



# TURKUAZ POMPA

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# **TURKUAZ POMPA**

## **GENERAL CATALOG**



<b>CONTENTS</b>	<b>PAGE</b>
<b>PUMPS</b>	
TPH SERIES PUMP BOOSTER PROMOTION	02
IMAGES OF SINGLE PUMP AND TWO PUMP BOOSTER	03
TPH SERIES CHARACTERISTIC PERFORMANCE CURVES	08
TPH 100/200/300/400 SERIES PUMP PARTS LIST	09
TPH 500/600/700 SERIES PUMP PARTS LIST	10
TPH SERIES PUMP SECTION DRAWING AND DIMENSIONS	11
SINGLE PUMP BOOSTER MATERIAL LIST	12
TPH SERIES VERTICAL SHAFT, MULTI-STAGE BOOSTER PUMPS	13
TWO PUMP BOOSTER MATERIAL LIST	14
TPH SINGLE PUMP BOOSTER DIMENSIONS 100/200/300/400/500/550/600/700	21
TPH TWO PUMP BOOSTER DIMENSIONS 100/200/300/400/500/550/600/700	28
SCHEMATIC INSTALLATION DIMENSIONS	30
BOOSTER CONNECTION SCHEMATIC PICTURES	32
TNSP SERIES HORIZONTAL SHAFT, SINGLE STAGE CENTRIFUGAL PUMPS	33
TNSP SERIES PUMP INTRODUCTION	34
TNSP SOFT PACKING PUMP PARTS LIST	35
TNSP MECHANICAL SEAL PUMP PARTS LIST	36
TNSP SERIES PUMP WORKING AREAS	37
TNSP SERIES CHARACTERISTIC PERFORMANCE CURVES	42
TNLL SERIES VERTICAL SHAFT, SINGLE STAGE, IN-LINE PUMPS	43
TNLL SERIES IN-LINE PUMPS	44
TNLL SERIES IN-LINE PARTS LIST	45
TNLL SERIES IN-LINE SHAFT DIAGRAM	46
TNLL SERIES IN-LINE MOUNTING STYLES	47
TNLL SERIES IN-LINE PERFORMANCE CURVES	60
NFPA 20 FIRE GROUP	61
TNSP-F SERIES PUMP INTRODUCTION	62
TNSP-F SOFT PACKING PUMP PARTS LIST	63
PERFORMANCE CHARACTERISTICS AND FLOW RATE OF FIRE PUMPS ACCORDING TO NFPA 20	64



## • TPH SERIES PUMP BOOSTER DESCRIPTION



- ◆ TPH Series boosters are designed to pump liquids that do not contain corrosive substances and large solid particles.
- ◆ Impeller material is Noryl.
- ◆ The balancing holes of the impellers are dynamically balanced, minimizing axial loads.
- ◆ Vertical shaft, multistage and closed impeller pumps.
- ◆ The discharge flange of the pump is under the motor side, the suction flange is on the lower body.
- ◆ Thanks to its vertical shaft structure, it takes up less space and saves space.
- ◆ Phase protection and sequencing relay are available in single pump boosters.
- ◆ It can be manufactured as standard with single, double or triple pumps depending on the desired operating flow rate.
- ◆ There is a water level float in single pump boosters.

## • Customer-Specific Production

- ◆ Different brands, types of seals and materials can be selected depending on the pump's operating location or the customer's request

## • Shaft Sealing • Seal Application

- ◆ Mechanical seals are used as standard production in TPH Series booster pumps.

## • Standard Production

PARTS LIST	MATERIAL
Receiver Body	GGG25/Cast Iron
Transmitter Body	GG25/Cast Iron
Shaft	AISI 304
Impeller	Noryl

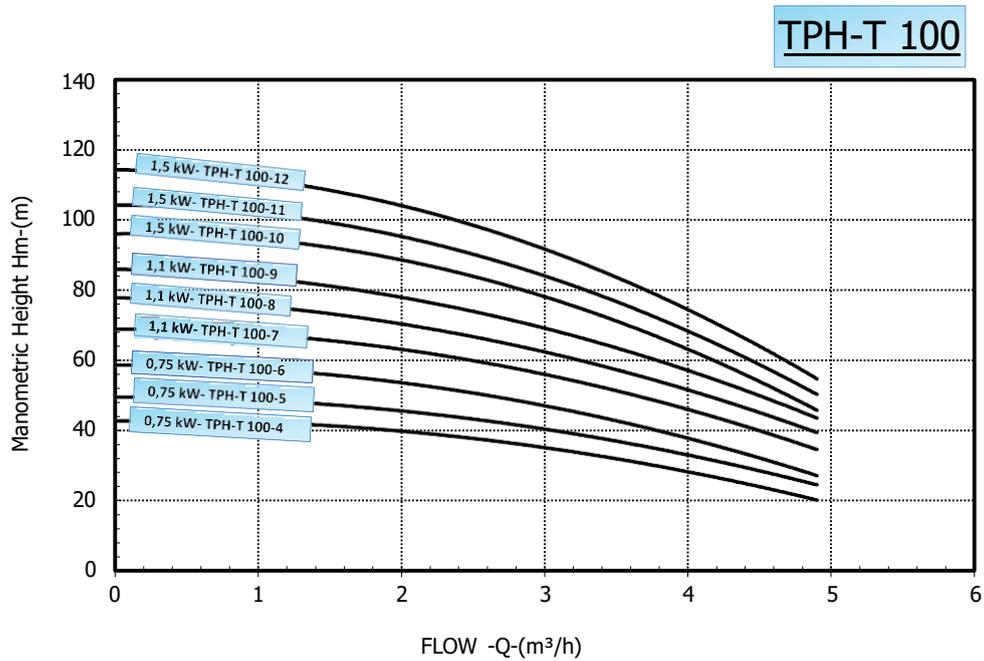
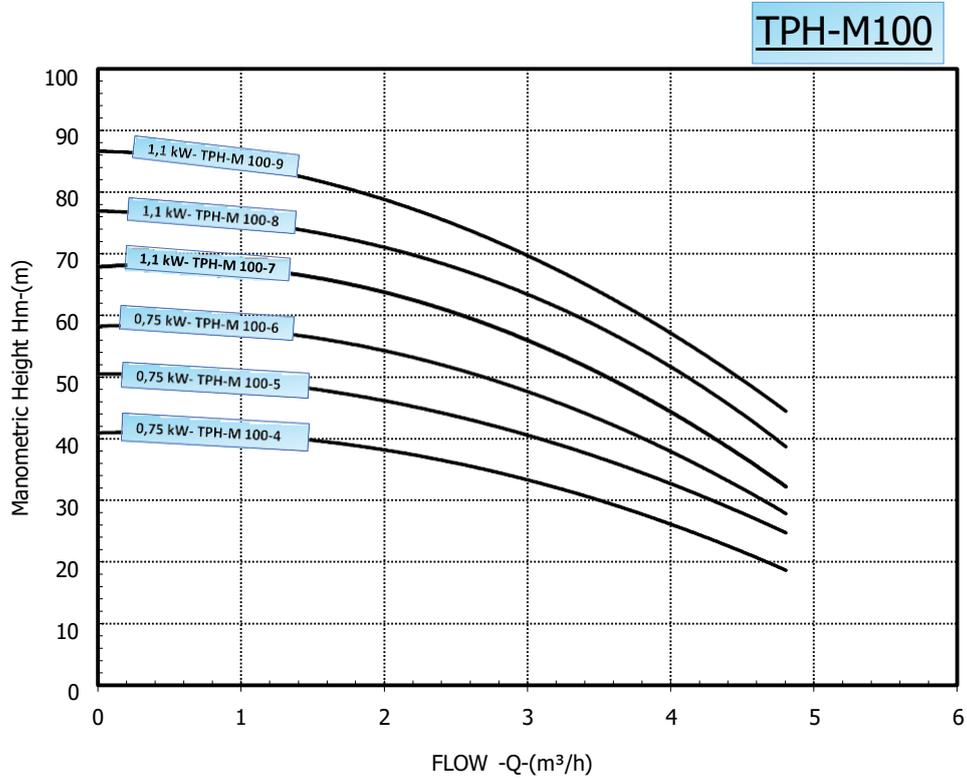


- IMAGES OF SINGLE PUMP AND TWO PUMP BOOSTER





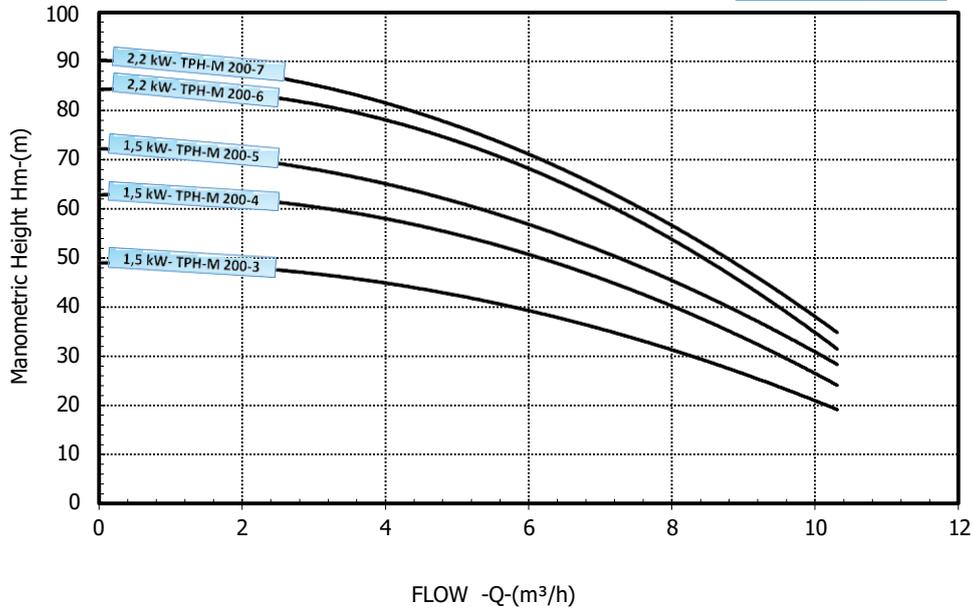
## • TPH SERIES CHARACTERISTIC PERFORMANCE CURVES



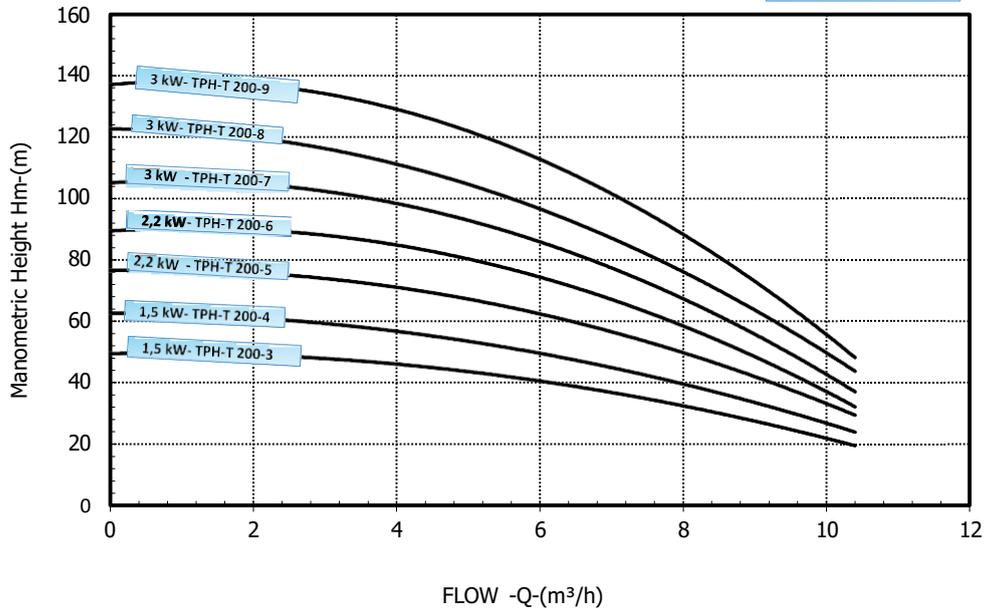


## • TPH SERIES CHARACTERISTIC PERFORMANCE CURVES

**TPH-M 200**

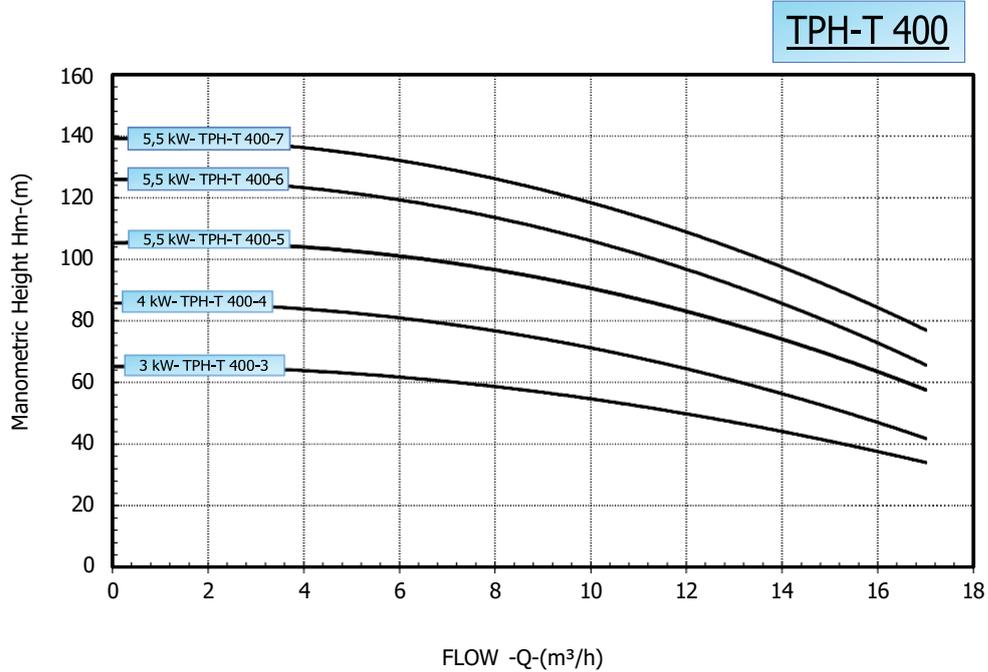
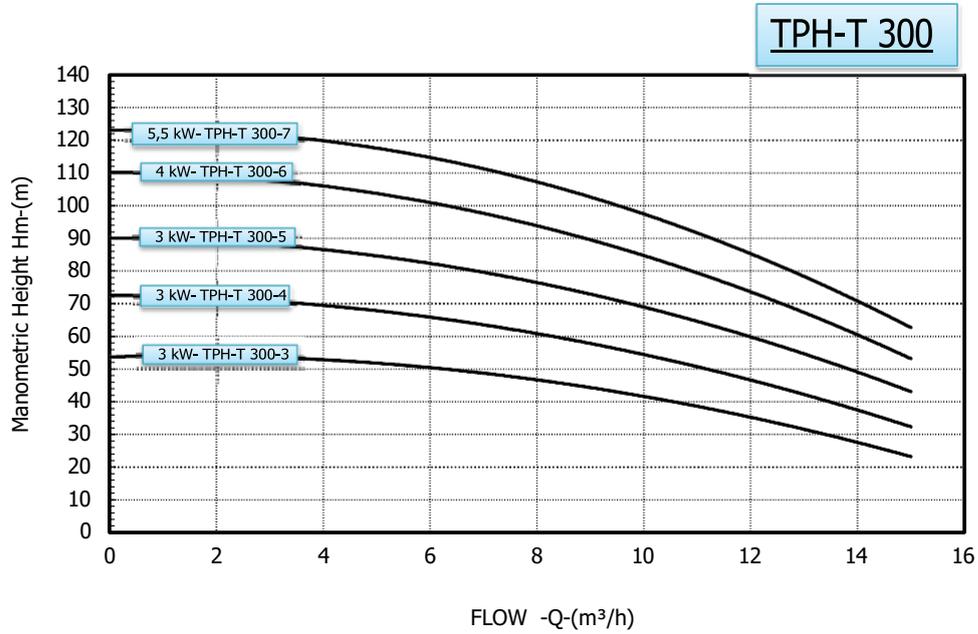


**TPH-T 200**



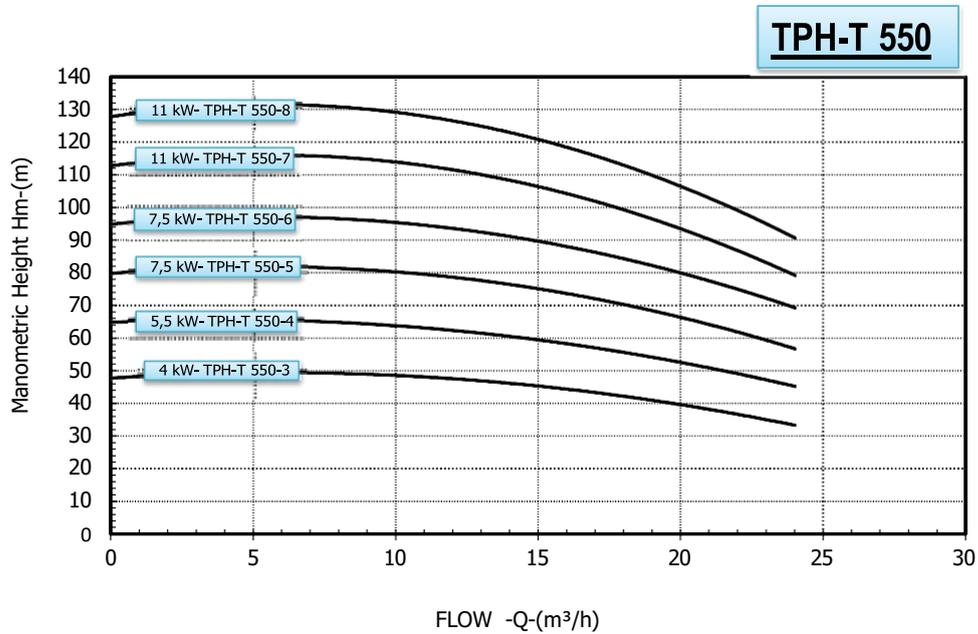
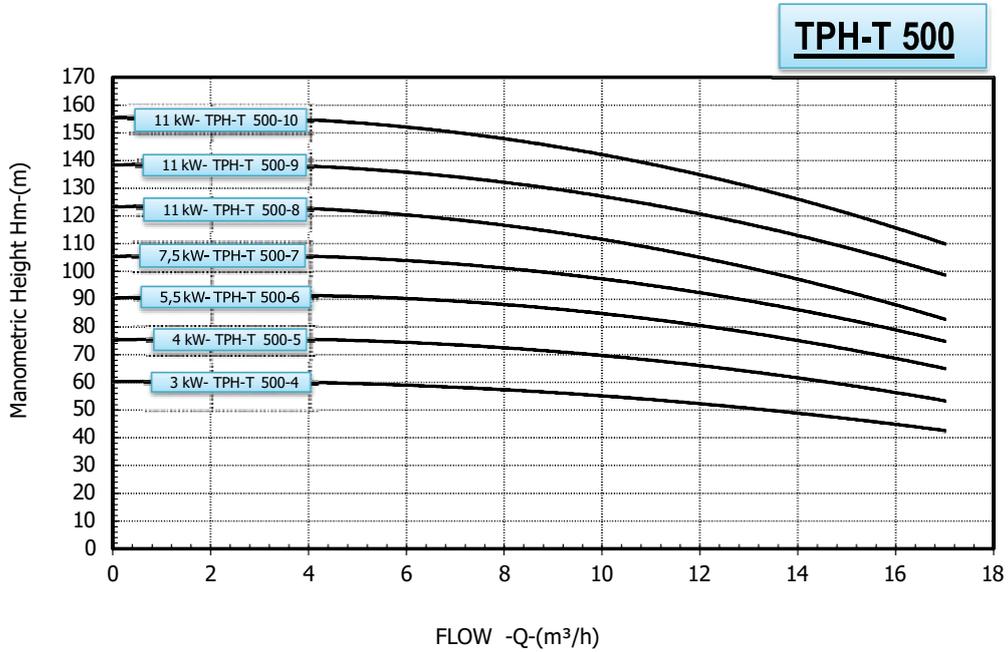


## • TPH SERIES CHARACTERISTIC PERFORMANCE CURVES



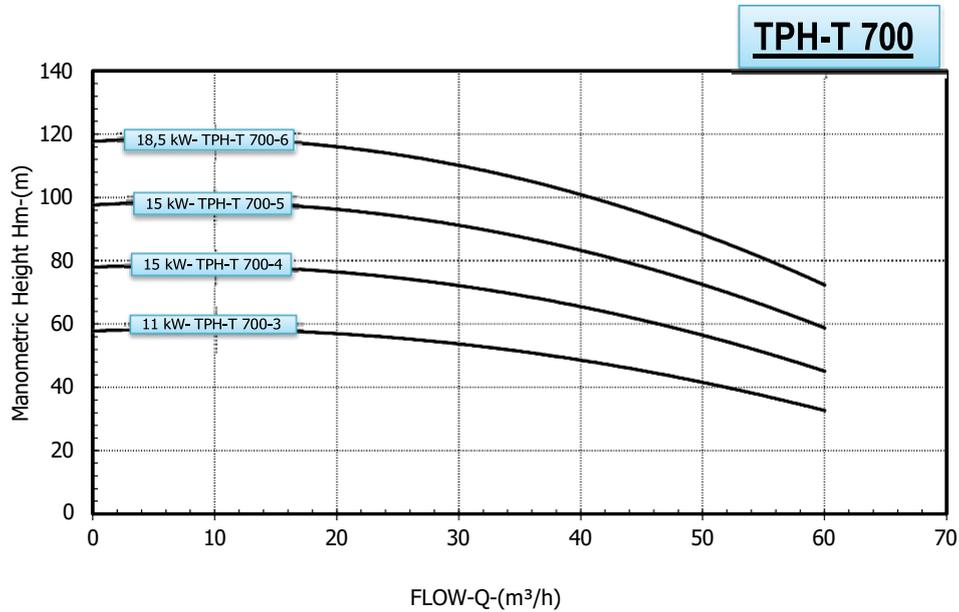
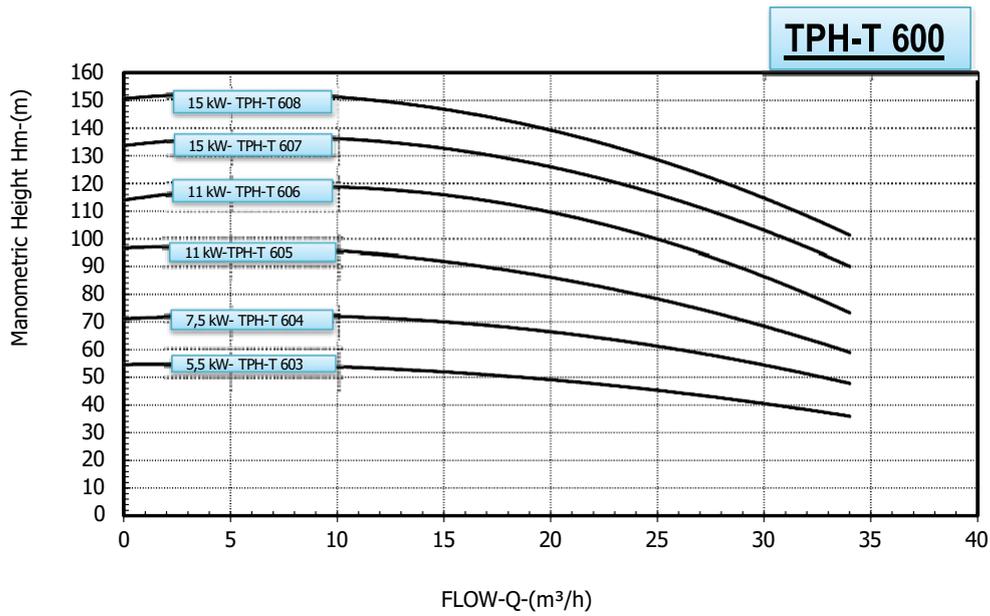


