



Enriching Lives

Upgraded experience  
with upgraded version.

# DBxe

End Suction Pump



**KIRLOSKAR BROTHERS LIMITED**

Established 1888

A Kirloskar Group Company

## RANGE

**Delivery size:** 32 to 150 mm | **Capacity:** Up to 550 m<sup>3</sup>/hr | **Head:** Up to 100 meters  
**Speed:** 1450 & 2900 rpm , 1760 & 3500 rpm | **Working Pressure:** ≤16 kg/cm<sup>2</sup> (MAWP)  
**Temperature:** -10 to 90°C | **Sealing:** Gland Packed (Standard), Mechanical Seal (Against Order)  
**Lubrication:** Grease (Standard) & Oil (Against Order)

## APPLICATIONS

These pumps are suitable for clean low viscosity liquid (up to 20 cSt) which are not contaminated by any solid particles. Maximum temperature of the pumped liquid is -10°C to +120 °c with adequate NPSHa to take care of liquid vapor pressure. Few of the applications are as below.

- › Water supply.
- › Air conditioning
- › Industrial water
- › Firefighting equipment
- › Monomers in paint industry
- › Cooling water
- › Condensate
- › Light chemicals
- › Drinking water/Potable water
- › Alcohol in distillery
- › Sprinkler
- › Clean juice in sugar industry
- › Swimming pool water
- › Solvent in pharma industry

## FEATURES

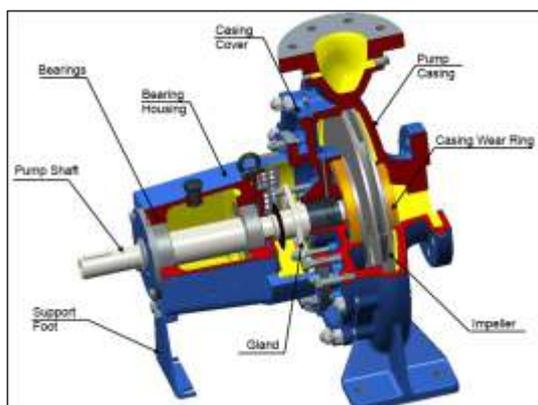
- › **Casing:** The casing has axial suction and top centre line delivery with self venting design. Smooth hydraulic passage ensures highest efficiency. Delivery flanges and supporting feet are cast integral with the casing.
- › **Impeller:** The impellers are of enclosed type. Hydraulic balancing of impellers is achieved by balancing holes depending upon magnitude of axial thrust. The impellers are statically and dynamically balanced.
- › **Shaft:** The shaft is supported between antifriction ball bearings. The critical speed of shaft is sufficiently above the operating speed. The shaft is critically machined and ground to maintain concentricity. It is fully protected from the liquid being handled by means of shaft sleeve and 'O' ring and gasket between impeller & screw impeller.
- › **Stuffing Box:** The stuffing box is sealed by either gland packing or by mechanical seal (DIN/Cartridge)
- › **Bearings:** Pre-lubricated grease sealed bearings are used as a standard scope of supply. Pumps with oil- lubricated bearings will be supplied against specific order.
- › **Direction of Rotation:** Clockwise when viewed from driving end.
- › **Drive:** Pumps can be driven by electric motor or engine.

## CONSTRUCTIONAL FEATURES

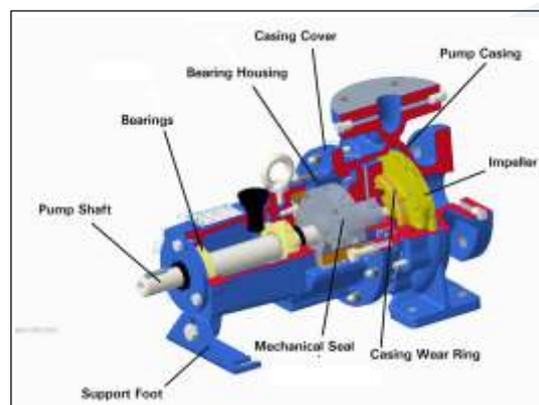
- Dimensions are fully conforming to EN733 (except 32/26 and 150/26)
- Centerline delivery with self-venting feature.
- Back pullout type design
- Pump is having dry shaft design.
- Max. allowable working pressure is  $\leq 16 \text{ kg/cm}^2$
- **Flange drilling** : BSEN 1092-PN-16 FF (standard)  
ANSI B16.1 CL-125 FF (optional)  
BSEN 1092-PN-16 RF (only for st casing) (standard)  
ANSI B16.5 CL-150 RF (only for st st casing) (optional)
- **Auxiliary tapping** : BSP (standard)
- **Coupling** : Flexible jaw type spacer coupling
- **Stuffing box sealing** : Gland Packing / Mechanical seal (DIN and Cartridge).
- Interchangeability of components
- Pre-lubricated grease sealed bearings (standard) / Oil-lubricated bearings (Optional)
- Improved allowable suction pressure limit  
Up to 1800 rpm : 5 bar & Above 1800 rpm and up to 3500 rpm: 3 bar
- Dry Shaft design avoiding liquids contact with pump shaft.
- For Steel casing nozzle Forces and Moments complying as per AP1610
- High Energy Efficiency to comply to requirement of **Minimum Efficiency Index  $MEI \geq 0.7$**  only for clear cold water application pumps as per EN 16480.
- Pumps can be offered with CE marking

