KYP

TÜV CERT EN-ISO 9001

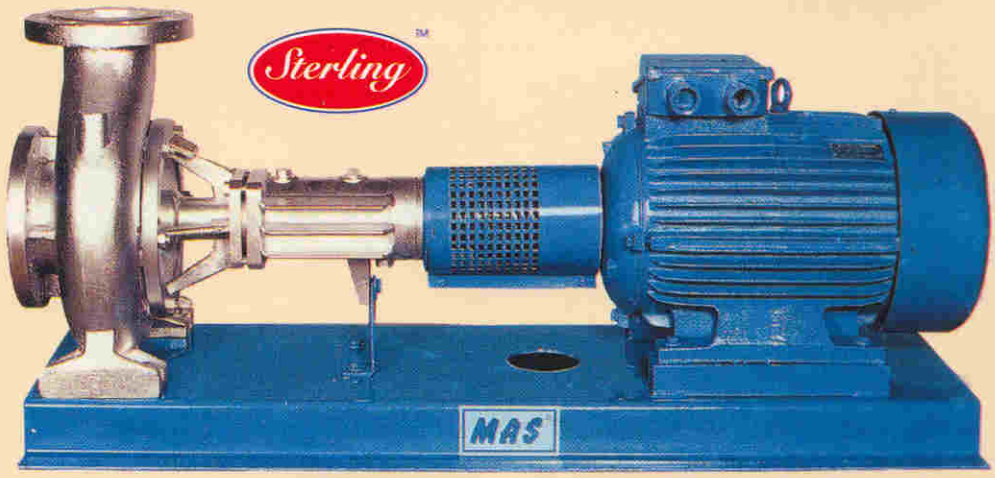
1997 POMSAD Member of Pumpi Manufacturer's Association

CE

Europump Member of Europump

MAS®

uncooled thermal oil pumps



general specifications

Fields of Application
- Chemical and petrochemical processing industries
- Paper / Sugar mills.
- Food and pharmaceutical industries.
- Leather industries.
- For heating of baking ovens.
- Manufacturing of plastic and syntetic fiber material
- Rubber industries.
- Launderies.
- Textile plants.
- All heat transfer applications over 100 ° C

Pumped Liquids
All kinds of heat transfer liquids.

General Information
The KYP series comprises horizontal single stage centrifugal pumps, specially designed for the pumping of thermal fluids at a high temperature, in industrial installations, without needing any type of external refrigeration.The Hydraulic characteristics of pumps are in accordance with the standard DIN 24 256 (ISO 2858) for chemical pumps. Which means that for each installation the most suitable pump can be used to give optimum performance.

Design
From the hydraulic point of view, the KYP pumps are centrifugal single stage, horizontal, volute type pumps. With regards to the mechanical design, the main concept of the KYP series is to a maximum, the mechanical seal and ball bearings from the source of heat that constitutes the pump casing, placing between both a thermal barrier and cooling the mechanical seal housing and bearing support by natural convection.

Pump Casing
Single spiral volute type, radially split with integrated suct'son and discharge ports and also integrally cast feet for baseplate attachment. Thanks to back pullout design, maintenance is much easier as the inside of the pump can be dismounted without needing to disconnect the casing from the pipe connections. Suction port is axial and discharge is vertical.

Impeller
The impellers of the KYP pumps are single entry,closed type and dynamically balanced. The impeller has back wings for the axial balancing of pressures.

Shaft and Support
The impeller is overhung mounted on the end of the shaft. The shaft is designed to be able to withstand all mechanical and thermal efforts generated during operation of the pump with minimum deflection. The bearing housing is made of cast iron and apart from serving as the shaft support, it also houses the mechanical seal.It is equipped with external cooling wings .

Shaft Seal & Bearings
Shaft sealing is optained by means of a high security mechanical seal, placed in the bearing housing, close to the second ball bearing near to the shaft end. This means that the seal is housed in a low temperature zone, given the distance from the pump casing, thus optaining a long life for the seal.
The first ball bearing near to the casing is lubricated by pumped liquid. A safety stuffing box with a following throttling area is arranged in front of the first ball bearing and mechanical seal. Even in case of failure of the mechanical seal, these additional safety elements prevent seepage from emerging in a hazardous quantity and manner.
The second ball bearing is located near the end of the shaft and lubricated by grease.

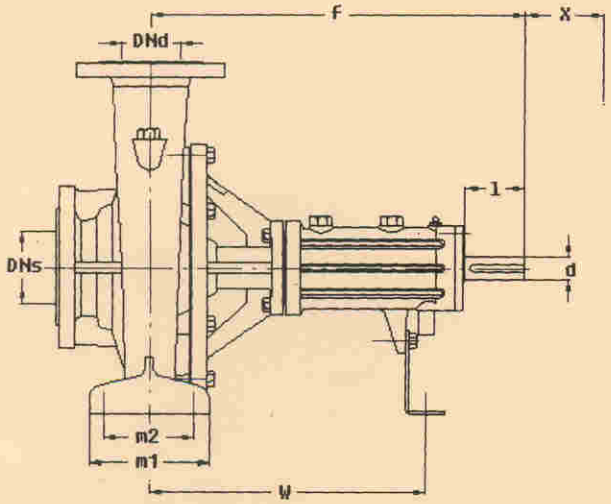
Technical Data
- Suction and Discharge Nozzles :.DN 32 ...DN 100
- Operating Pressure: ..... 16 Bar
- Speed : .....: 1450 - 1750 - 2900 - 3600 RPM
- Capacity Range : .....: 10 - 300 m3 l h
- Head Range :.....: 5 - 90 m.
- Temp Range:.....: 100-350° C

