

SKMV-H

MULTISTAGE CENTRIFUGAL PUMPS



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 + Shutoff Head)

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

Design Features

- Vertical ring section, multistage centrifugal pumps with closed impellers and diffusers.
- 8 models from DN 32 to Dn 150.
- Suction nozzle flanges conform to EN 1092 - 2 / PN 16 and discharge nozzle flanges conform to EN 1092 - 2 / PN 40 (PN 63) (For steel or stainless steel casing pumps, flanges conform to related pressure class ratings defined in EN 1092 - 1)

Pump Designation

Pump Type _____

Discharge Nozzle (DN-mm) _____

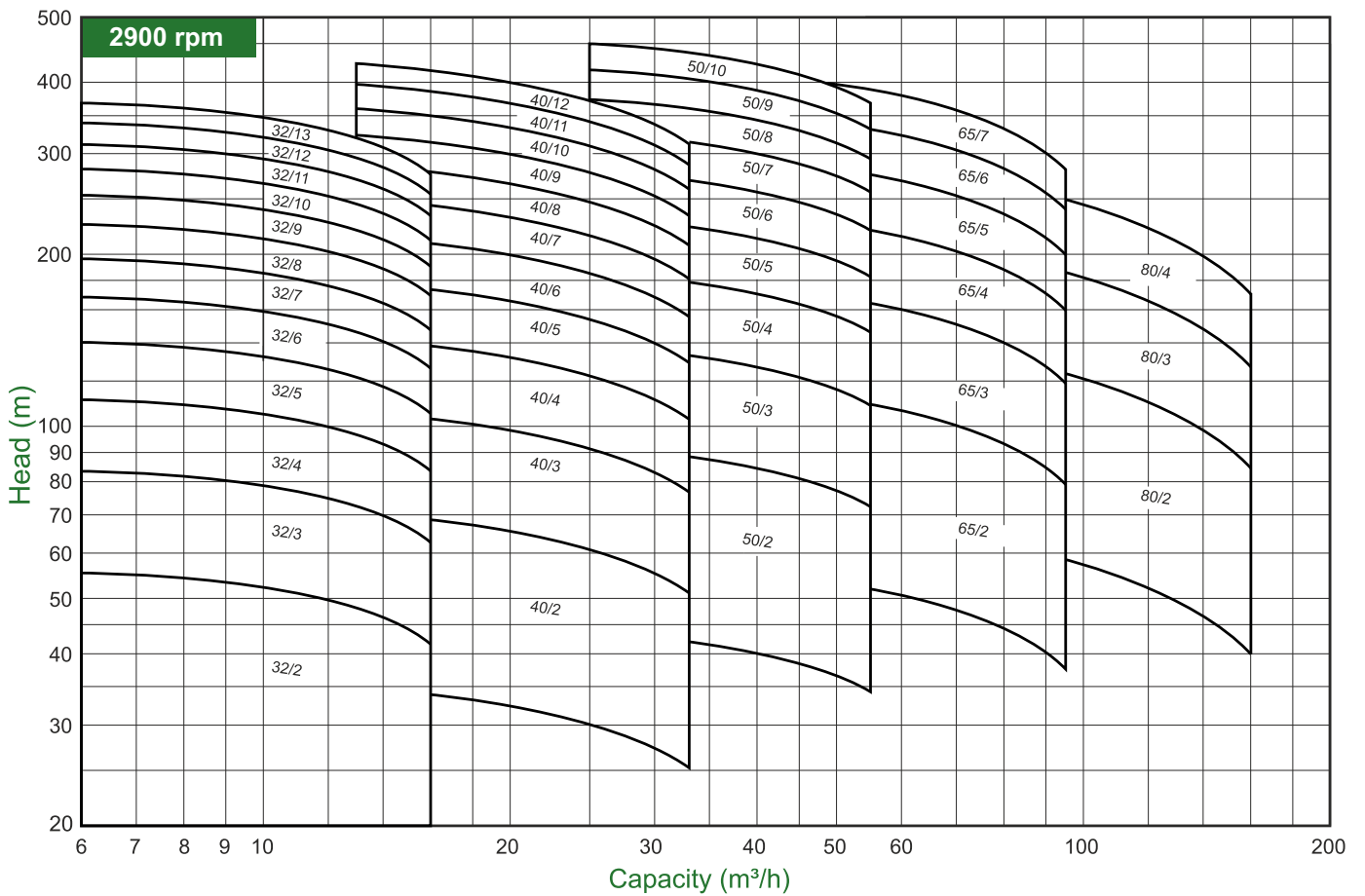
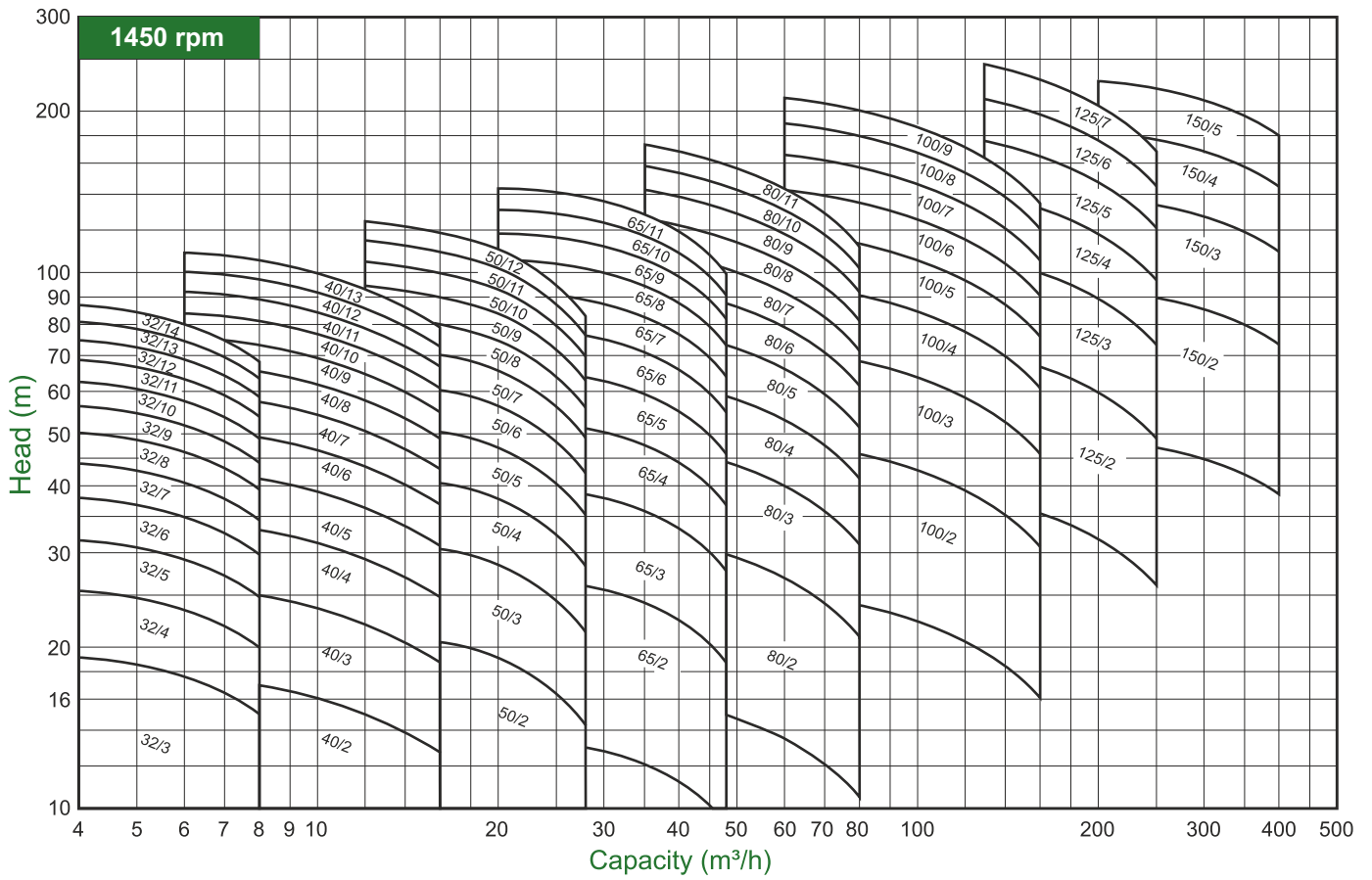
Number of Stages _____

