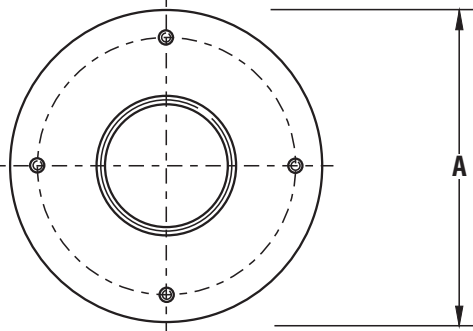
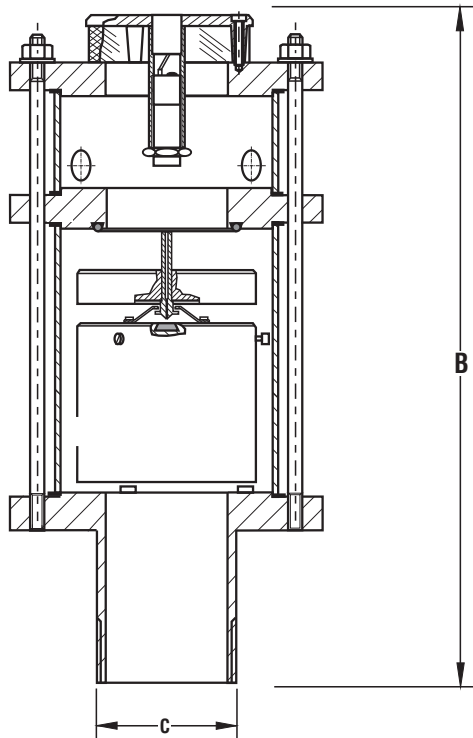
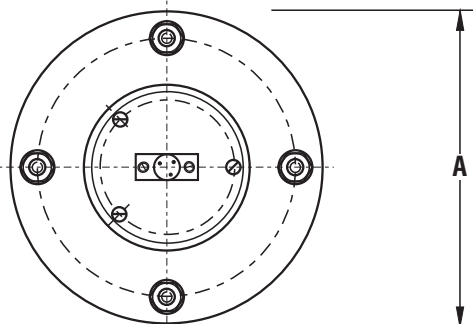


Series RX GENERAL SPECIFICATIONS SCREWED - DN 25 (1")



Type:
Double Orifice Air Valve / Pump Protector

End Connection:
Screwed BSP/ NPT male

Nominal Sizes:
DN25 (1")

Model No's: RX 4011 & 4021
Pressure Ratings bar (psi) PN 40 (580 psi) ANSI #300

Operating Pressure Range - bar (psi):

	Min	Max.
PN40 (580 psi) ANSI #300	0.5 (7.2)	40 (580)

Operating Temperature Range:
4 °C (40 °F) to 80 °C (180 °F)

Acceptable Media:
Potable or strained raw water.

Function:

- i) High volume air discharge from pump volute - pump priming.
- ii) Pressurized air discharge - pump primed.
- iii) Pump protection - pump de-priming.

Standard Factory Tests:

- i) Hydrostatic - 1.5 x max. rated working pressure

OVERALL DIMENSIONS & WEIGHTS

DN mm in.	MODEL No.	PRESSURE RATING	A		B		C	WEIGHT	
			mm	in.	mm	in.		Kg.	lbs
25 1"	025RX 4011 & 4021	PN40 (580 psi) ANSI #300	120	4 3/4	420	16 1/2	1" BSP/NPT	7	17.6

COMPONENT DESCRIPTION & MATERIAL SPECIFICATION SCREWED - DN25 (1")

