

BU4

KAWAMOTO SUBMERSIBLE PUMP
4 POLES / 50 Hz
SIZE 50 ~ 150 MM.



CHANNEL IMPELLER



APPLICATIONS AND FEATURES

■ APPLICATIONS

- For discharge of sewage and wastewater.

■ FEATURES

- The channel impeller and our original casing structure (patented) provide high pumping performance.
- Equipped with a motor with build-in auto-cut (7.5 kW or less) to prevent motor burnout. Motor with output of 11 kW or above can detect abnormal temperature rise of the motor coil as an external signal.
- Two types available: flange type and pedestal support type for easy maintenance and inspection.
- Some model with output of 3.7 kW or less are available with a float switch. (automatic, auto alternate build-in)
- High pressure model BU4-H type is also available. Please ask its specification each time.

STANDARD SPECIFICATIONS

Description		Model : BU4
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	Cast Iron
	Shaft	Stainless Steel (SUS420J2)
Motor	Speed	1500 rpm
	Protection	IP68, Class F
Construction	Impeller	Channel Impeller
	Shaft Seal	Double mechanical seal Pump : Sic x Sic Motor : Ceramics x Carbon
	Motor Bearing	Sealed ball bearing
Maximum Submergence		0.75 kW : 5m. 1.5~22 kW : 8 m.

OPTIONAL SPECIFICATIONS

Description		Model : BU4
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	SCS13 (0.75~7.5kW)
	Shaft	Stainless Steel (SUS420J2)
Motor	Speed	1500 rpm
	Protection	IP68, Class F
Construction	Impeller	SCS13 Channel Impeller (0.75~7.5 kW)
	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

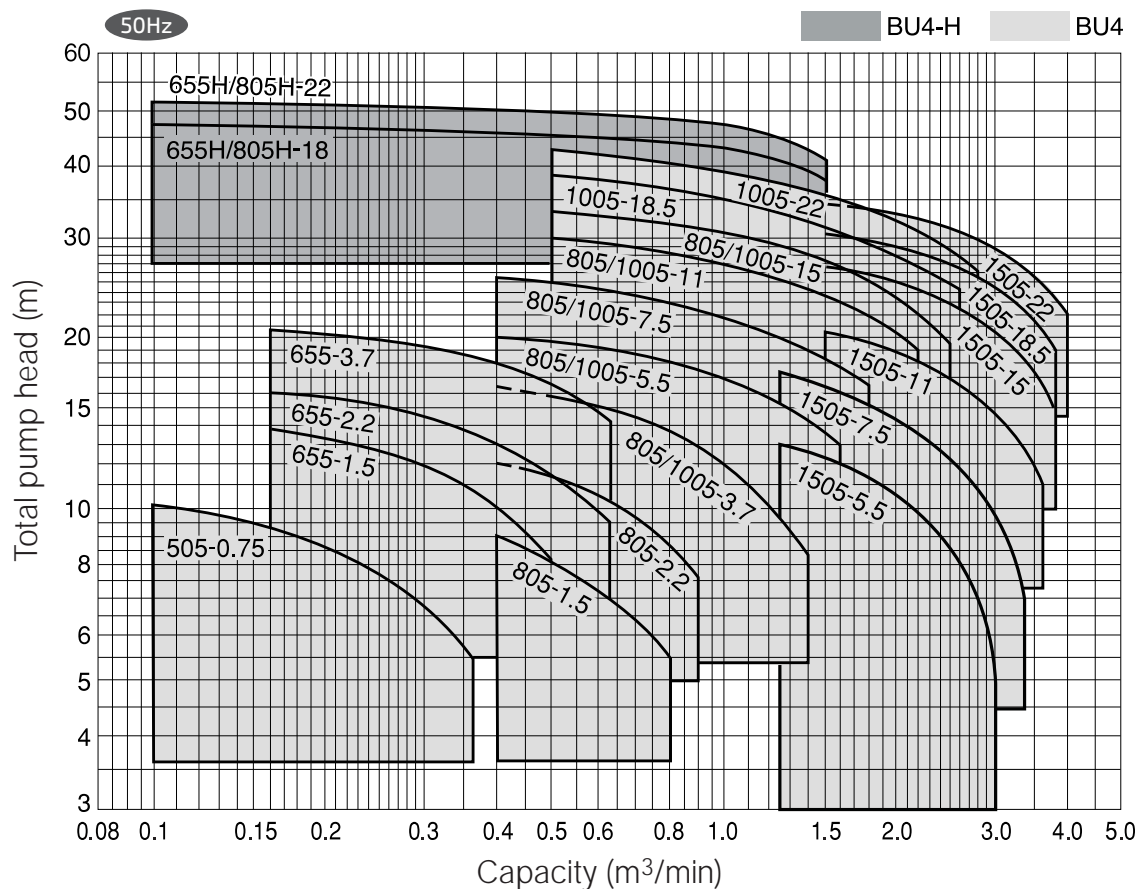
SOLID PASSAGE CABLE

Pump Bore (mm)	Solid diameter (mm)	Clothes (mm)
50	35	300 x 300
65	35	300 x 450
80	53	1.5 kW : 300 x 450
100	53	2.2~3.7 kW : 300 x 900
150	53	5.5~22 kW : 200 x 300

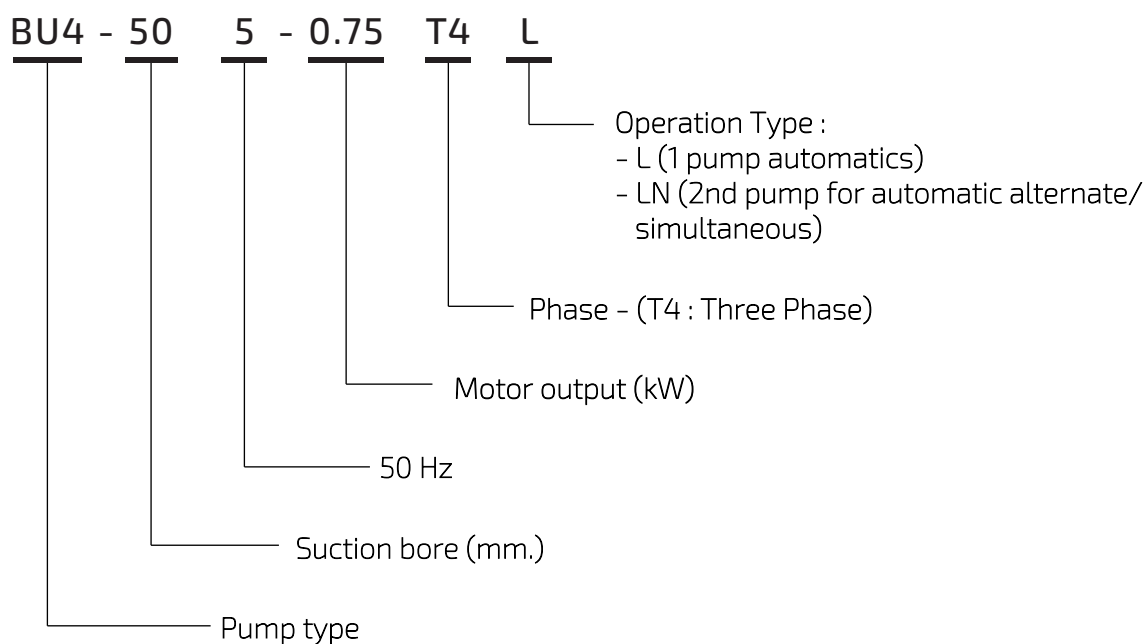
Output (kW)	Phase	Size (mm ²)	Core	Outer diameter (mm)	Length (m)
0.75	3	1.25	4	11	6
1.5	3	1.25	4	11	10
2.2	3	1.25	4	11	10
3.7	3	2	4	2	10
5.5	3	3.5	4	13.8	10
7.5	3	5.5	4	16.5	10
11	3	3.5 x 2	4+3	13.8	10 x 2
15	3	5.5 x 2	4+3	16.5	10 x 2
18.5	3	8 x 2	4+3	19.3	10 x 2
22	3	14 x 2	4+3	24	10 x 2

Cable Material : 600V insulating (VCT)

PERFORMANCE CHART



MODEL CODE



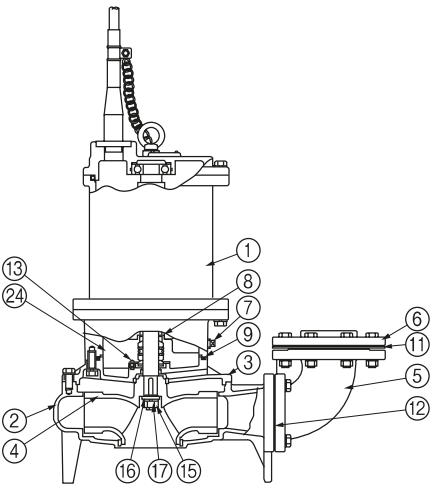
PUMP DATA - BU4

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	BU4-505-0.75T4	0.1	10.2	0.36	5.5
2	65	1.5	3	BU4-655-1.5T4	0.16	13.8	0.5	8.2
3		2.2	3	BU4-655-2.2T4	0.16	16	0.63	9.5
4		3.7	3	BU4-655-3.7T4	0.16	20.5	0.63	14.2
5	80	1.5	3	BU4-805-1.5T4	0.4	9	0.8	5.5
6		2.2	3	BU4-805-2.2T4	0.4	12.2	0.9	7.5
7		3.7	3	BU4-805-3.7T4	0.4	16.5	1.4	8.2
8		5.5	3	BU4-805-5.5T4	0.4	20	1.6	13
9		7.5	3	BU4-805-7.5T4	0.4	25.5	1.8	16.5
10		11	3	BU4-805-11T4	0.5	30.5	2.2	19
11		15	3	BU4-805-15T4	0.5	33.5	2.5	19.5
12	100	3.7	3	BU4-1005-3.7T4	0.4	16.5	1.4	8.2
13		5.5	3	BU4-1005-5.5T4	0.4	20	1.6	13
14		7.5	3	BU4-1005-7.5T4	0.4	25.5	1.8	16.5
15		11	3	BU4-1005-11T4	0.5	30.5	2.2	19
16		15	3	BU4-1005-15T4	0.5	33.5	2.5	19.5
17		18.5	3	BU4-1005-18.5T4	0.5	39	2.6	24
18	150	22	3	BU4-1005-22T4	0.5	42	2.8	26
19		5.5	3	BU4-1505-5.5T4	1.25	13	3	5
20		7.5	3	BU4-1505-7.5T4	1.25	17.5	3.4	7
21		11	3	BU4-1505-11T4	1.5	20.5	3.6	11
22		15	3	BU4-1505-15T4	1.5	26.5	3.8	15
23		18.5	3	BU4-1505-18.5T4	1.5	30.5	3.8	19
24		22	3	BU4-1505-22T4	1.5	34.5	4	22

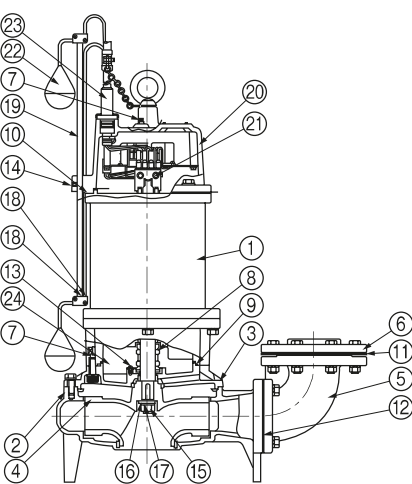
Please ask us specification for BU4-H type

SECTION VIEW - FLANGE TYPE

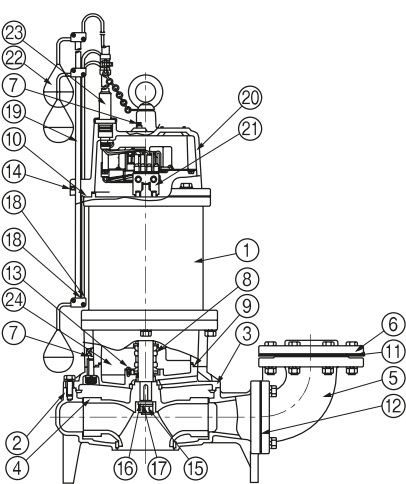
BU4



BU4-L



BU4-LN

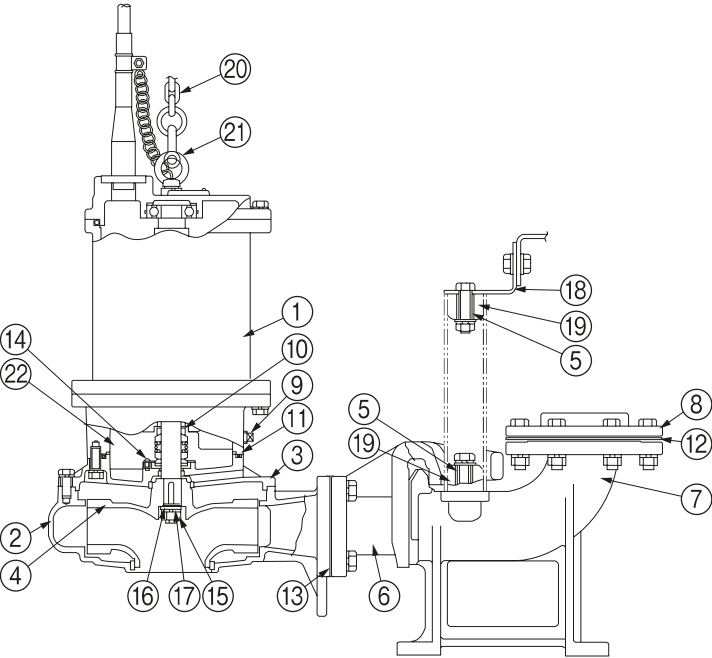


No.	Part name	Material	Note	No.	Part name	Material	Note
1	Motor	-	Class F	13	Screw	SWRM10	
2	Casing	Cast iron		14	Screw	SUS304	
3	Casing cover	Cast iron		15	Nut	SUS304	
4	Impeller	Cast iron		16	Plane washer	SUS304	
5	Bend	Cast iron		17	Spring washer	SUS304	
6	Flange	Cast iron		18	Clamp	Resin	
7	Plug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

※Shaft : SUS420J2

SECTION VIEW - WITH Q.D.C TYPE

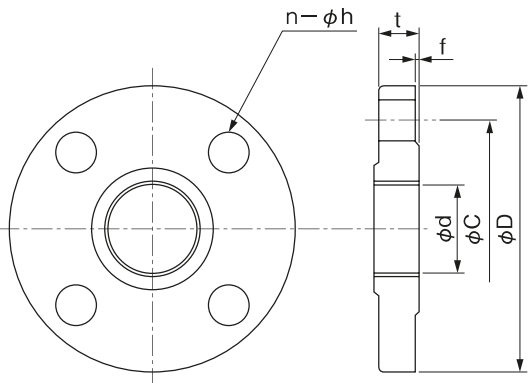
BU4



No.	Part name	Material	Note
1	Motor	-	Class F
2	Casing	Cast iron	
3	Casing cover	Cast iron	
4	Impeller	Cast iron	
5	Pipe	SUS304-TP	
6	Connecting pipe	FCD	
7	Connecting bend with baseplate	Cast iron	
8	Flange	Cast iron	
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	Steel	
21	Shackle	Steel	
22	Turbine oil	VG32	

※Shaft : SUS420J2

FLANGE DIMENSION

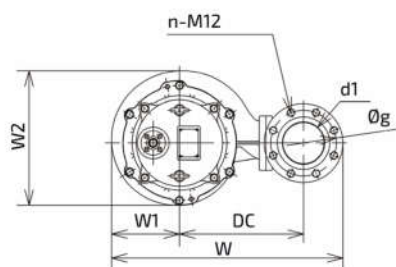


Unit:mm

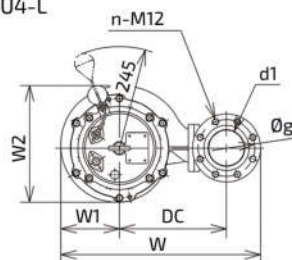
Bore a	d	C	D	t	f	n	h (Bolt)
50	Rc2	120	155	18	2	4	15(M12)
65	Rc2 ½	140	175	18	2	4	15(M12)
80	Rc3	150	185	18	2	8	15(M12)
100	Rc4	175	210	20	2	8	15(M12)

PUMP DIMENSION - BU4 WITH FLANGE TYPE

BU4

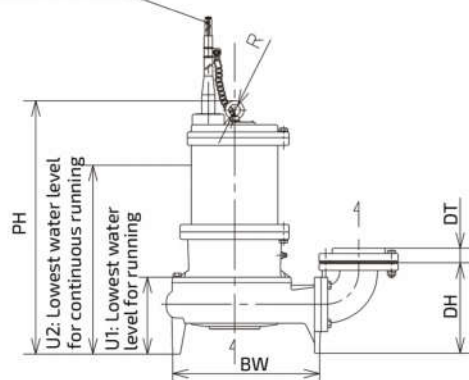


BU4-L

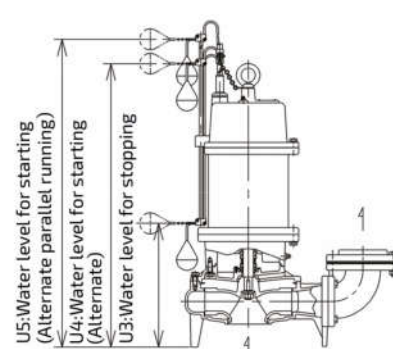
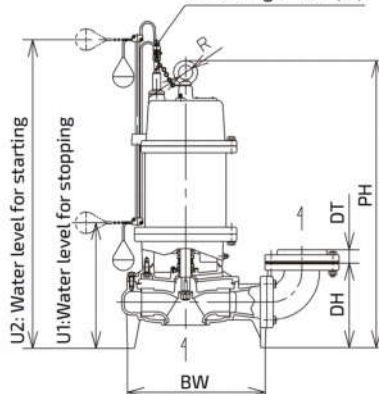


BU4-LN

Cable length 10m (※)



Cable length 10m (※)

