

EN ISO 9905

**Standart**

**SKY**

Thermal-Oil Pumps With Air Cooled



ST SKY 00 08-10 EN

## Handled Liquids

SKY Type pumps are suitable for heat-transfer oils and low viscosity industrial oils which do not contain abrasive particles.

## Technical Data

**Discharge Nozzle Range** — DN 32 .... DN 150 mm

**Capacities** — up to 450 m<sup>3</sup>/h

**Heads** — up to 90 m

**Speed** — up to 3000 rpm

**Operating Temperature** — up to 320 °C

**Cooling Method** — With air

**Casing Pressure (Pmax)** — 16 bar

(Pmax : Suction Pressure + Shut off Head)

(\*) The material of pump differs according to the type of pumped liquid , operating temperature and pressure. Contact our company for detailed information.

- 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.

- Axial thrust is balanced by back balancing ribs.

## Bearings

- Pump shaft is supported by two heavy duty grease lubricated ball bearings.
- Depending on customer requirement pumps with oil lubricated bearings are available.

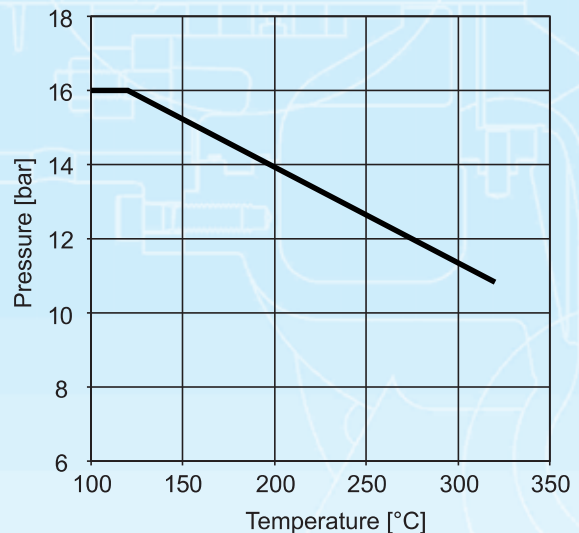
## Shaft seal

- Single mechanical seal suitable for high temperatures.

## Direction of Rotation

- The direction of rotation is clockwise (CW) viewed from the driver end.

## Pressure & Temperature Limits



## Applications

- Chemical and Pharmaceutical Industry
- Food Industry
- Iron&Steel Industry
- Textile, Leather and Paper Industry
- Rubber and Plastics Industry
- Paint Industry
- Tar and Bitumen Processing Industry
- Wood Processing and Furniture Industry

## Design Features

- Horizontal , single stage, end suction, volute type, air-cooled centrifugal pumps with closed impeller.
- The suction and discharge flanges are conforming to ISO 7005-2/PN 16.
- All impellers are dynamically balanced according to ISO 1940 Class 6.3

