

SUMP-GARD® SGK Thermoplastic **CANTILEVER BEARINGLESS VERTICAL PUMPS**



Rugged steel shaft is isolated from fluid by thick sectioned thermoplastic sleeve

- PVC ■ POLYPROPYLENE ■ PVDF ■ CPVC
- Flows to 1000 gpm ■ Heads to 240 feet
- Lengths to 4 feet ■ Temperatures to 275° F

All Vanton vertical centrifugal sump pumps are specifically designed to handle corrosive, abrasive and hazardous process fluids, wastewater liquids and slurries of various pH values, and for use in those applications where no metallic or other contaminants can be tolerated. The cantilevered large diameter shaft design of SGK pumps eliminates the necessity for any immersed bearings and permits dependable operation under dry running conditions. These pumps are available in lengths to 4 feet but can accommodate deeper sumps through the use of tail pipes. Models are available with standard semi-open or closed impellers, or with recessed impellers that provide unrestricted flow so that fluids with solids or stringy materials can be pumped without impeller clogging.

MATERIALS OF CONSTRUCTION

All pump components in contact with the fluid are furnished in a choice of chemically inert thermoplastics: polyvinyl chloride (PVC), chlorinated polyvinyl chloride (CPVC), polypropylene (PP) and polyvinylidene fluoride (PVDF). The heavy duty alloy steel shaft is completely isolated from the fluid by a heavy sectioned thermoplastic sleeve. No metal is in contact with the pumped fluid.

APPLICATIONS

Vanton SGK sump pumps are specified where submerged bearings cannot be tolerated because sudden fluid stoppage will result in running dry for short or extended periods. If this occurs, no harm will come to the pump. They are also recommended where regulations prohibit draining tanks from the bottom. They are

in wide use for the transfer, collection and circulation of aggressive or ultrapure fluids in chemical, petrochemical, environmental, manufacturing and wastewater applications where running dry capabilities are important to minimizing maintenance costs and maximizing MTBR.

ADVANTAGES OF THERMOPLASTICS

- Greater chemical resistance over the pH range compared to metals or thermosets.
- Superior resistance to abrasion compared to metals or thermoset composites.
- No metallic contamination of the fluid.
- No problems with galling. Easier maintenance.
- No interbatch product contamination. Fiberglass composites wick and absorb by capillary action. Solid homogeneous thermoplastics don't.
- No galvanic corrosion or rusting. Metals corrode, plastics don't.

SUMP-GARD® THERMOPLASTIC VERTICAL CANTILEVERED BEARINGLESS PUMP

SPECIFICATIONS

1. Rugged thermoplastic vertical pump with cantilevered shaft and dry running capability.
2. No bearings immersed in the pumped fluid.
3. Large diameter alloy steel shaft isolated from the fluid by a thick sectioned thermoplastic sleeve.
4. Heavy duty external ball bearings above the cover plate, housed in an epoxy-coated cast iron motor bracket that accommodates NEMA, IEC and European standard motors.
5. Casing, casing cover and impeller molded of solid, homogeneous thermoplastics. Columns, reinforcing ribs and other components in fluid contact to be of similar thermoplastic material.
6. All immersed pump parts and hardware to be homogeneous thermoplastics. No metal or thermoset composites in fluid contact.
7. Quiet running, durable flexible coupling to isolate motor from hydraulic thrust force.
8. Nonmetallic vapor seal to protect metal motor bracket assembly from corrosive fumes.
9. Dynamically balanced (semi-open or closed) impeller with imbedded, molded-in stainless steel reinforcing insert.
10. Standard or custom solid thermoplastic sump cover plate resistant to the corrosive liquid or vapor.
11. Heavy sectioned solid thermoplastic strainer, if required, manufactured of thermoplastic material similar to the construction of the pump.

MODEL	SIZE	A	B	C	D	Y*
SGK 200	1 x 1		9	7½	22⅝	
SGK 300	1½ x 1½		11¼	8⅞	22⅝	
SGK 500	2 x 2	VARIES WITH MOTOR SIZE	11¼	9⅝	22⅝	12
SGK 800	2 x 2		11¼	9⅝	22⅝	TO
SGK 1200	3 x 2		15	13¼	22⅝	48
SGK 1800	4 x 3		15	13¼	22⅝	
SGK 2000	4 x 3		15½	13¼	22⅝	
SGK 2400	6 x 4		22½	17⅞	32½	

*Tailpipe extensions can be added. All dimensions in inches.

