

DHH

Horizontal Double-Suction Split Case Centrifugal Pumps

50 Hz • 60 Hz



DHH Horizontal Double-Suction Split Case Centrifugal Pumps

Model Code **DHH 2 (S) - 150 x 100 A 5 30**

Output in kW: 30kW

Frequency 50Hz : 5

Discharge size in mm

Suction size in mm

All Stainless materials: S

Pole: DHH2 for 2 Pole, DHH4 for 4 Pole, DHH6 for 6 Pole, etc...

Model

■ Applications

- General water supply in dwelling houses, city buildings, etc.
- Circulation of cold or hot water
- Industrial water treatment and power plant
- Irrigation and flood control
- Fire fighting and sprinkler

■ Features

● Easy Disassembly

Inspection is simplified, it is not necessary to disturb pump alignment and suction & discharge piping when parts replacement are necessary

● Wide Range of Material

Pump material can be changed in accordance with customer's request

● High Efficiency

High operating efficiency realize lower operation cost and smaller motor output

● High suction lift

Double suction pump ensures high suction lift performance with wide capacities.



■ Specifications

- **Liquid** : Non-aggressive Industrial Water / River Water / Sea Water
- **Re. NPSH** : See the individual charastric curve
- **Operation Temp.** : -15°C ~ 80°C (81°C to 104°C at option)
- **Max suc. Press** : Max working pressure - $\frac{\text{shut off head}}{10}$ (kgf/cm²)

• Max working Press :

Pump Model DHH (2, 4, 6, 8, 10)	Max Working Pressure (kgf/cm ²)
150x100A,B,C / 200x150A,B,C / 250x150B / 250x200A,B,C,D / 300x200A / 350x300A,B / 300x250A,B,C,D / 300x300A / 350x250A / 350x300A,B / 350x350A / 400x350A / 500x350A / 500x400A,B / 500x500A / 600x500A / 700x500A,B	10
200x125A / 250x150A / 300x200B / 350x200A / 500x400C / 600x500B / 300x250A,B,C,D / 300x300A	16
400x300A	20

- **Revolution** : DHH2 - 3000 r.p.m. / DHH4 - 1500 r.p.m. / DHH6 - 1000 r.p.m. / DHH8 - 750 r.p.m. / DHH10 - 600 r.p.m. at 50Hz
: DHH2 - 3600 r.p.m. / DHH4 - 1800 r.p.m. / DHH6 - 1200 r.p.m. / DHH8 - 900 r.p.m. / DHH10 - 720 r.p.m. at 60Hz

