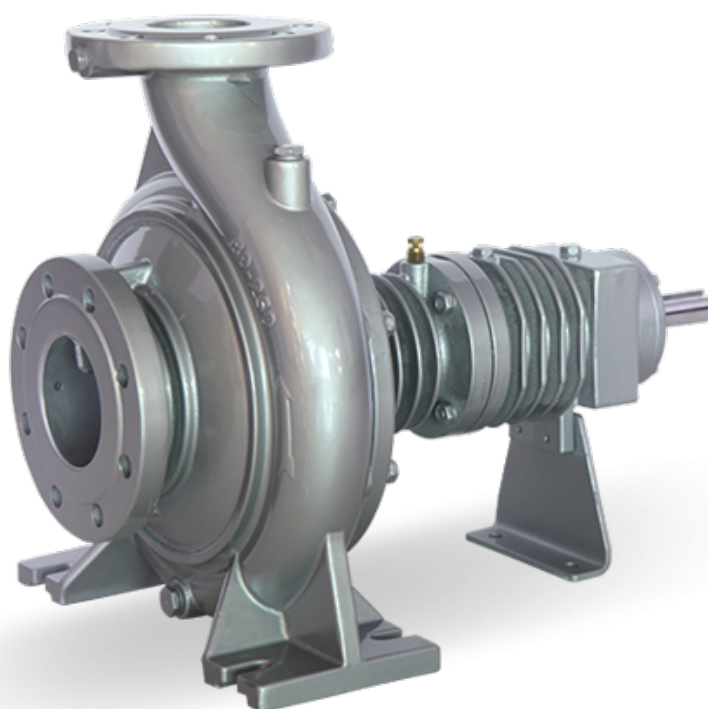




# FK-K SERIES

End Suction Thermal Oil Centrifugal Pump





## GENERAL INFORMATION

Discharge Flange	DN 65 - DN 150
Capacity	Up to 500 m³/h
Head	UP to 100 m
Frequency	Three Phase 50 Hz - 60 Hz*
Maximum Operating Pressure	Up to 16 bar



## Transferable Liquids

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



## Shaft Sealing

- Single type mechanical seals resistant to high temperature are used.



## Applications

Chemical and Petrochemical Industry

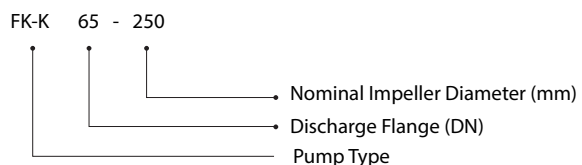


## Design Features

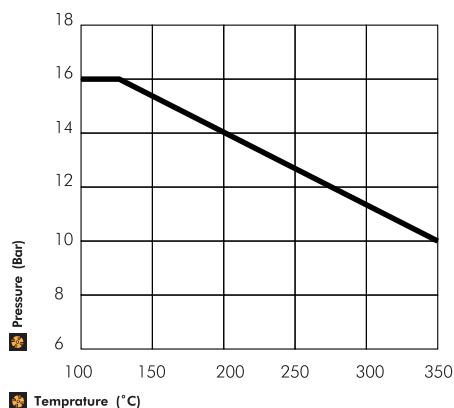
- Horizontal shaft, volute, single stage, end suction, air cooled, closed impeller centrifugal pumps.
- With the detachable design of the pump, it's possible to remove the bearing assembly, the seal bearing, the pump shaft and the impeller without removing the snail from the pipe. (Optionally, the rotor group of the pump can be removed without removing the motor from the motor carrier by applying the spacer sleeve coupling).
- The axial force is compensated by the balancing vanes on the rear of the impeller.
- All impellers are statically and dynamically balanced according to ISO 1940 class 6.3.
- Direction of rotation is clockwise when viewed from the motor side.
- FK-K type pumps use "oil lubrication" bearings as standard.
- Basic models designed with variety of motors (50Hz - 60Hz) 1000 - 1500 - 3000 RPM.



