

AU4

KAWAMOTO SUBMERSIBLE PUMP (CUTTER)
4 POLES / 50 Hz
SIZE 50 ~ 100 MM.



VORTEX IMPELLER WITH CUTTER



APPLICATIONS AND FEATURES

■ APPLICATIONS

- For drainage from sewage tanks, kitchens, and drainage of other sewage and waste water.

■ FEATURES

- The ceramic-coated cutter piece help maintain long service life with excellent performance.
- Original suction configuration (patented) and casing structure.
- 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.
- Some models with output of 3.7kW or less are available with a float switch (automatic, auto alternate built-in).

STANDARD SPECIFICATIONS

Description		Model : AU4
Applicable Liquid		Waste water, filthy water and other miscellaneous dirty water
Liquid Temperature		0~40 °C
pH		5~9
Main Pump	Casing	Cast Iron
	Impeller	FCD 450+SKDII (Ceramic coating)
	Shaft	Stainless Steel (SUS420J2)
Motor	Speed	1500 rpm
	Protection	IP68, Class F
Construction	Impeller	Vortex with cutter
	Shaft Seal	Double mechanical seal Pump : Sic x Sic Motor : Ceramics x Carbon
	Motor Bearing	Sealed ball bearing
Maximum Submergence		0.75 kW : 5m. 1.5~7.5 kW : 8 m.

OPTIONAL SPECIFICATIONS

Description		Model : AU4
Applicable Liquid		Waste water, filthy water and other miscellaneous dirty water
Liquid Temperature		0~60 °C
pH		5~9
Main Pump	Casing	Cast Iron
	Impeller	FCD 450+SKDII (Ceramic coating)
	Shaft	Stainless Steel (SUS420J2)
Motor	Speed	1500 rpm
	Protection	IP68, Class F
Construction	Impeller	Vortex with cutter
	Shaft Seal Oil	Double mechanical seal Pump : Sic x Sic Motor : Ceramics x Carbon White oil
	Motor Bearing	Sealed ball bearing
Cable length(m)		10m, 20m, 30m

SOLID PASSAGE

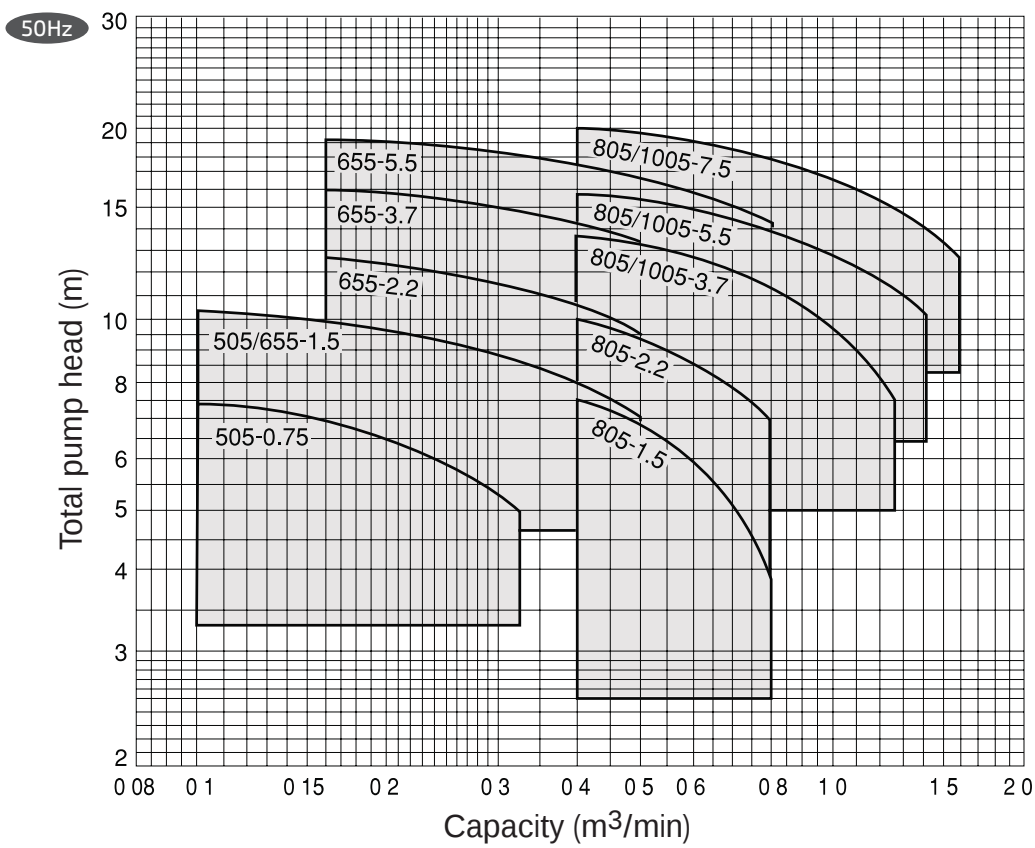
Pump Bore (mm)	Solid diameter (mm)	Clothes (mm)
50	17	0.75kW : Panty hose 1.5 kW : Towel (300x450) 2.2 and above : Towel (300x900) In addition to the above, Cotton gloves, Packing tapes, Plastic bags, etc. can also be cut.
65	17	
80	24 less than 2.2 kW	
	26 less than 3.7 kW	
100	26	

CABLE

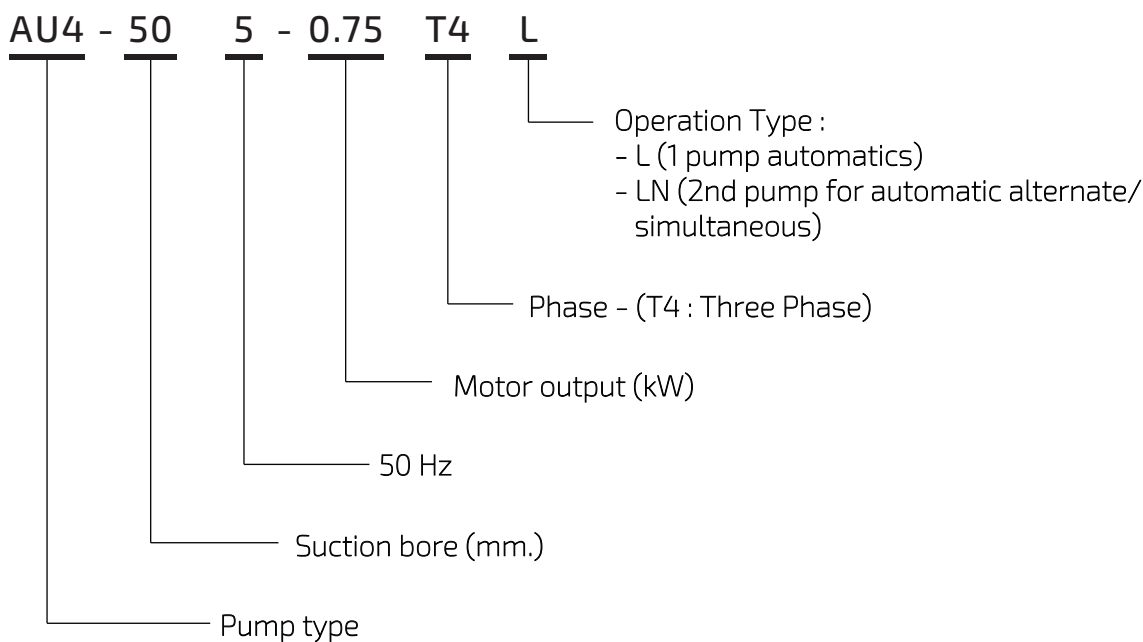
Output (kW)	Phase	Size (mm ²)	Core	Outer diameter (mm)	Length (m)
0.75	3	1.25	4	11	6
1.5	3	1.25	4	11	10
2.2	3	1.25	4	11	10
3.7	3	2	4	11.7	10
5.5	3	3.5	4	13.8	10
7.5	3	5.5	4	16.5	10

Cable Material : 600V insulating (VCT)

PERFORMANCE CHART



MODEL CODE

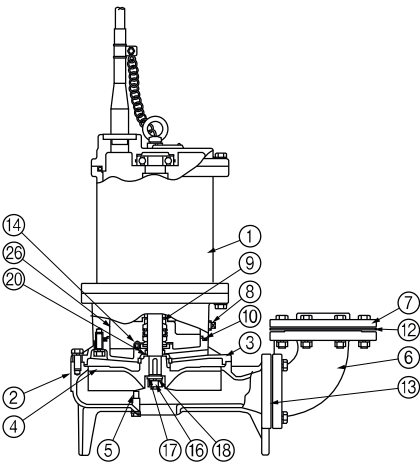


PUMP DATA – AU4

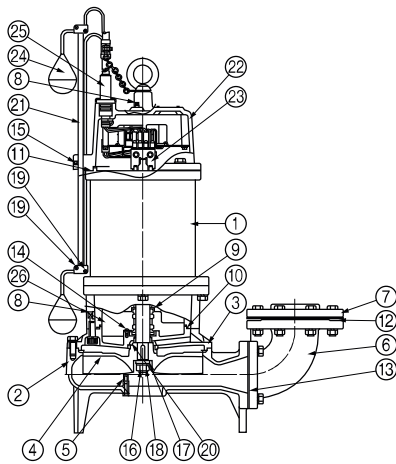
No.	Bore (mm)	Motor		Model	Performance			
		kW	Phase		Capacity (m ³ /min)	Total Head (m)	Capacity (m ³ /min)	Total Head (m)
1	50	0.75	3	AU4-505-0.75T4	0.1	7.2	0.32	5
2		1.5	3	AU4-505-1.5T4	0.1	10.2	0.5	7
3	65	1.5	3	AU4-655-1.5T4	0.1	10.2	0.5	7
4		2.2	3	AU4-655-2.2T4	0.16	12.5	0.5	9.5
5		3.7	3	AU4-655-3.7T4	0.16	16	0.63	12.5
6		5.5	3	AU4-655-5.5T4	0.16	19.2	0.8	14.2
7	80	1.5	3	AU4-805-1.5T4	0.4	7.5	0.8	3.8
8		2.2	3	AU4-805-2.2T4	0.4	10	0.8	7
9		3.7	3	AU4-805-3.7T4	0.4	13.5	1.25	7.5
10		5.5	3	AU4-805-5.5T4	0.4	15.5	1.4	9.8
11		7.5	3	AU4-805-7.5T4	0.4	19.8	1.6	12.5
12	100	3.7	3	AU4-1005-3.7T4	0.4	13.5	1.25	7.5
13		5.5	3	AU4-1005-5.5T4	0.4	15.5	1.4	9.8
14		7.5	3	AU4-1005-7.5T4	0.4	19.8	1.6	12.5
1	50	0.75	3	AU4-505-0.75T4(L/LN)	0.1	7.2	0.32	5
2		1.5	3	AU4-505-1.5T4(L/LN)	0.1	10.2	0.5	7
3	65	1.5	3	AU4-655-1.5T4(L/LN)	0.1	10.2	0.5	7
4		2.2	3	AU4-655-2.2T4(L/LN)	0.16	12.5	0.5	9.5
5		3.7	3	AU4-655-3.7T4(L/LN)	0.16	16	0.63	12.5
6	80	1.5	3	AU4-805-1.5T4(L/LN)	0.4	7.5	0.8	3.8
7		2.2	3	AU4-805-2.2T4(L/LN)	0.4	10	0.8	7
8		3.7	3	AU4-805-3.7T4(L/LN)	0.4	13.5	1.25	7.5
9	100	3.7	3	AU4-1005-3.7T4(L/LN)	0.4	13.5	1.25	7.5

SECTION VIEW - FLANGE TYPE

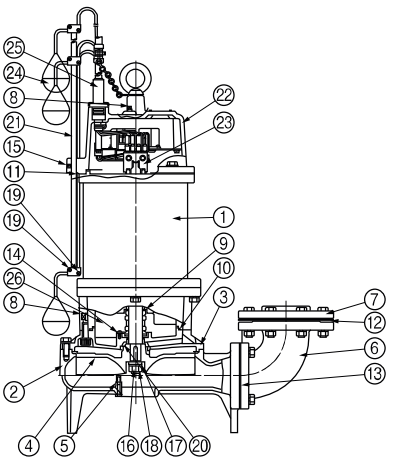
AU4



AU4-L



AU4-LN

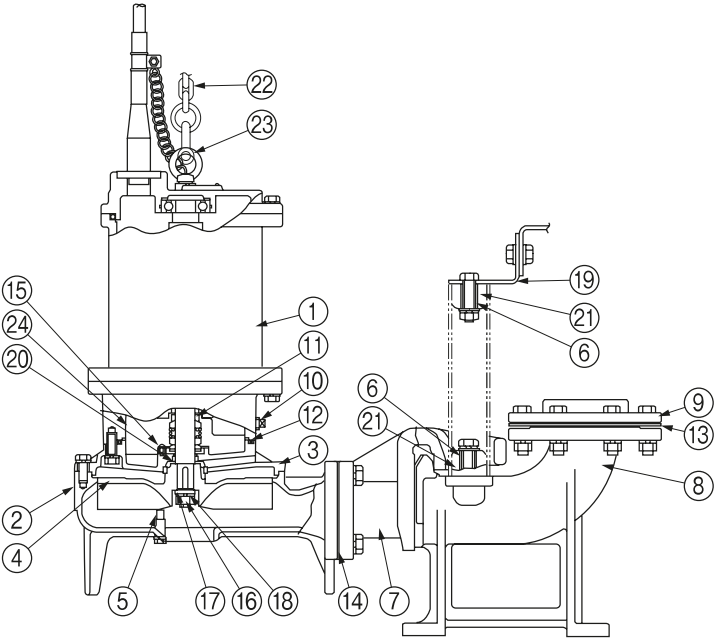


No.	Part name	Material	Note	No.	Part name	Material	Note
1	Motor	-	Class F	14	Screw	SWRM10	
2	Casing	Cast iron		15	Screw	SUS304	
3	Casing cover	Cast iron		16	Nut	SUS304	
4	Impeller	FCD450		17	Plane washer	SUS304	
5	Cutter	SKD11		18	Spring washer	SUS304	
6	Bend	Cast iron		19	Clamp	Resin	
7	Flange	Cast iron		20	Shim	SUS403	
8	Plug	SCS13		21	Rode	Resin	
9	Mechanical seal	-		22	Motor cover	Cast iron	
10	O-Ring	Rubber		23	Magnetic switch	-	
11	Packing	Rubber		24	Float switch	-	
12	Flange packing	Rubber		25	Cable	VCT	
13	Flange packing	Paper		26	Turbine oil	VG32	

