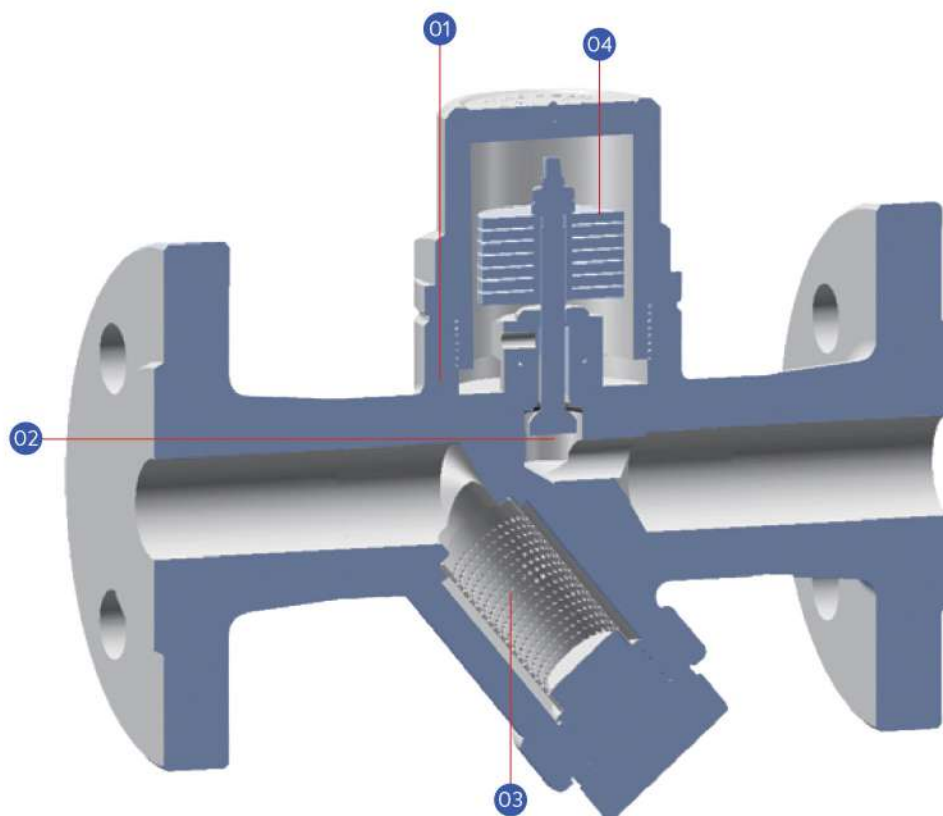


BIMETALLIC STEAM TRAP

Bimetallic steam traps offer high subcooling capability, long service life, excellent energy efficiency, strong resistance to water hammer, and a clean, Compact design. They are commonly used in heating systems and steam transportation pipelines.



1. High-Strength Corrosion Resistance

Constructed with A105 material, the design takes into account corrosion allowance, shell wall thickness, pressure, and temperature ratings for long-term durability.

2. Linear Sealing Closure System

The trap features a unique linear sealing mechanism with a micron-level precision valve seat and core, ensuring reliable closure and effective steam sealing.

3. Built-in Filtering Device

Prevents pipeline impurities from entering the valve, supports consistent operation, and protects internal components from water hammer damage.

4. Imported Bimetal

Uses high-quality bimetallic sheets imported from the U.S. to ensure accurate bending performance, adjustable temperature control, and precise thermal response.

Structural Features

The body and bonnet of the ValveWerkz bimetallic steam trap are made from A105 material. The condensate discharge temperature is adjustable and is factory-set between 120°C and 130°C.

This steam trap uses a line-sealed shut-off system that eliminates original steam leakage and noise. It offers excellent air discharge capability, maximises the sensible heat of condensate water, and provides strong energy-saving performance.

The bimetallic steam trap operates based on the temperature difference between steam and condensate. When condensate remains in the pipeline due to high temperature, the energy to be released gradually lowers. As the temperature drops, the bimetal deforms, causing the valve seat to open and discharge the condensate.

Users can manually adjust the discharge temperature of the trap to suit seasonal conditions and operational requirements.