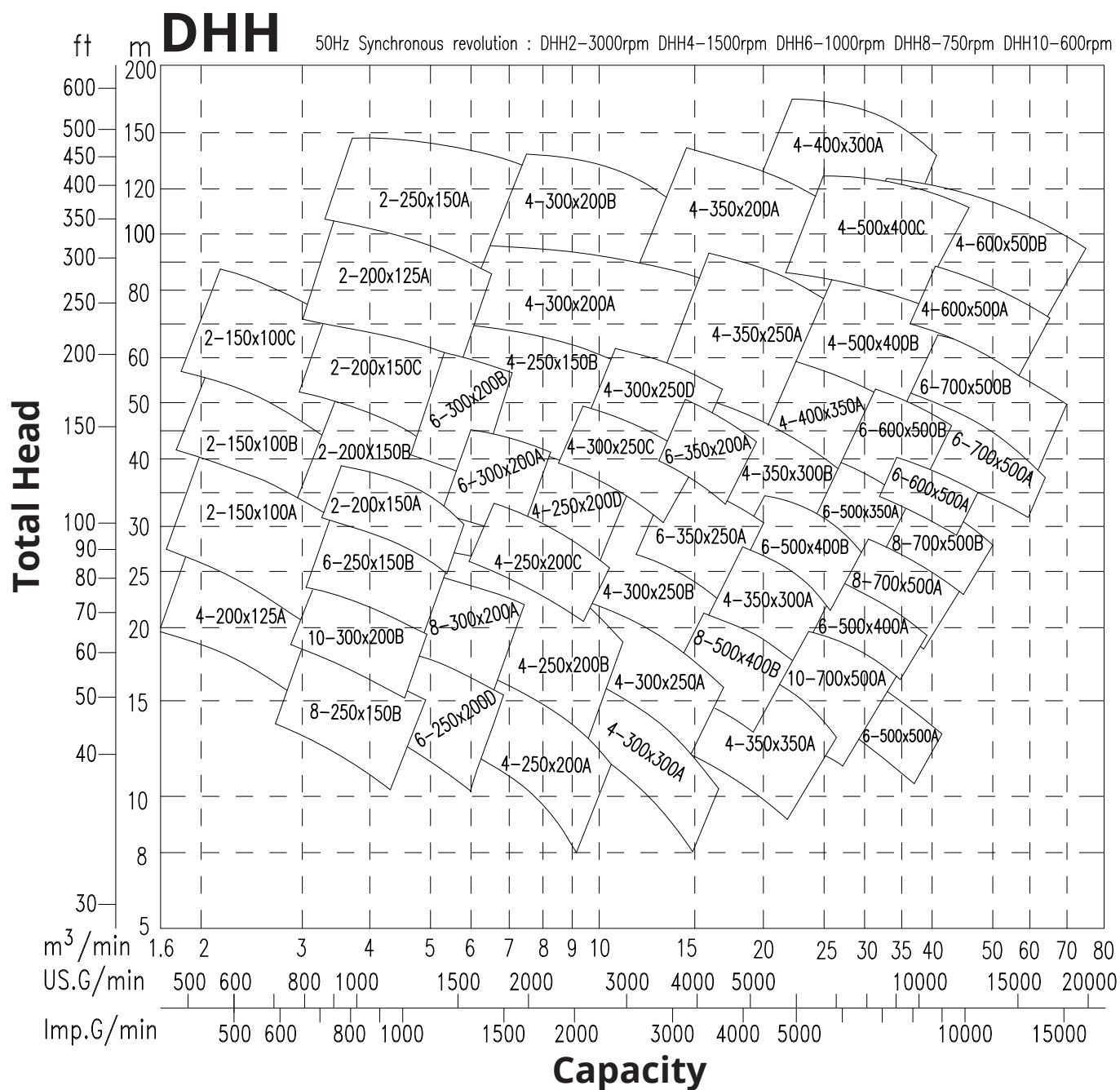
• Structure

- Impeller** : Closed
- Shaft seal** : Mechanical seal (or Gland packing)
- Bearing** : Ball bearing

