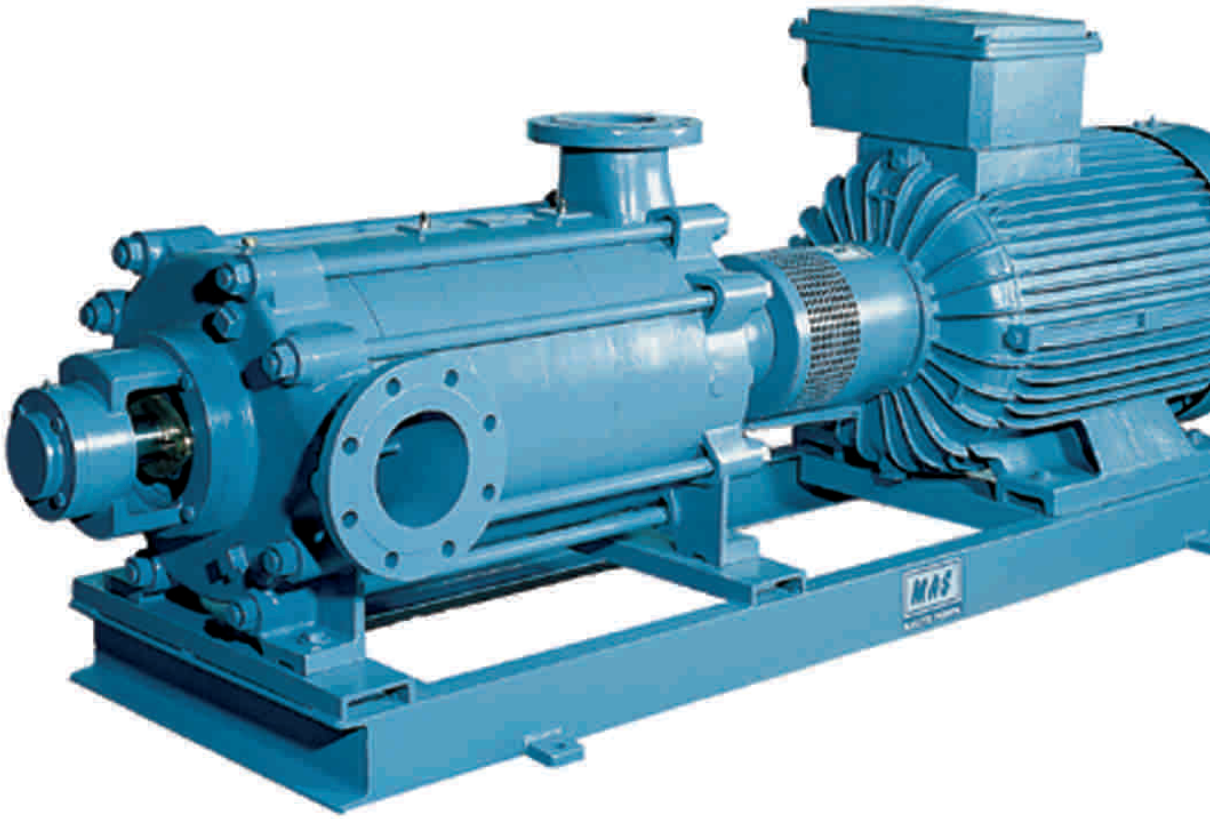
MAS KME - Series

high pressure multistage pumps

KALEPOMPA

KME



KME - Series (DN 80 – DN 200)

High pressure pumps for water supply , boosting , condensate and boiler feed applications.
Segmental ring construction.
Capacity up to 800 m³/h - Total head up to 500 m.
Temperature up to : 90 °C (140 ° C) - Operation Pressure : 50 Bar.

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general specifications

Fields of Application

- Water supply.
- Booster sets in high rise buildings and industry.
- Water treatment.
- Industrial washdown systems
- Fire fighting
- Boiler feed and condensate transfer.
- Cleaning installation for casks, tanks and cans.
- Sanitary and cleaning installations.
- For industrial applications and public services.
- Water distrubution systems,
- Industrial applications.

