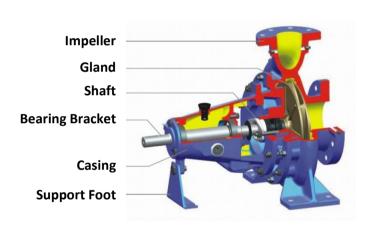
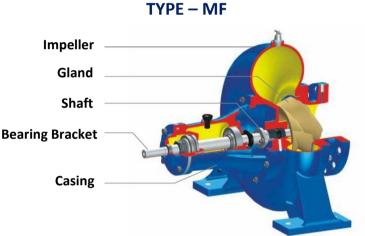


Established in 1888 and incorporated in 1920, KBL is the flagship company of the \$ 2.1 billion Kirloskar Group. KBL, a market leader, provides complete fluid management solutions for large infrastructure projects in the areas of water supply, power plants, irrigation, oil & gas and marine & defence. We engineer and manufacture industrial, agriculture and domestic pumps, valves and hydro turbines.

TYPE - DB / DB (Large Size)





### **Market Oriented**

"One stop shop for optimized pumping solutions from concept to commissioning across market segments"

- > BUILDING & CONSTRUCTION
- > INDUSTRY
- ➤ CUSTOMER SERVICE & SPARES
- > IRRIGATION
- ➤ DISTRIBUTION
- > POWER
- ➢ OIL & GAS
- ➤ WATER RESOURCE MANAGEMENT
- Marine & Defence



### TYPE - DB



# **TYPE - DB (Large Size)**

Casing Impeller Gland Shaft En

Enriching Lives



## **Bearing Bracket**

**Support Foot** 

### **RANGE**

Delivery size : up to 150 mm

Capacity : up to 550 m³/hr

Head : up to 100 metres

### **APPLICATIONS**

Circulation of water in industries, Air-conditioning plant, Power stations, Mine water, Lift irrigation, Sprinkler systems, Fire fighting, Booster services, Pumping brines, Oils etc. for liquids having temperature in the range of -10°C to 100°C.

### **CONSTRUCTIONAL FEATURES**

These are single stage, single suction, horizontal shaft type. They are made in accordance with DIN 24255. Models are available to operate at 1450 rpm and 2900 rpm at 50 Hz

**Casing:** End suction, volute type with top centerline discharger. Suction and discharge nozzles as well as the supporting feet are cast integral with the casing.

**Impeller:** Enclosed type dynamically balanced. Hydraulic balance is achieved either by back vanes for smaller impellers and by balancing hole with back wear rings for large impellers.

**Shaft:** Three driving units cover complete range. The high tensile steel shaft accurately machined and ground is supported by anti-fricition bearings. 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.

**Bearing:** Deep groove ball bearings are provided. Standard lubrication is grease. Oil lubrication against requirement.

**Direction of Rotation :** Clockwise viewed from driving end.

**Drive:** Suitable for coupling with electric motors, engines directly or through belt drives.

#### Flanges:

Standard: Drilling as per BS EN 1092-2 (DIN 2533 ND 16)

Optional: Drilling as per IS/BS/ASA/DIN available with suitable pressure rating.

### **RANGE**

Delivery size : 150 mm to 300 mm

Capacity : up to 1900 m³/hr

Head : up to 35 metres

### **APPLICATIONS**

Water Supply, Irrigation, Water Circulation, Injection Water System and Prawn Farming.

### CONSTRUCTIONAL FEATURES

These are horizontal shaft single stage, single suction pumps of back pull out type design. These pumps operate at 1450 rpm at 50 Hz and 1150 rpm at 60 Hz.

**Casing:** End suction with top centre line delivery (size 150) and tangential vertical delivery (other sizes) high efficiency volute type, suction and discharge nozzles as well as the supporting feet are cast integral with the casing.

**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 beatings housed in the bearing housing. Shaft in stuffing box area is protected by a shaft sleeve.

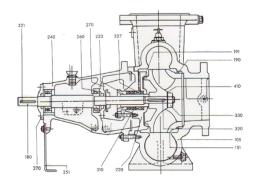
**Stuffing Box**: Either gland packed or with mechanical seal. Water – cooled stuffing box can also be provided.

Bearing: Standard lubrication is oil.

