



**TKW** (Horizontal Type)



**TKG** (Vertical Type)

## Inline Centrifugal Pump

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## PRODUCT INTRODUCTION

The standard G5 TKG series vertical inline pump and TKW series horizontal inline pump. It's an energy-efficient product, select and refer to the excellent hydraulic model domestic, designed based on the code of ISO28528 and JB/T53058. Reasonable structure, beautiful appearance, stable performance, small vibration, low noise, and long life.

## FUNCTION

The pumps are suitable for city water supply and drainage, high-rise building water booster, garden, fire fighting, hospitals, schools, metallurgy, chemical industry, restaurant, hotel and petroleum, paper making, pharmacy and air-condition for transporting the circulation hot and cold water.

## WORKING CONDITION

### 1.Speed

2960r/min, 1480r/min, or 980r/min, 740r/min, frequency conversion as client's requirement.

### 2.Flow

1.6~1400 (3600) m<sup>3</sup>/h

### 3.Head

5~150m

### 4.Liquid Temperature

-10~80 °C .If temperature>80~180 °C , can add cooling system. Please note that temperature >180°C in the order, we can design the high temperature model pump.

### 5.Ambient Temperature

<40°C; Relative Humidity: <95%

### 6.article content in the liquid

Particle content in the liquid not more than 0.1%, size <0.2mm. If out of this range, please indicate in the order, we will use the abrasion resistant mechanical seal.

### 7.Max. Operating Pressure

Pump caliber ≤ 200mm, the pressure is 1.6Mpa;  
Pump caliber ≥ 250mm, the pressure is 1.0Mpa.

### 8.Inlet/Outlet Flange

PN16-GB/T17241.6 standard.



## CHARACTERISTIC

- **TKG Pump**, vertical structure, inlet and outlet of the same diameter and located in the same center of the horizontal line, beautiful appearance, small footprint, low investment, installation and maintenance is extremely convenient.
- **TKW Pump** horizontal structure, inlet and outlet of the same caliber, compact appearance, small footprint, low investment, installation and maintenance is extremely convenient.
- Motor and Pump shares one shaft, concentricity good, small vibration, low noise, operate steadily.
- Shaft seal is mechanical seal. As client's condition, the rotor ring and stator ring can be hard ally, ceramic, tungsten carbide, silicon carbide, graphite and etc.
- As the client's requirement, pumps can be series connection for pressure boosting or parallel connection for increasing flow.
- **TKG pump** can be installed vertical or horizontal as the pipe layout.
- Perfect design, It can ensure no leakage, long-life operation, save the operation management costs 50%~70%.

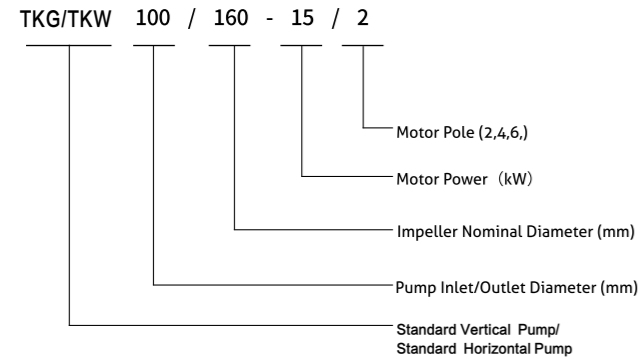
## ADVANTAGE

- ① Motor and Pump shares one shaft, concentricity good, small vibration, low noise, operate steadily.
- ② **TKG Pump**, vertical structure, inlet and outlet of the same diameter and located in the same center of the horizontal line, flow unimpeded, small lose, installation is very convenient.
- ③ **TKW Pump** horizontal structure, inlet and outlet of the same caliber, flow unimpeded, small lose, installation is very convenient.
- ④ Select the different castings and seals, pump can be delivered clear water, warm water, hot water, and other different liquids.
- ⑤ Select the Y2 and YX3 series energy-efficient motor, equipped with domestic,high-quality bearings, starting torque, high efficiency, small vibration, low noise, reliable operation and long service life.
- ⑥ Select the reasonable mechanical seal materials, ensure that pump can be operated for long-term without leakage. It can save the operation and management cost more than 50%.
- ⑦ Select imported mechanical seal, bearing, more reliable products.

## MODEL SPECIFICATION

## STRUCTURE

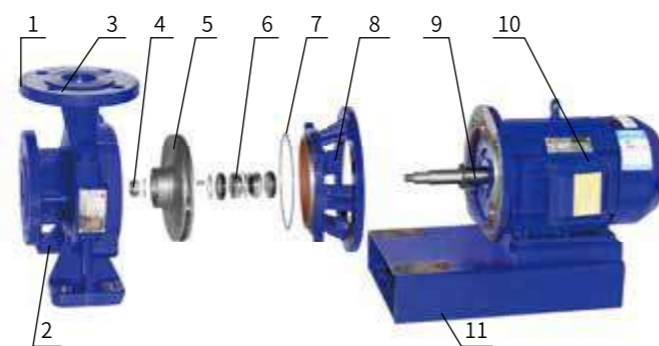
## STRUCTURE DESCRIPTION



### TKG VERTICAL PUMP



### TKW HORIZONTAL PUMP



TKG/TKW pump equipped with EX motor,  
the model will be TKBG/TKBW

TKG/TKW pump's material is stainless steel,  
the model will be TKHG/TKHW

TKG/TKW pump delivered the hot water,  
the model will be TKRG/TKRW

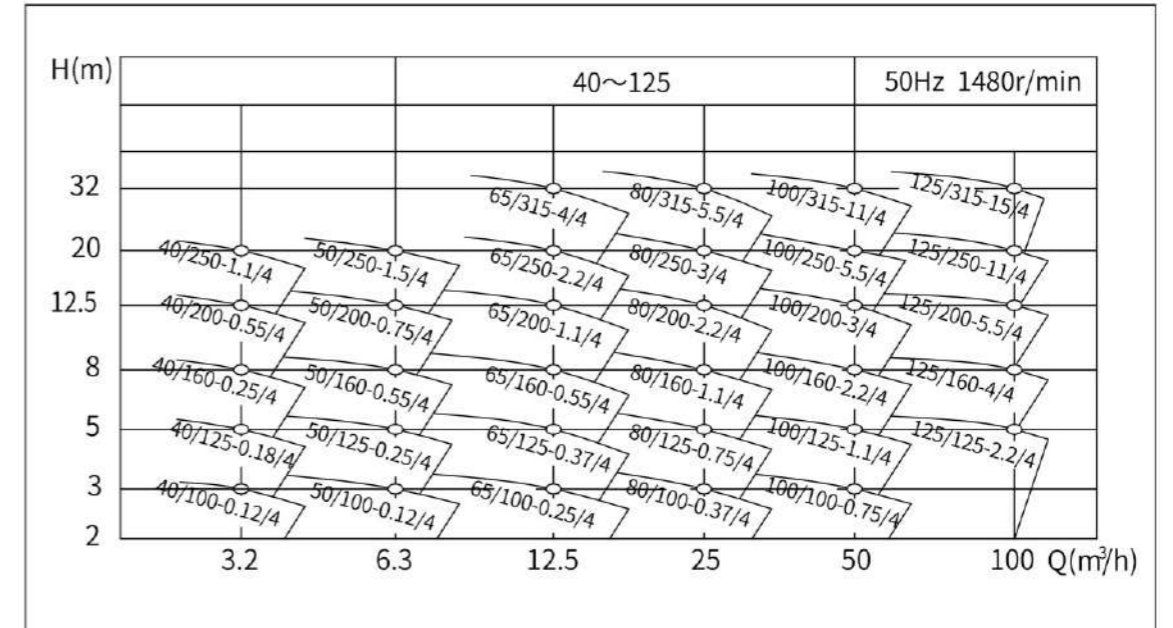
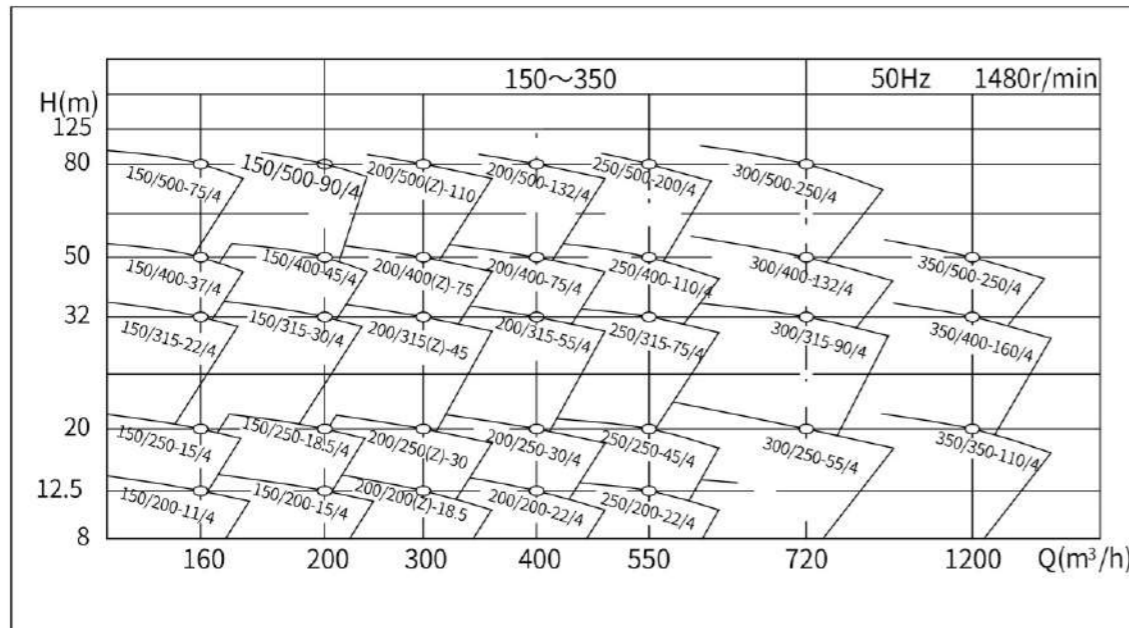
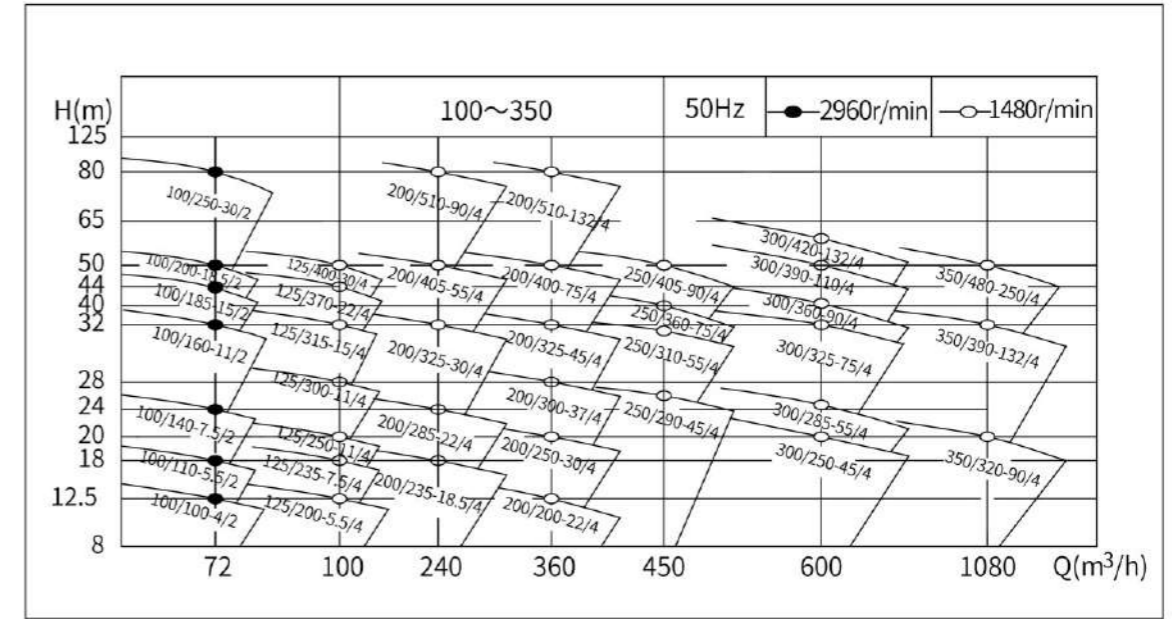
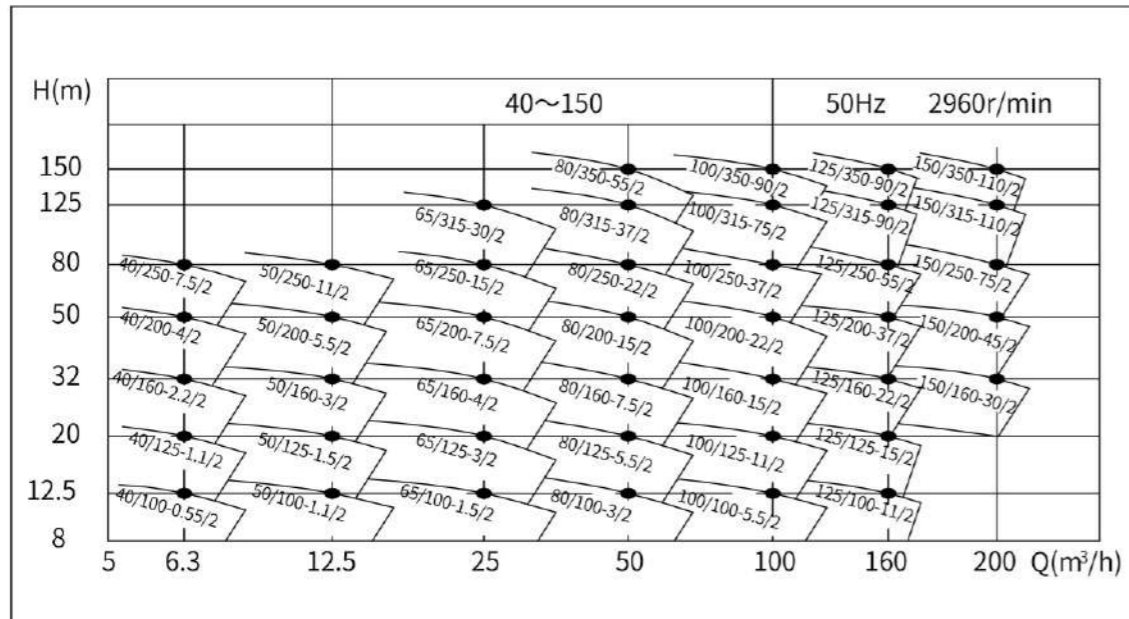
TKG/TKW pump's material is stainless steel,  
equipped with EX motor, the model will be TKHGB/TKHWB

- ① Pump Body ---- Using the modern optimal hydraulic model design
- ② Seal Ring ---- high strength rubber parts
- ③ Impeller Nut ----High-quality carbon steel, corrosion-resistant stainless steel
- ④ Impeller ----Select the modern excellent hydraulic model
- ⑤ Mechanical Seal ----Rotor (stator) ring is made of Graphite, Hard Alloy
- ⑥ Pump Cover ----High-quality carbon steel, stainless steel, casting
- ⑦ Seal Circle ----High strength Rubber
- ⑧ Moto ----Y2 or YX3 series energy-efficient V1 motor
- ⑨ Drain Plug ----Empty the pump case once stopped
- ⑩ Air-out Plug ----Exclude the air in the casing

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- ⑪ Air-out Plug ----Exclude the air in the casing----A fixed part of the pump to ensure the stability of the pump installation.

## HYDRAULIC COVERAGE

## HYDRAULIC COVERAGE



## PERFORMANCE PARAMETER TABLE

Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)	Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)
		(m <sup>3</sup> /h)	(L/s)									(m <sup>3</sup> /h)	(L/s)						
001	20/110-0.37/2	1.8	0.50	16	25	2900	0.37	2.3	25	024	40/185-0.37/4	2.0	0.56	10.4	30	1450	0.37	2.5	30
		2.5	0.69	15	34							10	30						
		3.3	0.92	13.5	35							9.6	30						
002	20/160-1.1/2	1.8	0.50	32	19	2900	1.1	2.3	29	025	40/250-1.1/4	2.2	0.61	20.5	25	1450	1.1	2.5	52
		2.5	0.69	32	25							20	25						
		3.3	0.92	29	24							18.5	25						
003	25/110-0.55/2	2.8	0.78	16	34	2900	0.55	2.3	26	026	40/235-0.75/4	2.0	0.56	16.4	25	1450	0.75	2.5	47
		4.0	1.11	15	42							16	25						
		5.2	1.44	13.5	41							15	25						
004	25/125-0.75/2	2.8	0.78	20.6	28	2900	0.75	2.3	27	027	40/220-0.55/4	1.6	0.44	13.2	24	1450	0.55	2.5	46
		4.0	1.11	20	36							13	24						
		5.2	1.44	18	35							12	24						
005	25/115-0.55/2	2.5	0.69	17	27	2900	0.55	2.3	26	028	40/100-1.1/2	8.8	2.44	13.6	55	2900	1.1	2.3	37
		3.6	1.00	16	35							12.5	62						
		4.6	1.28	14.4	34							11.3	60						
006	25/160-1.5/2	2.8	0.78	33	24	2900	1.5	2.3	39	029	40/90-0.75/2	8	2.22	11	53	2900	0.75	2.3	35
		4.0	1.11	32	32							11	60						
		5.2	1.44	30	33							9	58						
007	25/150-1.1/2	2.6	0.72	29	23	2900	1.1	2.3	34	030	40/125-1.5/2	8.8	2.44	21.5	49	2900	1.5	2.3	45
		3.7	1.03	28	31							12.5	58						
		4.9	1.36	26	32							17.8	57						
008	32/125-0.75/2	4.5	1.25	22	40	2900	0.75	2.3	29	031	40/110-1.1/2	8	2.22	17	48	2900	1.1	2.3	40
		5.0	1.39	20	44							11	57						
		6.5	1.81	18	43							14.5	56						
009	32/110-0.75/2	3.3	0.92	17	39	2900	0.75	2.3	28	032	40/160-3/2	8.8	2.44	33	45	2900	3	2.3	57
		4.5	1.25	16	43							12.5	52						
		5.7	1.58	14	41							16.3	51						
010	40/100-0.55/2	4.4	1.22	13.2	48	2900	0.55	2.3	32	033	40/150-2.2/2	8.2	2.28	29	44	2900	2.2	2.3	50
		6.3	1.75	12.5	54							11.7	51						
		8.3	2.31	11.3	53							15.2	50						
011	40/90-0.37/2	3.9	1.08	10.6	44	2900	0.37	2.3	30	034	40/140-1.5/2	7.3	2.03	23	43	2900	1.5	2.3	46
		5.6	1.56	10	52							10.4	50						
		7.4	2.06	9	51							13.5	50						
012	40/125-1.1/2	4.4	1.22	21	41	2900	1.1	2.3	33	035	40/200-5.5/2	8.8	2.44	52	38	2900	5.5	2.3	102
		6.3	1.75	20	46							12.5	46						
		8.3	2.31	18	43							16.3	46						
013	40/110-0.75/2	3.9	1.08	17.6	40	2900	0.75	2.3	32	036	40/185-4/2	8.3	2.31	45.8	37	2900	4	2.3	81
		6.6	1.56	16.0	45							11.7	45						
		7.4	2.06	14.5	41							15.3	45						
014	40/160-2.2/2	4.4	1.22	33	35	2900	2.2	2.3	48	037	40/170-3/2	7.5	2.08	40	36	2900	3	2.3	69
		6.3	1.75	32	40							10.6	44						
		8.3	2.31	30	42							13.8	44						
015	40/150-1.5/2	4.1	1.14	29	34	2900	1.5	2.3	45	038	40/250-1.1/2	8.8	2.44	82	29	2900	11	2.3	165
		5.9	1.64	28	39							12.5	38						
		7.8	2.17	26.3	39							16.3	42						
016	40/140-1.1/2	3.8	1.06	25.5	34	2900	1.1	2.3	39	039	40/235-7.5/2	8.2	2.28	71.5	29	2900	7.5	2.3	115
		5.5	1.53	24.0	38							11.6	38						
		7.2	2.00	22.5	37							15.2	41						
017	40/200-4/2	4.4	1.22	51	26	2900	4	2.3	75	040	40/220-7.5/2	7.6	2.11	61.5	28	2900	7.5	2.3	114
		6.3	1.75	50	33							10.8	37						
		8.3	2.31	48	32							14	40						
018	40/185-3/2	4.1	1.14	45	26	2900	3	2.3	62	041	50/100-1.1/2	8.8	2.44	13.6	55	2900	1.1	2.3	37
		5.9	1.64	44	31							12.5	62						
		7.8	2.17	42	30							16.3	60						
019	40/170-2.2/2	3.7	1.03	38	24	2900	2.2	2.3	52	042	50/90-0.75/2	8	2.22	11	53	2900	0.75	2.3	35
		5.3	1.47	36	29							11	60						
		7.0	1.94	34.5	28							14.5	58						
020	40/250-7.5/2	4.4	1.22	82	24	2900	7.5	2.3	106	043	50/125-1.5/2	8.8	2.44	21.5	49	2900	1.5	2.3	45
		6.3	1.75	80	28							12.5	58						
		8.3	2.31	74	28							16.3	57						
021	40/230-5.5/2	4.1	1.14	72	24	2900	5.5	2.3	100	044	50/110-1.1/2	8	2.22	17	48	2900	1.1	2.3	40
		5.9	1.64	70	28							11	57						
		7.8	2.17	65	27							14.5	56						
022	40/220-4/2	3.8	1.06	61.5	23	2900	4	2.3	77	045	50/160-3/2	8.8	2.44	33	45	2900	3	2.3	57
		5.5	1.53	60	27							12.5	52						
		7.2	2.00	56	26							16.3	51						
023	40/200-0.55/4	2.2	0.61	13	31	1450	0.55	2.5	38	046	50/150-2.2/2	8.2	2.28	29	44	2900	2.2	2.3	50
		3.2	0.89	12.5	31							11.7	51						
		4.2	1.17	12	31							15.2	50						

## PERFORMANCE PARAMETER TABLE

Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)	Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)
		(m <sup>3</sup> /h)	(L/s)									(m <sup>3</sup> /h)	(L/s)						
047	50/140-1.5/2	7.3	2.03	23	43	2900	1.5	2.3	46	070	50/235-11/2	16.4	4.56	71.5	40	2900	11	2.5	175
		10.4	2.89	22	50							23.4	6.50	70	50				
		13.5	3.75	20.5	50							30.4	8.44	67	52				
048	50/200-5.5/2	8.8	2.44	52	38	2900	5.5	2.3	102	071	50/220-11/2	15.0	4.17	61	38	2900	11	2.5	170
		12.5	3.47	50	46							21.6	6.00	60	50				
		16.3	4.53	48	46							28	7.78	58	54				
049	50/185-4/2	8.3	2.31	45.8	37	2900	4	2.3	81	072	50/315-30/2	17.5	4.86	127	32	2900	30	2.5	325
		12.5	3.47	44	45							25.0	6.94	125	40				
		15.3	4.25	42	45							32.5	9.03	122	44				
050	50/170-3/2	7.5	2.08	40	36	2900	3	2.3	69	073	50/300-22/2	16.6	4.61	115	32	2900	22	2.5	265
		10.6	2.94	38	44							23.7	6.58	113	40				
		13.8	3.83	35	44							31	8.62	110	44				
051	50/250-11/2	8.8	2.44	82	29	2900	11	2.3	170	074	50/285-18.5/2	15.7	4.36	103	31	2900	18.5	2.5	230
		12.5	3.47	80	38							22.5	6.25	101	39				
		16.3	4.53	77.5	42							29.2	8.11	98	43				
052	50/235-7.5/2	8.2	2.28	71.5	29	2900	7.5	2.3	120	075	50/270-15/2	14.4	4.00	86	30	2900	15	2.5	215
		11.6	3.22	70	38							20.6	5.72	85	38				
		15.2	4.22	68	41							26.8	7.44	83	42				
053	50/220-7.5/2	7.6	2.11	61.5	28	2900	7.5	2.3	119	076	65/100-1.5/2	17.5	4.86	13.7	67	2900	1.5	2.5	50
		10.8	3.00	60	37							25.0	6.94	12.5	69				
		14	3.89	58	40							32.5	9.03	10.5	69				
054	50/200-0.75/4	3.8	1.06	13.1	40	1450	0.75	2.5	50	077	65/90-1.1/2	15.6	4.33	11	65	2900	1.1	2.5	45
		6.3	1.75	12.5	40							22.3	6.19	10	67				
		7.5	2.08	12	40							29.0	8						

## PERFORMANCE PARAMETER TABLE

Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)	Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)
		(m³/h)	(L/s)									(m³/h)	(L/s)						
093	65/200-1.1/4	7.5	2.08	13.2	54	1450	1.1	2.5	55	116	65/285-30/2	31.0	8.61	103	42	2900	30	3	345
		12.5	3.47	12.5								44.5	12.4	101					
		15	4.17	11.8								58.0	16.1	97					
094	65/185-0.75/4	6.8	1.89	10.7	53	1450	0.75	2.5	50	117	65/270-22/2	29.0	8.06	98	40	2900	22	3	280
		11.3	3.14	10.1								41.0	11.4	85					
		13.5	3.75	9.6								53.6	14.9	83					
095	65/250-2.2/4	7.5	2.08	21	45	1450	2.2	2.8	80	118	80/100-3/2	35.0	9.72	13.8	67	2900	3	3	65
		12.5	3.47	20								50.0	13.9	12.5					
		15	4.17	19.4								65.0	18.1	10.0					
096	65/235-1.5/4	7	1.94	18.4	44	1450	1.5	2.8	70	119	80/90-2.2/2	31.3	8.69	11	66	2900	2.2	3	55
		11.7	3.25	17.5								44.7	12.4	10					
		14.1	3.92	17								58.0	16.1	8					
097	65/220-1.1/4	6.1	1.69	14.1	43	1450	1.1	2.8	65	120	80/125-5.5/2	35.0	9.72	22	68	2900	5.5	3	105
		10.2	2.83	13.4								50.0	13.9	20					
		12.3	3.42	13								65.0	18.1	17					
098	65/315-4/4	7.5	2.08	32.3	36	1450	4	2.8	90	121	80/110-4/2	31.3	8.69	17.5	66	2900	4	3	85
		12.5	3.47	32								45.0	12.5	16.0					
		15	4.17	31.5								58.0	16.1	13.6					
099	65/300-3/4	7	1.94	28.5	36	1450	3	2.8	85	122	80/160-7.5/2	35.0	9.72	35	63	2900	7.5	3	110
		11.7	3.25	28								50.0	13.9	32					
		14	3.89	27.5								65.0	18.1	28					
100	65/285-3/4	6.1	1.69	21.5	34	1450	3	2.8	83	123	80/150-7.5/2	32.7	9.08	30.6	62	2900	7.5	3	108
		10.1	2.81	21								46.7	13.0	28					
		12.1	3.36	20.5								61.0	16.9	25					
101	65/100-3/2	35.0	9.72	13.8	67	2900	3	3	65	124	80/140-5.5/2	30.0	8.33	27	61	2900	5.5	3	100
		50.0	13.9	12.5								43.3	12.0	24					
		65.0	18.1	10.0								56.3	15.6	20					
102	65/90-2.2/2	31.3	8.69	11	66	2900	2.2	3	55	125	80/200-15/2	35.0	9.72	53.3	55	2900	15	3	180
		44.7	12.4	10								50.0	13.9	50					
		58.0	16.1	8								65.0	18.1	46					
103	65/125-5.5/2	35.0	9.72	22	68	2900	5.5	3	105	126	80/185-11/2	32.8	9.11	47	54	2900	11	3	170
		50.0	13.9	20								47.0	13.1	44					
		65.0	18.1	17								61.0	16.9	40					
104	65/110-4/2	31.3	8.69	17.5	66	2900	4	3	85	127	80/170-7.5/2	30.5	8.47	40.6	53	2900	7.5	3	120
		45.0	12.5	16.0								43.0	12.1	38.0					
		58.0	16.1	13.6								43.5	15.7	33.4					
105	65/160-7.5/2	35.0	9.72	35	63	2900	7.5	3	110	128	80/250-22/2	35.0	9.72	83	52	2900	22	3	245
		50.0	13.9	32								50.0	13.9	80					
		65.0	18.1	28								65.0	18.1	72					
106	65/150-7.5/2	32.7	9.08	30.6	62	2900	7.5	3	108	129	80/235-18.5/2	32.5	9.03	73	52	2900	18.5	3	215
		46.7	13.0	28								46.7	13.0	70					
		61.0	16.9	25								61.0	16.9	64					
107	65/140-5.5/2	30.0	8.33	27	61	2900	5.5	3	100	130	80/220-15/2	30.0	8.33	63	51	2900	15	3	190
		43.3	12.0	24								43.3	12.0	60					
		56.3	15.6	20								56.0	15.6	54					
108	65/200-15/2	35.0	9.72	53.3	55	2900	15	3	180	131	80/315-37/2	35.0	9.72	128	43	2900	37	3	360
		50.0	13.9	50								50.0	13.9	125					
		65.0	18.1	46								65.0	18.1	122					
109	65/185-11/2	32.8	9.11	47	54	2900	11	3	170	132	80/300-30/2	32.5	9.03	116	42	2900	30	3	345
		47.0	13.1	44								46.5	12.9	113					
		61.0	16.9	40								60.5	16.8	110					
110	65/170-7.5/2	30.5	8.47	40.6	53	2900	7.5	3	120	133	80/285-30/2	31.0	8.61	103	42	2900	30	3	345
		43.5	12.1	38.0								44.5	12.4	101					
		56.5	15.7	33.4								58.0	16.1	97					
111	65/250-22/2	35.0	9.72	83	52	2900	22	3	245	134	80/270-22/2	29.0	8.06	98	40	2900	22	3	280
		50.0	13.9	80								41.0	11.4	85					
		65.0	18.1	72								53.6	14.9	83					
112	65/235-18.5/2	32.5	9.03	73	52	2900	18.5	3	215	135	80/125-0.75/4	15	4.17	5.6	70	1450	0.75	2.8	50
		46.7	13.0	70								25	6.94	5					
		61.0	16.9	64								30	8.33	4.5					
113	65/220-15/2	30.0	8.33	63	51	2900	15	3	190	136	80/110-0.55/4	13	3.61	4.3	65	1450	0.55	2.8	45
		43.3	12.0	60								22	6.06	3.8					
		56.0	15.6	54								26	7.25	3.4					
114	65/315-37/2	35.0	9.72	128	43	2900	37	3	360	137	80/160-1.1/4	15	4.17	9	68	1450	1.1	2.8	60
		50.0	13.9	125								25	6.94	8					
		65.0	18.1	122								30	8.33	7.2					
115	65/300-30/2	32.5	9.03	116	42	2900	30	3	345	138	80/150-0.75/4	13	3.61	6.8	65	1450	0.75	2.8	55
		46.5	12.9	113								21.6	6	6					
		60.5	16.8	110								25.9	7.19	5.4					

## PERFORMANCE PARAMETER TABLE

Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)	Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)
		(m³/h)	(L/s)									(m³/h)	(L/s)						
139	80/200-2.2/4	15	4.17	13.2	65	1450	2.2	2.8	75	162	80/285-45/2	63	17.5	106.6	54	2900	45	4.0	440
		25	6.94	12.5								90	25.0	101					
		30	8.33	11.8								117	32.5	92					
140	80/185-1.5/4	14	3.89	11.5	63	1450	1.5	2.8	70	163	80/270-37/2	58	16.1	90	52	2900	37	4.0	385
		23.3	6.47	10.9								82	22.8	85					
		27.9	7.75	10.2								107	29.7	76					
141	80/250-3/4	15	4.17	21	59	1450	3.0	2.8	95	164	80/350-55/2	35	9.72	156	53	2900	55	3.0	570
		25	6.94	20								50	13.9	150					
		30	8.33	18.8								65	18.1	140					
142	80/235-2.2/4	13.3	3.69	16.6	58	1450	2.2	2.8	90	165	80/330-45/2	30.8	8.58	148	45	2900	45	3.0	470
		22.2	6.17	15.8								44	12.2	142					
		26.6	7.39	14.8								52.8	14.7	135					
143	80/220-1.5/4	11.9	3.31	13.2	57	1450	1.5	2.8	85	166	80/310-37/2	28	7.78	142	39	2900	37	3.0	440
		19.8	5.50	12.6								40	11.1	135					
		23.8	6.61	11.8								46	12.8	128					
144	80/315-5.5/4	15	4.17	32.5	50	1450	5.5	2.8	135	167	100/100-4/2	50	13.9	13.6	66	2900	4.0	4.0	125
		25	6.94	32								72	20.0	12					
		30	8.33	31.5								85	23.6	10.5					
145	80/300-4/4	14	3.89	28.3	50	1450	4.0	2.8	110	168	100/110-5.5/2	50	13.9	18	68	2900	5.5	4.0	140
		23	6.39	28								72	20.0	17					
		28	7.78	27.4								85	23.6	15					
146	80/285-3/4	12.1	3.36	21.5	49	1450	3.0	2.8	100	169	100/140-7.5/2	50	13.9	27	68	2900	7.5	4.0	160
		20.2	5.61	21								72	20.0	2					

