728 T-STRAINER



For pressure rating, listing, and approval information, refer to data sheet or visit SHURJOINT website www.shurjoint.com for details or contact your SHURJOINT representatives.

The Shurjoint Model 728 grooved-end T-strainers are used to remove foreign matter from pipe lines and provide inexpensive protections to pumps, meters, valves, etc. The Model 728 strainers are designed for applications where easy maintenance and large capacity of straining are needed including drinking water, cooling water, irrigation, sea water, etc. The strainer installs with two Shurjoint couplings, and is rated up to 750 psi (52 Bar) depending upon the installed coupling's pressure rating and size. The strainer is made of 316 stainless steel mesh fringed with a durable stainless steel frame. The standard screen is mesh 12 for 2" to 3" sizes and mesh 6 for 4" to 14".



The strainer shall be cleaned periodically or before the differential pressure reaches 10 psi.

Features

- The streamline design provides lower pressure drop
- Easy installation with two mechanical couplings
- Easy removal and reinstallation of the screen by removing the two bolts and nuts of the coupling and end-cap (three bolts and nuts for 14").
- Good for horizontal or vertical installations.
- Easy access to the screen from above or side-ways
- More space-saving than the Y type strainers

material specification

- Body, End-Cap and Coupling Segments:
 Ductile Iron ASTM A536, Gr. 65-45-12, min. tensile strength: 65,000 psi (448 MPa).
- Surface Finish:

Orange color painted or red RAL3000 color painted.

- Epoxy coated in red RAL3000 or other colors. (optional).
- Screen:

316 stainless steel

- o 304 stainless steel (optional) Mesh 12 (0.020" wire) for $2\frac{1}{2}$ " to 3". Mesh 6 (0.041" wire) for 4" to 14".
- Rubber Gasket:

Grade "E" EPDM (Color code: Green stripe) Good for cold & hot water up to +230°F (+110°C). Also good for services for water with acid, water with chlorine or chloramines, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals. Not recommended for petroleum oils, minerals oils, solvents and aromatic hydrocarbons.

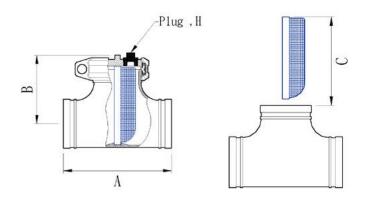
Maximum Temperature Range: -30°F (-34°C) to +230°F (+110°C)*.

*EPDM gaskets for water services are not recommended for steam services unless couplings or components are accessible for frequent gasket replacement.

Bolts & Nuts:

Heat-treated carbon manganese steel track bolts to ASTM A449-83a (or A183 Gr. 2), minimum tensile strength 110,000 psi (758 MPa), Zinc electroplated, with heavy-duty hexagonal nuts to ASTM A563.