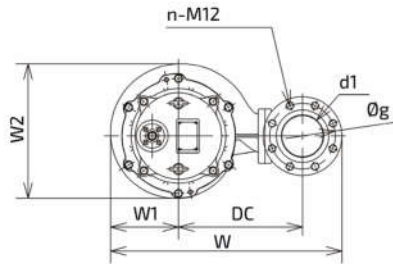


※ 6m when it's less than 0.75kW

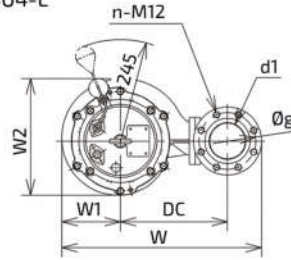
Discharge Bore (mm)	Model	Motor (kW)	Pump Combination								Water Level					Other		Weight (kg)
			PH	DH	DT	BW	W	W1	W2	DC	U1	U2	U3	U4	U5	RW	R	
50	BU4-505-0.75T4	0.75	549	185	27	251	401	118	242	205	175	375	-	-	-	-	25	43
65	BU4-655-1.5T4	1.5	559	205	31	296	470	137	273	245	185	385	-	-	-	-	25	54
	BU4-655-2.2T4	2.2	628	221	31	356	542	164	323	285	195	445	-	-	-	-	30	81
	BU4-655-3.7T4	3.7	628	221	31	356	542	164	323	285	195	445	-	-	-	-	30	85
80	BU4-805-1.5T4	1.5	584	232	33	306	495	148	289	260	195	410	-	-	-	-	25	62
	BU4-805-2.2T4	2.2	648	232	33	306	495	148	289	260	195	465	-	-	-	-	30	75
	BU4-805-3.7T4	3.7	658	252	33	356	584	169	332	310	205	475	-	-	-	-	30	86
	BU4-805-5.5T4	5.5	671	252	33	391	616	181	358	330	205	502	-	-	-	-	30	122
	BU4-805-7.5T4	7.5	671	252	33	391	616	181	358	330	205	502	-	-	-	-	30	128
	BU4-805-11T4	11	760	292	33	456	689	212	420	370	235	570	-	-	-	-	30	162
	BU4-805-15T4	15	820	292	33	456	689	212	420	370	235	615	-	-	-	-	30	175
100	BU4-1005-3.7T4	3.7	658	252	39	356	584	169	332	310	205	475	-	-	-	-	30	86
	BU4-1005-5.5T4	5.5	671	252	39	391	616	181	358	330	205	502	-	-	-	-	30	122
	BU4-1005-7.5T4	7.5	671	252	39	391	616	181	358	330	205	502	-	-	-	-	30	128
	BU4-1005-11T4	11	760	292	39	456	689	212	420	370	235	570	-	-	-	-	30	162
	BU4-1005-15T4	15	820	292	39	456	689	212	420	370	235	615	-	-	-	-	30	175
	BU4-1005-18.5T4	18.5	849	292	39	501	738	233	453	395	235	720	-	-	-	-	35	238
	BU4-1005-22T4	22	849	292	39	501	738	233	453	395	235	720	-	-	-	-	35	258

PUMP DIMENSION - BU4 WITH FLANGE TYPE

BU4

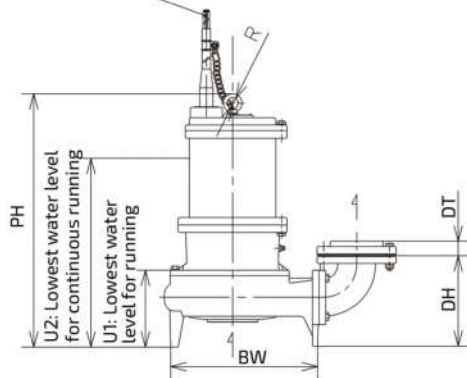


BU4-L

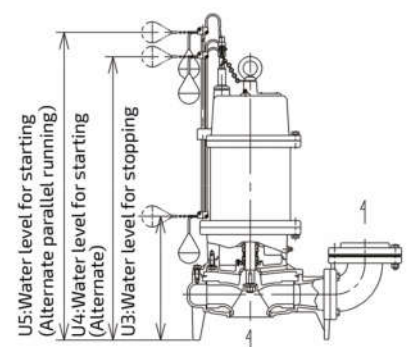
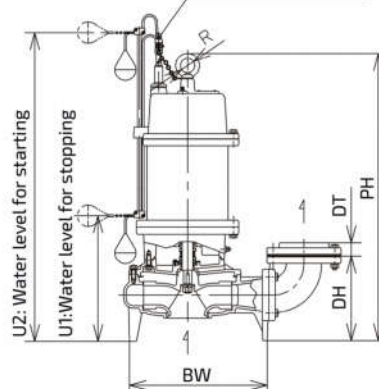


BU4-LN

Cable length 10m (※)



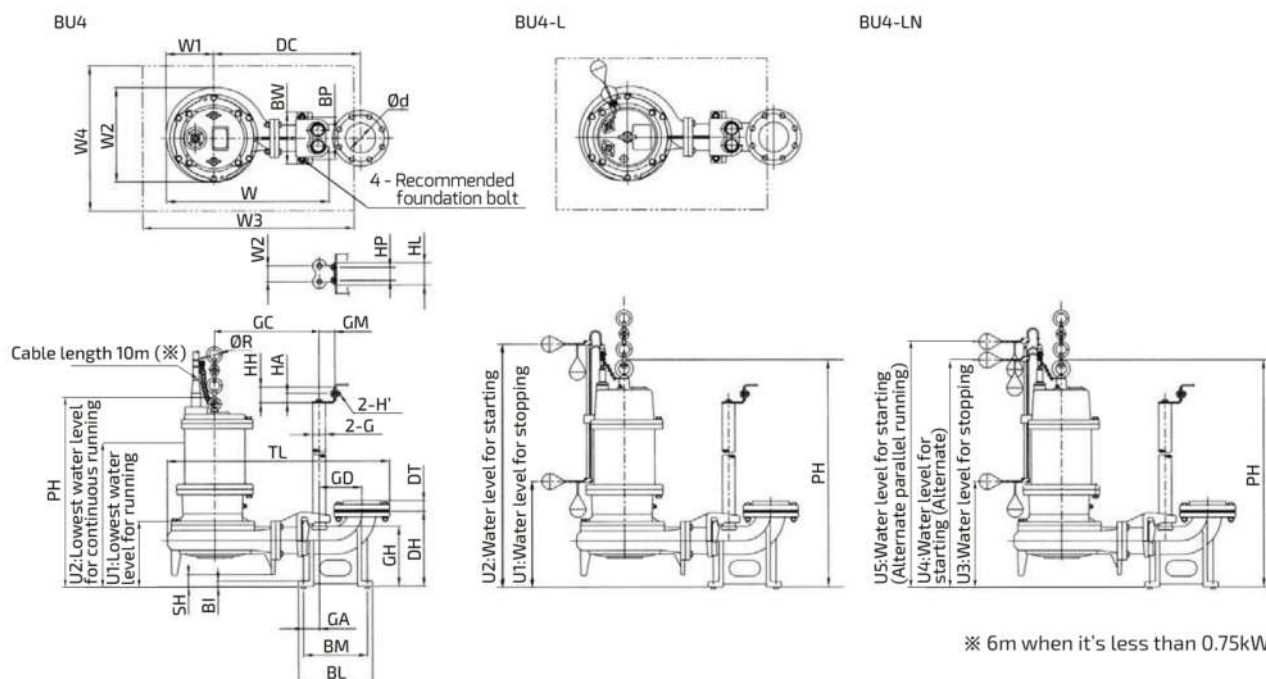
Cable length 10m (※)



※ 6m when it's less than 0.75kW

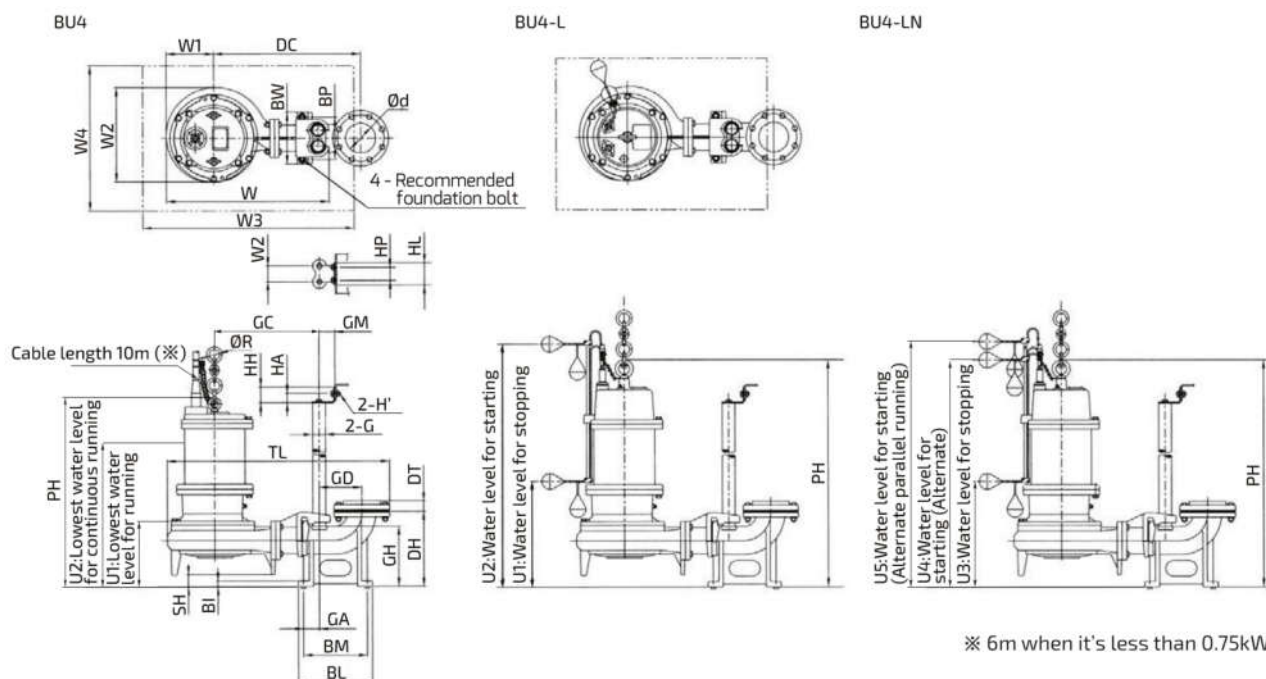
Discharge Bore (mm)	Model	Motor (kW)	Pump Combination								Water Level					Other		Weight (kg)
			PH	DH	DT	BW	W	W1	W2	DC	U1	U2	U3	U4	U5	RW	R	
150	BU4-1505-5.5T4	5.5	706	287	-	383	698	188	366	370	240	537	-	-	-	-	30	135
	BU4-1505-7.5T4	7.5	706	287	-	383	698	188	66	37	240	537	-	-	-	-	30	141
	BU4-1505-11T4	11	765	320	-	423	747	212	421	395	240	575	-	-	-	-	30	177
	BU4-1505-15T4	15	825	320	-	423	747	212	421	395	240	620	-	-	-	-	30	189
	BU4-1505-18.5T4	18.5	854	320	-	464	790	230	457	420	240	725	-	-	-	-	35	230
	BU4-1505-22T4	22	854	320	-	464	790	230	457	420	240	725	-	-	-	-	35	241
50	BU4-505-0.75T4L(LN)	0.75	599	185	27	251	401	118	242	205	218	618	278	558	678	245	25	45
65	BU4-655-1.5T4L(LN)	1.5	609	205	31	296	470	137	273	245	228	628	288	568	688	245	25	56
	BU4-655-2.2T4L(LN)	2.2	683	221	31	356	542	164	323	285	217	767	287	697	837	245	30	83
	BU4-655-3.7T4L(LN)	3.7	683	221	31	356	542	164	323	285	217	767	287	697	837	245	30	87
80	BU4-805-1.5T4L(LN)	1.5	634	232	33	306	495	148	289	260	253	653	313	473	713	245	25	62
	BU4-805-2.2T4L(LN)	2.2	703	215	33	306	500	148	289	260	237	787	307	717	857	245	30	77
	BU4-805-3.7T4L(LN)	3.7	713	252	33	356	584	169	332	310	247	797	317	727	867	245	30	88
100	BU4-1005-3.7T4L(LN)	3.7	713	252	39	356	584	169	332	310	247	797	317	727	867	245	30	88

PUMP DIMENSION - BU4 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	BU4-505-0.75T4	0.75	564	15	400	596	434	118	242	280	190	390	-	-	-	-	25	51
65	BU4-655-1.5T4	1.5	579	20	445	670	488	137	273	315	205	405	-	-	-	-	25	64
	BU4-655-2.2T4	2.2	667	39	505	762	570	164	323	365	234	484	-	-	-	-	30	94
	BU4-655-3.7T4	3.7	667	39	505	762	570	164	323	365	234	484	-	-	-	-	30	98
80	BU4-805-1.5T4	1.5	612	28	480	720	529	148	289	340	223	408	-	-	-	-	25	75
	BU4-805-2.2T4	2.2	676	28	480	720	529	148	289	340	223	458	-	-	-	-	30	88
	BU4-805-3.7T4	3.7	701	43	525	799	575	169	332	365	247	518	-	-	-	-	30	105
	BU4-805-5.5T4	5.5	714	43	545	831	607	181	358	385	247	545	-	-	-	-	30	141
	BU4-805-7.5T4	7.5	714	43	545	831	607	181	358	385	247	545	-	-	-	-	30	147
	BU4-805-11T4	11	773	13	595	912	690	212	420	435	247	580	-	-	-	-	30	185
	BU4-805-15T4	15	858	38	635	952	708	212	420	445	280	645	-	-	-	-	30	205
100	BU4-1005-3.7T4	3.7	701	43	525	799	575	169	332	365	247	518	-	-	-	-	30	105
	BU4-1005-5.5T4	5.5	714	43	545	831	607	181	358	385	247	545	-	-	-	-	30	141
	BU4-1005-7.5T4	7.5	714	43	545	831	607	181	358	385	247	545	-	-	-	-	30	147
	BU4-1005-11T4	11	773	13	595	912	690	212	420	435	247	580	-	-	-	-	30	185
	BU4-1005-15T4	15	853	38	635	952	708	212	420	445	280	645	-	-	-	-	30	205
	BU4-1005-18.5T4	18.5	887	38	660	998	757	233	453	470	280	755	-	-	-	-	35	268
	BU4-1005-22T4	22	887	38	660	998	757	233	453	470	280	755	-	-	-	-	35	288
150	BU4-1505-5.5T4	5.5	783	77	640	968	698	188	366	425	317	614	-	-	-	-	30	171
	BU4-1505-7.5T4	7.5	783	77	640	968	698	188	366	425	317	614	-	-	-	-	30	177
	BU4-1505-11T4	11	842	77	665	1017	713	212	421	450	320	655	-	-	-	-	30	213
	BU4-1505-15T4	15	902	77	665	1017	713	212	421	450	320	700	-	-	-	-	30	225
	BU4-1505-18.5T4	18.5	931	77	690	1060	756	230	457	475	320	805	-	-	-	-	35	266
	BU4-1505-22T4	22	931	77	690	1060	756	230	457	475	320	805	-	-	-	-	35	277

PUMP DIMENSION - BU4 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	BU4-505-0.75T4L(LN)	0.75	614	15	400	596	434	118	242	280	233	633	293	573	693	245	25	53
65	BU4-655-1.5T4L(LN)	1.5	629	20	445	670	488	137	273	315	248	648	308	588	708	245	25	66
	BU4-655-2.2T4L(LN)	2.2	722	39	505	762	570	164	323	365	256	806	326	736	876	245	30	96
	BU4-655-3.7T4L(LN)	3.7	722	39	505	762	570	164	323	365	256	806	326	736	876	245	30	100
80	BU4-805-1.5T4L(LN)	1.5	662	28	480	720	529	148	289	340	281	681	341	621	891	245	25	77
	BU4-805-2.2T4L(LN)	2.2	731	28	480	720	529	148	289	340	265	815	335	745	885	245	30	90
	BU4-805-3.7T4L(LN)	3.7	756	43	525	799	575	169	332	365	290	815	360	770	910	245	30	107
100	BU4-1005-3.7T4L(LN)	3.7	756	43	525	799	575	169	332	365	290	840	360	770	910	245	30	107

