## For Industrial Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

# Model: 791USA

# UL Listed Ball-Plex<sup>™</sup> Cast Iron Screwed Ends Duplex Strainers

Sizes: 3/4" - 3" (20 - 80mm)

Strainers provide economical protection for costly pumps, meters, valves, and other similar mechanical equipment by straining foreign matter from the connected piping system. Installation of a strainer before mechanical equipment can ensure trouble free service and avoid costly shutdowns for repair or replacement of equipment damaged by foreign matter. The size of the perforation or mesh in the basket screen will determine the smallest particles captured. See Strainer Information section of the Mueller Steam Specialty Engineering binder for detailed information including sizes and materials available.

## **Typical Service**

- Duplex Strainers are designed for use in fluid handling systems where the flow cannot be shut down for basket cleaning.
- Typical services include cooling water, compressors, condensers, fire lines, fuel lines, lubrication systems, salt and fresh water systems, chemical process systems, pump suction service, and more.
- Consider strainer body and screen material as well as gasket and seat materials for suitability for particular service.

#### **Features**

- Ball-Plex™ Duplex Strainers use 3-way balls as the diverter valves
- Balls are 316SS for corrosion resistance, strength, and resistance to build-up of solids on the balls' surfaces.
- PTFE seats provide bubble-tight sealing, superior to metal seats in other designs. This eliminates potentially dangerous leakage into the chamber being cleaned.
- Two part body casting allows true and easy in-line service
- After removal of the cover and basket, all working parts are easily accessible even with the unit in line.
- The handle covers the pressurized chamber. This prevents accidental opening of the pressurized chamber, and allows easy access to the chamber to be cleaned.

### **Baskets**

- Large open area ratios ensure minimum pressure drop across the unit.
- See Pressure Drop Charts in Technical Data section of the Mueller Steam Specialty Engineering Binder.



Model 791USA

Pressure/Temperature - Non-Shock								
Model	Material	Rating						
791USA	Cast Iron	175psi @-20°F to 150°F						
		12.07 bar @ 65.56°C						
		150psi @ 250°F						
		10.34 bar @ 121.11°C						

**791USA** 

Class 125

#### **A** WARNING

Bolted Covers required above 150 psi or 200°F.

		STANDARD (WATER)				
MODEL	SIZES	MATERIAL	OPENING			
791USA	3/4" — 3"	304SS	.062 perf			

#### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Mueller Steam Specialty product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Mueller Steam Specialty Technical Service. Mueller Steam Specialty reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Mueller Steam Specialty products previously or subsequently sold.

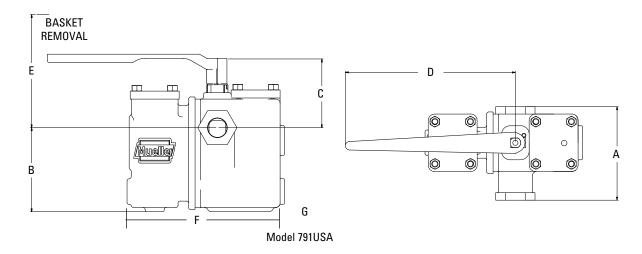


### Materials

	791USA
Body	Cast Iron ASTM A126-B
Cover	Cast Iron ASTM A126-B
Seats	PTFE
0-Rings	Buna-N

<sup>\*</sup>Cover may also be manufactured from equivalent plate material.

## **Dimensions and Weights**



SI	ZE				DIMEN	ISIONS										WEI	GHT
			A B		С			D E		F		G					
		·	•							Screen Removal		'		(NPT)			
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
3/4"	20	<b>5</b> ½	140	<b>4</b> <sup>15</sup> ⁄ <sub>16</sub>	125	45%	118	10	254	73/4	197	<b>10</b> <sup>3</sup> ⁄ <sub>16</sub>	259	3/4	20	30	13.6
1"	25	<b>5</b> ½	140	<b>4</b> <sup>15</sup> ⁄ <sub>16</sub>	125	45%	118	10	254	73/4	197	<b>10</b> <sup>3</sup> ⁄ <sub>16</sub>	259	3/4	32	30	13.6
11/4"	32	<b>7</b> ½	191	63/4	171	43//8	111.1	10	254	10%	264	123/4	324	11/4	32	53	24
11/2"	40	<b>7</b> ½	191	63/4	171	43/8	111.1	10	254	10%	264	123/4	324	11/4	32	54	24
2"	50	10	254	83/16	208	<b>7</b> 1/⁄8	181	20	508	12%	321	16%	416	11/4	40	105	47
21/2"	65	11½	292	12	309	81/16	205	20	508	<b>17</b> <sup>11</sup> / <sub>16</sub>	449	20%	518	1½	40	195	88
3"	80	11½	292	12	309	81/16	205	20	508	<b>17</b> <sup>1</sup> / <sub>16</sub>	449	203/8	518	11/2	40	200	90

Apply For Certified Drawings.

