

CDM

Double Suction Pumps

(Size : 200mm~500mm)



**COMPACT
HIGH EFFICIENCY FOR ECONOMICAL
ENERGY-SAVING DESIGN**



TORISHIMA double suction volute pump model CDM is newly designed with the most advanced hydraulic, providing less noise and vibration, wider operation range, lower NPSH required and higher efficiency. Particular in the pump efficiency, CDM is remarkably better than other brands, contributing to great cost reduction in operation.



Applications

- Energy Industry : Water intake, Distribution, Boosting, Circulating, Drainage, Fire-fighting
- Environmental Protection Facilities : Water intake, Distribution, Boosting, Drainage
- General Industries : Water intake, Distribution, Boosting, Circulating, Drainage, Sea water desalination, Fire-fighting
- Building : Water supply, Drainage, Distric heating and cooling
- Water Works : Water intake, Distribution, Water supply
- Agriculture : Irrigation, Drainage
- Others : Pipe line boosting, etc.

Standard Materials

- Volute casing : Cast iron, Ductile cast iron, Stainless steel
- Impeller : Cast iron, Bronze, Stainless steel
- Shaft : Carbon steel, Chrome-molybdenum steel, Stainless steel
- Shaft sleeve : Bronze, Stainless steel

Standard Specifications

- Size : DN 200 to 500 mm
- Capacity : Q 3.0 to 58m³/min
- Total head : 5 to 220 m
- Operating temperatur : up to 80°C
- Pumped liquid : Clean water, Industrial water, River w
Hot water, Sea water, Brine, etc
- Sealing : Gland packing, Mechanical seal (optional)
- Bearing/Lubrication : Grease-lubricated deep groove ball bearing
Oil-lubrication (optional)
- Flanges : JIS 10kgf/cm² G RF,
JIS 20kgf/cm² G RF, etc
- Direction of Rotation : Clockwise viewed from the drive end
Counter-clokwise viewed from the drive end
(optional)
- Nozzle direction : Horizontal suction/
Horizontal discharge

■ **Impeller**

Three-dimensional double suction impeller is designed according to new hydraulics with high efficiency, low NPSH req. and stable curves. Particularly in the pump efficiency, CDM is better than other famous brands.

■ **Wear ring - Sleeve**

Casing wear rings and shaft sleeves are replaceable for longer life span

■ **Bearing**

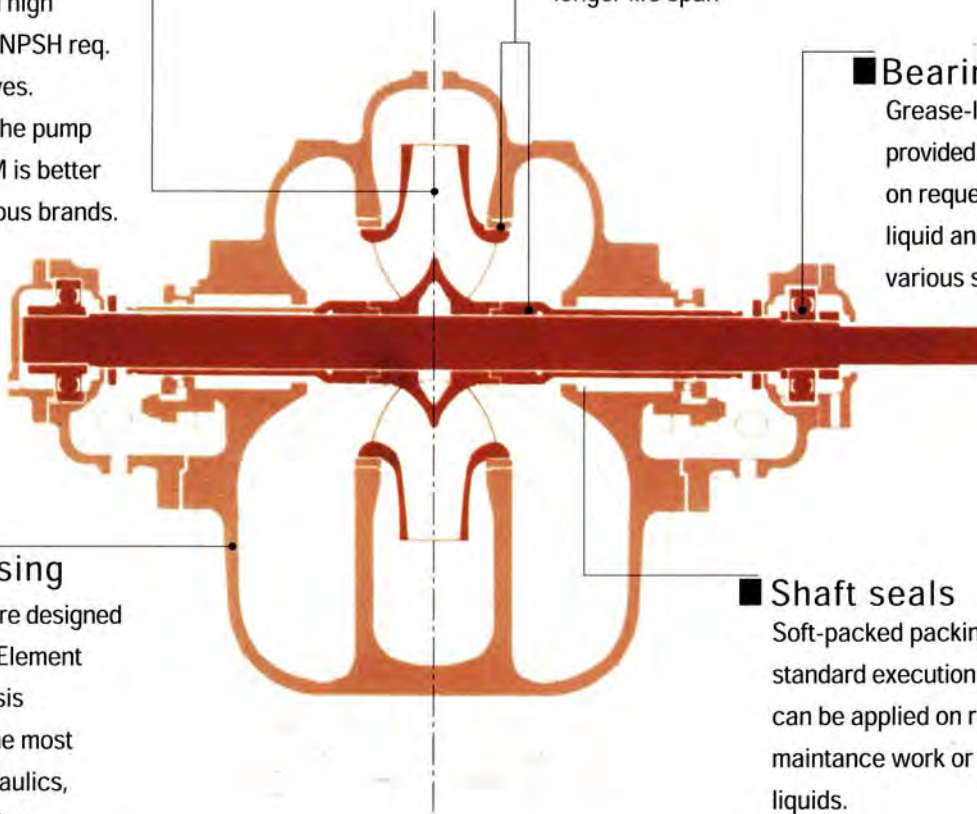
Grease-lubricated ball bearing is provided. Oil lubrication is available on request for high temperature liquid and for compliance with various standards