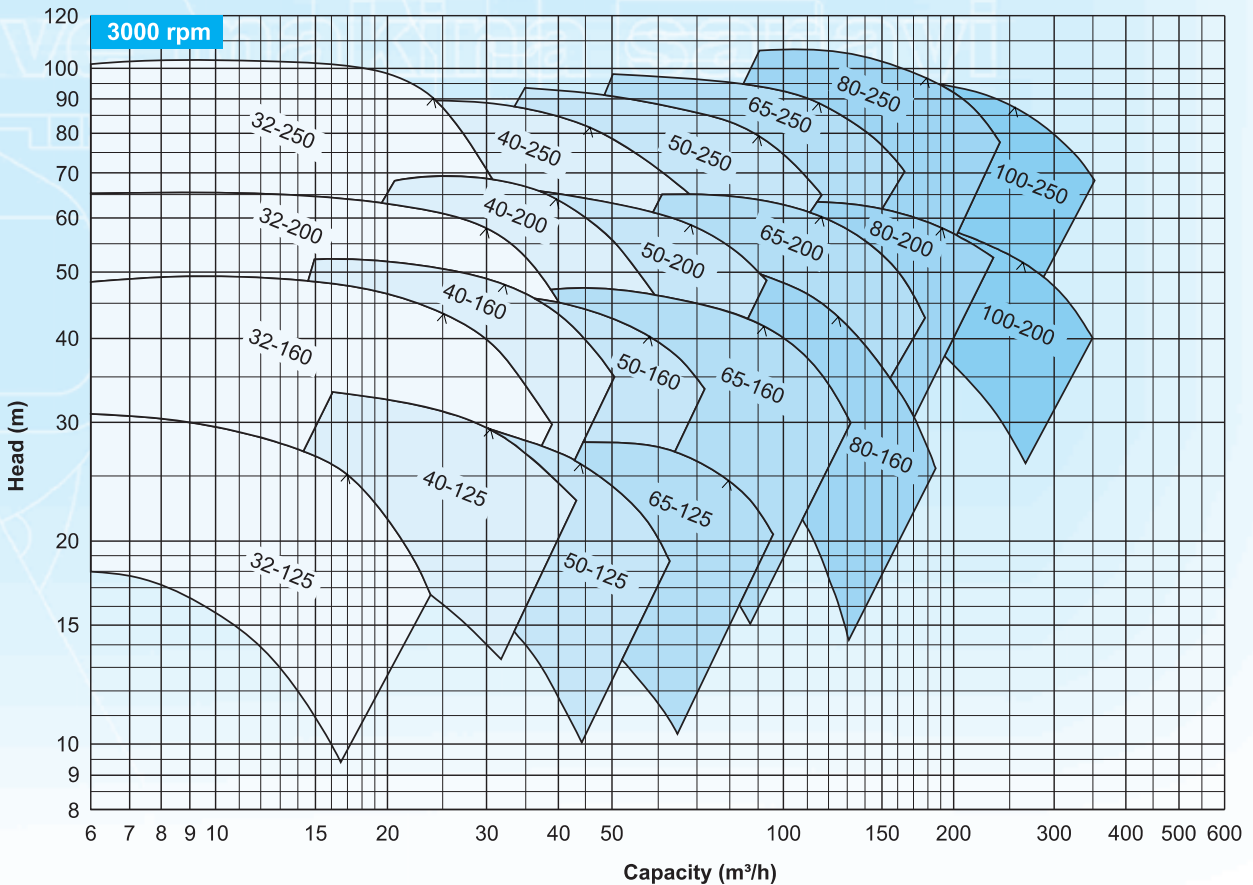