## Pump Code



## PRESSURE AND TEMPERATURE LIM





# DESCRIPTIONS



DIN



EN



AISI/SAE/ASTM

Cast Iron	0.6025	EN-GJL-250 (GG25)	A48 CLASS 40B
Ductile Iron Casting	0.7040	EN-GJS-400-15 (GGG 40)	A536 60-40-18
Ductile Iron Casting	0.7043	EN-GJS-400-18-LT (GGG40.3)	A536 60-40-18
Steel Casting	1.0619	GP240GHGS-C25	A216 WCB
Chrome Nickel Steel Casting	1.4308	GX5CrNi19-10	A351 CF8
Chrome Nickel Steel Casting (Low Carbon)	1.4309	GX2CrNi19-11	A351 CF3
Chrome Nickel Molybdenum Steel Casting	1.4408	GX5CrNiMo19-11-2	A351 CF8M
Chrome Nickel Molybdenum Steel Casting (L.C)	1.4409	GX2CrNiMo 19-11-2	A351 CF3M
Austenitic Steel Casting	1.4500	GX7NiCrMoCuNb 25-20	A351 CN7M
Austenitic Ferritic Steel Casting (Duplex)	1.4517	GX2CrNiMoCuN 25-6-3-3	A890 CD4MCuN
Austenitic Ferritic Steel Casting (S.Duplex)	1.4469	GX2CrNiMoN 26-7-4	A890 CE3MN
Martensitic Stainless Steel Casting	1.4317	GX4CrNi 13-4	A352 CA6NM
Martensitic Stainless Steel Casting	1.4008	GX7CrNiMo 12-1	A217 CA15
Bronze Casting ( Tinned)	2.1050.01	G-CuSn10	B427 C90700
Bronze Casting (Nickel Alloy)	2.0975.01	G-CuAl10Ni	B148 C95500
Bronze Casting (Leaded)	2.1096.01	G-CuSn5ZnPb	B584 C83600
Chromium Steel	1.4021	X20Cr13	A276 Type 420
Chromium Steel (Heat Treatment)	1.4021	X20Cr13	A276 Type 420+QT
Chrome Nickel Steel	1.4301	X5CrNi 18-10	A276 Type 304
Chrome Nickel Molybdenum Steel (L.Carbon)	1.4404	X2CrNiMo 17-12-2	A276 Type 316L
Duplex (Austenitic Ferritic) Steel	1.4460	X3CrNiMoN 27-5-2	AISI 329
Duplex ( Austenitic Ferritic) Steel	1.4462	X2CrNiMoN 22-5-3	UNS S32205
Ductile Iron Casting	0.7050	EN-GJS-500- 7 -LT (GGG 50)	A536 70-50-05



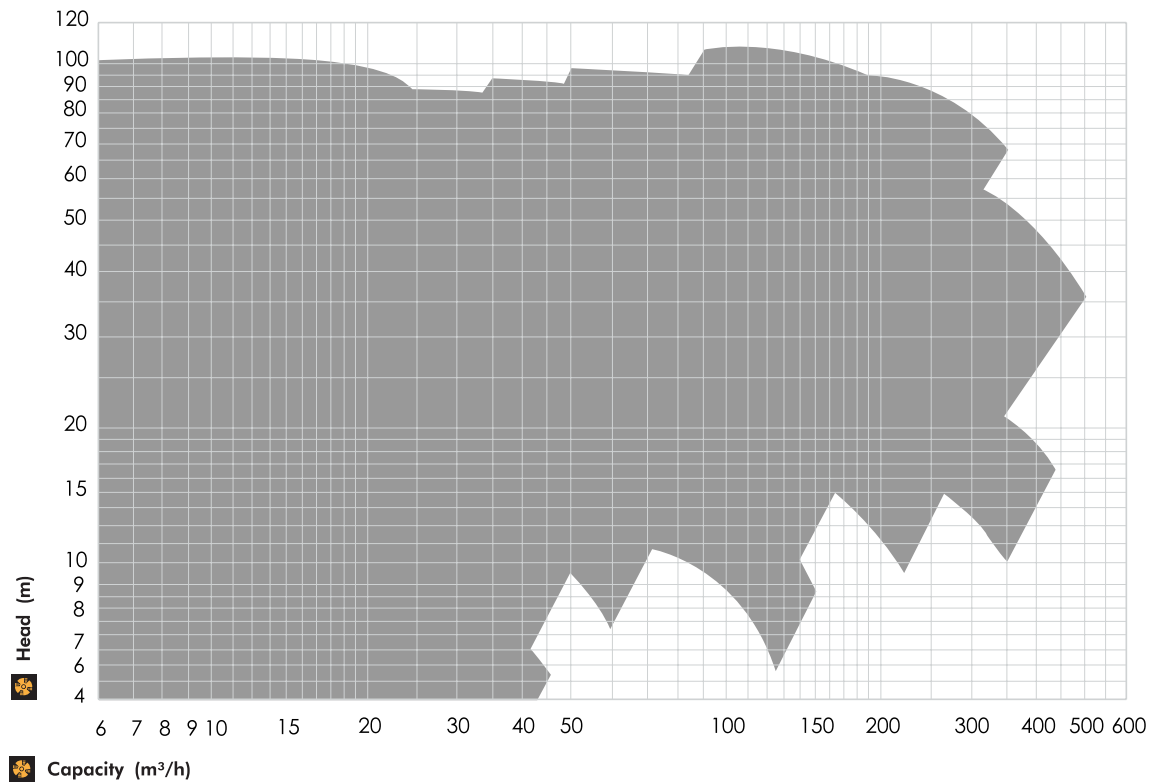
[www.wgpumps.com](http://www.wgpumps.com)