**Direction of Rotation :** Clockwise when viewed from driving end.

**Drive:** These pumps are suitable for coupling with electric motor or I.C. engines directly or through belt drive.

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



### TYPE - MF



**Enriching Lives** 

Casing Impeller

> Gland Shaft

**Bearing Bracket** 



## **RANGE**

Delivery size : up to 650 mm

Capacity: up to 7,000 m<sup>3</sup>/hr

Head : up to 30 metres

## **APPLICATIONS**

Pumping drainage water, Storm water, Supplying water from setting tanks in water works, Irrigation and agriculture for lift irrigation, Circulation of hot or cold water in industry, Air – conditioning plants, Power stations, Textile mills, Sewage handling, Flood control

### **CONSTRUCTIONAL FEATURES**

These are end suction single stage, horizontal shaft, volute pumps. These pumps operate at 50 Hz.  $\,$ 

**Pump Casing:** Horizontal / Vertical end suction high efficiency volute type with Top / side / 45 degrees orientations. Delivery flange and supporting feet are cast integral with the casing.

**Impeller:** Non clog – Semi open / Enclosed type and balanced dynamically. Hydraulically balanced by balancing holes / back vanes.

**Shaft:** Made of high tensile steel, accurately grounded. Supported by deep groove ball bearings and thrust bearing housed in the bearing housing.

**Stuffing Box**: Gland packed supply is standard for liquids having temperature up to 90°C Mechanical seal, can be supplied against request.

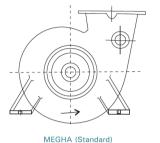
**Bearing:** Deep groove ball bearings and trust bearing. Standard lubrication – Oil (except MF 200 pump) MF 200 is with grease lubrication.

**Direction of Rotation :** Clockwise viewed from driving end.

**Drive:** Suitable for coupling with electric motors, I.C. engines either directly or through belt drives / gear box.

**Flanges :** Flanges shall be drilled as per BSEN 1092, PN 16 flat face except MF  $17\frac{1}{2}$  - 20, MF 55 – 60, MF 60 – 65 pumps. For these models drilling will be BS 10 Table D

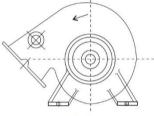
## **ALTERNATIVE AVAILABLE**



Different Orientation on Delivery Nozzle

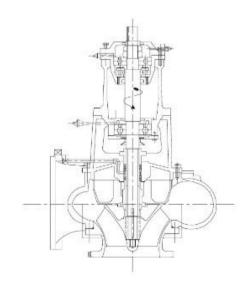


MRUGA



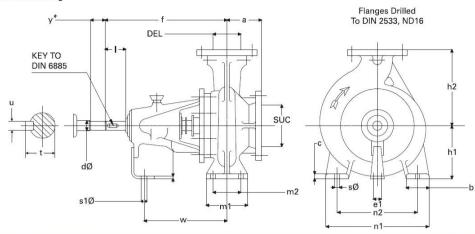
VARSHA

**MF - Vertical Execution** 



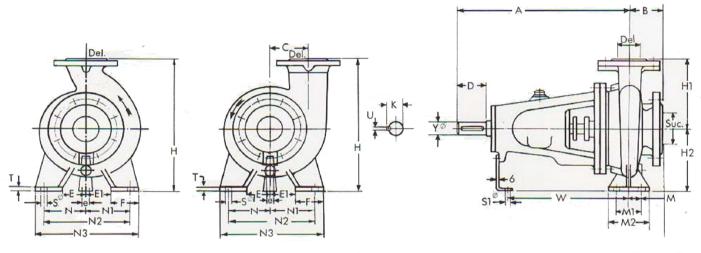
# **GENERAL DIMENSIONS / MOUNTING DETAILS**

