



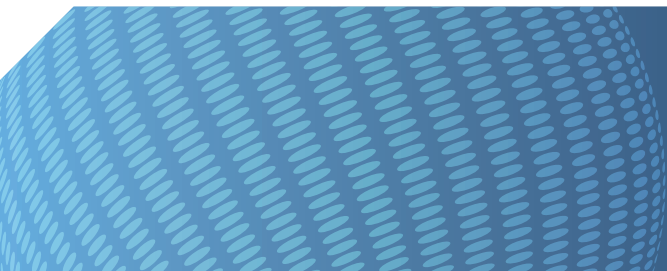
"A Trusted Partner in Pump Solutions"



RVI 80 SERIES

VERTICAL IN LINE PUMPS

RVI80 Series Vertical Inline Pumps



Rotech Vertical Inline Pumps are close coupled pumps designed for easy installation and can be mounted to a pipe line. The Suction and Discharge connections are on the same centre line in opposite direction at 180° apart.

Design Features

- Easy to install without disturbing piping
- Close coupled pumps, eliminates needs for extra Space, Rigid base or alignment.
- Can be installed vertically or Horizontally
- Impeller is mounted on motor shaft , minimizes run out
- Pump Adaptors are interchangeable with same series of pump sizes.
- Pumps are supplied with mechanical seals
- Flush line provided for the cooling of seal faces

Major Applications

- Heating and Air conditioning
- Pressure Boosting systems
- Apartment building
- Industrial Process Systems
- General Circulating water services

Specification

Casing

Radially Split Pump casing or volute with equal suction and discharge connection is supplied with standard 125# ANSI flanges connections working pressure up to 175 psi. Options are available for 250# and 300# working pressure ANSI Flange connections. Separate Tapped opening for Flush line, Gauge and Drain connections.

Casing has integral cast floor support to mount on base or floor ensures vibration free mounting.

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

Pump adaptor or Bracket

The Cast Iron pump adaptor is a key element for alignment of Motor and pump components. Its concentric alignment helps pumps' long life and avoid pumps breakdown.

Motors

Industry Standard Flange/Face Mounted TEFC OR ODP JM OR JP frame sizes of Motors are coupled with pump end. High efficiency or Explosion proof motors can be supplied on request.

Impeller

Dynamically Balanced Closed Impeller Bronze or Cast Iron with full diameter or trimmed depending upon duty point requirement. Impellers in other material can be supplied upon request. Impellers are dynamically balanced as per standard avoid vibration in to system.

Shaft sleeve

Shaft sleeve supplied either in Bronze or stainless steel construction.

Renewable Shaft sleeve eliminates replacement of complete shaft and saves money.

Mechanical Seal

Inside Type, Standard single coil spring type 21 carbon rotary, ceramic stationary and EPDM elastomer is supplied with pump. Other optional material combinations are available.

Easy to Install

In-line mounting doesn't require special foundations.

Standard piping supports on both sides of pump are required at all the times.

The support ring located on the underside of pump volute is designed to provide ground support when necessary.

Easy To Service

Back pullout design allows servicing without disturbing the piping. Repairs can be made quickly and easily.

Thus down-time is kept to a minimum.

IMPELLER BALANCED TO ANSI/HI GRADE G6.3

Quiet, vibration free operation results from this efficient balancing method.

Flush and Vent connection removes entrained Air and ensured liquid at seal face at all times.