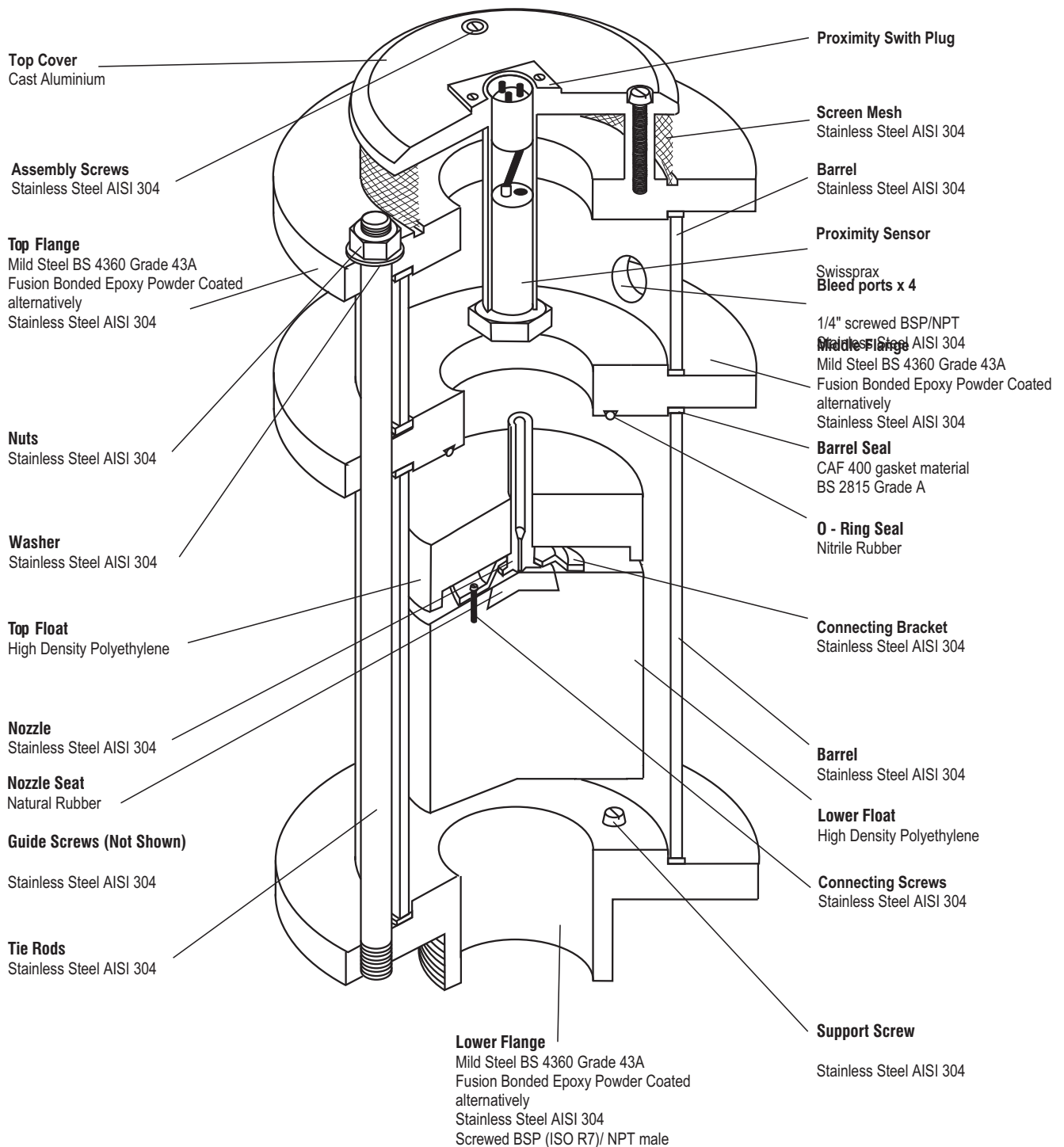
Type:
Series RX - Double Orifice Air Valve / Pump Protector

End Connection:
Screwed BSP (ISO R7)/ NPT Male

Nominal Size:
DN25 (1")