## PERFORMANCE PARAMETER TABLE

Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)	Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)
		(m³/h)	(L/s)									(m³/h)	(L/s)						
185	100/185-18.5/2	65.4 93.5 121.6	18.2 26.0 33.8	47.5 44.0 39.0	64 73 72	2900	18.5	4.0	215	208	100/285-5.5/4	24.3 40.5 48.6	6.75 11.3 13.5	22.3 21.0 19.1	60	1450	5.5	3	170
186	100/170-15/2	61 87 113	16.9 24.2 31.4	41 38 34	63 72 71	2900	15	4.0	200	209	125/100-11/2	96 160 192	26.7 44.4 53.3	13 12.5 12	78 82 84	2900	11	4.0	185
187	100/250-37/2	70 100 130	19.4 27.8 36.1	87 80 68	62 69 68	2900	37	4.0	350	210	125/90-7.5/2	86 143 172	23.9 39.7 47.8	10.4 10.0 9.6	73 77 79	2900	7.5	4.0	135
188	100/235-30/2	65.4 93.5 121.6	18.2 26.0 33.8	76 70 59.5	61 68 67	2900	30	4.0	335	211	125/125-15/2	96 160 192	26.7 44.4 53.3	22.6 20.0 17.0	76 80 82	2900	15	4.0	230
189	100/220-30/2	61 87 113	16.9 24.2 31.4	65 60 51	60 67 66	2900	30	4.0	330	212	125/110-11/2	86 143 172	23.9 39.7 47.8	18 16 13.6	73 77 79	2900	11	4.0	220
190	100/315-75/2	70 100 130	19.4 27.8 36.1	132 125 114	55 66 67	2900	75	4.0	685	213	125/160-22/2	96 160 192	26.7 44.4 53.3	36 32 28	72 78 79	2900	22	4.0	270
191	100/300-55/2	66.5 95.0 123.6	18.5 26.4 34.3	119 113 104	55 66 67	2900	55	4.0	550	214	125/150-18.5/2	90 150 180	25.0 41.7 50.0	31.5 28.0 24.5	71 76 78	2900	18.5	4.0	235
192	100/285-45/2	63 90 117	17.5 25.0 32.5	106.6 101 92	54 65 66	2900	45	4.0	440	215	125/140-15/2	83 138 166	23.1 38.3 46.1	27 24 21	70 75 77	2900	15	4.0	215
193	100/270-37/2	58 82 107	16.1 22.8 29.7	90 85 76	52 63 64	2900	37	4.0	385	216	125/200-37/2	96 160 192	26.7 44.4 53.3	55 50 46	72 79 78	2900	37	5.0	400
194	100/350-90/2	70 100 130	19.4 27.8 36.1	156 150 140	57	2900	90	4.0	950	217	125/185-30/2	90 150 180	25.0 41.7 50.0	48.4 44.0 40.5	71 77 78	2900	30	5.0	380
195	100/330-75/2	65.4 93.5 121.6	18.2 26 33.8	148 142 135	75	2900	75	4.0	830	218	125/170-22/2	83 138 166	23.1 38.3 46.1	41.3 37.5 34.5	70 75 77	2900	22	5.0	330
196	100/310-55/2	61 87 113	16.9 24.2 31.4	142 135 128	75	2900	55	4.0	600	219	125/250-55/2	96 160 192	26.7 44.4 53.3	87 80 73	71 76 77	2900	55	4.5	590
197	100/125-1.1/4	30 50 60	8.33 13.89 16.67	6 5 4	73	1450	1.1	3	75	220	125/235-45/2	90 150 180	25.0 41.7 50.0	76 70 64	70 75 76	2900	45	4.5	500
198	100/110-1.1/4	26.8 44.6 53.5	7.44 12.4 14.9	4.8 4 3.2	73	1450	1.1	3	75	221	125/220-37/2	83 138 166	23.1 38.3 46.1	65 60 55	69 74 75	2900	37	4.5	435
199	100/160-2.2/4	30 50 60	8.33 13.89 16.67	9.2 8.0 6.8	73	1450	2.2	3	95	222	125/315-90/2	96 160 192	26.7 44.4 53.3	133 125 119	69 73 68	2900	90	4.5	810
200	100/150-1.5/4	26.7 44.5 53.4	7.42 12.4 14.8	7.3 6.3 5.4	71	1450	1.5	3	85	223	125/300-75/2	90 150 180	25.0 41.7 50.0	117 110 104.6	66 71 68	2900	75	4.5	725
201	100/200-3/4	30 50 60	8.33 13.89 16.67	13.5 12.5 11.8	72	1450	3.0	3	105	224	125/285-75/2	84 143 172	23.9 39.7 47.8	106.4 100.0 95.2	65 70 67	2900	75	4.5	720
202	100/185-2.2/4	26.7 44.6 53.5	7.42 12.4 14.9	10.7 9.9 9.4	71	1450	2.2	3	95	225	125/270-55/2	80.5 134 161	22.4 37.2 44.7	96 88 86	64 69 66	2900	55	4.5	600
203	100/250-5.5/4	30 50 60	8.33 13.9 16.7	21.3 20.0 19.0	66	1450	5.5	3	145	226	125/350-110/2	96 160 192	26.7 44.4 53.3	162 150 137	70 75 74	2900	110	4.5	1400
204	100-235-4/4	28 46.7 56	7.78 13.0 15.6	18.6 17.4 16.6	65	1450	4.0	3	120	227	125/330-90/2	90 150 180	25.0 41.7 50.0	148 135 128	69 74 74	2900	90	4.5	1100
205	100/220-3/4	24.2 40.4 48.5	6.72 11.2 13.5	13.9 13.1 12.4	63	1450	3.0	3	110	228	125/310-75/2	86 143 172	23.9 39.7 47.8	130 125 115	68 73 73	2900	75	4.5	850
206	100/315-11/4	30 50 60	8.33 13.89 16.67	34 32 30	61	1450	11	3	230	229	125/160-4/4	60 100 120	16.7 27.8 33.3	10 8 7	78	1450	4	3	125
207	100/300-7.5/4	28 46.7 56	7.78 13.0 15.6	29.6 27.9 26.1	61	1450	7.5	3	185	230	125/200-5.5/4	60 100 120	16.7 27.8 33.3	14.0 12.5 11.0	75	1450	5.5	3	155

## PERFORMANCE PARAMETER TABLE

Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)	Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)
		(m³/h)	(L/s)									(m³/h)	(L/s)						
231	125/185-4/4	51.7 86.1 103	14.4 23.9 28.6	10.8 9.3 8.2	73	1450	4	3	135	254	150/330-90/2	90 150 180	25 41.7 50	145.6 142 134.8	70	2900	90	5.5	790
232	125/250-11/4	60 100 120	16.7 27.8 33.3	21.5 20.0 18.5	75	1450	11	4.5	220	255	150/200-11/4	112 160 208	31.1 44.4 57.8	13.5 12.5 10.0	61 73 67	1480	11	3.5	215
233	125/235-7.5/4	56 94 112	15.6 26.0 31.1	19 18 16	74	1450	7.5	4.5	175	256	150/185-7.5/4	98 140 182	27.2 38.9 50.6	11 10 8.5	68 70 71	1480	7.5	3.5	185
234	125/220-5.5/4	52.2 87 104	14.5 24.2 28.9	16 15 14	73	1450	5.5	4.5	160	257	150/250-15/4	112 160 208	31.1 44.4 57.8	23.5 20.0 14.0	67 72 67	1480	15	3.5	260
235	125/315-15/4	60 100 120	16.7 27.8 33.3	33.5 32 30.5	72	1450	15	3	235	258	150/235-11/4	98 140 182	27.2 38.9 50.6	19 17 11	66 71 67	1480	11	3.5	235
236	125/300-11/4	55 91 110	15.3 25.3 30.6	28 27 25.5	72	1450	11	3	225	259	150/220-7.5/4	84 120 156	23.3 33.3 43.3	15.5 14.0 10.0	62 70 68	1480	7.5	3.5	205
237	125/285-7.5/4	47 80 95	13.1 22.2 26.4	21 20 19	71	1450	7.5	3	175	260	150/315-22/4	112 160 208	31.1 44.4 57.8	33 32 28	63 71 80	1480	22	3.5	285
238	125/400-30/4	60 100 120	16.7 27.8 33.3	52 50 48	67	1450	30	3.5	400	261	150/300-18.5/4	98 140 182	27.2 38.9 50.6	29.0 28.0 26.6	62 71 80	1480	18.5	3.5	270
239	125/370-22/4	60 100 120	16.7 27.8 33.3	46 44 42	63	1450	22	3.5	335	262	150/285-15/4	84 120 156	23.3 33.3 43.3	25.0 24.0 22.5	66 71 70	1480	15	3.5	250
240	125/345-18.5/4	60 100 120	16.7 27.8 33.3	39 38 36	63	1450	18.5	3.5	270	263	150/400-37/4	112 160 208	31.1 44.4 57.8	52 50 42	62 72 80	1480	37	3.5	520
241	150/160-30/2	120 200 240	33.3 55.6 66.7	35 32 28	65	2900	30	4.5	390	264	150/370-30/4	98 140 182	27.2 38.9 50.6	46 44 39	61 71 80	1480	30	3.5	500
242	150/150-22/2	112 187 224	31.1 51.9 62.2	31.5 28 24	64	2900	22	4.5	325	265	150/345-22/4	84 120 156	23.3 33.3 43.3	41 38 30	66 70 74	1480	22	3.5	470
243	150/140-18.5/2	104 173 208	28.9 48.1 57.8	26.2 24 21	63	2900	18.5	4.5	310	266	150/510-75/4	112 160 208	31.1 44.4 57.8	83 80 75	64 68 66	1480	75	4.0	900
244	150/200-45/2	120 200 240	33.3 55.6 66.7	55 50 46	64	2900	45	4.5	505	267	150/475-55/4	98 140 182	27.2 39.0 50.6	73 70 66	62 66 64	1480	55	4.0	750
245	150/185-37/2	112 187 224	31.1 51.9 62.2	48.4 44 40	63	2900	37	4.5	455	268	150/440-45/4	84 120 156	23.3 33.3 43.3	65 60 56	60 64 62	1480	45	4.0	670
246	150/170-30/2	104 173 208	28.9 48.1 57.8	41 37 34.5	62	2900	30	4.5	435	269	150/200-15/4	140 200 260	38.9 55.6 72.2	13.8 12.5 10.6	68 78 78	1480	15	3.0	270
247	150/250-75/2	120 200 240	33.3 55.6 66.7	87 80 72	65	2900	75	4.5	710	270	150/185-11/4	125 179 233	34.7 49.7 64.7	11 10 8.5	66 76 76	1480	11	3.0	250
248	150/235-55/2	112 187 224	31.1 51.9 62.2	76 75 63	64	2900	55	4.5	560	271	150/250-18.5/4	140 200 260	38.9 55.6 72.2	21.8 20.0 17.0	74 80 78	1480	18.5	3.0	305
249	150/220-45/2	104 173 208	28.9 48.1 57.8	65 60 54	63	2900</													



## PERFORMANCE PARAMETER TABLE

Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)	Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)
		(m <sup>3</sup> /h)	(L/s)									(m <sup>3</sup> /h)	(L/s)						
277	150/400-45/4	140	38.9	53	69	1480	45	3.5	490	300	200/345-37/4	180	50.0	41.5	72	1480	37	4.0	470
		200	55.6	50	76							78							
		260	72.2	44	72							76							
278	150/370-37/4	131	36.4	46.6	68	1480	37	3.5	455	301	200/370-45/4	180	50.0	47.5	73	1480	45	4.0	540
		187	51.9	44.0	75							80							
		243	67.5	38.3	71							79							
279	150/345-30/4	122	33.9	40.5	67	1480	30	3.5	435	302	200/405-55/4	180	50.0	54	75	1480	55	4.0	640
		174	48.3	38.0	74							81							
		226	62.9	33.0	70							77							
280	150/320-22/4	112	31.1	34	65	1480	22	3.5	375	303	200/510-90/4	180	50.0	84	67	1480	90	44.2	710
		160	44.4	32	72							72							
		208	57.8	28	68							66							
281	150/510-90/4	140	38.9	84	64	1480	90	3.5	950	304	200/200-18.5/4	210	58.3	13.4	71	1480	18.5	4.0	400
		200	55.6	80	71							81							
		260	72.2	75	69							80							
282	150/475-75/4	131	36.4	73.0	63	1480	75	3.5	900	305	200/185-15/4	196	54.4	10.3	69	1480	15	4.0	380
		187	51.9	70.5	70							79							
		243	67.5	66.0	68							78							
283	150/440-55/4	122	33.9	65	62	1480	55	3.5	750	306	200/250-30/4	210	58.3	22.5	76	1480	30	4.0	480
		174	48.3	62	68							81							
		226	62.8	58	66							76							
284	150/410-45/4	112	31.1	56.5	60	1480	45	3.5	640	307	200/235-18.5/4	196	54.4	18.0	74	1480	18.5	4.0	400
		160	44.4	54.5	66							80							
		208	57.8	51.0	64							75							
285	200/200-15/4	140	38.9	13.8	68	1480	15	3.0	270	308	200/220-15/4	182	50.6	14.6	72	1480	15	4.0	385
		200	55.6	12.5	78							77							
		260	72.2	10.6	78							75							
286	200/185-11/4	125	34.7	11	66	1480	11	3.0	250	309	200/315-45/4	210	58.3	36	74	1480	45	4.0	550
		179	49.7	10	76							82							
		233	64.7	8.5	76							80							
287	200/250-18.5/4	140	38.9	21.8	74	1480	18.5	3.0	305	310	200/300-37/4	196	54.4	31.5	73	1480	37	4.0	530
		200	55.6	20.0	80							81							
		260	72.2	17.0	78							77							
288	200/235-15/4	129	35.8	18.5	73	1480	15	3.0	270	311	200/285-30/4	182	50.6	27.0	72	1480	30	4.0	500
		184	51.1	17.0	79							80							
		240	66.7	14.4	77							78							
289	200/220-11/4	116	32.5	15.2	72	1480	11	3.0	245	312	200/400-75/4	210	58.3	54.5	73	1480	75	4.0	830
		167	46.4	14.0	77							81							
		217	60.3	12.0	75							77							
290	200/315-30/4	140	38.9	33.8	71	1480	30	3.5	410	313	200/370-55/4	196	54.4	48	73	1480	55	4.0	680
		200	55.6	32.0	79							79							
		260	72.2	28.0	74							76							
291	200/300-22/4	131	36.4	29.5	70	1480	22	3.5	340	314	200/345-45/4	182	50.6	41.4	71	1480	45	4.0	580
		187	51.9	28.0	78							78							
		243	67.5	24.5	79							74							
292	200/285-18.5/4	121	33.6	25	70	1480	18.5	3.5	315	315	200/320-37/4	171	47.5	34.9	70	1480	37	4.0	550
		173	48.1	24	77							77							
		225	62.5	21	78							73							
293	200/400-45/4	140	38.9	53	69	1480	45	3.5	490	316	200/510-110/4	210	58.3	85	73	1480	110	4.5	1415
		200	55.6	50	76							80							
		260	72.2	44	72							75							
294	200/370-37/4	131	36.4	46.6	68	1480	37	3.5	455	317	200/475-90/4	196	54.4	74	75	1480	90	4.5	1240
		187	51.9	44.0	75							79							
		243	67.5	38.3	71							70							
295	200/345-30/4	122	33.9	40.5	67	1480	30	3.5	435	318	200/440-75/4	182	50.6	64	74	1480	75	4.5	1060
		174	48.3	38.0	74							78							
		226.5	62.9	33.0	70							69							
296	200/320-22/4	112	31.1	34	65	1480	22	3.5	375	319	200/280-37/4	275	76.4	25.2	73	1480	37	4.8	540
		160	44.4	32	72							79							
		208	57.8	28	68							74							
297	200/235-18.5/4	180	50.0	22.5	72	1480	18.5	4.0	330	320	200/300-37/4	275	76.4	32	77	1480	37	4.8	550
		240	66.7	18	78							82							
		297	82.5	13	76							79							
298	200/285-22/4	180	50.0	27	70	1480	22	4.0	365	321	200/325-45/4	255	70.8	35	76	1480	45	4.8	565
		240	66.7	24	80							82							
		297	82.5	18	77							80							
299	200/325-30/4	180	50.0	35	73	1480	30	4.0	440	322	200/350-55/4	275	76.4	41.5	74	1480	55	4.8	690
		240	66.7	32	80							79							
		297	82.5	26.5	79							76							

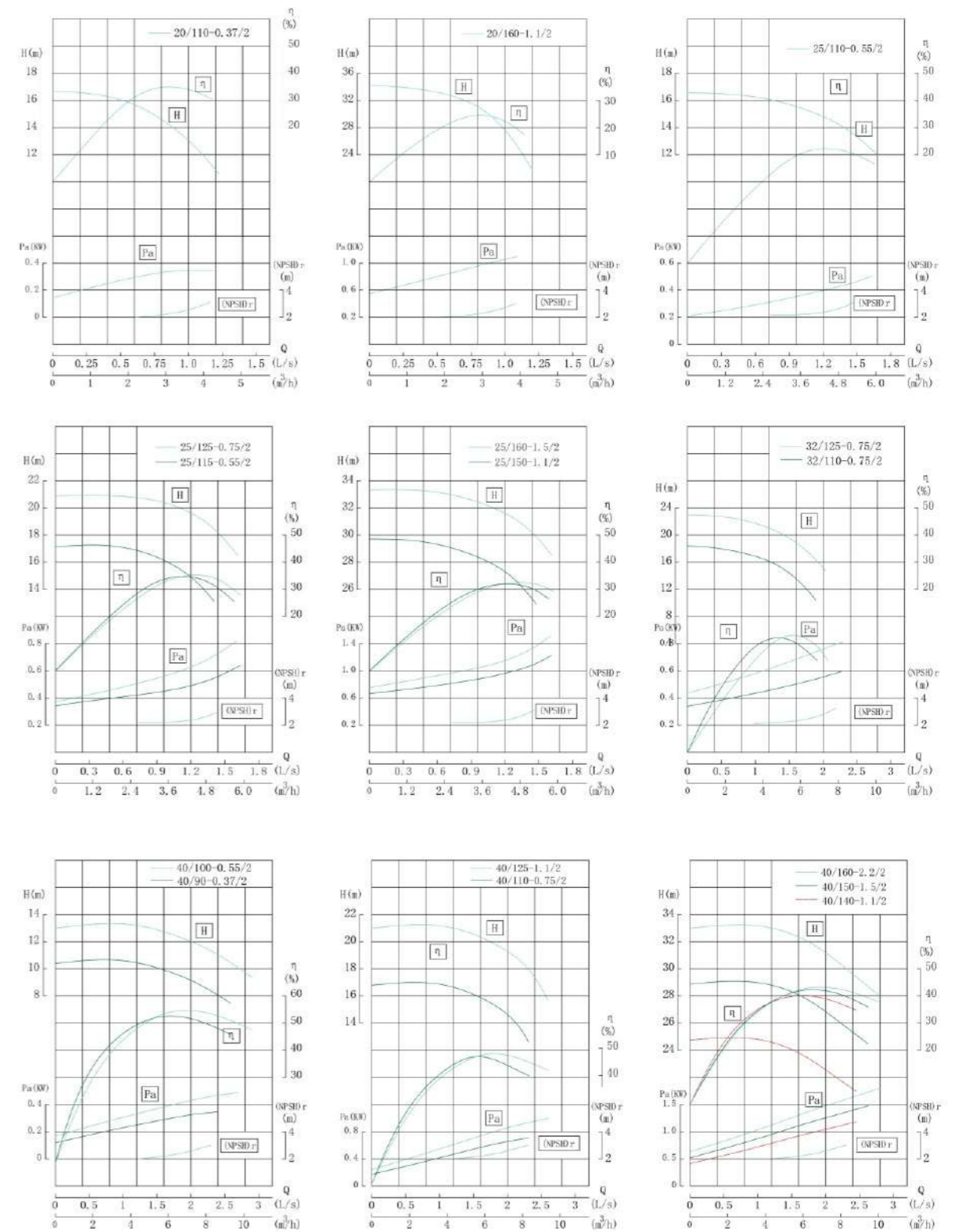
## PERFORMANCE PARAMETER TABLE

Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)	Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)
		(m <sup>3</sup> /h)	(L/s)									(m <sup>3</sup> /h)	(L/s)						
323	200/395-75/4	255	70.8	53	75	1480	75	4.8	850	346	250/405-90/4	325	90.3	54.5	72	1480	90	4.5	1055
		360	100	50	79							77							
		400	111.1	46	77							77							
324	200/200-22/4	280	77.8	13.4	71	1480	22	4.0	385	347	250/200-30/4	400	111.1	13.5	78	1480	30	5.0	550
		400	111.1	12.5	81							82							
		520	144.4	10.5	80							78							
325	200/185-18.5/4	250	69.4	10.7	69	1480	18.5	4.0	365	348	250/185-22/4	365	101.4	11.6	74	1480	22	5.0	500
		358	99.4	10.0	79							80							
		465	129.2	8.5	78							76							
326	200/250-30/4	280	77.8	22.2	75	1480	30	4.0	475	349	250/250-45/4	400	111.1	22.2	78	1480	45	5.0	600
		400	111.1	20.0	80							82							
		520	144.4	14.0	72							81							
327	200/235-22/4	250	69.4	19	73	1480	22	4.0	720	350	250/235-37/4	365	101.4	19	76	1480	37	5.0	550
		358	99.4	17	78							80							
		465	129.2	13	71							80							
328	200/220-18.5/4	226	62.8	15.5	70	1480	18.5	4.0	390	351	250/315-75/4	400	111.1	36	77	1480	75	5.0	905
		322	89.4	14.0	75							82							
		419	116.4	10.0	73							84							
329	200/315-55/4	280	77.8	36	73	1480	55	4.0	680	352	250/300-55/4	365	101.4	31.5	76	1480	55	5.0	830
		400	111.1	32	80							80							
		520	144.4	26	75							82							
330	200/300-45/4	262	72.8	31.5	72	1480	45	4.0	560	353	250/285-45/4	325	90.3	25	74	1480	45	5.0	685
		374	103.9	28.0	79							78							
		486	135.0	23	74							79							
331	200/285-37/4	242	67.2	27.5	71	1480	37	4.0	535	354	250/440-110/4	400	111.1	54.5	75	1480	110	5.0	1570
		346	96.1	24.0	78							78							
		450	125.0	18.5	73							80							
332	200/400-75/4	280	77.8	54.5	75	1480	75	4.0	835	355	250/370/90/4	365	101.4	47	74	1480	90	5.0	1080
		400	111.1	50.0	81							77							
		520	144.4	39.0	78							79							

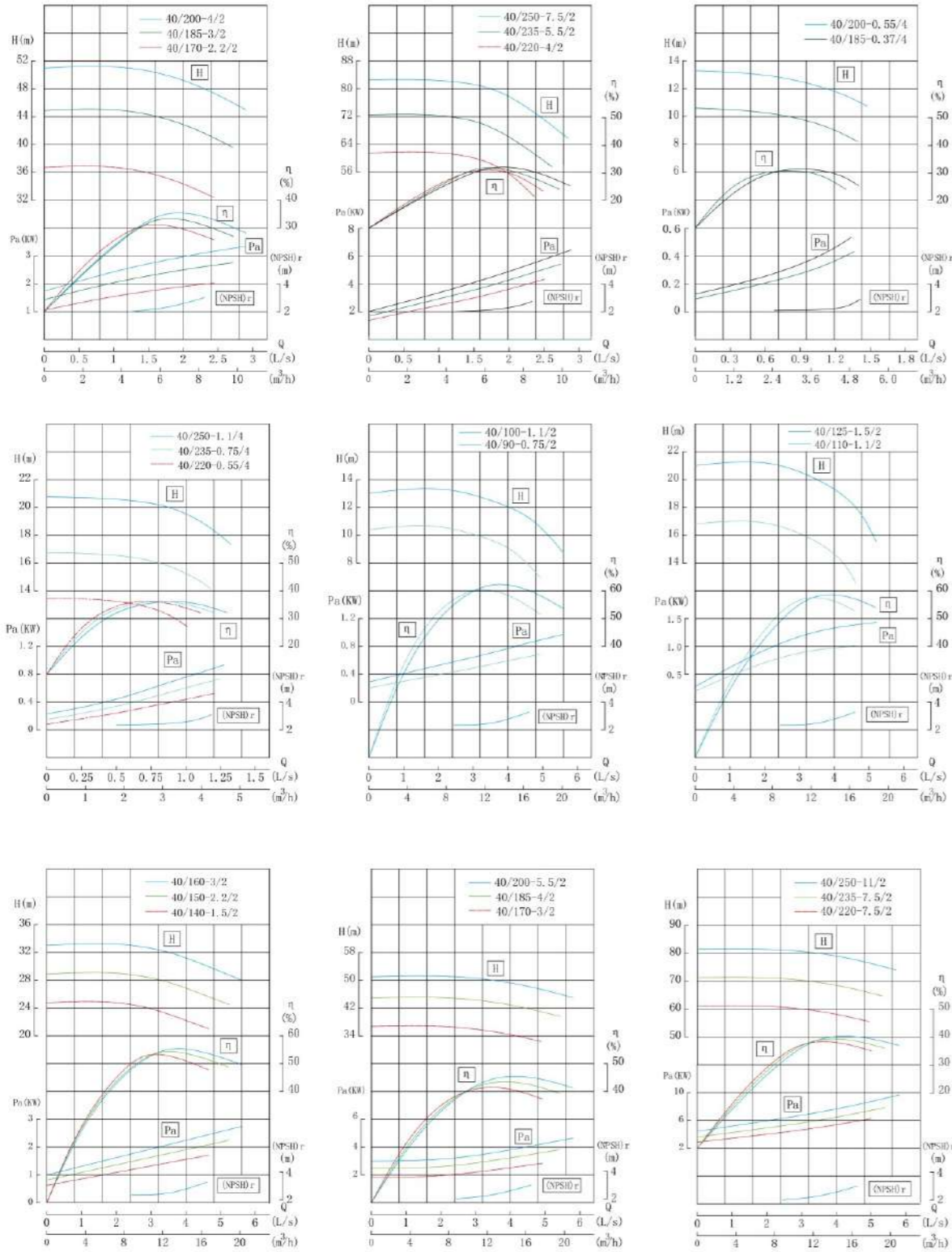
## PERFORMANCE PARAMETER TABLE

Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)	Serial Number	Type	Capacity		Head (m)	Efficiency (%)	Speed (r/min)	Motor Power (Kw)	(NPSH) <sub>r</sub>	Weight (Kg)				
		(m <sup>3</sup> /h)	(L/s)									(m <sup>3</sup> /h)	(L/s)										
369	300/420-132/4	420	116.7	59.0	74	1480	132	5.0	1725	394	300/435-220/4	560	90.3	65.0	73	1480	220	5.5	2170				
		600	166.7	55.0	79							820	125.0	60.0	78								
		720	200.0	47.0	78							960	141.7	54.0	76								
370	300/250-55/4	500	138.9	23	80	1480	55	5.0	1000	395	300/410-160/4	530	147.2	54.5	72	1480	160	5.5	1850				
		720	200.0	20	83							750	208.3	50.0	77								
		900	250.0	16	84							900	250.0	24.0	75								
371	300/235-45/4	460	127.8	20.2	78	1480	45	5.0	850	396	350/320-90/4	718	199.4	23.5	77	1480	90	6.0	1500				
		657	182.5	17.5	81							1080	300.0	20.0	73								
		791	219.7	14.5	82							1345	373.6	18.0	81								
372	300/220-37/4	422	117.2	16.1	76	1480	37	5.0	750	397	350/305-75/4	663	184.2	20.0	75	1480	75	5.5	1400				
		609	169.2	14.0	79							995	276.4	17.0	81								
		760	211.1	11.2	80							1245	345.8	14.0	79								
373	300/300-75/4	480	133.3	31	77	1480	75	5.0	1350	398	350/380-55/6	620	172.2	17.5	73	970	55	5.0	1250				
		720	200.0	28	81							931	258.6	15.0	81								
		900	250.0	25	77							1165	323.6	13.0	79								
374	300/280-75/4	444	123.3	26.5	76	1480	75	5.0	1350	399	350/390-132/4	718	199.4	36.4	78	1480	132	5.5	1750				
		666	185.0	24	80							1080	300.0	32.0	83								
		833	231.4	21.5	76							1345	373.6	28.0	80								
375	300/260-55/4	415	115.3	23.0	75	1480	55	5.0	1170	400	350/360-110/4	663	184.2	30.5	75	1480	110	5.5	1700				
		623	173.1	21.0	79							995	276.4	27.5	82								
		779	216.4	18.5	75							1245	345.8	24.0	79								
376	300/315-90/4	500	138.9	36	79	1480	90	5.0	1350	401	350/335-90/4	620	172.2	26.5	75	1480	90	5.5	1500				
		720	200.0	32	82.5							931	258.6	24.0	81								
		900	250.0	26	84							1165	323.6	21.0	79								
377	300/295-75/4	460	127.8	30.5	76	1480	75	5.0	1300	402	350/420-160/4	718	199.4	42	77	1480	160	5.5	1870				
		662	183.9	28.0	81							1080	300.0	37	83								
		791	219.7	23.5	76							1300	361.1	32	80								
378	300/270-55/4	423	117.5	25.5	74	1480	55	5.0	1080	403	350/405-132/4	642	178.3	35.7	77	1480	132	5.5	1800				
		609	169.2	23.5	80							965	268.1	32.0	82								
		728	202.2	20.0	75							1200	333.3	27.0	80								
379	300/380-132/4	480	133.3	48	76	1480	132	5.0	1725	404	350/380-110/4	600	166.7	31.2	76	1480	110	5.5	1700				
		720	200.0	44	84							900	250.0	28.0	80								
		900	250.0	34	82							1120	311.1	24.5	79								
380	300/360-110/4	444	123.3	41.4	73	1480	110	5.0	1620	405	350/480-250/4	718	199.4	54.7	77	1480	250	5.5	2600				
		666	185.0	38.0	81							1080	300.0	50.0	82								
		833	231.4	30.0	79							1345	373.6	44.2	80								
381	300/325-90/4	409	113.6	35	72	1480	90	5.0	1400	406	350/460-200/4	663	184.2	48.3	76	1480	200	5.5	2100				
		614	170.6	32	80							995	276.4	44.0	81								
		767	213.1	25	78							1245	345.8	37.0	78								
382	300/400-132/4	500	138.9	54.5	75	1480	132	5.5	1725	407	350/430-160/4	620	172.2	42.5	75	1480	160	5.5	2000				
		720	200.0	50.0	81							931	258.6	38.0	80								
		900	250.0	42.0	78							1165	323.6	32.5	76								
383	300/370-110/4	460	127.8	47.0	74	1480	110	5.5	1620	408	350/350-110/4	1000	277.8	23	76	1480	110	6.0	1750				
		662	183.9	44.0	80							1200	333.3	20	80								
		791	219.7	36.5	77							1450	402.8	16	77								
384	300/345-90/4	423	117.5	41.0	72	1480	90	5.5	1400	409	350/330-75/4	900	250.0	19	74	1480	75	6.0	1350				
		609	169.2	38.0	78							1080	300.0	17	79								
		728	202.2	32.0	75							1300	361.1	14	76								
385	300/460-200/4	500	138.9	71.0	75	1480	200	5.5	2150	410	350/400-160/4	1000	277.8	36	76	1480	160	6.0	1870				
		720	200.0	65.0	81							1200	333.3	32	80								
		900	250.0	58.0	82							1450	402.8	26	77								
386	300/425-160/4	460	127.8	60.0	74	1480	160	5.5	1830	411	350/370-132/4	900	250.0	31.5	74	1480	132	6.0	1750				
		662	183.9	55.0	80							1080	300.0	28	78								
		791	219.7	49.0	81							1300	361.1	23	75								
387	300/375-110/4	423	117.5	49	73	1480	110	5.5	1730	412	350/345-110/4	745	206.9	27	78	1480	110	6.0	1500				
		609	169.2	45	79							985	273.6	25	78								
		728	202.2	35	80							1182	328.3	20	77								
388	300/355-90/4	389	108.1	42.0	72	1480	90	5.5	1500	413	350/500-250/4	1000	277.8	55.0	75	1480	250	6.0	2600				
		561	155.8	38.0	78							1200	333.3	50.0	80								
		670	186.1	30.0	79							1450	402.8	43.0	77								
389	300/500-250/4	500	138.9	84	74	1480	250	5.5	2280	414	350/470-200/4	900	250.0	47.5	73	1480	200	6.0	2250				
		720	200.0	80	80							1080	300.0	44.0	78								
		900	250.0	72	75							1300	361.1	38.0	76								
390	300/470-200/4	460	127.8	74.0	73	1480	200	5.5	2150	415	350/450-160/4	745	206.9	42.0	72	1480	160	6.0	2100				
		662	183.9	70.5	79							985	273.6	38.5	77								
		791	219.7	63.5	74							1182	328.3	34.0	75								
391	300/440-160/4	423	117.5	65	71	1480	160	5.5	1980	416	350/425-132/4	678	188.3	37	76	1480	132	6.0	2000				
		609	169.2	62	77							900	250.0	34	76								
		728	202.2	56	72							1080	300.0	29	75								
392	300/415-132/4	389	108.1	57	68	1480	132	5.5	1830														
		561	155.5	54.5	75																		
		670	186.1	49.0	70																		
393	300/480-280/4	620	172.2	76	74	1480	280	5.5	2380														
		900	250.0	70	79																		
		1080	300.0	63	77																		

