



Enriching Lives

VERTICAL INLINE SHORT COUPLED PUMP

TYPE: KW-SC



KIRLOSKAR BROTHERS LIMITED

Established 1888

A Kirloskar Group Company

PERFORMANCE RANGE:

Delivery Size	: up to 80 mm
Discharge Capacity (Q)	: 150 m ³ /hr
Total Head	: 58 Meters
Speed (Nominal)	: 2900 RPM at 50 Hz
Maximum 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 Air conditioning plants, Circulation of chilled water in HAVC, Water boosting systems, Irrigation and sprinkler systems, Potable water, Water supply schemes, Bottling plants and Circulation system in Industries etc.

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

FEATURES:

- Vertical inline short coupled design, saves space and simplifies piping.
- Simple and compact installation. The pump can be mounted in any position, although installation with motor direction beneath the pump should be avoided.
- Suction, delivery and flanges are cast integral with volute. In addition, the additional support under the pump casing is provided if required.
- Eliminates the need for coupling.
- Mechanical seal as a standard scope of supply.
- Easy maintenance/ replacement of mechanical seal and pump internals without removing piping.
- Enclosed type, dynamically balanced impeller ensures smooth operation of the pump.
- Sturdy stub shaft designed for toughest service.
- Volute is designed with smooth fluid flow passages, which helps least resistance with superior hydraulics and higher efficiency.
- KW-SC pump design allows the use of standard motors.
- Motor - TEFC, IP55, IE2, VFD suitable.
- Robust Motor stool made with Grey Cast Iron with integral ribs ensures reliable and maintenance free operation.
- Supporting frame have guard that fully encloses accessible openings.
- Efficient water pumps with MEI of 0.4. Few of the models also comply MEI 0.7. Please refer HO.
- Testing complying to ISO 9906 Gr.2B.

COMPONENTS:

