

Design Features

Thermax	Competition
Rotary slide valve mechanism	Float - Lever Mechanism
Modulating discharge (Proportional control action)	On-Off discharge
Immersion Tube - Gas tight shutoff & ensures smooth flow of condensate to outlet port	The entire orifice is suddenly exposed to outlet leads to on-off discharge of condensate
Operate effectively even of smaller differential pressure of 0.01 bar	Limiting differential pressure is 0.1 bar.
They are insensitive to back pressure and their operation is not affected by pressure fluctuations	Operation is affected by pressure fluctuation
Can handle sudden surge loads of condensate due to higher body housing dimensions	Can't handle sudden surge load due to compact design
Relatively suitable to handle water hammer condition	Not suitable for water hammer condition.
Ball float failure rate is rare as float is fusion welded and uses no filler metal during welding process.	More prone to failure of ball float as float is welding by TIG welding due to which there is possibility of float failure due to thermal stresses acting on two dissimilar materials.

Applications

Float controlled steam trap is an ideal choice for removal of condensate from process heating equipment such as heat exchangers, storage tank coils, drying cyclinders, reactors, jacketed vessels, ovens etc.

Float controlled steam traps find applications in various process industries such as :

Chemicals & Fertilizers	Dairy	Hotels & Hospitality
Refinery & Petrochemical	Paper	Textile
Edible Oil	Sugar	Tobacco
Rubber & Tyre		

Different Directions of Flow

For installation in vertical pipes in both directions, i.e. From top and bottom.



For installation in horizontal pipes in both directions, i.e. From left and right.

