



Pump • Fire Fighting Units • Booster Set

SKMV-H

MULTISTAGE PUMPS (VERTICAL)



SKMV-H Rev.05.03.2024

Handled Liquids

Clean or slightly contaminated low viscosity liquids without solid & fibrous particles.

Technical Data

Discharge Flange _____ DN 32....DN 150 mm

Capacity _____ up to 400 m³/h

Head _____ up to 450 m

Speed _____ up to 2900 rpm

Operating Temperature _____ -10°C up to +140 °C*

Casing Pressure (Pmax) _____ 30 bar (63 bar)*

(Pmax: Suction Pressure + Shut off Head)

(*) The Material of pumps differ according to the type of pumped liquid, operating temperature and pressure. Contact for detailed information.

Design Features

- Vertical ring section, multistage, centrifugal pumps with closed impellers and diffusers.
- 8 models from DN 32 up to DN 150 discharge flange diameter.
- Suction nozzle flanges conform to EN 1092 - 2 / PN 16 and discharge nozzle flanges conform to EN 1092 - 2 / PN 40 (PN 63)
- SKMV-H pumps are short coupled with electric motors of IEC frame sizes with high efficiency class. (IE3 - IE4)

Pump Designation

Pump Type _____

Discharge Nozzle (DN-mm) _____

Number of Stage _____



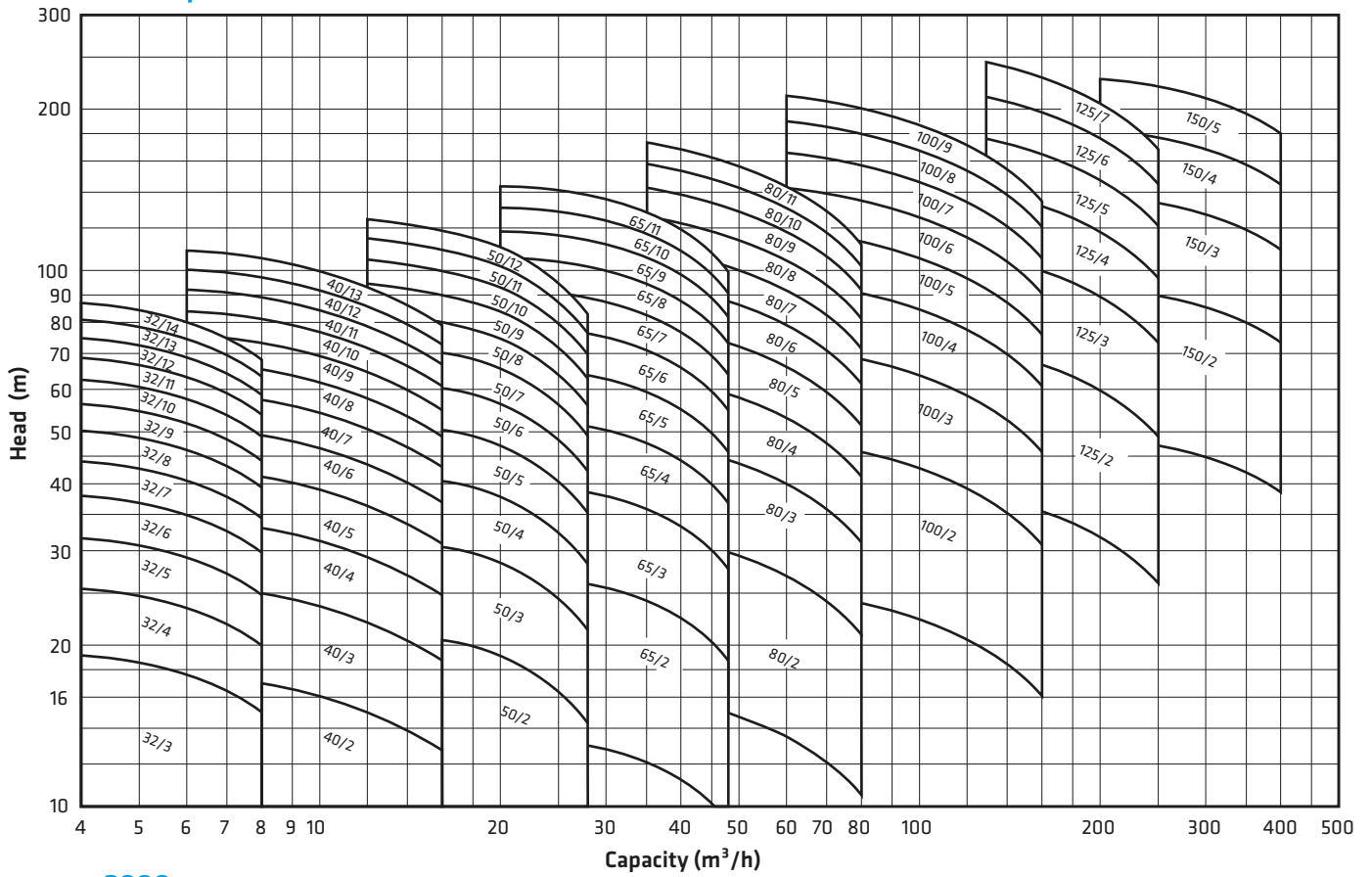
- Pump and motor shafts are connected to each other with flexible coupling.
- All impellers are balanced dynamically or statically according to ISO 1940 class 6.3.
- Axial thrust is balanced by impeller balancing holes system.
- Direction of rotation is always counter clockwise viewed from drive end.
- Bearings of SKMV-H type pumps are grease lubricated. Journal bearings used in the suction side is lubricated by the pumping liquid.

