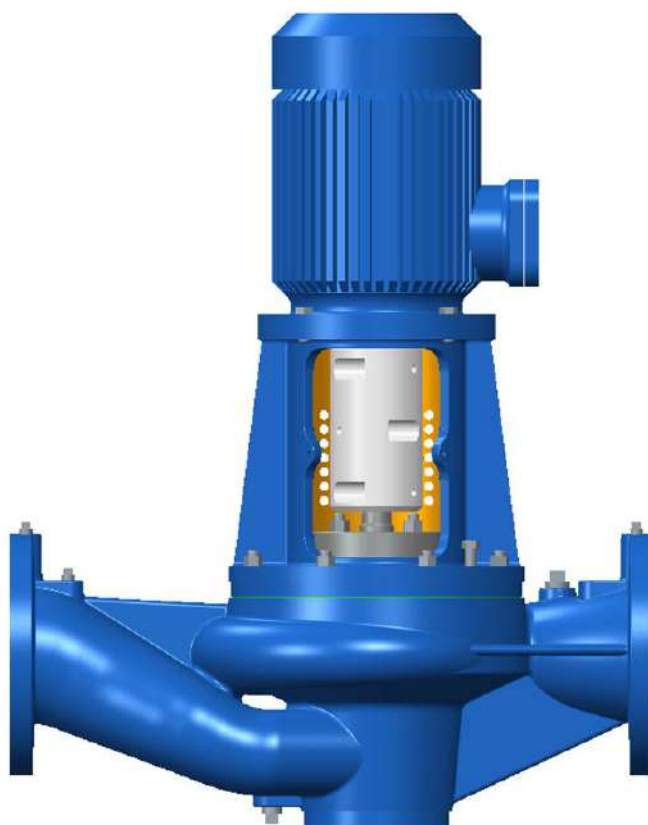




Enriching Lives

## VERTICAL INLINE LONG COUPLED PUMP

TYPE : KW-LC



**KIRLOSKAR BROTHERS LIMITED**

Established 1888

A Kirloskar Group Company

## PERFORMANCE RANGE:

Delivery size	: up to 200 mm
Discharge Capacity (Q)	: 550 m <sup>3</sup> /hr (150 LPS)
Total Head	: 52 Meters
Speed (Nominal)	: 1450 RPM
Working Pressure	: 16 bar
Suction Pressure	: 12 bar subject to maximum working pressure is 16 bar
Temperature	: maximum upto 90° C

### Applications :

These pumps are designed for pumping clear or turbid water up to 3000 ppm. These are widely used for water supply schemes, Potable Water, circulation of chilled water in HVAC, Air conditioning plants, Water boosting systems, Irrigation and sprinkler systems, bottling plants, circulation system in Industries, for Fire Fighting Applications, etc.

- Water supply
- HVAC
- Air conditioning
- Hot water up to 90°C
- Drinking water
- Cooling water
- Fire Fighting applications

## FEATURES:

- Vertical inline long coupled through axially split rigid coupling
- Suction and Delivery nozzles are cast integral with volute and are in-line. Suction and delivery flanges are cast integral
- Volute is designed with smooth fluid flow passages.
- Machined surface and mounting holes are provided on pump casing for ease of pump installation.
- Impeller is enclosed type. It is dynamically balanced which ensures smooth operation of the pump.
- Pump Shaft is designed for toughest service. The critical speed of shaft is sufficiently above the operating speed.
- Axially split rigid spacer type rigid coupling produced in high tensile aluminum material.
- The pump is supplied with mechanical seal as a standard scope of supply.
- The mechanical seal can be replaced only by removing the coupling and without disturbing suction & delivery piping and without removing the motor.
- Motor stool is produced in gray cast iron with integral ribs. It's robust design ensures more reliable and maintenance free operation.
- Coupling guard is in two halves and fully encloses the accessible openings.
- Maximum allowable suction pressure is 12 bar.
- Efficient water pumps with MEI of over 0.7, in accordance with Ecodesign requirements.
- Testing complying to ISO 9906 Gr.2B.

## COMPONENTS:

### Pump Casing:

The pump casing is made of cast iron. Casing suction & discharge branches are in-line and displayed at 180° cast integral with volute casing with flanges to suit ASME/ANSI 125#. Smooth hydraulic passage ensures high efficiency.

### Impeller:

The impellers are of enclosed type. Hydraulic balancing of impellers is achieved by balancing holes or back vanes depending upon magnitude of axial thrust. The impellers are statically and dynamically balanced.