## • TPH SERIES CHARACTERISTIC PERFORMANCE CURVES



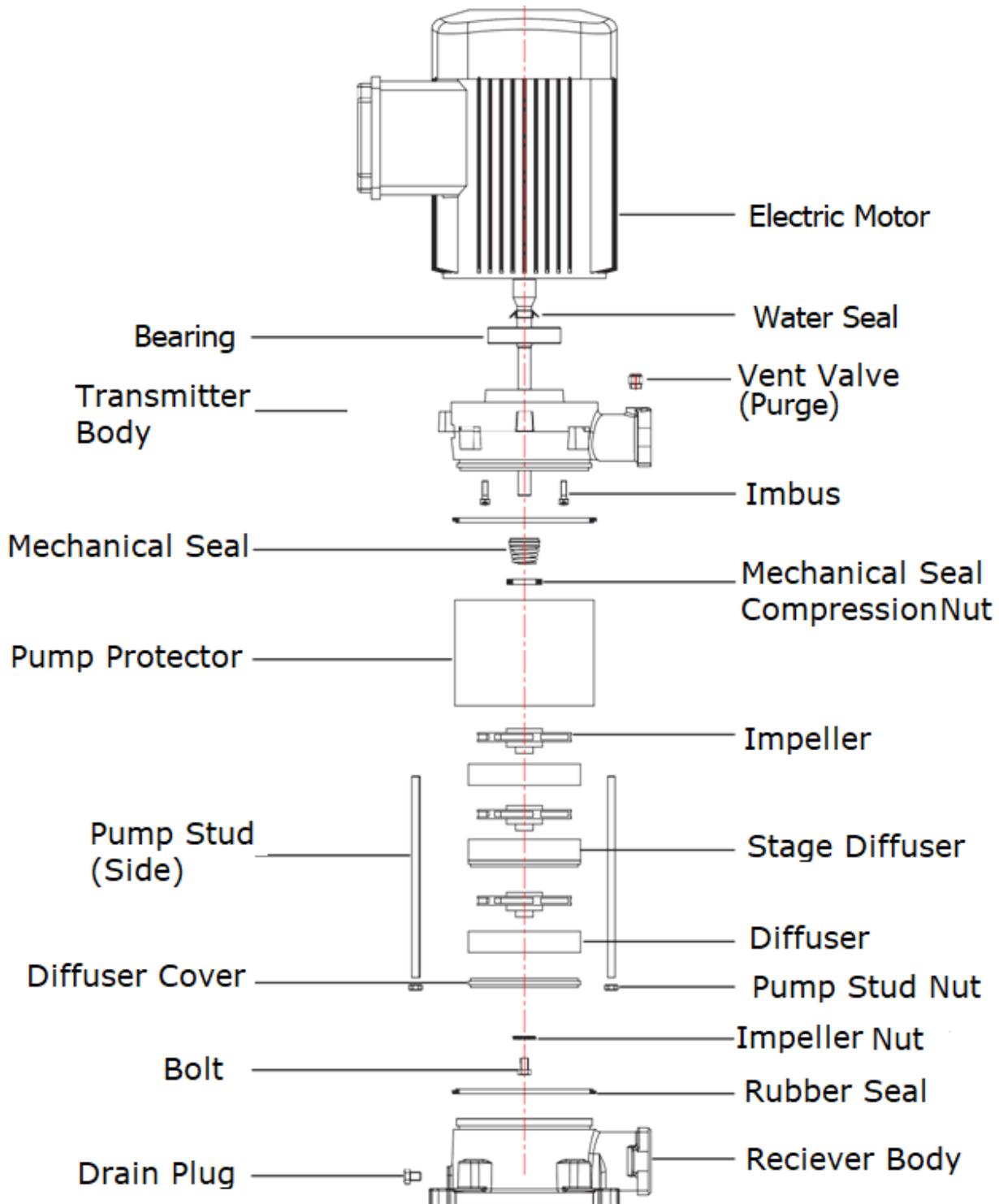


## • TPH SERIES CHARACTERISTIC PERFORMANCE CURVES



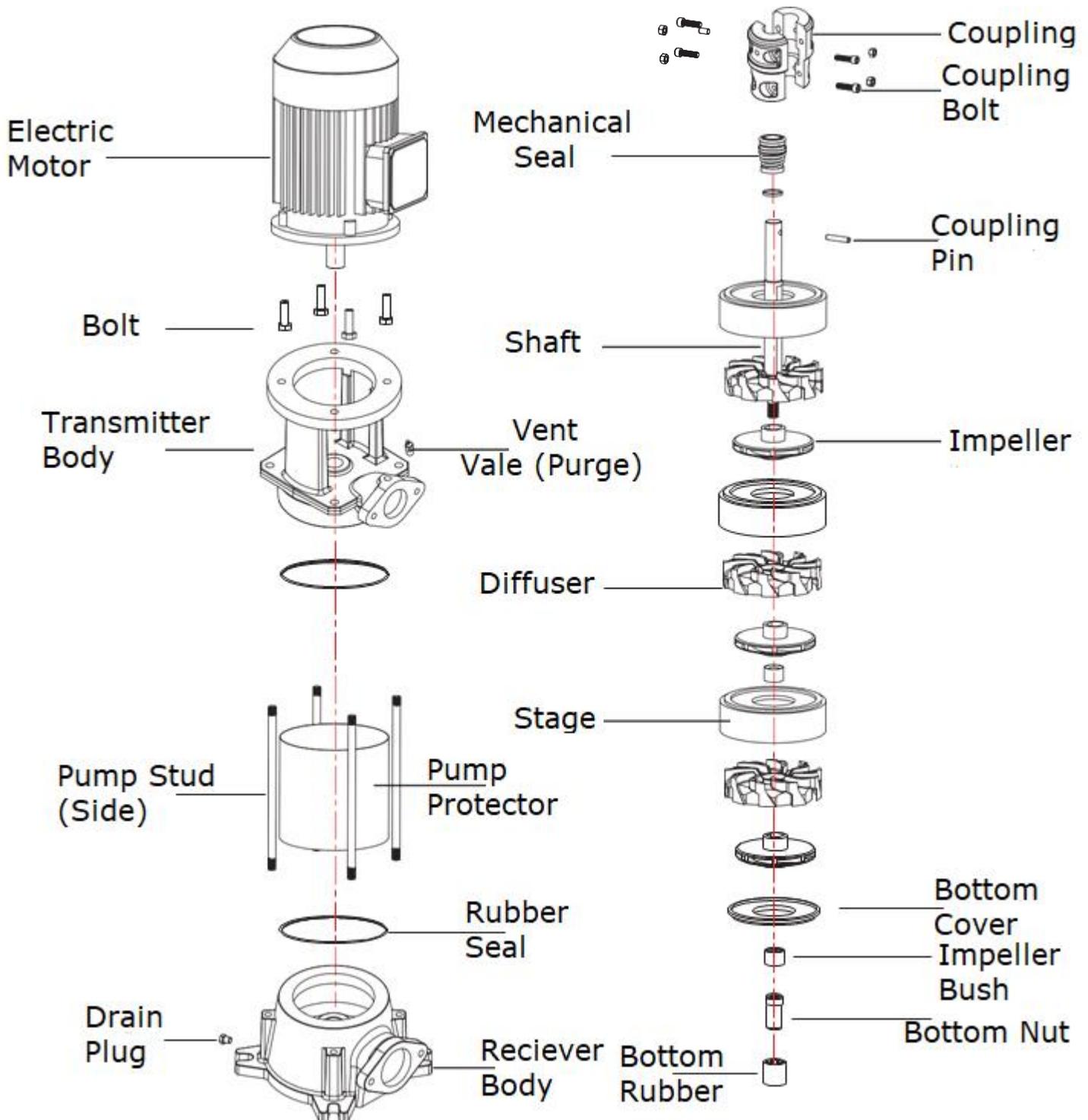


## • TPH 100/200/300/400 SERIES PUMP PART LIST



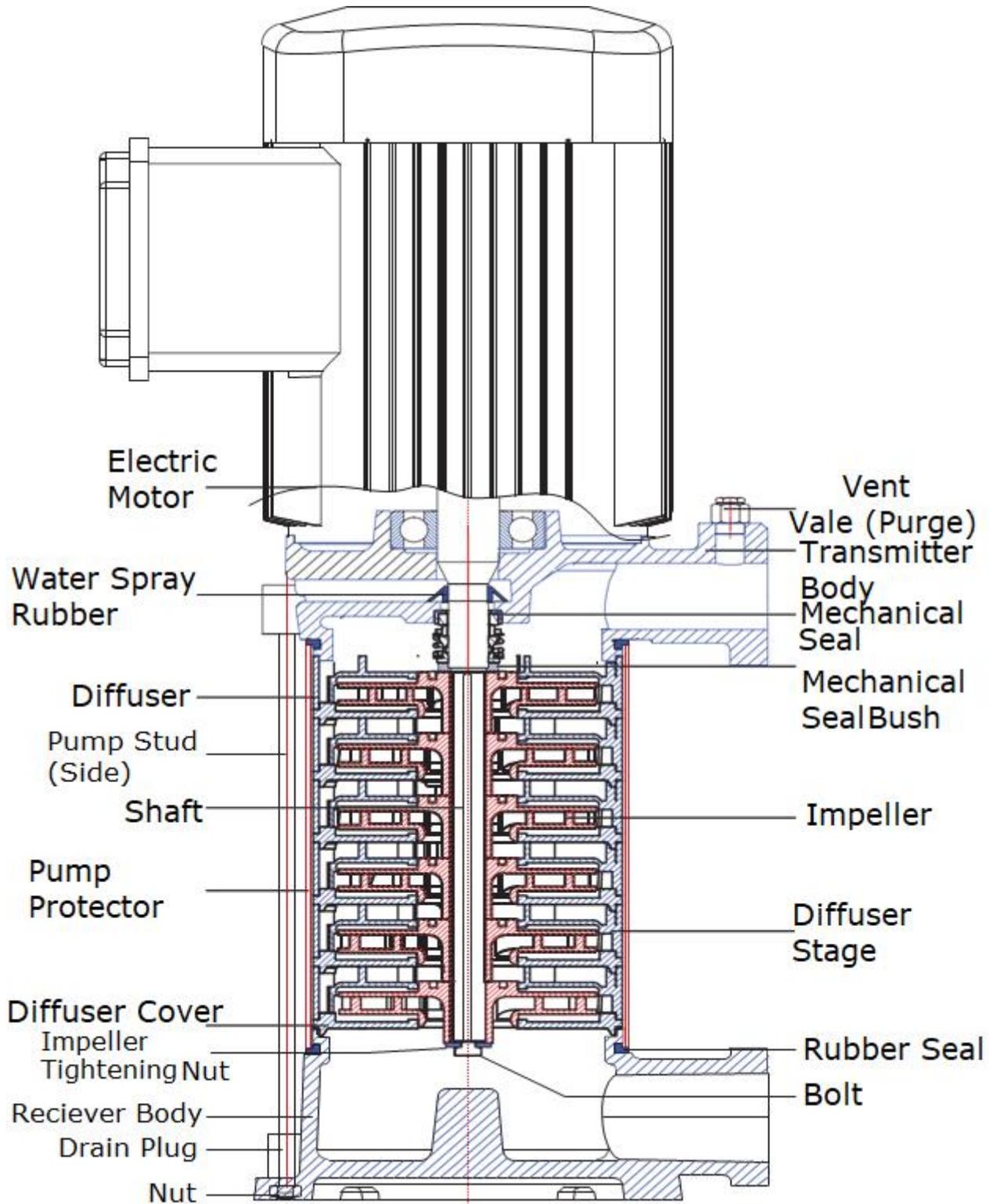


## • TPH 500/600/700 SERIES PUMP PART LIST



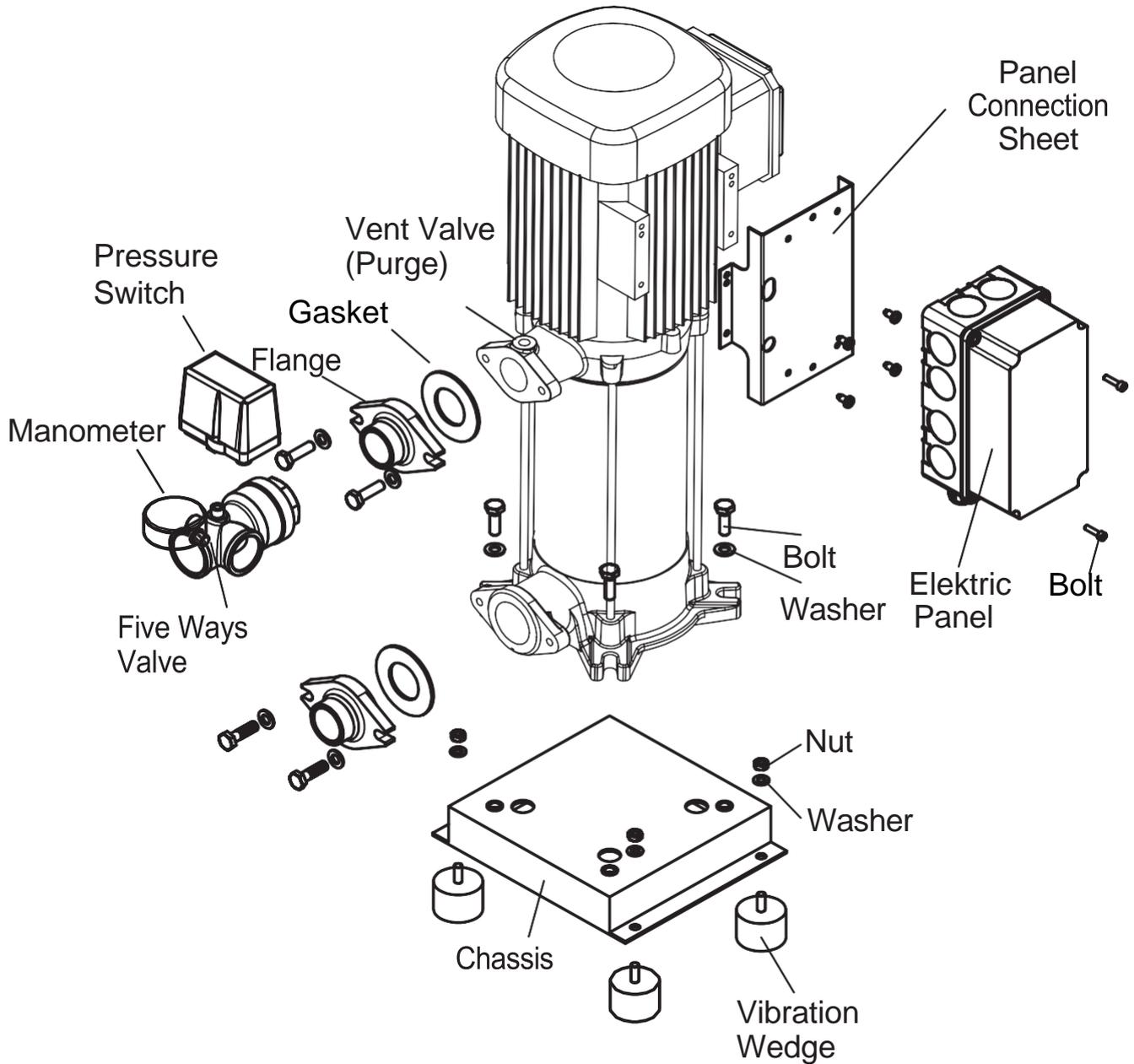


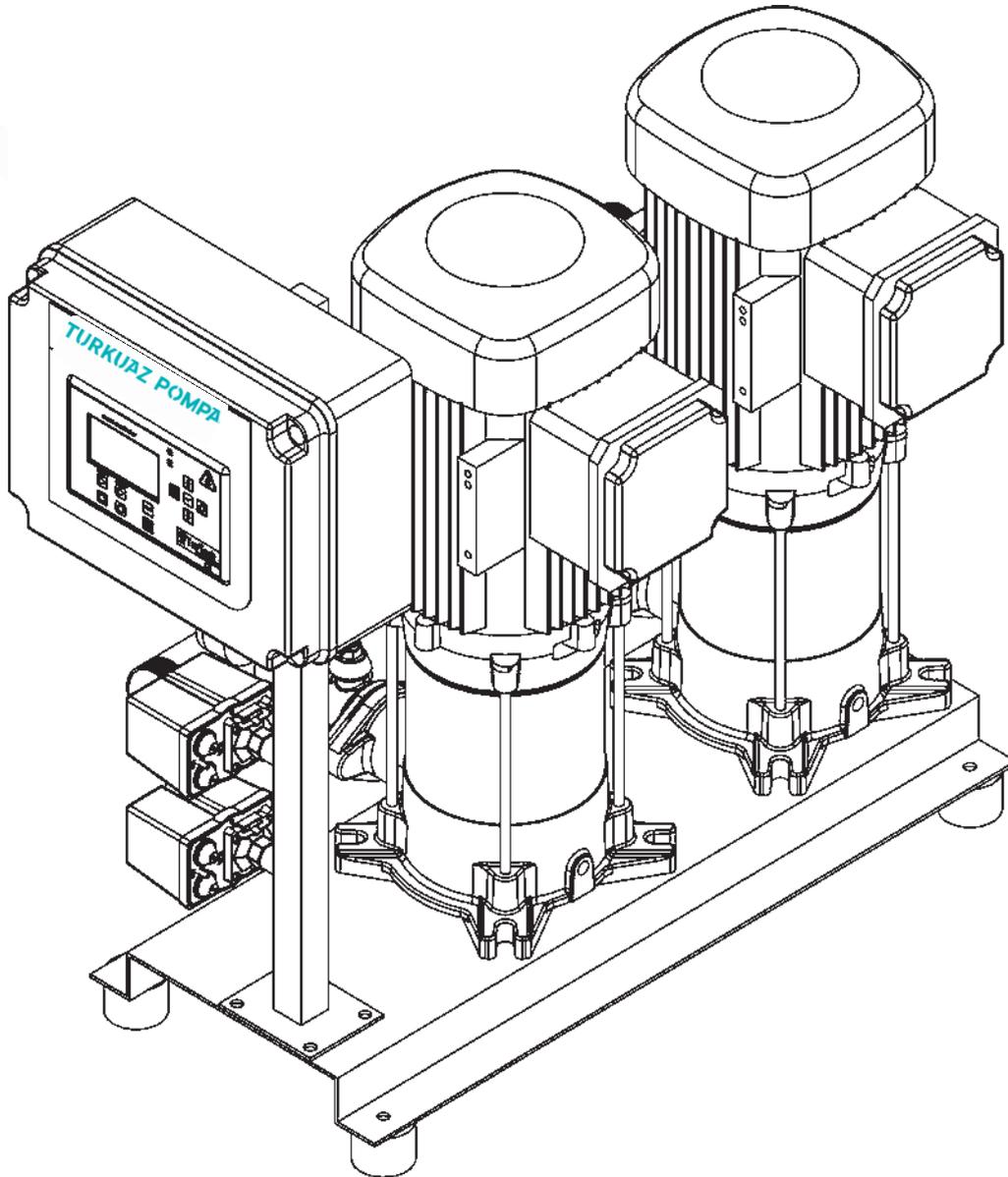
## • TPH SERIES PUMP CROSS SECTION PICTURE





## • SINGLE PUMP BOOSTER PART LIST





## VERTICAL SHAFT, MULTI-STAGE BOOSTER PUMPS

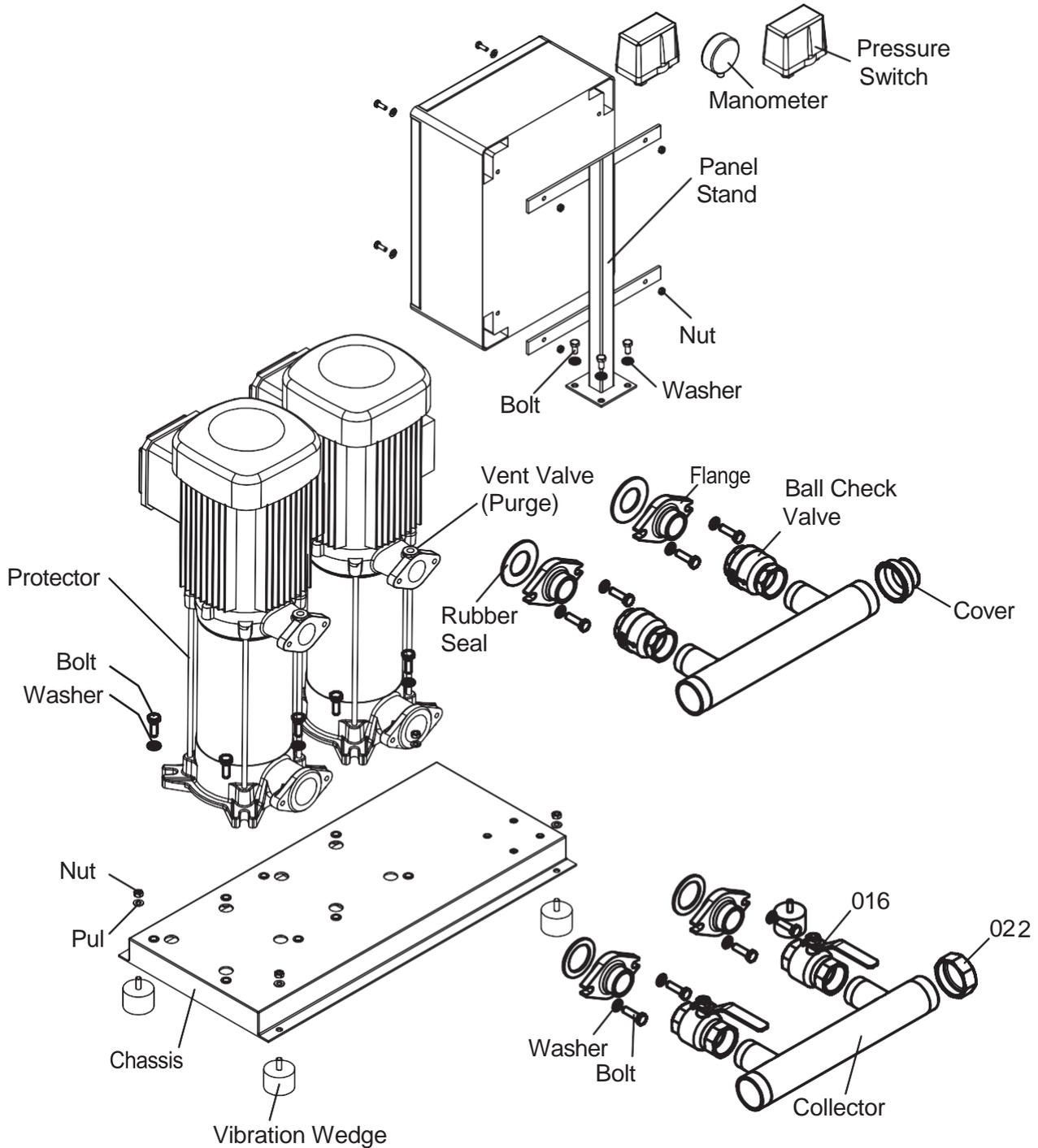
TPH SERIES

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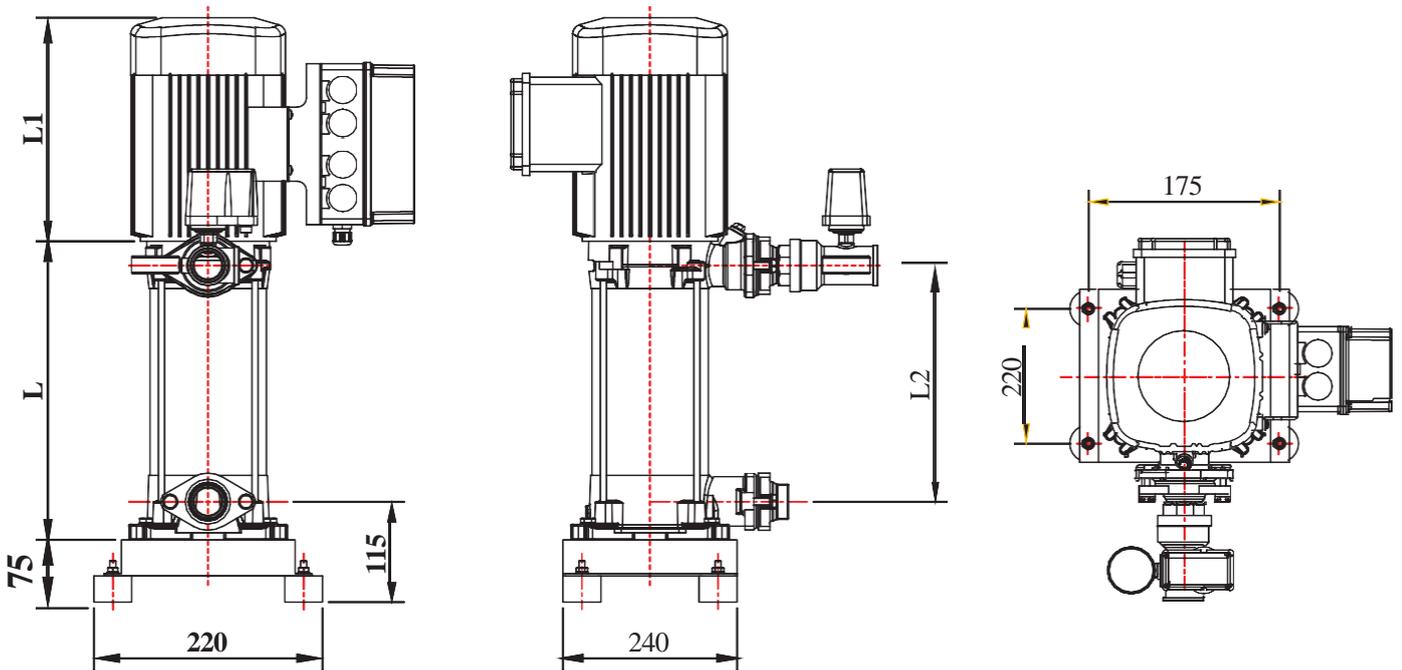


## • TWO PUMP BOOSTER MATERIAL LIST





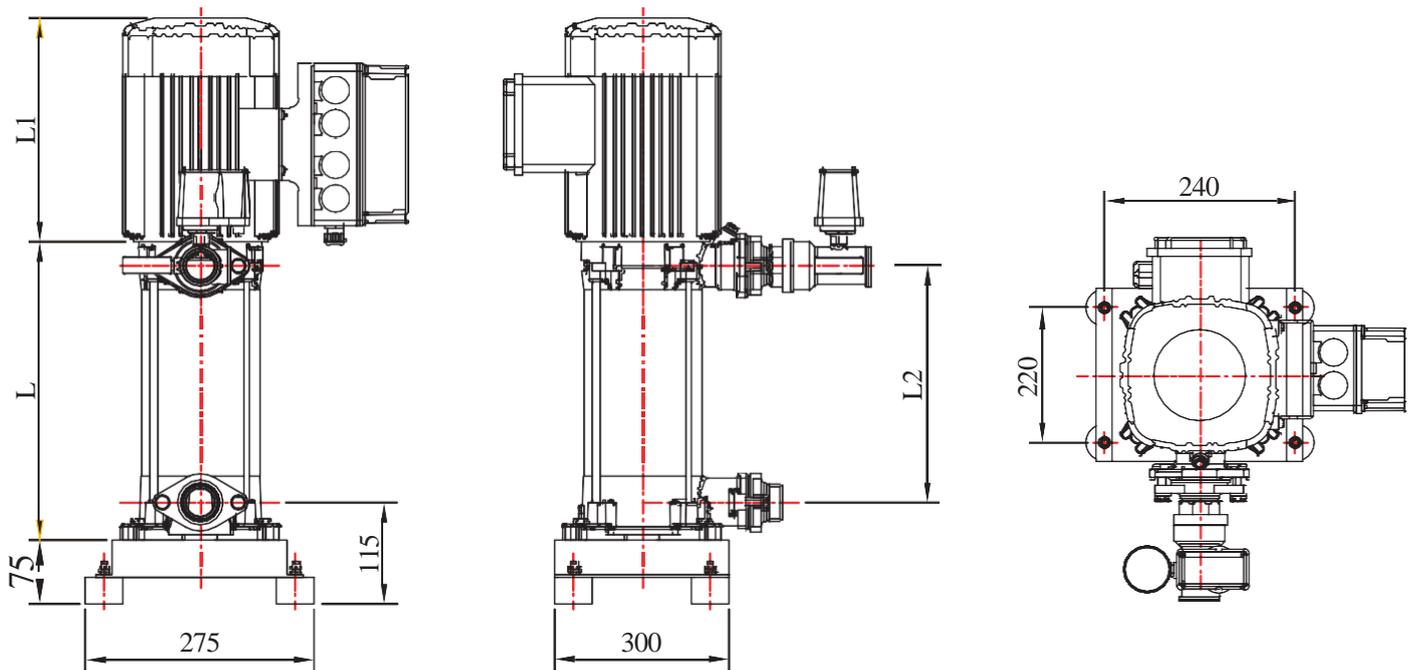
## • TPH 100 SERIES SINGLE PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
1xTPH 100-5	200	230	185	1 1/4"	1 1/4"
1xTPH 100-6	222	230	207		
1xTPH 100-7	244	235	228		
1xTPH 100-8	266	235	251		
1xTPH 100-9	288	235	273		
1xTPH 100-10	310	250	295		
1xTPH 100-11	332	250	317		
1xTPH 100-12	354	250	339		



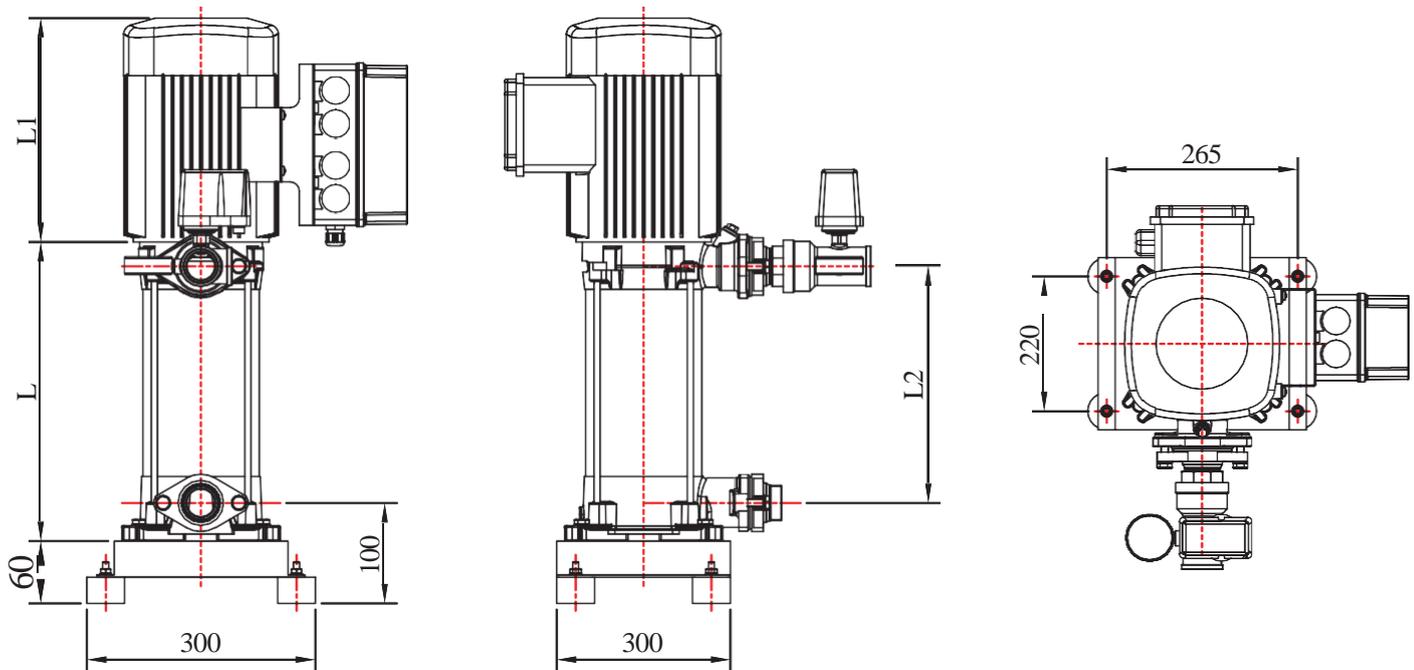
## • TPH 200 SERIES SINGLE PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
1xTPH 200-5	225	280	207	1 1/4"	1 1/4"
1xTPH 200-6	253	280	235		
1xTPH 200-7	281	315	263		
1xTPH 200-8	309	315	291		
1xTPH 200-9	337	315	319		