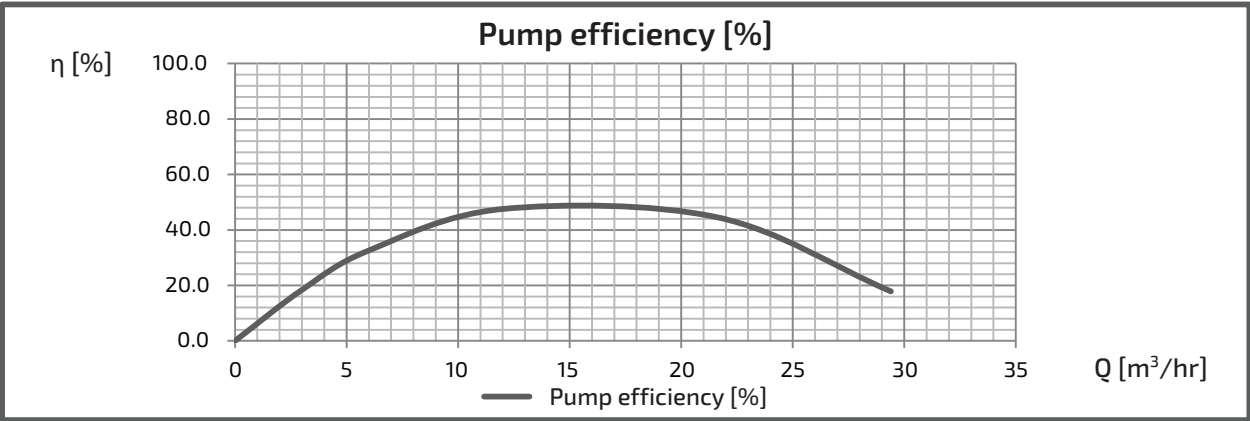
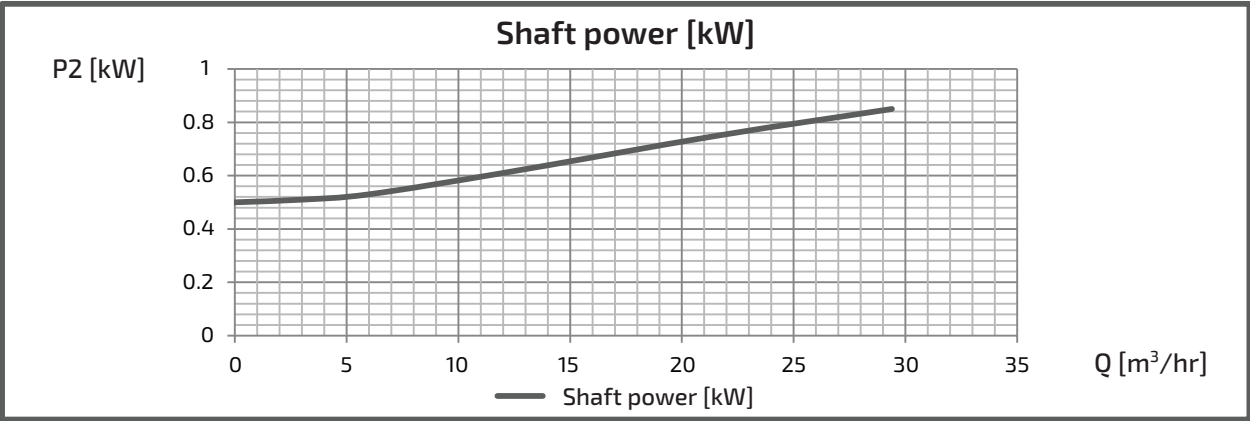
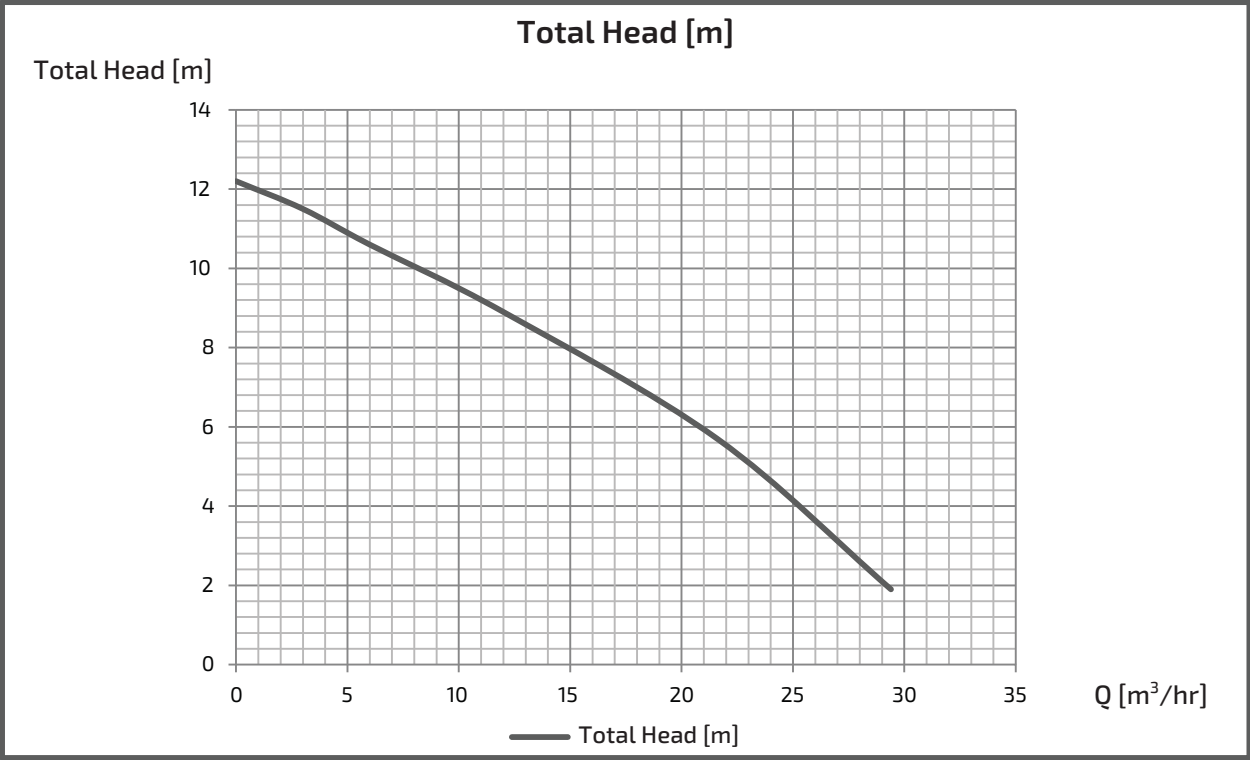
PEDESTAL SUPPORT MOUNT

Discharge Bore (mm)	Discharge Connection								Guide						Hanger					Manhole		Remark
	DH	DT	BI	BL	BM	BP	BW	H	GH	GA	GD	GM	GP	G	HH	HA	HL	HP	H'	W3	W4	
50	190	27	15	212	180	100	130	M12x160	141	50	120	50	50	32A	48	30	76	50	12	600	450	
65	215	31	15	222	190	110	140	M12x160	161	50	130	50	50	32A	48	30	76	50	12	600	450	1.5kW
	250	31	18	248	210	130	166	M16x200	192	60	140	60	60	40A	60	35	85	50	14	700	500	More than 2.2kW
80	250	33	18	248	210	130	166	M16x200	192	60	140	60	60	40A	60	35	85	50	15	600	450	Less than 2.2kW
	285	33	20	278	240	160	196	M16x200	228	60	160	60	60	40A	60	35	85	50	15	700	500	3.7kW
	285	33	20	278	240	160	196	M16x200	228	60	160	60	60	40A	60	35	85	50	15	800	550	More than 5.5kW
100	320	39	22	360	310	190	236	M16x200	261	95	190	70	74	50A	60	35	105	70	15	800	550	More than 15kW
	285	39	20	278	240	160	196	M16x200	228	60	160	60	60	40A	60	35	85	50	15	700	500	3.7kW
	285	39	20	278	240	160	196	M16x200	228	60	160	60	60	40A	60	35	85	50	15	800	550	5.5~11kW
150	380	-	22	410	350	220	280	M20x250	316	95	215	70	100	50A	60	35	105	70	15	800	550	

INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-505-0.75T4

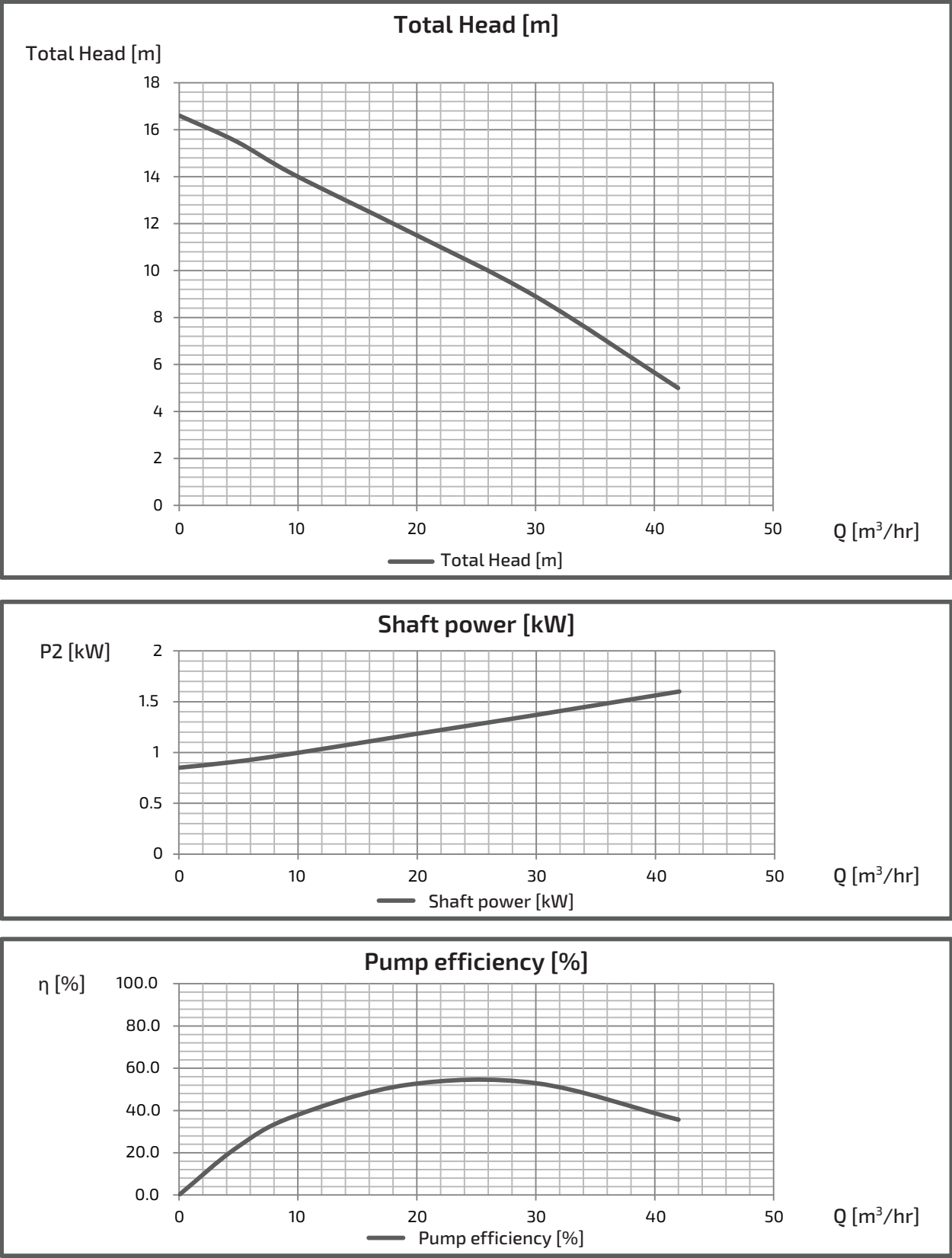
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-655-1.5T4

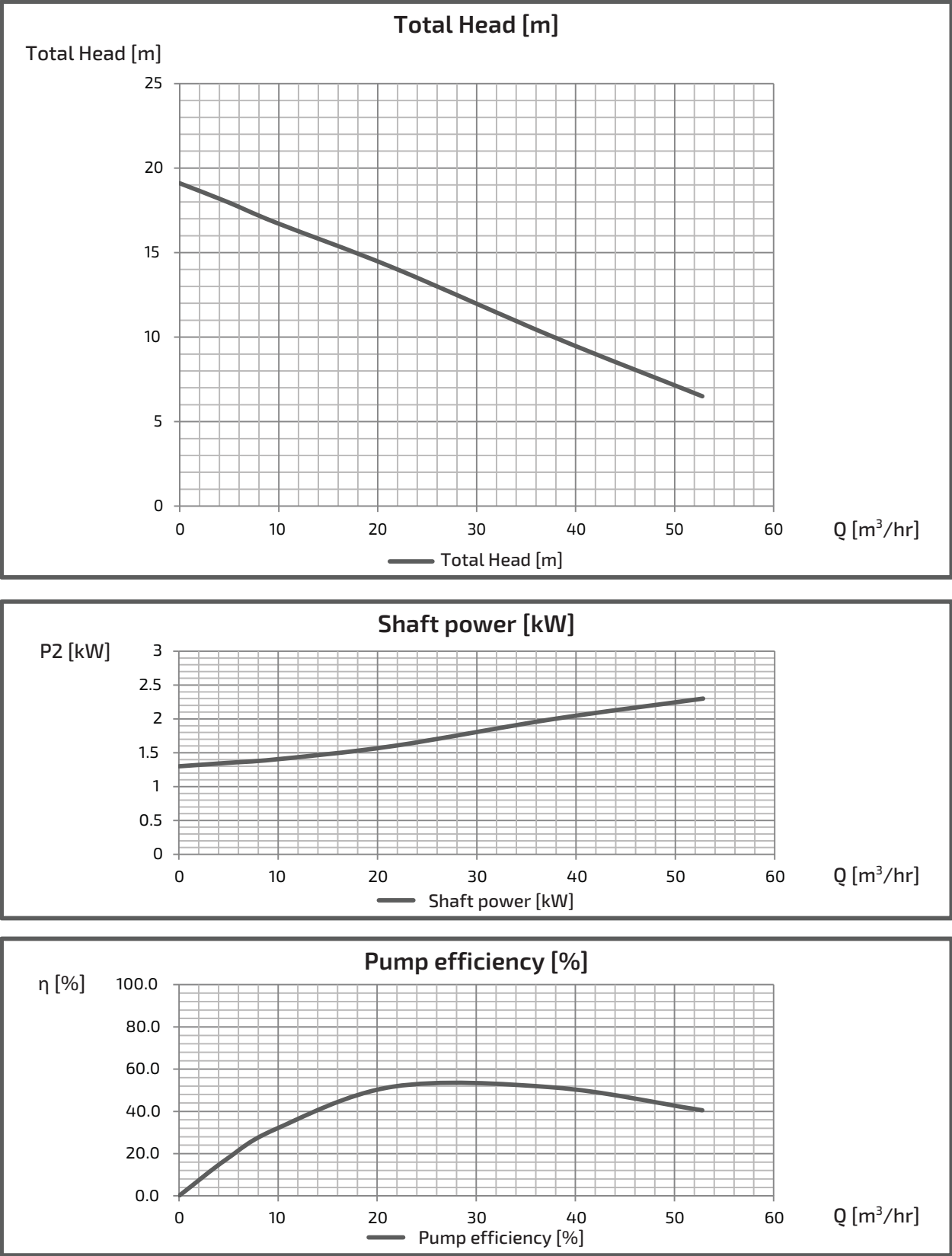
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-655-2.2T4

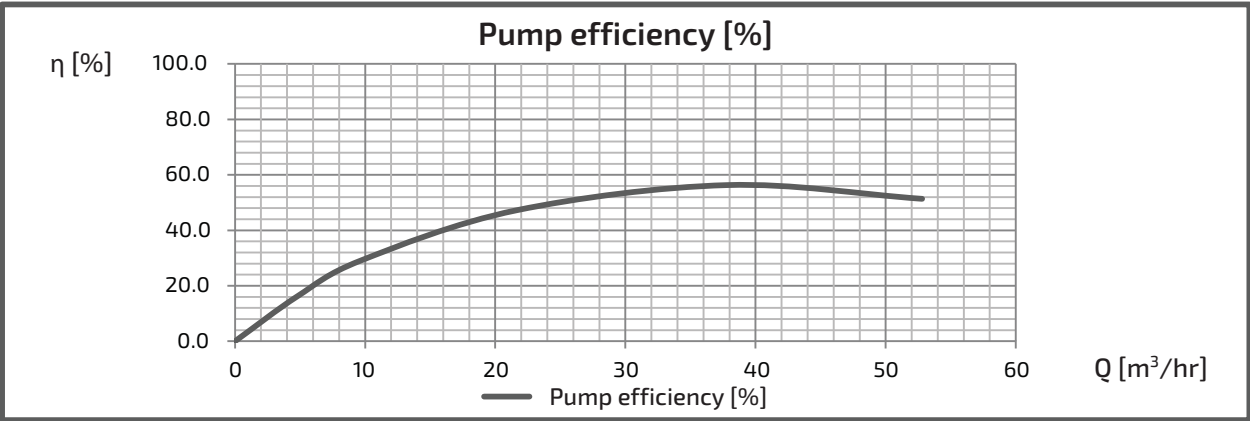
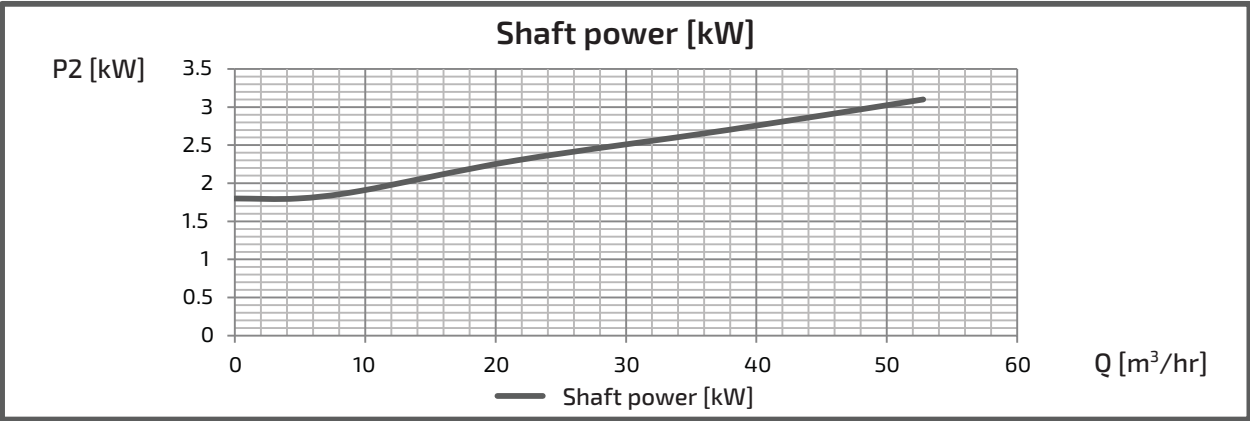
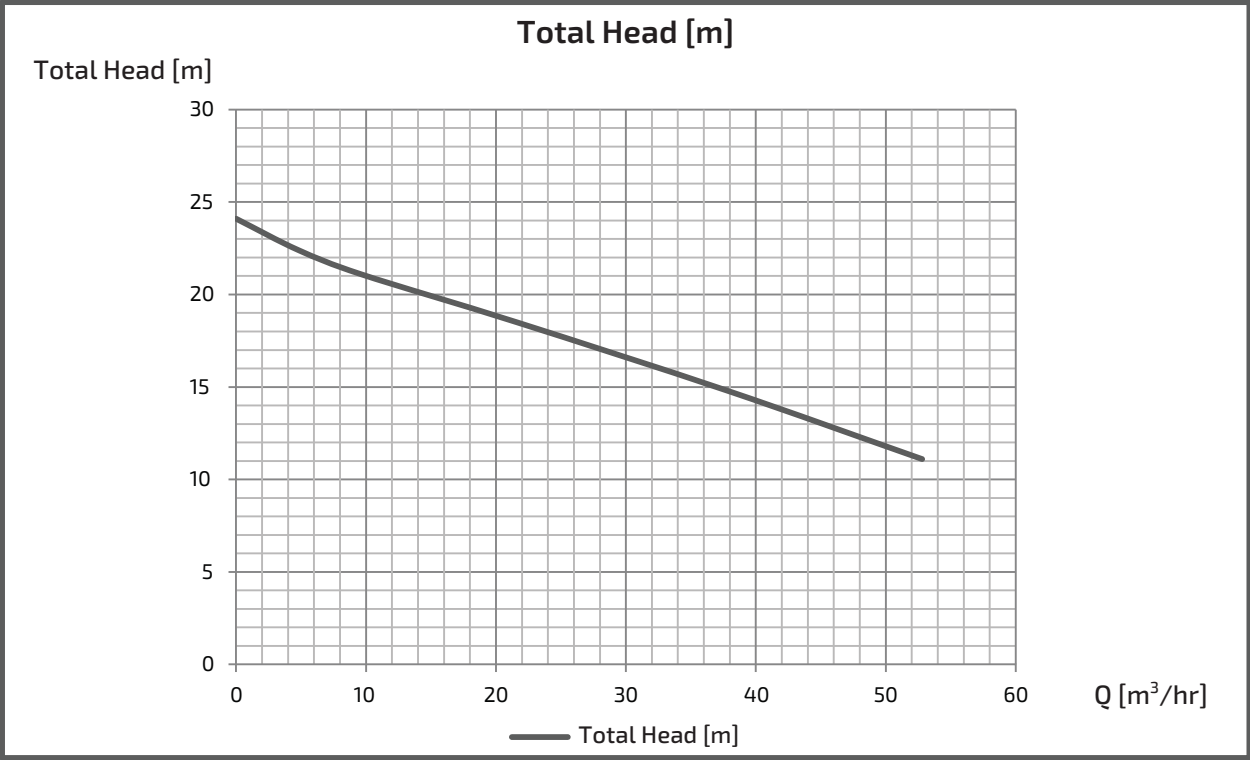
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-655-3.7T4