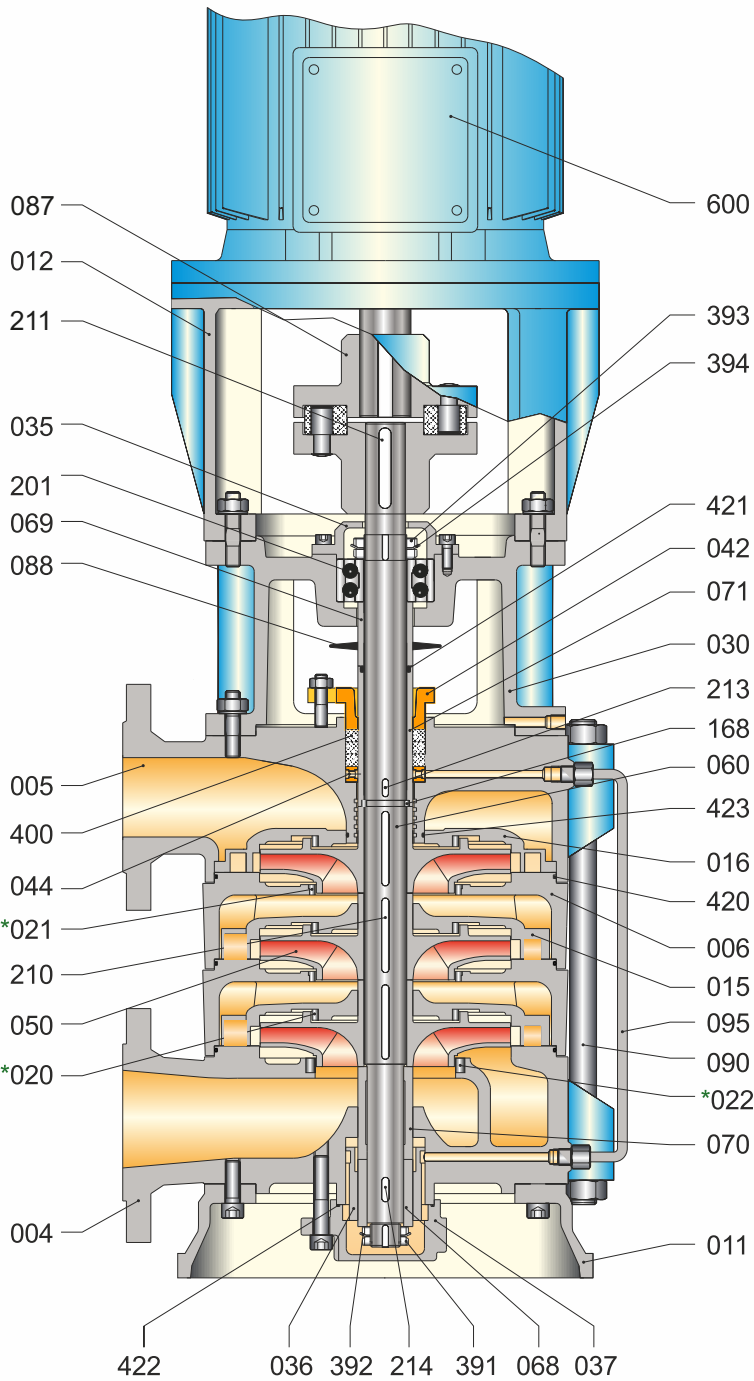
SKMV-H 100 / 6

- SKMV-H pumps are short coupled with electric motors of IEC frame sizes with high efficiency class.
- 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. Sleeve bearings used in the suction side is lubricated by the pumping liquid.