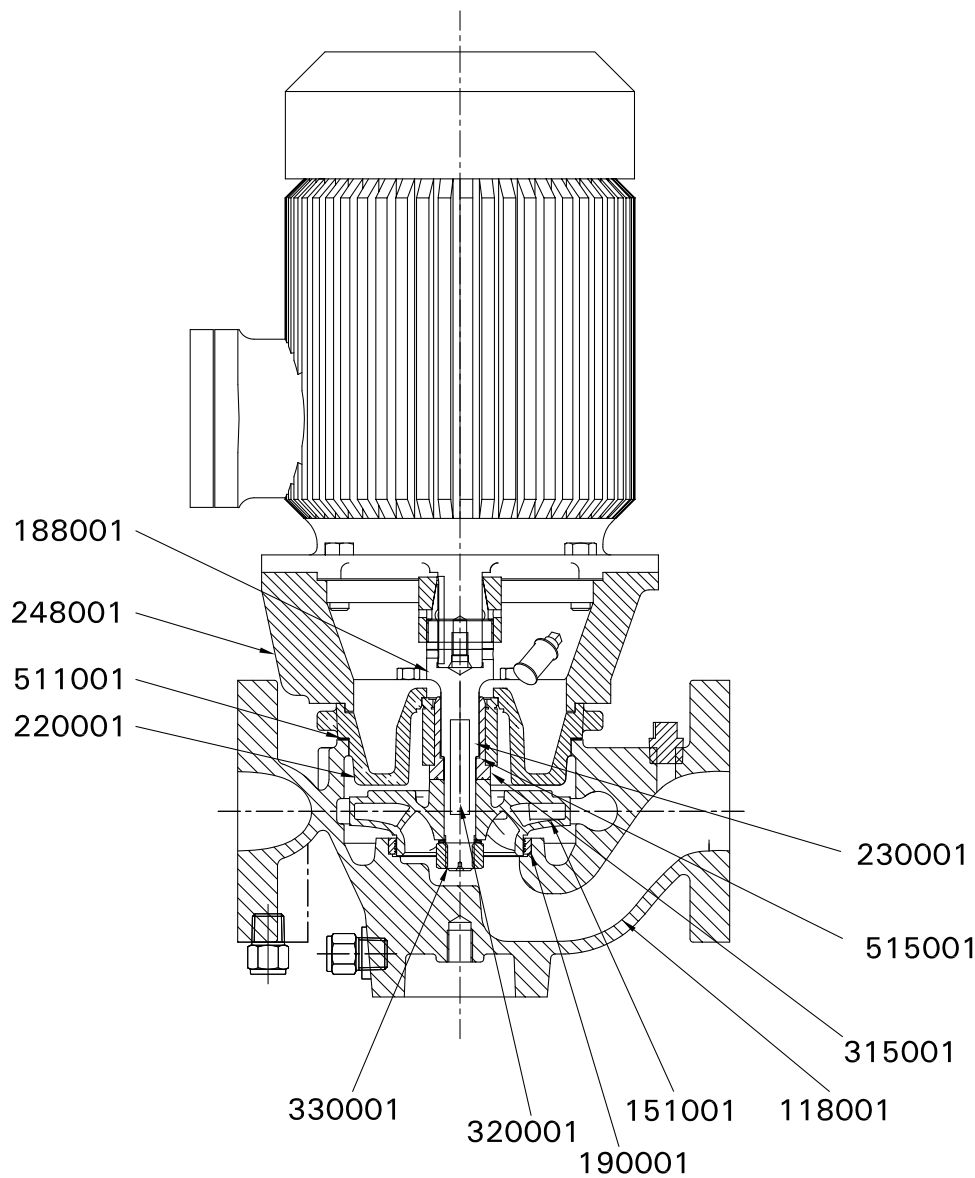
Pump Casing:	The pump casing is made of cast iron and ductile iron. Casing suction and discharge branches are in-line and displayed at 180°C cast integral with volute casing with flanges to suit BSEN 1092 PN16FF/ Optional ANSI 16.1 Class 125. Smooth hydraulic passage ensures high efficiency.
Impeller:	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.
Stub Shaft:	SS-410 steel grade stub shaft design eliminates need of couplings.
Casing Wear Ring:	Replaceable wear rings are provided on pump casing/casing cover.
Direction of Rotation:	Clockwise when viewed from top/driver end.
Motor:	KBL approved make vertical flange mounted.

MATERIAL OF CONSTRUCTION:

Part Code	Description	Material of construction code			
		94	95	96	97
11800	Pump Casing	CI IS 210-FG 260	SG IRON IS 1865 - SG 500/7	CI IS 210-FG 260	SG IRON IS 1865 - SG 500/7
15100	Impeller	BRONZE IS 318 GR LTB2	BRONZE IS 318 GR LTB2	ST ST ASTMA 351/351 M - CF8M	ST ST ASTMA 351/351 M - CF8M
18800	Stub Shaft	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD
19000	Wear Ring	BRONZE IS 318 GR LTB2	BRONZE IS 318 GR LTB2	BRONZE IS 318 GR LTB2	BRONZE IS 318 GR LTB2
22000	Casing Cover	CI IS 210-FG 260	SG IRON IS 1865 - SG 500/7	CI IS 210-FG 260	SG IRON IS 1865 - SG 500/7
31500	Sleeve	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD
33600	Locking Nut	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD
33000	Impeller Nut	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD	ST ST ASTMA276-410 ANLD

CROSS SECTION WITH MAJOR COMPONENTS:

