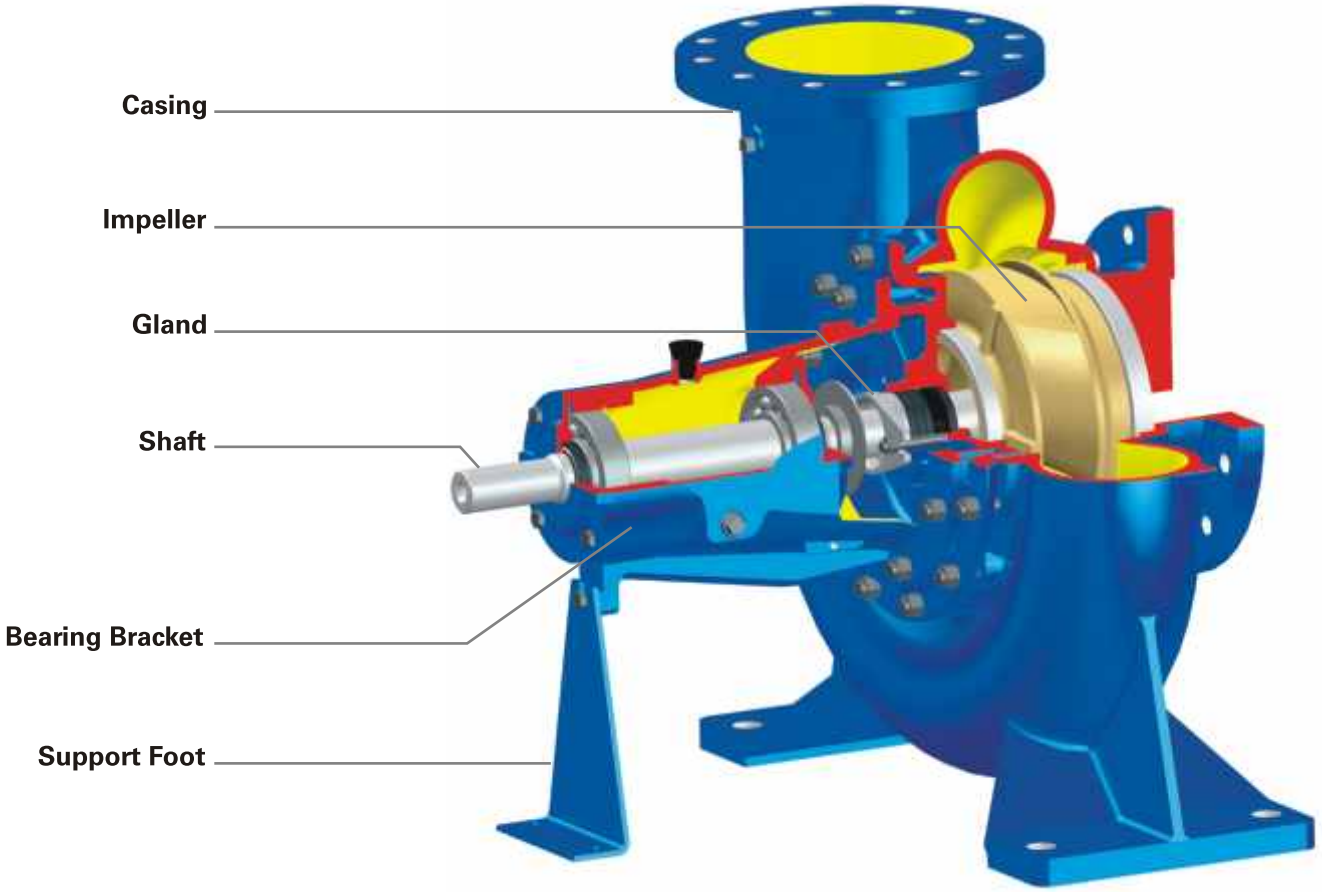
Enriching Lives

END SUCTION PUMPS

TYPE - DB LARGE

CE

KIRLOSKAR BROTHERS LIMITED



RANGE

Delivery size	:	150 mm to 300 mm
Capacity	:	up to 2100 m^3/hr
Head	:	up to 42 metres

APPLICATIONS

Water Supply, Irrigation, Water Circulation, Injection Water Systems and Prawn Farming

FEATURES

These are horizontal shaft single stage, single suction pumps of back pull out type design. These pumps operate at 1450 rpm at 50Hz.

Casing :

End suction with top centre line delivery for DB150 / 26 and tangential vertical delivery for remaining sizes high efficiency volute type, suction and discharge nozzles as well as the supporting feet are cast integral with the casing.

Impeller :

Enclosed type and balanced dynamically. Hydraulically balanced by balancing holes.

