

GREEN SAVER

PRODUCT DATA SHEET

Steam ESCO Limited

Office Unit B1
Clonard Village
Wexford Y35 FD88
Ireland

Tel: +353 53 914 3638
www.steamesco.com

VAT: IE3271546QH / Company Reg Number: 539921

GREEN SAVER STEAM TRAPS

PRODUCT DATA SHEET

Why Green Saver?	3
International Standards for Steam Traps	4
Green Saver Threaded Unit	5
Green Saver Flange-to-Flange Unit	6
Green Saver Flanged Unit	7
Green Saver Tracer Unit	8
Green Saver Clean Steam Unit	8

WHY GREEN SAVER?

Overview

The Steam ESCO Green Saver is a precision engineered and manufactured Venturi nozzle steam trap, guaranteed for performance and reliability. It is fabricated from solid stainless steel stock, and is resistant to most corrosive atmospheres.*

Advantages include increased productivity due to constant temperature and thus increased throughput, lower energy consumption. It has no moving parts to wear out, eliminating the need to maintain an inventory of spare parts and lowering maintenance time.



Applications

The Steam ESCO Green Saver is one of the most efficient traps available today. Its design promotes the efficient removal of condensate from the steam system while effectively preventing the escape of live steam.

It is suitable for most industrial and commercial applications involving saturated steam. In addition, the Green Saver has no moving parts to wear out.

It can be installed in areas that are not accessible during normal operations with the assurance that the trap will perform as designed for over 15 years.

PHYSICAL DATA

- Material: 303 Stainless Steel, ASTM A581/A582.
- Tensile Strength: 6,207 barg (90,000psi)
- Hardness: 145 BHN, B76
- *Optional:* 316 Stainless Steel, ASTM A276, tensile strength 5,517 barg (80,000psi), hardness 142 BHN, B78
- Operating Pressure:
 - ◆ to 17.2 barg (250 psig) threaded
 - ◆ to 100 barg (1450 psig) flange/socket weld
- Operating Temperature: to 500°C (932°F)
- Capacity: Design capacities exceeding 25,000 kg/h (55,000 lbs/h)
- Sizes: 15mm to 100mm
- Thread: BSP, NPT, ISO to order
- Flange: Standard PN/ASME



Features

- Manufactured from long lasting stainless steel
- Guaranteed to last for a minimum of 15 years
- Resistant to most corrosives
- Compact size makes installation simple and attractive
- Can be installed both horizontally and vertically
- Custom engineered for each application

INTERNATIONAL STANDARDS

FOR STEAM TRAPS

User and designer have full knowledge of steam traps characteristics and that it meets legislation requirements. Steam ESCO's products fully comply with the requirements of the European Pressure Equipment Directive 2014/68/EU.

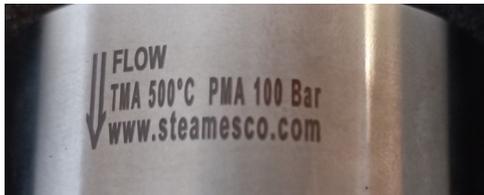
Steam Trap Material Certification

Trap bodies are precision machined from stainless steel bar stock and are traceable.

Material certification type 3.1 according to BS EN 10204:2004 (E) are available on request.

Shell material designation:

Nominal Pressure (PN), Maximum operating pressure



Other Standards of lesser relevance

- Face-to-face dimensions for flanged automatic steam traps EN 26554: 1991 ISO 6554: 1980
- Face-to-face dimensions for steam traps DN15, DN20, DN25, DN32, DN40, DN50
- Classification of automatic steam traps ISO 6704:1982, EN 26704:1991
- Methods for determination of discharge capacity of automatic steam traps ISO 7842:1988, EN27842:1991
- Production and performance characteristic tests for automatic steam traps ISO 6848:2015, EN:2694:2016

MARKING OF AUTOMATIC STEAM TRAPS

- BS EN ISO 6553:2017 requires certain minimum basic marking and identification of steam traps.
- To conform to this standard, all traps should be marked with the following:
 - ◆ Manufacturer's name and/or trademark
 - ◆ Maximum allowable pressure (PMA)
 - ◆ Maximum allowable temperature (TMA)
 - ◆ Indication of flow direction
 - ◆ Shell material designation
 - ◆ Nominal size
 - ◆ Nominal pressure
- Optional Markings:
 - ◆ Maximum operating pressure

GREEN SAVER THREADED UNIT

Technical Specifications

The Green Saver Threaded Unit is suitable for lower pressure, low to intermediate condensate flow, for both drainage and process applications.

