



# PowerDyne® STEAM TRAP

## MODEL FP46UC QuickTrap® STAINLESS STEEL

### UNIVERSAL THERMODYNAMIC DISC TRAP WITH THERMOSTATIC AIR VENTING

#### Features

**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 allows trap to be positioned in the correct attitude, regardless of pipeline configuration.
3. Screen located in connector ensures trouble-free operation.
4. Air jacketing reduces cycling and extends life.
5. Quick thermostatic air venting with bimetal ring for fast start-up.
6. Lapped disc provides steam-tight seal without air binding.
7. Hardened stainless steel working surfaces.



#### Pressure Equipment Directive (PED)

Classification according to PED 2014/68/EU, fluid group 2

Size	Category	CE marking
DN 15 to 25	—*	Art. 4, Sec. 3 (sound engineering practice), CE marking not allowed

\* Manufactured in accordance with sound engineering practice

#### Specifications

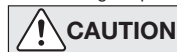
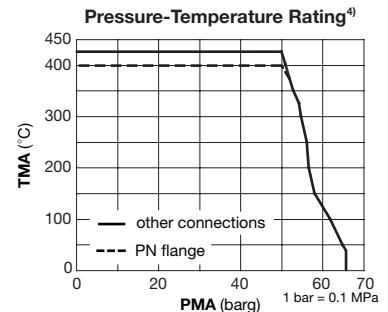
Model		FP46UC		
Connection		Screwed	Socket Welded	Flanged
Size		1/2", 3/4", 1"	DN 15, 20, 25	
Maximum Operating Pressure (barg)	PMO	46		
Minimum Operating Pressure (barg)		0.3		
Maximum Operating Temperature (°C)	TMO	400 <sup>1)</sup> / 425		
Maximum Allowable Pressure (barg)	PMA <sup>2)</sup>	66 @ 40 °C		
Maximum Allowable Temperature (°C)	TMA <sup>2)</sup>	400 <sup>1)</sup> / 425 @ 50 barg		
Maximum Back Pressure		80% of Inlet Pressure		
Connector Unit		F46		
Trap Unit		P46UC <sup>3)</sup>		

<sup>1)</sup> With PN flange <sup>2)</sup> PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS) 1 bar = 0.1 MPa

<sup>3)</sup> Designed for use with F46, F32 Connector Units and V1/V2 Trap Stations.

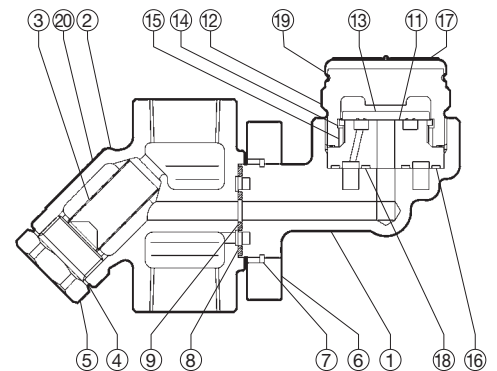
Trap and Connector Units sent as separate units for flexible installation.

<sup>4)</sup> This Rating Graph is based on Allowable Stress Values of ASTM-Materials at each temperature.



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	DIN*	ASTM/AISI*
① <sup>T</sup>	Trap Body	Cast Stainless Steel A351 Gr.CF8	1.4312	—
②	Connector Body	Cast Stainless Steel A351 Gr.CF8	1.4312	—
③ <sup>R</sup>	Screen inside/outside	Stainless Steel SUS304/430	1.4301/1.4016	AISI304/430
④ <sup>MR</sup>	Screen Holder Gasket	Stainless Steel SUS316L	1.4404	AISI316L
⑤	Screen Holder	Cast Stainless Steel A351 Gr.CF8	1.4312	—
⑥ <sup>T</sup>	Connector Flange	Carbon Steel A105	1.0460	—
⑦ <sup>T</sup>	Snap Ring	Carbon Steel SWRH57	1.0535	AISI1055
⑧ <sup>MRT</sup>	Outer Connector Gasket	Graphite/Stainless Steel SUS304	- /1.4301	-/AISI304
⑨ <sup>MRT</sup>	Inner Connector Gasket	Graphite/Stainless Steel SUS304	- /1.4301	-/AISI304
⑩ <sup>T</sup>	Connector Bolt**	Carbon Steel SNB7	1.7225	A193 Gr.B7
⑪ <sup>T</sup>	Module Valve Seat	Stainless Steel SUS420F	1.4028	AISI420F
⑫ <sup>T</sup>	Cover	Stainless Steel A182 F304	1.4301	—
⑬ <sup>T</sup>	Disc	Stainless Steel SUS420J2	1.4031	AISI420
⑭ <sup>T</sup>	Disc Holder Ring	Stainless Steel SUS420J2	1.4031	AISI420
⑮ <sup>T</sup>	Air Vent Ring	Bimetal	—	—
⑯ <sup>MRT</sup>	Outer Module Gasket	Graphite/Stainless Steel SUS316L	- /1.4404	-/AISI316L
⑰ <sup>T</sup>	Nameplate	Stainless Steel SUS304	1.4301	AISI304
⑱ <sup>MRT</sup>	Inner Module Gasket	Graphite/Stainless Steel SUS316L	- /1.4404	-/AISI316L
⑲ <sup>T</sup>	Cap	Stainless Steel SUS304	1.4301	AISI304
⑳	Connector Nameplate	Stainless Steel SUS304	1.4301	AISI304
㉑	Flange***	Cast Stainless Steel A351 Gr.CF8/ Stainless Steel SUS304	1.4312/ 1.4301	-/AISI304



