



PowerDyne™
Thermodynamic Steam Traps

P46S
P21S ver.C

Compact Trap Design with Built-in Y-strainer

For Steam Mains and Tracers



Actual Size (1/2")

Blowdown Valve: BD1 (Option)

Actual Size (3/8")

Easy Scale Blow

With a light and compact body, the P46S and P21S ver.C are the perfect traps for tracer applications. The built-in Y-strainer eliminates the need for an external strainer, and the optional blowdown valve enables easy removal of scale, and reaching a "Zero Energy" condition for maintenance.

Minimize Disc Trap Life Cycle Cost

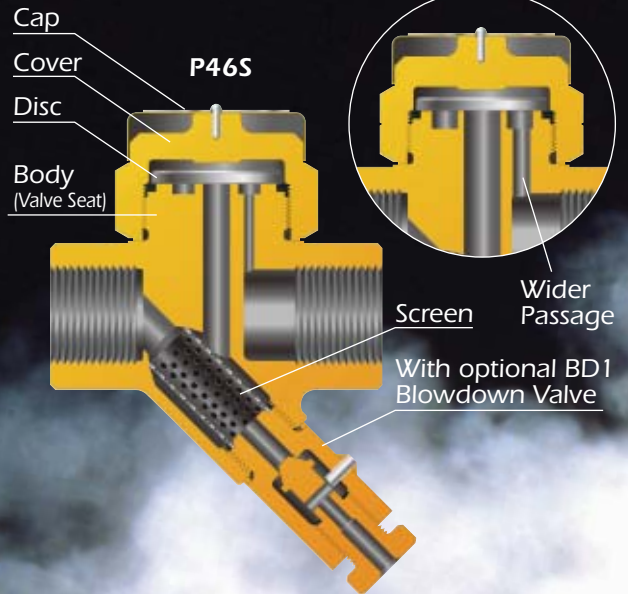
Energy Saving & Long Service Life

Designed to achieve the highest level of durability and reliability within the smallest trap body, the P46S and P21S ver.C are masterpieces of modern steam trap technology.

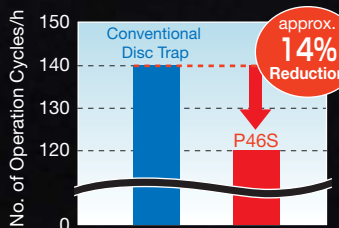
Steam loss and unnecessary trap operation are minimized by an air-insulated jacket that gives resistance to environmental conditions and ensures long-term high performance by virtually eliminating no load actuation. Energy is further saved through unique refinements such as the hardening of sealing surfaces for enhanced durability and their high-precision finish to ensure tight sealing while still preventing air binding.

The P21S ver.C is purpose-built for troublesome Copper Tracing applications, whereas the P46S is designed for multi-purpose applications.

Construction

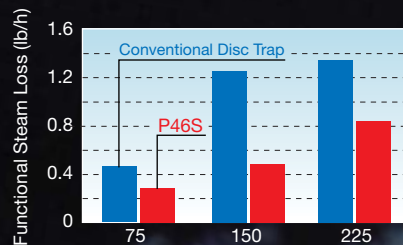


Comparing Cycling Rates



Inlet Steam Pressure: 170 psig
 Condensate Production Rate: 11 lb/h
 Normal Operation No Rain
 Temperature 76 °F Humidity 61%

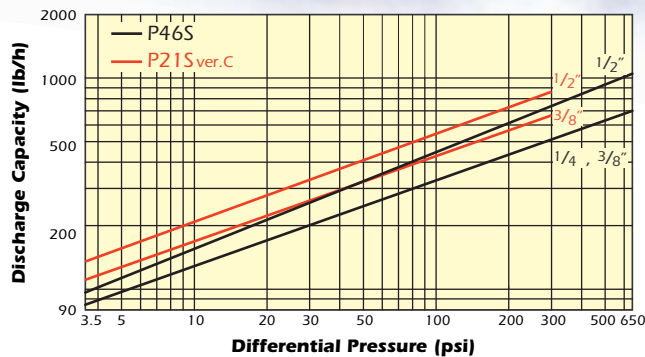
Comparing Steam Loss



Test Data with 11 lb/h Condensate Load

Test results are for both 3/8" & 1/2" sizes with insulated covers. Individual results may vary.

Discharge Capacity



- Differential Pressure is the difference between the inlet and outlet pressure of the trap.
- Recommended safety factor: at least 2.

Full product details (sizes, pressures, capacities and materials) are included in the individual specification data sheets (SDS).

CAUTION

To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

CAUTION

DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE. Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

Specifications

| Model | P46S | P21S ver.C |
|-------------------------------------|--------------------------------|------------|
| Body Material | Stainless Steel (A743 Gr.CA40) | |
| Connection | Screwed | |
| Size (in) | 1/4, 3/8, 1/2 | 3/8, 1/2 |
| Max. Operating Pressure (psig) PMO | 650* | 300 |
| Min. Operating Pressure (psig) | 5 | 3.5** |
| Max. Operating Temperature (°F) TMO | 800 | |
| Max. Allowable Pressure (psig) PMA | 650 | |
| Max. Allowable Temperature (°F) TMA | 800 | |
| Maximum Back Pressure | 80% of Inlet Pressure | |
| Pressure Chamber Insulation | Air Jacket | |

* In order to maintain the best performance for the longest time, it is recommended that the trap be operated at or below 300 psig.
 ** 6 psig for vertical installation.

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Manufacturer

TLV CO., LTD.
 Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001