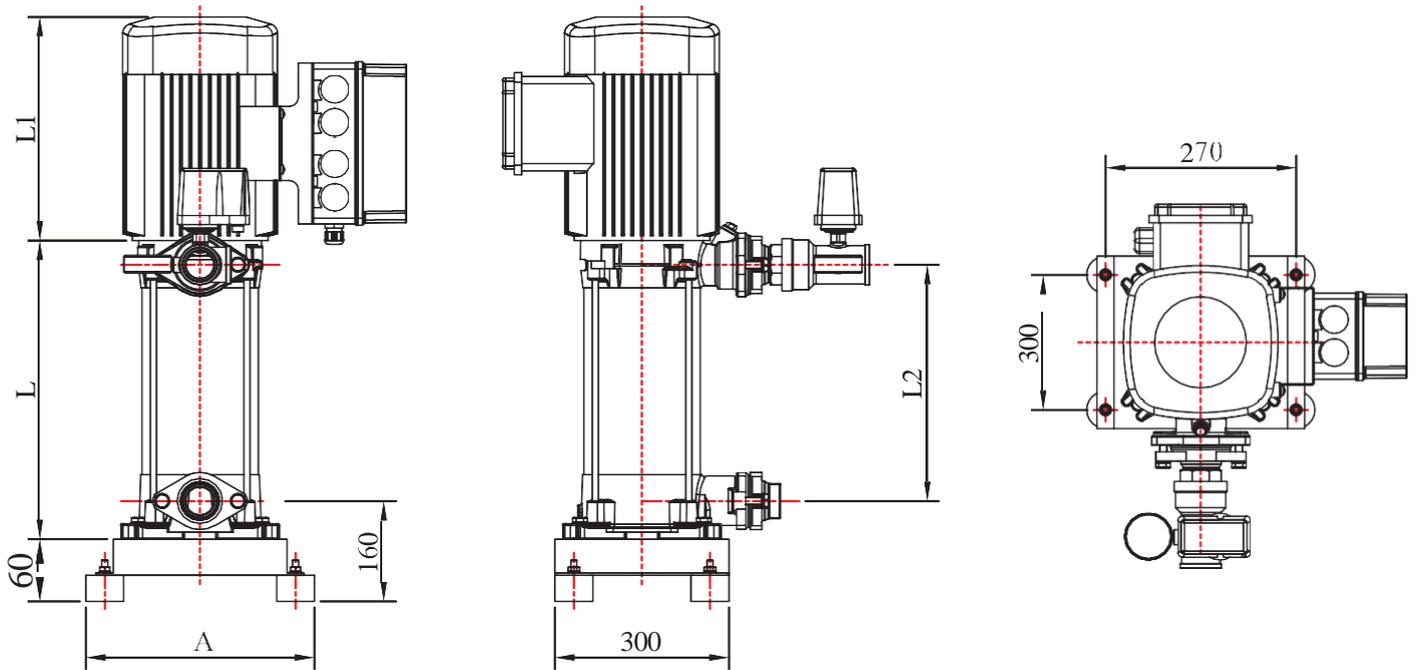
## • TPH 300-400 SERIES SINGLE PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
1xTPH 300-4	300	300	216,5	1 1/2 "	1 1/2"
1xTPH 300-5	333	300	249,5		
1xTPH 300-6	366	300	282,5		
1xTPH 300-7	399	300	315,5		
1xTPH 400-4	300	300	216,5	1 1/2 "	1 1/2"
1xTPH 400-5	333	300	249,5		
1xTPH 400-6	366	300	282,5		
1xTPH 400-7	399	300	315,5		



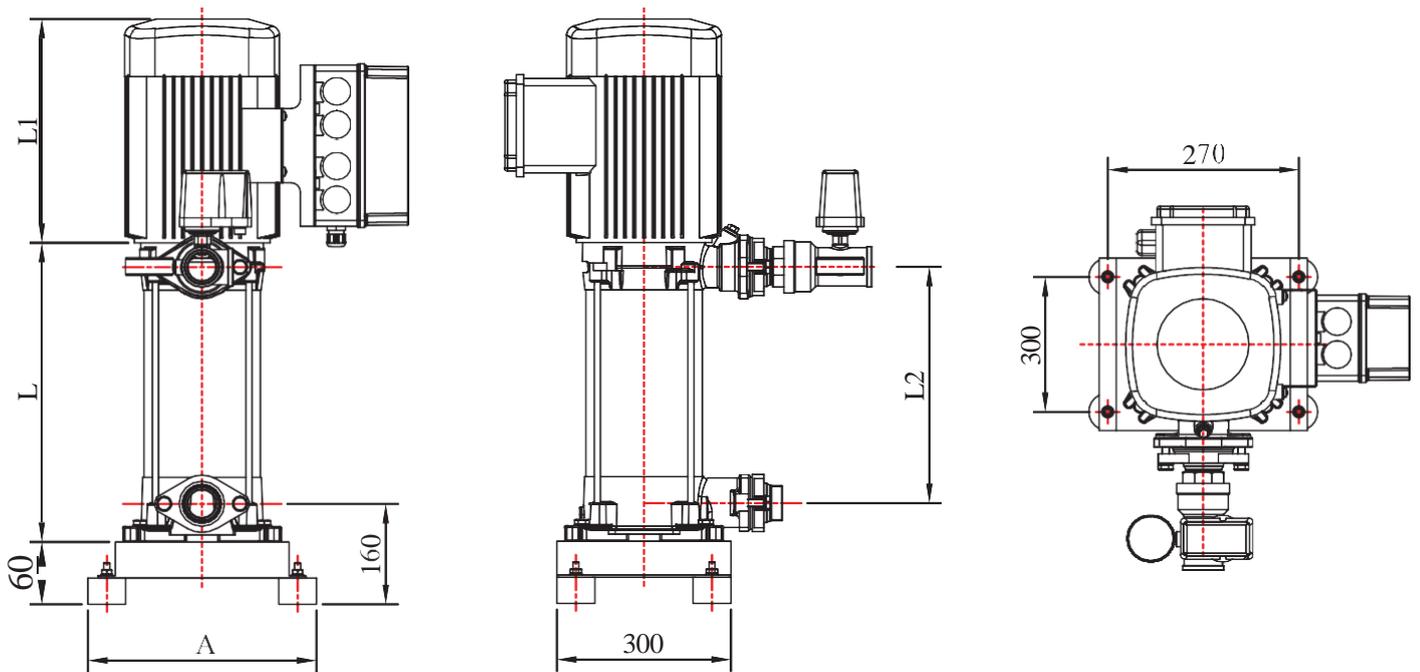
## • TPH 500 SERIES SINGLE PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	A	COLLECTOR	
					SUCTION	DISCHARGE
1xTPH 500-4	415	435	315	300	2 1/2 "	2"
1xTPH 500-5	465	435	365	300		
1xTPH 500-6	510	450	410	300		
1xTPH 500-7	560	500	460	700		
1xTPH 500-8	605	555	505	700		
1xTPH 500-9	655	555	555	700		
1xTPH 500-10	705	555	605	282,5		



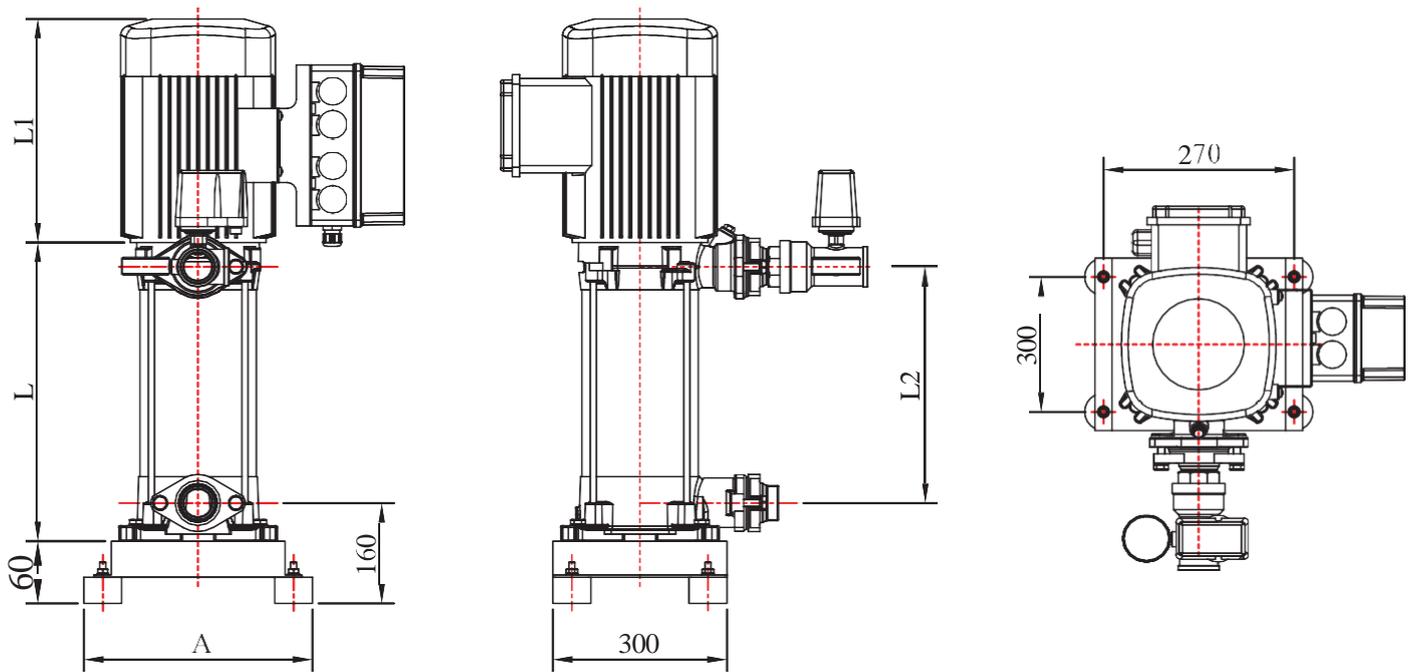
## • TPH 550 SERIES SINGLE PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	A	COLLECTOR	
					SUCTION	DISCHARGE
1xTPH 550-3	360	440	260	300	2 1/2"	2"
1xTPH 550-4	415	500	315	300		
1xTPH 550-5	465	540	365	700		
1xTPH 550-6	510	540	410	700		
1xTPH 550-7	560	620	460	700		
1xTPH 550-8	605	630	505	700		



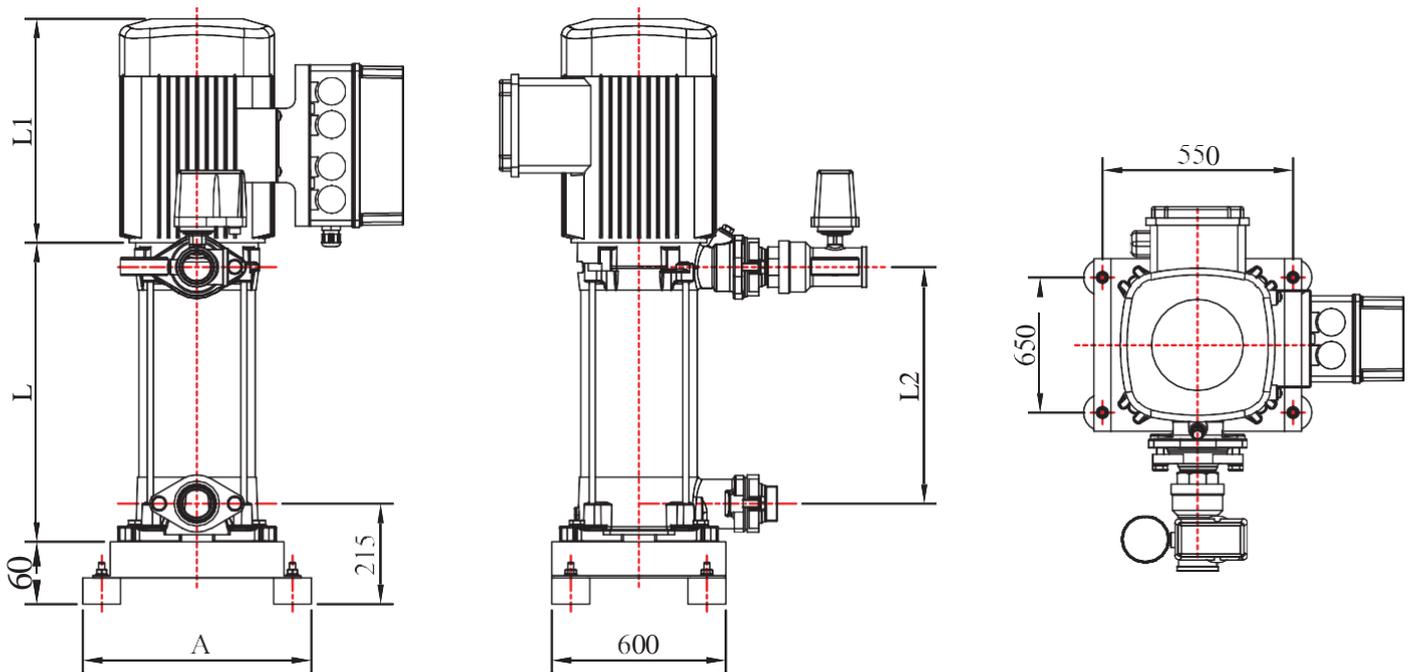
## • TPH 600 SERIES SINGLE PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	A	COLLECTOR	
					SUCTION	DISCHARGE
1xTPH 600-3	365	440	265	300	2 1/2"	2"
1xTPH 600-4	415	500	315	700		
1xTPH 600-5	465	540	365	700		
1xTPH 600-6	510	540	410	700		
1xTPH 600-7	560	620	460	700		
1xTPH 600-8	605	630	505	700		



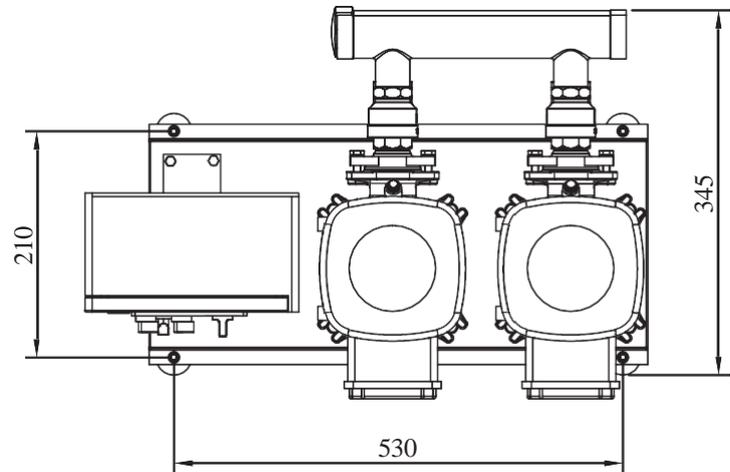
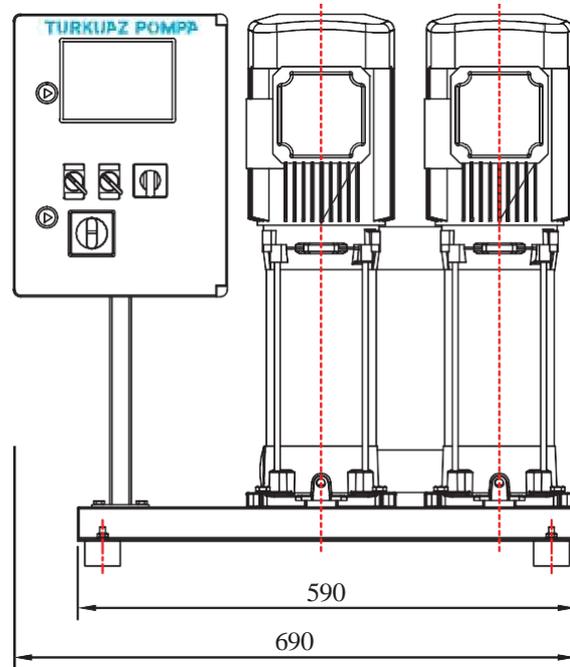
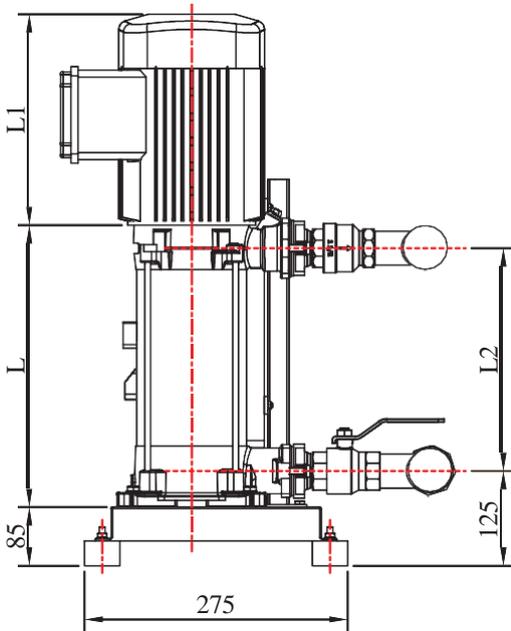
## • TPH 700 SERIES SINGLE PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	A	COLLECTOR	
					SUCTION	DISCHARGE
1xTPH 700-3	245	865	145	700	3"	2 1/2"
1xTPH 700-4	319	873	219	700		
1xTPH 700-5	393	873	293	700		
1xTPH 700-6	467	917	367	700		



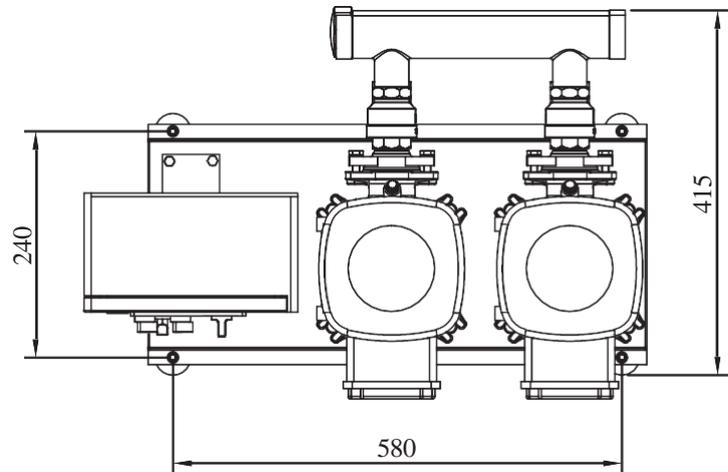
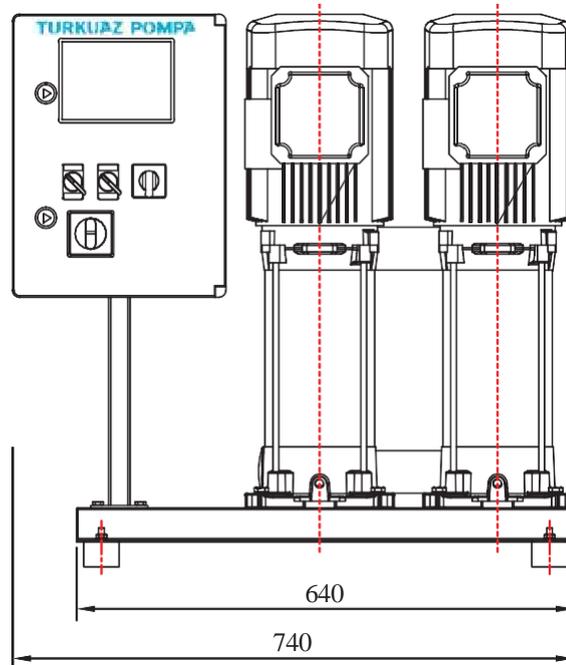
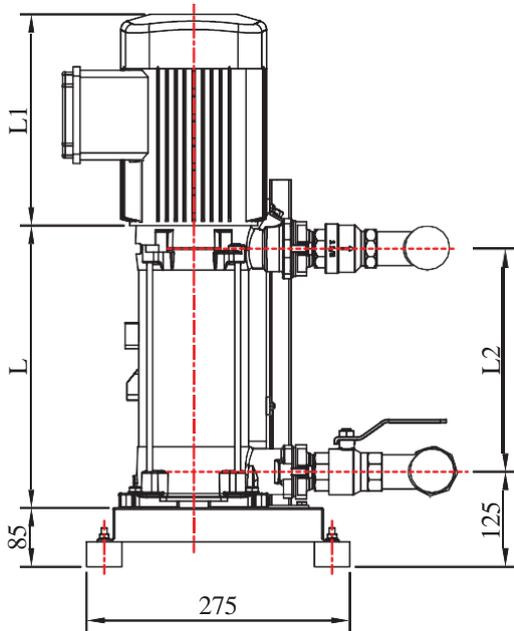
## • TPH 100 SERIES TWO PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
2xTPH 100-5	200	230	185	1 1/2"	1 1/2"
2xTPH 100-6	222	230	207		
2xTPH 100-7	244	235	228		
2xTPH 100-8	266	235	251		
2xTPH 100-9	288	235	273		
2xTPH 100-10	310	250	295		
2xTPH 100-11	332	250	317		
2xTPH 100-12	354	250	339		



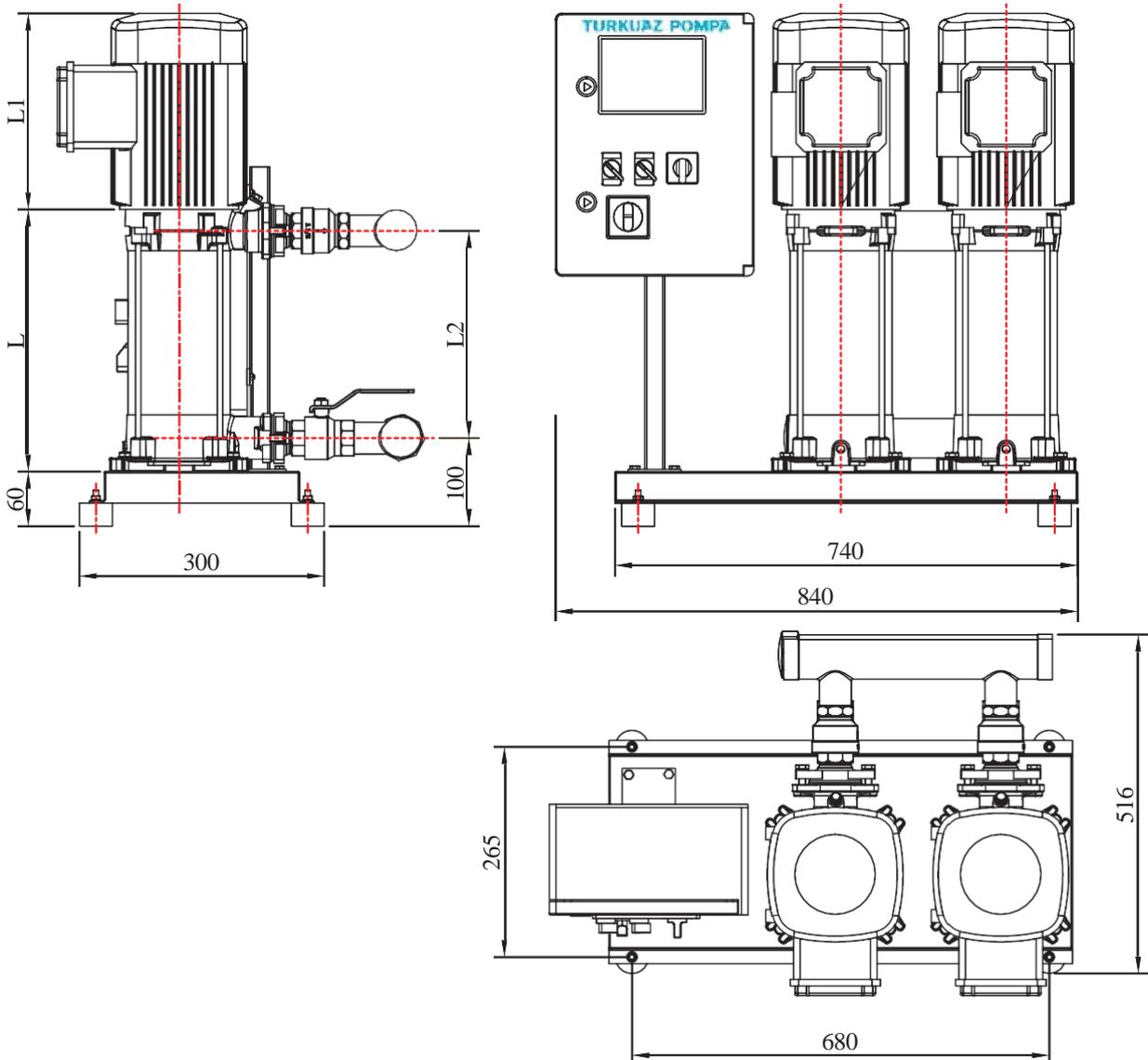
## • TPH 200 SERIES TWO PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
2xTPH 200-5	225	280	207	1 1/2"	1 1/2"
2xTPH 200-6	253	280	235		
2xTPH 200-7	281	315	263		
2xTPH 200-8	309	315	291		
2xTPH 200-9	337	315	319		



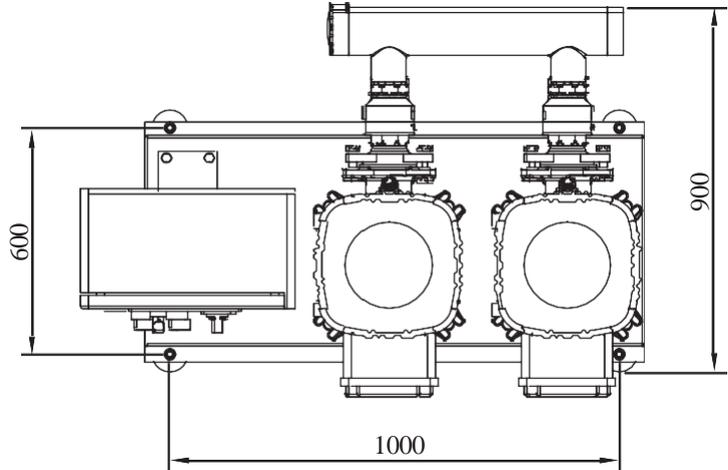
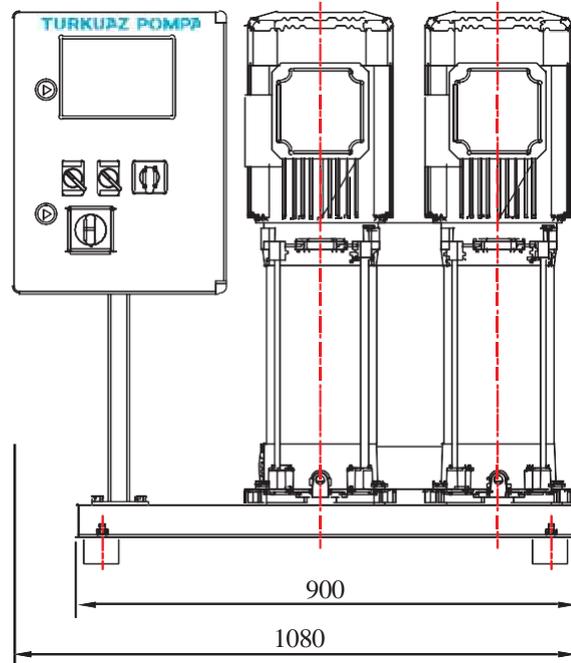
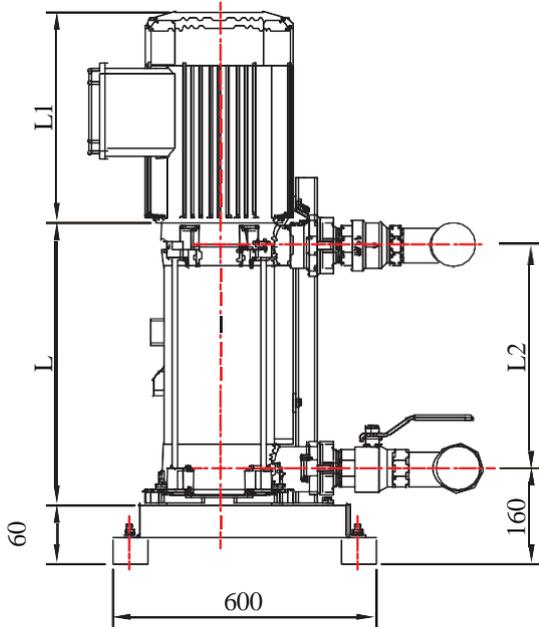
## • TPH 300-400 SERIES TWO PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
2xTPH 300-4	300	300	216,5	2 "	2 "
2xTPH 300-5	333	300	249,5		
2xTPH 300-6	366	300	282,5		
2xTPH 300-7	399	300	315,5		
2xTPH 400-4	300	300	216,5	2 "	2 "
2xTPH 400-5	333	300	249,5		
2xTPH 400-6	366	300	282,5		
2xTPH 400-7	399	300	315,5		