Shaft :

Three shaft units cover range of DB large size pumps. Made of high tensile steel, accurately ground all over. It is supported by two deep groove ball bearings housed in the bearing housing. Shaft in stuffing box area is protected by a shaft sleeve.

Stuffing Box :

Either gland packed or with mechanical seal. Water-cooled stuffing box can also be provided.

Bearing :

Standard lubrication is oil. Grease lubrication can be given against specific requirement.

Direction of Rotation :

Clockwise when viewed from driving end.

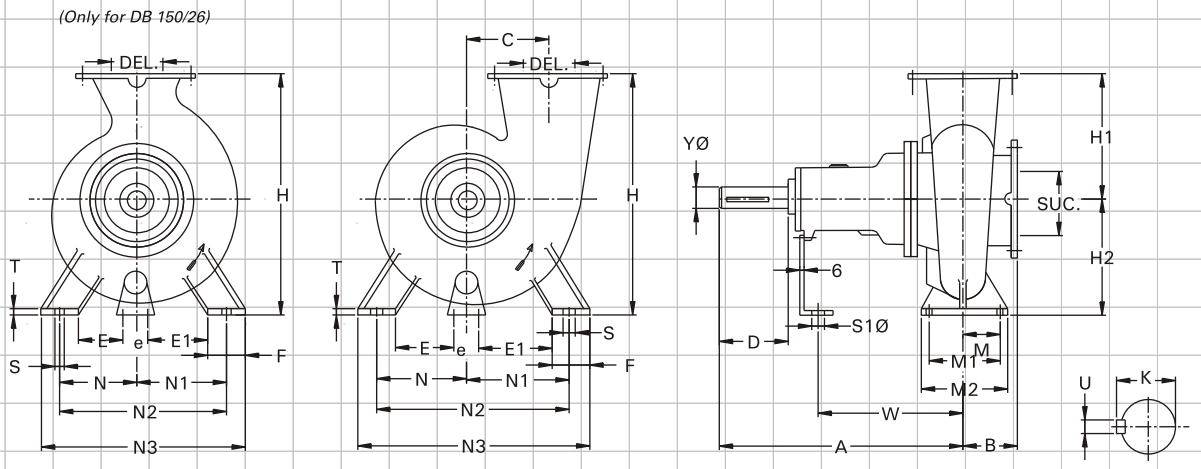
Drive :

These pumps are suitable for coupling with electric motors or I.C. engines (directly or through belt drives.)

Flanges :

As per BS 4504, Table 10/11. Drilling as per ASA/DIN also available.

GENERAL DIMENSIONS / MOUNTING DETAILS

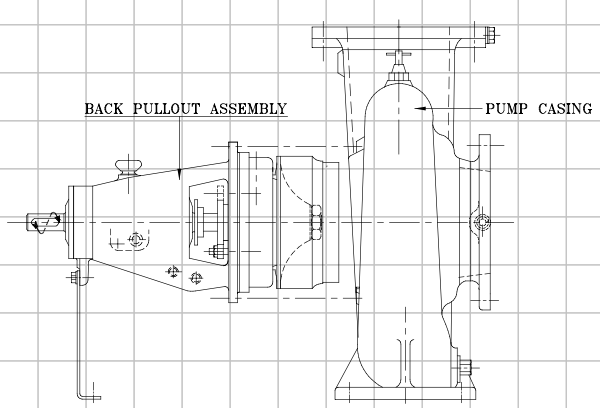


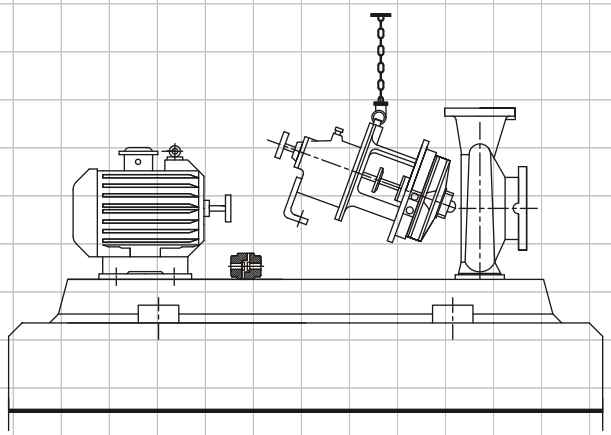
Pump	Suc.	Del.	A	B	C	D	E	E1	F	H	H1	H2	K	M
DB 150/26	200	150	470	160	–	80	150	150	100	655	375	280	35	75
DB 200/26	200	200	560	200	250	110	180	240	110	650	300	350	45	100
DB 200/33	200	200	670	200	265	110	215	215	100	685	315	370	51.5	132.5
DB 250/33A	250	250	670	220	295	110	220	290	120	720	320	400	51.5	140
DB 200/36	200	200	670	200	262	110	215	215	100	685	315	370	51.5	132.5
DB 250/33B	250	250	670	220	310	110	240	320	120	780	350	430	51.5	140
DB 250/36	250	250	670	220	310	110	255	255	120	825	400	425	51.5	140
DB 300/34	300	300	670	250	325	110	240	335	150	850	375	475	51.5	145
DB 300/36	300	300	670	250	345	110	240	335	150	875	400	475	51.5	160

