



Pump • Fire Fighting Units • Booster Set

ECO SNT

EN 733 NORM PUMPS



ECO SNT Rev.05.03.2024

Handled Liquids

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

Technical Data

Discharge Flange _____ DN 32.....DN 250 mm

Capacity _____ up to 1200 m³/h(*)

Head _____ up to 160 m(*)

Speed _____ up to 3600 rpm(*)

Design Temperature _____ -10 °C' to +140 °C(**)

Casing Pressure (Pmax) _____ 10 bar (16 bar)(**)

(Pmax: Suction Pressure + Shut off Head)

(*) Contact company for higher capacity and head values.

(**) The Material of pump differs 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 pump with closed impeller.

- Dimensionally complies with EN 733.

- Complies EU547/2012 regulations.

- In addition to 29 basic sizes conforming with EN 733, there are 17 additional sizes. Dimensions of additional sizes may differ from other suppliers.

Pump Designation

Pump Type _____

Discharge Nozzle (DN-mm) _____

Nominal Impeller Diameter (mm) _____

Special Application _____



- ECO SNT 40-315, 50-315, 65-315, 80-315, 100-315, 125-250 pumps are given with 3000 rpm only for fire fighting application.

- Suction and discharge flanges conform to EN 1092-2 / PN 16. In case of request, ANSI/ASME flanges can be supplied.

- 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 piping system. With spacer coupling application, also possible to take out the rotor group without dismantling the electric motor.

- All impellers are balanced dynamically or statically according to ISO 1940 grade 6.3.

- Axial thrust is balanced by impeller balancing holes system.

- Direction of rotation is clockwise viewed from drive end.

- In case of request, wear ring and/or shaft sleeve can be supplied.

- Bearings of ECO SNT type pumps are normally non-maintenance, "life time grease lubricated" ball bearings. In case of demand, oil lubrication or re-greasable bearing can be supplied.

- Oil lubrication bearings are used in pumps with 65 mm shaft end

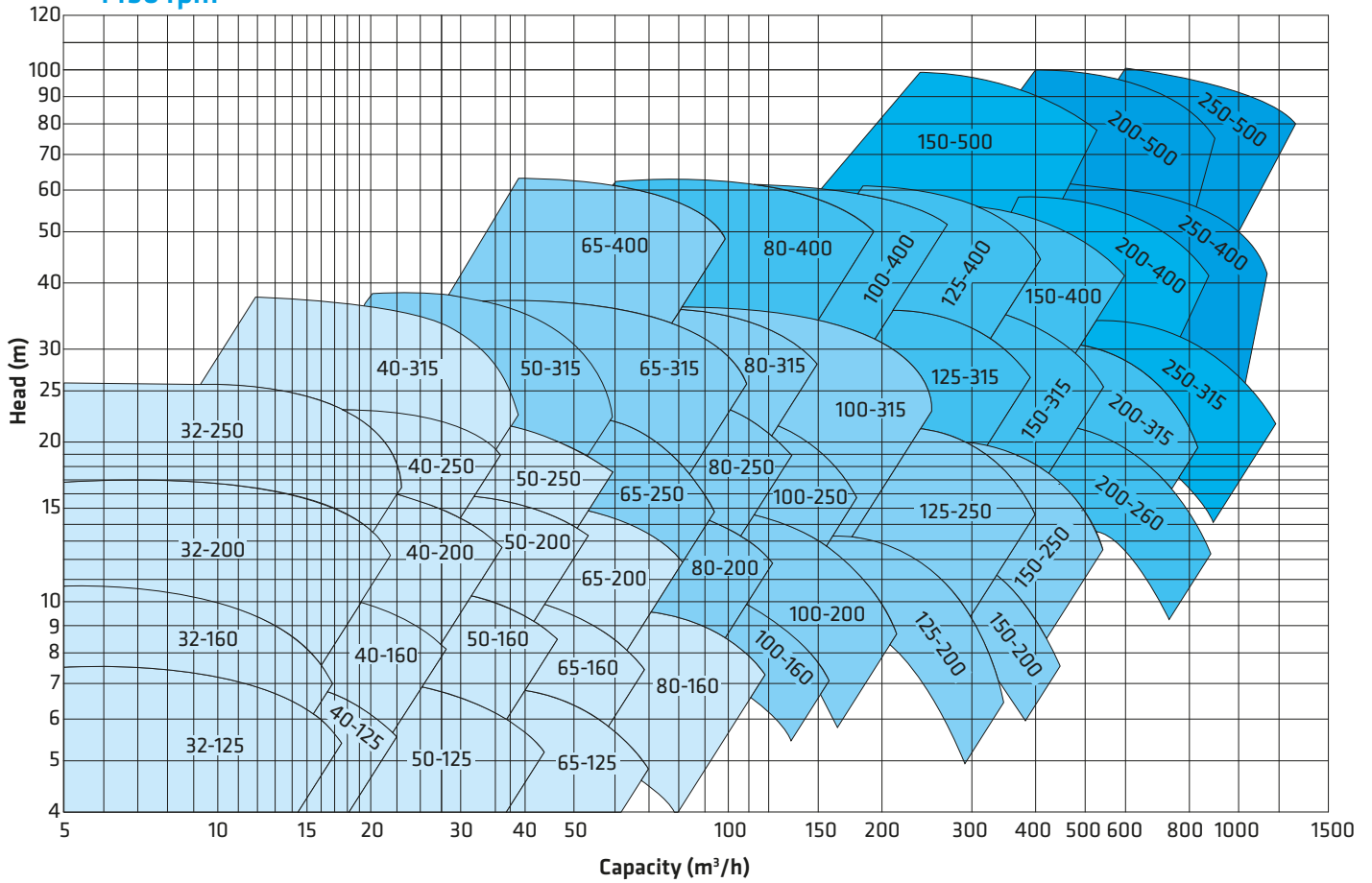
Shaft Sealing

- In standard production, soft packed stuffing boxes are used.