Material and Performance Specifications

The body and bonnet of the bimetallic steam trap are made from ASTM A105. The bimetal element is manufactured from imported materials, and all internal components are made of stainless steel with an integrated filtering device

- Nominal pressure: PN25 / PN40
- Maximum allowable temperature: 400°C
- Maximum working pressure: 16 to 23 Bar
- Maximum working temperature: 375 to 400°C
- Connection options: Threaded RC or flange (GJB7/1915.1–2000; HG/T20615–2009; HG/T20592–2009, etc.)

Selection and Installation

Thermodynamic steam traps operate with intermittent drainage. The orifice of 16 bar typically features a subcooling range of 5–10°C, while the orifice of 42 bar supports a wider range of 20–50°C. If subcooling is required for your application, please specify this during the ordering process.

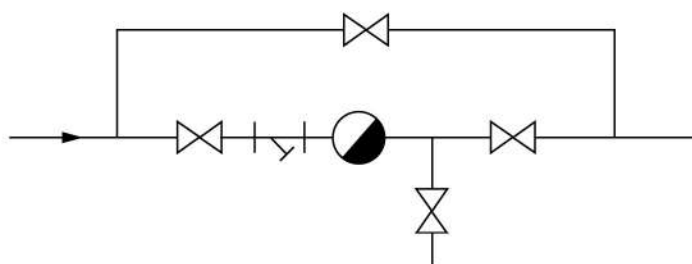
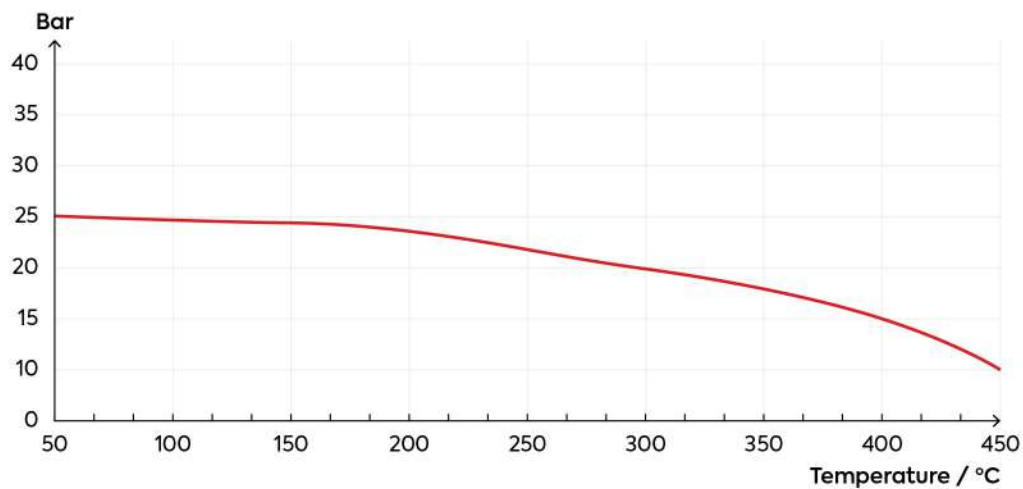
These traps can achieve a back pressure ratio of 80% or more (ratio of back-end pipeline pressure to steam pressure), making them well-suited for pipelines and Compact equipment where condensate removal is essential.

As a general guideline, a safety factor of 2 to 3 times is recommended when selecting trap models.

Note

The volume of condensate and the pressure differential in your steam system are key factors when selecting the appropriate trap type.

Valve Body Pressure - Rating Temperature (25 Bar; WCB)



The displacement capacity of a steam trap increases as the pressure difference rises. Please refer to the displacement curve for accurate selection. Do not confuse this with a large-diameter trap, which may not offer the same displacement characteristics.