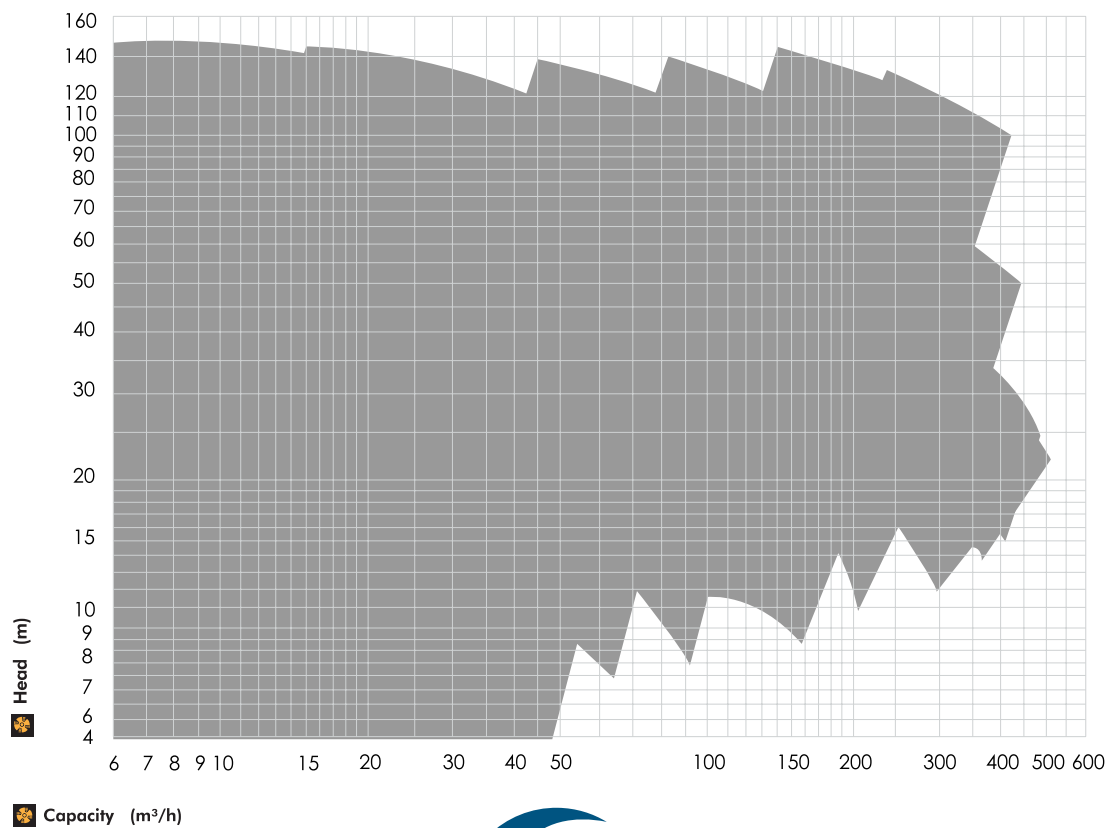
## SELECTION CHARTS



(50 Hz)