Shaft Sealing

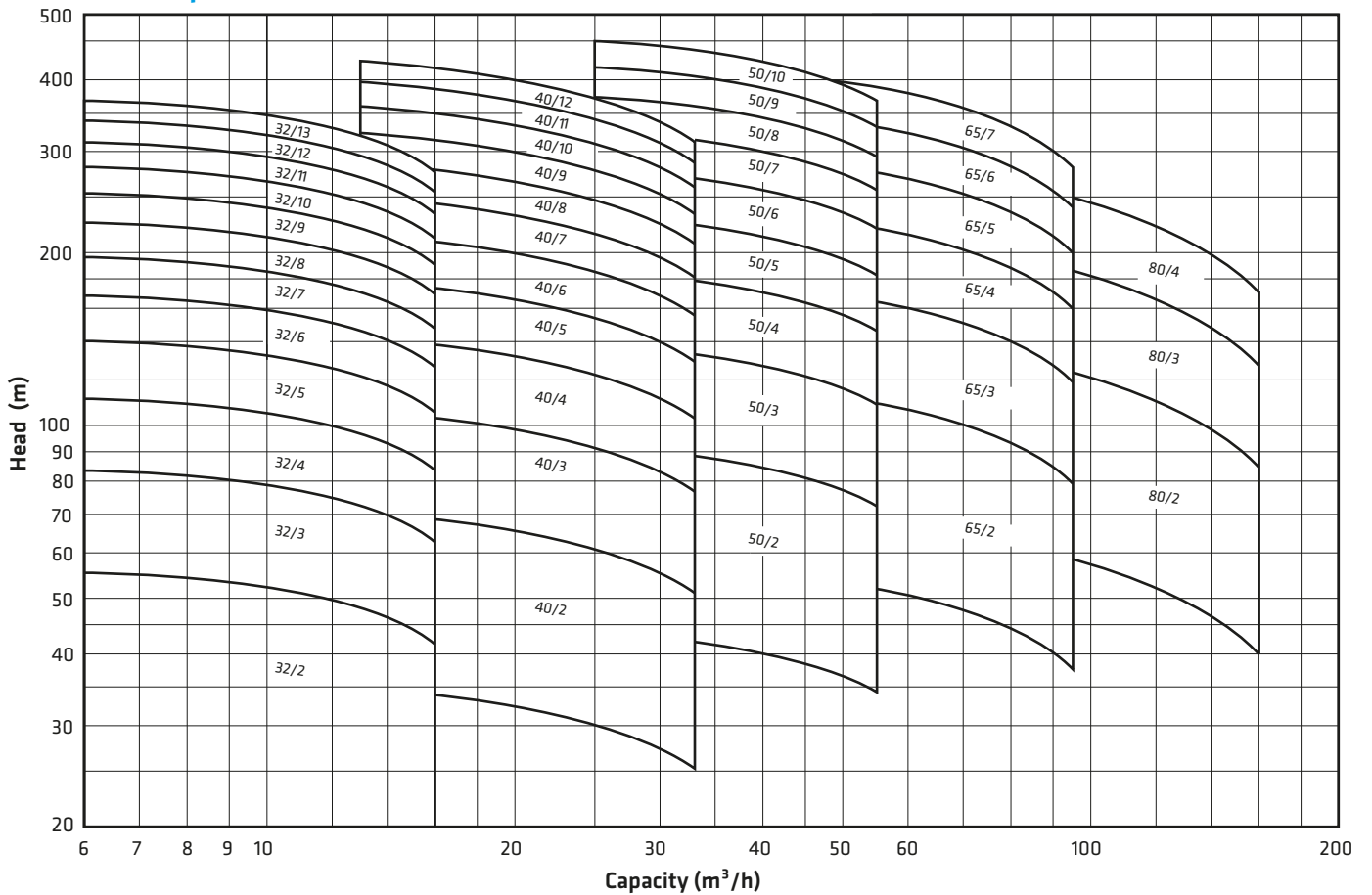
- Depending on request or requirement, pumps with soft packing or mechanical seals can be supplied.