※Shaft : SUS420J2

SECTION VIEW - WITH Q.D.C TYPE

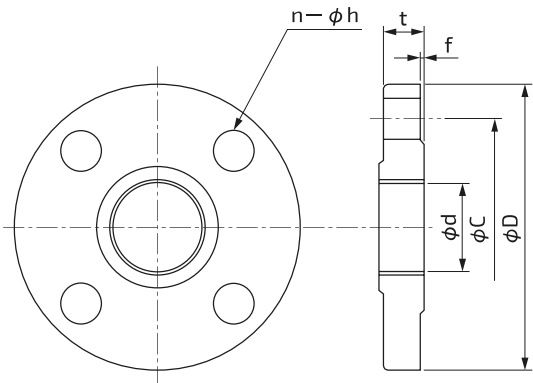
AU4



No.	Part name	Material	Note
1	Motor	-	Class F
2	Casing	Cast iron	
3	Casing cover	Cast iron	
4	Impeller	FCD450	
5	Cutter	SKD11	
6	Straight pipe	SUS304-TP	
7	Connecting pipe	FCD	
8	Connecting bend with baseplate	Cast iron	
9	Flange	Cast iron	
10	Plug	SCS13	
11	Mechanical seal	-	
12	O-Ring	Rubber	
13	Flange packing	Rubber	
14	Flange packing	Paper	
15	Screw	SWRM10	
16	Nut	SUS304	
17	Plane washer	SUS304	
18	Spring washer	SUS304	
19	Supporter	SUS304-TP	
20	Shim	SUS304	
21	Cushion	Rubber	
22	Chain	SUS304	
23	Shackle	-	
24	Turbine oil	VG32	

※Shaft : SUS420J2

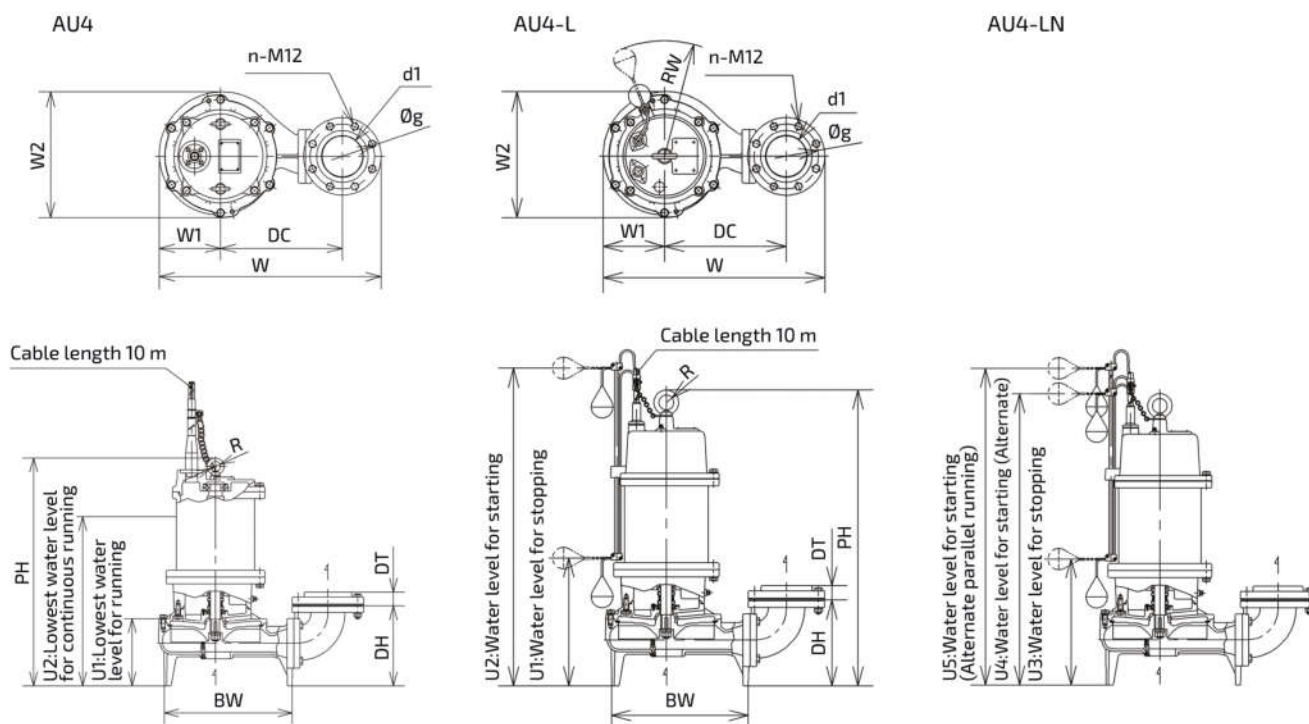
FLANGE DIMENSION



Unit:mm

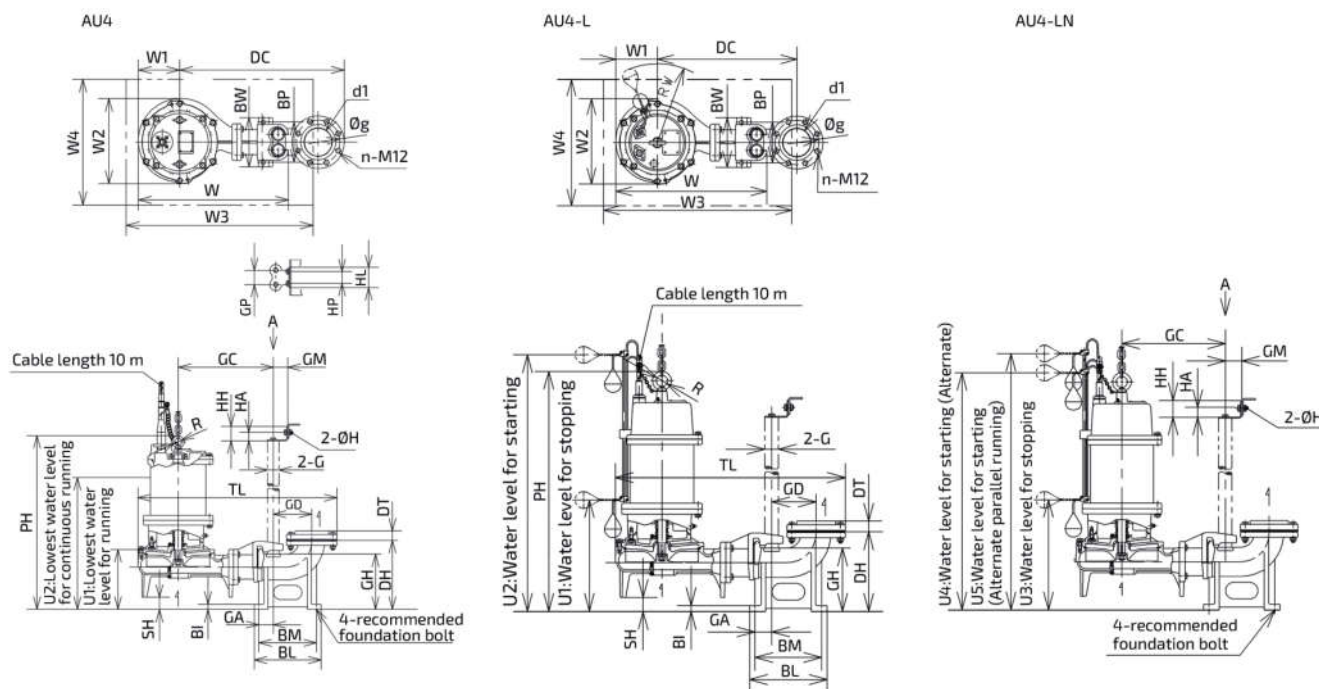
Bore a	d	C	D	t	f	n	h (Bolt)
50	Rc2	120	155	18	2	4	15(M12)
65	Rc2 ½	140	175	18	2	4	15(M12)
80	Rc3	150	185	18	2	8	15(M12)
100	Rc4	175	210	20	2	8	15(M12)

PUMP DIMENSION – AU4 WITH FLANGE TYPE



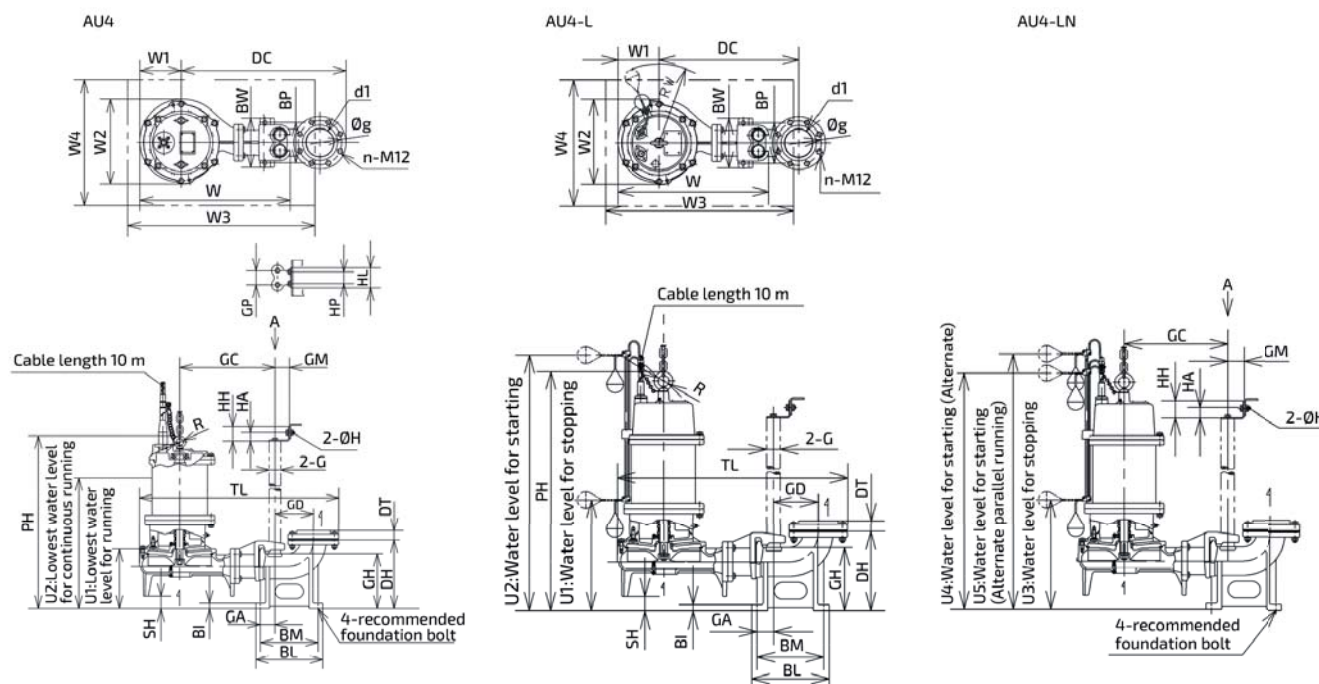
Discharge Bore (mm)	Model	Motor (kW)	Pump Combination								Water Level					Other		Weight (kg)
			PH	DH	DT	BW	W	W1	W2	DC	U1	U2	U3	U4	U5	RW	R	
50	AU4-505-0.75T4	0.75	534	172	27	236	379	106	232	195	142	360	-	-	-	-	25	42
	AU4-505-1.5T4	1.5	545	193	27	266	428	120	242	220	137	370	-	-	-	-	25	47
65	AU4-655-1.5T4	1.5	545	193	31	266	428	120	242	220	137	370	-	-	-	-	25	47
	AU4-655-2.2T4	2.2	619	208	31	286	465	127	266	245	165	436	-	-	-	-	30	71
	AU4-655-3.7T4	3.7	629	213	31	351	531	153	309	285	175	446	-	-	-	-	30	82
	AU4-655-5.5T4	5.5	642	213	31	351	531	153	309	285	203	473	-	-	-	-	30	104
80	AU4-805-1.5T4	1.5	567	215	33	281	463	126	264	245	175	390	-	-	-	-	25	50
	AU4-805-2.2T4	2.2	631	215	33	281	463	126	264	245	175	448	-	-	-	-	30	68
	AU4-805-3.7T4	3.7	651	245	33	335	558	143	300	310	200	468	-	-	-	-	30	80
	AU4-805-5.5T4	5.5	664	245	33	375	601	166	339	330	200	495	-	-	-	-	30	109
100	AU4-805-7.5T4	7.5	664	245	33	375	601	166	339	330	200	495	-	-	-	-	30	116
	AU4-1005-3.7T4	3.7	651	245	39	335	558	143	300	310	200	468	-	-	-	-	30	80
	AU4-1005-5.5T4	5.5	664	245	39	375	601	166	339	330	200	495	-	-	-	-	30	109
	AU4-1005-7.5T4	7.5	664	245	39	375	601	166	339	330	200	495	-	-	-	-	30	116
50	AU4-505-0.75T4(LN)	0.75	584	172	27	236	379	106	232	195	203	603	263	543	663	245	25	43
	AU4-505-1.5T4(LN)	1.5	595	193	27	266	428	120	242	220	214	614	274	554	674	245	25	49
65	AU4-655-1.5T4(LN)	2.2	595	193	31	266	428	120	242	220	214	614	274	554	674	245	25	49
	AU4-655-2.2T4(LN)	3.7	674	208	31	286	465	127	266	245	208	758	278	688	828	245	30	73
	AU4-655-3.7T4(LN)	3.7	684	213	31	351	531	153	309	285	218	768	288	698	838	245	30	84
80	AU4-805-1.5T4(LN)	1.5	617	215	33	281	463	126	264	245	236	636	306	586	706	245	25	52
	AU4-805-2.2T4(LN)	2.2	686	215	33	281	463	126	264	245	236	786	306	716	856	245	30	70
	AU4-805-3.7T4(LN)	3.7	706	245	33	335	558	143	300	310	256	806	326	706	846	245	30	82
100	AU4-1005-3.7T4(LN)	3.7	706	245	39	335	558	143	300	310	256	806	326	706	846	245	30	82