Model No:
RX 4011 & 4021

Pressure Ratings:
PN40 (580 psi) ANSI #300



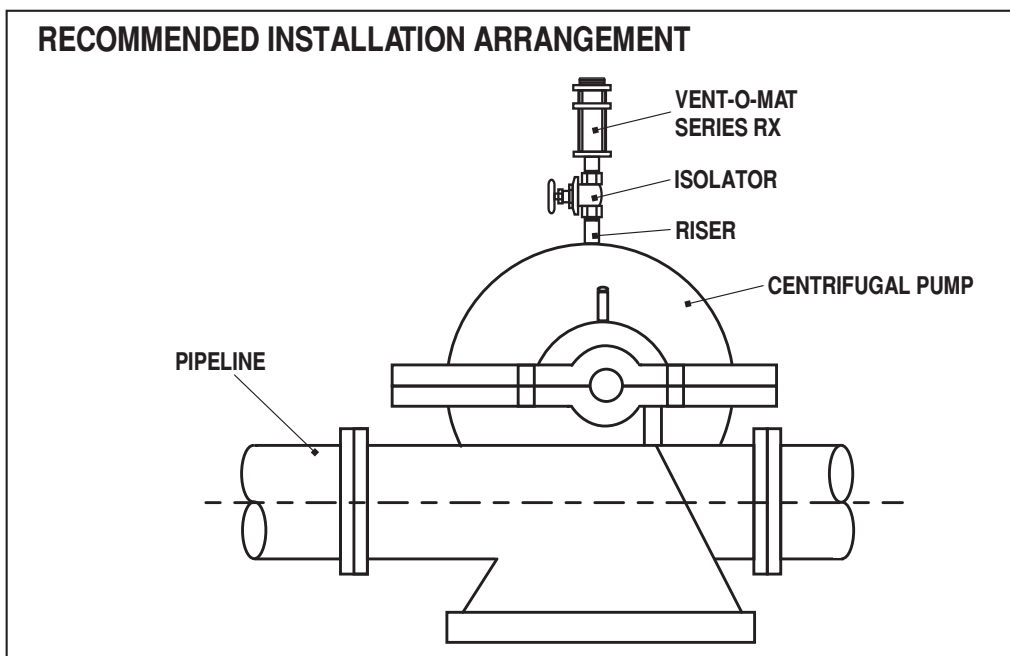
Series RX INSTALLATION

Vent-O-Mat series RX Pump Protector Air Valves are an inexpensive way to protect expensive centrifugal pumps from damage due to loss of prime.

The Vent-O-Mat series RX has three functions namely:

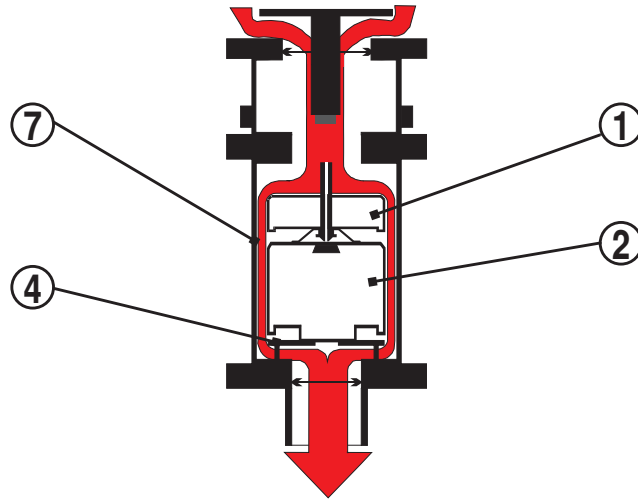
- a) **Automatic Air Release:**
An automatic air release function which allows air from the suction line and volute to be vented.
- b) **Pump Priming:**
The proximity switch senses the water level rising, indicating the pump is primed making the initial electrical circuit to the pump.
- c) **Pump Depriming:**
The proximity switch senses the water level falling, indicating loss of prime and breaks the electrical circuit to the pump.

The Valve must be mounted on the volute of the pump as indicated in the diagram.



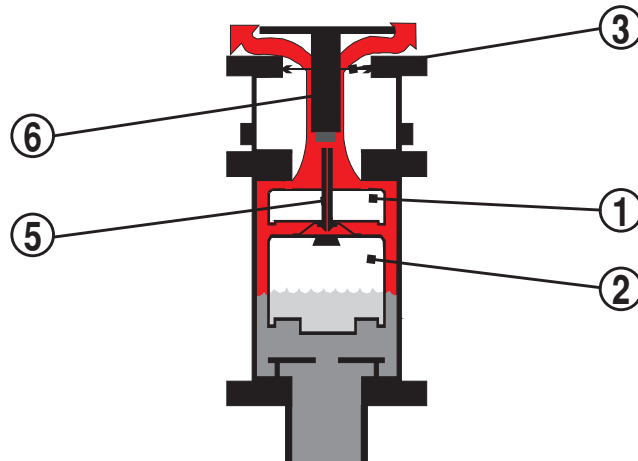
Series RX OPERATION

PUMP DEPRIMING



Liquid drains from the Air Valve Chamber (7) causing the Floats (1) & (2) to gravitate downward, thereby breaking the electrical circuit to the pump, protecting the pump from running dry.