\* Equivalent materials \*\* Shown on reverse

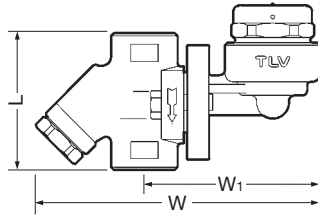
\*\*\* Shown on reverse, shape and material depend on flange specifications

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

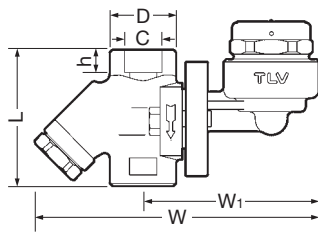


**FP46UC** Screwed\* (mm)

Size	L	W	W <sub>1</sub>	Weight (kg)
1/2"	80	168	104	1.7
3/4"				
1"	96	172	110	2.0

\* BSP DIN 2999, other standards available

● **FP46UC**  
Socket Welded

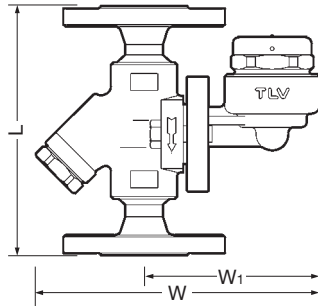


**FP46UC** Socket Welded\* (mm)

DN	L	W	W <sub>1</sub>	φD	φC	h	Weight (kg)
15	80	168	104	36	21.8	12	1.7
20							
25	96	172	110	44	33.9	14	2.0

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

● **FP46UC**  
Flanged

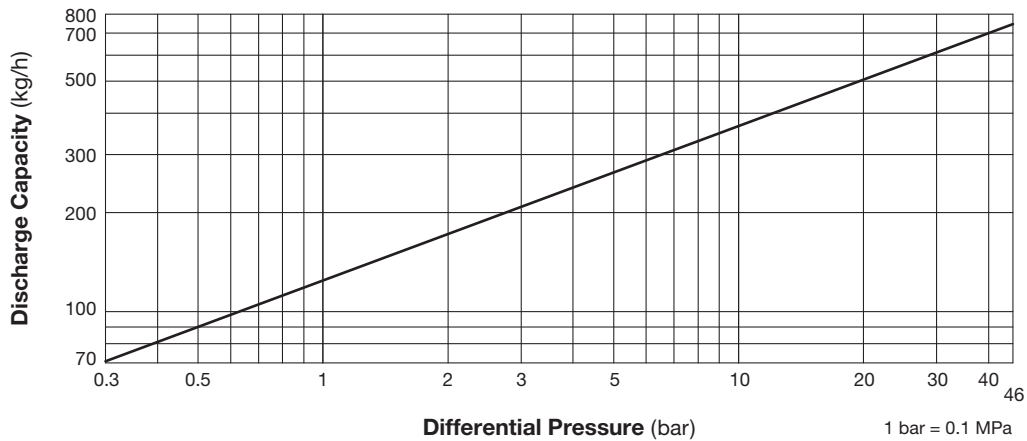


**FP46UC** Flanged (mm)

DN	L				W	W <sub>1</sub>	Weight* (kg)
	DIN 2501	ASME Class					
	PN25/40	150RF	300RF	600RF			
15	150	150	150	180	170	105	3.4
20							4.2
25	160	160	160	190			4.7

Other standards available, but length and weight may vary  
\* Weight is for DIN PN 25/40

**Discharge Capacity**



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

Manufacturer  
**TLV** CO., LTD.  
Kakogawa, Japan  
is approved by LRQA Ltd. to ISO 9001/14001

