

# SKMV-H

## MULTISTAGE PUMPS (VERTICAL)



### Handled Liquids

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

### Technical Data

**Discharge Flange** — DN 32 up to DN 150 mm

**Capacity** — up to 400 m<sup>3</sup>/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.

- Axial thrust is balanced by impeller balance hole system.
- All impellers are balanced statically and dynamically according to ISO 1940 class 6.3.
- Direction of rotation is always counter clockwise viewed from driver end.
- Pump and motor shafts are connected to each other with flexible coupling.
- Bearings of SKMV-H type pumps are grease lubricated. Bottom sleeve bearing is lubricated by the pumping liquid.

### Design Features

- Vertical ring section, multistage, centrifugal pumps with closed impellers and diffusers.
- Suction nozzle flanges conform to EN 1902 - 2 / PN16 and discharge nozzle flanges conform to EN 1902 - 2 / PN 40 (PN 63)
- 8 models from DN 32 up to DN 150 discharge flange diameter.

### Shaft Sealing

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

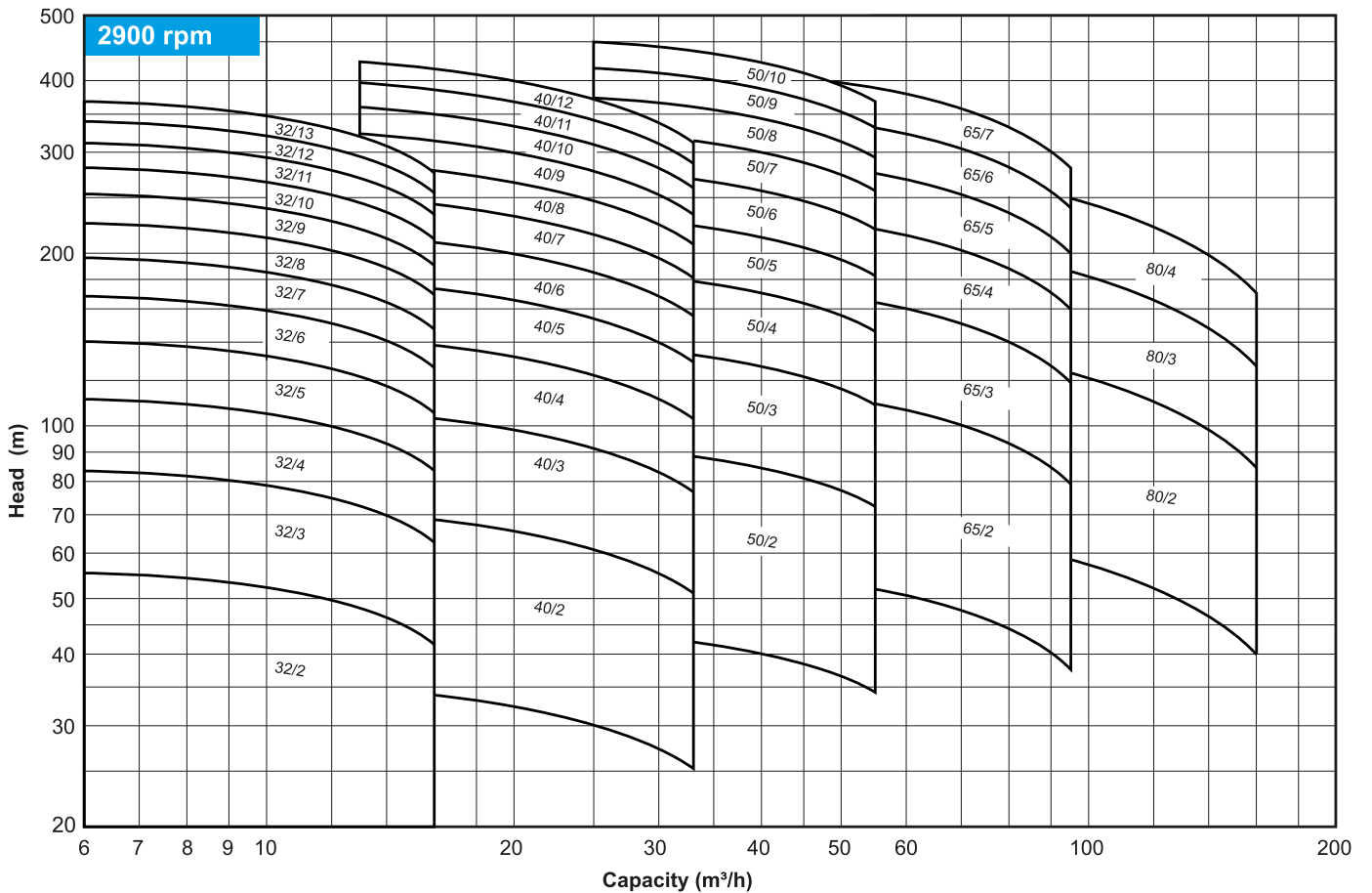
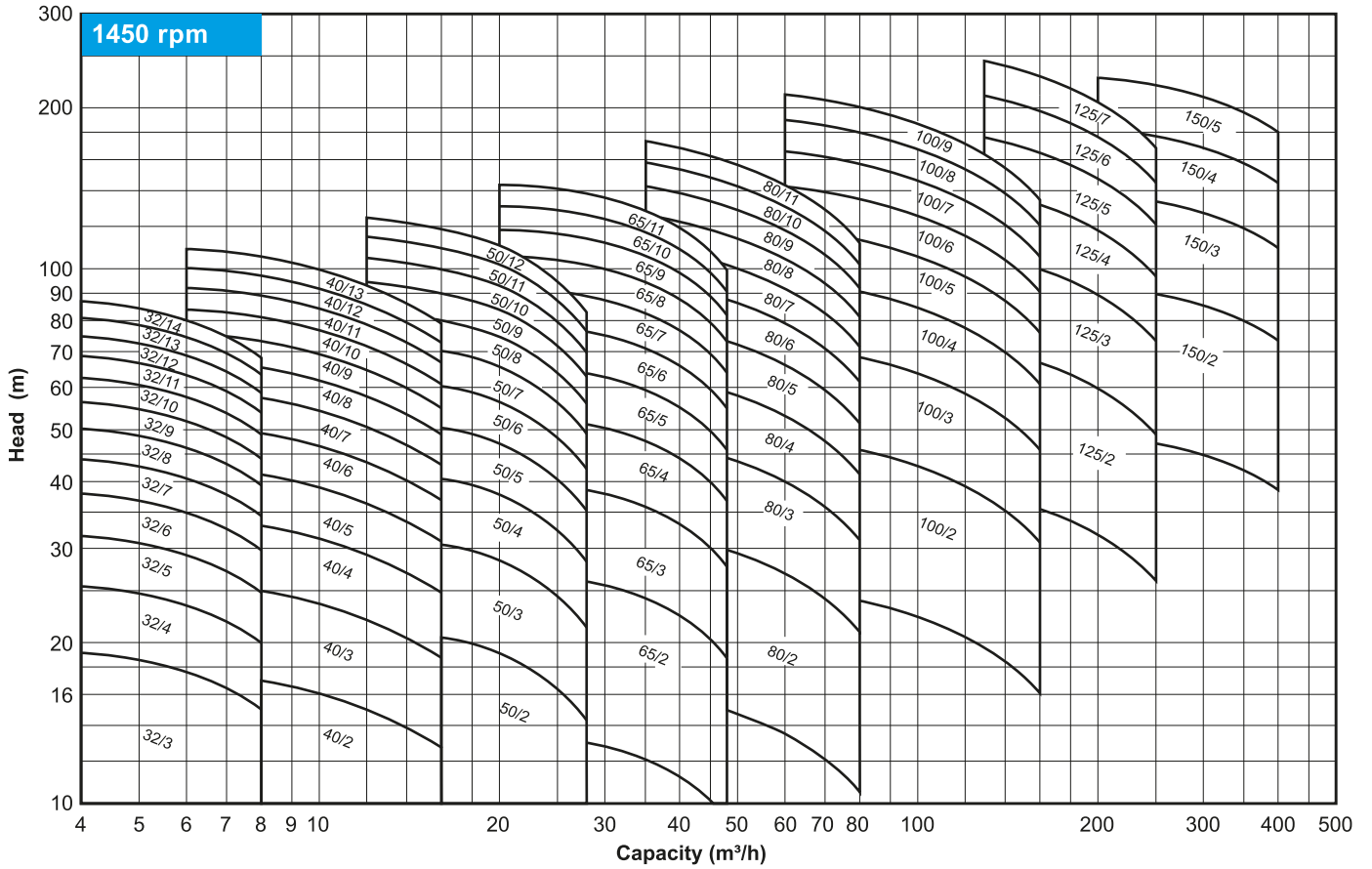
### Pump Designation