## MATERIAL OF CONSTRUCTION

<b>Pump Casing / Casing Cover</b>	: Cast Iron / CF8M / CF8
.....	
<b>Impeller</b>	: Cast Iron / Bronze / CF8M / CF8
.....	
<b>Wear Rings</b>	: Cast Iron / Bronze / SS316 / SS304
.....	
<b>Pump Shaft</b>	: CS 45C8 / ASTM-A-276 : SS410 / SS316 / SS304
.....	
<b>Shaft Sleeve</b>	: ASTM-A-276 : SS410 H / SS316 / SS304

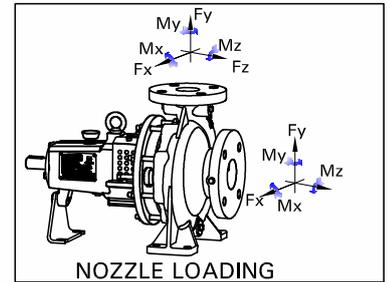
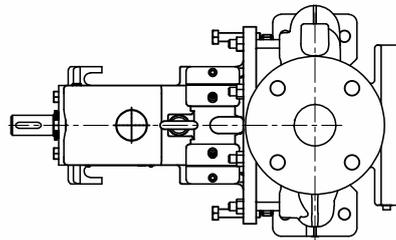
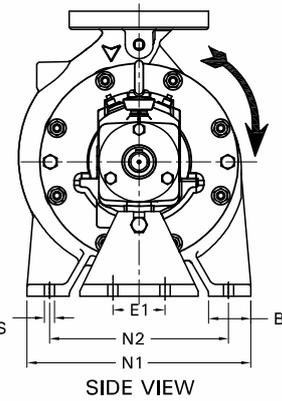
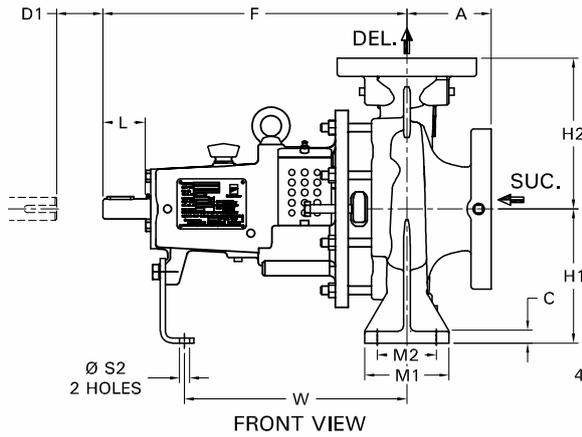
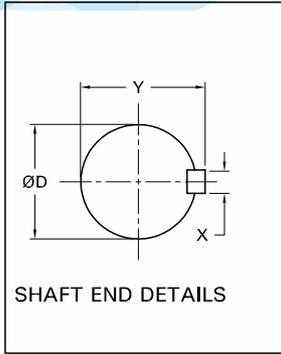