Material of Constructions

Standard

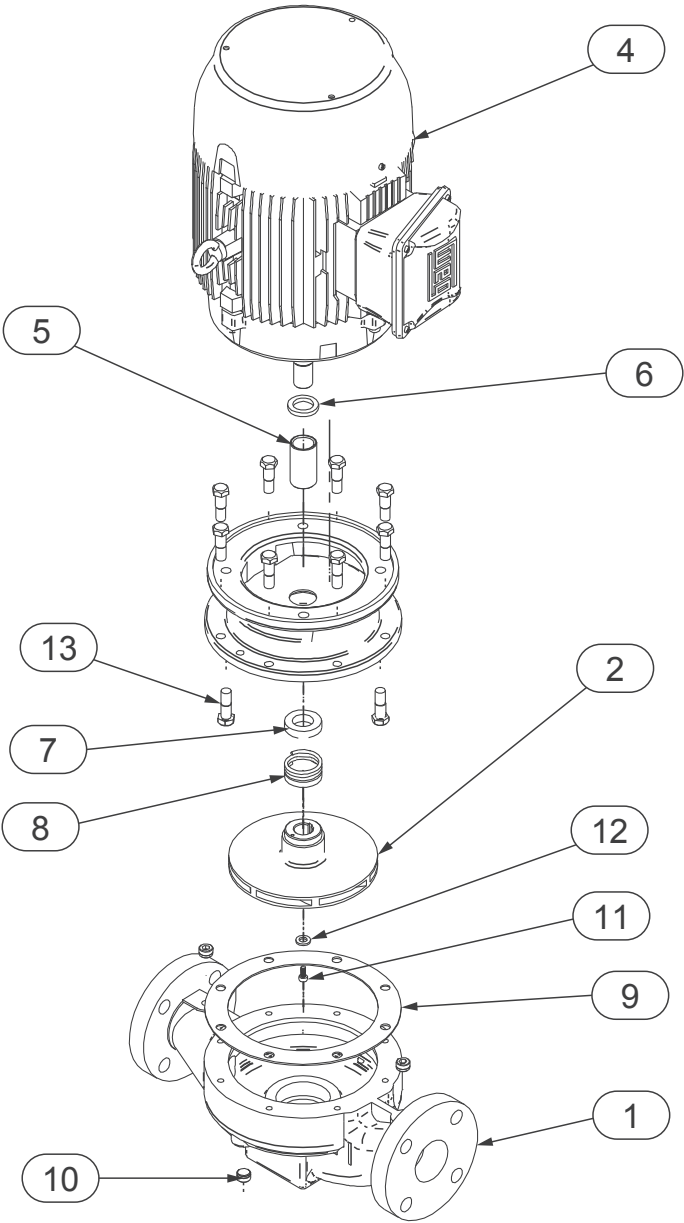
Pump casing/volute - Cast Iron grade ASTM, A48 Class 30

- Impeller - Bronze , ASTM B584 or Equivalent
- Shaft Sleeve, Bronze , SAE 660 or equivalent
- Shaft - not in our scope, as per Motor Manufacture
- Statically or dynamically Balanced Cast Impeller
 - Pump adaptor - Cast Iron, ASTM A48 CL 30
 - Impeller key- Stainless steel 304
 - Impeller lock washer - Stainless Steel 304
 - Impeller cap screw - stainless steel 304
- Mechanical Seal , Single coil spring Type 21 Carbon rotary, ceramic stationary cup seat with EPDM Elastomer, Mechanical seal spring - SS304
- Hydro Test by factory as per standard, Casing working Pressure- 175 psi.