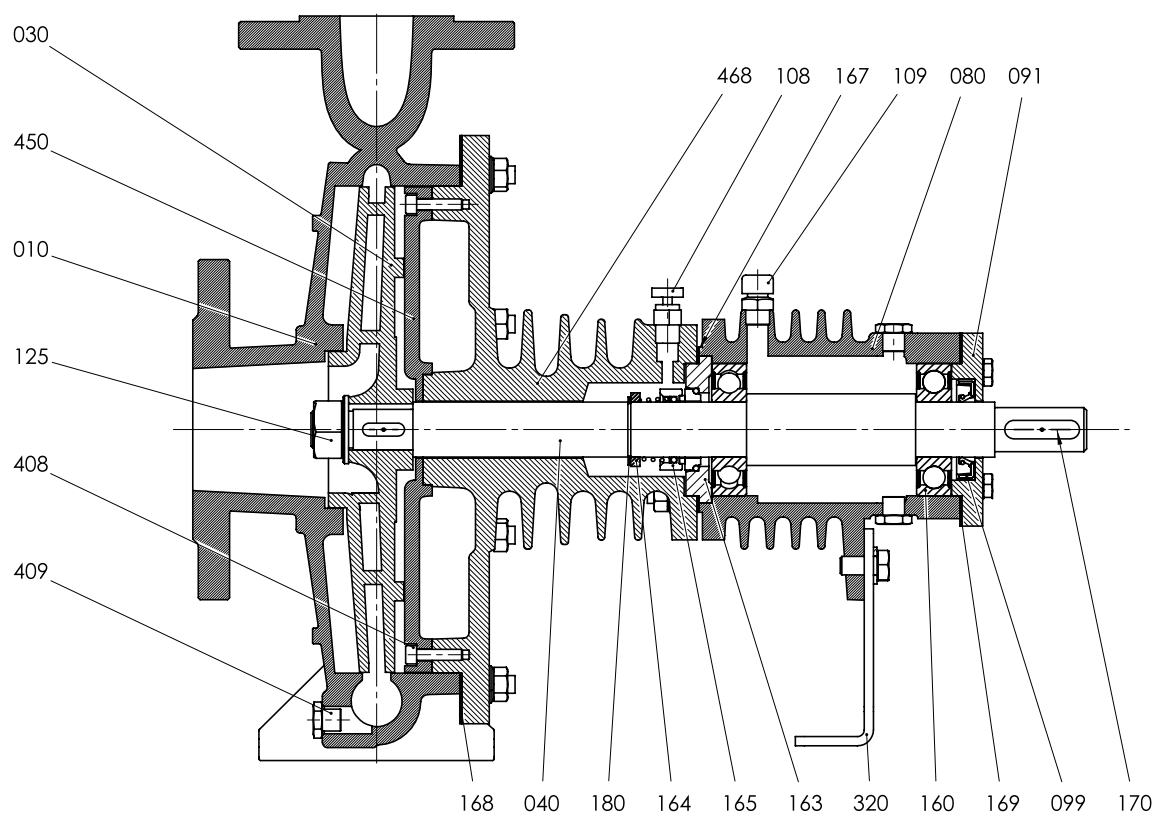


(60 Hz)





## SECTIONAL VIEW



## Part List

Volute Casing	010
Impeller	030
Shaft	040
Bearing Housing	080
Bearing Cover	091
Oil Seal	099
Air Purge	108
Air Plug	109
Nut	125
Bearing	160
Mechanical Seal Cover	163
Mechanical Seal Setting Sleeve	164
Mechanical Seal	165
Mechanical Seal Gasket	167
Body Seal	168
Bearing Cover Gasket	169
Key	170
Shaft Ring	180
Supporting Feet	320
Bolt	408
Drain Plug	409
Wear Plate	450
Casing Cover	468