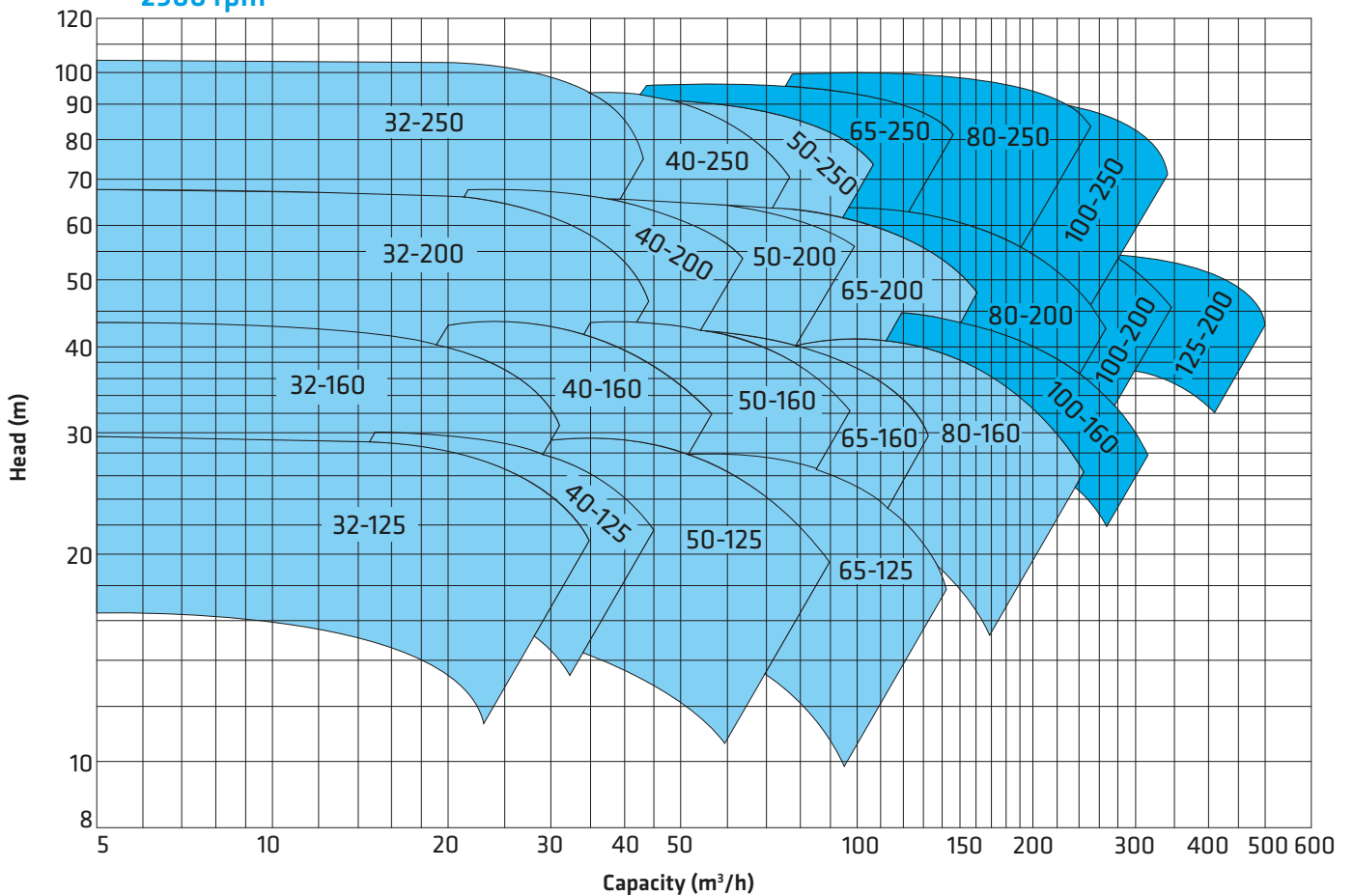
- Depending on customer request, mechanical seals are available. In this case, pump shaft is always stainless steel.