■ **Volute casing**

Volute casing are designed by FEM (Finite Element Method) analysis according to the most advanced hydraulics, resulting in higher efficiency, wider flow-rate operation range, noise free and vibration free operation.

■ **Shaft seals**

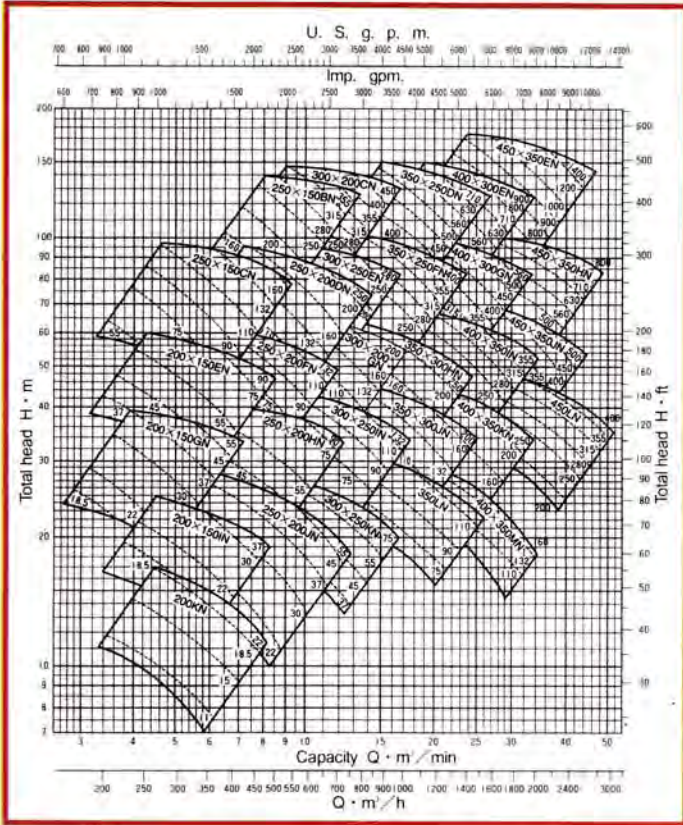
Soft-packed packing is applied as standard execution. Mechanical seals can be applied on request to facilitate maintenance work or accept various liquids.