PUMP-GLAND PACKING



PUMP-CARTRIDGE MECH SEAL

# OUTLINE DRAWING OF KIRLOSKAR DBxe PUMPS.

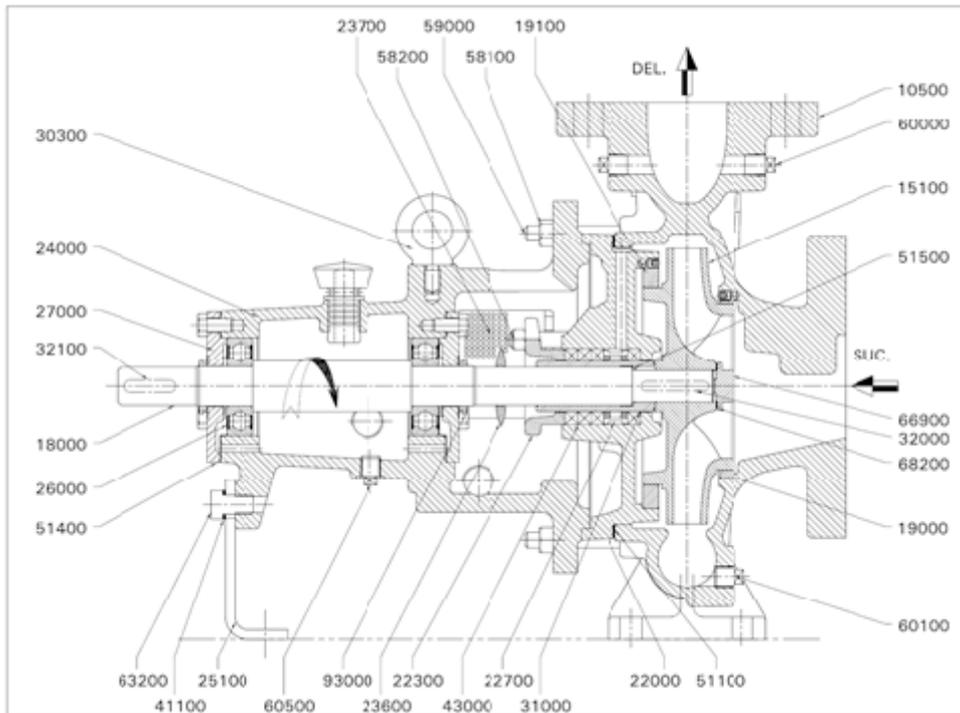


SIZE	UNIT NO.	PUMP DIMENSIONS								FOOT DIMENSIONS								SHAFT END				D1	WT.
		DEL	SUC.	a	f	h1	h2	b	c	m1	m2	n1	n2	Øs1	e1	Øs2	w	Ød	l	y	x		
32/13	25					112	140		14			190	140		100					27	8		30
32/16	25A	32	50	80		132	160	50	14	100	70								27	8		34	
32/20	25				360	160	180		14			240	190		110				27	8		39	
32/26	25A			100		180	225	65	14	125	95	320	250						27	8		56	
40/13	25			80		112	140		14			210	160		100				27	8		31	
40/16	25A	40	65			132	160	50	14	100	70	240	190						27	8		36	
40/20	25					160	180		14			265	212						27	8		42	
40/26	25A			100		180	225	65	14	125	95	320	250	M12		260	24	50	27	8	100	59	
50/13	25					132	160		14			240	190						27	8		35	
50/16	25A	50	65	100	360	160	180	50	14	100	70	265	212						27	8		39	
50/20	25					200			14										27	8		43	
50/26	25A			100		180	225		14			320	250						27	8		61	
65/13	25					160	180		14			280	212						27	8		39	
65/16	25A					160	200	65	14	125	95	320	212						27	8		45	
65/20	25	65	80	100		180	225		14			320	250					27	8		51		
65/26	35					200	250		16			360	280	M16		340	32	80	25	10	140	82	
65/32						225	280	80	16	160	120	400	315						35	10		100	
80/16	25A	80	100	125	360	180	225		14			320	250	M12	110	260	24	50	27	8	100	54	
80/20						180	250	65	14	125	95	345	280						35	10		75	
80/26						200	280		16			400	315						35	10		91	
80/32	35					250	315		16			400	315						35	10		108	
100/20						200	280	80	16	160	120	360	280	M16		340	32	80	35	10		87	
100/26						225			16										35	10		102	
100/32						250	315		16			400	315						35	10		116	
100/40	55					530	280		100	18	200	150	500	400	M20		370	42	110	45	12	140	179
125/26	35					470	250	355	80	16	160	120	400	315	M16		342	32	80	35	10		115
125/32						280			18										45	12		167	
125/40						530	315	400	100	18			500	400			370	42	110	45	12		191
150/32	55					280			18		200	150	550	450	M20				45	12		186	
150/40						315	450		18										45	12		215	
150/26	35					470	280	375	20			500	400			342	32	80	35	10		153	

D1- BACK PULL OUT DISTANCE REQUIRED BETWEEN MOTOR SHAFT END AND PUMP SHAFT.  
NOTE- ALL DIMENSIONS ARE IN mm.

