

D DF DY **Horizontal Multi-stage** **Centrifugal Pumps**

API610 7th & 8th Edition



DATA SHEET



INTRODUCTION

Thank You for purchasing Motion Pumps Horizontal Multi-stage Centrifugal Pump. The Data Sheet provides performance curve(s), a pump model cross-section drawing, for your pump. Therefore, it is the responsibility of the owner/installer of the pump to ensure that applications not addressed in this manual are performed **only** after establishing that neither operator safety nor pump integrity are compromised by the installation. Pumps and related equipment **must** be installed and operated according to all national, local and industry standards. This literature is not for sale, it is just a reference catalogue, not for use in United States of America, some pictures and information was taken from other manufacturers, this literature is made only for Costa Rica, under the local laws of Costa Rica where this information is protected by registration. If there are any questions regarding the pump which are not covered in this manual or in other literature accompanying the unit, please contact your Motion Pump distributor or our office:

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D DF DY Series pumps are in multi-stage single casing sectional horizontal construction designed in accordance with API610, for high-head pumping various kinds of liquids without solids, applicable to a wide range of tough and heavy circumstances.

Type D: ideal for low & medium pressure applications of clean water or similar liquids in mining and municipal water supply and drainage. Liquid Temperature up to 80 C.

Type DF: designed for pumping corrosive liquids with suction pressure up to 0.6 MPa and temperature up to 105 C. Materials of construction, type of seals and the internal construction may vary according to specific liquid to be pumped.

Type DY: Ideal for oils and petrochemical products with temperature up to 150 C and viscosity up to 120 centipoises.

Features:

- Standard piping design in accordance with API610 and flange drilled to meet GB, DIN and ANSI Standards plans.
- Sectional single casing construction, the suction casing, stage casing and discharge casing shall be tied together with tie-bolts and sealed with metal-to-metal surface sealing.
- Soft packing as standard shaft sealing, external water cooling system designed for cooling of gland cover and stuffing box. Mechanical seal also available upon request.
- The rotor will be supported at both ends by slide or ball bearings that will be lubricated with either oil or grease and cooled by circulation water. The axial thrust of the rotor is balanced by balancing discs. Return water piping shall be designed between the balancing chamber and suction casing.
- Pump shall be flexibly coupled with driving motor, clockwise rotation looking from motor side.



MATERIALS FOR LIQUID CONTACTED PARTS

Code	S-1	S-4	S-6	C-6	A-8
Materials	ZG230-450	ZG230-450	ZG230-450	ZG1Cr13Ni	ZGCr18Ni12Mo2Ti
Impeller	HT250	ZG230-450	ZG1Cr13Ni	ZG1Cr13Ni	ZGCr18Ni12Mo2Ti
Casing Wear Ring	HT250	HT250	ZG1Cr13MoS	ZG1Cr13MoS	OCr18Ni12Mo2Ti
Imp Wear Ring	OT500-7	OT500-7	3Cr13	3Cr13	OCr18Ni12Mo2Ti
Shaft	45	45	45CrMo OR 35CrMo	3Cr13	Cr18Ni12Mo2Ti
Shaft Sleeve (packing)	3Cr13	1Cr13 Cladding Tungsten Carbide	1Cr13 Cladding Tungsten Carbide	1Cr13 Cladding Tungsten Carbide	Cr18Ni12Mo2Ti
Shaft Sleeve (Mech Seal)	1Cr18Ni9 or 3Cr13	1Cr18Ni9 or 3Cr13	1Cr18Ni9 or 3Cr13	1Cr18Ni9 or 3Cr13	Cr18Ni12Mo2Ti

Model Nomenclature

e.g. Model D(DF/DY)85-67x5

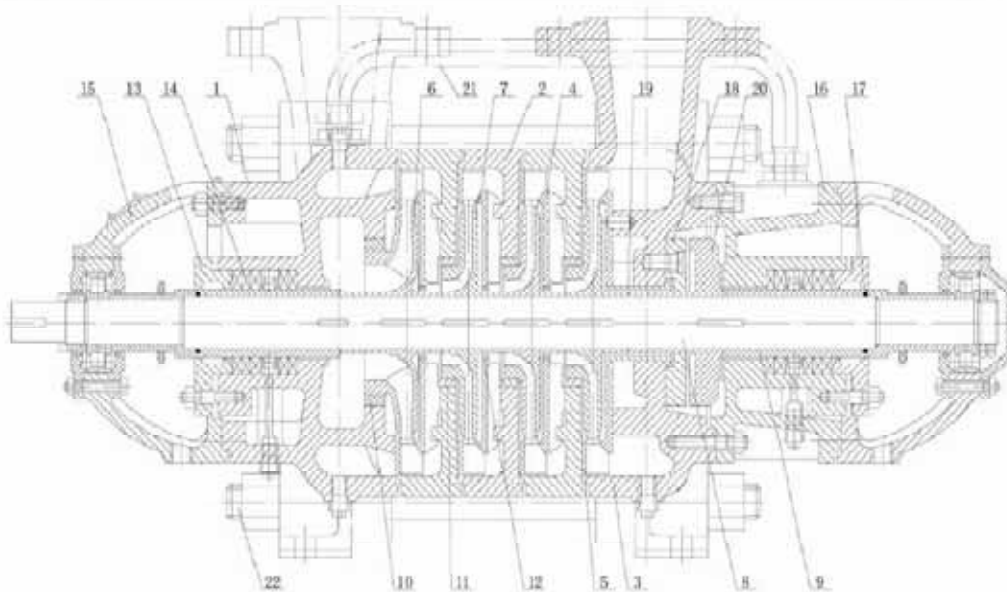
- D — Multi-stage Clean Water Centrifugal Pump
- DF — Multi-stage Corrosion-resistant Centrifugal Pump
- DY — Multi-stage Oil Centrifugal Pump
- 85 — Designed Capacity (m³/h)
- 67 — Designed Single Stage Head (m)
- 7 — No. of Stages

NOTE: In addition to above listed 5 kinds of materials, other 7 types of API610 materials are also available upon request after consulting with our engineers.

Performance Data

- ◇ Capacity Range: 6 ~ 650 m³/h
- ◇ Head Range: 24 ~ 650 m.

Configuration Drawings



- 1 - Suction Casing
- 2 - Stage Casing
- 3 - Discharge Casing
- 4 - Diffuser
- 5 - Discharge Diffuser
- 6 - First Stage Impeller
- 7 - Second Stage Impeller
- 8 - Shaft
- 9 - Shaft Sleeve
- 10 - First Stage Wear Ring
- 11 - Wear Ring
- 12 - Diffuser Bush
- 13 - Gland
- 14 - Packing
- 15 - Bearing Assembly
- 16 - End Cover
- 17 - O-ring
- 18 - Balancing Ring
- 19 - Balancing Bush
- 20 - Balancing Disc
- 21 - Balancing Piping
- 22 - Tie-bolts



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
D DF 6-25 DY	2	3.75	51	2950	34	1.54	2.0	3	Y100L-2
		6.3	50		46.5	1.84	2.0		
		7.5	49		50	2.0	2.5		
	3	3.75	76.5	2950	34	2.4	2.0	5.5	Y132S ₂ -2
		6.3	75		46.5	2.8	2.0		
		7.5	73.5		50	3.0	2.5		
	4	3.75	102	2950	34	3.1	2.0	7.5	Y132S ₂ -2
		6.3	100		46.5	3.7	2.0		
		7.5	98		50	4.0	2.5		
	5	3.75	127.5	2950	34	3.8	2.0	7.5	Y132S ₂ -2
		6.3	125		46.5	4.6	2.0		
		7.5	122.5		50	5.0	2.5		
6	3.75	153	2950	34	4.6	2.0	11	Y160M ₁ -2	
	6.3	150		46.5	5.5	2.0			
	7.5	147		50	6.0	2.5			
7	3.75	178.5	2950	34	5.4	2.0	11	Y160M ₁ -2	
	6.3	175		46.5	6.5	2.0			
	7.5	171.5		50	7.0	2.5			
8	3.75	204	2950	34	6.1	2.0	15	Y160M ₂ -2	
	6.3	200		46.5	7.2	2.0			
	7.5	196		50	8.0	2.5			
9	3.75	229.5	2950	34	6.8	2.0	15	Y160M ₂ -2	
	6.3	225		46.5	8.3	2.0			
	7.5	220.5		50	9.0	2.5			
10	3.75	255	2950	34	7.7	2.0	18.5	Y160L-2	
	6.3	250		46.5	9.2	2.0			
	7.5	245		50	10.0	2.5			
11	3.75	280.5	2950	34	8.4	2.0	18.5	Y160L-2	
	6.3	275		46.5	10.2	2.0			
	7.5	269.5		50	11.0	2.5			
12	3.75	306	2950	34	9.2	2.0	18.5	Y160L-2	
	6.3	300		46.5	11.1	2.0			
	7.5	294		50	12.0	2.5			
D DF 12-25 DY	2	7.5	56.4	2950	44	2.62	2.0	5.5	Y132S ₁ -2
		12.5	50		54	3.15	2.0		
		15.0	46		53	3.55	2.5		
	3	7.5	84.6	2950	44	3.93	2.0	7.5	Y132S ₂ -2
		12.5	75		54	4.73	2.0		
		15.0	69		53	5.32	2.5		
	4	7.5	112.8	2950	44	5.24	2.0	11	Y160M ₁ -2
		12.5	100		54	6.3	2.0		
		15.0	92		53	7.09	2.5		
	5	7.5	141	2950	44	6.55	2.0	11	Y160M ₁ -2
		12.5	125		54	7.88	2.0		
		15.0	115		53	8.86	2.5		
6	7.5	169.2	2950	44	7.85	2.0	15	Y160M ₂ -2	
	12.5	150		54	9.46	2.0			
	15.0	138		53	10.64	2.5			