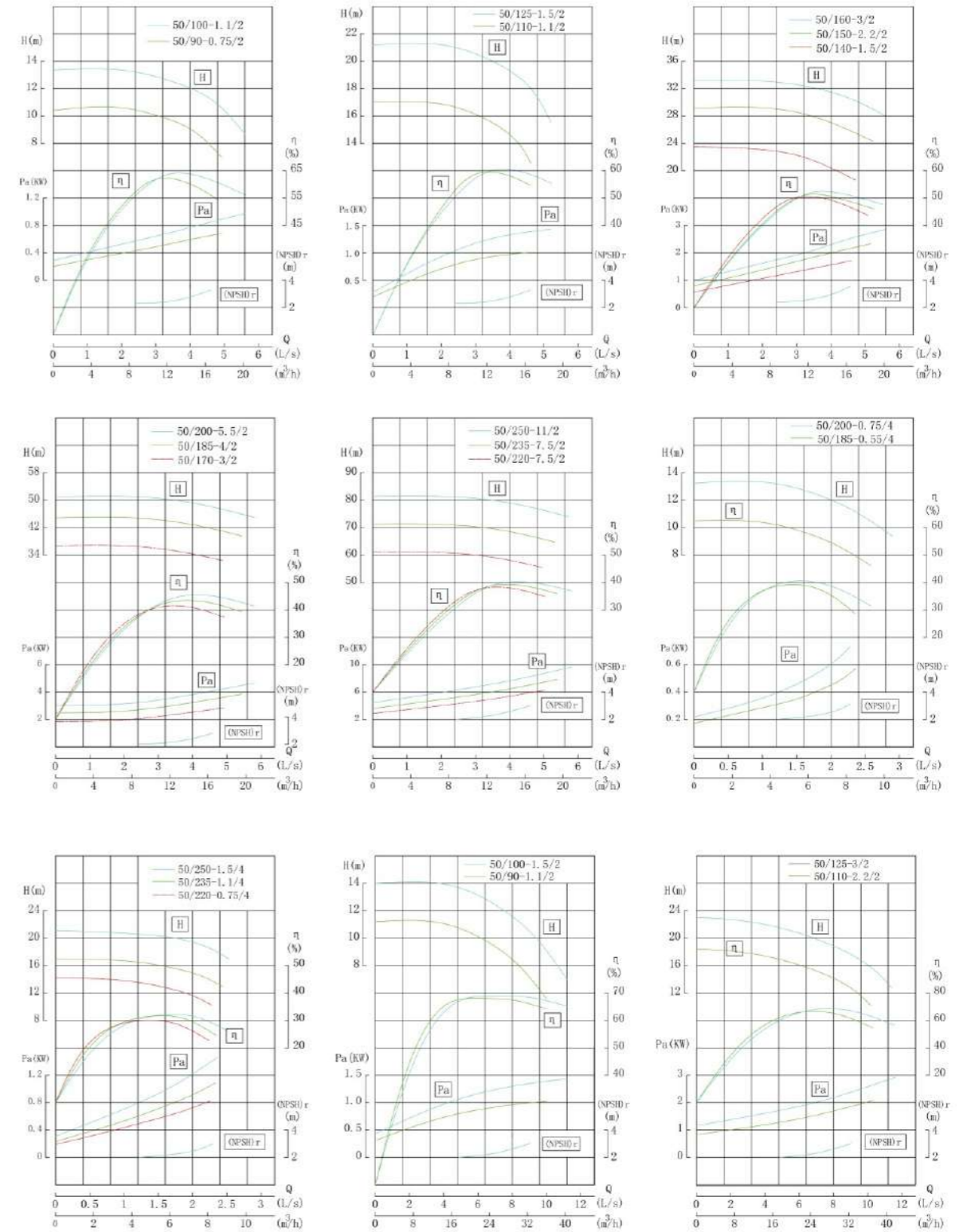
## PERFORMANCE GRAPHS



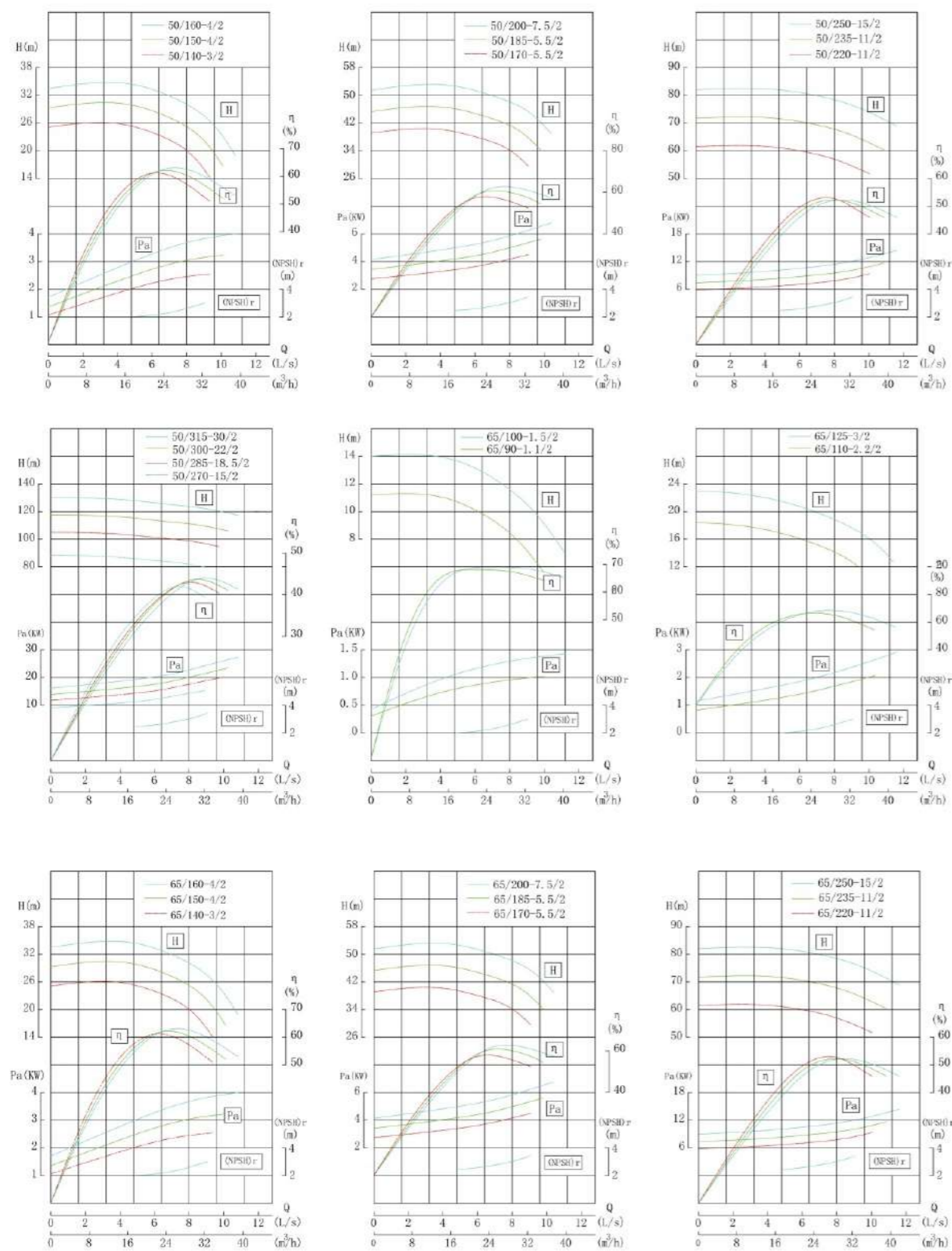
## PERFORMANCE GRAPHS



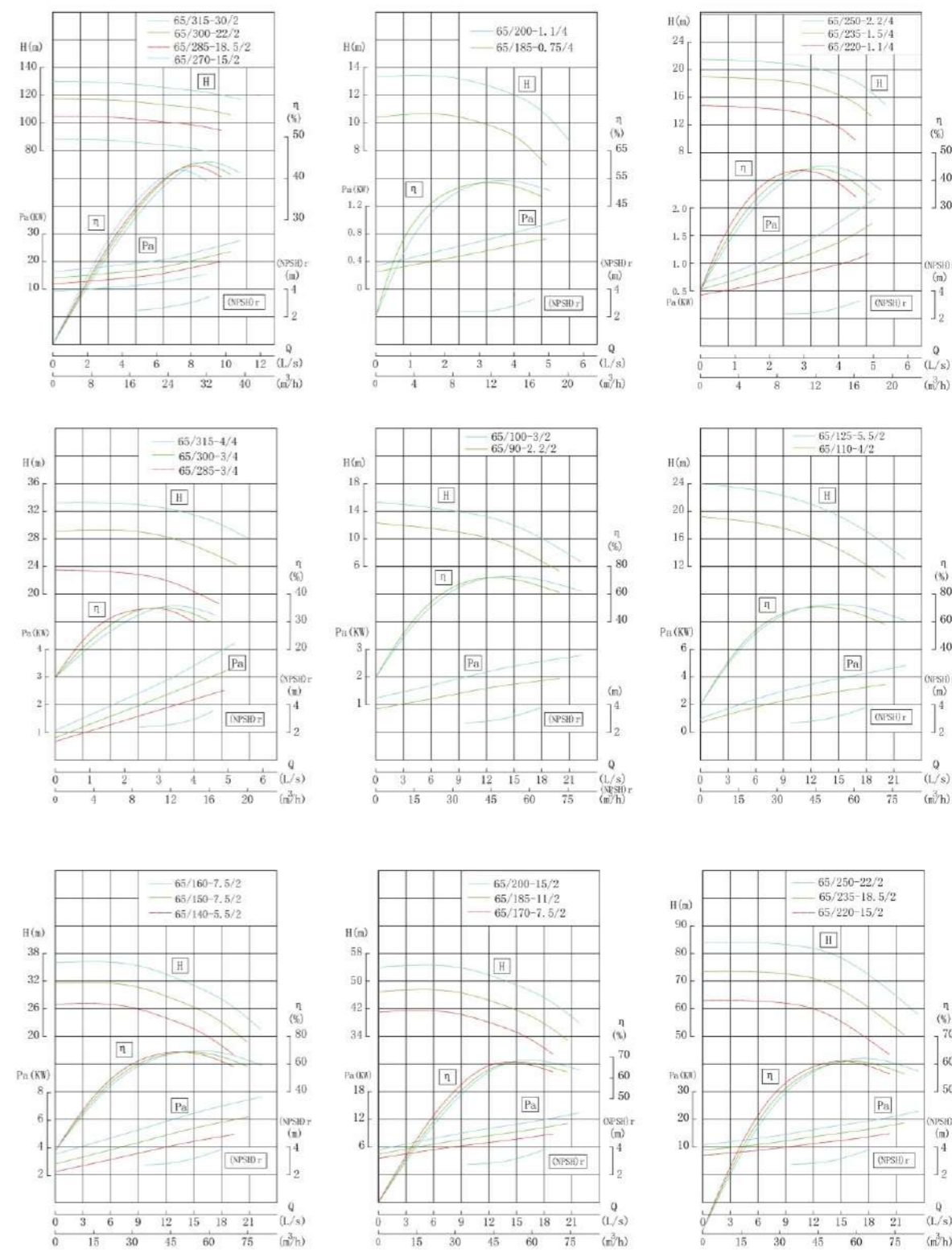
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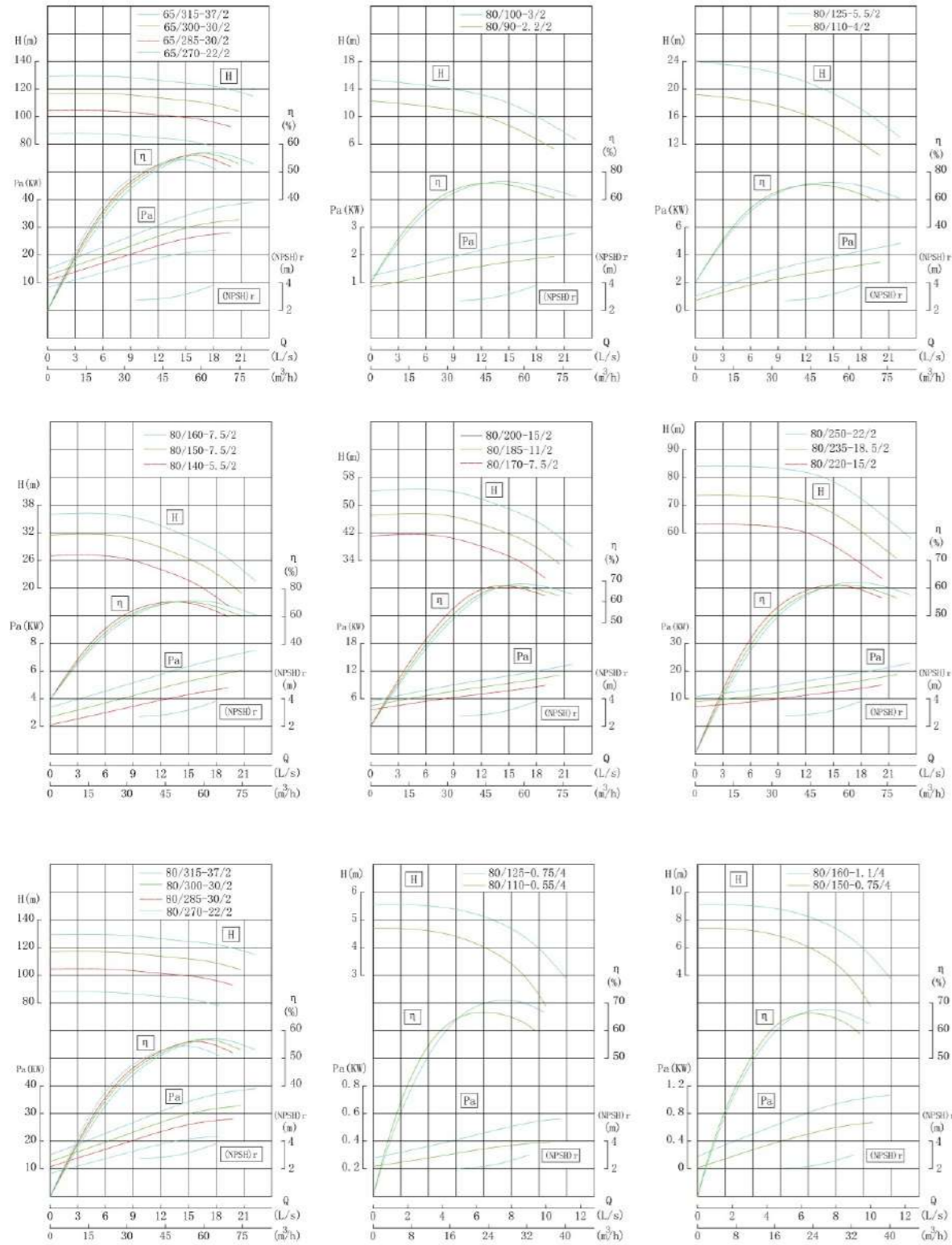
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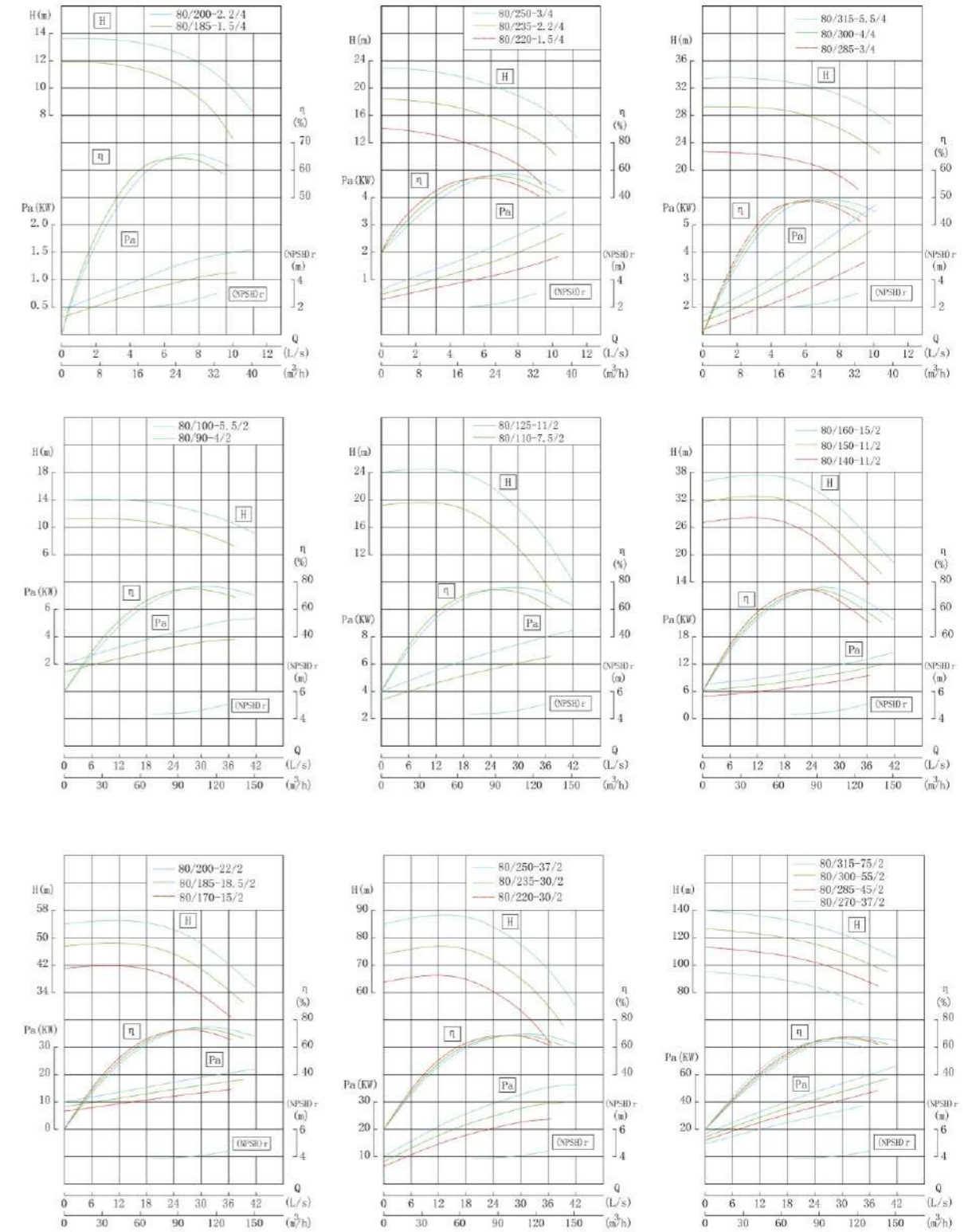
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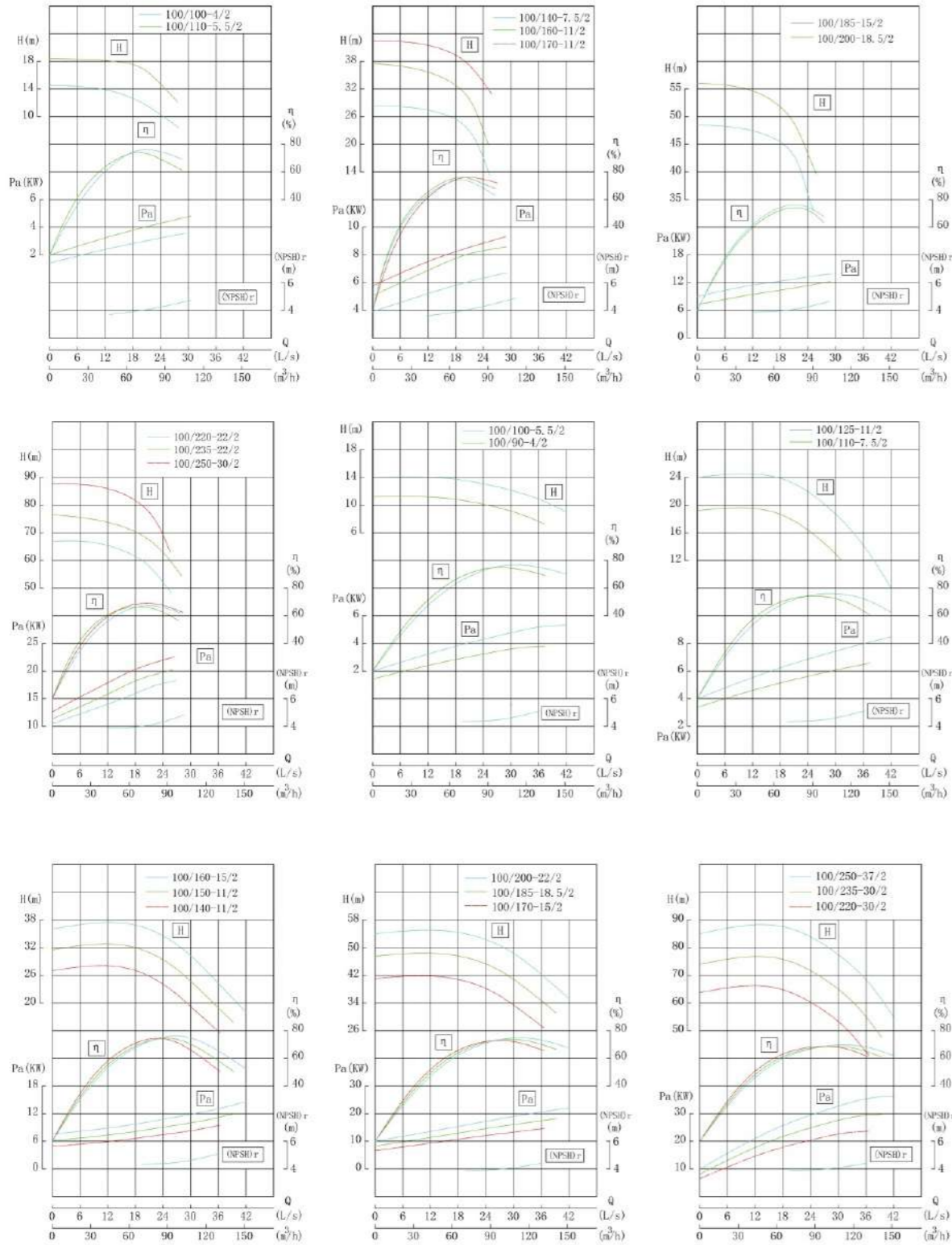
## PERFORMANCE GRAPHS



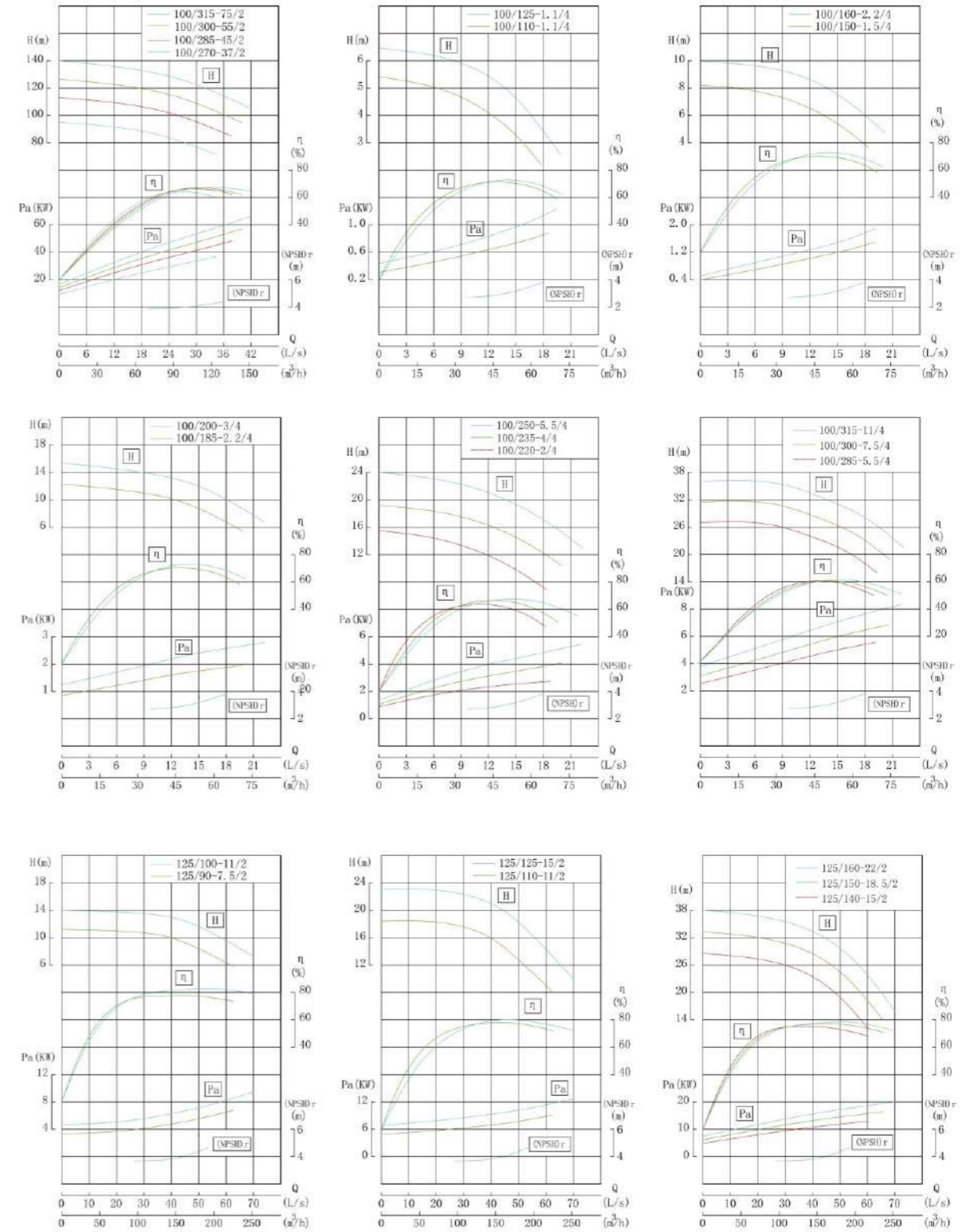
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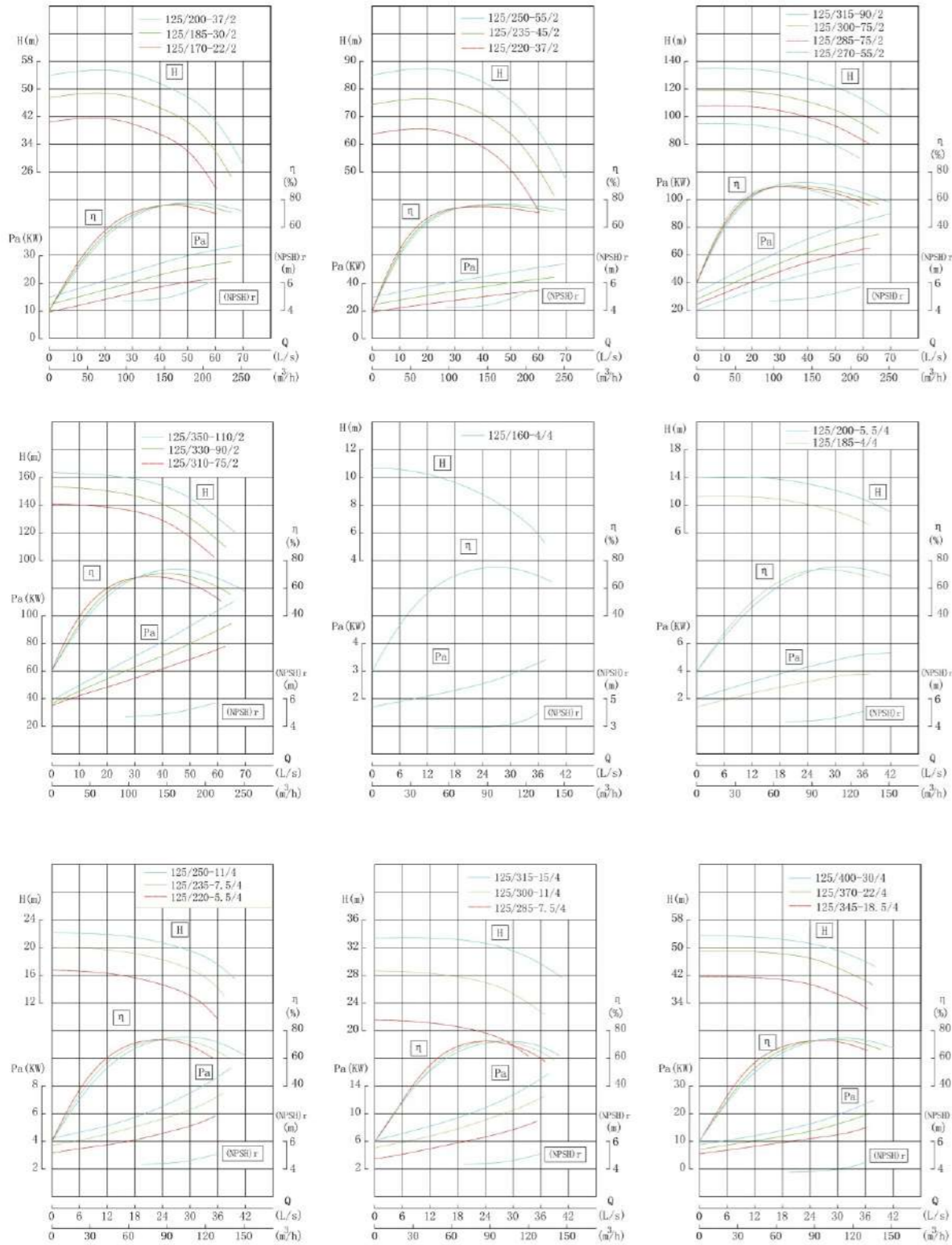
## PERFORMANCE GRAPHS