Pumped Liquids

Thin , clean , non-aggressive and non-explosive liquids free from solid particles or fibres.

Design

The KME Pump is a horizontal axis, radially split, ring section design multistage centrifugal pump of non self-priming type.
Impellers are between bearings , single entry,closed type and dynamically ballanced.
For ballancing the axial thrust, all impellers have back wear rings. It is not necessary to use ballance disk or drum.
Pump and motor are fitted on a common baseplate connected to each other by a flexible coupling. Normally, discharge port is at motor side on top and suction port is at dead end side at left. By special request suction and discharge nozzles may be set a choice of three 90° positions; it is also possible to put the suction nozzle at the motor end. In this arrangement motor rotation must be counter clockwise.

Shaft

Cromium steel fine grained shafts are used on KME pumps. There is no diameter difference along the shaft and it is possible and very easy to dismantling the pump beginning from suction or discharge ends

Bearings

On both ends there are bearing housings equipped with grease lubricated antifriction bearings. On suction side double row angular contact ball bearings are used (3300 Series) .At the discharge side there are cylindrical roller bearings (NU 300 Series). Deflectors on the shaft prevent leakage fluid from getting into bracket.

Shaft Seal

Pumps are supplied as standard , conventional packed glands. Lantern ring on both sides for water sealing and lubricating of packing. Sealing section of pump, shaft is protected by hard cromium plated sleeves.
On discharge side special high pressure packings and bushes for dropping pressure are used.

- Uncooled stuffing box is standard . (Up to 90 °C)
- Uncooled mechanical seal is optional . (Up To 90 ° C)
- Water cooled stuffing box or mechanical seal is optional . (90 – 140 ° C)

Technical Data

- Suction and Discharge Nozzles :.DN 80 ...DN 200
- Operating Pressure: .....: 40 Bar
- No of stages :.....: 2 - 10
- Speed : . .....: 1450 - 1750 RPM
  (For KME 80 up to 3600 RPM)
- Capacity Range : ..... : 30 - 800 m^3 / h
- Head Range :..... ..: 30 - 500 m.
  (On special request up to 500 m. is available)