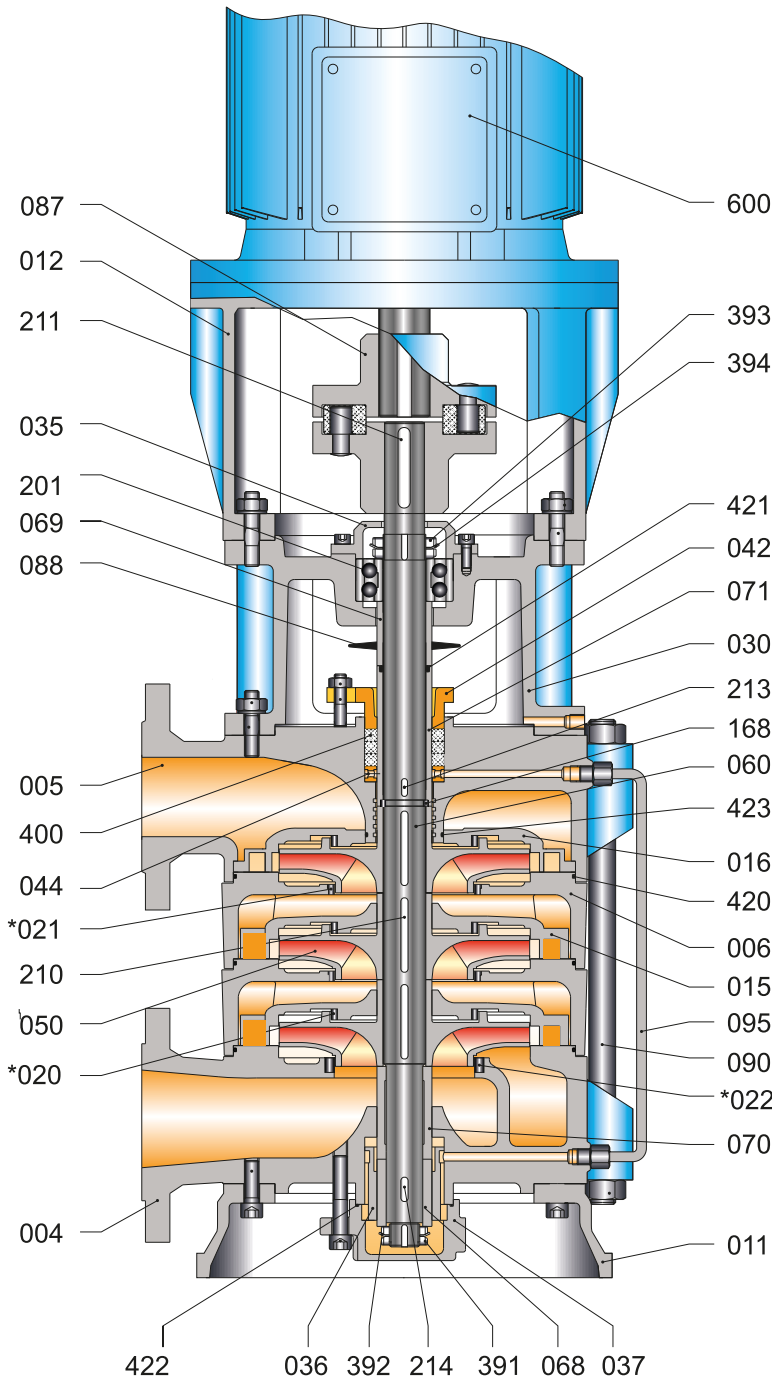
## SKMV-H 100 / 6

Pump Type

Discharge Nozzle (DN-mm)

