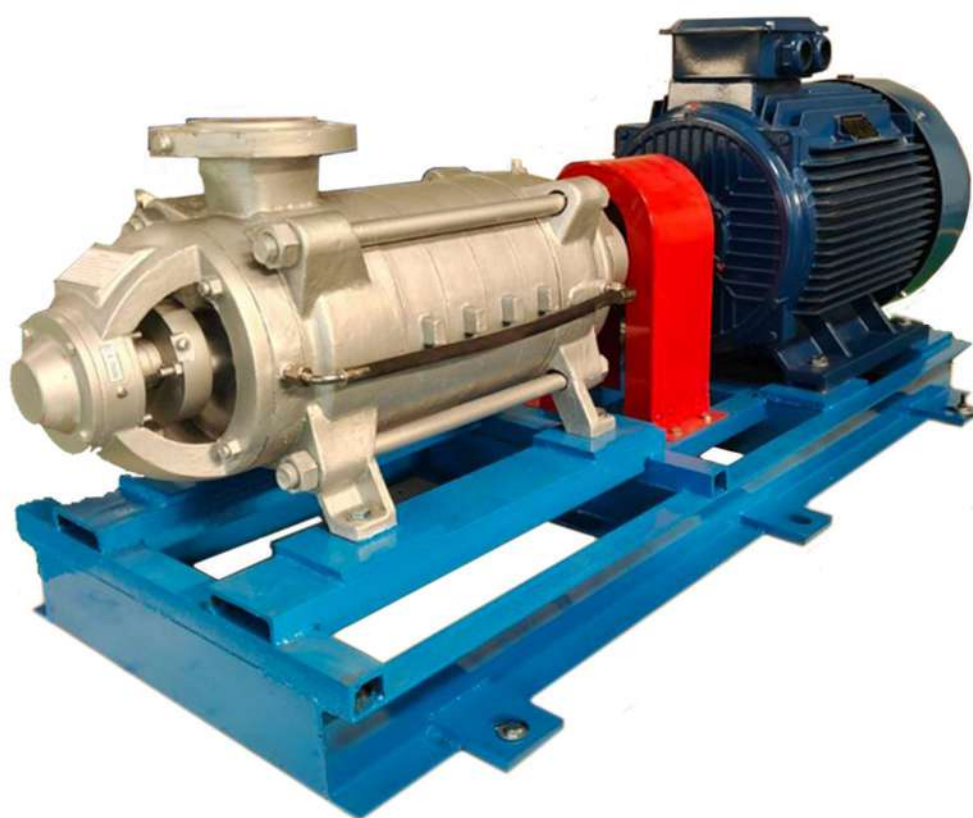


QD(G) Multistage Centrifugal Pump



RO Sea Water high pressure pump

PRODUCT PURPOSE

Model QD (G) pump is a horizontal multi-stage centrifugal pump and suitable for desalination water pump (with the contained foreign matters' content less than 1 % and graininess less than 0.1mm) and other liquids of both physical and chemical natures similar to those of pure water.

QD (G) model designed for high pressure membrane feed service in sea water reverse osmosis applications.

used for applications like ;Sea Water Reverse Osmosis (SWRO) clean water pumping stations ,any other high pressure application

Performance range of model QD (G) series

Flow : 3.75-185 m³/h Corollary power: 4.0-400kW

Head: 69-684m Inlet diameter: 40-150mm

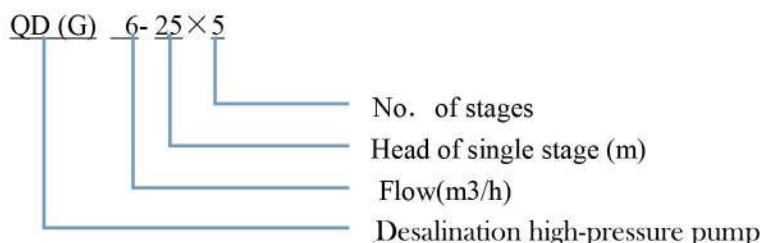
QD (G) model hypo-high-pressure desalination water pump is applicable to transport medium with temperature of not higher than 160°C, and is also applicable for small boiler water supply or transporting medium similar to hot water.

Performance range of mode QD (G) series

Flow: 15-300m³/h Corollary power: 75-1250kW

Head: 390-1050m Inlet diameter: 65-200mm

MODEL MEANING



Material of Pump Parts			
1	Impeller	Duplex Stainless Steel 2205	
2	Pump Shaft	Duplex Stainless Steel 2205	
3	Shaft Sleeves	Duplex Stainless Steel 2205	
4	Pump Casing	Duplex Stainless Steel 2205	
5	Bearing	NSK/ZWZ	
6	Bolts, Screws, Studs, Nuts, Washers, etc.	EN X20Cr13(AISI 420)	

QD(G) Multistage Centrifugal Pump

vertically upward.

Rotor portion

Consists of a shaft, impeller, balancing disk, muff etc. Parts.

Bearing portion

The whole rotor is supported by the roller bearings or sliding bearings on both ends of the shaft and the bearings are lubricated with grease or 20[#] engine oil.

Cooling and seal of pump

The joint-part between suction section, intermediate section and discharge section will be coated with molybdenum disulfide lubricating grease as seal. Rotor and fixed parts will be sealed by seal ring, guide-vane jacket and packing. The packing tensile degree of shaft seal should be proper and seep should be feasible dip by dip. Unload run should be forbid. The seal ring and guide vane jacket should be replaced if they are too worn to be used any more and even do harm to pump work. There is spare shaft sleeve near shaft seal to protect shaft of pump.

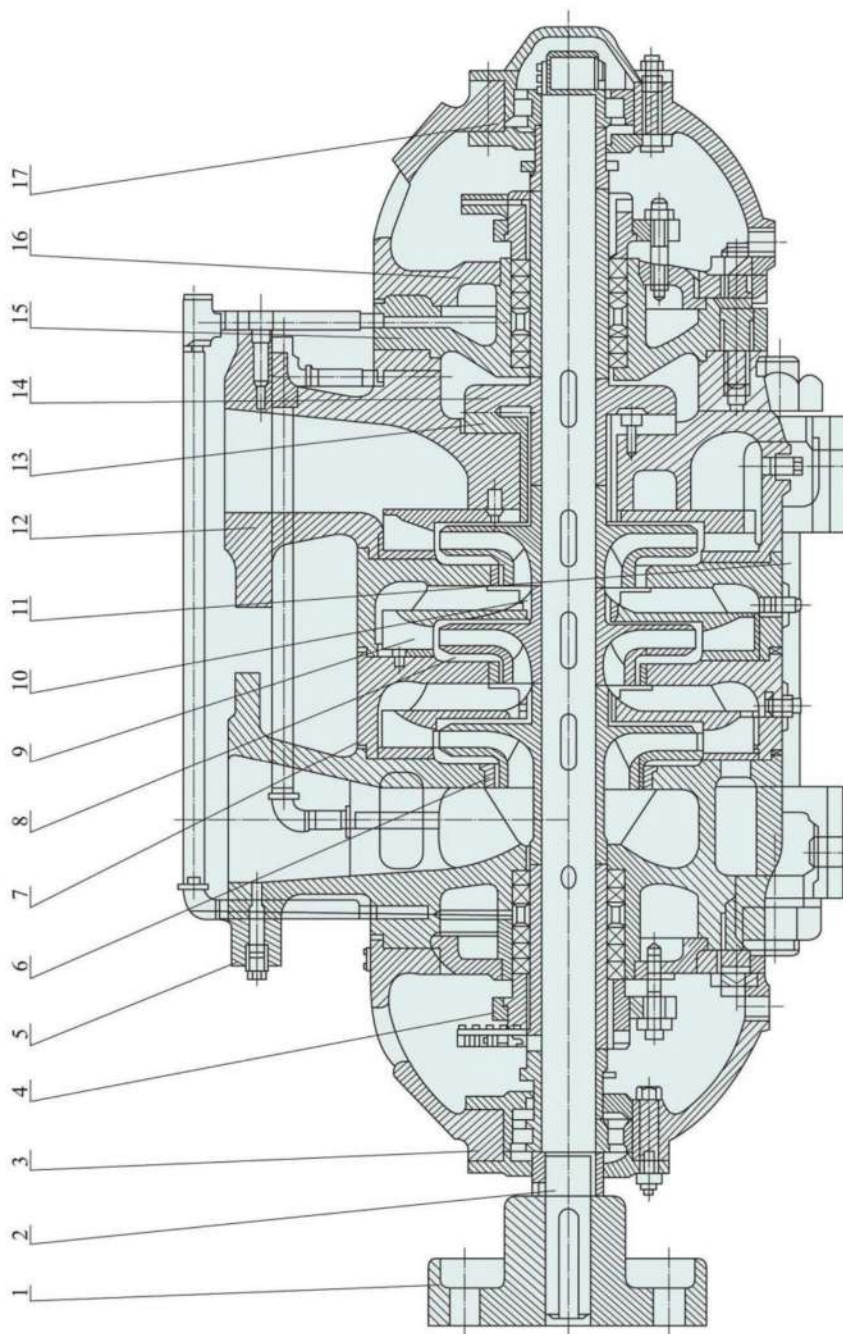
The shaft seal should perform to hold water and seal water.