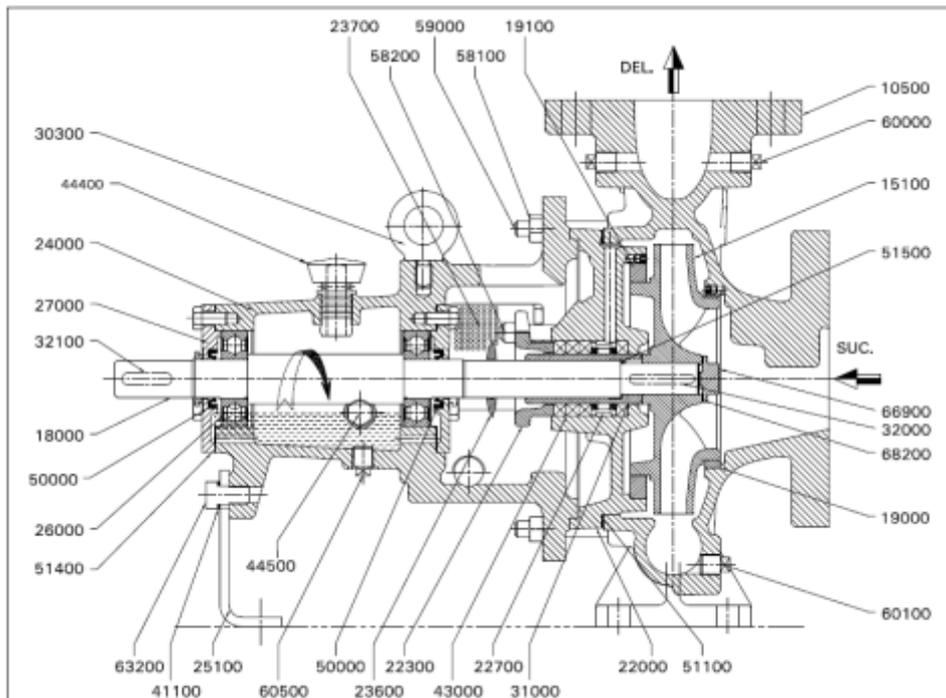
## a. CROSS SECTIONAL ASSEMBLY OF (Gland Packed and Grease Lubricated)

- 1) DBxe 32/13 to 65/13 2) DBxe 32/16 to 80/16 3) DBxe 32/20 to 100/20
- 4) DBxe 32/26 to 125/26



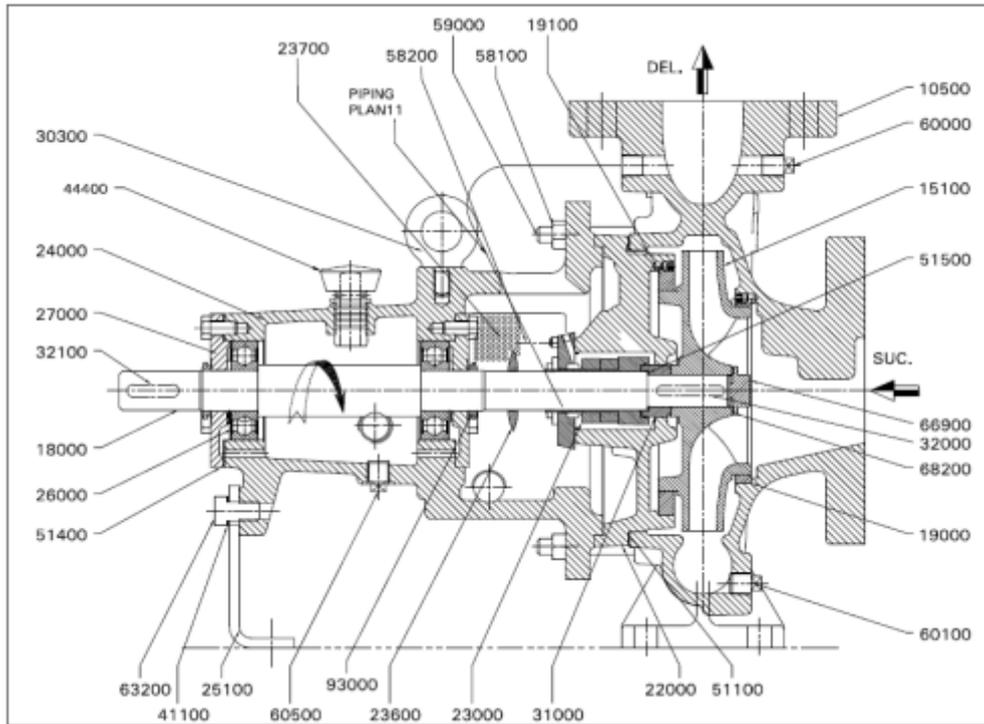
## b. CROSS SECTIONAL ASSEMBLY OF (Gland Packed and Oil Lubricated)

- 1) DBxe 32/13 to 65/13 2) DBxe 32/16 to 80/16 3) DBxe 32/20 to 100/20
- 4) DBxe 32/26 to 125/26