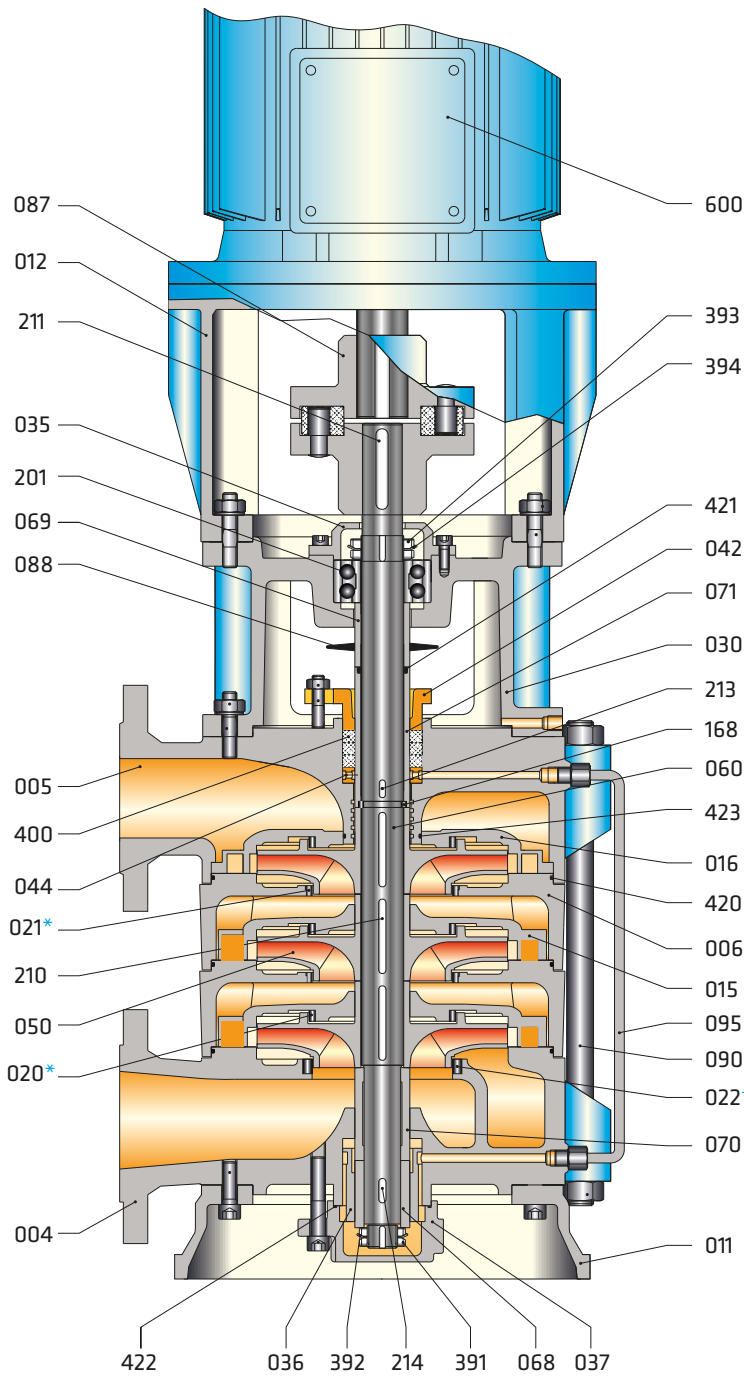
SKMV-H 100 / 6

1450 rpm

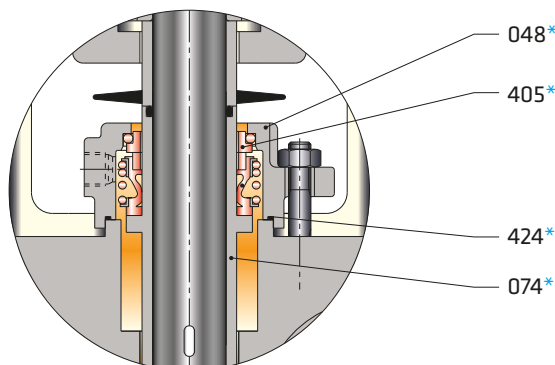


2900 rpm





Mechanical Seal Application



Part List

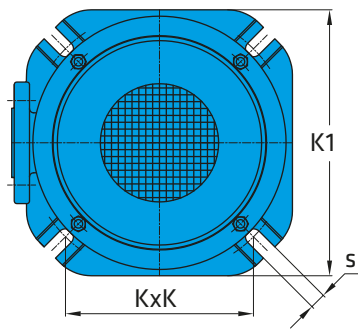
004	Suction Casing
005	Discharge Casing
006	Stage Casing
011	Pump Foot
012	Motor Pedestal
015	Diffuser
016	Last Stage Diffuser
020*	Wear Ring (Diffuser)
021*	Wear Ring (Stage Casing)
022*	Wear Ring (Suction Casing)
030	Bearing Housing
035	Bearing Cover
036	Sleeve Bearing
037	Sleeve Bearing Cover
042	Gland
044	Lantern Ring
048*	Mechanical Seal Cover
050	Impeller
060	Pump Shaft
068	Shaft Sleeve (Sleeve Bearing)
069	Spacer Sleeve (Bearing)
070	Shaft Sleeve (Suction Casing)
071	Shaft Protecting Sleeve (Soft Packing)
074*	Shaft Protecting Sleeve (Mechanical Seal)
087	Flexible Coupling
088	Thrower
090	Tiebolt
095	Sleeve Bearing Flushing Pipe
168	Split Ring
201	Double Row Ball Bearing
210	Key (Impeller)
211	Key (Coupling)
213	Key (Shaft Protecting Sleeve)
214	Key (Sleeve Bearing)
391	Shaft End Nut
392	Lock Washer
393	Shaft End Nut
394	Lock Washer
400	Soft Packing
405*	Mechanical Seal
420	O-Ring
421	O-Ring
422	O-Ring
423	O-Ring
424*	O-Ring
600	Electric Motor

