

# HOT OIL PUMPS

## Handled Liquids

Heat transfer oil or low viscosity industrial oil without aggressive solid particles.

## Technical Data

Discharge Flange \_\_\_\_\_ DN 32.....DN 125 mm

Capacity \_\_\_\_\_ up to 350 m<sup>3</sup>/h

Head \_\_\_\_\_ up to 105 m

Speed \_\_\_\_\_ up to 2900 rpm

Operating Temperature \_\_\_\_\_ up to 320 °C

Cooling Method \_\_\_\_\_ With Air

Casing Pressure (Pmax) \_\_\_\_\_ 10 bar (16 bar)

(Pmax: Suction Pressure + Shut off Head)

## Desing Features

- Horizontal, radially split volute casing type, single stage, end suction, air cooled centrifugal pumps with closed impeller.

- 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 balanced dynamically according to ISO 1940 class 6.3.

## Pump Designation

Pump Type \_\_\_\_\_ SKY

Discharge Nozzle (DN-mm) \_\_\_\_\_ 100 - 250

Nominal Impeller Diameter (mm) \_\_\_\_\_

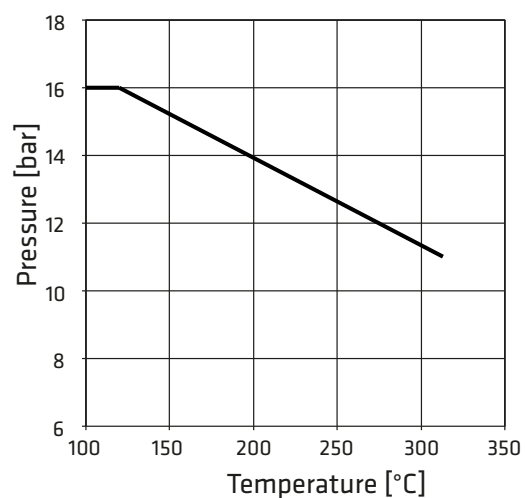


- Axial thrust is balanced by impeller back ribs.
- Direction of rotation is clockwise viewed from drive end.
- Bearings of SKY type pumps are "life time grease lubricated" ball bearings.

