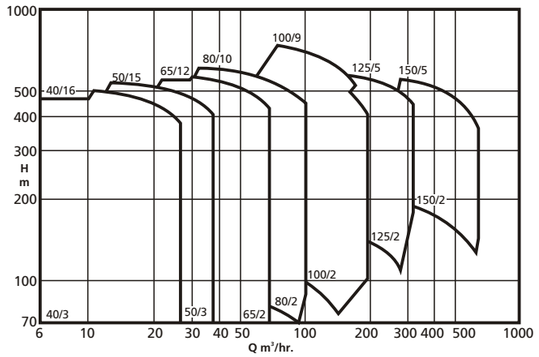
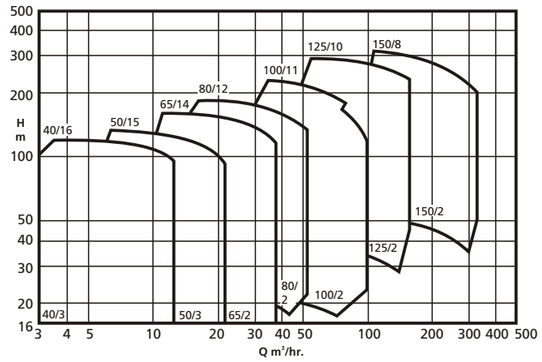
Family curves

2900 rpm



1450 rpm



Manufactured in technical collaboration with KSB Aktiengesellschaft., Germany by :

KSB PUMPS LIMITED

Works			Telephone No.	Fax
Pimpri	-	Irrigation and Process Division, Mumbai-Pune Road, Pune - 411 018	(020) 772008 ,770990	(020) 776120
Chinchwad	-	Power Projects Division, D - II Block, MIDC, Pune - 411 019		
Coimbatore	-	Valves Division, 151, NSN Palayam Post, Mettupalayam Road - 641 031	(0422) 892547 - 9, 892647	(0422) 892650
Vambori	-	Foundry Division, Ahmednagar- 413 704	(02426) 72528, 34, 50	(02426) 72443
Sinnar	-	Water Pumps Division, Plot No E-3, MIDC Sinnar, Malegaon, Dist. Nashik- 422 103	(02551) 30252, 53, 30255, 30256	(02551) 30254
Regd. Office:				
Mumbai	-	126, Maker Chambers III, Nariman Point - 400 021	(022) 2854237 - 42	(022) 2873299
Zonal Offices:				
Calcutta	-	30, Circus Avenue, 2nd Floor - 700 017	(033) 2470473, 2400117 - 8	(033) 2470588
Chennai	-	Guindy House, 2nd Floor, 95, Anna Salai - 600 032	(044) 2352571 - 2, 2300629	(044) 2352749
Mumbai	-	126, Maker Chambers III, Nariman Point - 400 021	(022) 2854237 - 42	(022) 2873299
NOIDA	-	"KSB House", A-96, Sector IV, NOIDA 201 301, Dist. Gautam Budh Nagar, U. P.	(0118) 4541091 - 2, 4541502-3	(0118) 4525627

Branch Offices:

● Ahmedabad - (079) 7540428, 7543427 ● Aurangabad - (0240) 351440 ● Bangalore - (080) 3491806, 3493925 ● Baroda - (0265) 330532, 333226 ● Bareilly - (0581) 452748
● Bhubaneswar - (0674) 563497 ● Chandigarh - (0172) 549021 ● Durgapur - (0343) 548743 ● Guwahati - (0361) 569689 ● Hubli - (0836) 251057
● Indore - (0731) 529478, 529704 ● Jaipur - (0141) 381206, 384121 ● Jamshedpur - (0657) 431408, 433461 ● Lucknow - (0522) 635203 ● Nagpur - (0712) 236889
● Pune- (020) 5533645,5533647 ● Raipur - (0771) 521721, 520758 ● Secunderabad - (040) 7017696, 7017364

Service Stations :

Odhav	-	Shed 22, G.V.M. Estate, Ahmedabad - 382 410	(079) 2870372
NOIDA	-	A- 96, Sector IV, 201 301	(0118) 4525626, 4550567
Howrah	-	142, Foreshore Road, Ramkrishnapur	(033) 6602909

WK/WL

High Pressure Multistage Pumps

TÜV CERT EN ISO 9001/2
RWTÜV

Applications

WK, WL Pumps are used for water works, irrigation, sprinkler installations, boiler feed applications, condensate extraction, fire fighting as well as for generation of high pressure water used in hydraulic press, descaling plants, etc.