Number of Stages

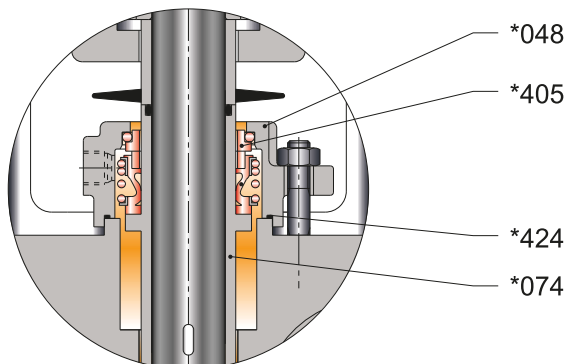




Part List

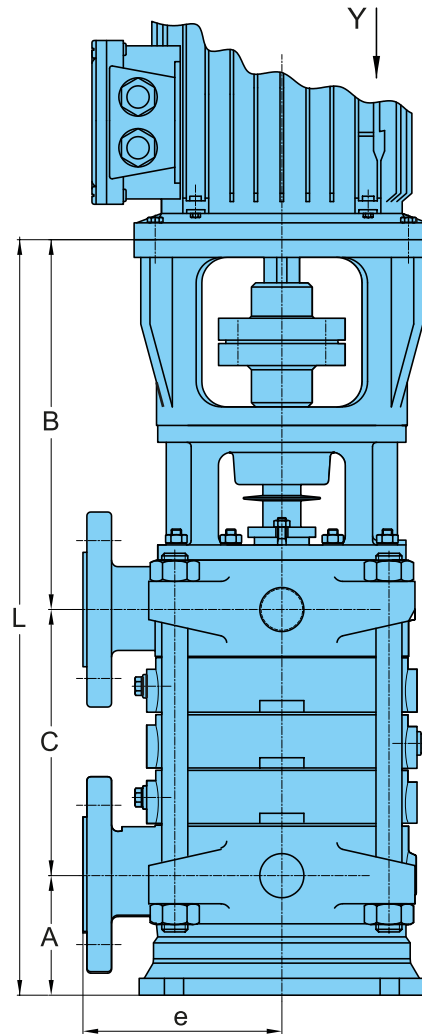
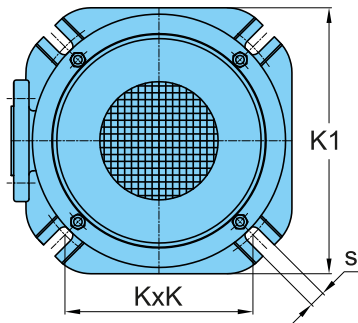
004	Suction Casing
005	Discharge Casing
006	Stage Casing
011	Pump Foot
012	Motor Pedestal
015	Diffuser
016	Last Stage Diffuser
*020	Wear Ring (diffuser)
*021	Wear Ring (stage casing)
*022	Wear Ring (suction casing)
030	Bearing Housing
035	Bearing Cover
036	Sleeve Bearing
037	Sleeve Bearing Cover
042	Gland
044	Lantern Ring
*048	Mechanical Seal Cover
050	Impeller
060	Pump Shaft
068	Shaft Sleeve
069	Spacer Sleeve (discharge casing)
070	Spacer Sleeve (suction casing)
071	Shaft Protecting Sleeve (soft packing)
*074	Shaft Protecting Sleeve (mech. 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

