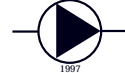


high pressure multistage pumps

KALİTE POMPAS

KMB



1997
Member of
Pump Manufacturers'
Association



Member of Europump



KMB - Series (1450 / 2900 rpm)

For water supply, boosting, condensate and boiler feed applications.

Capacity up to 100 m³/h - Total head up to 300 m.

Temperature up to : 90°C (140°C) - Operation Pressure: 40 Bar.

MAS Pompa Sanayi A. fi.

Merkez/Head Office: Ataflehir Bulvarı, Ata Çarşı
K:4 No:59 34758 Ataflehir - STANBUL / TÜRK-YE
Tel: (0216) 456 47 00 Fax: (0216) 455 14 24
e-mail: masgrup@superonline.com
http : //www.masgrup.com



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.
- Sanitary and cleaning installations.
- For industrial applications and public services.
- Water distribution systems,
- Industrial applications.

Pumped Liquids

Thin, clean, non-aggressive and non-explosive liquids free from solid particles or fibres.
For special applications, please consult to MAS

Design

The KMB Pump is a horizontal axis, radially split, ring section design multistage centrifugal pump of self-priming type.

Impellers are between bearings, single entry, closed type and dynamically balanced.

For balancing the axial thrust, all impellers have back wear rings. It is not necessary to use balance 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.

Suction and discharge nozzles may be set a choice of three 90° positions. By special request it is possible to put the suction nozzle at the motor end. In this arrangement motor rotation must be counter clockwise. Please see the possible arrangements at "Different Mounting Arrangements" section.

Shaft

Cromium steel (AISI 420) fine grained shafts are used on KMB pumps. There is no diameter differences along the shaft and it is possible and very easy to dismantling the pump beginning from suction or discharge ends. Since there is no part dependent on direction of rotation, same shaft can be used for all applications.

Bearings

On both ends bearing houses equipped with maintenance-free antifriction bearings, which are greased for life with high-temperature grease are used. Deflectors on the shaft prevent leakage fluid from getting into bracket.

Shaft Seal

Pumps are supplied as standard, soft packing glands. Lantern rings are used on both sides for water sealing and lubricating of packing. Sealing section of pump shaft are protected by hard chromium plated sleeves. On pressure side special design high pressure packings 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 32 ...DN 65
- Operating Pressure: 40 Bar
- No of stages: 3 - 14
- Speed: 1450...2900 RPM
- Capacity Range : 2 .. 100 m³/h
- Head Range : 30 - 300 m.

