

TECHNICAL DATASHEET

Fenix hydrodynamic steam trap

VFP

Process · **ANSI / PN flanges** · ½" to 1"

• No moving parts

• 15-year warranty

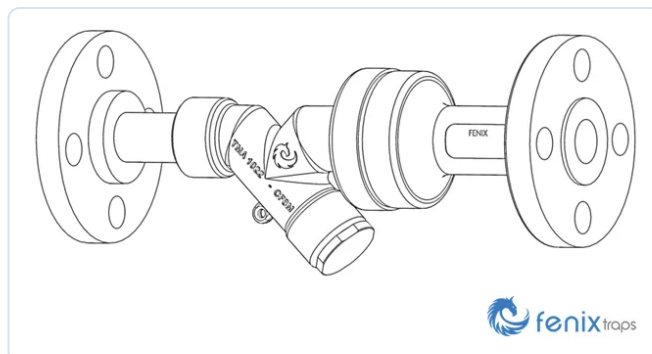
• Fenix-made strainer

The VFP (Variable Flanged Process) is designed for process applications. Each trap is designed for its location with flanges to match the system, in a standard length or custom up to 500 mm (20"). A high integrity strainer is part of the design, and the body can be removed for maintenance without removing the whole assembly. Welded and tested to ASME standards.

Connection	ANSI or PN flanges · ANSI 150–1500 · PN16–PN100
Sizes	½" (DN15) · ¾" (DN20) · 1" (DN25)
Strainer	40 mesh stainless steel with 10 mesh reinforcement
Drain valve	Optional (recommended up to 20 barg)
Dimension A	Custom up to 500 mm (19.7 in).
Reference standard	ISO 6552:1980 · ASME
Warranty	15 years on trap and strainer

The drain valve is an accessory that allows easy cleaning of the strainer. It is recommended for traps operating at no more than 20 barg.

Pressure and temperature limits depend on the flange standard and rating. See the curves and tables in the Operating range section. Trap welded and tested to ASME standards.

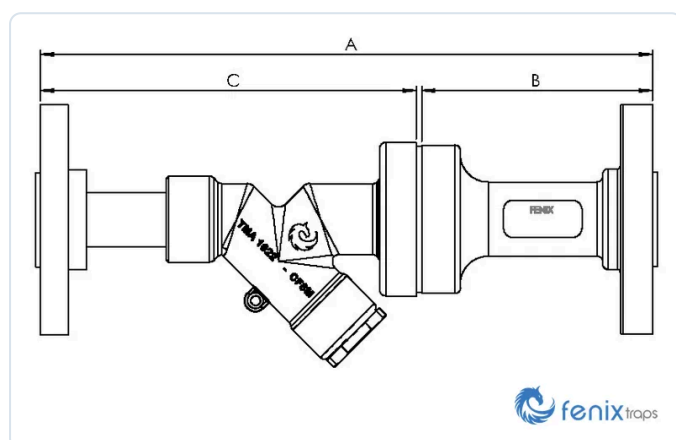


01 Benefits

No moving parts Works on a hydrodynamic principle with sized venturis. There is no disc, float or bimetal to wear out.	Designed for its location ANSI or PN flanges of any rating, in a standard length or custom up to 500 mm.	Removable body High integrity strainer. The body comes out for maintenance without removing the whole assembly.	Welded and tested to ASME Manufactured and tested to ASME standards.
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Typical applications: Shell and tube heat exchangers · Air heaters · Calorifiers and reboilers · Cooking vessels

