

Thermodynamic Variable Orifice traps 3/8"-1/2"-3/4"-1" Series 731-741

YARWAY

Medium capacity traps for process & drip applications using the Unibody Plus in line replaceable capsule concept.

Operating principle

The Yarway Series 731/741 is a Piston Type Thermodynamic Steam Trap, designed to drain a range of condensate loads in high pressure applications such as steam main drips, high pressure steam tracing and Process Heaters.

Features

- Instant removal of condensates without sub-cooling.
- Quick discharge of air and non condensibles.
- Type 741 with Y strainer.
- Four different models available to suit various condensate capacities.
- Unibody capsule can be changed to suit different capacity or pressure requirements.
- Economic assembly and maintenance.
- Suitable for varying condensate loads.
- Can be installed horizontal or in vertical lines.
- Energy efficient, condensate seals the orifice.
- Disassembly unnecessary before welding.
- Unibody concept:
- capsule renewable in line in few minutes
- capsule interchangeable with other technologies without disturbing the piping.





Typical applications

In all process plant where condensate has to be removed without sub-cooling, e.g. steam mains, steam collecting vessels, acid baths and alkaline solution baths fitted with syphons, autoclaves, heat-exchangers, galvanizing baths, calandering machines, draining auxiliary turbines, etc.

Technical data

loonnoul aata	
Max. Working Pressu	re : L 21 bar
	H 42 bar
Max. Temperature	: 400°C
Max. Back Pressure	: L 40% / H 25%
Size range	: 3/8"-1/2"-3/4"-1"
Connections	: BSP, NPT
	Socket Weld
731 Piston trap	: Straight body
741 Piston trap	: Body with Y-strainer



Parts/Materials

Iter	n	Part	Material	Item	Part	Material
1		Body	ASME SA-182 Gr. F11 ⁽¹⁾	13 #	Seat Gasket	Clad Non-asbestos
2	#	Retaining Ring	17-7 PH Stainless Steel	14	Screen	Stainless Steel 0.020 perf.
3	#	Bonnet	Stainless Steel	15 •	Cap Gasket	Monel
4	#	Nameplate	Stainless Steel	16 •	Blowdown Seat	416 Stainless Steel
5	#	Split Washer	Brass	17 •	Retaining Ring	17-7 PH Stainless Steele
6	#	Lock Pin	Brass	18 •	Blowdown Body	416 Stainless Steel
7	#	Cap Nut	Stainless Steel 400	19 •	O-Ring	Silicone
8	#	Lock Nut	Stainless Steel	20 •	Blowdown Valve	416 Stainless Steel
9	#	Cap Gasket	Monel	21 *	Strainer Cap	416 Stainless Steel
10	#	Control Cylinder	Stainless Steel	22 *	Plug 3/8 NPT	Stainless Steel
11	#	Valve	Stainless Steel	23 *	Blank Strainer Cap	Stainless Steel
12	#	Valve Seat	Stainless Steel Type 414HT			

⁽¹⁾ Low Carbon, 0.15 max. C

• Factory assembled blowdown valve renewal kit

Factory assembled renewal trap capsule

* Optional strainer caps

Dimensions/Weights

Trap Size	Nominal Dimensions, in. (mm)									Weight lb.	Weight Ib. (kg)	
In. (DN)*	Α	В	С	D	E	F	G	н	J	К	Series731	Series741
1/2	3-5/32	1-1/2	4-1/16	2-3/8	3-15/16	4-13/16	.860	3/8	1-1/16	1/2″	2-1/4	2-3/4
(15)	(80)	(38)	(103)	(73)	(100)	(122)	(21.8)	(9.5)	(27)		(1.1)	(1.3)
3/4	3-35/64	1-1/2	4-3/8	3-1/4	4-5/16	5-1/8	1.070	1/2	1-3/16	3/4"	2-3/4	3-1/2
(20)	(90)	(38)	(111)	(83)	(110)	(130)	(27.2)	(12.7)	(30)		(1.3)	(1.6)
1	3-15/16	1-1/2	4-3/8	3-3/8	4-1/16	5-1/8	1.335	1/2	1-3/16	1″	3	4
(25)	(100)	(38)	(111)	(86)	(113)	(130)	(33.9)	(12.7)	(30)		(1.4)	(1.8)
(20) 1 (25)	(90) 3-15/16 (100)	(38) 1-1/2 (38)	(111) 4-3/8 (111)	(83) 3-3/8 (86)	(110) 4-1/16 (113)	(130) 5-1/8 (130)	(27.2) 1.335 (33.9)	(12.7) 1/2 (12.7)	(30) 1-3/16 (30)	1″	(1.3) 3 (1.4)	(1.6) 4 (1.8)

*(DN) expresses metric equivalent