

KHG(X)5



5HP High Head Grinder Pump, 1 or 3 Phase (Class 1, Div. 1, Groups C & D Hazardous Location)

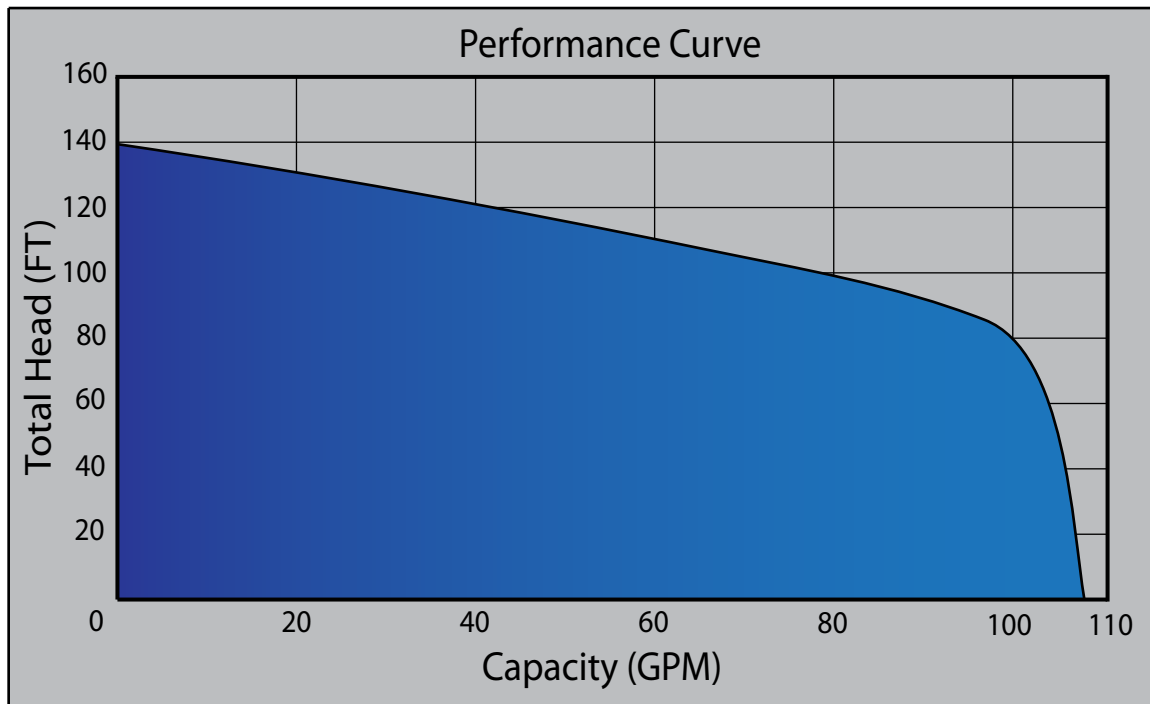


The KEEN PUMP **KHG(X)5** series centrifugal grinder pumps easily handle residential, commercial or industrial sanitary waste, reducing it to a fine slurry. The **KHG(X)5** pump is designed for use in pressure sewer applications or any piping network.

The recessed vortex impeller design of the **KHG(X)5** grinder pump provides trouble-free, non-overloading operation over the entire performance curve. The modular design provides quick and easy serviceability. The hardened stainless steel grinder assembly provides many years of dependable operation.

The **KHG(X)5** series pump features:

- Interchangeable with Competitor Installations
- Dual Silicon-Carbide Mechanical Shaft Seals w/ Viton[®] Elastomers
- Pressed-In Motor with Internal Overload Protection
- 3-Bearing Shaft Support (Upper / Lower / Sleeve)
- Internal Moisture Detection
- Strong Motor, 1-Phase (208/230) Volt or 3-Phase (208/230/460) Volt



Features and Benefits

1. Watertight Cable Entrance

Agency-approved, watertight strain relief cord grip with compression grommet protects outer cord jacket (**FM Explosion-Proof**) or Heavy-duty molded compression grommet protects outer cord jacket. Epoxy-filled inner cord cap provides anti-wicking moisture protection to the motor even if power cable is cut or damaged.

