



Enriching Lives

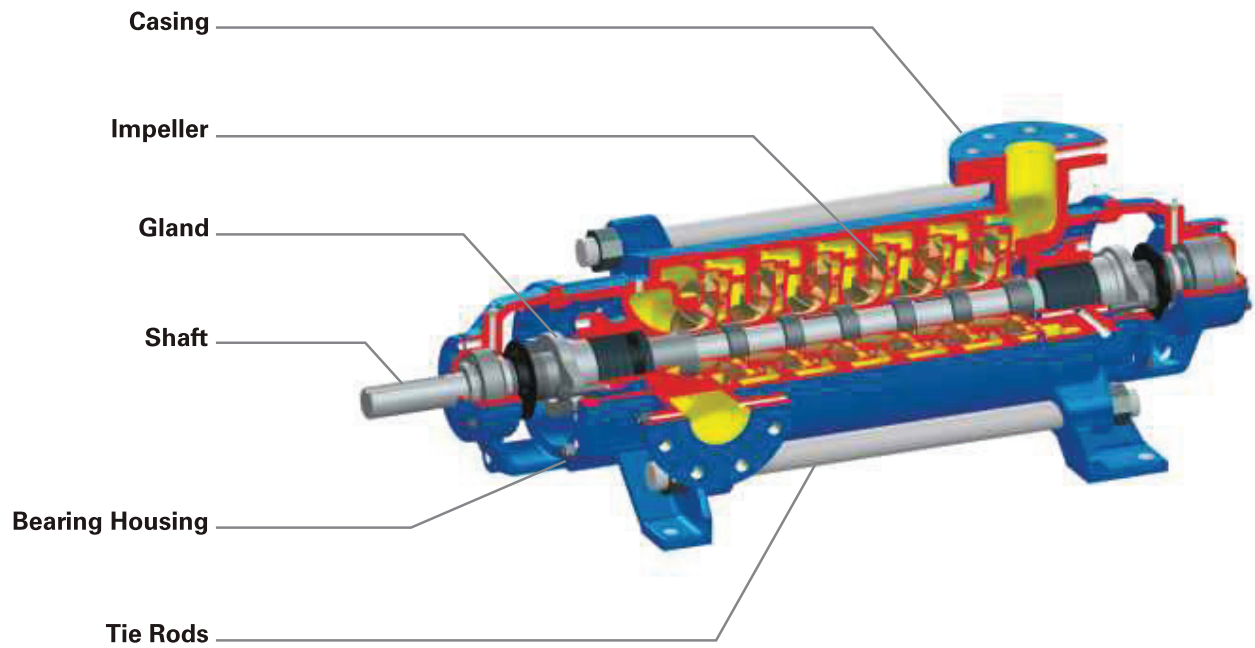
MULTISTAGE PUMPS

TYPE - RKB



CE

KIRLOSKAR BROTHERS LIMITED



RANGE

Delivery size : up to 250 mm
 Capacity : up to 850 m³/hr
 Head : up to 850 metres

APPLICATIONS

Sprinkler Irrigation, Fire Fighting, Water Supply to high rise buildings, Descaling, Mine Dewatering and Boiler Feed

FEATURES

This pump consists of a number of ring section diffuser casings bolted suction and delivery casing. Various models are available to operate at 1450 rpm and 2900 rpm at 50 Hz power supply frequency.

Casing :

Latest casing techniques ensure smoothness of hydraulic passages resulting in high efficiency and reliability under hazardous conditions. The delivery flange is vertical. The suction flange can be oriented left or right viewed from driving end.

Impeller :

The enclosed impellers of the radial flow type are provided with balancing holes to balance the hydraulic axial thrust. The rotating elements are statically and dynamically balanced.

Shaft :

The high tensile steel shaft accurately machined and ground is supported by antifriction bearings that take the residual axial thrust and prevent axial float or radial run out. The shaft is protected by shaft sleeve from wear in stuffing box area.

Stuffing Box :

The stuffing box can be sealed by gland packing or by mechanical seal with minor modification. While pumping high temperature liquids from 90°C to 140°C, cooling jacket is provided for the stuffing box.

Bearing :

Standard lubrication is grease. For temperature above 90°C and upto 140°C - oil lubrication is required.

Direction of Rotation :

Standard : Clockwise viewed from driving end.

Optional : Anticlockwise viewed from driving end.