PUMP DIMENSION – AU4 WITH Q.D.C TYPE



Discharge Bore (mm)	Model	Motor (kW)	Pump Combination								Water Level					Other		Weight (kg)
			PH	SH	DC	TL	W	W1	W2	GC	U1	U2	U3	U4	U5	RW	R	
50	AU4-505-0.75T4	0.75	562	28	390	574	412	106	232	270	170	388	-	-	-	-	25	50
	AU4-505-1.5T4	1.5	577	32	425	633	451	120	242	295	169	402	-	-	-	-	25	57
65	AU4-655-1.5T4	1.5	577	32	425	633	451	120	242	295	169	402	-	-	-	-	25	57
	AU4-655-2.2T4	2.2	671	52	465	685	493	127	266	325	217	488	-	-	-	-	30	84
	AU4-655-3.7T4	3.7	676	47	505	751	559	153	309	365	222	493	-	-	-	-	30	95
	AU4-655-5.5T4	5.5	689	47	505	751	559	153	309	365	252	520	-	-	-	-	30	126
80	AU4-805-1.5T4	1.5	612	45	465	683	492	126	264	325	220	435	-	-	-	-	25	63
	AU4-805-2.2T4	2.2	676	45	465	683	492	126	264	325	220	493	-	-	-	-	30	81
	AU4-805-3.7T4	3.7	701	50	525	773	549	143	300	365	250	518	-	-	-	-	30	99
	AU4-805-5.5T4	5.5	714	50	545	816	592	166	339	385	250	545	-	-	-	-	30	128
100	AU4-805-7.5T4	7.5	714	50	545	816	592	166	339	385	250	545	-	-	-	-	30	135
	AU4-1005-3.7T4	3.7	701	50	525	773	549	143	300	365	250	518	-	-	-	-	30	99
	AU4-1005-5.5T4	5.5	714	50	545	816	592	166	339	385	250	545	-	-	-	-	30	128
50	AU4-1005-7.5T4	7.5	714	50	545	816	592	166	339	385	250	545	-	-	-	-	30	135
50	AU4-505-0.75T4(LN)	0.75	612	28	390	574	412	106	232	270	231	631	291	571	691	245	25	51
	AU4-505-1.5T4(LN)	1.5	627	32	425	633	451	120	242	295	246	646	306	586	706	245	25	59
65	AU4-655-1.5T4(LN)	2.2	627	32	425	633	451	120	242	395	246	646	306	586	706	245	25	59
	AU4-655-2.2T4(LN)	3.7	726	52	465	685	493	127	266	325	260	810	330	740	880	245	30	86
	AU4-655-3.7T4(LN)	3.7	731	47	505	751	559	153	309	365	265	815	335	745	885	245	30	97
80	AU4-805-1.5T4(LN)	1.5	662	45	465	683	492	126	264	325	281	681	351	631	751	245	25	65
	AU4-805-2.2T4(LN)	2.2	731	45	465	683	492	126	264	325	281	831	351	761	901	245	30	83
	AU4-805-3.7T4(LN)	3.7	756	50	525	773	549	143	300	365	306	856	376	786	926	245	30	101
100	AU4-1005-3.7T4(LN)	3.7	756	50	525	773	549	143	300	365	306	856	376	786	926	245	30	101

PEDESTAL SUPPORT MOUNT

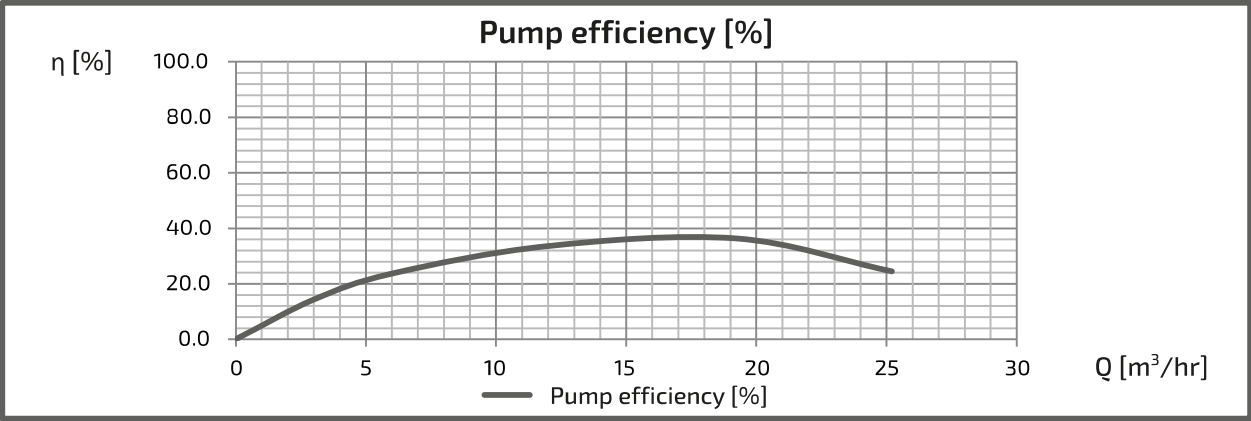
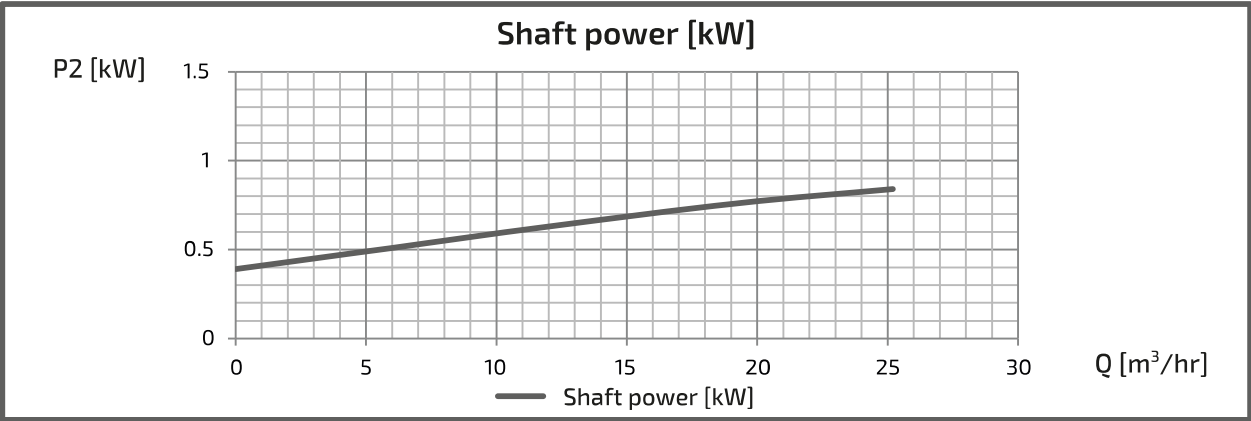
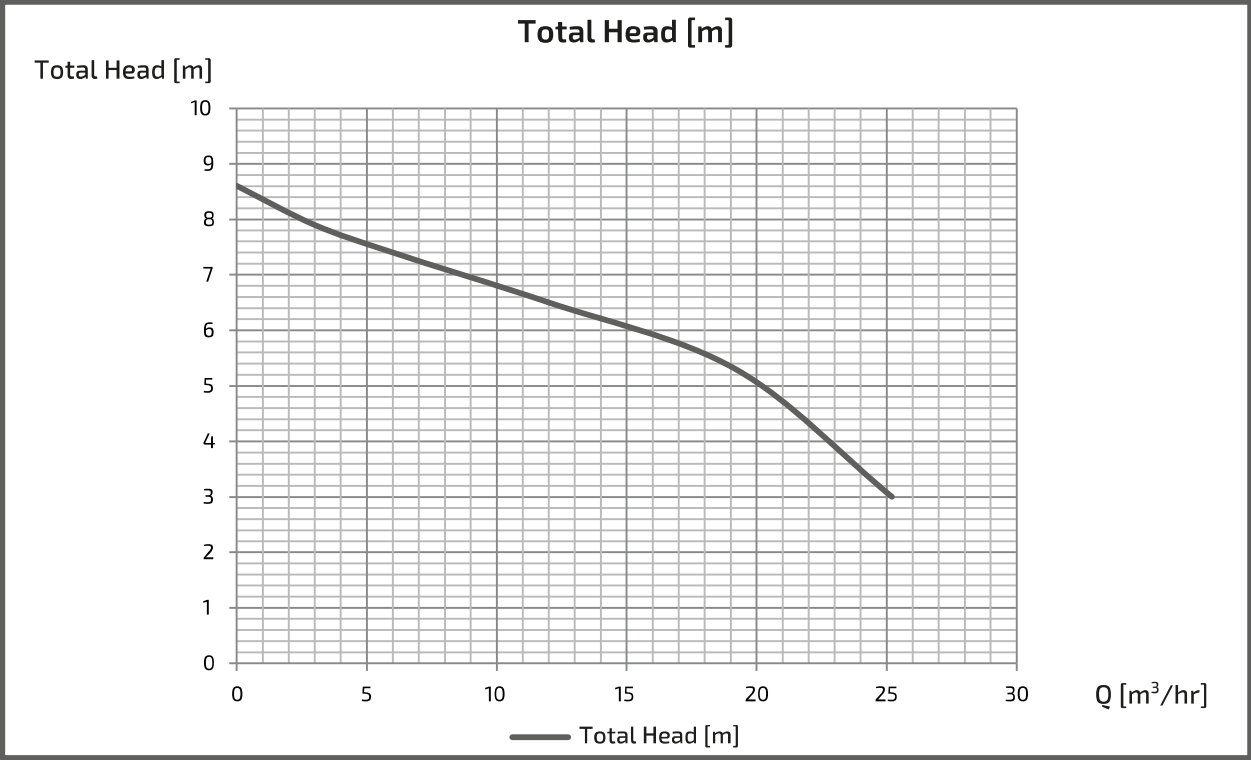


Discharge Bore (mm)	Discharge Connection								Guide					
	DH	DT	BI	BL	BM	BP	BW	H	GH	GA	GD	GM	GP	G
50	190	27	15	212	180	100	130	M12x160	141	50	120	50	50	32A
	215	27	15	222	190	110	140	M12x160	161	50	130	50	50	32A
65	215	31	15	222	190	110	140	M12x160	161	50	130	50	50	32A
	250	31	18	248	210	130	166	M16x200	192	60	140	50	60	40A
80	250	31	18	248	210	130	166	M16x200	192	60	140	60	60	40A
	250	33	18	248	210	130	166	M16x200	192	60	140	60	60	40A
	285	33	20	278	240	160	196	M16x200	228	60	160	60	60	40A
100	285	33	20	278	240	160	196	M16x200	228	60	160	60	60	40A
	285	39	20	278	240	160	196	M16x200	228	60	160	60	60	40A
Discharge Bore (mm)	Hanger					Manhole		Remark						
	HH	HA	HL	HP	H'	W3	W4							
50	48	30	76	50	12	600	450	0.75kW						
	48	30	76	50	12	600	450	1.5kW						
65	48	30	76	50	12	600	450	1.5kW						
	60	35	85	50	15	600	450	2.2.3.7kW						
80	60	35	85	50	15	700	500	5.5kW						
	60	35	85	50	15	600	450	Less than 2.2kW						
	60	35	85	50	15	700	500	3.7kW						
100	60	35	85	50	15	800	550	5.5.7.5kW						
	60	35	85	50	15	800	550	3.7kW						
100	60	35	85	50	15	700	500	3.7kW						
	60	35	85	50	15	800	550	5.5kW						

INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-505-0.75T4

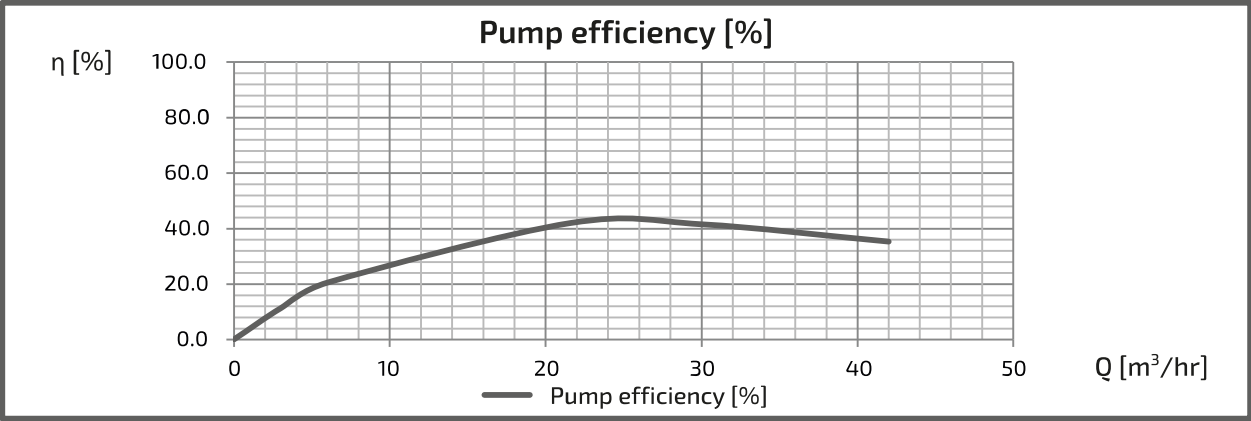
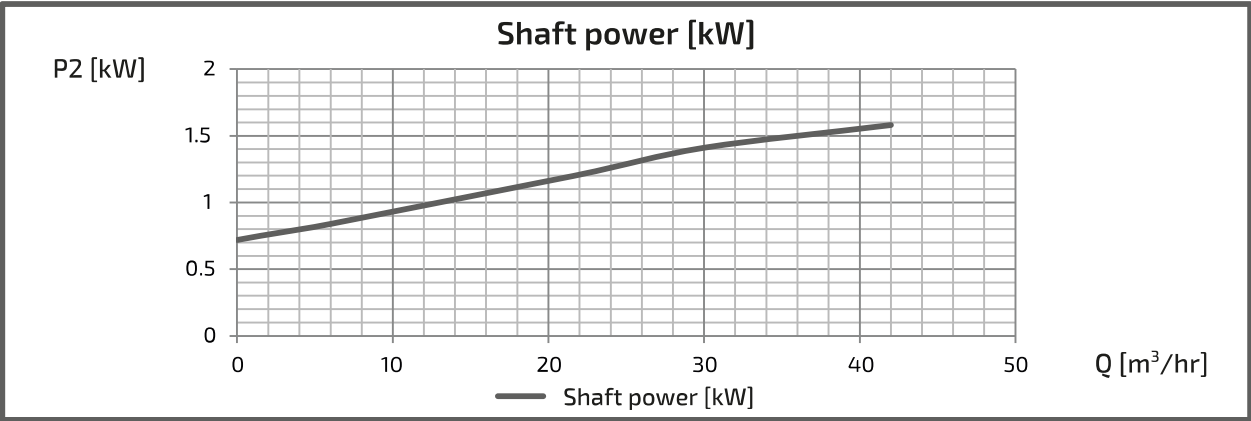
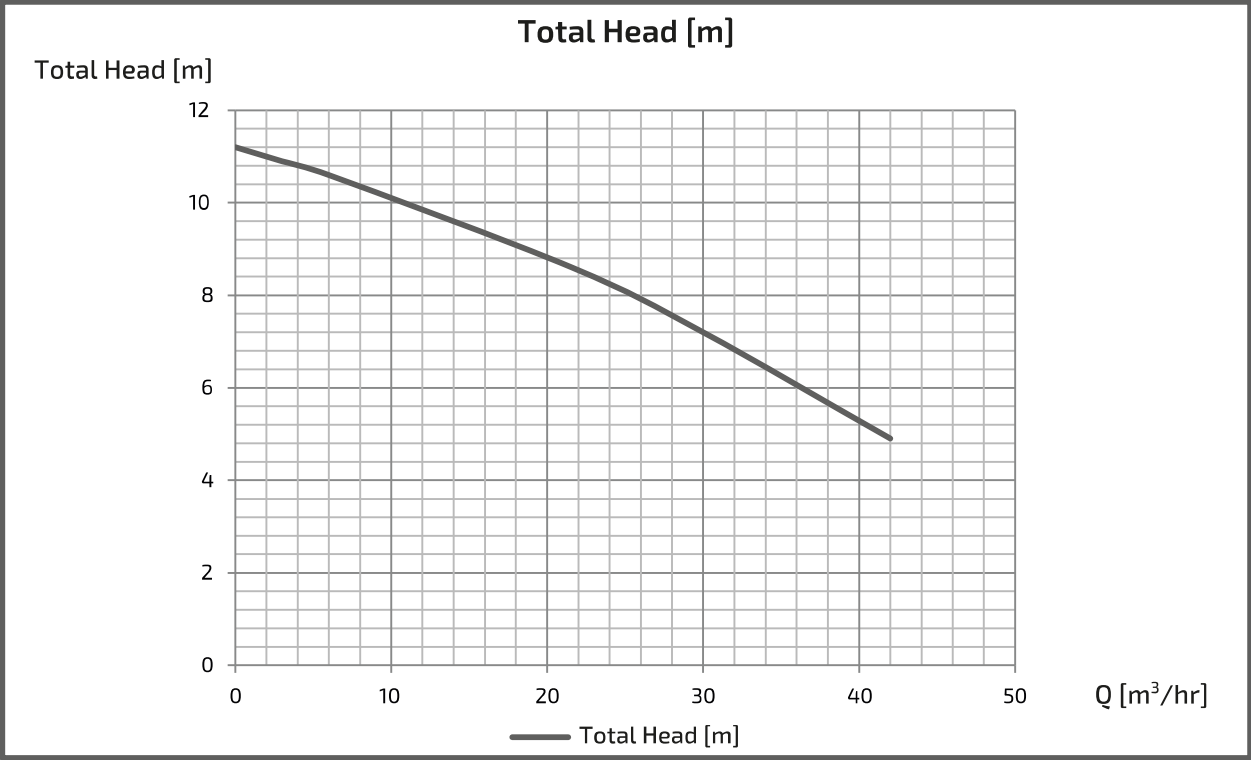
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-505-1.5T4