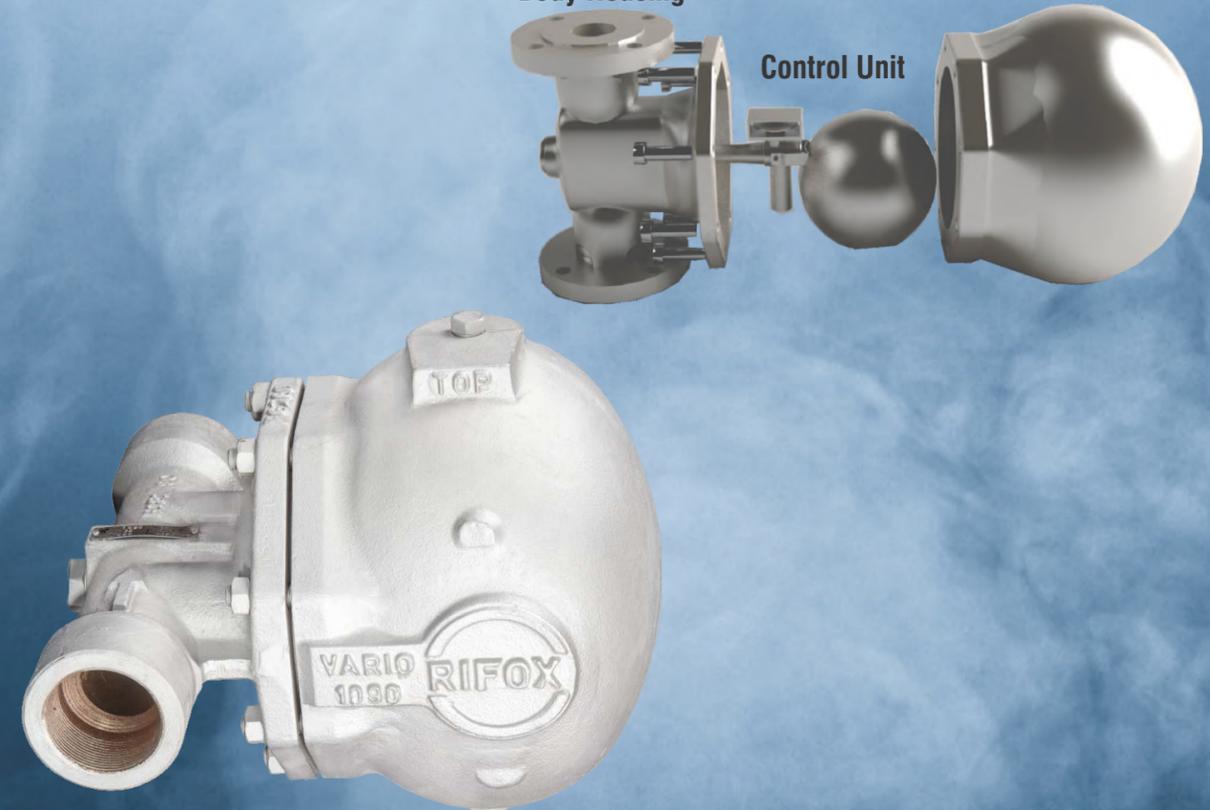


Energy Environment Solutions for Sustainable Growth

Body Housing

Cover

Control Unit



Float Steam Traps

STEAM ENGINEERING

Why Steam Traps ?

A Steam trap is an automatic valve which closes to trap steam & opens to discharge condensate, air & non-condensable gases from the steam system. Float controlled steam trap is an ideal choice for removal of condensate from process heating equipment such as heat exchangers, storage tank coils, drying cyclinders, jackets, reactors, jacketed vessels, ovens etc.



www.thermaxglobal.com

Publication No. :

Ver. 0 - Apr 2019



www.linkedin.com/company/thermax

Registered Office

D-13, MIDC Industrial Area,
R D Aga Road, Chinchwad,
Pune 411019, India

enquiry@thermaxglobal.com

Customer Care: 1800-209-0115

Thermax Business Portfolio

- Heating
- Cooling
- Steam Engineering
- Air Pollution Control
- Chemicals
- Water and Wastewater Solutions
- Solar
- Power

This brochure presents only some of our products and we reserve the right to amend any product details without notice. The photographs used in the brochure are indicative and may not match the actual plant.

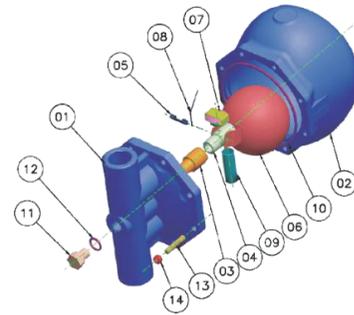
© Thermax Limited, 2019

Technical Specifications

Models

Exploded View

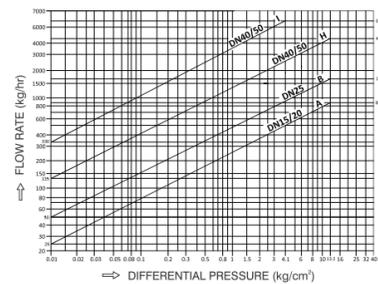
VARIO 1090



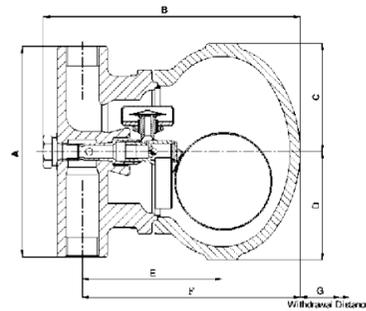
Materials

No.	Component	Material	Specification
01	Housing screwed	Cast Iron	IS 210 Gr. FG 260
02	Body housing	Cast Iron	IS 210 Gr. FG 260
03	Drain support tube	St. Steel	ASTM A276 Type 304
04	Drain tube	St. Steel	ASTM A276 TYPE 304
05	Rotary slide valve	St. Steel	ASTM A276 TYPE 440B
06	Float	St. Steel	ASTM A240 Type 304
07	Capsule Assembly	St. Steel	SS 304
08	Ventilation nozzle	St. Steel	SS 304
09	Immersion tube	St. Steel	ASTM A312 Type 304
10	Housing gasket (SWG)	St. Steel + Graphite	ASTM A240 Type 304 + Graphite
11	Supporting screw	St. Steel	ASTM A276 TYPE 304
12	Supporting screw gasket	St. Steel	ASTM A276 Type 304
13	Stud	St. Steel	ASTM A193 Grade B7
14	Hex. Nut	St. Steel	ASTM A194 Grade 2H