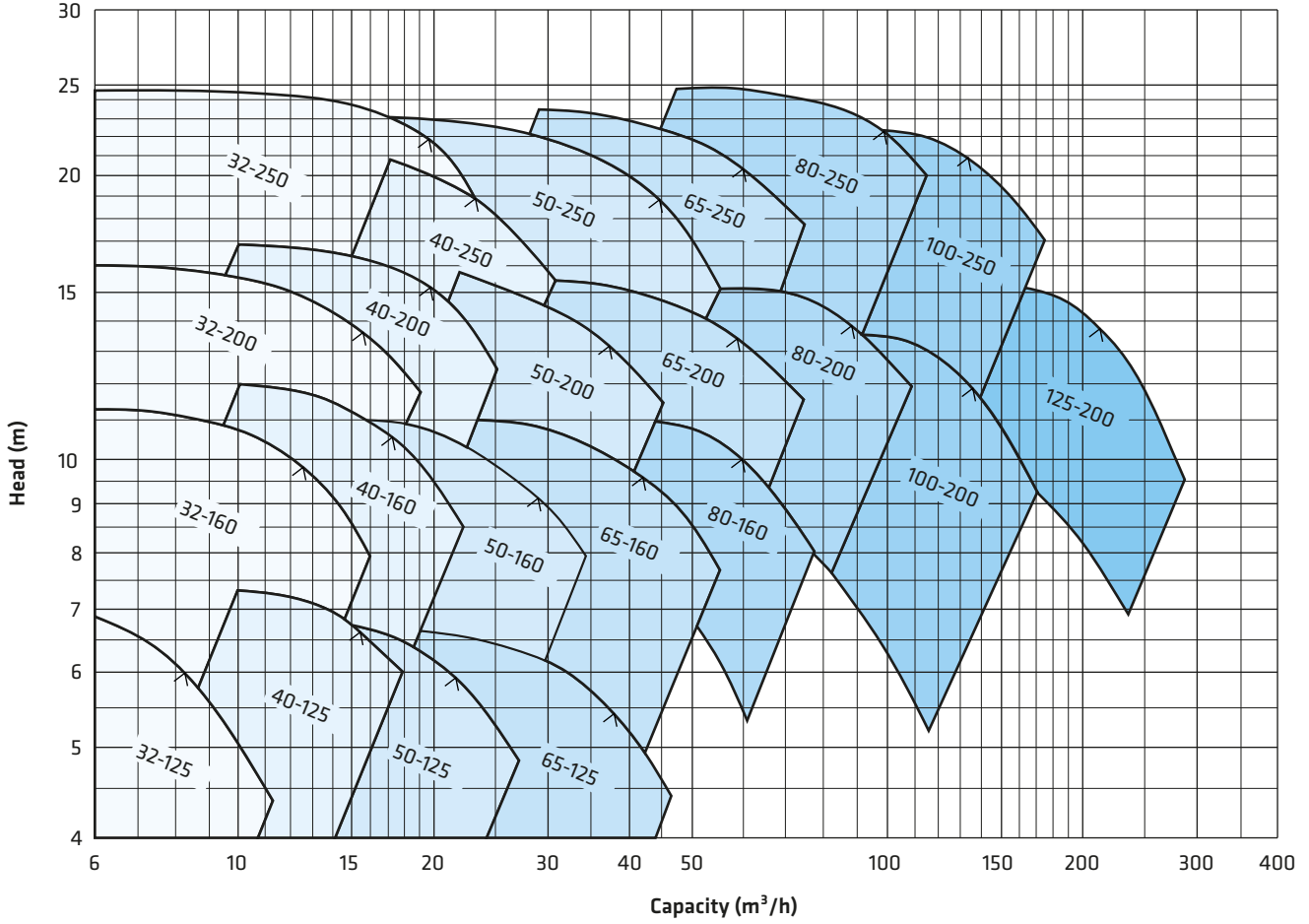
## Shaft Sealing

- High temperature resistant mechanical seals are used.