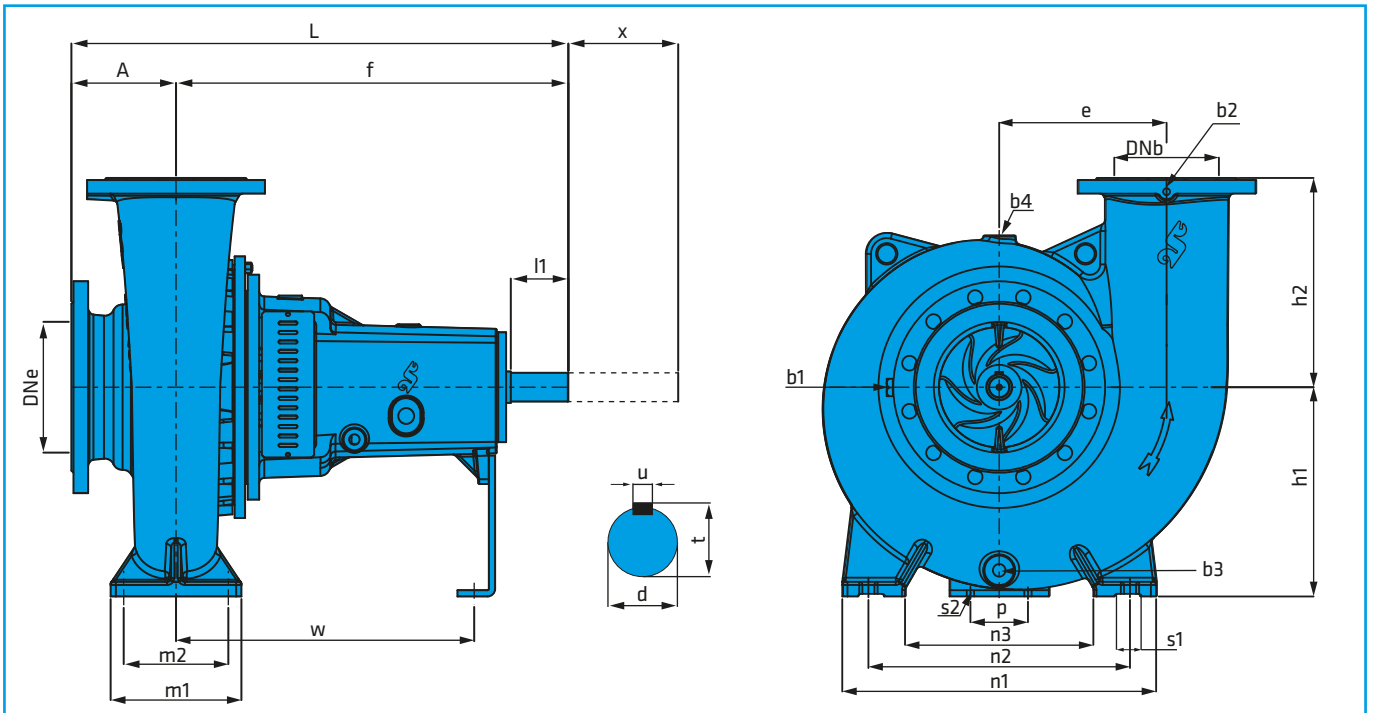
ECO SNT 100 - 250 - XXX

1450 rpm



2900 rpm





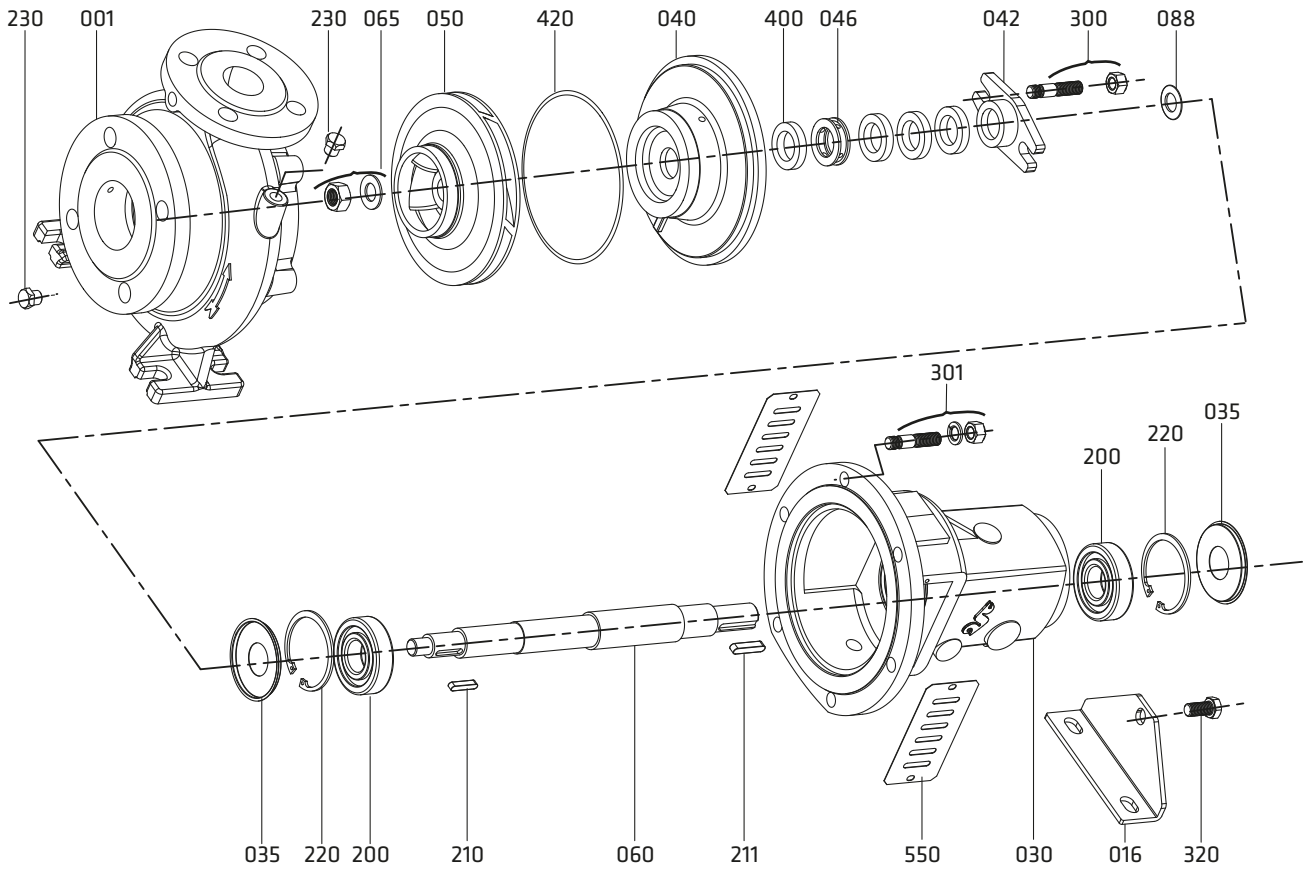
DIMENSIONS (mm)

