

# **PT17R**

# THERMODYNAMIC STEAM TRAPS





PT17R with Threaded Cap

#### PT17R with Bolted Cover

# **DESCRIPTION:**

Fully repairable Thermodynamic steam trap with integral strainer, in forged carbon steel construction, for steam mains, tracers, headers & drip legs.

#### **FEATURES:**

- All Repairable Working Parts
- Easy to repair Bolted Bonnets
- Complete stainless steel internals ensure better mechanical and corrosion resistance properties, hence longer life
- Hardened and lapped disc and seat provide a steam tight seal, withstanding continuous and prolonged operation
- Ideal for fluctuating loads and pressures
- Perfect shut off, no steam loss

**SIZES:** NPS 1/2", 3/4", 1"

### **CONNECTIONS:**

Screwed (NPT/BSPT/BSP) Socket Weld, Flanged\*, Butt Weld \*End connection flanges of ASTM A105 forged carbon steel are welded on.

# **INSTALLATION:**

The trap will operate in any position but the preferred installation is in the horizontal plane with the disc cap on the top. Isolating valves should be installed upstream and downstream of the trap. Always open isolation valves slowly until normal operating conditions are achieved to avoid system shocks.

#### **MAINTENANCE:**

The trap can be maintained inline without disturbing the piping connections. Ensure that the trap is isolated – upstream and downstream- before attempting to dismantle it.

ALLOW THE TRAP TO COOL AND DEPRESSURIZED BEFORE DISMANTLING.

For trouble-free performance, periodic cleaning of the disc and seat is recommended.

Do not use abrasive/corrosive media for cleaning.

Only the disc and seat are subject to wear.

A worn disc and seat should be replaced, as a set, along with the gaskets.

### **IMPORTANT:**

The traps should be installed as close as possible to the system drain point. For new installation, the system should be flushed prior to installation.

# LIMITING CONDITIONS:

	With Bolted Cover	With Threaded Cover			
PMA: Max. allowable pressure	725 psig	450 psig			
TMA: Max. allowable temperature	800 °F	800 °F			
Maximum operating back pressure at the outlet should not exceed 80% of the inlet pressure.					
Minimum differential pressure for satisfactory operation	3.6 psi	3.6 psi			
Cold hydro test pressure	1090 psig	915 psig			



#### MATERIAL: FOR PT17R WITH THE THREADED CAP

NO.	PART	MATERIAL	QTY. (Nos.)
1.	BODY	ASTM A105	01
2.	COVER	ASTM A105	01
3.	STRAINER CAP	ASTM A743 Gr. CA40	01
4.	STRAINER SCREEN	AISI 304 (φ0.8 PERF.)	01
5.	DISC SEAT (Hardened)	AISI 420	01
6.	DISC (Hardened)	AISI 420	01
7.	GASKET	Spiral Wound –	01
8.	GASKET	AISI304 Graphite Filler	02
9.	LOCATOR	AISI 304	01
10.	TUBE	AISI 304	01
11.	STUD	ASTM A193 Gr. B7	04
12.	NUT	ASTM A194 Gr. 2H	04

# **OPTIONAL FITTINGS**

Blow Down Valve: When the blow down valve is opened, loose material collected in the strainer is purged

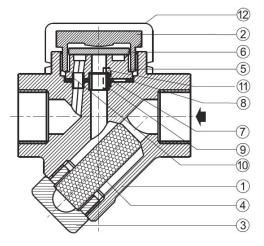
#### **DIMENSIONS:** Nominal in inches

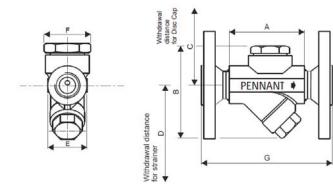
For Screwed/Socket Weld Traps

MODEL	SIZE	END CONNECTION	Α	В	с	D	E	F	Wt. Approx.
PT17R Threaded	½", ⅔⁄4"	311, 231,	3.3	4.02	2.17	3.35	1.6	1.65	2.86 lbs
	1"	BSPT/ NPT	4.02	4.52	2.56	3.54	1.89	1.96	4.4 lbs

