

VERTIFLO

The Vertical Pump Specialists

PUMPS FOR INDUSTRY

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Engineering Sample Specifications

VERTIFLO SERIES 700

Quality Design Features Assure Long, Trouble-Free Service



WIDE RANGE OF APPLICATIONS:

- Industrial Wastes
- Sanitary Wastes
- Process Wastes
- Rendering Wastes
- Pollution Control

CAPABILITIES:

- Capacities to 1500 GPM
- Heads to 100 Feet
- Pit Depths to 26 Feet
- Construction: Cast Iron

STANDARD MATERIALS OF CONSTRUCTION

Part Description	Materials
Motor Support Thrust Bearing Housing	Cast Iron, Class 30
Shaft	Stainless Steel AISI-416
Column	Steel ASTM-A53
Bearing Housing	Cast Iron, Class 30
Guide Bearings	Bronze SAE 660
Casing, Suction cover, Impeller	Cast Iron, Class 30
Impeller Trim	Stainless Steel AISI- 316
Discharge Pipe	Steel ASTM - A53
Cover Plate	Steel HRS
Adjusting Nut	Steel ASTM-307
Double Lip Seal	Nitrile

CONSTRUCTION:

Standard

- Bronze bottom line shaft bearings
- Bronze intermediate bearings (pit depths over 6'-0")
- Fully enclosed 2 vane non-clog design with wiping vanes
- High-thrust angular contact ball bearing
- External impeller adjustment
- Grease lubricated pump and line shaft bearings
- 416 stainless steel shaft
- Round or square cover plates with vent and inspection openings
- Gas-tight construction
- Pump setting increments of 1'-0" for sump depths up to 26'-0"

- Flanged discharge on all casings
- Long radius discharge elbow
- Standard C face motors

Options

- Various line shaft bearing designs
- 316 stainless steel shafting
- Oval pump mounting plate
- Various float switch enclosures
- Various liquid level controls
- High water alarm
- Alarm bells and horns
- 316 stainless steel float rod
- 316 stainless steel float
- Below plate discharge "T"
- Basins
- Simplex & duplex control panels

1. Motor Support

Assures positive alignment of motor and pump shaft with register fit. Normal thrust, vertical NEMA C face motor standard

2. Flexible Coupling

3. External Impeller Adjustment

High performance maintained without dismantling pump

4. Thrust Bearings

High thrust angular contact bearing. Moisture-proof enclosure with (2) grease seals, purge-type grease lubrication

5. Gas Tight Column Closure

Double lip seal, grease lubricated

6. Cover Plate

Designed for specific unit. Carbon steel standard

7. Column Pipe

Schedule 40 steel with welded flanges

8. Positive Machined Fits

Machine registered fits of column, bearing housing and casing

9. Intermediate Bearing Assembly

Optional designs for special applications. Furnished as standard on pumps built for pit depths greater than 6'-0"

10. Shafting

Accurately machined 416 stainless steel, 1 1/4" or 1 1/2" diameter to assure minimum deflection

11. Pump Bearing Assembly

Heavy construction designed for maximum bearing loadings. Optional designs available

12. Bearings

Various materials available to suit most specifications

13. Choker Ring

Restricts entrance of abrasives and solids into bottom bearing area

14. Impeller

Fully enclosed 2 vane non-clog design with wiping vanes which reduce axial loading and prolongs bearing life. Wiping vanes aid in keeping particles from behind impeller and pump bearing assembly. Impeller is secured to shaft by taper fit with woodruff key, nut.