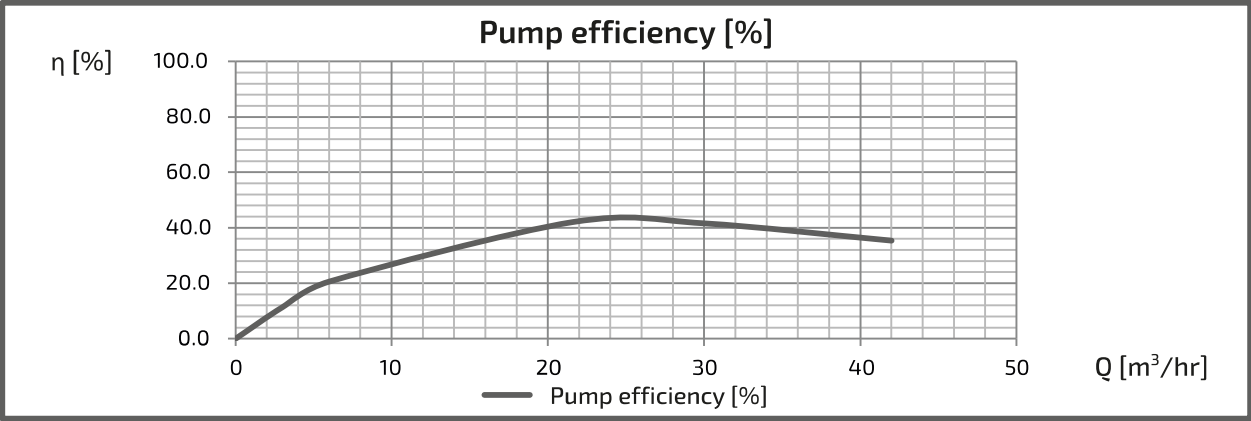
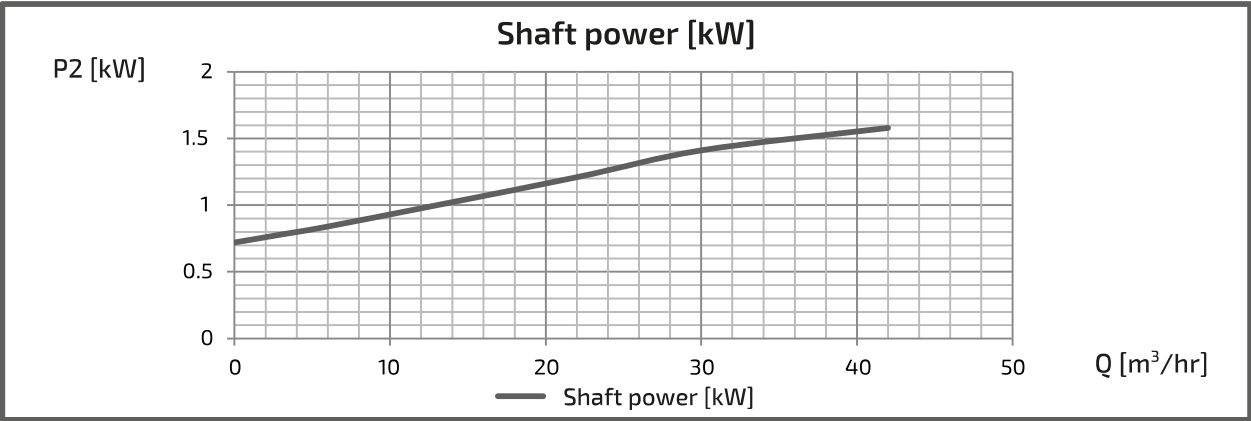
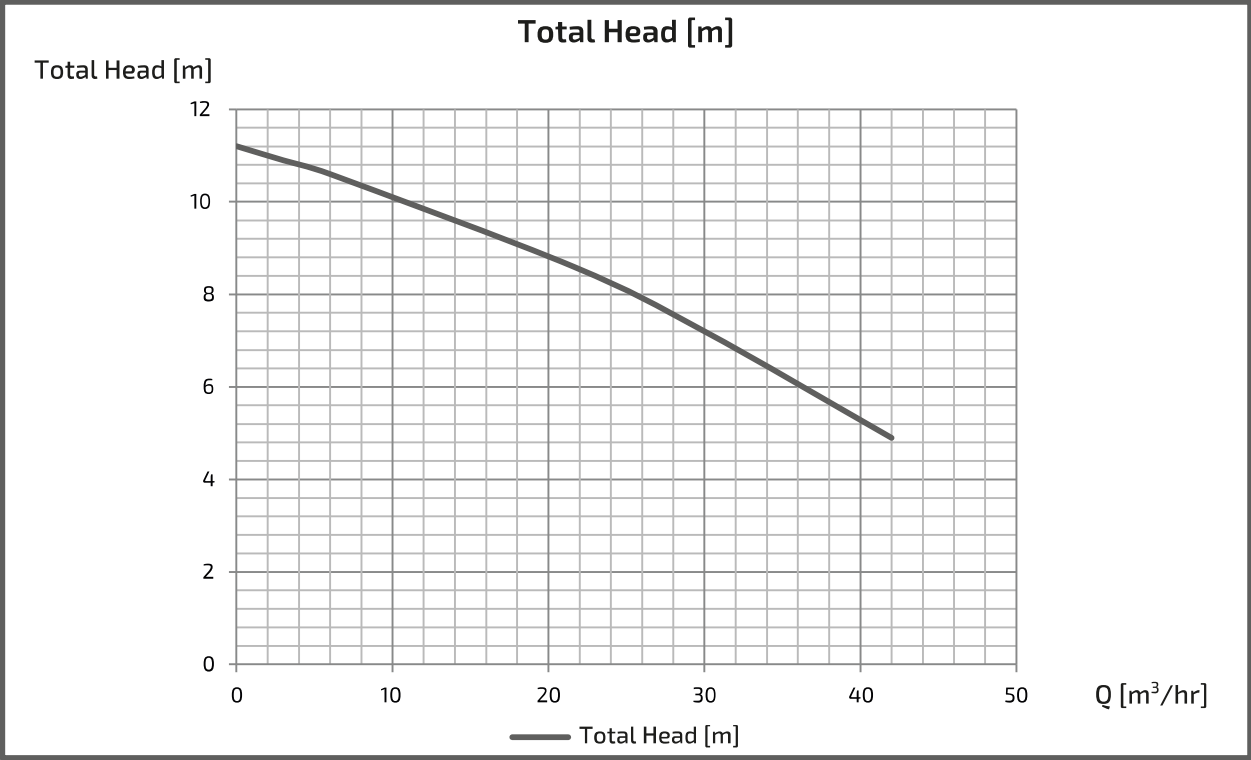
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-655-1.5T4

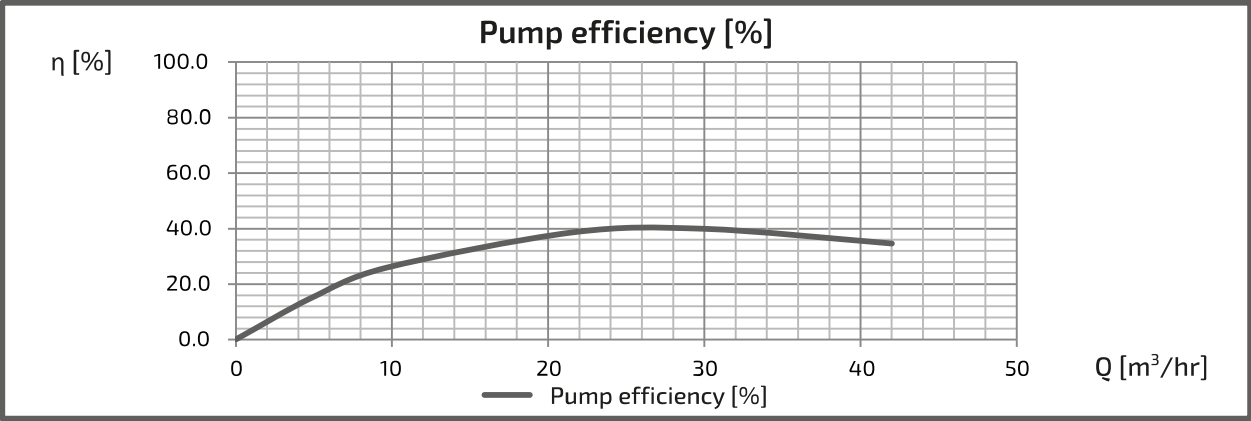
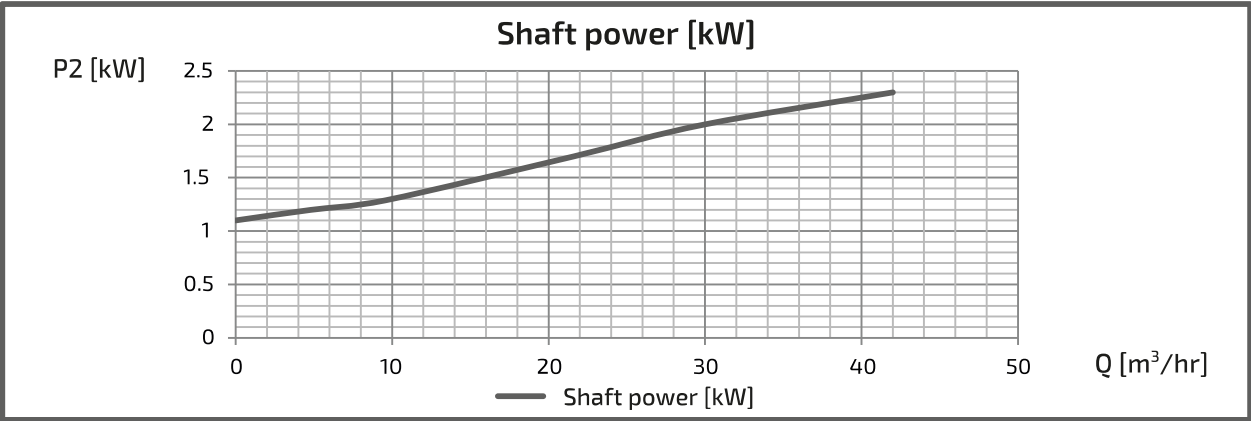
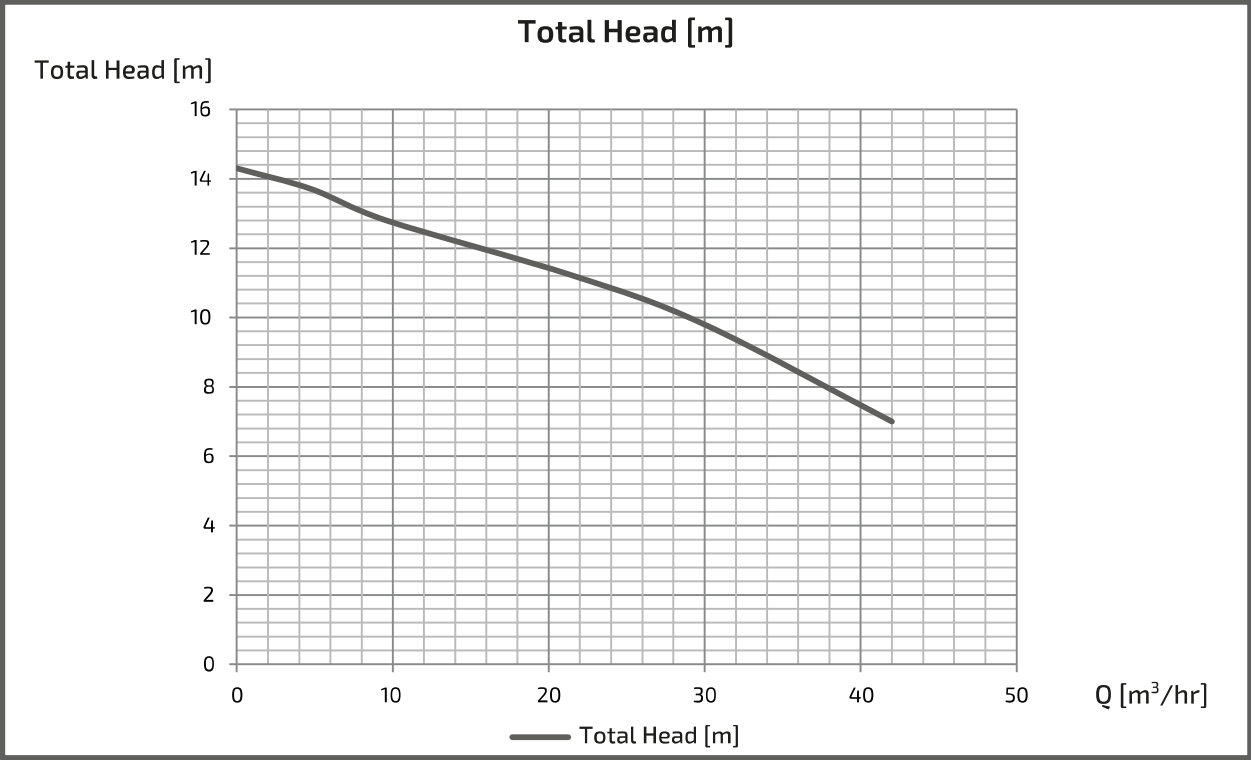
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-655-2.2T4

