

# Specification Sheet



## Description

**Operation.** The strainer is a vertical Z-plate design to protect cold water meters from the damaging effects of debris and foreign matter. The strainer improves the velocity profile of the water being metered and minimizes the effects of velocity distortion caused by upstream valves and fittings. Consequently, the meter's accuracy is maximized by the elimination of debris and turbulence.

**Compliance to Standards.** The Z-plate strainer complies with all material and design requirements of the American Water Works Association Standards C701 and C702 as most recently revised.

**Installation.** The strainer should be installed immediately upstream from the meter it is protecting. It is preferable that the strainer be installed with the removable top plate vertically accessible for underpressure flushing and maintenance.

**Application.** The strainer is recommended for use with the AMCO T3000 and C3000 meters. Its application ahead of these meters will maximize revenue and extend the life of the measuring element. The strainer is for use in POTABLE COLD WATER up to 120°F (50°C) and working pressures up to 150 psi. Working pressure tests are made before shipment. No adjustments need be made before installation.

# Z-Plate Strainers Bronze and Galvanized Plate Steel, Oval and Round Flanged Ends

**Sizes** 1 1/2" - 12"

## Specifications

	Size:	1 1/2-2"	3"	4-8"	10-12"
No. of Flange Bolt Holes		2	4	8	12
No. of Top Plate Bolts		6	8	8*	20*
Optional Drain Plug Inches		1/2	3/4	3/4	1
Operating Pressure psi		150	150	150	150
Operating Temperature °F		120	120	120	120
		* 6"=10, 8"=18, 12"=24			

**Strainer Type:** Z -Plate with top plate flushing feature

**Strainer Performance:** Protects turbine and compound meters from debris and cancels effects of velocity distortion

**Removable Drain Plug:** For sizes: 1 1/2" - 6" only

Materials:	
1 1/2"-6" Main Case	Bronze
1 1/2"-6" Top Plate	Bronze
8"-12" Main Case	Coated Galvanized Plate Steel
8"-12" Top Plate	Coated Galvanized Plate Steel
Strainer Plate	304 Stainless Steel
Top Plate Gasket	Rubber
Top Plate Bolts	Stainless Steel

## AMCO Strainer/Meter Laying Lengths (Inches)

Size	T3000 Turbine			C3000 Compound		
	Meter	Strainer	Total	Meter	Strainer	Total
1 1/2"	10	5	15	-	-	-
2"	10	7	17	17	7	24
3"	12	6	18	17	6	23
4"	14	7 1/2	21 1/2	20	7 1/2	27 1/2
6"	18	9	27	24	9	33
8"	20	9	29	34	9	43
10"	17 3/4	10	27 3/4	-	-	-
12"	19 3/4	12	31 3/4	-	-	-

**Construction.** The strainer consists of a main case, a removable perforated strainer, a flat gasket, a removable top cover and stainless steel bolts. The 1 1/2" - 6" main case and top plate are bronze and are supplied with a removable drain plug. The 8" - 12" main case and top plate are coated galvanized plate steel. The plate strainer is 304 stainless steel with 5/32" perforations, and the Z-configuration assures an effective open area 2 1/2 times greater than the size water meter case it precedes. The main case and top cover are assembled with a full-face flat gasket and stainless steel bolts.

**Connections.** Standard 1 1/2" and 2" strainers have 2-bolt oval flanged end connections. The 3" strainer has 4-bolt round flanged end connections. The 4"-8" have 8-bolt round flanged end connections, and the 10"-12" have 12-bolt round flanged end connections. All end connections are fully compatible to ANSI B 16.1 Class 125 flanges.

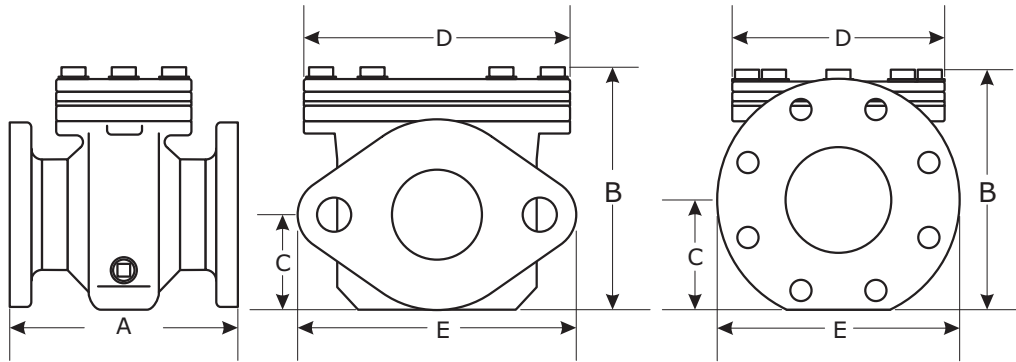
**Maintenance.** The Z-plate strainer can be removed, cleaned or replaced without removing the main case from the service line. For plate removal, the strainer main case must be isolated from line pressure. After depressurizing, simply loosen and remove the bolts and lift the top plate cover and gasket from the main case. Remove the strainer. Reassembly is the reverse. Maintenance should include a regular underpressure flushing program. Without isolating the strainer from line pressure, simply loosen the top cover bolts, allowing internal pressure to lift the full-face gasket and top plate for flushing. To reset the top plate, simply tighten the top cover bolts.

**Z-Plate Strainers With T3000 Turbine and C3000 Compound Meters**



**Dimensions & Net Weights**

Strainer Size/Ends	Dimensions (Inches)					Weight (lbs)
	A	B	C	D	E	
1 1/2" Oval	5	5 7/16	2 1/8	5 13/16	5 5/8	9 3/4
2" Oval	7	5 1/4	2 1/8	5 13/16	6	11 1/2
3" Round	6	7 3/4	3 9/16	6 7/8	7 1/2	24 3/4
4" Round	7 1/2	8 13/16	4 3/16	8 1/16	9	39 3/4
6" Round	9	11	5 1/4	11 1/8	11	65 1/2
8" Round	9	13 1/2	6 1/2	13	13 1/2	66
10" Round	10	17	8 1/2	14 1/2	17	105
12" Round	12	19	9 1/2	17	19	132



**AMCO Water Metering Systems Inc.**

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The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

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