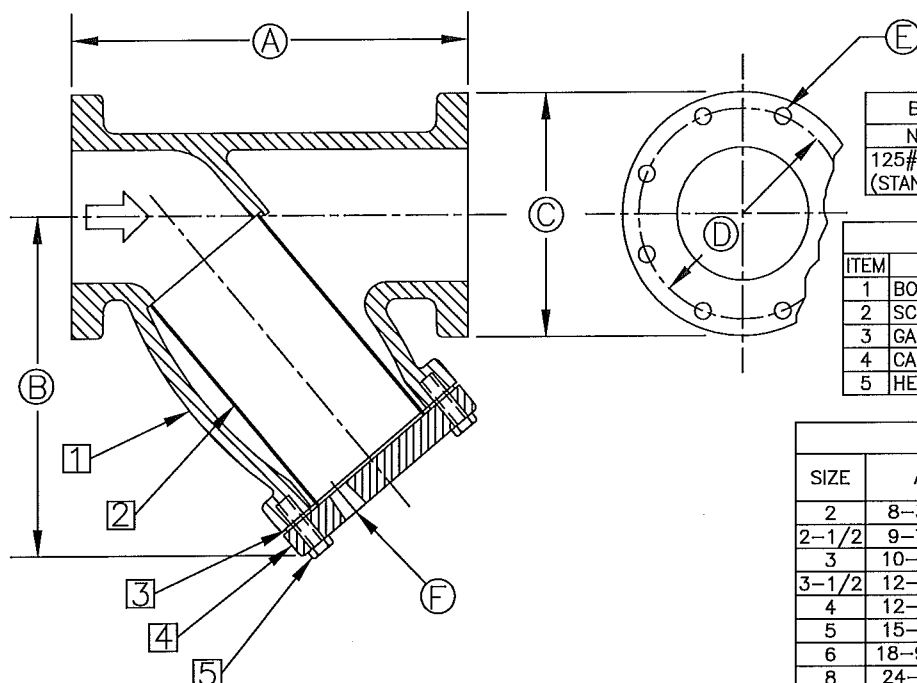


DRAWING NO.
AL 73174



BODY PRESSURE & TEMPERATURE RATINGS — NON SHOCK			
NOM. RATING	MEDIA	2" TO 12"	14" AND UP
125# ASA F.F.&D.	STEAM	125 PSI @ 450°F	100 PSI @ 353°F
(STANDARD FLANGE)	W.O.G.	200 PSI @ 150°F	150 PSI @ 150°F

PARTS LIST		
ITEM	DESCRIPTION	MATERIAL
1	BODY	CAST IRON (ASTM A-126 CLASS B)
2	SCREEN	STAINLESS STEEL (304)
3	GASKET	COMPOSITION
4	CAP	CAST IRON (ASTM A-126 CLASS B)
5	HEX HEAD CAP SCREWS	STEEL

DIMENSIONS						
SIZE	A	B	C	D	E	F
2	8-3/8	8-3/8	6	4-3/4	4	3/4
2-1/2	9-7/8	8-3/8	7	5-1/2	4	3/4
3	10-1/4	7-3/8	7-1/2	6	4	3/4
3-1/2	12-1/8	8-3/4	8-1/2	7	8	3/4
4	12-1/8	8-3/4	9	7-1/2	8	3/4
5	15-5/8	12	10	8-1/2	8	7/8
6	18-9/16	14	11	9-1/2	8	7/8
8	24-1/8	17-3/4	13-1/2	11-3/4	8	7/8
10	29-9/16	21-1/4	16	14-1/4	12	1
12	33-3/4	24	19	17	12	1
14	37-1/8	25-1/2	21	18-3/4	12	1
16	42-3/8	29-1/8	23-1/2	21-1/4	16	1-1/8
18	43-1/8	31	25	22-3/4	16	1-1/4

LARGER SIZES AVAILABLE ON APPLICATION

STANDARD SCREEN SUPPLIED			
SIZE	SCREEN GAGE	SCREEN PERFORATION	
		FOR STEAM	FOR LIQUID
2" TO 4"	28	3/64	1/16
5" TO 10"	24	3/64	1/8
12"	24	1/16	1/8
14" & UP	20	1/8	1/8

IF SCREEN REQUIREMENTS ARE NOT SPECIFIED, STANDARD SCREENS FOR STEAM SERVICE WILL BE SUPPLIED.

