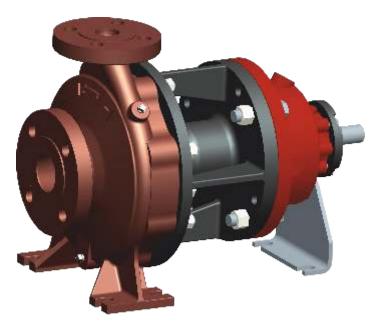


**Enriching Lives** 

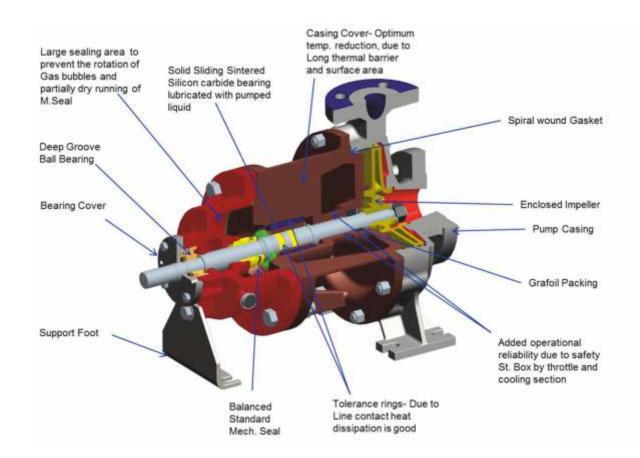
# AIRCOOLED THERMIC FLUID PUMP - AT DIN24256/EN22858



## **KIRLOSKAR BROTHERS LIMITED**

A Kirloskar Group Company Established 1888

### **CUT SECTIONAL VIEW**



## **OPERATING RANGE**

Delivery size	:	32 to 80 mm
Capacity	:	up to 250 m <sup>3</sup> /hr
Head	:	up to 100 metres
Working pressure	:	16 bar
Temperature	:	up to +240°C (Hot Water)
		up to +350°C (Thermal Oil)
RPM	:	1450 & 2900

## APPLICATIONS

- Thermic Fluid handling
- Hot Oil Transfer
- Synthetic Oil Transfer
- Hot water Supply
- District Heating System
- Mineral Oil Industry
- Various Chemical Industries
- Others viz Rubber, Paper, Plywood, Food, Plastic, Metal, Textile Industries.

## FEATURES

Pumps dimensionally conforming to EN 22858 (DIN 24256). The pump is foot mounted for given temperature range. Heat barrier is created by way of cooling the stuffing box region and sufficient space is kept between stuffing box and bearing, so that heat is not conducted to bearing.

#### Pump Casing:

The Pump casing has axial suction and top centre line delivery, radially split with self venting design. Smooth hydraulic passage ensures higher 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 either by balance holes and its hole size depending upon magnitude of axial thrust. The impellers are dynamically balanced. Reliable fixing of impeller on shaft is achieved by using Hex Nut.

#### Pump Shaft:

The shaft is supported between antifriction ball bearing and sliding bush bearings. The critical speed of shaft is sufficiently above the operating speed. The shaft is critically machined and ground to maintain concentricity.

#### **Stuffing Box:**

The Stuffing Box is sealed by grafoil packing and added operational reliability for safety with st. box throttle and cooling section design. As liquid temperature is high, the pump is designed for optimum temperature reduction by the use of long thermal barrier and large surface area. This ensures that no additional cooling is required.

#### **Bearings:**

The unique heat dissipation of the bearing housing ensures the reduced temperature at the seal faces and bearings. The bearings used are factory pre-lubricated deep groove ball bearing for life.

#### **Direction of Rotation:**

Clockwise when viewed from driving end.

#### Drive:

Pumps can be driven by electric motor or engine.