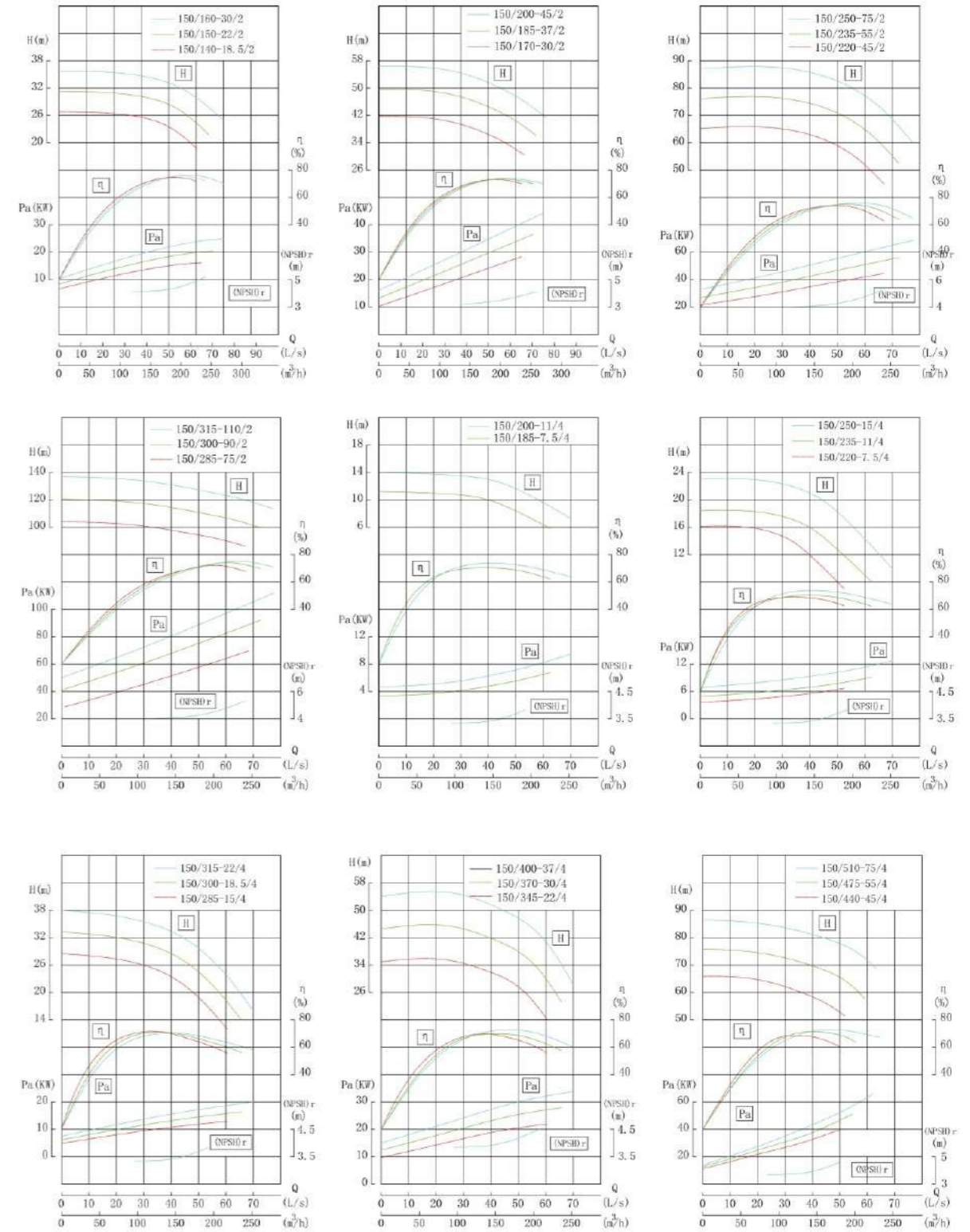
## PERFORMANCE GRAPHS



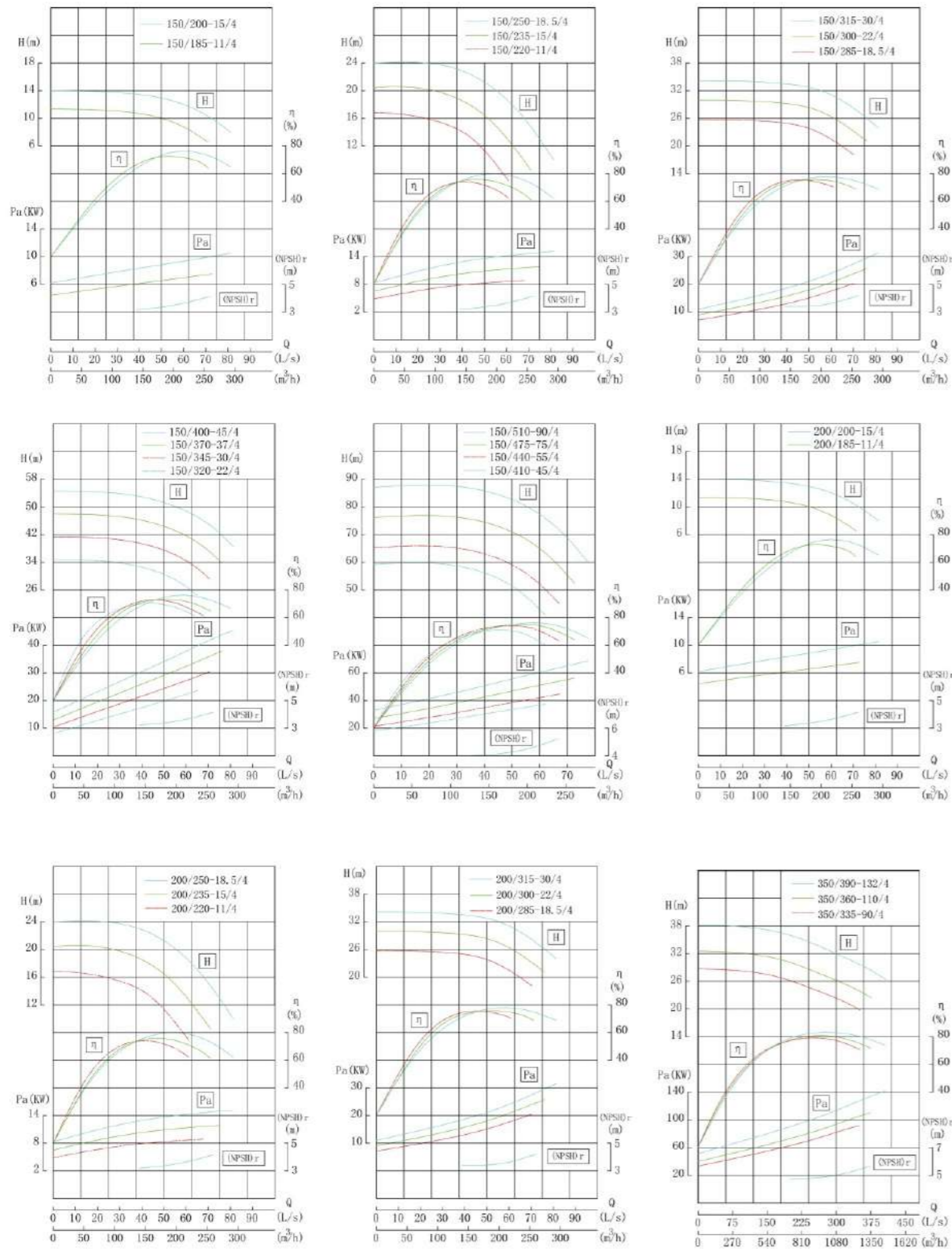
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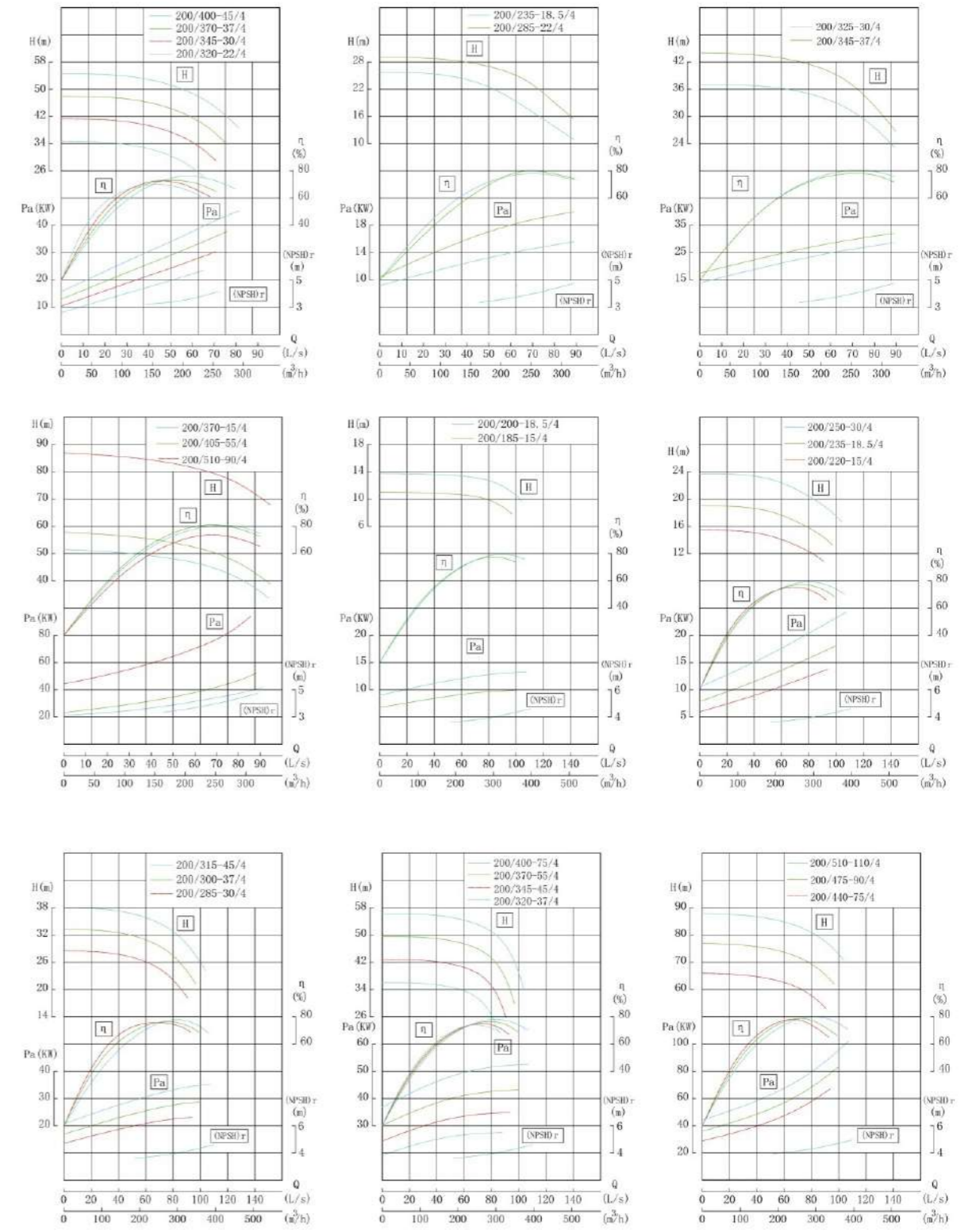
## PERFORMANCE GRAPHS



## PERFORMANCE GRAPHS

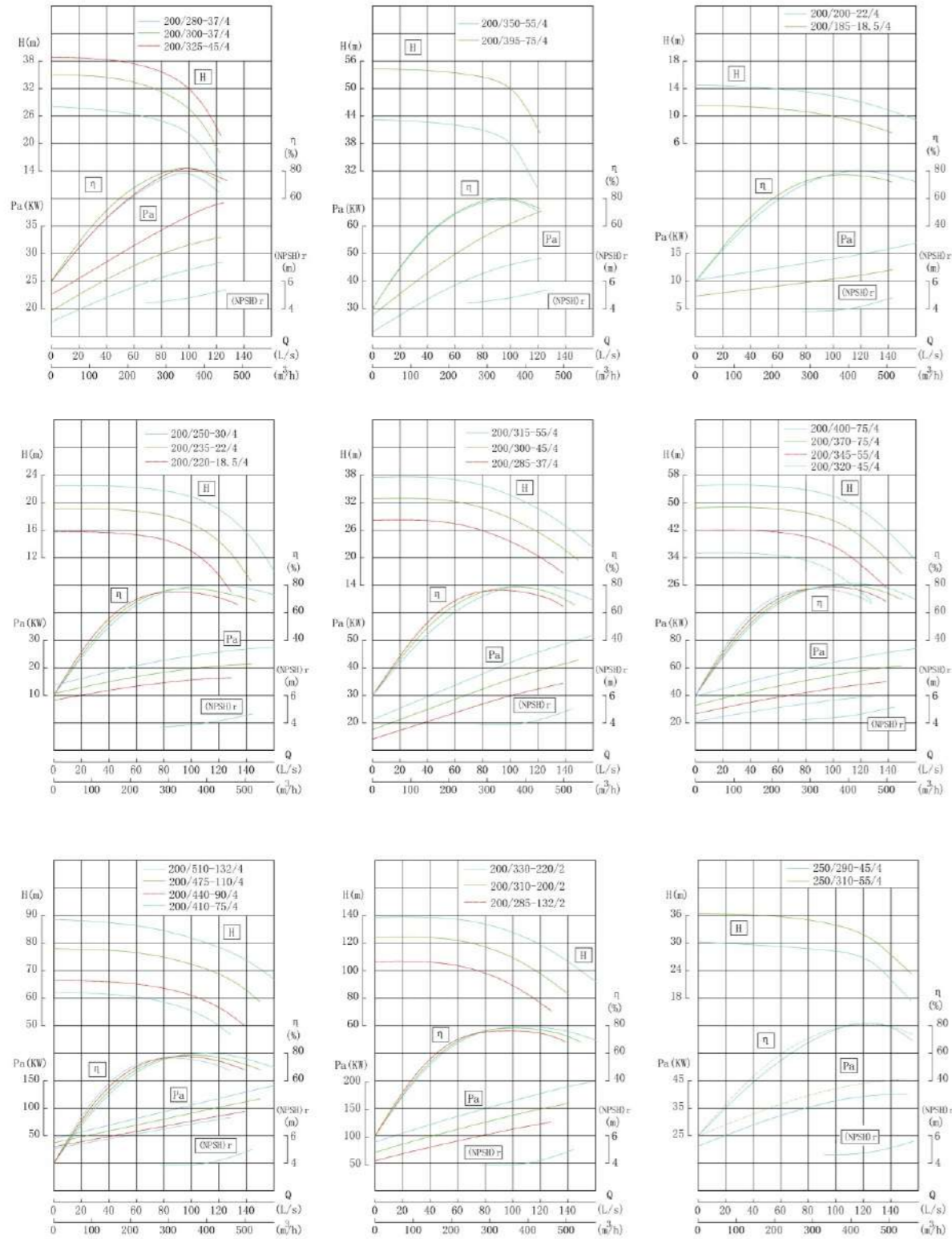


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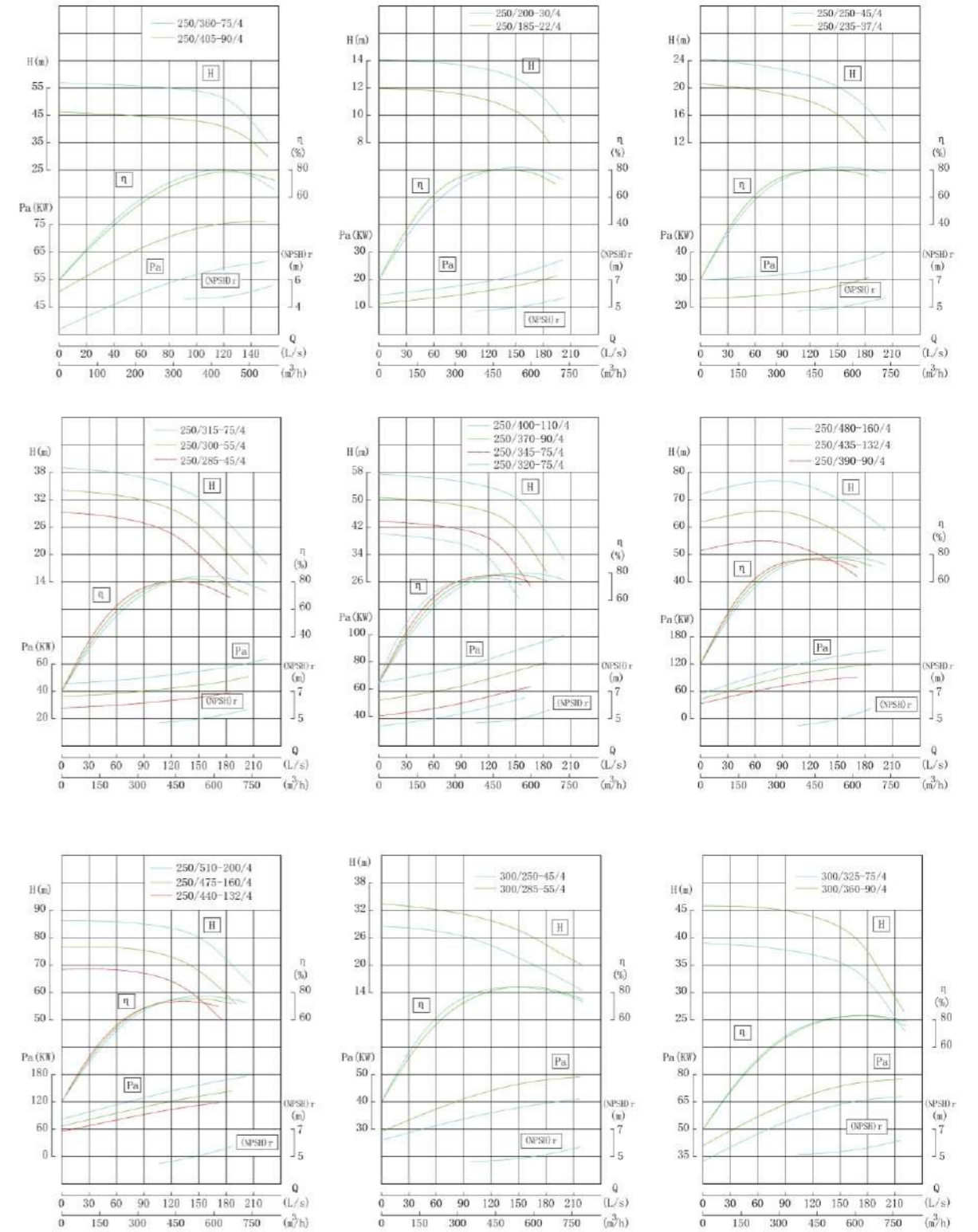




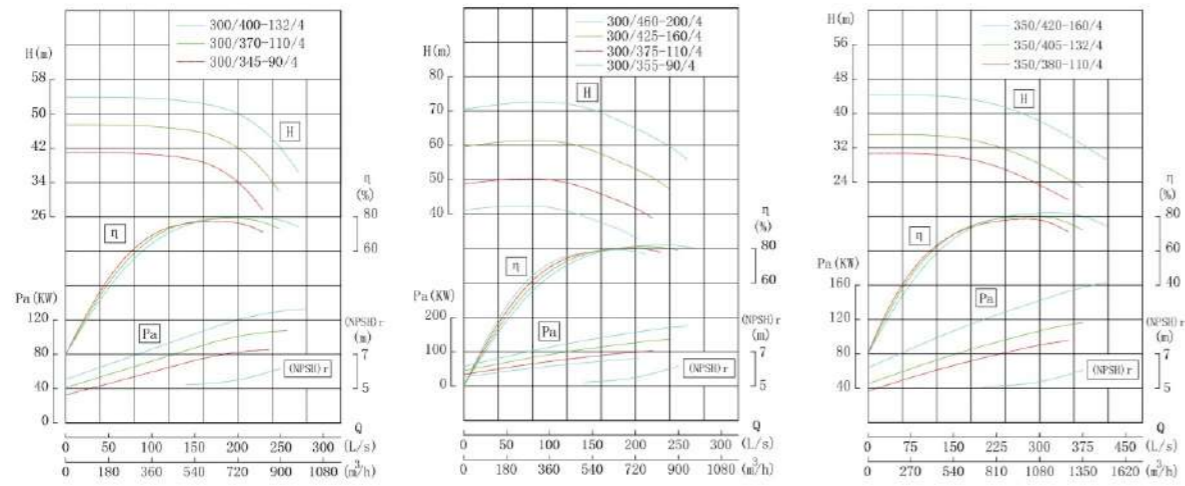
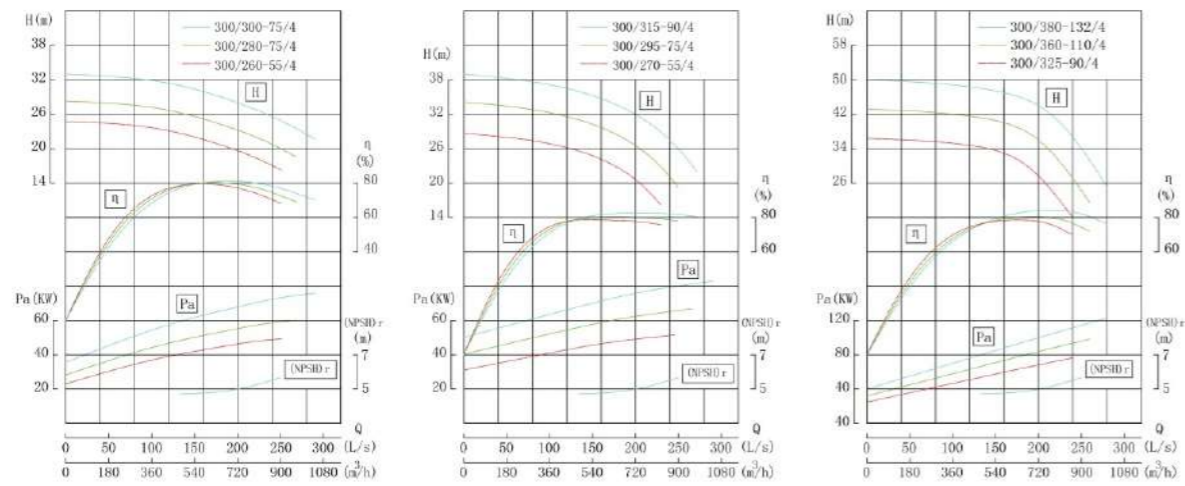
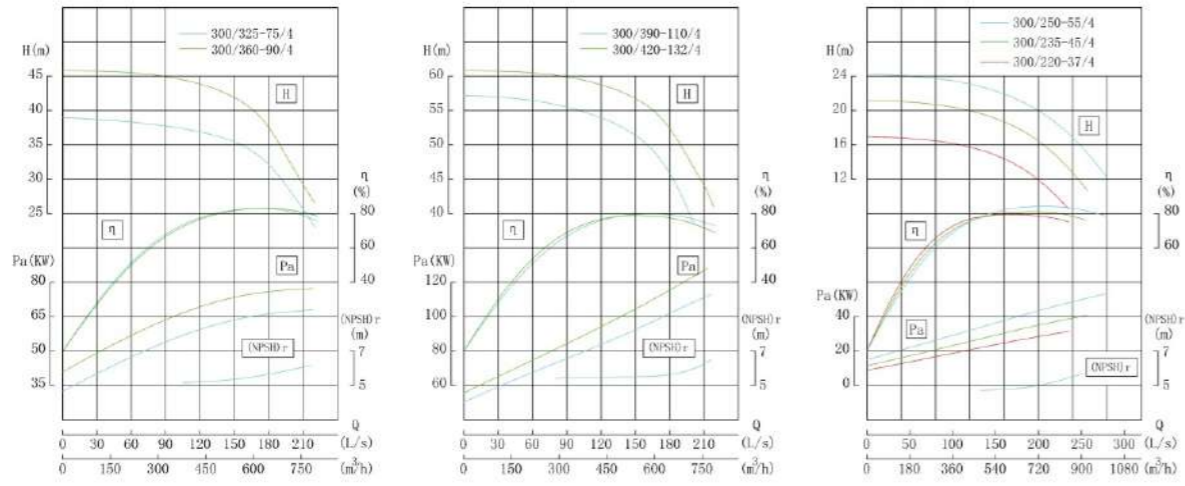
## PERFORMANCE GRAPHS



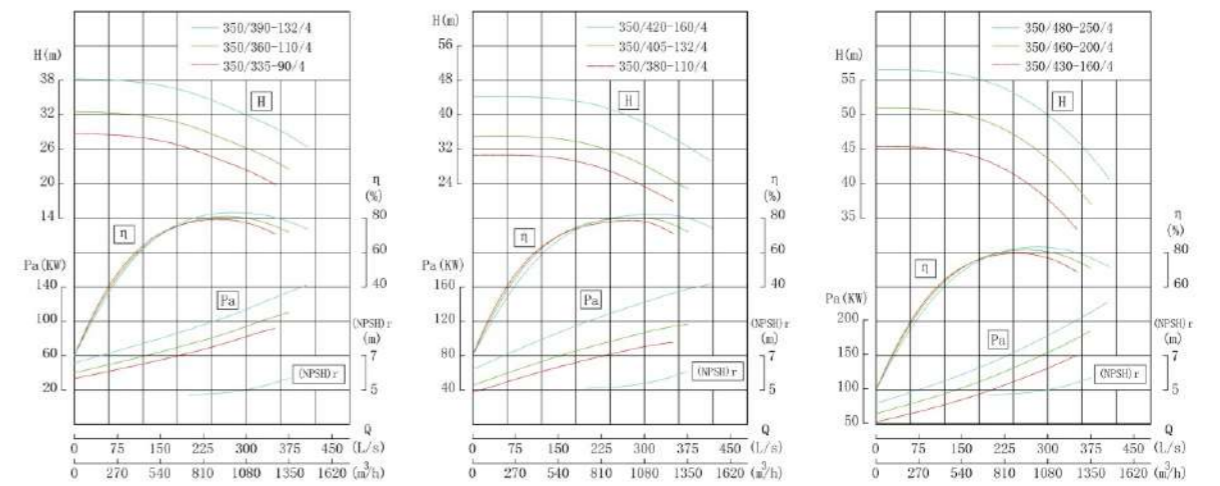
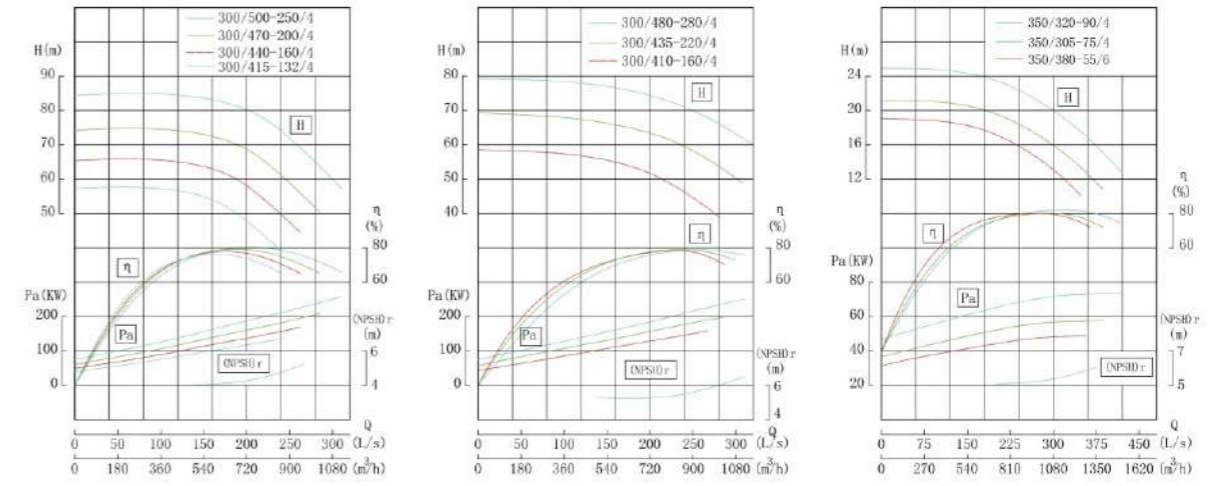
## PERFORMANCE GRAPHS



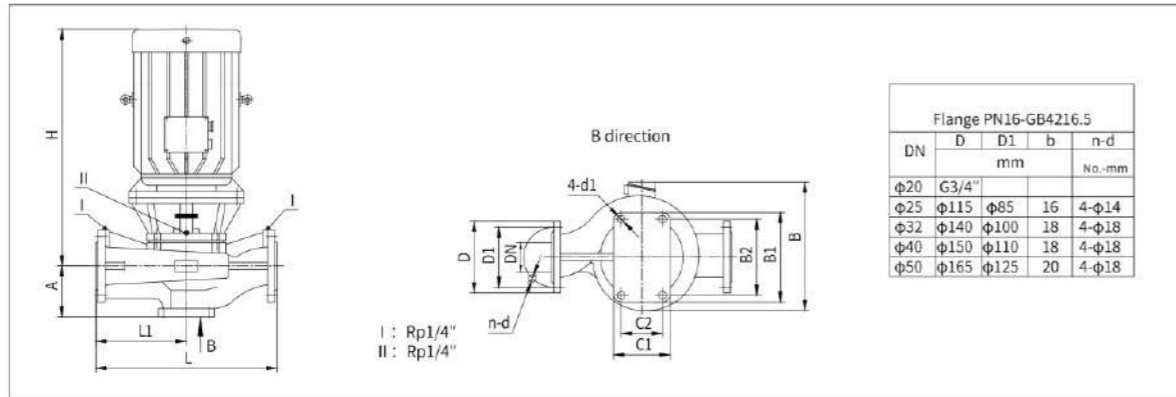
## PERFORMANCE GRAPHS



## PERFORMANCE GRAPHS

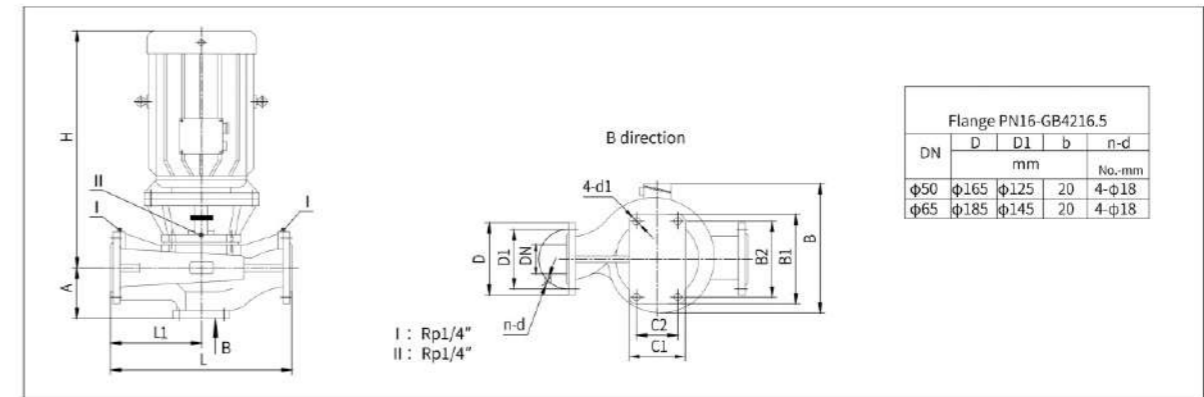


## TKG VERTICAL INSTALLATION SIZE DIAGRAM



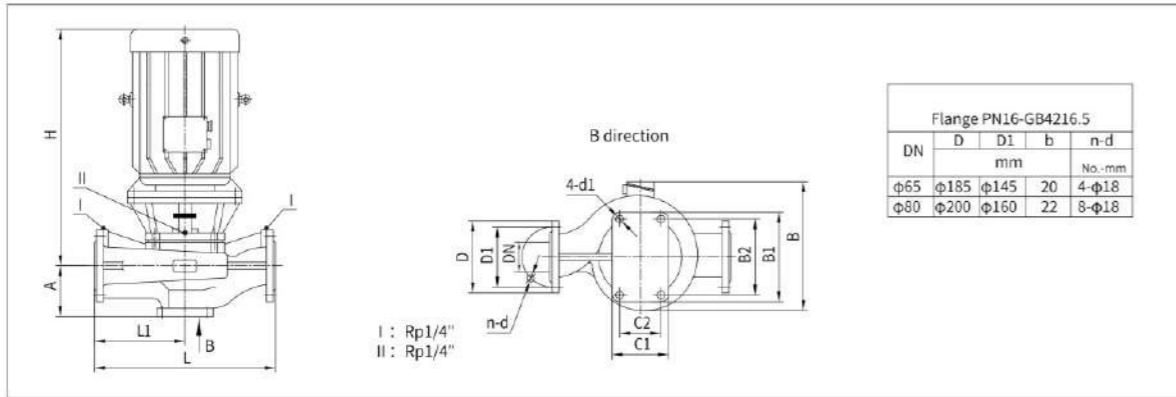
Model	Outline dimensions				Installing dimensions				Model	Outline dimensions				Installing dimensions					
	L	L1	B	H	C1XB1	A	C2XB2	4-d 1		L	L1	B	H	C1XB1	A	C2XB2	4-d 1		
001	20/110-0.37/2	260	130	230	315	70 X 115	65	45 X 90	4-φ 12	026	40/235-0.75/4	420	210	405	350	100 X 130	95	70 X 100	4-φ 12
002	20/160-1.1/2	300	150	230	350	70 X 115	65	45 X 90	4-φ 12	027	40/220-0.55/4	420	210	405	350	100 X 130	95	70 X 100	4-φ 12
003	25/110-0.55/2	260	130	230	315	70 X 115	65	45 X 90	4-φ 12	028	40/100-1.1/2	340	170	230	355	90 X 140	100	60 X 110	4-φ 14
004	25/125-0.75/2	260	130	230	350	70 X 115	65	45 X 90	4-φ 12	029	40/90-0.75/2	340	170	230	355	90 X 140	100	60 X 110	4-φ 14
005	25/115-0.55/2	260	130	230	315	70 X 115	65	45 X 90	4-φ 12	030	40/125-1.5/2	340	170	240	370	90 X 140	100	60 X 110	4-φ 14
006	25/160-1.5/2	300	150	270	370	70 X 115	65	45 X 90	4-φ 12	031	40/110-1.1/2	340	170	240	355	90 X 140	100	60 X 110	4-φ 14
007	25/150-1.1/2	300	150	270	355	70 X 115	65	45 X 90	4-φ 12	032	40/160-3/2	340	170	300	450	90 X 140	100	60 X 110	4-φ 14
008	32/125-0.75/2	260	130	230	355	70 X 115	75	45 X 90	4-φ 12	033	40/150-2.2/2	340	170	300	400	90 X 140	100	60 X 110	4-φ 14
009	32/110-0.75/2	260	130	230	355	70 X 115	75	45 X 90	4-φ 12	034	40/140-1.5/2	340	170	300	370	90 X 140	100	60 X 110	4-φ 14
010	40/100-0.55/2	340	170	230	320	70 X 115	90	45 X 90	4-φ 14	035	40/200-5.5/2	440	220	350	520	110 X 145	105	80 X 115	4-φ 14
011	40/90-0.37/2	340	170	230	320	70 X 115	90	45 X 90	4-φ 14	036	40/185-4/2	440	220	350	465	110 X 145	105	80 X 115	4-φ 14
012	40/125-1.1/2	340	170	230	355	70 X 115	90	45 X 90	4-φ 14	037	40/170-3/2	440	220	350	445	110 X 145	105	80 X 115	4-φ 14
013	40/110-0.75/5	340	170	230	355	70 X 115	90	45 X 90	4-φ 14	038	40/250-11/2	440	220	410	650	110 X 145	105	80 X 115	4-φ 14
014	40/160-2.2/2	340	170	320	395	70 X 115	90	45 X 90	4-φ 14	039	40/235-7.5/2	440	220	410	535	110 X 145	105	80 X 115	4-φ 14
015	40/150-1.5/2	340	170	320	375	70 X 115	90	45 X 90	4-φ 14	040	40/220-7.5/2	440	220	410	535	110 X 145	105	80 X 115	4-φ 14
016	40/140-1.1/2	340	170	320	360	70 X 115	80	45 X 90	4-φ 14	041	50/100-1.1/2	340	170	230	355	90 X 140	100	60 X 110	4-φ 14
017	40/200-4/2	420	210	330	440	100 X 130	95	70 X 100	4-φ 12	042	50/90-0.75/2	340	170	230	355	90 X 140	100	60 X 110	4-φ 14
018	40/185-3/2	420	210	330	420	100 X 130	95	70 X 100	4-φ 12	043	50/125-1.5/2	340	170	240	370	90 X 140	100	60 X 110	4-φ 14
019	40/170-2.2/2	420	210	330	375	100 X 130	95	70 X 100	4-φ 12	044	50/110-1.1/2	340	170	240	355	90 X 140	100	60 X 110	4-φ 14
020	40/250-7.5/2	420	210	405	500	100 X 130	95	70 X 100	4-φ 12	045	50/160-3/2	340	170	300	445	90 X 140	100	60 X 110	4-φ 14
021	40/235-5.5/2	420	210	405	490	100 X 130	95	70 X 100	4-φ 12	046	50/150-2.2/2	340	170	300	400	90 X 140	100	60 X 110	4-φ 14
022	40/220-4/2	420	210	405	445	100 X 130	95	70 X 100	4-φ 12	047	50/140-1.5/2	340	170	300	370	90 X 140	100	60 X 110	4-φ 14
023	40/200-0.55/4	420	210	330	345	100 X 130	95	70 X 100	4-φ 12	048	50/200-5.5/2	440	220	350	520	110 X 145	105	80 X 115	4-φ 14
024	40/185-0.37/4	420	210	330	315	100 X 130	95	70 X 100	4-φ 12	049	50/185-4/2	440	220	350	465	110 X 145	105	80 X 115	4-φ 14
025	40/250-1.1/4	420	210	405	365	100 X 130	95	70 X 100	4-φ 12	050	50/170-3/2	440	220	350	445	110 X 145	105	80 X 115	4-φ 14