When temperature of the liquid transferred is above 80°C, cooled water should be filled to the water cooling packing gland and shaft seal cooling chamber. Cooled water and seal water should be clean water in normal degree. The pressure of cooled water should be 1.5~3 Kg/cm², pressure of seal water should be more than 0.5~1 Kg/cm² of the seal chamber. The positions of cooling water pipe joints are different for various kind of water pump. Please refer to construction drawing of pump for axial position, and refer to chart I for radial position.

Shaft seals are classified as packing seal and mechanical seal. The water seal water of packing seal is industrial water, with pressure of 2~3 kg/cm². The flushing water of mechanical seal is softened water, whose pressure shall be 3 kg/cm² higher than the inlet pressure.

QD(G)

STRUCTURE DRAWING OF QD(G) MODEL MULTISTAGE PUMP



1	Column resilient clutch part	2	Shaft	3	Roller bearing part	4	Water cooled packing gland	5	Suck-in section
6	Seal ring	7	Middle section	8	Impeller	9	Guide vane	10	Guide vane sleeve
11	Take-up bolt	12	Spitting section	13	Balancing sleeve	14	Balancing disk	15	Packing
16	Cover of water cooling room	17	Bearing						

Material of Pump Parts	
1	Impeller
2	Pump Shaft
3	Shaft Sleeves
4	Pump Casing
5	Bearing
6	Bolts, Screws, Studs, Nuts, Washers, etc.
	Duplex Stainless Steel 2205
	Duplex Stainless Steel 2205
	Duplex Stainless Steel 2205
	Duplex Stainless Steel 2205
	NSK/ZWZ
	EN X20Cr13(AISI 420)

QD(G)

PERFORMANCE TABLE OF QD(G) MODEL MULTISTAGE PUMP

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	
					Shaft	Motor			kg
QD6-25	2	2950	3.75	51	1.49	3	33	2	77
			6.3	50	1.84		45	2	
			7.5	49	2.08		47	2.5	
	3		3.75	76.5	2.37	4	33	2	85
			6.3	75	2.86		45	2	
			7.5	73.5	3.19		47	2.5	
	4		3.75	102	3.16	5.5	33	2	94
			6.3	100	3.81		45	2	
			7.5	98	4.26		47	2.5	
	5		3.75	127.5	3.95	5.5	33	2	102
			6.3	125	4.77		45	2	
			7.5	122.5	5.32		47	2.5	
	6		3.75	153	4.73	7.5	33	2	111
			6.3	150	5.72		45	2	
			7.5	147	6.39		47	2.5	
	7		3.75	178.5	5.52	7.5	33	2	120
			6.3	175	6.67		45	2	
			7.5	171.5	7.45		47	2.5	
	8		3.75	204	6.31	11	33	2	128
			6.3	200	7.63		45	2	
			7.5	196	8.52		47	2.5	
	9		3.75	229.5	7.1	11	33	2	137
			6.3	225	8.58		45	2	
			7.5	220.5	9.58		47	2.5	
	10		3.75	255	7.89	15	33	2	145
			6.3	250	9.53		45	2	
			7.5	245	10.65		47	2.5	
	11		3.75	280.5	8.68	15	33	2	154
			6.3	275	10.5		45	2	
			7.5	269.5	11.71		47	2.5	
	12		3.75	306	9.47	15	33	2	162
			6.3	300	11.44		45	2	
			7.5	294	12.78		47	2.5	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD12-25	2	2950	7.5	56.4	2.62	5.5	44	2	78
			12.5	50	3.15		54	2	
			15	46	3.55		53	2.5	
	3		7.5	84.6	3.93	7.5	44	2	87
			12.5	75	4.73		54	2	
			15	69	5.32		53	2.5	
	4		7.5	112.8	5.24	11	44	2	96
			12.5	100	6.3		54	2	
			15	92	7.09		53	2.5	
	5		7.5	141	6.55	11	44	2	104
			12.5	125	7.88		54	2	
			15	115	8.89		53	2.5	
	6		7.5	169.2	7.85	15	44	2	113
			12.5	150	9.46		54	2	
			15	138	10.64		53	2.5	
	7		7.5	197.5	9.16	15	44	2	121
			12.5	175	11		54	2	
			15	161	12.41		53	2.5	
	8		7.5	225.6	10.41	18.5	44	2	130
			12.5	200	12.61		54	2	
			15	184	14.18		53	2.5	
	9		7.5	253.8	11.78	18.5	44	2	138
			12.5	225	14.18		54	2	
			15	207	15.95		53	2.5	
	10		7.5	282	13.09	22	44	2	147
			12.5	250	15.76		54	2	
			15	230	17.73		53	2.5	
	11		7.5	310.2	14.4	22	44	2	155
			12.5	275	17.34		54	2	
			15	253	19.5		53	2.5	
	12		7.5	338.4	15.7	30	44	2	165
			12. 5	300	18. 9		54	2	
			15	276	21. 3		53	2. 5	

QD(G) Multistage Centrifugal Pump

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD12-50	2	2950	7.5	108	5.8	11	37.8	2	142
			12.5	100	7.6		48	2	
			15	93	8.3		47	2.5	
	3		7.5	162	8.8	18.5	37.8	2	156
			12.5	150	10.6		48	2	
			15	139.5	11.9		47	2.5	
	4		7.5	216	11.7	22	37.8	2	170
			12.5	200	14.1		48	2	
			15	186	15.9		47	2.5	
	5		7.5	270	14.6	30	37.8	2	183
			12.5	250	17.7		48	2	
			15	232.5	19.8		47	2.5	
	6		7.5	324	17.6	30	37.8	2	197
			12.5	300	21.3		48	2	
			15	279	23.7		47	2.5	
	7		7.5	378	20.4	37	37.8	2	211
			12.5	350	24.8		48	2	
			15	325.5	27.7		47	2.5	
	8		7.5	432	23.3	45	37.8	2	224
			12.5	400	28.4		48	2	
			15	372	31.7		47	2.5	
	9		7.5	486	26.3	45	37.8	2	238
			12.5	450	31.9		48	2	
			15	418.5	35.7		47	2.5	
	10		7.5	540	29.2	55	37.8	2	251
			12.5	500	35.5		48	2	
			15	465	39.6		47	2.5	
	11		7.5	594	32.1	55	37.8	2	265
			12.5	550	39		48	2	
			15	511.5	43.5		47	2.5	
	12		7.5	648	35	75	37.8	2	279
			12.5	600	42.6		48	2	
			15	558	47.8		47	2.5	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD25-30	2	2950	15	68	5.56	11	50	2.2	150
			25	60	6.58		62	2.2	
			30	55	7.14		61	2.6	
	3		15	102	8.33	15	50	2.2	166
			25	90	9.88		62	2.2	
			30	82.5	10.7		61	2.6	
	4		15	136	11.1	18.5	50	2.2	181
			25	120	13.1		62	2.2	
			30	110	14.26		61	2.6	
	5		15	170	13.89	22	50	2.2	197
			25	150	16.47		62	2.2	
			30	137.5	17.83		61	2.6	
	6		15	204	16.67	30	50	2.2	212
			25	180	19.17		62	2.2	
			30	165	21.4		61	2.6	
	7		15	238	19.44	30	50	2.2	228
			25	210	23.1		62	2.2	
			30	192.5	24.96		61	2.6	
	8		15	272	22.22	37	50	2.2	244
			25	240	26.4		62	2.2	
			30	220	28.53		61	2.6	
	9		15	306	25	37	50	2.2	259
			25	270	29.65		62	2.2	
			30	247.5	32.1		61	2.6	
	10		15	340	27.8	45	50	2.2	275
			25	300	32.9		62	2.2	
			30	275	35.7		61	2.6	