Operating Data

Pump size	: DN 40 to 150 mm
Capacities	: Q up to 630 m^3/hr. (175 lps)
Total heads	: H up to 780 m
Speeds	: n up to 4500 rpm

Pressure & Temperature Limits

● Cast Iron & Carbon Steel	: P up to 40 bar : t up to 230°C
● Chrome Steel	: P up to 63 bar : t up to 230°C
● Stainless Steel	: P up to 48 bar : t up to 230°C

Design

Horizontal radially split, multistage ring section pump with radial impellers. The stages are sealed by O-rings and clamped together by tie rods.
Pump supports are integrally cast on suction/discharge casings, either at the bottom or at the shaft center line level.

Standard nozzle orientation -
For bottom support : Suction horizontal to right (when seen from suction side) Discharge vertically up.
However, these nozzles can be horizontal to right / horizontal to left / vertical up.

For center support both these nozzles are always vertically up.

Materials

Part description	Materials
Suction casing Discharge casing Stage casing	C.I., WCB, CA6NM, CF8M
St. box housing Diffuser Impeller	C.I., CA6NM, CF8M, LG2
Shaft	C-45, AISI 410, AISI 410 Cr.pl.
Wearing ring	C.I., NiCi, Bz15, Cr. Hard 400
Impeller ring	1.4024.19
Stage bush	AISI 410
Shaft prot. sleeve	C.I., AISI 410, AISI 316
Balancing disc*	C.I., A182 Gr. F6a
Counter bal. disc*	C.I., A 182 Gr. F6a
Bearing housing	C. I.
Cooling cover	WCB
Tie rods	C-45, EN24V

* Applicable only for WL Pumps

1. Standard flanges as per various DIN ratings.
   Flange rating as per ANSI also possible.

2. Radial load absorbed by roller bearing on suction side and deep groove ball bearing on discharge side for WK pumps. In case of WL pumps roller bearings are provided on both ends. Bearings are lubricated by means of oil stored in the sump of bearing housings and are with guaranteed bearing life of 25000 operating hours.

3. About 85% hydraulic thrust is balanced by means of balancing holes provided on impeller's pressure shroud, in case of WK pumps. In case of WL pumps, the hydraulic thrust is 100% balanced by means of balancing device comprising of balancing disc and counter balancing disc.

4. Throttling gaps provided with renewable wearing rings, at each stage, which reduces the hydraulic losses due to back flow and improves the efficiency, as well as reduces the hydraulic axial thrust.

5. Stuffing box packing :

A1. Standard feature is uncooled soft packing.

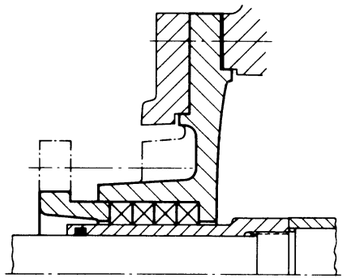
A2. For suction from a vacuum tank, deep stuffing box can be provided with sealing connection.

A3. For higher pumping temperatures stuffing box cooling facility is provided (HW) with cooling cover. As per choice, reputed mechanical seal can be provided with proper flushing and cooling facilities.

B. In case of higher differential pressure, in WK pumps, a pair of angular contact ball bearings, can be provided on discharge side with a special heavy duty bearing housing.

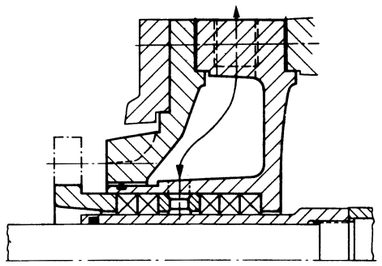
C. For material with galling tendency of stationary and rotating components, a special execution with renewable impeller rings and stage bushes for diffusers can be provided for better serviceability.