## TKG VERTICAL INSTALLATION SIZE DIAGRAM



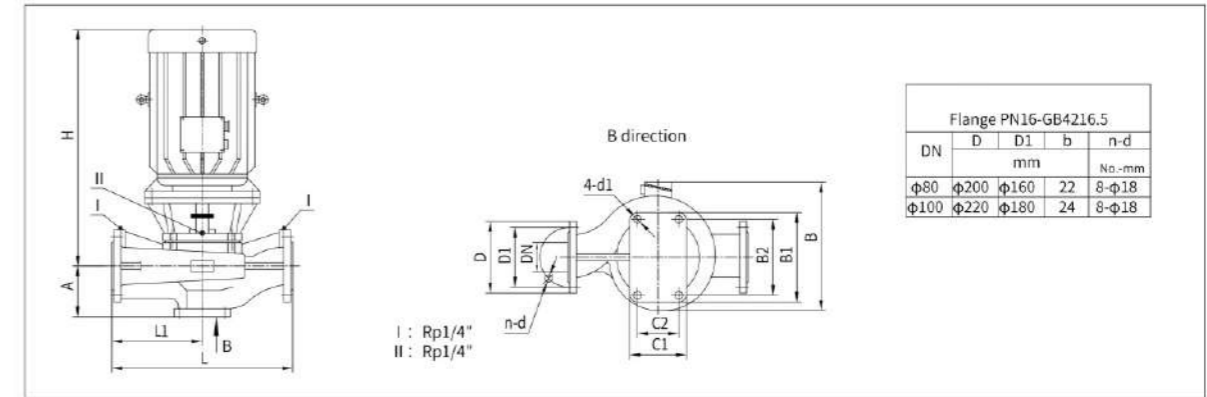
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051	50/250-11/2	440	220	410	650	110 X 145	105	80 X 115	4-φ 14	076	65/100-1.5/2	380	190	255	370	110 X 160	110	80 X 130	4-φ 14
052	50/235-7.5/2	440	220	410	535	110 X 145	105	80 X 115	4-φ 14	077	65/90-1.1/2	380	190	255	365	110 X 160	110	80 X 130	4-φ 14
053	50/220-7.5/2	440	220	410	535	110 X 145	105	80 X 115	4-φ 14	078	65/125-3/2	380	190	280	450	110 X 160	110	80 X 130	4-φ 14
054	50/200-0.75/4	440	220	350	370	110 X 145	105	80 X 115	4-φ 14	079	65/110-2.2/2	380	190	280	395	110 X 160	110	80 X 130	4-φ 14
055	50/185-0.55/4	440	220	350	370	110 X 145	105	80 X 115	4-φ 14	080	65/160-4/2	380	190	325	465	110 X 160	110	80 X 130	4-φ 14
056	50/250-1.5/4	440	220	410	445	110 X 145	105	80 X 115	4-φ 14	081	65/150-4/2	380	190	325	465	110 X 160	110	80 X 130	4-φ 14
057	50/235-1.1/4	440	220	410	400	110 X 145	105	80 X 115	4-φ 14	082	65/140-3/2	380	190	325	435	110 X 160	110	80 X 130	4-φ 14
058	50/220-0.75/4	440	220	410	385	110 X 145	105	80 X 115	4-φ 14	083	65/200-7.5/2	480	240	360	520	130 X 170	120	90 X 130	4-φ 18
059	50/100-1.5/2	380	190	250	370	110 X 160	110	80 X 130	4-φ 14	084	65/185-5.5/2	480	240	360	520	130 X 170	120	90 X 130	4-φ 18
060	50/90-1.1/2	380	190	250	365	110 X 160	110	80 X 130	4-φ 14	085	65/170-5.5/2	480	240	360	520	130 X 170	120	90 X 130	4-φ 18
061	50/125-3/2	380	190	285	450	110 X 160	110	80 X 130	4-φ 14	086	65/250-15/2	480	240	425	645	130 X 170	120	90 X 130	4-φ 18
062	50/110-2.2/2	380	190	285	400	110 X 160	110	80 X 130	4-φ 14	087	65/235-11/2	480	240	425	645	130 X 170	120	90 X 130	4-φ 18
063	50/160-4/2	380	190	315	470	110 X 160	110	80 X 130	4-φ 14	088	65/220-11/2	480	240	425	645	130 X 170	120	90 X 130	4-φ 18
064	50/150-4/2	380	190	315	470	110 X 160	110	80 X 130	4-φ 14	089	65/315-30/2	560	260	510	830	140 X 190	135	100 X 150	4-φ 18
065	50/140-3/2	380	190	315	435	110 X 160	110	80 X 130	4-φ 14	090	65/300-22/2	560	260	510	725	140 X 190	135	100 X 150	4-φ 18
066	50/200-7.5/2	480	240	365	520	130 X 170	120	90 X 130	4-φ 18	091	65/285-18.5/2	560	260	510	700	140 X 190	135	100 X 150	4-φ 18
067	50/185-5.5/2	480	240	365	520	130 X 170	120	90 X 130	4-φ 18	092	65/270-15/2	560	260	510	655	140 X 190	135	100 X 150	4-φ 18
068	50/170-5.5/2	480	240	365	520	130 X 170	120	90 X 130	4-φ 18	093	65/200-1.1/4	480	240	355	385	130 X 170	120	90 X 130	4-φ 18
069	50/250-15/2	480	240	415	645	130 X 170	120	90 X 130	4-φ 18	094	65/185-0.75/4	480	240	355	370	130 X 170	120	90 X 130	4-φ 18
070	50/235-11/2	480	240	415	645	130 X 170	120	90 X 130	4-φ 18	095	65/250-2.2/4	480	240	415	475	130 X 170	120	90 X 130	4-φ 18
071	50/220-11/2	480	240	415	645	130 X 170	120	90 X 130	4-φ 18	096	65/235-1.5/4	480	240	415	440	130 X 170	120	90 X 130	4-φ 18
072	50/315-30/2	560	260	510	830	140 X 190	135	100 X 150	4-φ 18	097	65/220-1.1/4	480	240	415	415	130 X 170	120	90 X 130	4-φ 18
073	50/300-22/2	560	260	510	725	140 X 190	135	100 X 150	4-φ 18	098	65/315-4/4	560	260	510	505	140 X 190	135	100 X 150	4-φ 18
074	50/285-18.5/2	560	260	510	700	140 X 190	135	100 X 150	4-φ 18	099	65/300-3/4	560	260	510	485	140 X 190	135	100 X 150	4-φ 18
075	50/270-15/2	560	260	510	655	140 X 190	135	100 X 150	4-φ 18	100	65/285-3/4	560	260	510	485	140 X 190	135	100 X 150	4-φ 18

## TKG VERTICAL INSTALLATION SIZE DIAGRAM



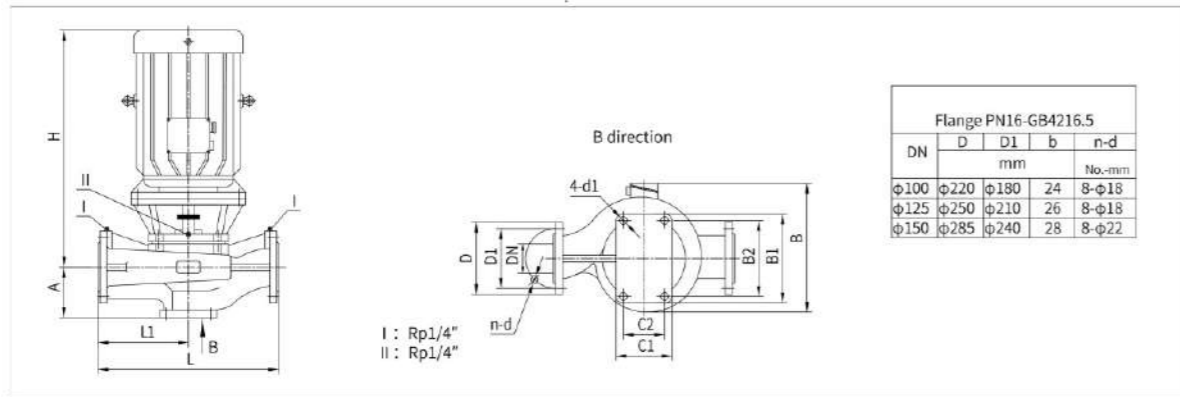
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101	65/100-3/2	400	200	325	450	120 X 160	120	90 X 130	4-φ 14	126	80/185-11/2	500	250	425	650	140 X 190	130	100 X 150	4-φ 18
102	65/90-2.2/2	400	200	325	435	120 X 160	120	90 X 130	4-φ 14	127	80/170-7.5/2	500	250	425	535	140 X 190	130	100 X 150	4-φ 18
103	65/125-5.5/2	400	200	365	525	120 X 160	120	90 X 130	4-φ 14	128	80/250-22/2	500	250	465	720	140 X 190	130	100 X 150	4-φ 18
104	65/110-4/2	400	200	365	470	120 X 160	120	90 X 130	4-φ 14	129	80/235-18.5/2	500	250	465	720	140 X 190	130	100 X 150	4-φ 18
105	65/160-7.5/2	400	200	385	525	120 X 160	120	90 X 130	4-φ 14	130	80/220-15/2	500	250	465	685	140 X 190	130	100 X 150	4-φ 18
106	65/150-7.5/2	400	200	385	525	120 X 160	120	90 X 130	4-φ 14	131	80/315-37/2	560	260	520	830	140 X 190	135	100 X 150	4-φ 18
107	65/140-5.5/2	400	200	385	525	120 X 160	120	90 X 130	4-φ 14	132	80/300-30/2	560	260	520	830	140 X 190	135	100 X 150	4-φ 18
108	65/200-15/2	500	250	425	650	140 X 190	130	100 X 150	4-φ 18	133	80/285-30/2	560	260	520	830	140 X 190	135	100 X 150	4-φ 18
109	65/185-11/2	500	250	425	650	140 X 190	130	100 X 150	4-φ 18	134	80/270-22/2	560	260	520	790	140 X 190	135	100 X 150	4-φ 18
110	65/170-7.5/2	500	250	425	545	140 X 190	130	100 X 150	4-φ 18	135	80/125-0.75/4	400	200	385	375	120 X 160	120	90 X 130	4-φ 14
111	65/250-22/2	500	250	465	720	140 X 190	130	100 X 150	4-φ 18	136	80/110-0.55/4	400	200	385	375	120 X 160	120	90 X 130	4-φ 14
112	65/235-18.5/2	500	250	465	720	140 X 190	130	100 X 150	4-φ 18	137	80/160-1.1/4	400	200	365	385	120 X 160	120	90 X 130	4-φ 14
113	65/220-15/2	500	250	465	690	140 X 190	130	100 X 150	4-φ 18	138	80/150-0.75/4	400	200	365	375	120 X 160	120	90 X 130	4-φ 14
114	65/315-37/2	560	260	510	830	140 X 190	135	100 X 150	4-φ 18	139	80/200-2.2/4	500	250	415	480	140 X 190	130	100 X 150	4-φ 18
115	65/300-30/2	560	260	510	830	140 X 190	135	100 X 150	4-φ 18	140	80/185-1.5/4	500	250	415	445	140 X 190	130	100 X 150	4-φ 18
116	65/285-30/2	560	260	510	830	140 X 190	135	100 X 150	4-φ 18	141	80/250-3/4	500	250	465	480	140 X 190	130	100 X 150	4-φ 18
117	65/270-22/2	560	260	510	785	140 X 190	135	100 X 150	4-φ 18	142	80/235-2.2/4	500	250	465	465	140 X 190	130	100 X 150	4-φ 18
118	80/100-3/2	400	200	325	450	120 X 160	120	90 X 130	4-φ 14	143	80/220-1.5/4	500	250	465	445	140 X 190	130	100 X 150	4-φ 18
119	80/90-2.2/2	400	200	325	435	120 X 160	120	90 X 130	4-φ 14	144	80/315-5.5/4	560	260	510	560	140 X 190	135	100 X 150	4-φ 18
120	80/125-5.5/2	400	200	365	525	120 X 160	120	90 X 130	4-φ 14	145	80/300-4/4	560	260	510	505	140 X 190	135	100 X 150	4-φ 18
121	80/110-4/2	400	200	365	470	120 X 160	120	90 X 130	4-φ 14	146	80/285-3/4	560	260	510	485	140 X 190	135	100 X 150	4-φ 18
122	80/160-7.5/2	400	200	385	520	120 X 160	120	90 X 130	4-φ 14	147	80/100-5.5/2	520	260	370	550	140 X 170	150	110 X 140	4-φ 14
123	80/150-7.5/2	400	200	385	520	120 X 160	120	90 X 130	4-φ 14	148	80/90-4/2	520	260	370	475	140 X 170	150	110 X 140	4-φ 14
124	80/140-5.5/2	400	200	385	520	120 X 160	120	90 X 130	4-φ 14	149	80/125-11/2	520	260	415	650	140 X 170	150	110 X 140	4-φ 14
125	80/200-15/2	500	250	425	650	140 X 190	130	100 X 150	4-φ 18	150	80/110-7.5/2	520	260	415	535	140 X 170	150	110 X 140	4-φ 14

## TKG VERTICAL INSTALLATION SIZE DIAGRAM



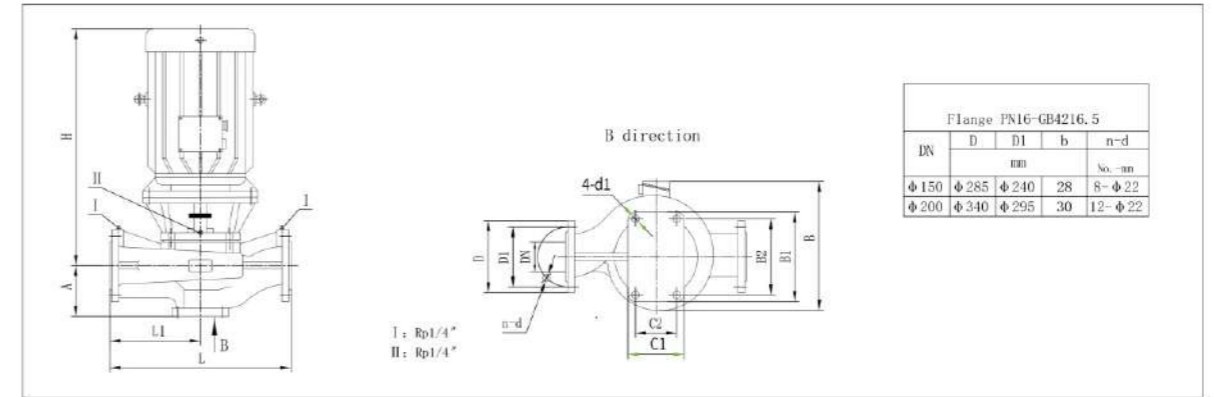
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151	80/160-15/2	520	260	435	650	140 X 170	150	110 X 140	4-φ 14	176	100/125-11/2	520	260	415	650	140 X 170	150	110 X 140	4-φ 14
152	80/150-11/2	520	260	435	650	140 X 170	150	110 X 140	4-φ 14	177	100/110-7.5/2	520	260	415	650	140 X 170	150	110 X 140	4-φ 14
153	80/140-11/2	520	260	435	650	140 X 170	150	110 X 140	4-φ 14	178	100/160-15/2	520	260	430	650	140 X 170	150	110 X 140	4-φ 14
154	80/200-22/2	540	270	465	725	160 X 220	145	120 X 180	4-φ 18	179	100/150-11/2	520	260	430	650	140 X 170	150	110 X 140	4-φ 14
155	80/185-18.5/2	480	240	465	700	160 X 220	145	120 X 180	4-φ 18	180	100/140-11/2	520	260	430	650	140 X 170	150	110 X 140	4-φ 14
156	80/170-15/2	480	240	465	655	160 X 220	145	120 X 180	4-φ 18	181	100/200-22/2	540	270	470	725	160 X 220	145	120 X 180	4-φ 18
157	80/250-37/2	540	270	510	830	160 X 220	145	120 X 180	4-φ 18	182	100/185-18.5/2	540	270	470	700	160 X 220	145	120 X 180	4-φ 18
158	80/235-30/2	540	270	510	830	160 X 220	145	120 X 180	4-φ 18	183	100/170-15/2	540	270	470	655	160 X 220	145	120 X 180	4-φ 18
159	80/220-30/2	540	270	510	830	160 X 220	145	120 X 180	4-φ 18	184	100/250-37/2	540	270	510	830	160 X 220	145	120 X 180	4-φ 18
160	80/315-75/2	670	330	670	1035	170 X 220	180	130 X 180	4-φ 18	185	100/235-30/2	540	270	510	830	160 X 220	145	120 X 180	4-φ 18
161	80/300-55/2	670	330	670	965	170 X 220	180	130 X 180	4-φ 18	186	100/220-30/2	540	270	510	830	160 X 220	145	120 X 180	4-φ 18
162	80/285-45/2	670	330	600	880	170 X 220	180	130 X 180	4-φ 18	187	100/315-75/2	670	330	675	1035	170 X 220	180	130 X 180	4-φ 18
163	80/270-37/2	670	330	520	840	170 X 220	180	130 X 180	4-φ 18	188	100/300-55/2	670	330	675	965	170 X 220	180	130 X 180	4-φ 18
164	100/100-4/2	520	260	360	475	140 X 170	150	110 X 140	4-φ 14	189	100/285-45/2	670	330	675	880	170 X 220	180	130 X 180	4-φ 18
165	100/110-5.5/2	520	260	400	530	140 X 170	150	110 X 140	4-φ 14	190	100/270-37/2	670	330	675	840	170 X 220	180	130 X 180	4-φ 18
166	100/140-7.5/2	520	260	380	550	140 X 170	150	110 X 140	4-φ 14	191	100/125-1.1/4	520	260	415	420	140 X 170	150	110 X 140	4-φ 14
167	100/160-11/2	520	260	415	650	140 X 170	150	110 X 140	4-φ 14	192	100/110-1.1/4	520	260	415	420	140 X 170	150	110 X 140	4-φ 14
168	100/170-11/2	540	270	465	655	160 X 220	145	120 X 180	4-φ 18	193	100/160-2.2/4	520	260	425	480	140 X 170	150	110 X 140	4-φ 14
169	100/185-15/2	540	270	465	655	160 X 220	145	120 X 180	4-φ 18	194	100/150-1.5/4	520	260	425	445	140 X 170	150	110 X 140	4-φ 14
170	100/200-18.5/2	540	270	465	700	160 X 220	145	120 X 180	4-φ 18	195	100/200-3/4	540	270	465	485	160 X 220	145	120 X 180	4-φ 18
171	100/220-22/2	540	270	480	720	160 X 220	145	120 X 180	4-φ 18	196	100/185-2.2/4	540	270	465	485	160 X 220	145	120 X 180	4-φ 18
172	100/235-22/2	540	270	480	720	160 X 220	145	120 X 180	4-φ 18	197	100/250-5.5/4	540	270	510	560	160 X 220	145	120 X 180	4-φ 18
173	100/250-30/2	540	270	480	825	160 X 220	145	120 X 180	4-φ 18	198	100/235-4/4	540	270	510	505	160 X 220	145	120 X 180	4-φ 18
174	100/100-5.5/2	520	260	370	525	140 X 170	150	110 X 140	4-φ 14	199	100/220-3/4	540	270	510	485	160 X 220	140	120 X 180	4-φ 18
175	100/90-4/2	520	260	370	475	140 X 170	150	110 X 140	4-φ 14	200	100/315-11/4	670	330	650	665	170 X 220	180	130 X 180	4-φ 18

## TKG VERTICAL INSTALLATION SIZE DIAGRAM



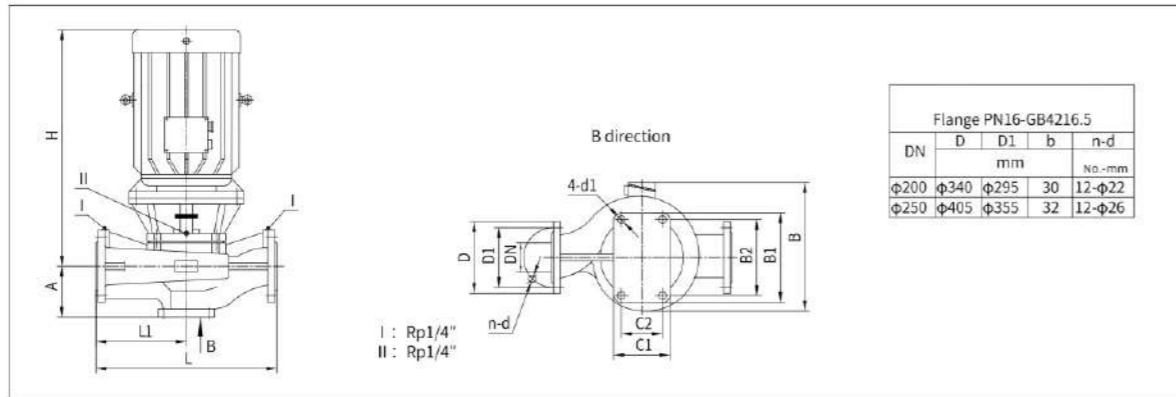
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201	100/300-7.5/4	670	330	650	610	170 X 220	180	130 X 180	4-φ18	226	125/250-11/4	640	310	530	610	210 X 260	190	160 X 210	4-φ22
202	100/285-5.5/4	670	330	650	570	170 X 220	180	130 X 180	4-φ18	227	125/235-7.5/4	640	310	530	610	210 X 260	190	160 X 210	4-φ22
203	125/100-11/2	560	260	430	665	190 X 240	170	150 X 200	4-φ18	228	125/220-5.5/4	640	310	530	570	210 X 260	190	160 X 210	4-φ22
204	125/90-7.5/2	560	260	430	570	190 X 240	170	150 X 200	4-φ18	229	125/315-15/4	670	330	545	710	170 X 220	180	130 X 180	4-φ18
205	125/125-15/2	560	260	475	660	190 X 240	170	150 X 200	4-φ18	230	125/300-11/4	670	330	545	710	170 X 220	180	130 X 180	4-φ18
206	125/110-11/2	560	260	475	660	190 X 240	170	150 X 200	4-φ18	231	125/285-7.5/4	670	330	545	660	170 X 220	180	130 X 180	4-φ18
207	125/160-22/2	560	260	485	725	190 X 240	170	150 X 200	4-φ18	232	125/400-30/4	780	380	600	845	250 X 300	195	210 X 260	4-φ22
208	125/150-18.5/2	560	260	485	700	190 X 240	170	150 X 200	4-φ18	233	125/370-22/4	780	380	600	775	250 X 300	195	210 X 260	4-φ22
209	125/140-15/2	560	260	485	655	190 X 240	170	150 X 200	4-φ18	234	125/345-18.5/4	780	380	600	735	250 X 300	195	210 X 260	4-φ22
210	125/200-37/2	640	310	510	825	210 X 260	190	160 X 210	4-φ22	235	150/160-30/2	560	260	475	825	190 X 240	170	150 X 200	4-φ18
211	125/185-30/2	640	310	510	825	210 X 260	190	160 X 210	4-φ22	236	150/150-22/2	560	260	465	730	190 X 240	170	150 X 200	4-φ18
212	125/170-22/2	640	310	485	720	210 X 260	190	160 X 210	4-φ22	237	150/140-18.5/2	560	260	465	700	190 X 240	170	150 X 200	4-φ18
213	125/250-55/2	640	310	650	965	210 X 260	190	160 X 210	4-φ22	238	150/200-45/2	640	310	550	870	210 X 260	190	160 X 210	4-φ22
214	125/235-45/2	640	310	600	880	210 X 260	190	160 X 210	4-φ22	239	150/185-37/2	640	310	510	825	210 X 260	190	160 X 210	4-φ22
215	125/220-37/2	640	310	560	835	210 X 260	190	160 X 210	4-φ22	240	150/170-30/2	640	310	495	825	210 X 260	190	160 X 210	4-φ22
216	125/315-90/2	670	330	720	1085	170 X 220	180	130 X 180	4-φ18	241	150/250-75/2	700	340	685	1040	220 X 290	200	170 X 240	4-φ22
217	125/300-75/2	670	330	720	1035	170 X 220	180	130 X 180	4-φ18	242	150/235-55/2	700	340	655	970	220 X 290	200	170 X 240	4-φ22
218	125/285-75/2	670	330	720	1035	170 X 220	180	130 X 180	4-φ18	243	150/220-45/2	700	340	600	885	220 X 290	200	170 X 240	4-φ22
219	125/270-55/2	670	330	720	965	170 X 220	180	130 X 180	4-φ18	244	150/315-110/2	760	340	790	1320	220 X 270	195	180 X 230	4-φ18
220	125/350-110/2	680	340	860	1235	230 X 320	180	170 X 260	4-φ18	245	150/300-90/2	760	340	700	1085	220 X 270	195	180 X 230	4-φ18
221	125/330-90/2	680	340	720	1085	230 X 320	180	170 X 260	4-φ18	246	150/285-75/2	760	340	700	1035	220 X 270	195	180 X 230	4-φ18
222	125/310-75/2	680	340	720	1035	230 X 320	180	170 X 260	4-φ18	247	150/200-11/4	700	340	485	640	220 X 290	190	170 X 240	4-φ22
223	125/160-4/4	560	260	465	485	190 X 240	170	150 X 200	4-φ18	248	150/185-7.5/4	700	340	485	585	220 X 290	200	170 X 240	4-φ22
224	125/200-5.5/4	640	310	480	555	210 X 260	190	160 X 210	4-φ22	249	150/250-15/4	700	340	540	910	220 X 290	200	170 X 240	4-φ22
225	125/185-4/4	640	310	480	500	210 X 260	190	160 X 210	4-φ22	250	150/235-11/4	700	340	540	875	220 X 290	200	170 X 240	4-φ22