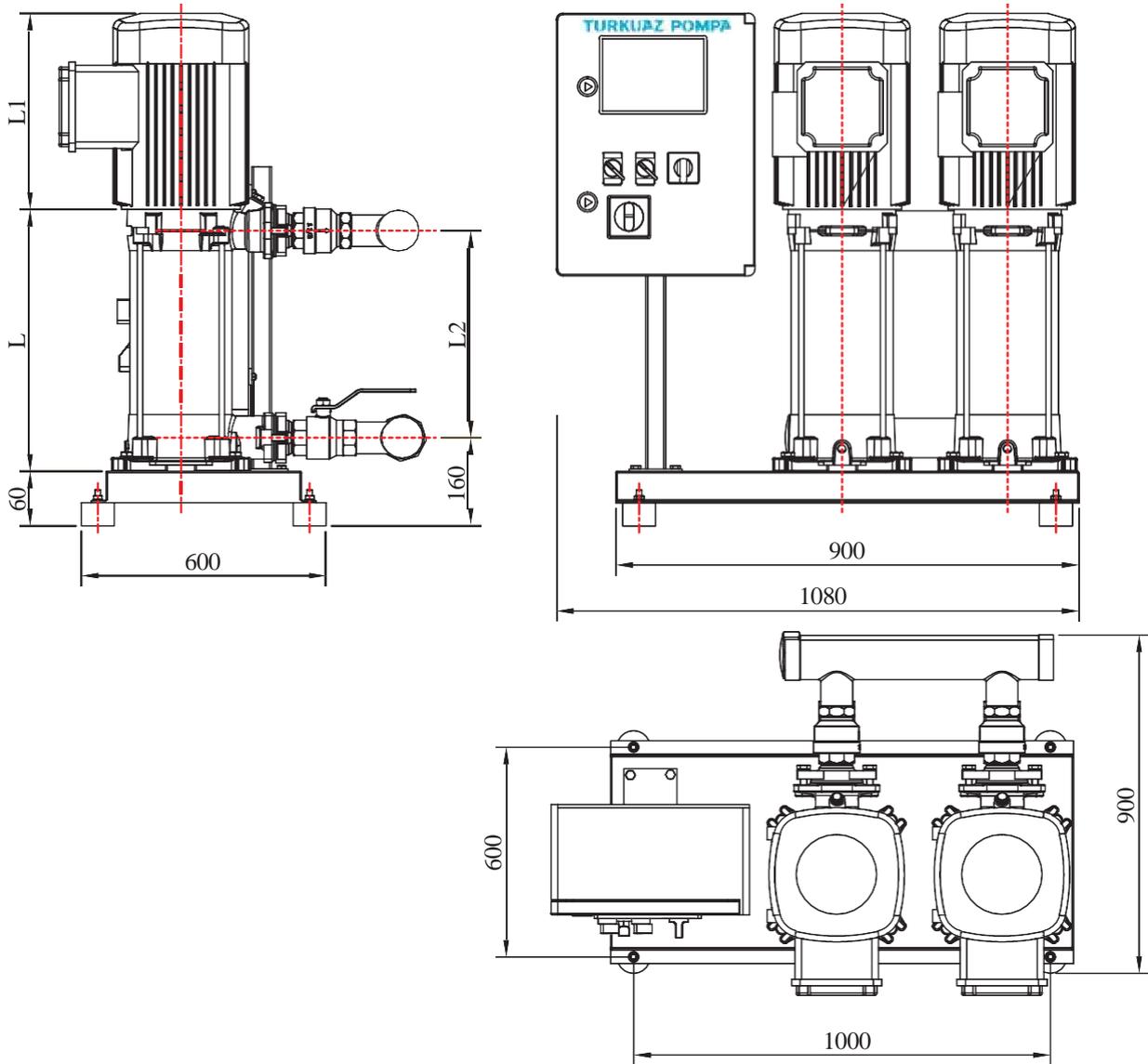
## • TPH 500 SERIES TWO PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
2xTPH 500-4	415	435	315	3"	2 1/2"
2xTPH 500-5	465	435	365		
2xTPH 500-6	510	450	410		
2xTPH 500-7	560	500	460		
2xTPH 500-8	605	555	505		
2xTPH 500-9	655	555	555		
2xTPH 500-10	705	555	605		



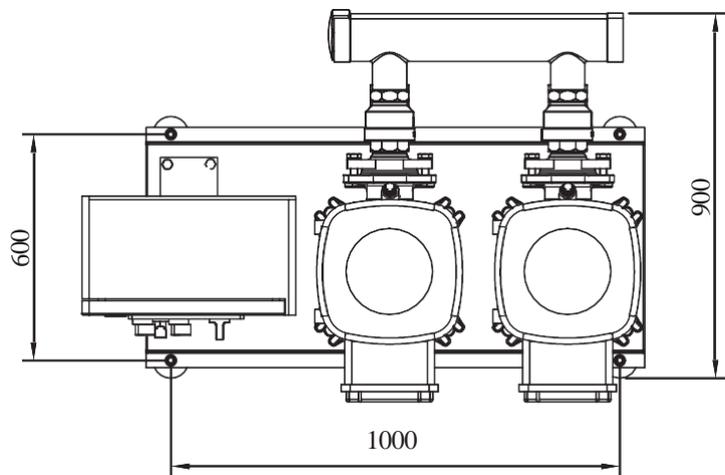
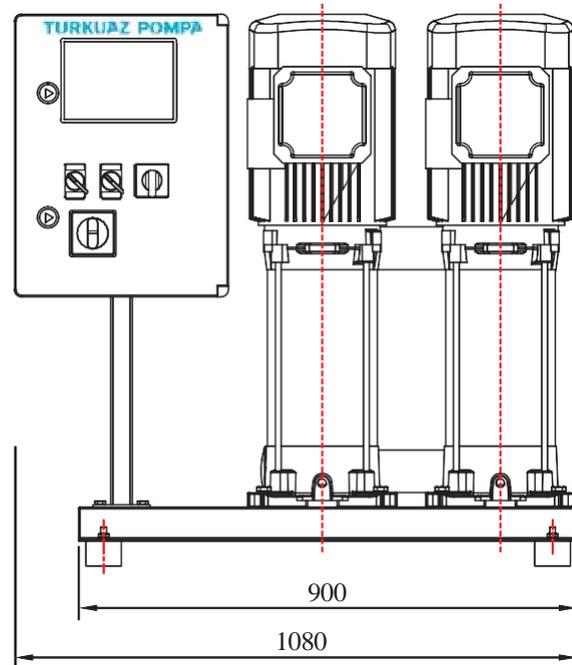
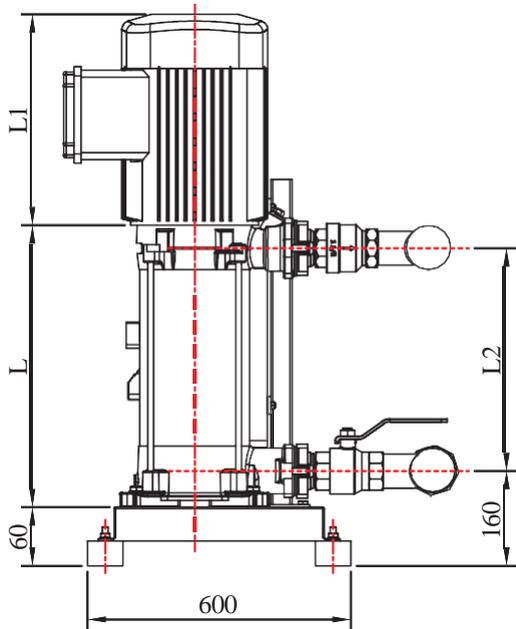
## • TPH 550 SERIES TWO PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
2xTPH 550-3	360	440	260	3"	2 1/2"
2xTPH 550-4	415	500	315		
2xTPH 550-5	465	540	365		
2xTPH 550-6	510	540	410		
2xTPH 550-7	560	620	460		
2xTPH 550-8	605	630	505		



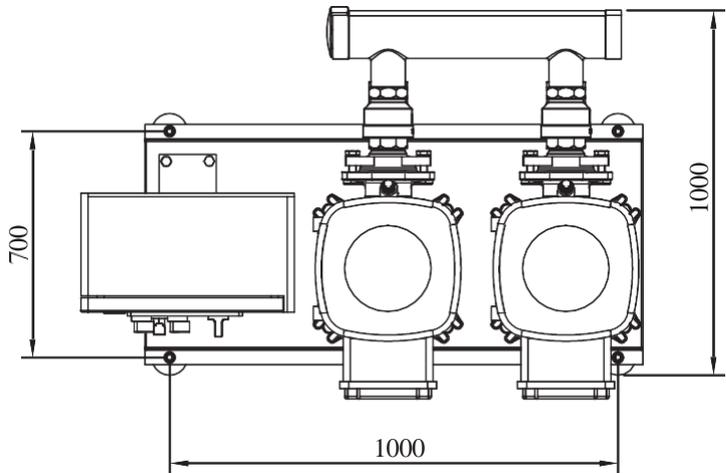
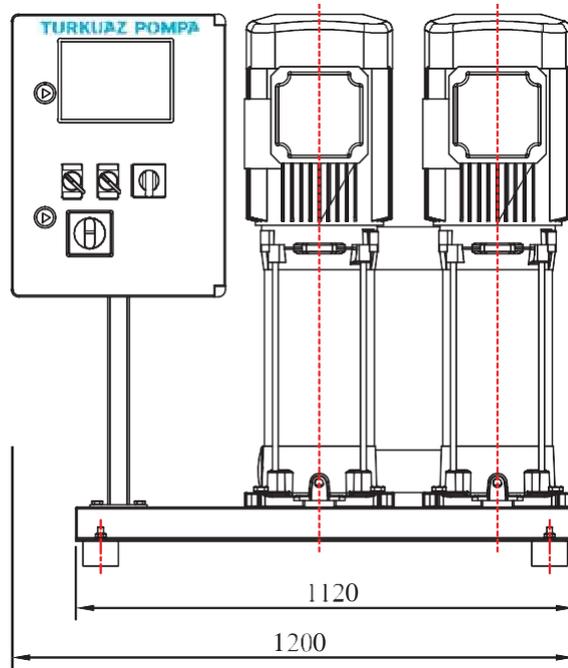
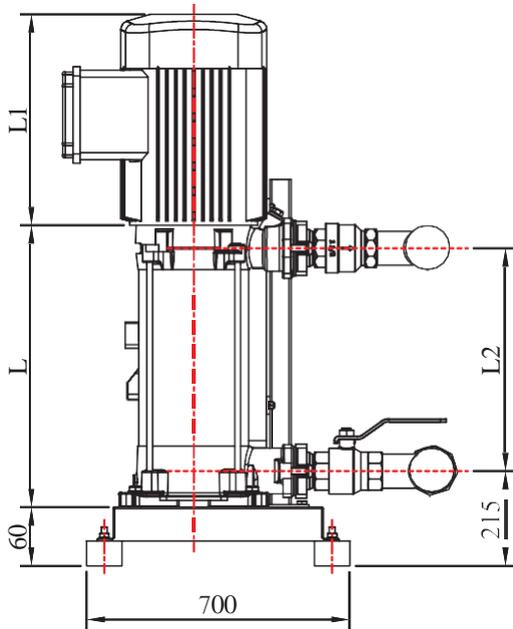
## • TPH 600 SERIES TWO PUMP BOOSTER BASE MEASUREMENTS



PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
2xTPH 600-3	365	440	265	3"	2 1/2"
2xTPH 600-4	415	500	315		
2xTPH 600-5	465	540	365		
2xTPH 600-6	510	540	410		
2xTPH 600-7	560	620	460		
2xTPH 600-8	605	630	505		



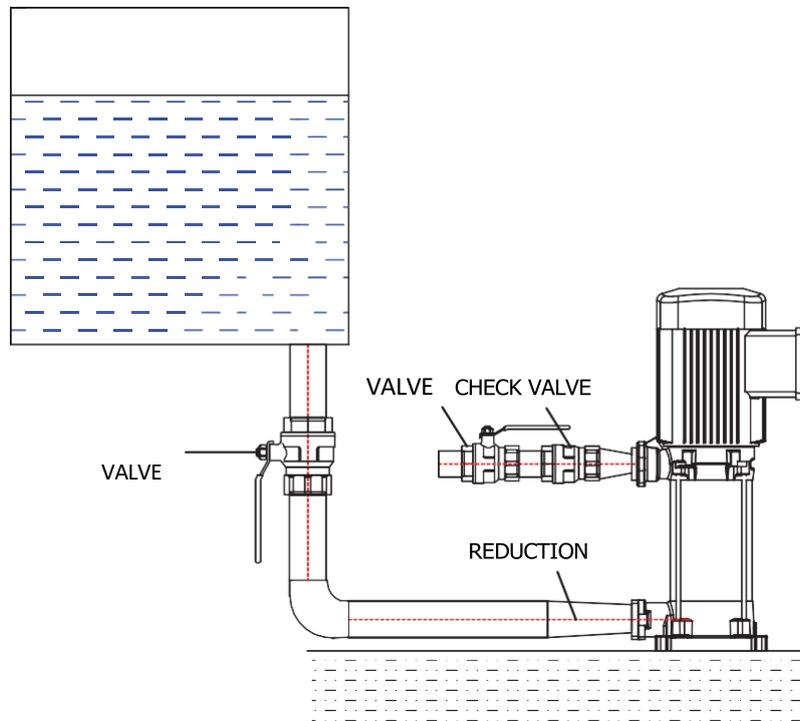
## • TPH 700 SERIES TWO PUMP BOOSTER BASE MEASUREMENTS



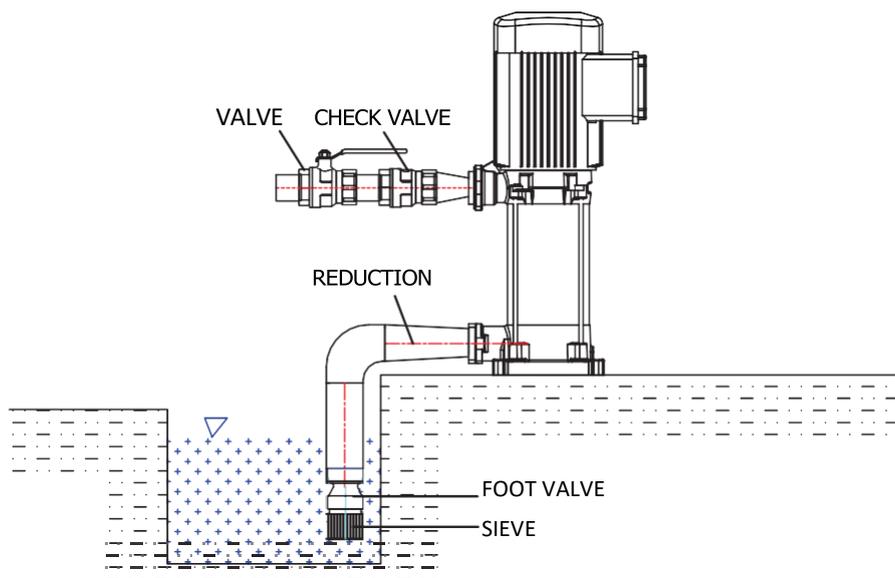
PUMP TYPE	L	L1	L2	COLLECTOR	
				SUCTION	DISCHARGE
2xTPH 700-3	245	865	145	DN 100	3"
2xTPH 700-4	319	873	219		
2xTPH 700-5	393	873	293		
2xTPH 700-6	467	917	367		



## • SCHEMATIC INSTALLATION EXAMPLES



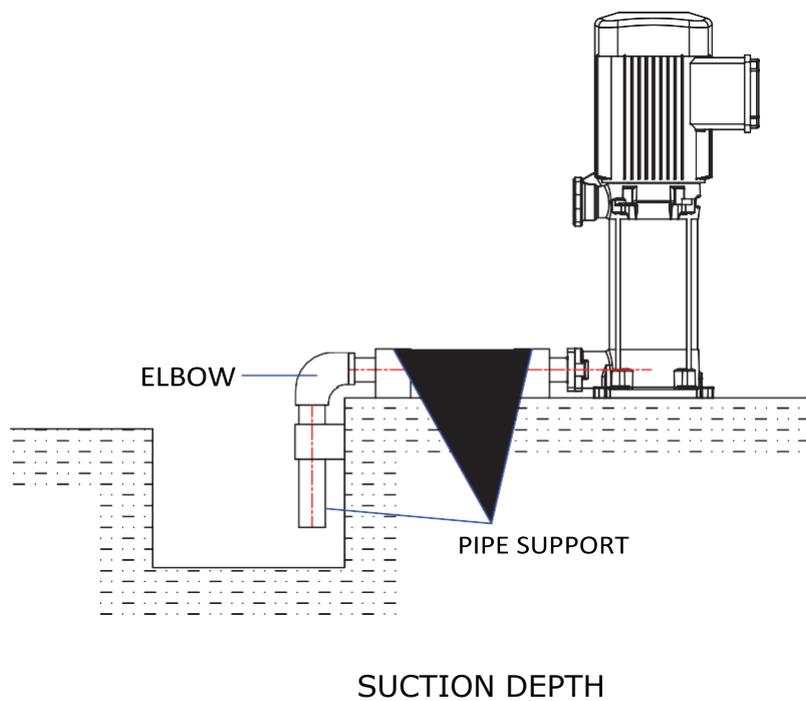
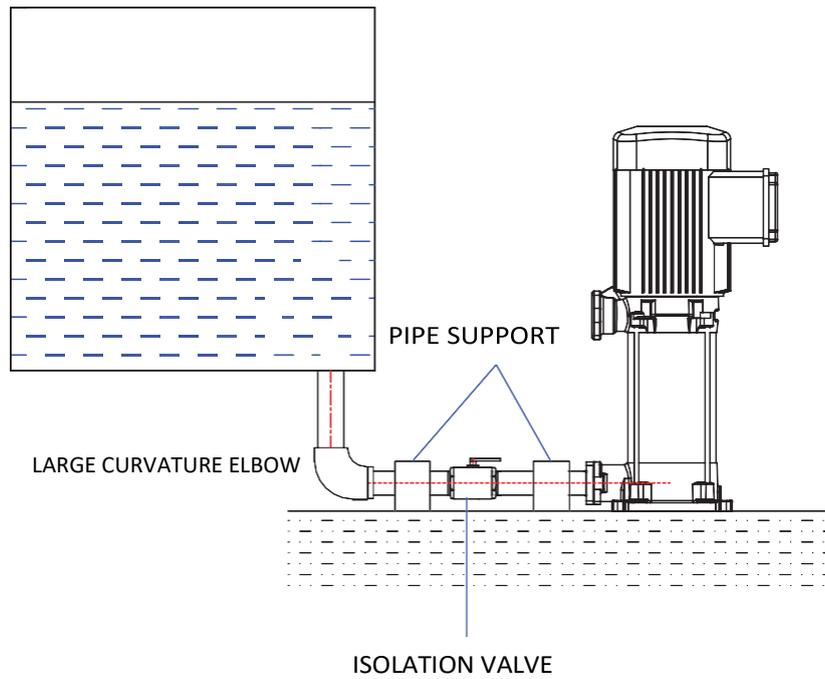
SUCTION HEIGHT



SUCTION DEPTH

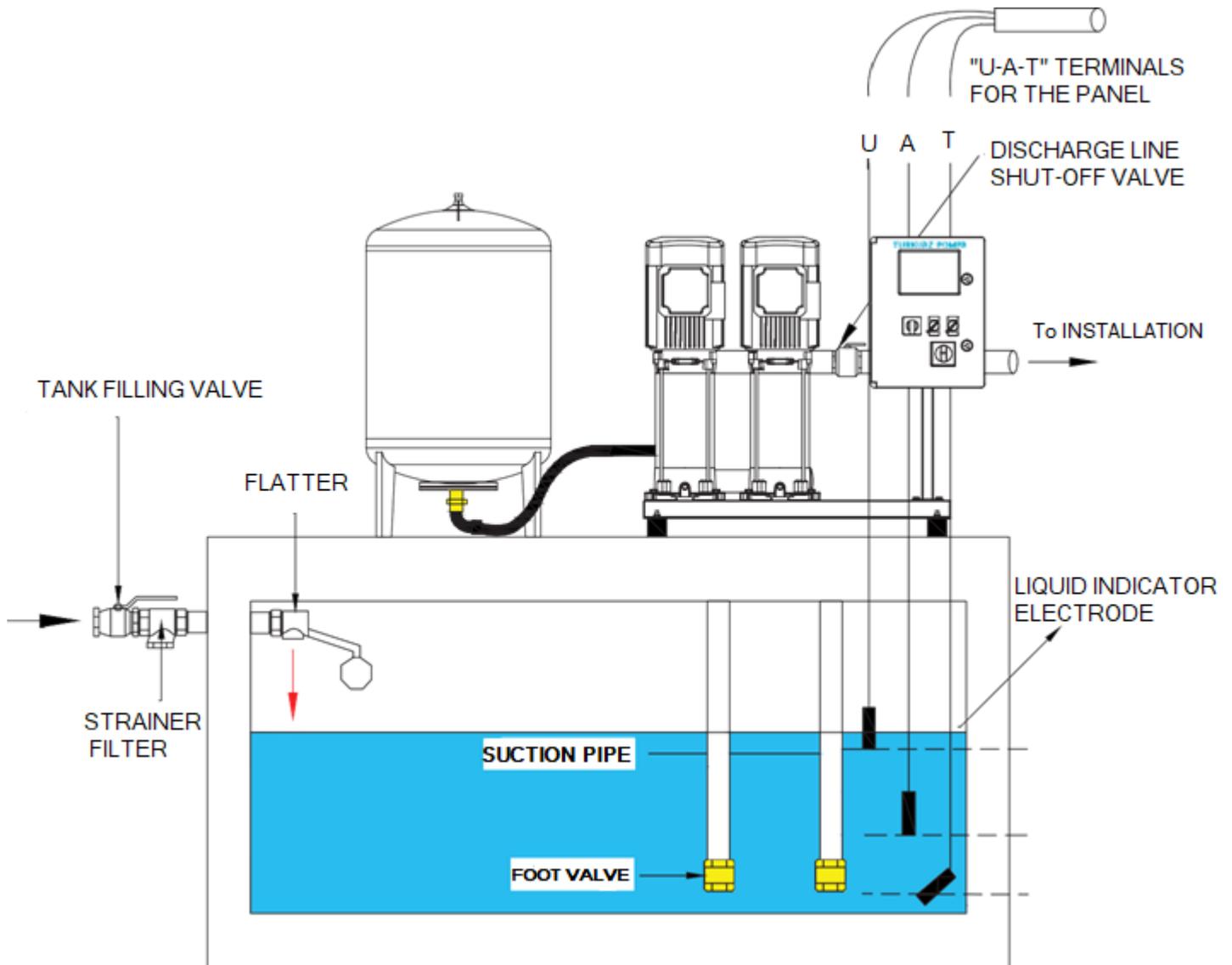


## • SCHEMATIC INSTALLATION EXAMPLES



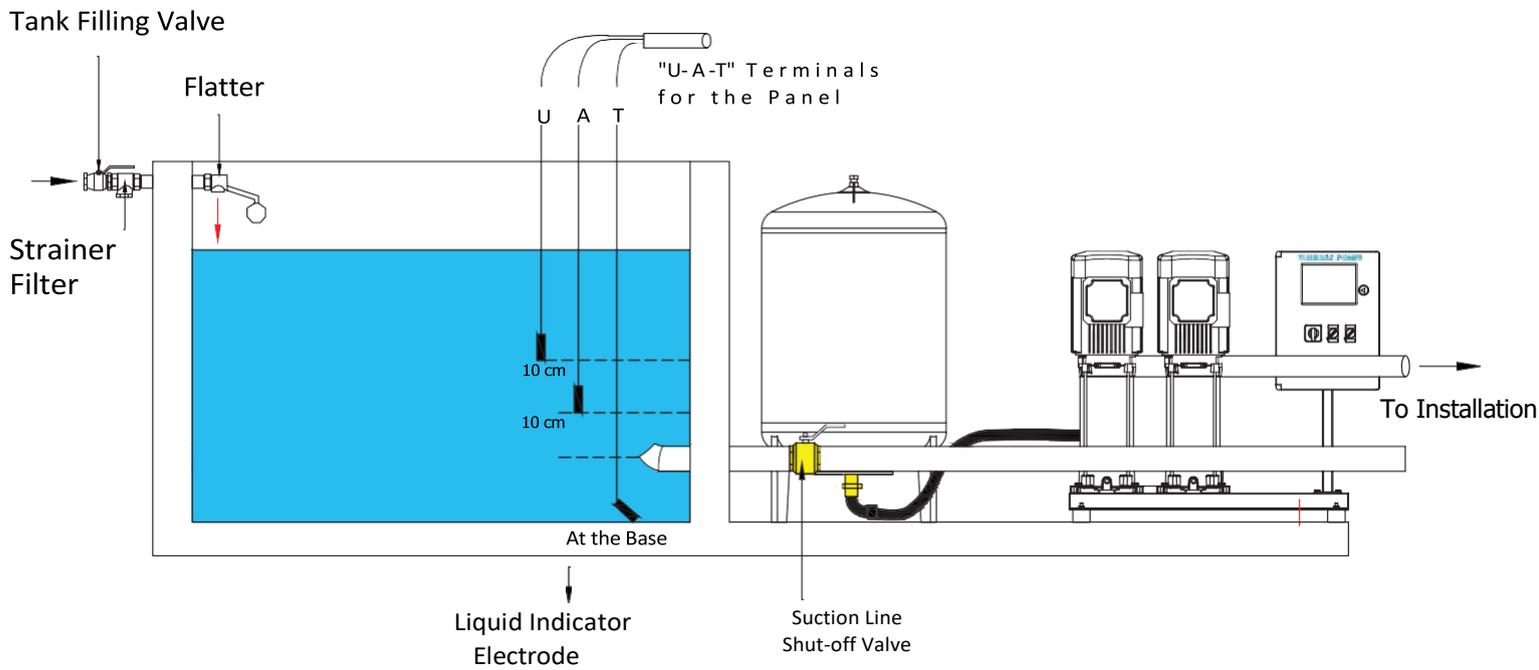


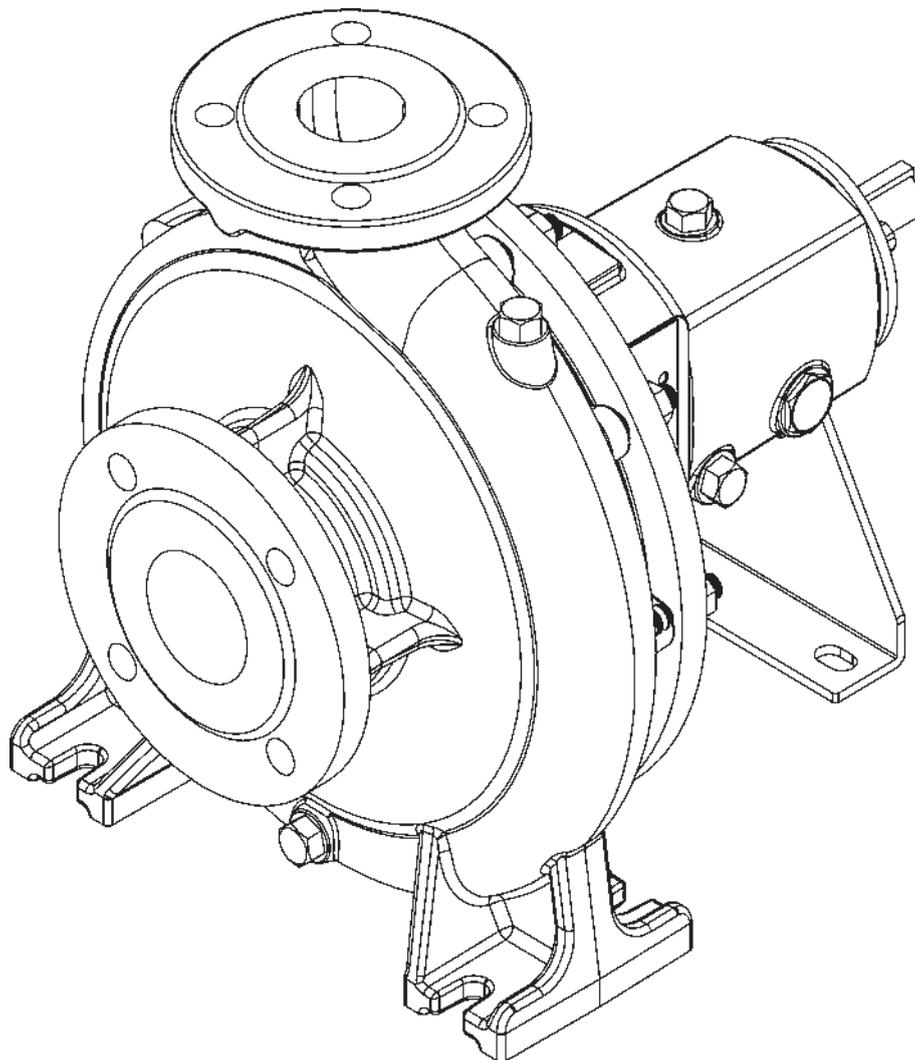
## • BOOSTER INSTALLATION SCHEMATIC DRAWING





## • BOOSTER INSTALLATION SCHEMATIC DRAWING





**HORIZONTAL SHAFT, SINGLE STAGE CENTRIFUGAL PUMPS**

**TNSP SERIES**

**TURKUAZ POMPA**

www.turkuazpompa.com



## • TNSP SERIES PUMP BOOSTER DESCRIPTION

- TNSP series is suitable for pumping liquids that do not contain corrosive substances and large solid particles.
- Single-stage, horizontal shaft, volute body, end suction, closed impeller centrifugal pumps.
- There is a coupling connection between the motor shaft and the pump shaft.
- Suction discharge flanges comply with TS EN 1092-2/PN 16 standard
- Soft packing is used in mass production for sealing. Mechanical seal can be applied depending on the intended use and optionally.
- Thanks to its easily removable design, the pump shaft, bearing housing and seal application seat can be dismantled without removing the volute from the installation.
- The direction of rotation is counterclockwise when looked from the suction side.
- Bearing housings must be lubricated from outside. The oil indicator is located in the bearing housing.