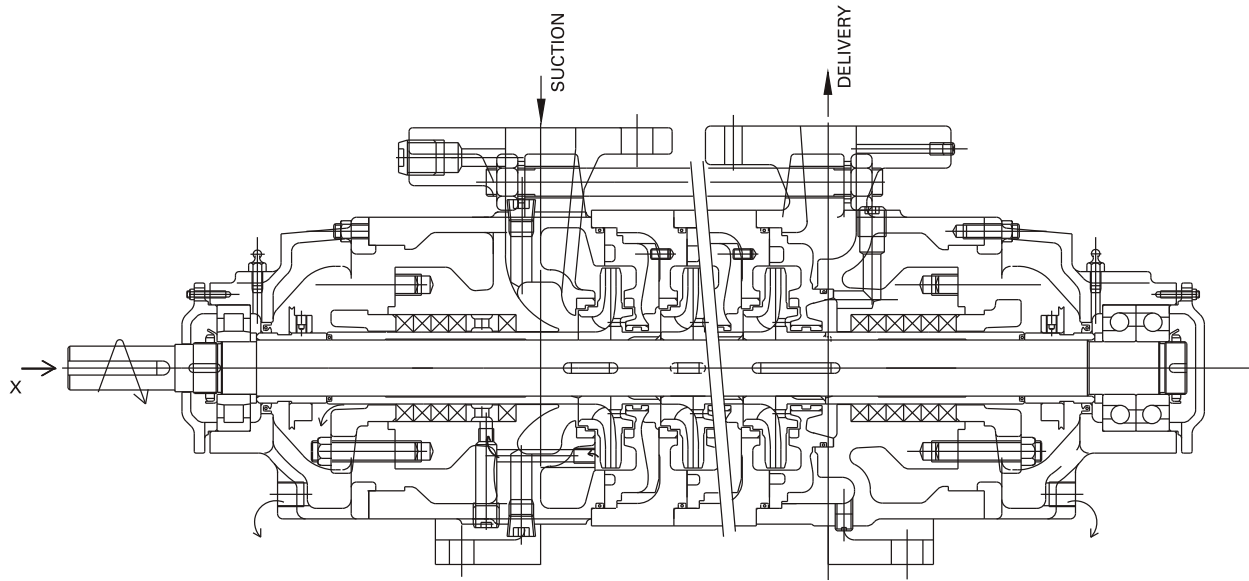
Drive :

These pumps are suitable for coupling with electric motors, I C engines or steam turbine either directly or through belt drives.

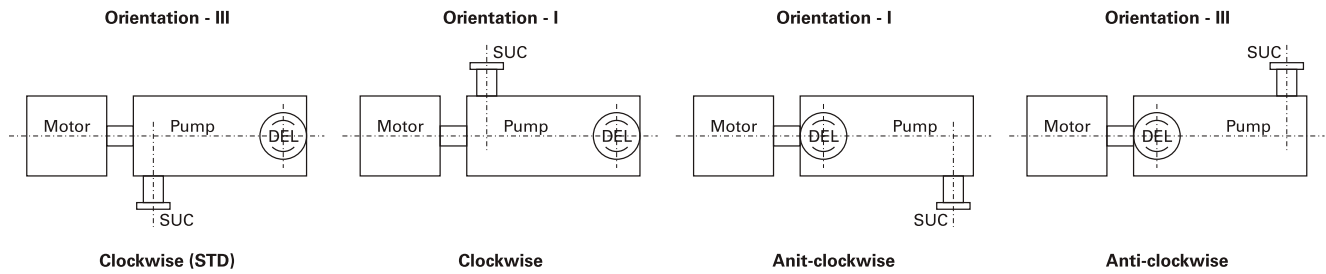
Flanges :

	Standard	Optional
Suction Flange	DIN ND - 10	ASA 125, 150 BS 4504-16/11
Delivery Flange	DIN ND - 40 or ND - 64	ASA 250, 300 or 800 BS 4504-16/11