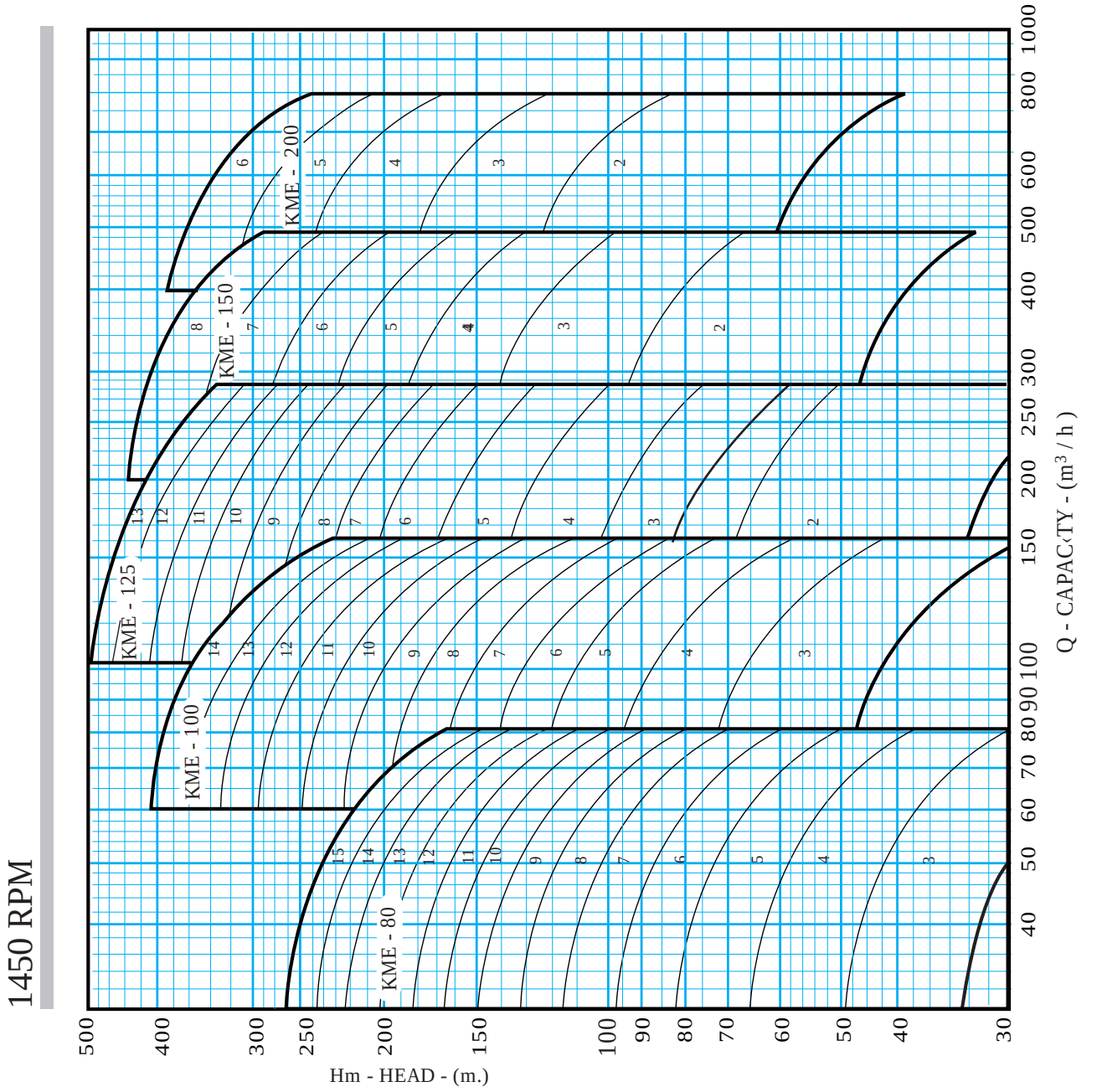
Pump Flanges

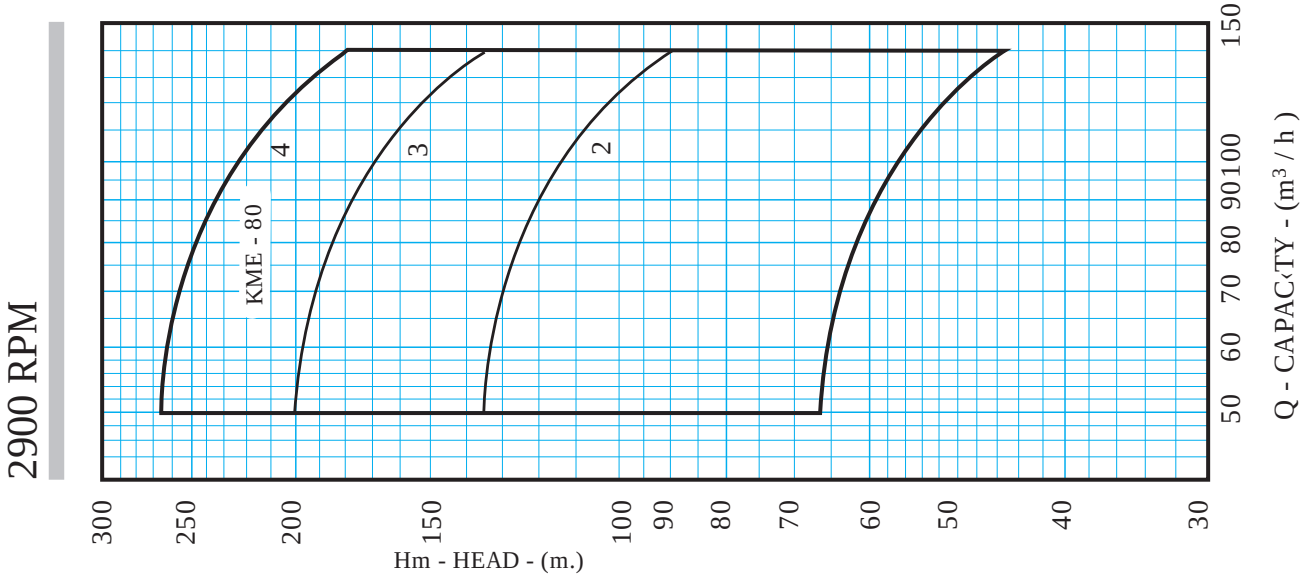
Suction Flanges :According to DIN 2533 – PN 16
Discharge Flanges : Acc. to DIN 2535 – PN 40