QD(G) Multistage Centrifugal Pump

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD25-50	2	2950	15	103	9.6	18.5	40	2.5	261
			25	100	12.6		54	2.8	
			30	93	14.3		53	3.2	
	3		15	154.5	15.78	22	40	2.5	280
			25	150	18.91		54	2.8	
			30	144	20.64		53	3.2	
	4		15	206	21.04	30	40	2.5	298
			25	200	25.22		54	2.8	
			30	192	27.5		53	3.2	
	5		15	257.5	26.2	37	40	2.5	317
			25	250	31.52		54	2.8	
			30	240	34.4		53	3.2	
	6		15	309	31.56	45	40	2.5	336
			25	300	37.82		54	2.8	
			30	288	41.28		53	3.2	
	7		15	380.5	38.86	55	40	2.5	355
			25	350	44.1		54	2.8	
			30	336	48.16		53	3.2	
	8		15	421	42	75	40	2.5	374
			25	400	50.46		54	2.8	
			30	384	55.04		53	3.2	
	9		15	463.5	47.33	75	40	2.5	393
			25	450	56.74		54	2.8	
			30	432	61.92		53	3.2	
	10		15	515	52.59	75	40	2.5	411
			25	500	63.04		54	2.8	
			30	480	68.8		53	3.2	
	11		15	566	57.8	90	40	2.5	430
			25	550	69.3		54	2.8	
			30	528	75.68		53	3.2	
	12		15	618	63.11	110	40	2.5	450
			25	600	75.65		54	2.8	
			30	576	82.56		53	3.2	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	
					Shaft	Motor			kg
QD46-30	2	2950	30	68	8. 68	15	64	2. 4	152
			46	60	10. 74		70	3	
			55	54	11. 89		68	4. 6	
	3		30	102	13. 02	22	64	2. 4	167
			46	90	16. 11		70	3	
			55	81	18. 84		68	4. 6	
	4		30	136	17. 36	30	64	2. 4	183
			46	120	21. 48		70	3	
			55	108	23. 79		68	4. 6	
	5		30	170	21. 7	37	64	2. 4	198
			46	150	26. 85		70	3	
			55	135	29. 74		68	4. 6	
	6		30	204	26. 4	37	64	2. 4	214
			46	180	32. 21		70	3	
			55	162	35. 68		68	4. 6	
	7		30	238	30. 38	45	64	2. 4	229
			46	210	37. 58		70	3	
			55	189	41. 63		68	4. 6	
	8		30	274	34. 72	55	64	2. 4	245
			46	240	42. 95		70	3	
			55	216	47. 58		68	4. 6	
	9		30	306	39. 06	55	64	2. 4	261
			46	270	48. 32		70	3	
			55	243	53. 53		68	4. 6	
	10		30	340	43. 3	75	64	2. 4	276
			46	300	53. 7		70	3	
			55	270	59. 5		68	4. 6	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD46-50	2	2950	30	111	16. 78	30	54	2. 5	262
			46	100	19. 88		63	2. 8	
			55	92	21. 52		64	3. 2	
	3		30	166. 5	25. 19	37	54	2. 5	281
			46	150	29. 83		63	2. 8	
			55	138	32. 3		64	3. 2	
	4		30	222	33. 59	45	54	2. 5	300
			46	200	39. 77		63	2. 8	
			55	184	43. 06		64	3. 2	
	5		30	277. 5	41. 98	75	54	2. 5	319
			46	250	49. 71		63	2. 8	
			55	230	53. 85		64	3. 2	
	6		30	333	50. 38	75	54	2. 5	338
			46	300	59. 65		63	2. 8	
			55	276	64. 59		64	3. 2	
	7		30	388. 5	58. 78	90	54	2. 5	356
			46	350	69. 6		63	2. 8	
			55	322	75. 36		64	3. 2	
	8		30	440	67. 18	90	54	2. 5	375
			46	400	79. 54		63	2. 8	
			55	368	86. 12		64	3. 2	
	9		30	499. 5	75. 57	110	54	2. 5	394
			46	450	89. 48		63	2. 8	
			55	414	96. 89		64	3. 2	
	10		30	555	83. 97	132	54	2. 5	412
			46	500	99. 42		63	2. 8	
			55	460	107. 6		64	3. 2	
	11		30	610. 5	92. 37	132	54	2. 5	432
			46	550	109. 3		63	2. 8	
			55	506	118. 4		64	3. 2	
	12		30	666	100. 8	160	54	2. 5	451
			46	600	119. 3		63	2. 8	
			55	552	129. 2		64	3. 2	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD85-45	2	2950	55	102	24.25	37	63	3.2	210
			85	90	28.92		72	4.2	
			100	78	30.35		70	5.2	
	3		55	153	36.38	55	63	3.2	232
			85	135	43.37		72	4.2	
			100	117	45.52		70	5.2	
	4		55	204	48.5	75	63	3.2	253
			85	180	57.87		72	4.2	
			100	156	60.7		70	5.2	
	5		55	255	60.63	90	63	3.2	274
			85	225	72.34		72	4.2	
			100	195	75.86		70	5.2	
	6		55	306	72.75	110	63	3.2	295
			85	270	86.81		72	4.2	
			100	234	91.04		70	5.2	
	7		55	357	84.88	132	63	3.2	317
			85	315	101.3		72	4.2	
			100	273	106.2		70	5.2	
	8		55	408	97	132	63	3.2	338
			85	360	115.7		72	4.2	
			100	312	121.4		70	5.2	
	9		55	459	109.1	160	63	3.2	359
			85	405	130.2		72	4.2	
			100	351	136.6		70	5.2	