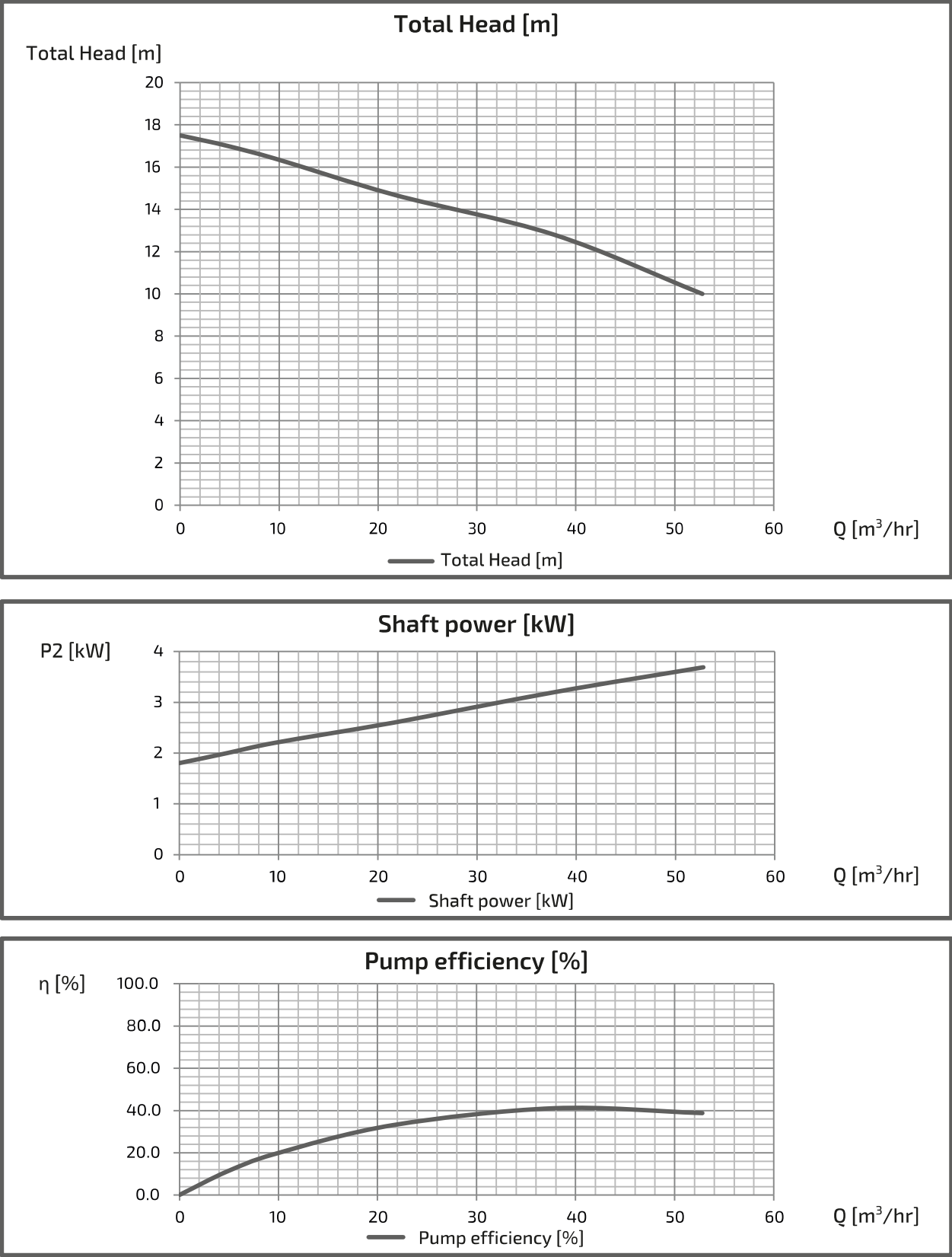
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-655-3.7T4

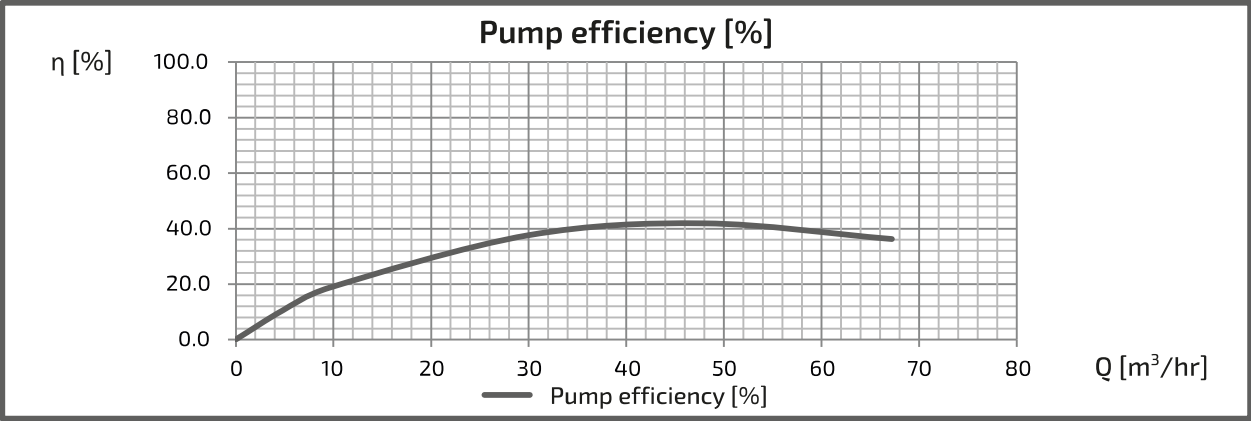
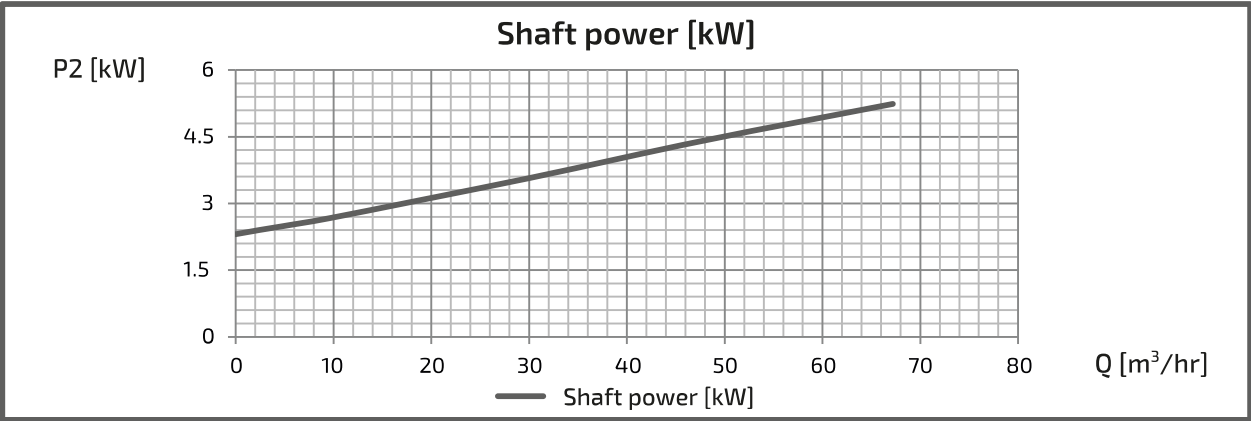
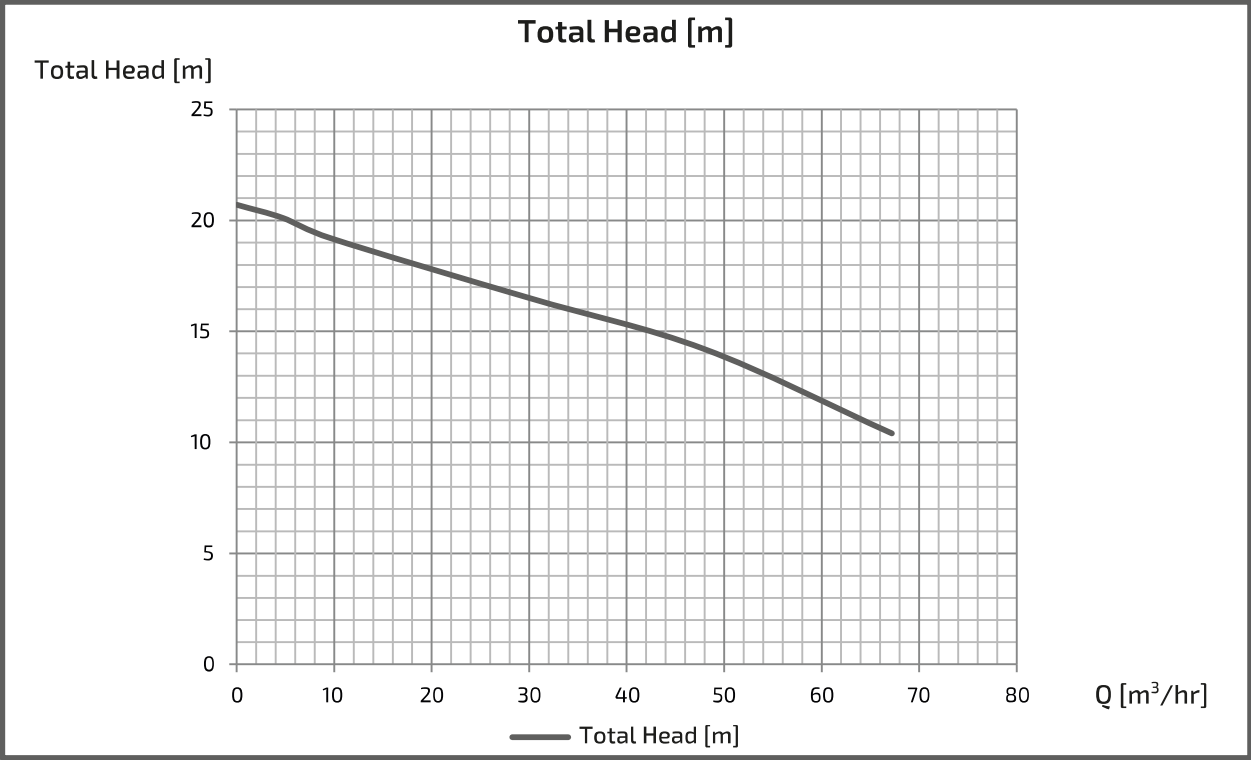
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-655-5.5T4

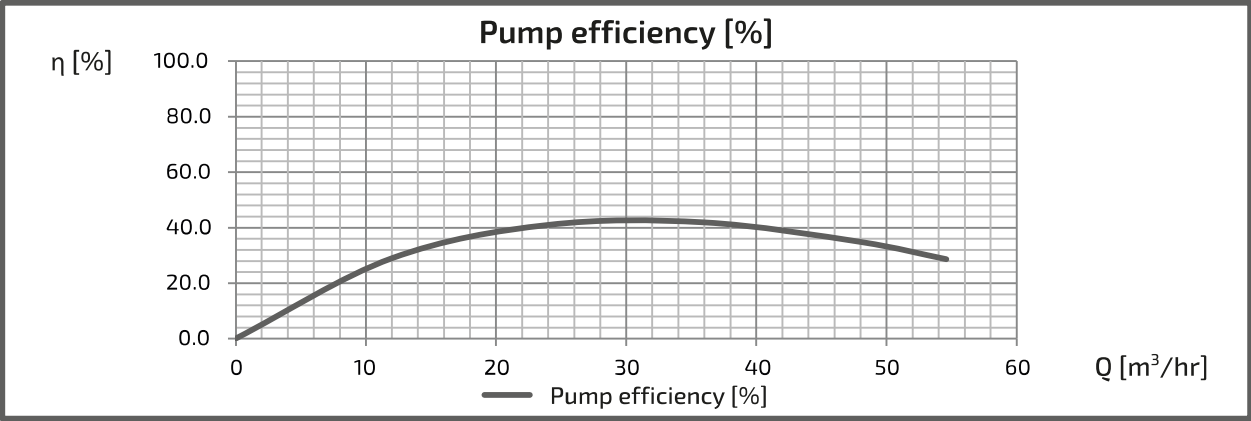
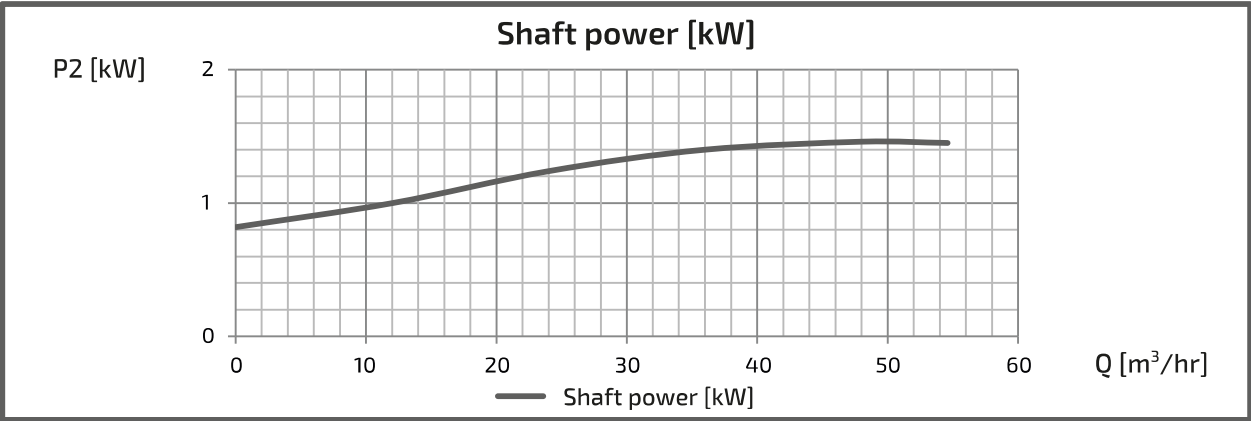
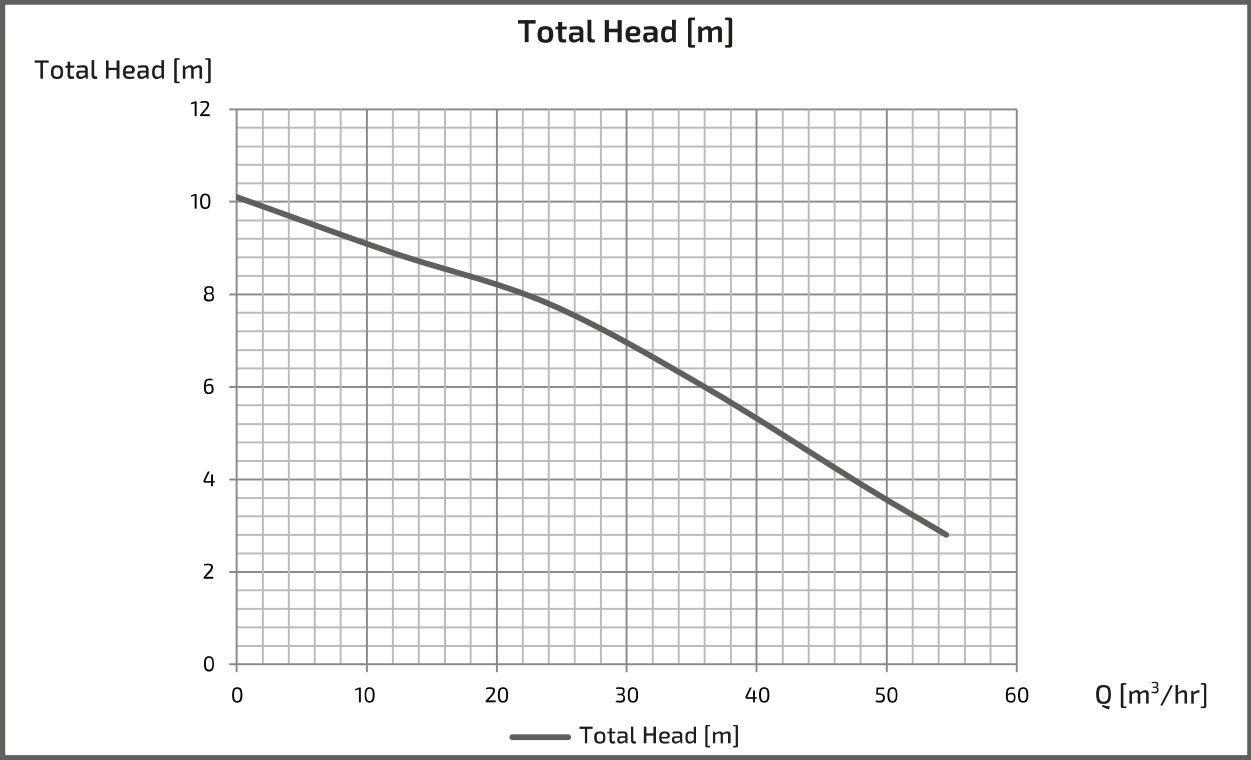
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-805-1.5T4

