



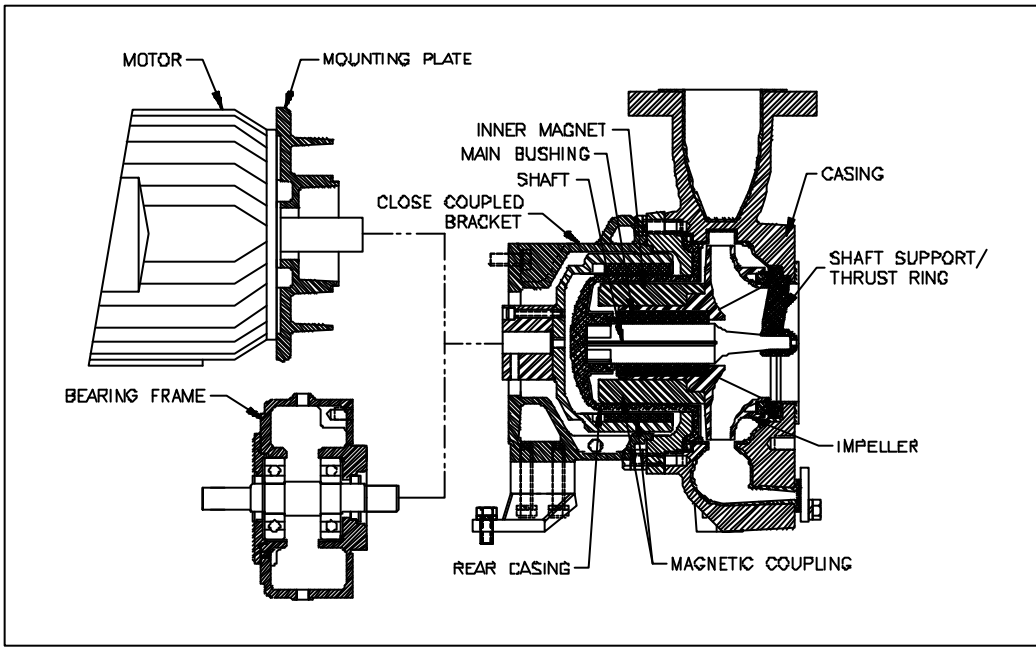
PROCESS EQUIPMENT INC.

ANSIMAG KF SERIES PUMP SPECIFICATIONS

KF2110, KF31510, KF3210, KF4310 and KF6410

ISO Flanged Models KFi2110, KFi31510, KFi3210, KFi4310 and KFi6410

JIS Flanged Models KFi2110, KFi31510, KFi3210, KFi4310 and KFi6410



PUMP

- Horizontal End-Suction, Centerline discharge, Mag-drive Centrifugal pump.
- Synchronous drive, magnetically coupled for zero leakage applications.
- Non-metallic wetted parts.
- ANSI Horizontal End-Suction, Centerline discharge, Mag-drive Centrifugal pump.
- Fully meets ASME/ANSI B73.1-1991 dimensions frame mounted or with close coupled, zero alignment mounting.
- Maximum power 100 hp (75kW) @ 3550 rpm.
- Back pull out design.
- Exterior protection: polyamide epoxy primer with polyurethane top coat (green).
- Maximum temperature: 250°F (121°C)
- Minimum temperature: -20°F (-30°C)
- Maximum Discharge pressure: 350 psi. (25.8 Bar)
- Slurry: 5% wt. 150 microns max. (0.005 in.)
- Maximum diameter solids: 1/32 in. (0.8 mm) max.
- Max. vapor pressure: consult factory for liquids with vapor pressure curve that passes above 8 psia (0.54 Bar) @ 90°F (32°C).
- Maximum viscosity: *
- Minimum flow: **

