

# **YARWAY**

Thermostatic bellows steam traps, Unibody Plus design with in line replaceable capsule.

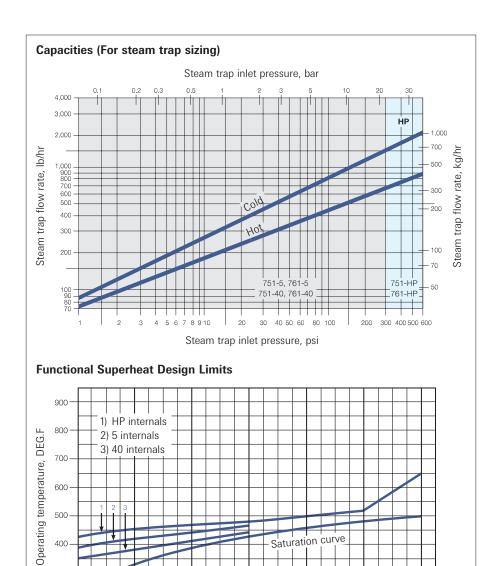
The Series 751/761 is available in two body designs and with three Filled Thermal Elements (FTEs). The Series 761 is an in-line body with an integral wye strainer and blowdown valve. The Series 751 is an in-line body only. The FTEs to 300 psi are the -5 for drip tracing and light process; the -40 for tracing. The -HP is for applications to 600 psi. The FTEs are available in factory set and assembled renewal kits.

All internals are energy efficient. The -5 and -HP internals are slightly subcooled operating near steam temperature. The -40 internals operate 35°F(1.6°C) to 45°F (7°C) subcooled. The -HP is recommended for optimum service life limited to 450 psig (31 barg).

#### Features

- Fail safe open
- Good efficiency and service life (minimum cycle life of the bellows is 10.000.000 cycles.)
- Follows the saturation curve on all the operating pressure ranges.
- Immediate discharge of the condensate with a subcooling of 3°C.
- Quick discharge of air and noncondensibles.
- Can be installed in any position
- · Self draining
- Unaffected by freezing when drained in either the horizontal or vertical position
- Easy to check due to ON-OFF action of the valve
- · Unibody concept:
  - Capsule renewable in line in few minutes
  - Capsule interchangeable with other technologies without disturbing the piping.
- · Check valve incorporated.
- The 751-HP/ 761 -HP is specifically designed for high pressure applications up to 41 bar.





#### Typical applications

300

200

In all process plant where condensate has to be removed immediately without sub-cooling, e.g. autoclaves, brewers, coppers, evaporating apparatus, mixers, galvanizing baths, steam main drainage, steam tracing,etc.

100

200

### **Technical data**

400

Max. Working Pressure: 41 bar Max. Temperature: 400°C Max. Back Pressure: 99%

Size Range : 3/8"-1/2"-3/4"-1"
Connections : BSP, NPT, Socket Weld

500

600

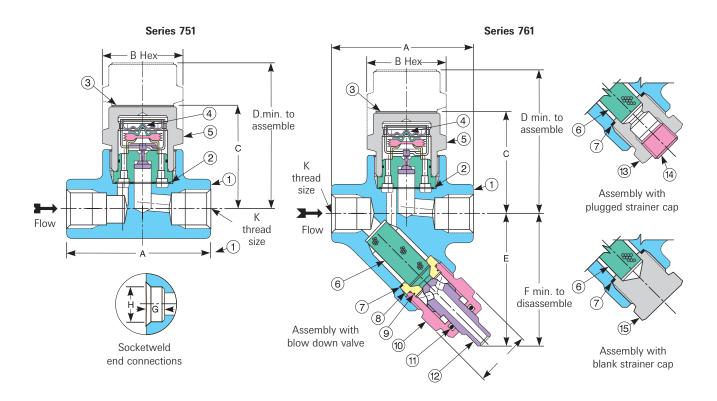
751 bellows trap = straight body

761 bellows trap = Y - body and integral strainer incorporated

Pressure-Temperature Ratings						
	751/761-5, -40	751/761-HP				
Shell rating	600 psi (41 bar)	600 psi (41 bar)				
Max. design temperature	750F (400C)	750F (400C)				
Max. operating pressure	300 psi (21 bar)	600 psi (41 bar)				
Min. operating pressure	1 psi (.07 bar)	1 psi (.07 bar)				
Operating temperature	See chart	See chart				

300

Operating pressure, PSIG



Dimensions/Weights												
Trap Size	Nominal Dimensions, in. (mm)							Weight lb. (kg)				
In. (DN)*	Α	В	С	D	E	F	G	Н	J	K	Series751	Series761
3/8	3-5/32	1-1/2	2-3/16	3	2-7/8	3-15/16	3/8	.695	1-1/16	3/8"	2	2-3/4
(10)	(80)	(38)	(56)	(76)	(73)	(100)	(9.5)	(17.6)	(27)		(0.9)	(1.3)
1/2	3-5/32	1-1/2	2-3/16	3	2-7/8	3-15/16	3/8	.860	1-1/16	1/2"	2	2-3/4
(15)	(80)	(38)	(56)	(76)	(73)	(100)	(9.5)	(21.8)	(27)		(0.9)	(1.3)
3/4	3-35/64	1-1/2	2-1/4	3-1/16	3-1/4	4-5/16	1/2	1.070	1-3/16	3/4"	2-1/2	3-1/4
(20)	(90)	(38)	(57)	(78)	(83)	(110)	(12.7)	(27.2)	(30)		(1.2)	(1.5)
1	3-15/16	1-1/2	2-1/4	3-1/16	3-3/8	4-7/16	1/2	1.335	1-3/16	1"	2-3/4	4
(25)	(100)	(38)	(57)	(78)	(86)	(113)	(12.7)	(33.9)	(30)		(1.3)	(1.8)

Parts/l	Parts/Materials					
Item	Part	Materials				
1	Body	ASME SA-182 GR F11 Low Carbon, 0.15 max C				
2 #	Seat Gasket	Clad Non-asbestos				
3 #	Nameplate	Stainless Steel				
4 #	FTE Cage Assembly	Stainless Steel				
5#	Bonnet	ASTM A-582 Type 416 Stainless Steel				
6	Screen	Stainless Steel				
7 •	Cap Gasket	Monel				
8 •	Blowdown Seat	416 Stainless Steel				
9 •	Retaining Ring	17-7 PH Stainless Steel				
10 •	Blowdown Body	416 Stainless Steel				
11 •	O-Ring	Silicone				
12 •	Blowdown Valve	416 Stainless Steel				
13 *	Strainer Cap	416 Stainless Steel				
14 *	Plug 3/8 NPT	Stainless Steel				
15 *	Blank Strainer Cap	416 Stainless Steel				

- # Part of factory assembled renewal capsule
- \* Optional strainer caps
- Factory assembled blowdown valve renewal kit

## Applicable Codes and Standards

Performance testing per ANSI/ASME PTC-39.1 End connections per ANSI B1.20.1 for threaded ends, per ANSI B16.11 for socketwelding ends.

#### How to Specify and Order

# Typical Specification

Traps shall be thermostatic rated to 600 psi (41 bar) and actuated by a FTE stainless steel. The body shall be low carbon (0.15 max c) chrome-moly steel with threaded (socketwelding) end connections.

### **Ordering**

Specify trap pipe size, series number, FTE rating, and the type of end connections desired (threaded or socketwelding). The renewal capsule consists of a factory-calibrated FTE cage assembly, seat and bonnet, with seat gasket. Order by specifying: renewal capsule for Series 751/761 trap.