Pump Flanges

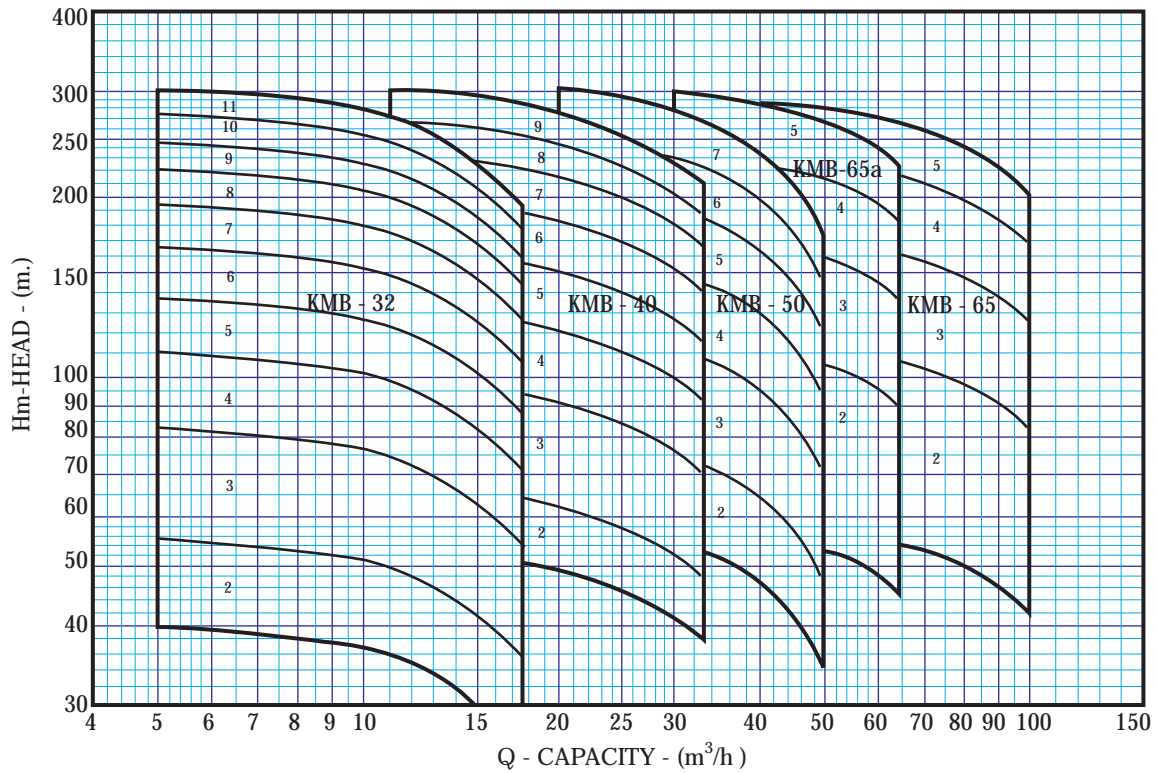
According to DIN 2535 – PN 40

Identification Code **KMB 40 / 12**

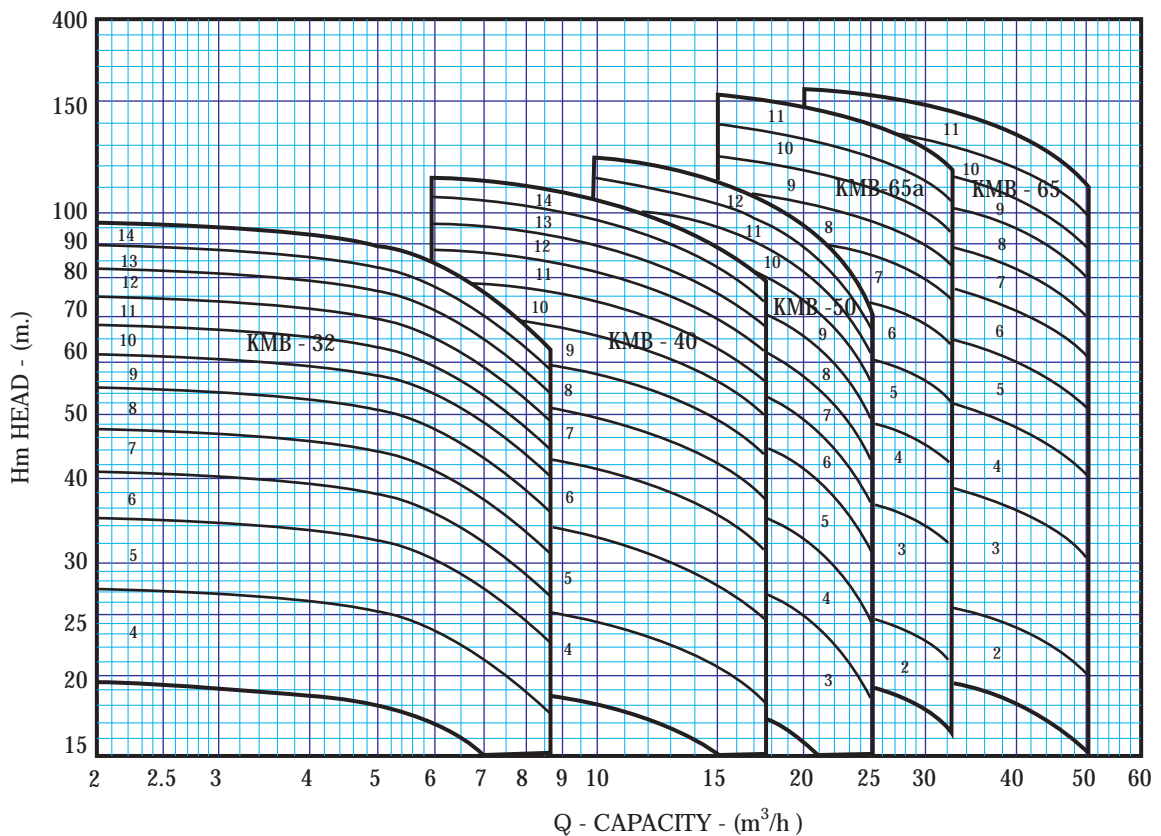
Pump Type _____ ↑
 Discharge Nozzle DN (mm) _____ ↑
 No of stages _____ ↑