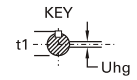
CROSS-SECTIONAL VIEW



ORIENTATION / ROTATION



MOUNTING DETAILS



Pump Dimensions																																			
Sr. no.	Pump Type	SUC	DEL	E	F	N1	L1	H1	H2	T Thk	J	K	R	G	Q Crs	N2	L2	No. of holes S1	d10	Shaft Details					SUC. Flanges				DEL. Flanges						
																				Do	U hg	I	t1	Y1	PN10				PN40		PN64				
																									S	d0	F	T2	T1 Thk	S'	d'0	F'	S'	d'0	F'
1	RKB 32-9E	40	32	269.5	209.5	15	60	112	252	14	105	140	245	210	180	15	60	4	14	25j6	8	60	28	-	4	18	110	18	23	4	15	100	-	-	-
2	RKB 40-12L	50	40	274	218	15	60	125	275	14	130	150	280	260	230	18	60	4	14	30k6	8	60	33	-	4	18	125	20	23	4	18	110	-	-	-
3	RKB 50-15E/L	65	50	330	265	20	70	135	315	15	140	180	320	280	240	20	65	4	19	35k6	10	80	38	-	4	18	145	20.5	25	4	18	125	-	-	-
4	RKB 65-19E/L	80	65	393	326	20	70	180	380	15	180	200	380	360	315	20	70	4	19	40k6	12	110	43	46	8	18	160	21	33	8	18	145	8	22	160
5	RKB 65-24	80	65	565	464	15	100	250	550	25	230	300	530	460	360	45	100	4	24	60m6	18	90	64	68	8	18	160	51	33	8	18	145	8	22	160
6	RKB 100-23E	125	100	407	327	30	80	215	490	18	205	275	480	420	360	30	80	4	24	45k6	14	110	48.5	52	8	18	210	26	38	8	22	190	8	26	200
7	RKB 125-27	150	125	435.5	379.5	40	100	250	565	25	245	315	560	490	400	40	100	4	24	50k6	14	110	53.5	57	8	22	240	28	45	8	26	220	8	30	240
8	RKB 125-30	150	125	453.8	404.9	40	100	280	630	25	250	350	600	530	440	40	100	4	26	55m6	16	110	59	63	8	22	240	28	45	8	26	220	8	30	240
9	RKB 150-34	200	150	511.5	476.5	40	100	300	700	25	278	400	678	550	460	40	100	4	26	60m6	18	140	64	68	8	22	295	30	55	26	250	8	33	280	
10	RKB 200-37	250	200	537	497	40	110	350	850	28	320	500	820	630	550	40	110	4	26	65m6	18	140	69	73	12	22	350	32	54	12	30	320	12	36	345
11	RKB 250-46	300	250	781	790	40	65	450	1050	48	400	600	1140	790	650	70	140	4	42	90m6	25	170	100	100	16	33	450	48	50	12	33	450	-	-	-

All dimensions are in mm

MATERIALS

MATERIAL OF CONSTRUCTION

Casing Suction / Discharge / Stage	Cast Iron / Cast Steel / Stainless Steel / Duplex Steel
Impeller	Cast Iron / Bronze / Phosphor Bronze / Cast Steel / Stainless Steel / Chrome Steel / Duplex Steel
Diffuser	Cast Iron / Bronze / Phosphor Bronze / Cast Steel / Stainless Steel / Chrome Steel / Duplex Steel
Casing wear Ring	Cast Iron / Bronze / Steel
Shaft	Carbon Steel / Stainless Steel
Shaft Sleeve	Stainless Steel / Bronze