### Pump Shaft:

It is designed for toughest service. The critical speed of shaft is sufficiently above the operating speed.

### Casing Wear Ring:

Replaceable wear rings are provided on pump casing.

### Coupling:

Axially Split rigid coupling produced in high tensile aluminum material.

### Direction of Rotation:

Clockwise when viewed from top/driver end.

### Motor :

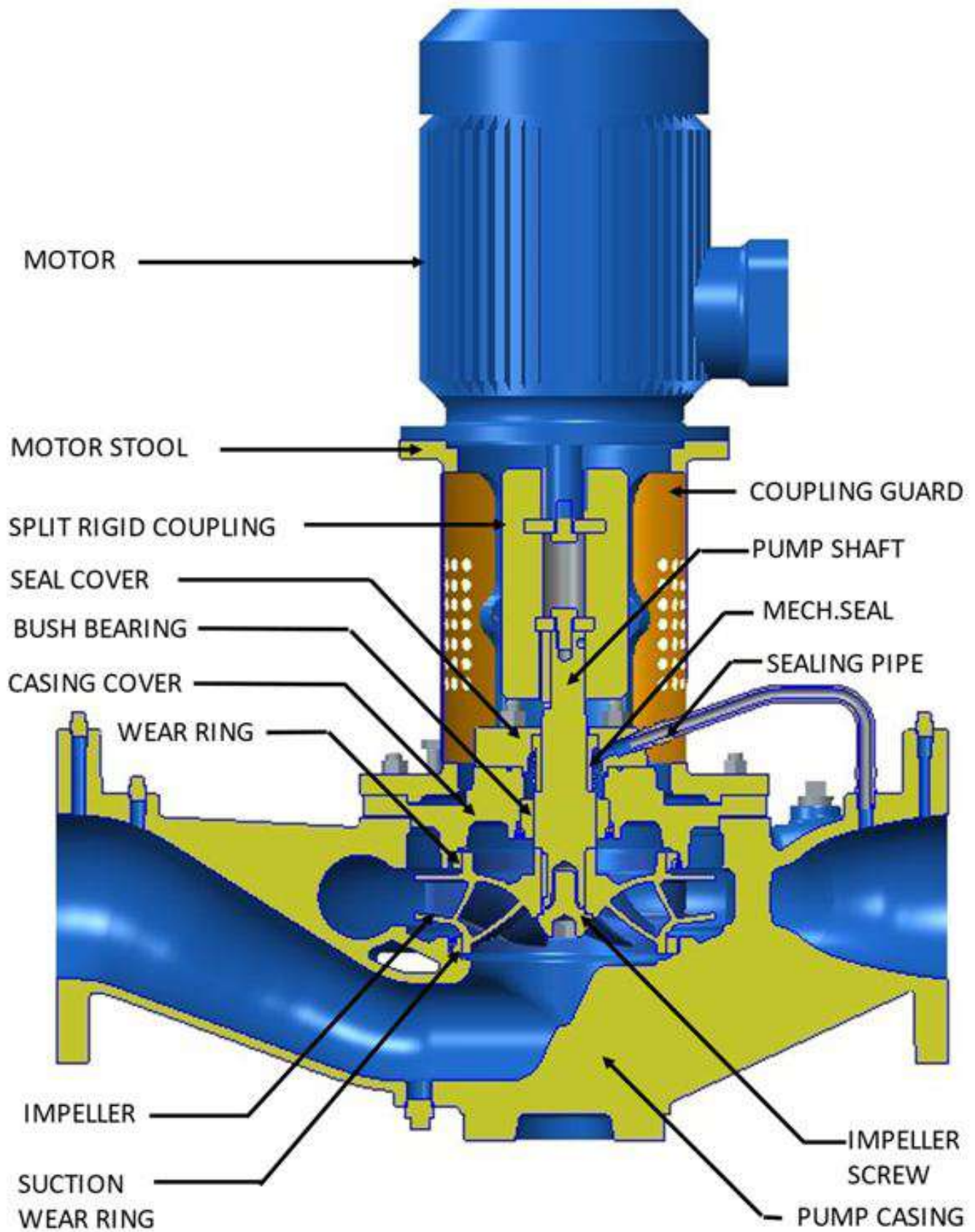
KBL approved make vertical flange mounted.

