

SCP

EN 22858 NORM PUMPS



Handled Liquids

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

Technical Data

Discharge Flange _____ DN 32 DN 250 mm

Capacity _____ up to 1700 m³/h

Head _____ up to 160 m

Speed _____ up to 2900 rpm

Operating Temperature _ -10 °C up to +175 °C *

Casing Pressure (Pmax) _ 16 bar (25 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

- Horizontal, radially split volute casing type, single stage, end suction centrifugal pumps with closed or semi-open impeller.
- In addition to 28 basic sizes conforming with EN 22858 / ISO 2858, there are 10 additional sizes. Dimensions of additional sizes may differ from other suppliers.
- Heavy duty shaft not in contact with the medium handled (dry shaft)
- For casing sealing, confined gaskets are used to prevent blow-out under pressure.

- Suction and discharge flanges conform to EN 1092 - 2 / PN 16
- Due to the back-pull-out design, the complete bearing assembly including impeller and casing cover can be dismantled without removing the volute casing from the pipe system. (With spacer coupling application, also possible to take out the rotor group without dismantling the electric motor.)
- All impellers are dynamically balanced according to ISO 1940 class 6.3.
- For closed impellers, axial thrust is balanced by impeller balancing holes system while for semi-open impellers, it is balanced by back ribs.
- Direction of rotation is clockwise viewed from driver end.
- Bearings of SCP type pumps are always oil lubricated.

Shaft Sealing

- Depending on request or requirement, pumps with soft packing or single, double and cartridge type mechanical seals can be supplied.
- External seal cooling system may be used if required.