CERTIFIED DIMENSIONAL DRAWINGS ARE AVAILABLE UPON REQUEST

WEIGHTS (APPROXIMATE)													
SIZE	2	2-1/2	3	3-1/2	4	5	6	8	10	12	14	16	18
125#	30	35	35	65	65	105	155	240	400	500	825	1050	2280

KECKLEY

3400 CLEVELAND SKOKIE ILLINOIS

DIMENSIONAL ASSEMBLY

2" TO 18" STYLE A

125# FLANGE WYE STRAINER

MAT'L: CAST IRON

REQ. —

DRAWING NO.
AL 73174

PART NO.

SCALE: NTS

DATE: 07/27/00

DR. BY: REW

Style F-150

Y-Strainer

Cast Bronze (C84400)

125 lb. Threaded

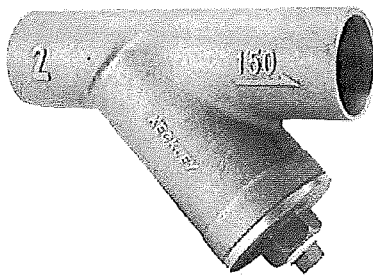


Style E-150

Y-Strainer

Cast Bronze (C84400)

125 lb. Solder Joint



Cast Bronze Y-Strainer

APPLICATIONS

Steam, water, oil or gas where protection from foreign matter in a pipeline is required.

CONSTRUCTION

The Keckley Style F-150 & E-150 strainers are constructed from the finest bronze castings and are machined to exacting specifications.

Solder Joint Ends are in compliance with ASME B16.18 unless otherwise specified.

FEATURES

The Keckley Style F-150 & E-150 strainers feature a machined seat in the body and cap for proper alignment and to ensure accurate reseating when servicing is required. These strainers have a straight threaded cap and are furnished standard with a NPT blow-off connection. The gasket is a flat fiber gasket that is compressed between the body and cap for maximum strength and durability. Keckley Style F-150 & E-150 strainers are furnished with a bronze blow-off plug unless otherwise specified.

SCREENS

Standard screens are 20 mesh 304 stainless steel through size 2". Sizes 2-1/2" and 3" are furnished with 3/64" perforated 304 stainless steel screens. All screens are spot welded for maximum strength. Different size meshes and perforations are available in stainless steel, monel, and brass to meet specific media requirements.

SELF CLEANING

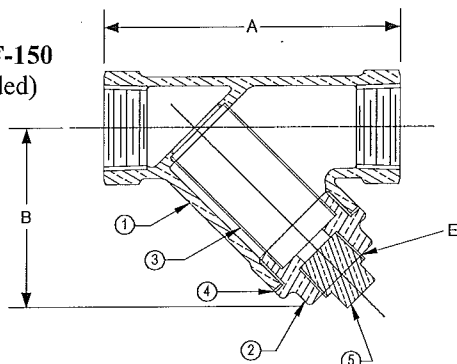
Self cleaning is accomplished by opening the valve or drain plug connected to the blow-off port. **Warning:** See Maintenance Instructions on page S6 of the Strainer Information Section for additional precautions and detailed information on servicing the strainer.

WORKING PRESSURES – NON SHOCK

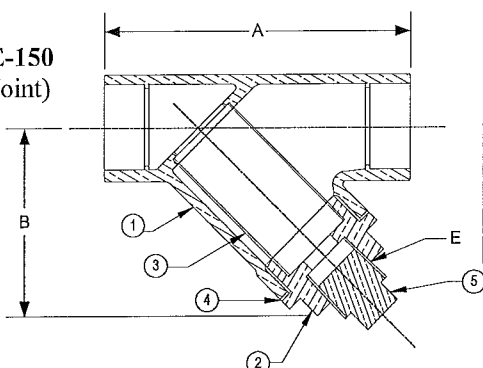
NOM. RATING	MEDIA	1/4" to 3"	8 mm to 80 mm
125# (THREADED & SOLDER JOINT)	STEAM	125 PSI @ 400°F	862 KPa @ 204°C
	W.O.G.	200 PSI @ 150°F	1379 KPa @ 66°C

TECHNICAL DATA DIMENSIONS AND WEIGHTS

STYLE F-150
(Threaded)