02 Dimensions

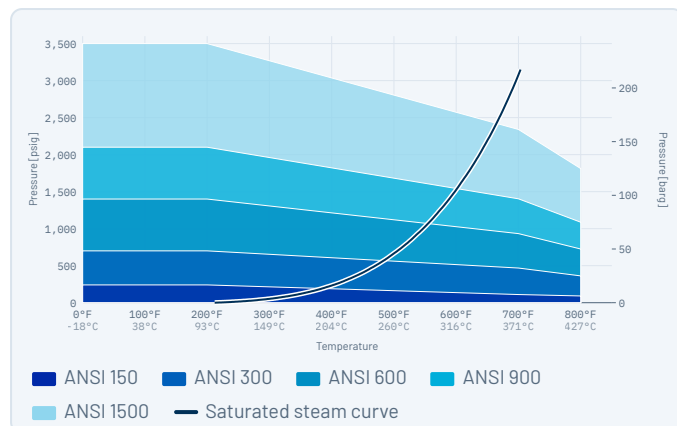


SIZE	A **	B	C	APPROX. WEIGHT *
½" (DN15)	12.00 in 305 mm	4.53 in 115 mm	7.40 in 188 mm	6.8 lb 3.1 kg
¾" (DN20)	12.00 in 305 mm	4.53 in 115 mm	7.40 in 188 mm	9 lb 4.1 kg
1" (DN25)	12.00 in 305 mm	4.53 in 115 mm	7.40 in 188 mm	9.7 lb 4.4 kg

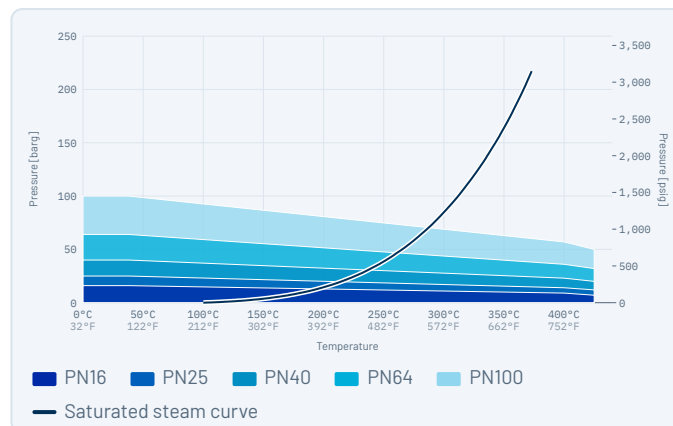
* Weight with ANSI 300 flanges. ** Custom up to 500 mm.

03 Operating range

ASME (ANSI)



DIN (PN)

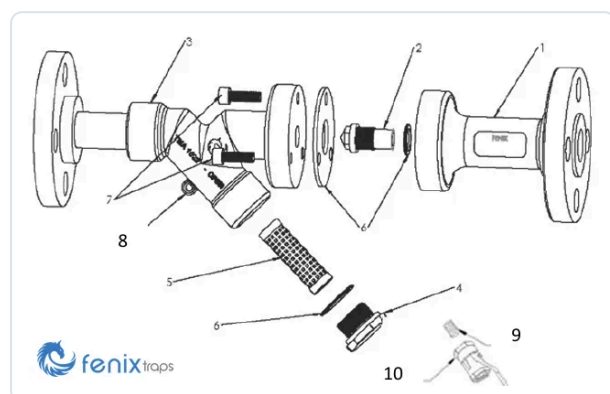


ASME (ANSI)	PMA	TMA	PMO	TMO
150	240 psig at 200 °F	800 °F at 91 psig	240 psig at 200 °F	700 °F at 110 psig
300	700 psig at 200 °F	800 °F at 362 psig	700 psig at 200 °F	700 °F at 468 psig
600	1,400 psig at 200 °F	800 °F at 725 psig	1,400 psig at 200 °F	700 °F at 933 psig
900	2,100 psig at 200 °F	800 °F at 1,087 psig	2,100 psig at 200 °F	700 °F at 1,403 psig
1500	3,500 psig at 200 °F	800 °F at 1,812 psig	3,500 psig at 200 °F	700 °F at 2,340 psig

DIN (PN)	PMA	TMA	PMO	TMO
PN16	16 barg at 38 °C	425 °C at 7 barg	16 barg at 38 °C	400 °C at 9 barg
PN25	25 barg at 38 °C	425 °C at 12 barg	25 barg at 38 °C	400 °C at 14 barg
PN40	40 barg at 38 °C	425 °C at 20 barg	40 barg at 38 °C	400 °C at 23 barg
PN64	64 barg at 38 °C	425 °C at 32 barg	64 barg at 38 °C	400 °C at 36 barg
PN100	100 barg at 38 °C	425 °C at 50 barg	100 barg at 38 °C	400 °C at 57 barg

Curves drawn from the table points (PMA, TMO and TMA of each rating).