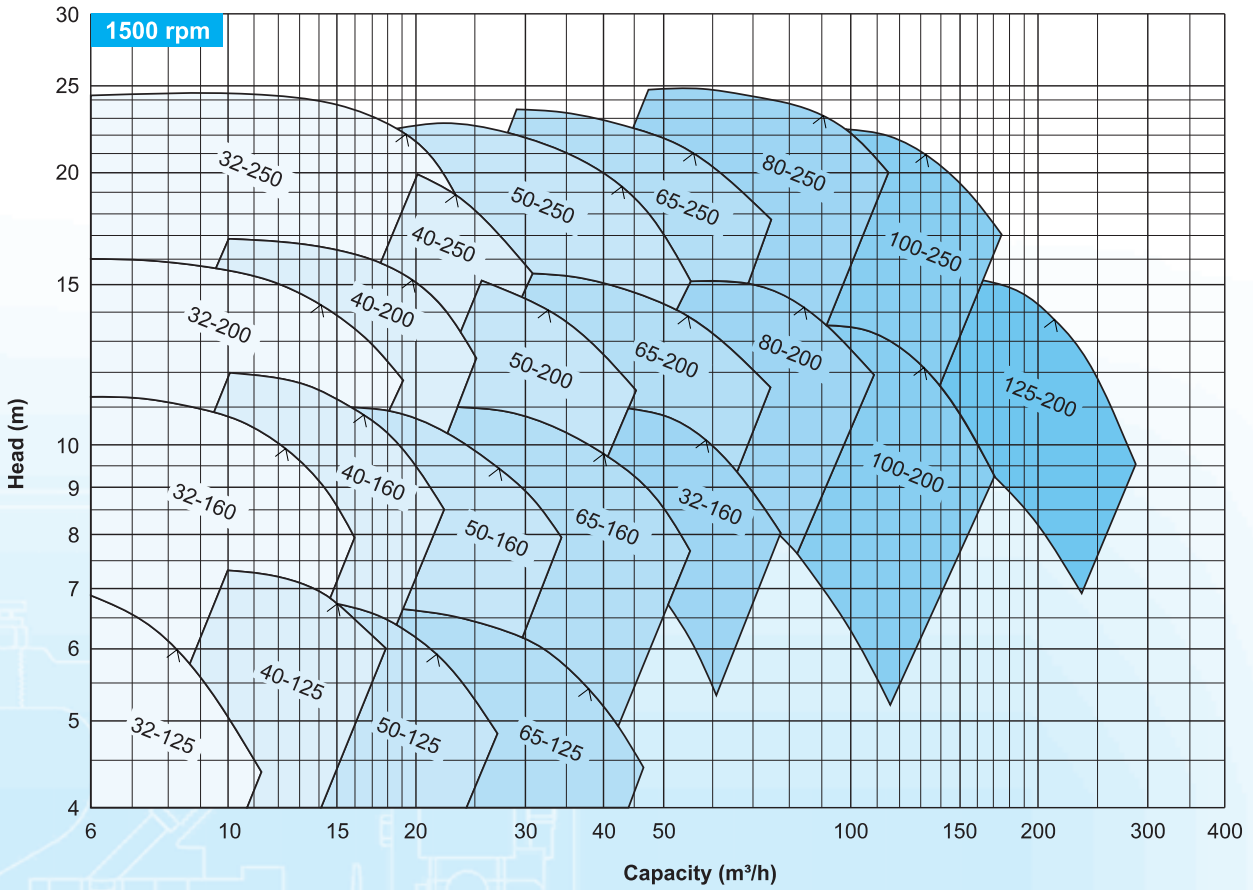
## Pump Designation