2. Modular Pump Design

Commonality of parts across the Keen product line minimizes the amount of parts required for servicing. Heavy-duty ASTM A48, Class 35 cast iron components.

3. Strong Motor

Powerful high-torque motor for reliable pump operation. Pressed stator securely holds motor and efficiently transfers heat. Class F insulation with overload protection in oil-filled chamber for cool operation and long motor life.

4. 3-Bearing Support

Motor / Pump shaft securely held with upper and lower ball bearing plus additional sleeve bearing in lower seal chamber. Long 100,000 hour L-10 bearing life.

5. Double Mechanical Seal Protection

Dual silicon carbide mechanical shaft seals w/ Viton® Elastomers provide twice the moisture protection for the motor. Dual seals are housed in a secondary oil-filled seal chamber. Tougher silicon carbide seals better handle sand, grit and abrasive materials.

6. Moisture Detection

Dual Seal leak probe signals alarm in control panel for scheduled maintenance.

7. Non-Overloading Hydraulic Design

The recessed centrifugal impeller allows 100% performance curve operation from shut-off to maximum flow without damage to the pump or system. The recessed vortex impeller is out of the passageway of fluid flow, eliminating concerns of blockage or wear.

8. Proven Grinder Assembly

Hardened (Rockwell 56-60) stainless steel grinder assembly has 30+ years proven field experience. The reversible grinder ring and grinder impeller effectively reduce solids into a fine slurry, easily passable in a piping system without concerns of clogging. Highly efficient 12,400 cuts/second.

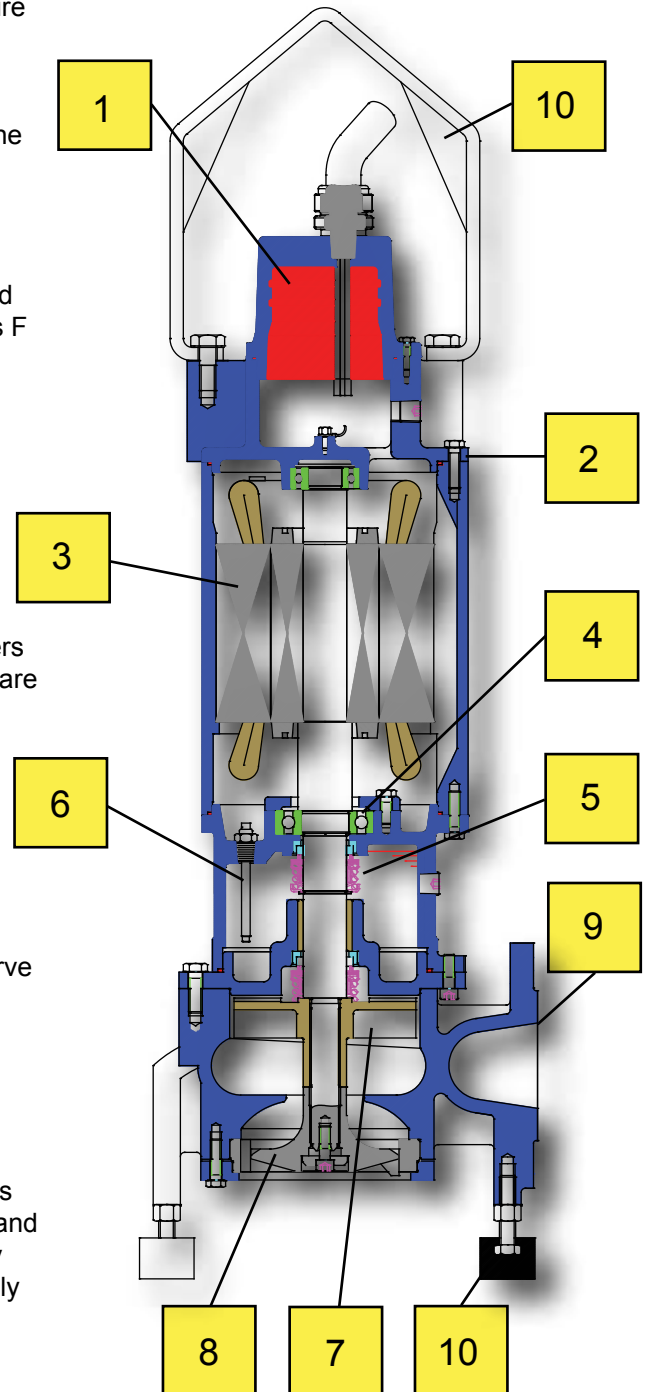
9. Versatile Flange Connection

Combination 2-1/2" and 3" horizontal flange. Industry-standard ANSI Class 125 dimensions.