## • PUMP NAMING

**TNSP 65 - 250**

Pump **Name**

Discharge Flange **(DN)**

Impeller Nominal Diameter **(mm)**

## • STANDARD PRODUCTION

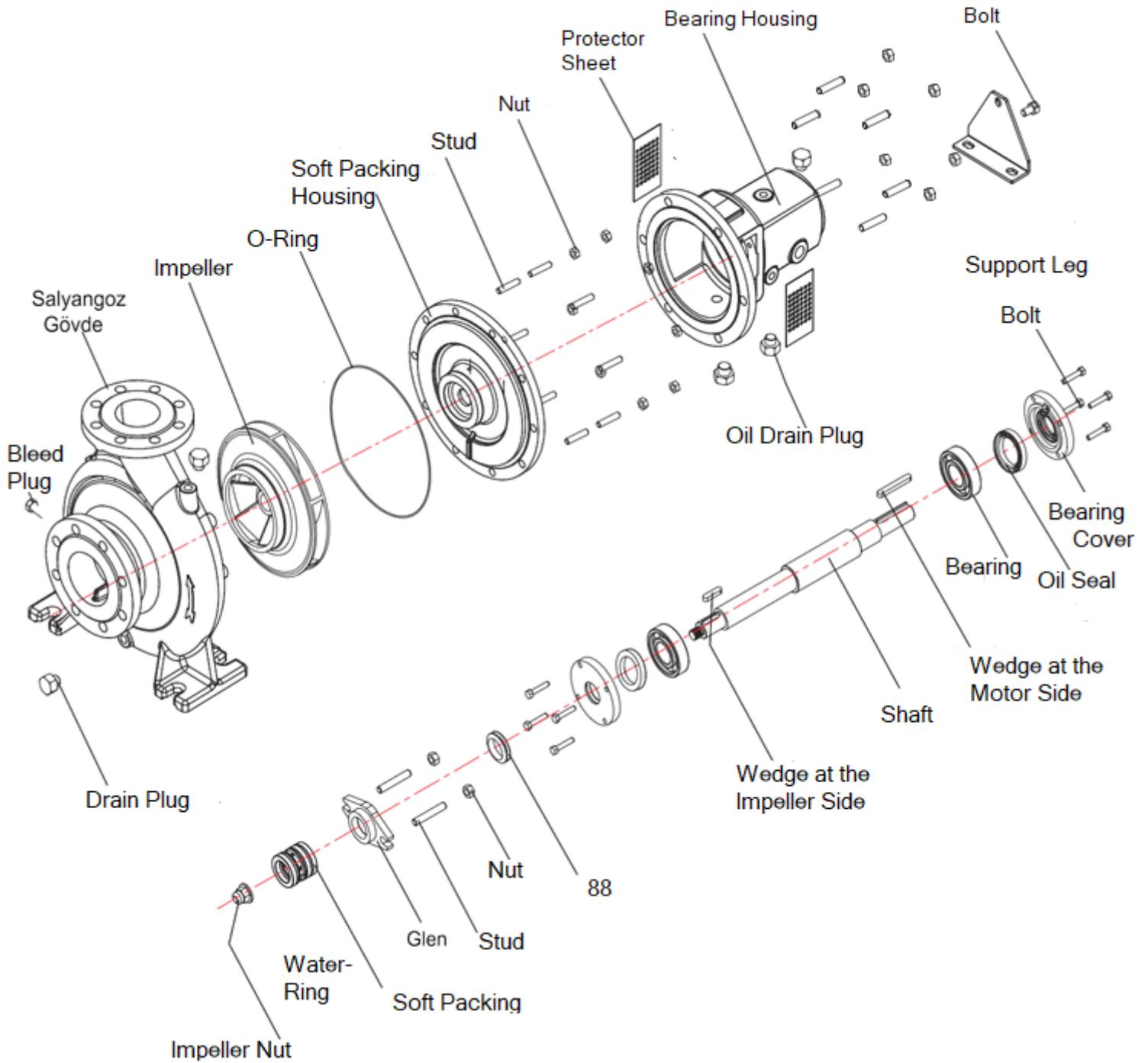
Part List	Material
Volute Body	GG25/0.6025
Seal Housing	GG25/0.6025
Bearing Housing	GG25/0.6025
Impeller	GG25/0.6025
Shaft	AISI 420/1.4021

## • SPECIAL PRODUCTION

- Pump material and seal may change depending on the density of the pumped liquid, operating temperature and pressure. The impeller material is produced in bronze according to the required standards.

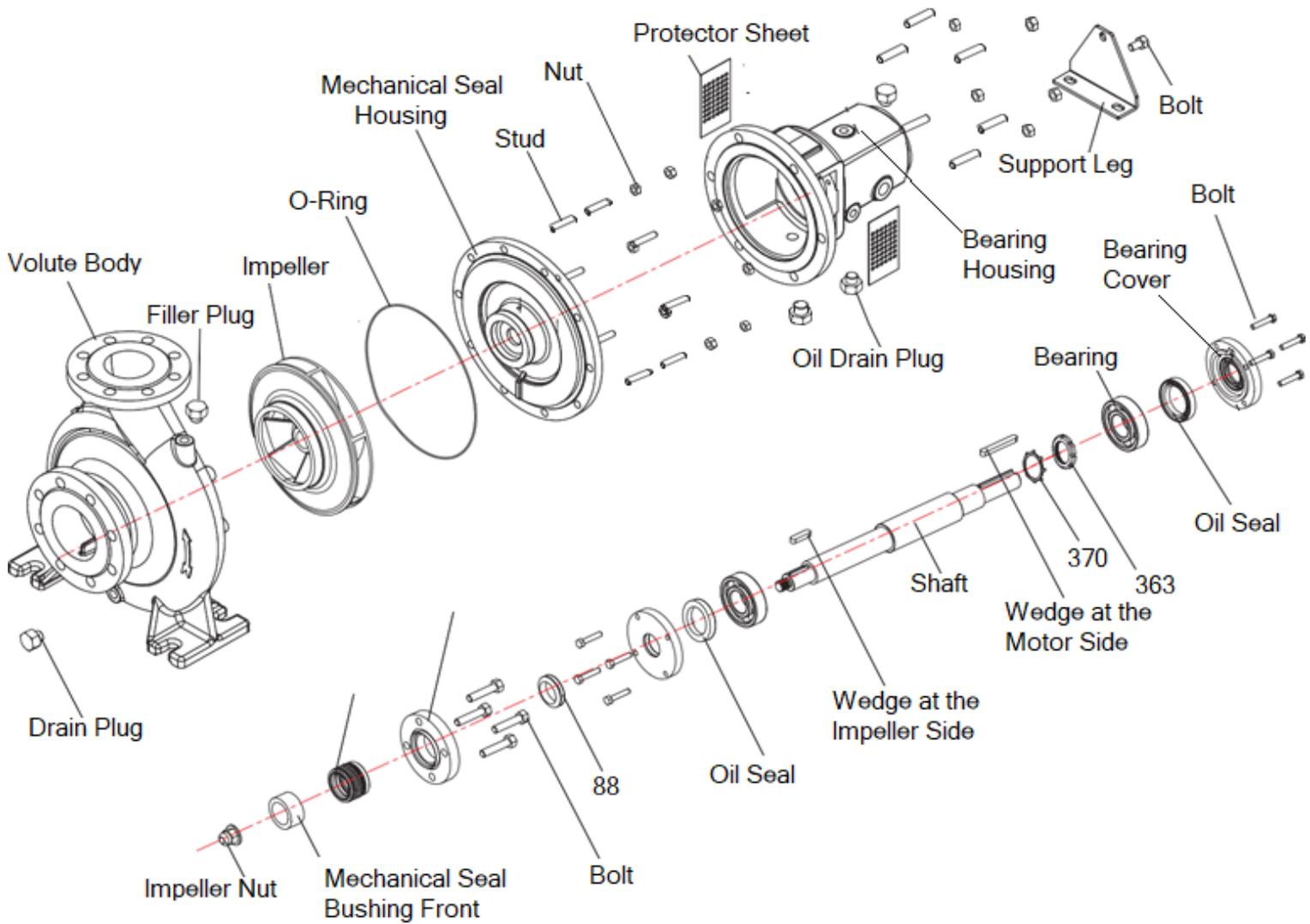


## • TNSP (SOFT PACKING) PUMP PARTS LIST





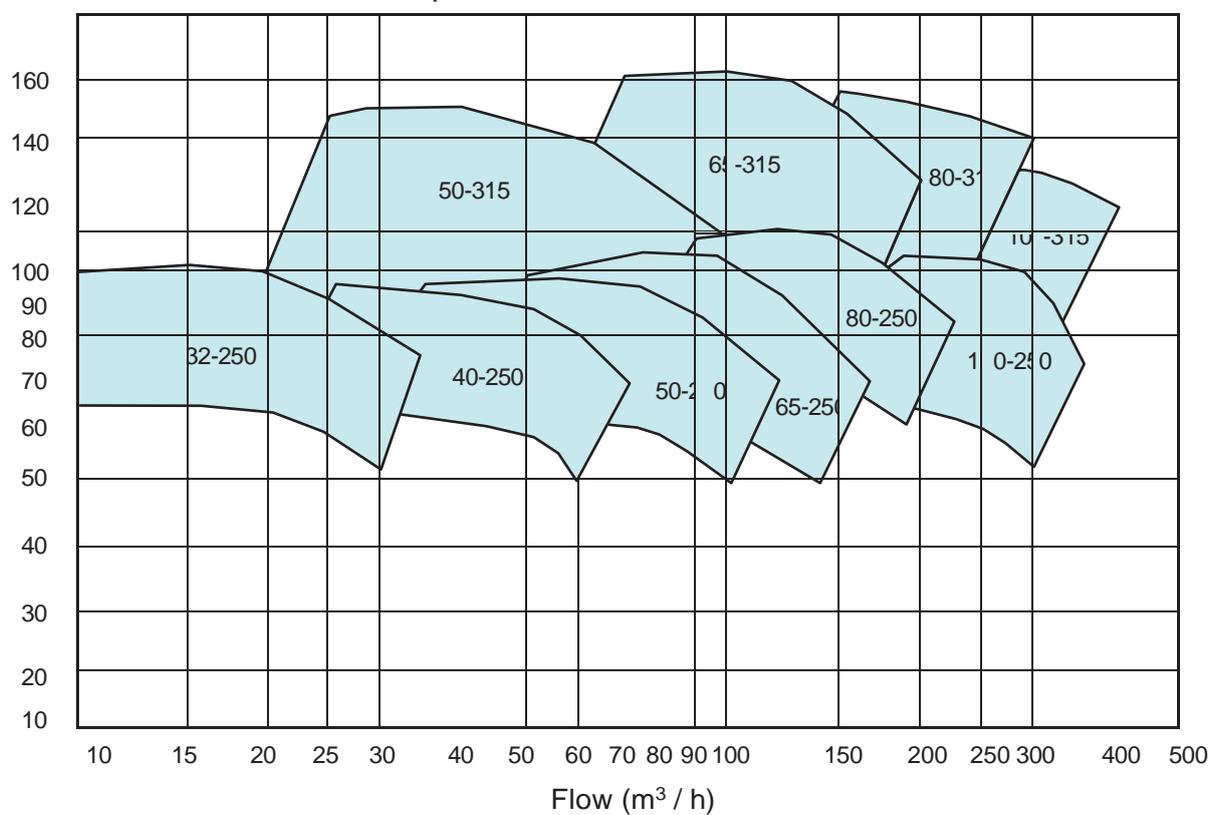
## • TNSP (MECHANICAL SEAL) PUMP PARTS LIST





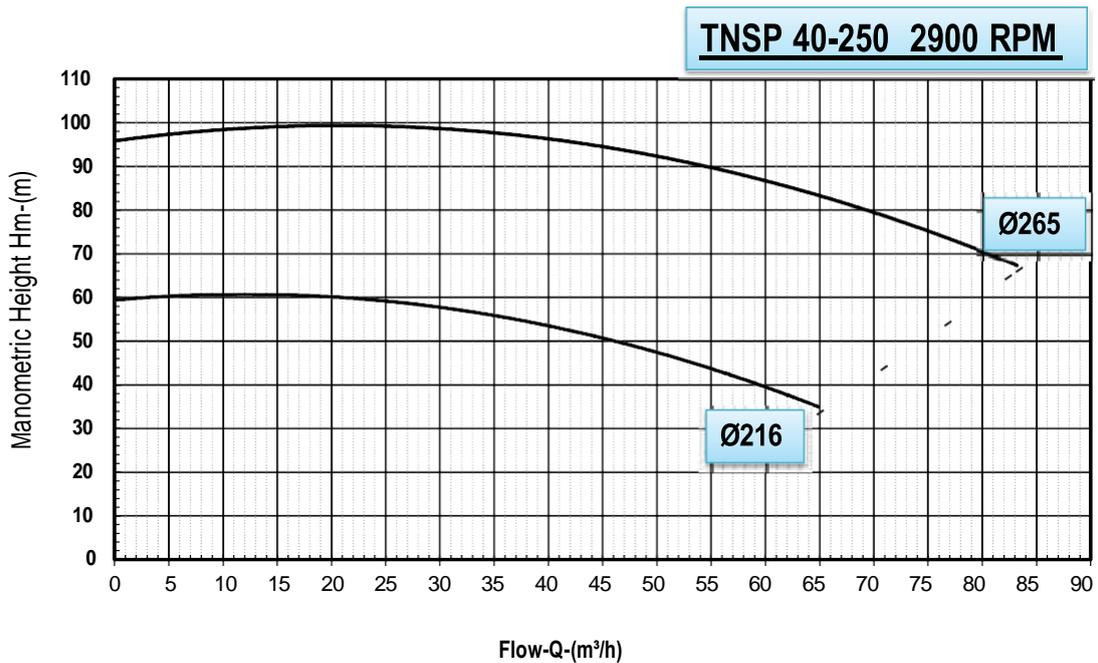
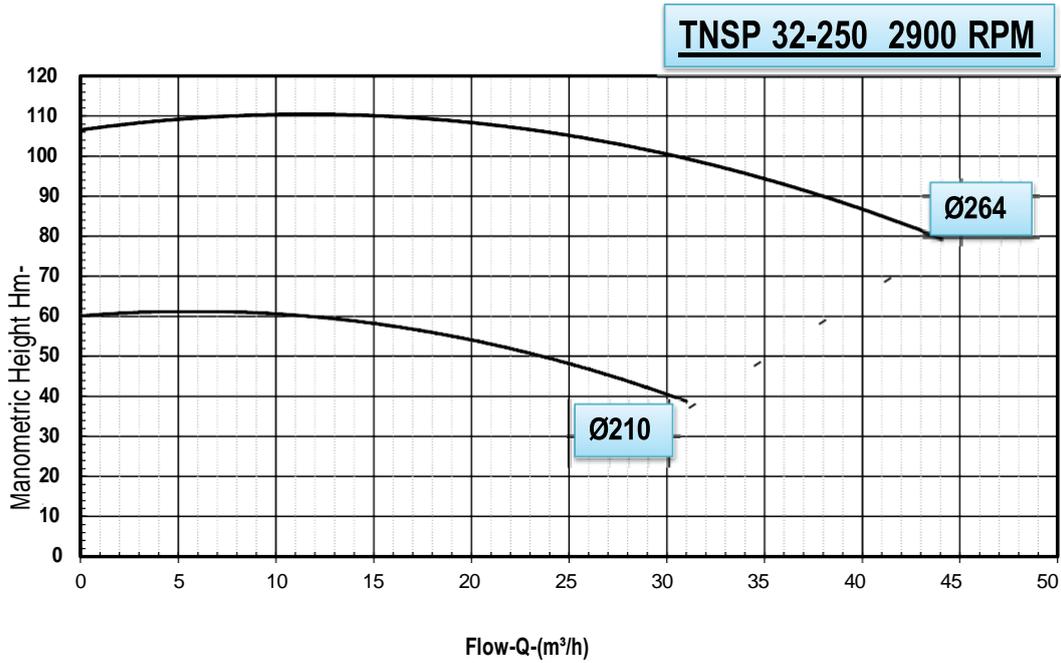
## • TNSP SERIES PUMP WORKING AREAS

WORKING AREA: 2900 rpm



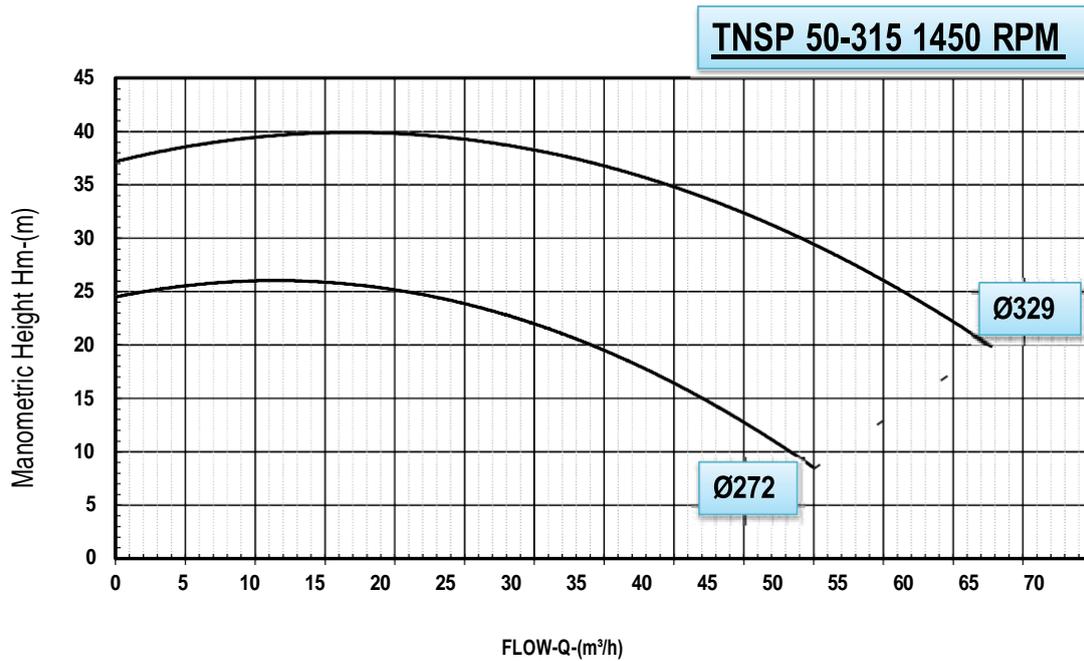
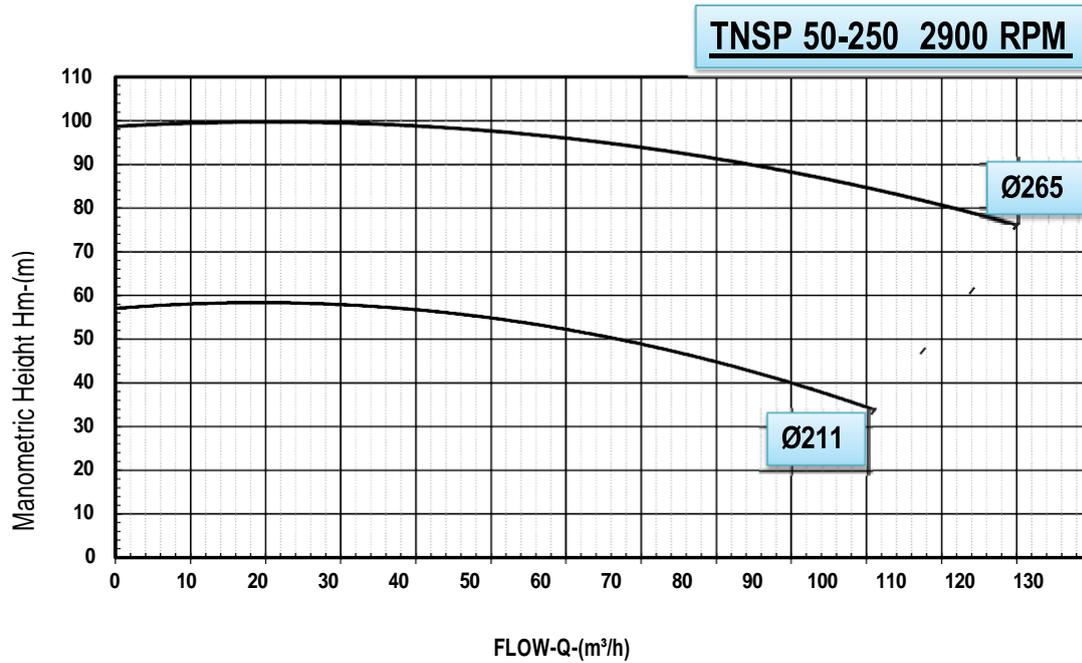


## TNSP SERIES CHARACTERISTIC PERFORMANCE CURVES



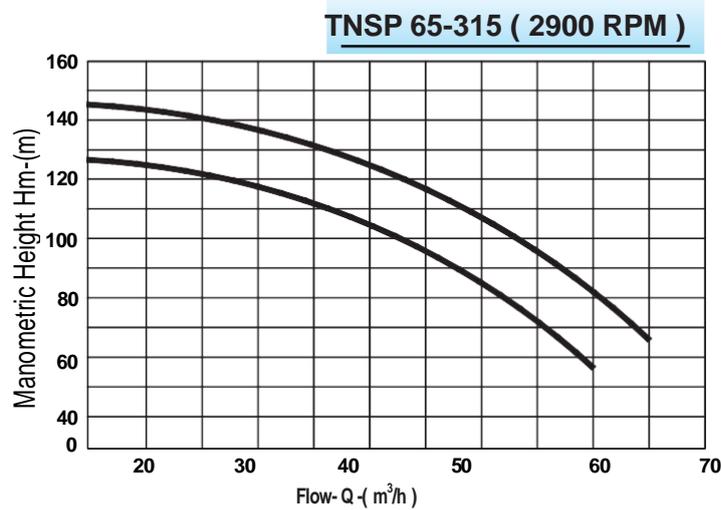
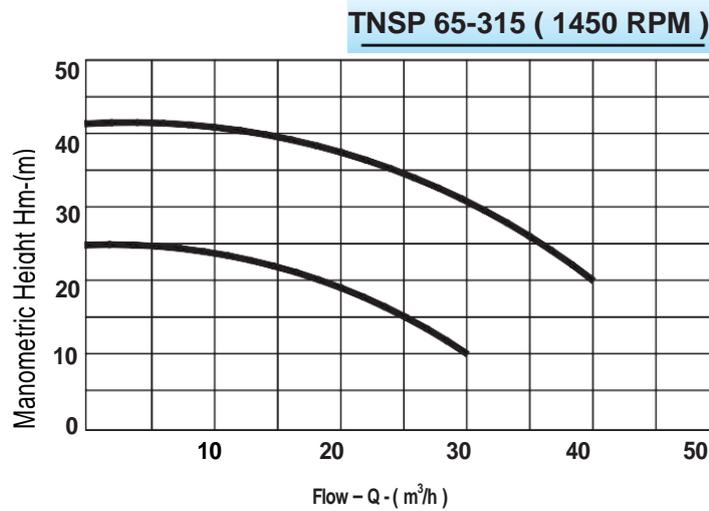
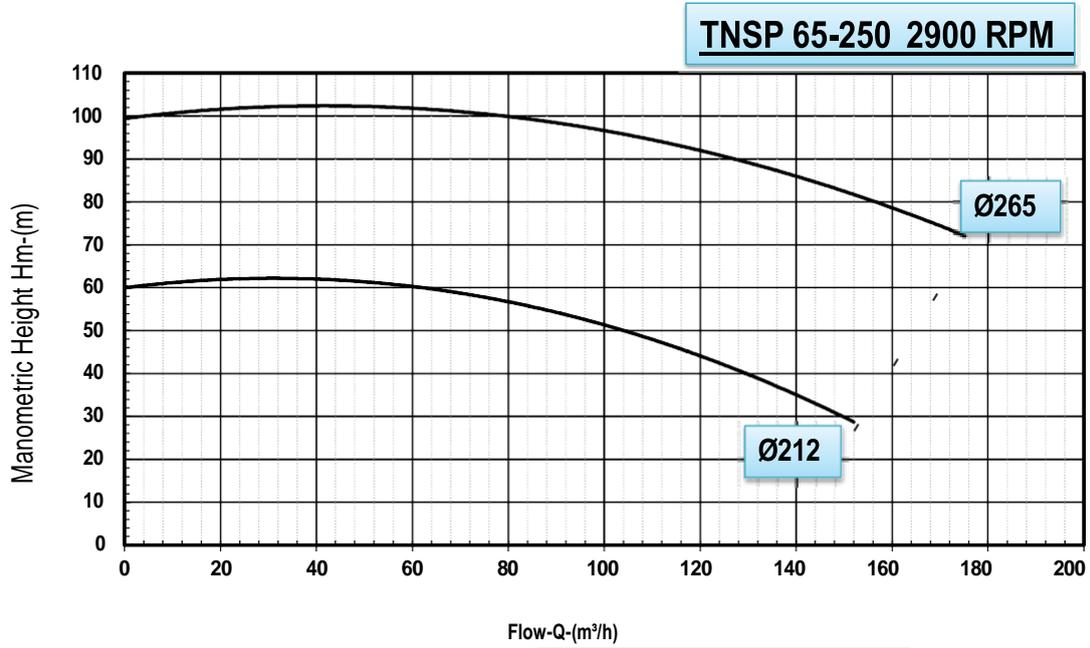