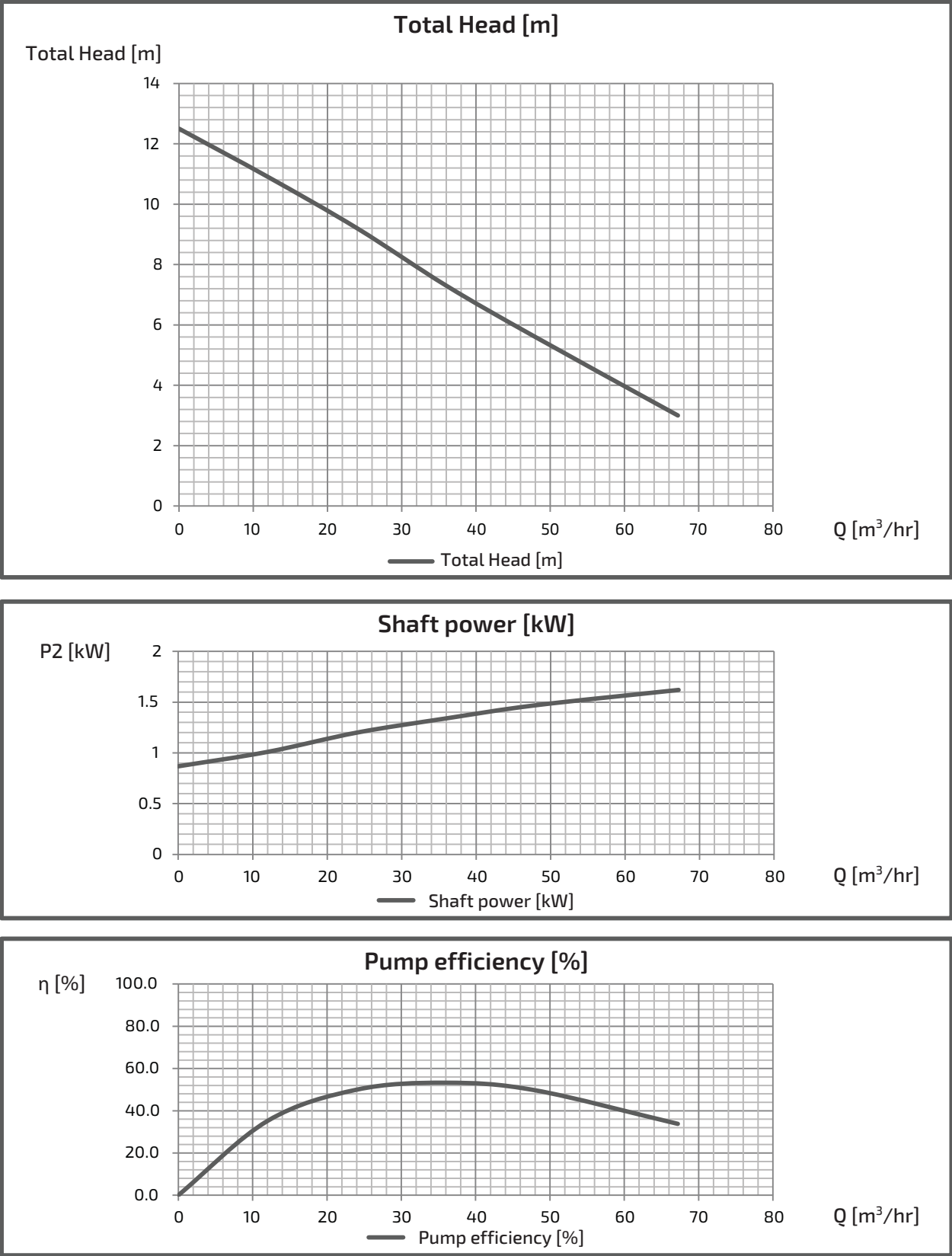
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-805-1.5T4

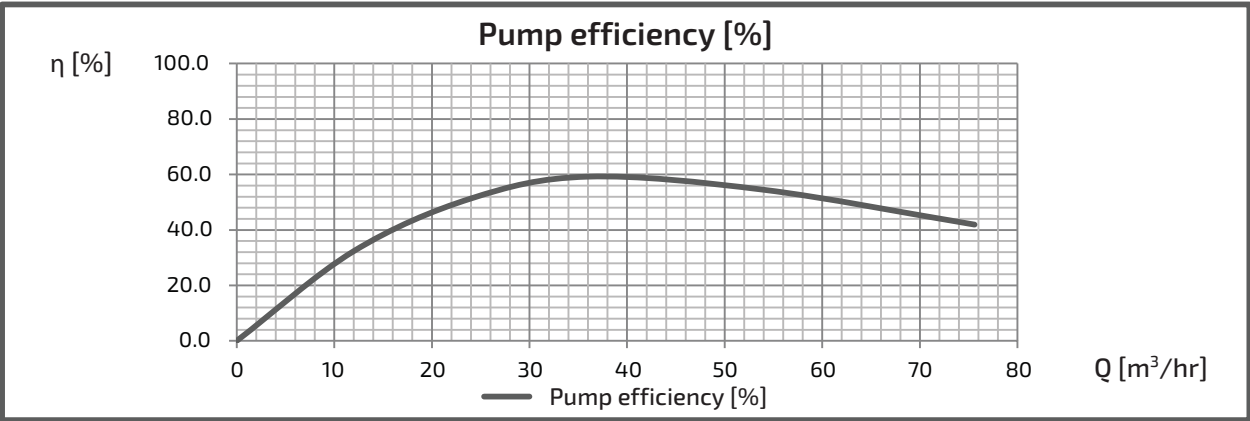
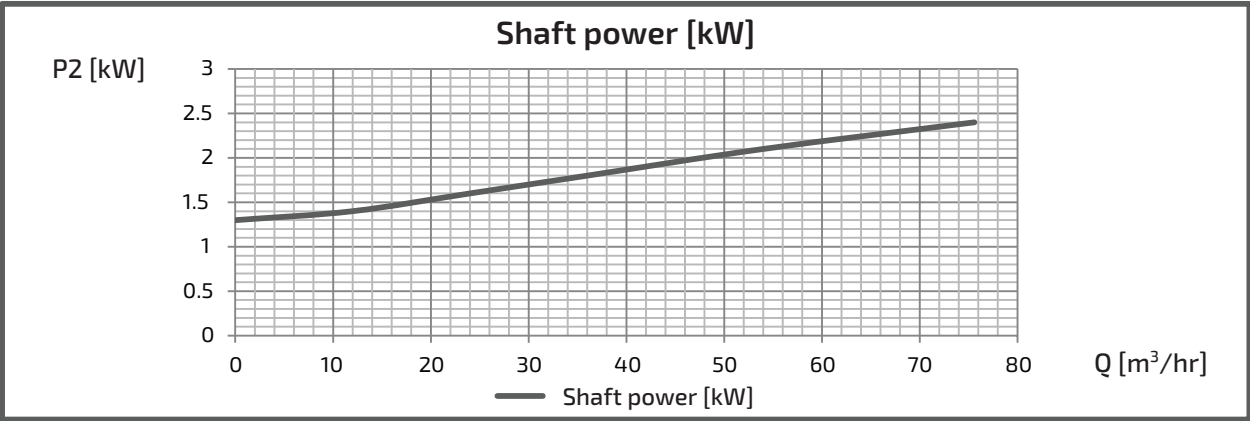
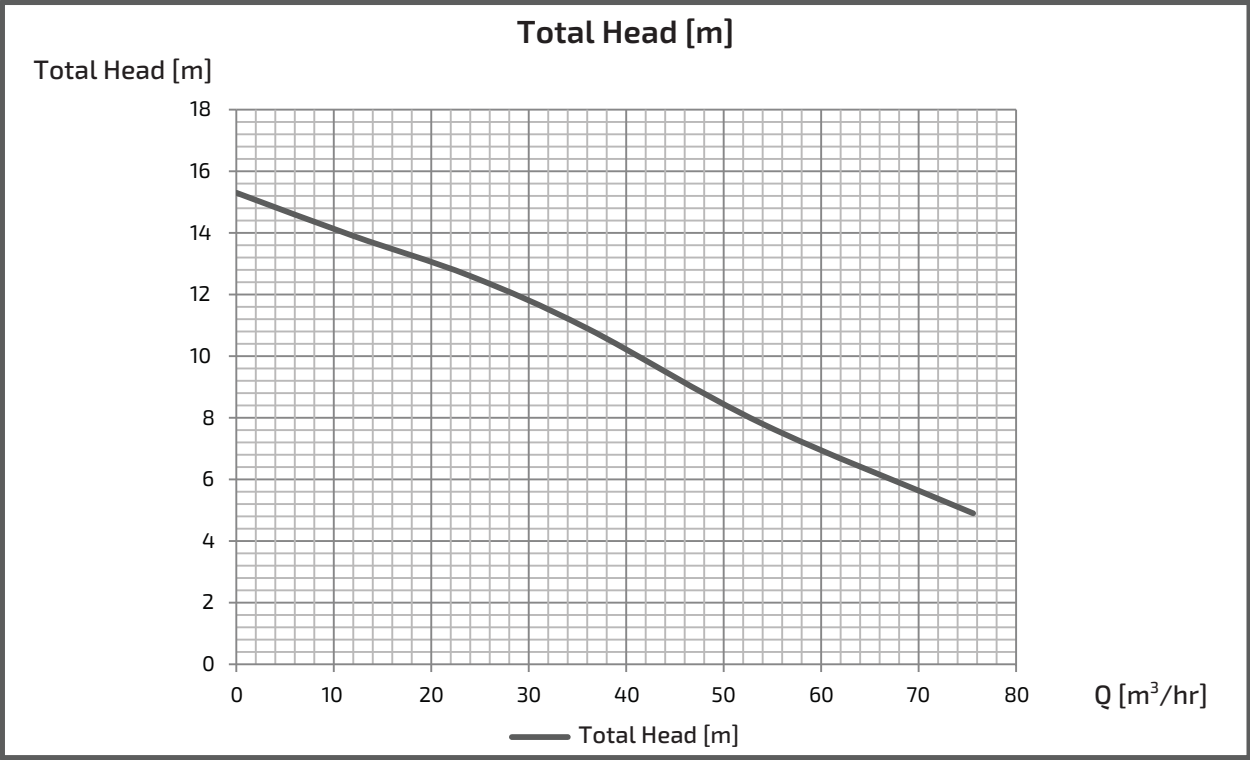
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-805-2.2T4

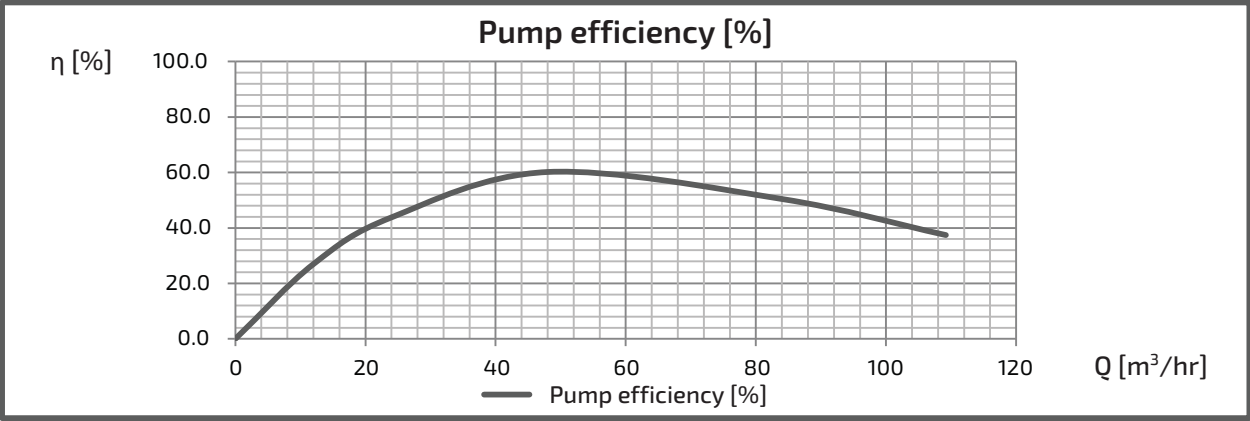
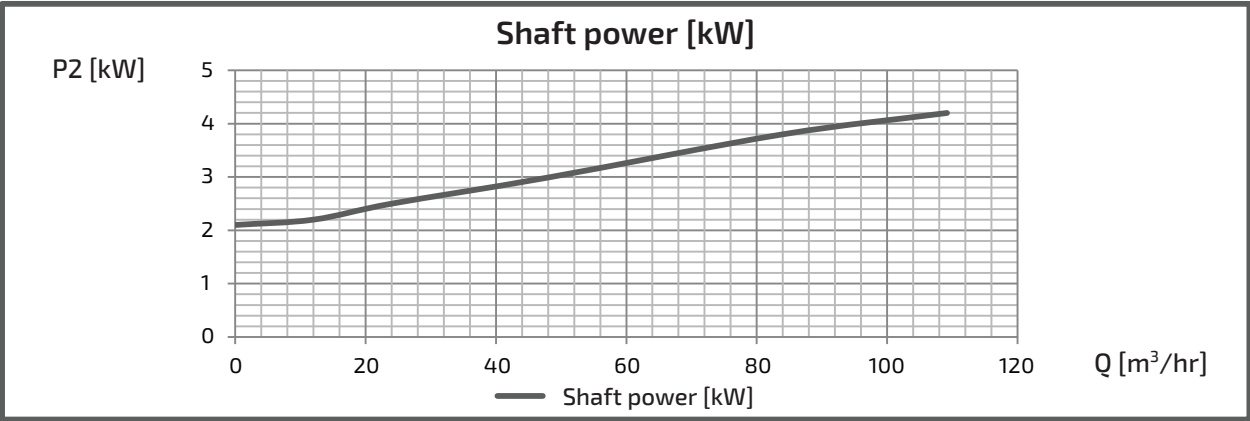
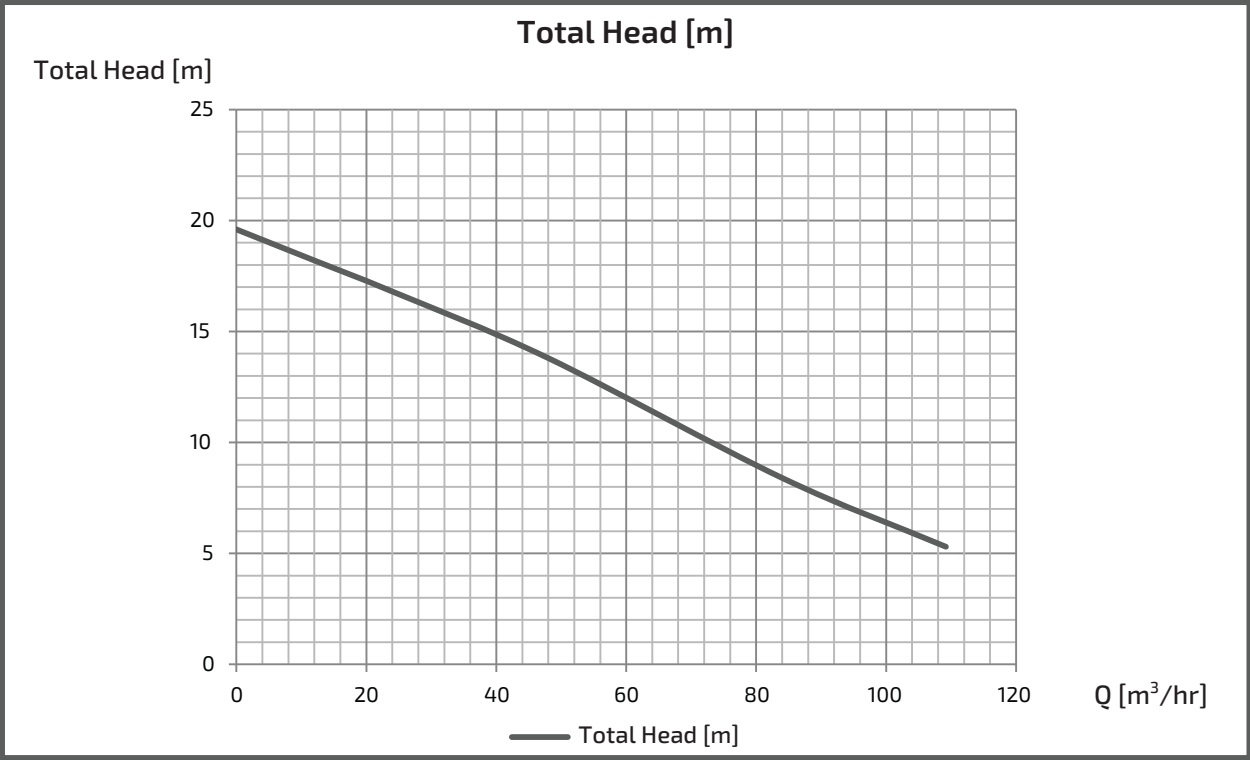
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-805-3.7T4