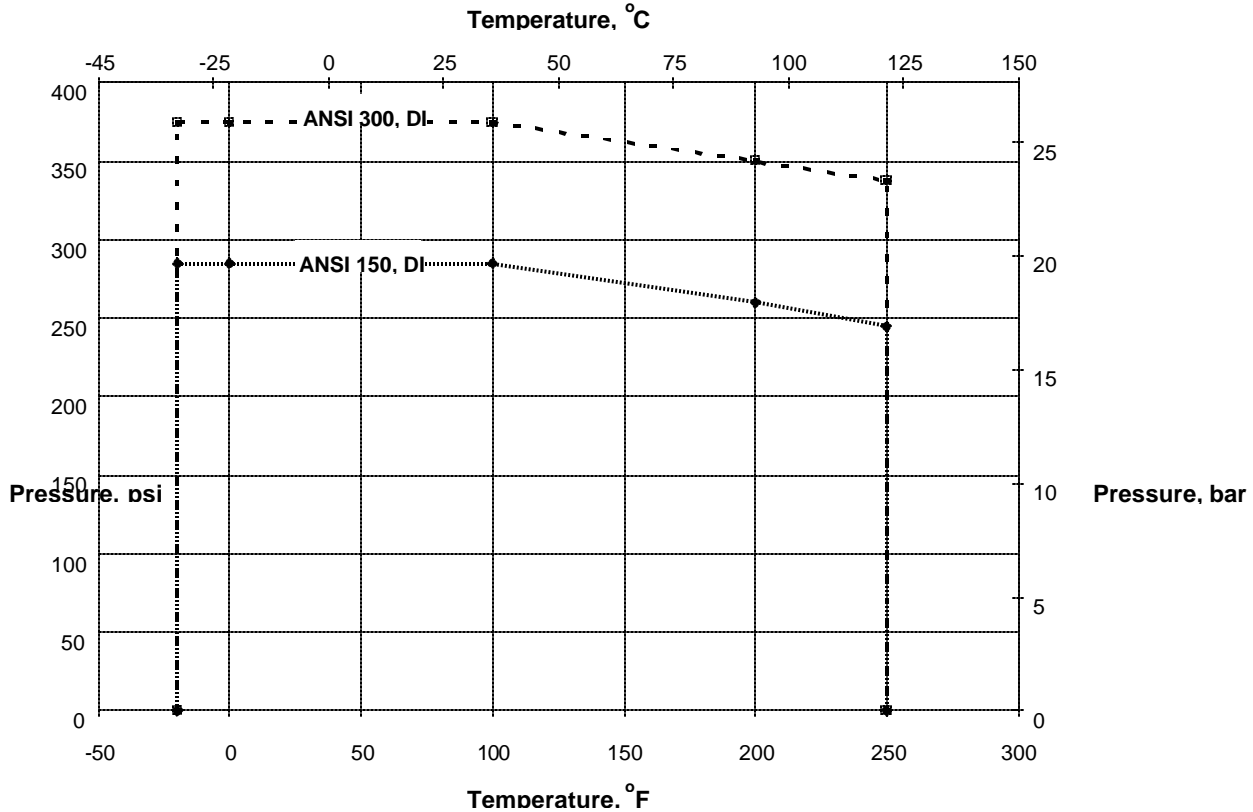
KF2110	900 SSU	198 centistokes
KF31510	1200 SSU	264 centistokes
KF3210	1700 SSU	370 centistokes
KF4310	2000 SSU	440 centistokes
KF6410	2200 SSU	480 centistokes

KF2110	15 gpm at 3600 rpm	3.4 m ³ /h at 2900 rpm
KF31510	20 gpm at 3600 rpm	4.5 m ³ /h at 2900 rpm
KF3210	25 gpm at 3600 rpm	5.6 m ³ /h at 2900 rpm
KF4310	30 gpm at 3600 rpm	6.8 m ³ /h at 2900 rpm
KF6410	15 gpm at 1750 rpm	3.4 m ³ /h at 1450 rpm

* Note: Pump performance (flow, head and efficiency) will be greatly affected by the viscosity of liquid pumped. Maximum viscosity given above are approximate numbers. Please refer to the Hydraulic Institute's "Viscosity Correction" chart. A pump should not be used or should be used with caution if efficiency with the viscous liquid is less than 50% of efficiency with water.