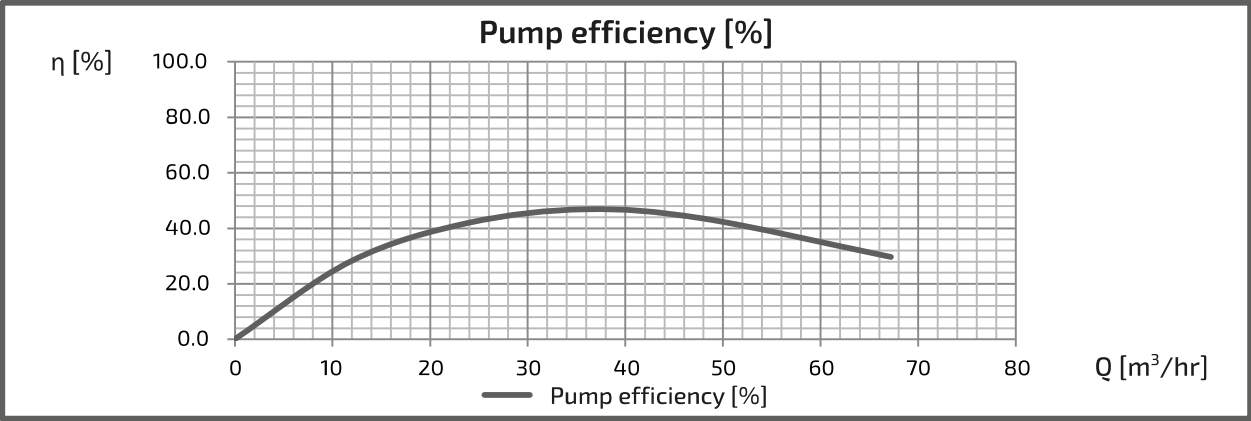
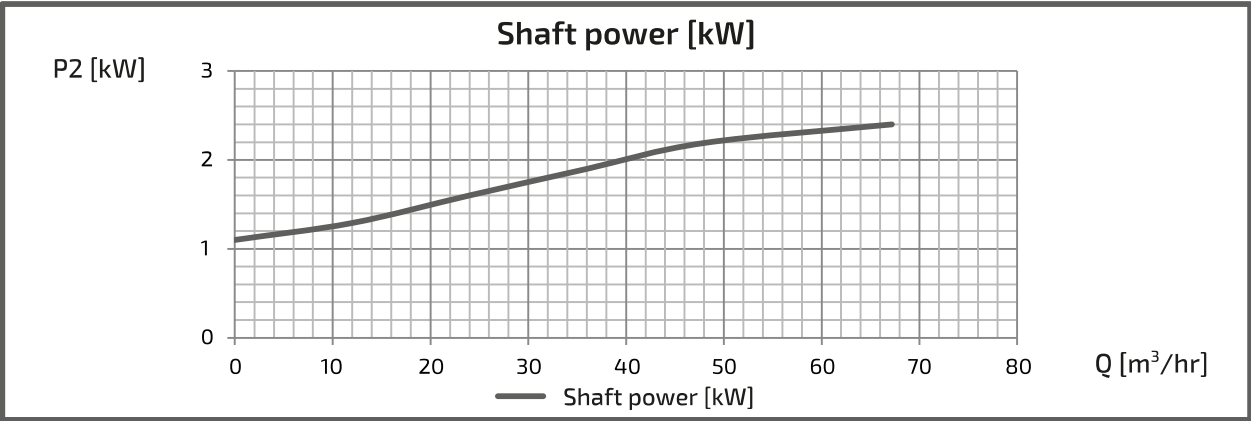
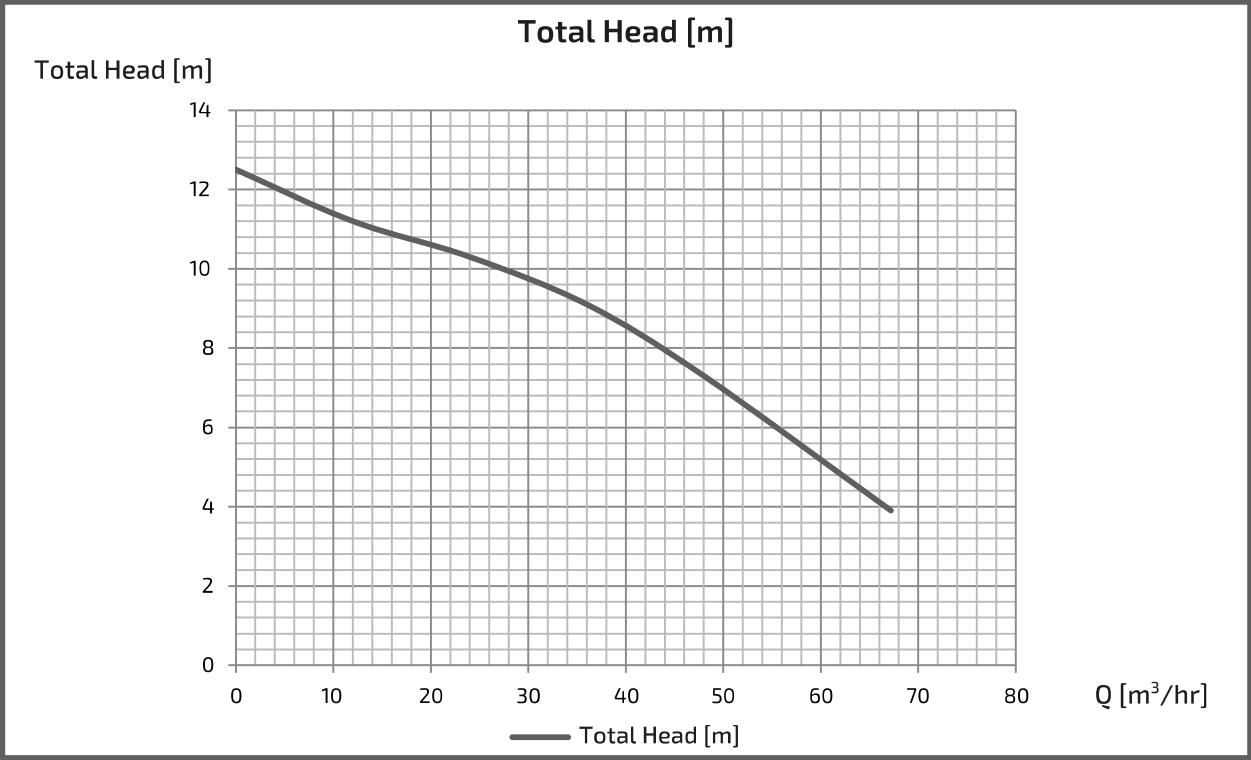
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-805-2.2T4

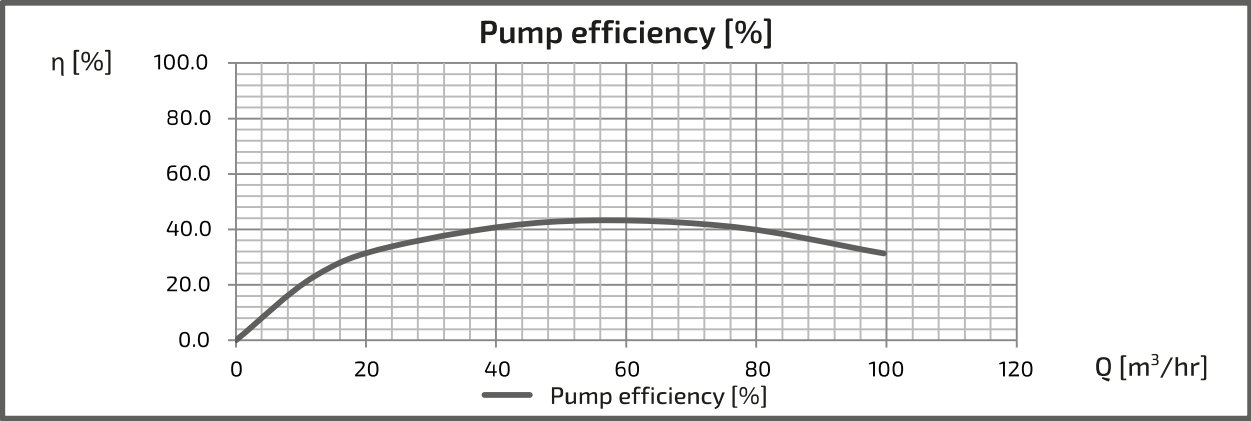
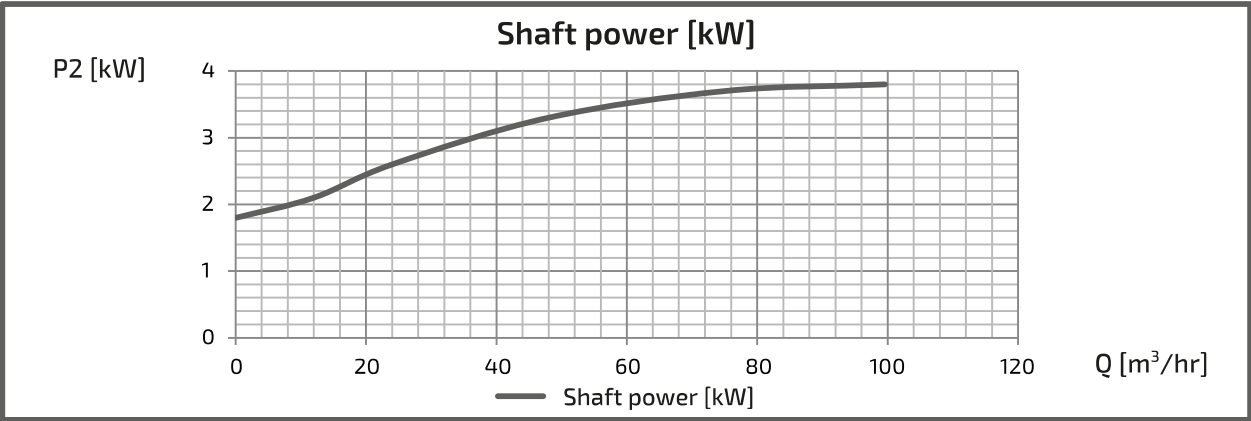
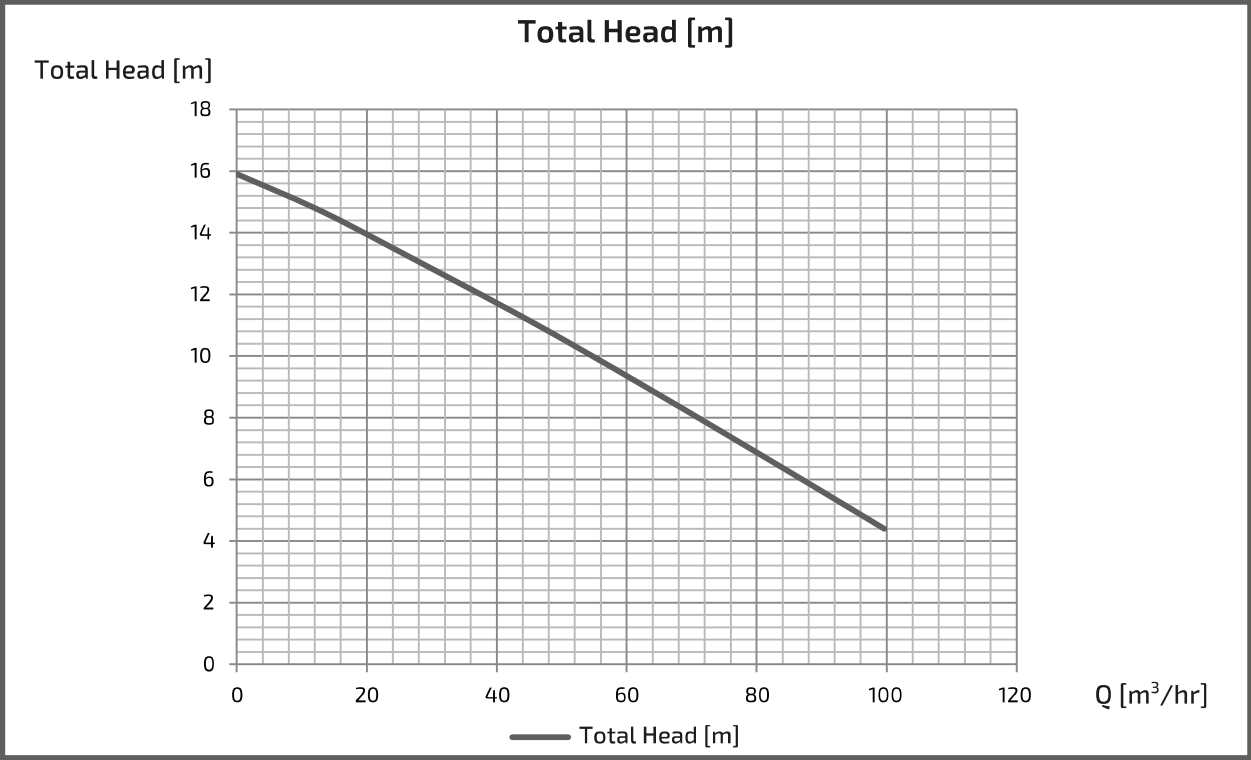
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-805-3.7T4