MATERIAL STANDARDS

Material Type	Indian Standard (IS)	American Standard (ASTM)	DIN
Cast Iron			
Cast Iron	IS 210 Gr. FG 260	ASTM A48 Class 40	(0.6025)DIN 1691 GG25
Spheroidal Graphite Cast Iron			
SG Iron (Ductile Iron)	IS 1865 Gr 400/15	A536, 60-40-18	(0.7040)DIN1693 GGG40
SG Iron (Ductile Iron)	IS 1865 Gr 500/7	A536, 65-45-12	(0.7050)DIN1693 GGG50
Carbon Steel			
Carbon steel (Wrought)	IS 1570 (part II) Gr. 40C8	ASTM A107 Gr. 1040	(1.1186)C40E/CK40
Carbon steel (Wrought)	IS 1570 (part II) Gr. 20C8	ASTM A107 Gr. 1020	(1.0402)C22
MS Steel	MS IS 2062 - Fe 410 W A	ASTM-A283 GR.D	DIN 1700 GR ST4-2 FABRICATED STEEL44
Cast Steel Grades			
Cast Steel		ASTMA 216 Gr. WCB	1.0619(GS-C25)
Cast Stainless Steel			
Stainless Steel CF8M	IS 3444 Gr. 4	ASTMA 351 Gr. CF8M	1.4408(GX5CrNiMo19-11-2)
Stainless Steel CF8M	IS 3444 Gr. 4	ASTMA 743 Gr. CF8M	1.4408(GX5CrNiMo19-11-2)
Stainless Steel CF3M	IS 3444 Gr. 16	ASTMA 351 Gr. CF3M	1.4409(GX2CrNiMo19-11-2)
Stainless Steel CF3M	IS 3444 Gr. 16	ASTMA 743 Gr. CF3M	1.4409(GX2CrNiMo19-11-2)
Stainless Steel CF8	IS 3444 Gr. 1	ASTMA 351 Gr. CF8	1.4301(X5CrNi18-10)
Stainless Steel CF3	IS 3444 Gr. 15	ASTMA 351 Gr. CF3	1.4306(X2CrNi19 11)
Cast Chromium Stainless Steel			
Stainless Steel CA15	IS 3444 Gr. 10	ASTMA 217 Gr. CA15	1.4106&1.448(DIN17445 GX12Cr14)
Stainless Steel CA15	IS 3444 Gr. 10	ASTMA 743 Gr. CA15	1.4106&1.448(DIN17445 GX12Cr14)
Stainless Steel CA6NM	IS 3444 Gr. 24	ASTMA 487 Gr. CA6NM	1.4313&1.4317(GX5CrNiMo13-4)
Stainless Steel CA6NM	IS 3444 Gr. 24	ASTMA 743 Gr. CA6NM	1.4313&1.4317(GX5CrNiMo13-4)
Chromium Stainless Steel Round Bar Material			
Stainless steel 410	IS 1570 (part V) Gr. X12Cr12	ASTMA 276 type 410	1.4006(X10Cr13)
Stainless steel 420	IS 1570 (part V) Gr. X20Cr13	ASTMA 276 type 420	1.4021(X20Cr13)
Stainless steel 431	IS 1570 (part V) Gr. X15Cr16Ni2	ASTMA 276 type 431	1.4057(X20CrNi17)
Stainless steel 316	IS 1570 (part V) Gr. X04Cr17Ni12Mo2	ASTMA 276 type 316	1.4401(X5CrNiMo17122)
Stainless steel 316L	IS 1570 (part V) Gr. X02Cr17Ni12Mo2	ASTMA 276 type316L	1.4404(X2CrNiMo1810)
Cast Duplex Steel			
Duplex Steel 1A		ASTMA 890 Gr. CD4MCu	25Cr-5Ni-Mo-Cu
Duplex Steel 2A		ASTMA 890 Gr. CE8MN	24Cr-10Ni-Mo-N
Duplex Steel 3A		ASTMA 890 Gr. CD6MN	25Cr-5Ni-Mo-N
Super Duplex steel 4A		ASTMA 890 Gr. CD3MN	25Cr-7Ni-Mo-N
Super Duplex steel 5A		ASTMA 890 Gr. CE3MN	24Cr-10Ni-Mo-N
Non Ferious Materials			
Bronze	IS 318 Gr. LTB2 (CuSn5Zn5Pb5C)	ASTMB 584 - C90500	DIN 1705 Rg 5
Phosphor Bronze	IS 28 Gr. 1 (CuSn11PC)		
Zinc Free Bornze	IS 28 Gr. 1 (CuSn10C)		

ALTERNATIVES AVAILABLE

Pump in Vertical Configuration

Pumps available in vertical execution complete with motor-stool /driving unit. Rotation anti-clockwise seen from top.

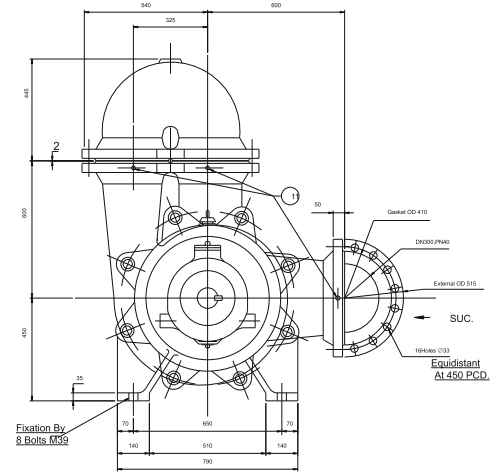
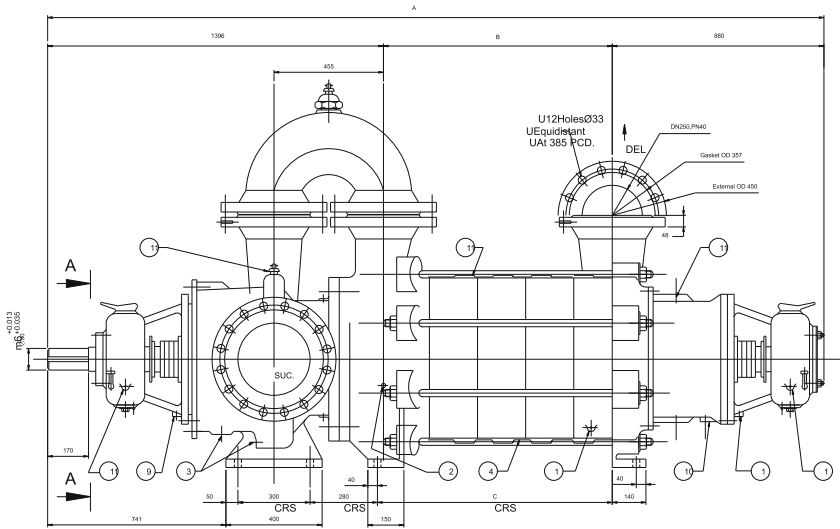