## • TNSP SERIES CHARACTERISTIC PERFORMANCE CURVES



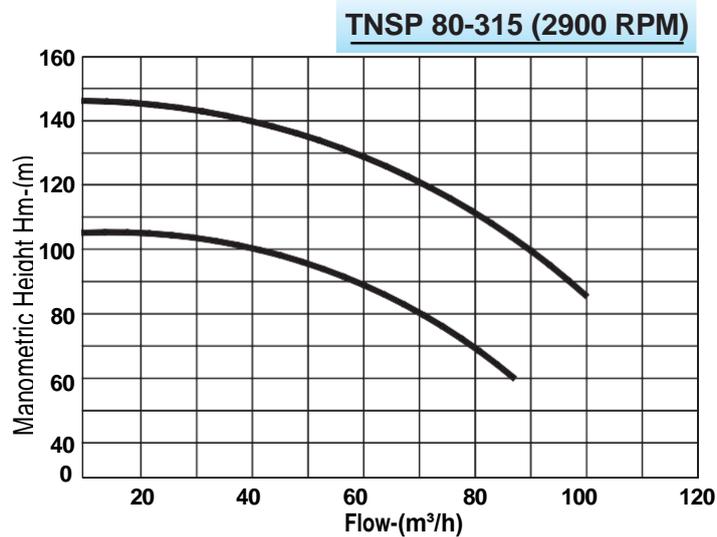
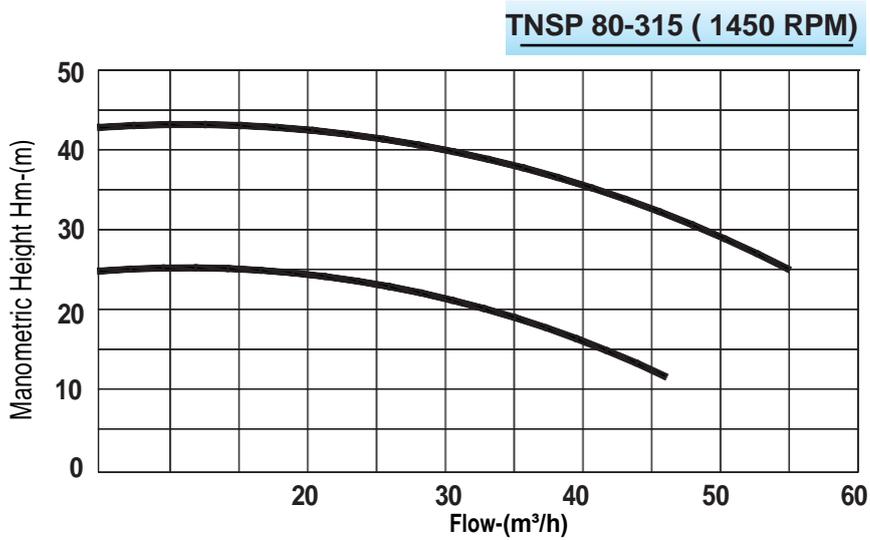
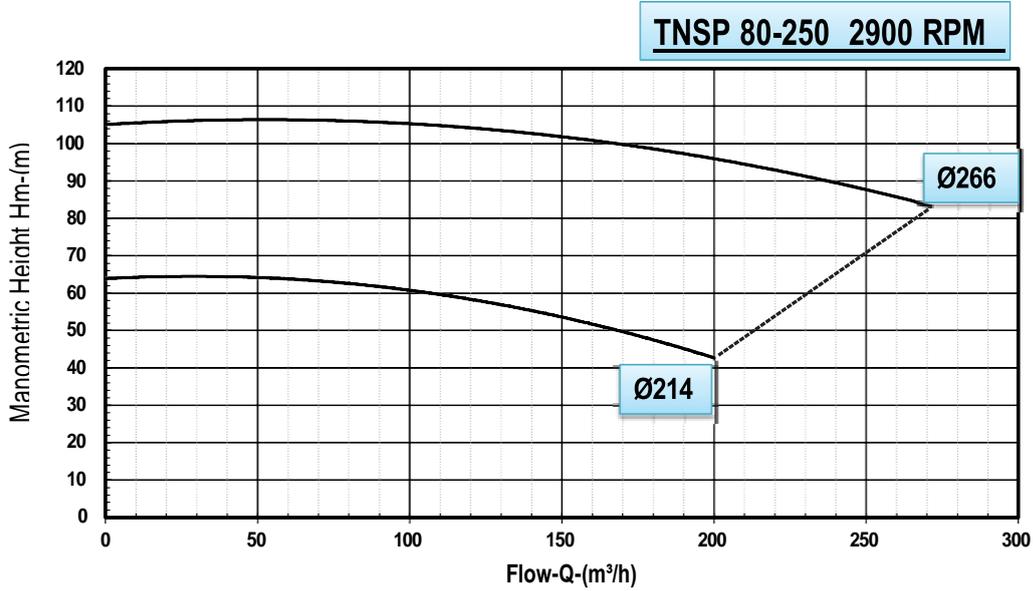


## • TNSP SERIES CHARACTERISTIC PERFORMANCE CURVES



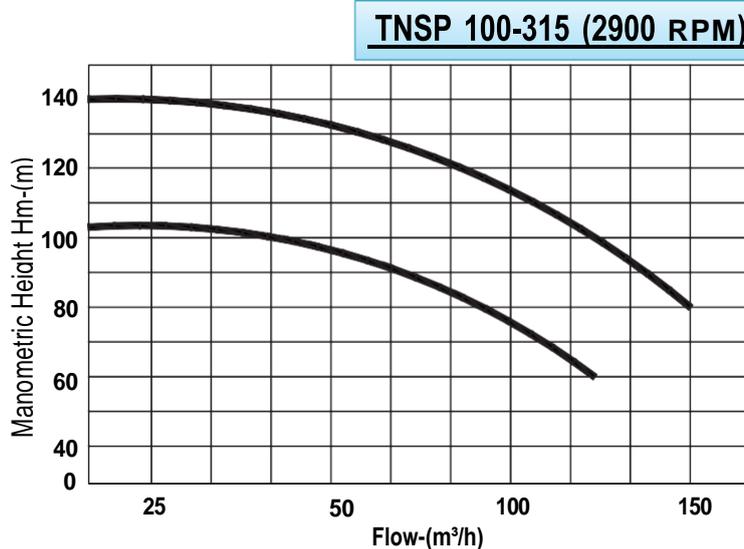
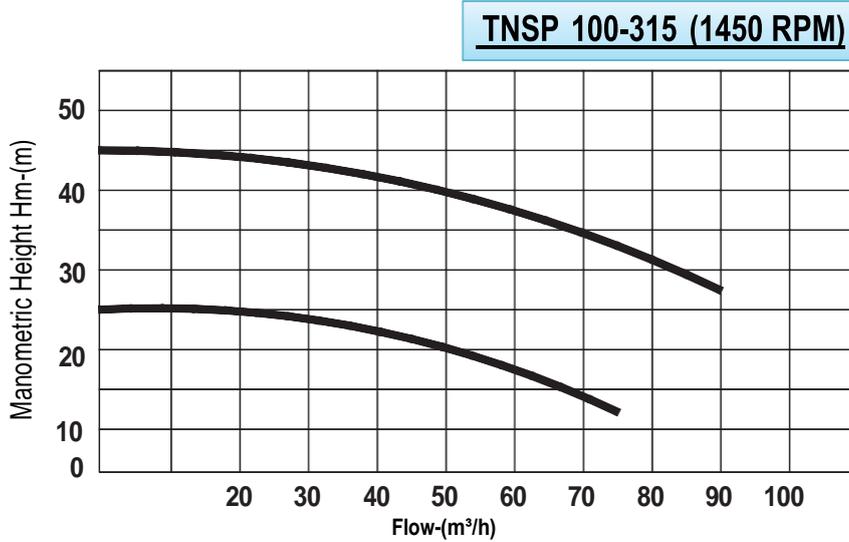
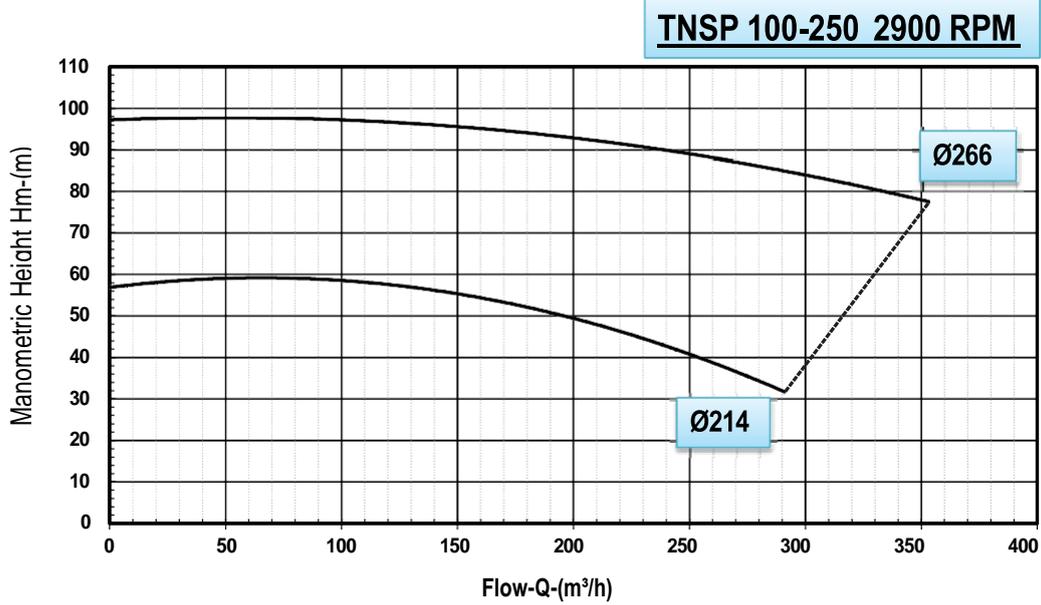


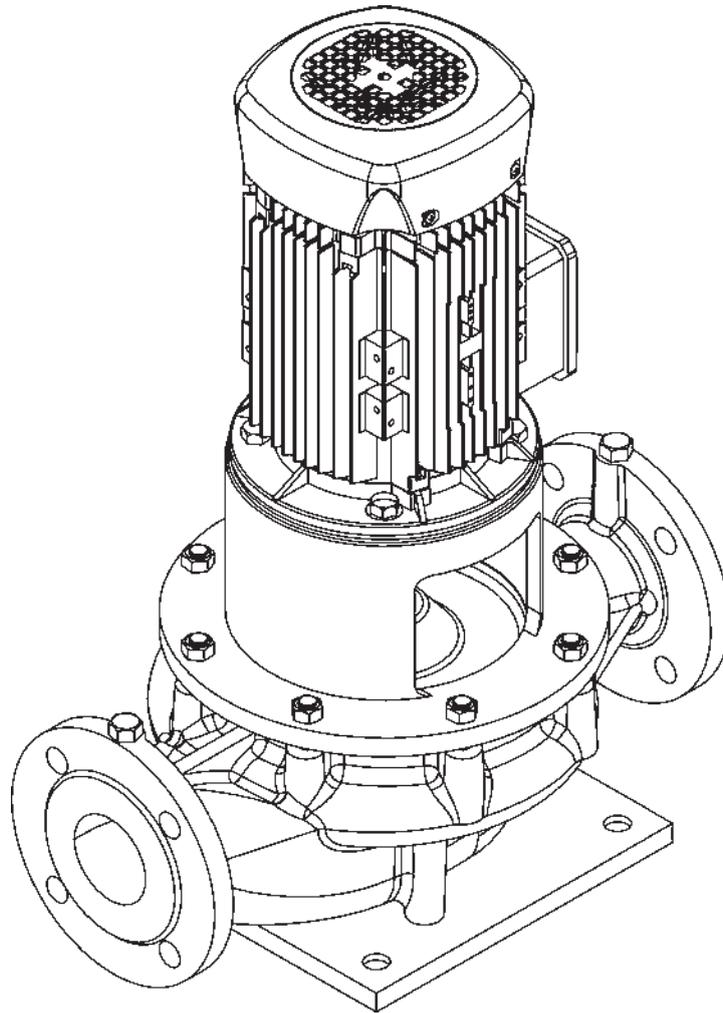
## • TNSP SERIES CHARACTERISTIC PERFORMANCE CURVES





## • TNSP SERIES CHARACTERISTIC PERFORMANCE CURVES





## VERTICAL SHAFT, SINGLE STAGE, IN-LINE PUMPS

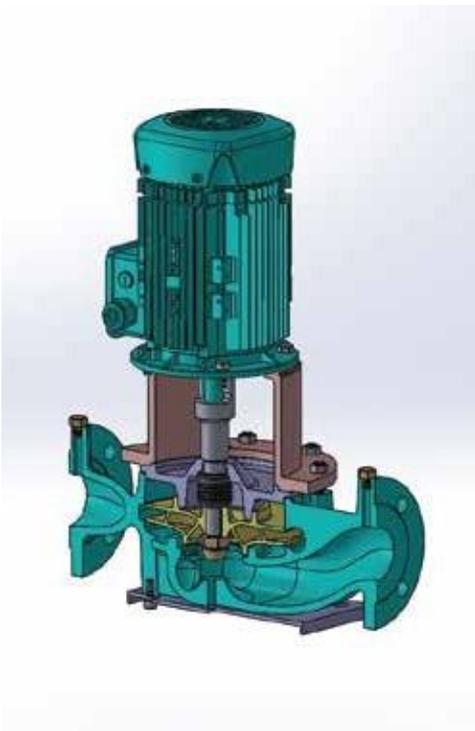
## TNLL SERIES

www.turkuazpompa.com

# TURKUAZ POMPA

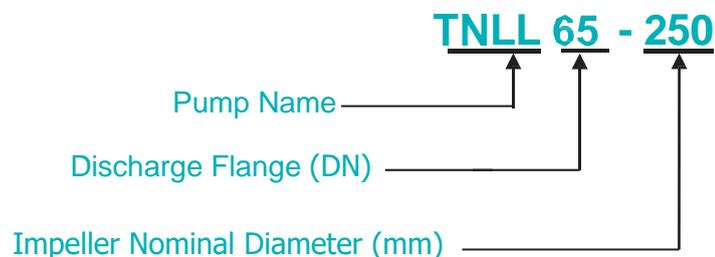


## • TNLL IN-LINE SERIES PUMP DESCRIPTION



- TNLL series pumps are suitable for pumping liquids that do not contain corrosive substances and large solid particles.
- They are single-stage, vertical shaft, volute body, can be connected to a straight pipe, end suction, centrifugal pumps with closed impellers.
- There is a connection between the motor shaft and the pump shaft or shaft pass or rigid coupling.
- Suction and discharge flanges comply with TS EN 1092-2/PN 16 standard.
- To prevent leakage, mechanical seals are used in mass production.
- Thanks to its easily removable design, the seal bearing, pump shaft and impeller can be removed without removing the volute from the installation.

## • PUMP NAMING



## • Standart Production

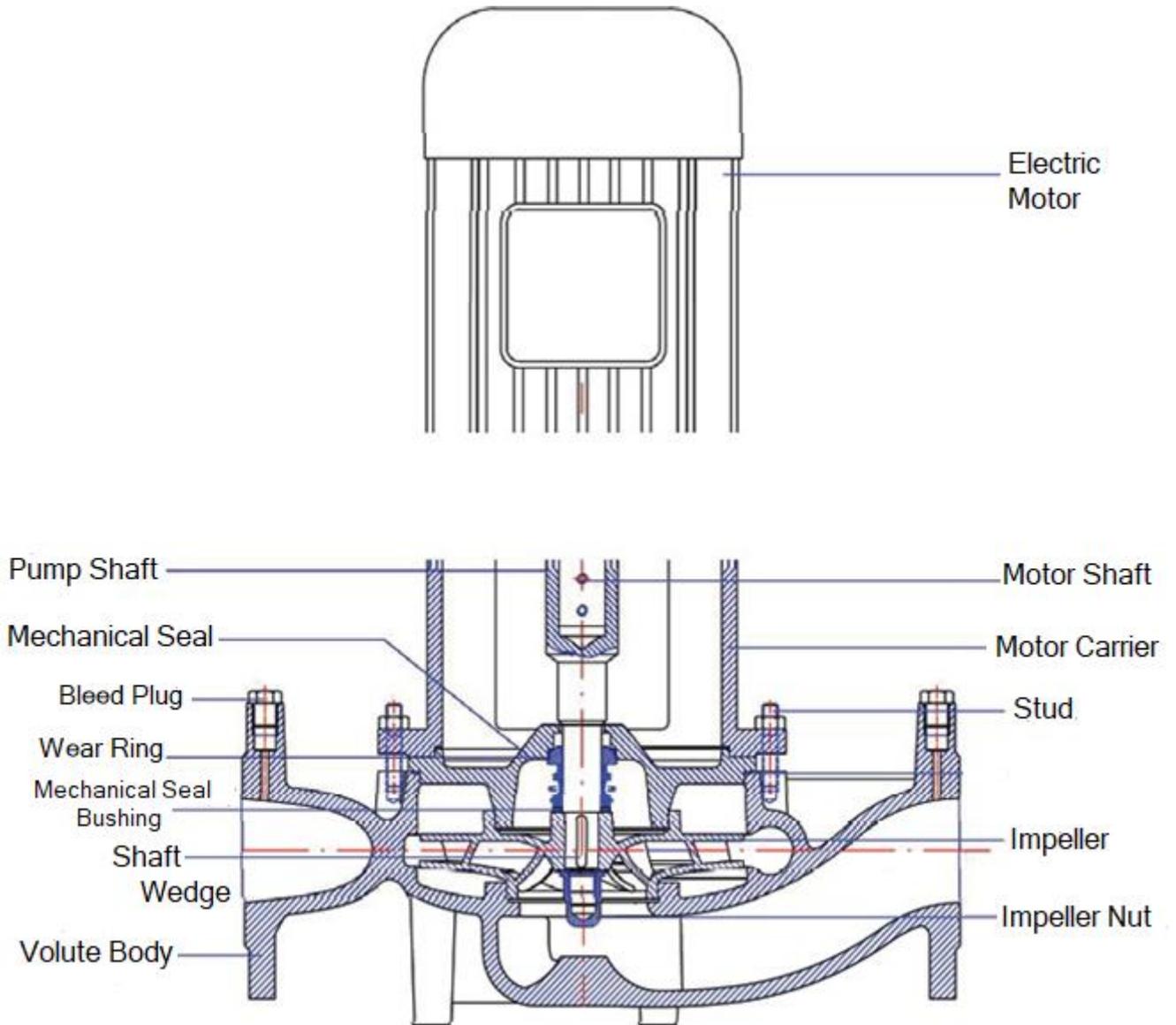
Part List	Material
Volute Body	GG25/0.6025
Seal Housing	GG25/0.6025
Impeller	GG25/0.6025
Shaft	AISI 420/1.4021

## • Special Production

- Pump materials may vary depending on the density of the pumped liquid, operating temperature and operating pressure. Optionally, the impeller material can be produced in Bronze.

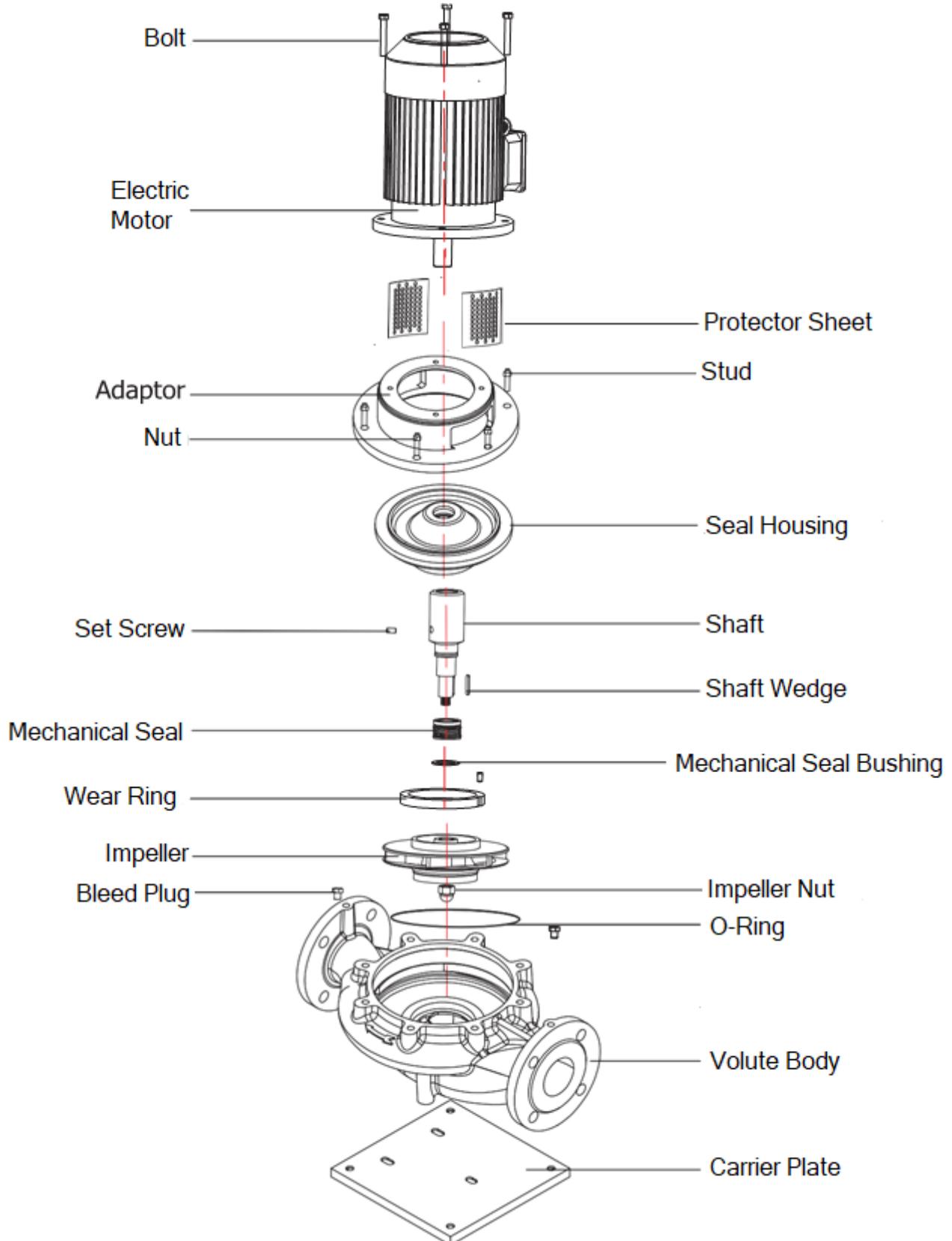


## • TNLL IN-LINE SERIES PUMP PART LIST



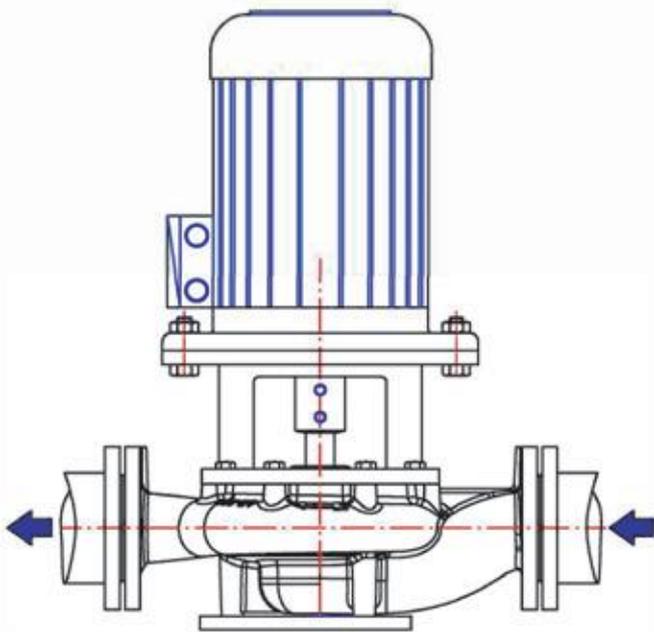


## • TNL IN-LINE SERIES INSERT SHAFT APPLICATION



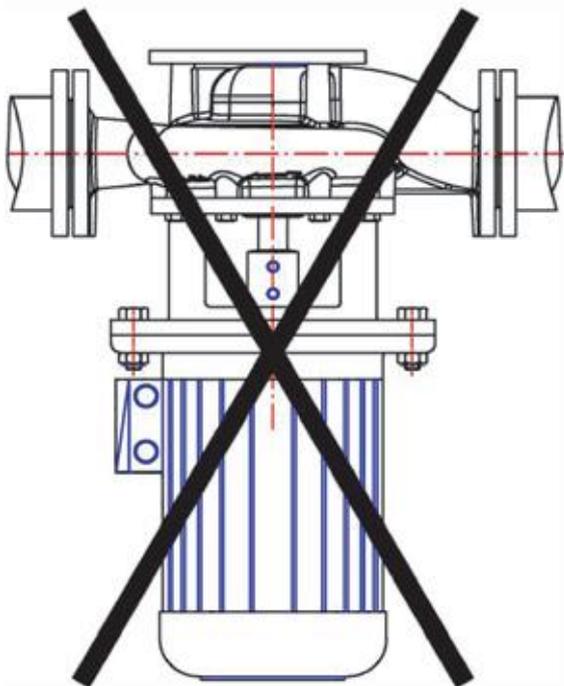
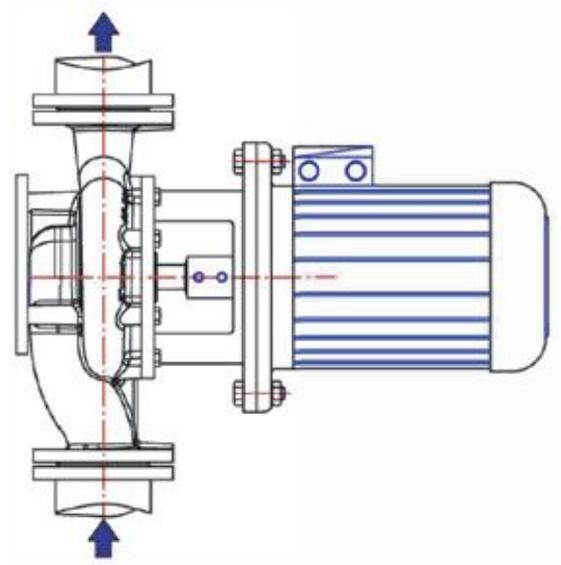


## • TNLL IN-LINE INSTALLATION METHODS



\*It is the standard installation method. When making pipe connections, it should be paid attention to the suction-discharge direction.