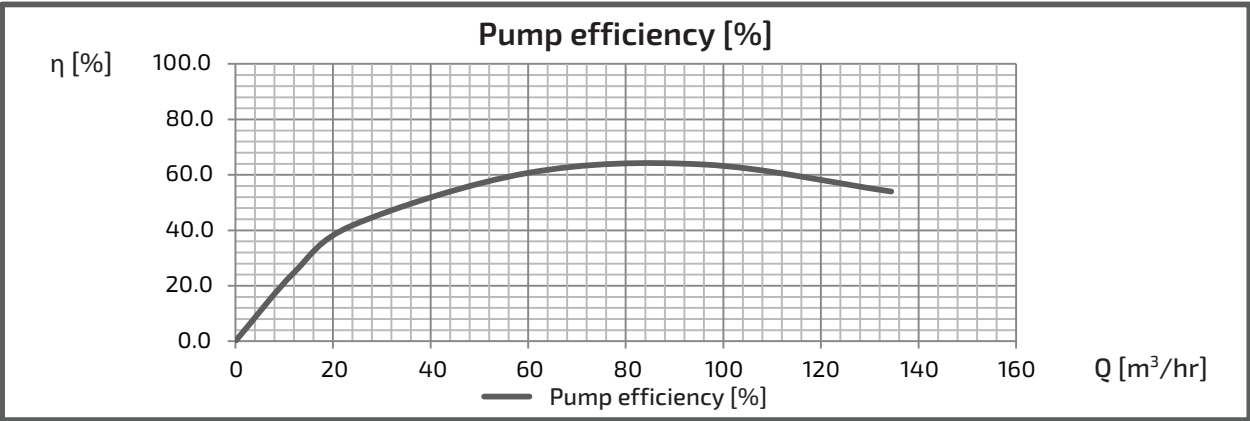
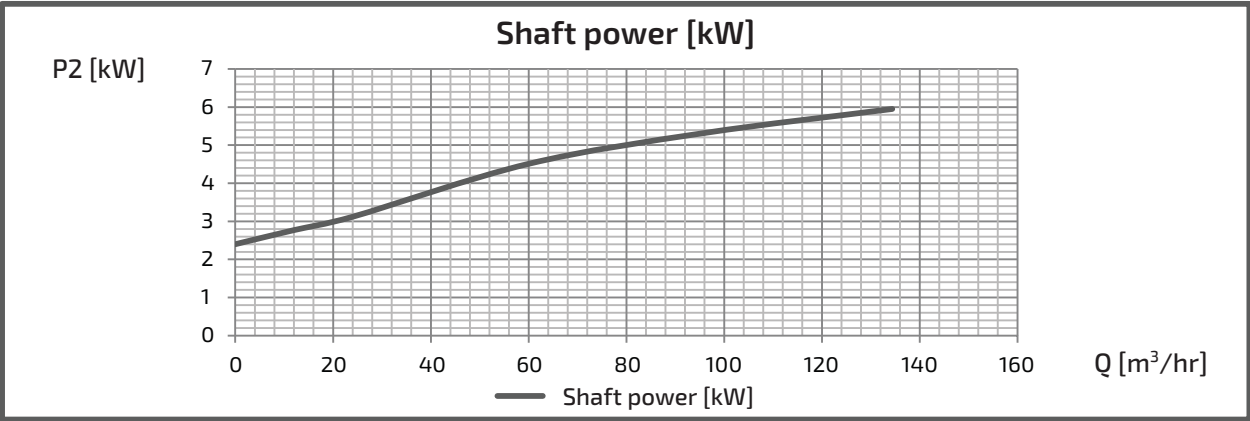
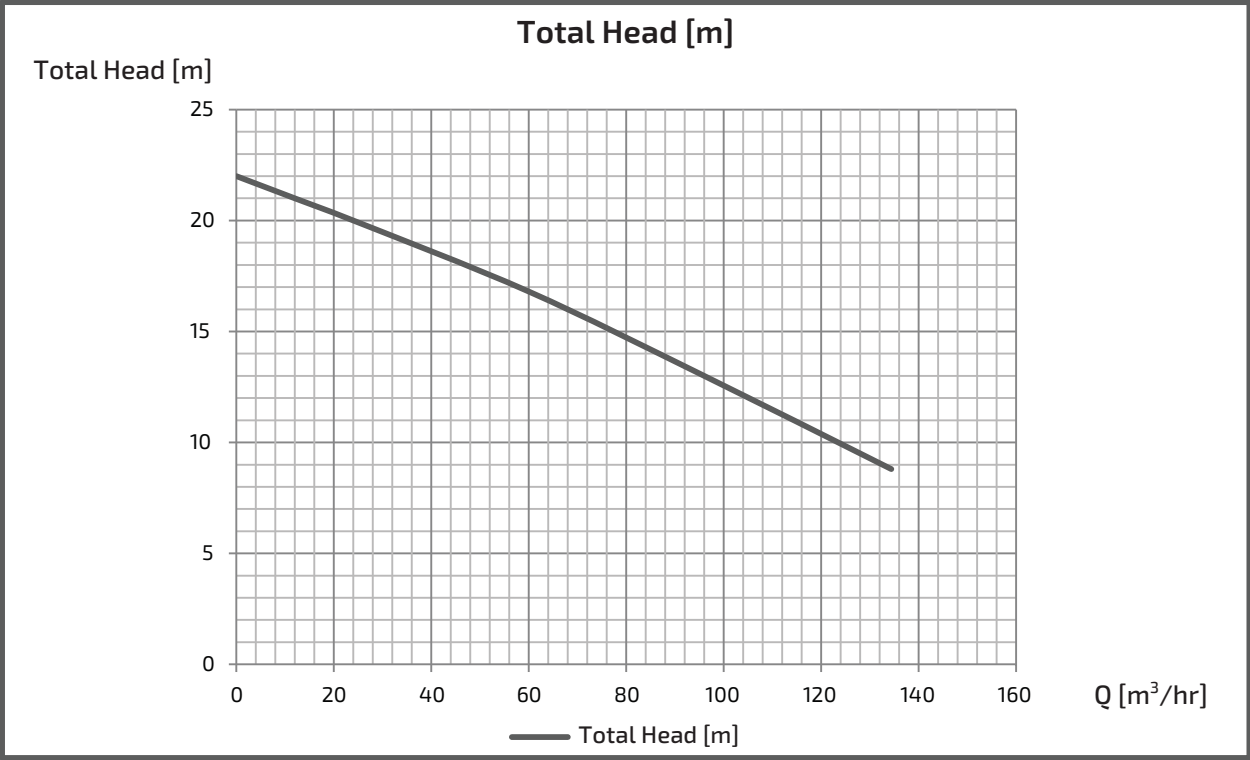
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-805-5.5T4

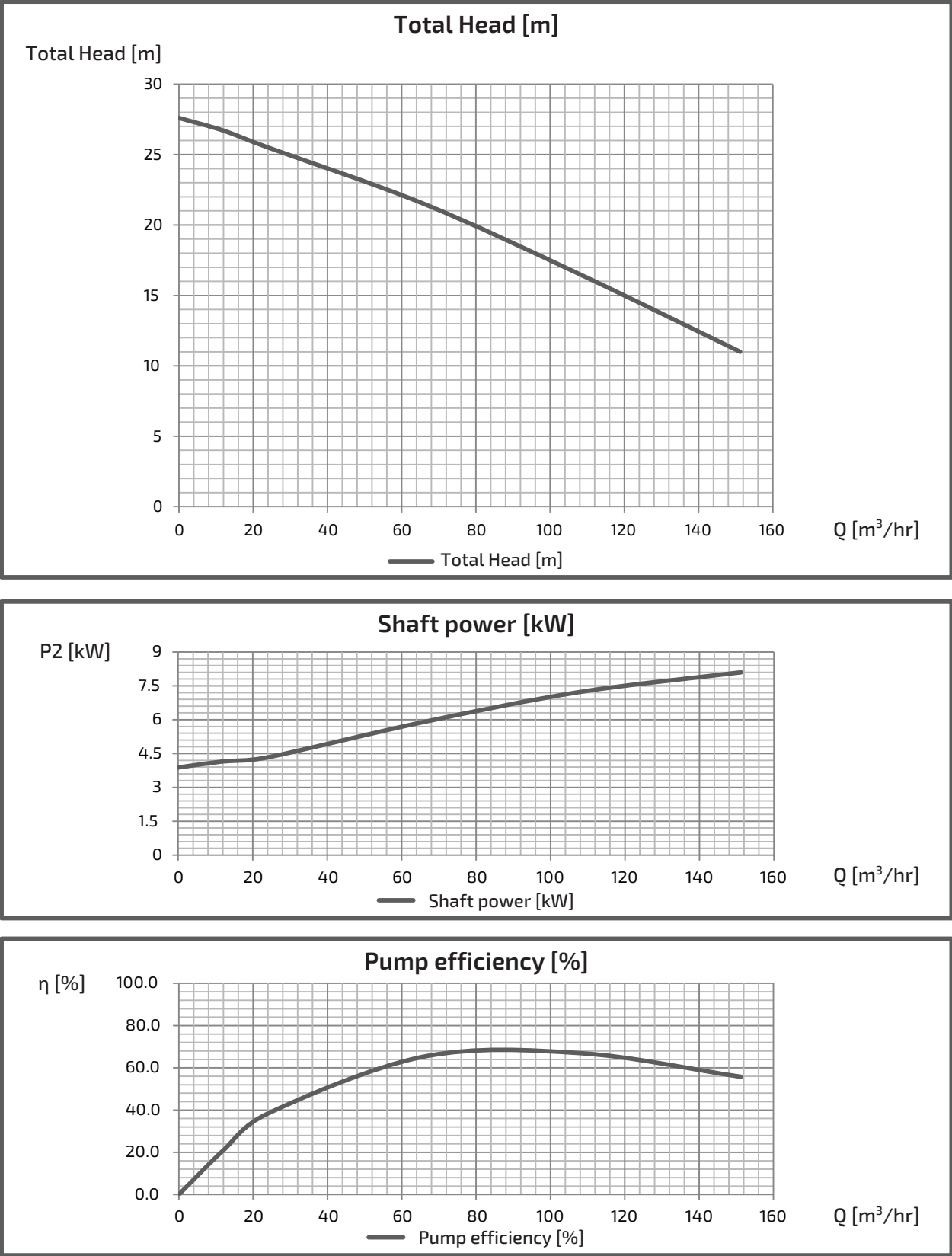
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-805-7.5T4

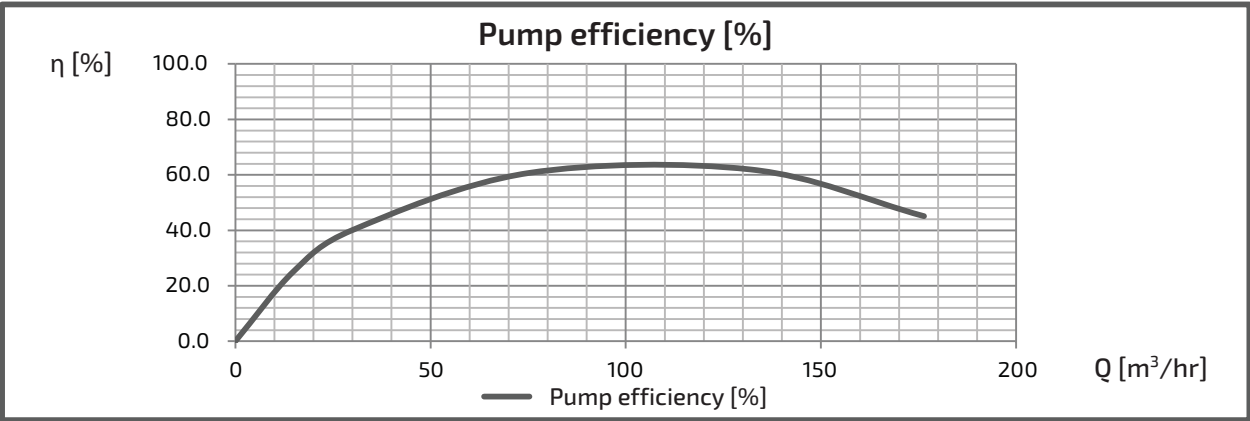
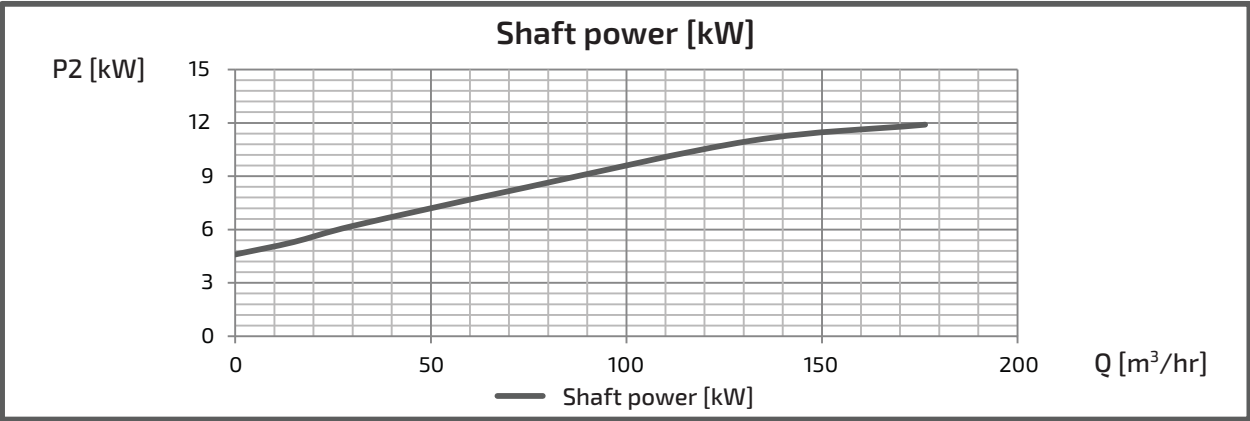
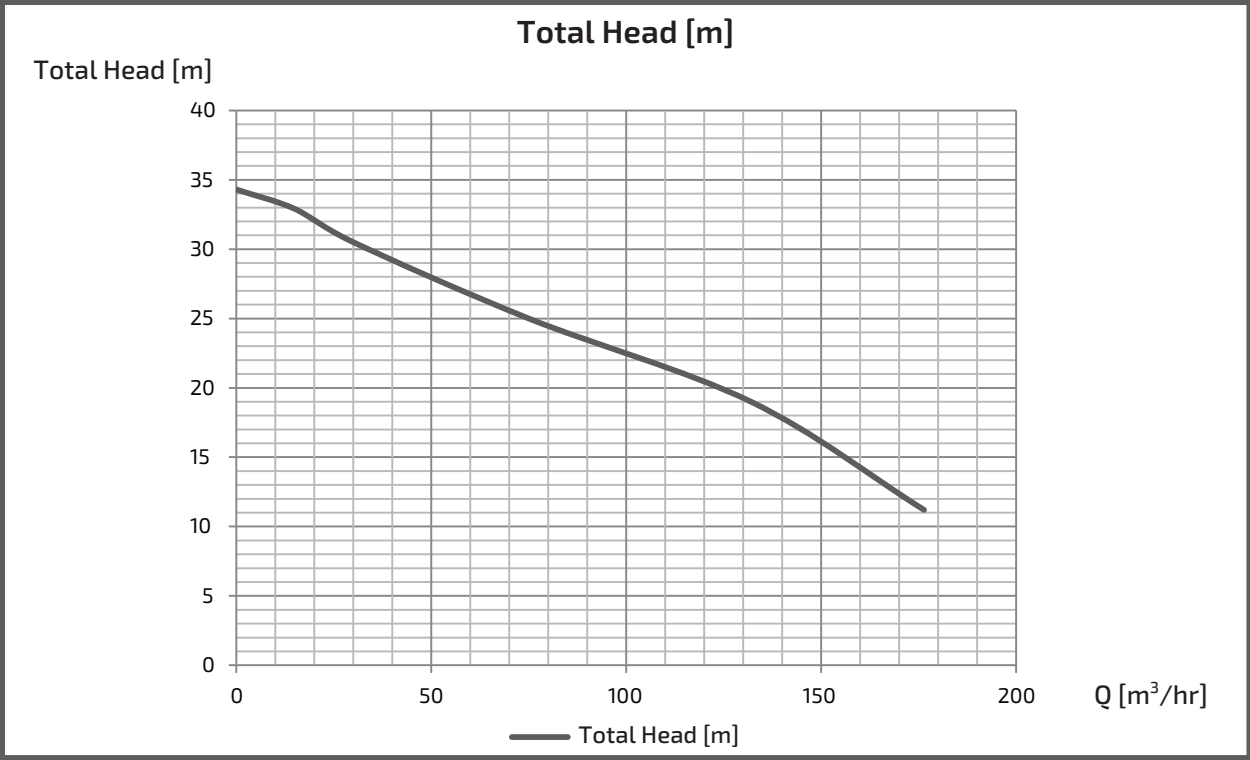
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-805-11T4