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
D DF 12-25 DY	7	7.5	197.4	2950	44	9.16	2.0	15	Y160M ₂ -2
		12.5	175		54	11.0	2.0		
		15.0	161		53	12.41	2.5		
	8	7.5	225.6	2950	44	10.47	2.0	18.5	Y160L-2
		12.5	200		54	12.61	2.0		
		15.0	184		53	14.18	2.5		
9	7.5	253.8	2950	44	11.78	2.0	18.5	Y160L-2	
	12.5	225		54	14.18	2.0			
	15.0	207		53	15.95	2.5			
10	7.5	282	2950	44	13.09	2.0	22	Y180M-2	
	12.5	250		54	15.76	2.0			
	15.0	230		53	17.73	2.5			
11	7.5	310.2	2950	44	14.4	2.0	22	Y180M-2	
	12.5	275		54	17.34	2.0			
	15.0	263		53	19.5	2.5			
12	7.5	338.4	2950	44	15.7	2.0	30	Y200L ₁ -2	
	12.5	200		54	18.9	2.0			
	15.0	276		53	21.3	2.5			
D DF 25-30 DY	2	15	68	2950	50	5.56	2.2	11	Y160M ₁ -2
		25	60		62	6.58	2.2		
		30	55		63	7.14	2.6		
	3	15	102	2950	50	8.33	2.2	15	Y160M ₂ -2
		25	90		62	9.88	2.2		
		30	82.5		63	10.7	2.6		
	4	15	136	2950	50	11.11	2.2	18.5	Y160L-2
		25	120		62	13.1	2.2		
		30	110		63	14.26	2.6		
	5	15	170	2950	50	13.89	2.2	22	Y180M-2
		25	150		62	16.47	2.2		
		30	137.5		63	17.89	2.6		
	6	15	204	2950	50	16.67	2.2	30	Y200L ₁ -2
		25	180		62	19.77	2.2		
		30	165		63	21.4	2.6		
	7	15	272	2950	50	19.44	2.2	30	Y200L ₁ -2
		25	210		62	23.1	2.2		
		30	192.5		63	24.96	2.6		
8	15	272	2950	50	22.2	2.2	37	Y200L ₂ -2	
	25	240		62	26.4	2.2			
	30	220		63	28.53	2.6			
9	15	306	2950	50	25.0	2.2	37	Y200L ₂ -2	
	25	300		62	29.65	2.2			
	30	247.5		63	32.1	2.6			
10	15	340	2950	50	27.8	2.2	45	Y225M-2	
	25	300		62	32.9	2.2			
	30	275		63	35.7	2.6			



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
D DF 25-50 DY	2	15	103	2950	44	9.55	2.4	18.5	Y160L-2
		25	100		54	12.60	2.7		
		28	98		54	13.58	2.8		
	3	15	154.5	2950	44	14.35	2.4	22	Y180M-2
		25	150		54	18.92	2.7		
		28	144		54	20.35	2.8		
	4	15	206	2950	44	19.14	2.4	30	Y200L ₁ -2
		25	200		54	25.23	2.7		
		28	192		54	27.13	2.8		
	5	15	257.5	2950	44	23.92	2.4	37	Y200L ₂ -2
		25	250		54	31.54	2.7		
		28	240		54	33.91	2.8		
6	15	309	2950	44	28.71	2.4	45	Y225M-2	
	25	300		54	37.85	2.7			
	28	288		54	40.69	2.8			
7	15	360.5	2950	44	33.49	2.4	55	Y250M-2	
	25	350		54	44.16	2.7			
	28	336		54	44.48	2.8			
8	15	412	2950	44	38.27	2.4	75	Y280S-2	
	25	400		54	50.24	2.7			
	28	384		54	54.26	2.8			
9	15	463.5	2950	44	43.06	2.4	75	Y280S-2	
	25	450		54	56.77	2.7			
	28	432		54	61.04	2.8			
10	15	515	2950	44	47.84	2.4	75	Y280S-2	
	25	500		54	63.08	2.7			
	28	480		54	67.82	2.8			
11	15	566	2950	44	52.58	2.4	90	Y280M-2	
	25	550		54	63.69	2.7			
	28	528		54	74.60	2.8			
12	15	618	2950	44	57.41	2.4	110	Y315S-2	
	25	600		54	75.69	2.7			
	28	576		54	81.38	2.8			
D DF 46-30 DY	2	30	68	2950	64	8.68	2.4	15	Y160M ₂ -2
		46	60		70	10.74	3.0		
		55	54		68	11.89	4.6		
	3	30	102	2950	64	13.02	2.4	22	Y180M-2
		46	90		70	16.11	3.0		
		55	81		68	17.84	4.6		
	4	30	136	2950	64	17.36	2.4	30	Y200L ₁ -2
		46	120		70	21.48	3.0		
		55	108		68	23.79	4.6		
	5	30	170	2950	64	21.7	2.4	37	Y200L ₂ -2
		46	150		70	26.85	3.0		
		55	135		68	29.74	4.6		



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
D DF 46-30 DY	6	30	204	2950	64	26.04	2.4	37	Y200L ₂ -2
		46	180		70	32.21	3.0		
		55	162		68	35.68	4.6		
	7	30	238	2950	64	30.38	2.4	45	Y225M-2
		46	210		70	37.58	3.0		
		55	189		68	41.63	4.6		
	8	30	274	2950	64	34.72	2.4	55	Y250M-2
		46	240		70	42.95	3.0		
		55	216		68	47.58	4.6		
	9	30	306	2950	64	39.06	2.4	55	Y250M-2
46		270	70		48.32	3.0			
55		243	68		53.03	4.6			
10	30	340	2950	64	43.04	2.4	75	Y280S-2	
	46	300		70	53.69	3.0			
	55	270		68	59.47	4.6			
D DF 46-50 DY	2	30	111	2950	54	16.79	2.5	30	Y200L ₁ -2
		46	100		63	19.88	2.8		
		55	92		64	21.53	3.2		
	3	30	166.5	2950	54	25.19	2.5	37	Y200L ₂ -2
		46	150		63	29.83	2.8		
		55	138		64	32.3	3.2		
	4	30	222	2950	54	33.59	2.5	45	Y225M-2
		46	200		63	39.77	2.8		
		55	184		64	43.06	3.2		
	5	30	277.5	2950	54	41.98	2.5	55	Y250M-2
46		250	63		49.77	2.8			
55		230	64		53.83	3.2			
6	30	330	2950	54	50.83	2.5	75	Y280S-2	
	46	300		63	59.65	2.8			
	55	276		64	64.59	3.2			
7	30	388.5	2950	54	58.78	2.5	90	Y280M-2	
	46	350		63	69.6	2.8			
	55	322		64	75.36	3.2			
8	30	440	2950	54	67.18	2.5	90	Y280M-2	
	46	400		63	79.54	2.8			
	55	368		64	86.12	3.2			
9	30	499.5	2950	54	75.57	2.5	110	Y315S-2	
	46	450		63	89.48	2.8			
	55	414		64	96.89	3.2			
10	30	555	2950	54	83.97	2.5	132	Y315M ₁ -2	
	46	500		63	94.42	2.8			
	55	460		64	107.66	3.2			
11	30	610.5	2950	54	92.37	2.5	132	Y315M ₁ -2	
	46	550		63	109.36	2.8			
	55	506		64	118.42	3.2			



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
80 D 12	2	21.6	28.8	2950	69	2.46	3.2	4	Y 112 M -2
		34.6	22.8		75	2.84	3.3		
		39.6	19.0		72	2.82	3.4		
	3	21.6	43.2	2950	69	3.69	3.2	5.5	Y 132 S ₁ -2
		34.6	34.2		75	4.26	3.3		
		39.6	28.5		72	4.23	3.4		
	4	21.6	57.6	2950	69	4.92	3.2	7.5	Y 132 S -2
		34.6	45.6		75	5.69	3.3		
		39.6	38.0		72	5.64	3.4		
5	21.6	72.0	2950	69	6.15	3.2	11	Y 160 M ₁ -2	
	34.6	57.0		75	7.10	3.3			
	39.6	50.5		72	7.05	3.4			
6	21.6	86.4	2950	69	7.38	3.2	11	Y 160 M ₁ -2	
	34.6	68.4		75	8.52	3.3			
	39.6	60.0		72	8.46	3.4			
7	21.6	100.8	2950	69	8.61	3.2	15	Y 160 M ₂ -2	
	34.6	79.8		75	9.94	3.3			
	39.6	69.5		72	9.87	3.4			
8	21.6	115.2	2950	69	9.84	3.2	16	Y 160 M ₂ -2	
	34.6	91.2		75	11.36	3.3			
	39.6	79.0		72	11.28	3.4			
9	21.6	129.6	2950	69	11.07	3.2	18.5	Y 160 L -2	
	34.6	102.6		75	12.78	3.3			
	39.6	88.5		72	12.69	3.4			
100 D 16 DY	2	37.6	36.8	2950	66	5.6	3.7	7.5	Y 160 S ₂ -2
		54.0	31.0		73	6.0	3.9		
		72	20.4		66	6.3	4.3		
	3	37.6	59.4	2950	66	9.22	3.7	15	Y 160 M ₂ -2
		54.0	51.0		73	10.28	3.9		
		72	33.6		66	9.99	4.3		
	4	37.6	79.2	2950	66	12.30	3.7	15	Y 160 M ₂ -2
		54.0	68.0		73	13.71	3.9		
		72	44.8		66	13.32	4.3		
5	37.6	99.0	2950	66	15.37	3.7	22	Y 180 M -2	
	54.0	85.0		73	17.13	3.9			
	72	56.0		66	16.65	4.3			
6	37.6	118.8	2950	66	18.44	3.7	22	Y 180 M -2	
	54.0	112.0		73	20.56	3.9			
	72	67.2		66	19.98	4.3			
7	37.6	138.6	2950	66	21.52	3.7	30	Y 200 L ₁ -2	
	54.0	119.0		73	23.99	3.9			
	72	78.4		66	23.31	4.3			
8	37.6	158.4	2950	66	24.59	3.7	30	Y 200 L ₁ -2	
	54.0	136.0		73	27.41	3.9			
	72	89.6		66	26.64	4.3			
9	37.6	178.6	2950	66	27.66	3.7	37	Y 200 L ₂ -2	
	54.0	153.0		73	30.84	3.9			
	72	110.8		66	29.97	4.3			