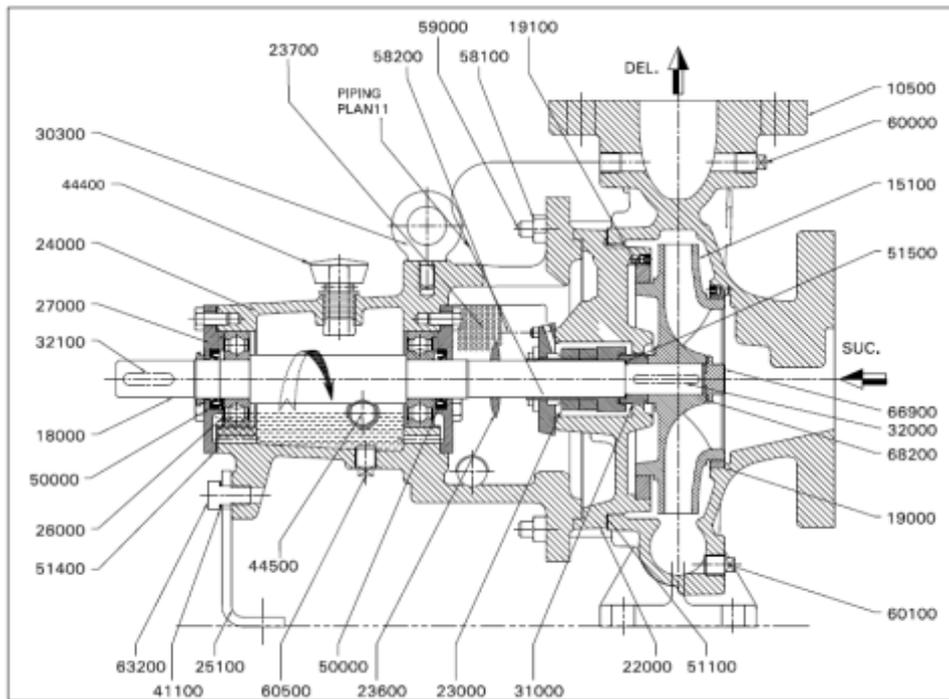
### c. CROSS SECTIONAL ASSEMBLY OF (Mech Seal Packed and Grease Lubricated)

- 1) DBxe 32/13 to 65/13 2) DBxe 32/16 to 80/16 3) DBxe 32/20 to 100/20
- 4) DBxe 32/26 to 125/26



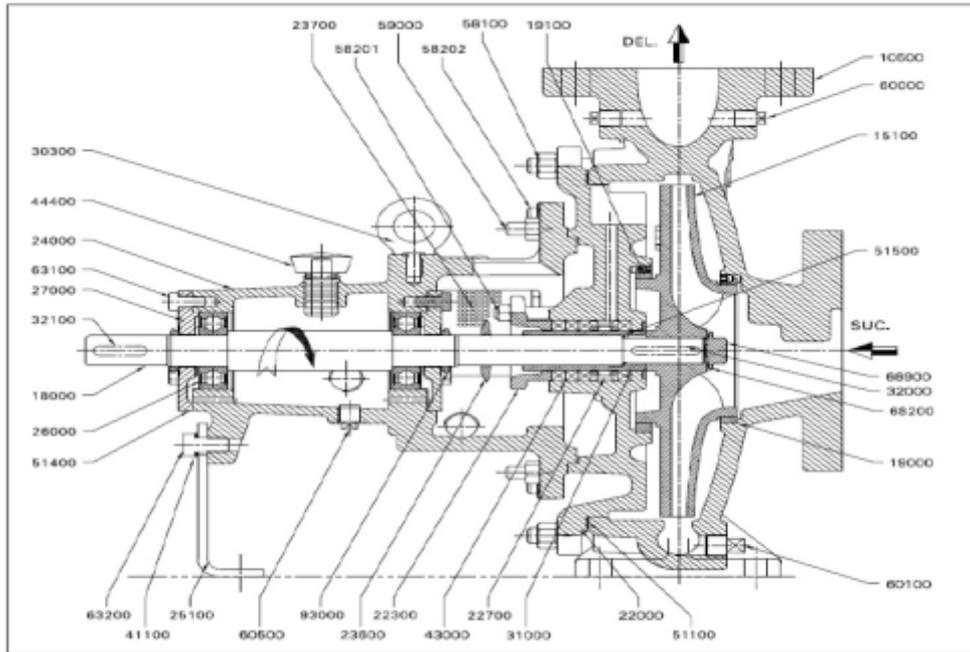
### d. CROSS SECTIONAL ASSEMBLY OF (Mech Seal Packed and Oil Lubricated)

- 1) DBxe 32/13 to 65/13 2) DBxe 32/16 to 80/16 3) DBxe 32/20 to 100/20
- 4) DBxe 32/26 to 125/26