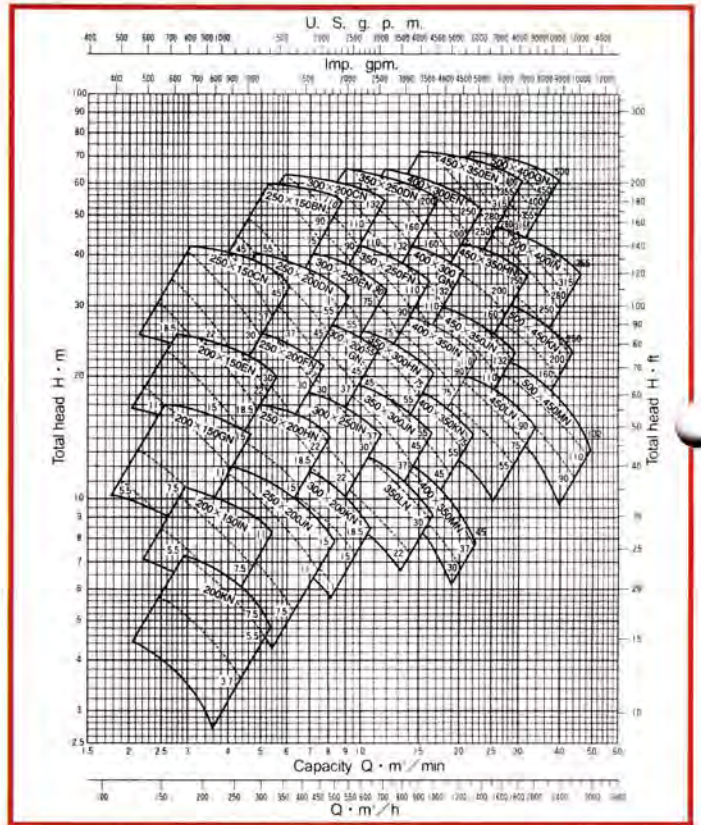
SELECTION CHARTS

shows motor rating in kW

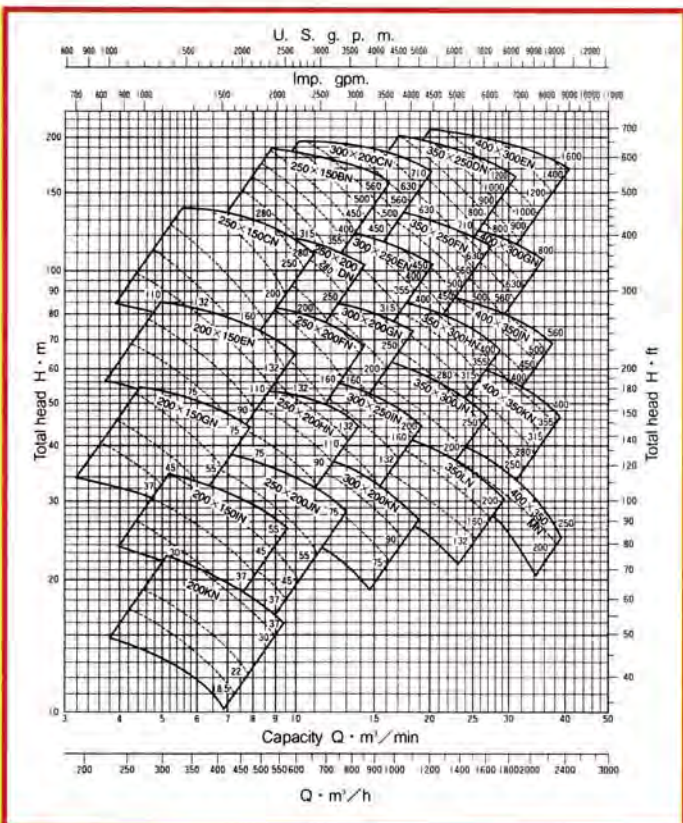
50Hz-4P



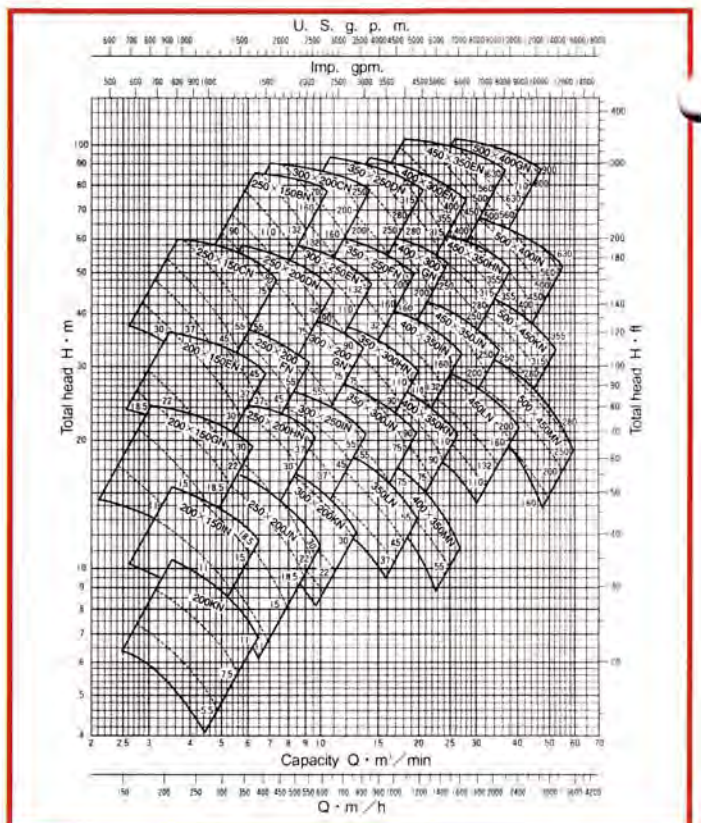