QD(G) Multistage Centrifugal Pump

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD85-67	2	2950	55	148	38.2	55	58	3.3	428
			85	134	45.6		68	4	
			100	122	48.9		68	4.4	
	3		55	222	57.3	90	58	3.3	498
			85	201	68.4		68	4	
			100	183	73.3		68	4.4	
	4		55	296	76.4	110	58	3.3	568
			85	268	91.2		68	4	
			100	244	97.7		68	4.4	
	5		55	370	95.6	132	58	3.3	638
			85	335	114		68	4	
			100	305	122.2		68	4.4	
	6		55	444	114.7	160	58	3.3	708
			85	402	136.9		68	4	
			100	366	146.6		68	4.4	
	7		55	518	133.8	185	58	3.3	778
			85	469	159.6		68	4	
			100	427	171		68	4.4	
	8		55	592	152.9	220	58	3.3	848
			85	536	182.4		68	4	
			100	488	195.4		68	4.4	
	9		55	666	172	250	58	3.3	918
			85	603	205.2		68	4	
			100	549	219.9		68	4.4	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	
					Shaft	Motor			kg
QD155-30	2	1480	119	64	29. 8	45	69. 5	3. 2	476
			155	60	33. 71		75	3. 9	
			190	54	36. 95		76	4. 8	
	3		119	96	44. 7	75	69. 5	3. 2	546
			155	90	50. 57		75	3. 9	
			190	81	55. 42		76	4. 8	
	4		119	128	59. 6	90	69. 5	3. 2	617
			155	120	67. 42		75	3. 9	
			190	108	73. 9		76	4. 8	
	5		119	160	74. 5	110	69. 5	3. 2	687
			155	150	84. 28		75	3. 9	
			190	135	92. 37		76	4. 8	
	6		119	192	89. 4	132	69. 5	3. 2	757
			155	180	101. 1		75	3. 9	
			190	162	110. 8		76	4. 8	
	7		119	224	104. 3	160	69. 5	3. 2	827
			155	210	118		75	3. 9	
			190	189	129. 3		76	4. 8	
	8		119	256	119. 2	200	69. 5	3. 2	897
			155	240	134. 8		75	3. 9	
			190	216	147. 8		76	4. 8	
	9		119	288	134. 1	200	69. 5	3. 2	968
			155	270	151. 7		75	3. 9	
			190	243	166. 3		76	4. 8	
	10		119	320	149	220	69. 5	3. 2	1038
			155	300	168. 6		75	3. 9	
			190	270	184. 7		76	4. 8	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD155-67	2	2950	100	152	64. 7	90	64	3. 2	432
			155	134	76. 5		74	5	
			185	118	82. 6		72	6. 6	
	3		100	228	97	132	64	3. 2	502
			155	201	114. 7		74	5	
			185	177	123. 9		72	6. 6	
	4		100	304	129. 3	185	64	3. 2	572
			155	268	152. 9		74	5	
			185	236	165. 1		72	6. 6	
	5		100	380	161. 6	220	64	3. 2	641
			155	335	191. 1		74	5	
			185	295	206. 4		72	6. 6	
	6		100	456	194	280	64	3. 2	712
			155	402	229. 3		74	5	
			185	354	247. 7		72	6. 6	
	7		100	532	226. 3	315	64	3. 2	782
			155	469	267. 5		74	5	
			185	413	288. 9		72	6. 6	
	8		100	608	258. 6	355	64	3. 2	852
			155	536	305. 7		74	5	
			185	472	330. 3		72	6. 6	
	9		100	684	290. 9	450	64	3. 2	922
			155	603	344		74	5	
			185	531	371. 6		72	6. 6	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD280-43	2	1480	185	94	68. 6	110	69	3	667
			280	86	85. 2		77	4. 7	
			335	76	92. 5		75	6	
	3		185	141	103	160	69	3	787
			280	129	127. 7		77	4. 7	
			335	114	138. 7		75	6	
	4		185	188	138. 3	200	69	3	908
			280	172	170. 3		77	4. 7	
			335	152	184. 9		75	6	
	5		185	235	171. 6	250	69	3	1028
			280	215	212. 9		77	4. 7	
			335	190	231. 1		75	6	
	6		185	282	205. 9	315	69	3	1149
			280	258	255. 5		77	4. 7	
			335	228	277. 3		75	6	
	7		185	329	240. 2	355	69	3	1271
			280	301	298. 1		77	4. 7	
			335	266	323. 6		75	6	
	8		185	376	274. 5	400	69	3	1391
			280	344	340. 7		77	4. 7	
			335	304	369. 8		75	6	
	9		185	423	308. 9	450	69	3	1512
			280	387	383. 2		77	4. 7	
			335	342	416		75	6	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD280-65	2	1480	185	136	102.2	185	67	2.8	824
			280	130	135.8		73	3.7	
			335	124	159.3		71	5	
	3		185	204	153.4	280	67	2.8	1006
			280	195	203.7		73	3.7	
			335	186	238.9		71	5	
	4		185	272	204.5	355	67	2.8	1188
			280	260	271.6		73	3.7	
			335	248	318.6		71	5	
	5		185	340	255.7	450	67	2.8	1370
			280	325	339.5		73	3.7	
			335	310	398.3		71	5	
	6		185	408	306.6	500	67	2.8	1552
			280	390	407.4		73	3.7	
			335	372	477.8		71	5	
	7		185	476	357.9	630	67	2.8	1734
			280	455	475.3		73	3.7	
			335	434	557.7		71	5	
	8		185	544	409.1	710	67	2.8	1916
			280	520	543.2		73	3.7	
			335	496	637.3		71	5	
	9		185	612	460.2	800	67	2.8	2098
			280	585	611.1		73	3.7	
			335	558	716.9		71	5	
	10		185	680	511.3	900	67	2.8	2280
			280	650	678.9		73	3.7	
			335	620	796.7		71	5	
	11		185	748	562.5	900	67	2.8	2460
			280	715	746.9		73	3.7	
			335	682	876.3		71	5	
	12		185	816	613.6	1000	67	2.8	2645
			280	780	814.8		73	3.7	
			335	744	955.9		71	5	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	
					Shaft	Motor			kg
QD360-40	2	1480	300	84	89. 1	132	77	4. 65	676
			360	80	98. 1		80	4. 7	
			440	71	110. 5		77	5. 4	
	3		300	126	133. 7	185	77	4. 65	807
			360	120	147. 2		80	4. 7	
			440	106. 5	165. 8		77	5. 4	
	4		300	168	178. 2	250	77	4. 65	938
			360	160	196. 2		80	4. 7	
			440	142	221. 1		77	5. 4	
	5		300	210	222. 8	315	77	4. 65	1069
			360	200	245. 3		80	4. 7	
			440	177. 5	276. 3		77	5. 4	
	6		300	252	257. 4	400	77	4. 65	1200
			360	240	294. 1		80	4. 7	
			440	213	331. 5		77	5. 4	
	7		300	294	311. 9	450	77	4. 65	1331
			360	280	343. 1		80	4. 7	
			440	248. 5	386. 7		77	5. 4	
	8		300	336	356. 5	500	77	4. 65	1462
			360	320	392. 2		80	4. 7	
			440	284	441. 9		77	5. 4	
	9		300	378	401. 1	560	77	4. 65	1593
			360	360	441. 2		80	4. 7	
			440	319. 5	497. 2		77	5. 4	
	10		300	420	445. 6	630	77	4. 65	1724
			360	400	490. 2		80	4. 7	
			440	355	552. 4		77	5. 4	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD450-60	2	1480	335	130	164. 7	250	72	4. 1	1500
			450	120	186. 1		79	5. 2	
			500	113	197. 3		78	6. 3	
	3		335	195	247. 1	355	72	4. 1	1750
			450	180	279. 2		79	5. 2	
			500	171	296		78	6. 3	
	4		335	260	329. 5	450	72	4. 1	2000
			450	240	372. 2		79	5. 2	
			500	228	394. 7		78	6. 3	
	5		335	325	411. 8	630	72	4. 1	2250
			450	300	465. 4		79	5. 2	
			500	285	493. 4		78	6. 3	
	6		335	390	494. 2	710	72	4. 1	2500
			450	360	558. 3		79	5. 2	
			500	342	592		78	6. 3	
	7		335	455	576. 5	800	72	4. 1	2750
			450	420	651. 5		79	5. 2	
			500	399	690. 7		78	6. 3	
	8		335	520	658. 9	900	72	4. 1	3000
			450	480	744. 4		79	5. 2	
			500	456	789. 4		78	6. 3	
	9		335	585	741. 2	1000	72	4. 1	3250
			450	540	837. 5		79	5. 2	
			500	513	888		78	6. 3	
	10		335	650	823. 6	1120	72	4. 1	3500
			450	600	930. 8		79	5. 2	
			500	570	995. 1		78	6. 3	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD500-57	2	1480	450	120	184	250	80	4.4	1500
			500	114	192		81	5	
			550	108	205		79	5.8	
	3		450	180	276	355	80	4.4	1750
			500	171	287.5		81	5	
			550	162	307.5		79	5.8	
	4		450	240	368	450	80	4.4	2000
			500	228	383.5		81	5	
			550	216	307.5		79	5.8	
	5		450	300	460	630	80	4.4	2250
			500	285	479.5		81	5	
			550	270	512		79	5.8	
	6		450	360	551.5	710	80	4.4	2500
			500	342	575		81	5	
			550	324	614.5		79	5.8	
	7		450	420	643.5	800	80	4.4	2750
			500	399	671		81	5	
			550	378	716.7		79	5.8	
	8		450	480	735.5	1000	80	4.4	3000
			500	456	767		81	5	
			550	432	819		79	5.8	
	9		450	540	827.5	1120	80	4.4	3250
			500	513	862.5		81	5	
			550	486	921.5		79	5.8	
	10		450	600	919.5	1250	80	4.4	3500
			500	570	958.5		81	5	
			550	540	1024		79	5.8	

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Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	—
					Shaft	Motor			kg
QD580-60	2	1480	450	130	202	280	79	3.16	1750
			580	120	231		82	4.84	
			638	110	239		80	5.16	
	3		450	195	302	450	79	3.16	1950
			580	180	346		82	4.84	
			638	165	359		80	5.16	
	4		450	260	403	560	79	3.16	2260
			580	240	462		82	4.84	
			638	220	479		80	5.16	
	5		450	325	504	710	79	3.16	2570
			580	300	578		82	4.84	
			638	275	599		80	5.16	
	6		450	390	605	800	79	3.16	2880
			580	360	694		82	4.84	
			638	330	718		80	5.16	
	7		450	455	706	900	79	3.16	3190
			580	420	809		82	4.84	
			638	385	838		80	5.16	
	8		450	520	806	1120	79	3.16	3500
			580	480	924		82	4.84	
			638	440	958		80	5.16	
	9		450	585	907	1250	79	3.16	3810
			580	540	1040		82	4.84	
			638	495	1077		80	5.16	
	10		450	650	1008	1250	79	3.16	4120
			580	600	1155		82	4.84	
			638	550	1197		80	5.16	

