

## SIMPLEX BASKET STRAINER \* THREADED ENDS (FF)

## **ASME CLASS 150 \* ALUMINUM BRONZE - LEAD FREE\***

Meets LEAD-FREE(1) requirements!

**MODELS: BS 87-AB** 

(ALUMINUM BRONZE)

**FEATURES** 

SIZES: 3/4" ~ 3"



QUICK-OPEN COVER



WITH ITS DUAL ANNULUS DESIGN, THE BS87 SERIES PROVIDES A STRAIGHTER FLOW PATH. DURING FLOW SIMULATION TESTING, THE BS87 ACHIEVED A 10 PERCENT REDUCTION IN PRESSURE LOSS WHEN COMPARED TO "OVER-THE-TOP" STYLE BASKET STRAINERS.

THE BS87 SERIES IS DESIGNED WITH A MACHINED, FLAT SEAT FOR THE STRAINING ELEMENT. THIS ALLOWS AN OPTIONAL O-RING TO BE INSTALLED UNDERNEATH THE LIP OF THE STRAINING ELEMENT, CREATING A TIGHT SEAL. THIS FEATURE PREVENTS DEBRIS FROM SLIPPING PAST THE STRAINING ELEMENT LIP- AS IS OFTEN THE CASE WITH 'SLANT-TYPE' BASKET STRAINERS THAT CANNOT UTILIZE AN O-RING.

♦ LARGE STRAINING CAPACITY

WITH ITS LARGE BODY AND SIZEABLE STRAINING ELEMENT, THE BS87 AB HAS THE ABILITY TO STORE LARGE QUANTITIES OF DEBRIS WITHOUT AFFECTING PRESSURE LOSS - THUS MAXIMIZING TIME BETWEEN SERVICING.

♦ NUMEROUS STRAINING ELEMENT OPTIONS

STRAINING ELEMENTS ARE AVAILABLE IN A VARIETY OF PERFORATIONS, MESHES, AND MATERIALS. SPECIAL DESIGNS ARE ALSO AVAILABLE INCLUDING MAGNETIC, WEDGEWIRE, DRILLED PERFORATIONS. AND PLEATED STRAINING ELEMENTS.

ASTM B148 BODY MATERIAL

ALUMINUM BRONZE IS STRONGER AND LESS LIKELY TO CORRODE THAN OTHER BRONZE ALLOYS, MAKING IT A PREFERRED CHOICE FOR SEA WATER AND OTHER APPLICATIONS WHERE CORROSION IS A CONCERN. BECAUSE OF ITS COPPER CONTENT, MARINE ORGANISMS CANNOT COLONIZE ON THE MATERIAL. ADDITIONALLY, TITAN'S BS87-AB IS USED FOR POTABLE WATER APPLICATIONS AS IT MEETS LEAD FREE STATUTES REQUIRING THAT THE LEAD CONTENT IN THE WETTED SURFACES IS 0.25% OR LESS AS DETERMINED BY A WEIGHTED AVERAGE.

**TECHNICAL** 

PRESSURE/ TEMPERATURE RATING (2)
AB - ASTM B148 - CLASS 150

WOG (Non-shock): 225 PSI @ 150 °F

- The BS 87-AB meets requirements for lead free use in potable water systems. The lead content in the wetted surfaces is 0.25% or less as determined by a weighted average. For more information on lead free requirements, contact Titan Flow Control.
- The above listed temperatures are theoretical and may vary during actual operating conditions. These ratings are based on ASME B16.24 for ASTM B62. The body material of the BS 87 is Aluminum Bronze B148 which may slightly exceed these ratings.

**NPPLICATIONS** 

MARKETS: POTABLE WATER, WATER & WASTEWATER, PULP & PAPER, CHEMICAL & PETROCHEMICAL, PETROLEUM, OIL & GAS, TRANSPORTATION, GOVERNMENT, MARINE INDUSTRY (SEAWATER), AND FOOD INDUSTRY

GENERAL APPLICATION: SIMPLEX BASKET STRAINERS ARE INSTALLED INTO A PIPELINE SYSTEM TO REMOVE UNWANTED DEBRIS FROM THE PIPELINE FLOW. BASKET STRAINERS ARE COMMONLY USED IN HORIZONTAL PIPELINES WHERE DEBRIS LOADING IS HIGH AND THE COLLECTION OF SOLIDS IS REQUIRED. STRAINING IS ACCOMPLISHED VIA A PERFORATED OR MESH LINED STRAINING ELEMENT, INTERNAL TO THE BASKET STRAINER. IN GENERAL, THE SIZE OF THE PERFORATION OR MESH SHOULD BE SLIGHTLY SMALLER THAN THE SMALLEST DEBRIS PARTICLE TO BE REMOVED. IT IS IMPORTANT TO NOTE THAT THE CORRECT SIZE OF A BASKET STRAINER IS DETERMINED BY ITS JOB FUNCTION, NOT BY THE SIZE OF THE PIPELINE.