50Hz-6P

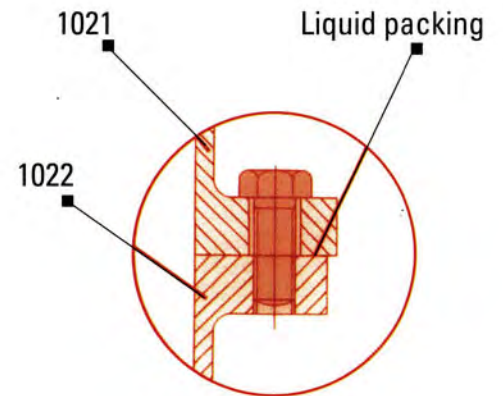
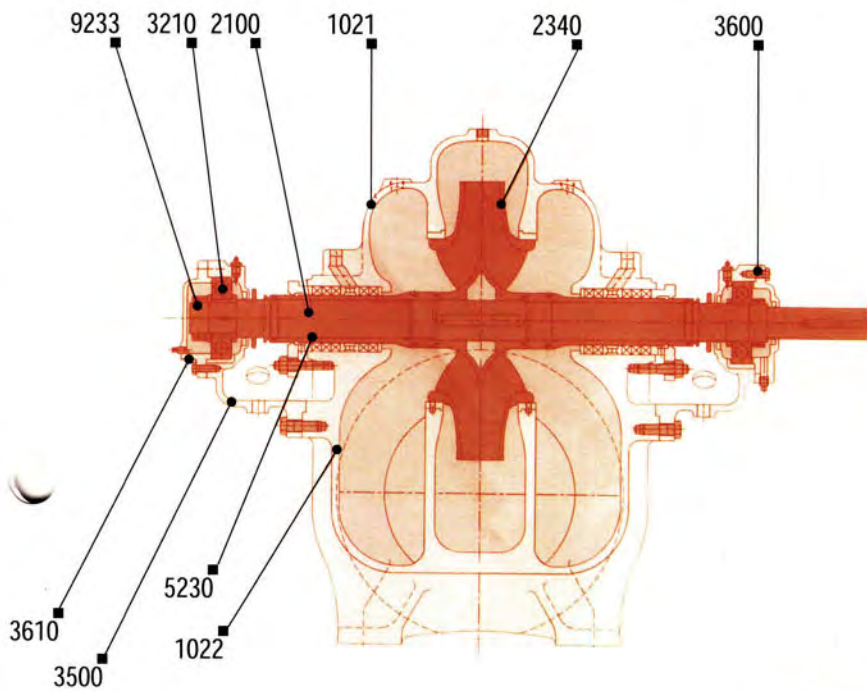


60Hz-4P

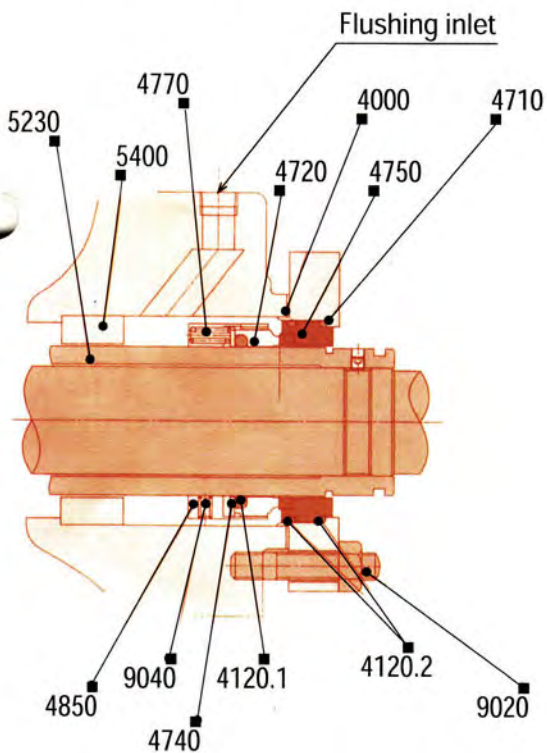


60Hz-6P





Mechanical Seal (option)