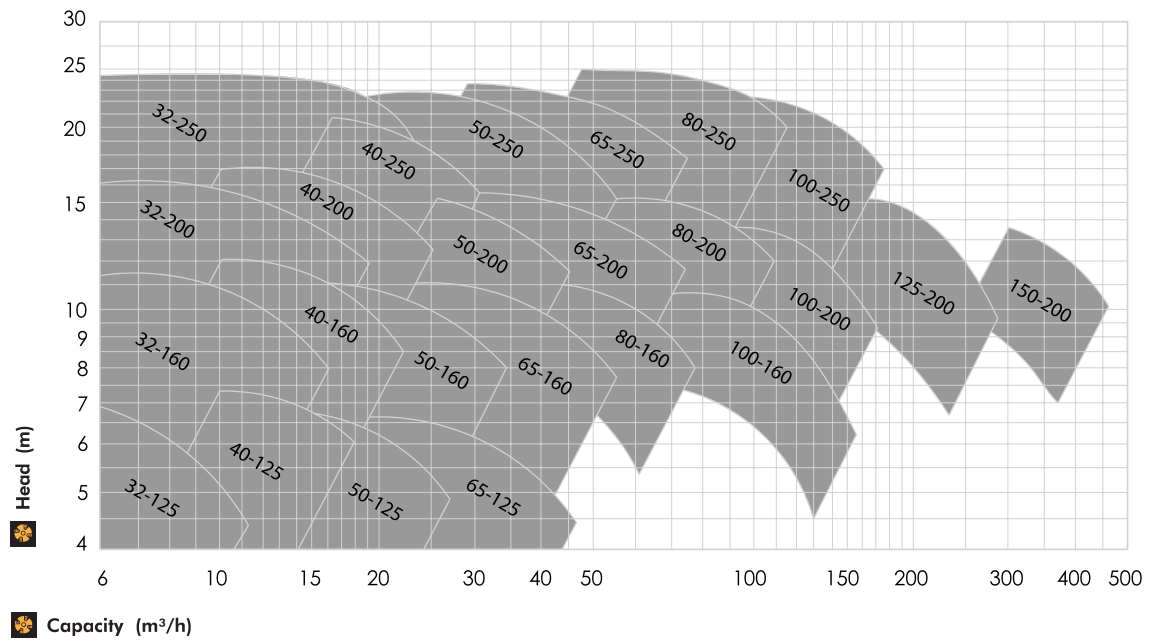




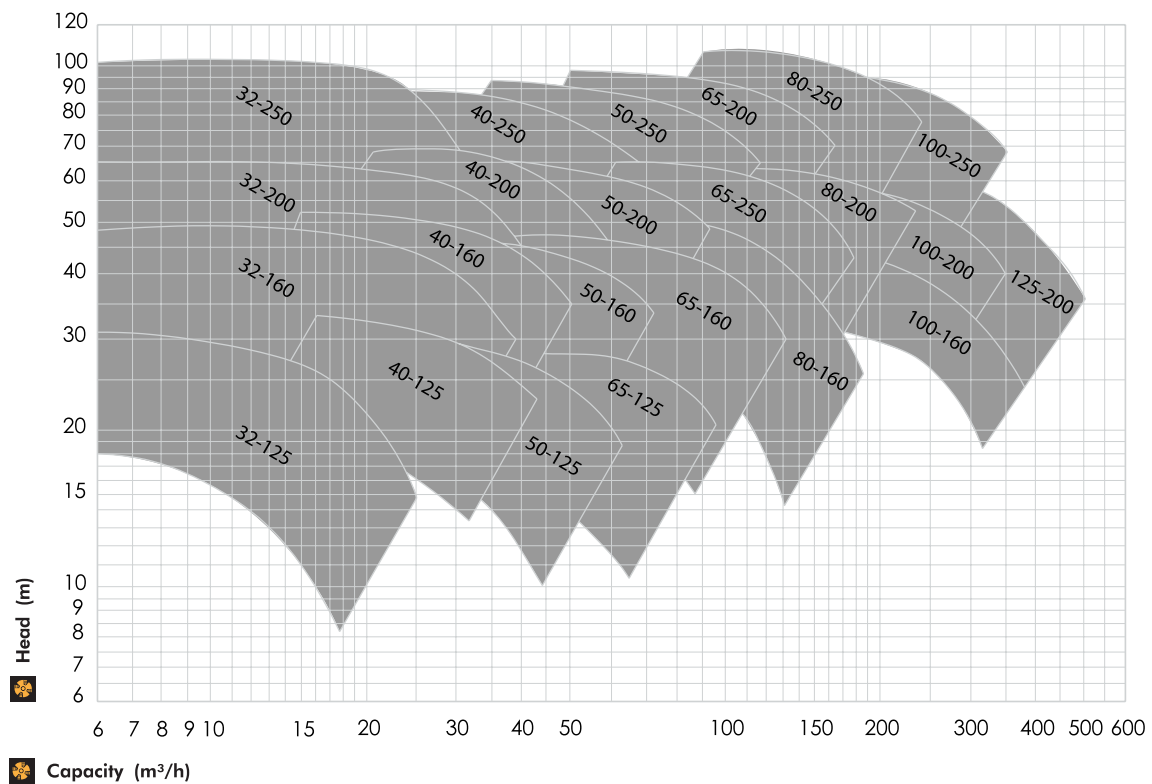
## SELECTION CHARTS



1450 rpm / (d/d) (50 Hz)



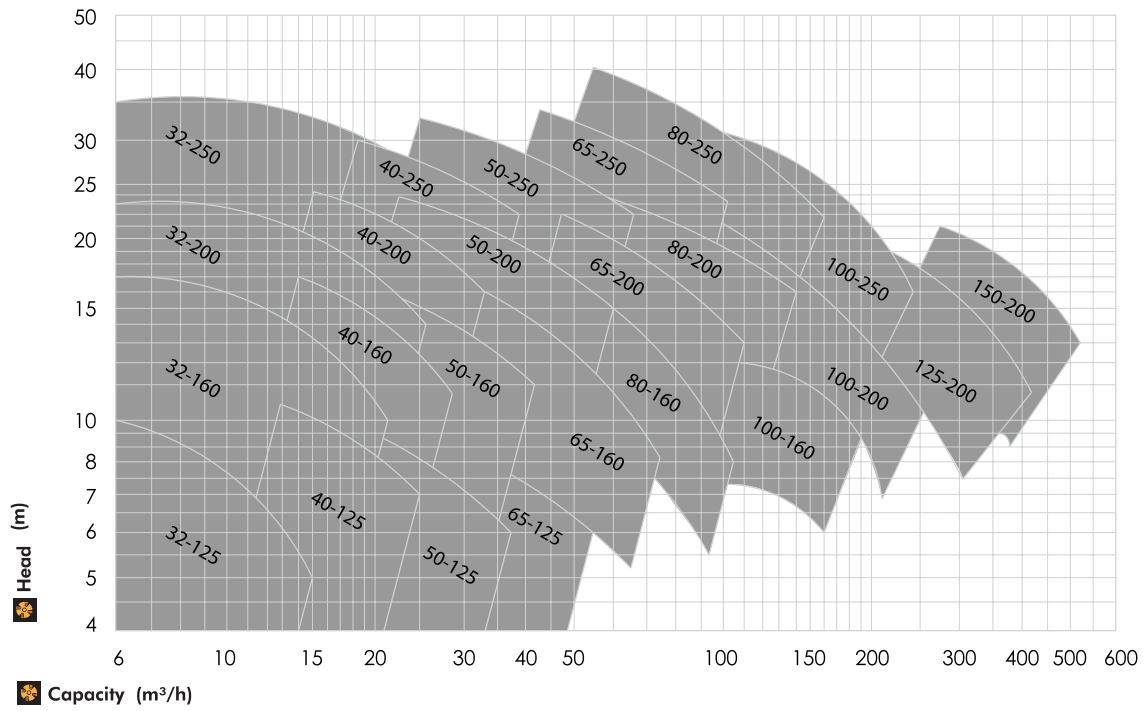
2900 rpm / (d/d) (50 Hz)