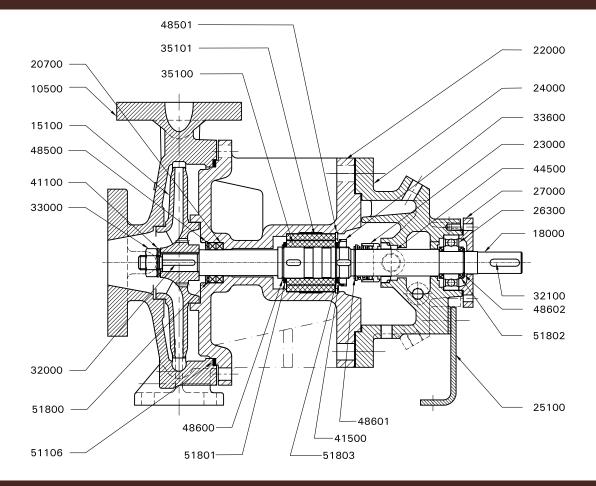
#### **Constructional Features:**

- Dimensions are fully conforming to DIN24256 / EN 22858
- Pump with integral foot mounted.
- Air-cooled design. No Separate cooling required for bearings.
- Pump with grafoil packing at St. Box cavity.
- Mechanical seals are metallic bellow type
- Centerline delivery self venting
- Back pullout type design
- Spiral wound gasket between casing and casing cover.
- S Flange drilling : ANSI B16.5 CL 150/300 FF or RF
- Auxiliary tapping : NPT
- Mechanical seal : Single unbalance
- Coupling : Flexible jaw type spacer coupling
- Performance testing standard: ISO9906 Gr.2B
- Interchangeability of components

#### Material of construction:

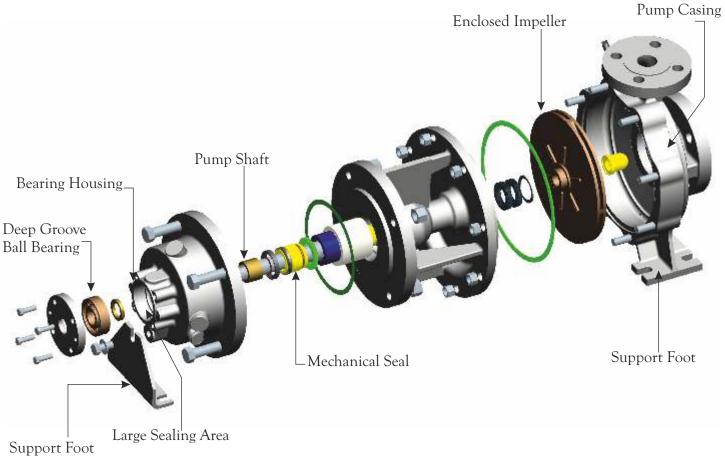
Pump Casing, Casing Cover	: Cast Steel/Stainless steel
Impeller	: Cast Steel/Stainless steel
Pump Shaft	: Stainless steel
Sliding Bush Bearings	: Sintered Silicon Carbide/Carbon/Steel