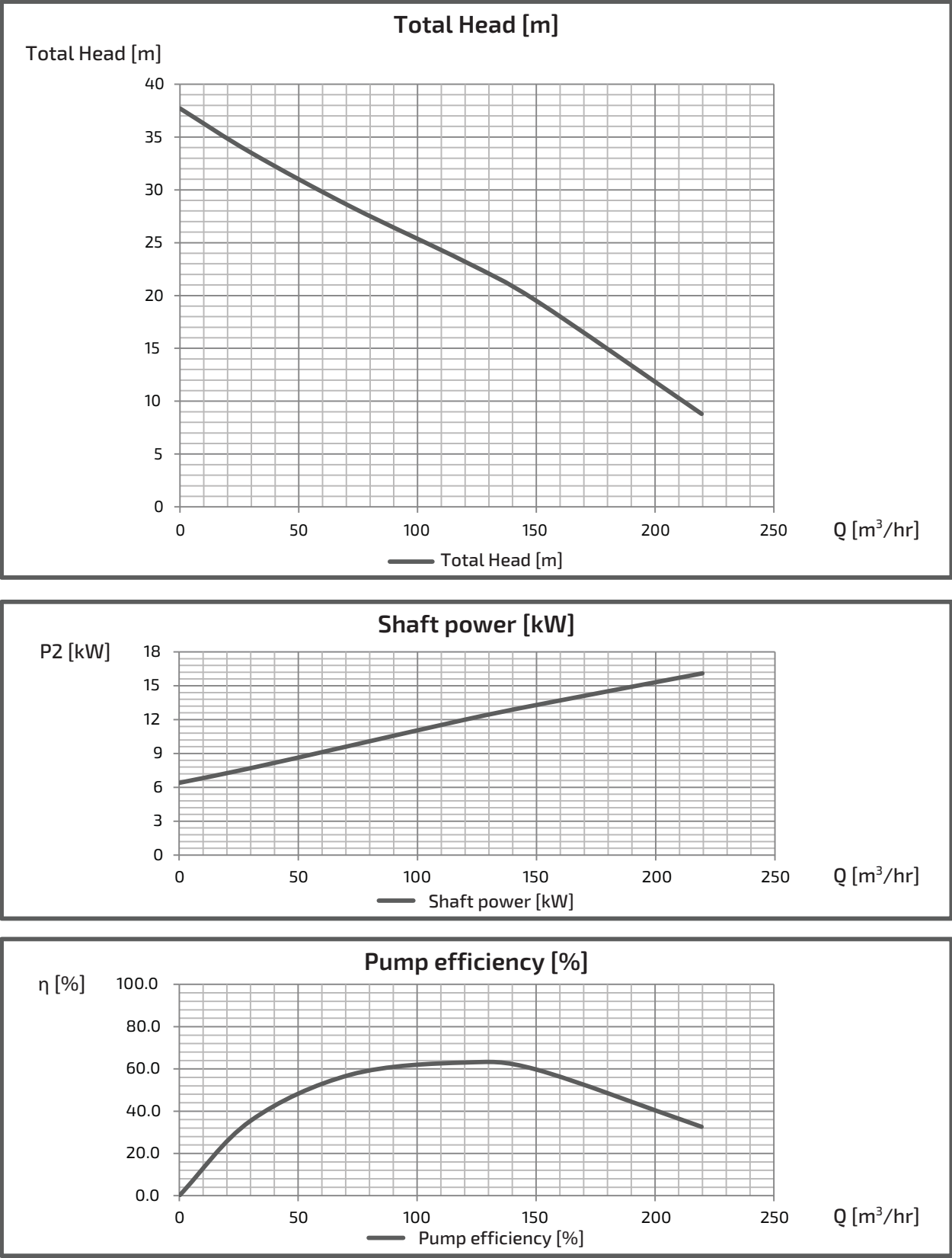
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-805-15T4

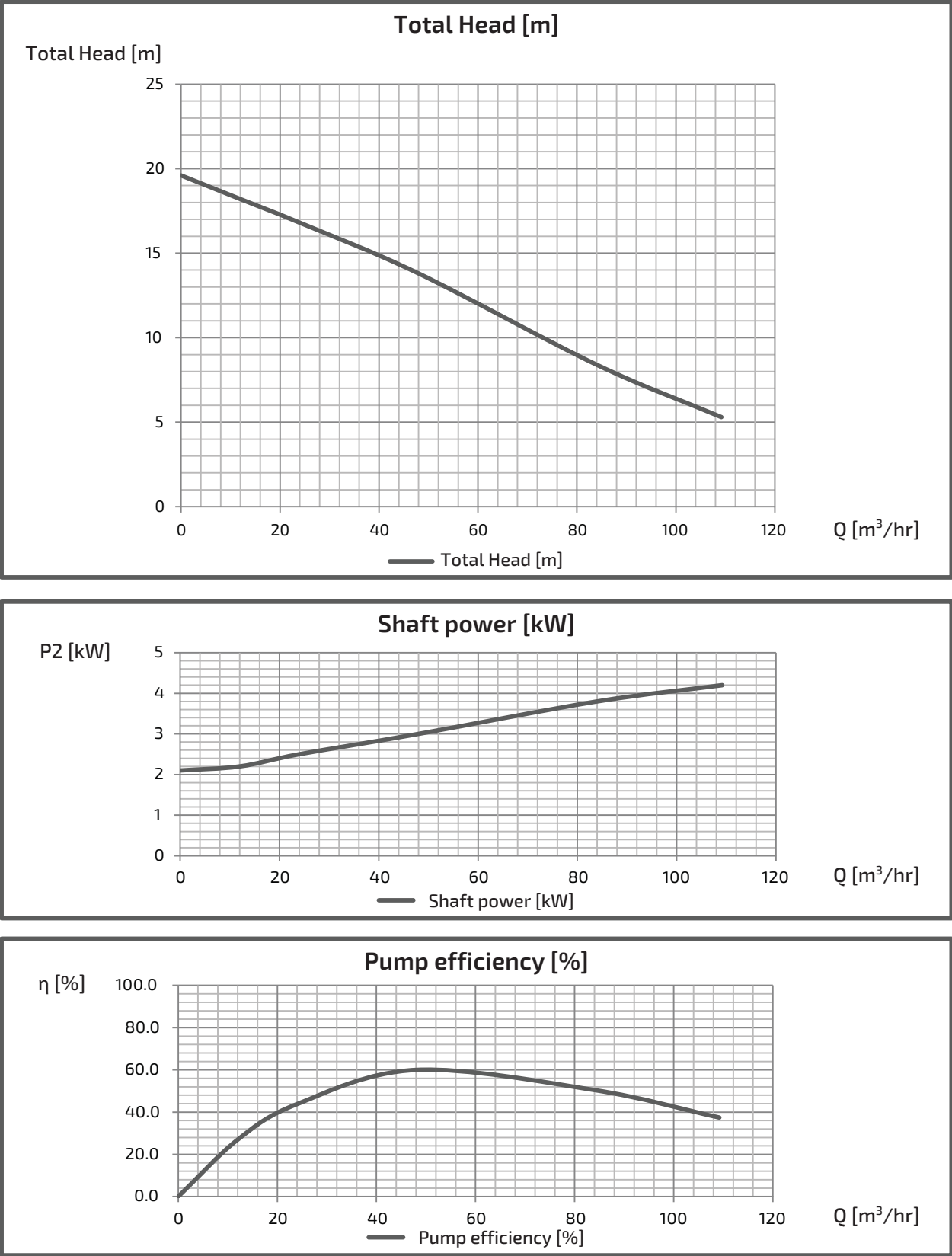
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1005-3.7T4

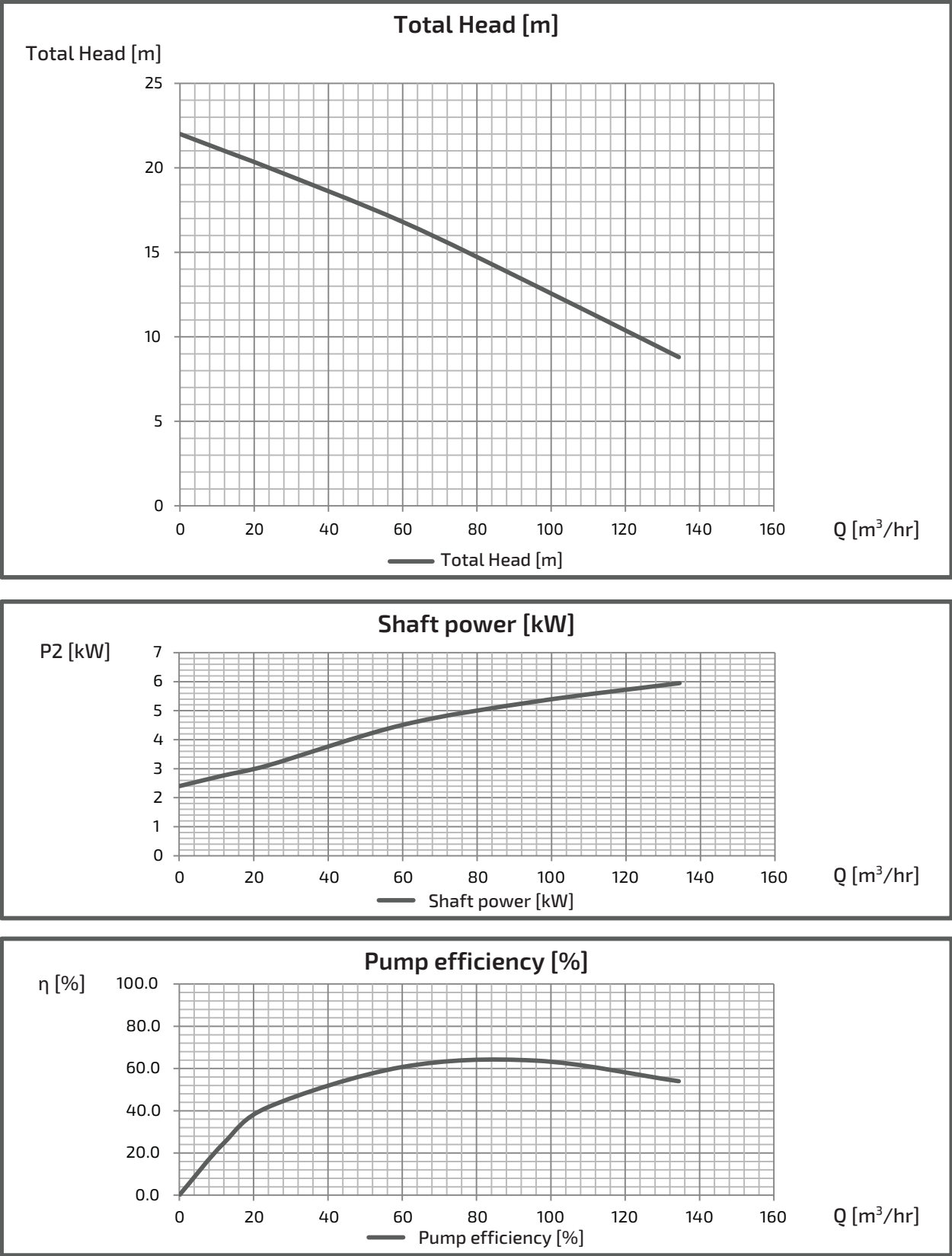
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1005-5.5T4

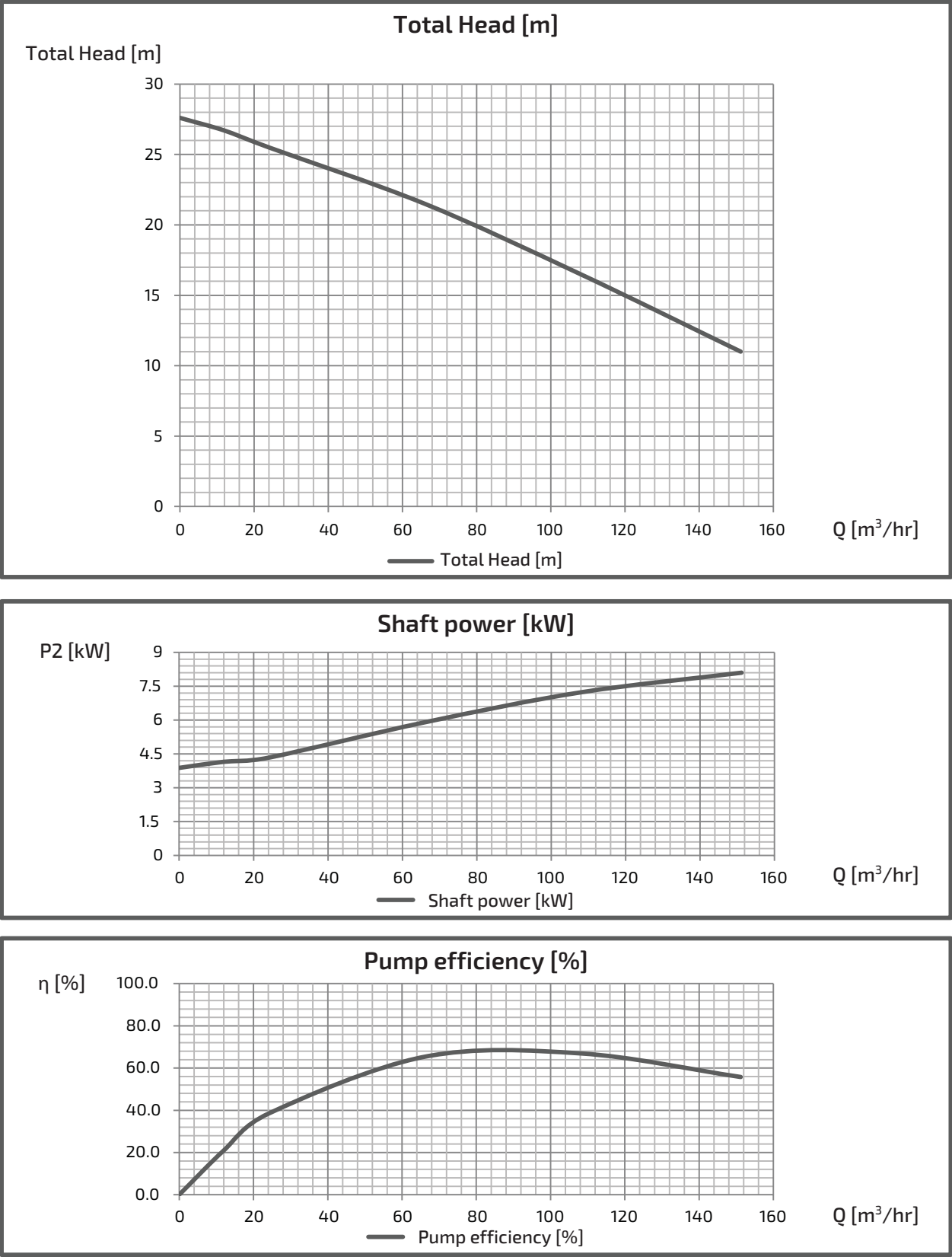
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1005-7.5T4

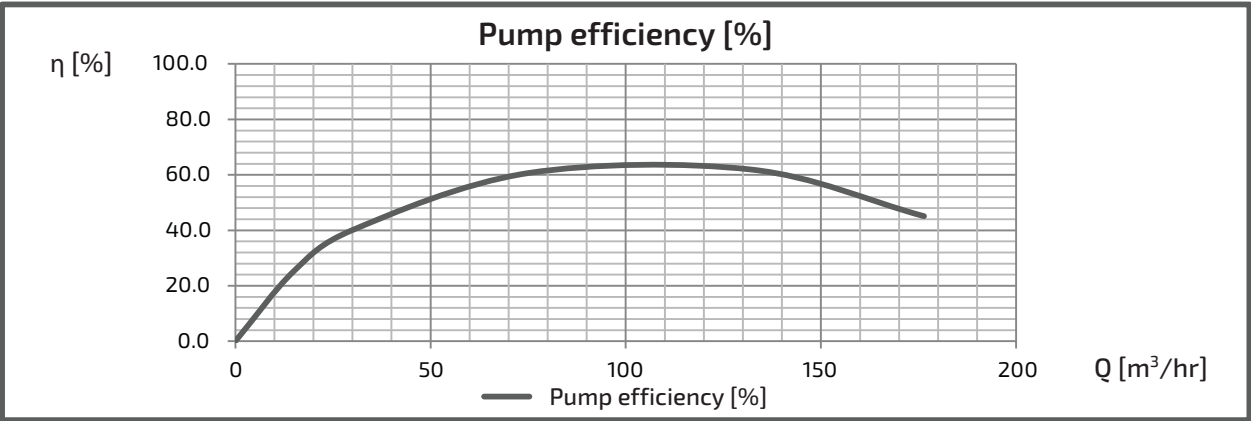
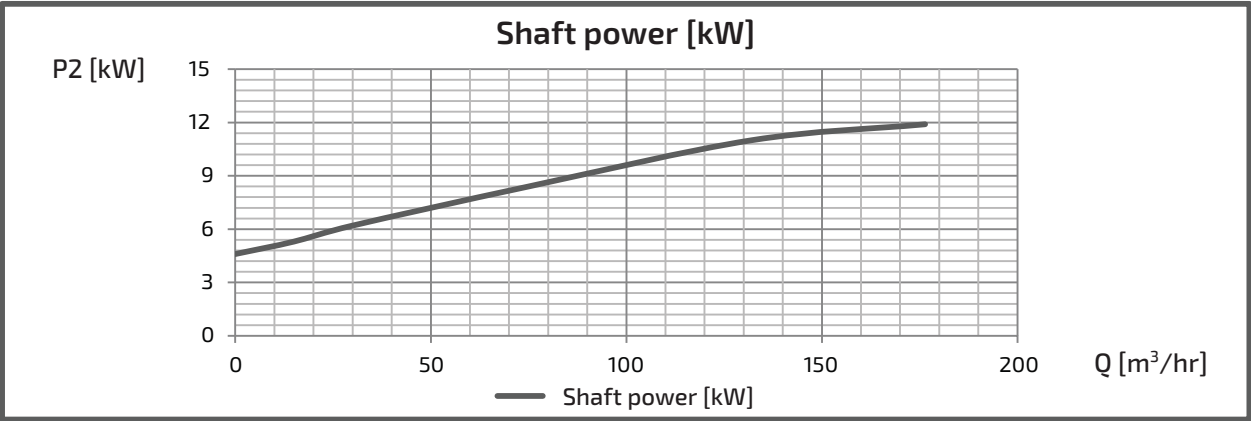
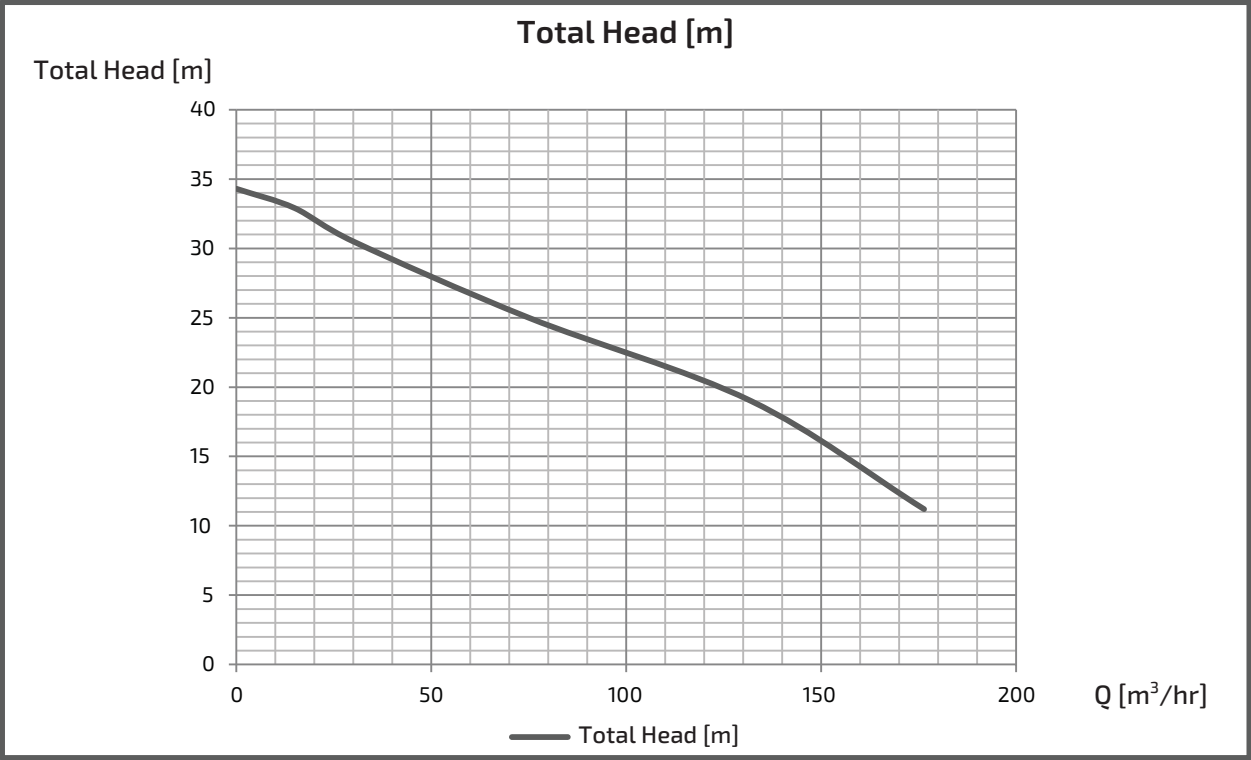
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1005-11T4