Identification Code KME 100 / 6

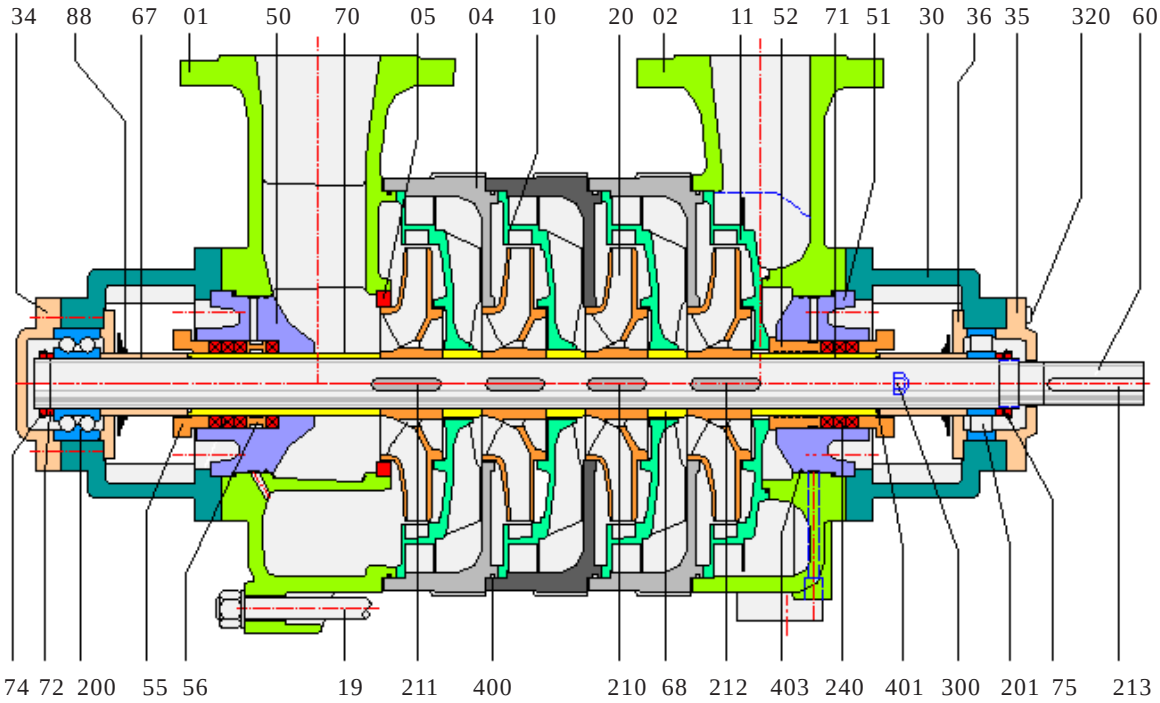
Pump Type
Discharge Nozzle DN (mm)
No of stages

