

FNV-B

PROCESS PUMPS (SUMP DESIGN)

Handled Liquids

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

Technical Data

Discharge Flange _____ DN 32.....DN 200 mm
 Capacity _____ up to 800 m³/h
 Head _____ up to 35 m
 Speed _____ up to 1450 rpm
 Operating Temperature _____ up to +95 °C
 Casing Pressure (Pmax) _____ 10 bar

Design Features

- Vertical, volute casing, single stage, end suction centrifugal sump pumps with enclosed type impeller.
- Up to 4 m. column length.
- Discharge pipe is extended up to base plate for easy installation.
- Suction and discharge flanges conform to EN 1092-2 / PN 16. (EN 1092-1 / PN 16 for steel or stainless steel casing)
- All impellers are balanced dynamically or statically according to ISO 1940 class 6.3.
- Axial thrust is balanced by impeller balancing holes system.

Pump Designation

Pump Type _____
 Discharge Nozzle (DN-mm) _____
 Nominal Impeller Diameter (mm) _____



- Direction of rotation is clockwise viewed from driver.
- Bearings of FNV-B type pumps are grease lubricated. Bottom and internal sleeve bearings are lubricated by the pumping liquid. (different lubrication systems can be applied for the sleeve bearings in case of request or requirement. Contact for detailed information).

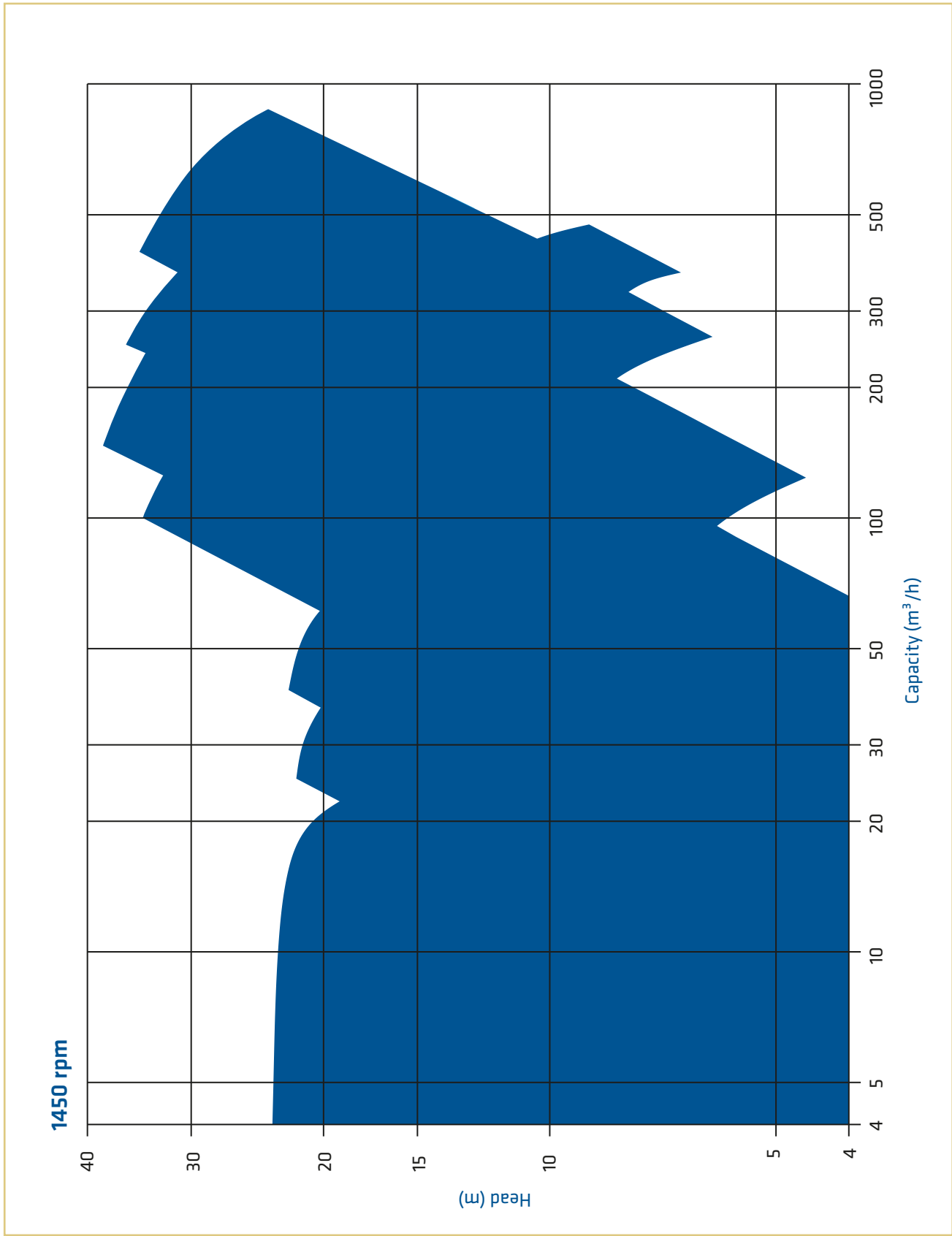
Shaft Sealing

- No sealing is required.