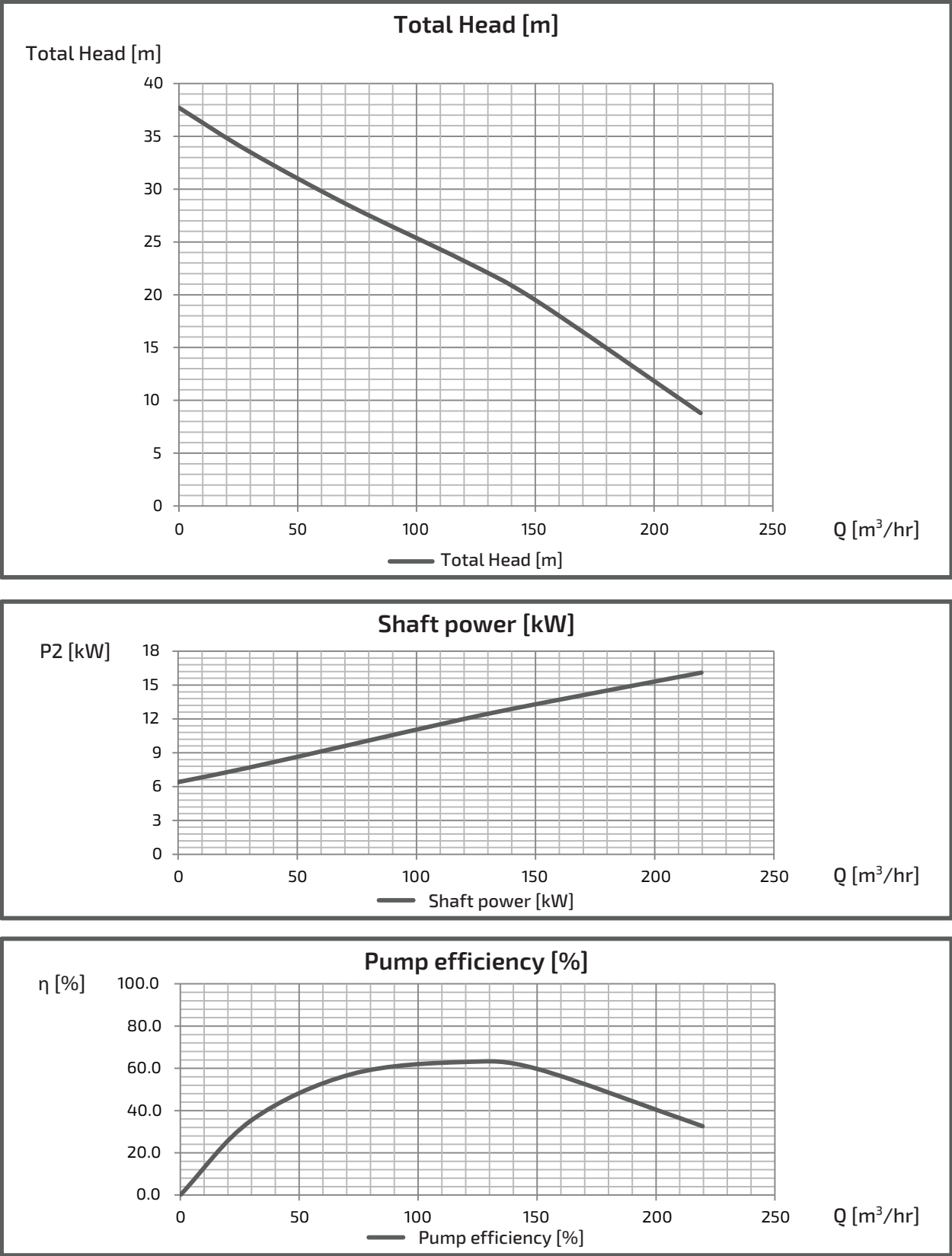
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1005-15T4

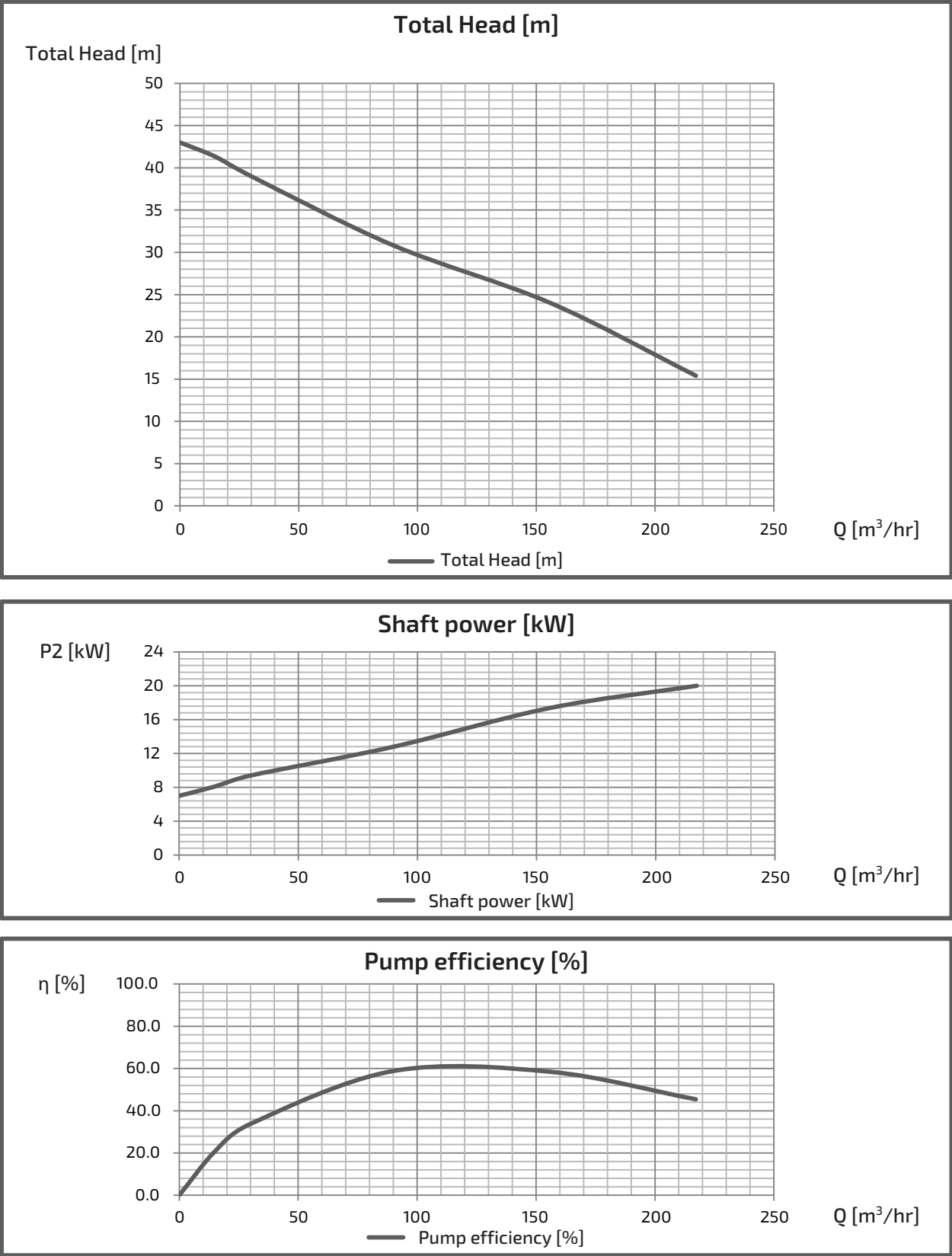
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1005-18.5T4

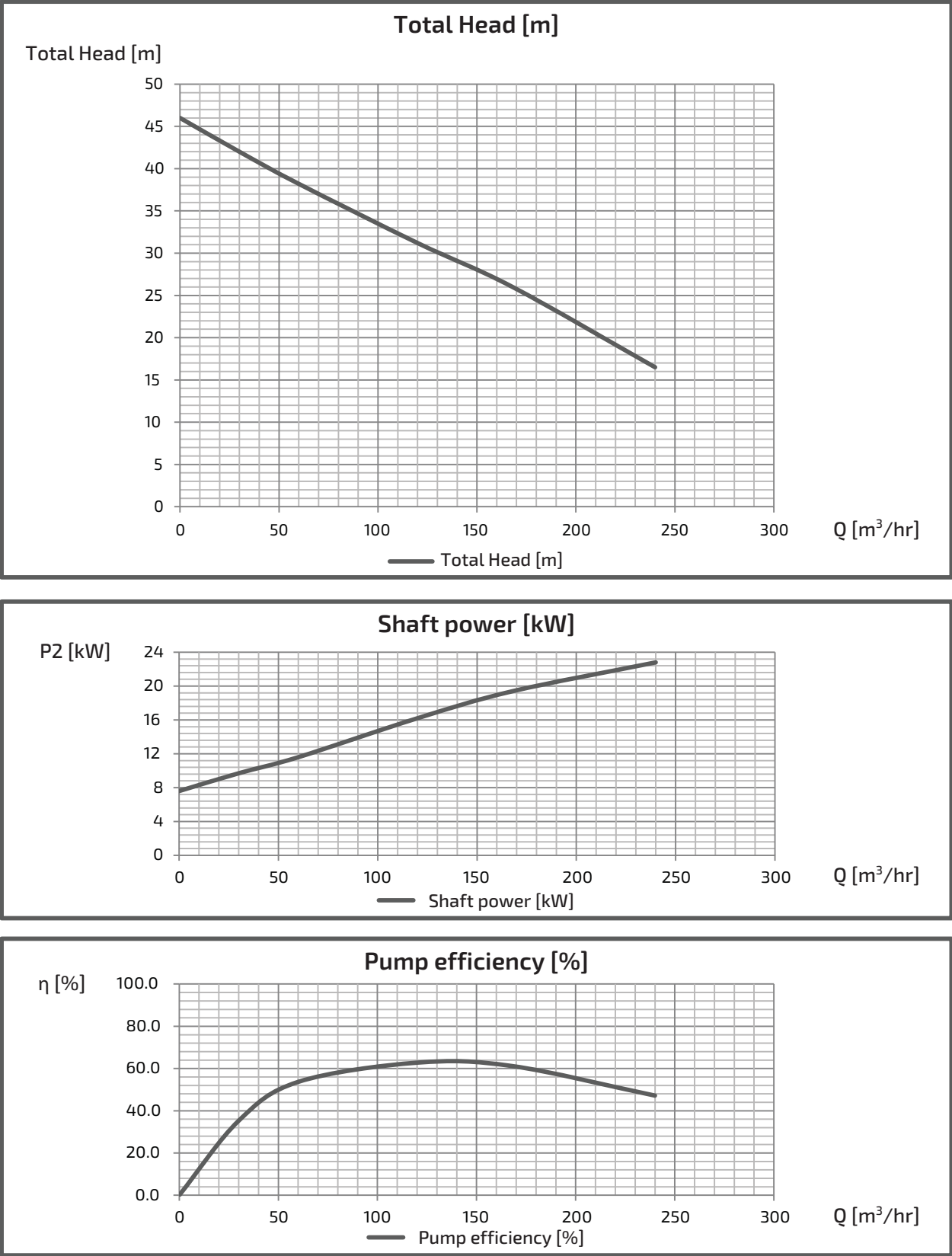
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1005-22T4

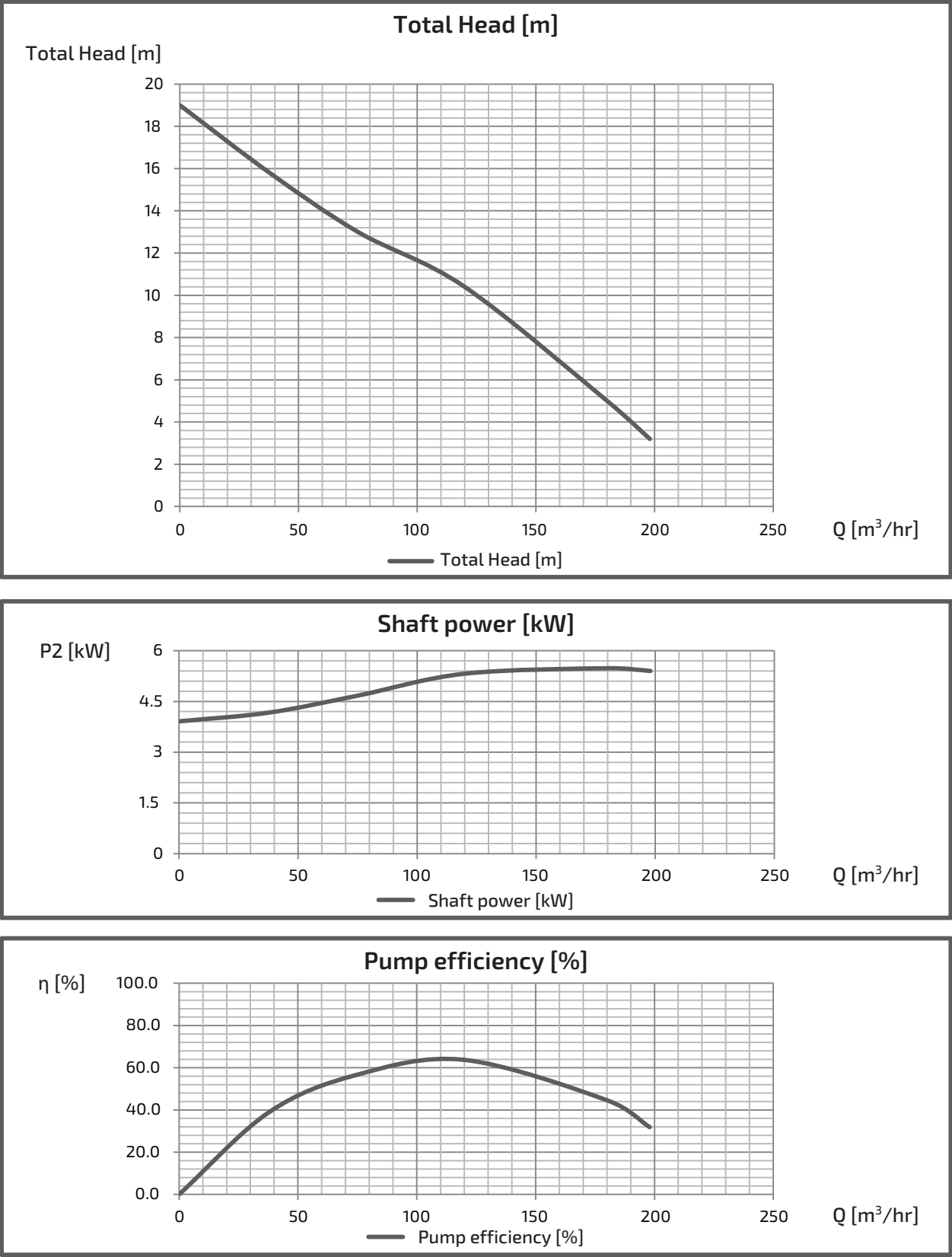
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1505-5.5T4