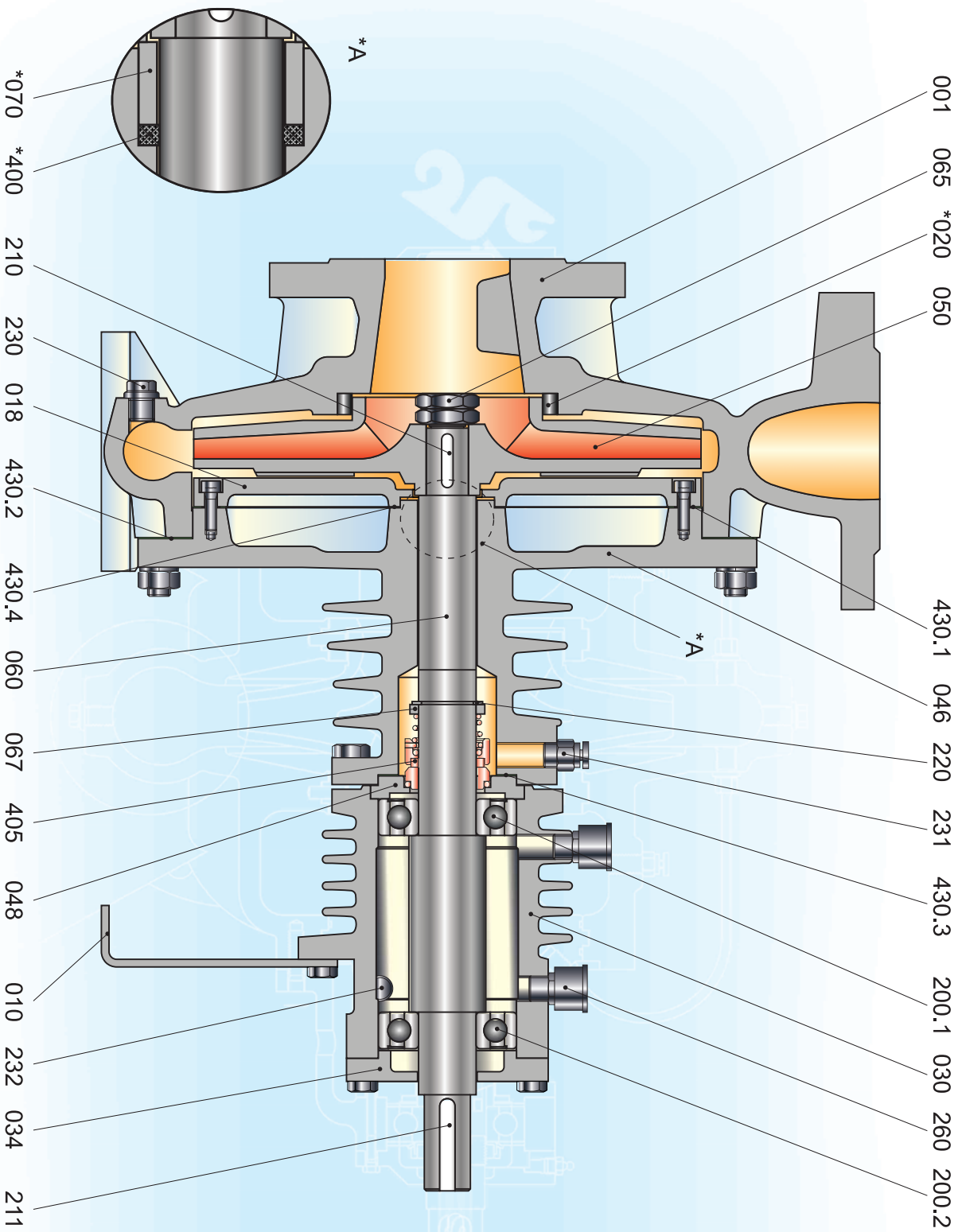
Pump type

Discharge nozzle (DN)