10. Accessories

Stainless steel lifting handle included. Anti-vibration nylon mounting feet **OPTIONAL**.

5HP Grinder Pump High Head KHG(X)5



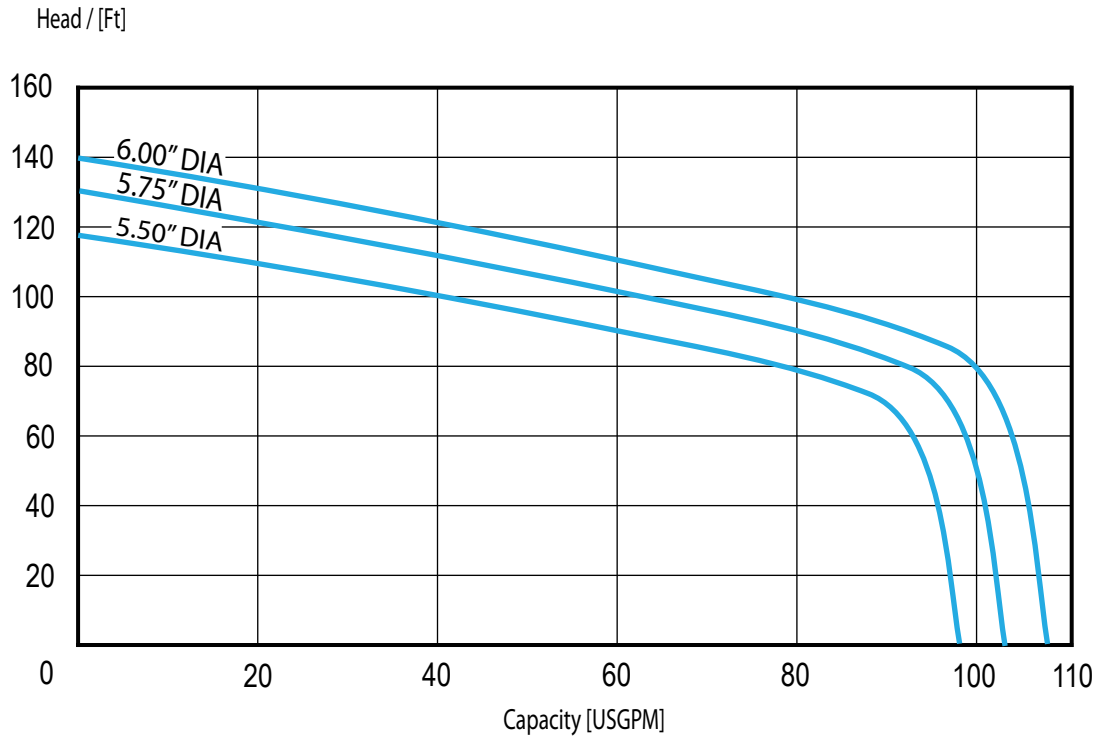
471 US Hwy 250 East · Ashland, Ohio 44805
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www.keenpump.com



5HP SUBMERSIBLE GRINDER PUMP

GENERAL		MOTOR DATA	
Pump Model	KHG(X)5	HP / Power Supply	5HP / 1 ϕ , 60 Hz
PUMP DATA		Full Load Amps 208V	40 Amps
Date	09/27/2017	Start Amps 208V	144 Amps
Discharge Flange	2-1/2 & 3" ANSI Horizontal	Full Load Amps 230V	34 Amps
Grinder Ring	25 Slots	Start Amps 230V	122 Amps
Impeller Type / Std. Dia.	Recessed / 6.00"	Poles / Rated Speed	2 P / 3450 rpm
Single Phase	START KIT SK-5 includes: Start & Run Capacitors, Relay, and Mounting Hardware	Insulation Class	F Class
		Start Capacitor	300 ufd, 250 VAC
		Run Capacitor	30 ufd, 370 VAC