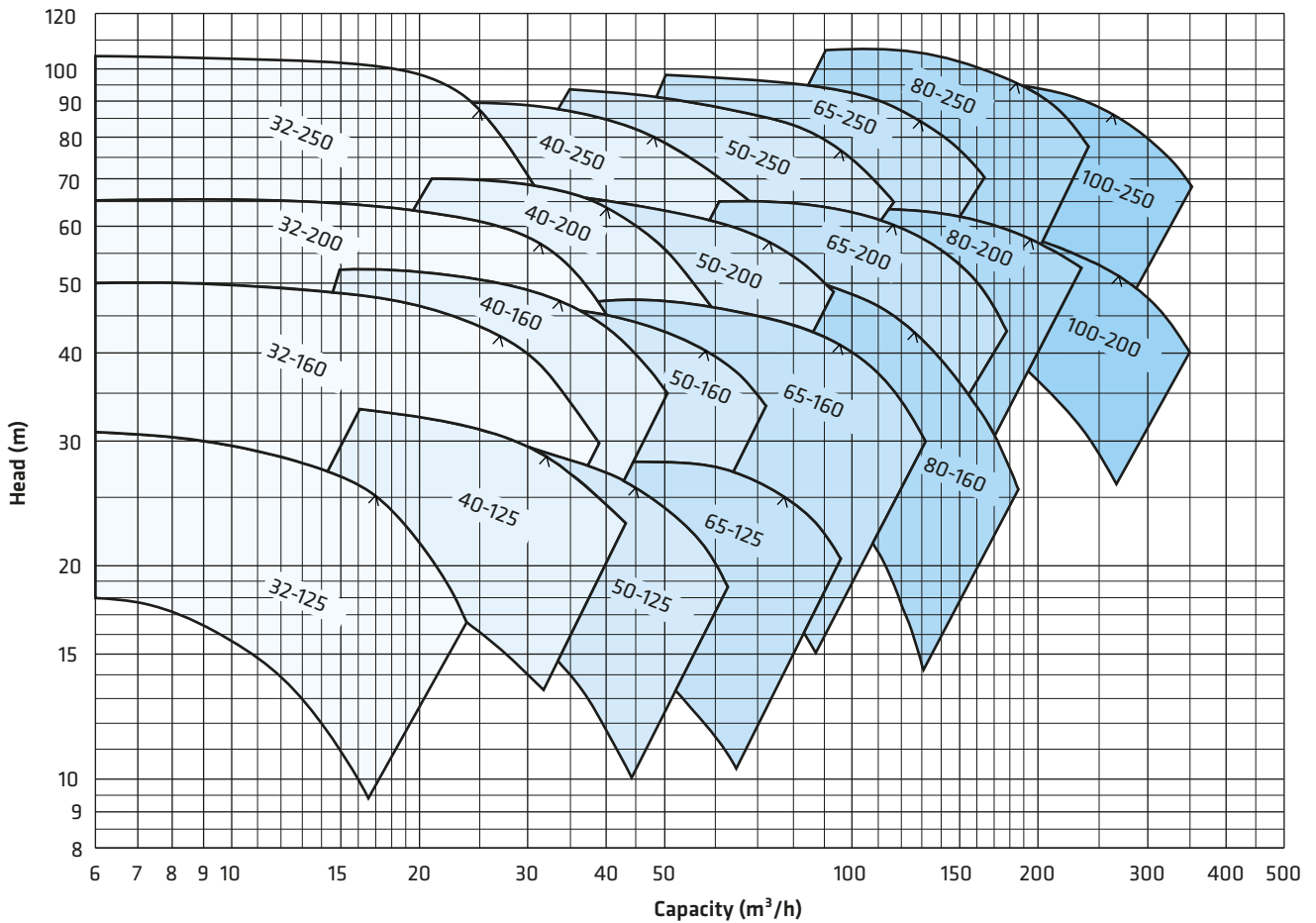
## Pressure & Temperature Limits



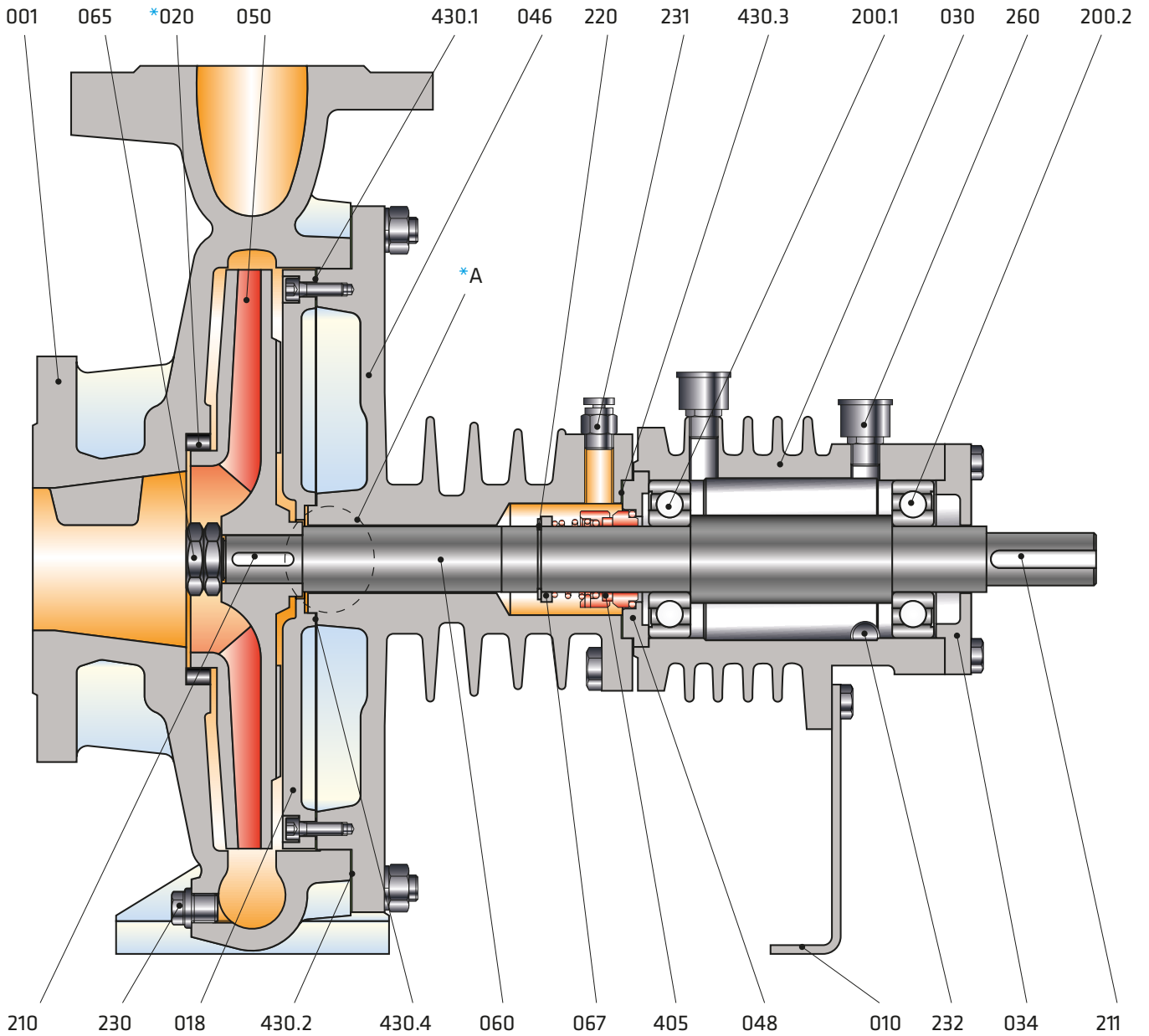
1450 rpm



2900 rpm



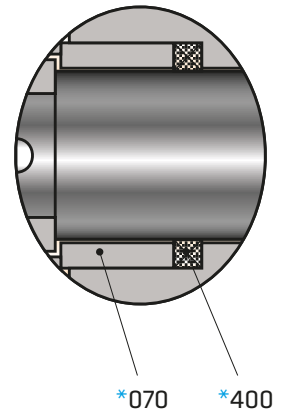
Sectional Drawings



Part List

001	Volute Casing	210	Impeller Key
010	Support Foot	211	Coupling Key
018	Wear Plate	220	Circlip
*020	Wear Ring	230	Draing Plug
030	Bearing Housing	231	Air Venting Plug
034	Bearing Cover	232	Grease Drain Plug
046	Casing Cover	260	Grease Nipple
048	Mechanical Seal Cover	*400	Soft Packing (type 6050)
050	Impeller	405	Mechanical Seal
060	Shaft	430.1	Gasket (wear plate)
065	Impeller Nut	430.2	Gasket (casing)
067	Spacer Sleeve (mechanical seal)	430.3	Gasket (mech. seal cover)
*070	Spacer Sleeve (soft packing)	430.4	Gasket (wear plate)
200	Ball Bearing		