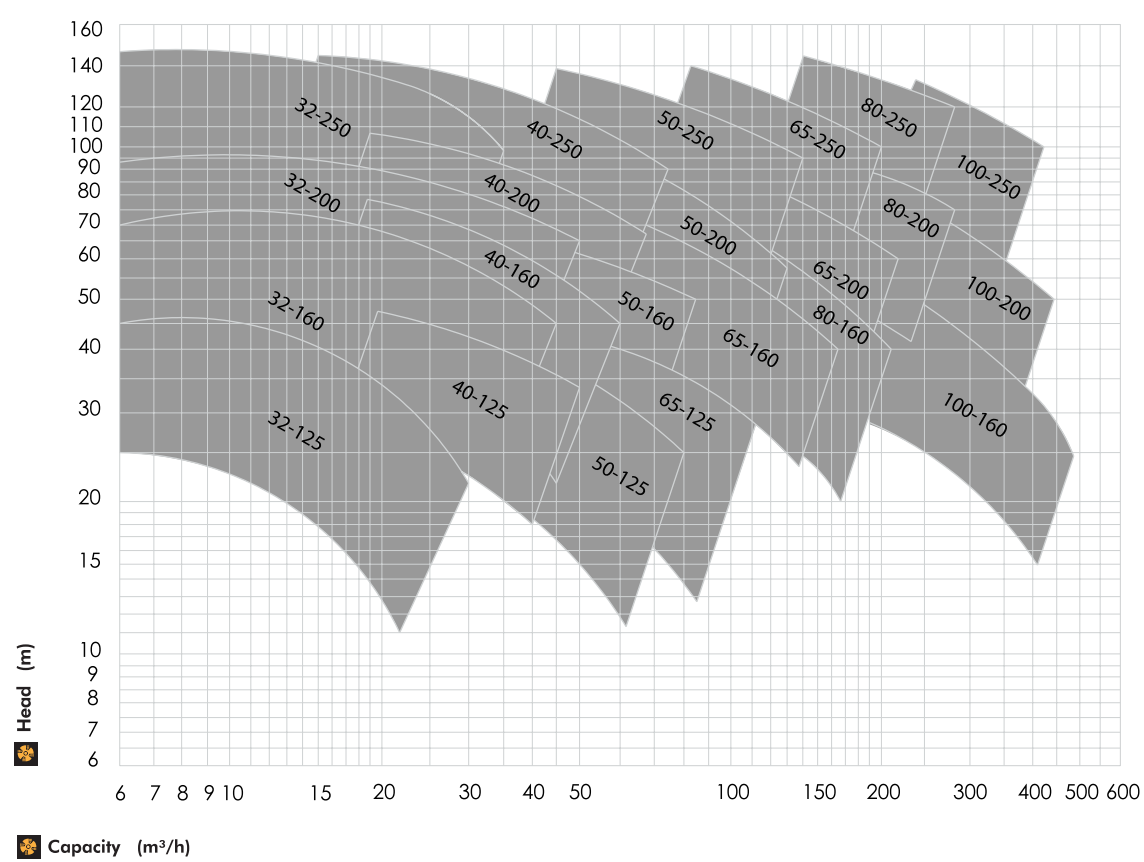


# SELECTION CHARTS

1750 rpm / (d/d) (60 Hz)