## MATERIAL OF CONSTRUCTION:

Component Description	CI Fitted*	Bronze Fitted*	CF8M Fitted	Std with SGI Casing & Casing Cover*
Pump Casing	CI IS 210-FG 260	CI IS 210-FG 260	CI IS 210-FG 260	SGI IS:1865-SG 500/7
Impeller	CI IS 210-FG 260	BRONZE IS 318 GR LTB2	ST ST ASTMA 351/351 M - CF8M	CI IS 210-FG 260
Casing Wear Rings	CI IS 210-FG 260	BRONZE IS 318 GR LTB2	CF8M / SS316	CI IS 210-FG 260
Pump Shaft	ST ST ASTMA-276 TYPE 410	ST ST ASTMA-276 TYPE 410	ST ST ASTMA-276 TYPE 410	ST ST ASTMA-276 TYPE 410
Motor Stool	CI IS 210-FG 260	CI IS 210-FG 260	CI IS 210-FG 260	CI IS 210-FG 260

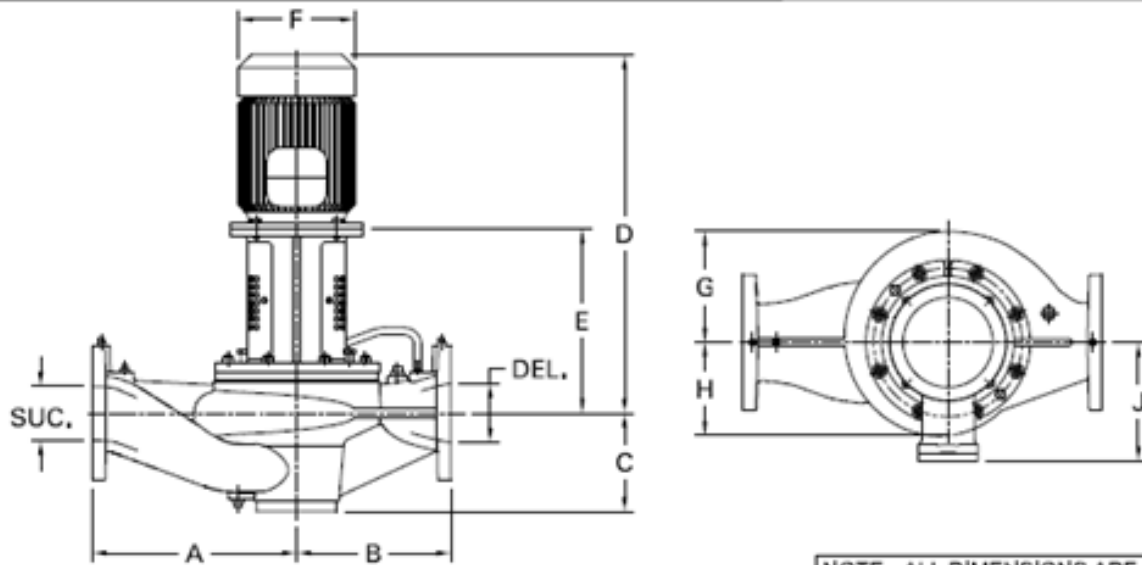
\* Consult factory / Sales team for availability

## CROSS SECTION WITH MAJOR COMPONENTS:



# GENERAL OUTLINE DIMENSIONS:

OUTLINE DRAWING FOR VERTICAL INLINE KW-LC PUMPS.



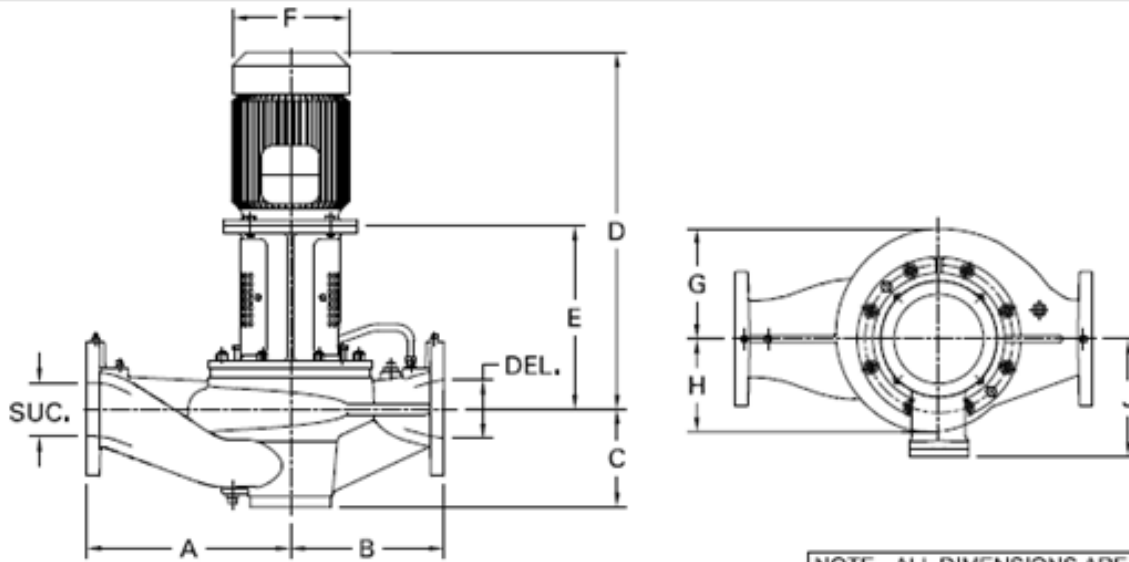
NOTE - ALL DIMENSIONS ARE IN mm.