(*) Optional

Dimensions

SKMV-H

Y View

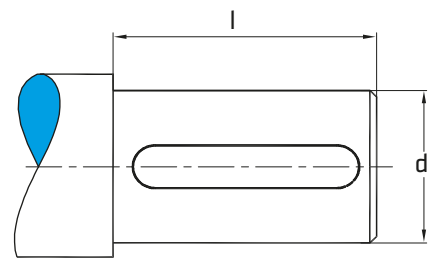
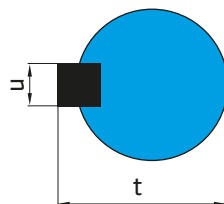
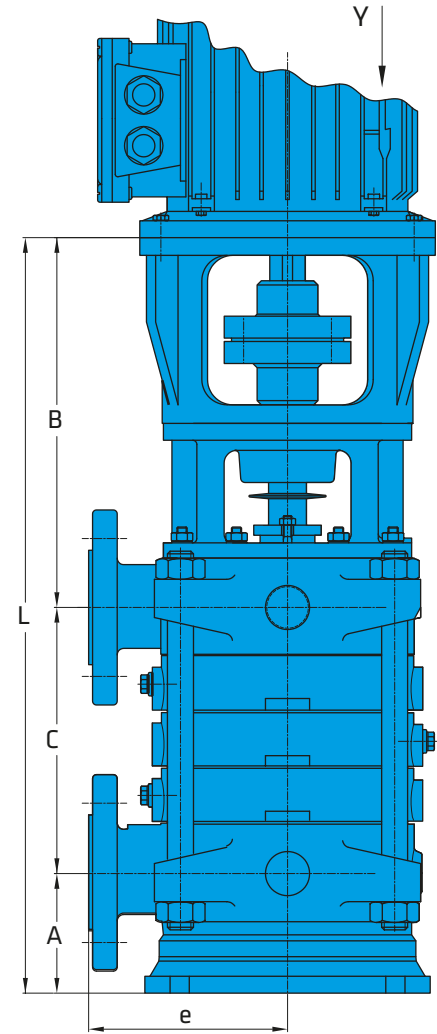


Bearing Type

Pump Type	Bearing Type
32	3305
40	3305
50	3306
65	3307
80	3308
100	3309
125	3310
150	3312

Shaft End Dimensions

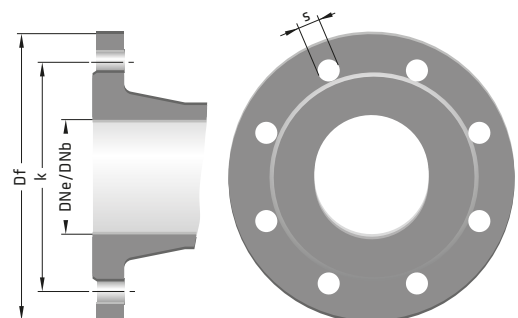
Pump Type	d	l	t	u
32	22	50	25	6
40	22	50	25	6
50	28	65	31	8
65	32	65	35	10
80	38	80	41	10
100	42	110	45	12
125	48	110	51,5	14
150	55	110	59	16



Flange Dimensions

DNe/DNb	Suction (PN 16)				Discharge (PN 40)			
	Df	k	s	n	Df	k	s	n
32	140	100	18	4	140	100	18	4
40	150	110	18	4	150	110	18	4
50	165	125	18	4	165	125	18	4
65	185	145	18	4	185	145	18	8
80	200	160	18	8	200	160	18	8
100	220	180	18	8	235	190	22	8
125	250	210	18	8	270	220	26	8
150	285	240	22	8	300	250	26	8
200	340	295	22	12	375	320	30	12

" n " number of holes



PART LIST	0.6025	0.7040	0.7043	1.0619	1.4308	1.4309	1.4408	1.4409	1.4500	1.4517	1.4469	1.4317	1.4008	2.1050.01	2.0975.01	2.1096.01	1.0503	1.4021	1.4021+QT	1.4301	1.4404	1.4460	1.4462	PTFE	
Suction Casing	●	○	○		○	○	○	○	○	○	○	○	○	○											
Discharge Casing	●	○	○		○	○	○	○	○	○	○	○	○	○											
Stage Casing	●	○	○		○	○	○	○	○	○	○	○	○	○											
Diffuser	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○									
Impeller	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○							○		
Shaft																		●	○	○	○			○	
Bearing Housing	●	○	○	○	○	○	○	○																	
Wear Ring (Casing)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○									
Shaft Sleeve																		●	○	○	○	○		○	
Shaft Pro. Sleeve																		●	○	○	○	○		○	
Spacer Sleeve																		●	○	○	○	○		○	
Sleeve Bearing																									●