AIR DISCHARGE (PUMP START UP)

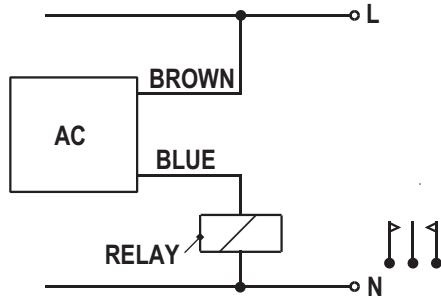


Air discharges through the Large Orifice (3), liquid enters Air Valve, buoying Floats (1) & (2). Electric circuit is made as Small Orifice Nozzle (5) comes within range of Proximity Switch (6) sends a signal indicating that the pump is primed.

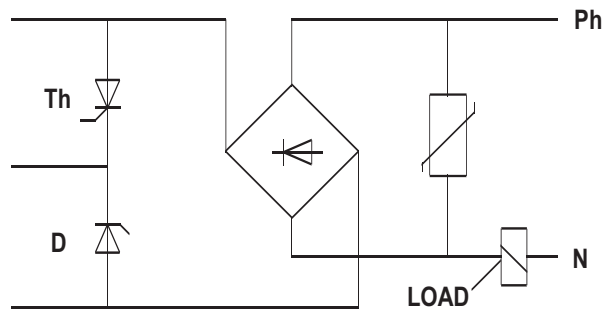
PUMP OPERATING

Valve will discharge disentrained air that accumulates in the Air Valve Chamber (7), through the Small Orifice Nozzle (5).

INDUCTIVE SENSOR TECHNICAL DATA



CONNECTION DIAGRAM



CIRCUIT DIAGRAM

Supply voltage	24 - 250 VAC
Switching current	200 mA
Voltage drop	< 10 V
Quiescent current	≤ 3 mA
Switching frequency	100 Hz
Output	Thyristor
Switching function	Make/Break (N.O./N.O.)
Switchpoint hysteresis	≤ 5 % Sn
Reproducibility	0.5 - 2 % Sn
Status indication	Built - in LED is standard for M18 and larger
Spurious response	Suppressed
Overvoltage protection	Built - in
Temperature range	-25° to 70°C
Temperature drift	≤ 10 % Sn
Switching point	Fixed setting for Sn
Cable: length	2m
Cross - section	2 x 0.5 mm ²
Conductor colours	brown / blue
Degree of protection	IP 67

PROXIMITY SENSORS FOR AC OPERATION

The proximity sensors are two conductor types suitable for 24 VAC to 250 VAC power supply. No modifications are required to operate them with any voltage within this range. The thyristor on the output is controlled by a sweep amplifier. This proximity sensor is supplied via the load which means that a low quiescent current flows in the idle state. The voltage drop of the energized proximity sensor is approximately 9V.

Overvoltage Protection

All AC proximity sensors are protected against overvoltage. Parasitic voltage peaks from the AC supply and inductive loads are limited at the input by a varistor.

AC proximity sensors are increasingly replacing mechanical limit switches. The load can also be connected through the two-wire line directly to the 220V AC supply. All loads such as time-lag relays, supervisory relays or contactors can be switched without problems.

AC proximity sensors can also be operated in series and in certain conditions also in parallel.