Mechanical Seal Application



\* Optional

## Y View

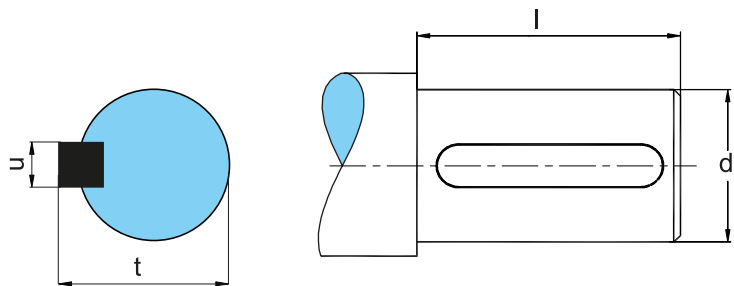


## Bearing Type

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

## Shaft End Dimensions

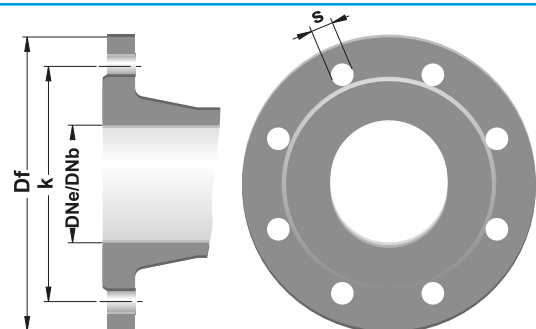
Pump Type	d	l	t	u
32	22	50	25	6
40	22	50	25	6
50	28	65	31	8
65	32	65	35	10
80	38	80	41	10
100	42	110	45	12
125	48	110	51,5	14
150	55	110	59	16



## Flange Dimensions

DNe / DNb	Suction (PN 16)				Discharge (PN 40)			
	Df	k	s	n	Df	k	s	n
40	150	110	19	4	150	110	19	4
50	165	125	19	4	165	125	19	4
65	185	145	19	4	185	145	19	8
80	200	160	19	8	200	160	19	8
100	220	180	19	8	235	190	23	8
125	250	210	19	8	270	220	28	8
150	285	240	23	8	300	250	28	8
200	340	295	23	12	375	320	31	12

"n" number of holes



1450 rpm

Pump Type	MOTOR IEC No	Dimensions (mm)									C (mm) Number of Stages													
		DNe	DNb	L	A	B	e	KxK	K1	s	1	2	3	4	5	6	7	8	9	10	11	12	13	14
32	80	40	32	399+C	105	298	155	212	300	18	71	114	157	200	243	286	329	372	415	458	501	544	587	630
	409+C			308																				
	405+C			302																				
40	90	50	40	415+C	103	312	175	212	300	18	78	133	188	243	298	353	408	463	518	573	628	683	738	-
	100			332																				
	112																							
50	100	65	50	453+C	114	340	190	247	350	18	90	152	214	276	338	400	462	524	586	648	710	772	-	-
	112			360																				
	132			390																				
65	100	80	65	505+C	135	368	215	247	350	18	107	178	249	320	391	462	533	604	675	746	817	-	-	-
	112			388																				
	132			420																				
80	132	100	80	568+C	145	423	265	247	350	23	112	195	278	361	444	527	610	693	776	859	942	-	-	-
	160			453																				
	180			483																				
100	160	125	100	675+C	170	504	300	318	450	23	133	233	333	433	533	633	733	833	933	-	-	-	-	-
	180			534																				
	200																							
125	200	150	125	717+C	178	538	375	424	600	27	165	280	395	510	625	740	855	-	-	-	-	-	-	-
	225			568																				
	250			598																				
150	250	200	150	888+C	265	623	425	424	600	27	218	363	508	653	798	-	-	-	-	-	-	-	-	-
	280			653																				
	315																							

2900 rpm

Pump Type	MOTOR IEC No	Dimensions (mm)									C (mm) Number of Stages												
		DNe	DNb	L	A	B	e	KxK	K1	s	1	2	3	4	5	6	7	8	9	10	11	12	13
32	112	40	32	409+C	105	306	155	212	300	18	71	114	157	200	243	286	329	372	415	458	501	544	544
	132			326																			
	160			356																			
40	132	50	40	435+C	103	332	175	212	300	18	78	133	188	243	298	353	408	463	518	573	628	683	-
	160			362																			
	180			392																			
50	160	65	50	503+C	114	389	190	247	350	18	90	152	214	276	338	400	462	524	586	648	-	-	-
	180			419																			
	200																						
65	160	80	65	555+C	135	420	215	247	350	18	107	178	249	320	391	462	533	-	-	-	-	-	-
	180			480																			
	200																						
80	200	100	80	598+C	145	453	265	247	350	23	112	195	278	361	-	-	-	-	-	-	-	-	-
	225			483																			
	250																						
280																							

NOTE: All rights reserved.