hydraulic data





sectional drawing and parts list



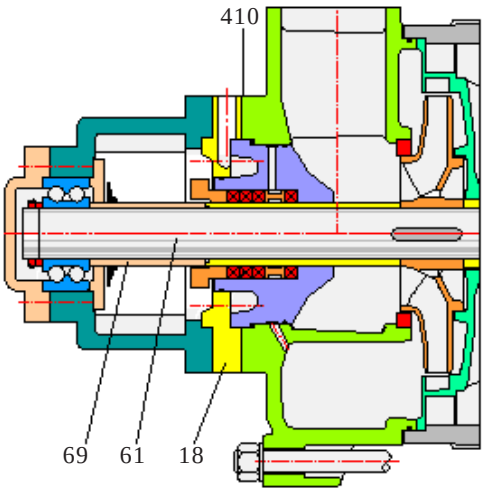
parts list

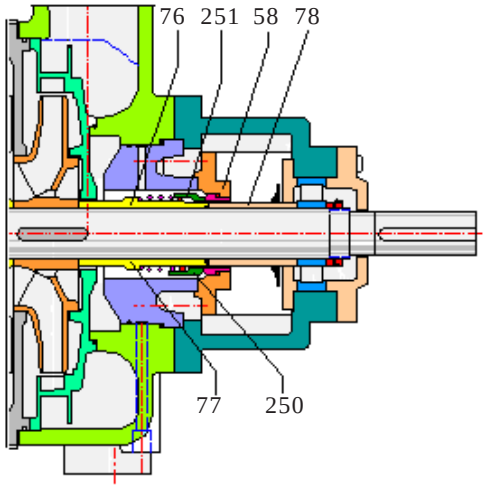
01 Suction Casing
02 Discharge Casing
04 Stage Casing
05 Wear Ring (first stage)
10 Difuser
11 Last Stage Difuser
19 Tiebolt and Nut
20 Impeller
30 Bearing Housing
34 Bearing Cover (Suction Side)
35 Bearing Cover (Disch. Side)
36 Bearing Cover (Inside)
50 Stuffing Box (Suction Side)
51 Stuffing Box (Disch. Side)
52 Throat Bushing
55 Gland
56 Lantern Ring
60 Pump Shaft
67 Space Sleeve
68 Space Sleeve
70 Seal Sleeve(Suction Side)
71 Seal Sleeve (Disch. Side)
72 Space Ring
74 Shaft Nut (Suction Side)
75 Shaft Nut (Disc. Side)
88 Thrower
200 Ball Bearing (3300 C3)
201 Roller Bearing (NU 300)
210 Key For Impeller
211 Key For First Stage
212 Key For Last Stage
213 Key For Coupling
240 Soft Packing
300 Stud and Nut For Gland
320 Bolt for Bearing cover
400 O-Ring (Stage Housing)
401 O-Ring (Shaft Sleeve)
403 O-Ring (Stuffing Box)

materials of construction

Component	Material Version					
	Standart	Bronze Fitted	Spheroidal Cast Iron	All Bronze	Carbon Steel	Stainless Steel
Suc.& Disc.Casing	GG 25	GG 25	GGG 40	Bronze	GS 45	SS 304 – 316
Stage Casing	GG 25	GG 25	GGG 40	Bronze	GS 45	SS 304 – 316
Impeller	GG25	Bronze	Bronze-GG25	Bronze	GS 45	SS 304 – 316
Diffuser	GG 25	GG25	GG25	Bronze	GS 45	SS 304 – 316
Gland	Bronze	Bronze	Bronze	Bronze	GS 45	SS 304 – 316
Shaft	X20Cr13	X20Cr13	X20Cr13	X20Cr13	X20Cr13	SS 304 – 316
Shaft Sleeve	C1040(Cr Plt)	C1040(Cr Plt)	C1040(Cr Plt)	Bronze	C1040(Cr Plt)	SS 304 – 316
Bearing Housing	GG 25	GG 25	GG 25	GG 25	GG 25	GG 25
Bearing Cover	GG 25	GG 25	GG 25	GG 25	GG 25	GG 25

optional applications





- Cooled Stuffing Box
  (Cooled mech.seal is also available)