PUMP MODEL	FRAME SIZES	PUMP OUTLINE DIMENSIONS											PSET Wt. kg
		DEL.	SUC.	A	B	C	D	E	F	G	H	J	
KW04C(LC)	ND 80	40	40	200	175	100	522	295	157	130	130	134	67
	90S	40	40	200	175	100	547	295	174	130	130	140	74
	90L	40	40	200	175	100	572	295	174	130	130	140	75
KW04J(LC)	90S	40	40	245	210	115	572	295	174	170	160	140	74
	90L	40	40	245	210	115	623	295	174	170	160	140	75
	100L	40	40	245	210	115	623	295	195	170	160	157	84
KW05J(LC)	ND80	50	50	245	200	125	531	304	157	170	155	134	81
	90S	50	50	245	200	125	556	304	174	170	155	140	89
	90L	50	50	245	200	125	581	304	174	170	155	140	90
	100L	50	50	245	200	125	581	304	195	170	155	157	98
KW06J(LC)	90L	65	65	242	225	135	587	310	174	185	160	140	97
	100L	65	65	242	225	135	638	310	195	185	160	157	106
	112M	65	65	242	225	135	638	310	220	185	160	170	118
KW06K(LC)	100L	65	65	305	255	140	668	340	195	200	185	157	129
	112M	65	65	305	255	140	668	340	220	200	185	170	142
	132S	65	65	305	255	140	777	360	260	200	185	206	162
	132M	65	65	305	255	140	777	360	260	200	185	206	173
KW08D(LC)	ND80	80	80	300	235	145	532	305	157	170	145	134	90
	90S	80	80	300	235	145	582	305	174	170	145	140	98
	90L	80	80	300	235	145	582	305	174	170	145	140	99
	100L	80	80	300	235	145	633	305	195	170	145	157	107
	112M	80	80	300	235	145	633	305	220	170	145	170	120
KW08E(LC)	100L	80	80	302	237	140	627	299	195	190	170	157	110
	112M	80	80	302	237	140	627	299	220	190	170	170	123
	132S	80	80	302	237	140	766	349	260	190	170	206	145
	132M	80	80	302	237	140	766	349	260	190	170	206	156
KW10C(LC)	90S	100	100	285	260	165	638	310	174	175	145	140	97
	90L	100	100	285	260	165	638	310	174	175	145	140	98
	100L	100	100	285	260	165	638	310	195	175	145	157	106
	112M	100	100	285	260	165	638	310	220	175	145	170	119