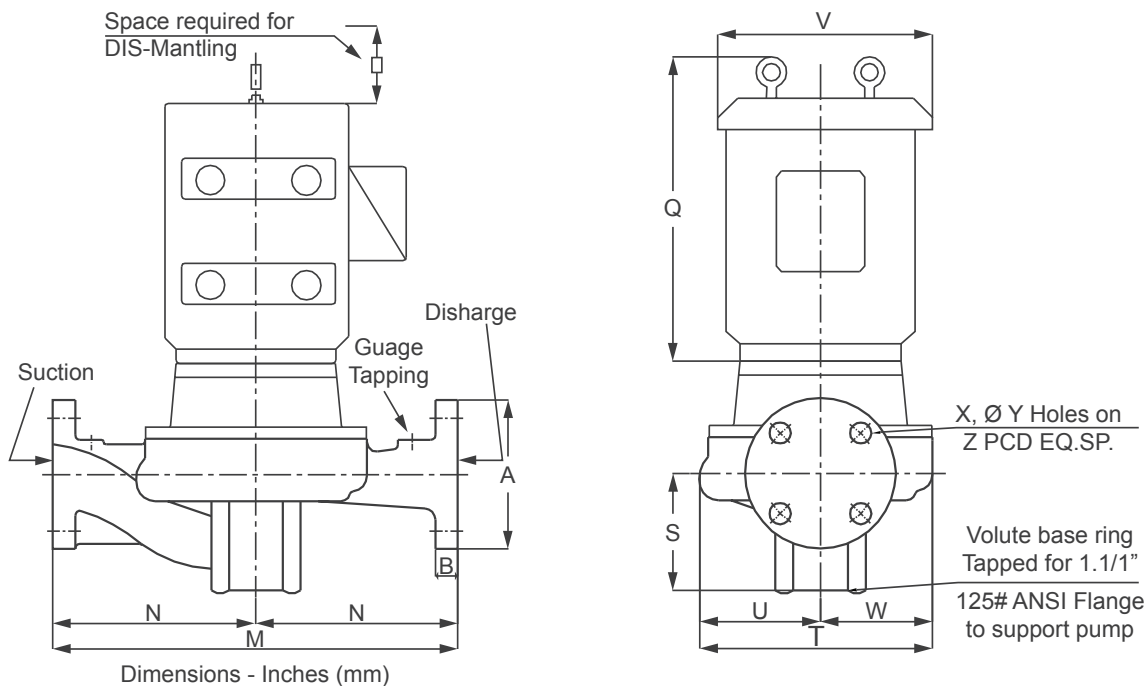
Optional

- Cast iron fitted or stainless steel fitted Construction
- 410 Stainless Steel Shaft Sleeve
- Suction and Discharge Companion Flanges
- Pump Base
 - Mechanical seal upgrade to Sic/sic/viton or tc/tc/viton
 - Case working pressure 250#, 300#.

Exploded View



Item	Qty.	Part Name	Material
1	1	Pump Casing	Cast iron
2	1	Impeller	C.I. / Bronze / St. Steel
3	1	Adaptor	Cast iron
4	1	Motor	Var
5	1	Shaft sleeve	Bronze or St. Steel
6	1	Slinger	Rubber
7	1	Mechanical Seal Stationery	Ceramic / EPDM cupset as standard
8	1	Mechanical Seal Rotary	Carbon / EPDM stainless retainer and spring as standard
9	1	Gasket	Non asbesters
10	5	Plug	Steel
11	1	Impeller screw	Steel
12	1	Impeller washer	Brass
13	12	Bolt	Steel



Pump Dimensional Data

Size	125# ANSI		250# ANSI		N	M	W	U	S	T	125# ANSI			250# ANSI			S (max)*
	A	B	A	B							X	Y	Z	X	Y	Z	
1½ × 1½-7	5	9/16	6-1/8	13/16	8 (203)	16 (406)	4-3/4 (121)	4-5/8 (117)	4-3/8 (111)	9-3/8 (238)	3-7/8 (98)	4	5/8 (16)	4-1/2 (114)	4	7/8 (22)	1-1/2 (38)
2 × 2-7	6	5/8	6-½	7/8	8-1/2 (216)	17 (432)	5-1/4 (133)	4-3/4 (121)	4-7/8 (124)	10 (254)	4-7/8 (124)	4	3/4 (19)	5 (127)	8	3/4 (19)	1-1/2 (38)
2½ × 2½-7	7	11/16	7-½	1	9 (229)	18 (457)	5 (127)	5-5/8 (143)	5-1/4 (133)	10-5/8 (270)	5-1/2 (140)	4	3/4 (19)	5-7/8 (149)	8	7/8 (22)	1-1/2 (38)
3 × 3-7	7-½	3/4	8-¼	1-1/8	9-1/2 (241)	19 (483)	5-1/4 (133)	6-1/4 (159)	5-1/2 (140)	11-1/2 (292)	6 (152)	4	3/4 (19)	6-5/8 (168)	8	7/8 (22)	1-1/2 (38)
4 × 4-7	9	15/16	10	1-¼	10-1/2 (267)	21 (533)	6-3/4 (171)	5-1/4 (140)	6-3/8 (162)	12-1/4 (311)	7-1/2 (190)	8	3/4 (19)	7-7/8 (200)	8	7/8 (22)	1-1/2 (38)