Pump Types	Form	DIMENSIONS (mm)																		Weight (kg)	Space x(*)								
		Overall Dimensions								Foot Dimensions								Shaft End				Support Connections							
		DNe	DNb	A	f	L	h1	h2	e	m1	m2	n1	n2	n3	s1	p	s2	w	d	l1	t	u	b1	b2	b3	b4	b5		
150-500	F2	200	150	200	750	950	400	450	350	250	200	720	600	435	27	140	20	560	55	110	59	16	1/4"	1/4"	3/4"	3/4"	1/2"	430	250
200-400	F2	250	200	200	750	950	400	400	320	250	200	600	500	360	23	140	20	560	55	110	59	16	1/4"	1/4"	3/4"	3/4"	1/2"	394	250
200-500	F2	250	200	200	800	1000	450	475	370	300	200	720	600	435	27	140	20	560	65	140	69	18	1/4"	1/4"	3/4"	3/4"	1/2"	540	250
250-400	F2	300	250	230	800	1030	450	480	350	300	240	720	600	435	27	140	20	560	65	140	69	18	1/4"	1/4"	3/4"	3/4"	1/2"	430	250
250-500	F2	300	250	225	800	1025	475	500	400	300	240	720	600	435	27	140	20	560	65	140	69	18	1/4"	1/4"	3/4"	3/4"	1/2"	620	250

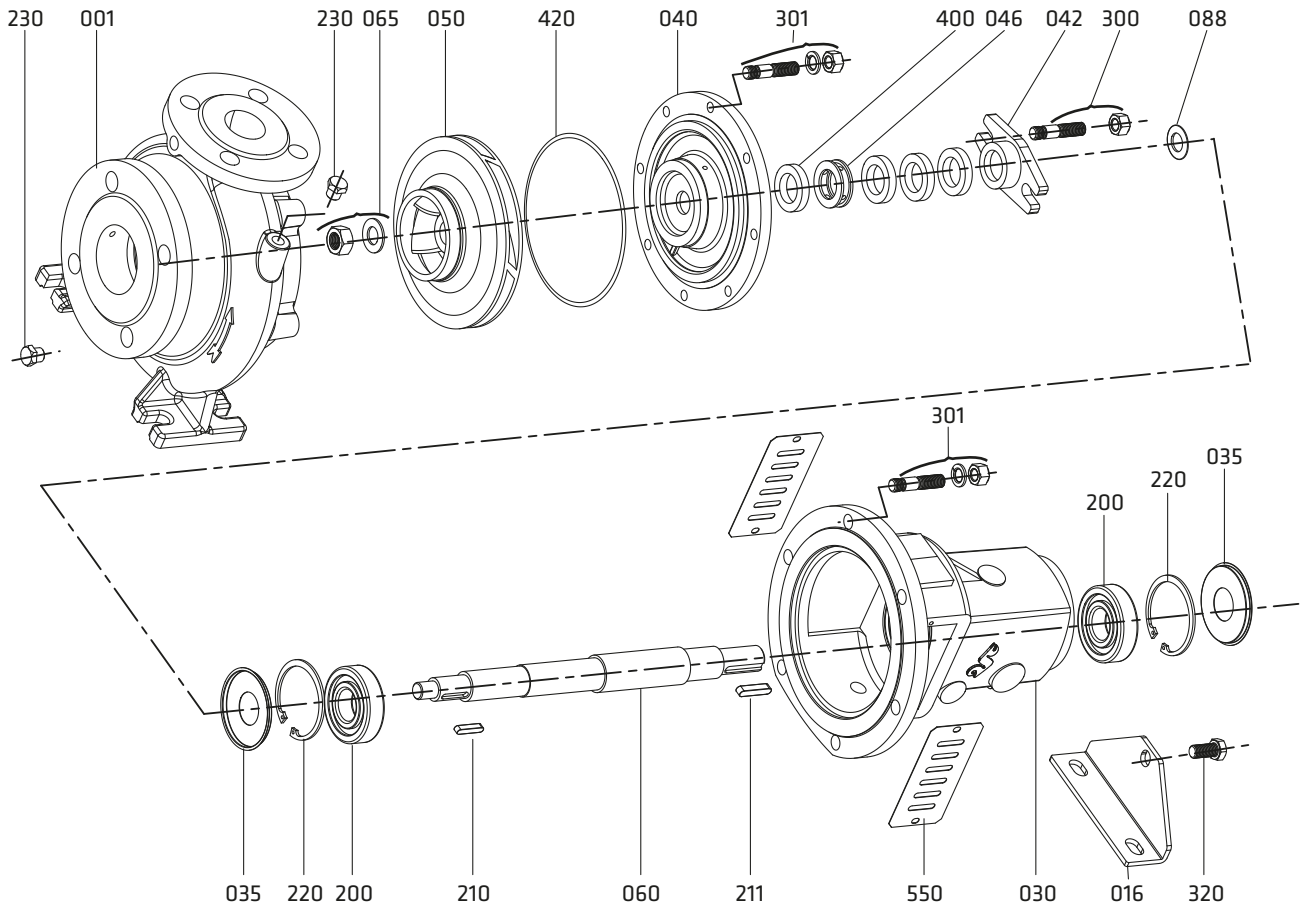
(*) Gap necessary for the withdrawal of the pump rotor from the driven end without the need for dismantling the motor and pipework (spacer coupling application)

(*) b1, b2 and b4 holes are not drilled in ductile iron, cast steel and stainless steel volute casings.