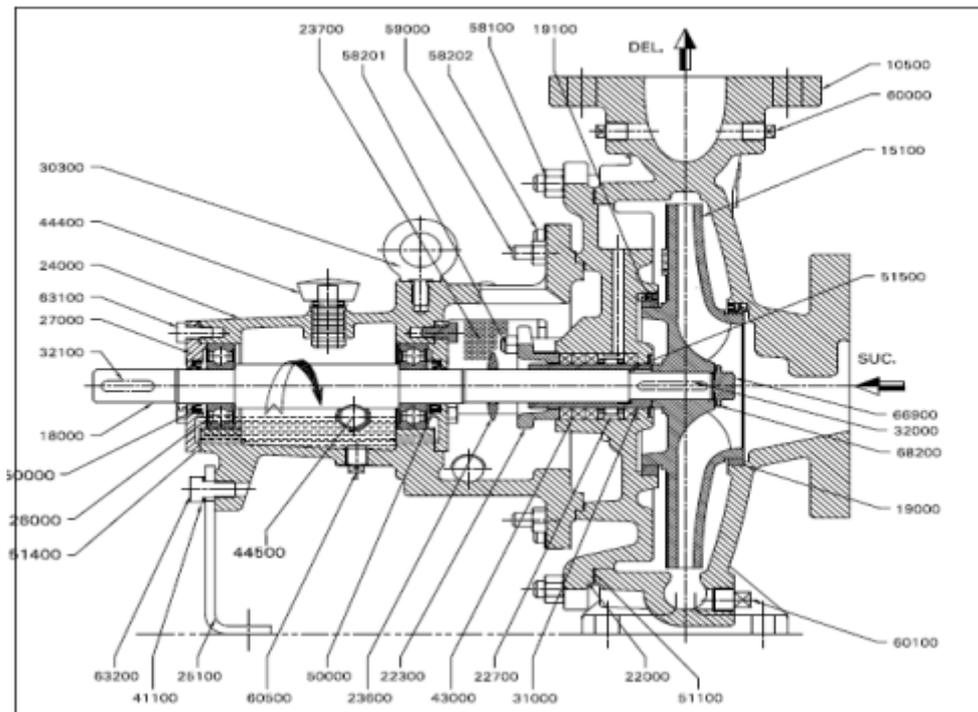
### e. CROSS SECTIONAL ASSEMBLY OF (Gland Packed and Grease Lubricated)

DBxe 65/32 to 150/32 DBxe 100/40 to 150/40



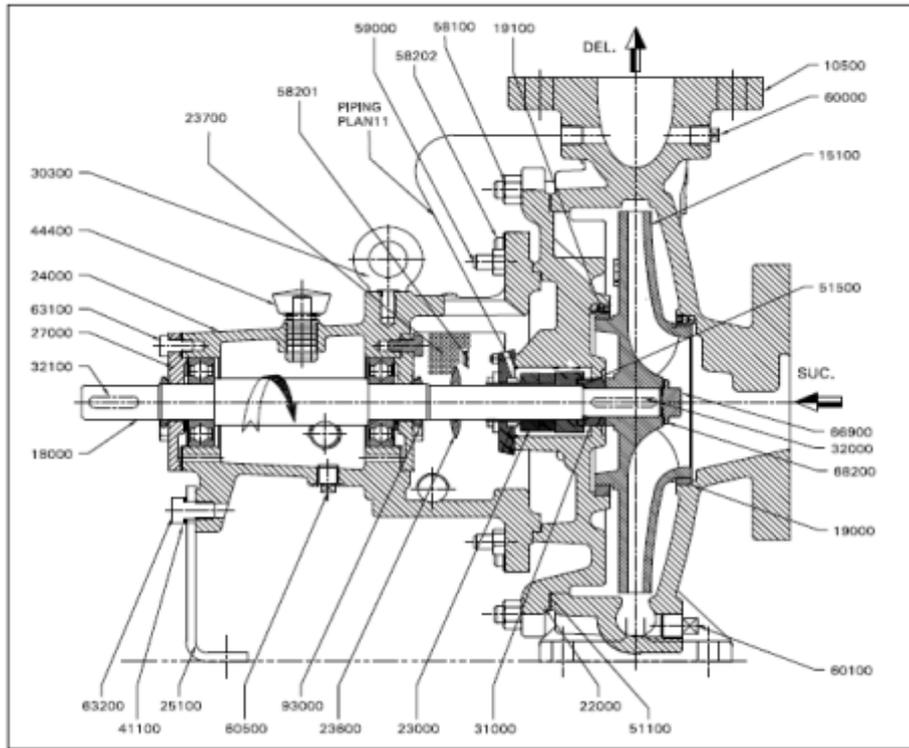
### f. CROSS SECTIONAL ASSEMBLY OF (Gland Packed and Oil Lubricated)