X - PCD | Y - No. of holes | Z - Dia. of holes

Motor Dimension

Motor Frame	Q(max)	V
143JM	10.046 (255)	7 (178)
145JM	11.045 (280)	7 (178)
182JM	11.738 (298)	8.740 (222)
184JM	12.762 (324)	8.740 (222)
213JM	14.42 (366)	12.165 (309)
215JM	15.916 (404)	12.165 (309)
254JM	19.12 (485)	12.283 (312)
256JM	20.852 (530)	12.283 (312)
284JM	21.906 (556)	14.000 (355)
256JP	20.852 (530)	12.283 (312)

Size	143JM		154JM		182JM		184JM		213JM		215JM		254JM		256JM		284JM		256JP	
	R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	P
1½ × 1½-7	4-5/8 (117)	19.05 (517)	4-5/8 (117)	20.05 (510)	4-5/8 (117)	20.74 (527)	4-5/8 (117)	21.76 (553)	4-5/8 (117)	23.42 (595)	4-5/8 (117)	24.92 (633)	-	-	-	-	-	-	8-1/2 (216)	33.77 (858)
2 × 2-7	4-5/8 (117)	19.55 (497)	4-5/8 (117)	20.55 (522)	4-5/8 (117)	21.24 (540)	4-5/8 (117)	22.26 (565)	4-5/8 (117)	23.92 (608)	4-5/8 (117)	25.42 (645)	8-1/2 (216)	32.50 (825)	-	-	-	-	8-3/4 (222.4)	34.33 (872)
2½ × 2½-7	4-7/8 (124)	20.17 (512)	4-7/8 (124)	21.17 (540)	4-7/8 (124)	21.86 (555)	4-7/8 (124)	22.89 (582)	4-7/8 (124)	24.55 (625)	4-7/8 (124)	26.04 (660)	8-3/4 (222)	33.12 (840)	-	-	-	-	8-3/4 (222.4)	34.8 (884)
3 × 3-7	4-7/8 (124)	20.42 (520)	4-7/8 (124)	21.42 (545)	4-7/8 (124)	22.11 (562)	4-7/8 (124)	23.14 (588)	4-7/8 (124)	24.80 (630)	4-7/8 (124)	26.29 (668)	8-3/4 (222)	33.37 (848)	-	-	-	-	8-3/4 (222.4)	26.29 (892)
4 × 4-7	-	-	5-1/8 (130)	22.55 (573)	5-1/8 (130)	23.24 (590)	5-1/8 (130)	24.26 (616)	5-1/8 (130)	25.92 (658)	5-1/8 (130)	27.42 (696)	9 (229)	34.50 (876)	9 (229)	36.23 (920)	9 (229)	37.28 (947)	9 (229)	36.23 (920)

Rotech's Other Products

- DNJ series Close coupled End suction Pumps
- DN series End suction Frame mounted pumps
- 1196 series ANSI process Pumps
- RST series stamped stainless steel pumps
- RVMS series vertical multistage pumps
- SPT & SPU self-priming Trash Pumps
- SCP & SFP close coupled and frame mounted self-priming
- Various other types of pumps under development like
- RCP series NPT close coupled end suction pumps
- C1296 series close coupled ANSI pumps
- Sanitary Centrifugal & Lobe Pumps
- Ball Check Valves
- Mechanical Seals

Apart from the listed above, we offer an array of other products also.
Contact us to get further details



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