Low NPSH Pumps

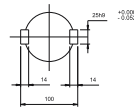
Model : RKB 250-46 DK

First Stage impeller : Double Suction

Subsequent Stages : Single Suction



- ① Del. casing drain - 1/2"BSP.
- ② Suc.casing drain - 1/2"BSP.
- ③ Pump casing drain - 1/2"BSP.
- ④ Stage casing drain - 1/2"BSP.
- ⑤ Suc & Del Pressure gauge conne- 1/2"BSP.
- ⑥ Pressure leak of water conne - 1.1/2"BSP.
- ⑦ Pump casing air vent-3/8"BSP.
- ⑧ Storage casing air vent - 3/8"BSP.
- ⑨ Gland leakage drain - 1/2"BSP.
- ⑩ Stuffing box housing NDE drain- 1"BSP.
- ⑪ Bearing housing cooling inlet & outlet-3/4"BSP.

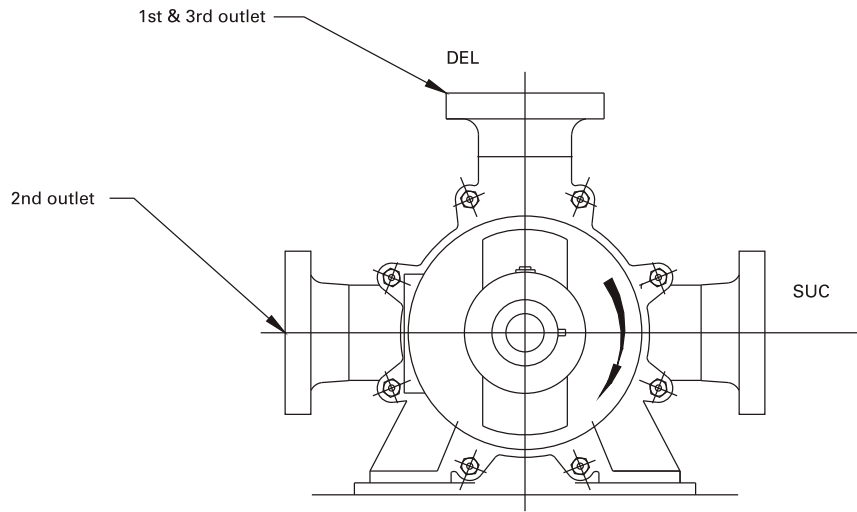
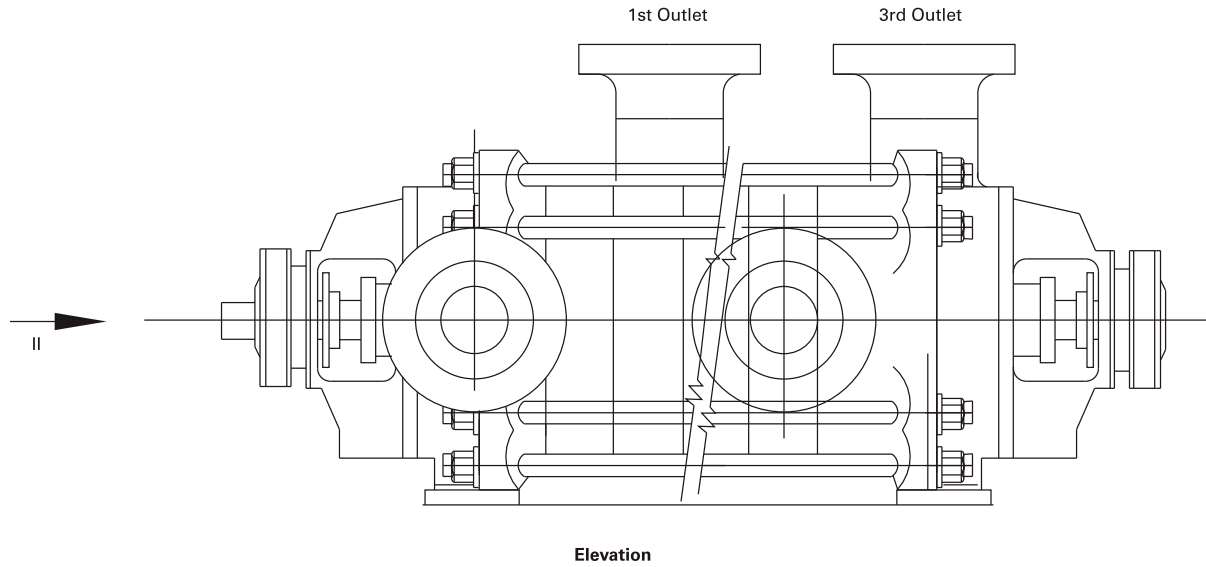