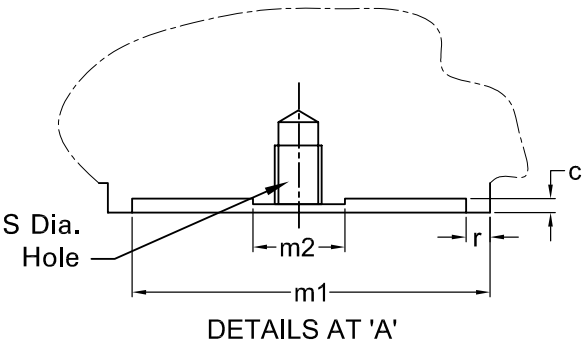
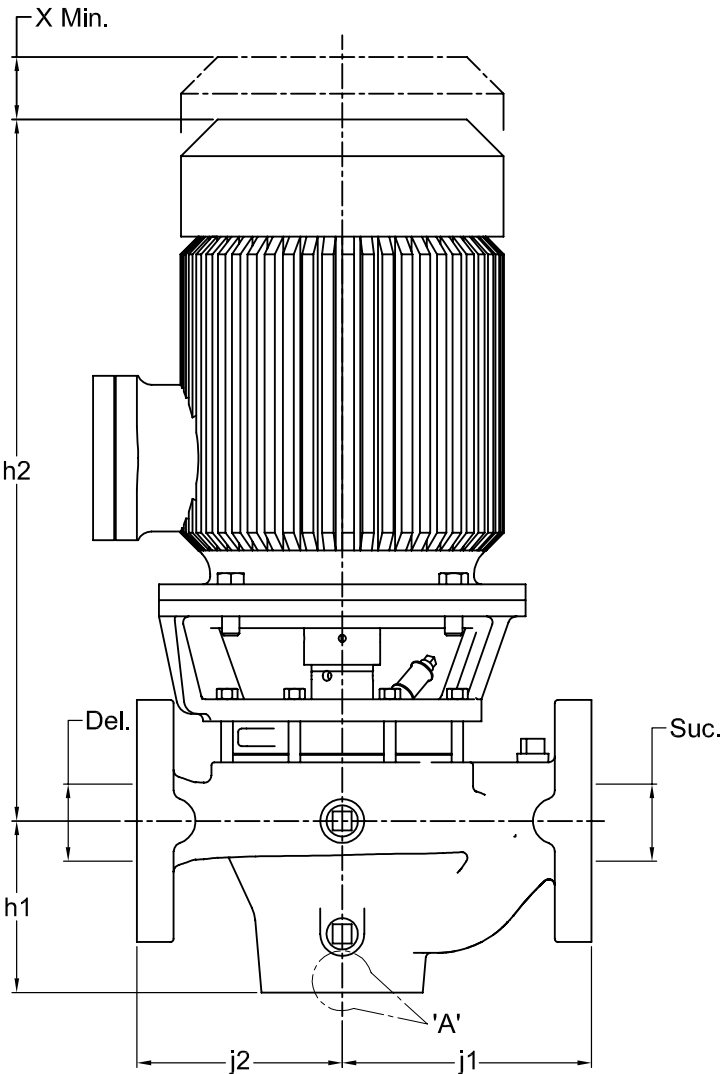
KW-SC: SECTIONAL ARRANGEMENT



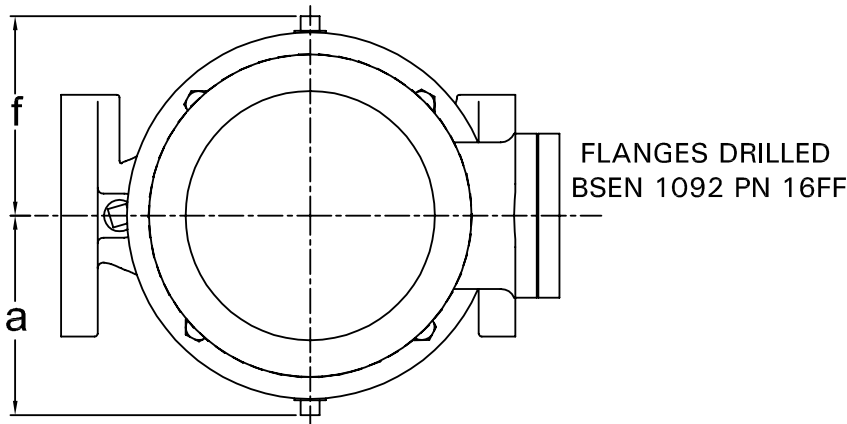
Part Number	Description
118001	Pump Casing/ Volute
220001	Casing Cover
188001	Stub Shaft
151001	Impeller
248001	Support Frame
511001	Gasket