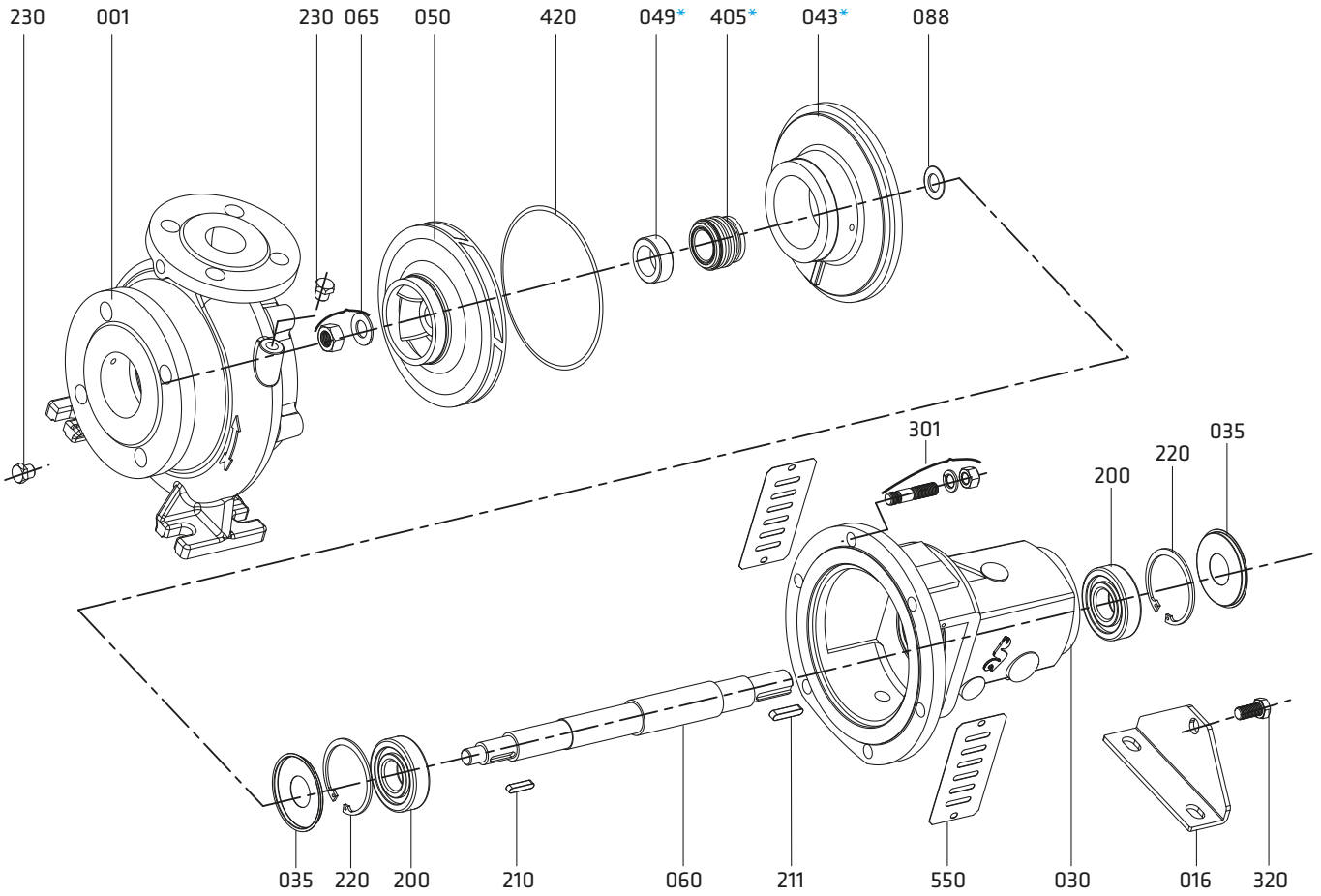
Form: F1 (Soft Packing Seal Pump)



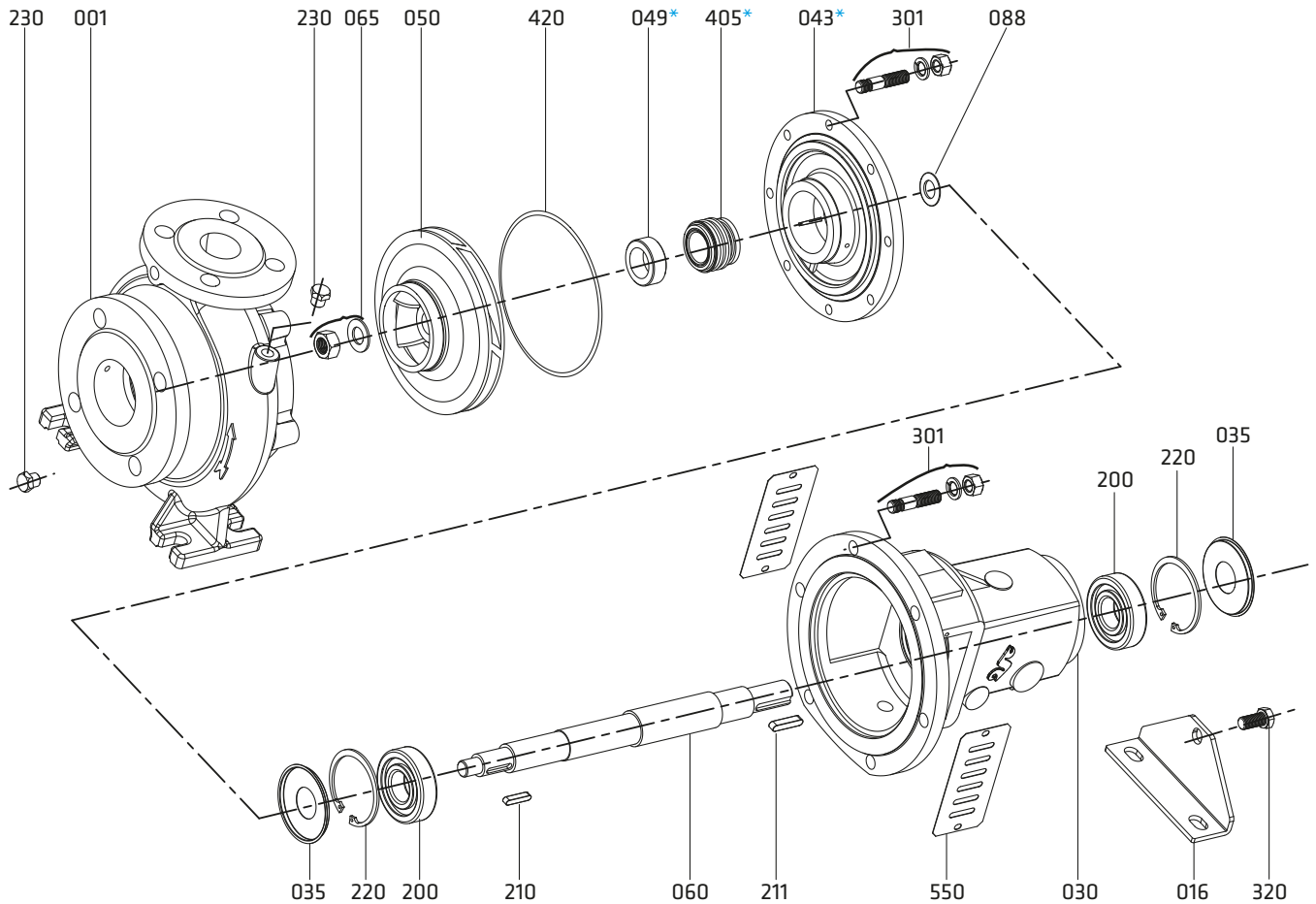
Form: F2 (Soft Packing Seal Pump)