DBxe 65/32 to 150/32 DBxe 100/40 to 150/40



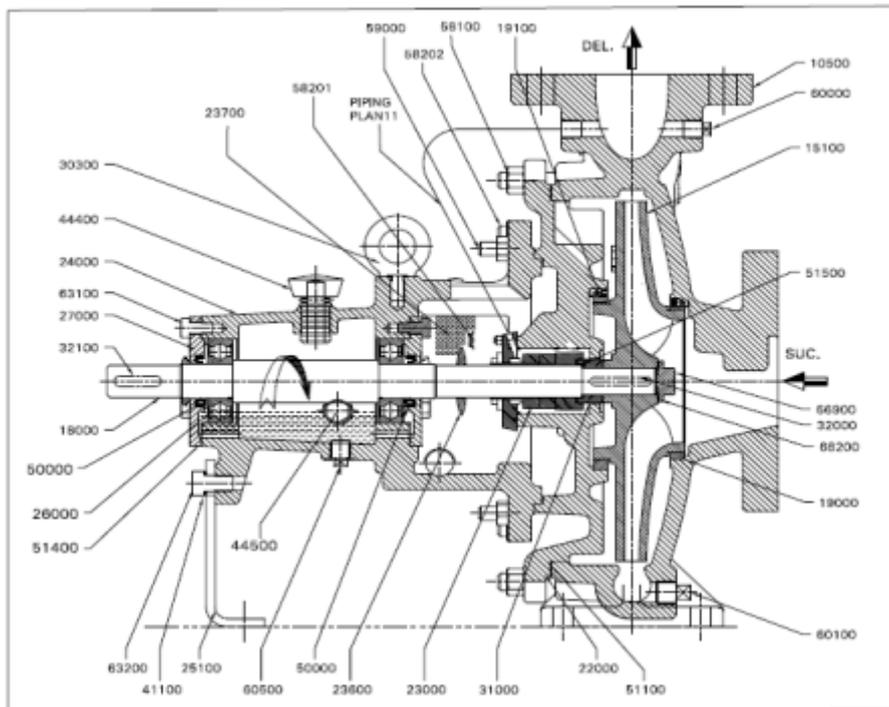
### g. CROSS SECTIONAL ASSEMBLY OF (Mech Seal Packed and Grease Lubricated)