Part Number	Description
515001	Gasket
230001	Mechanical Seal
190001	Wear Ring
315001	Shaft Sleeve
330001	Impeller Nut
320001	Key

GENERAL OUTLINE DIMENSIONS:



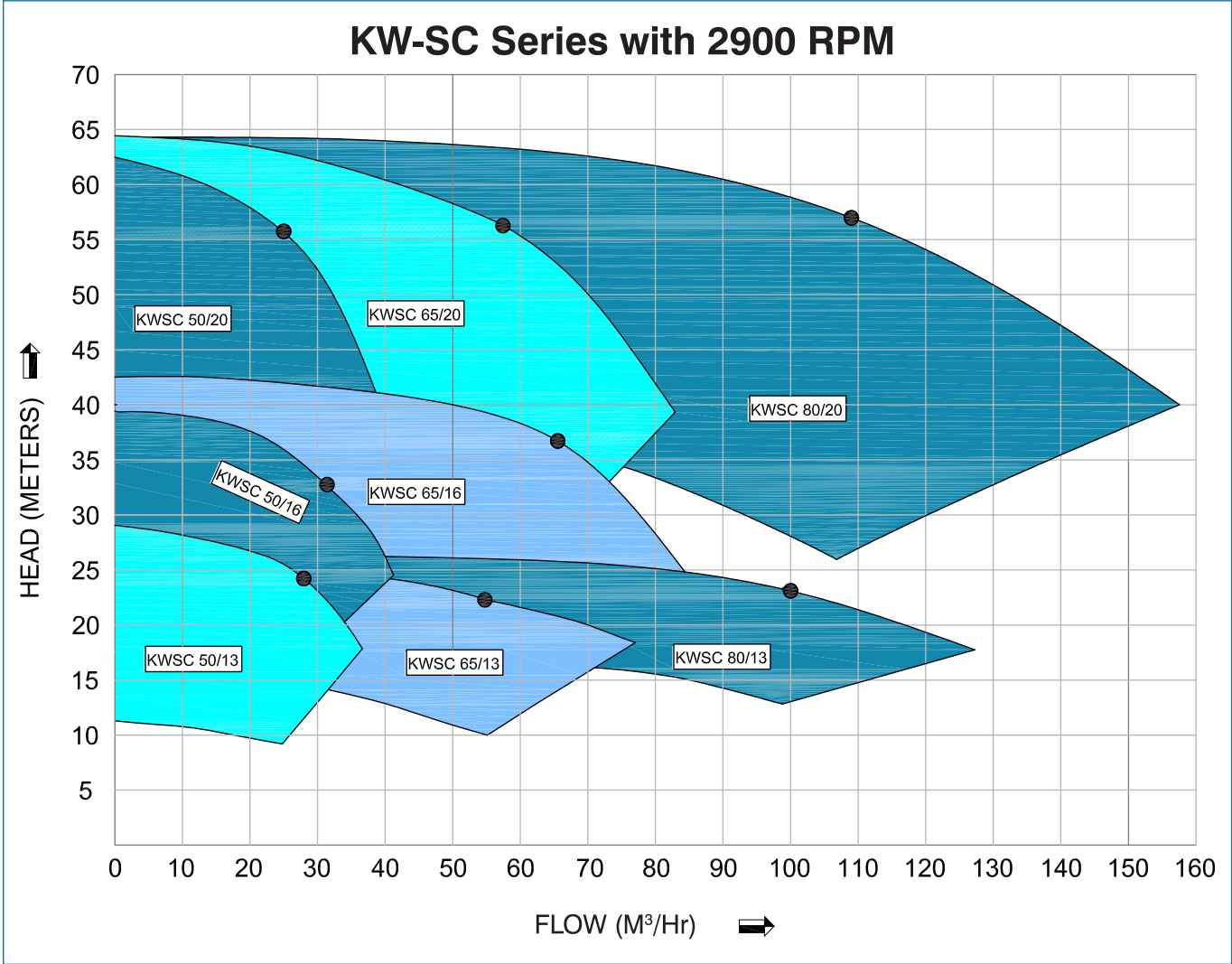
ALL DIMENSIONS ARE IN MM.