hydraulic data

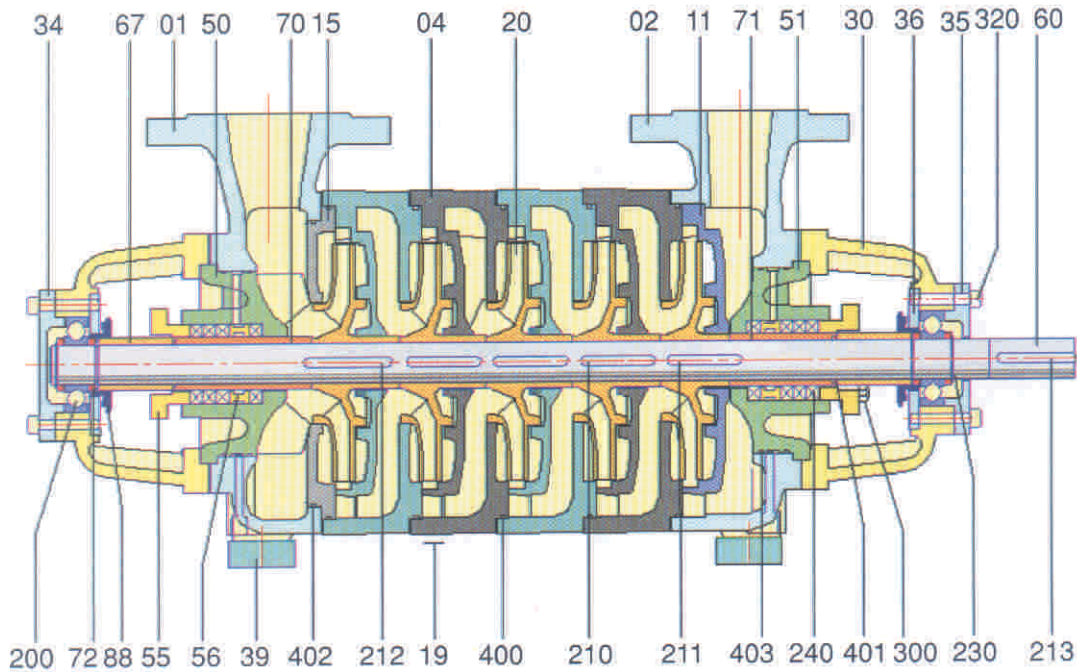
Performance Range - 2900 RPM



Performance Range - 1450 RPM



sectional drawing and part list



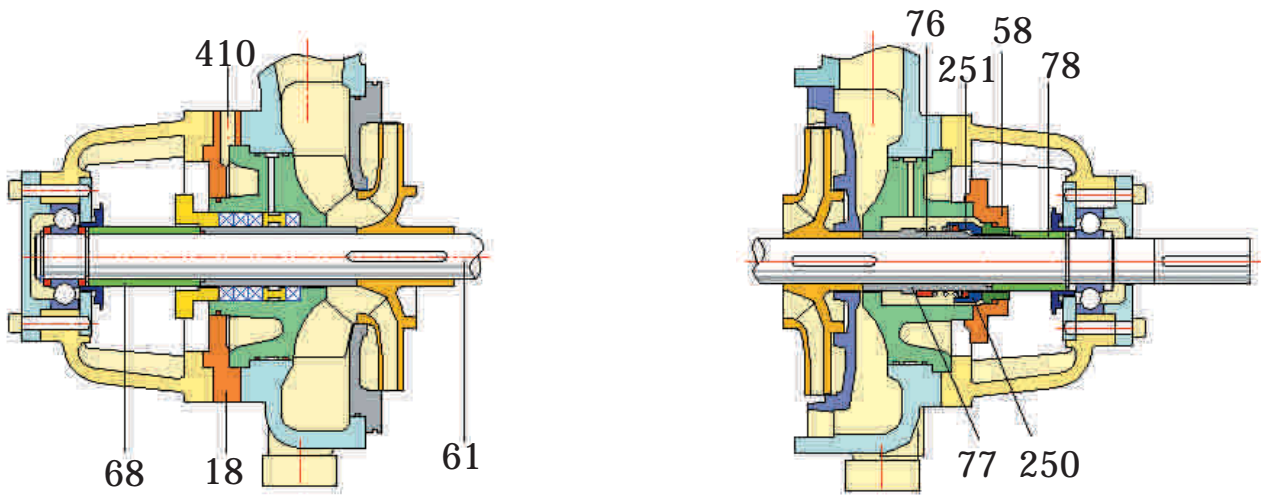
Part List

01 Suction Casing	39 Pump Foot	211 Key For First Stage
02 Discharge Casing	55 Gland	212 Key For Last Stage
04 Stage Casing	56 Lantern Ring	213 Key For Coupling
11 Last Stage Difuser	60 Pump Shaft	230 Retaining Ring
15 Suction Housing Cover	67 Space Sleeve	240 Soft Packing
19 Tiebolt and Nut	70 Seal Sleeve (Suction Side)	300 Stud and Nut For Gland
20 Impeller	71 Seal Sleeve (Disch. Side)	320 Bolt for Bearing Cover
30 Beraring Housing	72 Space Ring	400 O-Ring (Stage Housing)
34 Bearing Cover (Suction Side)	88 Thrower	401 O-Ring (Shaft Sleeve)
35 Bearing Cover (Disch. Side)	200 Ball Bearing (63...-2RS)	402 O-Ring (Suction Hausing)
36 Bearing Cover (Inside)	210 Key For Impeller	403 O-Ring (Stuffing Box)