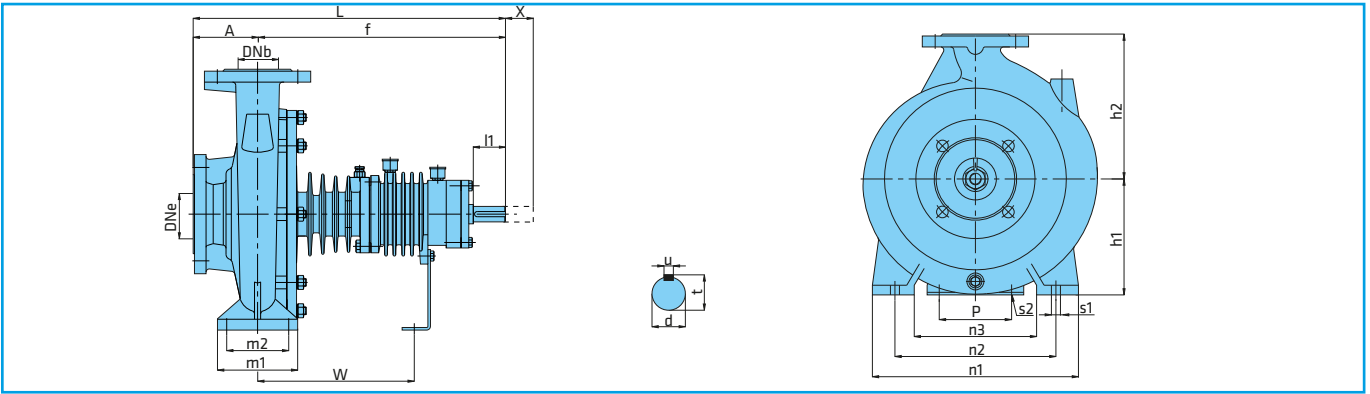
\*A



\*070

\*400

\* Optional



Pump Type	Overall Dimensions (mm)							Support & Foot Dimensions(mm)								Shaft (mm)				Spacer (mm) x*	
	DNe	DNb	A	f	L	h1	h2	m1	m2	n1	n2	n3	s1	p	s2	w	d	l1	t		u
32-125	50	32	80	385	465	112	140	100	70	190	140	90	14	110	14	240	24	50	27	8	100
40-125	65	40	80	385	465	112	140	100	70	210	160	90	14	110	14	240	24	50	27	8	100
50-125	65	50	100	385	485	132	160	100	70	240	190	145	14	110	14	240	24	50	27	8	100
65-125	80	65	100	385	485	160	180	125	95	280	212	150	14	110	14	240	24	50	27	8	100
32-160	50	32	80	385	465	132	160	100	70	240	190	145	14	110	14	240	24	50	27	8	100
40-160	65	40	80	385	465	132	160	100	70	240	190	145	14	110	14	240	24	50	27	8	100
50-160	65	50	100	385	485	160	180	100	70	265	212	145	14	110	14	240	24	50	27	8	100
65-160	80	65	100	385	485	160	200	125	95	280	212	150	14	110	14	240	24	50	27	8	100
80-160	100	80	125	395	520	180	225	125	95	320	250	190	14	110	14	250	24	50	27	8	140
32-200	50	32	80	385	465	160	180	100	70	240	190	140	14	110	14	240	24	50	27	8	100
40-200	65	40	100	385	485	160	180	100	70	265	212	166	14	110	14	240	24	50	27	8	100
50-200	65	50	100	385	485	160	200	100	70	265	212	166	14	110	14	240	24	50	27	8	100
65-200	80	65	100	385	485	180	225	125	95	320	250	190	14	110	14	240	24	50	27	8	140
80-200	100	80	125	500	625	180	250	125	95	345	280	215	18	110	14	310	32	80	35	10	140
100-200	125	100	125	505	630	200	280	160	120	360	280	200	18	110	14	310	32	80	35	10	140
125-200	150	125	140	505	645	250	315	165	120	400	315	230	18	110	14	310	32	80	35	10	140
32-250	50	32	100	385	485	180	225	125	95	320	250	190	14	110	14	240	24	50	27	8	100
40-250	65	40	100	385	485	180	225	125	95	320	250	190	14	110	14	240	24	50	27	8	100
50-250	65	50	100	385	485	180	225	125	95	320	250	190	14	110	14	240	24	50	27	8	100
65-250	80	65	100	495	595	200	250	160	120	360	280	200	18	110	14	305	32	80	35	10	140
80-250	100	80	125	495	620	200	280	160	120	400	315	240	18	110	14	305	32	80	35	10	140
100-250	125	100	140	500	640	225	280	160	110	400	315	240	18	110	14	310	32	80	35	10	140

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

## Material Options

Part List	0.6025	0.7040	1.4408	1.4021	1.4401
	Cast Iron		●	○	
Nodular Cast Iron		●	○		
Chrome Nickel Moly. Cast Steel		●	○		
Chrome Steel		●	○		
Chrome Nickel Moly. Steel				●	○
Bearing Housing	●	○	○		
Wear Ring	○	○	○		
Wear Plate		●	○		
Mechanical Seal	EN 12756				

## Material Equivalents

Description	DIN / EN		AISI / SAE / ASTM
	Cast Iron	0.6025	EN-GJL-250 (GG25)
Nodular Cast Iron	0.7040	EN-GJS-400-15 (GGG40)	A 536 Gr. 60-40-18
Chrome Nickel Moly. Cast Steel	1.4408	GX5CrNiMo19-11-2	A351 CF8M
Chrome Steel	1.4021	X20Cr13	A276 Type 420
Chrome Nickel Moly. Steel	1.4301	X5CrNi18-10	A276 Type 304

● Standart manufacturing  
○ Optional

## Flange Dimensions

EN 1092 - 2	DNe/DNb	Suction & 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

" n " number of holes