The above data represents common market and service applications. No representation or guarantee, expressed or implied, is given due to the numerous variations of concentrations, temperatures and flow conditions that may occur during actual service.

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## SIMPLEX BASKET STRAINER

**BS 87-AB - (Aluminum Bronze)** 

**ASME** Class 150

Threaded Ends • Aluminum Bronze

BILL OF MATERIALS(1)						
No.	PART		BS87-AB			
ı	Body		Aluminum Bronze ASTM B148			
2	Cover		Aluminum Bronze ASTM B148			
3	Gasket (3)(4) O-Ring (3)(4)	Bolted Cover Quick-Open	PTFE (Non-Asbestos) Buna O-Ring			
4	Straining <sup>(2)</sup> Element		Type 304 Stainless Steel			
5	Stud		Alloy Steel A I 93-B8			
6	Nut Eye-Nut	Bolted Cover Quick-Open	A194-8 CS A105			
7	Drain Plug <sup>(5)</sup>		Stainless Steel			

- I. Equivalent or better materials may be substituted at the manufacturer's discretion.
- 2. Denotes recommended spare parts.

Size

**A** DIMENSION

**B** DIMENSION

**C** DIMENSION

**D** DIMENSION

**E** DIMENSION

Flow Coefficient

ASSEMBLED WEIGHT

3. Carbon Fiber Compressed gasket may be substituted at the manufacturer's discretion.

3/4

20

5.4

136.5

4 88

124

3.94

100

2.68

68.26

7.75

197

15

6.8

24

- 4. Bolted Cover is standard. Quick-Open Cover is optional.
- 5. Standard Vent shall be Brass and Gauge Plugs shall be Stainless Steel.

in

mm

in

mm

in

mm

in

mm in

mm

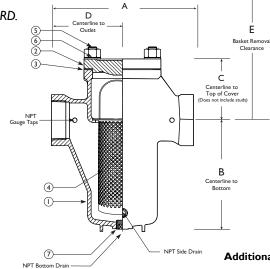
in

mm

lh

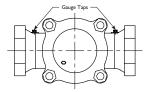
kg

**Bolted Cover** is STANDARD.

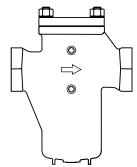


Drawings are for illustrative purposes. When required please request certified drawings.

**Additional Design Notes:** 



Side drains and gauge taps are standard on sizes 1 1/,"~3



 $C_v$ 1. Dimensions, weights, and flow coefficients are provided for reference only. When required, always request certified drawings.

**DIMENSIONS AND PERFORMANCE DATA** (1)

25

5.4

136.5

4 88

124

3.94

100

2.68

68.26

7.75

197

15.5

7.0

24

I 1/2

8.75

222.3

6 93

176

5.00

128

4.38

111

293

37

16.8

50

11.50

2

**50** 

8.75

222.3

6.93

176

5.00

128

4.38

111

11.50

293

36

78

16.3

2 1/2

65

12.5

317.5

9.81

249

6.50

164

6.25

158.7

16.75

426

68

30.8

3

80

12.5

317.5

9.81

249

6.50

164

6.25

158.7

16.75

426

66

30

210

2. Face to face values have a tolerance of ±0.06 in (±2.0 mm)

Gauge Taps located as shown on units 3/4"  $\sim 1$ " units

240					straii refer	ner with a bo ence only. Th	dy material o e body mate	e-temperatu of ASTM B62 rial of the BS tly exceed the	Cast Bronze 87AB is Alu	for
Pressure (PS)								odes limit the ature at 406°		
140	0	50	100	150	200		300	350	400	<u> </u>

NPT FITTING SCHEDULE(1)							
SIZE	Gauge Taps	Bottom Drain	Side Drain	Cover Vent			
3/4" ~ I"	1/8"	1/2"	NA	1/8"			
I'/2" ~ 2"	1/8"	1"	1/2"	1/8"			
21/2" ~ 3"	1/8"	11/2"	1/2"	1/8"			

1.3/4" ~ 1" size units gauge taps are located on the front of body.

CODE DESCRIPTION					
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ASME B16.24 Cast Copper Alloy Pipe Flan	ges, Flanged Fittings & Valves				
MSS SP-55 Quality Standard - Visual Ins	pection				

PRESSURE - TEMPERATURE RATING				
ASME CLASS 150	AB - B148			
WOG (Non-shock)	225 PSI @ 150 °F			

SCREEN SELECTION GUIDELINES						
Size	Liquid	Open Area	Steam	Open Area		
3/4" ~ 3"	1/16 (.0625)	41%	3/64 (.045)	36%		

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