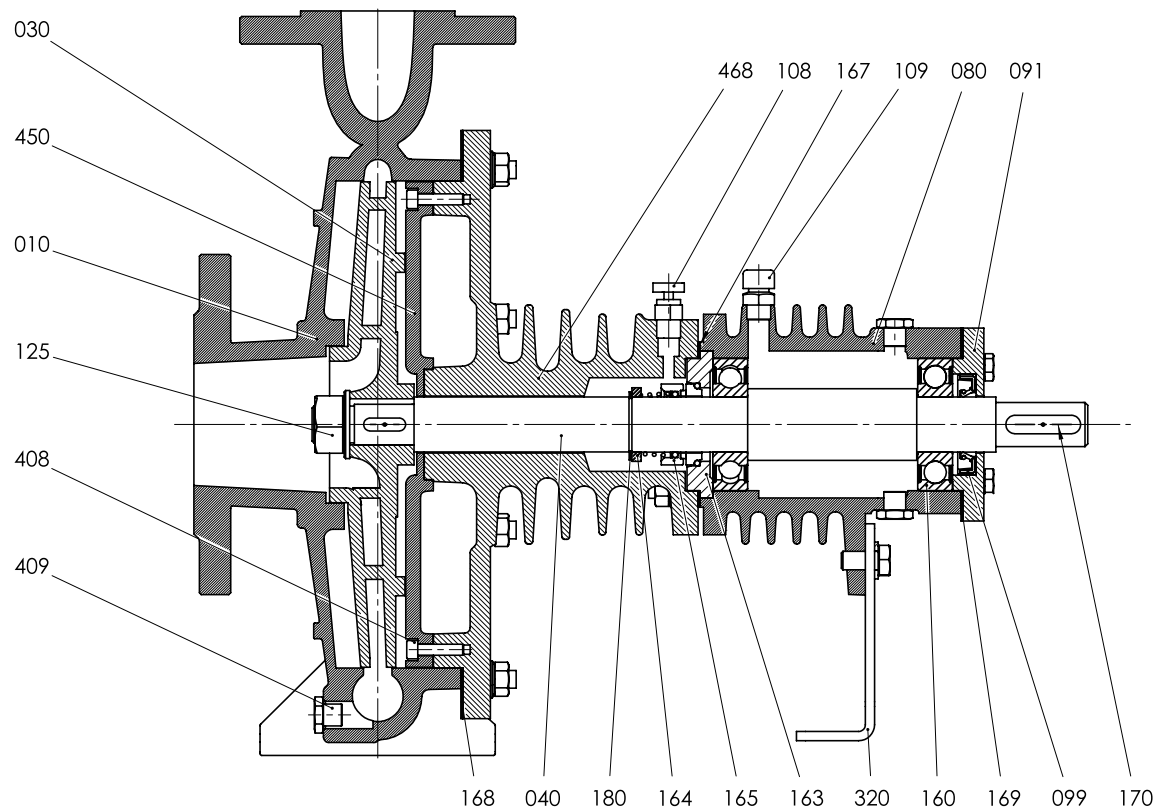


3500 rpm / (d/d) (60 Hz)





## SECTIONAL VIEW



## Part List

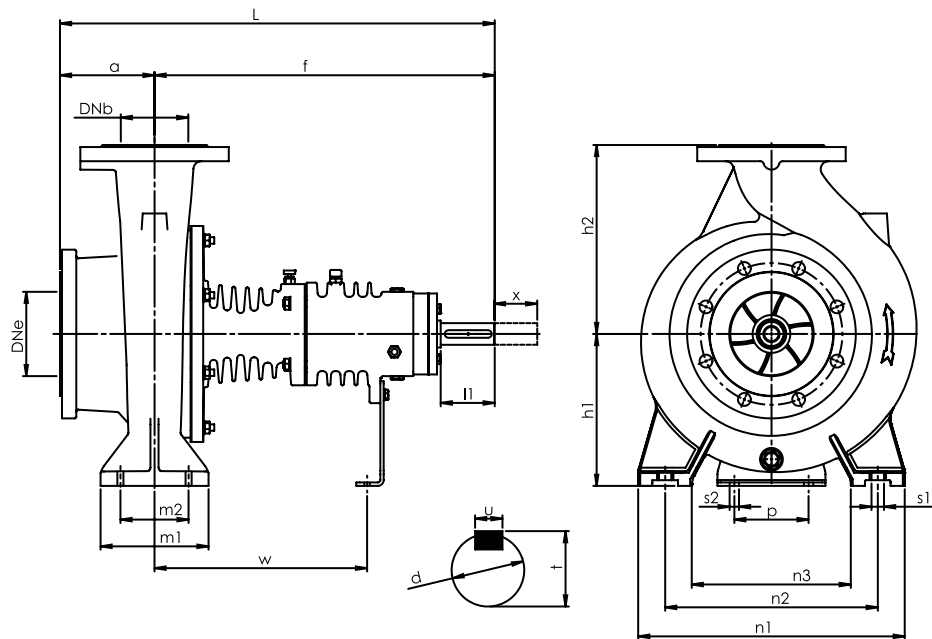
Volute Casing	010
Impeller	030
Shaft	040
Bearing Housing	080
Bearing Cover	091
Oil Seal	099
Air Purge	108
Air Plug	109
Nut	125
Bearing	160
Mechanical Seal Cover	163
Mechanical Seal Setting Sleeve	164
Mechanical Seal	165
Mechanical Seal Gasket	167
Body Seal	168
Bearing Cover Gasket	169
Key	170
Shaft Ring	180
Supporting Feet	320
Bolt	408
Drain Plug	409
Wear Plate	450
Casing Cover	468