Materials of Construction

Component	Material Version				
	Standard	Diffuser in Bronze	All Bronze	Carbon Steel	Stainless Steel
Suc.&Disch. Casing	GG 25	GG 25	Bronze	GS 45	AISI 304 / AISI 316
Stage Casing	GG 25	GG 25	Bronze	GS 45	AISI 304 / AISI 316
Impeller	GG 25	Bronze	Bronze	GS 45	AISI 304 / AISI 316
Diffuser	GG 25	Bronze	Bronze	GS 45	AISI 304 / AISI 316
Gland	Bronze	Bronze	Bronze	GS 45	AISI 304 / AISI 316
Shaft	AISI 420	AISI 420	AISI 420	AISI 420	AISI / 316 / AISI 420
Shaft Sleeve	AISI 1035 (Cr Plated)	AISI 1035 (Cr Plated)	Bronze	AISI 1035 (Cr Plated)	AISI / 316 / AISI 420
Bearing Housing	GG 25	GG 25	GG 25	GG 25	GG 25
Bearing Cover	GG25	GG 25	GG 25	GG 25	GG 25

optional applications



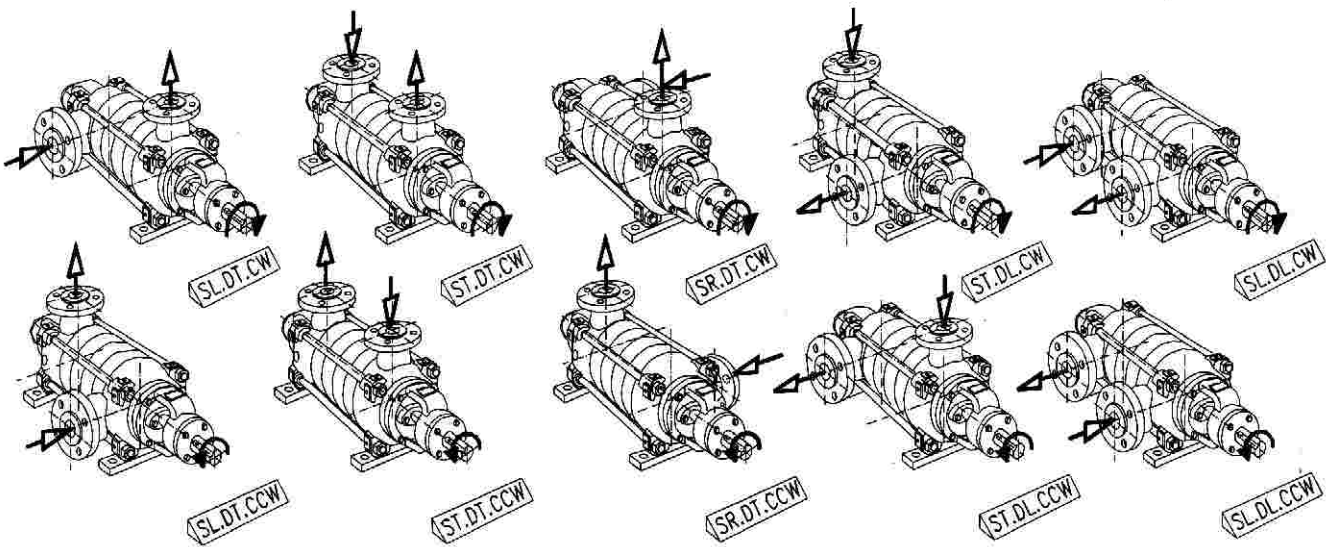
- Cooled Stuffing Box
(Cooled mech. seal is also available)

- Upper half of drawing: Balanced 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.)