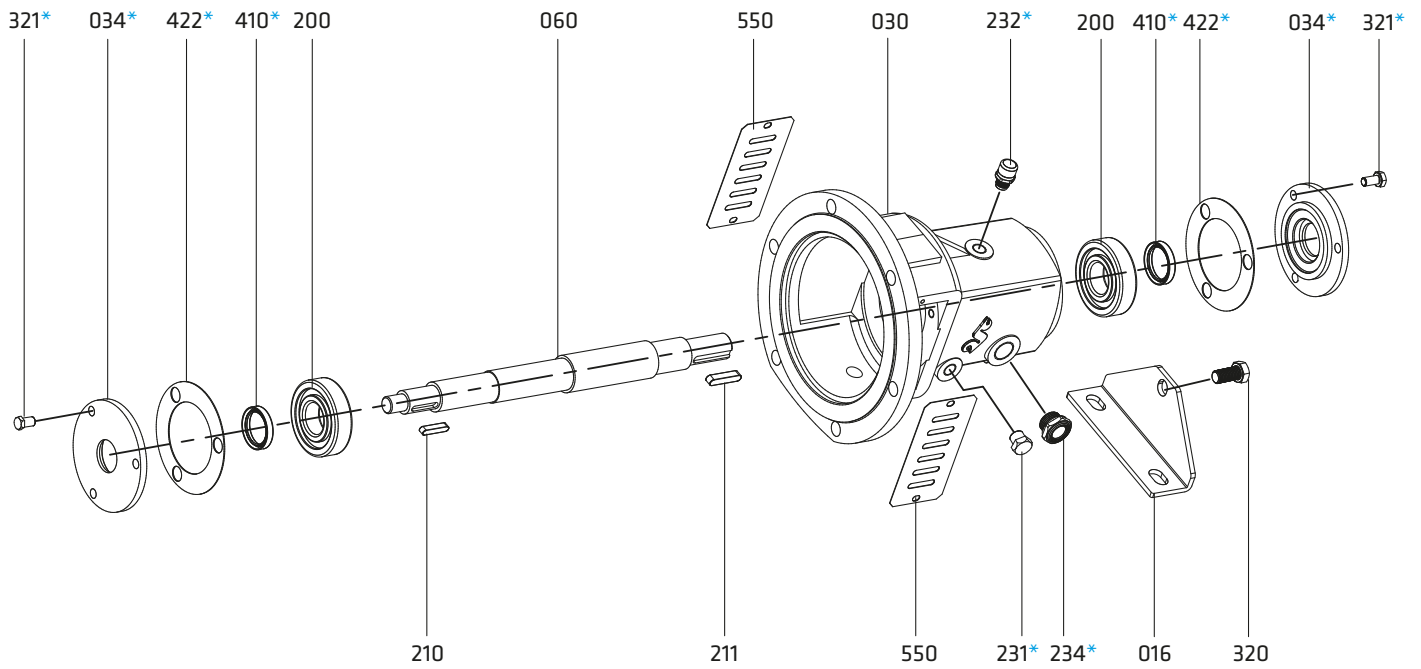
Form: F1 (Mechanical Seal Pump)



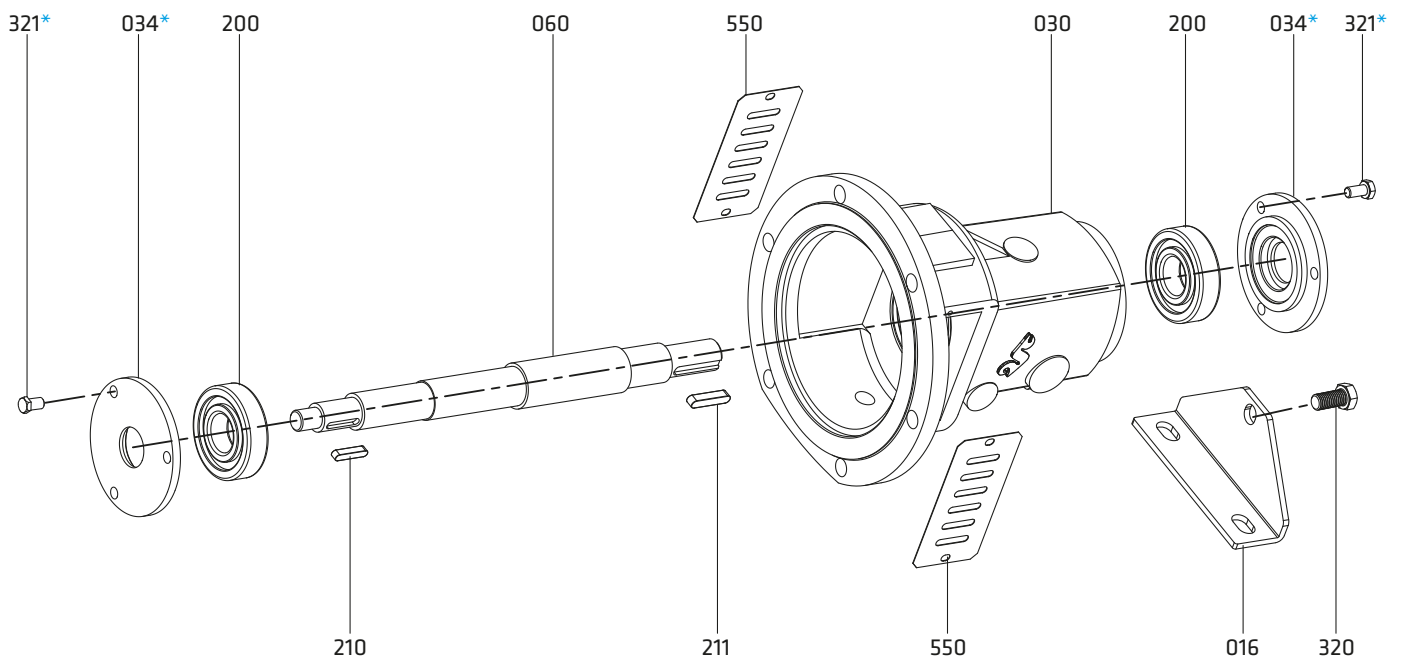
Form: F2 (Mechanical Seal Pump)