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
D DF 46-50 DY	12	30	666	2950	54	100.8	2.5	132	Y315M ₁ -2
		46	600		63	119.3	2.8		
		55	552		64	129.2	3.2		
D DF 80-30 DY	3	26	102	2950	60	12.04	3	18.5	Y160L-2
		43	90		70	15.07	3.9		
		48	83.4		69	15.81	4.3		
	4	26	136	2950	60	16.06	3	22	Y180M-2
		43	120		70	20.09	3.9		
		48	111.2		69	21.08	4.3		
	5	26	170	2950	60	20.07	3	30	Y200L ₁ -2
		43	150		70	25.11	3.9		
		48	139		69	26.35	4.3		
	6	26	204	2950	60	24.08	3	37	Y200L ₂ -2
		43	180		70	30.13	3.9		
		48	166.8		69	31.62	4.3		
7	26	238	2950	60	28.10	3	45	Y225M-2	
	43	210		70	35.15	3.9			
	48	194.6		69	31.62	4.3			
8	26	272	2950	60	32.12	3	55	Y250M-2	
	43	240		70	40.17	3.9			
	48	222.4		69	42.16	4.3			
9	26	306	2950	60	36.13	3	55	Y250M-2	
	43	270		70	45.20	3.9			
	48	250.2		69	47.43	4.3			
10	26	340	2950	60	40.15	3	55	Y250M-2	
	43	300		70	50.22	3.9			
	48	278		69	52.70	4.3			
D DF 85-45 DY	2	55	102	2950	63	24.25	3.2	37	Y200L ₂ -2
		85	90		72	28.94	4.2		
		100	78		70	30.35	5.2		
	3	55	153	2950	63	36.38	3.2	55	Y250M-2
		85	135		72	43.3	4.2		
		100	117		70	45.52	5.2		
	4	55	204	2950	63	48.5	3.2	75	Y280S-2
85		180	72		57.87	4.2			
100		156	70		60.7	5.2			
5	55	255	2950	63	60.83	3.2	90	Y280M-2	
	85	225		72	72.34	4.2			
	100	195		70	75.86	5.2			
6	55	306	2950	63	72.75	3.2	110	Y315S-2	
	85	270		72	86.71	4.2			
	100	234		70	91.04	5.2			
7	55	357	2950	63	84.88	3.2	132	Y315M ₁ -2	
	85	315		72	101.3	4.2			
	100	273		70	106.2	5.2			



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
D DF 85-45 DY	8	55	408	2950	63	97.0	3.2	132	Y315M ₁ -2
		85	360		72	115.7	4.2		
		100	312		70	121.4	5.2		
	9	55	459	2950	63	109.1	3.2	160	Y315M ₂ -2
		85	405		72	130.2	4.2		
		100	351		70	136.6	5.2		
D DF 85-67 DY	2	55	148	2950	54	41.05	3.3	75	Y280S-2
		85	134		65	47.72	4		
		100	122		65	51.11	4.4		
	3	55	222	2950	54	61.62	3.3	90	Y280M-2
		85	201		65	71.63	4		
		100	183		65	76.72	4.4		
	4	55	296	2950	54	82.15	3.3	110	Y315S-2
		85	268		65	95.50	4		
		100	244		65	102.29	4.4		
	5	55	370	2950	54	102.69	3.3	132	Y315M ₁ -2
		85	335		65	119.38	4		
		100	305		65	127.87	4.4		
	6	55	444	2950	54	123.23	3.3	160	Y315M ₂ -2
		85	402		65	143.25	4		
		100	365		65	153.02	4.4		
	7	55	518	2950	54	143.76	3.3	185	Y315L ₁₂ -2
		85	469		65	167.13	4		
		100	427		65	179.01	4.4		
8	55	592	2950	54	164.31	3.3	220	Y315M ₁ -2	
	85	536		65	191.0	4			
	100	488		65	204.58	4.4			
9	55	666	2950	54	184.85	3.3	250	Y315M ₂ -2	
	85	603		65	214.88	4			
	100	549		65	230.16	4.4			
D DF 155-30 (15D30)	2	119	64	1480	72	28.76	2.7	55	Y250M-4
		155	60		77	32.84	3.2		
		190	54		76.5	36.68	3.9		
	3	119	96	1480	72	43.14	2.7	75	Y280S-4
		155	90		77	49.26	3.2		
		190	81		76.5	55.02	3.9		
	4	119	128	1480	72	57.52	2.7	90	Y280M-4
		155	120		77	65.68	3.2		
		190	108		76.5	73.36	3.9		
	5	119	160	1480	72	71.90	2.7	110	Y315S-4
		155	150		77	82.10	3.2		
		190	135		76.5	91.70	3.9		
	6	119	192	1480	72	86.28	2.7	132	Y315M ₁ -2
		155	180		77	98.52	3.2		
		190	162		76.5	110.04	3.9		



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
125D25	2	72	51.2	2950	70.5	14.2	3.2	22	Y180M-2
		101	43.0		77.5	15.2	3.9		
		119	35.0		77.0	15.3	4.5		
	3	72	76.8	2950	70.5	21.3	3.2	30	Y200L ₁ -2
		101	64.5		77.5	22.8	3.9		
		119	52.5		74.0	22.95	4.5		
	4	72	102.4	2950	70.5	28.4	3.2	37	Y200L ₂ -2
		101	86.0		77.5	30.4	3.9		
119		70.0	74.0		30.6	4.5			
5	72	128.0	2950	70.5	35.5	3.2	45	Y225M-2	
	101	107.5		77.5	38.0	3.9			
	119	87.5		74.0	38.3	4.5			
6	72	153.6	2950	70.5	42.6	3.2	55	Y250M-2	
	101	129.0		77.5	45.6	3.9			
	119	105.0		74.0	45.9	4.5			
7	72	179.2	2950	70.5	49.7	3.2	75	Y280S-2	
	101	150.5		77.5	53.2	3.9			
	119	122.5		74.0	53.6	4.5			
8	72	204.8	2950	70.5	56.8	3.2	75	Y280S-2	
	101	172.0		77.5	60.8	3.9			
	119	140.0		74.0	61.2	4.5			
9	72	230.4	2950	70.5	63.9	3.2	90	Y280M-2	
	101	193.5		77.5	68.4	3.9			
	119	157.5		74.0	68.9	4.5			
D 100DF45 DY	2	55	102	2950	63	24.25	3.2	37	Y200L ₂ -2
		85	90		72	28.94	4.2		
		100	78		70	30.35	5.2		
	3	55	153	2950	63	36.38	3.2	55	Y250M-2
		85	135		72	43.3	4.2		
		100	117		70	45.52	5.2		
	4	55	204	2950	63	48.05	3.2	75	Y280S-2
		85	180		72	57.87	4.2		
100		156	70		60.7	5.2			
5	55	255	2950	63	60.63	3.2	90	Y280M-2	
	85	255		72	72.34	4.2			
	100	195		70	75.86	5.2			
6	55	306	2950	63	72.75	3.2	110	Y315S-2	
	85	270		72	86.81	4.2			
	100	234		70	91.04	5.2			
7	55	357	2950	63	84.88	3.2	132	Y315M ₁ -2	
	85	315		72	101.3	4.2			
	100	273		70	106.2	5.2			
8	55	408	2950	63	97.0	3.2	160	Y315M ₂ -2	
	85	360		72	115.7	4.2			
	100	312		70	121.4	5.2			
9	55	459	2950	63	109.1	3.2	160	Y315M ₂ -2	
	85	405		72	130.2	4.2			
	100	351		70	136.6	5.2			



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
D DF 155-30 (150D30)	7	119	224	1480	72	100.66	2.7	160	Y315M ₂ -4
		155	210		77	114.97	3.2		
		190	189		76.5	126.38	3.9		
	8	119	266	1480	72	116.04	2.7	200	Y315L ₂ -4
		155	240		77	131.06	3.2		
		190	216		76.5	146.72	3.9		
	9	119	288	1480	72	129.42	2.7	200	Y315L ₂ -4
		155	270		77	147.78	3.2		
		190	243		76.5	166.06	3.9		
	10	119	320	1480	72	143.80	2.7	220	Y315M ₁ -4
		155	300		77	164.20	3.2		
		190	270		76.5	183.40	3.9		
D DF 155-67 DY	2	100	152	2950	64	64.7	3.2	90	Y280M-2
		155	134		74	76.5	5.0		
		185	118		72	82.6	6.6		
	3	100	228	2950	64	97.0	3.2	132	Y315M ₁ -2
		155	201		74	114.7	5.0		
		185	177		72	123.9	6.6		
	4	100	304	2950	64	129.4	3.2	185	Y315L ₁₂ -2
		155	268		74	152.9	5.0		
		185	236		72	165.1	6.6		
	5	100	380	2950	64	161.7	3.2	220	Y355M ₁ -2
		155	335		74	191.1	5.0		
		185	295		72	206.4	6.6		
	6	100	456	2950	64	194	3.2	280	Y355L ₁ -2
		155	402		74	229.3	5.0		
		185	354		72	247.7	6.6		
	7	100	532	2950	64	226.4	3.2	315	Y355L ₂ -2
		155	469		74	267.5	5.0		
		185	413		72	289	6.6		
	8	100	608	2950	64	258.7	3.2	355	Y355L-2
		155	536		74	305.7	5.0		
		185	472		72	330.3	6.6		
	9	100	684	2950	64	291.1	3.2	440	JK134-2-6KV
		155	603		74	344	5.0		
		185	531		72	371.6	6.6		
D 280-43 (200D43)	2	185	94	1480	69	68.8	2.5	110	Y315S-4
		280	86		77	85.2	4.0		
		335	76		75	92.4	5.2		
	3	185	141	1480	69	103.0	2.5	160	Y315M ₂ -4
		280	129		77	127.7	4.0		
		335	114		75	138.7	5.2		
	4	185	188	1480	69	137.3	2.5	220	Y355M ₁ -4
		280	172		77	170.7	4.0		
		335	152		75	184.9	5.2		



Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
D 280-43 (200D43)	5	185	235	1480	69	171.6	2.5	250	Y355M ₂ -4
		280	216		77	212.9	4.0		
		335	190		75	231.1	5.2		
	6	185	282	1480	69	205.9	2.5	300	Y355M-4
		280	258		77	255.5	4.0		
		335	228	75	277.3	5.2			
7	185	329	1480	69	240.2	2.5	350	Y355L-4	
	280	301		77	298.1	4.0			
		335	266	75	323.6	5.2			
8	185	376	1480	69	274.5	2.5	450	Y400-50-4	
	280	344		77	340.7	4.0			
		335	304	75	369.8	5.2			
9	185	423	1480	69	308.9	2.5	450	Y400-50-4	
	280	387		77	383.2	4.0			
		335	342	75	416	5.2			
D 280-65 (200D65)	3	185	204	1480	61	168.6	2.8	280	Y355M ₁ -4
		280	195		73	203.8	3.7		
		335	186		75	226.4	5.0		
	4	185	272	1480	61	224.8	2.8	350	Y355L-4
		280	260		73	271.8	3.7		
			335	248	75	301.9	5.0		
	5	185	340	1480	61	281.0	2.8	450	Y400-50-4
		280	325		73	339.7	3.7		
			335	310	75	377.3	5.0		
	6	185	408	1480	61	337.2	2.8	500	Y400-54-4
280		390	73		407.6	3.7			
		335	372	75	452.8	5.0			
7	185	476	1480	61	393.4	2.8	630	Y450-50-4	
	280	456		73	476.6	3.7			
		335	434	75	528.3	5.0			
8	185	544	1480	61	449.6	2.8	680	Y450-50-4	
	280	520		73	543.5	3.7			
		335	496	75	603.7	5.0			
9	185	612	1480	61	505.8	2.8	800	Y450-64-4	
	280	585		73	611.4	3.7			
		335	558	75	679.2	5.0			
10	185	680	1480	61	562.0	2.8	850	Y450-64-4	
	280	650		73	679.4	3.7			
		335	620	75	754.6	5.0			
D 450-60 (250D60)	3	355	195	1480	72	247.1	3.8	360	Y355L-4
		450	180		79	279.2	4.9		
		500	171		78	298.5	6.0		
	4	355	260	1480	72	329.4	3.0	500	Y400-54-4
		450	240		79	372.3	4.0		
		500	228	78	396	5.6			

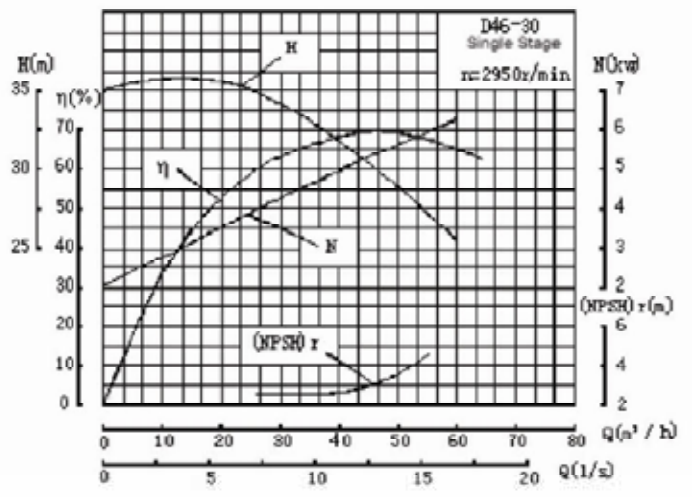
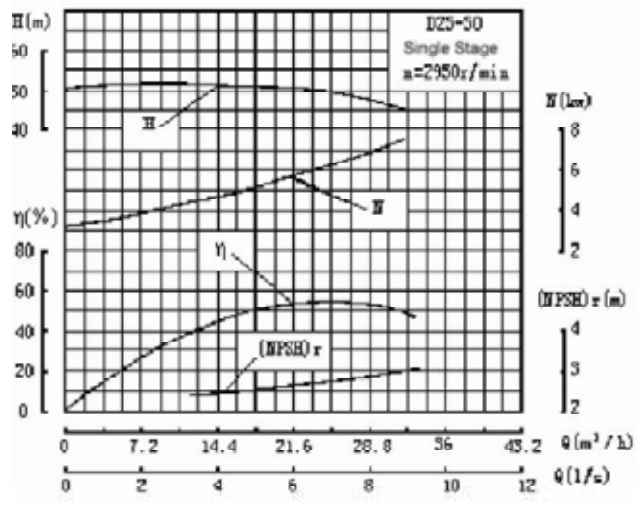
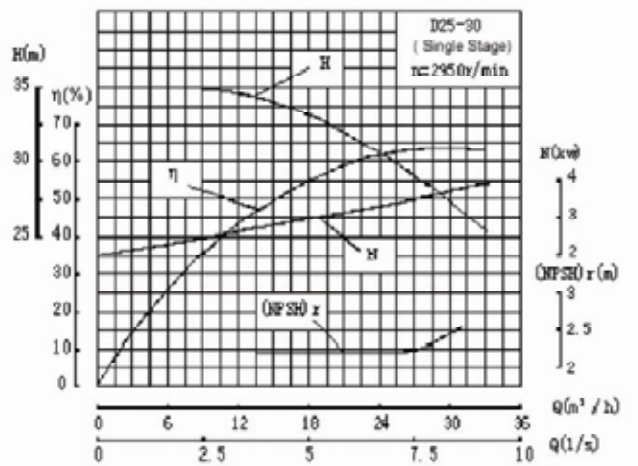
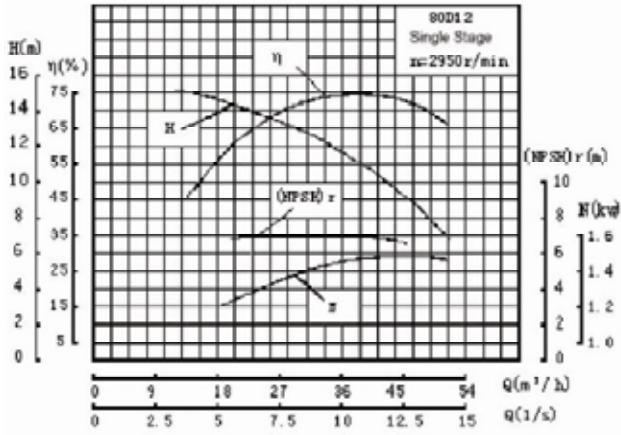
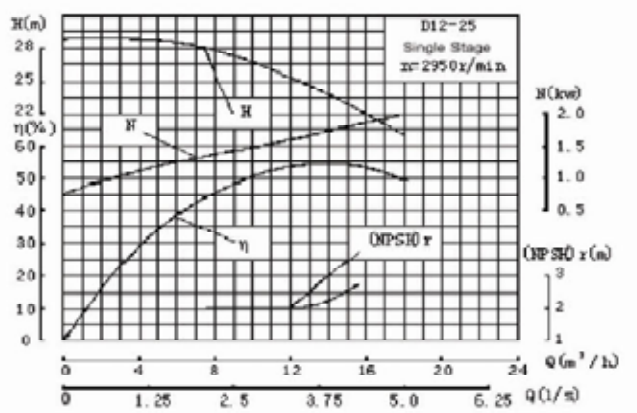
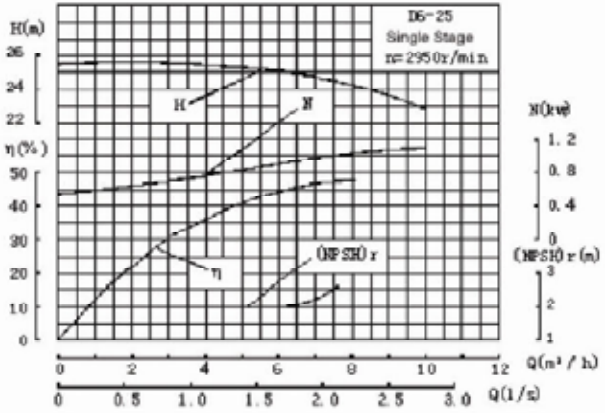


Performance Data Charts

Model	Stage	Capacity Q (m ³ /h)	Head H (m)	Speed n (r/min)	Eff. η (%)	Shaft Power P (kw)	(NPSH) _r (m)	Motor	
								Power (kw)	Model
D 450-60 (250D60)	5	335	325	1480	72	411.8	3.8	630	Y450-50-4
		450	300		79	465.4	4.9		
		500	285		78	497.5	6.0		
	6	335	390	1480	72	494.2	3.8	630	Y450-50-4
		450	360		79	558.5	4.9		
		500	342		78	597	6.0		
7	335	455	1480	72	576.5	3.8	800	Y450-64-4	
	450	420		79	651.5	4.9			
	500	399		78	696.5	6.0			
8	335	520	1480	72	658.9	3.8	900	Y450-64-4	
	450	480		79	744.6	4.9			
	500	456		78	796	6.0			
9	335	585	1480	72	741.2	3.8	1000	Y500-54-4	
	450	540		79	837.7	4.9			
	500	513		78	895.6	6.0			
10	335	650	1480	72	823.6	3.8	1120	Y500-64-4	
	450	600		79	930.8	4.9			
	500	570		78	885.1	6.0			
D 550-50	2	450 550 650	106.4	1480	78.9 81.0 80.5	165.3	3.3 3.5 4.6	220	Y355M1-4
			100.0			185.1			
			90.4			198.9			
	3		159.6	1480		248.0		355	Y400-43-4
150.0		277.6							
4	135.6	1480	298.4	450	Y400-46-4				
	212.8		330.7						
5	200	1480	370.1	560	Y450-46-4				
	180.8		397.9						
	266		413.4						
D 650-80	2	550 650 750	167.4	1480	78.5 81.0 80.0	319.7	3.2 3.6 4.1	400	Y400-43-4
			160.0			349.9			
			150.4			384.1			
	3		251.1	1480		479.9		630	Y450-50-4
240.0		524.9							
4	225.6	1480	576.2	800	Y450-64-4				
	334.8		639.3						
5	320	1480	699.9	1120	Y500-64-4				
	300.8		768.3						
	418.5		799.1						
	400		874.9						
	376		960.4						