Shaft Sealing

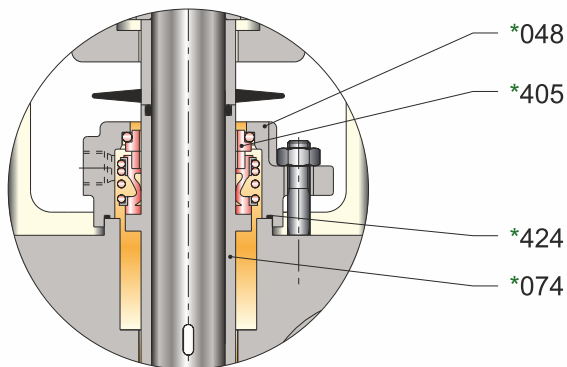
- Depending on request or requirement, pumps with soft packing or mechanical seals can be supplied.



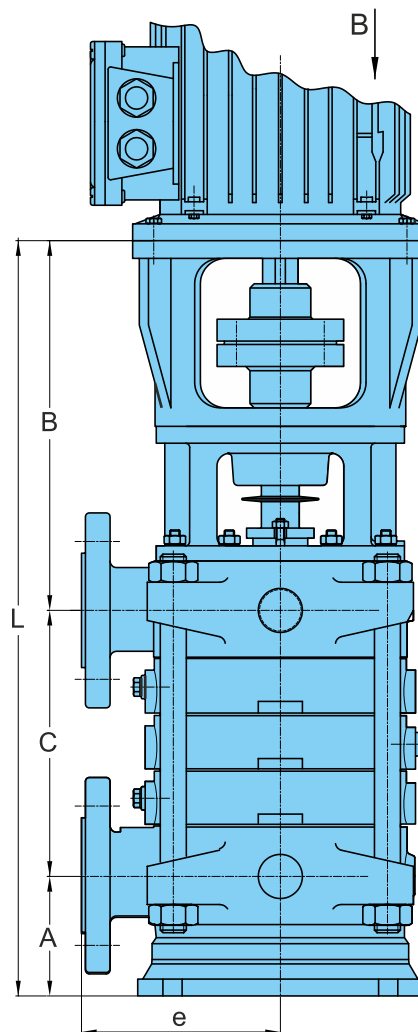
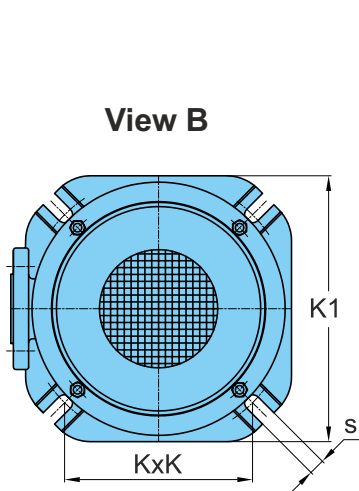


Parts List	
004	Suction casing
005	Discharge casing
006	Stage casing
011	Pump foot
012	Motor pedestal
015	Diffuser
016	Final stage diffuser
*020	Wear ring (Diffuser)
*021	Wear ring (Stage casing)
*022	Wear ring (Suction casing)
030	Bearing house
035	Bearing cover
036	Sleeve bearing
037	Sleeve bearing 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	Impeller key
211	Coupling key
213	Shaft protecting sleeve key
214	Sleeve bearing key
391	Shaft end nut
392	Locking washer
393	Shaft end nut
394	Locking 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