# GENERAL OUTLINE DIMENSIONS:

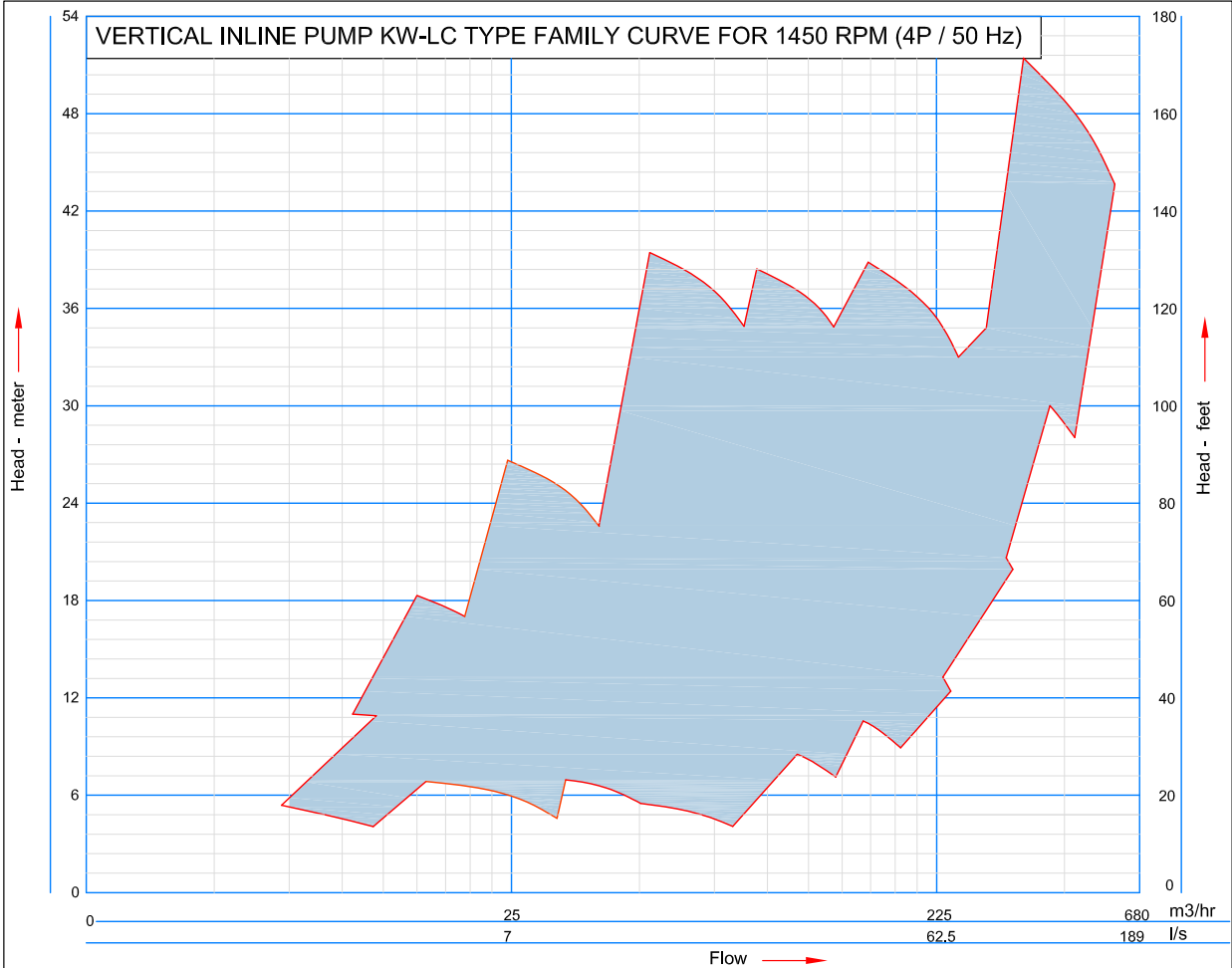
OUTLINE DRAWING FOR VERTICAL INLINE KW-LC PUMPS.



NOTE - ALL DIMENSIONS ARE IN mm.