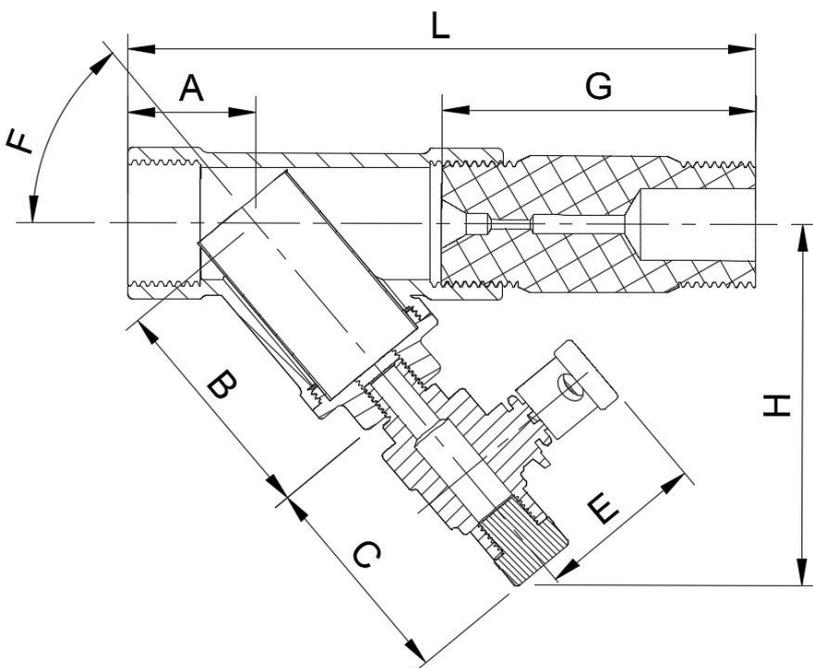
PHYSICAL DATA

- Supplied with Y-Strainer and Blow Down Valve
- Material: Trap Body 303 Stainless Steel
- Operating Parameters:
 - ◆ PMA 17.2bar (250psi)
 - ◆ TMA 208°C (406°F)
- Thread to order BSP, NPT, ISO7/1 and ISO228/1 and any other specifications as required



As the largest standard threaded Green Saver is 25mm, installation in existing steam systems is simple and fast.

The 25mm Green Saver can replace traditional mechanical traps that are 50mm and larger, thus allowing trap assembly to fit into smaller spaces.



Serial Number	ST1500	ST2000	ST2500
DN	15	20	25
L (mm)*	125	145	155
H (mm)*	81	100	104
G (mm)	72	82	82
A (mm)	22	23	28
B (mm)	53	67	78
F (degrees)	45	45	45
C (mm)*	52	52	59
E (mm)*	42	42	42
Trap Unit Weight	0.16kg	0.34kg	0.52kg
Strainer + bdv weight	0.4kg	0.52kg	0.84kg

* Dimensions may vary due to threaded connection

Suitable Applications:

- ◆ Suitable for BSP, NPT, ISO7/1 and ISO228/1 threaded connection (other specifications as required).
- ◆ Operates at lower pressures up to 17.2 barg.
- ◆ Suitable for line drainage and process applications.
- ◆ Suitable for low and intermediate condensate flow rates up to 5,000kg/h.