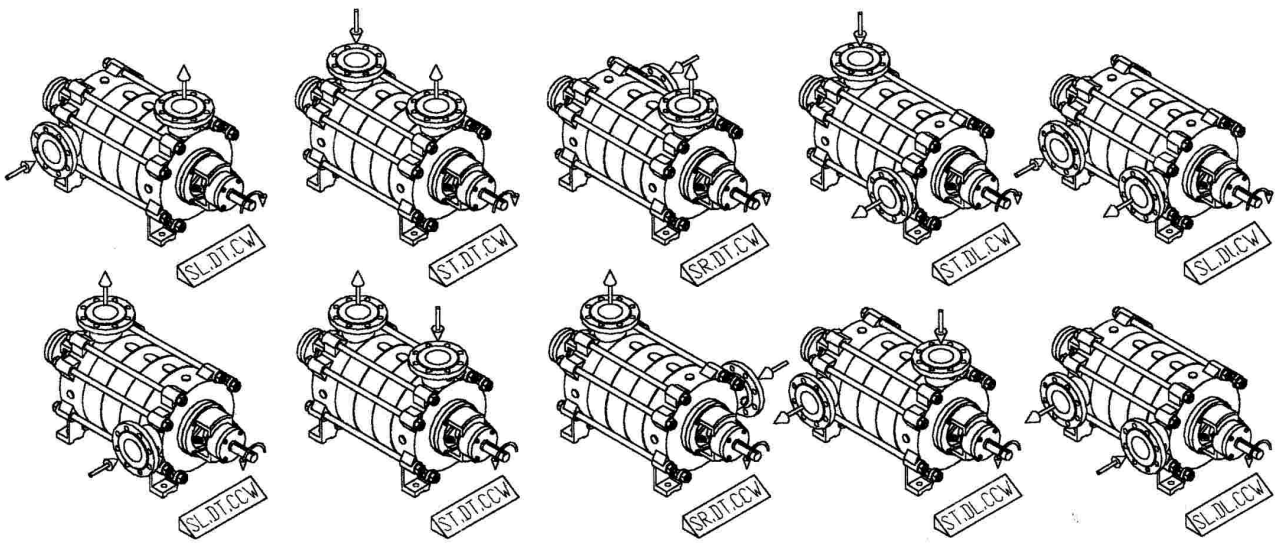
69 Long Spacer Sleeve
18 Cover for cooled stuffing box
61 Special shaft
for cooled stuffing box.
410 Gasket

- Upper half of drawing :Ballanced Mechanical Seal
  (part No:251)
  (For Discharge side - Over 10 Bar)

- Lower half of drawing : Single spring Mech. Seal.
  (part No:250)
  (For Suction side , and discharge side up to 10 Bar.)