Model	No.of Stage	Speed (r/min)	Flow (m3/h)	Head (m)	Power(kW)		Eff. (%)	NPSH)r (m)	kg
					Shaft	Motor			
QD720-60	2	1480	550	132	260	355	76	3.5	1830
			720	120	294		80	4.5	
			850	108	318.4		78.5	5.5	
	3		550	198	390	560	76	3.5	2040
			720	180	441		80	4.5	
			850	162	477.6		78.5	5.5	
	4		550	264	520	710	76	3.5	2350
			720	240	588		80	4.5	
			850	216	636.8		78.5	5.5	
	5		550	330	640	900	76	3.5	2650
			720	300	735		80	4.5	
			850	270	796		78.5	5.5	
	6		550	396	780	1120	76	3.5	2960
			720	360	882		80	4.5	
			850	324	955.2		78.5	5.5	
	7		550	462	910	1250	76	3.5	3280
			720	420	1029		80	4.5	
			850	378	1114.4		78.5	5.5	
	8		550	528	1040	1400	76	3.5	3595
			720	480	1176		80	4.5	
			850	432	1273.6		78.5	5.5	
	9		550	594	1170	1600	76	3.5	3900
			720	540	1323		80	4.5	
			850	486	1432.8		78.5	5.5	

ASSEMBLY AND DETECTION OF PUMP

The assembly quality of the pump will result in a notable affection to the performance and the running stability of it and can not be guaranteed unless the technical requirements in the drawings are strictly followed in the assembly, such as on the alignment between the centers of the impeller's outlet and the guide vane's inlet. the uniform values of the sealing intervals of both rotor and stator portions etc.

1.Rotor

It takes two bearings as the support and measure the circle jumping values of the oral ring of the impeller, the impellers baffling sleeve (or rear navel), the balancing baffling sleeve and the muff, respectively, and the jumping value of the balancing disk's end-face, which should conform the requirements in the figure of the jointed parts of rotor (Fig. 4).

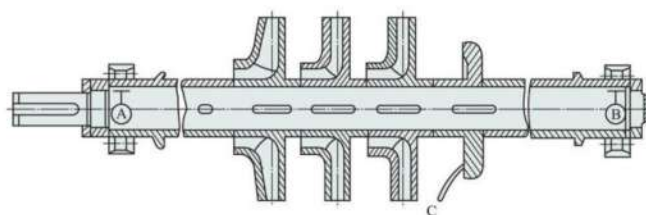


Fig. 4

For the nominal radial intervals of the seal rings of both pump casing and impeller, upon the table below:

Nominal size(mm)	30~90	>90~120	>120~180	>180~250	>250~500	>500~800	>800~1250	>1250
Diameter interval(mm)	0.3~0.4	0.4~0.5	0.5~0.6	0.6~0.7	0.7~0.85	0.85~1.2	1.2~1.6	1.6~2.0

For the allowed radial jumping error of each part of the assembled rotor, upon the table below:

Nominal Diameter	≤50	>50~120	>120~260	>260~500	>500~800
Seal ring of impeller (A-B)	0.08	0.10	0.10	0.12	0.15
End-face jumping of disk C (A-B)	0.05	0.05	0.06	0.08	0.08

2. Stator

Measure the axial serial amount of the rotor and the end-face jumping value of the balancing ring(sleeve), which should conform the requirements in the overall assembly drawing.

3, At the end of assembly, move the rotor with hand to check if there is frictional sound, non-flexible movement etc. abnormal condition inside of the pump.

INSTALLATION OF PUMP

1. Installation steps

Generally covering the placement of the pump on the foundation, leveling, adjustment and connection of the pump's pipeline.

2. Facilities necessary for installation

The following common facilities and tools are required in installation:

- a. Safe lifters available with a proper loading capacity.
- b. Set a steel horn or wedge horn on every foot screw for leveling foundation.
- c. The grouting material must be a non-shrinking one and it is necessary to prepare a wood case for grouting, which has to be fitted with a hopper.
- d. To mount and remove the packing, a set of special tools is required. such as the clamp with hooks.

3. Pump transportation

When to transport the pump, take care of safety to prevent any accident from occurring and the following cautions:

- a. Place the hook of the lifter under the foundation or use a folk lifter, do not lift it with the hook in the pump, the prime mover and bolt holes or on the bearing, furthermore, on the pump shaft.
- b. Make the lifted load even and balanced, take care about the lifting capacity and not to let the pump parts collided with each other, especially the processed fitting-surface of the shaft on the pump clutch, not to let it damaged.
- c. Prohibited foreign matters or dust from getting into both pump and motor during transportation.

4. Unpacking and check of pump

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Unpack and check, when the pump arrives. If any part is lost and if there is any damage, report it to the transporter and the pump manufacturer at once if any.

5. Temporary storage

If the pump is to be stored for a period of time before installation, pack it and place it on a dry, rain-proof and dust-proof ground with both spitting and suck-in mouths covered to prevent foreign matters in. Pay attention not to let the shaft, bearing and other precisely processed parts of the pump getting wet and coat them with a protective oil layer.

6. Basis for the pump

6.1 The basis should be a concrete one of sufficient strength and size. with the mass of it 3-5 times that of the unit one, and 50-70mm longer than that of the pump foundation, plus the foot bolt holes (a steel pipe's diameter 3-4 times that of the foot bolt).

6.2 The job to set the basis covers: locating the foot bolt hole. grouting and leave the place for the pipeline connection, then grouting into the other space.

6.3 The rougher the surface of the basis. the better the grouting effect.

6.4 Do not install any equipment until the basis gets completely solidified.

7. Movement, placement and leveling

7. 1 Place steel and wedge horns or regulating iron at the foot bolts under the pump foundation, in general, place a horn in between two bolts in case of a longer foundation.

7.2 Check the basis under the pump foundation and clear dust. oil and other foreign matters.

7.3 Place lifting hooks on the four corners of the foundation to lift it above the basis and then slowly put it on the position with the boltholes aligned.

7.4 Place a knife edge flat ruler and a mechanical leveler under the processed planes of both pump and motor's foundations and use the thickness of a regulating wedge iron or pad to decide the levelness of the foundation on every respect, for which, non-flatness less than 0.25mm per 100mm is recommended. Then tighten the nut of the foot bolt to a proper extent (not over-tightened) and secure the wedge iron or regulating pad.

7.5 Level the foundation, do not grout until it is more closely fitted with the basis.

8. Grout the foundation

8.1 Make sure the air inside of each space is completely exhausted when to grout.

8.2 Tighten the nut of the foot bolt when the grouted material is solidified and then coat the material with paint for wet resisting.

8.3 After grouting, adjust both pump and motor.

9.Adjustment of equipment

Covering angle and central line position adjustment. check the equipment at least in the following three periods and take adjustment:

The first time, both pump and foundation are secured while the motor is not.

The second time, both pump and motor are secured while the bolts on the suck-in and spitting pipeline flanges are not.

The third time is in 24 hours after the pump starts running, then secure both pump and motor

Pay attention to the following cautions in the adjustment:

a. Before adjusting, check all pipelines to make sure they will not produce any action or moment on the pump foundation

b. Put the pad under the motor while to adjust both pump and motor.

Angle adjustment is to guarantee the parallelism of the two planes of the clutches. Use a dial gauge to check four points on the end-face of the clutch flange, the reading on the gauge is 0.02-0.03. and use a feeler to check the parallelism, the difference (a-b) between the two planes is ≤ 0.06 (see Fig. 5)

Central line alignment means the aligned degree between the central lines of both pump and motor's shafts,

c should be ≤ 0.08 (see Fig. 5)

10.Connect of the main pipelines

After grouting and securing the pump on the basis, align and link the flanges of both pump and pipeline without subject to an external force, i.e. the force from the flange bolt.

For the pipeline support (additional). It should be able to avoid the pipeline vibration and reduce the cleaning to the pipeline.

Cautions in the installation of the pipeline:

a.The pipeline used should be of a proper norm and length and a sufficient bearing capacity, reducing both bends and fittings of the pipeline as can as possible.

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b. The suck-in pipeline of the pump should be short and straight, the diameter of it should be equal or more than that of the pump's suction inlet and the bent radius of the suck-in pipeline should be made as big as possible.