STYLE E-150
(Solder Joint)



Style F-150 & E-150

Y-Strainer, 125 lb. Threaded & Solder Joint
Cast Bronze (C84400)

PARTS LIST

ITEM	DESCRIPTION	MATERIAL
1	BODY	BRONZE (C84400)
2	CAP	BRONZE (C84400)
3	SCREEN	STAINLESS STEEL (304)
4	GASKET	COMPOSITION
5	PLUG	BRONZE (C84400)

STANDARD SCREENS SUPPLIED

SIZE		SCREEN GAGE	SCREEN PERFORATION				OPEN AREA
in	mm		FOR STEAM	OPEN AREA	FOR LIQUID	OPEN AREA	
1/4 to 2	8 to 50		in	mm	in	mm	
2-1/2 & 3	65 & 80	28	3/64	1.2	33%	3/64	1.2

Options: Other meshes, perforations, and screen materials are available.

SIZE		DIMENSIONS												WEIGHTS			
		A				B				E							
		F-150		E-150		F-150		E-150		F-150		E-150		F-150		E-150	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kgs	lbs	kgs
1/4	8	2-7/16	62	3-3/8	86	1-5/8	41	2-1/4	57	1/4	8	3/8	10	0.50	0.2	.75	0.3
3/8	10	2-9/16	65	3-3/8	86	1-5/8	41	2-1/4	57	1/4	8	3/8	10	0.50	0.2	.75	0.3
1/2	15	3-3/16	81	3-3/8	86	2-1/4	57	2-1/4	57	3/8	10	3/8	10	0.80	0.4	.75	0.3
3/4	20	3-15/16	100	4-1/4	108	2-5/8	67	2-5/8	67	3/8	10	3/8	10	1.20	0.5	1.00	0.5
1	25	4-1/2	114	5	127	3	76	3-3/16	81	1/2	15	1/2	15	1.80	0.8	2.25	1.0
1-1/4	32	5-5/16	135	5-7/8	149	3-9/16	90	3-3/4	95	1/2	15	1/2	15	2.70	1.2	2.75	1.2
1-1/2	40	6-3/16	157	6-7/8	175	4	102	4-1/8	105	1/2	15	1/2	15	3.60	1.6	3.25	1.5
2	50	7-7/16	189	8-5/8	219	4-5/8	117	5-1/8	130	1/2	15	1/2	15	5.60	2.5	5.75	2.6
2-1/2	65	9	229	10-3/8	264	5-1/2	140	5-3/4	146	1/2	15	1/2	15	10.00	4.5	8.5	3.9
3	80	10	254	11-3/4	298	6-1/8	156	6-1/2	165	1/2	15	1/2	15	13.50	6.1	12.5	5.7

Certified dimensional drawings are available upon request.

†This table reflects only the nearest metric equivalents.

FLOW COEFFICIENTS

Size	C _v	Size	C _v	Size	C _v
1/2"	9.5	1-1/4"	44.9	2-1/2"	129.7
3/4"	18.7	1-1/2"	61	3"	161.3
1"	30	2"	98		

TOTAL SCREEN AREA

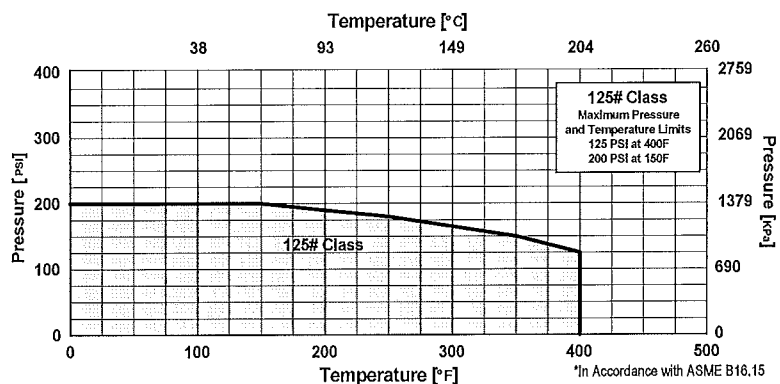
Size	(in ²)	Size	(in ²)	Size	(in ²)
1/2"	3.09	1-1/4"	14.26	2-1/2"	46.98
3/4"	7.36	1-1/2"	19.94	3"	62.87
1"	9.54	2"	33.39		

*See DETERMINING RATIOS on page S5 of the Strainer

Information Section for calculating NET FREE AREA of the screen to inside pipe area.

