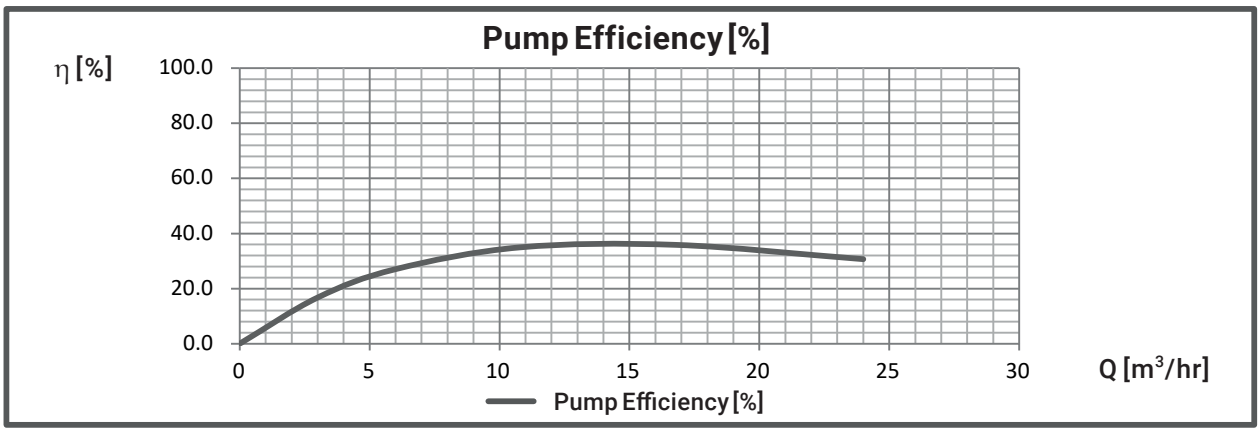
EXPECTED PERFORMANCE CURVE

MODEL : VUS-505-0.4T4

■ PERFORMANCE CURVES



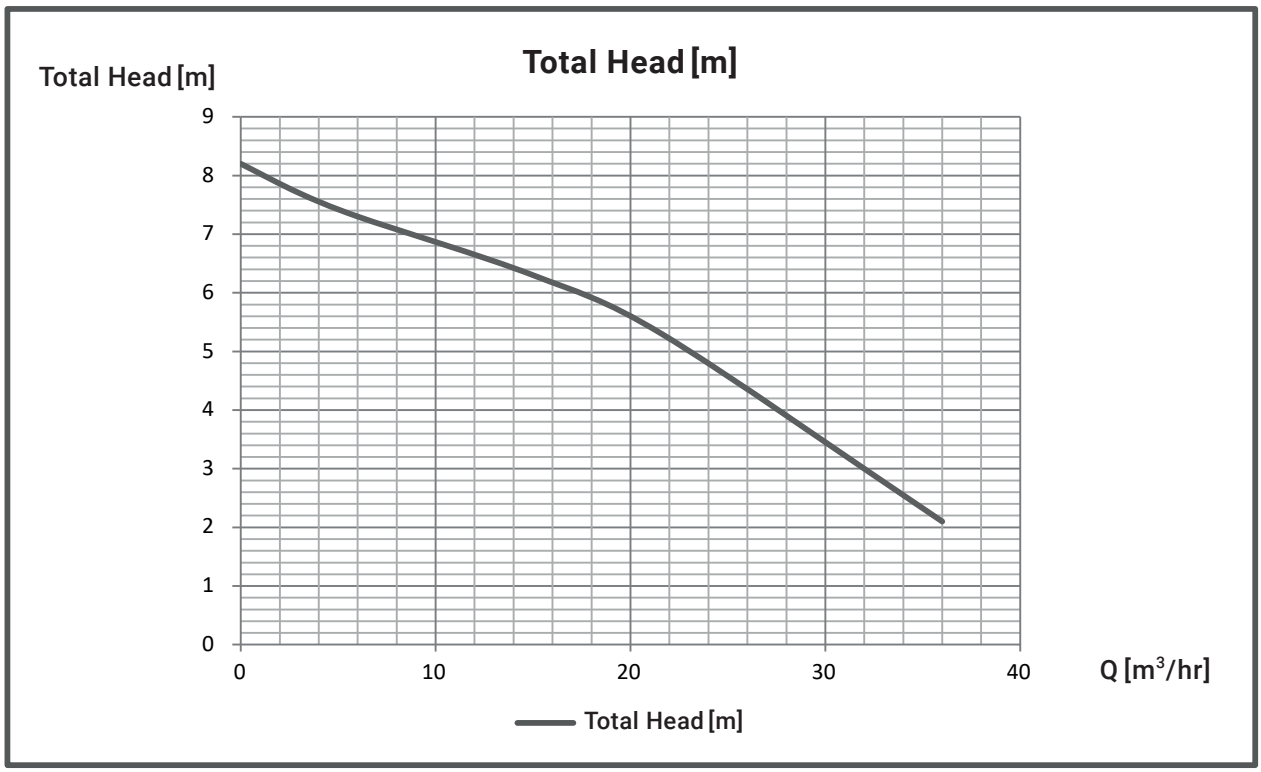


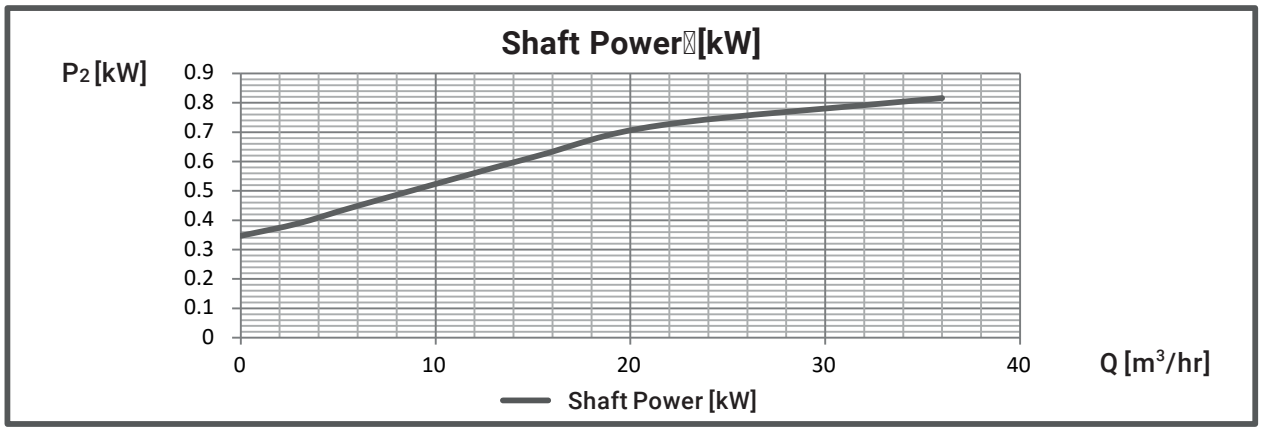


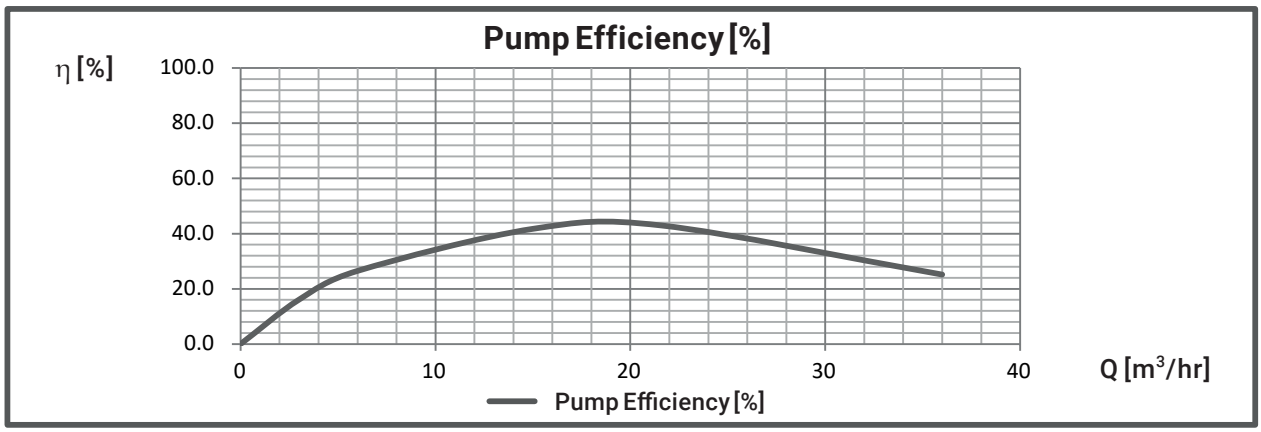
EXPECTED PERFORMANCE CURVE

MODEL : VUS-505-0.75T4

■ PERFORMANCE CURVES



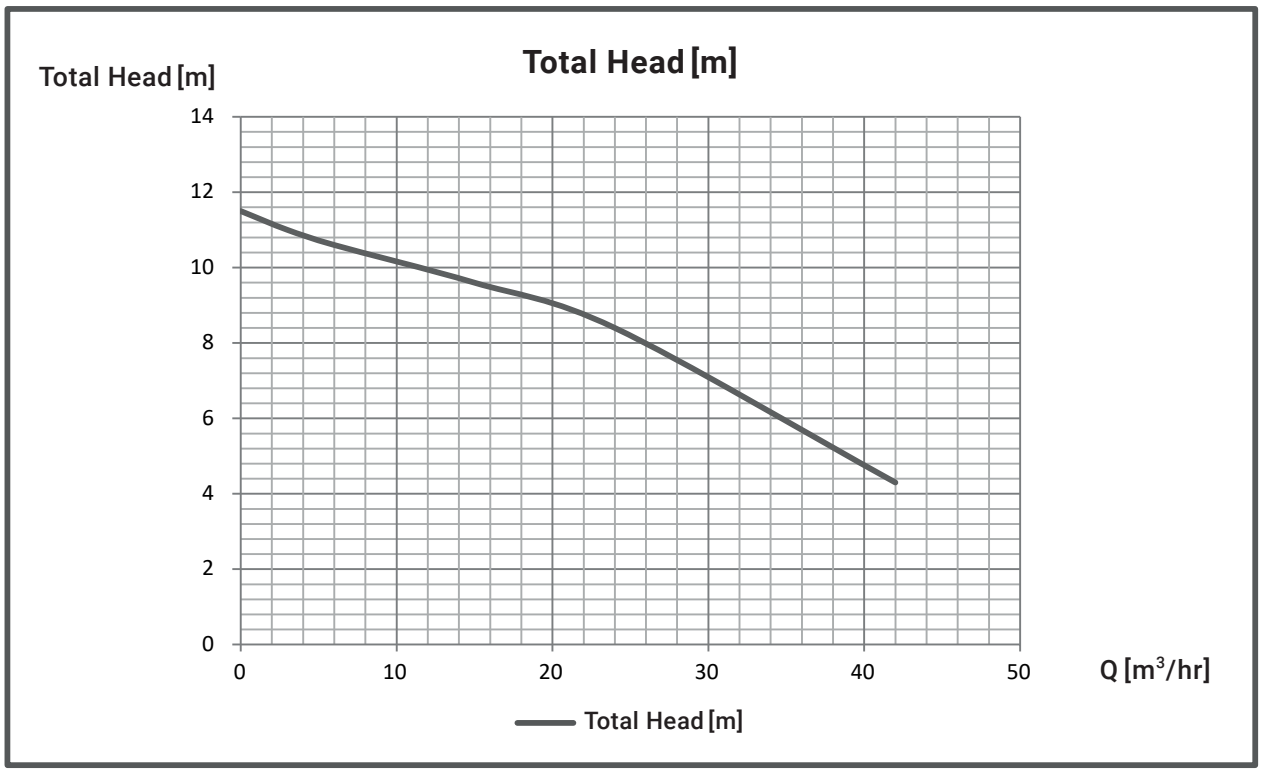


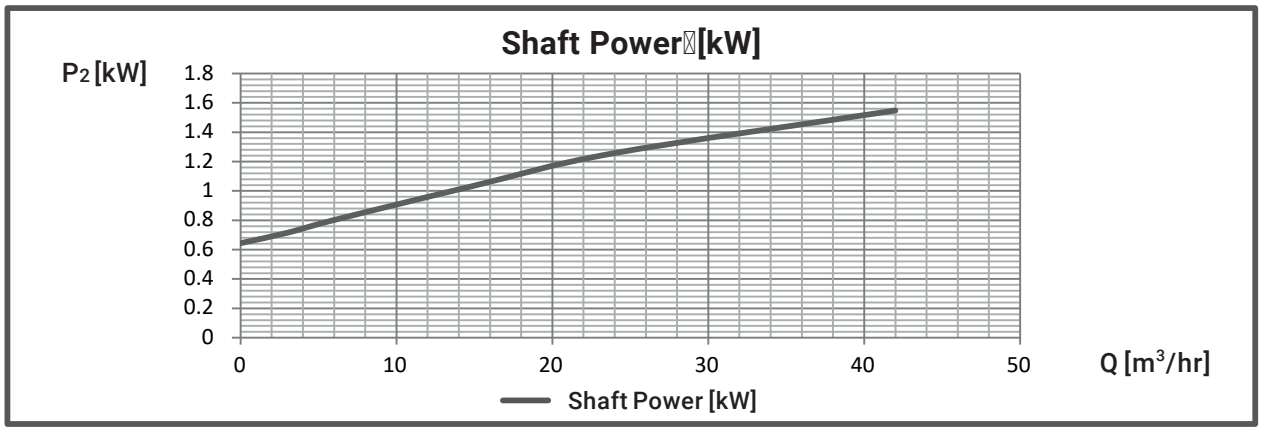


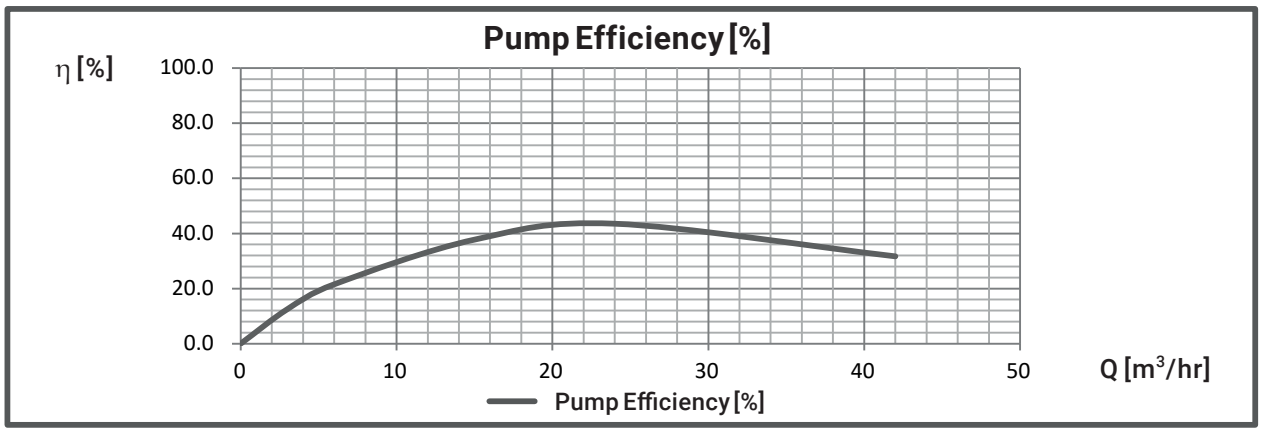
EXPECTED PERFORMANCE CURVE

MODEL : VUS-505-1.5T4

■ PERFORMANCE CURVES



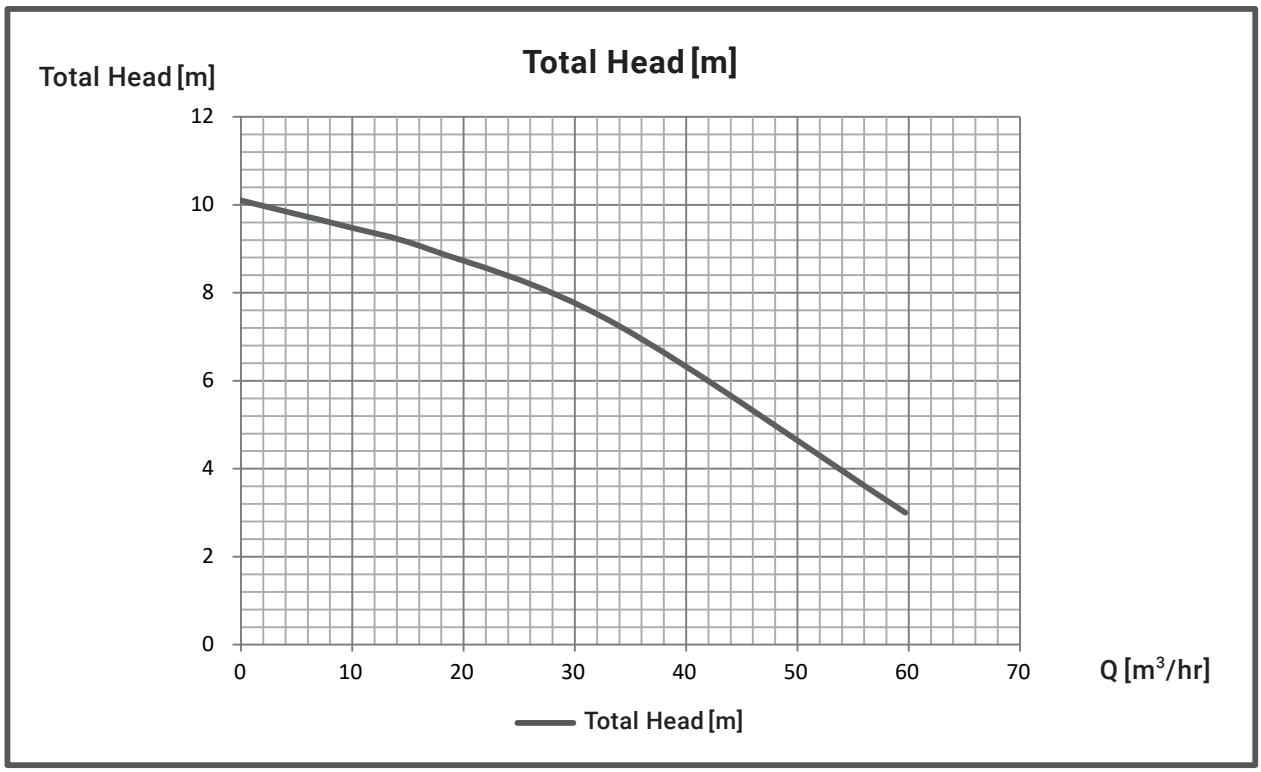


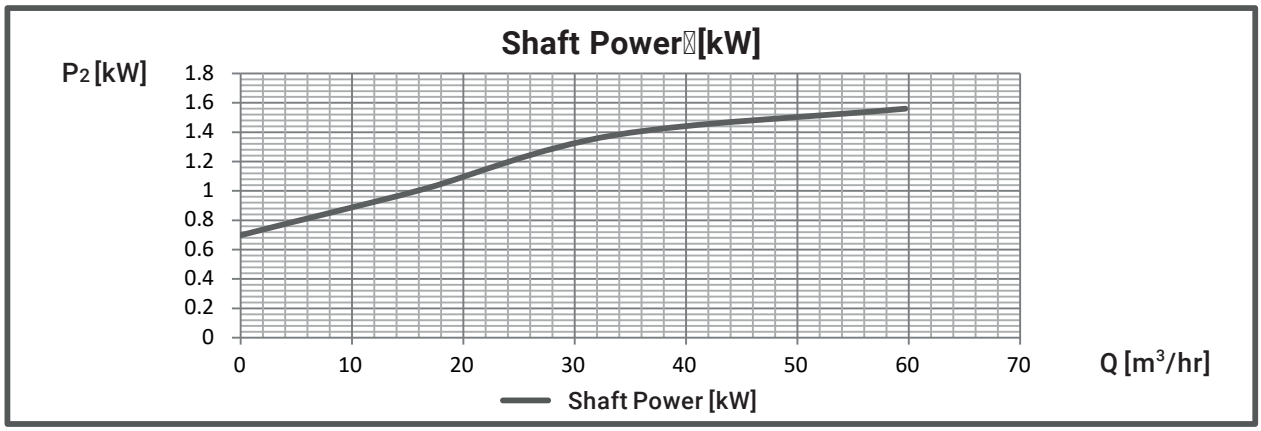


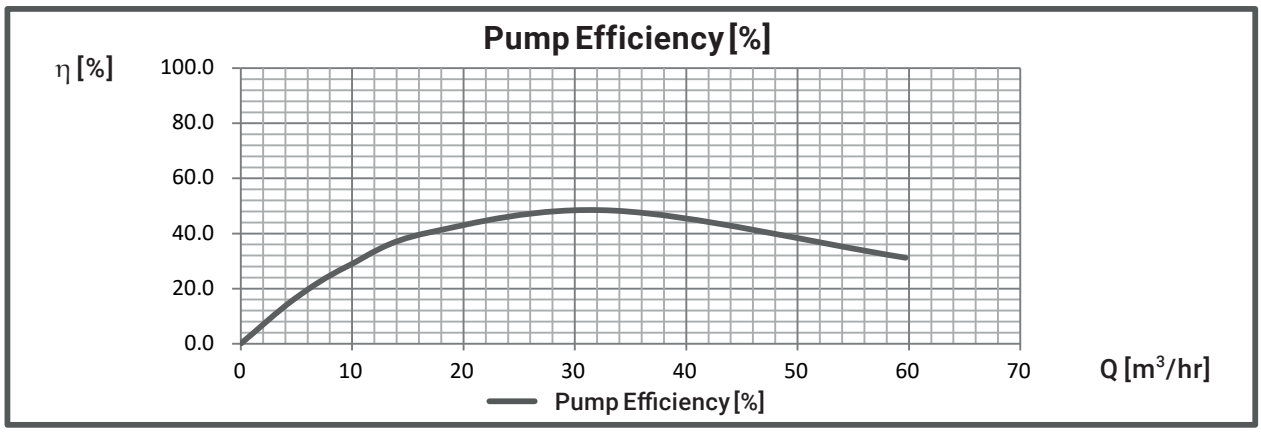
EXPECTED PERFORMANCE CURVE

MODEL : VUS-655-1.5T4

■ PERFORMANCE CURVES



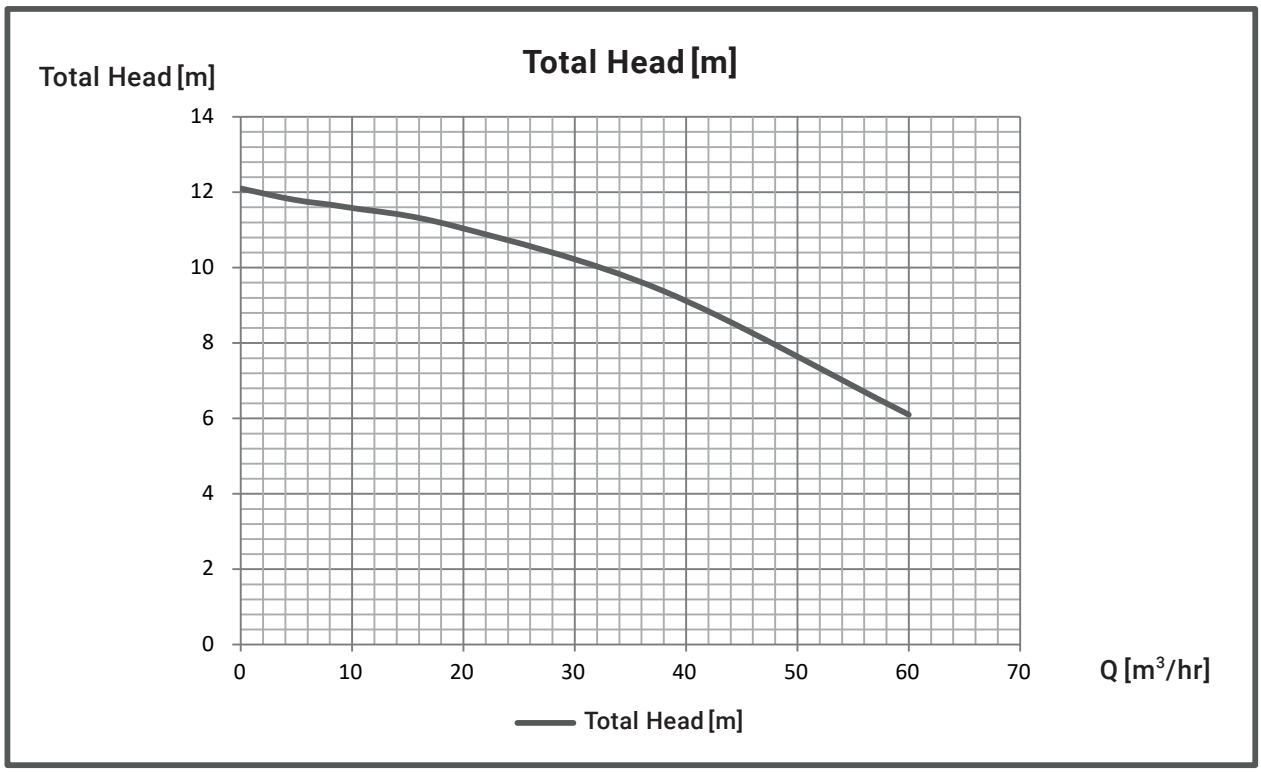