11. Connect of the additional equipment

11.1 Pressure gauge

The pressure gauges used on both suck-in and spitting pipeline must be good quality and certified performance. It is better for the spitting pressure gauge to be mounted at the distance 2 times of the diameter of the spitting flange of both pump and main pipeline while not by both elbow and valve so as to prevent the disturbance from unstable flowing.

11.2 Coupler

Recheck the alignment before connecting the coupler of both pump and motor; check whether the steering of the motor meets the requirements, and the steering of the pump shaft: the pump rotates clockwise from the direction of the coupling. If the steering of the motor does not match the steering of the pump shaft, the steering of the motor must be adjusted.

11.3 Shaft seal

Readjust or reassemble the shaft seal before the pump starts if necessary.

RUNNING OF THE PUMP

1. Cautions in operation

1.1 The pump can only be allowed to run within the specified parameters.

1.2 The pump is not allowed to run with the spitting valve closed or closed to a little opening, or it will be caused heated and duration lowered. Each pump is required to run under the special parameters so as to guarantee the flow of it if mounted in a parallel system.

1.3 The pump can not run with the suck-in valve closed, or it may be dried moving to cause parts damaged.

1.4 The medium the pump transports can not contain air or gas, or both flow and head of the pump may not be accurately measured and, meanwhile, grinding maybe produced to damage parts.

1.5 This pump is not allowed to transport any material with grains, or both pump efficacy and part duration may be

lowered.

1.6 Check the pump before starting it.

2. Check before starting the pump

2.1 Before starting the pump, check if all the bolts, pipelines and the lead-wires are securely connected.

2.2 Check if all the meters, valves and instruments are normal.

2.3 Check if the oil ring's position and the oil in the oil leveler are normal.

2.4 Check if the motor moves in the correct direction.

3. Start the pump

3.1 Precautions when starting the pump

a. The temperature of the medium this pump transports is higher (160°C).

b. Look at the indications of both pressure gauge and switch during starting so as to adjust them.

c. After starting the pump, do not let the spitting valve closed or nearly closed for a longer time, or the liquid inside of the pump may become overheated.

3.2 Steps to start the pump

a. First do the before-starting check (as abovementioned).

b. Open the pump's suck-in valve and the water sealed water pipeline's valve.

c. Close the discharge pipeline to have inside of the pump full of liquid.

d. Start the motor and then open the valve on the discharge pipeline.

4. Check of the pump movement

After the pump starts moving, check the meters every certain time upon the procedure in 2.2 to see if it works normally and the rotating speed of it. In addition, check the flow, head, temperature and lubrication of it. In case of a failure, stop it and repair it by referring the table of trouble shooting.

5. Stop the pump

5.1 Close the pump's spitting valve to the smallest flow, but do not close the pump's suck-in valve.

5.2 Turn off the motor.

5.3 Close the pump's spitting valve.

5.4 Then close the suck-in valve when the pump stops stably.

REPAIR OF PUMP

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1.General

To keep the pump in a high effective and stable work, it must be often repaired, the items of repair and the interval between every repair depend on the working condition and running state of it.

2.Maintenance of pump

Hold a periodic check of the pump's performance (as the flow, head, vibration etc.) And make a record, then analyze the pump upon these recorded data to see if it works normally, needs repairing or decide which portion needs repairing .

In general conditions. Reliable information whether the pump needs repairing can be gained every several months provided that insistent and accurate tests and records as well as periodic summarizing of the records have been made.

In addition to the monitor of the pump at the set time, the followings need to be maintained often:

- a.Check if the pump, foundation and motor are secured, causing the pump vibrated if loose.
- b.Check the meters and leading-wires' state; check if the pipeline leaks or loosens or gets damaged in any other forms, repair it at once if necessary.
- c.Do not let the packing gland pressed too tightly, or the duration of it may be affected.
- d. Replace the lubricating oil on the bearings every 1000h of work.

FAILURES AND TROUBLESHOOTING OF THE PUMP

Failure	Causes	Troubleshooting
Pump not suck in. pointers of pressure gauge and vacuum meter severely jumping	Water injected into the pump insufficient. air leaks from water inlet pipe, meters etc.	Inject water into pump, tighten the leaking places
Pump not suck water, high vacuum shown on vacuum meter	Foot valve not opened or blocked up, too big resistance with water sucking pipe, too high suck-in height	Correct or replace foot valve. clean or replace water sucking pipe, lower the height
Pressure available at pump outlet viewing from pressure gauge while no water out of pump	Too big resistance with water outlet pipe. Wrong rotating direction. impeller blocked up, or pump damaged, insufficient r.p.m	Check or shorten outlet pipe, check motor, remove the pipe union, clean or replace impeller. raise r.p.m
Insufficient flow	Pump blocked up, too much friction with seal ring, insufficient r.p.m.	Clean pump and pipe, replace seal ring, raise r.p.m
Too big power the pump consumes	Too tightly pressed packing gland, packing room heated, impeller worn out, water supply quantity of the pump in-creases	Loosen packing gland or replace packing, replace impeller. increase resistance with outlet pipe to reduce the flow
Abnormal sound inside of pump, no water into pump	Too big flow, too big resistance inside of water sucking pipe, too high water-sucking height, air gets in the water-sucking place, too high temperature of the liquid being transported	Increase the resistance inside of water outlet pipe to reduce the flow. check water-sucking pipe and foot valve. lower the height. tighten the air leaking places

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Pump vibrates	Axes of pump and motor not on one central line, dirt or water gets into the bearing	Align the two central lines, clean bearing. replace lubricating grease
Bearing overheated	Lubricating grease dried or dirty. axes of pump and motor not on one central line	Check or clean bearing, replace lubricating grease, align the central lines
Balancing water stops, balancing room heated. motor's power increased	Pump runs under a big flow and low head. grinding occurs between balancing disk and board	Close outlet valve to the designed working condition, remove balancing disk for rep- Airing

Removal of pump

1 Cautions in the removal

- Stop the pump upon the pump stopping procedure in 5 .
- Drain the liquid inside of the pump casing out (for the cooling water sleeve too if it is available) .
- Drain out the thinned oil if it is used for lubricating the bearings.
- Remove the additional pipelines obstructing the removal, such as the balancing pipe, water sealed water pipe etc.
- Remove the clutches by way of heating (for the motor's clutch too if necessary to remove it).

2 Sequence of removal

Start the pump removal from the bearing on the spitting side,

the sequence comes as below:

- a. Screw out the bolts on the bearing gland on the spitting side and the linking nuts between the spitting section, packing and bearing to remove the bearing.
- b. Screw out the circular nut on the shaft, then in turn remove the inner ring of the bearing, gland and baffling sleeve, then the spitting section (including the packing gland, packing ring, packing etc.).
- c. Remove the O-seal ring, muff, balancing disk and key on the shaft in turn, then the spitting section (including the guide vane on the last stage, balancing board etc.).
- d. After removing the last-stage impeller and key, remove the middle section (including the guide vane), then the impeller. middle section, guide vane on the rest stages in the same way till the impeller on the first stage.
- e. Screw out the linking nuts between the suck-in section and the bearing and the bolt on the bearing gland to remove the bearing (remove the pump clutch prior to this).
- f. Draw out the shaft from the suck-in section screw out the fixing nut on it, then remove the inner ring of the bearing, O-seal ring, muff, baffling sleeve etc. in turn). The removal has then been finished generally However some parts are still linked together during the removal and can be removed once the linking nuts are screwed out, in general.

Clean and check

- 1 Clean all the parts with coal oil and let them dried in the air or with a cloth.
- 2 Check the worn-out conditions on the all parts and replace those unable to make sure of normal work.
- 3 Check if there is dust or rust on the shaft and use a dial gauge to check the non-straightness of it (the radial jumping valve of it not more than the 8-class accuracy).
- 4 Replace the sealing element when the sealing interval is over the maximum value of the recommended one by 50% .