Pump Designation

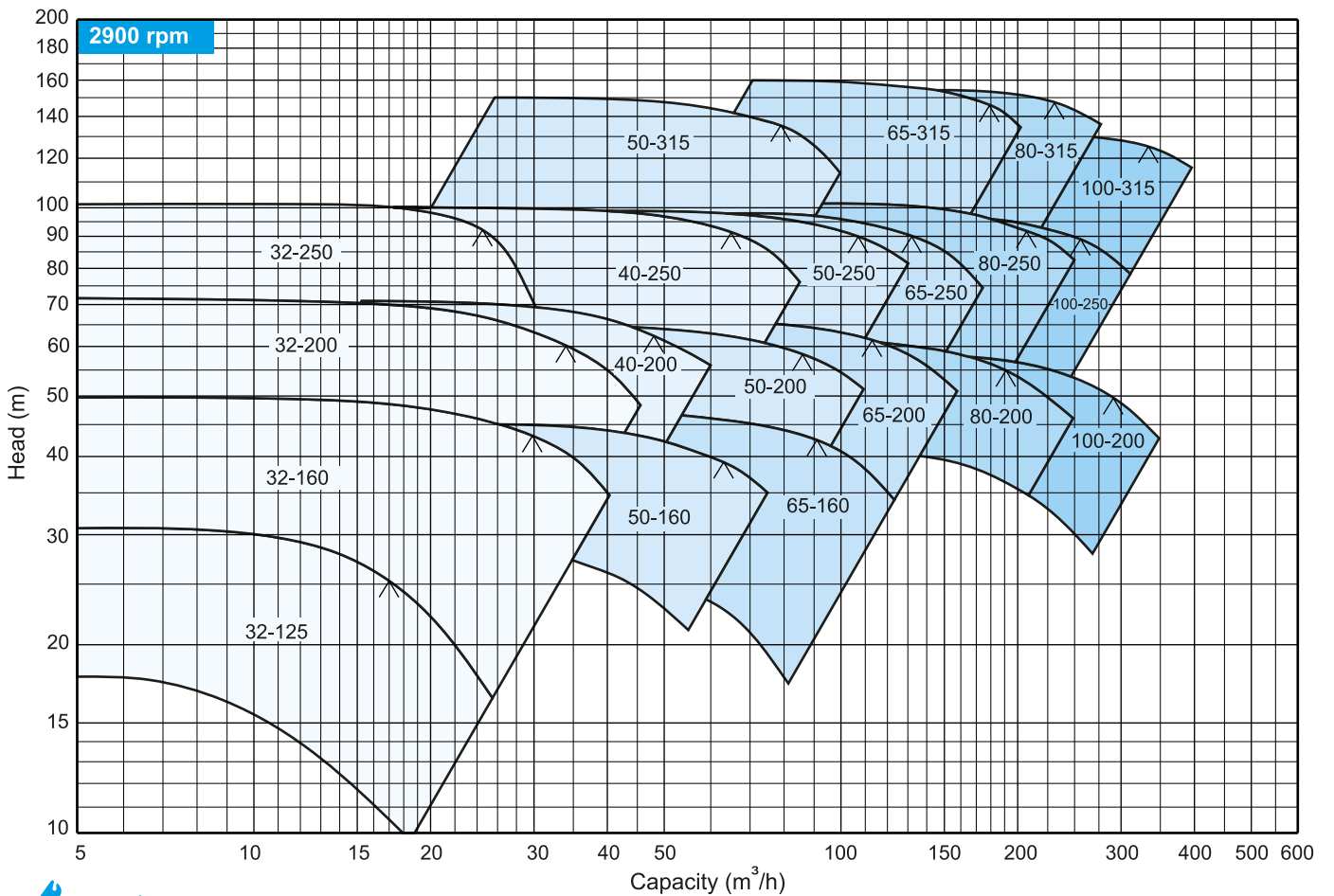