A1



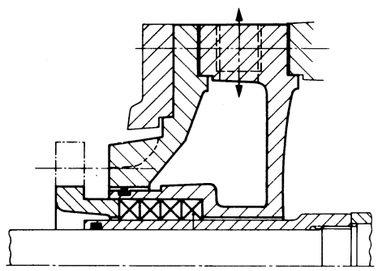
Normal design (N) ⩽ + 105°C

A2



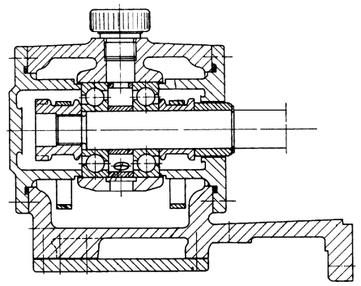
DSB-M (VSM) < + 106°C

A3



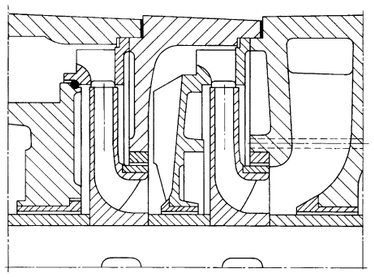
Hot water design (HWD) ⩾ 106°C

B



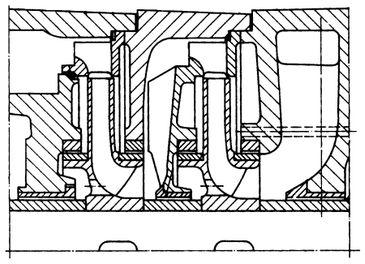
Execution with heavy duty bearing housing

C



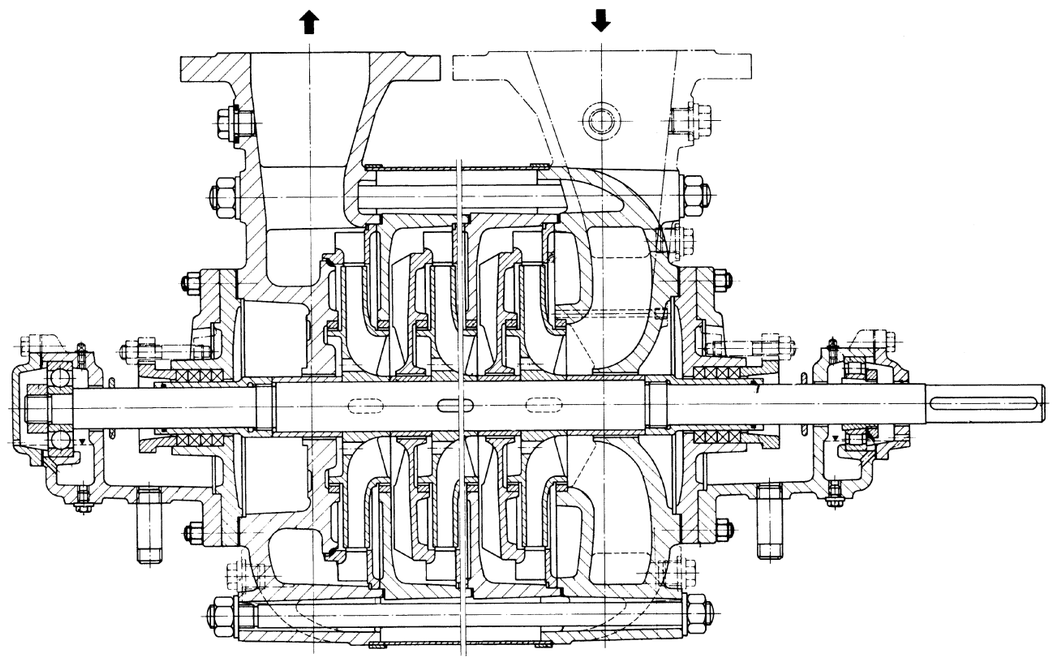
Execution with double wearing ring and stage bushes for WL

C



Execution with double wearing ring and stage bushes for WK

WK



WL