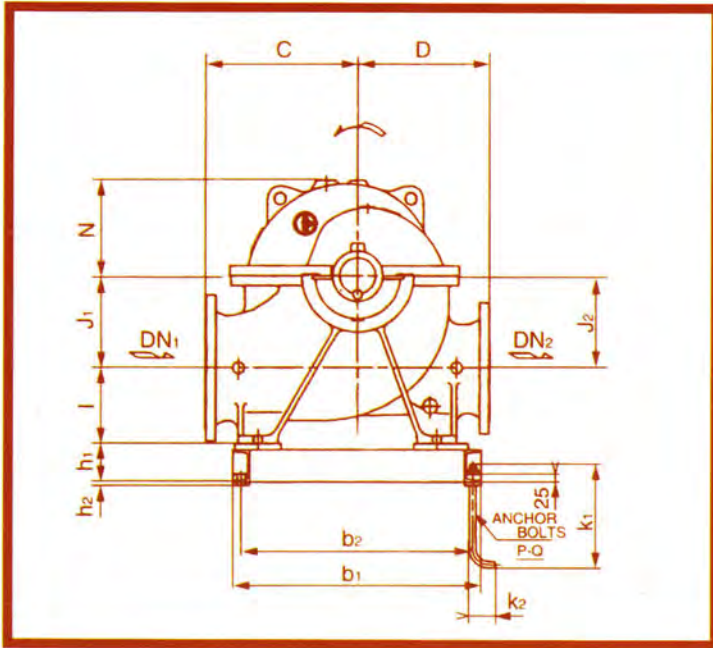


Part No.	Part designation
1021	Volute casing, upper half
1022	Volute casing, lower half
2100	Shaft
2340	Impeller
3210	Ball bearing
3500	Bearing bracket
3600	Bearing cover
3610	End cover
5230	Shaft sleeve
9233	Hard lock nut

Mechanical Seal

Part No.	Part designation
4000	Flat gasket
4120.1	O-ring
4120.2	O-ring
4710	Seal cover
4720	Washer
4740	Stopper
4750	Seat
4770	Spring
4850	Stopper
5230	Shaft sleeve
5400	Bush
9020	Stud bolt
9040	Set bolt

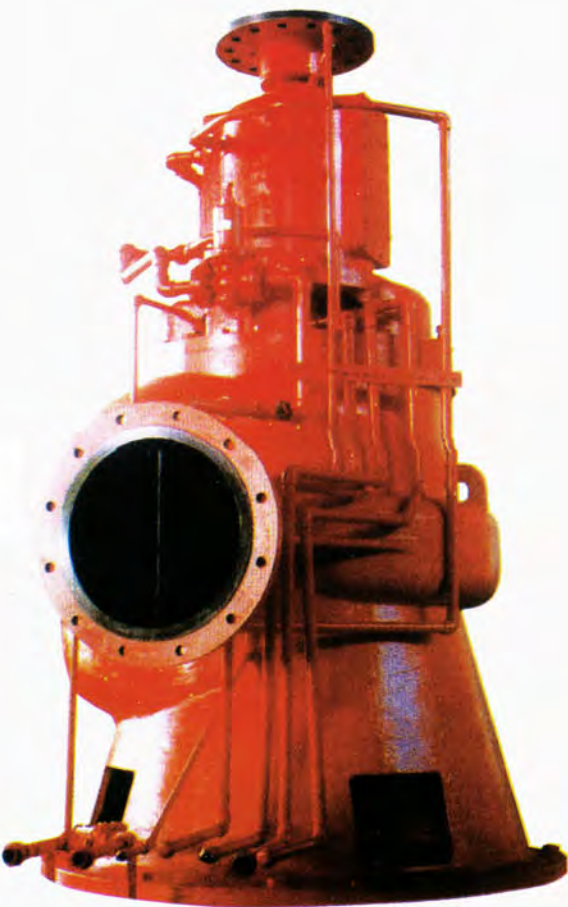
DIMENSIONAL DRAWING



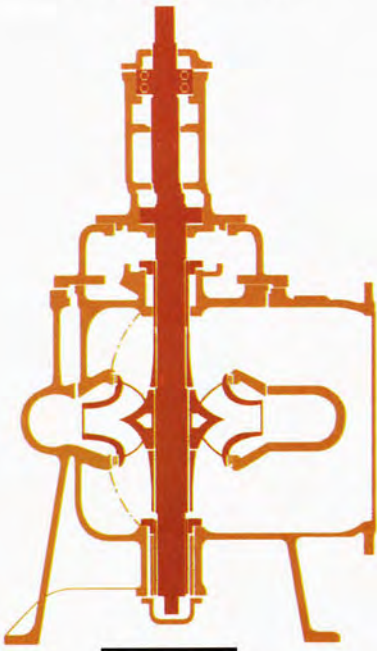
Bearing size	Designation (CDM)	Pump dimensions										Weight kgf
		DN ₁	DN ₂	A	B	C	D	I	J1	J2	N	
40/110	200KN	200	200	425	552	360	340	175	210	210	215	332
	200 x 150IN	200	150	425	552	370	350	175	215	215	225	362
	200 x 150GN	200	150	407	534	370	335	175	190	190	240	320
	250 x 200JN	250	200	429	556	420	360	210	250	250	250	363
	250 x 200HN	250	200	429	556	430	370	210	255	255	265	366
50/130	300 x 200KN	300	250	443	570	460	400	230	280	280	290	417
	200 x 150EN	200	150	445	585	400	360	175	215	215	270	377