15. Casing

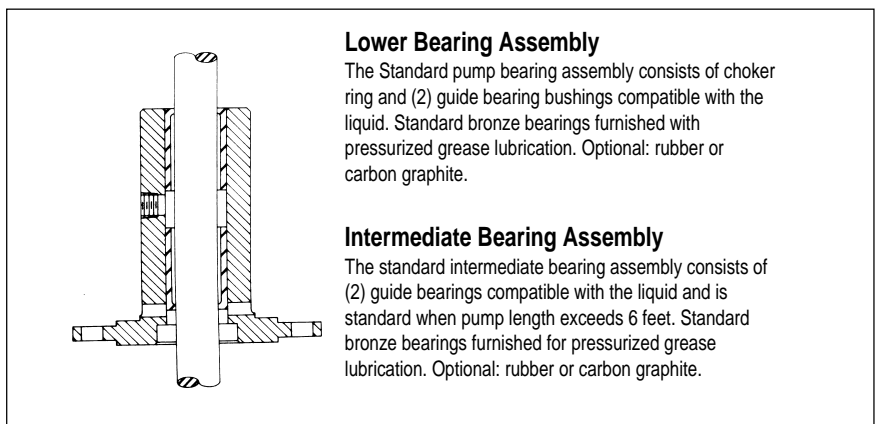
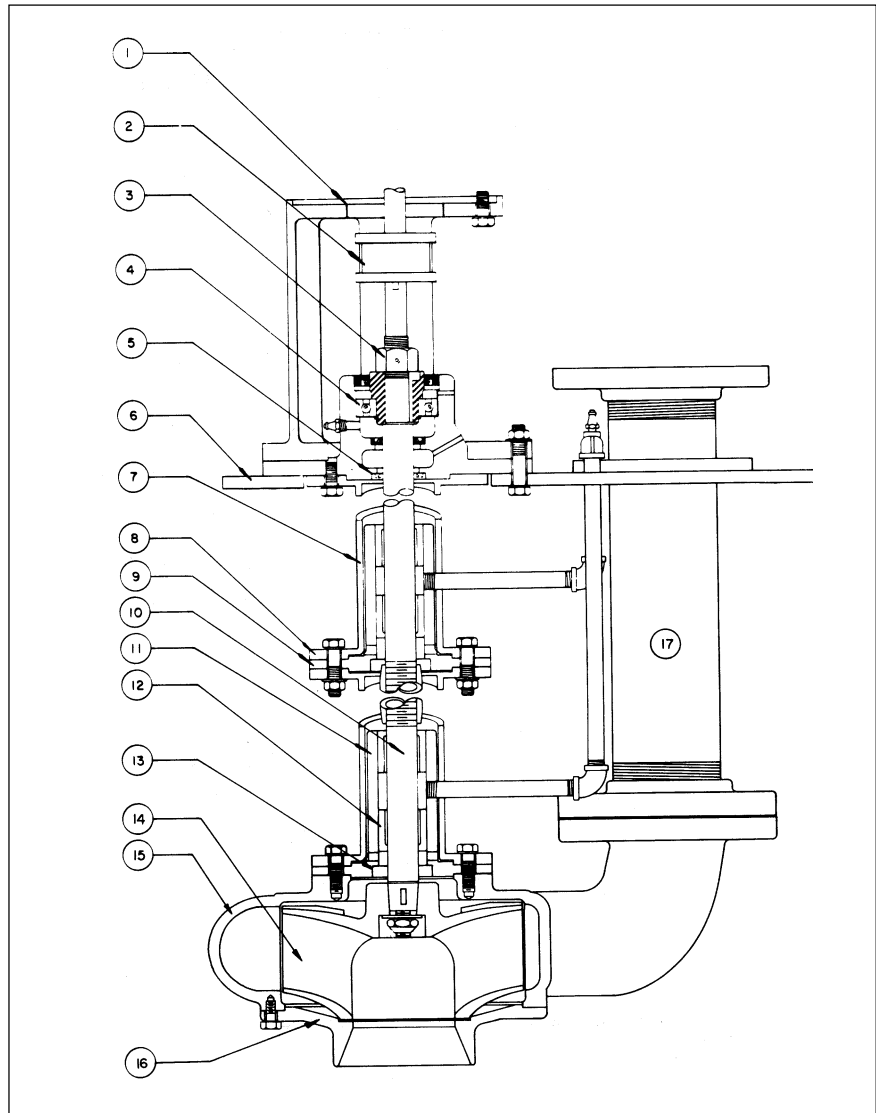
Flanged discharge all sizes. Designed specifically for solids handling. Incorporates long radius elbow, reducing friction loss

16. Suction Cover

Removable on all pumps for easy inspection, cleaning or servicing

17. Discharge Pipe

All sizes flanged. Below plate "T"-type discharge available



Lower Bearing Assembly

The Standard pump bearing assembly consists of choker ring and (2) guide bearing bushings compatible with the liquid. Standard bronze bearings furnished with pressurized grease lubrication. Optional: rubber or carbon graphite.

Intermediate Bearing Assembly

The standard intermediate bearing assembly consists of (2) guide bearings compatible with the liquid and is standard when pump length exceeds 6 feet. Standard bronze bearings furnished for pressurized grease lubrication. Optional: rubber or carbon graphite.

Model Number	Shaft Size	Column Pipe Size	Quantity of Bushings Bottom Bearing
720	1.250	4.00	2
724	1.500	4.00	2