ST62 Series

Bimetallic Steam Trap

Carbon Steel
SS304

SS304

Threaded End
Socket Weld End
Flanged End

DN15 (½") to DN25 (1")

Max Discharge = 800 kg/hr

PN25 - PN40

Max W.P = 21 - 32 Bar

ST62.1 |
Max Capacity
= 800 kg/h

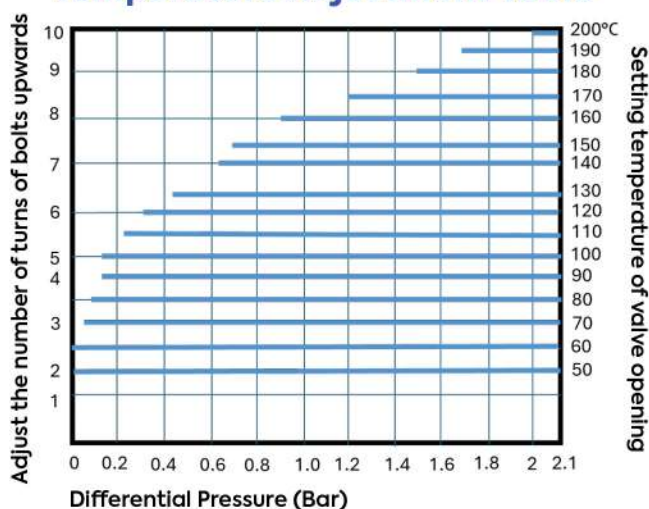
Technical Parameters

Nominal pressure	PN25
Max. allowable pressure (Shell)	24.5 Bar / 200°C
Max. allowable temperature (Shell)	450°C / 10.3 Bar
Factory steam action test	>3 times / 16 Bar

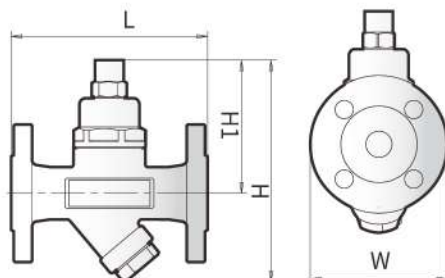
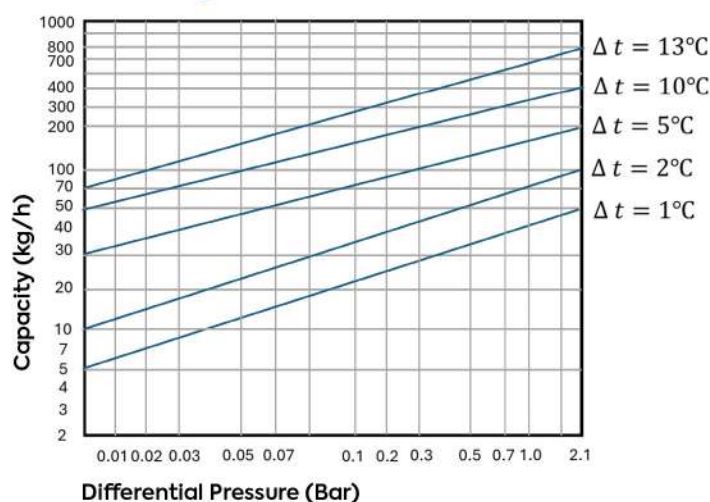
Technical Parameters

Max. operating pressure	16 Bar
Max. operating temperature	350°C
Factory cold test pressure	38 Bar
Air test	20 Bar

Temperature Adjustment Table



Displacement Curve



Part Name

Material

Bonnet	A105 / F304 / F316
Body	A105 / F304 / F316
Seat	420
Disc	440C + 304
Other Internal Parts	304

Data Size Table

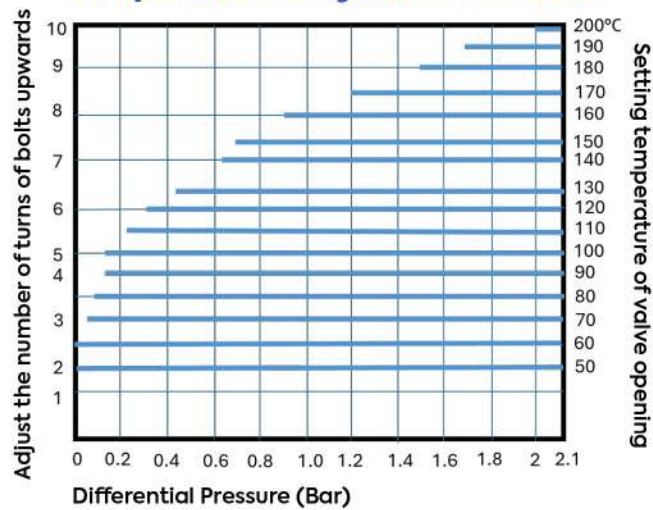
Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Threaded	DN15 - 25	90	168	100	55	1.8
Butt Weld / Socket Weld	DN15 - 25	90	168	100	55	1.8
Flanged	DN15 - 25	150	168	100	115	4