Pump	M1	M2	N	N1	N2	N3	Sø	S1ø	T	U	W	Yø	e	Wt. in Kg
DB 150/26	150	200	200	200	400	500	23	14	20	10	342	32	110	140
DB 200/26	200	260	235	295	530	640	27	19	25	12	400	42	140	202
DB 200/33	265	335	280	280	560	630	33	19	25	14	500	48	140	250
DB 250/33A	280	350	280	350	630	750	33	19	30	14	500	48	140	320
DB 200/36	265	335	280	280	560	630	33	19	25	14	500	48	140	265
DB 250/33B	280	350	300	380	680	800	33	19	30	14	500	48	140	360
DB 250/36	280	350	315	315	630	750	33	19	30	14	500	48	140	400
DB 300/34	290	360	315	410	725	875	33	19	30	14	500	48	140	450
DB 300/36	320	400	315	410	725	875	33	19	30	14	500	48	140	480

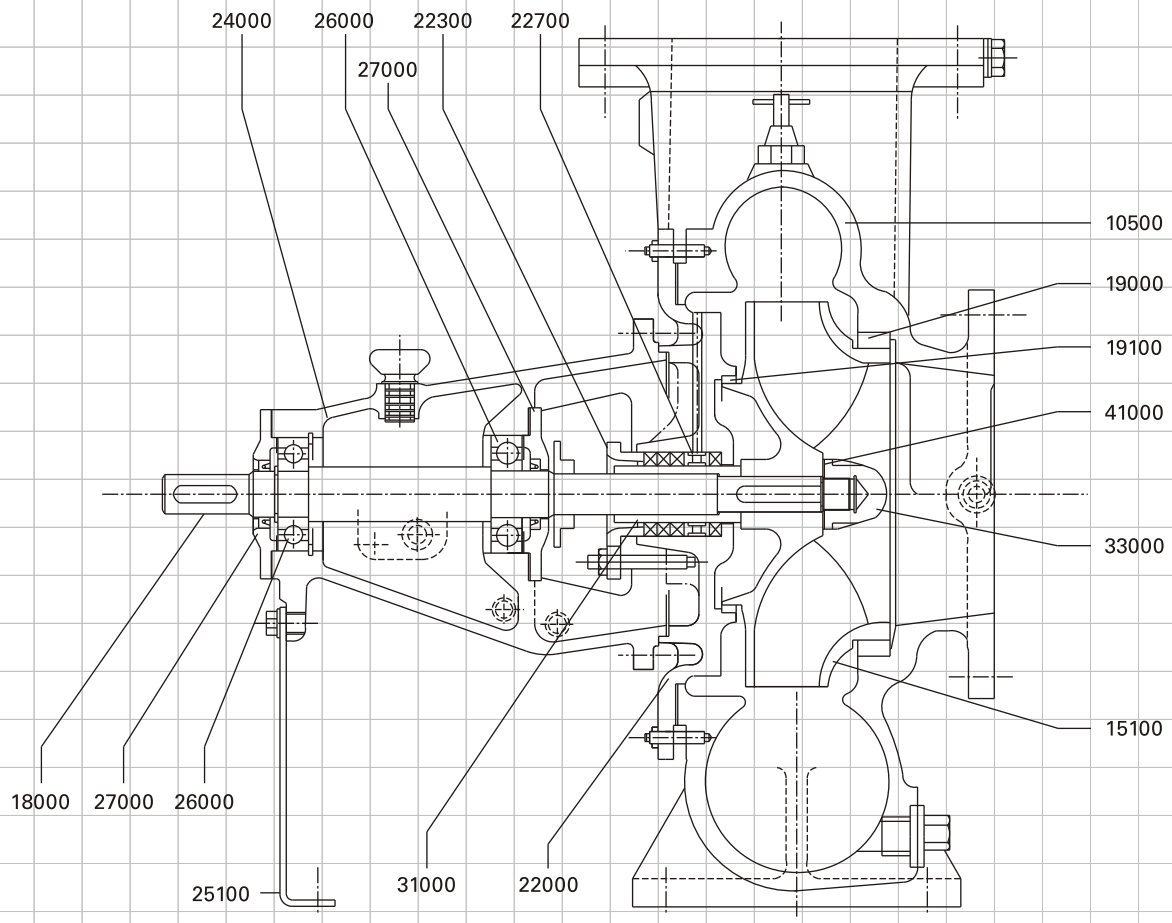
Note : 1. All dimensions are in mm
2. Flanges drilled as per BS4505 PN10