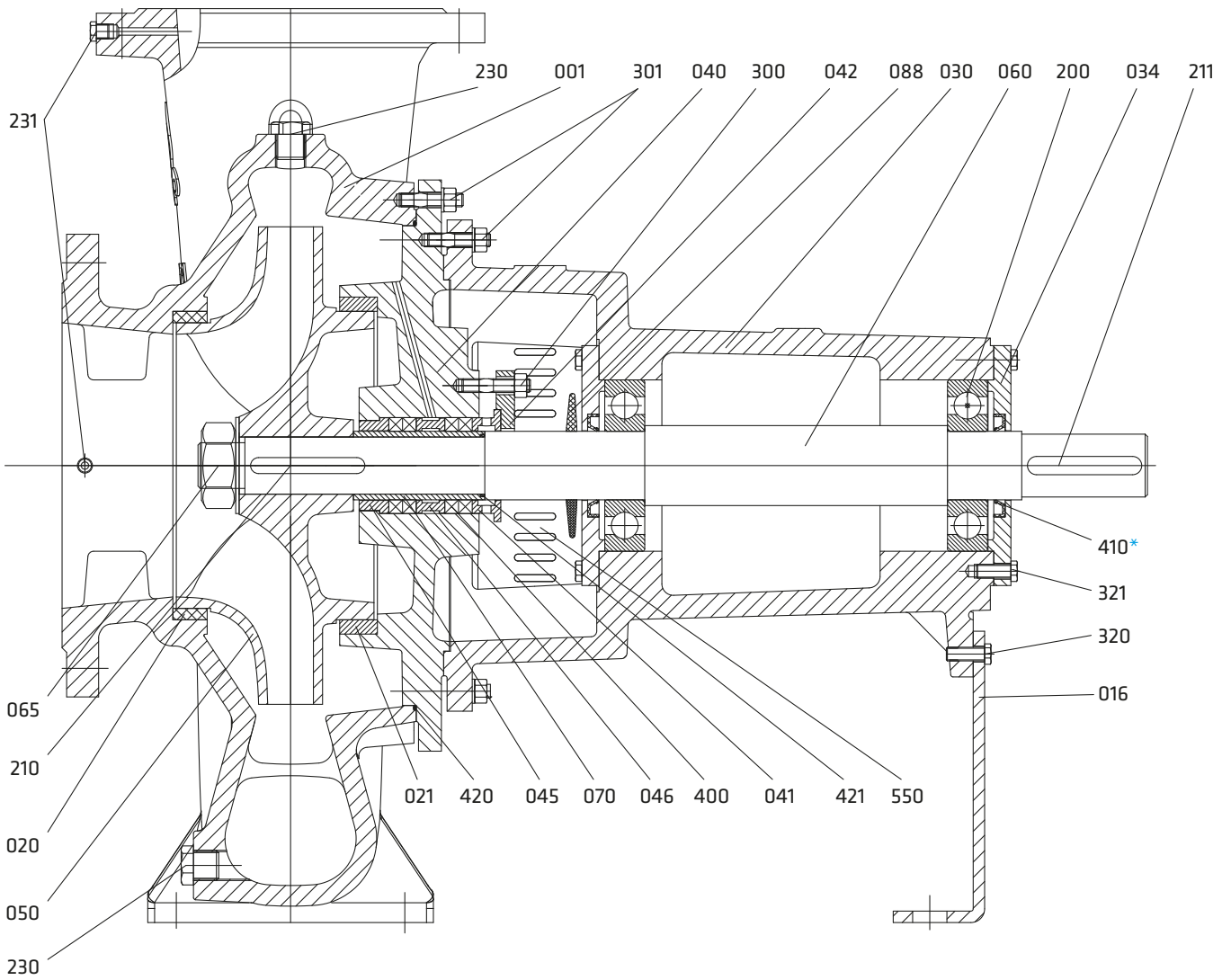
Oil Lubrication Bearing Housing



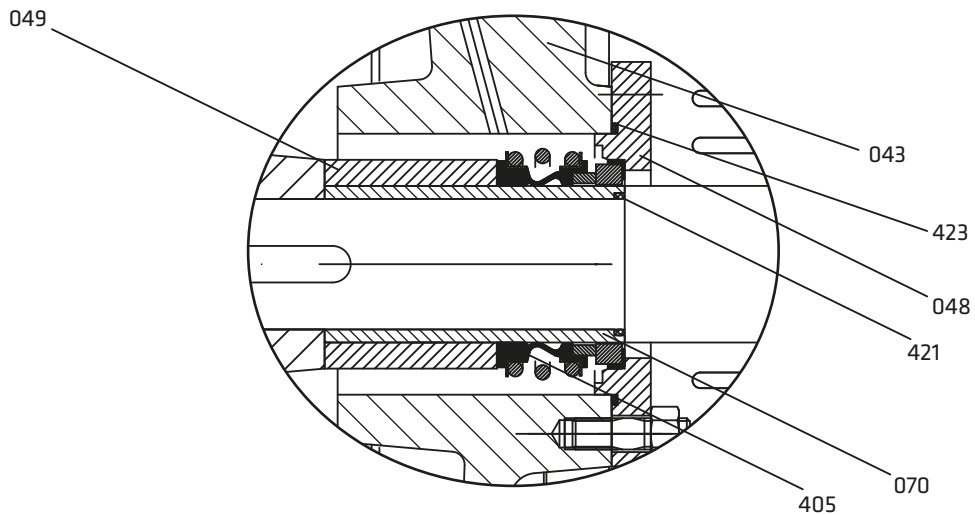
Re-greasable Bearing Housing



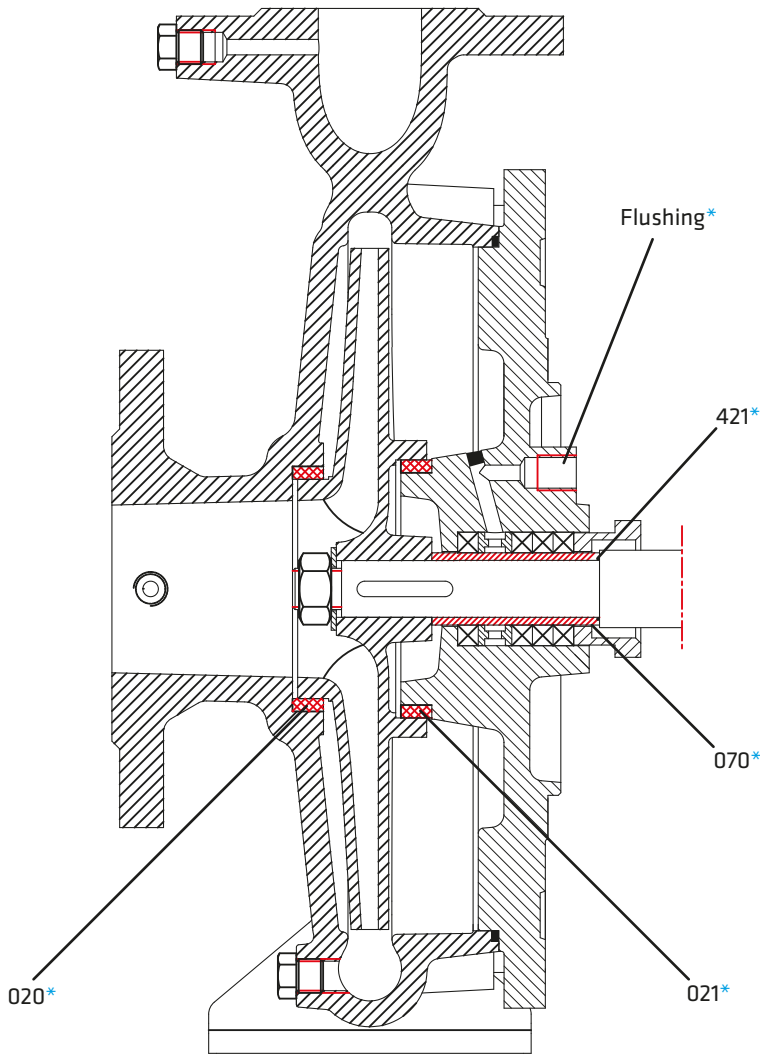
Cross Section of ECO SNT 150-500, 200-400, 200-500, 250-315, 250-400 and 250-500



ECO SNT 150-500, 200-400, 200-500, 250-315, 250-400 and 250-500 for mechanical sealing application



Optional Applications



Part List

001	Volute Casing
016	Support Foot
020*	Wear Ring (Casing)
021*	Wear Ring (Seal Cover)
030	Bearing Housing
034*	Bearing Cover (GG)
035	Bearing Cover (St)
040	Soft Packing Seal Cover
041	Gland Sleeve
045	Sleeve
042	Gland
043*	Mechanical Seal Cover
046	Lantern Ring
048	Cover
049*	Mechanical Seal Spacer Sleeve
050	Impeller
060	Shaft
065	Impeller Nut and Washer
070*	Shaft Sleeve
088	Thrower
200	Ball Bearing
210	Impeller Key
211	Coupling Key
220	Circlip
230	Screw
231*	Screw
232*	Oil Filling Plug and Breather
234*	Oil Level Indicator
300	Gland Stud and Nut
301	Stud, Washer and Nut
320	Screw
321*	Screw
400	Soft Packing
405*	Mechanical Seal
410*	Lip Seal
420	O-ring
421*	O-ring
422*	Gasket
423	O-ring
550	Guard

(*) Optional

Part List	10	30	35	20	60	6L	70	7L	8M	7D	7S	8N	80	4C	4A	40	20	80	8T	60	7L	7E	7D	
	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	
Volute Casing	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
Seal Cover (Mech. or Soft)	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
Impeller	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○							○	
Shaft																	●	○	○	○	○			○
Bearing House	●	○	○	○	○	○	○	○																
Wear Ring	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○								
Shaft Sleeve																	○	○	○	○	○			○
Mechanical Seal (*)	EN 12756																							

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

● Standard manufacturing

NOTE: Depends on the request, different than above casting and shaft material can be supplied.

○ 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 (Leaded)	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 Dimensions

DNe/DNb	Suction & Discharge (PN 16)			
	Df	k	s	n
32	140	100	18	4
40	150	110	18	4
50	165	125	18	4
65	185	145	18	4
80	200	160	18	8
100	220	180	18	8
125	250	210	18	8
150	285	240	22	8
200	340	295	22	12
250	405	355	26	12
300	460	410	26	12

“ n “ number of holes