PRESSURE vs. TEMPERATURE CHART

125# Threaded & Solder Joint Cast Bronze (C84400)





PIPING SPECIFICATION

Rev. A

Date: 5-24-16

No.	PIPE SYSTEM	SIZE	PIPE MATERIAL	CONNECTION TYPE	FITTING MATERIAL	FITTINGS					VALVES							NOTES
						UNIONS	JOINT COMPOUNDS	FLANGES	GASKETS	BOLTS AND NUTS	BALL	BUTTERFLY	CHECK	DIAPHRAGM	GATE	GLOBE	PLUG	
1	CHILLED , HEAT RECOVERY (GLYCOL), AND HEATING WATER	2" and Under	Copper, Type L, (ASTM B88)	Press	Wrought Copper (ASTM B584)	N/A	N/A	N/A	EPDM	N/A	Milwaukee BA-480B		Milwaukee 509-P2		Milwaukee 148	Milwaukee 502		14
													MilwaukeeSilent Check 548T-P2		Apollo 101TLF-PR (threaded)	Apollo 120TLF-PR (threaded)		
													Apollo 163TLF-PR (threaded)					
		2" and Under	Carbon Steel, Sch 40, Electric Resistance Weld ERW, Black (ASTM A53)	Threaded	Malliable Iron, Class 150 (ASTM A47)	Acceptable	TFE Tape	Class 150; Raised Face; Forged Carbon Steel Threaded (ASTM A105)	N/A	N/A	Milwaukee BA-400s		Milwaukee 509Y					1, 14
													Milwaukee Silent Check 548T		Milwaukee 148	Milwaukee 502		
		2-1/2" to 12"	Carbon Steel, Sch 40, Electric Resistance Weld ERW, Black (ASTM A53)	Butt-Weld	Carbon Steel, Sch 40, Seamless, (ASTM A234-WPB)	Flanges	N/A	Class 150; Raised Face; Forged Carbon Steel Weld Neck (ASTM A105)	Garlock 2900	SAE J429 Grade 5 bolts and SAEJ5 Grade 5 Hex	Milwaukee F201CSN2	Milwaukee CL Series (Import)2-12 Figure# CL223E Lever Handle, Figure# CL323E	Milwaukee 2974A (Domestic) 2-12"		Milwaukee 2885M (Import) 2-12"	Milwaukee 2981A (Domestic) 2-10"		1, 14
													Milwaukee 2974M (Import);		Milwaukee 2885A (Domestic) 2-12"	Milwaukee 2981M (Import) 2-10"		
												Milwaukee ML Series (Domestic) 2-12 Figure # ML233E Lever Handle; Figure ML333E Gear. Operated	Milwaukee Silent Check Fig # 1800			Armstrong Circuit Balancing Valves		
		2-1/2" to 12"	Carbon Steel, Sch 40, Electric Resistance Weld ERW, Black (ASTM A53)	Grooved	Ductile Iron (ASTM A 536)	N/A	N/A	Flange Adapter Avalliable	EPDM	Galvanized Carbon Steel ASTM A 183 and ASTM A 563	Gruvlok Fig # 7500		Milwaukee Silent Check Fig # 1800		Milwaukee 2885M (Import) 2-12"	Milwaukee 2981A (Domestic) 2-10"		1,2, 14
												Gruvlok Fig # 7700	Milwaukee 2974M (Import);		Milwaukee 2885A (Domestic) 2-12"	Milwaukee 2981M (Import) 2-10"		
													Milwaukee 2974A (Domestic) 2-12"					
													Gruvlok Fig # 7800					
2	COOLING COIL DRAINS	2" and Under	Copper, Type M, (ASTM B88)	Press	Wrought Copper (ASTM B584)	N/A	N/A	N/A	EPDM	N/A	Milwaukee BA-480B		Milwaukee 509-P2		Milwaukee 148	Milwaukee 502		1
													MilwaukeeSilent Check 548T-P2		Apollo 101TLF-PR (threaded)	Apollo 120TLF-PR (threaded)		
													Apollo 163TLF-PR (threaded)					