• Material

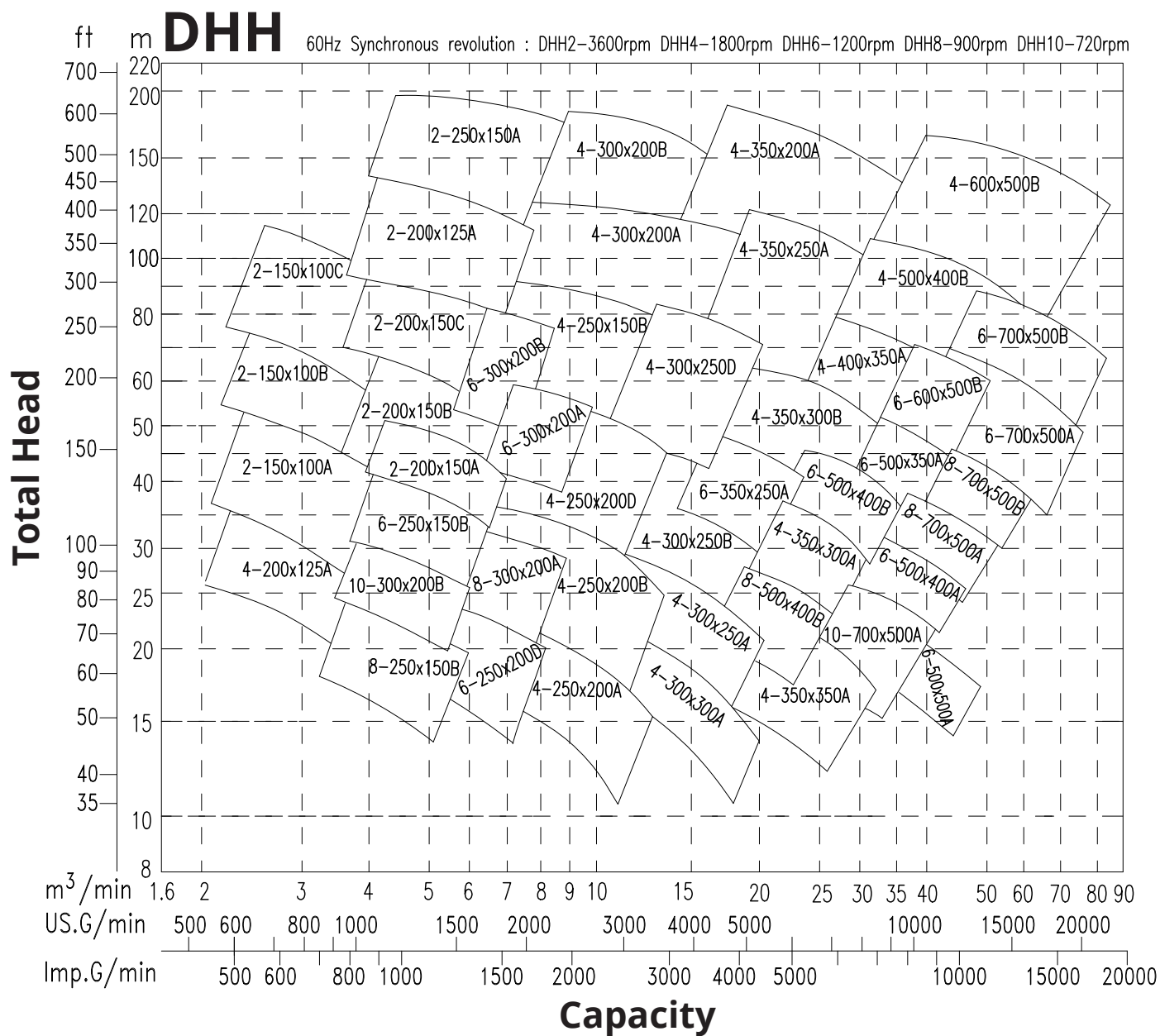
- Impeller** : Cast iron (FC250) / Bronze (CAC406) Option : Duplex Stainless Steel (SUS329J1)
- Shaft** : Stainless steel (SUS420J1) Option : Duplex Stainless Steel (SUS329J3L)
- Casing** : Cast iron (FC250) Option : Duplex Stainless Steel (SUS329J1)

Selection Charts (50Hz)



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Selection Charts (60Hz)