## TKG VERTICAL INSTALLATION SIZE DIAGRAM



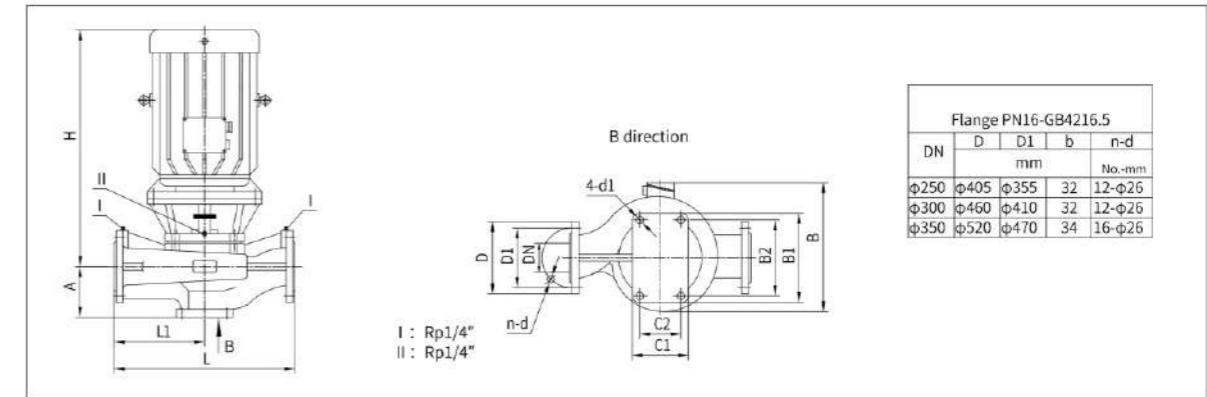
Model	Outline dimensions				Installing dimensions				Model	Outline dimensions				Installing dimensions					
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251	150/220-7.5/4	700	340	540	820	220 X 290	200	170 X 240	4-φ22	276	150/410-45/4	1000	500	665	890	360 X 460	235	300 X 400	4-φ23
252	150/315-22/4	760	380	550	790	220 X 270	195	180 X 230	4-φ18	277	200/200-15/4	750	375	435	865	220 X 310	210	170 X 275	4-φ18
253	150/300-18.5/4	760	380	550	750	220 X 270	195	180 X 230	4-φ18	278	200/185-11/4	750	375	435	865	220 X 310	210	170 X 275	4-φ18
254	150/285-15/4	760	380	550	725	220 X 270	195	180 X 230	4-φ18	279	200/250-18.5/4	750	375	540	735	220 X 310	210	170 X 275	4-φ18
255	150/400-37/4	800	400	580	865	220 X 270	210	180 X 230	4-φ18	280	200/235-15/4	750	375	540	710	220 X 310	210	170 X 275	4-φ18
256	150/370-30/4	800	400	550	850	220 X 270	210	180 X 230	4-φ18	281	200/220-11/4	750	375	540	665	220 X 310	210	170 X 275	4-φ18
257	150/345-22/4	800	400	530	785	220 X 270	210	180 X 230	4-φ18	282	200/315-30/4	760	380	540	840	220 X 270	195	180 X 230	4-φ18
258	150/510-75/4	1000	500	685	1040	350 X 450	235	300 X 400	4-φ22	283	200/300-22/4	760	380	540	775	220 X 270	195	180 X 230	4-φ18
259	150/475-55/4	1000	500	645	970	350 X 450	235	300 X 400	4-φ22	284	200/285-18.5/4	760	380	540	735	220 X 270	195	180 X 230	4-φ18
260	150/440-45/4	1000	500	935	875	350 X 450	235	300 X 400	4-φ22	285	200/400-45/4	800	400	575	880	220 X 270	210	180 X 230	4-φ18
261	150/200-15/4	700	340	440	705	220 X 290	200	170 X 240	4-φ22	286	200/370-37/4	800	400	575	855	220 X 270	210	180 X 230	4-φ18
262	150/185-11/4	700	340	440	665	220 X 290	200	170 X 240	4-φ22	287	200/345-30/4	800	400	540	820	220 X 270	210	180 X 230	4-φ18
263	150/250-18.5/4	700	340	475	735	220 X 290	200	170 X 240	4-φ22	288	200/320-22/4	800	400	520	775	220 X 270	210	180 X 230	4-φ18
264	150/235-15/4	700	340	475	710	220 X 290	200	170 X 240	4-φ22	289	200/235-18.5/4	750	375	540	735	220 X 310	210	170 X 275	4-φ18
265	150/220-11/4	700	340	475	665	220 X 290	200	170 X 240	4-φ22	290	200/285-22/4	760	380	540	775	220 X 270	195	180 X 230	4-φ18
266	150/315-30/4	760	380	545	840	220 X 270	195	180 X 230	4-φ18	291	200/325-30/4	800	400	540	840	220 X 270	210	180 X 230	4-φ18
267	150/300-22/4	760	380	520	775	220 X 270	195	180 X 230	4-φ18	292	200/345-37/4	800	400	575	855	220 X 270	210	180 X 230	4-φ18
268	150/285-18.5/4	760	380	520	735	220 X 270	195	180 X 230	4-φ18	293	200/370-45/4	1080	540	575	880	370 X 470	270	270 X 370	4-φ22
269	150/400-45/4	800	400	575	880	220 X 270	210	180 X 230	4-φ18	294	200/405-55/4	1080	540	625	960	370 X 470	270	270 X 370	4-φ22
270	150/370-37/4	800	400	575	855	220 X 270	210	180 X 230	4-φ18	295	200/510-90/4	1080	540	700	1080	370 X 470	270	270 X 370	4-φ22
271	150/345-30/4	800	400	575	820	220 X 270	210	180 X 230	4-φ18	296	200/200-18.5/4	830	400	545	740	300 X 370	230	250 X 320	4-φ22
272	150/320-22/4	800	400	575	775	220 X 270	210	180 X 230	4-φ18	297	200/185-15/4	830	400	525	720	300 X 370	230	250 X 320	4-φ22
273	150/510-90/4	1000	500	740	1075	360 X 460	235	300 X 400	4-φ23	298	200/250-30/4	830	400	545	840	300 X 370	230	250 X 320	4-φ22
274	150/475-75/4	1000	500	740	1025	360 X 460	235	300 X 400	4-φ23	299	200/235-18.5/4	830	400	545	735	300 X 370	230	250 X 320	4-φ22
275	150/440-55/4	1000	500	700	950	360 X 460	235	300 X 400	4-φ23	300	200/220-15/4	830	400	545	720	300 X 370	230	250 X 320	4-φ22

## TKG VERTICAL INSTALLATION SIZE DIAGRAM



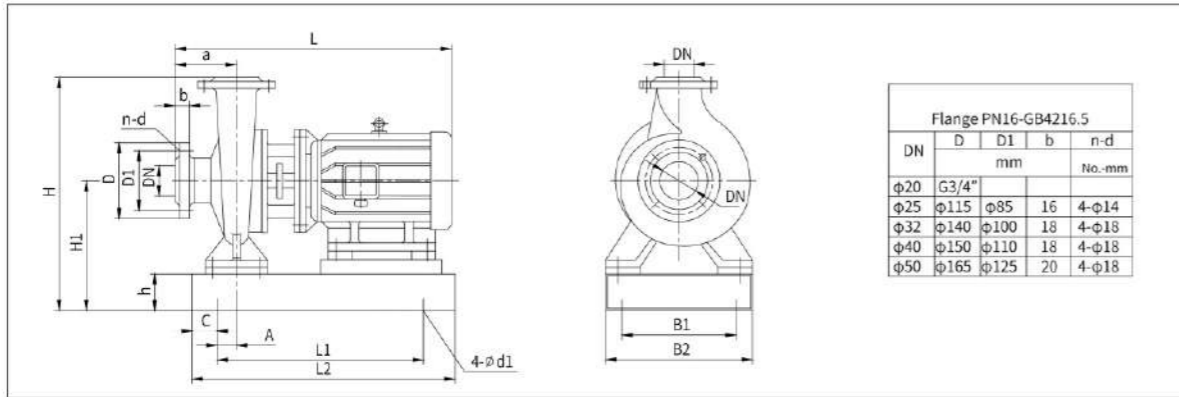
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	L	L1	B	H	C1XB1	A	C2XB2	4-d 1		L	L1	B	H	C1XB1	A	C2XB2	4-d 1		
301	200/315-45/4	860	420	630	895	300 X 350	220	250 X 300	4-φ 22	326	200/345-55/4	880	440	685	980	250 X 350	240	200 X 300	4-φ 22
302	200/300-37/4	860	420	630	870	300 X 350	220	250 X 300	4-φ 22	327	200/320-45/4	880	440	685	895	250 X 350	240	200 X 300	4-φ 22
303	200/285-30/4	860	420	630	850	300 X 350	220	250 X 300	4-φ 22	328	200/510-132/4	1080	540	900	1445	370 X 470	270	270 X 370	4-φ 22
304	200/400-75/4	880	440	685	1050	250 X 350	240	200 X 300	4-φ 22	329	200/475-110/4	1080	540	900	1335	370 X 470	270	270 X 370	4-φ 22
305	200/370-55/4	880	440	685	980	250 X 350	240	200 X 300	4-φ 22	330	200/440-90/4	1080	540	850	1100	370 X 470	270	270 X 370	4-φ 22
306	200/345-45/4	880	440	685	895	250 X 350	240	200 X 300	4-φ 22	331	200/410-75/4	1080	540	850	1050	370 X 470	270	270 X 370	4-φ 22
307	200/320-37/4	880	440	685	875	250 X 350	240	200 X 300	4-φ 22	332	200/330-220/2	760	445	950	1550	220 X 270	195	180 X 230	4-φ 18
308	200/510-110/4	1080	540	850	1335	370 X 470	270	270 X 370	4-φ 22	333	200/310-200/2	760	445	950	1435	220 X 270	195	180 X 230	4-φ 18
309	200/475-90/4	1080	530	850	1100	370 X 470	270	270 X 370	4-φ 22	334	200/285-132/2	760	445	860	1430	220 X 270	195	180 X 230	4-φ 18
310	200/440-75/4	1080	530	850	1050	370 X 470	270	270 X 370	4-φ 22	335	250/290-45/4	1100	500	670	915	330 X 420	310	280 X 370	4-φ 22
311	200/280-37/4	860	420	630	870	300 X 350	220	250 X 300	4-φ 22	336	250/310-55/4	1100	500	670	1000	400 X 500	310	350 X 450	4-φ 22
312	200/300-37/4	860	420	630	870	300 X 350	220	250 X 300	4-φ 22	337	250/360-75/4	1200	550	850	1080	400 X 500	300	350 X 430	4-φ 27
313	200/325-45/4	860	420	650	895	300 X 350	220	250 X 300	4-φ 22	338	250/405-90/4	1200	550	850	1130	400 X 500	300	350 X 430	4-φ 27
314	200/350-55/4	880	440	685	980	250 X 350	240	200 X 300	4-φ 22	339	250/200-30/4	970	460	640	875	350 X 400	310	300 X 350	4-φ 22
315	200/395-75/4	880	440	685	1050	250 X 350	240	200 X 300	4-φ 22	340	250/185-22/4	970	460	640	810	350 X 400	310	300 X 350	4-φ 22
316	200/200-22/4	830	400	540	775	300 X 370	230	250 X 320	4-φ 22	341	250/250-45/4	970	460	640	915	350 X 400	310	300 X 350	4-φ 22
317	200/185-18.5/4	830	400	540	735	300 X 370	230	250 X 320	4-φ 22	342	250/235-37/4	970	460	640	890	350 X 400	310	300 X 350	4-φ 22
318	200/250-30/4	830	400	540	840	300 X 370	230	250 X 320	4-φ 22	343	250/315-75/4	1100	500	685	1070	330 X 420	310	280 X 370	4-φ 24
319	200/235-22/4	830	400	540	775	300 X 370	230	250 X 320	4-φ 22	344	250/300-55/4	1100	500	685	1000	330 X 420	310	280 X 370	4-φ 24
320	200/220-18.5/4	830	400	540	735	300 X 370	230	250 X 320	4-φ 22	345	250/285-45/4	1100	500	640	915	330 X 420	310	280 X 370	4-φ 24
321	200/315-55/4	860	420	630	980	300 X 350	220	250 X 300	4-φ 22	346	250/400-110/4	1200	550	900	1365	400 X 500	310	350 X 430	4-φ 27
322	200/300-45/4	860	420	630	895	300 X 350	220	250 X 300	4-φ 22	347	250/370-90/4	1200	550	800	1130	400 X 500	310	350 X 430	4-φ 27
323	200/285-37/4	860	420	630	870	300 X 350	220	250 X 300	4-φ 22	348	250/345-75/4	1200	550	800	1080	400 X 500	310	350 X 430	4-φ 27
324	200/400-75/4	880	440	685	1050	250 X 350	240	200 X 300	4-φ 22	349	250/320-75/4	1200	550	800	1080	400 X 500	310	350 X 430	4-φ 27
325	200/370-75/4	880	440	685	1050	250 X 350	240	200 X 300	4-φ 22	350	250/480-160/4	1250	600	900	1475	400 X 500	320	350 X 450	4-φ 27

## TKG VERTICAL INSTALLATION SIZE DIAGRAM

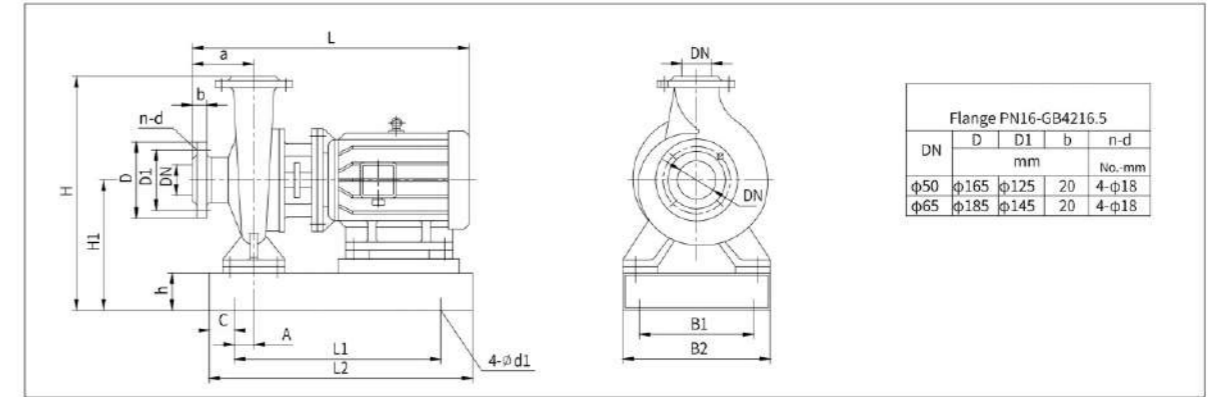


Model	Outline dimensions				Installing dimensions				Model	Outline dimensions				Installing dimensions					
	L	L1	B	H	C1XB1	A	C2XB2	4-d 1		L	L1	B	H	C1XB1	A	C2XB2	4-d 1		
351	250/435-132/4	1250	600	900	1475	400 X 500	320	350 X 450	4-φ 27	376	300/400-132/4	1250	600	920	1400	350 X 450	340	300 X 400	4-φ 22
352	250/390-90/4	1250	600	900	1095	400 X 500	320	350 X 450	4-φ 27	377	300/370-110/4	1250	600	920	1380	350 X 450	340	300 X 400	4-φ 22
353	250/510-200/4	1280	640	900	1485	400 X 500	325	350 X 450	4-φ 27	378	300/345-90/4	1250	600	850	1145	350 X 450	340	300 X 400	4-φ 22
354	250/475-160/4	1280	640	900	1485	400 X 500	325	350 X 450	4-φ 27	379	300/460-200/4	1300	650	920	1500	480 X 530	360	400 X 450	4-φ 27
355	250/440-132/4	1280	640	900	1485	400 X 500	325	350 X 450	4-φ 27	380	300/425-160/4	1300	650	920	1500	480 X 530	360	400 X 450	4-φ 27
356	300/250-45/4	1200	600	700	1010	400 X 500	385	350 X 450	4-φ 27	381	300/375-110/4	1300	650	920	1390	480 X 530	360	400 X 450	4-φ 27
357	300/285-55/4	1250	625	800	925	350 X 450	340	300 X 400	4-φ 22	382	300/355-90/4	1300	650	920	1145	480 X 530	360	400 X 450	4-φ 27
358	300/325-75/4	1250	625	800	1080	350 X 450	340	300 X 400	4-φ 22	383	300/500-250/4	1400	700	1050	1745	540 X 590	370	450 X 500	4-φ 32
359	300/360-90/4	1400	650	800	1145	480 X 530	390	400 X 450	4-φ 27	384	300/470-200/4	1400	700	920	1500	540 X 590	370	450 X 500	4-φ 32
360	300/325-75/4	1250	625	800	1080	350 X 450	340	300 X 400	4-φ 22	385	300/440-160/4	1400	700	920	1500	540 X 590	370	450 X 500	4-φ 32
361	300/360-90/4	1400	650	800	1145	480 X 530	390	400 X 450	4-φ 27	386	300/415-132/4	1400	700	920	1500	540 X 590	370	450 X 500	4-φ 32
362	300/390-110/4	1300	650	920	1380	480 X 530	360	400 X 450	4-φ 27	387	300/480-280/4	1400	700	1050	1760	540 X 590	370	450 X 500	4-φ 32
363	300/420-132/4	1350	650	920	1400	480 X 530	360	400 X 450	4-φ 27	388	300/435-220/4	1400	700	920	1730	540 X 590	370	450 X 500	4-φ 32
364	300/250-55/4	1200	600	700	1010	400 X 500	385	350 X 450	4-φ 27	389	300/410-160/4	1300	650	920	1500	480 X 530	360	400 X 450	4-φ 27
365	300/235-45/4	1200	600	700	930	400 X 500	385	350 X 450	4-φ 27	390	350/320-90/4	1330	600	850	1170	480 X 530	435	400 X 450	4-φ 27
366	300/220-37/4	1200	600	700	900	400 X 500	385	350 X 450	4-φ 27	391	350/305-75/4	1330	600	850	1115	480 X 530	435	400 X 450	4-φ 27
367	300/300-75/4	1250	625	800	1080	350 X 450	330	290 X 390	4-φ 27	392	350/380-55/6	1320	600	850	1170	480 X 530	445	400 X 450	4-φ 27
368	300/280-75/4	1250	625	800	1080	350 X 450	330	290 X 390	4-φ 27	393	350/390-132/4	1320	600	920	1440	480 X 530	445	400 X 450	4-φ 27
369	300/260-55/4	1250	625	800	1010	350 X 450	330	290 X 390	4-φ 27	394	350/360-110/4	1320	600	920	1440	480 X 530	445	400 X 450	4-φ 27
370	300/315-90/4	1250	625	800	1130	350 X 450	330	290 X 390	4-φ 27	395	350/335-90/4	1320	600	850	1170	480 X 530	445	400 X 450	4-φ 27
371	300/295-75/4	1250	625	800	1080	350 X 450	330	290 X 390	4-φ 27	396	350/420-160/4	1400	650	950	1430	540 X 590	435	450 X 500	4-φ 32
372	300/270-55/4	1250	625	800	1010	350 X 450	330	290 X 390	4-φ 27	397	350/405-132/4	1320	600	920	1440	480 X 530	445	400 X 450	4-φ 27
373	300/380-132/4	1250	600	920	1400	350 X 450	340	300 X 400	4-φ 22	398	350/380-110/4	1320	600	920	1440	480 X 530	445	400 X 450	4-φ 27
374	300/360-110/4	1250	600	920	1380	350 X 450	340	300 X 400	4-φ 22	399	350/480-250/4	1400	650	1050	1625	540 X 590	435	450 X 500	4-φ 32
375	300/325-90/4	1250	600	850	1145	350 X 450	340	300 X 400	4-φ 22	400	350/460-200/4	1400	650	920	1430	540 X 590	435	450 X 500	4-φ 32

## TKW HORIZONTAL INSTALLATION SIZE DIAGRAM



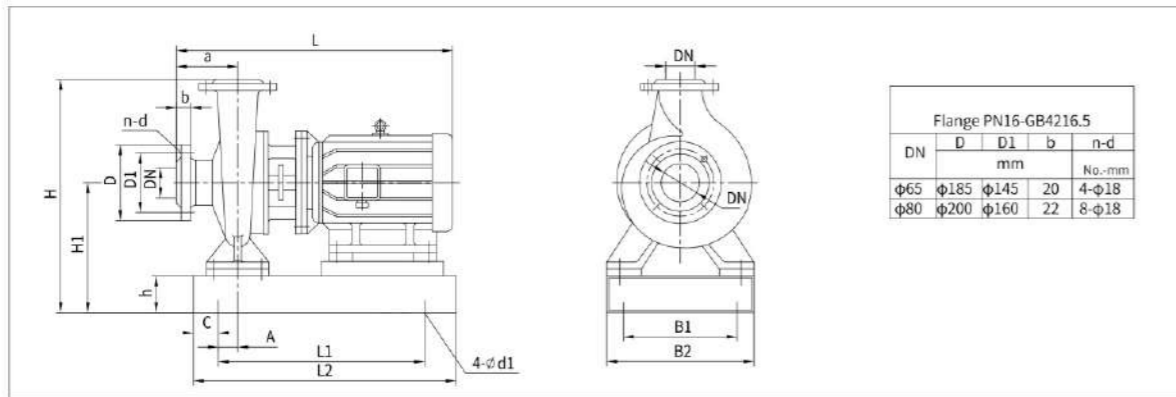
## TKW HORIZONTAL INSTALLATION SIZE DIAGRAM



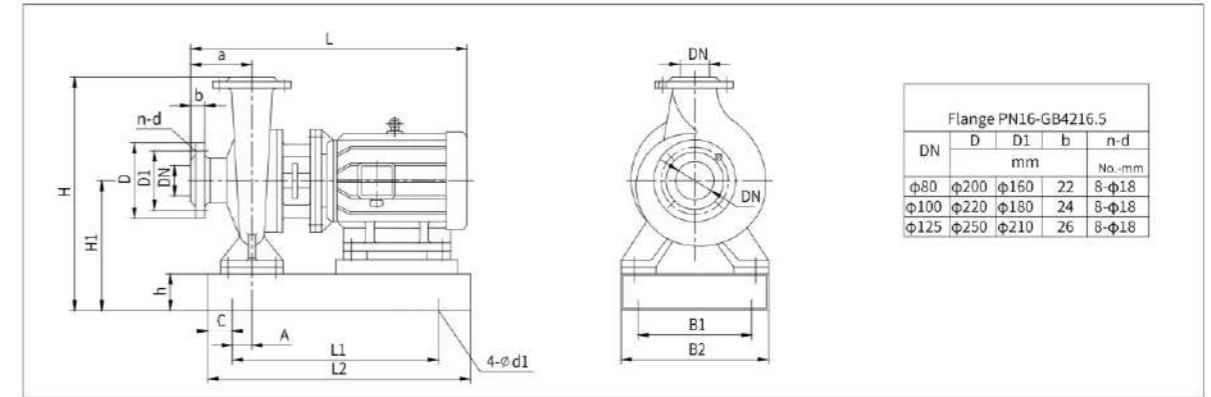
Model	Outline dimensions				Installing dimensions								Model	Outline dimensions				Installing dimensions									
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001	20/110-0.37/2	380	255	320	190	65	4-φ12	60	155	270	110	20	25	026	40/235-0.75/4	410	460	370	320	80	4-φ14	80	260	300	220	37	35
002	20/160-1.1/2	380	255	320	190	65	4-φ12	60	155	270	110	20	25	027	40/220-0.55/4	410	460	370	320	80	4-φ14	80	260	300	220	37	35
003	25/110-0.55/2	435	300	320	190	65	4-φ12	70	180	270	110	20	25	028	40/100-1.1/2	430	372	420	240	80	4-φ14	80	121	350	140	25	35
004	25/125-0.75/2	435	300	320	190	65	4-φ12	70	180	270	110	20	25	029	40/90-0.75/2	430	372	420	240	80	4-φ14	80	212	350	140	25	35
005	25/115-0.55/2	435	300	320	190	65	4-φ12	70	180	270	110	20	25	030	40/125-1.5/2	455	372	420	240	80	4-φ14	80	212	350	140	25	35
006	25/160-1.5/2	450	332	320	190	65	4-φ12	70	192	270	110	20	25	031	40/110-1.1/2	430	372	420	240	80	4-φ14	80	212	350	140	25	35
007	25/150-1.1/2	425	332	320	190	65	4-φ12	70	192	270	110	20	25	032	40/160-3/2	520	372	420	240	80	4-φ14	80	212	350	140	25	35
008	32/125-0.75/2	435	300	320	190	65	4-φ12	70	180	270	110	20	25	033	40/150-2.2/2	480	372	420	240	80	4-φ14	80	212	350	140	25	35
009	32/110-0.75/2	435	300	320	190	65	4-φ12	70	180	270	110	20	25	034	40/140-1.5/2	455	372	420	240	80	4-φ14	80	212	350	140	25	35
010	40/100-0.55/2	445	392	320	240	80	4-φ14	80	212	250	140	25	35	035	40/200-5.5/2	630	480	570	340	80	4-φ14	100	260	500	240	37	35
011	40/90-0.37/2	445	392	320	240	80	4-φ14	80	212	250	140	25	35	036	40/185-4/2	580	480	570	340	80	4-φ14	100	260	500	240	37	35
012	40/125-1.1/2	445	392	320	240	80	4-φ14	80	212	250	140	25	35	037	40/170-3/2	565	480	570	340	80	4-φ14	100	260	500	240	37	35
013	40/110-0.75/5	445	392	320	240	80	4-φ14	80	212	250	140	25	35	038	40/250-11/2	755	480	570	340	80	4-φ14	100	260	500	240	37	35
014	40/160-2.2/2	485	392	320	240	80	4-φ14	80	212	250	140	25	35	039	40/235-7.5/2	630	480	570	340	80	4-φ14	100	260	500	240	37	35
015	40/150-1.5/2	460	392	320	240	80	4-φ14	80	212	250	140	25	35	040	40/220-7.5/2	630	480	570	340	80	4-φ14	100	260	500	240	37	35
016	40/140-1.1/2	445	392	320	240	80	4-φ14	80	212	250	140	25	35	041	50/100-1.1/2	430	372	420	240	80	4-φ14	80	121	350	140	25	35
017	40/200-4/2	520	460	450	345	80	4-φ14	80	260	380	245	37	35	042	50/90-0.75/2	430	372	420	240	80	4-φ14	80	212	350	140	25	35
018	40/185-3/2	500	460	450	345	80	4-φ14	80	260	380	245	37	35	043	50/125-1.5/2	455	372	420	240	80	4-φ14	80	212	350	140	25	35
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020	40/250-7.5/2	590	460	450	345	80	4-φ14	80	260	380	245	37	35	045	50/160-3/2	520	372	420	240	80	4-φ14	80	212	350	140	25	35
021	40/235-5.5/2	590	460	450	345	80	4-φ14	80	260	380	245	37	35	046	50/150-2.2/2	480	372	420	240	80	4-φ14	80	212	350	140	25	35
022	40/220-4/2	520	460	450	345	80	4-φ14	80	260	380	245	37	35	047	50/140-1.5/2	455	372	420	240	80	4-φ14	80	212	350	140	25	35
023	40/200-0.55/4	410	460	370	320	80	4-φ14	80	260	300	220	37	35	048	50/200-5.5/2	630	480	570	340	80	4-φ14	100	260	500	240	37	35
024	40/185-0.37/4	410	460	370	320	80	4-φ14	80	260	300	220	37	35	049	50/185-4/2	580	480	570	340	80	4-φ14	100	260	500	240	37	35
025	40/250-1.1/4	440	460	370	320	80	4-φ14	80	260	300	220	37	35	050	50/170-3/2	565	480	570	340	80	4-φ14	100	260	500	240	37	35

Model	Outline dimensions				Installing dimensions								Model	Outline dimensions				Installing dimensions									
	L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		
051	50/250-11/2	755	480	570	340	80	4-φ14	100	260	500	240	37	35	076	65/100-1.5/2	475	392	420	240	80	4-φ14	80	212	350	140	25	35
052	50/235-7.5/2	630	480	570	340	80	4-φ14	100	260	500	240	37	35	077	65/90-1.1/2	460	392	420	240	80	4-φ14	80	212	350	140	25	35
053	50/220-7.5/2	630	480	570	340	80	4-φ14	100	260	500	240	37	35	078	65/125-3/2	525	392	420	240	80	4-φ14	80	212	350	140	25	35
054	50/200-0.75/4	480	480	450	345	80	4-φ14	100	260	380	245	37	35	079	65/110-2.2/2	500	392	420	240	80	4-φ14	80	212	350	140	25	35
055	50/185-0.55/4	480	480	450	345	80	4-φ14	100	260	380	245	37	35	080	65/160-4/2	540	392	420	240	80	4-φ14	80	212	350	140	25	35
056	50/250-1.5/4	520	480	450	345	80	4-φ14	100	260	380	245	37	35	081	65/150-4/2	540	392	420	240	80	4-φ14	80	212	350	140	25	35
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058	50/220-0.75/4	480	480	450	345	80	4-φ14	100	260	380	245	37	35	083	65/200-7.5/2	635	500	570	340	80	4-φ14	100	260	500	240	37	35
059	50/100-1.5/2	475	392	420	240	80	4-φ14	80	212	350	140	25	35	084	65/185-5.5/2	635	500	570	340	80	4-φ14	100	260	500	240	37	35
060	50/90-1.1/2	460	392	420	240	80	4-φ14	80	212	350	140	25	35	085	65/170-5.5/2	635	500	570	340	80	4-φ14	100	260	500	240	37	35
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063	50/160-4/2	540	392	420	240	80	4-φ14	80	212	350	140	25	35	088	65/220-11/2	750	500	570	340	80	4-φ14	100	260	500	240	37	35
064	50/150-4/2	540	392	420	240	80	4-φ14	80	212	350	140	25	35	089	65/315-30/2	920	585	710	410	100	4-φ18	100	325	640	310	37	35
065	50/140-3/2	525	392	420	240	80	4-φ14	80	212	350	140	25	35	090	65/300-22/2	850	585	630	365	100	4-φ18	100	325	560	265	37	35
066	50/200-7.5/2	635	500	570	340	80	4-φ14	100	260	500	240	37	35	091	65/285-18.5/2	820	585	630	365	100	4-φ18	100	325	560	265	37	35
067	50/185-5.5/2	635	500	570	340	80	4-φ14	100	260	500	240	37	35	092	65/270-18.5/2	760	585	630	365	100	4-φ18	100	325	560	265	37	35
068	50/170-5.5/2	635	500	570	340	80	4-φ14	100	260	500	240	37	35	093	65/200-1.1/4	500	500	450	345	80	4-φ14	100	260	380	245	37	35
069	50/250-15/2	750	500	570	340	80	4-φ14	100	260	500	240	37	35	094	65/185-0.75/4	485	500	450	345	80	4-φ14	100	260	380	245	3	

## TKW HORIZONTAL INSTALLATION SIZE DIAGRAM



## TKW HORIZONTAL INSTALLATION SIZE DIAGRAM

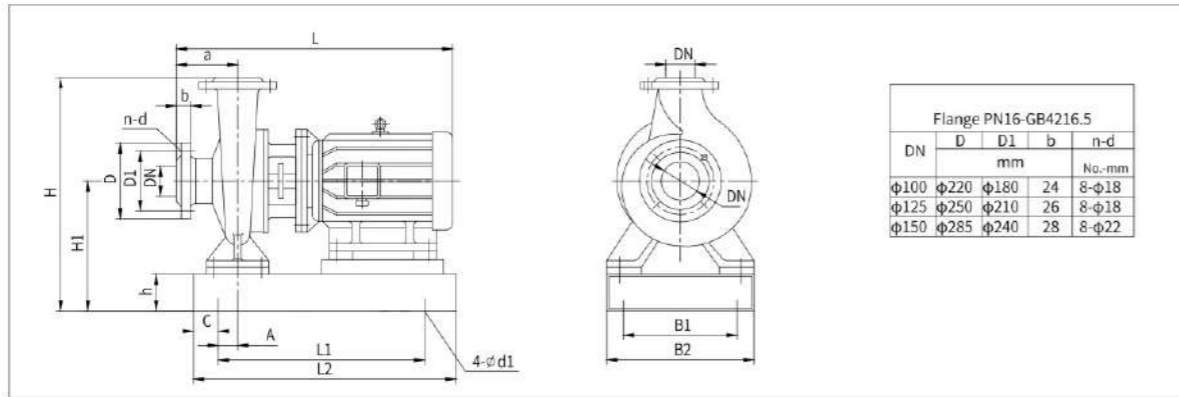


Model	Outline dimensions				Installing dimensions									Model	Outline dimensions				Installing dimensions								
	L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C	L		H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		
101	65/100-3/2	540	440	440	285	80	4-φ14	100	240	370	185	25	35	126	80/185-11/2	780	520	630	365	100	4-φ18	125	280	560	265	37	35
102	65/90-2.2/2	510	440	440	285	80	4-φ14	100	240	370	185	25	35	127	80/170-7.5/2	665	520	630	365	100	4-φ18	125	280	560	265	37	35
103	65/125-5.5/2	610	440	440	285	80	4-φ14	100	240	370	185	25	35	128	80/250-22/2	865	520	630	365	100	4-φ18	125	280	560	265	37	35
104	65/110-4/2	560	440	440	285	80	4-φ14	100	240	370	185	25	35	129	80/235-18.5/2	835	520	630	365	100	4-φ18	125	280	560	265	37	35
105	65/160-7.5/2	610	440	440	285	80	4-φ14	100	240	370	185	25	35	130	80/220-15/2	780	520	630	365	100	4-φ18	125	280	560	265	37	35
106	65/150-7.5/2	610	440	440	285	80	4-φ14	100	240	370	185	25	35	131	80/315-37/2	920	585	710	410	100	4-φ18	100	325	640	310	37	35
107	65/140-5.5/2	610	440	440	285	80	4-φ14	100	240	370	185	25	35	132	80/300-30/2	920	585	710	410	100	4-φ18	100	325	640	310	37	35
108	65/200-15/2	780	520	630	365	100	4-φ18	125	280	560	265	37	35	133	80/285-30/2	920	585	710	410	100	4-φ18	100	325	640	310	37	35
109	65/185-11/2	780	520	630	365	100	4-φ18	125	280	560	265	37	35	134	80/270-22/2	850	585	630	365	100	4-φ18	100	325	560	265	37	35
110	65/170-7.5/2	665	520	630	365	100	4-φ18	125	280	560	265	37	35	135	80/125-0.75/4	460	440	360	265	80	4-φ14	100	240	290	165	25	35
111	65/250-22/2	865	520	630	365	100	4-φ18	125	280	560	265	37	35	136	80/110-0.55/4	460	440	360	265	80	4-φ14	100	240	290	165	25	35
112	65/235-18.5/2	835	520	630	365	100	4-φ18	125	280	560	265	37	35	137	80/160-1.1/4	485	440	360	265	80	4-φ14	100	240	290	165	25	35
113	65/220-15/2	780	520	630	365	100	4-φ18	125	280	560	265	37	35	138	80/150-0.75/4	460	440	360	265	80	4-φ14	100	240	290	165	25	35
114	65/315-37/2	920	585	710	410	100	4-φ18	100	325	640	310	37	35	139	80/200-2.2/4	580	500	450	345	80	4-φ14	125	260	380	245	37	35
115	65/300-30/2	920	585	710	410	100	4-φ18	100	325	640	310	37	35	140	80/185-1.5/4	550	500	450	345	80	4-φ14	125	260	380	245	37	35
116	65/285-30/2	920	585	710	410	100	4-φ18	100	325	640	310	37	35	141	80/250-3/4	580	500	450	345	80	4-φ14	125	260	380	245	37	35
117	65/270-22/2	850	585	630	365	100	4-φ18	100	325	560	265	37	35	142	80/235-2.2/4	580	500	450	345	80	4-φ14	125	260	380	245	37	35
118	80/100-3/2	540	440	440	285	80	4-φ14	100	240	370	185	25	35	143	80/220-1.5/4	550	500	450	345	80	4-φ14	125	260	380	245	37	35
119	80/90-2.2/2	510	440	440	285	80	4-φ14	100	240	370	185	25	35	144	80/315-5.5/4	635	565	450	345	80	4-φ14	100	305	380	245	37	35
120	80/125-5.5/2	610	440	440	285	80	4-φ14	100	240	370	185	25	35	145	80/300-4/4	585	565	450	345	80	4-φ14	100	305	380	245	37	35
121	80/110-4/2	560	440	440	285	80	4-φ14	100	240	370	185	25	35	146	80/285-3/4	570	565	450	345	80	4-φ14	100	305	380	245	37	35
122	80/160-7.5/2	610	440	440	285	80	4-φ14	100	240	370	185	25	35	147	80/100-5.5/2	640	490	570	340	80	4-φ14	100	240	500	240	37	35
123	80/150-7.5/2	610	440	440	285	80	4-φ14	100	240	370	185	25	35	148	80/90-4/2	590	490	570	340	80	4-φ14	100	240	500	240	37	35
124	80/140-5.5/2	610	440	440	285	80	4-φ14	100	240	370	185	25	35	149	80/125-11/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35
125	80/200-15/2	780	520	630	365	100	4-φ18	125	280	560	265	37	35	150	80/110-7.5/2	640	490	570	340	80	4-φ14	100	240	500	240	37	35