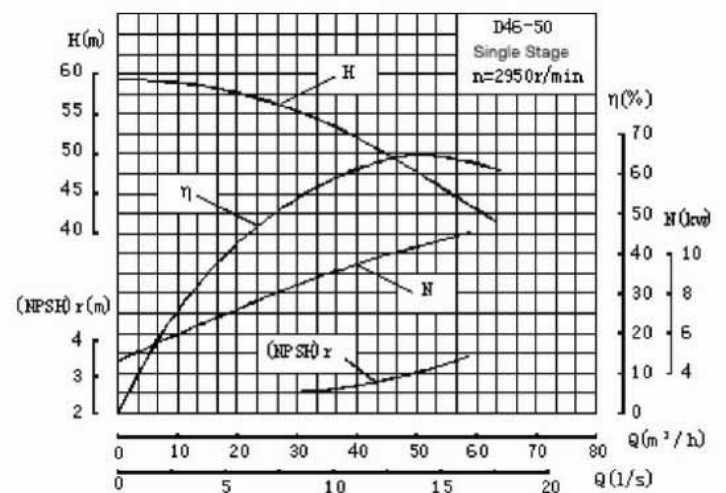
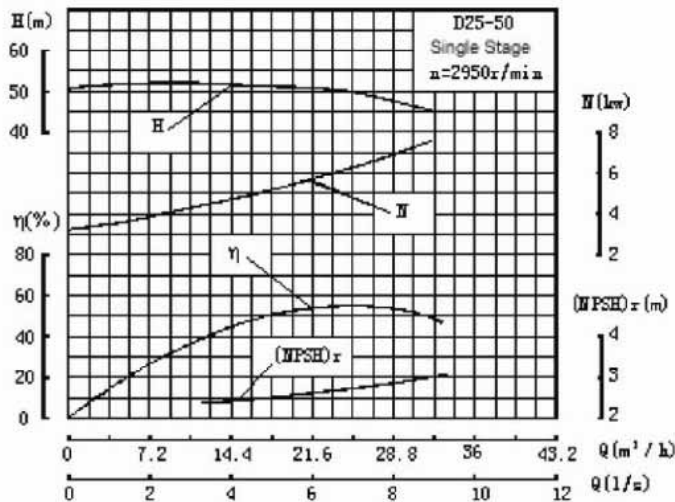
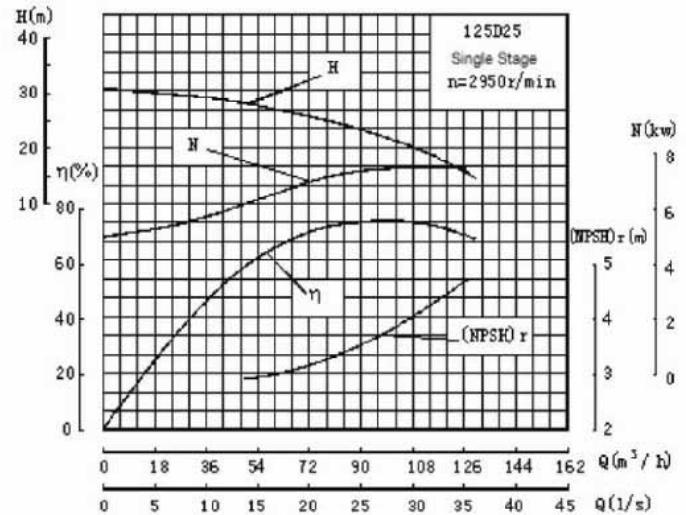
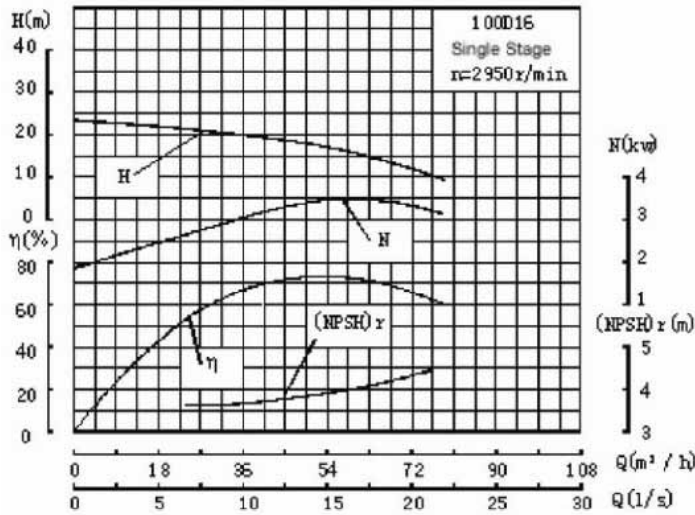


Performance Curves



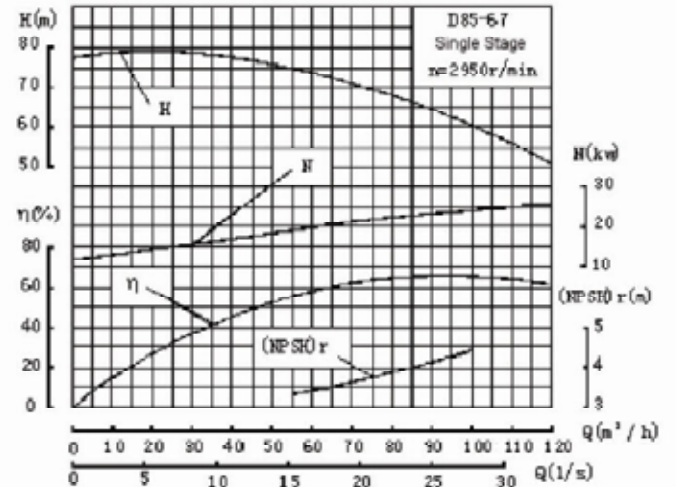
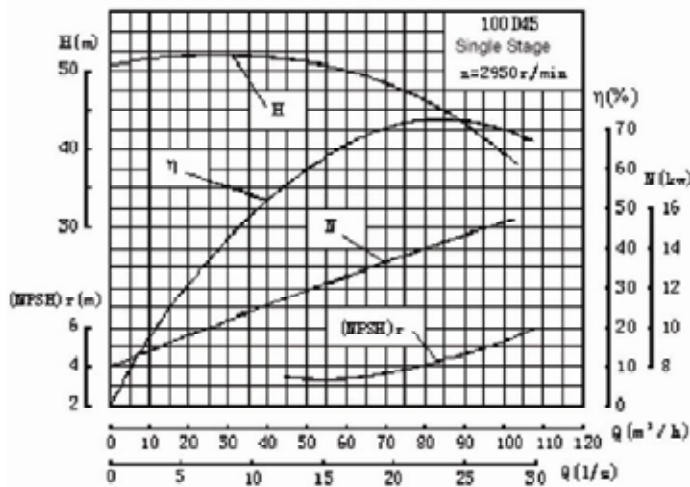
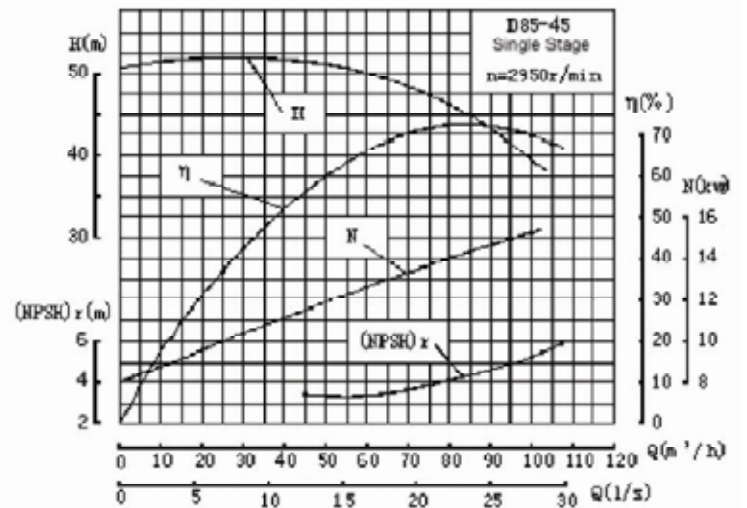
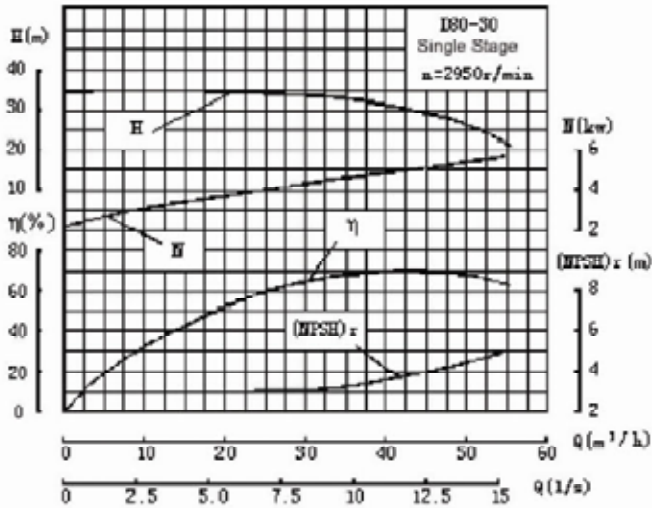