04 Components and materials



NO.	PART	MATERIAL
1	Trap body	304L stainless steel
2	Inlet removable nozzle	316 stainless steel
3	Strainer	CF8M cast stainless steel
4	Strainer cap	304L stainless steel
5	Strainer filter	40 mesh stainless steel with 10 mesh reinforcement
6	Gaskets	Graphite with stainless steel reinforcement
7	Bolts	Carbon steel
8	Loop ¹	—
9	Nipple ²	304L stainless steel
10	Drain valve ²	304L stainless steel

¹ For an identification tag. ² Optional accessory for easy strainer cleaning, recommended up to 20 barg.

Spare parts

PART	CODE
Cap gasket	G-4
Flange gasket	G-8
Nozzle gasket	G-3

05 Installation and maintenance

- Install the trap following the flow direction arrow marked on the body.
- Clean and blow down the pipework before installation to remove weld slag and debris.
- Isolation valves upstream and downstream of the trap are recommended to ease maintenance.
- The nozzle is sized for each application: state pressure, back pressure and condensate load when ordering.
- The trap body can be removed for maintenance without removing the whole assembly from the pipework. The optional drain valve allows periodic strainer cleaning.

Safety: before any maintenance, isolate the trap, depressurise the line and let the equipment cool down.

Steam traps must not be installed on paper machine dryer cylinders or Yankee dryers. For these applications, contact Pesint for a properly designed steam and condensate system.

Quality and traceability

Every trap is hydrostatically tested and inspected with dye penetrant. Casting and machining lots are recorded, and each trap is identified by serial number and QR code. Manufactured under an ISO 9001 quality management system.

06 Information for quotation

To size the nozzle and confirm the model, please state:

1. Model, connection and size
2. Operating pressure and maximum steam pressure
3. Back pressure or discharge type (atmosphere or return)
4. Minimum and maximum condensate load (kg/h or lb/h)
5. Equipment or application (drainage, tracing, heat exchanger, etc.)
6. Options: drain valve, special length, flange standard and rating

Specification text

Suggested text for engineering specifications:

Fenix VFP hydrodynamic steam trap, no moving parts, operating with venturis sized for the application. 304L body, 316 nozzle and CF8M cast strainer. With integrated Fenix strainer (40 mesh stainless steel with 10 mesh reinforcement). Connection: ANSI or PN flanges. Size: ½" (DN15) - ¾" (DN20) - 1" (DN25). Pressure and temperature limits per the specified flange rating (ANSI 150-1500 or PN16-PN100). 15-year warranty.

Contact: commercial@pesint.com • andres.alarcon@pesint.com • rob.williams@pesint.com

07 Fenix strainer, designed and made by Fenix

15

year warranty on trap and strainer

Protects the nozzle and venturis

Rust, weld slag and scale carried by the steam are among the most common causes of trap failure. The strainer holds them back before they reach the nozzle.

Robust by design

High integrity strainer: CF8M cast body and 40 mesh stainless steel screen with 10 mesh reinforcement. 304L stainless steel cap.

Cleaning without removing the trap

The screen comes out through its cap; the trap body stays installed in the line.

Optional drain valve

An accessory that allows easy strainer cleaning: when opened, line pressure blows out the sediment held in the screen without opening the cap. Recommended for traps operating at no more than 20 barg.

Need to select the right trap for your plant?

Our engineers review your operating conditions and recommend the right model, connection and size.

fenixtraps.com