4	REFRIGERANT	2" and Under	Copper, Type ARC, (ASTM B280)	Socket, Brazed	Wrought Copper (ASTM B584)	N/A	Stay-Brite Solder	N/A	N/A	N/A								14
5	MAKEUP WATER; CHEMICAL FEED	2" and Under	Copper, Type L, (ASTM B88)	Press	Wrought Copper (ASTM B584)	N/A	N/A	N/A	EPDM	N/A	Milwaukee BA-480B		Milwaukee 509-P2		Milwaukee 148	Milwaukee 502		1,14
													MilwaukeeSilent Check 548T-P2		Apollo 101TLF-PR (threaded)	Apollo 120TLF-PR (threaded)		
													Apollo 163TLF-PR (threaded)					

7	RELIEF VENTS	2" and Under	Carbon Steel, Sch 40, Electric Resistance Weld ERW, Black (ASTM A53)	Threaded	Malliable Iron, Class 150 (ASTM A47)	Acceptable	TFE Tape	Class 150; Raised Face; Forged Carbon Steel Threaded (ASTM A105)	N/A	N/A								1, 15
		2-1/2" to 12"	Carbon Steel, Sch 40, Electric Resistance Weld ERW, Black (ASTM A53)	Butt-Weld	Carbon Steel, Sch 40, Seamless, (ASTM A234-WPB)	Flanges	N/A	Class 150; Raised Face; Forged Carbon Steel Weld Neck (ASTM A105)	Garlock 2900	SAE J429 Grade 5 bolts and SAEJ5 Grade 5 Hex								1, 15
8	NATURAL GAS	2 1/2" and Under	Carbon Steel, Sch 40, Electric Resistance Weld ERW, Black (ASTM A53)	Threaded	Malliable Iron, Class 150 (ASTM A47)	N/A	N/A	Adapter Available	EPDM	SAE J429 Grade 5 bolts and SAEJ5 Grade 5 Hex	Milwaukee 22CSOR-02-LL						Nordstrum 142	1, 16
											Apollo 80-100 Series							
		3" to 12"	Carbon Steel, Sch 40, Electric Resistance Weld ERW, Black (ASTM A53)	Butt-Weld	Carbon Steel, Sch 40, Seamless, (ASTM A234-WPB)	Flanges	N/A	Class 150; Raised Face; Forged Carbon Steel Weld Neck (ASTM A105)	Garlock 5500	SAE J429 Grade 5 bolts and SAEJ5 Grade 5 Hex	PBV C4510-31-2236-FY-NL						Nordstrum 143	1, 16

**NOTES**

1. Use flat faced flanges (ASTM A105) in raised face flange piping systems where required for mating with flat faced valves and equipment.
2. Use grooved valves for piping 6" and less or where required based on cost.
3. Only use AGS Victaulic connections for chilled water piping systems over 14". N/A
4. Use 14" and over pipe size grooved piping systems only in low risk location such as basements. N/A
5. Threaded connections allowed where required for equipment connection.
6. Medical gas fittings will be oxygen cleaned, capped and bagged.
7. The maximum operating pressure for PVC pipe is 140°F. The allowable working pressure is reduced by a de-rating factor above 73°F.
8. The maximum operating pressure for CPVC pipe is 200°F. The allowable working pressure is reduced by a de-rating factor above 73°F.
9. The maximum operating pressure for PP pipe is 200°F. The allowable working pressure is reduced by a de-rating factor above 73°F.
10. The maximum operating pressure for HDPE pipe is 140°F. The allowable working pressure is reduced by a de-rating factor above 73°F.
11. Use Solon washers where thermal cycling is a significant issue.
12. Use fire and smoke rated materials for piping in soffits.
13. Use di-electric nipples Gruvlok Figures 7088, 7089 or 7090 to address galvanic action for dissimilar materials.
14. Use silent check valves in pump discharge applications.
15. Relief valves and rupture discs, pressure regulator vents and gas pressure switch vents shall be piped full size of valve outlet to atmosphere outside building. For multiple valve installations common discharge pipe shall have cross-sectional area equal to the sum of the outlet area of the connected valves.
16. Gas piping installed in mechanical room plenums or in ceiling plenums or where concealed in inaccessible plenums and chases shall have welded joints and fittings and shall not have valves installed within the spaces.