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

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

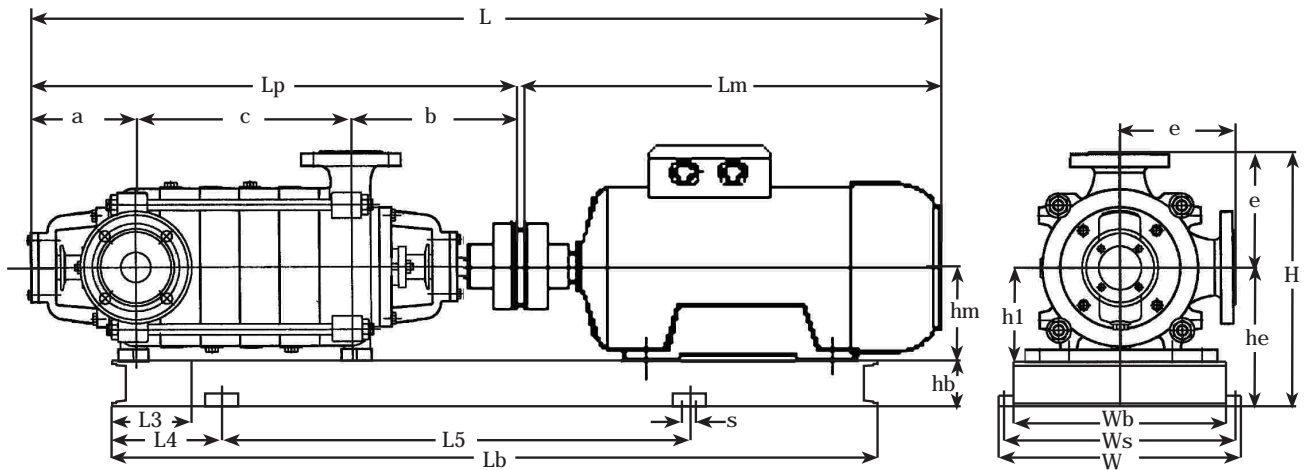
Different Mounting Arrangements



Example: SL-DT . CW

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

overall dimensions - 2900 RPM



Pump size st.	PUMP				OVERALL			DRIVER		BASE PLATE									
	MOTOR		DN s mm Ø	DN d mm Ø	Lp mm	L mm	W mm	H mm	Lm mm	hm mm	Lb mm	Wb mm	hb mm	he mm	L3 mm	L4 mm	L5 mm	Ws mm	s mmØ
	kw	IEC No																	
KMB 32/2	4	112M	40	32	536	945	360	332	384	112	800	270	65	182	42	130	540	320	19
KMB 32/3	5.5	132S	40	32	579	1046	360	347	447	132	800	270	65	197	42	130	540	320	19
KMB 32/4	7.5	132S	40	32	622	1089	360	347	447	132	900	270	65	197	42	150	600	320	19
KMB 32/5	11	160M	40	32	665	1279	450	390	594	160	1120	340	80	240	42	190	740	400	24
KMB 32/6	11	160M	40	32	708	1322	450	390	594	160	1120	340	80	240	42	190	740	400	24
KMB 32/7	15	160M	40	32	751	1365	450	390	594	160	1120	340	80	240	42	190	740	400	24
KMB 32/8	15	160M	40	32	794	1408	450	390	594	160	1250	340	80	240	42	205	840	400	24
KMB 32/9	18.5	160L	40	32	837	1495	450	390	638	160	1250	340	80	240	42	205	840	400	24
KMB 32/10	18.5	160L	40	32	880	1538	450	390	638	160	1400	340	80	240	42	230	940	400	24
KMB 32/11	22	180M	40	32	880	1554	490	410	654	180	1400	380	80	260	42	230	940	400	24

KMB 40/2	7.5	132S	50	40	547	1014	390	367	447	132	800	300	65	197	49	130	540	350	19
KMB 40/3	11	160M	50	40	602	1216	450	410	594	160	1000	340	80	240	49	170	660	400	24
KMB 40/4	15	160M	50	40	657	1271	450	410	594	160	1120	340	80	240	49	190	740	400	24
KMB 40/5	18.5	160L	50	40	712	1370	450	410	638	160	1120	340	80	240	49	190	740	400	24
KMB 40/6	22	180M	50	40	767	1441	490	430	654	180	1250	380	80	260	49	205	840	440	24
KMB 40/7	30	200L	50	40	822	1589	540	450	747	200	1400	430	80	280	49	230	940	490	24
KMB 40/8	30	200L	50	40	877	1644	540	450	747	200	1400	430	80	280	49	230	940	490	24
KMB 40/9	37	200L	50	40	932	1699	540	450	747	200	1600	430	80	280	49	270	1060	490	24

