

# TLV®

# PowerDyne® STEAM TRAP

## MODEL FP46UC QuickTrap®

### UNIVERSAL THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

#### Benefits

**Inline replaceable and cleanable 2-bolt universal flange steam trap with high air venting capability. For steam mains, tracers and coils.**

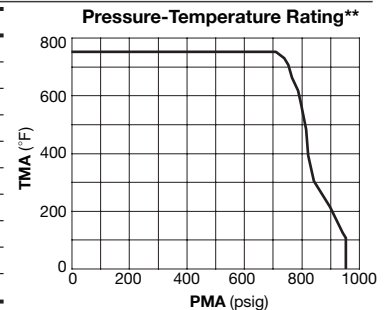
1. Two-bolt flange connector, replaceable trap unit and module valve seat permit replacement in minutes without disturbing piping.
2. Universal flange permits trap installation in optimum position regardless of piping.
3. Screen is located in connector to provide protection while keeping replacement costs low.
4. Connector gaskets are easily replaced after cleaning to allow for trap unit reuse.
5. Air-jacketing reduces no-load cycling and extends service life.
6. Quick thermostatic air venting with bimetal ring for fast start-up.
7. Lapped disc provides steam-tight seal without air-binding for long service life.
8. Hardened stainless steel working surfaces for long service life.



#### Specifications

Model	FP46UC		
Connection	Screwed	Socket Weld	Flanged
Size (in)	<b>1/2, 3/4, 1</b>		
Maximum Operating Pressure (psig)	PMO	650	
Minimum Operating Pressure (psig)		5	
Maximum Operating Temperature (°F)	TMO	752	
Maximum Allowable Pressure (psig)	PMA	953 @ 100°F	
Maximum Allowable Temperature (°F)	TMA	752 @ 710 psig	
Maximum Back Pressure	80% of Inlet Pressure		
Connector Unit	F46		
Trap Unit	P46UC*		

\* Designed for use with F46, F32 Connector Units and V1/V2/V1P/V2P Trap Stations. **Connections and sizes in bold are standard**  
Trap and Connector Units sent as separate units for flexible installation.



\*\* This Rating Graph is based on Allowable Stress Values of ASTM-Materials at each temperature.

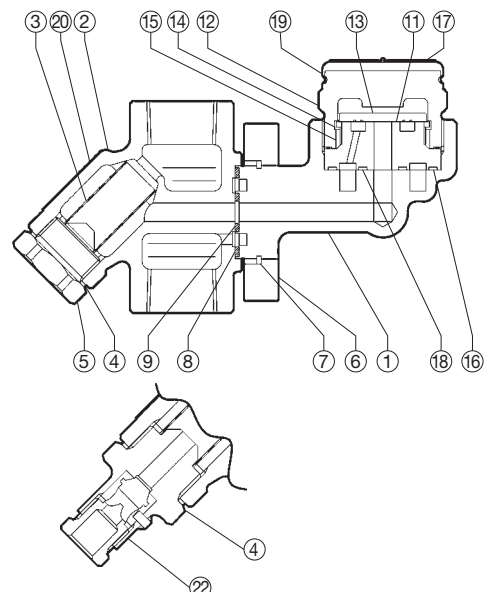


#### CAUTION

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.

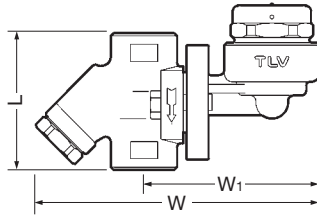
No.	Description	Material	ASTM/AISI <sup>1)</sup>	JIS
① <sup>T</sup>	Trap Body	Cast Stainless Steel	A351 Gr.CF8	—
②	Connector Body	Cast Stainless Steel	A351 Gr.CF8	—
③ <sup>R</sup>	Screen	Stainless Steel	AISI430	SUS430
④ <sup>MR</sup>	Screen Holder Gasket	Stainless Steel	AISI316L	SUS316L
⑤	Screen Holder	Cast Stainless Steel	A351 Gr.CF8	—
⑥ <sup>T</sup>	Connector Flange	Carbon Steel	A105	—
⑦ <sup>T</sup>	Snap Ring	Carbon Steel	AISI1055	SWRH57
⑧ <sup>MRT</sup>	Outer Connector Gasket	Graphite/Stainless Steel	- /AISI304	- /SUS304
⑨ <sup>MRT</sup>	Inner Connector Gasket	Graphite/Stainless Steel	- /AISI304	- /SUS304
⑩ <sup>T</sup>	Connector Bolt <sup>2)</sup>	Carbon Steel	A193 Gr.B7	SNB7
⑪ <sup>T</sup>	Module Valve Seat	Stainless Steel	AISI420F	SUS420F
⑫ <sup>T</sup>	Cover	Stainless Steel	A182 F304	—
⑬ <sup>T</sup>	Disc	Stainless Steel	AISI420	SUS420J2
⑭ <sup>T</sup>	Disc Holder Ring	Stainless Steel	AISI420	SUS420J2
⑮ <sup>T</sup>	Air Vent Ring	Bimetal	—	—
⑯ <sup>MRT</sup>	Outer Module Gasket	Graphite/Stainless Steel	- /AISI316L	- /SUS316L
⑰ <sup>T</sup>	Nameplate	Stainless Steel	AISI304	SUS304
⑱ <sup>MRT</sup>	Inner Module Gasket	Graphite/Stainless Steel	- /AISI316L	- /SUS316L
⑲ <sup>T</sup>	Cap	Stainless Steel	AISI304	SUS304
⑳	Connector Nameplate	Stainless Steel	AISI304	SUS304
㉑	Flange <sup>3)</sup>	Cast Stainless Steel	A351 Gr.CF8	—
		Stainless Steel	AISI304	SUS304
㉒	BD2 Blowdown Valve <sup>4)</sup>	Cast Stainless Steel	A351 Gr.CF8	—