SECTION A-A

Dimensions	No. of Stages			
	2	3	4	5
A	2198	2406	2614	2822
B	535	743	951	1159
C	660	868	1076	1284
Wt. Kg.	1900	2448	2595	2942

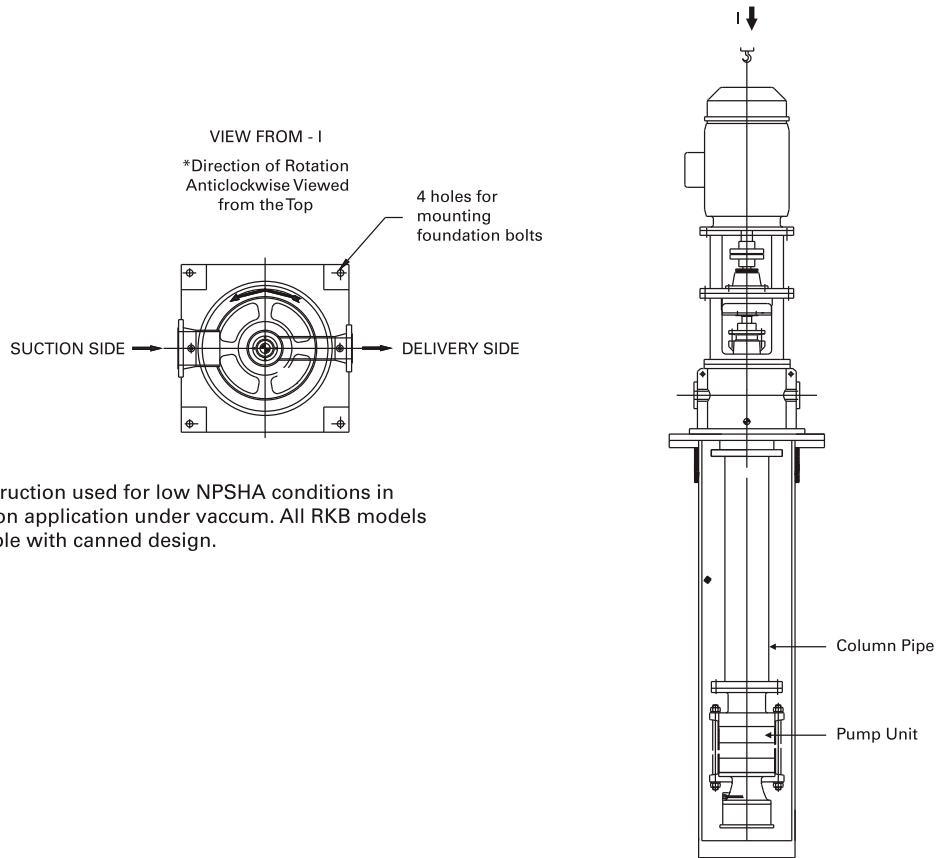
OUTLINE DRAWING OF RKB MULTI-OUTLET PUMPS

RKB Multi-outlet arrangement is normally used when capacity is fixed and total head changes time to time, without disturbing the pump's internals. Available with option of two or three outlets depending upon the requirement.