PERFORMANCE CURVE



<u>MODEL</u>	<u>HP</u>	<u>Phase</u>	<u>Volts</u>
KHG(X)5-2081	5	1	208
KHG(X)5-2301	5	1	230

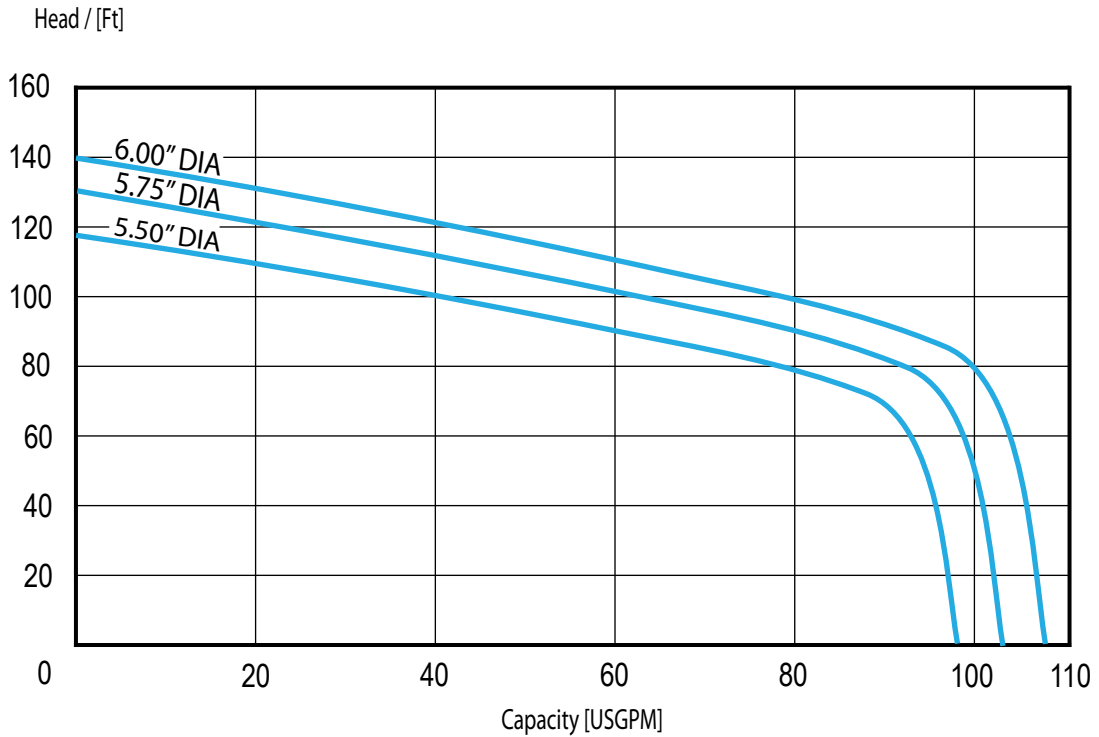
* Performance with clear water and ambient temp 20°C (68°F)