GENERAL OUTLINE DIMENSIONS:

Model	Suction Size	Delivery Size	a	c	f	h1	h2	j1	j2	m1	m2	r	s	x	Rating (kW)	Pole	Motor Frame Size	Motor Weight (kg)	Pump Weight (kg)	Total Weight (kg)
KW-SC 50/13	50	50	120	5	105	100	415.5	170	140	110	30	20	16	200	1.5	2	90S	22	38	60
							435.5								2.2	2	90L	26	38	64
							465.5								3.7	2	100L	35	38	73
							560								5.5	2	132S	56	38	94
KW-SC 50/16	50	50	132	5	120	100	435.5	190	160	110	30	15	16	200	2.2	2	90L	26	42	68
							465.5								3.7	2	100L	35	42	77
							560.5								5.5	2	132S	56	42	98
							560.5								7.5	2	132S	60	42	102
KW-SC 50/20	50	50	147	5	136	100	560	200	180	110	30	20	16	200	5.5	2	132S	56	57	113
							560								7.5	2	132S	60	57	117
							700.5								9.3	2	160M	100	57	157
							700.5								11	2	160M	105	57	162
KW-SC 65/13	65	65	129	5	112	105	465.5	185	160	120	30	20	16	200	3.7	2	100L	35	56	91
							560								5.5	2	132S	56	56	112
							560								7.5	2	132S	60	56	116
							560.5								5.5	2	132S	56	55	111
KW-SC 65/16	65	65	143	5	126	105	560.5	200	180	120	30	20	16	200	7.5	2	132S	60	55	115
							700.5								9.3	2	160M	100	55	155
							700.5								11	2	160M	105	55	160
							560								7.5	2	132S	60	70	130
KW-SC 65/20	65	65	157	5	143	100	700.5	215	200	120	30	20	16	200	9.3	2	160M	100	70	170
							700.5								11	2	160M	105	70	175
							700.5								15	2	160M	125	70	195
							745.5								18.5	2	160L	135	70	205
KW-SC 80/13	80	80	156	5	123	130	566	240	180	140	30	22.5	16	200	7.5	2	132S	60	73	133
							706.5								9.3	2	160M	100	73	173
							706.5								11	2	160M	105	73	178
							705.5								15	2	160M	125	80	205
KW-SC 80/20	80	80	173	5	153	130	750.5	255	225	140	30	22.5	16	100	18.5	2	160L	135	80	215
							760.5								22	2	180M	160	80	240
							947.5								30	2	200L	230	80	310

FAMILY CURVE:





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KIRLOSKAR BROTHERS LIMITED

Established 1888

A Kirloskar Group Company

REGISTERED OFFICE & GLOBAL HEADQUARTERS

“Yamuna”, S. No. 98/(3-7), Plot No. 3, Baner,
Pune - 411 045, Maharashtra, India.

Toll Free: 1800-123-4443 | **Phone:** +91 (20) 67214444

Email: marketing@kbl.co.in | **Fax No.** 020 67211060

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

OUR COMPANIES



BRAYBAR PUMPS (PTY) LTD
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KARAD PROJECTS AND MOTORS LIMITED
India



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Thailand



KIRLOSKAR CORROCOAT PRIVATE LIMITED
India



KIRLOSKAR EBARA PUMPS LIMITED
India



RODELTA PUMPS INTERNATIONAL B.V.
The Netherlands



SPP PUMPS LIMITED
United Kingdom



SYNCOFLO, INC.
U.S.A.



THE KOLHAPUR STEEL LIMITED
India