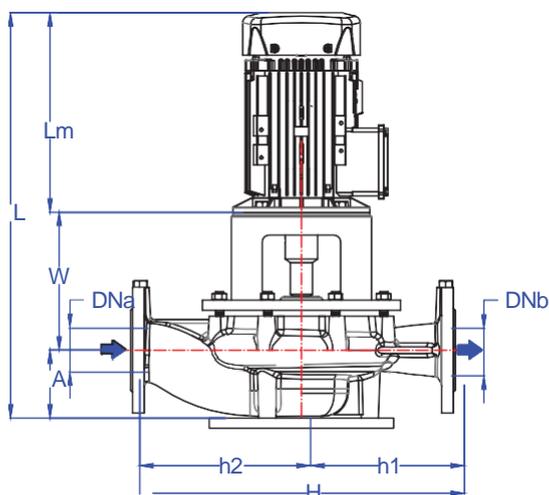
\*Installing on a vertical pipe as shown in the figure should be consulted to Turkuaz Pump



\*The engine should never The Motor should never be mounted upside down.

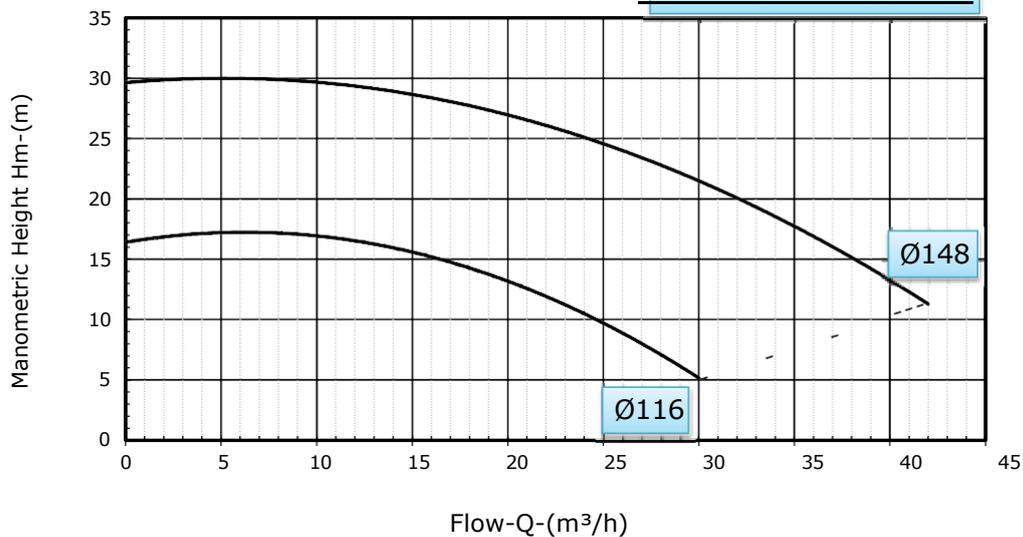


## • TNLL 40-125 IN-LINE



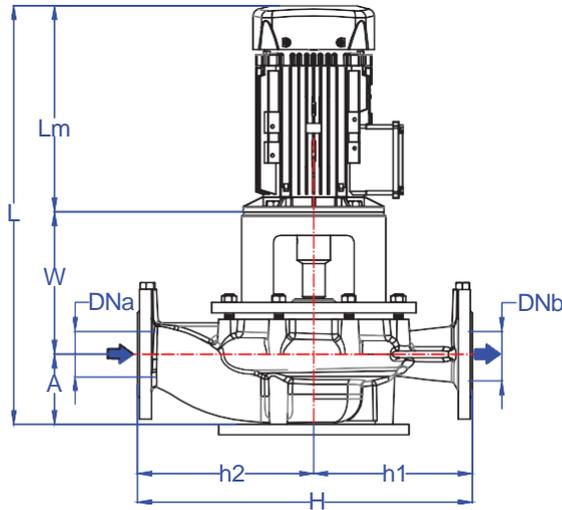
		Motor		Flanges	General	Pump					
		KW	IEC	Lm mm	DNs - DNd mm	L mm	A mm	W mm	H mm	h2 mm	h1 mm
40-125	4 POLE	0,25	71	217	40	462	105	140	300	160	140
		0,37	71	217		462	105	140	300	160	140
	2 POLE	0,75	80	238	40	483	105	140	300	160	140
		1,1	90S	258		503	105	140	300	160	140
		1,5	90L	283		528	105	140	300	160	140
		2,2	90L	283		528	105	140	300	160	140
		3	100L	315		590	105	170	300	160	140

TNLL 40-125 2900 RPM



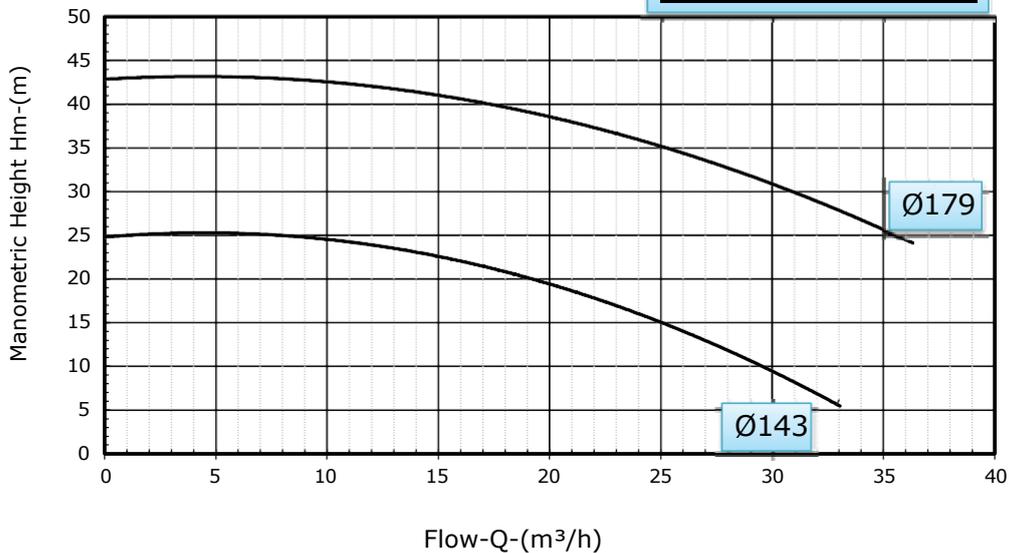


## • TNLL 40-160 IN-LINE



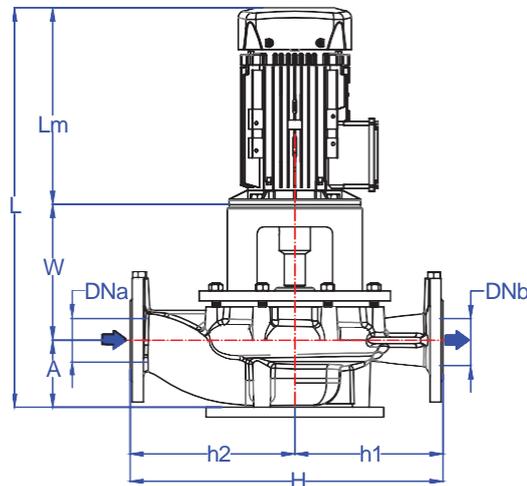
	MOTOR			FLANGES	GENERAL	PUMP					
	KW	IEC	Lm	DNs - DNd	L	A	W	H	h2	h1	
			mm								mm
40-160	4 POLE	0.25	71	217	40	462	80	140	340	180	160
		0.37	71	217		462	80	140	340	180	160
		0.55	80	238		483	80	140	340	180	160
		0.75	80	238		483	80	140	340	180	160
	2 POLE	2.2	90L	283	40	528	80	140	340	180	160
		3	100L	315		590	80	170	340	180	160
		4	112M	332		607	80	170	340	180	160
		5.5	132S	375		650	80	170	340	180	160
		7.5	132S	375		650	80	170	340	180	160

**TNLL 40-160 2900 RPM**



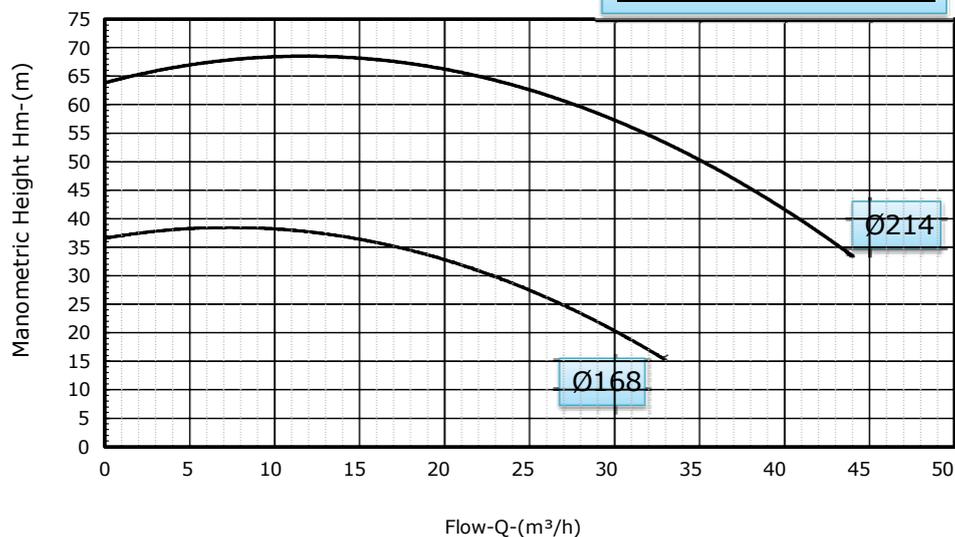


## • TNLL 40-200 IN-LINE



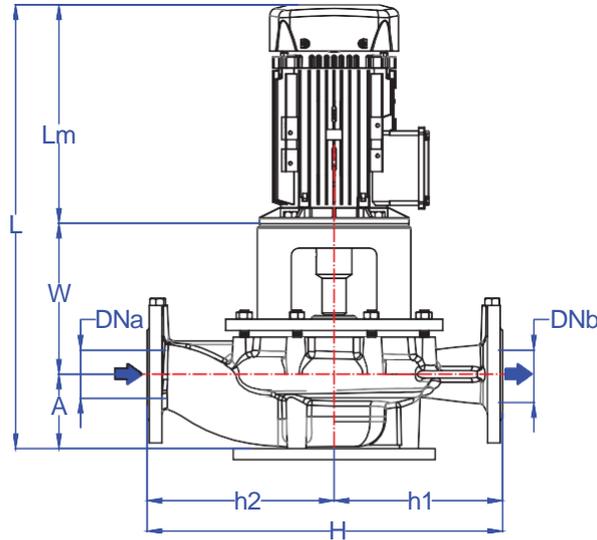
	MOTOR		FLANGES	GENERAL	PUMP						
	KW	IEC	Lm	DNs - DNd	L	A	W	H	h2	h1	
			mm	mm	mm	mm	mm	mm	mm	mm	
40-200	4 POLE	0.37	71	217	40	447	85	135	380	180	200
		0.55	71	217		447	85	135	380	180	200
		0.75	80	238		493	85	160	380	180	200
		1.1	90S	258		513	85	160	380	180	200
	2 POLE	3	100L	315	40	590	85	180	380	180	200
		4	112M	332		607	85	180	380	180	200
		5.5	132S	375		675	85	205	380	180	200
		7.5	132S	375		675	85	205	380	180	200
		11	180M	491		816	85	230	380	180	200

TNLL 40-200 2900 RPM



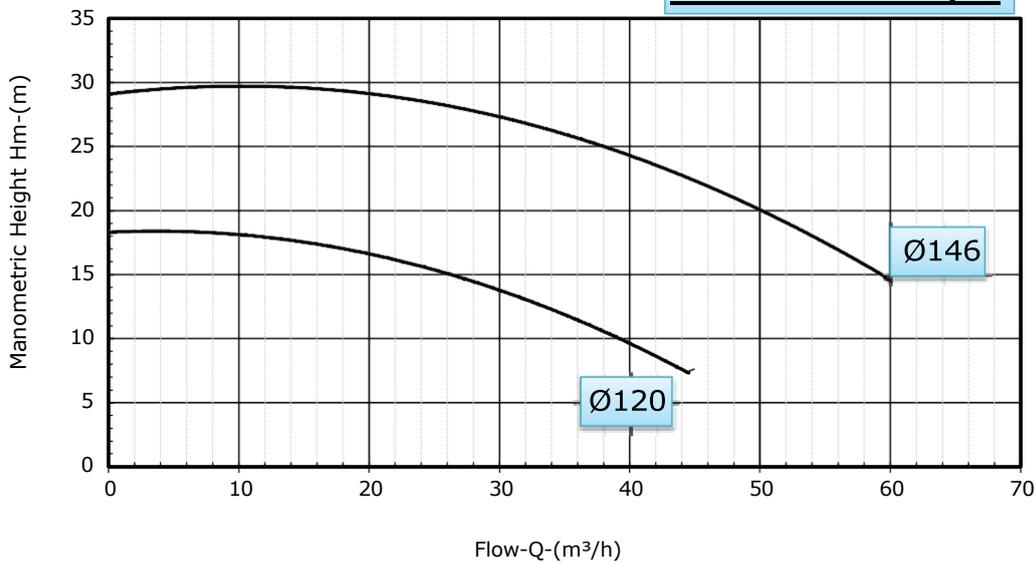


## • TNLL 50-125 IN-LINE



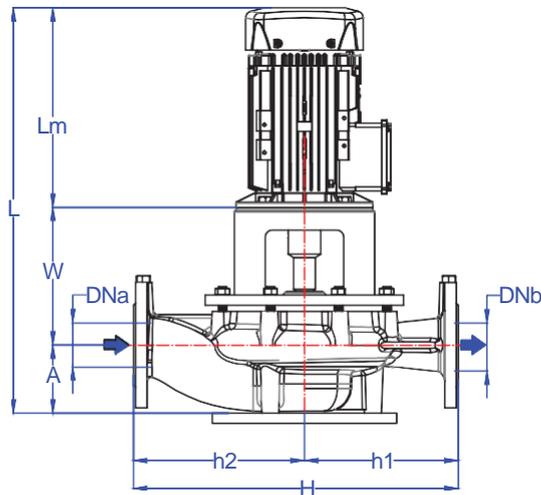
50-125	MOTOR		FLANGES		GENERAL	PUMP					
	KW	IEC	Lm	DNs - DNd	L	A	W	H	h2	h1	
			mm	mm	mm	mm	mm	mm	mm	mm	
50-125	4 POLE	0.37	71	217	50	467	110	140	320	170	150
		0.55	80	238		488	110	140	320	170	150
		0.75	80	238		488	110	140	320	170	150
	2 POLE	1.5	90L	283	50	533	110	140	320	170	150
		2.2	90L	283		533	110	140	320	170	150
		3	100L	315		595	110	170	320	170	150
		4	112M	332		612	110	170	320	170	150
		5.5	132S	375		655	110	170	320	170	150

**TNLL 50-125 2900 rpm**



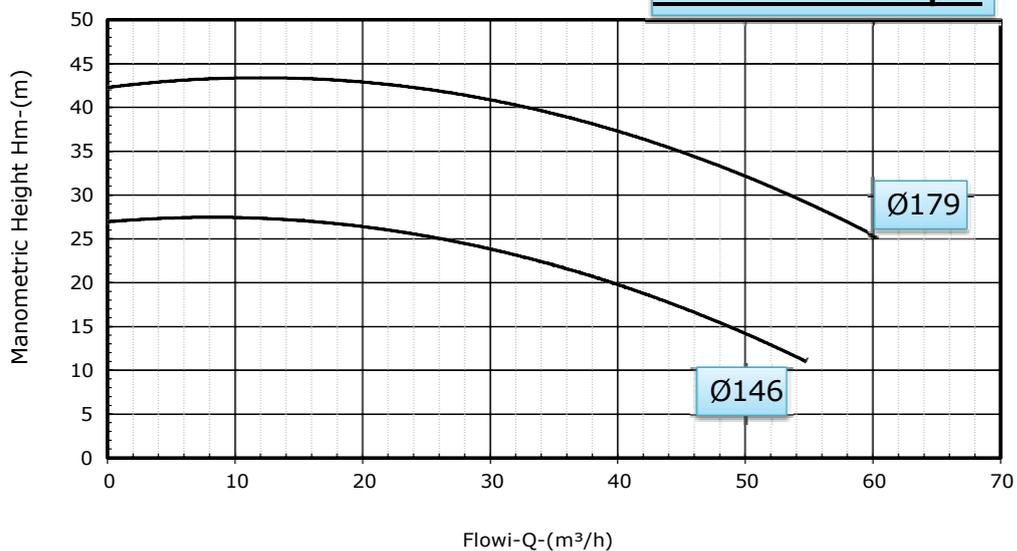


## • TNLL 50-160 IN-LINE



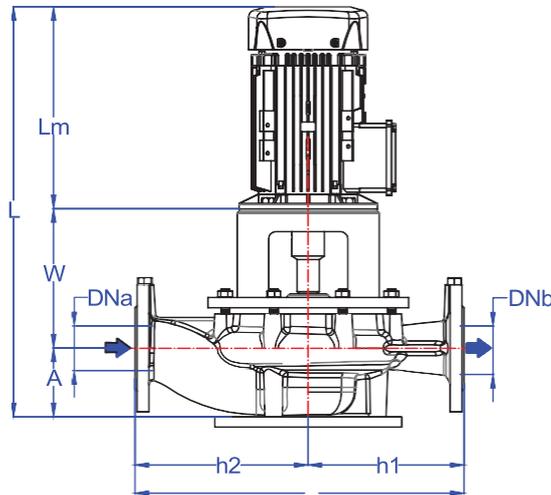
	MOTOR		FLANGES	GENERAL	PUMP					
	KW	IEC	Lm	DNs - DNd	L	A	W	H	h2	h1
			mm	mm	Mm	Mm	mm	mm	mm	mm
50-160	4 POLE	0,37	71	50	482	100	140	345	162,5	162,5
		0,55	80		503	100	140	345	162,5	162,5
		0,75	80		503	100	140	345	162,5	162,5
		1,1	90S		523	100	140	345	162,5	162,5
		1,5	90L		548	100	140	345	162,5	162,5
	2 POLE	3	100L	315	810	100	170	345	162,5	162,5
		4	112M	332	827	100	170	345	162,5	162,5
		5,5	132S	375	870	100	170	345	162,5	162,5
		7,5	132S	375	870	100	170	345	162,5	162,5
		11	160M	491	816	100	200	345	162,5	162,5

**TNLL 50-160 2900 rpm**



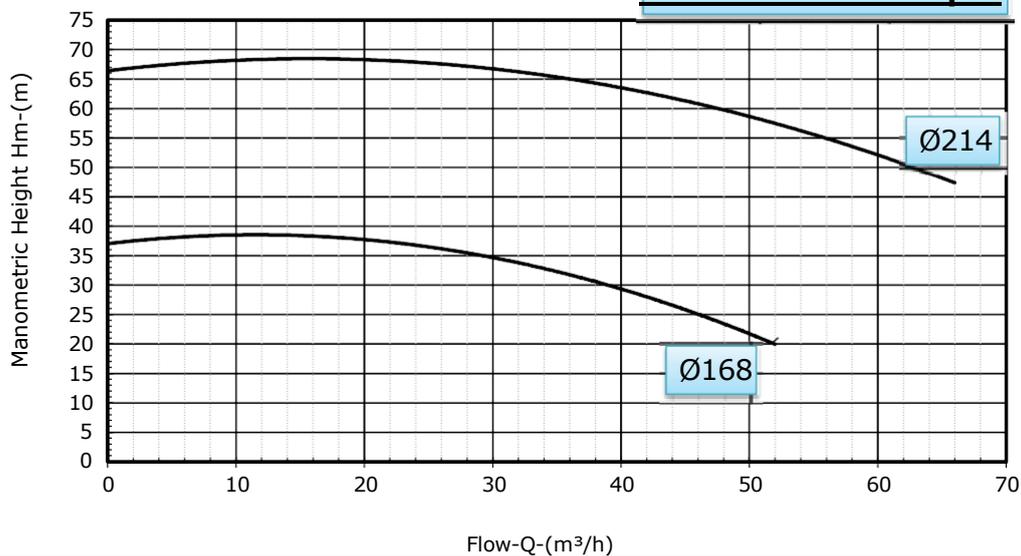


## • TNLL 50-200 IN-LINE



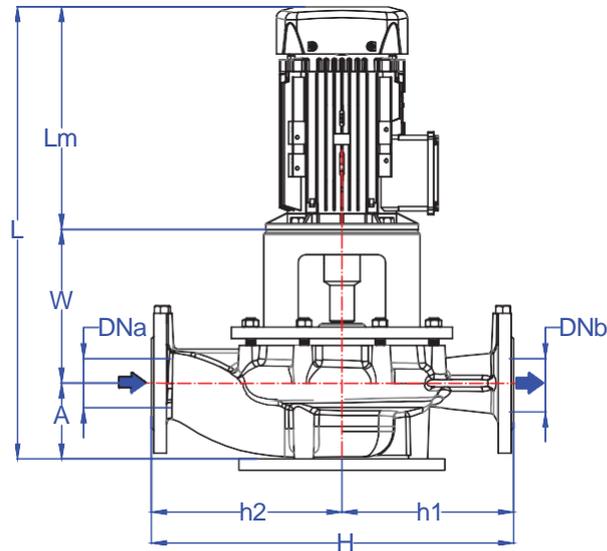
		MOTOR			FLANGES	GENERAL		PUMP			
		KW	IEC	Lm	DNs - DNd	L	A	W	H	h 2	h 1
					mm	mm	mm	mm	mm	mm	mm
50-200	4 POLE	0.55	71	217	50	472	95	145	425	225	200
		0.75	80	238		508	95	160	425	225	200
		1.1	90S	258		528	95	160	425	225	200
		1.5	90L	283		553	95	160	425	225	200
	2 POLE	3	100L	315	50	605	95	180	425	225	200
		4	112M	332		622	95	180	425	225	200
		5.5	132S	375		690	95	205	425	225	200
		7.5	132S	375		690	95	205	425	225	200
		11	160M	491		831	95	230	425	225	200
		15	160M	491		831	95	230	425	225	200

**TNLL 50-200 2900 rpm**



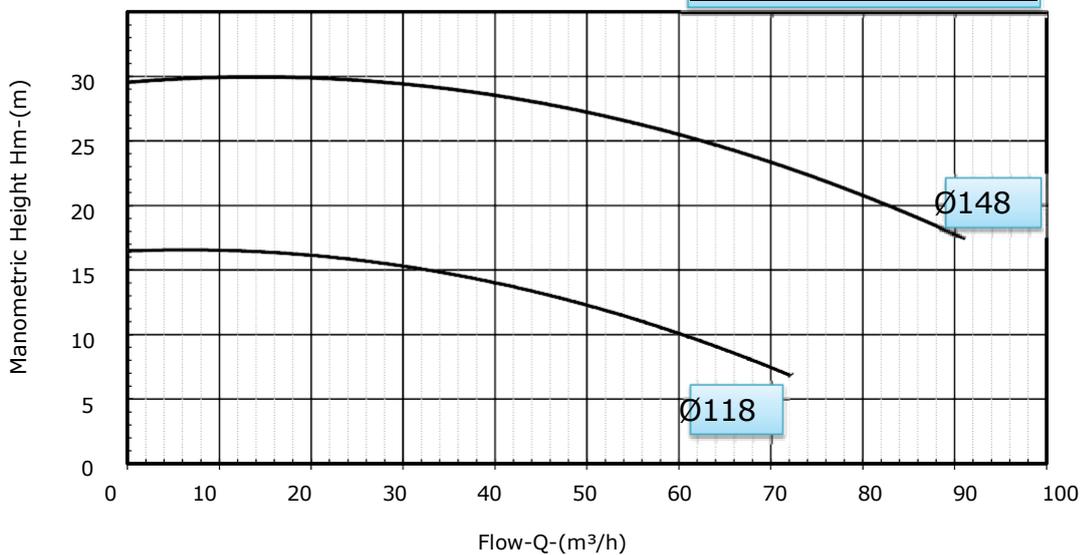


• **TNLL 65-125 IN-LINE**



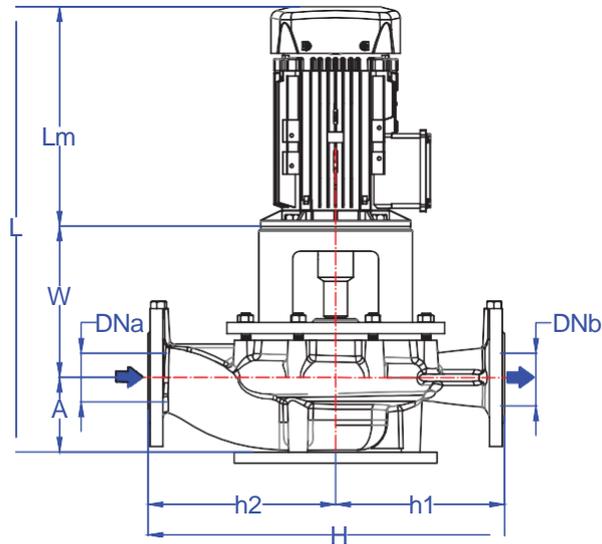
	MOTOR		FLANGES	GENERAL	PUMP						
	KW	IEC	Lm	DN <sub>s</sub> - DN <sub>d</sub>	L	A	W	H	h <sub>2</sub>	h <sub>1</sub>	
			mm	mm	mm	mm	mm	mm	mm	mm	
65-125	4 POLE	0.37	71	217	65	487	130	140	340	180	160
		0.55	80	238		508	130	140	340	180	160
		0.75	80	238		508	130	140	340	180	160
	2 POLE	2.2	90L	283	65	553	130	140	340	180	160
		3	100L	315		615	130	170	340	180	160
		4	112M	332		632	130	170	340	180	160
		5.5	132S	375		675	130	170	340	180	160

**TNLL 65-125 2900 rpm**



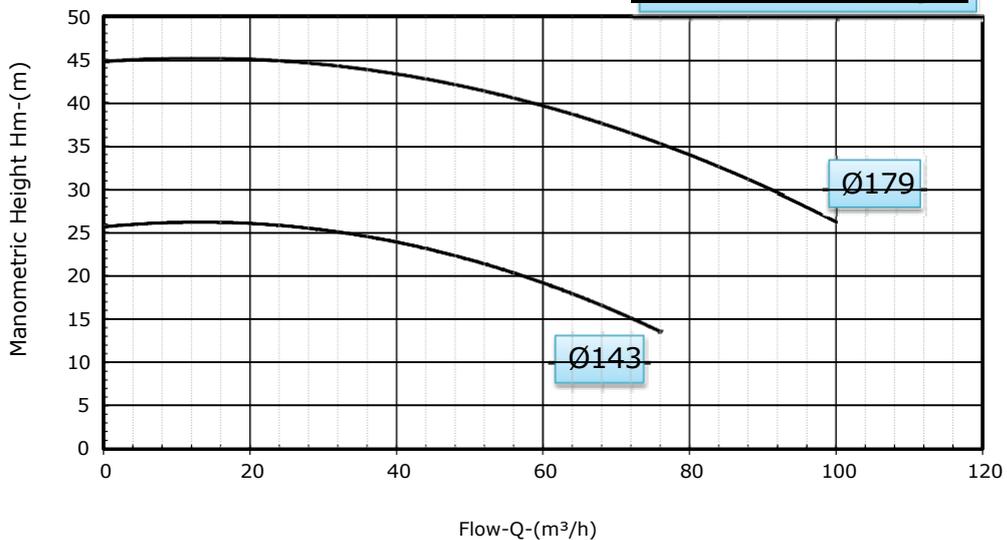


## TNLL 65-160 IN-LINE



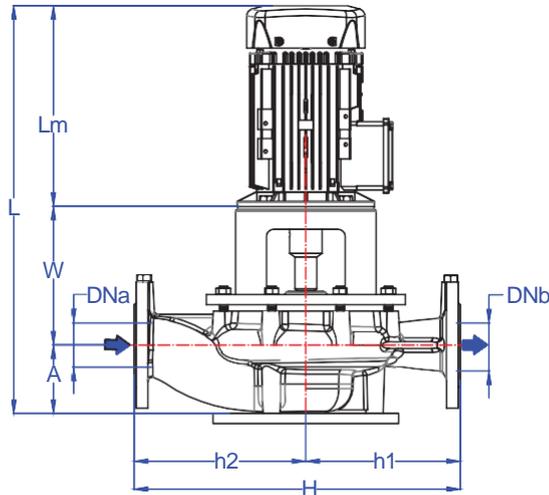
	MOTOR			FLANGES	GENERAL			PUMP			
	KW	IEC	Lm mm	DNs - DNd mm	L mm	A mm	W mm	H mm	h2 mm	h1 mm	
65-160	4 POLE	0.37	71	217	85	489	120	142	380	200	180
		0.55	80	238		510	120	142	380	200	180
		0.75	80	238		510	120	142	380	200	180
		1.1	90S	258		530	120	142	380	200	180
		1.5	90L	283		555	120	142	380	200	180
	2 POLE	3	100L	315	85	617	120	172	380	200	180
		4	112M	332		634	120	172	380	200	180
		5.5	132S	375		677	120	172	380	200	180
		7.5	132S	375		677	120	172	380	200	180
		11	160M	491		823	120	202	380	200	180
					823	120	202	380	200	180	