5HP SUBMERSIBLE GRINDER PUMP

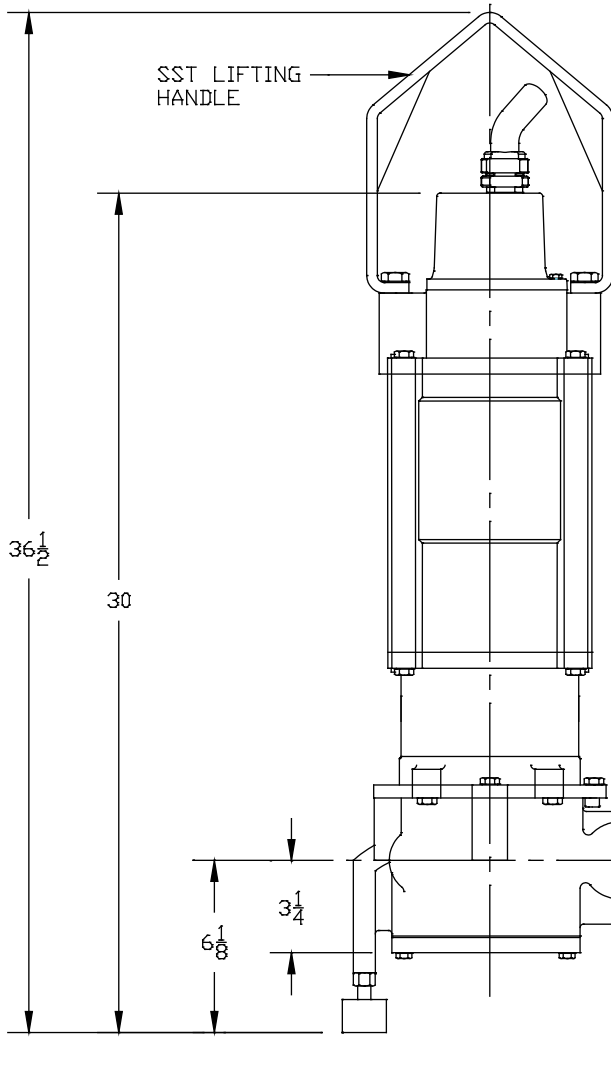
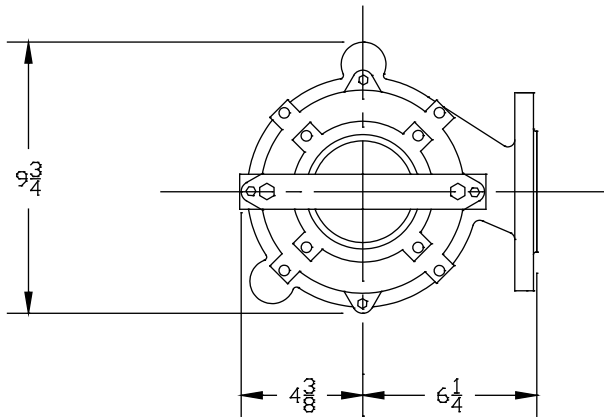
GENERAL		MOTOR DATA	
Pump Model	KHG(X)5	HP / Power Supply	5HP / 3 ϕ , 60 Hz
PUMP DATA		Full Load Amps 208V	29 Amps
Date	12/7/2017	Start Amps 208V	120 Amps
Discharge Flange	2-1/2 & 3" ANSI Horizontal	Full Load Amps 230V	25 Amps
Grinder Ring	25 Slots	Start Amps 230V	102 Amps
Impeller Type / Std. Dia.	Recessed / 6.00"	Full Load Amps 460V	13 Amps
Three Phase		Start Amps 460V	54 Amps
		Poles / Rated Speed	2 P / 3450 rpm
		Insulation Class	F Class

PERFORMANCE CURVE



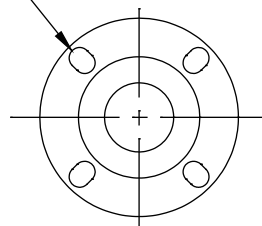
<i>MODEL</i>	<i>HP</i>	<i>Phase</i>	<i>Volts</i>
KHG(X)5-2083	5	3	208
KHG(X)5-2303	5	3	230
KHG(X)5-4603	5	3	460

* Performance with clear water and ambient temp 20°C (68°F)



* PUMP STANDARD HORIZONTAL FLANGE
 (2-1/2" OR 3" ANSI) STANDARD BASIN
 PACKAGE DISCHARGE (2" PIPING)
 ACCEPTABLE WITH MACERATED
 SEWAGE SLURRY

* DISCHARGE FLANGE "SLOTS"
 FOR OPTIONAL 2.5" OR 3" ANSI
 DISCHARGE, CLASS 125., 4-BOLT



NOTE: ALL DIMENSIONS FOR REFERENCE ONLY

REV	INITIALS	DATE
B	SE	01/06/2017
A	SE	03/26/2015

		KEEN PUMP CO. 471 US HWY 250 EAST ASHLAND, OHIO 44805	PHONE: 419-207-9400 FAX: 419-207-8031
TITLE 3-7.5HP HIGH FLOW/HIGH HEAD GR. PUMP DIMENSIONS			
SCALE NTS		DWG. # KN-28	REV. B
DWG. BY SE	DATE 01/27/2014		