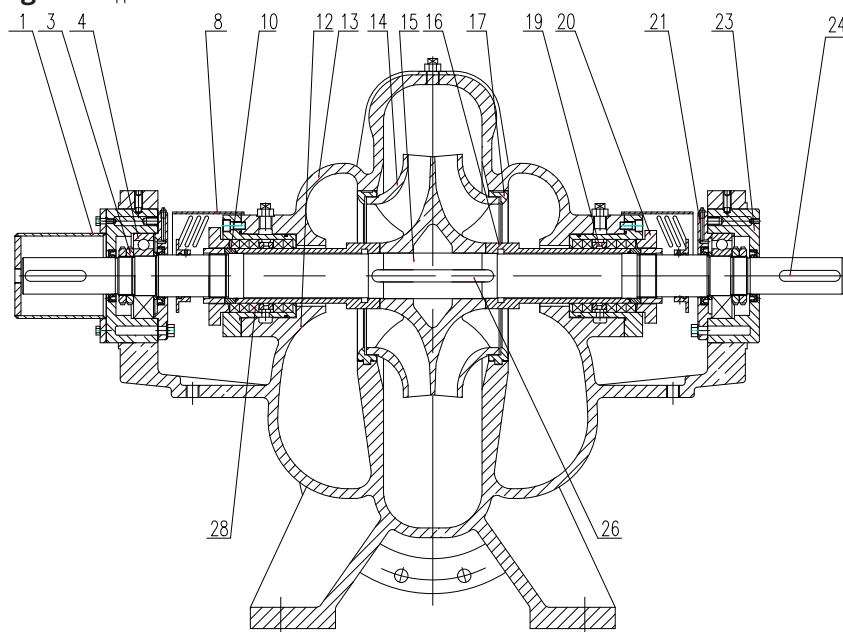


Design Detail

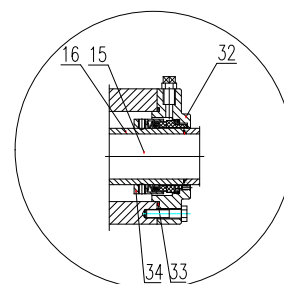
Pump Model DHH (2, 4, 6, 8, 10)	Bearing	Shaft Dimension at coupling (mm)		Gland Packing Size (mm) : Nos.	Mechanical seal x 2 pcs
	x2 pcs	Diameter	Key size		
		S	W x T		
150x100A,B,C / 200x150A / 250x200A	6307	30	8 x 7	50 x 70 x 10 :10	M7N/50
200x125A / 200x150B,C / 250x200B / 300x250A / 300x300A	6309	40	12 x 8	65 x 89 x 12 :10	M7N/65
250x150A,B / 250x200C,D / 300x250B / 350x300A / 350x350A / 500x500A	6311	50	14 x 9	80 x 110 x 15 :10	M7N/80
300x200A,B / 300x250C,D / 350x300B / 500x350A / 500x400A	6313	60	18 x 11	90 x 120 x 15 :10	M7N/90
350x200A / 350x250A / 400x350A	6316	75	20 x 12	110 x 150 x 20 :10	M74/110
500x400B,C / 600x500A / 700x500A,B	6318	85	22 x 14	120 x 160 x 20 :10	M74/120
400x300A	6324	115	32 x 18	145 x 185 x 25 :12	M74/145

Sectional View

Fig. 1 Application model : All

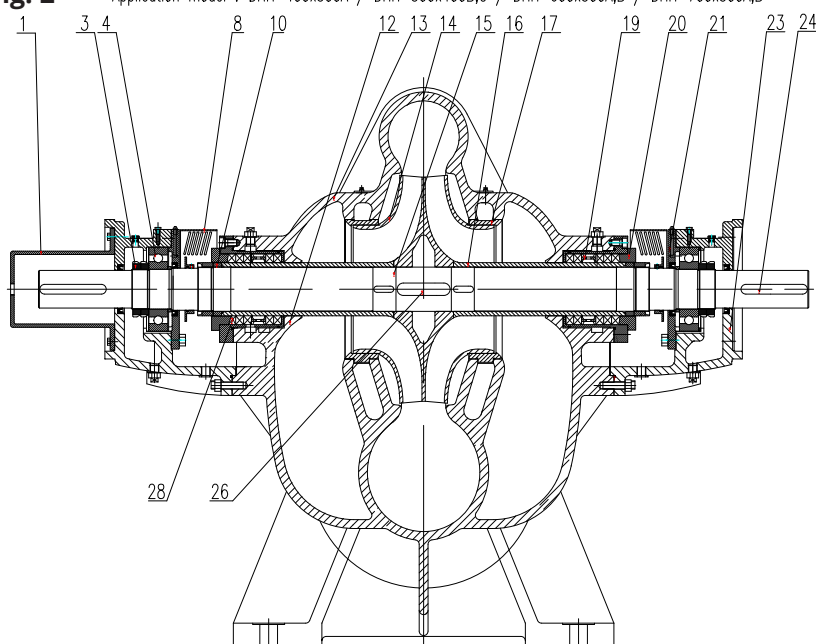


Gland Packing Type Drawing

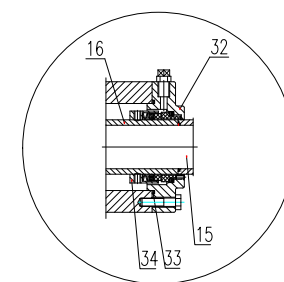


Mechanical Seal Type Drawing

Fig. 2 Application model : DHH-400x300A / DHH-500x400B,C / DHH-600x500A,B / DHH-700x500A,B