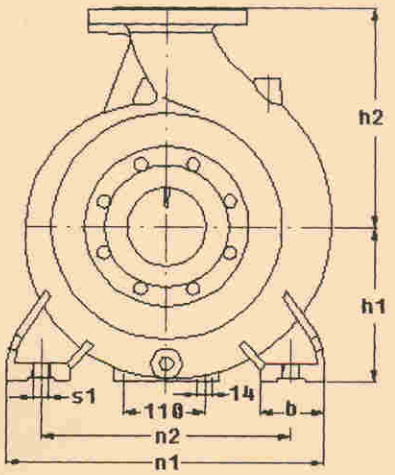
Pump Flanges
- According to DIN 2533 - PN 16

Identification Code KYP 80 - 250
Pump Type
Discharge Nozzle DN (mm)
Rated Impeller Diam. (mm)

Materials
For standard construction the KYP pump casing and casing cover are made with nodular cast iron (GGG 40) which is very resistant to high temperatures.
Impeller and bearing housing are made with cast iron (GG 25)
Shaft is made with % 13 Chromium Stainless steel.

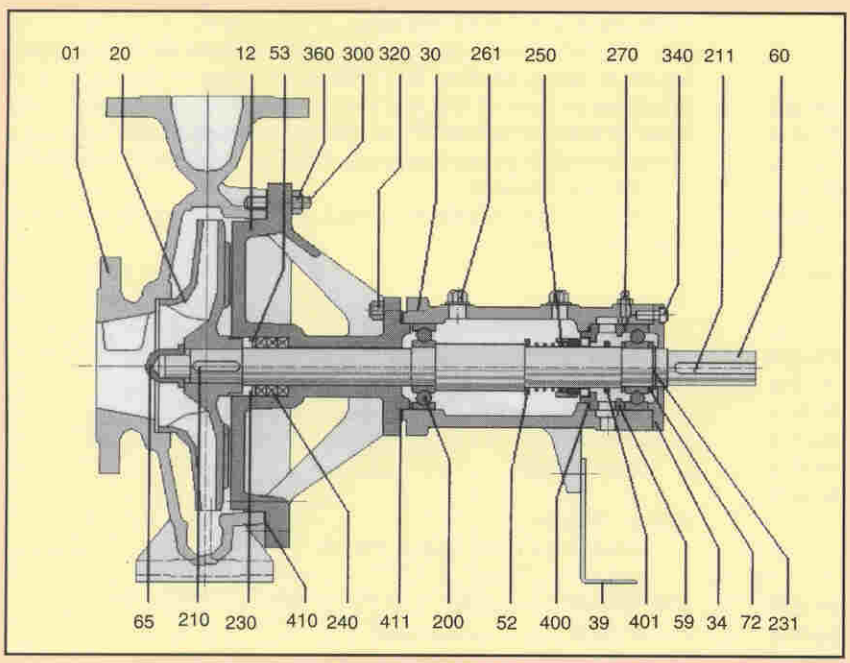
pump dimensions





No	Pump Size DIN 24256	Flanges DNs	Flanges DNd	Length a	Length f	Height h1	Height h2	Feet b	Feet m1	Fixing Details m2	Fixing Details n1	Fixing Details n2	Fixing Details s1	Fixing Details W	Shaft End d	Shaft End l	(*) x
1	32-160	50	32	80	385	132	160	50	100	70	240	190	14	285	24	50	65
2	32-200	50	32	80	385	160	180	50	100	70	240	190	14	285	24	50	65
3	32-250	50	32	100	500	180	225	65	125	95	320	250	14	370	32	80	80
4	40-160	65	40	80	385	132	160	50	100	70	240	190	14	285	24	50	75
5	40-200	65	40	100	385	160	180	50	100	70	265	212	14	285	24	50	75
6	40-250	65	40	100	500	180	225	65	125	95	320	250	14	370	32	80	75
7	50-160	65	50	100	385	160	180	50	100	70	265	212	14	285	24	50	80
8	50-200	65	50	100	385	160	200	50	100	70	265	212	14	285	24	50	85
9	50-250	65	50	100	500	180	225	65	125	95	320	250	14	370	32	80	85
10	65-160	80	65	100	500	160	200	65	125	95	280	212	14	370	32	80	100
11	65-200	80	65	100	500	180	225	65	125	95	320	250	14	370	32	80	100
12	65-250	80	65	100	500	200	250	80	160	120	360	280	18	370	32	80	100
13	80-160	100	80	125	500	180	225	65	125	95	320	250	14	370	32	80	100
14	80-200	100	80	125	500	180	250	65	125	95	345	280	14	370	32	80	100
15	80-250	100	80	125	500	200	280	80	160	120	400	315	18	370	32	80	100
16	100-200	125	100	125	500	200	280	80	160	120	360	280	18	370	32	80	100

(*) Back pull-out distance required betweeen motor shaft and pump shaft end.
KYP type pumps are conforming with DIN 24 256 and ISO 2858



parts list

01 Pump Casing
12 Discharge Cover
20 Impeller
30 Bearing housing
34 Bearing Cover
39 Support Foot
52 Mech Seal Ring
53 Soft Packing Ring
59 Mec. Seal Housing
60 Shaft
65 Impeller Nut
72 Space Ring
200 Ball Bearing
210 Impeller Key
211 Coupling Key
230 Retaining Ring
231 Retaining Ring
240 Soft Packing
250 Mechanical Seal
261 Oil Filling Plug
270 Grease Cup
300 Casing Stud
320 Hex Bolt
340 Imbuss Bolt
360 Casing Nut
400 Gasket For Casing
401 O-Ring (Mech Seal)
411 Gasket for Bea. Housing

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