** Note: Minimum flow data based on water. Consult factory for other liquids.

PRESSURE & TEMPERATURE CAPABILITY



CASING

- ANSI/ASME B73.1-1991 dimensions for flange and foot position.
- Self venting and top centerline discharge.
- One piece solid ductile iron casing, lined with rotomolded ETFE fluoropolymer 0.125in. (3.0 mm) min.
- Foot supported for maximum resistance to piping loads.
- Flanges: ANSI/ASME B16.5 Class 150, standard. ANSI Class 300, optional
ISO 2084 PN16 or JIS B 2210 10kg/cm², hole pattern optional.
- Drain flange: ½ in. ANSI/ASME B16.5 Class 150, standard or Class 300, optional.
ISO 2084 PN16 or JIS B 2210 10kg/cm², hole pattern optional.

SHAFT SUPPORT/THRUST RING

- Streamlined and internally reinforced for all radial load conditions. Patent pending.
- Pure sintered silicon carbide thrust ring integral with shaft support.
- Reinforcement fully encapsulated and hermetically sealed at the factory.

IMPELLER

- Replaceable, closed type, one piece construction.
- Manufactured with carbon fiber filled ETFE fluoropolymer.
- Coupled to inner magnet by oversized polygon with axial lock mechanism. Patent pending
- Replaceable, sintered silicon carbide, mouth ring (pads). Patent pending.

INNER MAGNET

- Encapsulated with carbon fiber filled ETFE fluoropolymer.
- Magnet assembly fully encapsulated and hermetically sealed at the factory.
- Coupled to impeller by oversized polygon with axial lock mechanism. Patent pending

MAIN BUSHING

- Rotating, two bearing design, sleeved with CFR-ETFE.
- Large bearing area for all loads and viscosities.
- Bearings in sintered silicon carbide (SiC), only.
- Press fit installation into impeller bore.

SHAFT

- Non-rotating, one piece, solid construction, sintered silicon carbide (SiC).
- Fully supported at both ends utilizing front shaft support and rear casing.
- Axial groove for improved lubrication and particulate bypass. U.S. Patent 5,641,275.

REAR CASING

- Exceeds ANSI/ASME B73.1 Pressure and Temperature Ratings for Class 150 flanges.
- Injection molded carbon fiber filled ETFE fluoropolymer backed by non-metallic reinforcement.
- Integral carbon fiber reinforce PTFE back thrust ring, optional sintered silicon carbide.
- No energy losses due to eddy currents from magnetic coupling.
- Fully confined casing O-ring.
- 2600 psi (178 Bar) burst pressure.

MAGNETIC COUPLING

- Four drive sizes with interchangeable hubs.
- Neodymium Iron Boron for maximum strength.
- Designed for zero slippage and zero losses.
- Utilizes standard NEMA or IEC motors.
- Eliminates soft start devices.

KF MAXIMUM DRIVE RATINGS hp (Kw)				
DRIVE	1450 rpm	1750 rpm	2950 rpm	3550 rpm
PR drive	11.0 (8.2)	13.3 (10.0)	22.1 (16.5)	27.0 (20.1)
PS drive	21.8 (16.3)	26.4 (19.7)	44.5 (33.2)	53.5 (39.9)
QS drive	32.7 (24.4)	39.4 (29.4)	66.5 (49.6)	80.0 (59.7)
QT drive	40.7 (30.4)	49.1 (36.6)	82.8 (61.8)	100.0 (74.6)

- Note:
1. QT drive pumps limited to 200°F maximum operating temperature.
 2. When selecting the KF drive combination always insure that the end-of-curve power is less then the maximum drive rating power. This is required even on pumps operating near shut-off.

BEARING FRAME

- L_{10} life of 70,000 hrs.
- Fully ANSI/ASME B73.1-1991 dimensional.

CLOSE COUPLED BRACKET & MOUNTING PLATES

- Provides metal-to-metal fit to casing and motor.
- Eliminates the flexible coupling, bearing frame and tedious alignment procedure.
- Motor and pump alignment not effected by nozzle loads.
- Motors:
 - NEMA C face from 182TC through 405TSC
 - IEC B5 with D flange from 100/112 through 250 (B3/B5 required above 132 frame).
 - JIS B5 with D flange from 100/112 through 250 (B3/B5 required above 132 frame).
- Drilled and tapped for leak monitoring sensor (3/8 NPT).