Gland Packing Type Drawing



Mechanical Seal Type Drawing

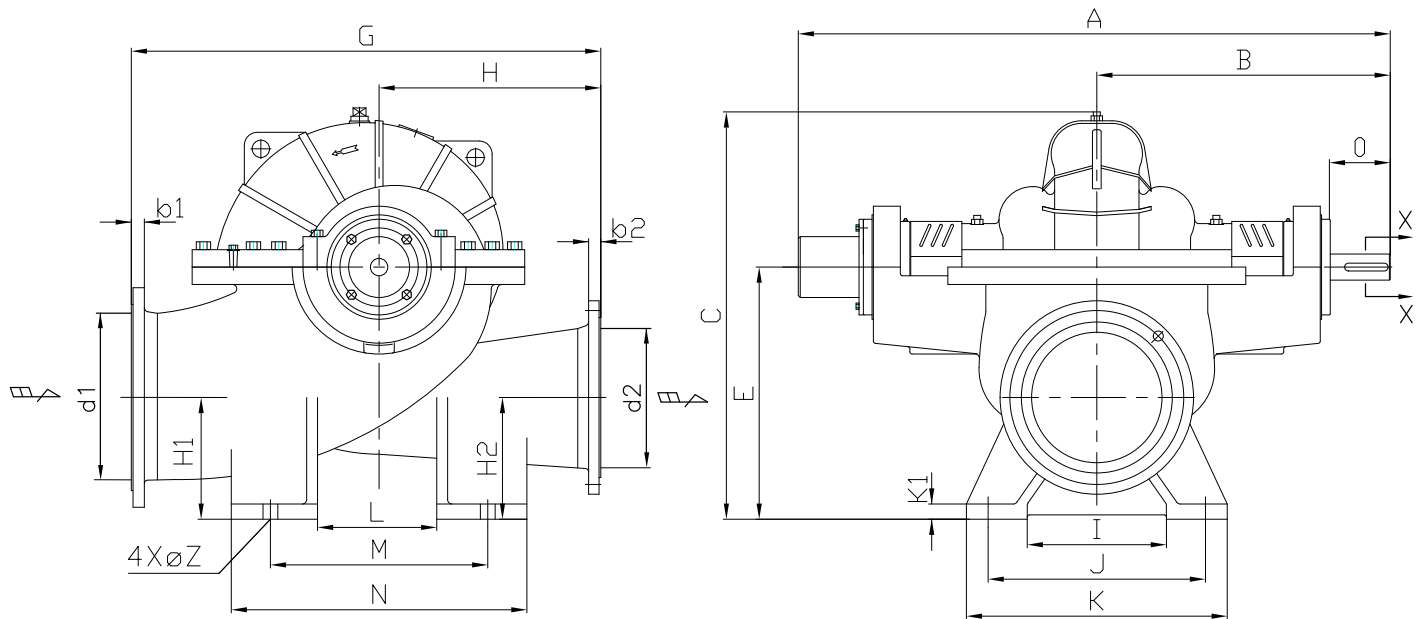
No	Parts Description	Q'ty	Materials
1	Shaft end guard	1	Steel (SS400)
3	Bearing lock nut	1	Carbon steel (S45C)
4	Bearing	2	SKF
8	Shaft seal guard	2	Steel (SS400)
12	Casing lower half	1	Cast Iron (FC250)
13	Casing upper half	1	Cast Iron (FC250)
14	Impeller	1	Bronze (CAC406)
15	Shaft	1	Stainless steel (SUS420J1)
16	Shaft sleeve	2	Cast steel (SCS2)
17	Casing wearing ring	2	Bronze (CAC406)