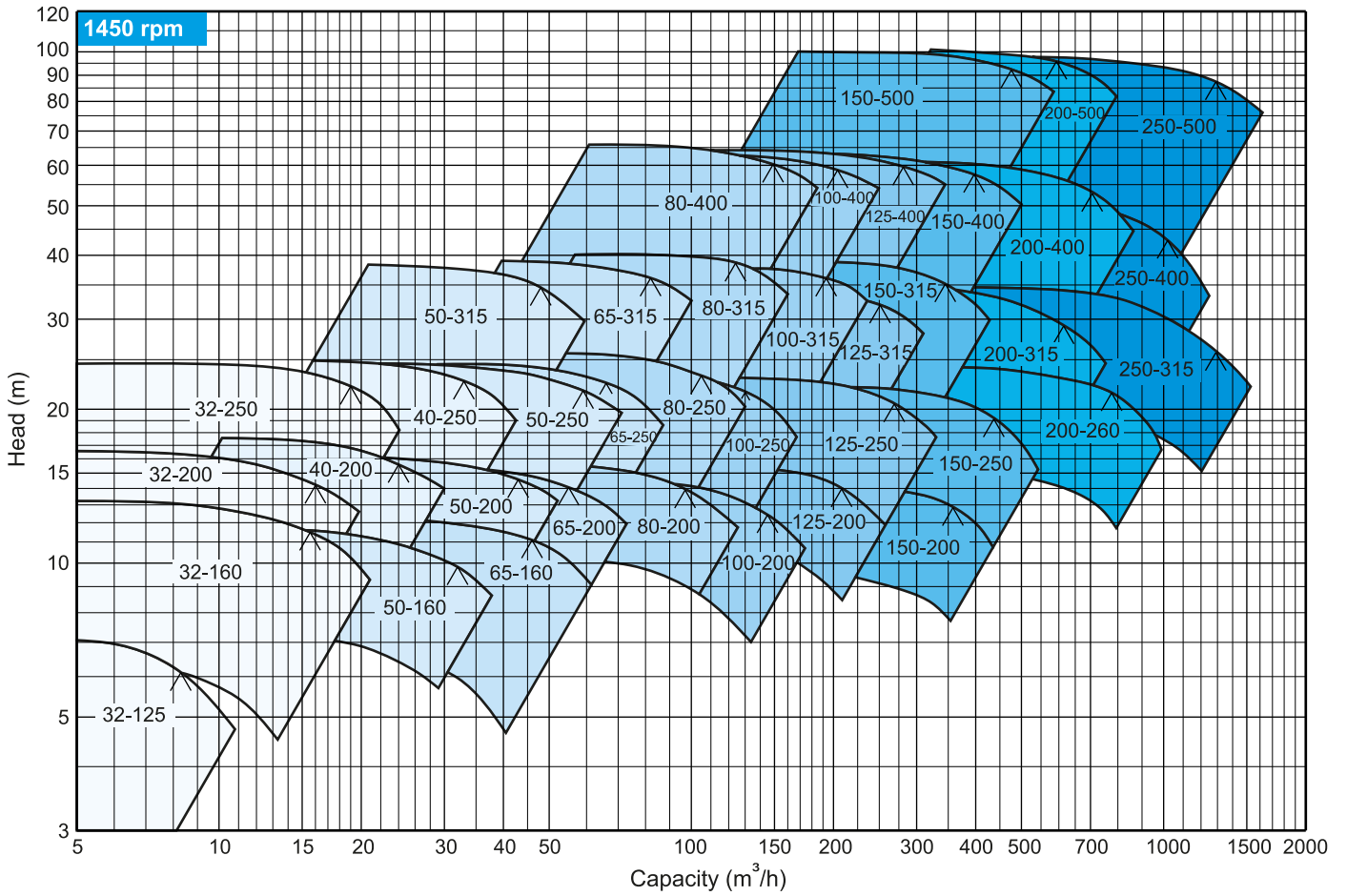
Pump Type _____