## **CROSS-SECTION WITH MAJOR COMPONENTS**

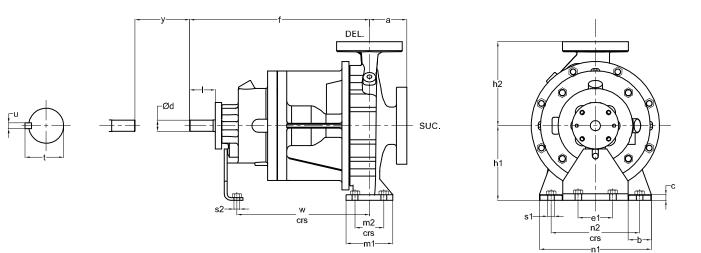


## TABLE (PART LIST)

PART NO	ΩΤΥ.	PART DESCRIPTION
10500	01	PUMP CASING
*15100	01	ENCLOSED IMPELLER
*18000	01	PUMP SHAFT
20700	02	ST.BOX PACKING RING
22000	01	CASING COVER
*23000	01	MECHANICAL SEAL
24000	01	BEARING HOUSING
*25100	01	SUPPORT FOOT
*26300	01	BALL BEARING
27000	01	BEARING COVER D.E.
*32000	01	KEY FOR IMPELLER
32100	01	KEY FOR COUPLING
33000	01	IMPELLER NUT
33600	01	LOCK NUT
35100	01	INTERNAL BEARING BUSH
35101	01	EXTERNAL BEARING BUSH
*41100	01	SPRING WASHER FOR IMP. NUT
41500	01	LOCK WASHER FOR BRG. NUT
44500	01	OIL LEVEL SIGHT GLASS
48500	01	INTERNAL CIRCLIP
48501	01	INTERNAL CIRCLIP
48600	01	EXTERNAL CIRCLIP
48601	01	EXTERNAL CIRCLIP
48602	01	EXTERNAL CIRCLIP
*51106	01	GASKET FOR PUMP CASING
*51800	01	WASHER
*51801	01	WASHER
*51802	02	WASHER
*51803	01	WASHER

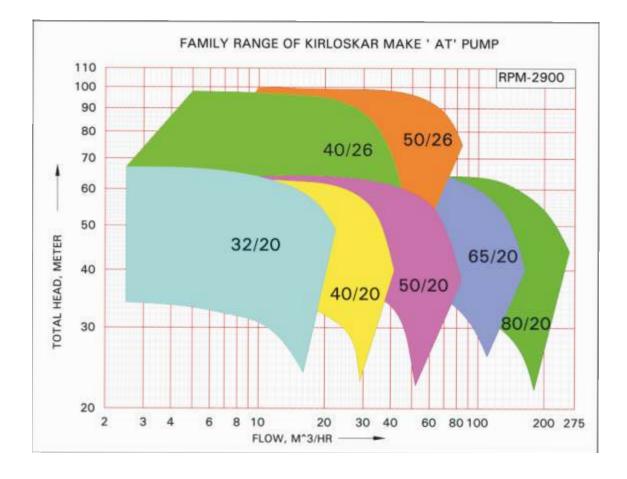


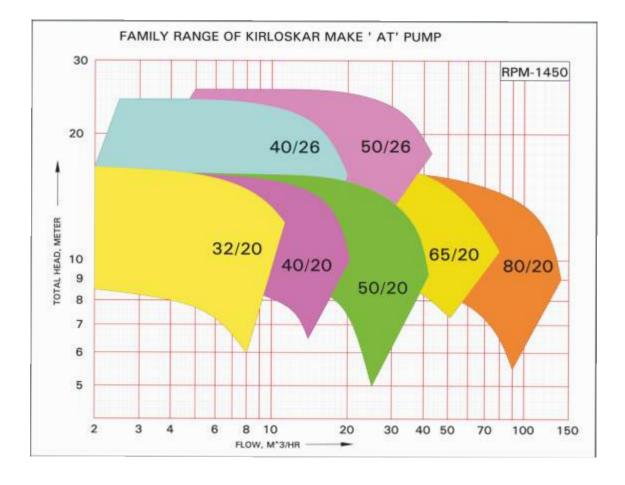
## **GENERAL OUTLINE DIMENSION**



		PUMP DIMENSIONS FOOT DIMENSIONS														S	HAFT	Weight					
PUMP SIZE	DRIVING UNIT	DEL.	SUC.	а	f	h1	h2	b	с	m1	m2	n1	n2	w	s1	s2	e1	Ød	I	t	u	У	in kg. (Approx)
32/20		32	50	80	385	160	180	50	14	100	70	240	190	285	14	15	110	24	50	27	8	100	56
40/20	5	40	65	100	385	160	180	50	14	100	70	265	212	285	14	15	110	24	50	27	8	100	60
50/20		50	80	100	385	160	200	50	14	100	70	265	212	285	14	15	110	24	50	27	8	100	63
40/26		40	65	100	500	180	225	65	14	125	95	320	250	370	14	15	110	32	80	35	10	140	87
50/26	7	50	80	125	500	180	225	65	14	125	95	320	250	370	14	15	110	32	80	35	10	140	95
65/20		65	100	100	500	180	225	65	14	125	95	320	250	370	14	15	110	32	80	35	10	140	90
80/20		80	125	125	500	180	250	65	14	125	95	345	280	370	14	15	110	32	80	35	10	140	97

## **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 up to 5000 kW and 50,000  $m^3/hr$ .

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).

#### 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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