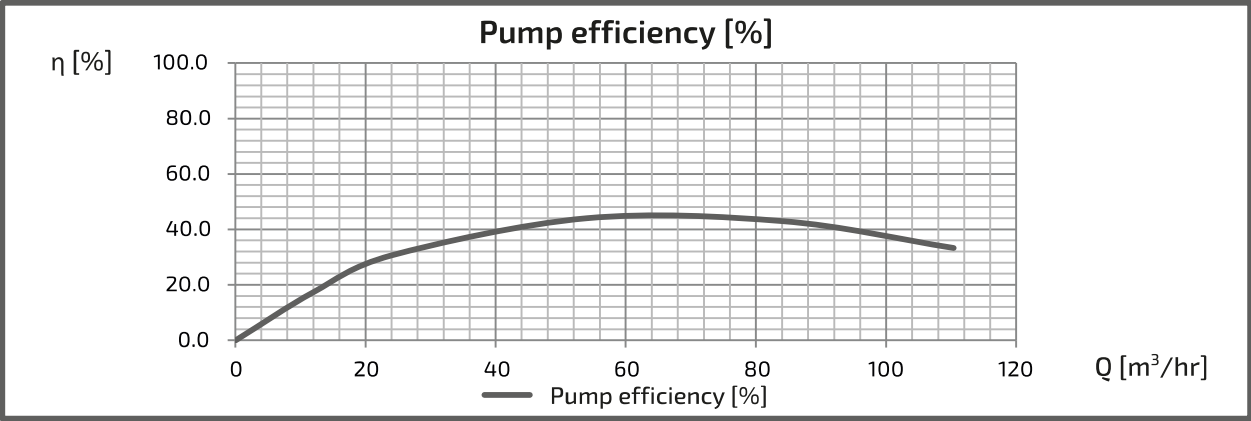
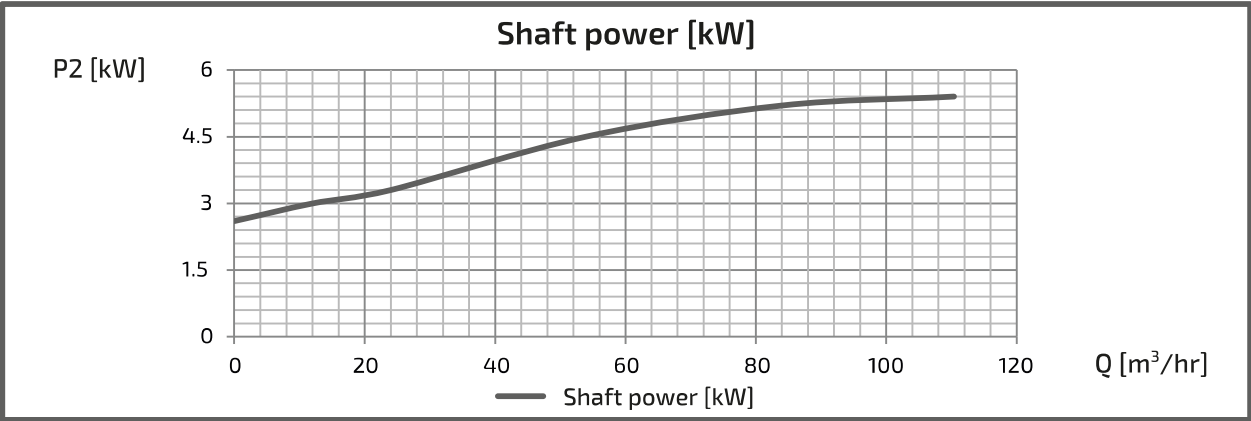
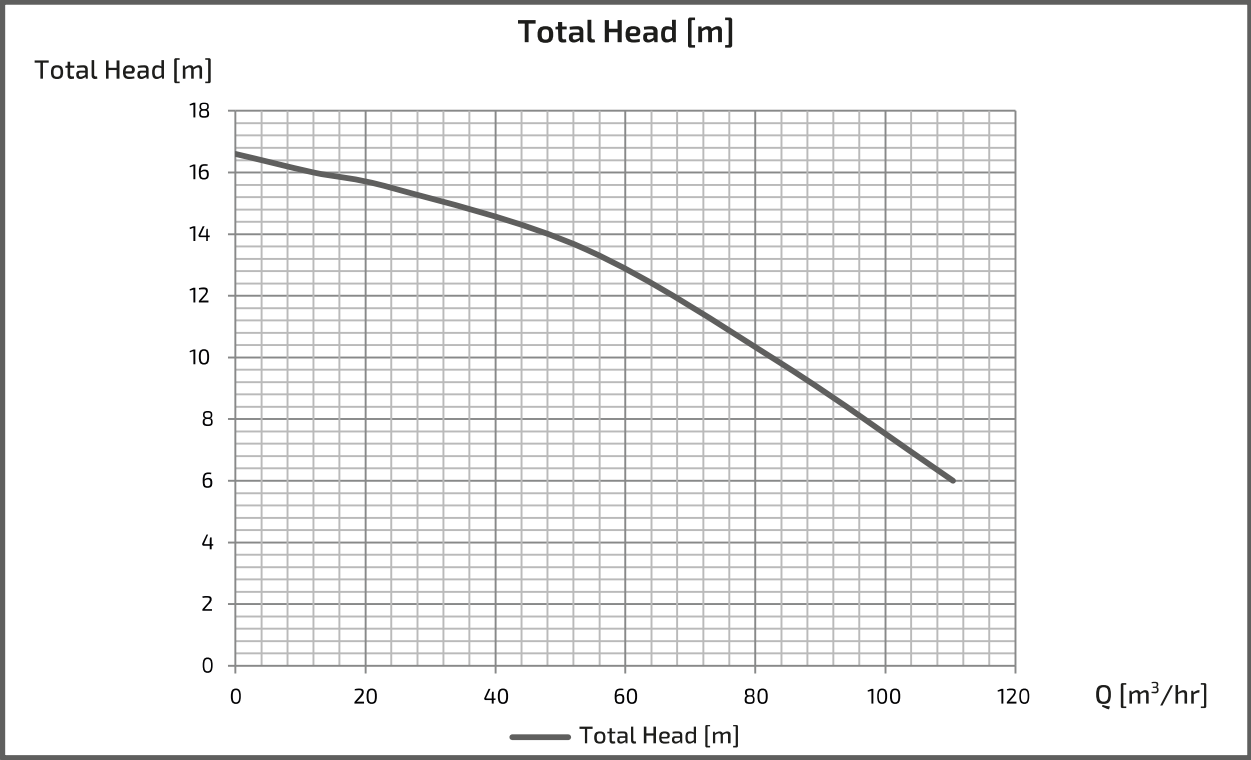
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-805-5.5T4

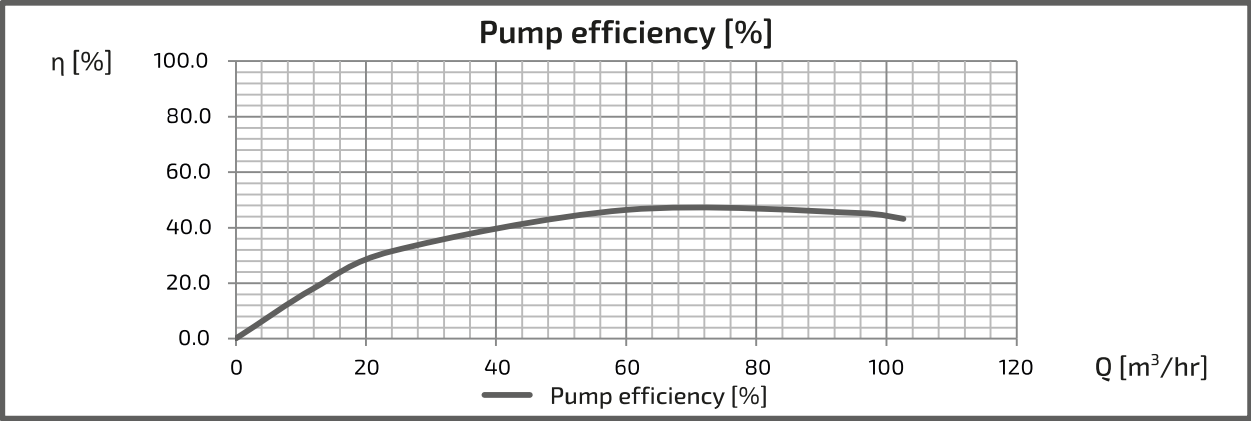
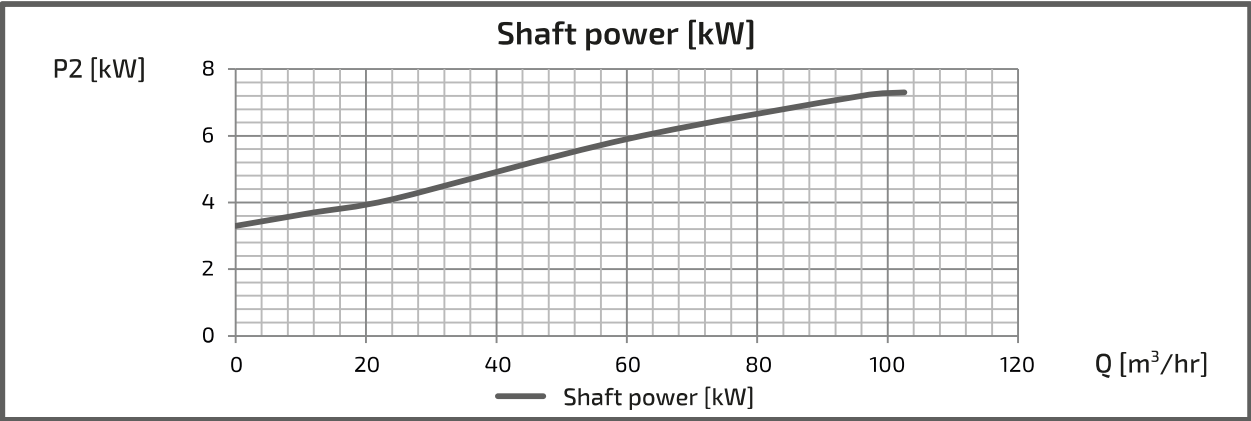
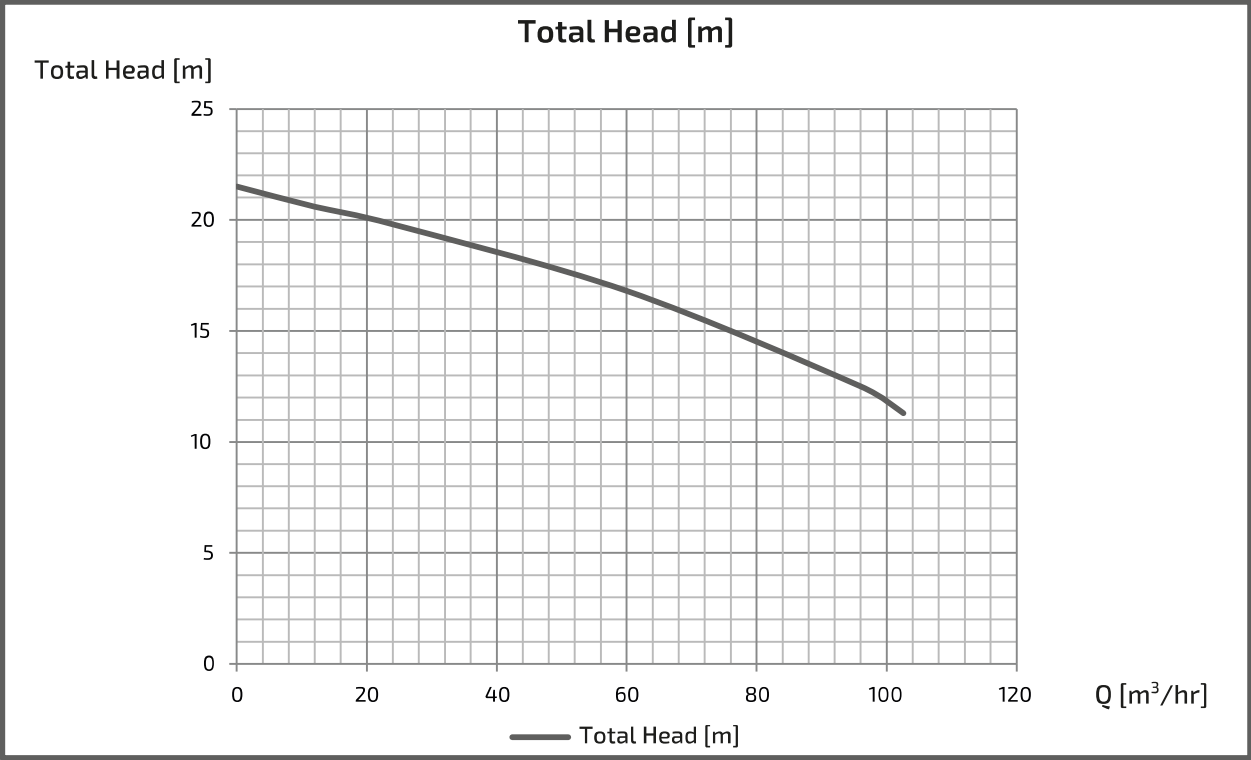
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-805-7.5T4

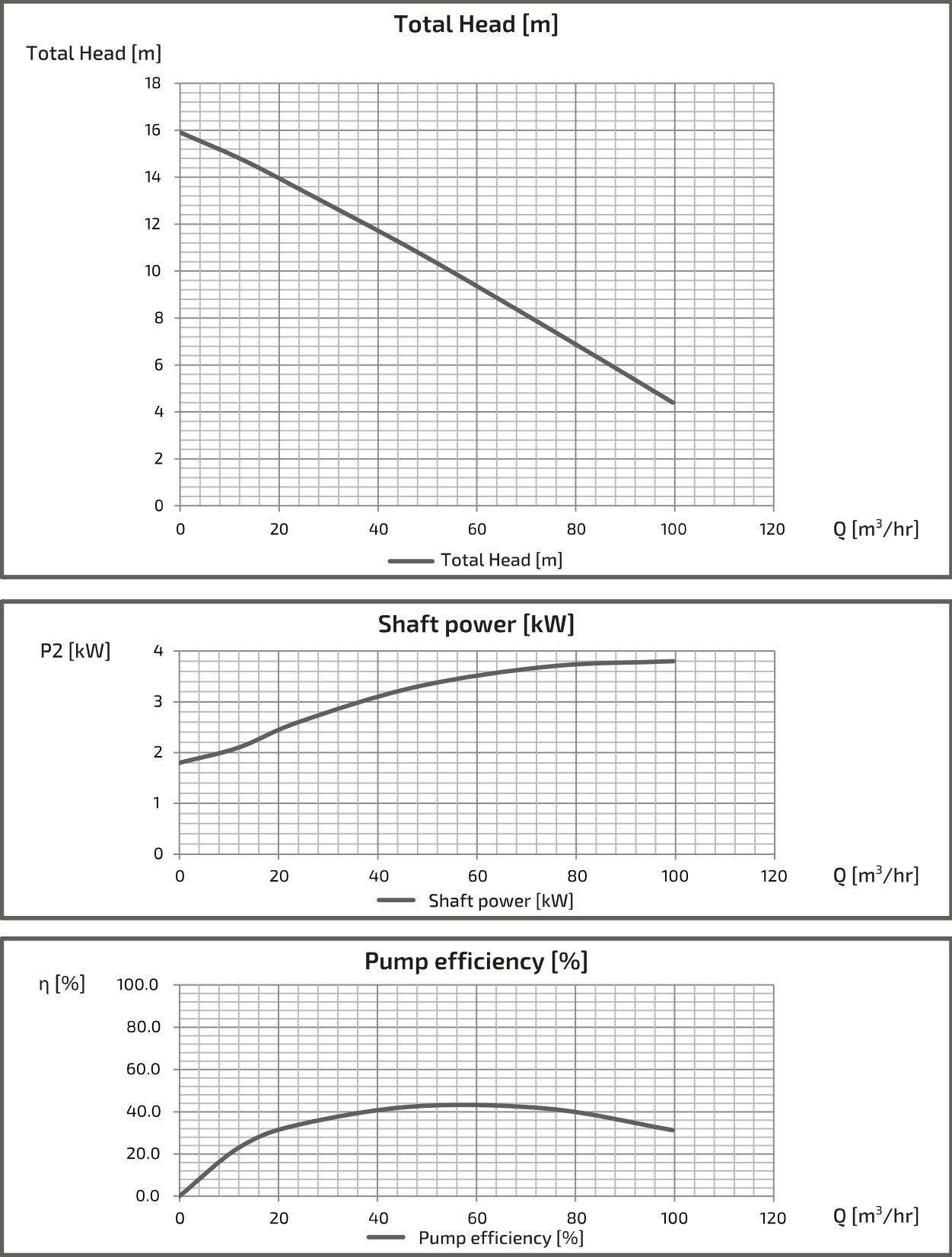
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-1005-3.7T4