Model	Outline dimensions				Installing dimensions									Model	Outline dimensions				Installing dimensions								
	L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C	L		H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		
151	80/160-15/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35	176	100/125-11/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35
152	80/150-11/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35	177	100/110-7.5/2	640	490	570	340	80	4-φ14	100	240	500	240	37	35
153	80/140-11/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35	178	100/160-15/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35
154	80/200-22/2	880	570	630	365	100	4-φ18	125	300	560	265	55	35	179	100/150-11/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35
155	80/185-18.5/2	850	570	630	365	100	4-φ18	125	300	560	265	55	35	180	100/140-11/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35
156	80/170-15/2	800	570	630	365	100	4-φ18	125	300	560	265	55	35	181	100/200-22/2	880	570	630	365	100	4-φ18	125	300	560	265	55	35
157	80/250-37/2	950	570	710	410	100	4-φ18	125	300	640	310	55	35	182	100/185-18.5/2	850	570	630	365	100	4-φ18	125	300	560	265	55	35
158	80/235-30/2	950	570	710	410	100	4-φ18	125	300	640	310	55	35	183	100/170-15/2	800	570	630	365	100	4-φ18	125	300	560	265	55	35
159	80/220-30/2	950	570	710	410	100	4-φ18	125	300	640	310	55	35	184	100/250-37/2	950	570	710	410	100	4-φ18	125	300	640	310	55	35
160	80/315-75/2	1145	730	880	570	100	4-φ22	125	400	630	520	52	125	185	100/235-30/2	950	570	710	410	100	4-φ18	125	300	640	310	55	35
161	80/300-55/2	1070	680	820	510	100	4-φ22	125	350	750	410	37	35	186	100/220-30/2	950	570	710	410	100	4-φ18	125	300	640	310	55	35
162	80/285-45/2	1010	680	750	450	100	4-φ18	125	350	680	350	37	35	187	100/315-75/2	1145	730	880	570	100	4-φ22	125	400	630	520	52	125
163	80/270-37/2	960	680	710	410	100	4-φ18	125	350	640	310	37	35	188	100/300-55/2	1070	680	820	510	100	4-φ22	125	350	750	410	37	35
164	100/100-4/2	590	490	570	340	80	4-φ14	100	240	500	240	37	35	189	100/285-45/2	1010	680	750	450	100	4-φ18	125	350	680	350	37	35
165	100/110-5.5/2	640	490	570	340	80	4-φ14	100	240	500	240	37	35	190	100/270-37/2	960	680	710	410	100	4-φ18	125	350	640	310	37	35
166	100/140-7.5/2	640	490	570	340	80	4-φ14	100	240	500	240	37	35	191	100/125-1.1/4	500	490	440	285	80	4-φ14	100	240	370	185	37	35
167	100/160-11/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35	192	100/110-1.1/4	500	490	440	285	80	4-φ14	100	240	370	185	37	35
168	100/170-11/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35	193	100/160-2.2/4	555	490	440	285	80	4-φ14	100	240	370	185	37	35
169	100/185-15/2	755	490	570	340	80	4-φ14	100	240	500	240	37	35	194	100/150-1.5/4	525	490	440	285	80	4-φ14	100	240	370	185	37	35
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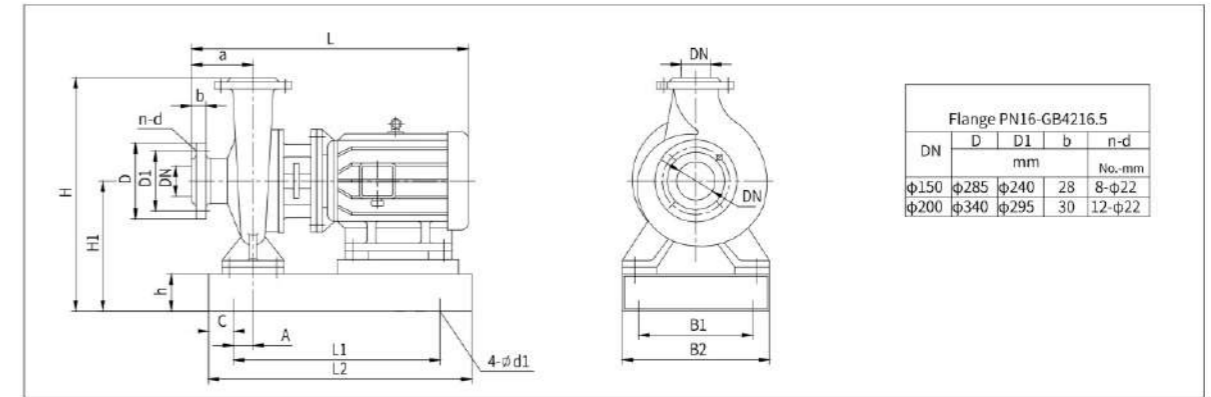


## TKW HORIZONTAL INSTALLATION SIZE DIAGRAM



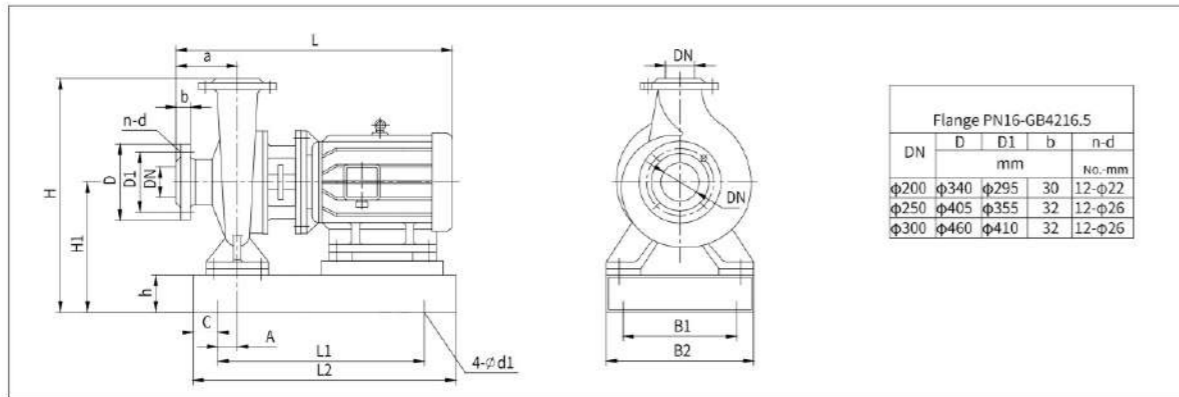
Model	Outline dimensions				Installing dimensions								Model	Outline dimensions				Installing dimensions									
	L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		
201	100/300-7.5/4	680	680	630	365	100	4-φ18	125	350	560	265	37	35	226	125/250-11/4	790	590	600	410	80	4-φ18	125	280	530	310	55	35
202	100/285-5.5/4	680	680	630	365	100	4-φ18	125	350	560	265	37	35	227	125/235-7.5/4	675	590	600	410	80	4-φ18	125	280	530	310	55	35
203	125/100-11/2	790	545	630	365	100	4-φ18	125	280	560	265	37	35	228	125/220-5.5/4	675	590	600	410	80	4-φ18	125	280	530	310	55	35
204	125/90-7.5/2	675	545	630	365	100	4-φ18	125	280	560	265	37	35	229	125/315-15/4	850	680	630	365	100	4-φ18	125	350	560	265	37	35
205	125/125-15/2	790	545	630	365	100	4-φ18	125	280	560	265	37	35	230	125/300-11/4	800	680	630	365	100	4-φ18	125	350	560	265	37	35
206	125/110-11/2	790	545	630	365	100	4-φ18	125	280	560	265	37	35	231	125/285-7.5/4	730	680	630	365	100	4-φ18	125	350	560	265	37	35
207	125/160-22/2	870	545	630	365	100	4-φ18	125	280	560	265	37	35	232	125/400-30/4	975	780	820	510	100	4-φ22	140	380	750	410	75	35
208	125/150-18.5/2	840	545	630	365	100	4-φ18	125	280	560	265	37	35	233	125/370-22/4	945	780	820	510	100	4-φ22	140	380	750	410	75	35
209	125/140-15/2	790	545	630	365	100	4-φ18	125	280	560	265	37	35	234	125/345-18.5/4	905	780	820	510	100	4-φ22	140	380	750	410	75	35
210	125/200-37/2	960	610	710	410	100	4-φ18	125	300	640	310	55	35	235	150/160-22/2	870	545	630	365	100	4-φ18	125	280	560	265	37	35
211	125/185-30/2	960	610	710	410	100	4-φ18	125	300	640	310	55	35	236	150/150-18.5/2	840	545	630	365	100	4-φ18	125	280	560	265	37	35
212	125/170-22/2	890	610	710	410	100	4-φ18	125	300	640	310	55	35	237	150/140-15/2	790	545	630	365	100	4-φ18	125	280	560	265	37	35
213	125/250-55/2	1070	680	820	510	100	4-φ22	125	370	750	410	55	35	238	150/200-37/2	960	610	710	410	100	4-φ18	125	300	640	310	55	35
214	125/235-45/2	1010	655	750	450	100	4-φ18	125	345	680	350	55	35	239	150/185-30/2	960	610	710	410	100	4-φ18	125	300	640	310	55	35
215	125/220-37/2	960	610	710	410	100	4-φ18	125	300	640	310	55	35	240	150/170-22/2	890	610	710	410	100	4-φ18	125	300	640	310	55	35
216	125/315-90/2	1195	730	925	570	100	4-φ22	125	400	675	520	-52	125	241	150/250-75/2	1150	750	880	570	100	4-φ22	140	400	630	500	-35	125
217	125/300-75/2	1145	730	880	570	100	4-φ22	125	400	630	520	-52	125	242	150/235-55/2	1075	700	820	510	100	4-φ22	140	350	750	410	55	35
218	125/285-75/2	1145	730	880	570	100	4-φ22	125	400	630	520	-52	125	243	150/220-45/2	1015	700	750	450	100	4-φ18	140	350	680	350	55	35
219	125/270-55/2	1070	680	820	510	100	4-φ22	125	350	750	410	37	35	244	150/315-110/2	1410	835	1040	655	120	4-φ26	140	455	790	595	-15	125
220	125/350-110/2	1375	805	1000	655	120	4-φ26	140	455	750	595	-35	125	245	150/300-90/2	1240	780	960	570	100	4-φ22	140	400	710	520	-15	125
221	125/330-90/2	1210	750	940	570	100	4-φ22	140	400	690	520	-35	125	246	150/285-75/2	1190	780	910	570	100	4-φ22	140	400	660	520	-15	125
222	125/310-75/2	1160	750	890	570	100	4-φ22	140	400	640	520	-35	125	247	150/200-11/4	800	700	710	410	100	4-φ18	140	350	640	310	55	35
223	125/160-4/4	600	525	450	345	80	4-φ14	125	260	380	245	37	35	248	150/185-7.5/4	730	700	710	410	100	4-φ18	140	350	640	310	55	35
224	125/200-5.5/4	675	590	600	410	80	4-φ18	125	280	530	310	55	35	249	150/250-15/4	855	700	710	410	100	4-φ18	140	350	640	310	55	35
225	125/185-4/4	625	590	600	410	80	4-φ18	125	280	530	310	55	35	250	150/235-11/4	800	700	710	410	100	4-φ18	140	350	640	310	55	35

## TKW HORIZONTAL INSTALLATION SIZE DIAGRAM



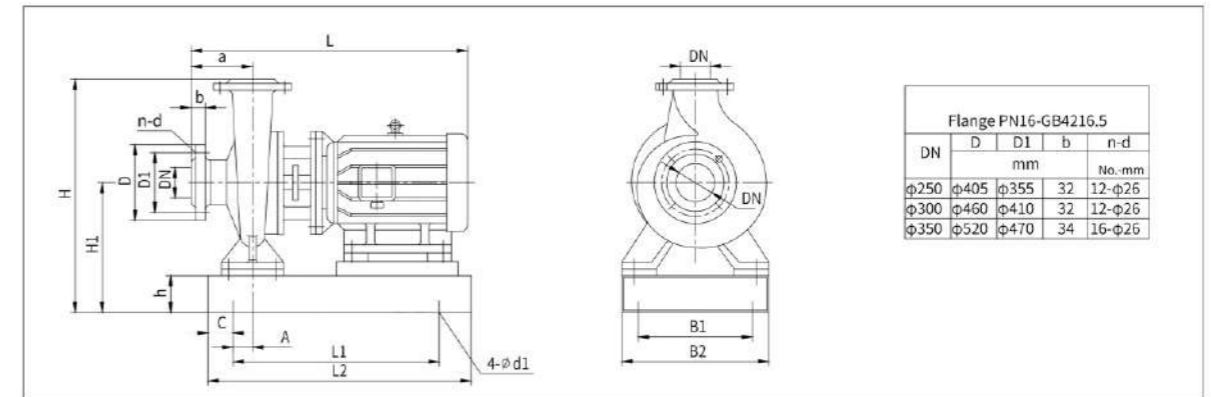
Model	Outline dimensions				Installing dimensions								Model	Outline dimensions				Installing dimensions									
	L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		
251	150/220-7.5/4	730	700	710	410	100	4-φ18	140	350	640	310	55	35	276	150/410-45/4	1070	950	860	650	100	4-φ22	180	450	790	550	75	35
252	150/315-22/4	935	760	820	510	100	4-φ22	140	380	750	410	75	35	277	200/200-15/4	855	700	710	410	100	4-φ18	140	350	640	310	55	35
253	50/300-18.5/4	900	760	820	510	100	4-φ22	140	380	750	410	75	35	278	200/185-11/4	800	700	710	410	100	4-φ18	140	350	640	310	55	35
254	150/285-15/4	870	760	820	510	100	4-φ22	140	380	750	410	75	35	279	200/250-18.5/4	885	700	710	410	100	4-φ18	140	350	640	310	55	35
255	150/400-37/4	980	815	820	510	100	4-φ22	140	415	750	410	75	35	280	200/235-15/4	855	700	710	410	100	4-φ18	140	350	640	310	55	35
256	150/370-30/4	960	815	820	510	100	4-φ22	140	415	750	410	75	35	281	200/220-11/4	800	700	710	410	100	4-φ18	140	350	640	310	55	35
257	150/345-22/4	930	815	820	510	100	4-φ22	140	415	750	410	75	35	282	200/315-30/4	965	760	820	510	100	4-φ22	140	380	750	410	75	35
258	150/510-75/4	1205	970	920	670	100	4-φ22	180	470	670	620	-15	125	283	200/300-22/4	935	760	820	510	100	4-φ22	140	380	750	410	75	35
259	150/475-55/4	1130	950	860	650	100	4-φ22	180	450	790	550	75	35	284	200/285-18.5/4	900	760	820	510	100	4-φ22	140	380	750	410	75	35
260	150/440-45/4	1070	950	860	650	100	4-φ22	180	450	790	550	75	35	285	200/400-45/4	1020	815	820	510	100	4-φ22	140	415	750	410	75	35
261	150/200-15/4	855	700	710	410	100	4-φ18	140	350	640	310	55	35	286	200/370-37/4	980	815	820	510	100	4-φ22	140	415	750	410	75	35
262	150/185-11/4	800	700	710	410	100	4-φ18	140	350	640	310	55	35	287	200/345-30/4	960	815	820	510	100	4-φ22	140	415	750	410	75	35
263	150/250-18.5/4	885	700	710	410	100	4-φ18	140	350	640	310	55	35	288	200/320-22/4	930	815	820	510	100	4-φ22	140	415	750	410	75	35
264	150/235-15/4	855	700	710	410	100	4-φ18	140	350	640	310	55	35	289	200/235-18.5/4	885	700	710	410	100	4-φ18	140	350	640	310	55	35
265	150/220-11/4	800	700	710	410	100	4-φ18	140	350	640	310	55	35	290	200/285-22/4	935	760	820	510	100	4-φ22	140	380	750	410	75	35
266	150/315-30/4	965	760	820	510	100	4-φ22	140	380	750	410	75	35	291	200/325-30/4	960	815	820	510	100	4-φ22	140	415	750	410	75	35
267	150/300-22/4	935	760	820	510	100	4-φ22	140	380	750	410	75	35	292	200/345-37/4	980	815	820	510	100	4-φ22	140	415	750	410	75	35
268	150/285-18.5/4	900	760	820	510	100	4-φ22	140	380	750	410	75	35	293	200/370-45/4	1020	815	820	510	100	4-φ22	140	415	750	410	75	35
269	150/400-45/4	1020	815	820	510	100	4-φ22	140	415	750	41																

## TKW HORIZONTAL INSTALLATION SIZE DIAGRAM



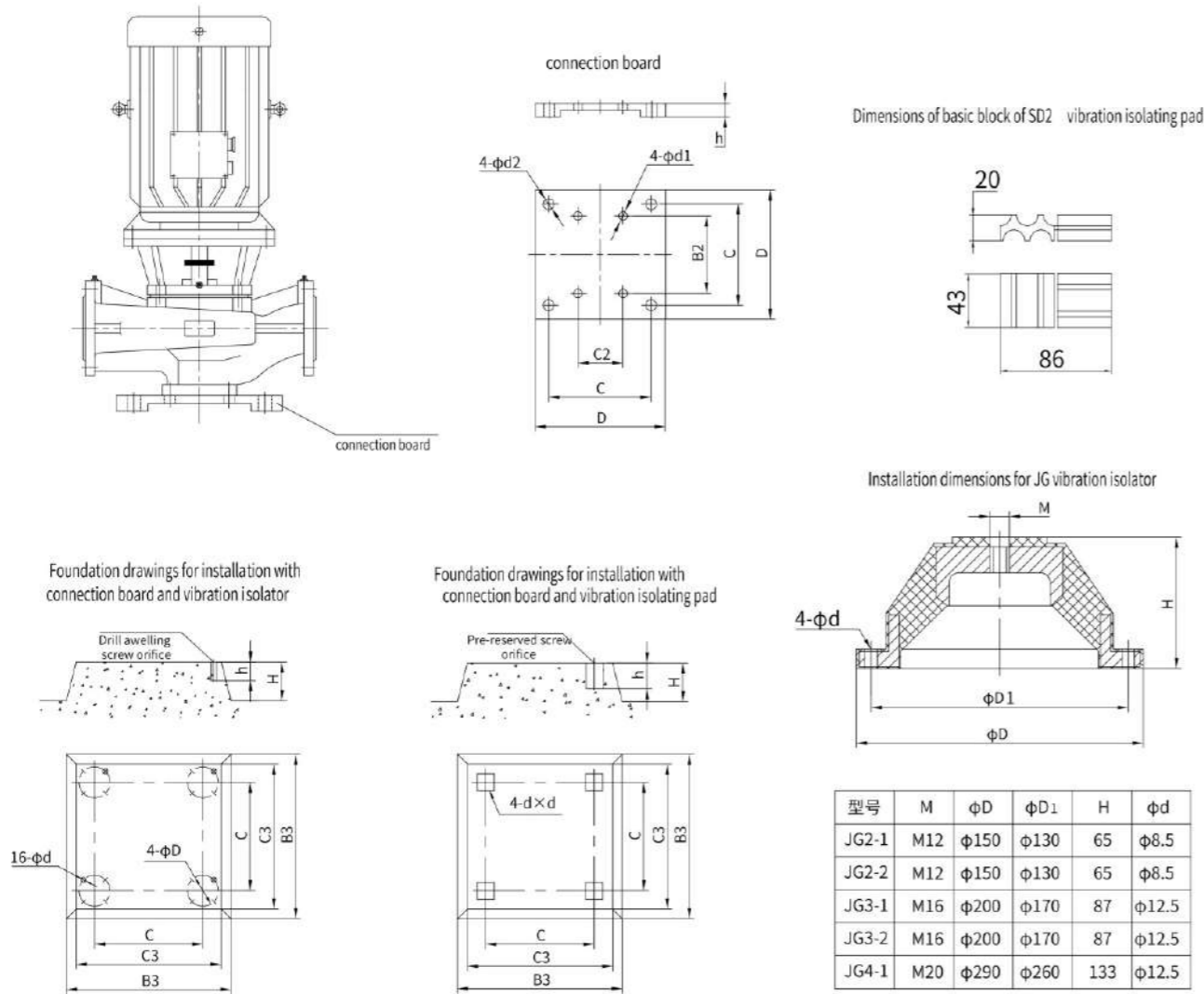
Model	Outline dimensions				Installing dimensions								Model	Outline dimensions				Installing dimensions									
	L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		
301	200/315-45/4	1050	835	820	510	100	4-φ22	160	415	750	410	75	35	326	200/345-55/4	1110	855	870	560	100	4-φ22	160	415	800	460	75	35
302	200/300-37/4	1010	835	820	510	100	4-φ22	160	415	750	410	75	35	327	200/320-45/4	1050	855	870	560	100	4-φ22	160	415	800	460	75	35
303	200/285-30/4	995	835	820	510	100	4-φ22	160	415	750	410	75	35	328	200/510-132/4	1450	1040	1130	720	120	4-φ26	160	500	880	660	-15	125
304	200/400-75/4	1190	875	920	570	100	4-φ22	160	435	670	520	-15	125	329	200/475-110/4	1410	1040	1020	720	120	4-φ26	160	500	770	660	-15	125
305	200/370-55/4	1110	855	870	560	100	4-φ22	160	415	800	460	75	35	330	200/440-90/4	1235	1020	970	720	100	4-φ22	160	480	720	670	-15	125
306	200/345-45/4	1050	855	870	560	100	4-φ22	160	415	800	460	75	35	331	200/410-75/4	1185	1020	920	720	100	4-φ22	160	480	670	670	-15	125
307	200/320-37/4	1010	855	870	560	100	4-φ22	160	415	800	460	75	35	332	200/330-220/2	1405	835	1110	655	120	4-φ26	140	455	860	595	-15	125
308	200/510-110/4	1410	1040	1020	720	120	4-φ26	160	500	770	660	-15	125	333	200/310-200/2	1405	835	1110	655	120	4-φ26	140	455	860	595	-15	125
309	200/475-90/4	1235	1020	970	720	100	4-φ22	160	480	720	670	-15	125	334	200/285-132/2	1405	835	1110	655	120	4-φ26	140	455	860	595	-15	125
310	200/440-75/4	1185	1020	920	720	100	4-φ22	160	480	670	670	-15	125	335	250/290-45/4	1095	930	870	560	100	4-φ22	200	430	800	460	75	35
311	200/280-37/4	1010	835	820	510	100	4-φ22	160	415	750	410	75	35	336	250/310-55/4	1155	930	870	560	100	4-φ22	200	430	800	460	75	35
312	200/300-37/4	1010	835	820	510	100	4-φ22	160	415	750	410	75	35	337	250/360-75/4	1230	990	920	570	100	4-φ22	200	450	670	520	-15	125
313	200/325-45/4	1050	835	820	510	100	4-φ22	160	415	750	410	75	35	338	250/405-90/4	1280	990	970	570	100	4-φ22	200	450	720	520	-15	125
314	200/350-55/4	1110	855	870	560	100	4-φ22	160	415	800	460	75	35	339	250/200-30/4	1045	930	870	560	100	4-φ22	200	430	800	460	75	35
315	200/395-75/4	1185	1020	920	720	100	4-φ22	160	480	670	670	-15	125	340	250/185-22/4	1015	930	870	560	100	4-φ22	200	430	800	460	75	35
316	200/200-22/4	960	780	820	510	100	4-φ22	160	380	750	410	75	35	341	250/250-45/4	1095	930	870	560	100	4-φ22	200	430	800	460	75	35
317	200/185-18.5/4	920	780	820	510	100	4-φ22	160	380	750	410	75	35	342	250/235-37/4	1060	930	870	560	100	4-φ22	200	430	800	460	75	35
318	200/250-30/4	990	780	820	510	100	4-φ22	160	380	750	410	75	35	343	250/315-75/4	1230	950	920	570	100	4-φ22	200	450	670	520	-15	125
319	200/235-22/4	960	780	820	510	100	4-φ22	160	380	750	410	75	35	344	250/300-55/4	1155	930	870	560	100	4-φ22	200	430	800	460	75	35
320	200/220-18.5/4	920	780	820	510	100	4-φ22	160	380	750	410	75	35	345	250/285-45/4	1095	930	870	560	100	4-φ22	200	430	800	460	75	35
321	200/315-55/4	1110	835	820	510	100	4-φ22	160	415	750	410	75	35	346	250/400-110/4	1450	1010	1010	655	120	4-φ26	200	470	760	595	-15	125
322	200/300-45/4	1050	835	820	510	100	4-φ22	160	415	750	410	75	35	347	250/370-90/4	1280	990	970	570	100	4-φ22	200	450	720	520	-15	125
323	200/285-37/4	1010	835	820	510	100	4-φ22	160	415	750	410	75	35	348	250/345-75/4	1230	990	920	570	100	4-φ22	200	450	670	520	-15	125
324	200/400-75/4	1185	1020	920	720	100	4-φ22	160	480	670	670	-15	125	349	250/320-75/4	1230	990	920	570	100	4-φ22	200	450	670	520	-15	125
325	200/370-75/4	1185	1020	920	720	100	4-φ22	160	480	670	670	-15	125	350	250/480-160/4	1515	1140	1160	670	120	4-φ26	200	520	910	620	-15	125

## TKW HORIZONTAL INSTALLATION SIZE DIAGRAM



Model	Outline dimensions				Installing dimensions								Model	Outline dimensions				Installing dimensions									
	L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		L	H	L2	B2	h	4-φd1	a	H1	L1	B1	A	C		
351	250/435-132/4	1515	1140	1160	670	120	4-φ26	200	520	910	620	-15	125	376	300/400-132/4	1665	1160	1180	652	120	4-φ26	250	560	930	600	-15	125
352	250/390-90/4	1280	1120	970	670	100	4-φ22	200	500	720	620	-15	125	377	300/370-110/4	1545	1160	1130	652	120	4-φ26	250	560	880	600	-15	125
353	250/510-200/4	1515	1140	1160	670	120	4-φ26	200	520	910	620	-15	125	378	300/345-90/4	1380	1155	1090	652	100	4-φ22	250	555	840	600	-15	125
354	250/475-160/4	1515	1140	1160	670	120	4-φ26	200	520	910	620	-15	125	379	300/460-200/4	1665	1095	1215	652	120	4-φ26	250	545	965	600	-15	125
355	250/440-132/4	1515	1140	1160	670	120	4-φ26	200	520	910	620	-15	125	380	300/425-160/4	1665	1095	1215	652	120	4-φ26	250	545	965	600	-15	125
356	300/250-45/4	1210	1075	885	647	100	4-φ22	250	525	815	550	75	35	381	300/375-110/4	1545	1095	1105	652	100	4-φ26	250	545	855	600	-15	125
357	300/285-55/4	1280	1095	935	647	100	4-φ22	250	495	865	550	75	35	382	300/335-90/4	1380	1095	1065	647	100	4-φ22	250	545	815	600	-15	125
358	300/325-75/4	1350	1095	1005	647	100	4-φ22	250	495	755	600	-15	125	383	300/500-250/4	1860	1300	1350	752	140	4-φ26	250	600	1100	700	-35	125
359	300/360-90/4	1380	1095	1065	647	100	4-φ22	250	545	815	600	-15	125	384	300/470-200/4	1665	1300	1240	752	120	4-φ26	250	580	990	700	-35	125
360	300/325-75/4	1330	1155	1035	652	100	4-φ22	250	555	785	600	-15	125	385	300/440-160/4	1665	1300	1240	752	120	4-φ26	250	580	990	700	-35	125
361	300/360-90/4	1380	1155	1090	652	100	4-φ22	250	555	840	600	-15	125	386	300/415-132/4	1665	1300	1190	752	120	4-φ26	250	580	940	700	-35	125
362	300/390-110/4	1545	1095	1105	652	100	4-φ26	250	545	855	600	-15	125	387	300/480-280/4	1860	1300	1350	752	140	4-φ26	250	600	1100	700	-35	125
363	300/420-132/4	1655	1300	1190	752	120	4-φ26	250	600	940	700	-15	125	388	300/435-220/4	1665	1300	1240	752	120	4-φ26	250	580	990	700	-35	125
364	300/250-55/4	1295	1075	960	647	100	4-φ22	250	525	710	550	75	35	389	300/410-160/4	1665	1300	1240	752	120	4-φ26	250	580	990	700	-35	125
365	300/235-45/4	1210	1075	885	647	100	4-φ22	250	525	815	550	75	35	390	350/320-90/4	1415	1135	1055	670	100	4-φ22	280	520	805	620	10	125
366	300/220-37/4	1185	1075	860	647	100	4-φ22	250	525	610	550	75	35	391	350/305-75/4	1415	1135	1000	670	100	4-φ22	280	520	750	620	10	125
367	300/300-75/4	1350	1095	1005	647	100	4-φ22	250	495	755	600	-15	125	392	350/380-55/6	1415	1135	1055	670	100	4-φ22	280	520	805	620	10	125
368	300/280-75/4	1350	10																								