DBxe 65/32 to 150/32 DBxe 100/40 to 150/40



### h. CROSS SECTIONAL ASSEMBLY OF (Mech Seal Packed and Oil Lubricated)

DBxe 65/32 to 150/32 DBxe 100/40 to 150/40



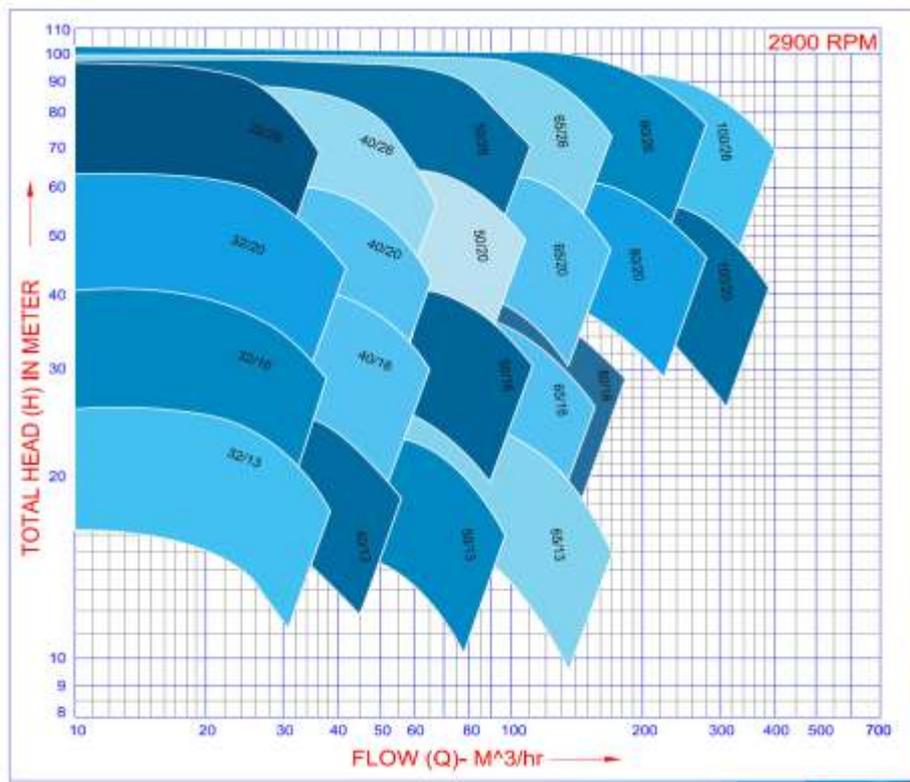
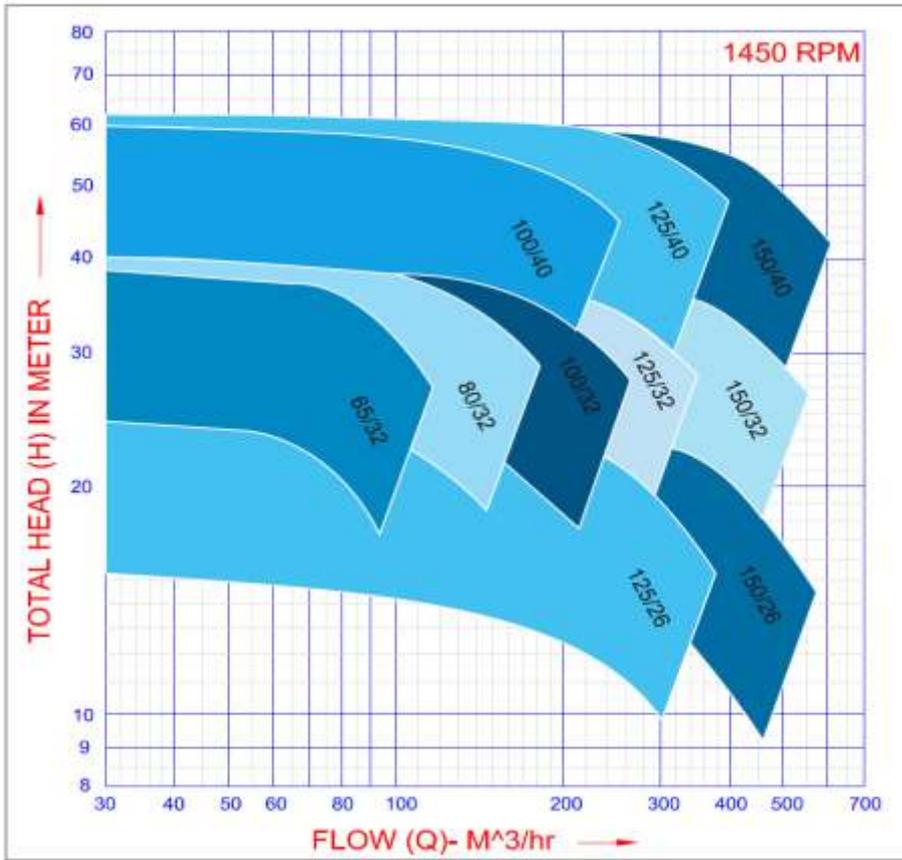
## 7. PART LIST AND CROSS SECTIONAL ASSEMBLY

### Part List for DBxe pumps

Part no.	Description	Quantity per Pump
10500	Pump Casing	1
15100*	Impeller	1
18000	Pump Shaft	1
19000*	Casing Wear ring, Suction Side	1
19100	Casing Wear ring, Delivery Side	1
22000	Casing Cover	1
22300	Gland	1
22700*	Lantern Ring	1
23000	Mechanical Seal	1
23600*	Liquid Deflector	1
24000	Bearing Housing	1
25100	Support Foot	1
26000*	Radial Ball Bearing SKF or eq.	2
27000	Bearing Cover	2
30300	Lifting Eye Bolt	1
31000*	Shaft Sleeve	1
32000*	Key for Impeller	1
32100	Key for Coupling	1
23700	St. Box Guard	2
41100	Lock Washer for Support Foot	1
43000*	Gland Packing	4
44500*	Oil level Sight Glass (for Oil lub. Pump)	1
44400	Oil Filler Plug (For Oil lub. Pump)	1
50000*	Oil Seal (For Oil lub. Pump)	2
51100*	Gasket for Casing Cover	1
51400*	Gasket for Bearing Cover	2
51500*	Gasket for Shaft Sleeve	1
63200	Hex Screw for Support Foot	1
58100	Hex Nut for Pump Casing Stud	8 or 12 (Based on pump size)
58201	Hex Nut for Gland Stud	2
58200	Hex Nut for Casing Cover Stud to Bearing housing	6 or 8 (Based on pump size)
59000	Stud for Pump Casing and Casing Cover	8 or 12 (Based on pump size)
60000	Gauge plug	2
60100	Drain plug for casing	1
60500	Drain plug for bearing housing	1
66900*	mpeller Hex Screw	1
93000	"V" ring	2

\* Indicates Recommended Spares.

# FAMILY CURVES





Enriching Lives

## KIRLOSKAR BROTHERS LIMITED

Established 1888  
A Kirloskar Group Company

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