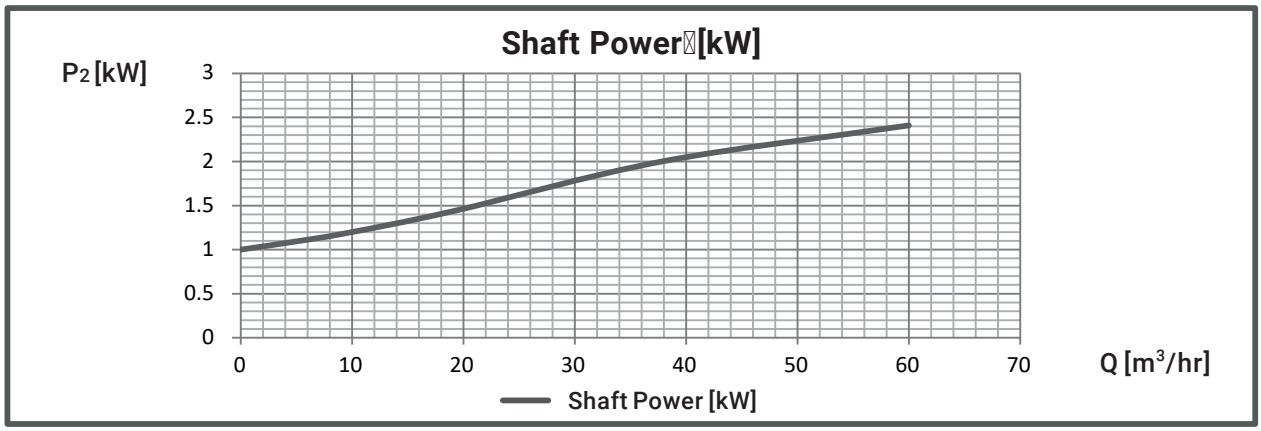


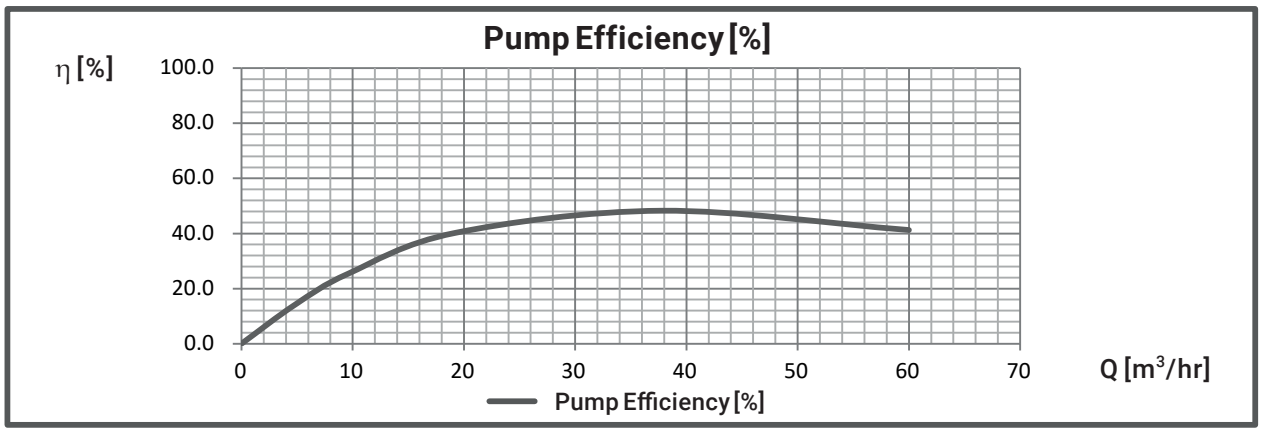
EXPECTED PERFORMANCE CURVE

MODEL : VUS-655-2.2T4

■ PERFORMANCE CURVES



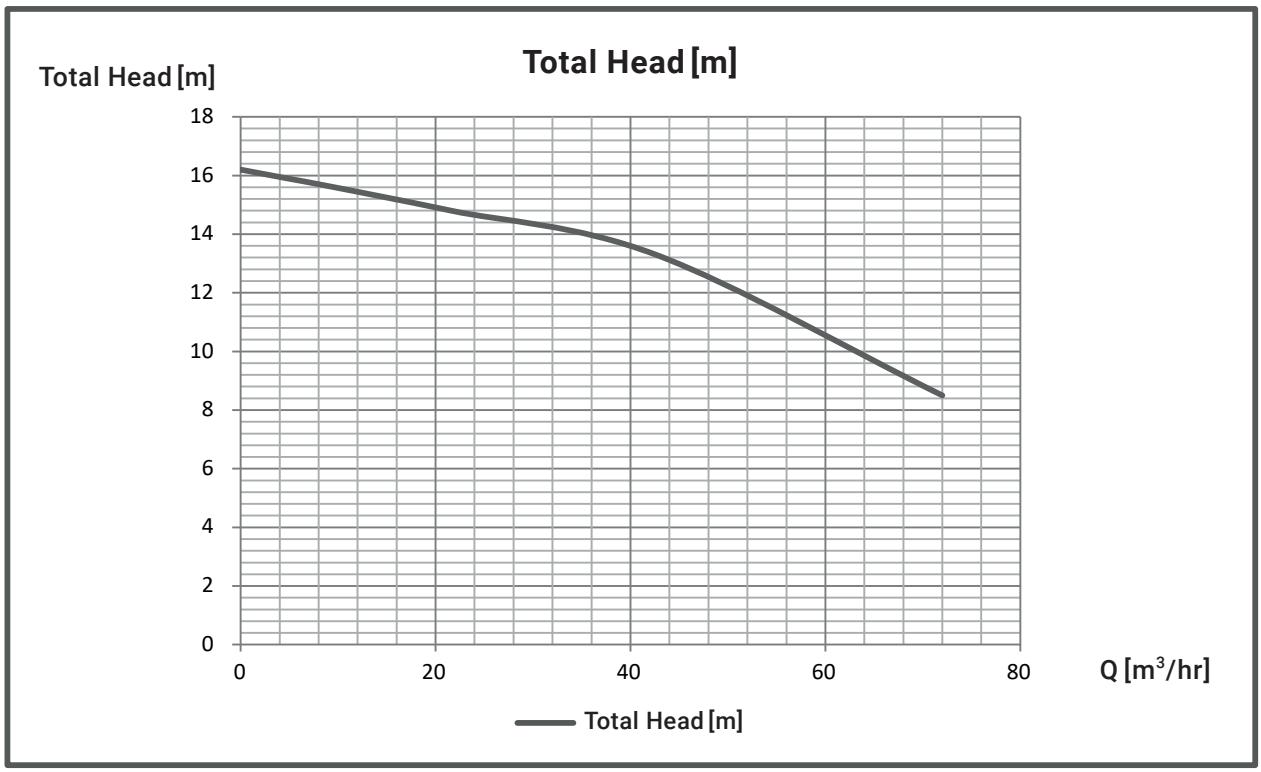


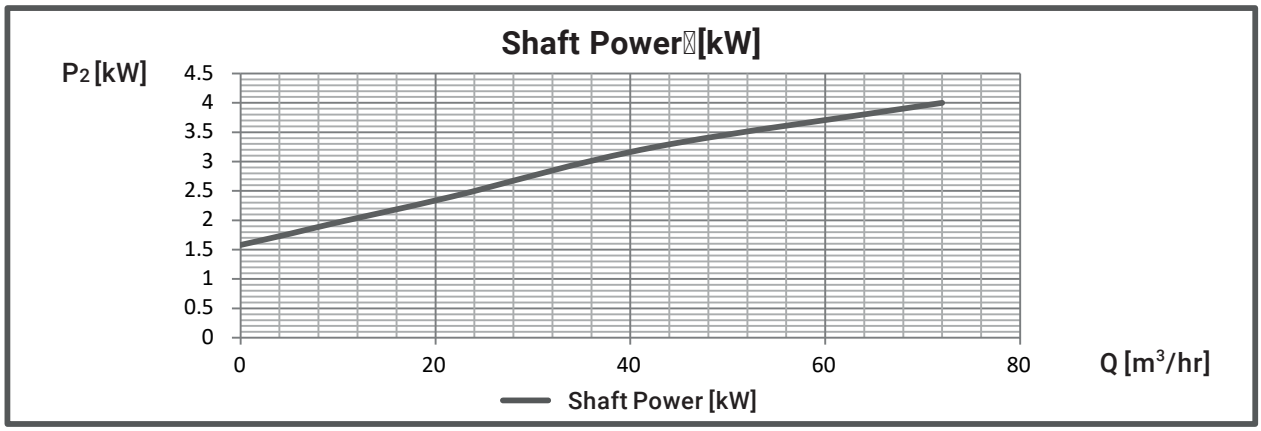


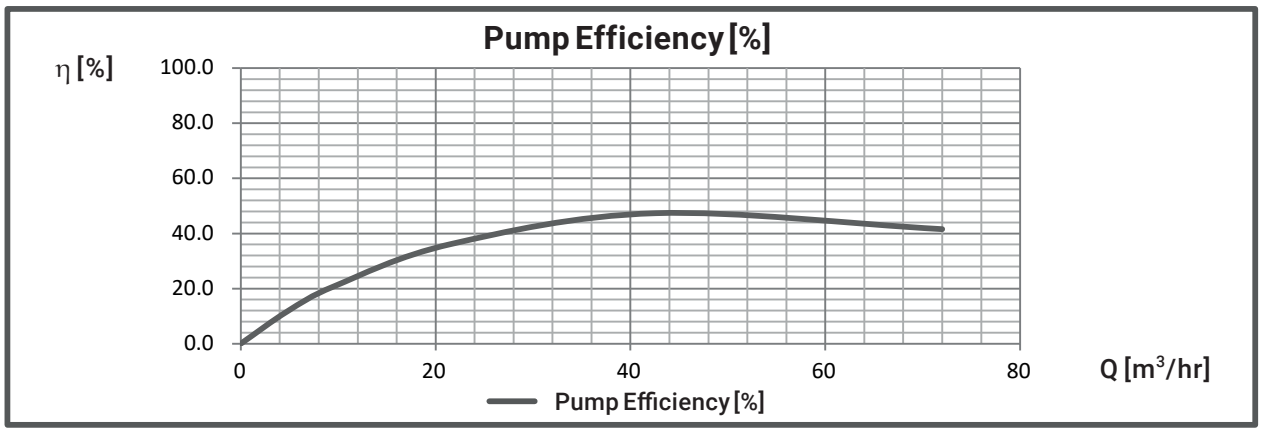
EXPECTED PERFORMANCE CURVE

MODEL : VUS-655-3.7T4

■ PERFORMANCE CURVES



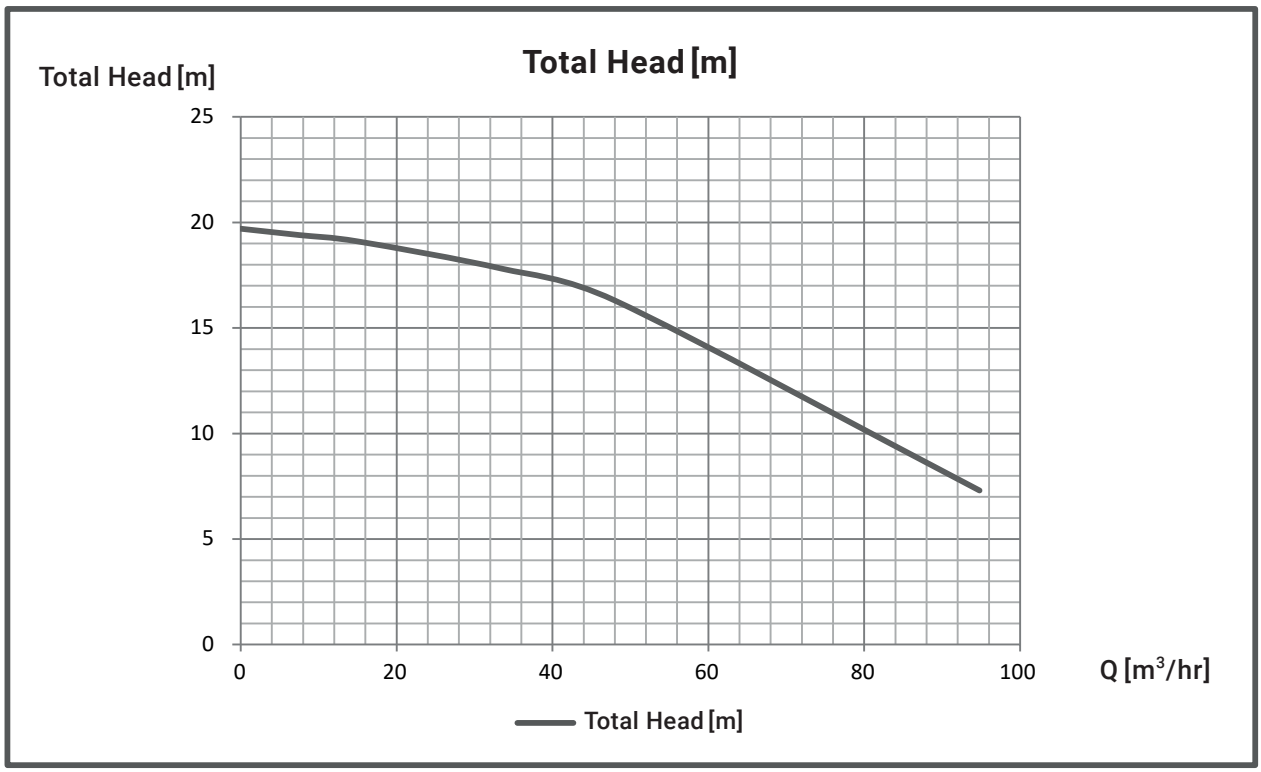


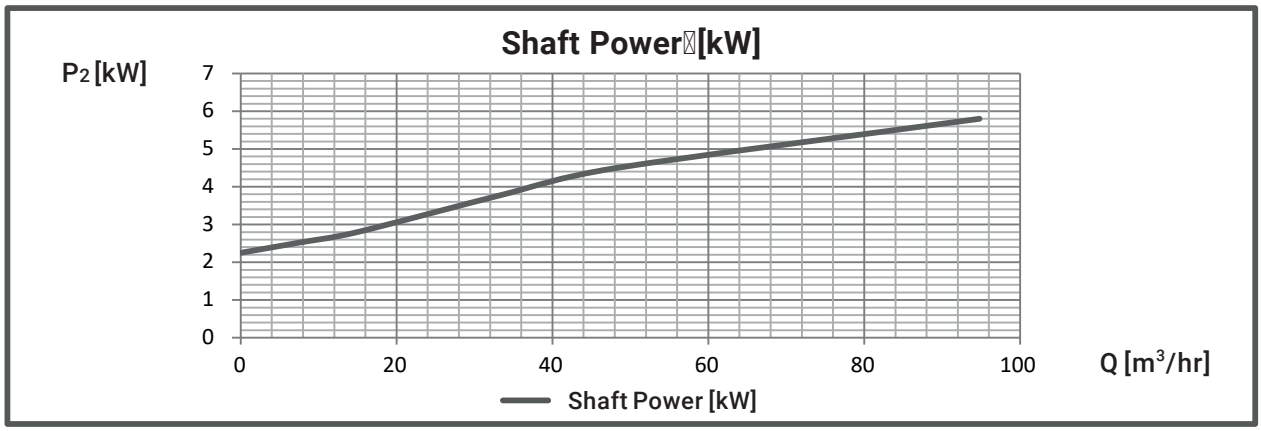


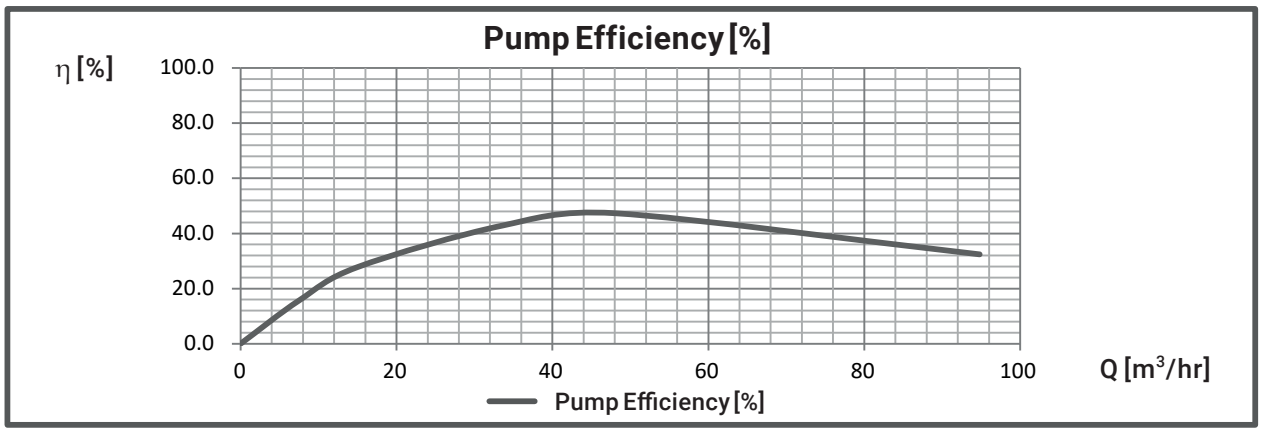
EXPECTED PERFORMANCE CURVE

MODEL : VUS-655-5.5T4

■ PERFORMANCE CURVES



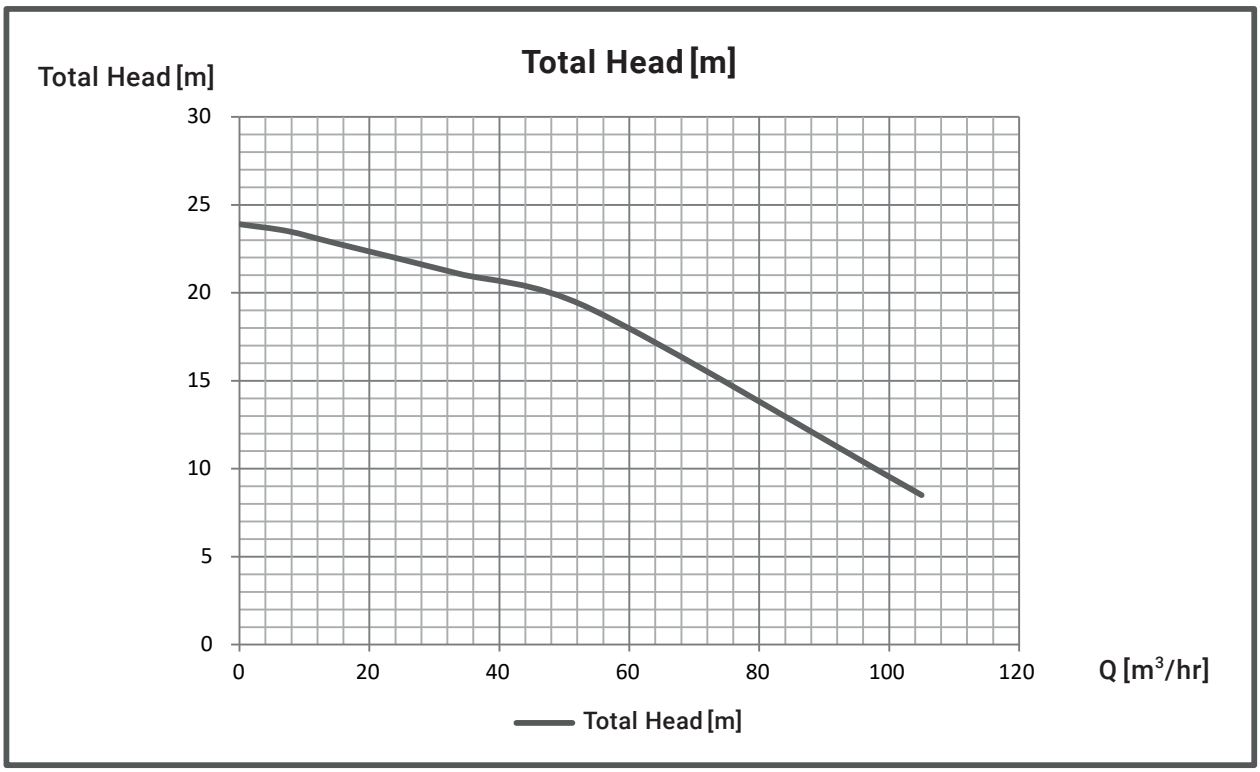


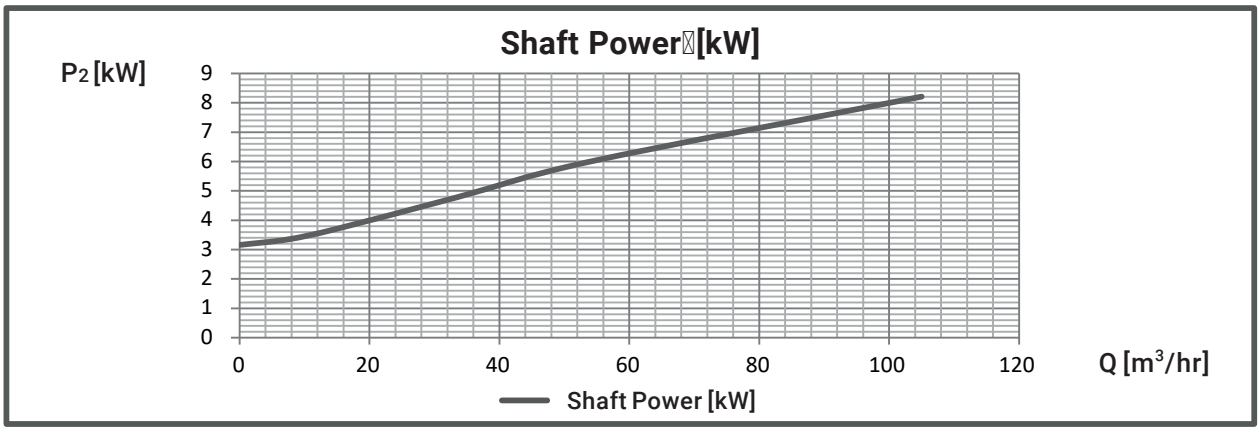


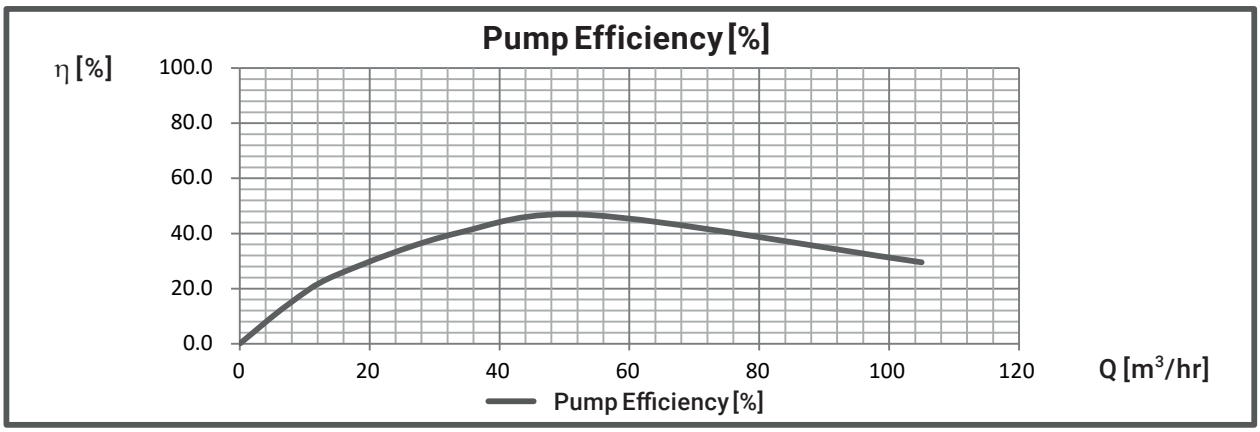
EXPECTED PERFORMANCE CURVE

MODEL : VUS-655-7.5T4

■ PERFORMANCE CURVES



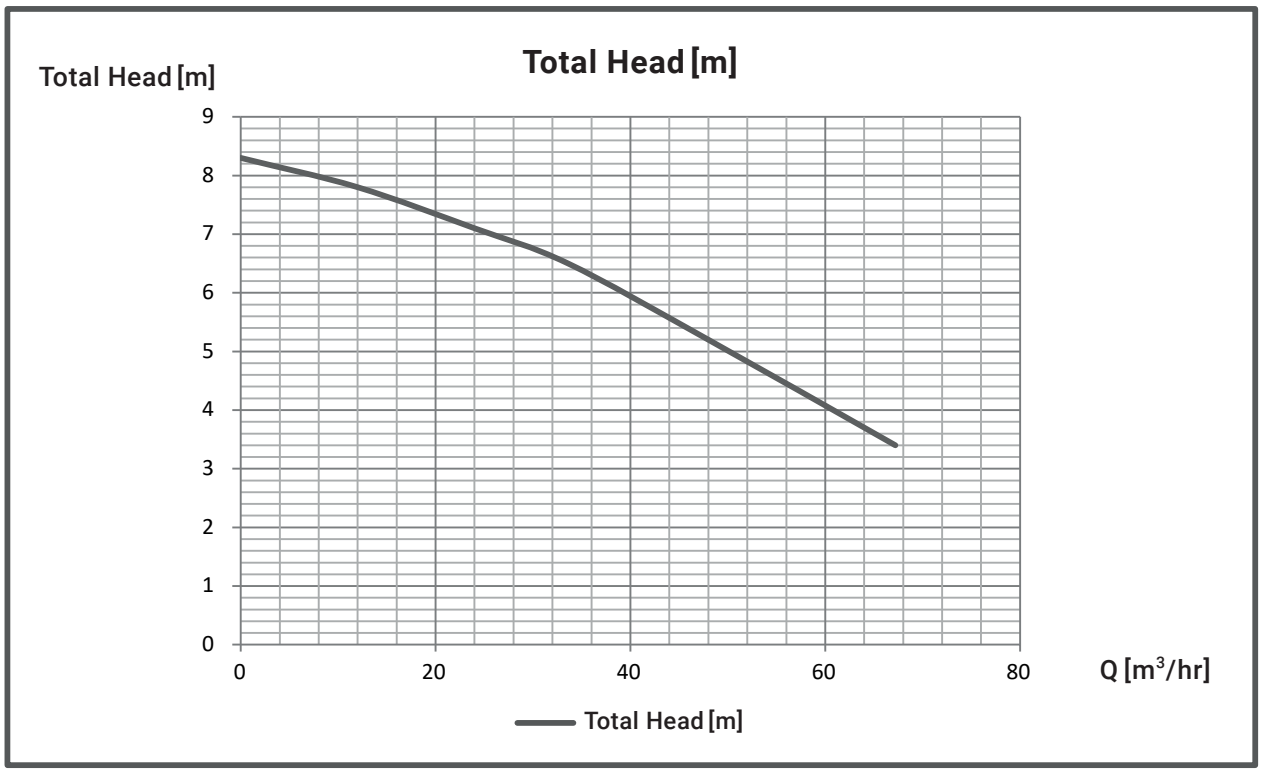