#### Flanged Traps

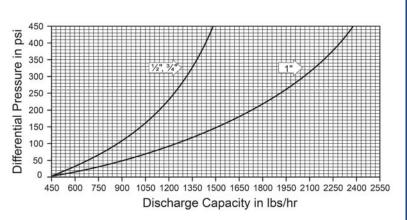
MODEL	SIZE/ RATING	G	Wt. (approx.)	
	1⁄2" / #150	6.54	5.5 lbs	
	1⁄2" / #300	6.93	6.82 lbs	
	½" / #600	7.4	7.72 lbs	
PT17R Threaded	<sup>3</sup> ⁄4" / #150	6.7	6.50 lbs	
	<sup>3</sup> ⁄4" / #300	7.08	8.37 lbs	
	<sup>3</sup> ⁄4" / #600	7.56	9.26 lbs	
	1" / #150	7.6	9.6 lbs	
	1" / #300	8.07	12.12 lbs	
	1" / #600	8.62	13.2 lbs	





# **AVAILABLE SPARES:**

Disc, Disc Seat, Set of Gaskets, Strainer Screen (Packet of 5), Blow Down Valve

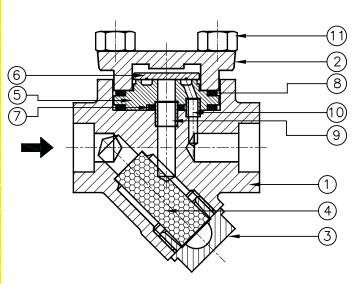


Local regulations may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only. In the interest of development and improvement of the product, we reserve the right to change the specifications without prior notice.



#### MATERIAL: FOR PT17R WITH THE BOLTED COVER

NO.	PART	MATERIAL	QTY. (Nos.)
1.	BODY	ASTM A105	01
2.	COVER	ASTM A105	01
3.	STRAINER CAP	ASTM A743 Gr. CA40	01
4.	STRAINER SCREEN	AISI 304 (φ0.8 PERF.)	01
5.	DISC SEAT (Hardened)	AISI 420	01
6.	DISC (Hardened)	AISI 420	01
7.	GASKET	Spiral Wound –	01
8.	GASKET	AISI304 Graphite Filler	02
9.	LOCATOR	AISI 304	01
10.	TUBE	AISI 304	01
11.	STUD	ASTM A193 Gr. B7	04
12.	NUT	ASTM A194 Gr. 2H	04



# **OPTIONAL FITTINGS**

Blow Down Valve: When the blow down valve is opened, loose material collected in the strainer is purged

#### **DIMENSIONS:** Nominal in inches

For Screwed/Socket Weld Traps

MODEL	SIZE	END CONNECTION	A	В	с	D	Wt. Approx.
PT17R	1/2" 3/4"	SW/ BSP/	3.3	4.25	3.22	3.46	3.3 lbs
Bolted	1"	BSPT/ NPT	4.02	5.28	3.94	4.25	5.3 lbs

#### Flanged Traps

MODEL	SIZE/RATING	G	Wt. (approx.)
	1/2" / #150	6.54	5.50 lbs
	1/2" / #300	6.93	6.39 lbs
	1/2" / #600	7.40	7.27 lbs
PT17R Bolted	3/4" / #150	6.70	6.39 lbs
	3/4" / #300	7.08	8.60 lbs
	3/4" / #600	7.56	10.14 lbs
	1" / #150	7.60	9.03 lbs
	1" / #300	8.07	13.0 lbs
	1"/#600	8.62	14.11 lbs

# **AVAILABLE SPARES:**

Disc, Disc Seat, Set of Gaskets, Strainer Screen (Packet of 5), Blow Down Valve

# **HOW TO ORDER:**

Refer 'How To Order' page