### TNLL 65-160 2900 rpm



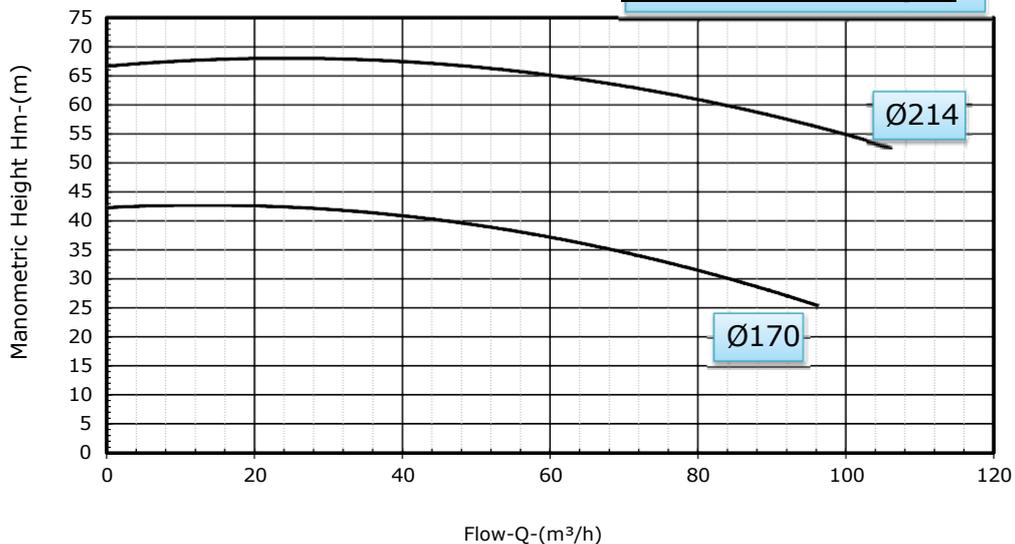


## • TNLL 65-200 IN-LINE



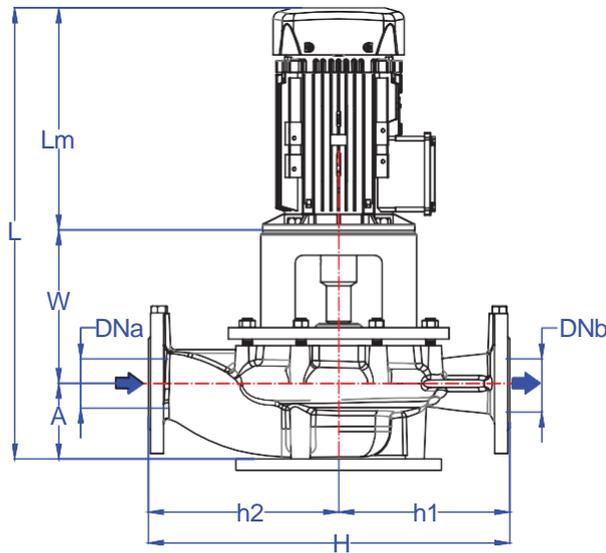
	MOTOR		FLANGES	GENERAL	PUMP						
	KW	IEC	Lm mm	DNs - DNd mm	L mm	A mm	W mm	H mm	h2 mm	h1 mm	
65-200	4 POLE	0.55	71	217	65	477	100	145	475	250	225
		0.75	80	238		513	100	160	475	250	225
		1.1	90S	258		533	100	160	475	250	225
		1.5	90L	283		558	100	160	475	250	225
		2.2	100L	315		610	100	180	475	250	225
	2 POLE	4	112M	332	65	627	100	180	475	250	225
		5.5	132S	375		695	100	205	475	250	225
		7.5	132S	375		695	100	205	475	250	225
		11	160M	491		836	100	230	475	250	225
		15	160M	491		836	100	230	475	250	225
		18.5	160L	491	836	100	230	475	250	225	

### TNLL 65-200 2900 rpm



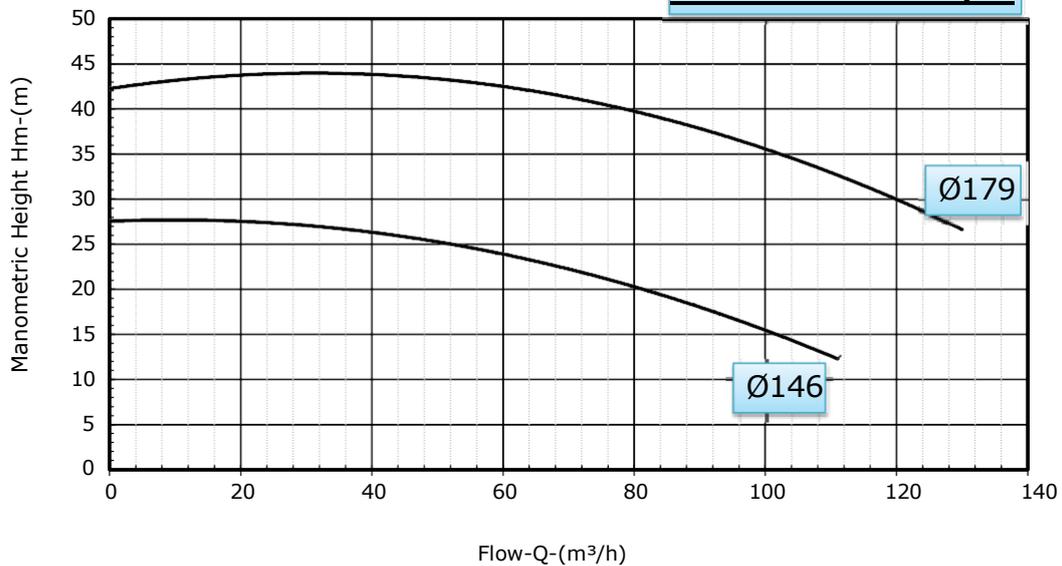


## • TNLL 80-160 IN-LINE



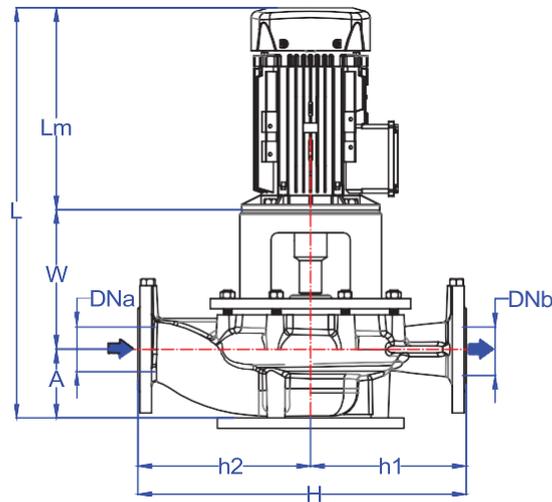
	MOTOR		FLANGES		GENERAL		PUMP				
	KW	IEC	Lm	DNs - DNd	L	A	W	H	h2	h1	
			mm	mm	mm	mm	mm	mm	mm	mm	
80-160	4 POLE	0.75	80	238	80	543	135	170	425	225	200
		1.1	90S	258		563	135	170	425	225	200
		1.5	90L	283		588	135	170	425	225	200
		2.2	100L	315		640	135	190	425	225	200
	2 POLE	4	112M	332	80	657	135	190	425	225	200
		5.5	132S	375		720	135	210	425	225	200
		7.5	132S	375		720	135	210	425	225	200
		11	160M	491		866	135	240	425	225	200
		15	160M	491		866	135	240	425	225	200

TNLL 80-160 2900 rpm



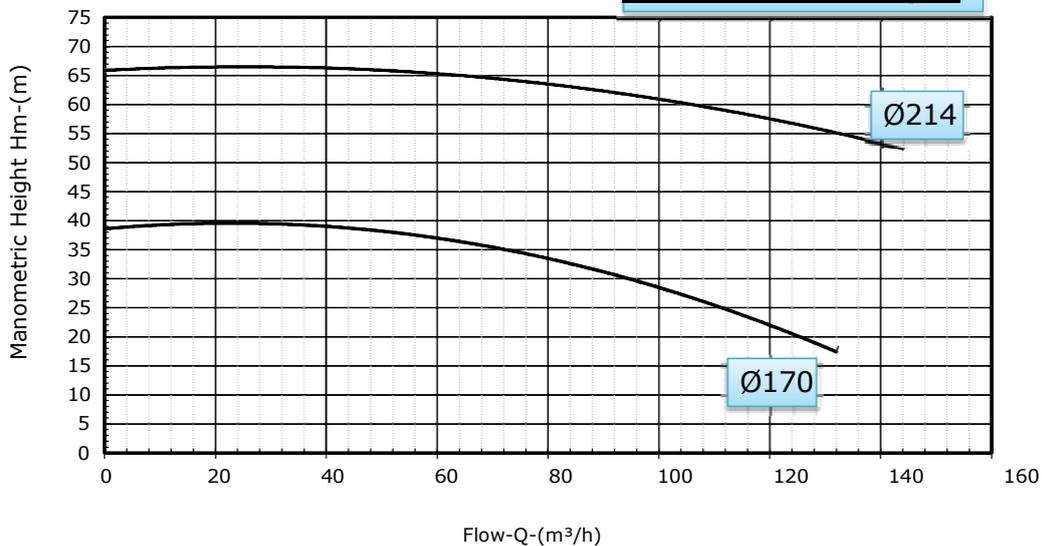


## • TNLL 80-200 IN-LINE



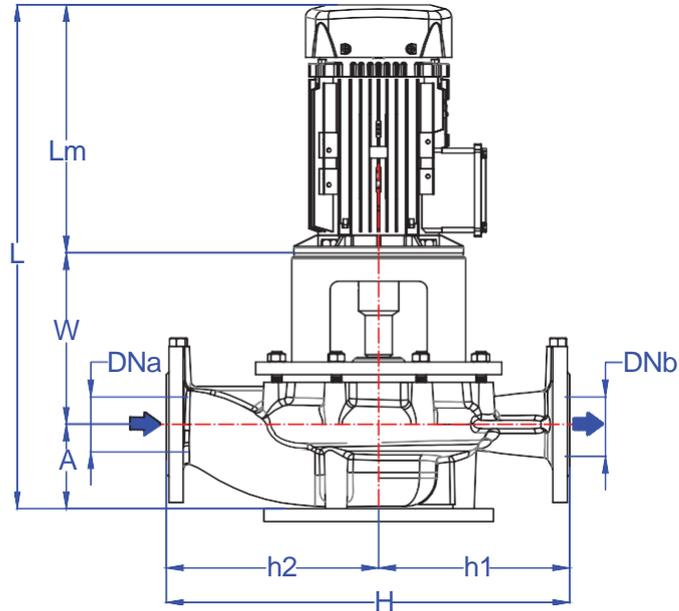
	MOTOR			FLANGES	GENERAL	PUMP					
	KW	IEC	Lm mm	DNs - DNd mm	L mm	A mm	W mm	H mm	h 2 mm	h 1 mm	
80-200	4 POLE	1.1	90S	258	80	558	135	180	500	250	250
		1.5	90L	283		583	135	160	500	250	250
		2.2	100L	315		635	135	180	500	250	250
		3	100L	315		635	135	180	500	250	250
		4	112M	332		652	135	180	500	250	250
	2 POLE	11	180M	491	80	861	135	230	500	250	250
		15	180M	491		861	135	230	500	250	250
		18.5	160L	491		861	135	230	500	250	250
		22	180M	549		919	135	260	500	250	250
		30	200L	637		1037	135	260	500	250	250
		37	200L	637	1037	135	260	500	250	250	

TNLL 80-200 2900 rpm



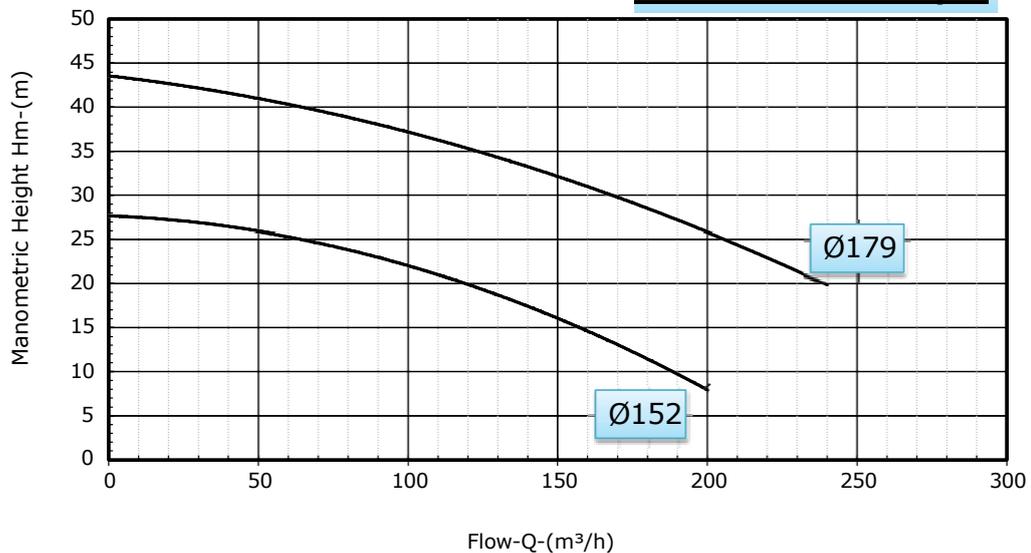


## • TNLL 100-160 IN-LINE



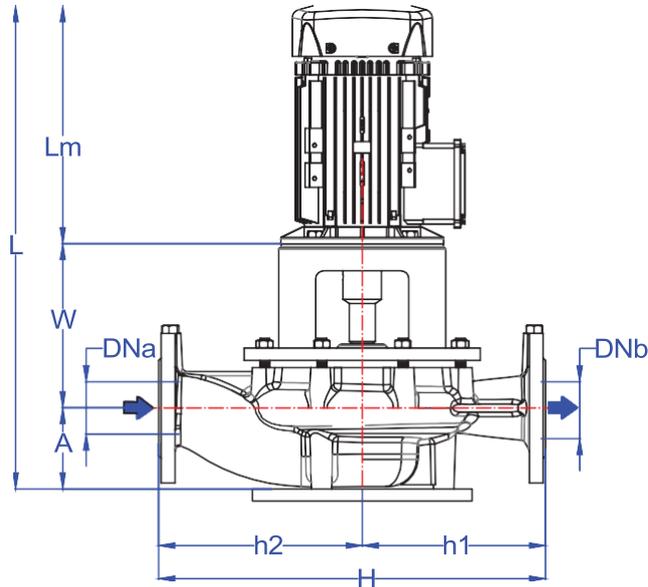
	MOTOR		Lm	FLANGES		GENERAL	PUMP				
	KW	IEC		DN <sub>a</sub> - DN <sub>d</sub>	L		A	W	H	h <sub>2</sub>	h <sub>1</sub>
			mm	mm	mm	mm	mm	mm	mm	mm	
100-160	4 POLE	1,1	90S	258	100	583	200	170	525	225	300
		1,5	90L	283		608	200	170	525	225	300
		2,2	100L	315		660	200	190	525	225	300
		3	100L	315		660	200	190	525	225	300
	2 POLE	11	180M	491	100	886	200	240	525	225	300
		15	180M	491		886	200	240	525	225	300
		18.5	160L	491		886	200	240	525	225	300
		22	180M	549		944	200	240	525	225	300

**TNLL 100-160 2900 rpm**



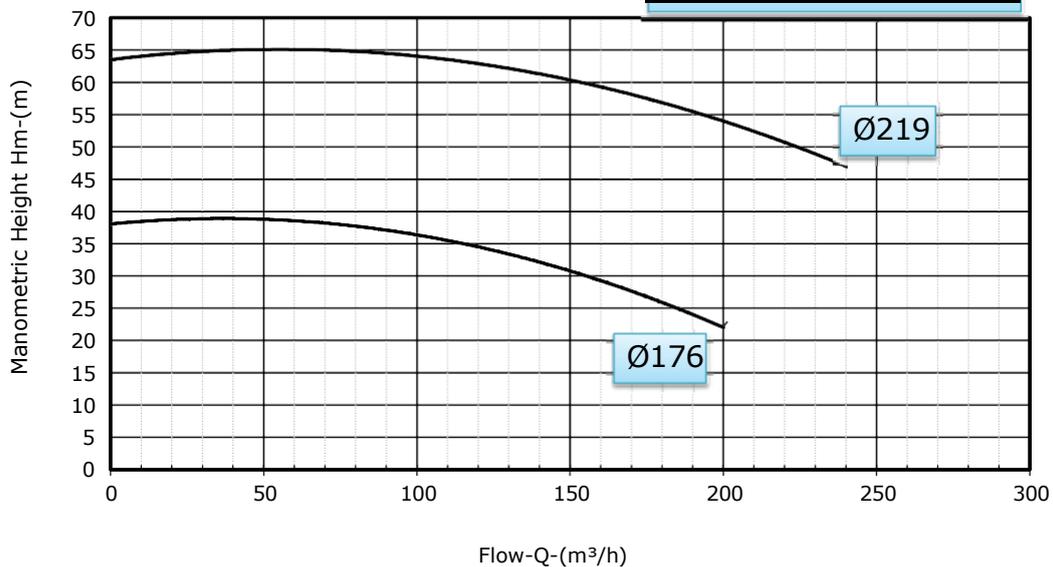


## • TNLL 100-200 IN-LINE



	MOTOR		FLANGES		GENERAL			PUMP			
	KW	IEC	Lm	DNs - DNd	L	A	W	H	h2	h1	
			mm	mm	mm	mm	mm	mm	mm	mm	
100-200	4 POLE	2.2	100L	315	100	685	175	190	550	300	250
		3	100L	315		685	175	190	550	300	250
		4	112M	332		702	175	190	550	300	250
		5.5	132S	375		770	175	215	550	300	250
		7.5	132M	421		816	175	215	550	300	250
	2 POLE	18.5	180L	491	100	911	175	240	550	300	250
		22	180M	549		969	175	240	550	300	250
		30	200L	637		1087	175	270	550	300	250
		37	200L	637		1087	175	270	550	300	250
		45	225M	680		1130	175	270	550	300	250

**TNLL 100-200 2900 rpm**





- NPFA 20 FIRE GROUP

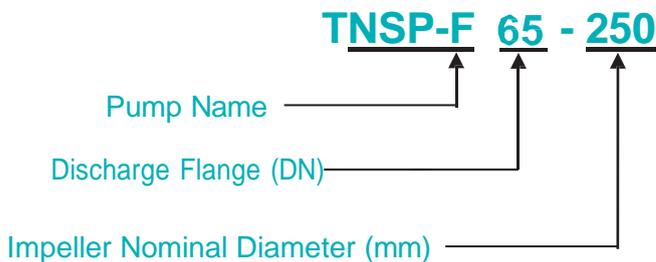




## • TNSP-F SERIES PUMP DESCRIPTION

- TNSP-F Series pumps are suitable for pumping liquids that do not contain corrosive substances and large solid particles.
- They are single-stage, horizontal shaft, volute body, end suction, closed impeller centrifugal pumps.
- There is a coupling connection between the motor shaft and the pump shaft.
- Suction and discharge flanges comply with TS EN 1092-2/PN 16 standard
- Soft packing is used in mass production to prevent leakage. Mechanical seals can be preferred depending on the intended use or request.
- Thanks to its easily removable design, the pump shaft, bearing housing and seal housing can be dismantled without removing the volute from the installation.
- The direction of rotation is counterclockwise when looked from the suction side.
- Roller bearings must be lubricated from outside. The oil indicator is located in the bearing housing

## • PUMP NAMING



## • STANDARD PRODUCTION

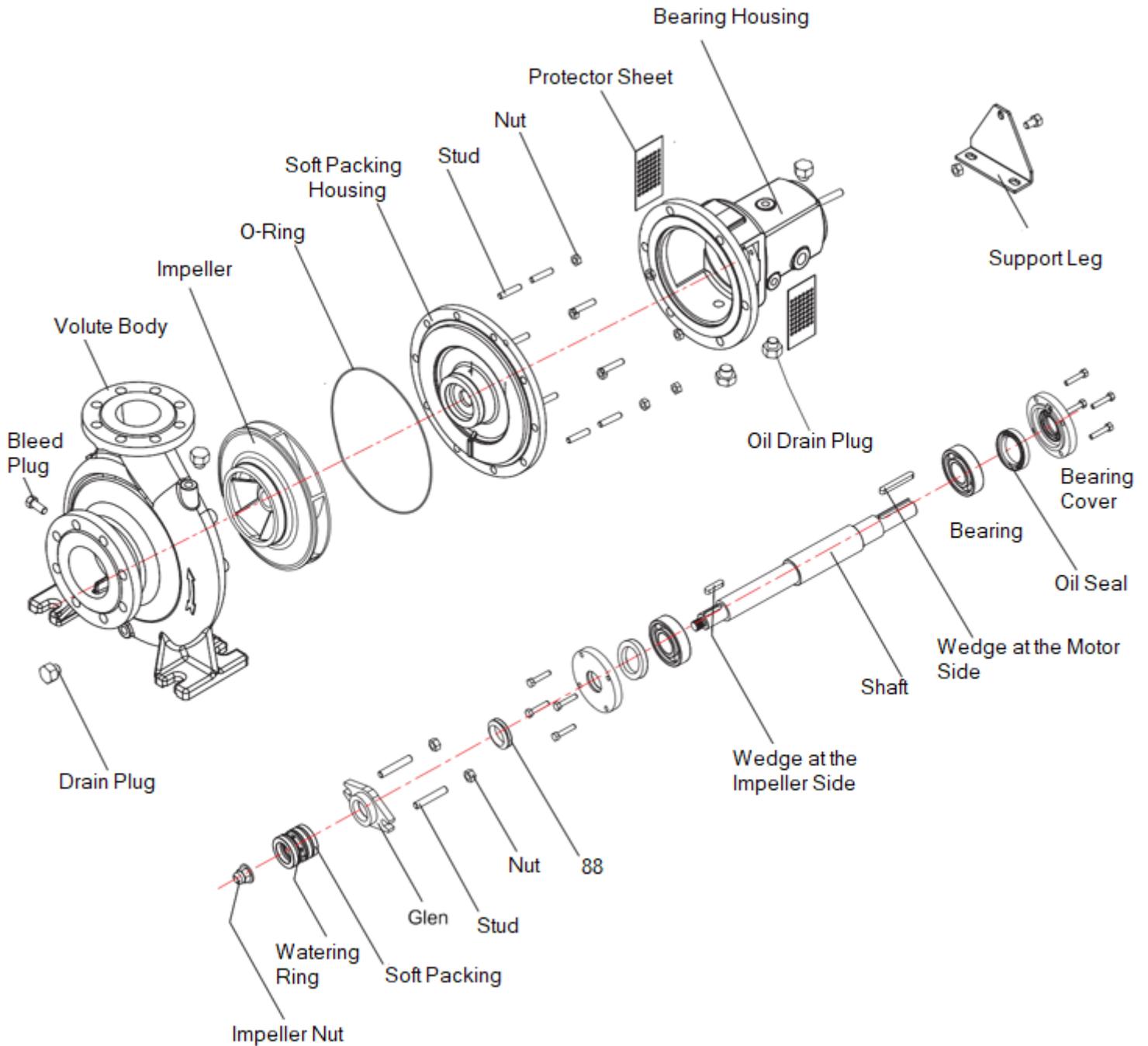
Part List	Material
Volute Body	GG25/0.6025
Seal Housing	GG25/0.6025
Bearing Housing	GG25/0.6025
Impeller	GG25/0.6025
Shaft	AISI 420/1.4021

## • SPECIAL PRODUCTION

- Pump materials and seals may change depending on the density of the pumped liquid, operating temperature and pressure. Optionally, the impeller material can be produced in Bronze.

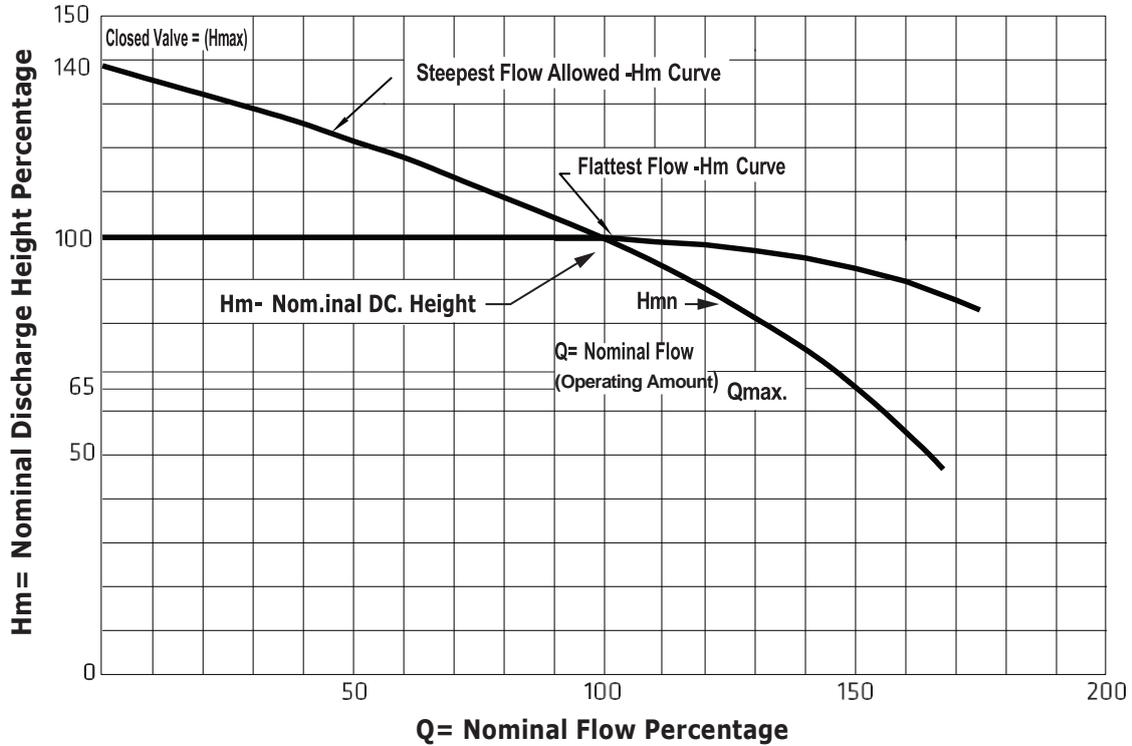


• TNSP - F SOFT PACKING PUMP PARTS LIST





## • FIRE PUMP CHARACTERISTIC CURVE



## • Fire Pump Flow Rates According to NFPA 20

According to NFPA 20, rated flow rates of fire pumps cannot differ from the following values:

(GPM)	(l/dak)	(m <sup>3</sup> /h)
25	95	5,7
50	189	11,4
100	379	22,7
150	568	34,1
200	757	45,4
250	946	56,8
300	1136	68,1
400	1514	91
450	1703	102
500	1892	114
750	2893	170
1000	3785	227
1250	4731	284
1500	5677	341
2000	7570	454
2500	9462	568
3000	11355	681
3500	13247	795
4000	15140	908
4500	17032	1022
5000	18925	1136