Bearing size	Designation (CDM)	Pump dimensions										Weight kgt
		DN ₁	DN ₂	A	B	C	D	I	J1	J2	N	
50/130	250 x 200FN	250	200	455	595	450	380	210	290	290	290	452
	300 x 250IN	300	250	481	621	460	410	235	295	295	290	580
	350LN	350	350	561	701	480	435	255	295	295	295	635
	400 x 350MN	400	350	561	701	560	470	290	340	340	350	1092
60/150	250 x 150CN	250	150	476	605	490	395	230	260	310	325	556
	250 x 200 DN	250	200	474	603	550	450	220	300	335	350	588
	300 x 200GN	300	200	484	613	470	410	235	270	270	300	520
	300 x 250EN	300	250	482	611	550	450	250	315	315	355	609
	350 x 300JN	350	300	525	654	500	440	255	325	325	325	674

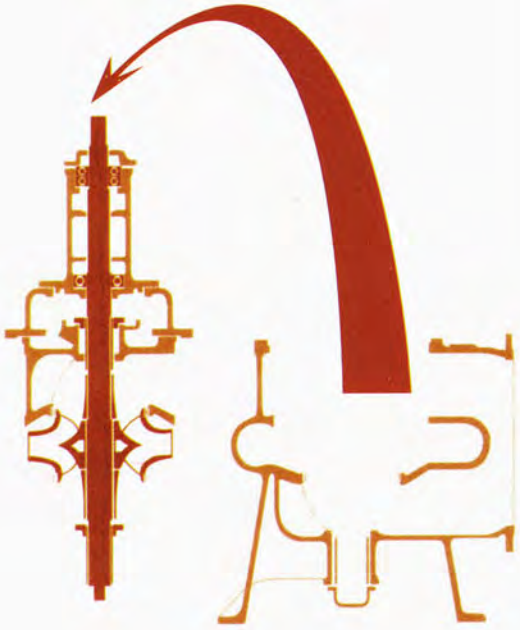
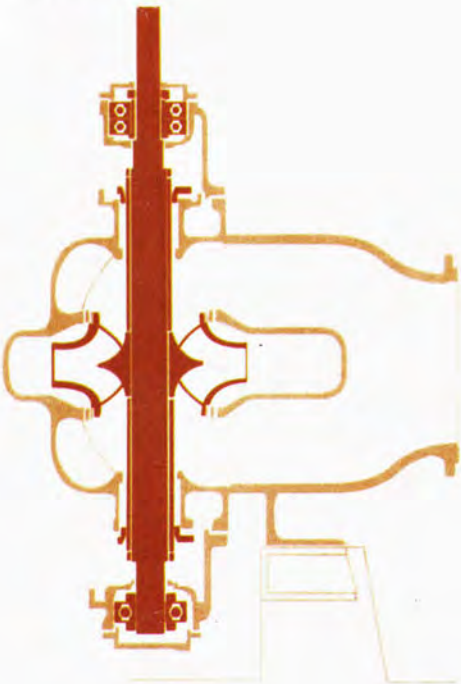
Bearing size	Designation (CDM)	Pump dimensions										Weight kgf
		DN ₁	DN ₂	A	B	C	D	I	J1	J2	N	
60/130	350 x 300HN	350	300	525	654	545	450	255	330	330	335	775
	400 x 350KN	400	350	532	661	550	470	290	350	350	360	775
75/160	250 x 150BN	250	150	547	658	570	465	225	320	370	405	746
	300 x 200CN	300	200	547	658	580	480	200	330	380	410	823
	350 x 250FN	350	250	534	682	580	460	255	360	360	370	965
	400 x 350IN	400	350	548	696	610	480	290	380	380	385	1030
	400 x 300GN	400	300	553	701	620	500	295	365	365	395	1185
	450LN	450	450	669	817	590	545	325	370	370	370	1543
	450 x 350JN	450	350	614	765	615	550	320	400	400	405	968
500 x 450MN	500	450	694	842	700	600	355	425	425	420	1809	



Pull-out type
For easier maintance



Split type



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