<sup>1)</sup> Equivalent <sup>2)</sup> Shown on reverse <sup>3)</sup> Shown on reverse, shape and material depend on flange specifications <sup>4)</sup> Option  
Replacement kits available: (M) maintenance parts, (R) repair parts, (T) trap unit P46UC  
Replacement parts for former connector body F32 differ from those for F46.



**Dimensions**

● **FP46UC** Screwed



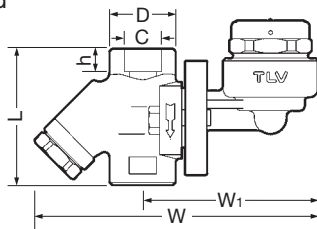
**FP46UC** Screwed\* (in)

Size	L	W**	W <sub>1</sub>	Weight (lb)
1/2	3 1/8	6 5/8	4 1/8	3.7
3/4				
1	3 3/4	6 3/4	4 5/16	4.4

\* NPT, other standards available

\*\* With optional BD2 add approx. 1 1/16" to W

● **FP46UC** Socket Weld



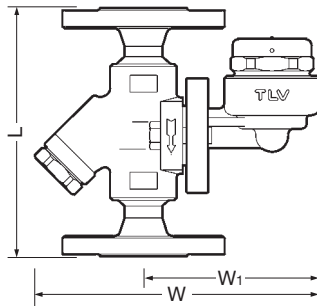
**FP46UC** Socket Weld\* (in)

Size	L	W**	W <sub>1</sub>	φD	φC	h	Weight (lb)
1/2	3 1/8	6 5/8	4 1/8	1 7/16	0.855	1/2	3.7
3/4							
1	3 3/4	6 3/4	4 5/16	1 3/4	1.330	9/16	4.4

\* ASME B16.11-2005, other standards available

\*\* With optional BD2 add approx. 1 1/16" to W

● **FP46UC** Flanged



**FP46UC** Flanged (in)

Size	L			W**	W <sub>1</sub>	Weight* (lb)
	Connects to ASME Class					
	150RF	300RF	600RF			
1/2	5 7/8	5 7/8	7 1/16	6 1 1/16	4 1/8	8.4
3/4						11
1	6 5/16	6 5/16	7 1/2			13

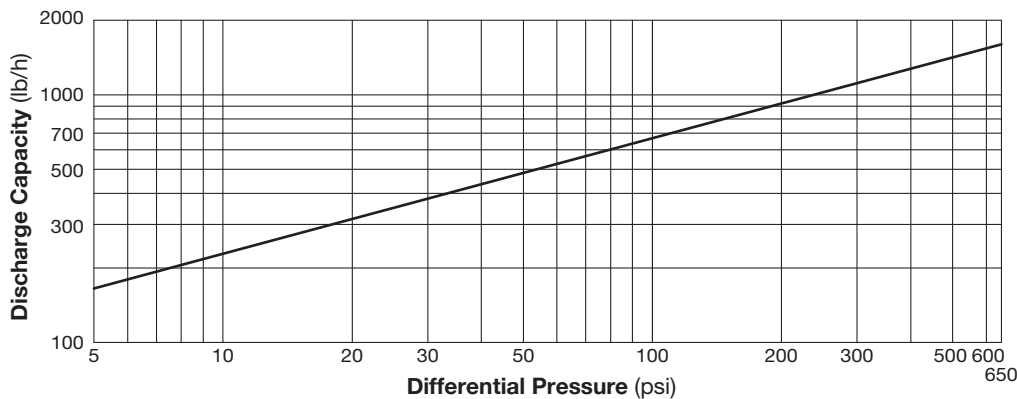
Other standards available, but length and weight may vary

\* Weight is for Class 600 RF

\*\* With optional BD2 add approx. 1 1/16" to W

Flange classes in bold are standard

**Discharge Capacity**



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



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.

**TLV CORPORATION**

13901 South Lakes Drive, Charlotte, NC 28273-6790

Tel: 704-597-9070 Fax: 704-583-1610

E-mail: [tlv@tlvengineering.com](mailto:tlv@tlvengineering.com) <https://www.tlv.com>

For Technical Service 1-800 "TLV TRAP"



Manufacturer

**TLV CO., LTD.**

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001  
ISO 14001