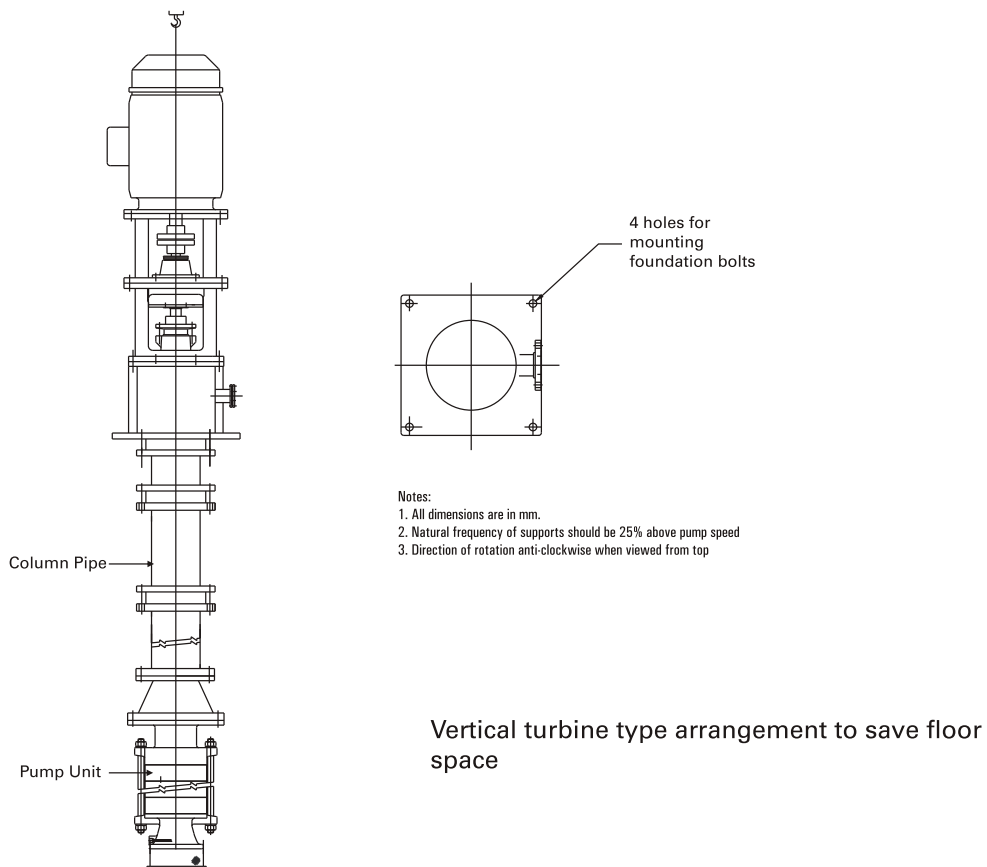
OUTLINE DRAWINGS

RKBCV Pump



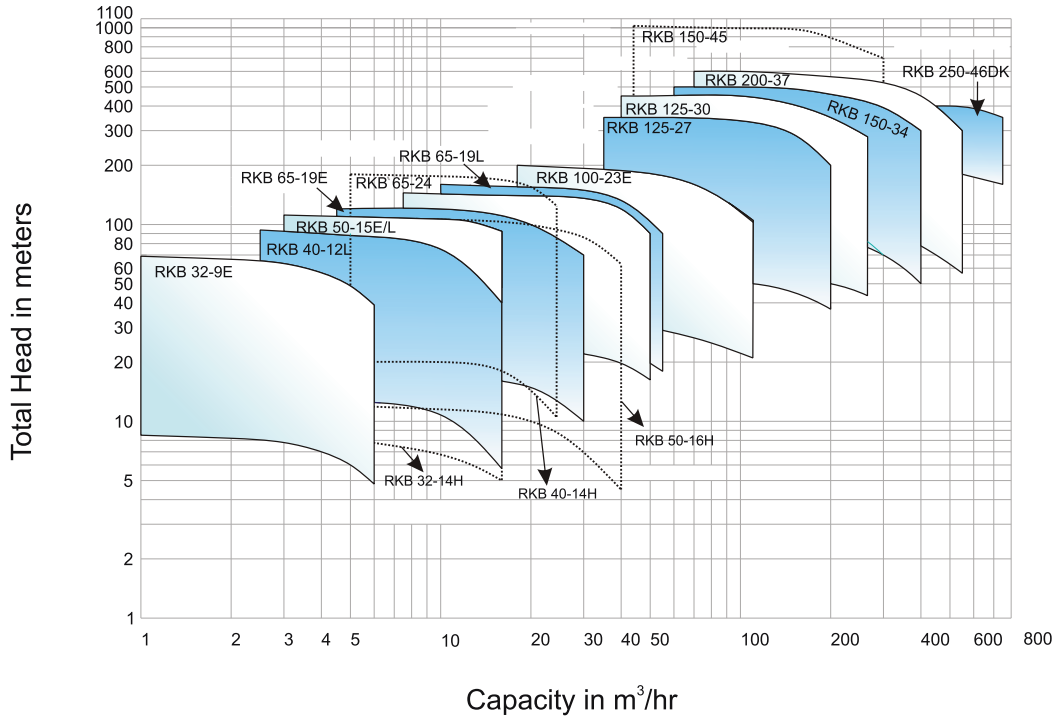
Canned pump construction used for low NPSHA conditions in condensate extraction application under vacuum. All RKB models can be made available with canned design.

