

Specifications

ANSIMAG KM SERIES

Models: KM1515 KM1516LF KM2156





PUMP

- Horizontal End-Suction, Tangential Discharge, Centrifugal process pump.
- Sealless, magnetically driven for zero leakage applications.
- Synchronous drive for zero slip operation.
- Non-metallic wetted parts: ETFE (Standard), PFA (Optional)
- Compact, Sub-ANSI, back motor pullout design
- Close Coupled, designed for use with NEMA C-Face or IEC B5 motors
- Maximum power: 7.5hp (5.5kW) @ 3500RPM
- Maximum temperature: 250°F (121°C)
- Minimum temperature: -20°F (-29°C)
- Maximum Allowable Working Pressure: 150psi (10.3 Bar) @ 70°F Hydrotest Pressure: 225 psi (15.45 Bar) @ 70°F
- Maximum Slurry concentration: 20% wt.
- Maximum solids size: $\frac{1}{16}$ inch (1.6 mm) diameter
- Maximum viscosity: 700 SSU (150 centistokes)

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

• Minimum continuous (mechanical) flow:

Model	60 Hz	50 Hz	
KM1515	1 gpm at 3500 rpm	(.23 m ³ /h at 2900 rpm)	
	1/2 gpm at 1750 rpm	(.11 m ³ /h at 1450 rpm)	
KM1516 LF	1 gpm at 3500 rpm	(.23 m ³ /h at 2900 rpm)	
	1/2 gpm at 1750 rpm	(.11 m ³ /h at 1450 rpm)	
KM2156	5 gpm at 3500 rpm	(1 m ³ /h at 2950 rpm)	
	3 gpm at 1750 rpm	(.5 m ³ /h at 1450 rpm)	

Minimum continuous (mechanical) flow data based on water (S.G=1.0, specific heat=1.0). Temperature rise should be calculated for Minimum continuous "thermal" flow for continuous flow rates < 5 gpm.

• Weight (Pump only)

Model	Weight
KM1515	53 lbs. (24 kg.)
KM1516LF	65 lbs. (29 kg.)
KM2156	70 lbs. (32 kg.)

CASING

- One piece solid ductile iron casing, lined with .125" ETFE fluoropolymer (standard) or PFA fluoropolymer (optional)
- End suction, Tangential discharge.
- Universal (Slotted) Flange Connections

	ANS	SI 150#	ISO	PN16	JIS 10)kg/cm2
Model	Suction	Discharge	Suction	Discharge	Suction	Discharge
KM1515	1.5"	1"	40mm	25mm	40mm	25mm
KM1516LF	1.5"	1"	40mm	25mm	40mm	25mm
KM2156	2"	1.5"	50mm	40mm	50mm	40mm

• Pure sintered silicon carbide thrust ring integral with front center support.

• Plugged, ¹/₄" NPT, casing drain connection.

• Casing Design Pressure: to ASME B16.1 Class 150 flange rating.

• For "Low System Temperature" applications (to -120°F), an optional 316SS casing (and rear support) is available for the model KM1515.

IMPELLER ASSEMBLY

• Closed type, one piece construction.

Model	Minimum Trim	Maximum Trim
KM1515	3" (76 mm)	5" (127 mm)
KM1516LF	4.75" (120mm)	6" (152 mm)
KM2156	3" (76 mm)	6" (152 mm)

• Manufactured with carbon fiber filled ETFE fluoropolymer (standard) or GFR-PFA fluoropolymer (optional).

• Integral Magnets, fully encapsulated.

• Replaceable, press fit main bushing, either carbon/graphite or sintered silicon carbide.

• Replaceable, mouth ring, either carbon fiber filled PTFE or sintered silicon carbide.

SHAFT

- Manufactured from pure sintered silicon carbide (SiC).
- Solid, heavy duty (0.75" diameter) construction.
- Non-rotating, replacable design.
- Axial groove for improved lubrication and particulate bypass. (U.S. Patent 5,641,275)
- Fully supported at both ends (front shaft support and rear casing).

CONTAINMENT SHELL (Rear Casing)

- Injection molded carbon fiber filled ETFE fluoropolymer backed by non-metallic reinforcement. Optional glass fiber reinforce PFA.
- Integral carbon fiber filled PTFE back thrust ring.
- No energy losses due to eddy currents from magnetic coupling.
- 900 psi (55 Bar) burst pressure.

MAGNETIC COUPLING

- Utilizing Neodymium Iron Boron magnets for maximum strength.
- Zero slip coupling design.
- Soft start devices not required.
- Two magnetic coupling sizes available
- Fully "sheathed" Outer Drive
- Maximum Driver Power:

Coupling Size	60 Hz	50 Hz
AA	5 hp (3.7kW) @ 3500 rpm 2.5 hp (1.9kW) @ 1750 rpm	3.1 kW @ 2900 rpm 1.6 kW @ 1450 rpm
AB	7.5 hp (5.5kW) @ 3500 rpm 3.75 hp (2.87kW) @ 1750 rpm	4.6 kW @ 2900 rpm 2.3 kW @ 1450 rpm

CLOSE COUPLED BRACKET

- Ductile Iron, providing rigid "monobloc" fit between motor and casing.
- Eliminates the flexible coupling and bearing frame.
- Drilled and tapped for leak monitoring sensor (1/4" NPT).
- Designed to fit standard NEMA C-Face & IEC B5 flange motors



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