The outline and installation dimensions of the pump

Model	Stage	Pump + motor overall installation dimensions (common base)																								
		L	L电	L1	L2	L3	L4	L5	L6	L7	C	H	H1	H2	H3	H'	HD	AD	B1	B1'	h	B2	B2'	n-Φ d		
QD6-25	2	996	380	820		575	145		130							100	245	180	350	400		350	400	4-Φ 24		
	3	1181							180	272											30	370	420			
	4	1231	475	1020		645	190		230				230			132	315	210	370	420						
	5	1281							280																	
	6	1467							330										360	410		35	430		480	
	7	1517	605	1240		820	230	238	380		2	150	170		170					410	460				480	530
	8	1567							430	275						160	385	265								
	9	1617		1390		920	300		480					270					410	460						
	10	1712							530																	
	11	1762	650	1540		990	350		580											365	415	40	460		510	
	12	1812							630																	
	QD12-25	2	1132	475	855		575	150		130	272				230		132	315	210	370	420		370		420	4-Φ 24
3		1182		1020		645	190		180																	
4		1366							230													440	490			
5		1416	605	1130		745	205		280										360	410						
6		1466							330													430	480			
7		1516		1240		820	230	238	380	275	2	150	170	260	170	160	385	265		410	460		480	530		
8		1611	650	1390		920	300		430											410	460					
9		1661							480														450	500		
10		1731	670	1475		975	355		530					280		180	430	285	340	390						
11		1781							580																	
12		1940	775	1620		965	445		630	277				300		200	475	315	350	400	45	500	550			
QD12-50		2	1407	605	1275		845	220		160	339				250		160	385	265	460	530		460	530	4-Φ 24	
	3	1512	650						220													465	535			
	4	1592	670	1325		880	240		280					260		180	430	285								
	5	1761							340													510	580			
	6	1821	775	1520		930	310		400					280		200	475	315	465	535	35					
	7	1881						284	460	341	2	170	215		215							545	615			
	8	1981	815	1765		1105	440		520					305		225	530	345								
	9	2041							580																	
	10	2216	930	1895	500	1200	420		640					330		250	575	385	460	530		595	665			
	11	2276							700																	
	12	2406	1000	2020	600	1300	400		760	340				360		280	640	410				645	715			
	QD25-30	2	1414	605	1170		840	190		165	342				250		160	385	265	480	550		480	550	4-Φ 24	
3		1479							230										460	530		460	530			
4		1589	650	1275		845	220		295												465	535				
5		1674	670	1325		880	240		360					260		180	430	285	465	535		465	535			
6		1848		1520		930	310	285	425		2	170	210		210											
7		1913	775						490																	
8		1978		1685		1075	350		555	344				280		200	475	315	445	515		510	580			
9		2043							620																	
10		2148	815	1765		1105	440		685					330		225	530	345	465	535		545	615			

Model	Stage	Pump + motor overall installation dimensions (common base)																							
		L	L电	L1	L2	L3	L4	L5	L6	L7	C	H	H1	H2	H3	H'	HD	AD	B1	B1'	h	B2	B2'	n-Φ d	
QD25-50	2	1552	650	1180		665	280		183	346						160	385	265	480	540	40	480	540	4-Φ 24	
	3	1632	670	1240					243					330		180	430	285	500	560		500	560		
	4	1801	775	1430		900	250		303							200	475	315	520	580	45	520	580		
	5	1861							363																
	6	1961	815	1570	530	1060	235		423					325		225	530	345	560	620		560	620	6-Φ 24	
	7	2136	930	1760	555	1125	270	356	483	349	2	210	270	340	300	250	575	385	530	590		600	660		
	8	2266							543												50	670	730		
	9	2326	1000		2060	725	1470	380		603				380		280	640	410	500	560					
	10	2386							663																
	11	2446	1050						723																
	12	2752	1240	2230	745	1490	360		783	274				440		315	865	576	510	580	60	730	800		
	QD46-30	2	1414	605	1170		840	190		165	340				250		160	385	265	480	550		480		550
3		1544	670	1325		880	240		230					260		180	430	285				465	535		
4		1718							295																
5		1783	775	1520		930			360				280		200	475	315	465	535		510	580			
6		1848					310	285	425	342	2	170	210		210		225	530	345	460	530	35	540	610	
7		1953	815	1575		1000			490					305		250	575	385	480	550		610	680		
8		2133	930	1810		1130	390		555					330		280	640	410	460	530		650	720		
9		2198							620					360											
10		2263	1000	1945		1240	410		685							280	640	410	460	530					
QD46-50		2	1681	775	1430		900	250		183					330		200	475	315	520	580	45	520	580	4-Φ 24
	3	1741							243																
	4	1841	815	1570	530	1060	235		303	346				325		225	530	345	560	630		560	630		
	5	2016	930	1760	555	1115	270		363					340		250	575	385	530	590		600	660		
	6	2146	1000						423												50	670	730		
	7	2256	1050	2060	725	1470	380	356	483		2	210	270	380	300	280	640	410	500	560					
	8	2316							543																
	9	2572	1240						603																
	10	2632							663					440		315	865	576	510	580	60	730	800		
	11	2692	1310	2230	745	1490	360		723	349															
	12	2752							783																
	QD85-45	2	1640	775	1265		840	200		203					325		200	475	315	520	580		520	580	4-Φ 24
3		1869	930	1485		1040	230	303	277	337	3	210	250	360	250	250	575	385	530	590	40	635	695		
4		2013	1000						351					380		280	640	410	520	580		670	730		
5		2137	1050	1740	560	1120	310		425														6-Φ 24		

Model	Stage	Pump + motor overall installation size (separate base)																																																																	
		L	L电	L1	L2	L3	L4	L5	L6	L7	L8	C	H	H1	H2	H3	H'	HD	AD	B1	B1'	h	n-Φd	A	AA	B	BB	4-ΦK	EC																																						
QD85-45	6	2284	1258	750	380	795	190	303	499	340		4	210	250	345	250	315	865	576	540	600	40	4-Φ26	508	628	406	609	28	392																																						
	7	2428	900						525																	798	832			721																																					
	8	2502		1328	798	837																																																													
	9	2576																																																																	
QD85-67	2	2268	930	765	400	814.5	182.5	490	283	557		4	270	350	420	350	250	575	385	600	670	50	4-Φ30	406	490	349	455	28	308																																						
	3	2476	1050			880.5			371								280	640	410							457	550		419	581	330																																				
	4	2754	1240			950.5			459															406	609																																										
	5	2912	1310			994.5			547								635	723	811					899	315	865	576		610	740	532	610	740	560	830	394																															
	6	3000		945	580		948.5	635		723	811	899	315	865	576	610				740	560	830	394																																												
	7	3000	1222	1125	760	994.5	547	635	723	811	899	315	865	576	610	740	532	610	740	560	830	394																																													
	8	3408	945																				580	948.5	635	723	811	899	315	865	576	610	740	560	830	394																															
	9	3496	1540																				1125	760	1028.5	899																																									
	QD155-30	2	1937	858	730	450	629	140	355	315	388		4	280	350	400	350	225	530	345	600	680	50	4-Φ26	356	435	311	393	19	302																																					
3		2181	1000	718.5			430			280								640	410	457							550	419	581	24	330																																				
4		2346	1050	776			545																																																												
5		2711	1270	1075			795			800.5								862	722	1005					1120	1235	315	865	576	610	740	560	830	394																																	
6		2896	1340		1165	780.5		876	283		371	459	547	635	723	811	899				315	865	576	610											740	560	830	394																													
7		3011																																					1075	795	800.5	862	722	1005	1120	1235	315	865	576	610	740	560	830	394													
8		3126	1420	1165	780.5	876	283	371	459	547	635	723	811	899	315	865	576	610	740	560	830	394																																													
9		3242																					1075	795	800.5	862	722	1005	1120	1235	315	865	576	610	740	560	830	394																													
10		3587																					1570																																												
QD155-67		2	2388	1050	765	400	836.5	182.5	490	283	557		4	270	350	420	350	280	640	410	600	670	50	4-Φ30	457	550	419	581	24	330																																					
	3	2736	1310	906			371			315								865	576	457							628	457	660	356																																					
	4	2736	1222	950.5			459													508					628	457	600	356																																							
	5	3142	1540	580			1031			987.5								811	899	315					865	576	610	740	610	740	630	855	830	394																																	
	6	3230			1075	795		800.5	862		722	1005	1120	1235	315	865	576				610	740	630	855											830	394																															
	7	3319	945	580	1031	987.5	811	899	315	865	576	610	740	610	740	630	855	830	394																																																
	8	3277	1410	1125	760	1180.5	876	283	371	459	547	635	723	811	899	315	865	576	610	740	560	830	394																																												
	9	4045	2090																					1180.5	899																																										
	10	4450	2420																					1270	770	373																																									
QD280-43	3	2621	1340	735	435	835	150	384	503	385		5	330	400	450	450	315	865	576	700	770	50	4-Φ30	508	628	508	711	28	386																																						
	4	2751				900			633								355	1035	680							457	628			508	711	386																																			
	5	3111	1570	1125	800	820.5			886.5								763	893	400					1200	790	710	900			1000	1500	35	545																																		
	6	3241				820.5																												886.5	763	893	400	1200	790	710	900	1000	1500	35	545																						
	7	3702	1900	1385	1060	1100.5	1035.5	1100.5	1283	417		6	400	1200	790	710	900	1000	1500	35	545																																														
	8	3832				1035.5																1100.5	1283	417																																											
	9	3962																																																																	