KMB 50/2	15	160M	65	50	589	1203	450	430	594	160	1000	340	80	240	52	170	660	400	24
KMB 50/3	18.5	160L	65	50	655	1313	450	430	638	160	1120	340	80	240	52	190	740	400	24
KMB 50/3	22	180M	65	50	665	1329	490	450	654	180	1120	380	80	260	52	190	740	440	24
KMB 50/4	30	200L	65	50	721	1488	540	470	747	200	1250	430	80	280	52	205	840	490	24
KMB 50/5	37	200L	65	50	787	1554	540	470	747	200	1400	430	80	280	52	230	940	490	24
KMB 50/6	45	225M	65	50	853	1663	610	515	790	225	1400	480	100	325	52	230	940	550	28
KMB 50/7	55	250M	65	50	919	1829	660	540	890	250	1600	530	100	350	52	270	1060	600	28

KMB 65a/2	30	200L	80	65	617	1384	540	505	747	200	1120	430	80	280	68	190	740	490	24
KMB 65a/3	37	200L	80	65	687	1454	540	505	747	200	1250	430	80	280	68	205	840	490	24
KMB 65a/3	45	225M	80	65	687	1497	610	550	790	225	1250	480	100	325	68	205	840	550	28
KMB 65a/4	55	250M	80	65	757	1667	660	575	890	250	1400	530	100	350	68	230	940	600	28
KMB 65a/5	75	280S	80	65	827	1805	730	605	958	280	1600	600	100	380	68	270	1060	600	28

KMB 65/2	45	225M	80	65	622	1432	610	550	790	225	1120	480	100	325	68	190	740	550	28
KMB 65/3	55	250M	80	65	697	1607	660	575	890	250	1400	530	100	350	68	230	940	600	28
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KMB 65/4	90	280M	80	65	772	1802	730	605	1010	280	1600	600	100	380	68	270	1060	600	28
KMB 65/5	110	315S	80	65	847	1945	830	660	1078	315	1600	680	120	435	68	270	1060	750	28

(*) a , b , c , h1 and e dimensions are in the sheet "PUMP DIMENSIONS TABLE".

overall dimensions - 1450 RPM

Pump size st	PUMP					OVERALL			DRIVER		BASE PLATE								
	MOTOR		DN s	DN d	Lp	L	W	H	Lm	hm	Lb	Wb	hb	he	L3	L4	L5	Ws	s
	kw	IEC No	mm ø	mm ø	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mmø
KMB 32/2	0.55	80	40	32	536	829	360	332	273	80	630	270	65	182	42	105	420	320	19
KMB 32/3	0.75	80	40	32	579	872	360	332	273	80	710	270	65	182	42	115	480	320	19
KMB 32/4	1.1	90S	40	32	622	942	360	332	300	90	800	270	65	182	42	130	540	320	19
KMB 32/5	1.1	90S	40	32	665	985	360	332	300	90	800	270	65	182	42	130	540	320	19
KMB 32/6	1.5	90L	40	32	708	1053	360	332	325	90	900	270	65	182	42	150	600	320	19
KMB 32/7	1.5	90L	40	32	751	1096	360	332	325	90	900	270	65	182	42	150	600	320	19
KMB 32/8	2.2	100L	40	32	794	1179	360	332	365	100	1000	270	65	182	42	170	660	320	19
KMB 32/9	2.2	100L	40	32	837	1222	360	332	365	100	1120	270	65	182	42	190	740	320	19
KMB 32/10	2.2	100L	40	32	880	1265	360	332	365	100	1120	270	65	182	42	190	740	320	19
KMB 32/11	3	100L	40	32	923	1308	360	332	365	100	1120	270	65	182	42	190	740	320	19
KMB 32/12	3	100L	40	32	966	1351	360	332	365	100	1250	270	65	182	42	205	840	320	19
KMB 32/13	3	100L	40	32	1009	1394	360	332	365	100	1250	270	65	182	42	205	840	320	19
KMB 32/14	4	112M	40	32	1052	1456	360	332	384	112	1250	270	65	182	42	205	840	320	19