#### **Outline Drawing**



PUMP								PUI	MP IV	IOUN	TING	DIME	NSIC	NS				S	HAF	TEN	D		W
MODEL	UNIT NO.	SUC.	DEL.	а	f	h1	h2	b	С	m1	m2	n1	n2	sØ	e1	slØ	w	dØ	ı	t	u	у	K
32/13	25	50	32	80	360	112	140	50	14	100	70	190	140	14	100	14	267	24	50	27	8	100	2
32/16	25	50	32	80	360	132	160	50	14	100	70	240	190	14	100	14	267	24	50	27	8	100	
32/20	25	50	32	80	360	160	180	50	14	100	70	240	190	14	110	14	267	24	50	27	8	100	8)
32/26	25	50	32	100	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	B
40/13	25	65	40	80	360	112	140	50	14	100	70	210	160	14	100	14	267	24	50	27	8	100	33
40/16	25	65	40	80	360	132	160	50	14	100	70	240	190	14	100	14	267	24	50	27	8	100	8
40/20	25	65	40	100	360	160	180	50	14	100	70	265	212	14	110	14	267	24	50	27	8	100	22
40/26	25	65	40	100	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	10
50/13	25	65	50	100	360	132	160	50	14	100	70	240	190	14	100	14	267	24	50	27	8	100	8
50/16	25	65	50	100	360	160	180	50	14	100	70	265	212	14	110	14	267	24	50	27	8	100	8
50/20	25	65	50	100	360	160	200	50	14	100	70	265	212	14	110	14	267	24	50	27	8	100	3
50/26	25	65	50	100	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	3
50/32K	35	65	50	125	470	225	290	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	i i
65/13	25	80	65	100	360	160	180	65	14	125	95	280	212	14	110	14	267	24	50	27	8	100	
65/16	25	80	65	100	360	160	200	65	14	125	95	280	212	14	110	14	267	24	50	27	8	100	É
65/20	25	80	65	100	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	1
65/26	35	80	65	100	470	200	250	80	16	160	120	360	280	18	110	14	342	32	80	35	10	140	
65/32	35	80	65	125	470	225	280	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	9
80/16	25	100	80	125	360	180	225	65	14	125	95	320	250	14	110	14	267	24	50	27	8	100	
80/20	35	100	80	125	470	180	250	65	14	125	95	345	280	14	110	14	342	32	80	35	10	140	4
80/26	35	100	80	125	470	200	280	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	7
80/32	35	100	80	125	470	250	315	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	8
100/20	35	125	100	125	470	200	280	80	16	160	120	360	280	18	110	14	342	32	80	35	10	140	8
100/26	35	125	100	140	470	225	280	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	
100/32	35	125	100	140	470	250	315	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	1
100/40	45	125	10	140	530	280	355	100	18	200	150	500	400	23	110	14	370	42	110	45	12	140	0.00
125/26	35	150	125	140	470	250	355	80	16	160	120	400	315	18	110	14	342	32	80	35	10	140	
125/32	45	150	125	140	530	280	355	100	18	200	150	500	400	23	110	14	370	42	110	45	12	140	1
125/40	45	150	125	140	530	315	400	100	18	200	150	500	400	23	110	14	370	42	110	45	12	140	
150/32	45	200	150	160	530	280	400	100	18	200	150	550	450	23	110	14	370	42	110	45	12	140	
150/40	45	200	150	160	530	315	450	100	18	200	150	550	450	23	110	14	370	42	110	45	12	140	3

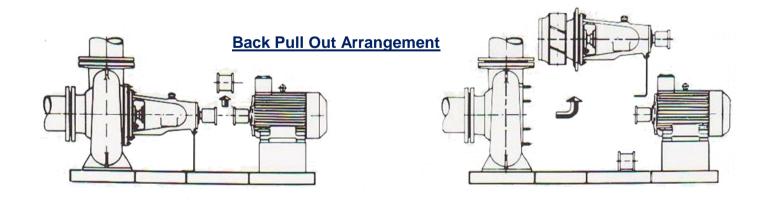
 $<sup>^\</sup>star \mathrm{Y}$  - Backpullout distance required between motor shaft end and pump shaft All Dimensions are in mm



Pump	Suc.	Del.	Α	В	С	D	Е	E1	F	Н	н1	H2	K	М
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 250/33A	250	250	670	220	295	110	220	290	120	720	320	400	51.5	140
DB 250/33B	250	250	670	220	310	110	240	320	120	780	350	430	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	NI	N2	N3	SØ	S1º	Ť	U	W	Υ	е	Wt. in kg.
DB 150/26	150	200	200	200	400	500	23	14	20	10	342	32	140	140
DB 200/26	200	260	235	295	530	640	27	19	25	12	400	42	140	202
DB 250/33A	280	350	280	350	630	750	33	19	30	14	500	48	140	320
DB 250/33B	280	350	300	380	680	800	33	19	30	14	500	48	140	360
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	825	33	19	30	14	500	48	140	480

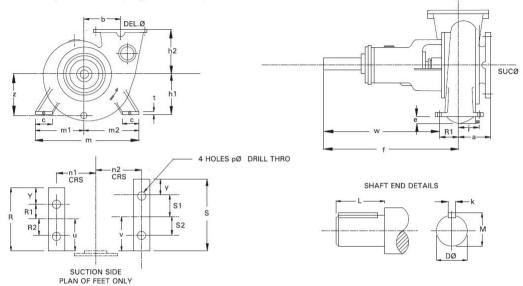
Note: DB 200/33 and DB 200/36 under development, Details against specific request.