*See the design detail

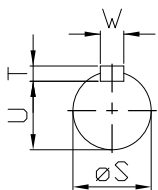
No	Parts Description	Q'ty	Materials
19	Lantern ring	2	Stainless steel (SUS304)
20	Gland - Gland packing	2	Stainless steel (SUS304)
21	Bearing housing cover	2	Cast Iron (FC250)
23	Bearing housing	2	Cast Iron (FC250)
24	Coupling key	1	Stainless steel (SUS420J1)
26	Impeller key	1	Stainless steel (SUS420J1)
28	Gland packing	*	Ramie PTFE
32	Gland - Mechanical seal	2	Stainless steel (SUS304)
33	O-Ring	2	NBR
34	Mechanical seal	2	Ceramic x Carbon

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Dimensions (Bare shaft pump)



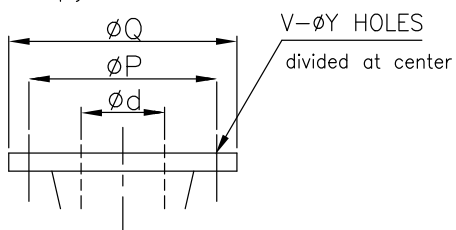
SECTION X-X VIEW



W&T, See the design detail

Flange Size

Comply with ISO 7005.2



Flange Pressure Rating:

PN10 when nominal head < 95m

PN16 when 95m ≤ nominal head < 130m

PN25 when nominal head ≥ 130m

Flange Dimension

Unit : mm

d	P	Q	V	Y	Pressure rating (PN)
100	180	220	8	18	10
125	210	250	8	18	10
125	210	250	8	18	16
150	240	285	8	22	10
150	250	300	8	28	25
200	295	340	8	22	10
200	295	340	12	22	16
200	310	360	12	28	25
250	350	395	12	22	10
250	355	405	12	28	16
300	400	445	12	22	10
300	410	460	12	28	16
300	430	485	16	31	25
350	460	505	16	22	10
350	470	520	16	28	16
400	515	565	16	28	10
400	525	580	16	31	16
500	620	670	20	28	10
500	650	715	20	34	16
600	725	780	20	31	10
600	770	840	20	37	16
700	840	895	24	31	10