Performance Curves



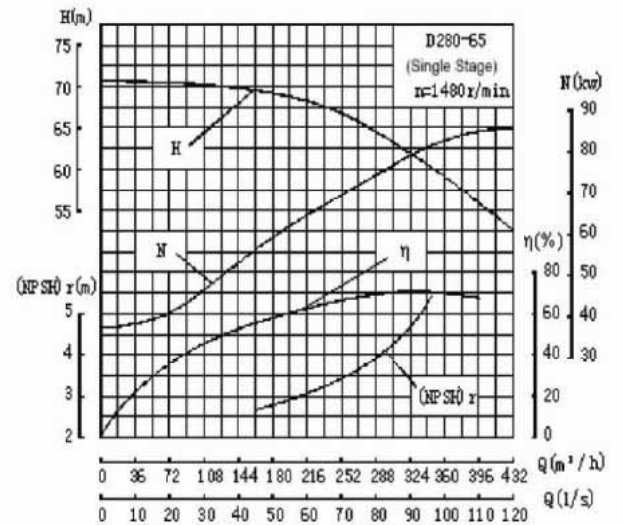
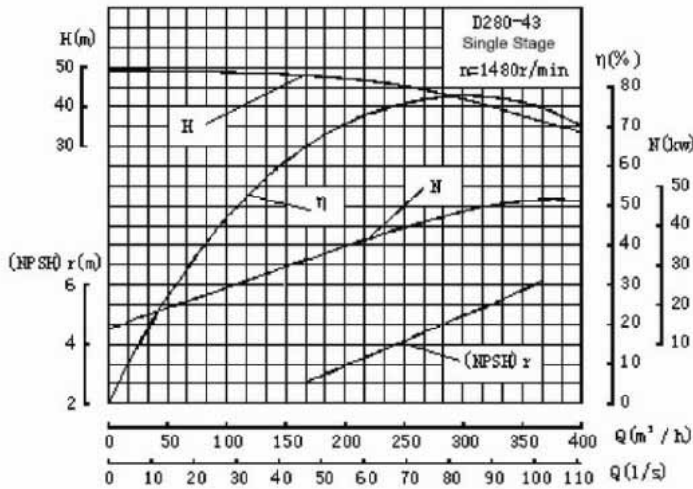
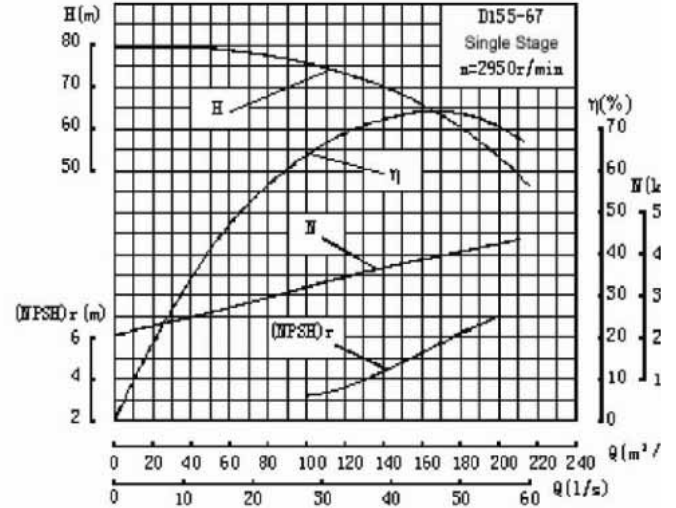
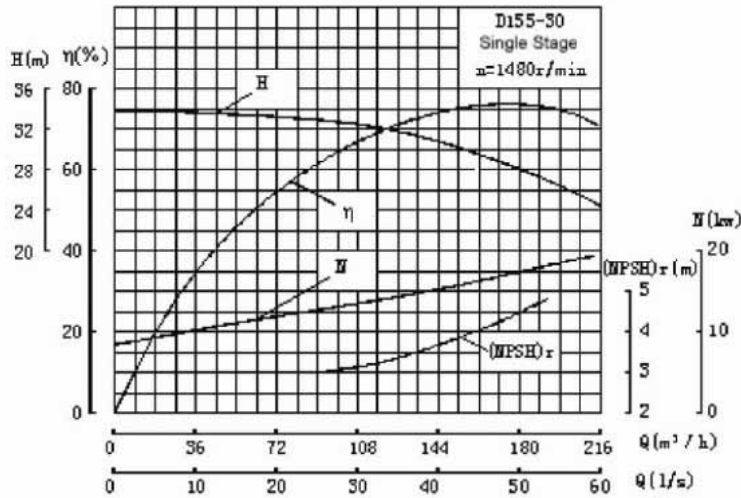


Performance Curves



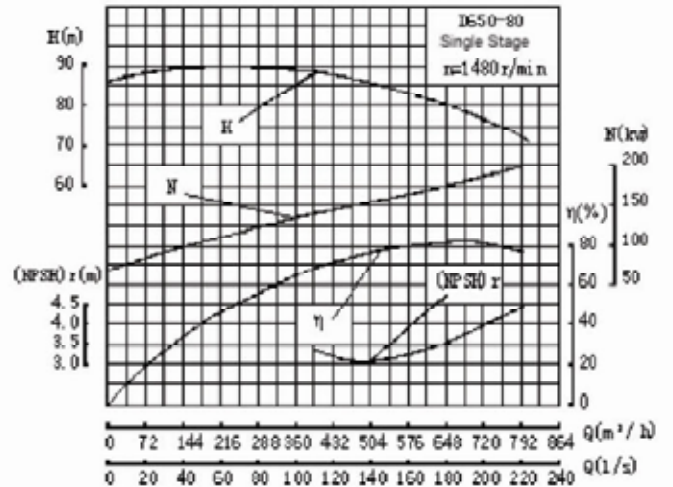
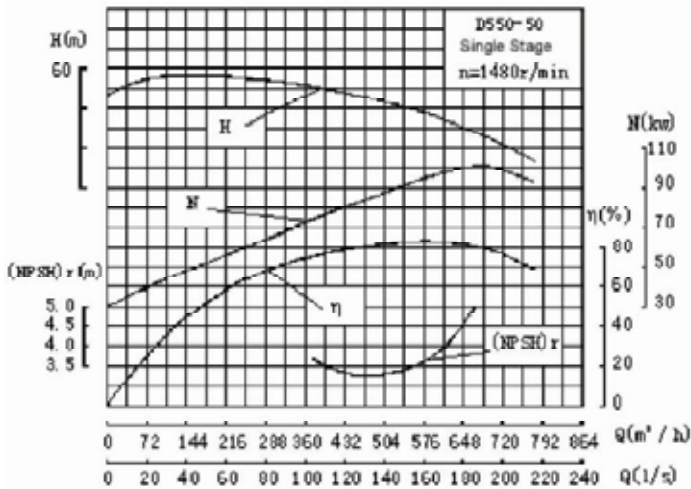
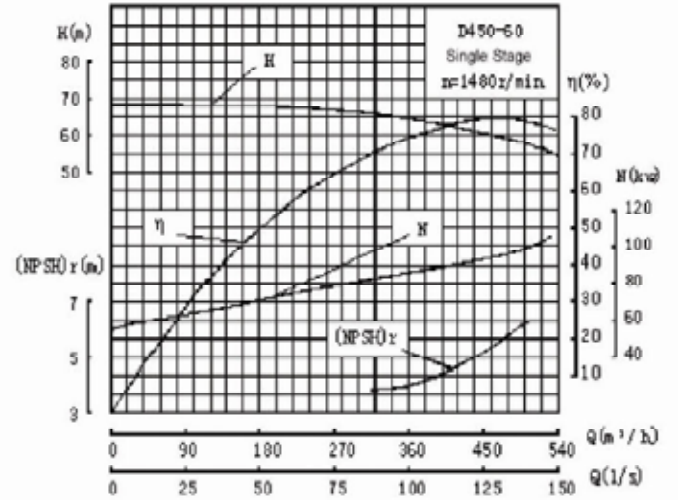
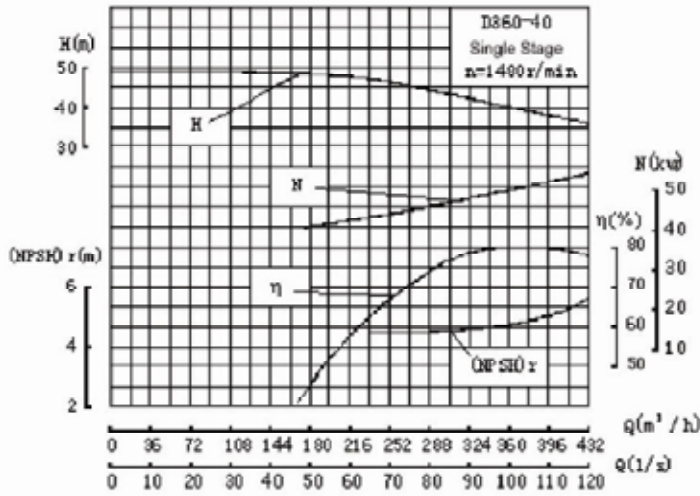