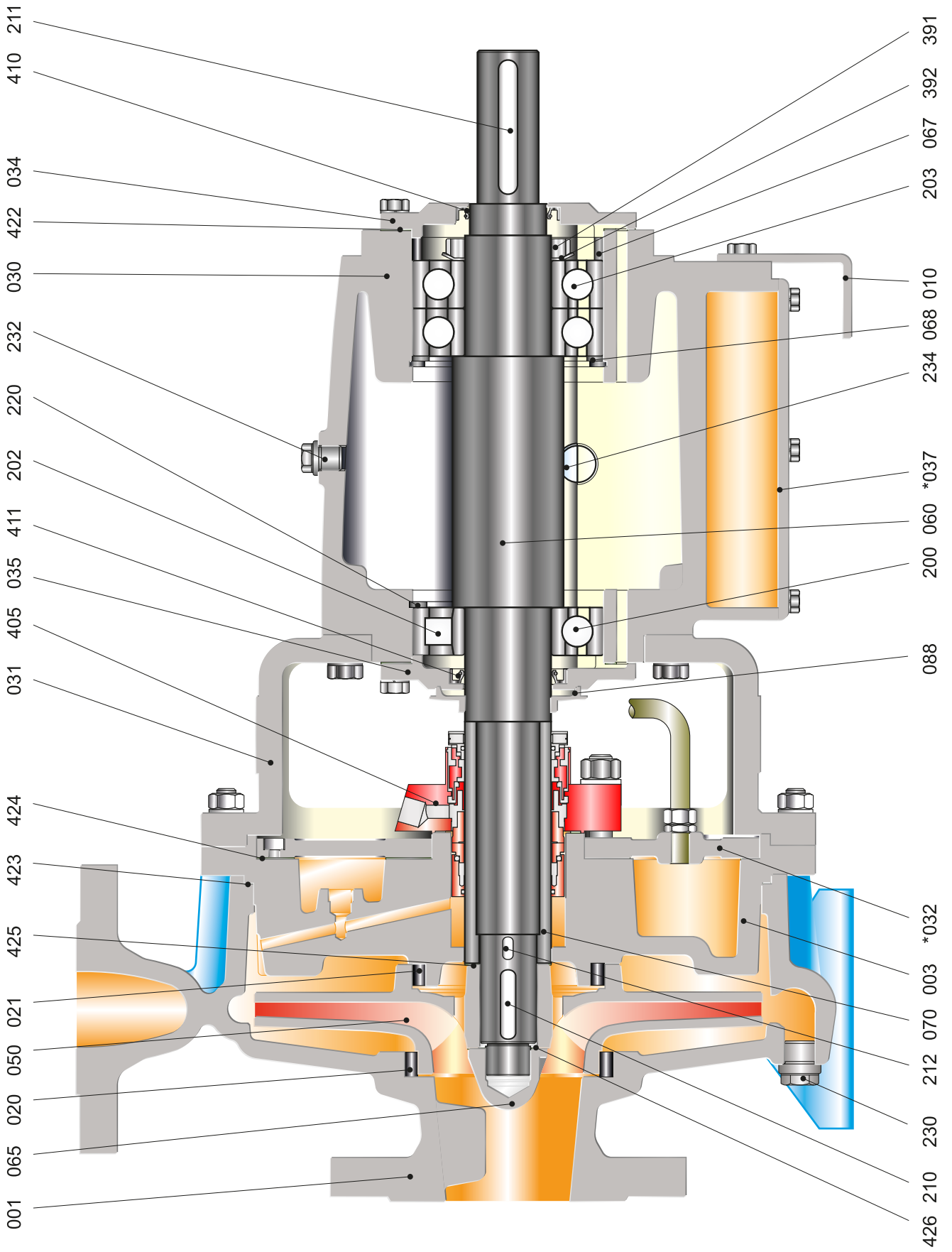
Discharge Nozzle (DN-mm) _____

Nominal Impeller Diameter (mm) _____

Impeller Type (A: semi-open) _____

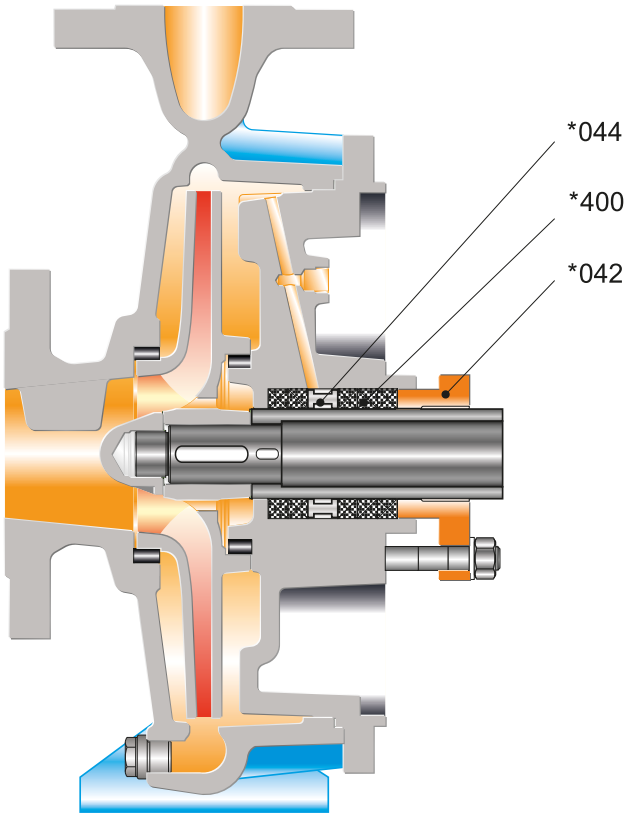
SCP 125 - 315 A



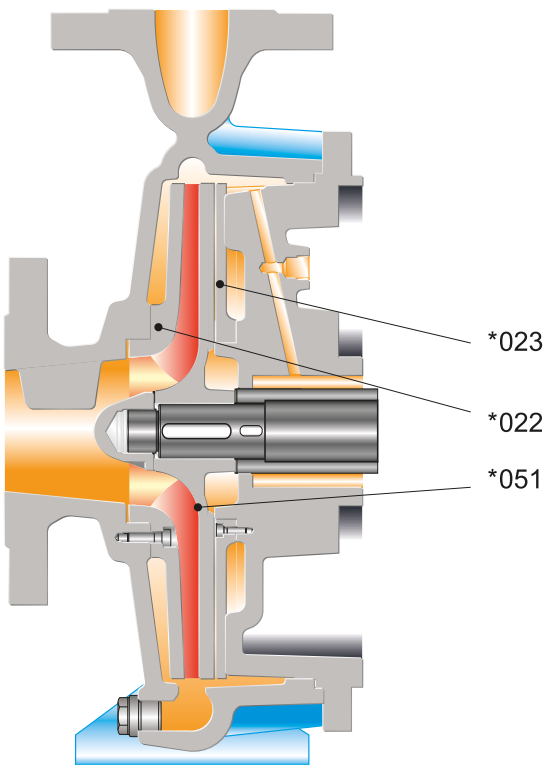


Sectional Drawings

Soft Packing Application



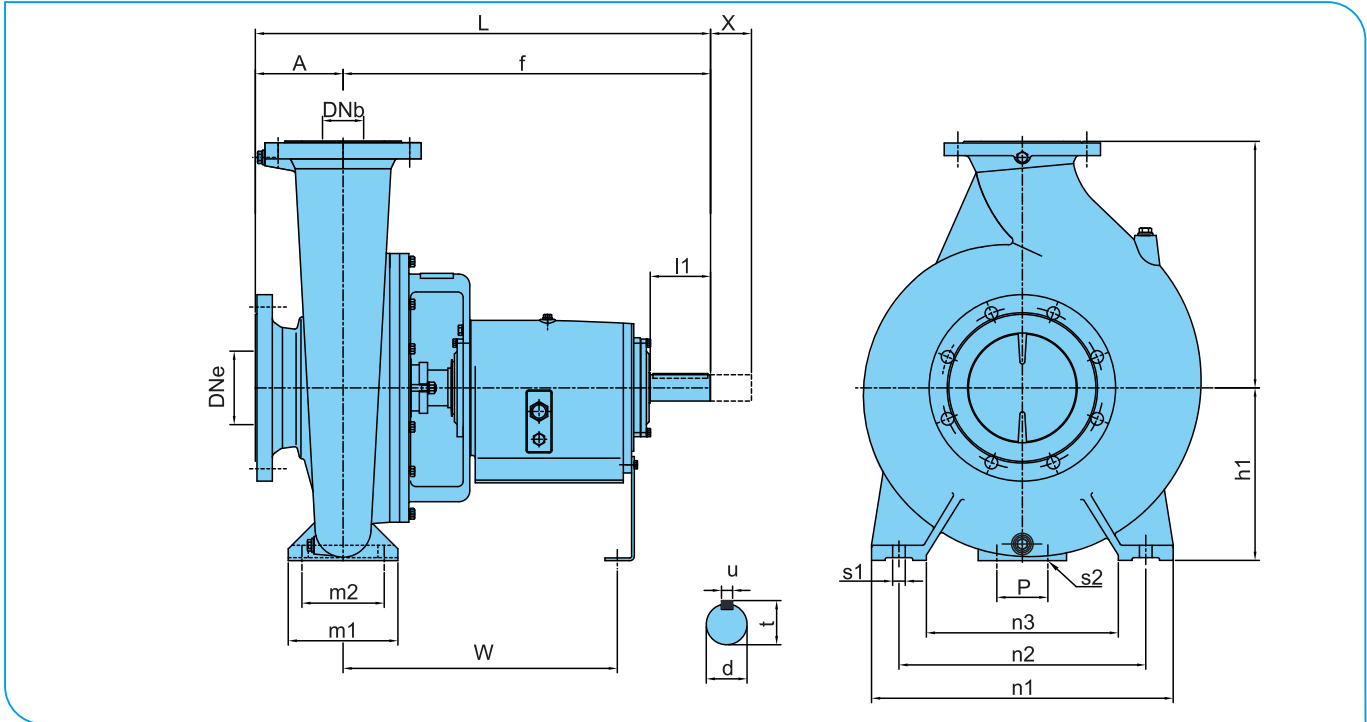
Semi-open Impeller Application



Part List

- 001 Volute Casing
- 003 Casing Cover
- 010 Support Foot
- 020 Wear Ring (casing)
- 021 Wear Ring (casing cover)
- *022 Front Wear Plate
- *023 Back Wear Plate
- 030 Bearing Bracket
- 031 Bearing Bracket Lantern
- *032 Cooling-Heating Jacket Cover
- 034 Bearing Cover (outboard)
- 035 Bearing Cover (inboard)
- *037 Bearing Cooling Cover
- *042 Gland
- *044 Lantern Ring
- 050 Impeller
- *051 Semi-open impeller
- 060 Shaft
- 065 Impeller Nut
- 067 Bearing Spacer Sleeve
- 068 Bearing Spacer Sleeve
- 070 Shaft Sleeve
- 088 Thrower
- 200 Ball Bearing
- 202 Cylindrical Roller Bearing
- 203 Angular Contact Ball Bearing
- 210 Key (impeller)
- 211 Key (coupling)
- 212 Shaft Sleeve Key
- 220 Circlip
- 230 Drain Plug
- 232 Oil Filling Plug
- 234 Oil Sight Gauge
- 391 Shaft Nut
- 392 Lock Washer
- *400 Soft Packing
- 405 Mechanical Seal
- 410 Lip Seal
- 411 Lip Seal
- 422 Gasket
- 423 Gasket
- 424 Gasket
- 425 Gasket
- 426 Gasket