FNV-B 100 - 250



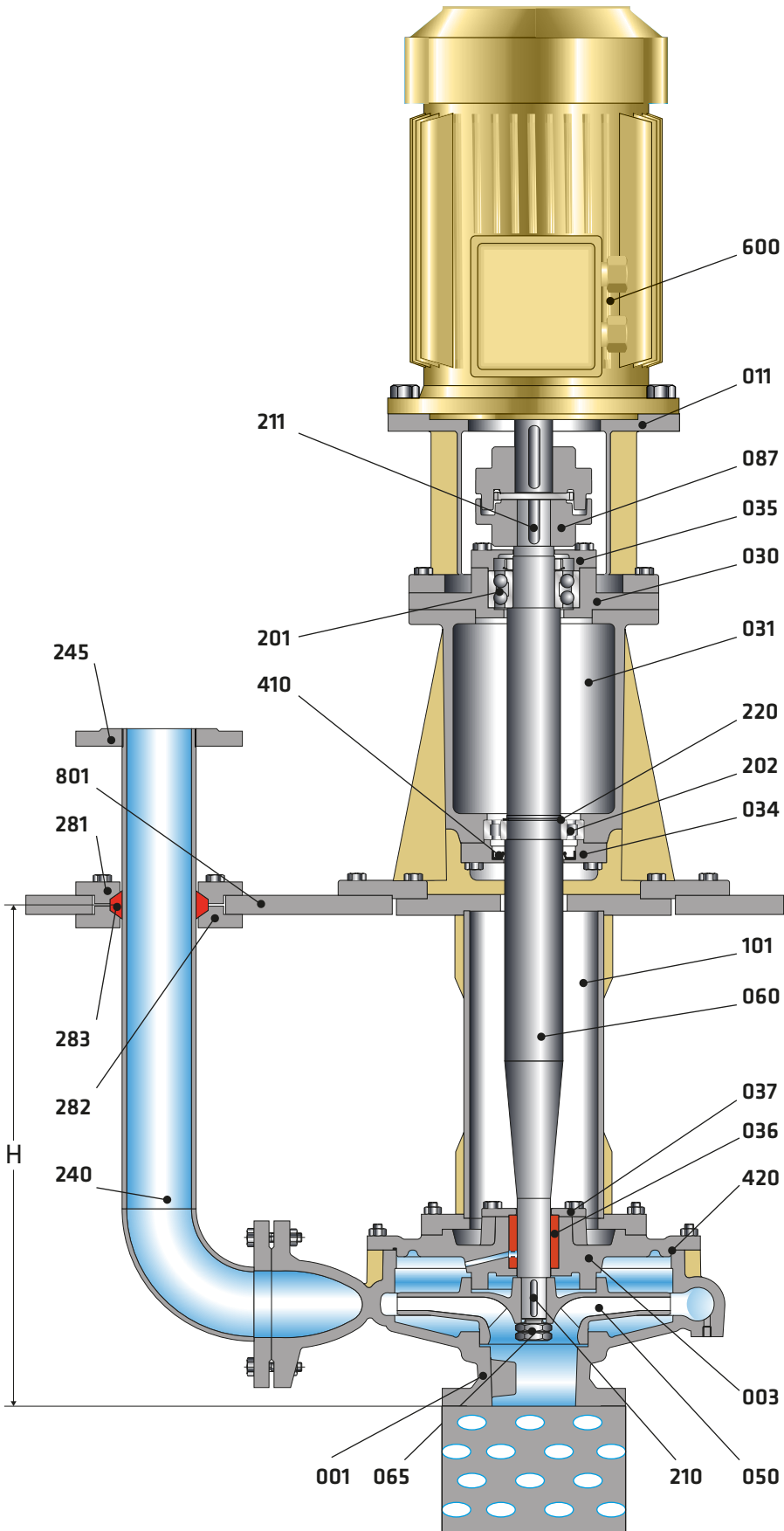
Field Chart



Sectional Drawings (up to "H" 1.5 m column length)

Part List

001	Volute Casing
003	Casing Cover
011	Motor Pedestal
030	Bearing Housing (top)
031	Bearing Housing (bottom)
034	Bearing Cover (bottom)
035	Bearing Cover (top)
036	Sleeve Bearing
037	Sleeve Bearing Cover
050	Impeller
060	Shaft
065	Impeller Nut
087	Flexible Coupling
101	Column Pipe
201	Double Row Ball Bearing
202	Cylindrical Roller Bearing
210	Impeller Key
211	Coupling Key
220	Circlip
240	Discharge Pipe
245	Discharge Flange
281	Top Fixing Flange
282	Bottom Fixing Flange
283	Rubber Gasket
410	Lip Seal
420	O-Ring
600	Electric Motor
801	Base Plate



Technical Data

PART LIST	0.6025	0.7040	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	1.0037	1.0503	1.4021	1.4021+QT	1.4301	1.4404	1.4460	1.4462	Tungsten Carbide	
Volute Casing	●	○	○	○	○	○	○	○	○	○	○	○	○												
Casing Cover	●	○	○	○	○	○	○	○	○	○	○	○	○												
Impeller	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○								○		
Shaft																	●	○	○	○	○			○	
Bearing Housing	●	○	○	○	○	○	○																		
Column Pipe																●				○	○				
Sleeve Bearing													●												○

● Standard manufacturing
○ 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 (lead)	2.1096.01 G-CuSn5ZnPb	B584 C83600
Steel	1.0037 St37	A 29 1015
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

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
	200	340	295	23	12

“ n “ number of holes