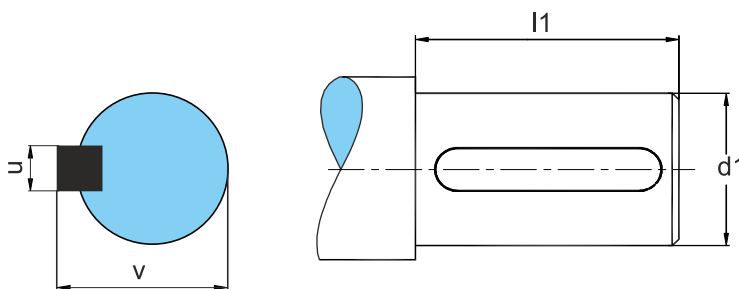


Bearing Types

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

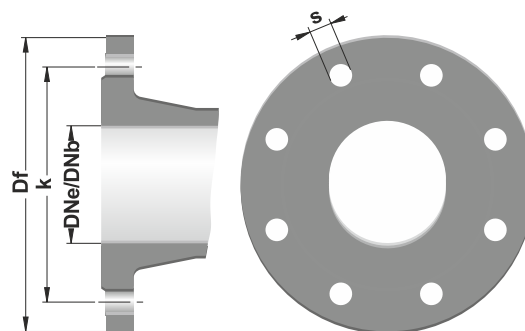
Shaft end

Pump Type	d1	l1	v	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 & Discharge (PN 16)				Suction & Discharge (PN 40)			
	Df	k	s	n	Df	k	s	n
32	140	100	19	4	140	100	19	4
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) Stage Number													
		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																				
40	90	50	40	405+C	103	302	175	212	300	18	78	133	188	243	298	353	408	463	518	573	628	683	738	-
	100			312																				
	112			332																				
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			483																				
	180			598+C																				
100	160	125	100	675+C	170	504	300	318	450	23	133	233	333	433	533	633	733	833	933	-	-	-	-	-
	180			534																				
	200			705+C																				
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			918+C																				

2900 rpm

Pump Type	MOTOR IEC No	Dimensions (mm)									C (mm) Stage Number												
		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			533+C																			
65	160	80	65	555+C	135	420	215	247	350	18	107	178	249	320	391	462	533	-	-	-	-	-	-
	180			480																			
	200			615+C																			
80	200	100	80	598+C	145	453	265	247	350	23	112	195	278	361	-	-	-	-	-	-	-	-	-
	225			483																			
	250			628+C																			
280																							

Note: Right reserved to change without notice.

Material Options

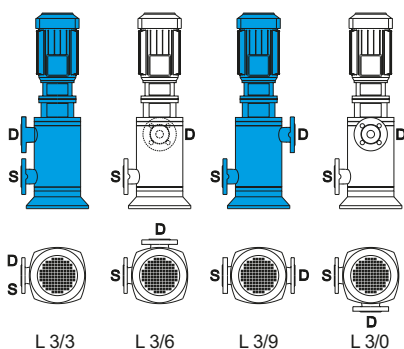
	0.6025	0.7040	0.7043	1.0619	1.4308	1.4309	1.4408	1.4409	1.4500	1.4517	1.4469	1.4317	1.4008	2.1050.01	2.0975.01	2.1096.01	1.0503	1.4021	1.4021+QT	1.4301	1.4404	1.4460	1.4462	Tungsten Carbide	
Suction Casing	●	○	○		○	○	○	○	○	○	○	○	○	○											
Discharge Casing	●	○	○		○	○	○	○	○	○	○	○	○	○											
Stage Casing	●	○	○		○	○	○	○	○	○	○	○	○	○											
Diuser	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○									
Impeller	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○							○		
Shaft																		●	○	○	○		○		
Bearing Housing	●	○	○	○	○	○	○	○																	
Wear Ring	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○									
Spacer Sleeve																	●	○	○	○	○		○		
Shaft Pro. Sleeve																	●	○	○	○	○		○		
Spacer Sleeve																	●	○	○	○	○		○		
Sleeve Bearing														●										○	
Mechanical Seal (*)	EN 12756																								

(*) Optional: Depending on customer requirement or request, different types and brands of mechanical seals are applicable. ● Standard manufacturing ○ Optional

Material Equivalents

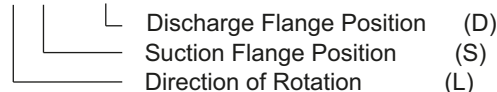
Description	DIN / EN	AISI / SAE / ASTM	
Cast Iron	0.6025	EN-GJL-250 (GG25)	A48 Class 40B
Nodular Cast Iron	0.7040	EN-GJS-400-15 (GGG40)	A536 60-40-18
Nodular Cast Iron	0.7043	EN-GJS-400-18-LT (GGG40.3)	A536 60-40-18
Cast Steel	1.0619	GP240GHGS-C25	A216 WCB
Chrome Nickel Cast Steel	1.4308	GX5CrNi19-10	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