**COMPONENT DESCRIPTION & MATERIAL SPECIFICATION
SCREWED - DN25 (1")****Type:**

Series RX - Double Orifice Air Valve / Pump Protector

End Connection:

Screwed BSP (ISO R7)/ NPT Male

Nominal Size:

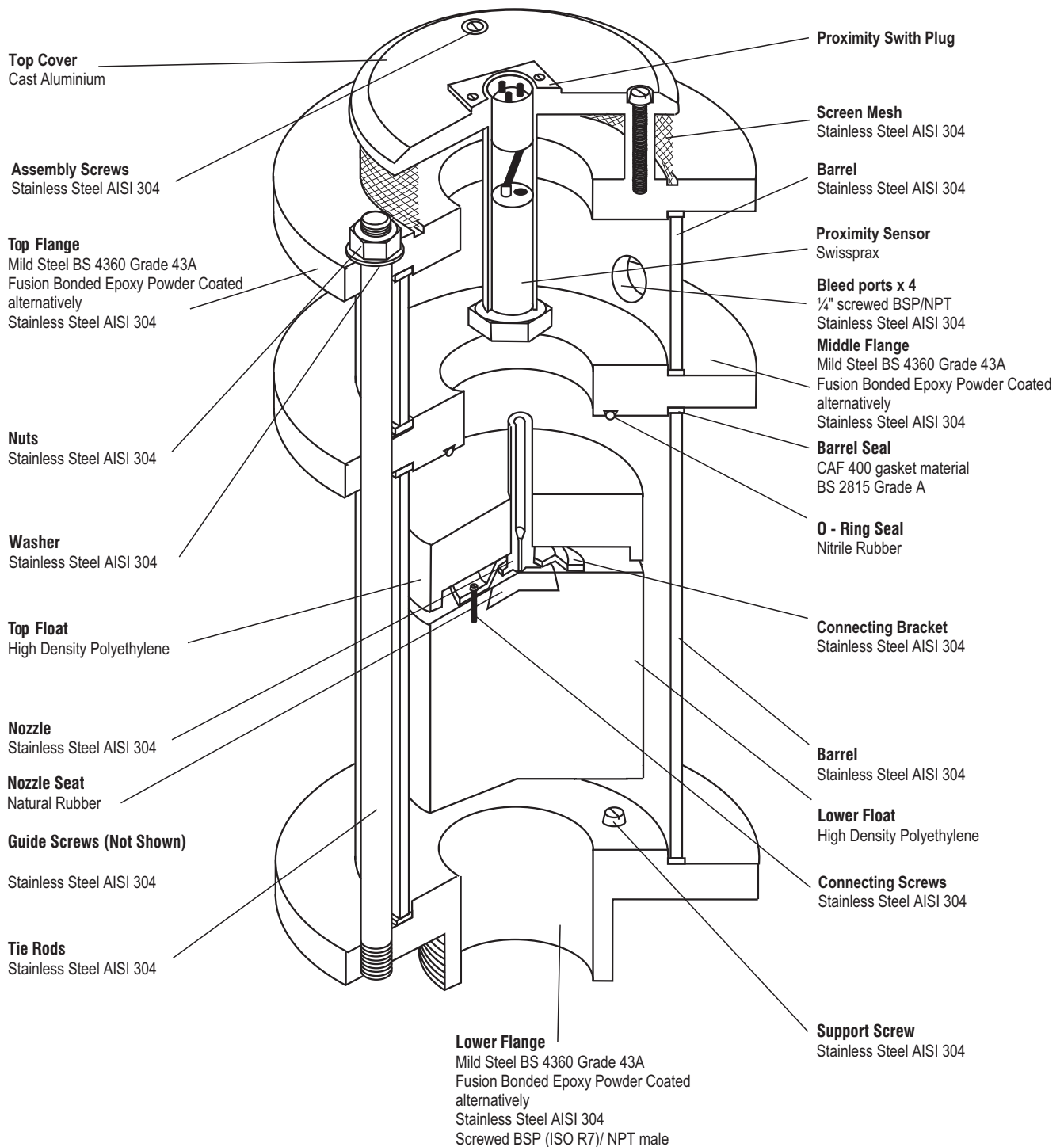
DN25 (1")

Model No:

RX 4011 & 4021

Pressure Ratings:

PN40 (580 psi) ANSI #300



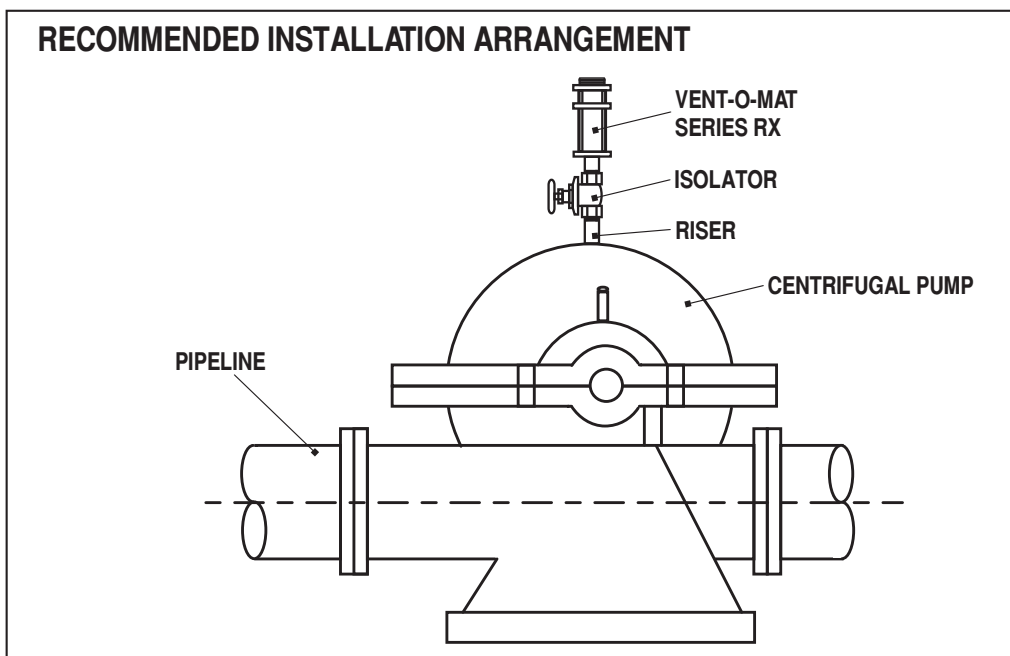
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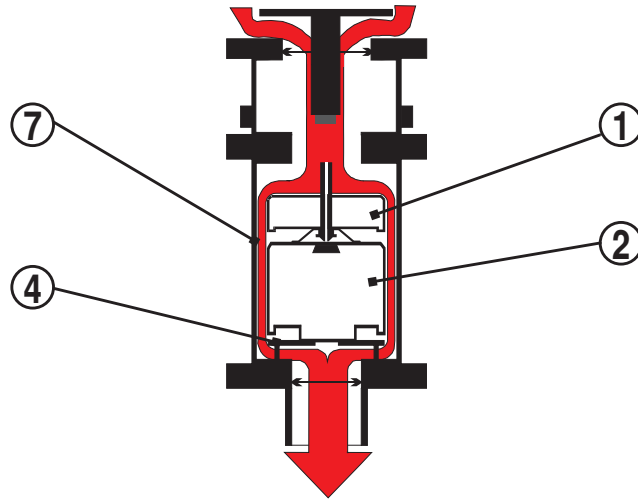
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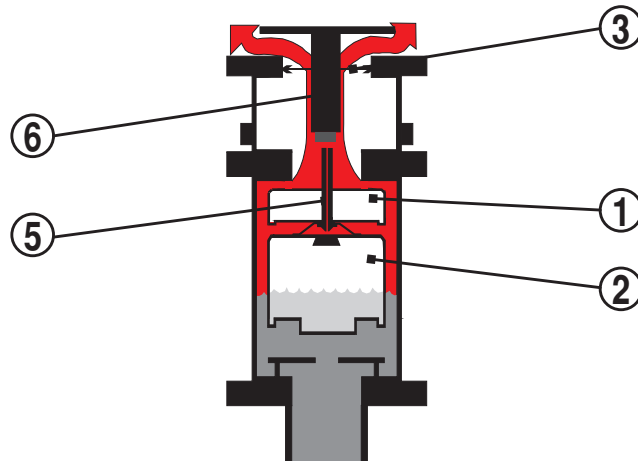
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