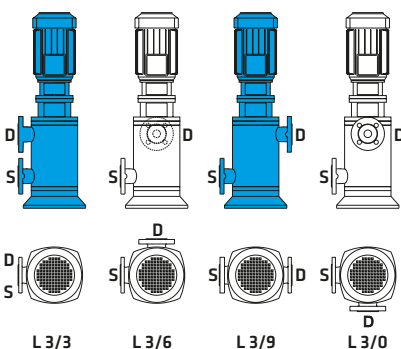
Depending on customer requirement or request different types and brands of mechanical seals are applicable.

● Standard manufacturing
○ Optional

Material Equivalents

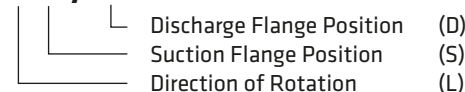
Description	DIN / EN		AISI / SAE / ASTM
Cast Iron	0.6025	EN-GJL-250 (GG25)	A48 Class 40B
Nodular Cast Iron	0.7040	EN-GJS-400-15 (GGG40)	A536 60-40-18
Nodular Cast Iron	0.7043	EN-GJS-400-18-LT (GGG40.3)	A536 60-40-18
Cast Steel	1.0619	GP240GHGS-C25	A216 WCB
Chrome Nickel Cast Steel	1.4308	GX5CrNi19-10	A351 CF8
Chrome Nickel Cast Steel (low carbon)	1.4309	GX2CrNi19-11	A351 CF3
Chrome Nickel Molybdenum Cast Steel	1.4408	GX5CrNiMo19-11-2	A351 CF8M
Chrome Nickel Molybdenum Cast Steel (low carbon)	1.4409	GX2CrNiMo19-11-2	A351 CF3M
Austenitic Cast Steel	1.4500	GX7NiCrMoCuNb25-20	A351 CN7M
Austenitic - Ferritic Cast Steel (duplex)	1.4517	GX2CrNiMoCuN25-6-3-3	A890 CD4MCuN
Austenitic - Ferritic Cast Steel (super duplex)	1.4469	GX2CrNiMoN26-7-4	A890 CE3MN
Martenzitic Stainless Cast Steel	1.4317	GX4CrNi13-4	A352 CA6NM
Martenzitic Stainless Cast Steel	1.4008	GX7CrNiMo12-1	A217 CA15
Cast Bronze (tin alloy)	2.1050.01	G-CuSn10	B427 C90700
Cast Bronze (nickel alloy)	2.0975.01	G-CuAl10Ni	B148 C95500
Cast Bronze (lead)	2.1096.01	G-CuSn5ZnPb	B584 C83600
Carbon Steel	1.0503	C45	AISI 1045
Chrome Steel	1.4021	X20Cr13	A276 Type 420
Chrome Steel (heat treated)	1.4021	X20Cr13	A276 Type 420+QT
Chrome Nickel Steel	1.4301	X5CrNi18-10	A276 Type 304
Chrome Nickel Steel (low carbon)	1.4404	X2CrNiMo17-12-2	A276 Type 316L
Duplex (austenitic-ferritic) Steel	1.4460	X3CrNiMoN27-5-2	AISI 329
Duplex (austenitic-ferritic) Steel	1.4462	X2CrNiMoN22-5-3	UNS S32205

Flange Positions



Explanation :

L 3 / 9



Direction of rotation viewed from drive end
L : Left

Attention :

In the absence of specific request, pumps are supplied with the following nozzle arrangement:

- . L 3/9 : up to 2 stages
- . L 3/3 : 3 or more stages