Capacity Chart



Dimension & Weight



Size	A	B	C	D	E	F	G	Wt.
DN 15 (1/2")	121	210	85	85	120	190	120	7.8
DN 20 (3/4")	121	210	85	85	120	190	120	7.8
DN 25 (1")	145	280	110	110	160	235	140	14.0
DN 40 (1.1/2")	270	330	145	145	190	290	180	27.0
DN 50 (2")	300	330	145	145	190	290	180	28.0

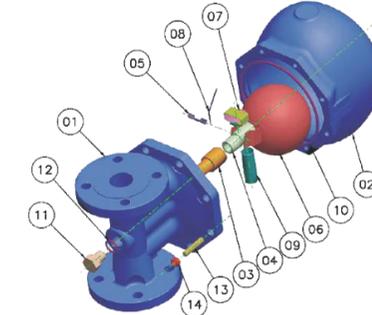
Body Design Conditions

Parameter	Screwed End
Maximum Operating Pressure - PMO (kg/cm ²)	13.2
Maximum Operating Temperature - TMO (°C)	220
Hyd. Test (kg/cm ²)	26.4

Models

Exploded View

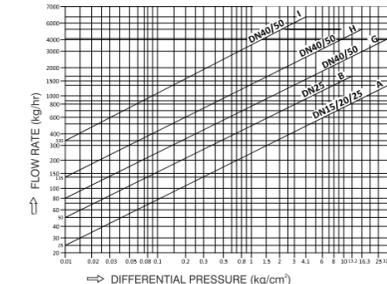
VARIO 1290



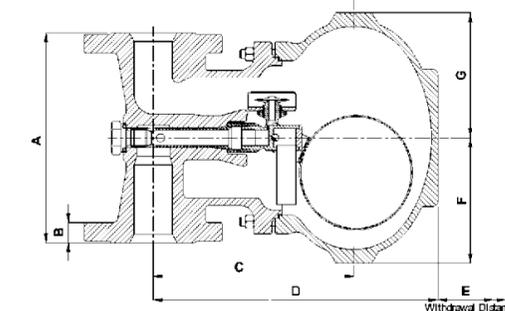
Materials

No.	Component	Material	Specification
01	Housing Flanged	Cast Steel	ASTM A216 Gr. WCB
02	Body housing	Cast Steel	ASTM A216 Gr. WCB
03	Drain support tube	St. Steel	ASTM A276 Type 304
04	Drain tube	St. Steel	ASTM A276 TYPE 304
05	Rotary slide valve	St. Steel	ASTM A276 TYPE 440B
06	Float	St. Steel	ASTM A240 Type 304
07	Capsule Assembly	St. Steel	SS 304
08	Ventilation nozzle	St. Steel	SS 304
09	Immersion tube	St. Steel	ASTM A312 Type 304
10	Housing gasket (SWG)	St. Steel + Graphite	ASTM A240 Type 304 + Graphite
11	Supporting screw	St. Steel	ASTM A276 TYPE 304
12	Supporting screw gasket	St. Steel	ASTM A276 Type 304
13	Stud	St. Steel	ASTM A193 Grade B7
14	Hex. Nut	St. Steel	ASTM A194 Grade 2H

Capacity Chart



Dimension & Weight



Size	A	B	C	D	E	F	G	Wt.
DN 15 (1/2")	150	18.5	180	240	130	115	115	13.0
DN 20 (3/4")	150	18.5	180	240	130	115	115	14.5
DN 25 (1")	160	18.5	185	245	130	115	115	15.0
DN 40 (1.1/2")	230	22.6	225	320	180	145	145	31.0
DN 50 (2")	230	22.6	225	320	180	145	145	32.0

Body Design Conditions

Parameter	Flanged
Maximum Operating Pressure - PMO (kg/cm ²)	32.6
Maximum Operating Temperature - TMO (°C)	425
Hyd. Test (kg/cm ²)	65.2