RKBS Pump

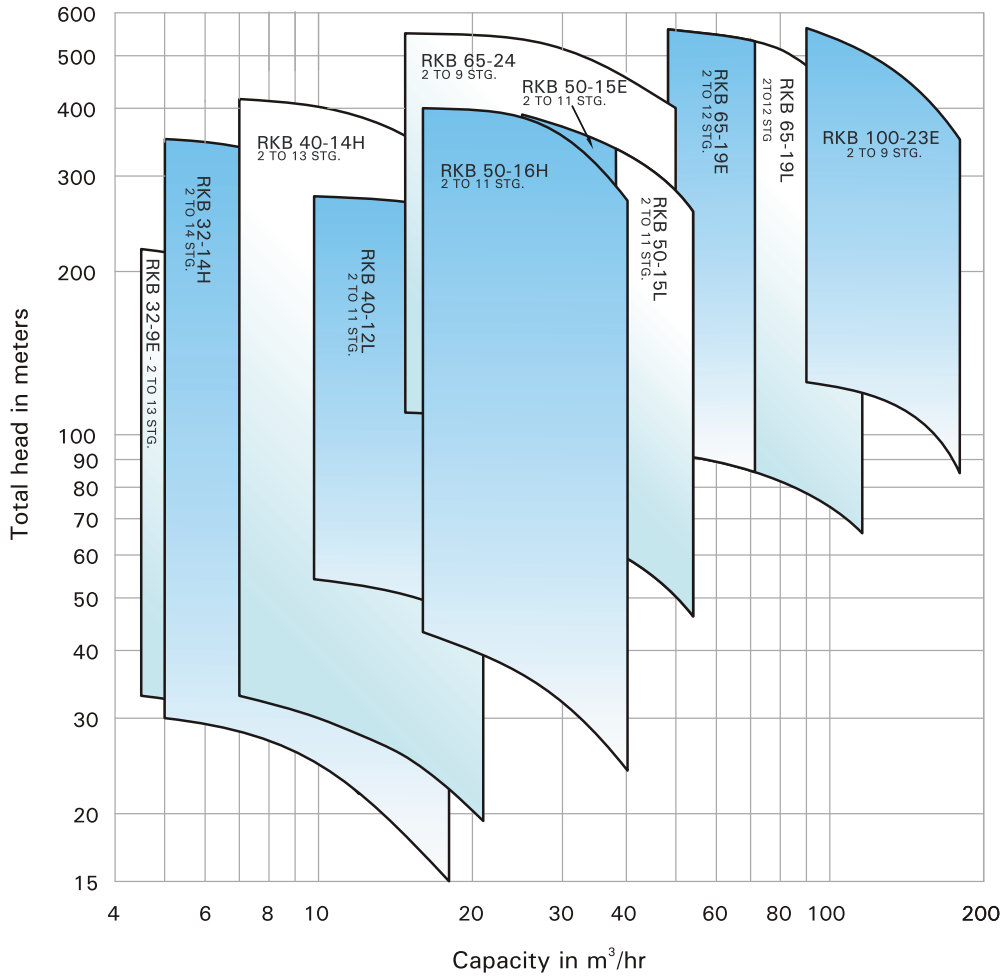


FAMILY CURVES

Pump at 1450 rpm-50Hz



Pump at 2900 rpm-50Hz



OUR GLOBAL PRESENCE



As we are constantly endeavouring to improve the performance of our products/ equipment, we reserve the right to make alterations from time to time and as such our products/ equipment may differ from that detailed in this publication. For latest information you may get in touch with our Regional Sales Offices.



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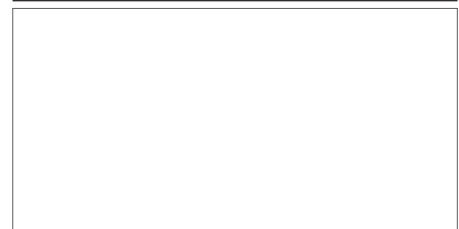
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