# SELECTION CHARTS



Pump Type	Dimensions																						Weight (kg)
	Outside Dimensions								Supporting Foot Dimensions								Shaft Dimensions				Spancing		
	DNe	DNb	a	f	L	H	h1	h2	m1	m2	n1	n2	n3	s1	p	s2	w	d	l1	t	u	x	
32-125	50	32	80	387	467	252	112	140	100	70	190	140	90	14	110	14	245	24	50	27	8	100	32
32-160	50	32	80	380	460	292	132	160	100	70	240	190	140	14	110	14	245	24	50	27	8	100	37
32-200	50	32	80	382	462	340	160	180	100	70	240	190	140	14	110	14	245	24	50	27	8	100	40
32-250	50	32	100	387	487	405	180	225	125	95	320	255	190	14	110	14	245	24	50	27	8	100	53
40-125	65	40	80	389	469	252	112	140	100	70	210	160	110	14	110	14	245	24	50	27	8	100	33
40-160	65	40	80	382	462	292	132	160	100	70	240	190	140	14	110	14	245	24	50	27	8	100	36
40-200	65	40	100	383	483	340	160	180	100	70	265	212	165	14	110	14	245	24	50	27	8	100	43
40-250	65	40	100	387	487	405	180	225	125	95	320	250	190	14	110	14	245	24	50	27	8	100	57
50-125	65	50	100	391	491	292	132	160	100	70	240	190	140	14	110	14	245	24	50	27	8	100	36
50-160	65	50	100	383	483	340	160	180	100	70	265	212	165	14	110	14	245	24	50	27	8	100	41
50-200	65	50	100	385	485	360	160	200	100	70	265	212	165	14	110	14	245	24	50	27	8	100	46
50-250	65	50	100	388	488	405	180	225	125	95	320	250	190	14	110	14	250	24	50	27	8	100	56
65-125	80	65	100	394	494	340	160	180	125	95	280	212	150	14	110	14	250	24	50	27	8	100	41
65-160	80	65	100	388	488	360	160	200	125	95	280	212	150	14	110	14	250	24	50	27	8	100	46
65-200	80	65	100	387	487	405	180	225	125	95	320	250	190	14	110	14	245	24	50	27	8	140	53
65-250	80	65	100	498	598	450	200	250	160	120	360	280	200	19	110	14	308	32	80	35	10	140	78
80-160	100	80	125	391	516	405	180	225	125	95	320	250	190	14	110	14	250	24	50	27	8	140	51
80-200	100	80	125	502	627	430	180	250	125	95	345	280	215	14	110	14	315	32	80	35	10	140	75
80-250	100	80	125	500	625	480	200	280	160	120	400	315	240	19	110	14	310	32	80	35	10	140	81
100-160	125	100	125	397	522	480	200	280	160	120	360	280	200	19	110	14	260	24	50	27	8	140	70
100-200	125	100	125	503	628	480	200	280	160	120	360	280	200	19	110	14	315	32	80	35	10	140	81
100-250	125	100	140	504	644	505	225	280	160	120	400	315	240	19	110	14	315	32	80	35	10	140	90
125-200	150	125	140	512	652	565	250	315	160	120	400	315	240	19	110	14	320	32	80	35	10	160	91
150-200	200	150	160	520	680	635	280	355	200	150	505	400	300	23	110	14	330	32	80	35	10	190	138

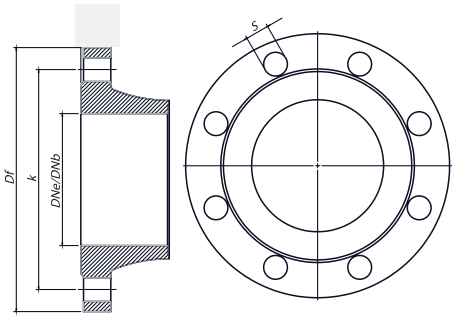
○ x: Minimum distance between motor and pump shafts to remove rotor from rear





## FLANGE DIMENSIONS

Pump Type	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



○ TS EN 1092 - 2      ○ "n" Number of Holes



## SEAL SOLUTIONS

Packing Type	Packing Specifications	
	Temperature	Pressure
M37GN4	t = -20 °C ... +200 °C	p1 = 16 bar (230 PSI)

○ (\*) Optionel

\*Note: Above datas mentioned according to BURGMANN Brand.  
Packing can be changed according to customer request.

\*Different seal application can be used according to liquid  
specification.