# TYPE - MF

## **GENERAL DIMENSIONS / MOUNTING DETAILS**

#### Vertical Delivery End Position (Megha Execution)



	Pump Type				Pump	Meas	uremer	nts			
		SUC.	DEL.	а	f	j	е	h1	h2	z	b
1	MF 17 <sup>1</sup> / <sub>2</sub> - 20	175	200	200	564	102	32	250	230	255	208
2	MF 20-25	200	250	215	545	120	40	280	275	290	240
3	MF 250	250	250	248	545	120	40	280	275	290	240
4	MF 25-25	250	250	245	620	145	31	315	285	315	268
5	MF 25-30, A	250	300	245	620	145	50	355	320	370	300
6	MF 300	300	300	285	620	145	50	355	320	370	300
7	MF 30-35, M1	300	350	295	707	161	85	400	370	435	355
8	MF 30-35, M	350	350	350	707	161	85	400	370	435	355
9	MF 35-35, M	350	350	345	670	176	85	400	400	442	375
10	MF 35-40, M	350	400	345	670	195	10	500	440	520	415
11	MF 40-40	400	400	390	872	182	85	470	450	515	428
12	MF 40-45	400	450	400	862	185	85	600	500	590	475
13	MF 50-50	500	500	490	960	212	140	600	625	648	535
14	MF 55-60	550	600	540	920	260	135	800	680	825	650
15	MF 55-60 E	600	600	540	920	260	135	800	680	825	650
16	MF 60-65	600	650	590	1047	297	214	800	850	890	710

	PumpType		Feet Measurements														Shaft End Measurements							
		t	С	m1	m2	m	u	٧	n1	n2	R1	R2	R	Υ	S1	S2	S	Pø	W	DøM6	М	K	L	Net weight In Kg (Approx.)
1	MF 17½ - 20	24	110	270	320	590	140	140	215	265	90	110	260	30	110	110	280	7/8"	474	32	35.5	10	80	175
2	MF 20-25	26	120	310	360	670	155	155	250	300	100	120	290	35	120	120	310	1"	445	32	35.5	10	80	235
3	MF 250	26	120	310	360	670	155	155	250	300	100	120	290	35	120	120	310	1"	445	32	35.5	10	80	235
4	MF 25-25	28	130	330	390	720	175	175	265	325	95	125	320	50	1250	1250	350	11/8"	525	42	45.5	12	110	325
5	MF 25-30, A	32	140	385	450	835	190	190	315	380	120	140	360	50	140	140	380	11/8"	500	42	45.5	12	110	405
6	MF 300	32	140	385	450	835	190	190	315	380	120	140	360	50	140	140	380	11/8"	500	42	45.5	12	110	405
7	MF 30-35 M1	36	170	470	550	1020	225	225	385	465	150	170	430	55	170	170	450	11/4"	557	50	54	14	120	535
8	MF 35-35, M	36	170	470	550	1020	225	225	385	465	140	170	420	55	170	170	450	11/4"	30	50	54	14	120	550
9	MF 35-40, M	40	200	530	620	1150	265	265	430	520	170	200	500	65	200	200	560	13/8"	500	50	54	14	120	720
10	MF 40-40	56	196	663	733	1396	280	280	565	635	170	210	520	70	210	210	560	13/8"	702	70	76	20	170	1150
11	MF 40-45	60	200	625	700	1325	315	300	525	600	225	255	600	60	240	240	600	13/8"	637	70	76	20	170	1375
12	MF 50-50	60	200	660	790	1450	310	310	560	690	195	245	570	65	245	245	600	13/8"	765	80	87	25	170	1700
13	MF 55-60	75	250	800	950	1750	380	380	675	825	265	305	720	75	305	305	765	15/8"	655	80	87	25	170	2450
14	MF 60-65	75	270	925	1075	2000	400	400	790	940	265	325	740	75	325	325	765	15/8"	782	100	108	28	210	2600

#### Note:

<sup>1)</sup> Flanges drilled as per BSEN 1092 PN 16. For MF 17½-20, MF 55-60 and MF 60-65, flange driving will be as per BS 10 table D 2) All dimensions are in mm

<sup>3)</sup> For MF 250 center line of suction flange is 24 mm below the pump center line 4) For MF 300 center line of suction flange is 24.5 mm below the pump center line