Performance Curves





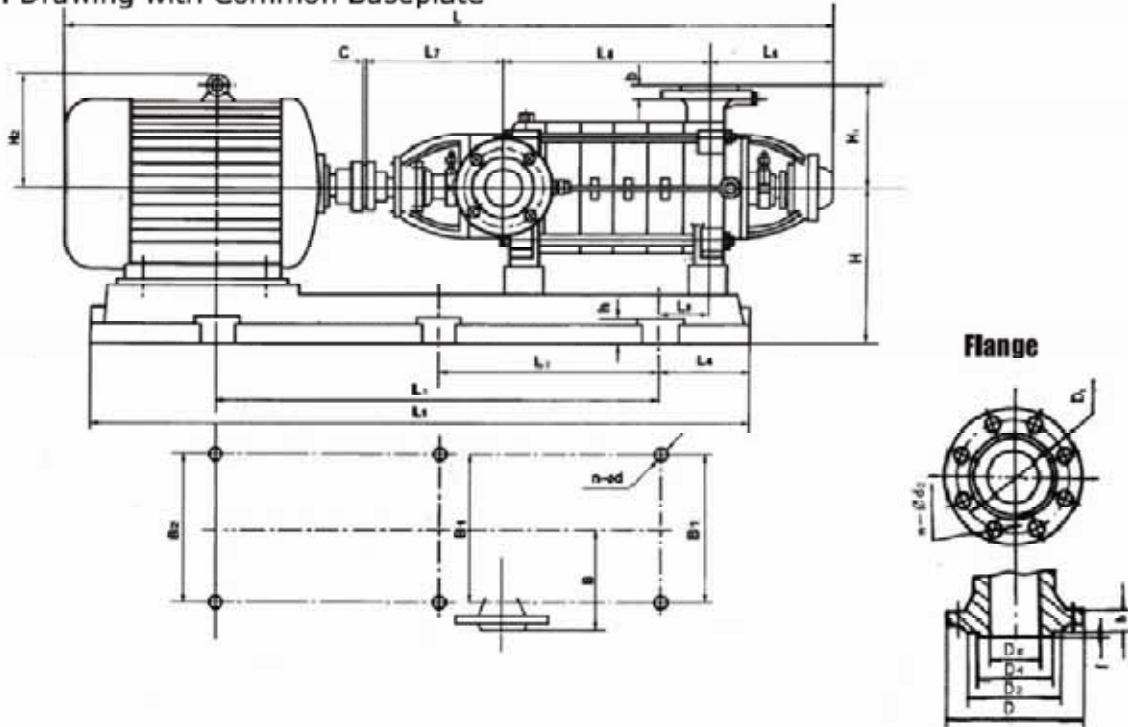
Performance Curves



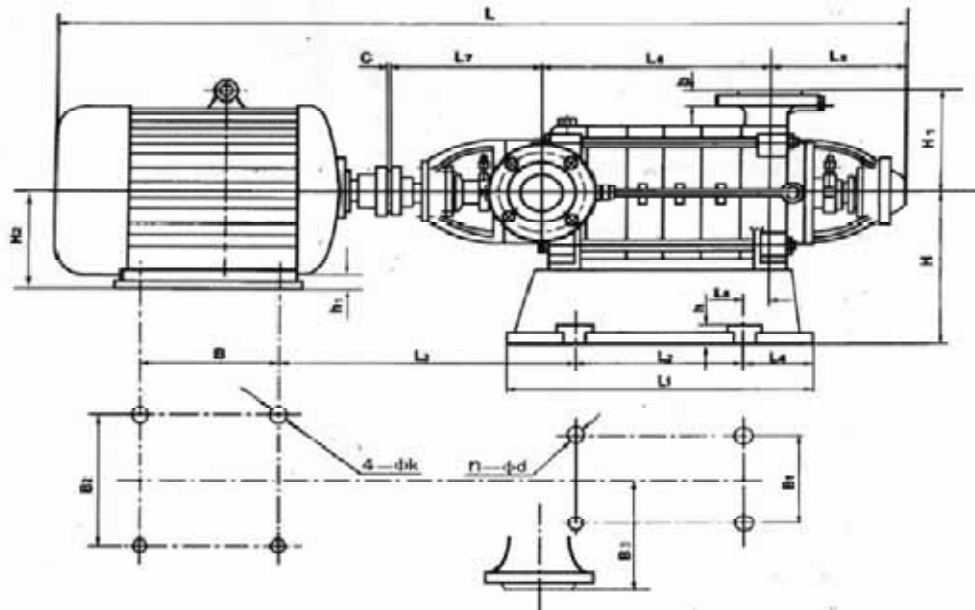


Installation Drawings

Installation Drawing with Common Baseplate



Installation Drawing without Common Baseplate





Installation Dimensions

D DF DY Model 6-25 with Common Base

Stage	L	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	C	B ₁	B ₂	B ₃	H	H ₁	H ₂	h	n-φ d		
2	1047	855		575	145	240	130	275	2	350	350	170	230	170	145	30	4-φ 21		
3	1192	965		650	190		180			370	370								
4	1242						230								450			480	225
5	1292						280												
6	1478	1225		820	230		330			470	240				225				
7	1528						380												
8	1578	1445		915	305		430			240	225				35				
9	1628						480												
10	1723						530												
11	1773	1515		970	375		580			370	470				40				
12	1823						630												

D DF DY Model 12-25 with Common Base

Stage	L	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	C	B ₁	B ₂	B ₃	H	H ₁	H ₂	h	n-φ d	
2	1067	965		650	190	240	130	275	3	370	370	170	230	170	183	30	4φ-25	
3	1192						180								440			225
4	1378						230											
5	1428	1120		745	205		280			470	260		250					
6	1478						330											
7	1528	1225		820	230		380			240	225		30					
8	1623						430											
9	1673						480											
10	1743	1520		970	380		530			365	470		40					
11	1793						580											
12	1952	1645		965	445		630			350	500		280		275			

D DF DY Model 25-30 with Common Base

Stage	L	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	C	B ₁	B ₂	B ₃	H	H ₁	H ₂	h	n-φ d			
2	1430	1185		840	200	285	160	345	5	475	475	210	260	210	183	40	4-φ 23			
3	1495						225											460	460	250
4	1560						290													
5	1688	1350		885	270		355			500	260		35		4-φ 27					
6	1858	1450					420													
7	1923	1497		1000	200		485			460	505		280		35	4-φ 30				
8	1988						550													
9	2053						615													
10	2160	1750		1310	220		680			460	550		305		305	40	4-φ 27			



Installation Dimensions

D DF DY Model 46-30 with Common Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B1	B2	B3	H	H1	H2	h	n-φ d
2		1185					185			475	475		260		225	40	4-φ 24
3	1520			840	190		230								250		
4	1690	1465		925	310		295			470	510		280	210	275	35	4-φ 25
5	1755						360										
6	1820	1450		935	310	280	425	330	3	480	510	210				30	4-φ 24
7	1925	1560		1120	230		490			445	530		305			35	4-φ 24
8	2105	1170		1125	405		555			470	590		330			30	4-φ 24
9	2170						620								325		4-φ 24
10	2305	1890		1245	250		685			460	650		360		360	35	4-φ 30

D Model 80-12 with Common Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B1	B2	B3	H	H1	H2	h	n-φ d
2	1153						195								183	40	4-φ 24
3	1298	1125		780	180		265			410	410				183		
4	1368						335								183		
5	1574	1420		1060	170	255	405	280	3	410	410	170		210		40	4-φ 27
6	1644						475										
7	1714						545								225		
8	1784	1560		1060	190		615			420	420						
9	1899						685										

D DY Model 100-16 with Common Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B1	B2	B3	H	H1	H2	h	n-φ d
2	1260	1010		635	175		229			480	480		250		183	40	4-φ 27
3	1467						306	253									
4	1589	1270		850	180		383			470	470		275		225	40	4-φ 25
5	1696						460										
6	1773	1510		1100	180	275	537	263	2	450	450	220	305	230	250	40	4-φ 23
7	1981						614						325				
8	2058	1830		1100	415		691	285		530	530		360		275	40	4-φ 26
9	2135						768						360				



Installation Dimensions

D Model 125-25 with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B1	B2	B3	H	H1	H2	h	n-φ d			
2	1477	1215		720	240	245	262	272	2	560	560	280	360	300	275	40	4-φ 20			
3	1676	1510		1010	250		352			510	510					280	360	275	40	4-φ 26
4	1806						442													
5	2021	1580	530	1070	250		532	282		560	560	280	375		305	40	6-φ 25			
6	2111	1760	560	1120	360		622			530	600							400	325	6-φ 26
7	2271	2170	710	1420	380		712	282		4	2	600	710		280	410	360	60	6-φ 40	
8	2361						802													410
9	2501						892													410

D DF DY Model 25-50 with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B1	B2	B3	H	H1	H2	h	n-φ d
3	1757	1240		655	270	355	250	345	2	470	470		360	270	275	40	4-φ 23
4	1817	1440		900	260		310			500	500		360		275	45	4-φ 26
5	1877						370										
6	1977	1580	530	1070	250		430	560		560	300	405	305		6-φ 25		
7	2152	1760	560	1120	360		490									530	600
8	2282	2050	635	1270	460		550	490		650	300	430	270		360	40	6-φ 25
9	2342	2240	730	1465	375		610										
10	2402						670										
11	2512						730	435									
12	2762	790	470	445													

D DF DY Model 46-50 with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B1	B2	B3	H	H1	H2	h	n-φ d	
2	1697	1440		900	260	355	190	345	2	500	500		360	270	275	45	4-φ 26	
3	1757						250						560		560	305	40	6-φ 25
4	1857						1580						530		1070	250	310	530
5	2162	1760	560	1120	360		370	490		650	300	420	360		40	6-φ 26		
6	2158	430																
7	2268	2050	635	1270	460		490	500		730	300	515	270		360	40	6-φ 26	
8	2328	550																
9	2582	610																
10	2712	2240	730	1465	375		670	500		730	300	515	270		445	60	6-φ 24	
11	2772					730												
12	2832					790												



Installation Dimensions

D DF DY Model 80-30 with Common Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B1	B2	B3	H	H1	H2	h	n-φd
3	1427	1180		800	260		229			450	450		350			225	4-φ26
4	1513						290									250	
5	1683	1440		950	200		351		2	430	480		200			275	4-φ25
6	1744						412									305	
7	1845	1540		1000	270	255	473	300		460	540	205	375	200		40	
8	2021	1835	670	1340	245		534			460	600		600			325	6-φ25
9	2082						595										
10	2143						656										

D DF Model 85-45 with Common Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B	B1	B2	B3	H	H1	H2	h	n-φd
2	1641	1265		850	200		203				520	520		325		225	30	4-φ27
3	1870	1520		1350	230		304				277	325		4		515	615	250
4	2014	1690	560	1120	310		351				520	670		395		360	35	4-φ25
5	2137						425											

D DF Model 85-45 with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B	B1	B2	B3	H	H1	H2	h	n-φd	4-φk
4	2014	595	330		135		351			368				395		280	40	4-φ23	φ24
5	2137						425			419									
6	2420	760	370		190	304	499		4	406				345		315	35	4-φ26	φ28
7	2563						573												
8	2637	900	525		180		647			457	510	510		345		315	35	4-φ23	φ28
9	2711						721												

D DF DY Model 85-67 with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	L8	C	B	B1	B2	B3	H	H1	H2	h	h1	n-φd	4-φk
3	2465	765	400	880.5			371		-14		419		457				280	50	30	4-30	φ28
4	2693	765	400	950.5			459		29.5		406		508				60				
5	2831	765	400	994.5	182	479	547		73.5	4	457	600	508	350	420	350	315	50	35	4-30	φ28
6	2919	945	580	948.5			635		559		27.5		457								
7	2897	945	580	992.5	182	479	723		71.5	4	406	600	508	350	420	350	315	50	35	4-30	φ28
8	3035	1125	760	946.5			811		25.5		457		508								
9	3123	1125	760	990.5	182	479	899		69.5	4	457	600	508	350	420	350	315	60	35	4-30	φ28



Installation Dimensions

D DF DY Model 155-67 with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	L8	C	B	B1	B2	B3	H	H1	H2	h	h1	n-φd	4-φk													
3	2655	765	400	906.5	182	479	371	559	-14	4	457	600	508	355	420	350	315	50	35	4-φ43	φ28													
4	2683	765	400	950.5			459		29.5	4	457		508																					
5	2771	765	400	995.5			547		73.5	4	457		508																					
6	3166	945	580	987.5			635		27.5	4	760		610									355	420	350	355	50	38	4-φ43	φ28					
7	3564	945	580	1031			723		71.5	5	560		610																					
8	3652	1125	760	985.5			811		25.5	5	560		610																					
9	3754	1125	760	1095			899		69.5	5	860		790									500	500	500	500	500	500	500	500	500	500	500	500	500