GREEN SAVER FLANGE-TO-FLANGE

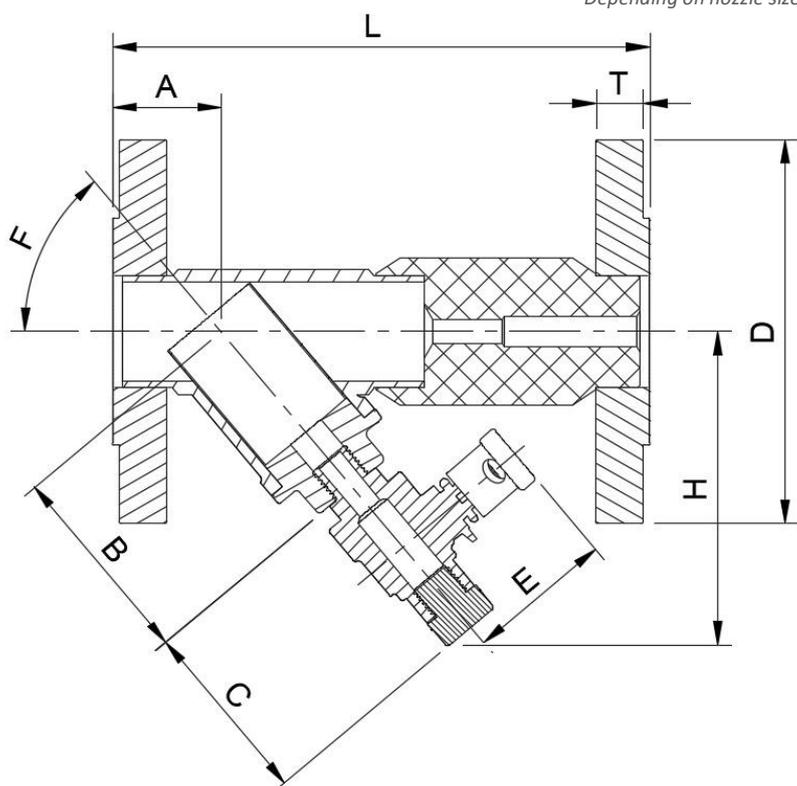
Technical Specifications

The Green Saver Flange to Flange Unit is suitable for low and intermediate pressure, low and intermediate condensate flow, for both drainage and process applications. It is designed to be installed as a like for like retrofit of the standard traditional flanged traps.

PHYSICAL DATA

- Material: Trap Body 303 Stainless Steel, Strainer 316A Stainless Steel, Strainer mesh 316 Stainless steel 0.5mm or 0.25mm mesh*
- Operating Parameters:
 - ◆ PMA 40bar (580psi)
 - ◆ TMA 252°C (485°F)

*Depending on nozzle size.



Suitable Applications:

- ◆ Suitable for all standard PN / ASME flanged application
- ◆ Operates at lower and intermediate pressure up to 40 barg
- ◆ Suitable for line drainage and process applications
- ◆ Suitable for low and intermediate condensate flow rates up to 17,000kg/h
- ◆ Designed to fit standard traditional steam trap dimensions, but bespoke units can be made to fit existing flange to flange dimensions.

Serial Number	W1500	W2000	W2500	W3200	W4000	W5000
DN	15	20	25	32	40	50
L (mm)	150	150	160	230	230	230
D (mm)	95	105	115	140	150	165
H* (mm)	82	87	101	105	117	124
T (mm)	12	14	14	16	15	17
A (mm)	27	27	31	37	42	48
F (degrees)	50	50	50	50	50	50
B (mm)	42	49	68	75	86	99
C* (mm)	57	57	57	57	57	57
E (mm)	42	42	42	42	42	42
Bolt size/Qty	M12 x 4	M12 x 4	M12 x 4	M16 x 4	M16 x 4	M16 x 4
Unit Weight	2.2kg	3kg	3.5kg	5.5kg	7kg	9.5kg

* Dimensions may vary due to threaded connection

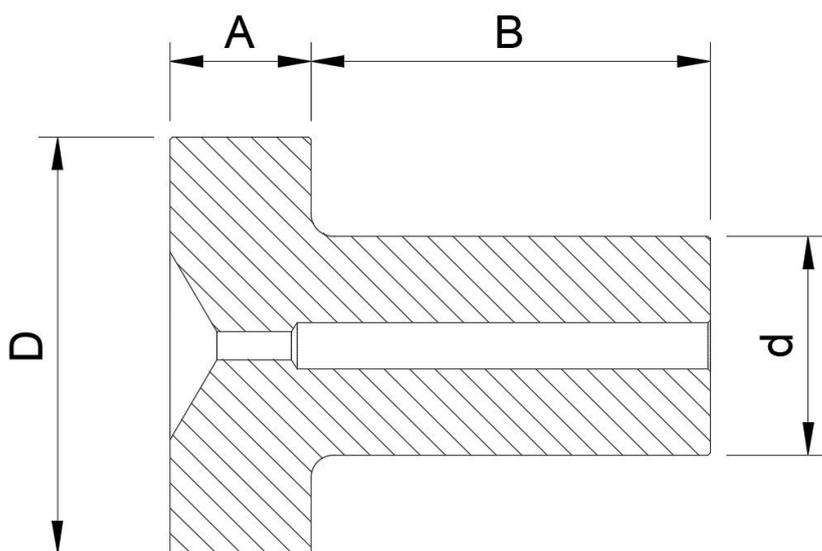
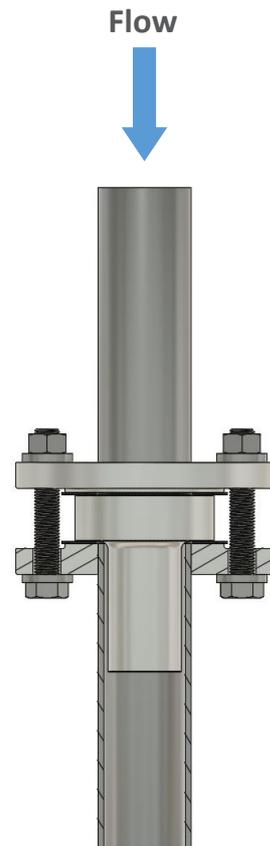
GREEN SAVER FLANGED UNIT

Technical Specifications

The Green Saver Flange Unit is suitable for high pressure, high condensate flow process applications and is designed to be installed between two flanges.