Back Pull Out Arrangement





CROSS-SECTIONAL VIEW



INTERCHANGEBILITY OF COMPONENTS

Part no.	Name of the Part	Total no. of parts	Pump Model								
			150/26	200/26	200/33	200/36	250/33A	250/33B	250/36	300/34	300/36
			Unit-35	Unit-45	Unit-55						
10500	Pump Casing	9	1	2	3	4	5	6	7	8	9
15100	Impeller	8	1	2	3	4	5	5	6	7	8
18000	Shaft	4	1	2	3	3	3	3	4	3	3
19000	Casing Ring	7	1	2	3	3	4	4	5	6	7
19100	Back Wear Ring	5	–	1	2	2	3	3	4	5	5
22000	Casing Cover	7	1	2	3	4	3	3	5	6	7
22300	Gland	3	1	2	3	3	3	3	3	3	3
22700	Lantern Ring	3	1	2	3	3	3	3	3	3	3
24000	Bearing Housing	3	1	2	3	3	3	3	3	3	3
25100	Support Foot	5	1	2	3	3	3	4	5	5	5
26000	Bearing	3	1	2	3	3	3	3	3	3	3
27000	Bearing Cover	3	1	2	3	3	3	3	3	3	3
31000	Shaft Sleeve	4	1	2	3	3	3	3	4	3	3
33000	Impeller Nut	3	1	2	3	3	3	3	3	3	3
41000	Lock Washer	3	1	2	3	3	3	3	3	3	3

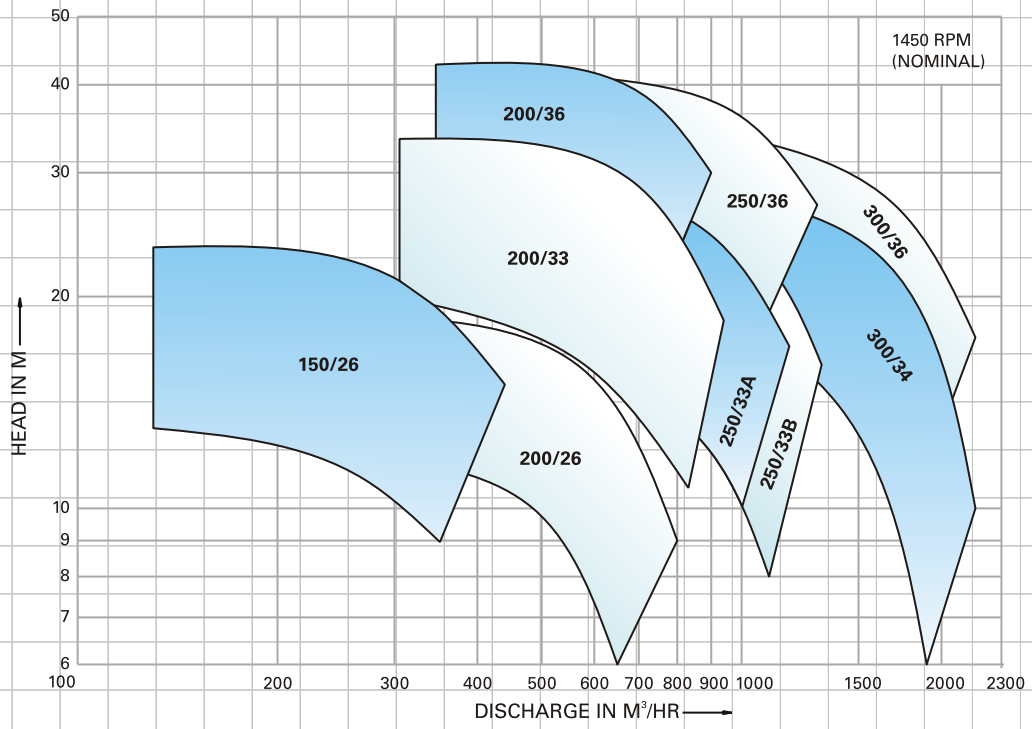
MATERIAL OF CONSTRUCTION

Casing	Cast Iron / Cast Steel / Stainless Steel
Casing Cover	Cast Iron / Cast Steel / Stainless Steel
Impeller	Cast Iron / Bronze / Phosphor Bronze / Cast Steel / Stainless Steel / Chrome Steel
Wear Ring	Cast Iron / Bronze/ Steel
Shaft	Carbon Steel / Stainless Steel
Shaft Sleeve	Stainless Steel / Bronze
Lantern Ring	Cast Iron / Bronze
Gland	Cast Iron / Bronze

MATERIAL STANDARDS

Material	IS	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)
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 BornzeIS 28 Gr. 1 (CuSn10C)

Family Curves of DB Large Pump at 1450 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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