(*) Optional



Pump Type		DIMENSIONS (mm)																				
		Overall Dimensions						Support and Foot Dimensions						Shaft End						Spacer		
EN 22858	Additional	DNe	DNb	A	f	L	h1	h2	m1	m2	n1	n2	n3	s1	p	s2	w	d	l1	t	u	x
32-125		50	32	80	385	465	112	140	100	70	190	140	90	14	110	14	285	24	50	27	8	100
32-160	132						160															
32-200	160						180															
32-250	180						225															
40-200		65	40	100	385	485	160	180	100	70	265	212	165	14	110	14	285	24	50	27	8	100
40-250	500				600	180	225	125									95	320	250	190	370	
50-160		80	50	100	385	485	160	180	100	70	265	212	165	14	110	14	285	24	50	27	8	100
50-200	180						200															
50-250	180			225																		
50-315	225			280																		
65-160		100	65	100	500	600	160	200	125	95	280	212	150	14	110	14	370	32	80	35	10	140
65-200	180						225															
65-250	200			250																		
65-315	225			280																		
80-200		125	80	125	500	625	180	250	160	120	400	315	240	19	110	14	370	42	110	45	12	140
80-250	225						280															
80-315	250			315																		
80-400	280			355																		
100-200		125	100	125	500	625	200	280	160	120	360	280	200	19	110	14	370	32	80	35	10	140
100-250	225						280															
100-315	250			315																		
100-400	280			355																		
	125-200	150	125	140	500	640	250	315	160	120	400	315	240	19	110	14	370	32	80	35	10	140
125-250	250						315															
125-315	280			355																		
125-400	315			400																		
	150-200	200	150	160	545	705	280	355	200	150	550	450	350	23	140	19	381	42	110	45	10	180
150-250	530				690	375	366	42									45	12				
150-315	670			830	400	500	48	51.5	14													
150-400	730			930	450	495	55	59	16													
	150-500	250	200	200	630	830	355	450	250	200	600	500	360	23	140	20	410	48	110	51.55	14	160
200-260	684				884	500	520	48									45	14				
200-315	180			725	905	490	55	59	16													
200-400	210			925	1135	640	70	140	74.5	20												
	250-315	300	250	230	730	960	400	525	300	240	720	600	435	27	140	20	515	55	110	59	16	200
250-400	750				980	670	70	140									74.5	20				
250-500	225			940	1165	450	630	70	140	74.5	20											

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	1.4021	1.4301	1.4306	1.4401	1.4404	1.4462	
Volute Casing	●	○	○	○	○	○	○	○	○	○	○	○	○							
Casing Cover	●	○	○	○	○	○	○	○	○	○	○	○	○							
Impeller	●	○	○	○	○	○	○	○	○	○	○	○	○							
Shaft														●	○	○	○	○	○	
Bearing Bracket	●	○																		
Wear Ring (casing)	●	○	○	○	○	○	○	○	○	○	○	○	○							
Shaft Protecting Sleeve														●	○	○	○	○	○	
Mechanical Seal (*)													EN 12756 / DIN 24960							

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

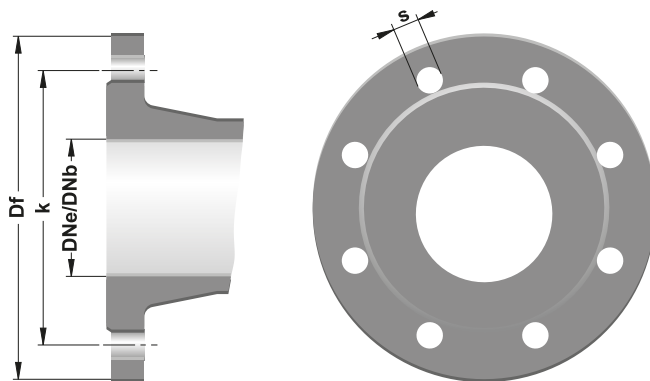
● Standart manufacturing
○ Optional

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	GX4 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
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 Dimensions

DNe / DNb	Suciton & Discharge (PN 16)			
	Df	k	s	n
32	140	100	19	4
40	150	110	19	4
50	165	125	19	4
65	185	145	19	4
80	200	160	19	8
100	220	180	19	8
125	250	210	19	8
150	285	240	23	8
200	340	295	23	12
250	405	355	28	12
300	460	410	28	12



"n" number of holes