KMB 40/2	1.1	90S	50	40	547	867	390	367	300	90	710	300	65	197	49	115	480	350	19
KMB 40/3	1.5	90L	50	40	602	947	390	367	325	90	800	300	65	197	49	130	540	350	19
KMB 40/4	2.2	100L	50	40	657	1042	390	367	365	100	900	300	65	197	49	150	600	350	19
KMB 40/5	2.2	100L	50	40	712	1097	390	367	365	100	900	300	65	197	49	150	600	350	19
KMB 40/6	3	100L	50	40	767	1152	390	367	365	100	1000	300	65	197	49	170	660	350	19
KMB 40/7	4	112M	50	40	822	1207	390	367	365	100	1120	300	65	197	49	190	740	350	19
KMB 40/8	4	112M	50	40	877	1281	390	367	384	112	1120	300	65	197	49	190	740	350	19
KMB 40/9	5.5	132S	50	40	932	1399	390	367	447	132	1250	300	65	197	49	205	840	350	19
KMB 40/10	5.5	132S	50	40	987	1454	390	367	447	132	1250	300	65	197	49	205	840	350	19
KMB 40/11	5.5	132S	50	40	1042	1509	390	367	447	132	1400	300	65	197	49	230	940	350	19
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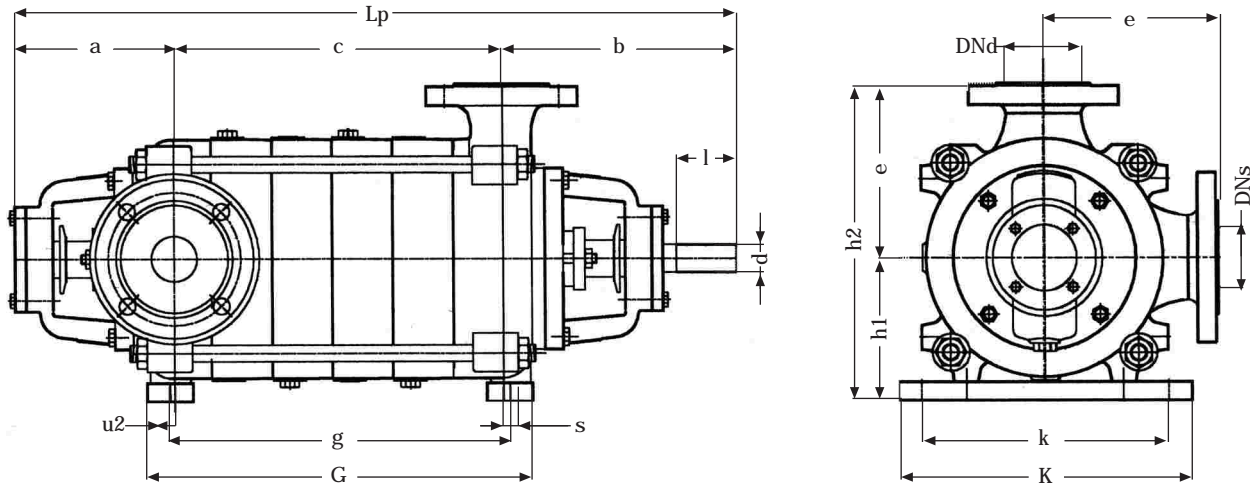
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KMB 50/4	4	112M	65	50	721	1106	450	425	365	100	1000	340	80	235	52	170	660	400	24
KMB 50/5	5.5	132S	65	50	787	1254	450	425	447	132	1120	340	80	235	52	190	740	400	24
KMB 50/6	5.5	132S	65	50	853	1320	450	425	447	132	1120	340	80	235	52	190	740	400	24
KMB 50/7	7.5	132M	65	50	919	1424	450	425	485	132	1250	340	80	235	52	205	840	400	24
KMB 50/8	7.5	132M	65	50	985	1490	450	425	485	132	1400	340	80	235	52	230	940	400	24
KMB 50/9	11	160M	65	50	1051	1665	450	430	594	160	1600	340	80	240	52	270	1060	400	24
KMB 50/10	11	160M	65	50	1117	1731	450	430	594	160	1600	340	80	240	52	270	1060	400	24
KMB 50/11	11	160M	65	50	1183	1797	450	430	594	160	1600	340	80	240	52	270	1060	400	24
KMB 50/12	11	160M	65	50	1249	1863	450	430	594	160	1800	340	80	240	52	300	1200	400	24

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KMB 65a/3	5.5	132S	80	65	687	1154	490	485	447	132	900	380	80	260	68	150	600	440	24
KMB 65a/4	7.5	132M	80	65	757	1262	490	485	485	132	1120	380	80	260	68	190	740	440	24
KMB 65a/5	11	160M	80	65	827	1441	490	485	594	160	1250	380	80	260	68	205	840	440	24
KMB 65a/6	11	160M	80	65	897	1511	490	485	594	160	1250	380	80	260	68	205	840	440	24
KMB 65a/7	15	160L	80	65	967	1625	490	485	638	160	1400	380	80	260	68	230	940	440	24
KMB 65a/8	15	160L	80	65	1037	1695	490	485	638	160	1600	380	80	260	68	270	1060	440	24
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KMB 65a/10	18.5	180M	80	65	1177	1851	490	485	654	180	1600	380	80	260	68	270	1060	440	24
KMB 65a/11	22	180L	80	65	1247	1959	490	485	692	180	1800	380	80	260	68	300	1200	440	24