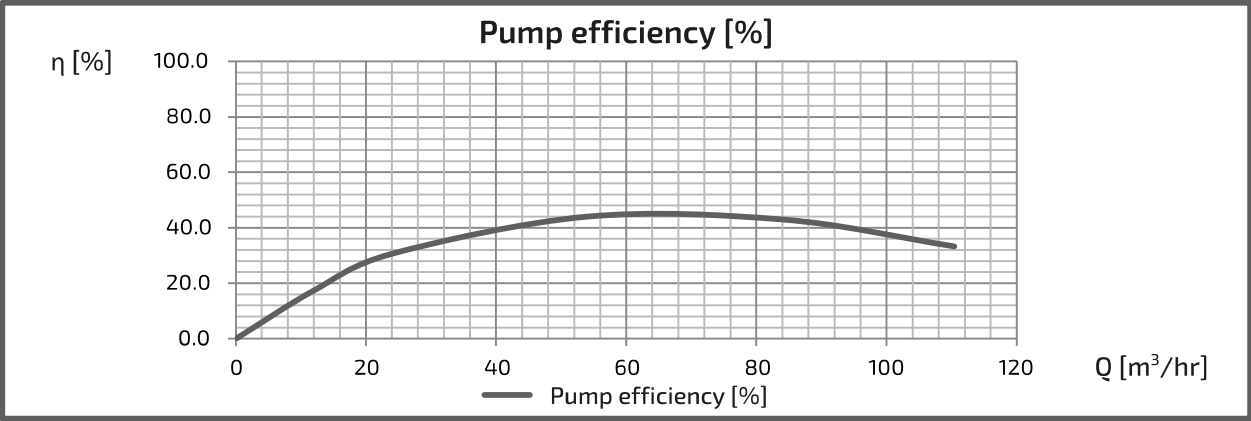
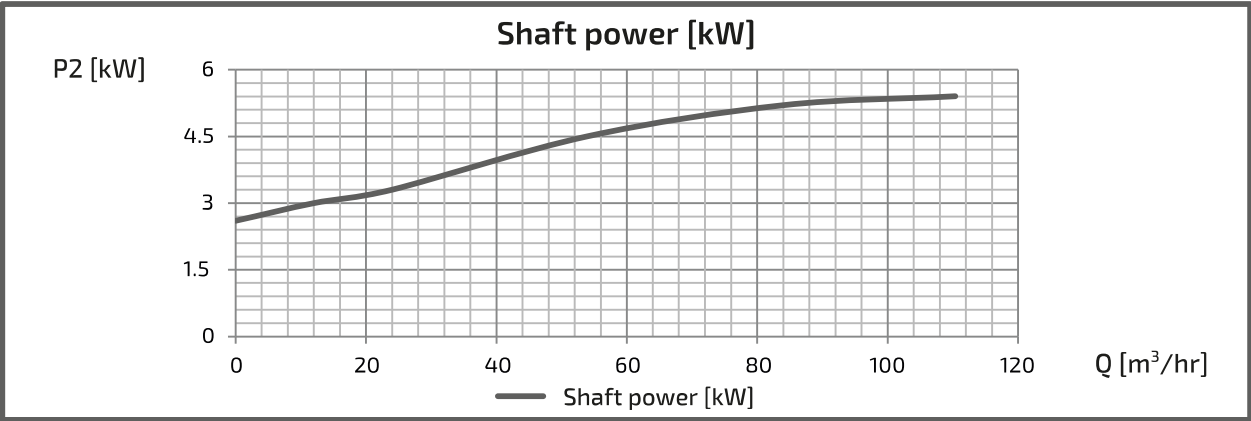
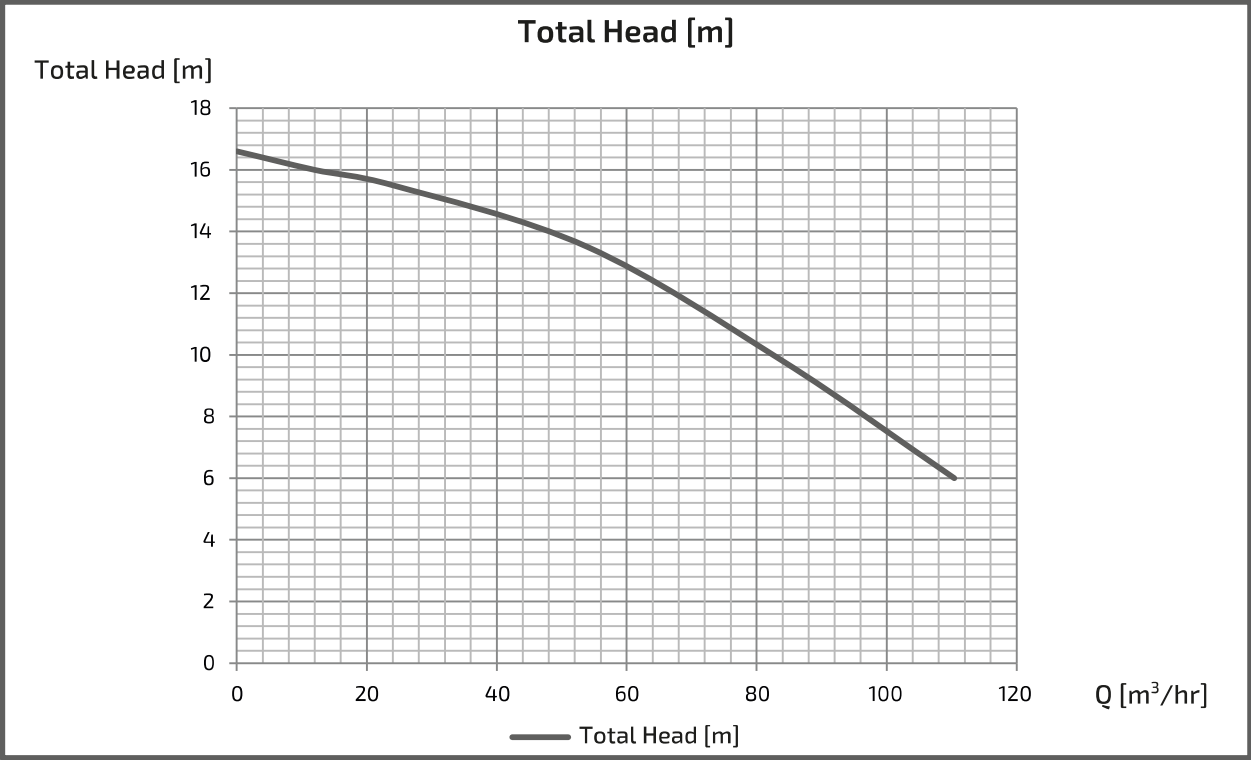
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-1005-5.5T4

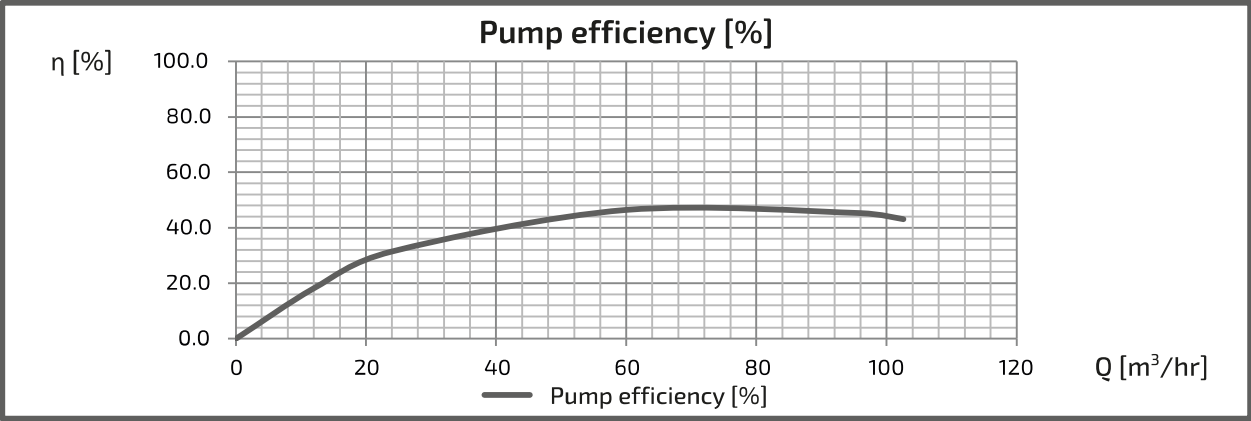
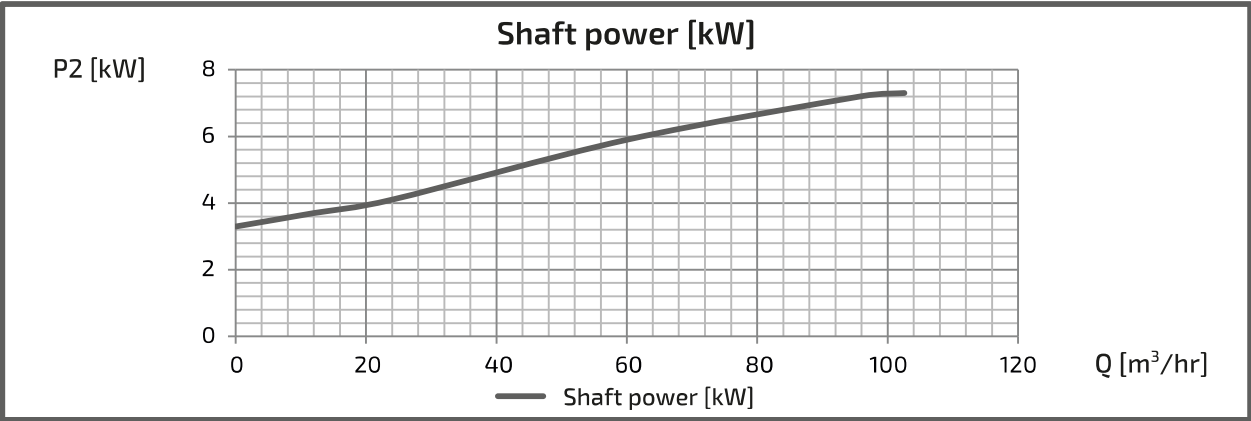
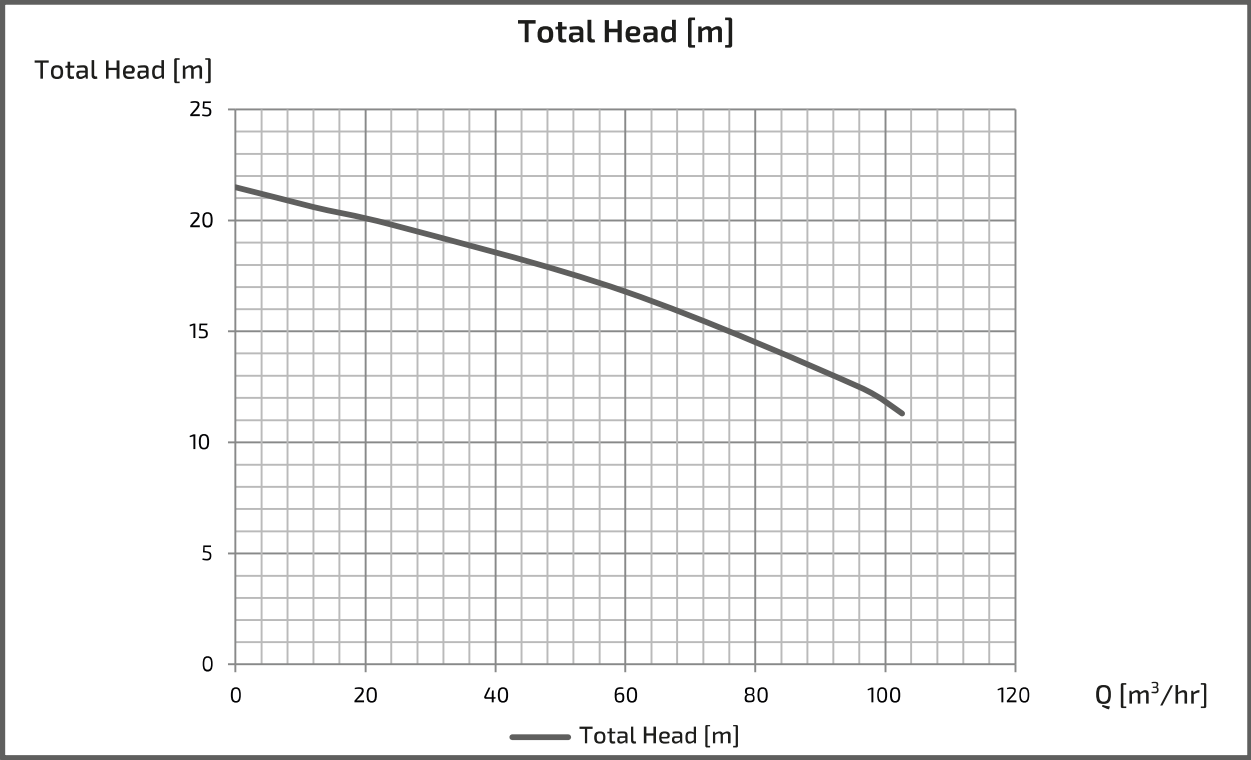
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : AU4-1005-7.5T4

■ 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 distributor or our nearest sales office.

Note

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