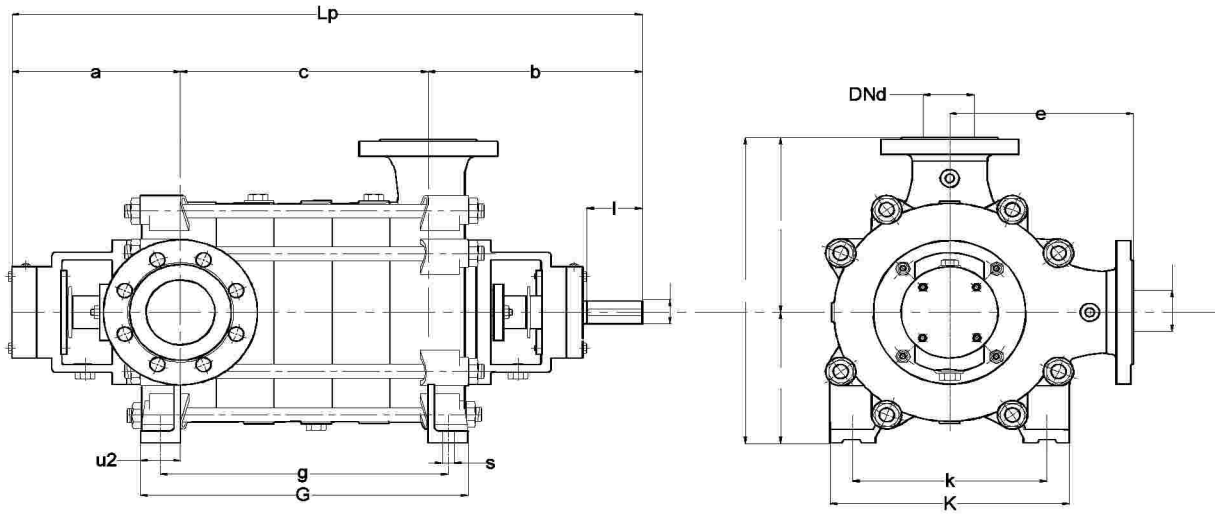
76 Shaft Sleeve for Ballanced Mech.seal
58 Mech Seal Cover.
78 Spacer sleeve for Ballanced Mech.Seal.
77 Shaft Sleeve for single spring Mech.Seal.

different mounting arrangements



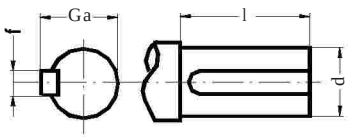
Example: SL-DT-CW :(SL : Suction Left - DT: Discharge Top - CW: Rotation Clock Wise)

pump dimensions table

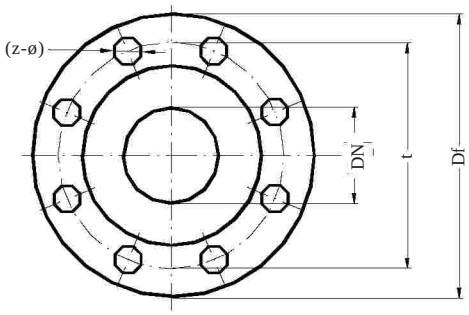


Pumps Size	DNs mm ø	DNd mmø	a	b	Lp	g	G	u2	h1	hp	e	d	l	k	K	s
KME 80	100	80	243	309	C+552	C+70	C+120	60	200	465	265	35	80	280	345	22
KME 100	125	100	281	374	C+655	C+80	C+140	70	240	540	300	40	110	340	417	22
KME 125	150	125	346	398	C+744	C+103	C+182	96	280	655	375	45	110	400	490	28
KME 150	200	150	395	435	C+830	C-115	C+210	110	315	740	425	55	110	450	560	28
KME 200	250	200	467	565	C+1031	C+134	C+233	128	365	865	500	65	140	520	645	33

Pumps Size	Dimension "c " according to stage number														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
KME 80	108	191	274	357	440	523	606	689	772	855	938	1021	1104	1187	1270
KME 100	131	236	341	446	551	656	761	866	971	1076	1181	1285	1391	1495	
KME 125	154	282	410	538	666	794	922	1050	1178	1306	1434	1562	1690		
KME 150	175	320	465	610	755	900	1045	1190							
KME 200	235	405	575	745	915	1085									



Shaft End & Key Way



Flange Dimensions

Dimensions in (mm)				
Pumps Size	d	l	f	Ga
KME 80	35	80	10	38
KME 100	40	110	12	43
KME 125	45	110	14	48.5
KME 150	55	110	16	59
KME 200	65	140	18	69

Suction Flange (DN 16)				
DN	Df	t	z	Ø
DN 100	220	180	8	18
DN 125	250	210	8	18
DN 150	285	240	8	22
DN 200	340	295	12	22
DN 250	405	355	12	26

Discharge Flange (PN 40)				
DN	Df	t	z	Ø
DN 80	200	160	8	18
DN 100	235	190	8	22
DN 125	270	220	8	26
DN 150	300	250	8	26
DN 200	375	320	12	30