PHYSICAL DATA

- Material: Trap Body 303 Stainless Steel
- Operating Parameters:
 - ◆ PMA 100bar (1450psi)
 - ◆ TMA 500°C (940°F)



Serial Number	F1500	F2000	F2500	F4000	F5000	F6500	F8000	F10000
DN	15	20	25	40	50	65	80	100
A (mm)	20	20	20	30	30	30	30	40
B (mm)	32	44	62	84	84	85	92	100
D (mm)	40	50	60	75	90	105	127	158
d (mm)	13	16	21	36	47	56	73	97
Unit Weight	0.2kg	0.35kg	0.6kg	1.5kg	2.5kg	3.8kg	4.8kg	8.2kg

Suitable Applications:

- ◆ Suitable for all standard PN / ASME flanged application.
- ◆ Operates at high pressure up to 100 barg.
- ◆ Suitable for process applications, and higher condensate flow rates between 2,500kg/h to 25,000kg/h.
- ◆ Any face to face length can be accommodated with a spool piece.
- ◆ On low capacity applications a Y-Strainer with appropriately sized mesh basket must be fitted upstream of our flanged units.

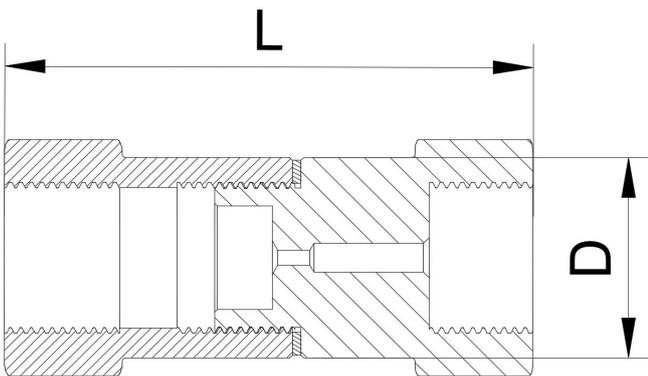
GREEN SAVER TRACER UNIT

Technical Specifications

With venturi nozzle traps, tracer lines have better heat transfer at 75m than with traditional traps at 45m.

PHYSICAL DATA

- Material: Trap Body 303 Stainless Steel, Filter Mesh 316 Stainless Steel 0.25mm
- Operating Parameters:
 - ◆ PMA 17.2bar (250psi)
 - ◆ TMA 400°C (752°F)



Serial Number	TT1500	TT2000
DN	15	20
D	35mm	35mm
L	80mm	90mm

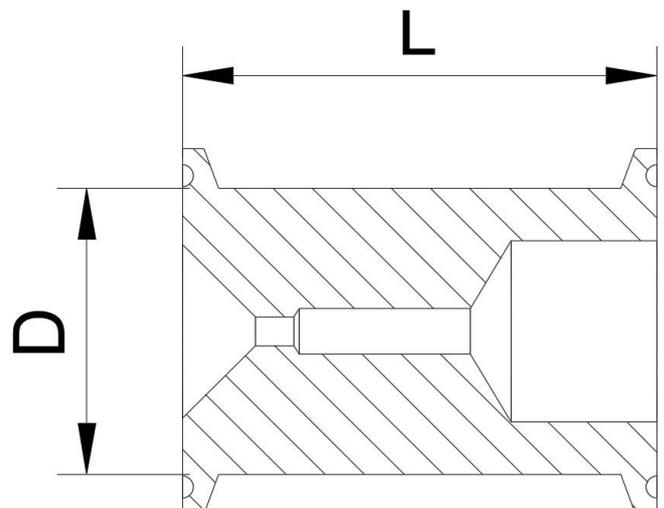
GREEN SAVER CLEAN STEAM UNIT

Technical Specifications



PHYSICAL DATA

- Material: Trap Body 316 Stainless Steel
- Operating Parameters:
 - ◆ PMA 10bar (145psi)
 - ◆ TMA 200°C (392°F)
- Clamp and fittings: Tri-Clover



Serial Number	CS2000	CS2500
DN	20	25
D	19mm	39.5mm
L	68mm	65mm
Width	To Suit Fittings	