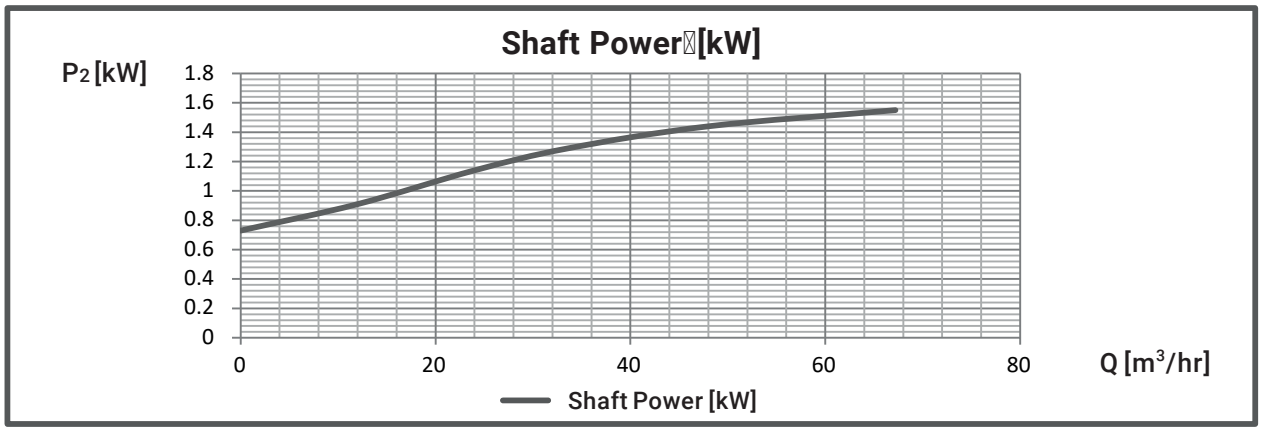


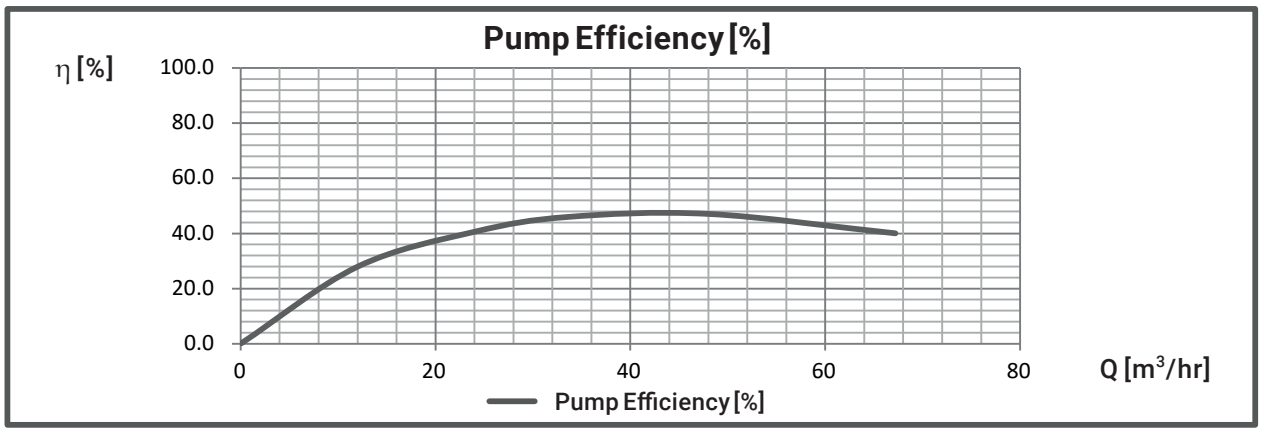
EXPECTED PERFORMANCE CURVE

MODEL : VUS-805-1.5T4

■ PERFORMANCE CURVES



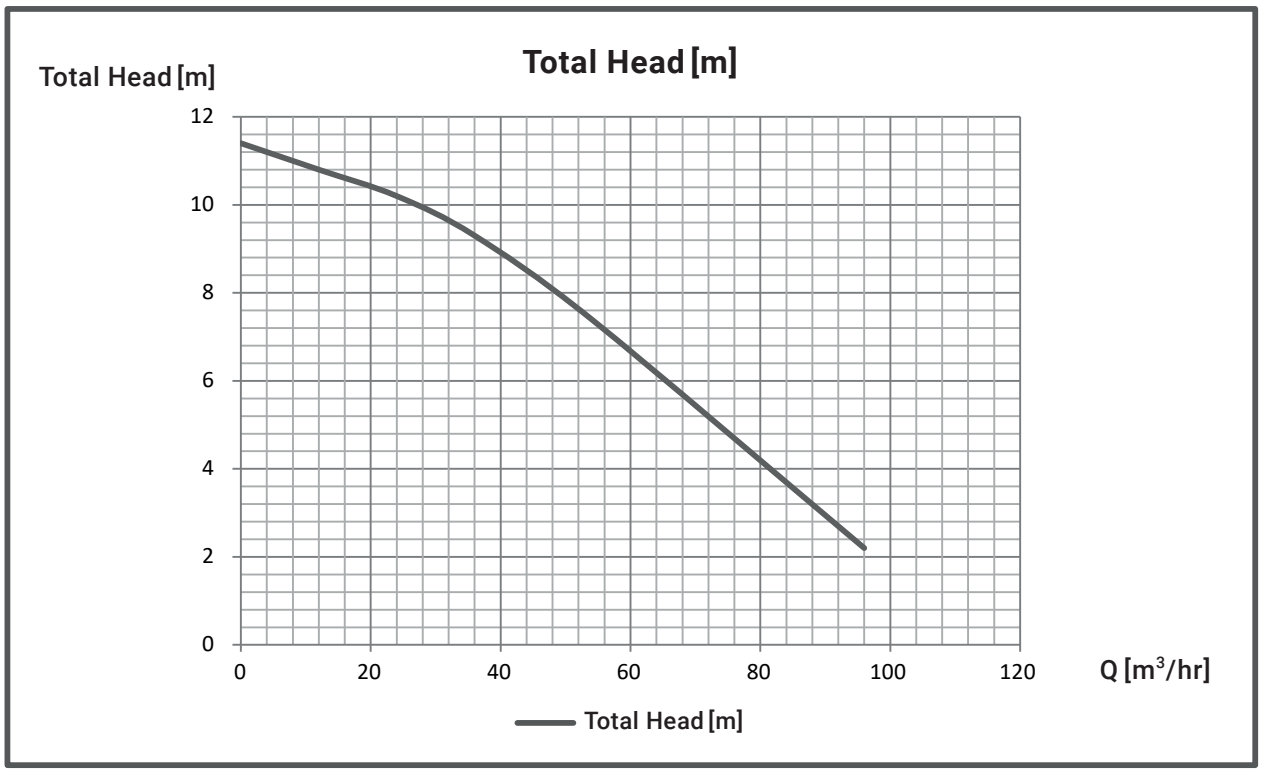


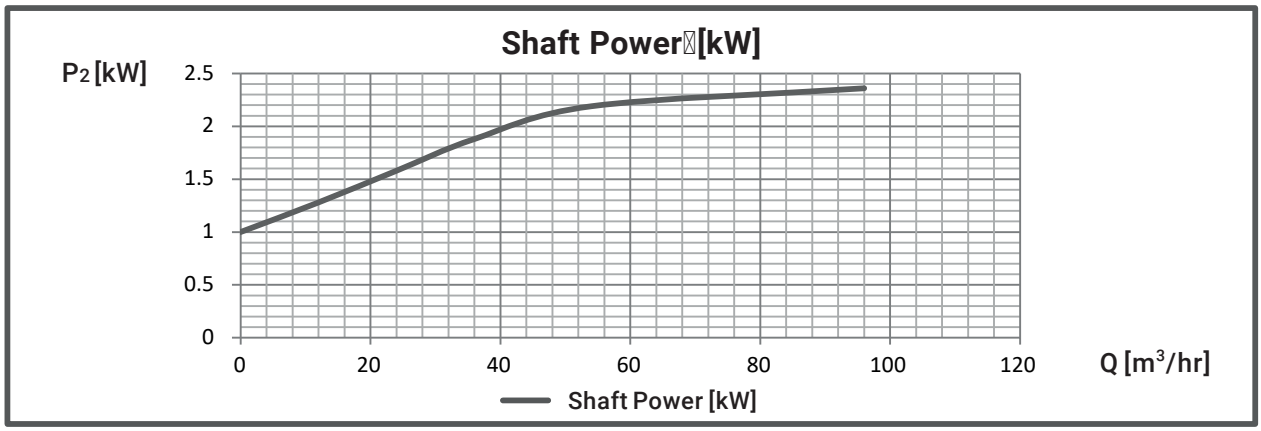


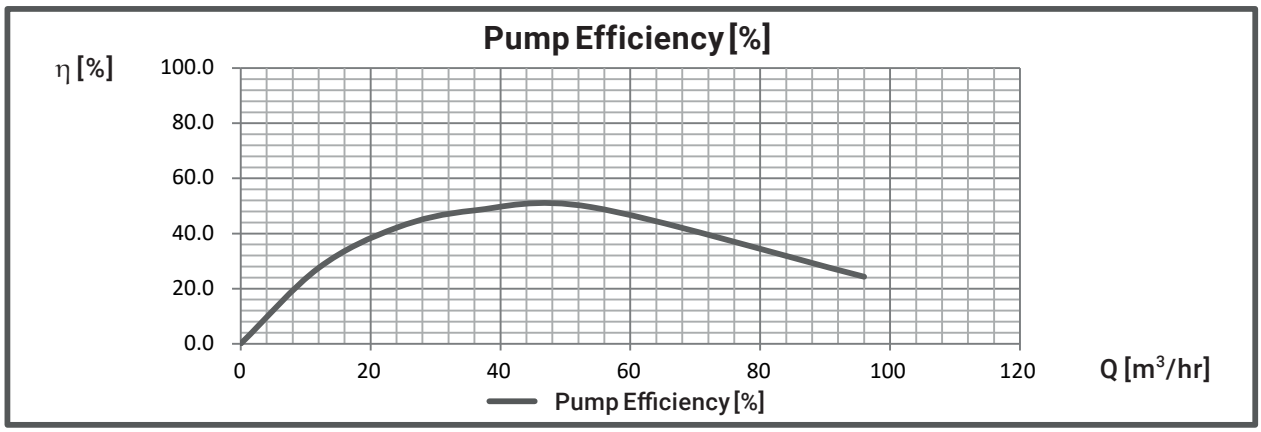
EXPECTED PERFORMANCE CURVE

MODEL : VUS-805-2.2T4

■ PERFORMANCE CURVES



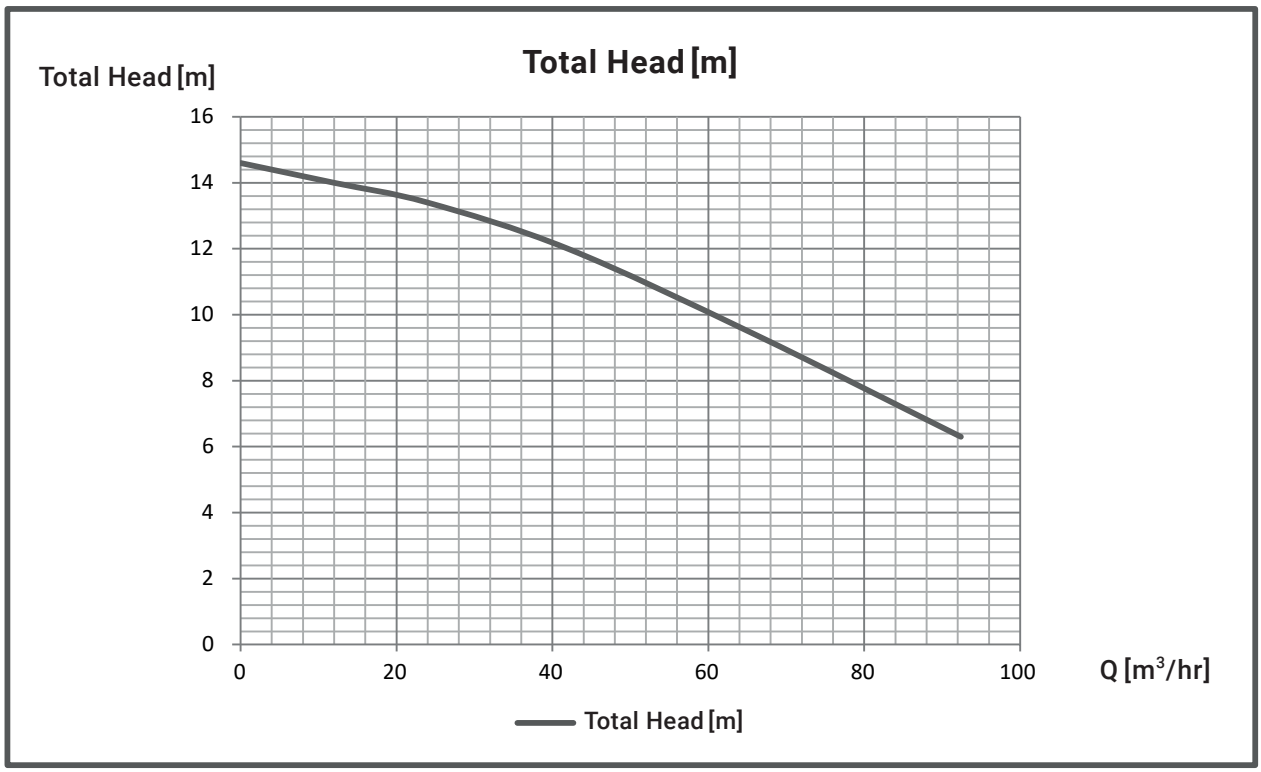


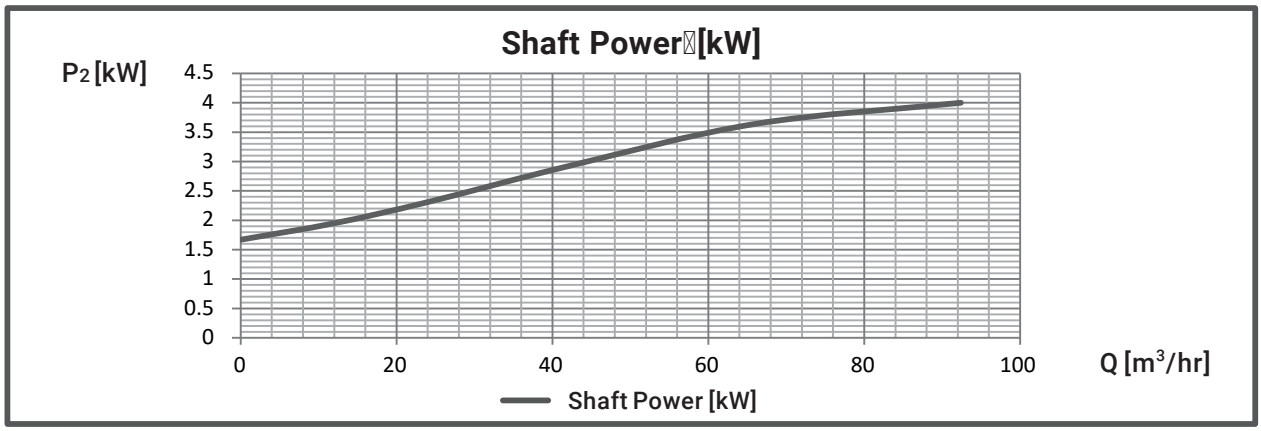


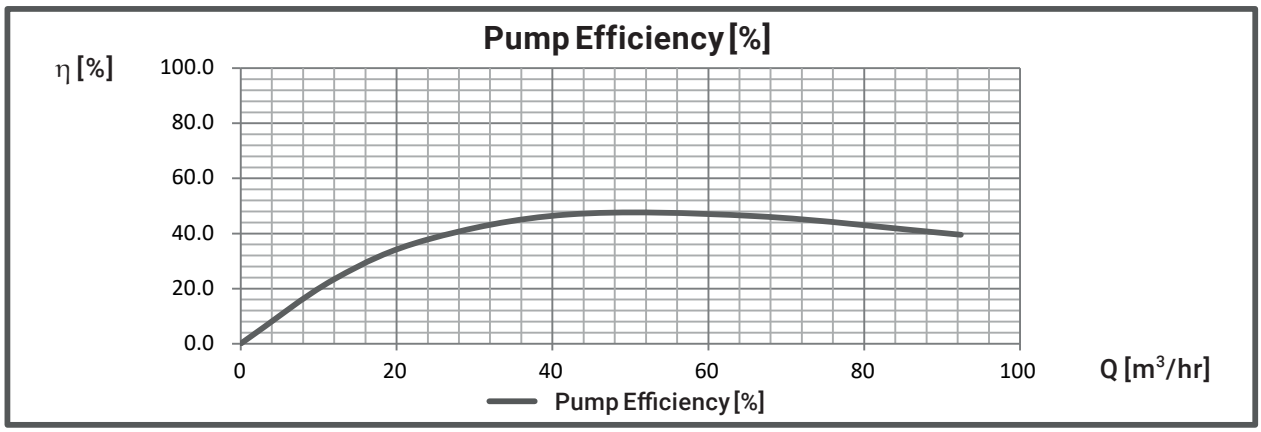
EXPECTED PERFORMANCE CURVE

MODEL : VUS-805-3.7T4

■ PERFORMANCE CURVES



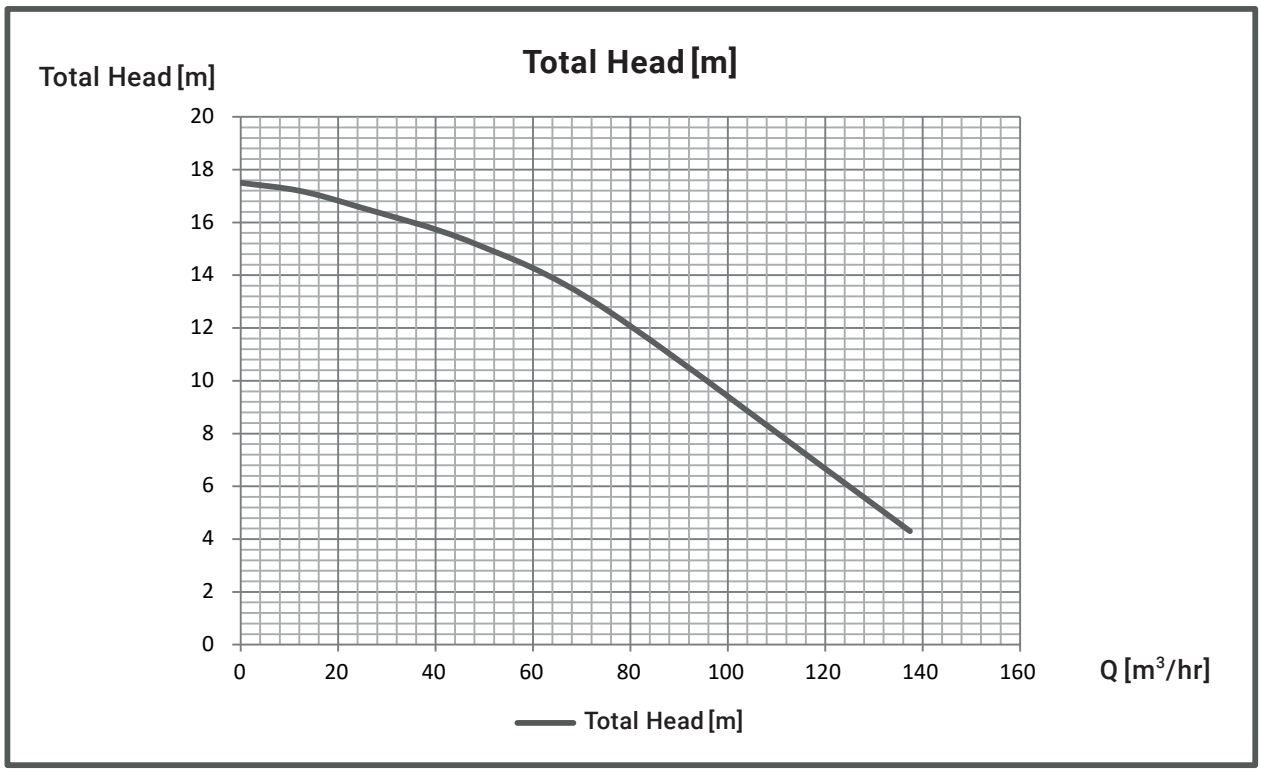


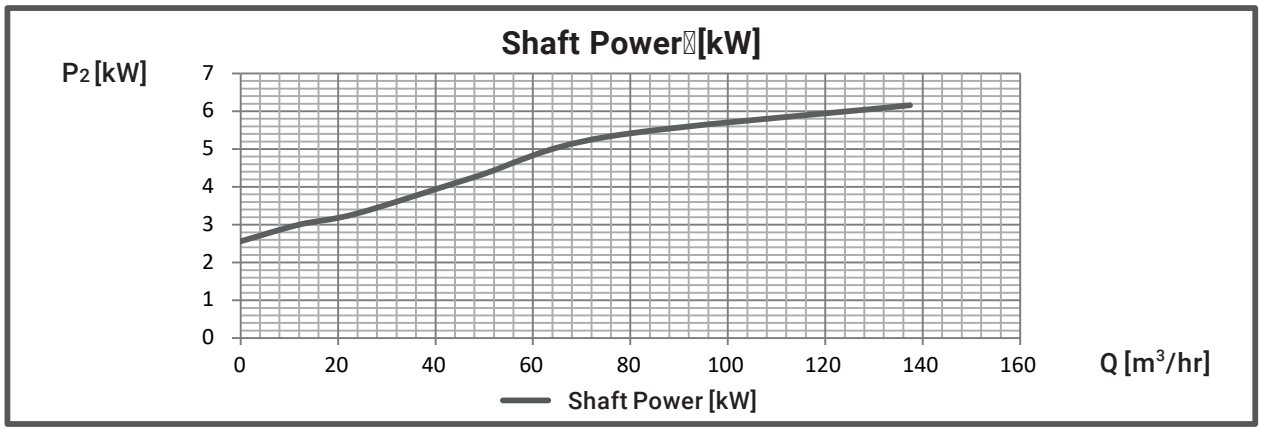


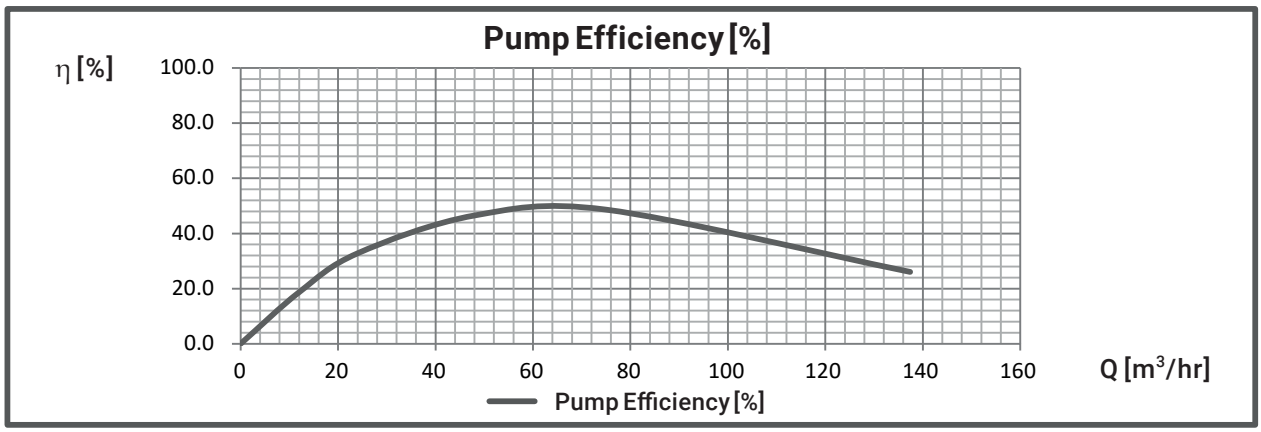
EXPECTED PERFORMANCE CURVE

MODEL : VUS-805-5.5T4

■ PERFORMANCE CURVES