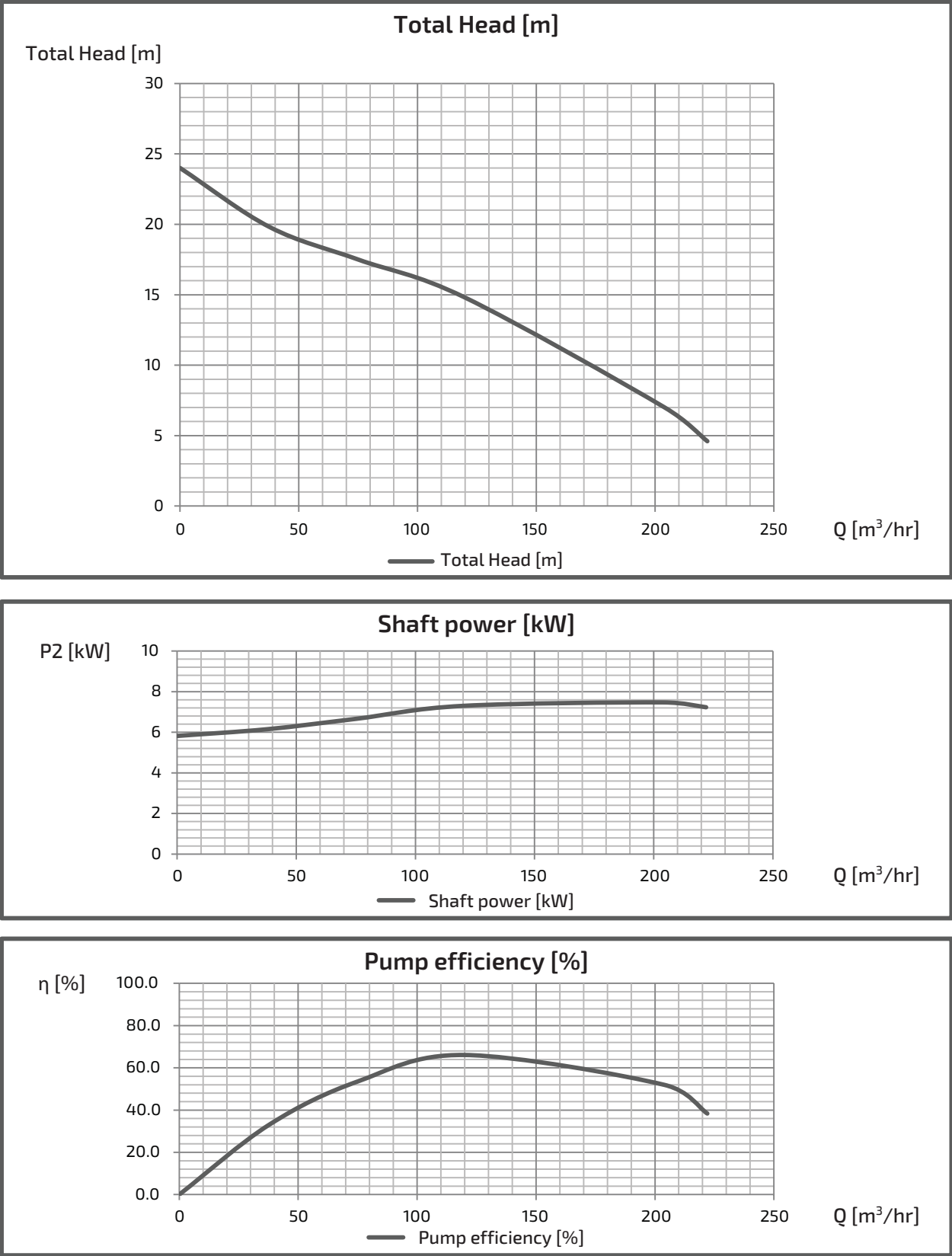
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1505-7.5T4

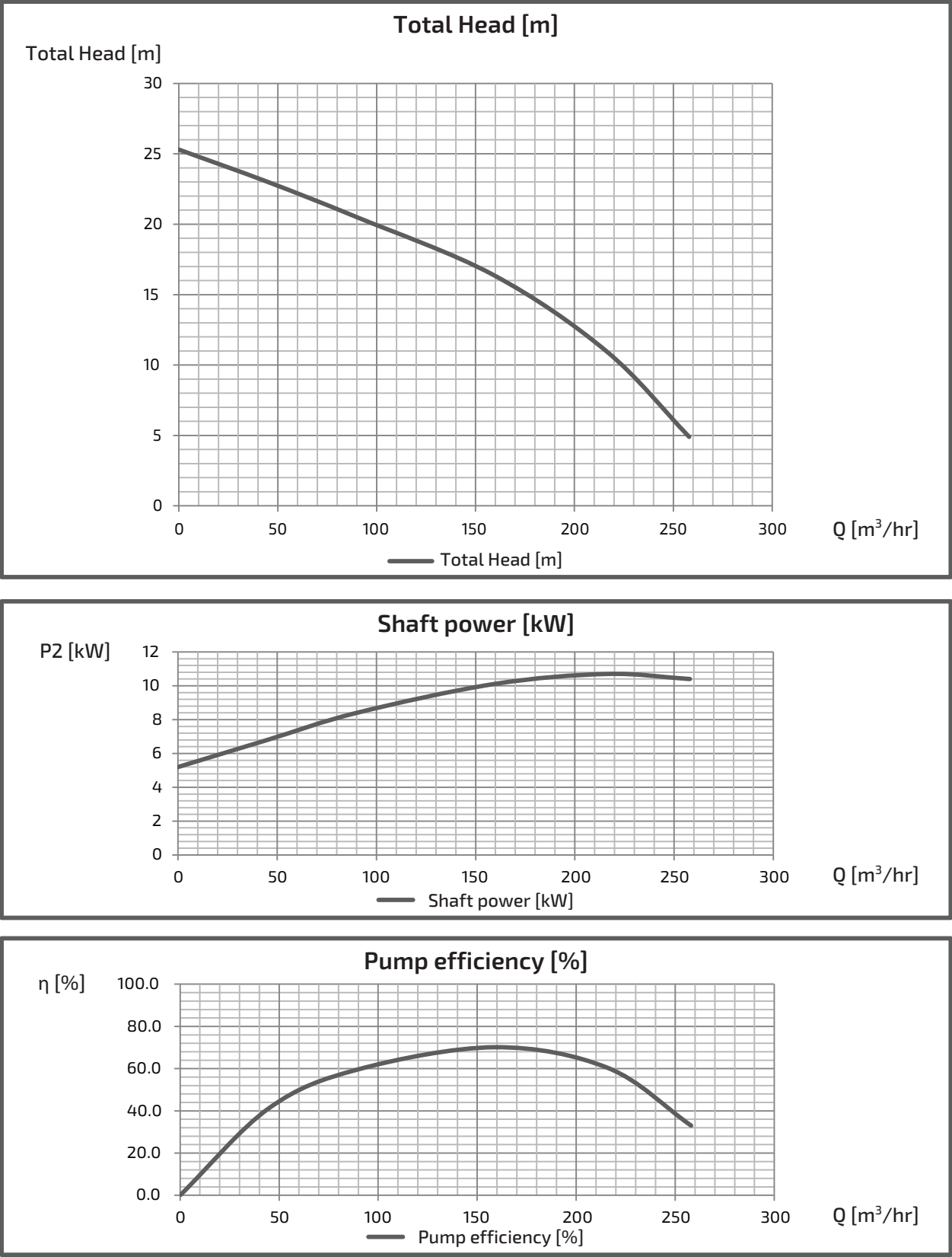
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1505-11T4

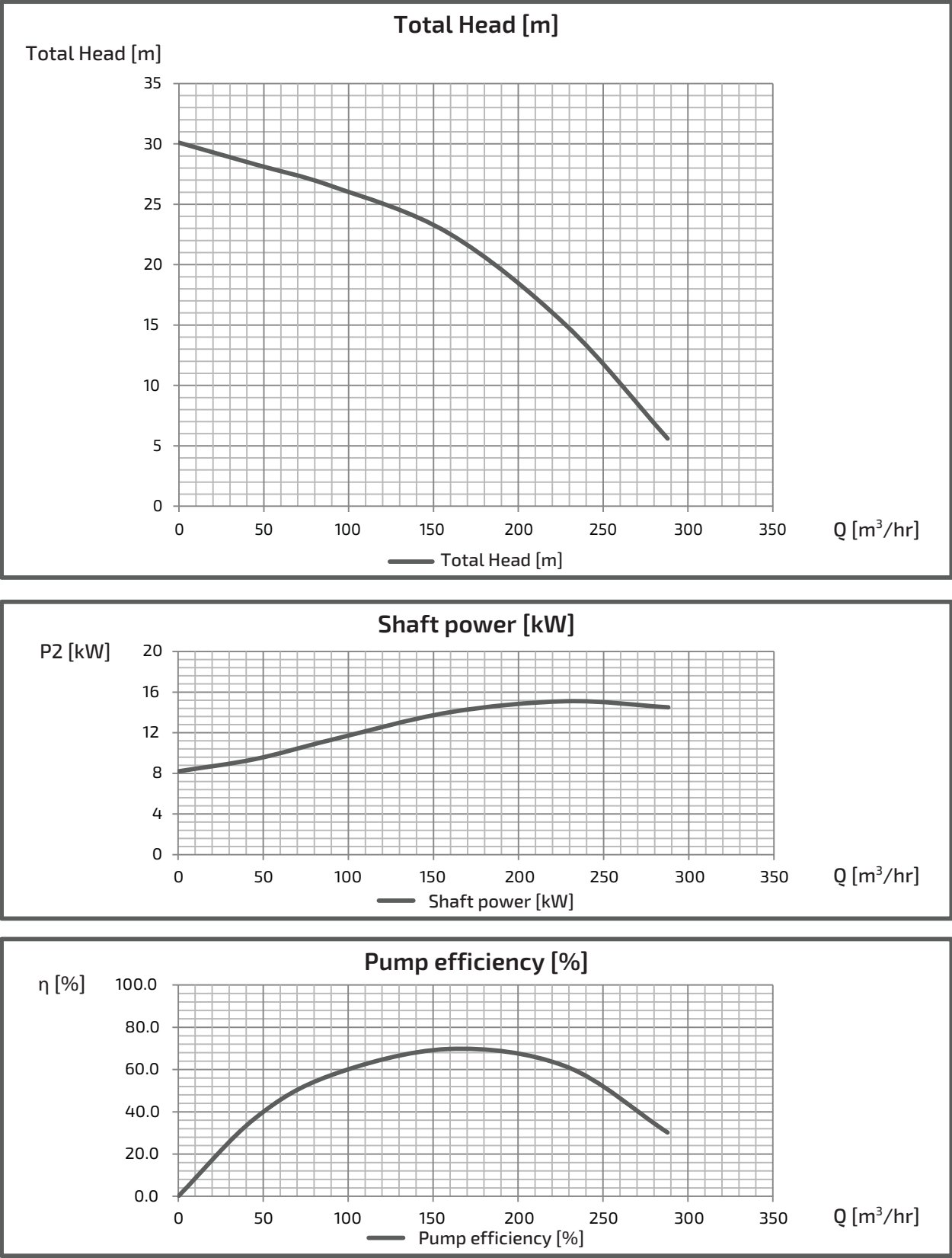
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1505-15T4

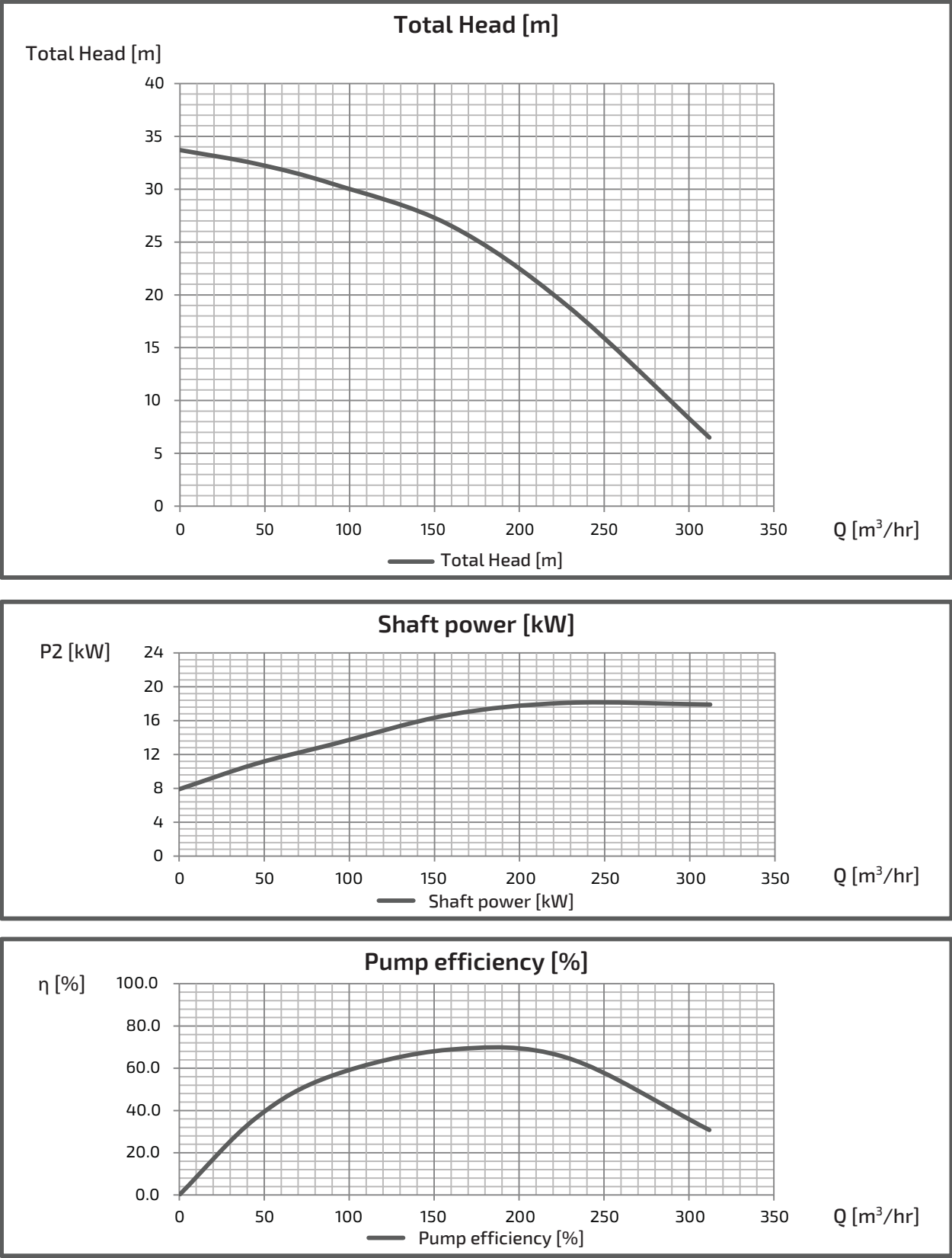
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1505-18.5T4

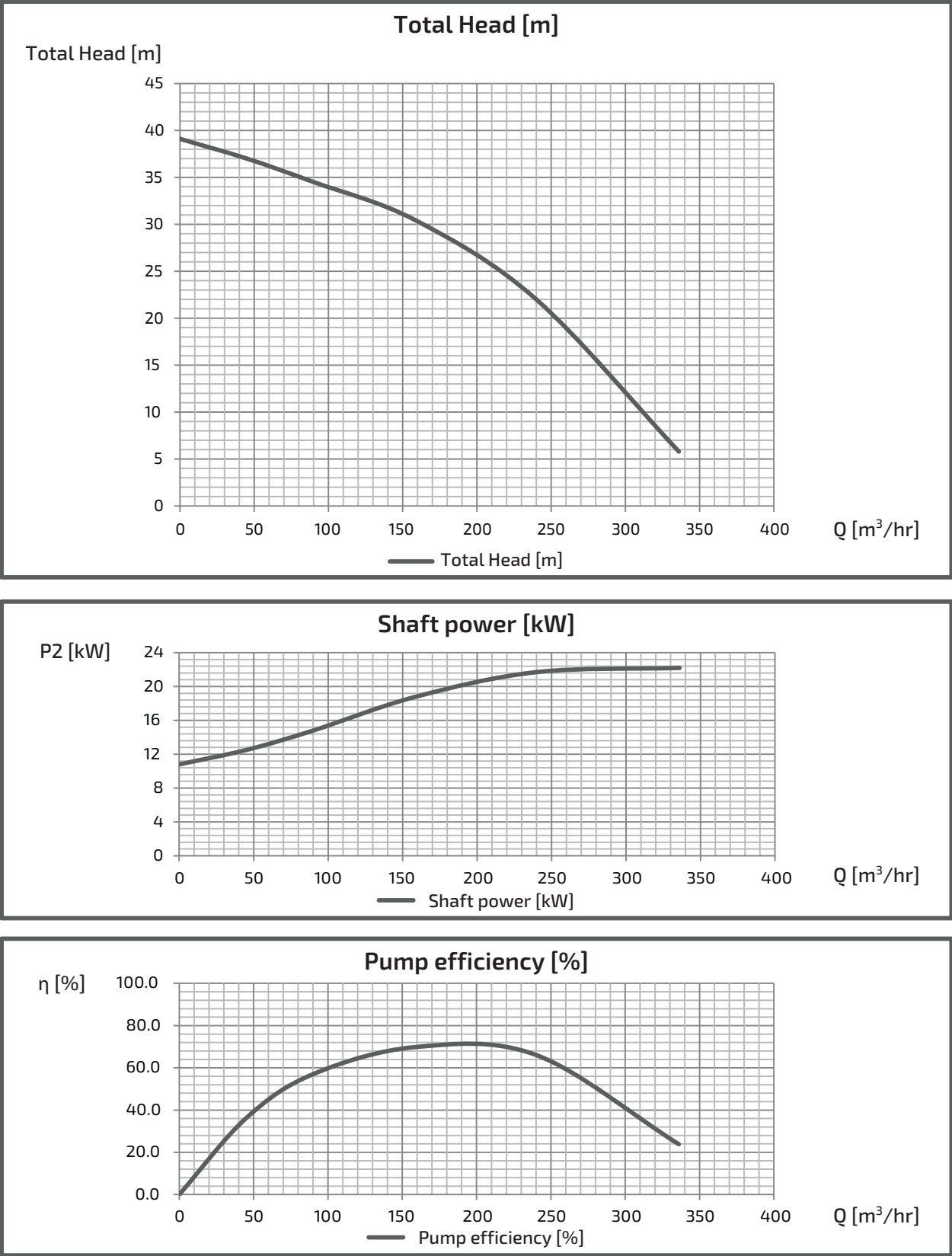
■ PERFORMANCE CURVES



INDIVIDUAL EXPECTED PERFORMANCE CURVE

MODEL : BU4-1505-22T4

■ 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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