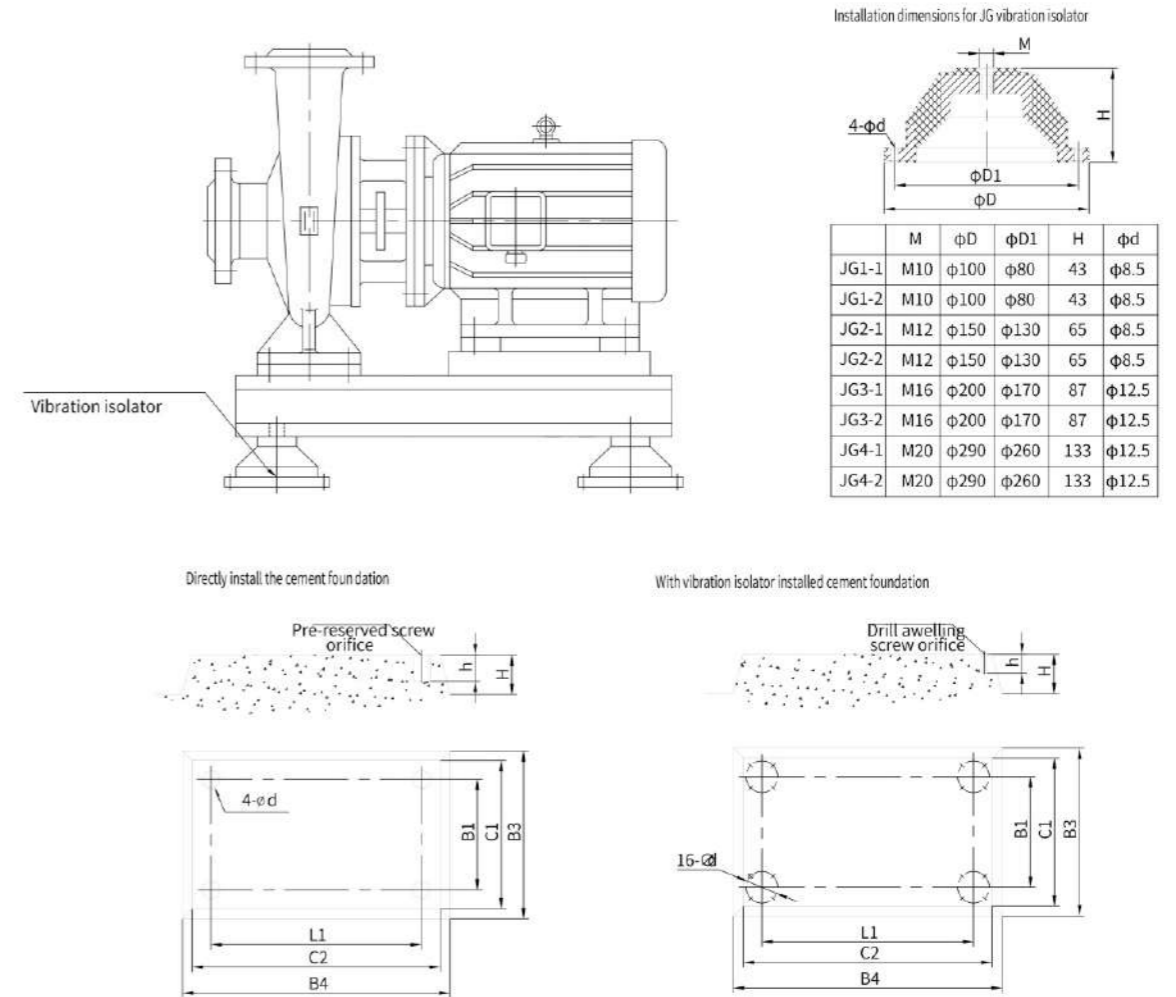
## TKG VERTICAL MAP



Dimensions of BY type connection board						Foundation dimensions for installing with connection board and vibration isolator						Foundation dimensions for installing with connection board and vibration isolating pad							
	C2×C2	C×C	D×D	h	φd1	φd2	H	C3	B3	C	φD	φd	h	H	C3	B3	C	d	h
ZL-1	80×130	240×240	300×300	55	φ12	φ14	200	500	550	240	∕	∕	∕	200	500	550	240	60	200
ZL-2	120×180	340×340	400×400	55	φ18	φ14	250	650	700	340	∕	∕	∕	250	650	700	340	80	250
ZL-3	170×260	440×440	500×500	55	φ23	φ14	300	800	850	440	∕	∕	∕	300	800	850	440	80	250
ZL-4	250×320	540×540	600×600	55	φ23	φ14	300	800	850	540	∕	∕	∕	300	800	850	540	80	250
ZL-5	300×400	740×740	800×800	55	φ26	φ18	350	1000	1100	740	∕	∕	∕	350	1000	1100	740	80	250
ZL-6	450×500	900×900	1000×1000	75	φ32	φ23	400	1300	1400	900	∕	∕	∕	400	1300	1400	900	80	300

C2×C2					C2×C2						
ZL-1	45×90	60×110	80×115	80×130	90×130	ZL-4	200×300	250×300	250×320		
ZL-2	100×150	110×140	120×180	130×180	150×200	ZL-5	270×370	280×370	290×390	300×350	
ZL-3	160×210	170×240	170×260	170×275	180×230	ZL-6	300×400	350×430	350×450	400×450	450×500

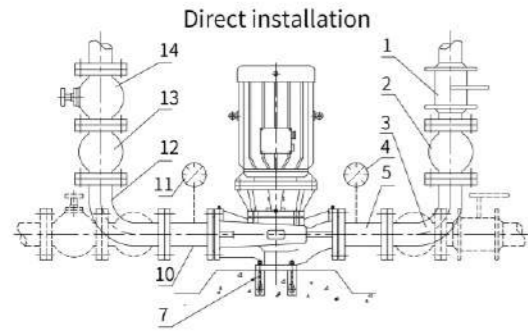
## TKW HORIZONTAL MAP



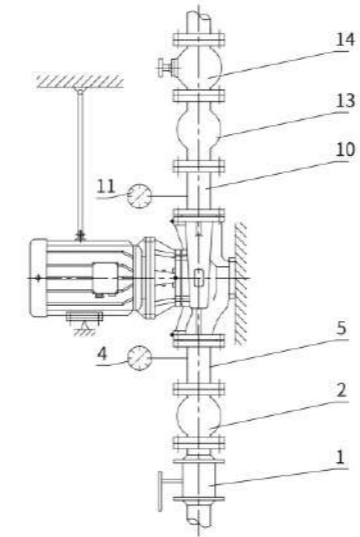
Directly install the cement foundation size						With vibration isolator installed cement base size					
H	h	L1×B1	C2×C1	B4×B3	4-φd	H	h	L1×B1	C2×C1	B4×B3	16-φd
150	120	270×110	370×210	420×260	φ50	60	40	270×110	430×270	480×320	φ10.5
250	200	250×140	350×240	400×290	φ50	60	40	250×140	410×300	460×350	φ10.5
250	200	290×165	390×265	440×315	φ50	60	40	290×165	500×375	550×245	φ10.5
250	200	300×220	400×320	450×370	φ50	60	40	300×220	410×430	460×480	φ10.5
250	200	350×140	450×240	500×290	φ50	60	40	350×140	460×350	510×400	φ10.5
250	200	370×185	470×285	520×335	φ50	60	40	370×185	580×395	640×455	φ10.5
250	200	380×245	480×345	530×395	φ50	60	40	380×245	590×455	650×515	φ10.5
250	200	430×260	530×360	580×410	φ50	60	40	430×260	640×470	700×730	φ10.5
250	200	500×240	600×340	650×390	φ50	60	40	500×240	710×450	770×510	φ10.5
300	250	530×310	650×330	710×390	φ60	60	40	530×310	790×570	860×640	φ14.5
300	250	560×265	680×385	740×445	φ60	80	60	560×265	820×525	880×595	φ14.5
300	250	640×310	760×430	820×490	φ60	80	60	640×310	900×570	970×640	φ14.5
300	250	680×350	800×470	860×530	φ60	80	60	680×350	940×610	1010×680	φ14.5
400	350	750×410	900×560	1000×660	φ80	80	60	750×410	1100×760	1170×830	φ14.5
400	350	790×550	940×700	1040×800	φ80	80	60	790×550	1140×900	1210×970	φ14.5
400	350	800×460	950×610	1050×710	φ80	80	60	800×460	1150×810	1220×880	φ14.5

## TKG VERTICAL INSTALLATION

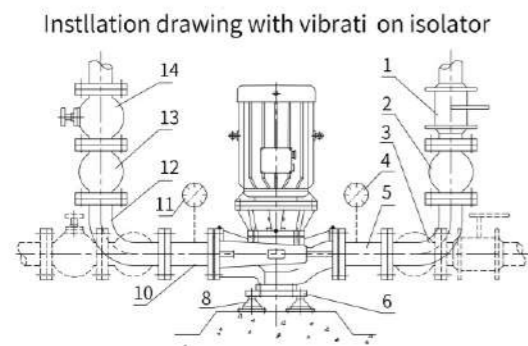
A few general installation modes



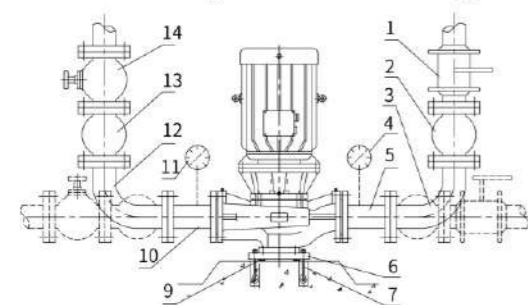
Direct installation



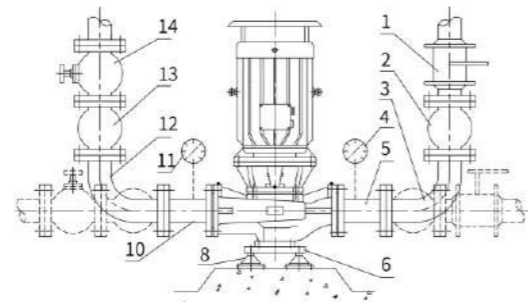
Cantilever horizontal installation



Instllation drawing with vibrati on isolator



- |                          |                           |                            |
|--------------------------|---------------------------|----------------------------|
| 1. Inlet valve           | 2. Inlet flexible joint   | 3. Inlet elbow             |
| 4. Inlet pressure gauge  | 5. Inlet straight pipe    | 6. connection board        |
| 7. Ground bolt           | 8. Vibration isolator     | 9. Vibration isolating pad |
| 10. Outlet straight pipe | 11. Outlet pressure gauge | 12. Outlet elbow           |
| 13. Outet flexible joint | 14. Outlet control valve  |                            |



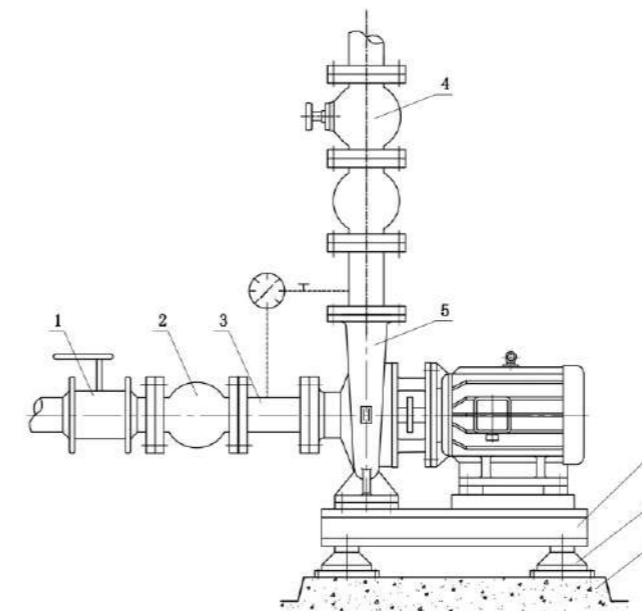
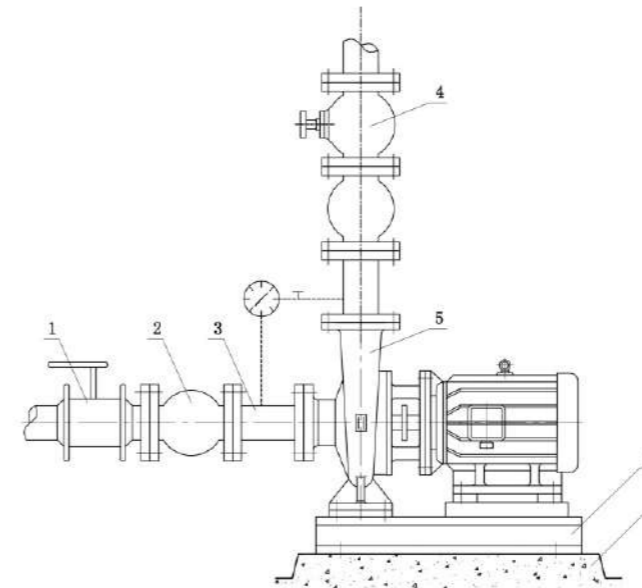
Use out doors:adopt IP54 outdoor type motor

**NOTE:**

1. Installed with vibration isolator must with connection board.
2. We suggest not to employ cantilever horizontal, just as well.
3. Include 1,2,3 three installation modes for outdoor usage.

## TKW HORIZONTAL INSTALLATION

The two installation method of common



- 1. Inlet valve
- 2. Inlet flexible joint
- 3. inlet pipe
- 4. Outlet control valve
- 5. pump body
- 6. foot disc
- 7. Vibration isolator
- 8. cement foundation

## PUMP INSTRUCTIONS



## INSTALLATION

- Should be checked before installation: no blockage within the pump flow path, check the connections between pump and pipes, tighten all the bolts and make sure no looseness;
- Should install the control valve, pressure gauge on the pipes in inlet and outlet, equipped the flex joints on the flange connection. Can not directly added the weight of pipeline on the pump, to avoid the distortion, vibration, and noise;
- The selected pressure gauge should be 1.25~1.5 times of the pump's working condition (if no pressure at the inlet, the pressure gauge is not needed at the inlet.)
- Installation method (see No. Twelve)
- After installation, rotate the pump shaft, It should not be frictional. Everything is well, then prepare to connect the electric wire.

## ADJUST, START, STOP

### PREPARATION BEFORE ADJUSTING:

- 1. Ensure the wire connected, and tighten the connected ports to avoid lack of phase or short circuit;
- 2. Starting motor and confirm the motor rotation then stopped. From the top of motor, the correct rotation is clockwise.
- 3. Open exhaust valve, close outlet valve.
- 4. Open inlet valve, fill the water full of pump casing till water overflow from exhaust valve, then turn off the exhaust valve.
- 5. Check every parts (includes pipe, pump), to ensure no leakage.
- 6. To delivering hot water, pump needs to be preheated. The preheated speed is increase 50°C per hour and ensure every part warm evenly;

### START:

- 1. Start motor till the speed turn to normal, then open the outlet valve slowly;
- 2. Observe the outlet pressure gauge, control the outlet pressure under the pump rated flow;
- 3. Normally adjust the outlet pressure as the three flow points on the usage manual, and test the current over the motor rated current or not. If current over, stop motor immediately;
- 4. Pump outlet valve can't opened with full size. When delivering huge flow, then can't work for long time.
- 5. When pump operating, regularly checking: pump's working temperature, motor's working current, to make sure everything is well. Maintain input and output unblocked of the cooling tank inside of hot water pump.

### STOP:

- 1. Hot water pump should be lower the temperature, the decrease speed less than 10°C per minute till temperature under 80°C , then pump can be stopped.
- 2. Shut off the outlet valve, turn off motor;
- 3. Shut off the inlet valve; if not use for long time, the liquid pump inside should be drain off.

## MAINTENANCE AND REPAIR

### MAINTENANCE:

- 1. Inlet pipe must be filled with liquid, prohibit run for long time in the state of pump catitation, can not be working without water even more!
- 2. Prohibit pump reverse rotating for long time;
- 3. Do the daily work of the pump check, to appear abnormal noise, vibration intensity is large, current overload, temperature rise is not normal should immediately stop it and check it again.

### REPAIR:

- 1. Regularly check the pump's bearing lubrication. Normally running after 500 hours, plus lubricating oil. Running after 5000 hours, pump stopped and separated to wash and lubricate.
- 2. If pump long time no use, clean and dry the components, apply oil and seal it in a storehouse at a normal temperature;
- 3. To assemble the pump, it should follow the reverse order of disassembling without any missing of components, and wearing parts, such like bearing, mechanical seal and end face gasket ring, should be replaced during heavy repair.
- 4. To replace the motor's bearing, the specific disassembling tools should be used. First clean the bearing to be replaced and apply oil on it with a volume not larger than two thirds of the bearing oil chamber;
- 5. High-quality greasing should be adopted for oiling of the bearing chamber. It's not allowed to have any impurities in the grease or even use deteriorated grease.

### 6. Detailed list of wearing parts

Motor base number	Bearing specification	Mechanical seal	Motor base number	Bearing specification	Mechanical seal
TKG					
80-2、4	6204	MG1-18	200-2、4	6312/7312	MG1-45
90-2、4	6205	MG1-20	225-2、4	6313/7313	MG1-45
100-2、4	6206	MG1-25	250-2、4	6314/7314	MG1-55
112-2、4	6306	MG1-25	280-2	6314/7314	MG1-55
132-2	6308	MG1-25	280-4	6317/7317	MG1-55
132-4	6308	MG1-35	315-2	6317/7317	MG1-55
160-2、4	6309	MG1-35	315-4	6319/7319	MG1-75
180-2	6311/7311	MG1-35	355-4	6322/7322	MG1-75
180-4	6311/7311	MG1-45			
Motor base number	Bearing specification	Mechanical seal	Motor base number	Bearing specification	Mechanical seal
TKW					
80-2、4	6204	MG1-18	200-2、4	6312	MG1-45
90-2、4	6205	MG1-20	225-2、4	6313	MG1-45
100-2、4	6206	MG1-25	250-2、4	6314	MG1-55
112-2、4	6306	MG1-25	280-2	6314	MG1-55
132-2	6308	MG1-25	280-4	6317	MG1-55
132-4	6308	MG1-35	315-2	NU317/6317	MG1-75
160-2、4	6309	MG1-35	315-4	NU319/6319	MG1-75
180-2	6311	MG1-35	355-4	NU322/6322	MG1-75
180-4	6311	MG1-45			



**FAULT REASONS AND PROCESSING METHODS**

Fault	Possible Reasons	Processing Methods
1、No water flow out	a) The inlet and outlet valves are not opened; the pipeline or impeller channel blocked. b) The motor running direction is wrong, lack of phase, the speed is very slow. c) The suction pipe leaks. d) The liquid is not full of pump, air inside pump chamber not drained off e) The inlet is short of water supply, the suction lift is too high, the bottom valve leaks. f) The pump resistance is excessive and pump type is not right.	a) Check, and remove the clogging b) Adjust the motor's turning direction, and tighten the connected terminals. c) Tighten all sealing surfaces and exhaust air. d) Open outlet exhaust valve and refill water and exhaust. e) Stop pump and check, adjust the water supply and replace the bottom valve. f) Reduce the pipeline's turns and select a new pump.
2、The flow is deficient	a) Check the reasons as the step 1 first. b) The pipeline or impeller flow channel blocked, scale deposition and inadequate valve opening. c) The voltage is too low. d) The impeller is abraded	a) Troubleshoot with the method as the step 1 first. b) Remove the blockage and readjust the valve's opening. c) Stabilize the voltage d) Replace the impeller.

Fault	Possible Reasons	Processing Methods
3、Power is excessive	a) Its working flow is beyond the rating. b) The suction lift is too high. c) The pump's bearing abraded.	a) Adjust the flow, and turn down the outlet valve. b) Reduce the suction lift. c) Replace the bearing.
4、Noise and vibration	a) The pipeline support is not stable. b) The liquid is mixed with air. c) Cavitation d) The bearing is damaged. e) The motor runs in an overload and heating state.	a) Stabilize the pipeline b) Increase the suction pressure, and exhaust the air. c) Reduce the vacuum degree d) Replace the bearing. e) Adjust as the step 5.
5、The motor heat	a) The flow is excessive with overload operation b) Scuffing c) The motor's bearing is damaged d) Under voltage	a) Turn down the outlet valve b) Check and process it c) Replace the bearing d) Stabilize the voltage
6、The pump leaks	a) The mechanical seal is abraded. b) The pump body has sand holes or cracks. c) The seal surface is uneven d) The mounting bolts are loose	a) Replace it. b) Weld it or replace it. c) Repair d) Fastening the bolt.

## TKG/TKW

(FIVE) THE CHECK LIST OF THE 5G TKG/ SERIES PUMP MODEL AN ISG/ MODEL (1)

TKG/TKW MODEL	ISG/ ISW MODEL	TKG/TKW MODEL	ISG/ ISW MODEL	
20/110-0.37/2	20-110	50/90-0.75/2	50-100A	40-100(I)A
20/160-1.1/2	20-160	50/100-1.1/2	50-100	40-100(I)
20/110-0.12/4	20-110	50/110-1.1/2	50-125A	40-125(I)A
20/160-0.18/4	20-160	50/125-1.5/2	50-125	40-125(I)
25/110-0.55/2	25-110	50/140-1.5/2	50-160B	40-160(I)B
25/115-0.55/2	25-125A	50/150-2.2/2	50-160A	40-160(I)A
25/125-0.75/2	25-125	50/160-3/2	50-160	40-160(I)
25/150-1.1/2	25-160A	50/170-3/2	50-200B	40-200(I)B
25/160-1.5/2	25-160	50/185-4/2	50-200A	40-200(I)A
25/110-0.12/4	25-110	50/200-5.5/2	50-200	40-200(I)
25/115-0.12/4	25-125A	50/220-7.5/2	50-250B	40-250(I)B
25/125-0.12/4	25-125	50/235-7.5/2	50-250A	40-250(I)A
25/150-0.18/4	25-160A	50/250-11/2	50-250	40-250(I)
25/160-0.25/4	25-160	50/100-0.12/4	50-100	40-100(I)
32/110-0.55/2	32-125A	50/110-0.18/4	50-125A	40-125(I)A
32/125-0.75/2	32-125	50/125-0.25/4	50-125	40-125(I)
32/110-0.12/4	32-125A	50/150-0.25/4	50-160A	40-160(I)A
32/125-0.18/4	32-125	50/160-0.55/4	50-160	40-160(I)
40/90-0.37/2	40-100A	50/185-0.55/4	50-200A	40-200(I)A
40/100-0.55/2	40-100	50/200-0.75/4	50-200	40-200(I)
40/110-0.75/2	40-125A	50/220-0.75/4	50-250B	40-250(I)
40/125-1.1/2	40-125	50/235-1.1/4	50-250A	40-250(I)A
40/140-1.1/2	40-160B	50/250-1.5/4	50-250	40-250(I)
40/150-1.5/2	40-160A	65/90-1.1/2	65-100A	50-100(I)A
40/160-2.2/2	40-160	65/100-1.5/2	65-100	50-100(I)
40/170-2.2/2	40-200B	65/110-2.2/2	65-125A	50-125(I)A
40/185-3/2	40-200A	65/125-3/2	65-125	50-125(I)
40/200-4/2	40-200	65/140-3/2	65-160B	50-160(I)B
40/220-4/2	40-250B	65/150-4/2	65-160A	50-160(I)A
40/235-5.5/2	40-250A	65/160-4/2	65-160	50-160(I)
40/250-7.5/2	40-250	65/170-5.5/2	65-200B	50-200(I)B
40/100-0.12/4	40-100	65/185-7.5/2	65-200A	50-200(I)A
40/110-0.12/4	40-125A	65/200-7.5/2	65-200	50-200(I)
40/125-0.18/4	40-125	65/220-11/2	65-250B	50-250(I)B
40/150-0.18/4	40-160A	65/235-11/2	65-250A	50-250(I)A
40/160-0.25/4	40-160	65/250-15/2	65-250	50-250(I)
40/185-0.37/4	40-200A	65/270-15/2	65-315C	50-315(I)C
40/200-0.55/4	40-200	65/285-18.5/2	65-315B	50-315(I)B
40/220-0.55/4	40-250B	65/300-22/2	65-315A	50-315(I)A
40/235-0.75/4	40-250A	65/315-30/2	65-315	50-315(I)
40/250-1.1/4	40-250	65/100-0.25/4	65-100	50-100(I)

## TKG/TKW

(FIVE) THE CHECK LIST OF THE 5G SERIES PUMP MODEL AN MODEL (2)

TKG/TKW MODEL	ISG/ ISW MODEL		TKG/TKW MODEL	ISG/ ISW MODEL	
65/110-0.25/4	65-125A	50-125(I)A	80/315-5.5/4	80-315	65-315(I)
65/125-0.37/4	65-125	50-125(I)	80/310-37/2		80-350B
65/150-0.37/4	65-160A	50-160(I)A	80/330-45/2		80-350A
65/160-0.55/4	65-160	50-160(I)	80/350-55/2		80-350
65/185-0.75/4	65-200A	50-200(I)A	100/90-4/2	100-100A	80-100(I)A
65/200-1.1/4	65-200	50-200(I)	100/100-5.5/2	100-100	80-100(I)
65/220-1.1/4	65-250B	50-250(I)B	100/110-7.5/2	100-125A	80-100(I)
65/235-1.5/4	65-250A	50-250(I)A	100/125-11/2	100-125	80-125(I)
65/250-2.2/4	65-250	50-250(I)	100/140-11/2	100-160B	80-160(I)B
65/285-3/4	65-315B	50-250(I)B	100/150-11/2	100-160A	80-160(I)A
65/300-3/4	65-315A	50-315(I)A	100/160-15/2	100-160	80-160(I)
65/315-4/4	65-315	50-315(I)	100/170-15/2	100-200B	80-200(I)B
80/90-2.2/2	80-100A	65-100(I)A	100/185-18.5/2	100-200A	80-200(I)A
80/100-3/2	80-100	65-100(I)	100/200-22/2	100-200	80-200(I)
80/110-4/2	80-125A	65-125(I)A	100/220-30/2	100-250B	80-250(I)B
80/125-5.5/2	80-125	65-125(I)	100/235-30/2	100-250A	80-250(I)A
80/140-5.5/2	80-160B	65-160(I)B	100/250-37/2	100-250	80-250(I)
80/150-7.5/2	80-160A	65-160(I)A	100/270-37/2	100-315C	80-315(I)C
80/160-7.5/2	80-160	65-160(I)	100/285-45/2	100-315B	80-315(I)B
80/170-7.5/2	80-200B	65-200(I)B	100/300-55/2	100-315A	80-315(I)A
80/185-11/2	80-200A	65-200(I)A	100/315-75/2	100-315	80-315(I)
80/200-15/2	80-200	65-200(I)	100/310-55/2		100-350B
80/220-15/2	80-250B	65-250(I)B	100/330-75/2		100-350A
80/235-18.5/2	80-250A	65-200(I)A	100/350-90/2		100-350
80/250-22/2	80-250	65-250(I)	100/100-0.75/4	100-100	80-100(I)
80/270-22/2	80-315C	65-315(I)C	100/110-1.1/4	100-125A	80-125(I)A
80/285-30/2	80-315B	65-315(I)B	100/125-1.1/4	100-125	80-125(I)
80/300-30/2	80-315A	65-315(I)A	100/150-1.5/4	100-160A	80-160(I)A
80/315-37/2	80-315	65-315(I)	100/160-2.2/4	100-160	80-160(I)
80/100-0.37/4	80-100	65-100(I)	100/185-2.2/4	100-200A	80-200(I)A
80/110-0.55/4	80-125A	65-125(I)A	100/200-3/4	100-200	80-200(I)
80/125-0.75/4	80-125	65-125(I)	100/220-3/4	100-250B	80-250(I)B
80/150-0.75/4	80-160A	65-160(I)A	100/235-4/4	100-250A	80-250(I)A
80-160-1.1/4	80-160	65-160(I)	100/250-5.5/4	100-250	80-250(I)
80/185-1.5/4	80-200A	65-200(I)A	100/285-5.5/4	100-315B	80-315(I)B
80/200-2.2/4	80-200	65-200(I)	100/300-7.5/4	100-315A	80-315(I)A
80/220-1.5/4	80-250B	65-250(I)B	100/315-11/4	100-315	80-315(I)
80/235-2.2/4	80-250A	65-250(I)A	125/90-7.5/2		125-100A
80/250-3/4	80-250	65-250(I)	125/100-11/2	125-100	100-100(I)
80/285-3/4	80-315B	65-315(I)B	125/110-11/2	125-125A	100-125(I)A
80/300-4/4	80-315A	65-315(I)A	125/125-15/2	125-125	100-125(I)



(FIVE) THE CHECK LIST OF THE 5G SERIES PUMP MODEL AN MODEL (3)

TKG/TKW MODEL	ISG/ ISW MODEL		TKG/TKW MODEL	ISG/ ISW MODEL	
125/140-15/2	125-160B		150/285-18.5/4	150-315B	200-315B
125/150-18.5/2	125-160A	100-160(I)A	150/300-22/4	150-315A	200-315A
125/160-22/2	125-160	100-160(I)	150/315-30/4	150-315	200-315
125/170-22/2	125-200B	100-200(I)B	150/320-22/4	150-400C	200-400C
125/185-30/2	125-200A	100-200(I)A	150/345-30/4	150-400B	200-400B
125/200-37/2	125-200	100-200(I)	150/370-37/4	150-400A	200-400A
125/220-37/2	125-250B	100-250(I)B	150/400-45/4	150-400	200-400
125/235-45/2	125-250A	100-250(I)A	150/440-45/4		150-500B
125/250-55/2	125-250	100-250(I)	150/475-55/4		150-500A
125/125-2.2/4		100-125 (I)	150/510-75/4		150-500
125/150-3/4		100-160 (I) A	150/310-75/2		150-350B
125/160-4/4		100-160 (I)	150/330-90/2		150-350A
125/185-4/4		100-200 (I) A	150/350-110/2		150-350
125/200-5.5/4		100-200 (I)	200/185-18.5/4		200-200(I)A
125/220-5.5/4		100-250 (I) B	200/200-22/4		200-200(I)
125/235-7.5/4		100-250 (I) A	200/220-18.5/4		200-250(I)B
125/250-11/4		100-250 (I)	200/235-22/4		200-250(I)A
125/285-7.5/4		100-315 (I) B	200/250-30/4		200-250(I)
125/300-11/4		100-315 (I) A	200/285-37/4		200-315(I)B
125/315-15/4		100-315 (I)	200/300-45/4		200-315(I)A
125/320-15/4		100-400 (I) C	200/315-55/4		200-315(I)
125/345-18.5/4		100-400 (I) B	200/320-45/4		200-400(I)C
125/370-22/4		100-400 (I) A	200/345-55/4		200-400(I)B
125/400-30/4		100-400 (I)	200/370-75/4		200-400(I)A
150/140-15/2	150-160B	125-160B	200/400-75/4		200-400(I)
150/150-18.5/2	150-160A	125-160A	200/410-75/4		200-500(I)C
150/160-22/2	150-160	125-160	200/440-90/4		200-500(I)B
150/170-22/2	150-200B(G)	125-200B	200/475-110/4		200-500(I)A
150/185-30/2	150-200A(G)	125-200A	200/510-132/4		200-500(I)
150/200-37/2	150-200(G)	125-200	250/235-37/4		250-250A
150/220-45/2		150-250B(G)	250/250-45/4		250-250
150/235-55/2		150-250A(G)	250/285-45/4		250-315B
150/250-75/2		150-250(G)	250/300-55/4		250-315A
150/285-75/2		150-315B(G)	250/345-75/4		250-400B
150/300-90/2		150-315A(G)	250/370-90/4		250-400A
150/315-110/2		150-315(G)	250/400-110/4		250-400
150/185-11/4	150-200A	200-200A	300/220-37/4		300-235B
150/200-15/4	150-200	200-200	300/235-45/4		300-235A
150/220-11/4	150-250-B	200-250B	300/250-55/4		300-235
150/235-15/4	150-250-A	200-250A			
150/250-18.5/4	150-250	200-250			

(FIVE) THE CHECK LIST OF THE 5G SERIES PUMP MODEL AN MODEL (4)

TKG/TKW MODEL	ISG/ ISW MODEL	TKG/TKW MODEL	ISG/ ISW MODEL
300/260-55/4	300-300B	300/235-55/6	300-235
300/280-75/4	300-300A	300/235-45/6	300-235A
300/300-75/4	300-300	300/300-75/6	300-300
300/270-55/4	300-315B	300/300-75/6	300-300A
300/295-75/4	300-315A	300/300-55/6	300-300B
300/315-90/4	300-315	300/380-132/6	300-380
300/345-90/4	300-400B	300/380-110/6	300-380A
300/370-110/4	300-400A	300/380-90/6	300-380B
300/400-132/4	300-400		
300//440-160/4	300-500B	350/250-75/6	350-250
300//470-200/4	300-500A	350/250-55/6	350-250A
300/500-250/4	300-500	350/315-90/6	350-315
350/300-75/4	350-315A	350/315-75/6	350-315A
350/315-110/4	350-315	350/315-75/6	350-315B
350/345-110/4	350-400B	350/400-160/6	350-400
350/370-132/4	350-400A	350/400-132/6	350-400A
350/400-160/4	350-400	350/400-110/6	350-400B
350/425-132/4	350-500C		
350/450-160/4	350-500B	400/400-55/6	400-400
350/470-200/4	350-500A	400/400-45/6	400-400A
350/500-250/4	350-500	400/500-90/6	400-500
		400/500-75/6	400-500A
		400/500-55/6	400-500B
		400/625-132/6	400-625
		400/625-110/6	400-625A
		400/625-90/6	400-625B
		500/400-75/6	500-400
		500/400-55/6	500-400A
		500/500-110/6	500-500
		500/500-90/6	500-500A
		500/500-75/6	500-500B
		500/625-160/6	500-625
		500/625-132/6	500-625A
		500/625-110/6	500-625B