Technical Data

Material Option

Part List	0.6025	0.7040	1.0619	1.4308	1.4309	1.4408	1.4409	1.4500	1.4517	1.4469	1.4317	2.1050.01	2.0975.01	1.0503	1.4021	1.4301	1.4306	1.4401	1.4404	1.4462	Tungsten Carbide
Suction Casing	●	○		○	○	○	○	○	○	○	○	○									
Discharge Casing	●	○		○	○	○	○	○	○	○	○	○									
Stage Casing	●	○		○	○	○	○	○	○	○	○	○									
Diffuser	●	○	○	○	○	○	○	○	○	○	○	○	○								
Impeller	●	○	○	○	○	○	○	○	○	○	○	○	○								
Shaft															●	○	○	○	○	○	○
Bearing Housing	●	○																			
Wear Ring (casing)	○	○	○	○	○	○	○	○	○	○	○	○									
Shaft Sleeve												○		●	○	○	○	○	○	○	○
Shaft Pro. Sleeve												○		●	○	○	○	○	○	○	○
Spacer Sleeve												○		●	○	○	○	○	○	○	○
Sleeve Bearing												●									○

Mechanical Seal (\*)

EN 12756 / DIN 24960

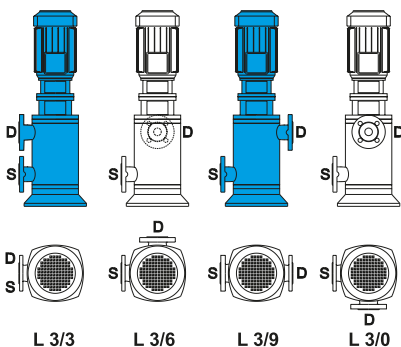
(\*) Optional : Depending on customer requirement or request different types and brands of mechanical seals are applicable.

● Standart manufacturing  
○ Optional

Material Equivalents

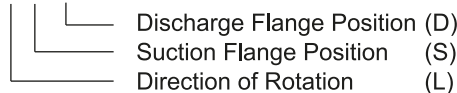
Description	DIN 17007	EN-DIN	ASTM
Cast iron	0.6025	GJL-250 (GG 25)	A 48 Class 40-B
Nodular cast iron	0.7040	GJS-400-15 (GGG 40)	A 536 Gr. 60-40-18
Cast steel	1.0619	GP240GH (GS-C 25)	A 216 Gr. WCB
Chrome nickel cast steel	1.4308	G-X5 Cr Ni 19-10	A 351/743/744 Gr. CF8
Chrome nickel cast steel (low carbon)	1.4309	G-X2 Cr Ni 19-11	A 351/743/744 Gr. CF3
Chrome nickel molybdenum cast steel	1.4408	G-X5 Cr Ni Mo 19-11-2	A 351/743/744 Gr. CF8M
Chrome nickel molybdenum cast steel (low carbon)	1.4409	G-X2 Cr Ni Mo 19-11-2	A 351/743/744 CF3M
Austenitic cast steel	1.4500	G-X7 Cr Ni Mo Cu Nb 25-20	A 351/743/744 (CN7M)
Austenitic-ferritic cast steel (duplex)	1.4517	G-X2 Cr Ni Mo Cu N 25-6-3-3	A 890 Gr. 1B (CD4MCuN)
Austenitic-ferritic cast steel (super duplex)	1.4469	G-X2 Cr Ni Mo N 26-7-4	A 890 Gr. 5A (CE3MN)
Martenzitic Stainless Cast Steel	1.4317	G-X4 Cr Ni 13-4	A 351/743/744 (CA6NM)
Cast bronze (tin alloy)	2.1050.01	G-Cu Sn 10	B 584 C 90700
Cast bronze (nickel alloy)	2.0975.01	G-Cu Al 10 Ni	B 148 C 95800
Carbon steel	1.0503	C 45	A 29/108/576 1045
Chrome steel	1.4021	X20 Cr 13	A 276 Type 420
Chrome nickel steel	1.4301	X5 Cr Ni 18-10	A 276 Type 304
Chrome nickel steel (low carbon)	1.4306	X2 Cr Ni 19-11	A 276 Type 304L
Chrome nickel molybdenum steel	1.4401	X5 Cr Ni Mo 17-12-2	A 276 Type 316
Chrome nickel molybdenum steel (low carbon)	1.4404	X2 Cr Ni Mo 17-12-2	A 276 Type 316 L
Duplex (austenitic-ferritic) steel	1.4462	X2 Cr Ni Mo N 22-5-3	A 276 S 31803

Flange Positions



Explanation :

L 3 / 0



Direction of rotation viewed from driver 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