Nominal impeller diameter

# SKY 100 - 250

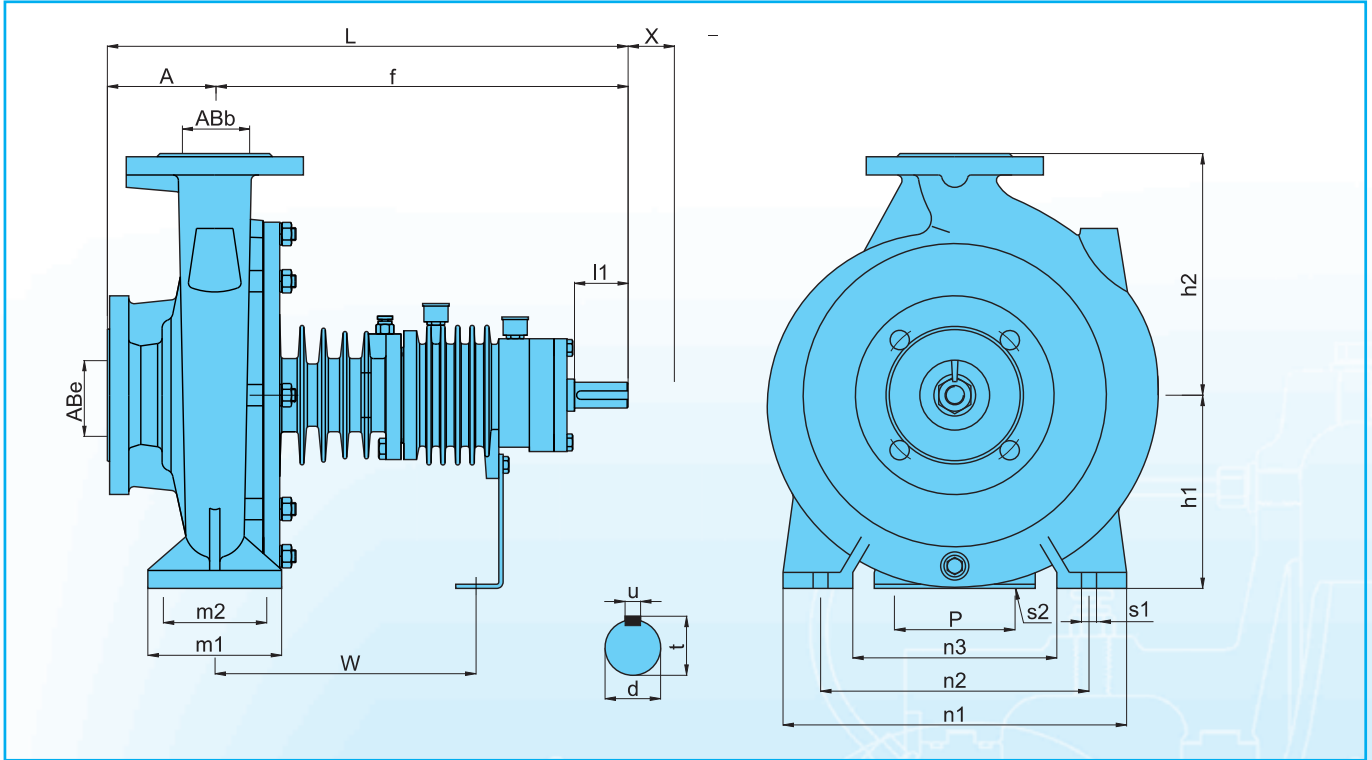




**Part List**

001	—	Volute casing
010	—	Frame foot
018	—	Wear plate
*020	—	Wear ring
030	—	Bearing housing
034	—	Bearing cover
046	—	Casing cover
048	—	Mechanical seal cover
050	—	Impeller
060	—	Shaft
065	—	Impeller nut
067	—	Spacer sleeve (Mech. seal)
*070	—	Spacer sleeve (Soft pack.)
200	—	Ball bearing
210	—	Impeller key
211	—	Coupling key
220	—	Circclip
230	—	Drain plug
231	—	Air venting plug
232	—	Grease drain plug
260	—	Grease nipple
*400	—	Soft packing
405	—	Mechanical seal
430.1	—	Gasket (Wear plate)
430.2	—	Gasket (Casing)
430.3	—	Gasket (Mech. seal cover)
430.4	—	Gasket (Wear plate)

\*Optional



Dimensions (mm)

Pump Type	Overall Dimensions							Support & Feet Dimensions							Shaft End			Space	
	ABe	AB	a	f	L	h1	h2	m1	m2	n1	n2	n3	s1	w	d	l	t	u	x*
32-125	50	32	80	385	465	112	140	100	70	190	140	90	14	285	24	50	27	8	50
40-125	65	40				132	160				245	190							
50-125	65	50	100	485	160	180	125	95	280	212	150								
65-125	80	65																	
32-160	50	32	80	385	465	132	160	100	70	245	190	145	14	285	24	50	27	8	50
40-160	65	40				180	212				150								
50-160	65	50	100	485	160	200	125	95	280	212	150								
65-160	80	65																	
80-160	100	80	125	395	520	180	225			320	250	190		295					
32-200	50	32	80	385	465	180	180	100	70	240	190	140	14	285	24	50	27	8	50
40-200	65	40				200	266				212	166							
50-200	65	50	100	485	180	225	125	95	320	250	190								
65-200	80	65																	
80-200	100	80	125	500	625	180	250	125	95	345	280	215		355					
100-200	125	100		505	630	200	280	160	120	360	280	200	18	359	32	80	35	10	80
125-200	150	125	140	505	645	250	315	165		390	310	230							
32-250	50	32	100	385	485	180	225	125	95	320	250	190	14	285	24	50	27	8	50
40-250	65	40				250	280				200								
50-250	65	50																	
65-250	80	65		495	595	200	250	160	120	360	280	200	18	350	32	80	35	10	80
80-250	100	80	125	620	280	280	400												
100-250	125	100	140	500	640	225			110										

(\*) 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

Parts List	0.6025	0.7040	1.4021	1.4401
Volute casing		●		
Casing cover		●		
Impeller	●	○		
Shaft			●	○
Bearing housing	●	○		
Wear ring (Casing )	○	●		
Wear plate	○	●		
Mechanical seal	EN 12756 / DIN 24960			

- Standard 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
Chrome steel	1.4021	X20 Cr 13	A 276 Type 420
Chrome nickel molybdenum steel	1.4401	X5 Cr Ni Mo 17-12-2	A 276 Type 316

## Flange Dimensions

Pump Type	Suction (PN 16)						Discharge (PN 16)					
	ABe	Df	k	s	n	bf	ABb	Df	k	s	n	bf
32	50	165	125	18	4	20	32	140	100	18	4	18
40	65	185	145	18	4	20	40	150	110	18	4	18
50	65	185	145	18	4	20	50	165	125	18	4	20
65	80	200	160	18	8	22	65	185	145	18	4	20
80	100	220	180	18	8	24	80	200	160	18	8	22
100	125	250	210	18	8	26	100	220	180	18	8	24
125	150	285	240	23	8	26	125	250	210	18	8	26

" n " number of holes