Nominal Size				Model 728	3 T-Strainer			
Size O.D. (CWP)* A B B C (CWP)* C (Drain Plug) Weight (CWP)* in in in in in in in in lbs mm mm <t< th=""><th>Nominal</th><th rowspan="2"></th><th rowspan="2">Working _ Pressure</th><th colspan="3">Dimensions</th><th>Н</th><th></th></t<>	Nominal		Working _ Pressure	Dimensions			Н	
mm mm Bar mm				А	В	С		Weight
2 2.375 750 6.54 4.72 4.92 ½ 6.6 50 60.3 52 166 120 125 15 3.0 2½ 2.875 750 7.50 5.19 5.59 ½ 8.8 65 73.0 52 191 132 142 15 4.0 3 3.500 750 8.50 5.74 6.45 ½ 13.2 80 88.9 52 216 146 164 15 6.0 4 4.500 750 10.00 6.49 7.48 1 17.7 100 114.3 52 254 165 190 25 8.0 5 5.563 750 11.00 7.48 8.58 1 28.6 125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 <	in	in	PSI	in	in	in	in	lbs
50 60.3 52 166 120 125 15 3.0 2½ 2.875 750 7.50 5.19 5.59 ½ 8.8 65 73.0 52 191 132 142 15 4.0 3 3.500 750 8.50 5.74 6.45 ½ 13.2 80 88.9 52 216 146 164 15 6.0 4 4.500 750 10.00 6.49 7.48 1 17.7 100 114.3 52 254 165 190 25 8.0 5 5.563 750 11.00 7.48 8.58 1 28.6 125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 <	mm	mm	Bar	mm	mm	mm	mm	kg
2½ 2.875 750 7.50 5.19 5.59 ½ 8.8 65 73.0 52 191 132 142 15 4.0 3 3.500 750 8.50 5.74 6.45 ½ 13.2 80 88.9 52 216 146 164 15 6.0 4 4.500 750 10.00 6.49 7.48 1 17.7 100 114.3 52 254 165 190 25 8.0 5 5.563 750 11.00 7.48 8.58 1 28.6 125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½	2	2.375	750	6.54	4.72	4.92	1/2	6.6
65 73.0 52 191 132 142 15 4.0 3 3.500 750 8.50 5.74 6.45 ½ 13.2 80 88.9 52 216 146 164 15 6.0 4 4.500 750 10.00 6.49 7.48 1 17.7 100 114.3 52 254 165 190 25 8.0 5 5.563 750 11.00 7.48 8.58 1 28.6 125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 29.1 42 394 253 320 40	50	60.3	52	166	120	125	15	3.0
3 3.500 750 8.50 5.74 6.45 ½ 13.2 80 88.9 52 216 146 164 15 6.0 4 4.500 750 10.00 6.49 7.48 1 17.7 100 114.3 52 254 165 190 25 8.0 5 5.563 750 11.00 7.48 8.58 1 28.6 125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96	21/2	2.875	750	7.50	5.19	5.59	1/2	8.8
80 88.9 52 216 146 164 15 6.0 4 4.500 750 10.00 6.49 7.48 1 17.7 100 114.3 52 254 165 190 25 8.0 5 5.563 750 11.00 7.48 8.58 1 28.6 125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 4	65	73.0	52	191	132	142	15	4.0
4 4.500 750 10.00 6.49 7.48 1 17.7 100 114.3 52 254 165 190 25 8.0 5 5.563 750 11.00 7.48 8.58 1 28.6 125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 4	3	3.500	750	8.50	5.74	6.45	1/2	13.2
100 114.3 52 254 165 190 25 8.0 5 5.563 750 11.00 7.48 8.58 1 28.6 125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430	80	88.9	52	216	146	164	15	6.0
5 5.563 750 11.00 7.48 8.58 1 28.6 125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 </td <td>4</td> <td>4.500</td> <td>750</td> <td>10.00</td> <td>6.49</td> <td>7.48</td> <td>1</td> <td>17.7</td>	4	4.500	750	10.00	6.49	7.48	1	17.7
125 141.3 52 279 190 218 25 13.0 6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 1½ 186.3	100	114.3	52	254	165	190	25	8.0
6 6.625 700 13.00 8.34 10.23 1 44.0 150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 1½ 186.3	5	5.563	750	11.00	7.48	8.58	1	28.6
150 168.3 48 330 212 260 25 20.0 8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 1½ 186.3	125	141.3	52	279	190	218	25	13.0
8 8.625 600 15.50 9.96 12.60 1½ 77.0 200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 1½ 186.3	6	6.625	700	13.00	8.34	10.23	1	44.0
200 219.1 42 394 253 320 40 35.0 10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 1½ 186.3	150	168.3	48	330	212	260	25	20.0
10 10.750 500 18.00 11.18 14.96 1½ 114.6 250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 1½ 186.3	8	8.625	600	15.50	9.96	12.60	1½	77.0
250 273.0 35 457 284 380 40 52.0 12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 1½ 186.3	200	219.1	42	394	253	320	40	35.0
12 12.750 400 20.00 12.16 16.92 1½ 160.3 300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 1½ 186.3	10	10.750	500	18.00	11.18	14.96	1½	114.6
300 323.9 28 508 309 430 40 72.7 14 14.000 250 22.00 17.75 21.25 1½ 186.3	250	273.0	35	457	284	380	40	52.0
14 14.000 250 22.00 17.75 21.25 1½ 186.3	12	12.750	400	20.00	12.16	16.92	1½	160.3
	300	323.9	28	508	309	430	40	72.7
350 355.6 17 559 451 540 40 84.5	14	14.000	250	22.00	17.75	21.25	1½	186.3
	350	355.6	17	559	451	540	40	84.5

¹⁾ Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.

3) Working pressure is dependent upon the Shurjoint coupling used to join Model 728 to the piping system.



²⁾ Working pressure is maximum based on Shurjoint Model Z07 access coupling and will be governed by couplings used for installation and related system components. Maximum differential pressure from inlet to outlet must not exceed 10 psi (0.69 Bar).



Flow Data - Cv Values

Values for flow of water at +60°F (+16°C).

$$Cv = \frac{Q}{\sqrt{\Delta P}}$$

Where: Cv = Flow coefficient Q = Flow (GPM) $\Delta P = Pressure$ drop (psi)

Model #728	T-Strainer					
Cv Values						
Valve	Cv					
Size	Value					
in						
mm						
2	190					
50						
2½	230					
65						
3	290					
80						
4	425					
100	425					
5	685					
125						
6	950					
150						
8	2100					
200	2108					
10	2607					
250	2683					
12	3872					
300						
14	5050					
350						

General note

- Maximum Working Pressure (CWP) listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods.
 Figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact Shurjoint for additional information.
- Field Joint Test: For one time only, the system may be tested hydrostatically at 1½ times the maximum working pressure listed (AWWA C606 5.2.3).
- Warning: Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- The 10 Year Limited Warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.