PUMP MODEL	FRAME SIZES	PUMP OUTLINE DIMENSIONS											PSET Wt. kg
		DEL.	SUC.	A	B	C	D	E	F	G	H	J	
KW10F(LC)	132S	100	100	402	315	195	782	365	260	260	230	206	219
	132M	100	100	402	315	195	782	365	260	260	230	206	230
	160M	100	100	402	315	195	914	395	316	260	230	226	273
	160 L	100	100	402	315	195	914	395	316	260	230	226	293
	180M	100	100	402	315	195	1022	395	354	260	230	265	325
	180L	100	100	402	315	195	1022	395	354	260	230	265	343
KW10J(LC)	112M	100	100	320	245	270	734	317	220	205	170	170	137
	132S	100	100	320	245	270	784	367	260	205	170	206	155
	132M	100	100	320	245	270	784	367	260	205	170	206	166
KW10K(LC)	132S	100	100	320	330	175	778	361	260	220	190	206	177
	132M	100	100	320	330	175	910	391	316	220	190	226	188
	160M	100	100	320	330	175	778	361	260	220	190	206	231
	160 L	100	100	320	330	175	910	391	316	220	190	226	251
KW12J(LC)	112M	125	125	385	290	185	675	347	220	220	185	170	153
	132 S	125	125	385	290	185	784	367	260	220	185	206	174
	132 M	125	125	385	290	185	784	367	260	220	185	206	185
	160M	125	125	385	290	185	916	397	316	220	185	226	230
KW12X(LC)	132S	125	125	400	295	185	785	368	260	225	200	206	188
	132M	125	125	400	295	185	785	368	260	225	200	206	199
	160M	125	125	400	295	185	917	398	316	225	200	226	248
	160L	125	125	400	295	185	917	398	316	225	200	226	268
KW15X(LC)	160M	150	150	410	358	220	917	398	316	245	210	226	271
	160 L	150	150	410	358	220	917	398	316	245	210	226	290
	180M	150	150	410	358	220	1022	395	354	245	210	265	322
	180L	150	150	410	358	220	1022	395	354	245	210	265	340
KW20M(LC)	225S	200	200	650	450	313	1235	461	489	330	290	415	670
	225M	200	200	650	450	313	1198	461	450	330	290	344	670
	250S	200	200	650	450	313	1198	461	450	330	290	344	798
	250M	200	200	650	450	313	1331	461	544	330	290	445	798
	280S	200	200	650	450	313	1331	461	544	330	290	445	933
	280M	200	200	650	450	313	1235	461	489	330	290	415	933

FAMILY CURVES:



# ABOUT KBL

Kirloskar Brothers Limited (KBL) is a world class pump manufacturing company with expertise in engineering and manufacture of systems for fluid management. 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.

In 2003, KBL acquired SPP Pumps, United Kingdom and established SPP INC, Atlanta, USA, as a wholly owned subsidiary of SPP, UK to expand its international presence. In 2007, Kirloskar Brothers International B.V., The Netherlands and Kirloskar Brothers (Thailand) Ltd., a wholly owned subsidiary in Thailand, were incorporated. In 2008, KBL incorporated Kirloskar Brothers Europe B.V. (Kirloskar Pompen B.V. since June 2014), a joint venture between Kirloskar International B.V. and Industrial Pump Group, The Netherlands. In 2010, KBL further consolidated its global position by acquiring Braybar Pumps, South Africa. SPP MENA was established in Egypt in 2012. In 2014, KBL acquired SyncroFlo Inc., the largest independent fabricator of commercial and municipal domestic water booster pumps.

To further strengthen its global position, in 2015, Kirloskar Pompen B.V. acquired Rodelta Pumps International, The Netherlands.

KBL has joint venture cooperation with Ebara, Japan since 1988 for the manufacture of API 610 standard pumps. Kirloskar Corrocoat Private Limited is a joint venture cooperation with Corrocoat, UK since 2006. KBL acquired The Kolhapur Steel Limited in 2007 and Hematic Motors in 2010.

KBL has eight manufacturing facilities in India at Kirloskarvadi, Dewas, Kondhapuri, Shirwal, Sanand, Kaniyur, Kolhapur and Karad. In addition, KBL has global manufacturing and packaging facilities in Egypt, South Africa, Thailand, The Netherlands, United Arab Emirates, United Kingdom and United States of America. KBL has 12,700 channel partners in India and 80 overseas and is supported by best-in-class network of Authorised Centres and Authorised Refurbishment Centres across the country.

All the manufacturing facilities at KBL are certified for ISO 9001, ISO 14001, ISO 50001, BS OHSAS 18001 and SA8000. In addition, the Kirloskarvadi plant is also certified for N & NPT Stamp. KBL's corporate office in Pune is certified for ISO 9001 & Sa8000.

The factories deploy Total Quality Management tools using European Foundation for Quality Management (EFQM) model. The Kirloskarvadi plant of KBL is a state-of-the-art integrated manufacturing facility having Asia's largest hydraulic research centre with testing facility upto 5000 kW and 50,000 m<sup>3</sup>/hr.

KBL is the ninth pump manufacturing company in the world to be accredited with the N and NPT certification by American Society of Mechanical Engineers (ASME).

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Pumps | Valves | Hydro Turbines | Turnkey Projects

Water Resource Management | Irrigation | Power | Industry | Oil & Gas | Marine & Defence | Building & Construction | Distribution (Small Pumps) | Valves | Customer Service & Spares

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## KIRLOSKAR BROTHERS LIMITED

Established 1888

A Kirloskar Group Company

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Website: www.kirloskarpumps.com | CIN No.: L29113PN1920PLC000670

### OUR COMPANIES



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