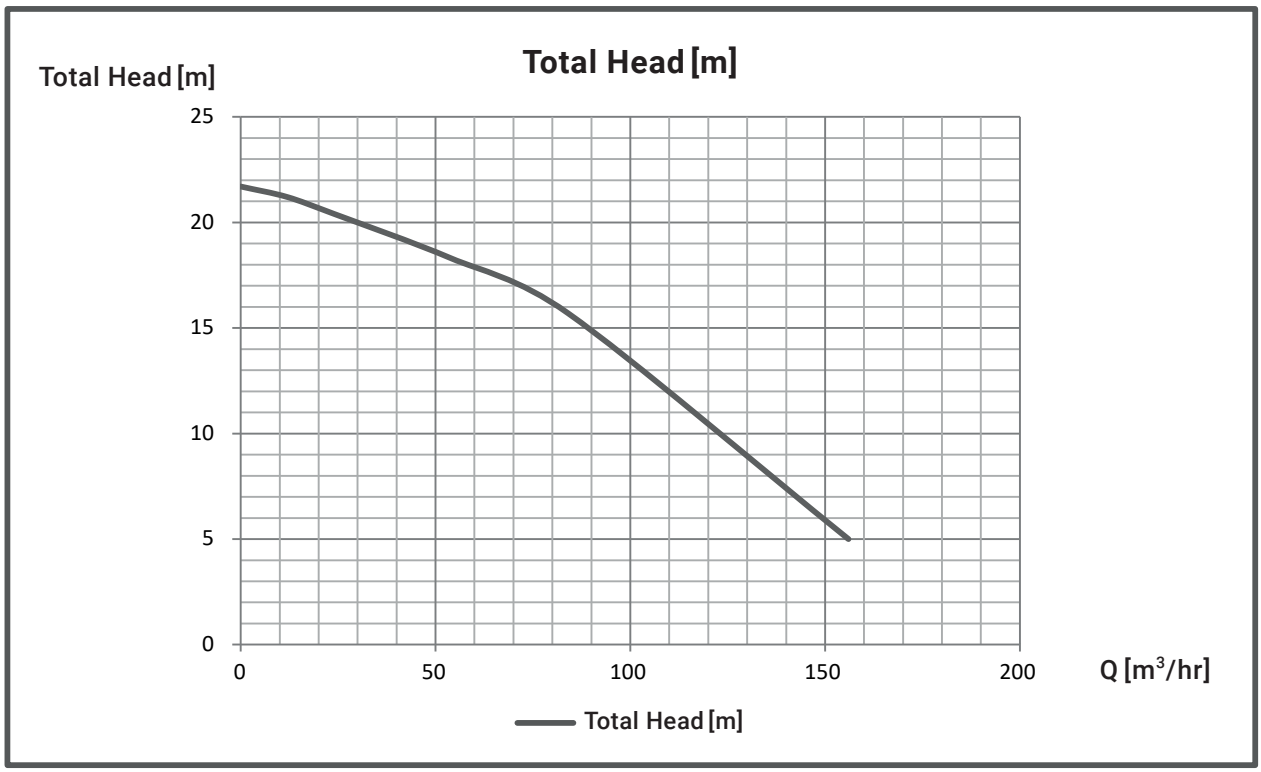


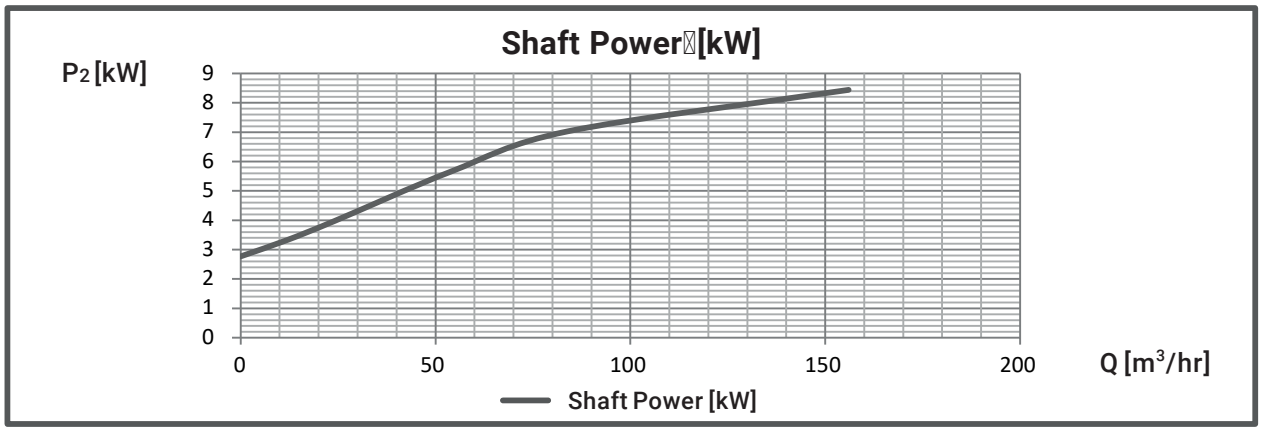


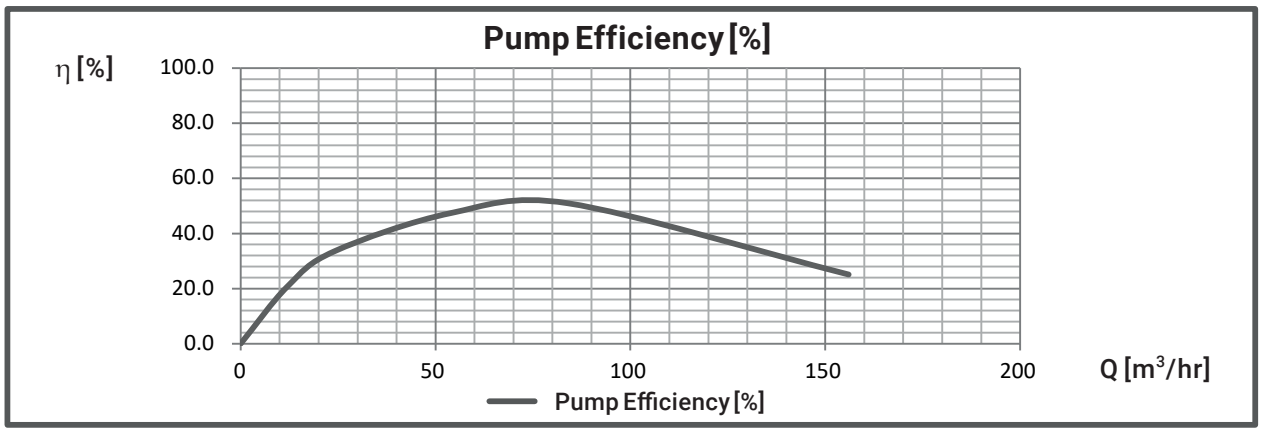
EXPECTED PERFORMANCE CURVE

MODEL : VUS-805-7.5T4

■ PERFORMANCE CURVES



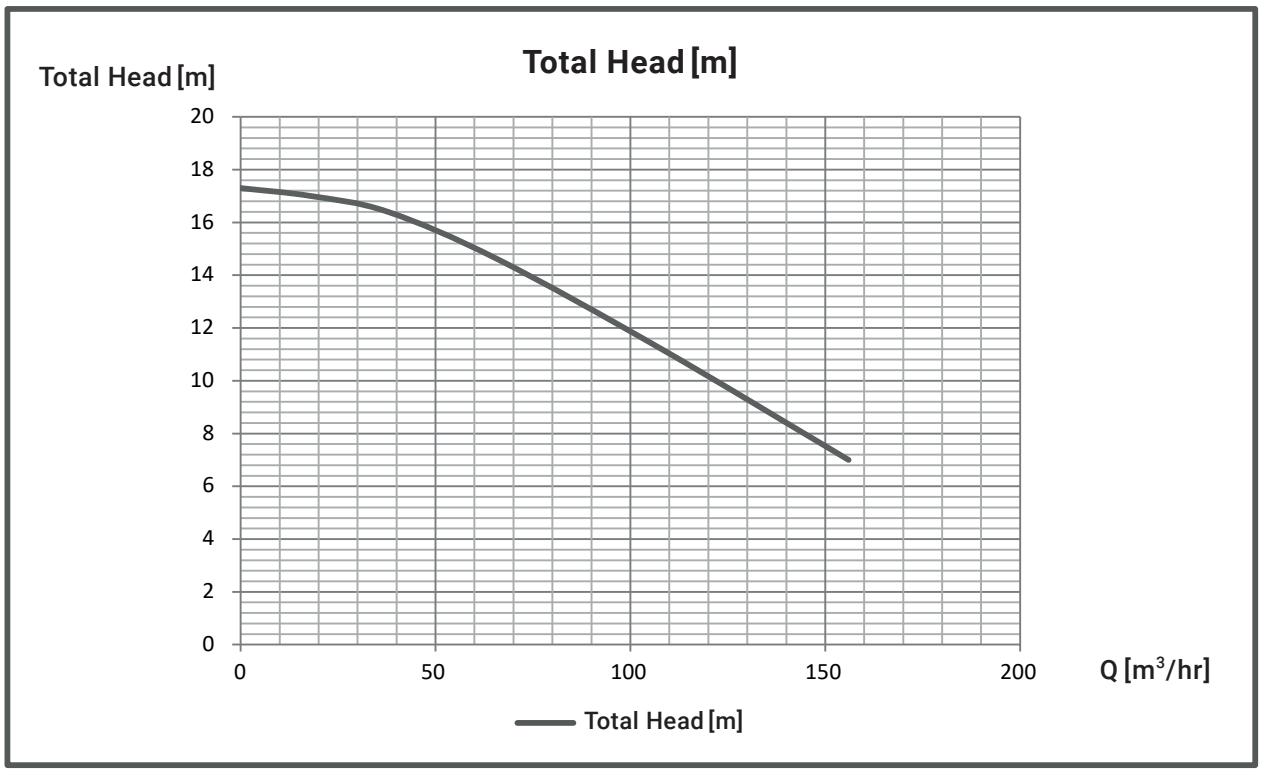


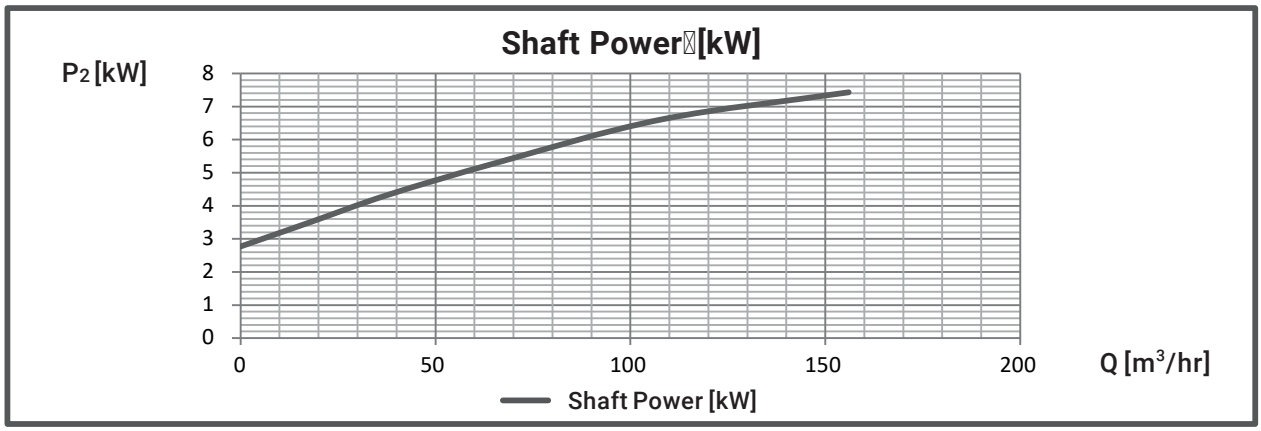


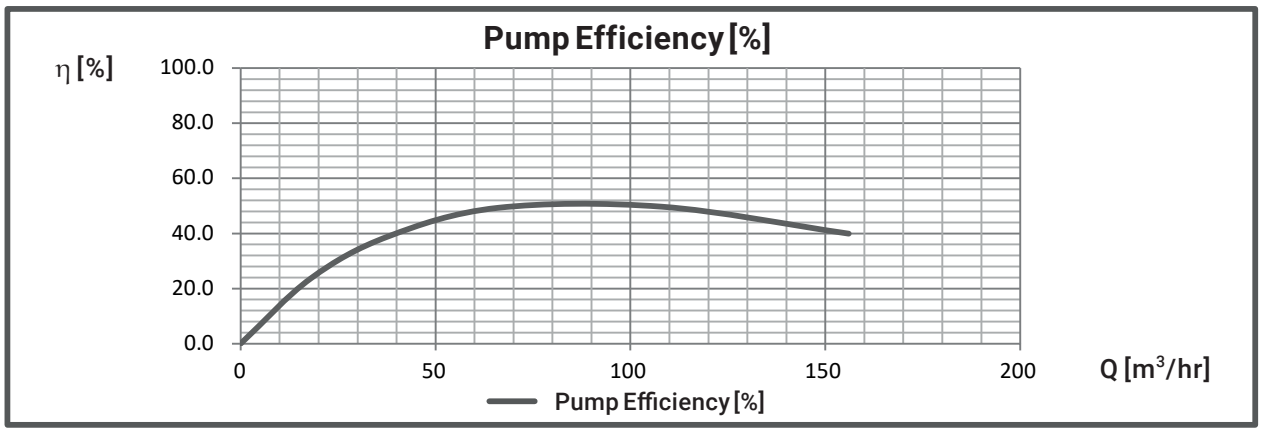
EXPECTED PERFORMANCE CURVE

MODEL : VUS-1005-7.5T4

■ PERFORMANCE CURVES







IMPORTANT SAFETY PRECAUTIONS

Always read the manual thoroughly and fully comprehend the contents for safe operation before starting use.
Precautions for using products safely and for preventing personal injuries or physical damage are given in the manual.

- Matters falling under the following may not be covered by the warranty: uses out of the specified scope of