

TECHNICAL DATASHEET

Fenix hydrodynamic steam trap

IVP-SC

Process · **NPT / BSP** thread · $\frac{3}{4}$ " and 1"

• No moving parts

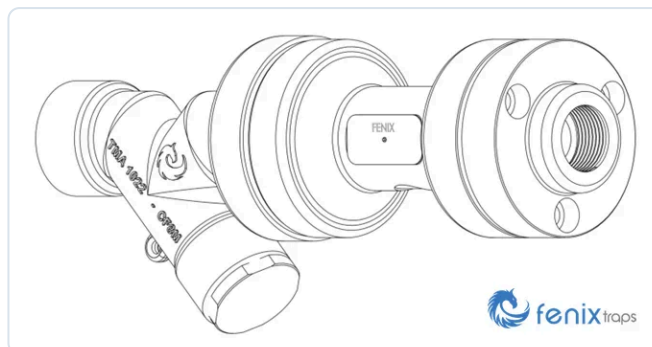
• 15-year warranty

• Fenix-made strainer

The IVP (Integrated Variable Process) is designed for process applications and supplied with a screwed connection. A high integrity strainer is part of the design. The body sits between the strainer and the downstream connector, giving access to the nozzle without removing the assembly from the pipework.

Connection	NPT or BSP thread
Sizes	$\frac{3}{4}$ " (DN20) · 1" (DN25)
Strainer	40 mesh stainless steel with 10 mesh reinforcement
Drain valve	Optional (recommended up to 20 barg)
Reference standard	ISO 6552:1980
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.



PMA 1,450 psig 100 barg Maximum allowable pressure	TMA 1,022 °F 550 °C Maximum allowable temperature	PMO 580 psig 40 barg Recommended maximum operating pressure	TMO 932 °F 500 °C Maximum operating temperature
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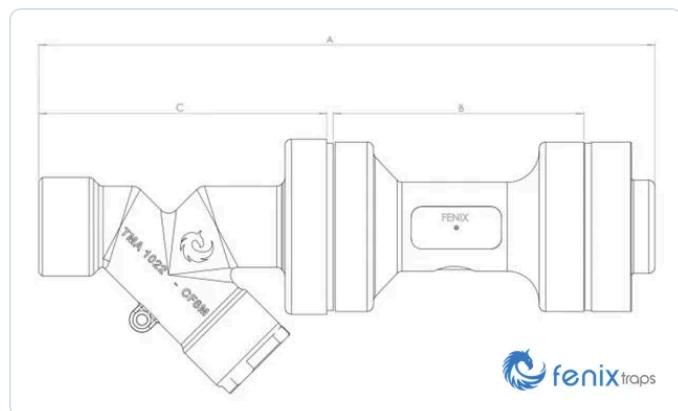
Operating parameters per ISO 6552:1980. Hydraulic cold tested to 2,175 psig (150 barg).

01 Benefits

No moving parts Works on a hydrodynamic principle with sized venturis. There is no disc, float or bimetal to wear out.	Integrated strainer High integrity CF8M cast strainer with reinforced 40 mesh screen.	Direct nozzle access The body sits between the strainer and the downstream connector, so the nozzle is reached without removing the assembly.	Full load range Works from minimum to maximum process load.
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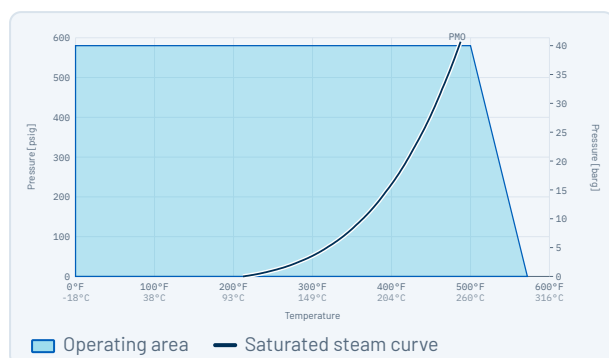
Typical applications: Shell and tube heat exchangers · Air heaters · Calorifiers and reboilers · Cooking vessels

02 Dimensions



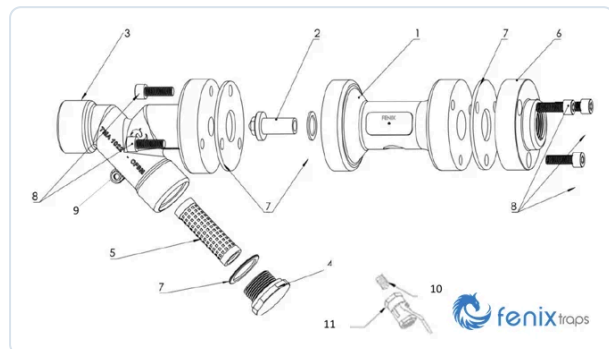
SIZE	A	B	C	APPROX. WEIGHT
¾" (DN20)	11.02 in 280 mm	4.60 in 117 mm	5.07 in 129 mm	9.5 lb 4.3 kg
1" (DN25)	11.02 in 280 mm	4.60 in 117 mm	5.07 in 129 mm	9.2 lb 4.2 kg

03 Operating range



The shaded area shows the pressure and temperature conditions in which the trap can operate. The saturated steam curve is for reference: in saturated steam service the operating point lies on it.

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	Connector flange	304L stainless steel
7	Gaskets	Graphite with stainless steel reinforcement
8	Bolts	Carbon steel
9	Loop ¹	—
10	Nipple ²	304L stainless steel
11	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
Strainer filter	F - L
Connector flange gasket	G - 8
Cap gasket	G - 4
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 sits between the strainer and the downstream connector, so the nozzle is reached without removing the assembly from the pipework. The optional drain valve makes strainer cleaning easy (recommended up to 20 barg).

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 IVP-SC hydrodynamic steam trap, no moving parts, operating with venturis sized for the application. 304L body and connector, 316 nozzle and CF8M cast strainer. With integrated Fenix strainer (40 mesh stainless steel with 10 mesh reinforcement). Connection: NPT or BSP thread. Size: $\frac{3}{4}$ " (DN20) - 1" (DN25). PMA 1,450 psig (100 barg); PMO 580 psig (40 barg). 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