DHH Dimension Table

Unit: mm

Model DHH (2,4,6,8,10)	Fig	Flange		A	B	C	E	G	H	H1	H2	I	J	K	K1	L	M	N	O	S	U	Z	b1	b2	Weight (Kg)
		Suc. d1	Dis. d2																						
150x100A	1	150	100	861	419	474	320	520	250	170	180	170	250	300	20	160	270	340	87	30	26	18	26	24	150
150x100B	1	150	100	832	400	435	285	550	250	145	145	190	280	330	25	-	280	340	78	30	26	18	26	24	160
150x100C	1	150	100	811	401	455	285	550	250	145	130	160	250	300	25	170	270	340	74	30	26	18	26	24	175
200x125A	1	200	125	991	475	555	355	680	330	185	185	200	280	330	25	200	280	350	105	40	35	18	28	26	255
200x150A	1	200	150	934	453	565	370	570	285	200	220	190	280	330	25	180	280	340	82	30	26	18	26	26	180
200x150B	1	200	150	996	470	547	355	620	300	185	185	200	250	300	25	-	250	340	89	40	35	18	26	26	205
200x150C	1	200	150	996	470	544	355	620	300	185	185	190	280	330	25	-	280	360	89	40	35	18	26	26	220
250x150A	1	250	150	1145	558	685	450	760	380	240	240	330	450	520	36	250	400	550	130	50	44.5	28	34	34	450
250x150B	1	250	150	1227	603	856	510	880	400	270	220	330	450	510	40	430	550	620	125	50	44.5	28	28	26	500
250x200A	1	250	200	995	485	709	450	745	330	240	235	230	350	410	30	330	450	510	85	30	26	28	28	28	305
250x200B	1	250	200	1040	501	738	450	850	400	220	220	230	350	410	30	-	400	510	90	40	35	28	28	26	375
250x200C	1	250	200	1237	610	745	450	890	440	250	190	230	350	410	30	-	400	510	133	50	44.5	28	28	26	400
250x200D	1	250	200	1237	610	745	450	890	440	250	190	230	350	410	30	-	400	510	133	50	44.5	28	28	26	405
300x200A	1	300	200	1375	674	898	510	1046	470	242	185	330	450	520	40	300	450	600	165	60	53	28	28	26	760
300x200B	1	300	200	1436	705	1040	620	1130	500	295	295	330	450	520	45	450	600	680	164	60	53	28	40	34	1600
300x250A	1	300	250	1096	537	803	510	900	400	260	250	330	450	510	40	430	550	620	105	40	35	28	28	28	445
300x250B	1	300	250	1234	610	824	510	880	410	250	240	330	450	520	40	300	450	600	135	50	44.5	28	28	28	550
300x250C	1	300	250	1306	625	852	510	1070	530	260	200	330	450	510	40	430	550	620	134	60	53	28	28	28	580
300x250D	1	300	250	1306	625	852	510	1070	530	260	200	330	450	510	40	430	550	620	134	60	53	28	28	28	590
300x300A	1	300	300	1116	535	808	510	1000	500	245	245	330	450	510	40	430	550	620	90	40	35	28	28	28	500
350x200A	1	350	200	1562	775	1080	620	1210	550	290	210	360	500	580	50	450	600	680	185	75	67.5	34	36	30	1450
350x250A	1	350	250	1592	765	1118	620	1250	600	346	264	360	500	600	50	310	500	690	173	75	67.5	34	30	28	1225
350x300A	1	350	300	1291	632	963	620	1040	460	330	320	360	500	580	50	450	600	680	120	50	44.5	34	30	28	690
350x300B	1	350	300	1392	675	982	620	1080	510	320	320	360	500	600	50	310	500	690	130	60	53	34	30	28	895
350x350A	1	350	350	1377	675	970	620	1168	584	310	310	380	500	580	50	450	600	680	133	50	44.5	34	30	30	755
400x300A	2	400	300	2023	985	1250	750	1445	700	380	295	450	650	800	50	600	800	1000	215	115	104	48	48	40	2100
400x350A	1	400	350	1549	768	1055	670	1185	580	335	270	480	700	820	40	400	700	900	170	75	67.5	34	32	30	1460
500x350A	1	500	350	1524	756	1270	800	1350	630	385	385	420	580	760	55	580	800	1020	160	60	53	42	34	30	1390
500x400A	1	500	400	1537	750	1266	800	1460	640	390	390	420	580	760	55	580	800	1020	135	60	53	42	34	32	1740
500x400B	2	500	400	1848	905	1267	800	1290	600	359	359	450	700	850	50	550	750	950	175	85	76	48	34	32	1750
500x400C	2	500	400	1717	840	1200	760	1550	750	390	326	400	600	800	50	550	800	1050	175	85	76	48	42	38	1750
500x500A	1	500	500	1456	717.5	1251	800	1550	775	390	390	420	580	760	55	580	800	1020	130	50	44.5	42	34	34	1280
600x500A	2	600	500	1920	941	1370	900	1650	800	422	422	600	800	950	50	650	900	1150	175	85	76	48	36	34	2500
600x500B	2	600	500	2393	1170	1555	1000	1710	810	477	477	710	940	1085	50	650	890	1130	215	115	104	48	48	42	3200
700x500A	2	700	500	1948	955	1624	1050	1660	760	503	503	550	850	1050	50	600	850	1100	175	85	76	48	40	34	2850
700x500B	2	700	500	1978	970	1650	1050	1680	780	471	471	550	850	1050	50	600	850	1100	175	85	76	48	40	34	3250

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