application, failure to comply with precautions, improper repairs and alterations, matters arising from natural disasters, matters arising from the installation environment (improper power source, foreign objects, sand etc.), non-compliance with laws and regulations or standards pertaining thereto, accidental or intentional damage or injury, replacement of consumable parts, defects due to resale, etc.

- Do not use the product for applications out of the product specifications. Doing so may cause electric shock, fire, water leakage, etc.

- Have spare equipment ready when using pumps for equipment for living things (fish farms, fish tanks, aquariums, etc.) or critical equipment.

- Pump failure may cause lack of oxygen and water quality deterioration, and may affect the lives of the living things.
  When using pumps for equipment for living things (fish farms, fish tanks, aquariums, etc.), do not install the pump in the tank where the living things are put into. The current leakage or sealing liquid leak from the mechanical seal may cause the death of the living things.

- If used to transport food-related items, give due consideration to the materials used. Contamination by foreign objects may occur.

- Avoid using for living things which disagrees with copper alloy. It may affect the lives of the living things.

- Select a product which is appropriate for your application. Inappropriate use of products may cause accidents.

- Conduct construction in accordance with the applicable laws and regulations (the Technical Standards of Electric Installation, interior wiring regulation, Building Standards Act, Water Supply Law, etc.). Not only does it violate the laws and regulations, but it also may cause injuries due to electric shock, fire, falling and tipping over.

- Do not use in places where people are assumed to get in contact with the product (baths, pools, lakes, etc.). Electric leak may occur and cause electric shock.

- Depending on the equipment, attach a filter etc. appropriate for your application on the discharge side before use, perform thorough flushing to check that there is no contamination. Cutting oil, rubber mold releasing agent, foreign objects etc. from the manufacturing line and cutting oil, foreign objects etc. from the pipeline may contaminate the liquid which is to be handled.

- Do not operate pumps with a specification of 50Hz at 60Hz. It may cause damage due to overpressure or burn damage of motors etc. due to overload. Do not operate pumps with a specification of 60Hz at 50Hz. Pump performance may be reduced.

- Only repair technicians may disassemble, repair, modify the product or replace cables. Defects may cause failure, damage, electrification or fire.

- It is recommended that both periodic and daily inspections be performed in order to ensure that the pump will operate reliably for as long as possible. Failure to perform inspections may lead to pump failure, accidents etc. For periodic inspections, please consult your distributer or our nearest sales office.

Note
Specifications/Configurations may be altered as a result of improvements and such.