D DF Model 100-45 with Common Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B	B1	B2	B3	H	H1	H2	h	n-φd							
2	1641	1265		850	200	304	230	325	4		520	520	250	325	250	225	30	4-φ27							
3	1870	1520		1350	230		277				515	615						365	325	45	4-φ23				
4	2014	1690	560	1120	310		351				520	670						395	360	35	4-φ25				
5	2137						425																		

D DF Model 100-45 with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B	B1	B2	B3	H	H1	H2	h	n-φd	4-φk										
4	2014	295	330		135		351	325	4	368	520	520	250	395	250	280	40	4-φ23	φ24										
5	2137						425													419	406	345	315	35	4-φ23				
6	2420						370													370	190	499	406	510	510	345	315	35	4-φ23
7	2563						573													457	510	510	345	315	35	4-φ23			
8	2637						647													510	510	345	315	35	4-φ23				
9	2711	900	525	180	721																								

150D,DF30(D155-30) with Common Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B	B1	B2	B3	H	H1	H2	h	n-φd
2	2073	1980	680	1350	315	365	310	388	4		660	660	350	400	350	305	35	6-φ26
3	2258						425				660	660				360		
4	2423						540											



Installation Dimensions

150D,DF30(D155-30) with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	C	B	B1	B2	B3	H	H1	H2	h	n-φd	4-φk				
2	2073			605			310			311						250							
3	2258	1980	450	746	140	365	425	388	4	349	660	600				280	35	4-φ26	φ24				
4	2423			804			540			349													
5	2708	1080	810	811	140		655	418		406	580	580				350	400	350	315	40	4-φ27	φ28	
6	2873			868			770			457													
7	2988	1500	1190	958	145		885	428		5	640	595				600				40	4-φ25		
8	3178			821			1000																
9	3293	878	1115				1115																
10	3336	903	1230				1230					550									355		

D280-43(200D43) with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	L8	C	B	B1	B2	B3	H	H1	H2	h	h1	n-φd	4-φk				
3	2567	625	310	898.5			503				457		508				315		35						
4	3322	755	440	1037	157	429	633	388	75.5	5	900	720	630	450	480	400	355	50	38	4-φ30	φ28				
5	3452	885	570	1037			763				900		630				355								
6	3582	1015	700	1037			893	900		633	355	710	710				710	400	400	400	400	400	400		
7	3905	1145	830	1090			1023	1000		710	355	1000	1000				710	710	400	400	400	400	400		
8	4035	1275	960	1090			1153	1000		710	400	1000	1000				710	710	400	400	400	400	400		
9	4165	1405	1090	1090			1283	1000		710	400	1000	1000				710	710	400	400	400	400	400		

D280-65(200D65) with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	L8	C	B	B1	B2	B3	H	H1	H2	h	h1	n-φd	4-φk								
3	3500	690	310	1243	190	536	475	625	80	6	900	790	630	500	530	500	355	50	38	4-φ40	φ35								
4	3799	820	440	1263			605				1000		710				355												
5	3929	950	570	1263			735				1000	710	400				710	710	710	500	530	500	500	450	450	450			
6	4060	1080	700	1284			865				1000	800	450				800	800	800	800	500	530	500	500	450	450	450		
7	4360	1210	830	1284			995				1120	800	450				1120	1120	800	800	500	530	500	500	450	450	450		
8	4490	1340	960	1284			1125				1120	800	450				1120	1120	800	800	500	530	500	500	450	450	450		
9	4620	1470	1090	1284			1255				1120	800	450				1120	1120	800	800	500	530	500	500	450	450	450		
10	4975	1600	1220	1444			1385				1125	900	450				1125	1125	900	900	500	530	500	500	450	450	450		φ42

D450-60(250D60) with Pump Base

Stage	L	L1	L2	L3	L4	L5	L6	L7	L8	C	B	B1	B2	B3	H	H1	H2	h	h1	n-φd	4-φk								
3	3738	770	388	1243	190	537	574	591	88	7	1000	850	710	500	560	550	355	50	38	4-φ42	φ35								
4	3891	920	541	1243			727				1000		710				400					710	710	710	500	560	550	550	450
5	4214	1075	694	1263			880				1120	800	450				800	800	800	800	500	560	550	550	450	450	450		
6	4367	1230	847	1263			1033				1120	800	450				1120	1120	800	800	500	560	550	550	450	450	450		
7	4520	1380	1000	1263			1186				1120	800	450				1120	1120	800	800	500	560	550	550	450	450	450		
8	4898	1535	1153	1423			1339				1250	900	450				1250	1250	900	900	500	560	550	550	450	450	450		φ42
9	5051	1685	1306	1423			1492				1250	900	450				1250	1250	900	900	500	560	550	550	500	500	500		φ42
10	5204	1840	1495	1423			1645				1250	900	450				1250	1250	900	900	500	560	550	550	500	500	500		φ42

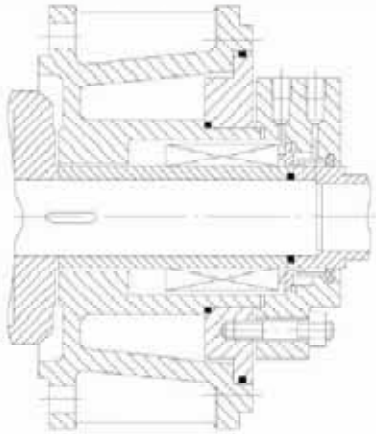


Flange Dimensions

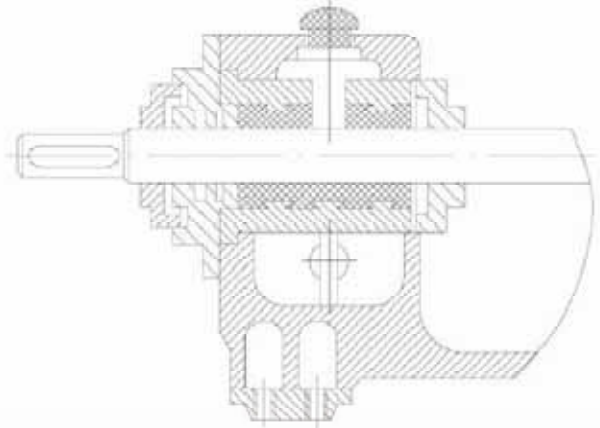
Model	Suc.Flange								Dis.Flange							
	Dg	D	D1	D2	D4	b	f1/f2	n-φd0	Dg	D	D1	D2	D4	b	f1/f2	n-φd0
D DY6-25 DF	40	130	100	80	-	18	-1/3	4-13.5	40	150	110	88	75	20	4/3	4-17.5
D DY12-25 DF	50	140	110	90	-	18	-1/3	4-13.5	40	150	110	88	75	20	4/3	4-17.5
D DY25-30 DF	65	160	130	110	-	20	-1/3	4-13.5	65	185	145	122	109	28	4/3	8-17.5
D25-50	80	190	150	128	-	18	-1/3	4-17.5	80	215	170	133	120	30	4/3	8-22
DF25-50	80	215	170	133	120	30	4/3	8-22								
D DY46-30 DF	80	190	150	128	-	22	-4/3	4-17.5	65	185	145	122	109	28	4/3	8-17.5
D46-50	80	190	150	128	-	18	-1/3	4-17.5	80	215	170	140	120	30	4/3	8-22
DF 46-50 DY	80	215	170	140	120	30	4/3	8-22								
D 80-30 DF	80	195	160	135	-	22	-1/3	4-17.5	80	195	160	135	-	26	-1/3	8-17.5
D 85-45 DF	100	210	170	148	-	22	-1/3	4-17.5	100	235	190	160	149	30	4.5/3	8-22
D 85-67 DY	150	265	225	202	-	33	-1/3	8-33	150	345	280	212	203	33	4.5/3	8-33
DF85-67	150	345	280	212	203	33	4.5/3	8-33								
D 155-67 DY	150	265	225	202	-	33	-1/3	8-33	150	345	280	212	303	33	4.5/3	8-33
DF155-67	150	345	280	212	203	33	4.5/3	8-33								
D 155-30 DF	150	285	240	212	-	26	-1/3	8-22	150	300	250	212	203	34	4.5/3	8-26
D280-43	200	340	295	268	-	28	-1/3	8-22	200	375	320	285	259	38	4.5/3	12-30
D280-65	200	340	295	268	-	30	-1/3	12-22	200	415	345	285	259	44	4.5/3	12-36
D450-60	250	405	355	320	-	32	-1/3	12-26	250	470	400	345	312	48	4.5/3	12-36
80D12	80	195	160	135	-	18	-1/3	4-17.5	80	195	160	135		26	-1/3	8-17.5
100D45	100	210	170	148	-	22	-1/3	4-17.5	100	235	190	160	149	30	4.5/3	8-22
100D16	100	210	170	148	-	18	-1/3	4-17.5	100	220	180	158	-	24	-1/3	8-17.5
125D25	125	240	200	178	-	20	-1/3	8-17.5	125	270	220	184	175	30	4.5/3	8-26



Typical Shaft Sealing Arrangements



Mechanical Seal for DF & DY



Slide Bearing for D85-67 & 155-67

Pump Model	Suction Side	Discharge Side
D6-25		
D12-25		
D25-30 D46-30 D25-50 D46-50		
D85-67 D155-67		



WARRANTY

Pumping units manufactured or distributed by Intra Corporation, are guaranteed to be free from defects in material and workmanship for one year from date of shipment from factory in Florida. The obligation under this Warranty, statutory or otherwise, is limited to replacement or repair at Saint Petersburg, Florida factory or at a point designated by Intra Corporation, of such part as shall appear to us upon inspection at such point, to have been defective in material or workmanship.

This Warranty does not obligate Intra Corporation to bear the cost of labor or transportation charges in connection with replacement or repair of defective parts; nor shall it apply to a pump upon which repairs or alterations have been made unless authorized by Intra Corporation.

No warranty is made in respect to engines, motors, or trade accessories, such being subject to warranties of their respective manufacturers.

No express implied or statutory warranty, other than herein set forth is made or authorized to be made by Intra Corporation.

In no event shall Intra Corporation be liable for consequential damages or contingent liabilities arising out of the failure of any Motion pumps or parts thereof to operate properly.

INTRA CORPORATION
Saint Petersburg, Florida