

ARMSTRONG



Horizontal Base Mounted Pumps

FILE NO:	40.12IN
DATE:	July 20, 2009
SUPERSEDES:	40.12IN
DATE:	Aug 05, 2008

The Best Base Mounted Pump Design in Today's HVAC Industry



► Armstrong Pumps - Hallmark of Quality

- Armstrong, manufacturer of pumps since 1934
- Base mounted pump designs continuously updated
- Traditional features combined with cutting edge concepts

► Traditional Features

- Back pull out design
- Base supported radially-split casing
- Flexible coupling with guard
- Drain and gauge connections
- Cast iron housing, bronze-fitted construction
- All iron and ductile iron construction available
- Designed, manufactured and inspected to exacting standards

► Current Design Concepts

- Self venting centerline discharge casing
- Large flow range
- DIN flanged casing
- Pre-lubricated and sealed ball bearings
- Confined casing gasket
- Mechanical seal with O-ring mounted silicone carbide seat
- Stainless steel shaft sleeve
- Dynamically balanced impellers
- OSHA coupling guard
- Baseplate designed to ANSI/HI 1.3.5 rigidity standards for freestanding base

► Pressure/Temperature Parameters*

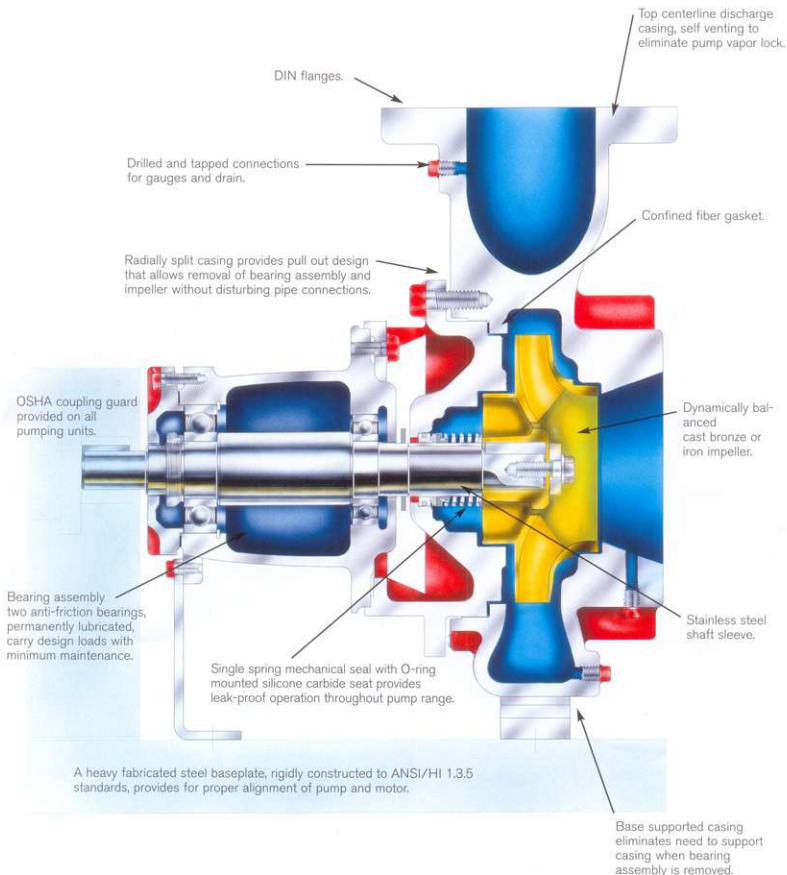
- Cast Iron - PN16 flanges
 - Pressure up to 16 Bar (232 PSI)
 - Temperature up to 107°C (225°F)
- Ductile Iron - PN25 flanges
 - Pressure up to 17 Bar (250 PSI)
 - Temperature up to 121°C (250°F)

* Please view AceOnline or submittal data for full details

Notes:-

- Hydrostatic test pressure at ambient temperature is 150% maximum working pressure.
- All values are based on clear, clean water. Values may change with other liquids.

Base Mounted Centrifugal Pumps



► TYPICAL SPECIFICATION

Furnish and install, as indicated on the plans and specifications, Armstrong Series 4030 base mounted centrifugal pumps.

The pump shall be single, end suction type with radially split, top center-line discharge, self-venting casing. The casing-to-cover gasket shall be confined on the atmospheric side to prevent blow-out possibility.

Pump construction shall be cast iron, bronze fitted (all iron, all bronze, ductile iron) and shall be fitted with a long-life, product lubricated, drip-tight mechanical seal, with O-ring silicone carbide seat retainer, designed for the specified maximum temperature and pressure.

The shaft shall be fitted with a Stainless Steel shaft sleeve and be supported by two heavy duty ball bearings. The design shall allow Back Pull Out servicing, enabling the complete rotating assembly to be removed without disturbing the casing piping connections.

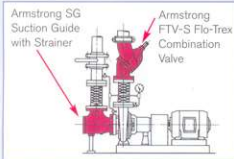
The pump shall be mounted on a rigid baseplate, designed to ANSI/HI 1.3.5 rigidity standards, for grouting or freestanding, and connected by flexible coupling, with OSHA guard, to a ____ kW, ____ Hz, ____ phase, ____ Volts, ____ rpm, ____ enclosure squirrel cage, induction type motor with EFF2 (EFF1) efficiency level and suitable for ____ starting.

Motor power requirements shown on the pump schedule are the minimum acceptable and have been sized for continuous operation without exceeding the full load name plate rating over the entire pump curve, exclusive of service factor.

The housing shall be hydrostatically tested to 150% maximum working pressure.

Need to reduce space requirements and installation costs?

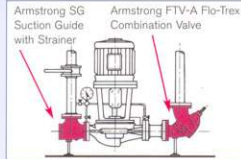
► Base mounted



Base mounted pump with Suction Guide and Flo-Trex valve eliminates cost and space of:

- Suction:
- Y-strainer,
 - Long radius elbow,
 - Min. straight pipe run.
- Discharge:
- Check valve,
 - Isolating valve,
 - Throttling valve.

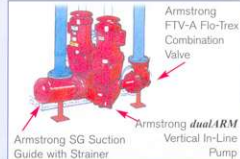
► Vertical In-Line



Vertical In-Line with Suction Guide and Flo-Trex valve eliminates cost and space of all the items listed under base mounted pump, plus the following:

- Inertia base with spring mounts,
- Long radius elbow,
- Flexible pipe connectors,
- Grouting,
- Field alignment,
- Split couplings available for ease of mechanical seal replacement.

► dualARM



dualARM Vertical In-Line incorporates two pumps in a casing with single inlet and outlet connections. Enables standby or parallel operation with only one set of piping. Casing design and port valves allow one pump to be removed for service with the second pump still operating. When installed with a Suction Guide and Flo-Trex valve the **dualARM** represents the greatest Life Cycle Value in today's commercial HVAC market.