ST62.2 | Max Capacity = 750 kg/h

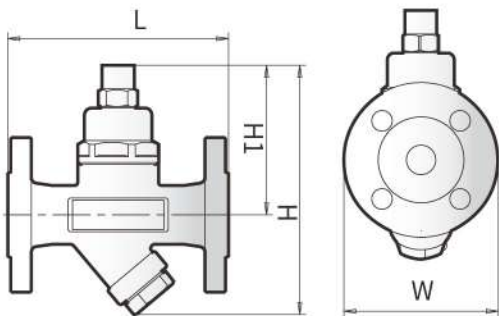
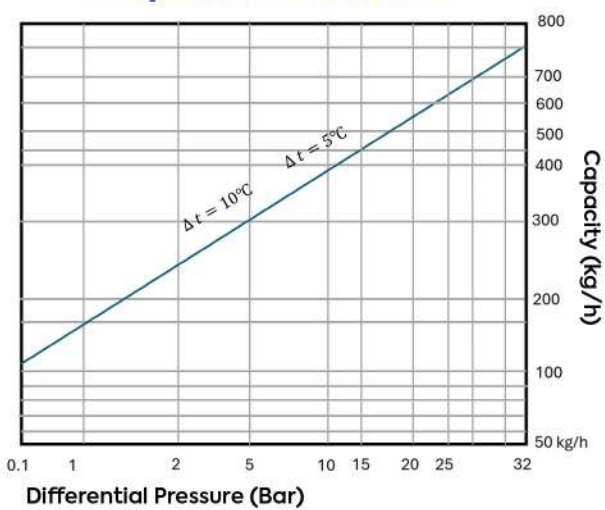
Technical Parameters	
Nominal pressure	PN40
Max. allowable pressure (Shell)	48 Bar / 300°C
Max. allowable temperature (Shell)	427°C / 32 Bar
Factory steam action test	>3 times / 16 Bar

Technical Parameters	
Max. operating pressure	32 Bar
Max. operating temperature	350°C
Factory cold test pressure	95 Bar
Air test	20 Bar

Temperature Adjustment Table



Displacement Curve



Part Name	Material
Bonnet	A105 / F304 / F316
Body	A105 / F304 / F316
Seat	420
Disc	440C + 304
Other Internal Part	304

Data Size Table

Connection	Size	L(mm)	H(mm)	H1(mm)	W(mm)	Weight(kg)
Threaded	DN15 - 25	90	168	100	55	1.8
Butt Weld / Socket Weld	DN15 - 25	90	168	100	55	1.8
Flanged	DN15 - 25	150	168	100	115	4

REQUEST FOR QUOTE



STEP 1

Find the model series



STEP 2

Define the specification/ valve code



STEP 3

Fill up ordering sheet (back of the brochure) or Scan the QR code below



STEP 4

Submit your order via our website or contact your local partner



STEP 5

Prepare for confirmation and delivery

*For further assistance with placing your order, please contact your local partner. A sales engineer will be assigned to assist you.

Valve Coding Sheet
Bimetallic Steam Trap

01

02

03

04

05

06

Body Material	
Code	Material
C1	WCB
S1	SS304
S2	SS316

Internal Parts	
Code	Material
A	SS304

Rating	
Code	Rating
A	PN25
B	PN40

Size	
Code	Size
A	½"
B	¾"
C	1"

Connection	
Code	Material
B	BSPT - Tapped
N	NPT
F	Flanged End
S	Socket Weld

Δ T	
Code	Type
1	1°C
2	2°C
3	5°C
5	10°C
6	13°C

Your Valve Ordering Code:

ST62

01

02

03

04

05

06

Example:

ST62 - C1AAAB1.
WCB Body Material. SS304 Internal Parts. Pressure Rating of PN25, ½ inch size.
Connection Type of BSPT - Tapped. Δ T 1°C.

*For special material or customisation, please refer to our sales engineer.



SCAN FOR ONLINE ORDERING FORM

Tel: +65 6909 1221
Email: enquiry@valvewerkz.com
Website: www.valvewerkz.com