Model	Stage	Pump + motor overall installation size (separate base)																																	
		L	L电	L1	L2	L3	L4	L5	L6	L7	L8	C	H	H1	H2	H3	H'	HD	AD	B1	B1'	h	n-Φd	A	AA	B	BB	4-ΦK	EC						
QD280-65	2	2736	1260	555	235	1076.5	160	536	345	623	6	380	500	530	500	315	740	532	790	870	50	4-Φ30	508	628	457	600	28	386							
	3	3444	1800	670	310	1243			475							355	1070	740					630	800	900	1420		525							
	4	3674	1900	1060	700	1003			605							400	1200	790					710	900	1000	1500		35	545						
	5	3804		1133	735	865			450							1350	840	800												1000	1120	1760	565		
	6	3935		1263	995	1125																												1255	1385
	7	4315		1190	830	1274																													
	8	4445	2150	1450	1090	1154					1284	800	1000	1120	1760				565																
	9	4575		1284	1255	1385																													
	10	4705		1580	1220	1284			1385																										
	QD360-40	2	2539	1340	645	340			779.5		150	384	390	415	6	330	400	450	450	315	865	576	700	780	50	4-Φ40	508	628	457	660	28	386			
3		2599	1260	919.5		530	740	532	610	740			560							600	424														
4		3049	1570	925		620	817.5	670	355	1035			680							710	900	1000					1500	35	545						
5		3189	1900	1065		760	957.5	810	400	1200			790							710	900	1000					1500	35	545						
6		3659		1078.5		950	400	1200	790	710			900							1000	1500	35					545								
7		3799		1205		900	1078.5	1090	400	1200			790							710	900	1000					1500	35	545						
8		4049		1570		925	620	817.5	670	355			1035							680	710	900					1000	1500	35	545					
QD450-60	2	3357	1800	615	235	1223	190	536	421	589	7	410	550	560	500	355	1070	740	850	950	50	4-Φ42	630	800	900	1420	28	525							
	3	3610	770	390	1241	574			400							1200	790	710					900	1000	1500	35	545								
	4	3763	1900	920	540	1244			727							400	1200	790					710	900	1000	1500	35	545							
	5	4166	2150	1230	850	1185			880							450	1350	840					800	1000	1120	1760	35	565							
	6	4319		1260	1033	1186			450							1350	840	800					1000	1120	1760	35	565								
	7	4472		1530	1150	1188			450							1350	840	800					1000	1120	1760	35	565								
	8	4625		1266	1339	450			1350							840	800	1000					1120	1760	35	565									
	9	5048	1353	1492	500	1520			900							900	1120	1250					1940	42	725										
	10	5201	2420	1840	1460	1506			1645							500	1520	900					900	1120	1250	1940	42	725							
	QD500-57	2	3357	1800	615	235			1223							190	536	421					589	7	410	550	560	500	355	1070	740	850	950	50	4-Φ42
3		3610	770	390	1241	574	400	1200	790	710	900	1000	1500	35	545																				
4		3763	1900	920	540	1244	727	400	1200	790	710	900	1000	1500	35			545																	
5		4166	2150	1230	850	1185	880	450	1350	840	800	1000	1120	1760	35			565																	
6		4319		1260	1033	1186	450	1350	840	800	1000	1120	1760	35	565																				
7		4472		1530	1150	1188	450	1350	840	800	1000	1120	1760	35	565																				
8		4625		1266	1339	450	1350	840	800	1000	1120	1760	35	565																					
9		5048	1353	1492	500	1520	900	900	1120	1250	1940	42	725																						
10		5201	2420	1840	1460	1418	1645	500	1520	900	900	1120	1250	1940	42			725																	
QD580-60		2	3605	1880	757	377	1205	190	599	490	625	7	430	550	580			550	355	1070	740	930							1030	50	4-Φ42				
	3	3825	957	577	690	400	1200			790						710	900		1000	1500	35		545												
	4	4025	1900	1157	777	890	400			1200						790	710		900	1000	1500		35	545											
	5	4475	2150	1357	977	1090	450			1350						840	800		1000	1120	1760		35	565											
	6	4675		1557	1177	1290	450			1350						840	800		1000	1120	1760		35	565											
	7	4875		1757	1377	1490	450			1350						840	800		1000	1120	1760		35	565											
	8	5345		1957	1577	1690	450			1350						840	800		1000	1120	1760		35	565											
	9	5545	2157	1777	1890	450	1350			840						800	1000		1120	1760	35		565												
	10	5745	2357	1977	2090	450	1350			840						800	1000		1120	1760	35		565												
	QD720-60	2	3655	1900	712	412	1226			150						618.5	518.5		607	7	520		629	700	620	400	1200	790				970	1050	50	4-Φ35
3		3840	897		597	703.5	450	1350	840		800	1000	1120	1760	565																				
4		4275	1082		782	888.5	450	1350	840		800	1000	1120	1760	565																				
5		4460	1267		967	1073.5	450	1350	840		800	1000	1120	1760	565																				
6		4915	1452	1152	1258.5	450	1350	840	800		1000	1120	1760	565																					
7		5100	1637	1337	1443.5	450	1350	840	800		1000	1120	1760	565																					
8		5285	1822	1522	1628.5	450	1350	840	800		1000	1120	1760	565																					
9		5470	2007	1707	1813.5	450	1350	840	800		1000	1120	1760	565																					

QD(G) Multistage Centrifugal Pump

Flange size table

Model	Inlet flange								Outlet flange							
	Dg	D	D1	D2	D3	b	f1/f2	n-Φdo	Dg	D	D1	D2	D3	b	f1/f2	n-Φdo
QD6-25	40	130	100	80	—	18	—/3	4-13.5	40	150	110	88	75	20	4/3	4-17.5
QD12-25	50	140	110	90	—	18	—/3	4-13.5	40	150	110	88	75	20	4/3	4-17.5
QD12-50	50	160	110	90	—	30	—/3	4-13.5	50	175	135	105	87	28	4/3	4-23
QD25-30	65	160	130	110	—	20	—/3	4-13.5	65	185	145	122	109	28	4/3	8-17.5
QD25-50	80	190	150	128	—	18	—/3	4-17.5	80	210	170	140	120	30	4/3	8-23
QD46-30	80	190	150	128	—	22	—/3	4-17.5	65	185	145	122	109	28	4/3	8-17.5
QD46-50	80	190	150	128	—	18	—/3	4-17.5	80	210	170	140	120	30	4/3	8-23
QD85-45	100	210	170	148	—	24	—/3	4-17.5	100	235	190	160	149	30	4.5/3	8-33
QD85-67	150	265	225	202	—	33	—/3	8-18	150	345	280	242	203	38	4.5/3	8-33
QD155-30	150	285	240	212	—	26	—/3	8-22	150	300	250	212	—	34	—/3	8-26
QD155-67	150	265	225	202	—	33	—/3	8-18	150	345	280	242	203	38	4.5/3	8-33
QD280-43	200	340	295	268	—	28	—/3	8-22	200	375	320	285	259	38	4.5/3	12-30
QD280-65	200	340	295	268	—	30	—/3	12-22	200	415	345	285	259	44	4.5/3	12-36
QD360-40	200	340	295	268	—	28	—/3	8-22	200	375	320	285	259	38	4.5/3	12-30
QD450-60	250	405	355	320	—	32	—/3	12-26	250	470	400	345	312	48	4.5/3	12-36
QD500-57	250	405	355	320	—	32	—/3	12-26	250	470	400	345	312	48	4.5/3	12-36
QD580-60	300	460	410	370	—	32	—/3	12-26	250	470	400	352	312	48	4.5/3	12-36
QD720-60	300	460	410	370	—	34	—/4	12-26	300	530	460	412	363	54	4.5/4	16-36