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KMB 65/3	11	160M	80	65	697	1311	490	485	594	160	1120	380	80	260	68	190	740	440	24
KMB 65/4	11	160M	80	65	772	1386	490	485	594	160	1120	380	80	260	68	190	740	440	24
KMB 65/5	15	160L	80	65	847	1505	490	485	638	160	1250	380	80	260	68	205	840	440	24
KMB 65/6	18.5	180M	80	65	922	1596	490	485	654	180	1400	380	80	260	68	230	940	440	24
KMB 65/7	22	180L	80	65	997	1709	490	485	692	180	1600	380	80	260	68	270	1060	440	24
KMB 65/8	22	180L	80	65	1072	1784	490	485	692	180	1600	380	80	260	68	270	1060	440	24
KMB 65/9	30	200L	80	65	1147	1914	540	505	747	200	1800	430	80	280	68	300	1200	490	24
KMB 65/10	30	200L	80	65	1222	1989	540	505	747	200	1800	430	80	280	68	300	1200	490	24
KMB 65/11	30	200L	80	65	1297	2064	540	505	747	200	1800	430	80	280	68	300	1200	490	24

(*) a, b, c, h1 and e dimensions are in the sheet "PUMP DIMENSIONS TABLE".

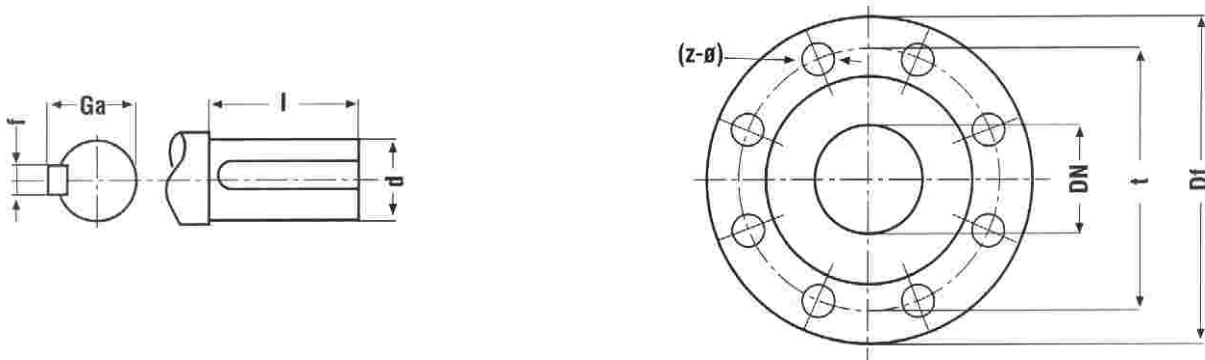
pump dimensions table



Pump Size	DN s mm Ø	DN d mm Ø	a	b	L_p	g	G	u_2	h_1	h_2	e	d	l	k	K	s
KMB 32	40	32	40	243	C+423	C+2	C+42	22	117	267	150	25	60	220	250	12
KMB 40	50	40	50	238	C+412	C+13	C+53	29	132	302	170	25	60	260	300	12
KMB 50	65	50	65	255	C+429	C+12	C+62	32	155	345	190	30	65	290	330	12
KMB 65a	80	65	80	217	C+432	C-5	C+54	48	180	405	225	35	80	340	380	14
KMB 65	80	65	80	217	C+432	C-5	C+54	48	180	405	225	35	80	340	380	14

Dimension "c" according to stage number.

Pump Size	2	3	4	5	6	7	8	9	10	11	12	13	14
KMB 32	113	156	199	242	285	328	371	414	457	500	543	586	659
KMB 40	135	190	245	300	355	410	465	520	575	630	685	740	795
KMB 50	160	226	292	358	424	490	556	622	688	754	820		
KMB 65a	185	255	325	395	465	535	605	675	745	815			
KMB 65	190	265	340	415	490	565	640	715	790	865			



Shaft End & Key Way Dimensions

Pump Size	d (mmø)	l (mm)	f (mm)	G_a (mm)
KMB 32	25	60	8	28
KMB 40	25	60	8	28
KMB 50	30	65	10	33
KMB 65	35	80	10	38

Flange Dimensions (PN 40)

DN mm ø	D_f (mmø)	t mmø	z Adet	ø mmø
DN 32	140	100	4	18
DN 40	150	110	4	18
DN 50	165	125	4	18
DN 65	185	145	8	18
DN 80	200	160	8	18