

# Models: 101MAT, 103MAT

## LEAD FREE\*

### Cast Iron Standard Wafer Silent Check Valves Sizes: 1" - 10" (25 - 250mm)

Pressure/Temperature-Non-Shock		
Model	Material	Rating
101MAT	Cast Iron	200psi @ 150° F
103MAT	Cast Iron	500psi @ 150° F

Max. temp. can be limited by seat or spring material. Consult Factory.

**101MAT**  
**103MAT**

**Class 125**  
**Class 250**



Model 101M, 103M

### CAUTION

- Not for use with reciprocating compressors or pumps.
- Not for use in sewage ejector piping
- Not Recommended for Steam Service.
- Consult factory for other specific service conditions.

### Typical Service

- Designed for liquids and gases where flow reversal can cause surge and water hammer.
- Used extensively in pump suction and discharge

### Features

- Spring closes the disc before flow reversal, preventing surge and water hammer
- Mating surfaces of the disc and seat are hand lapped for best possible sealing.
- Disc is fully guided at top and bottom to insure alignment and sealing at any installation angle.
- Disc begins to open at .5 psi.
- Disc opens 1/3" per inch of line size, greater than similar competitive products, for enhanced flow.
- Bodies are designed to accommodate 110% flow of equivalent pipe size.

### Construction

- Wafer design for light weight and space saving.
- 302SS springs are standard. Many variations in material and weight are available on specification, consult factory.
- Designed to fit within ANSI bolt circles.
- Variety of trim and seat materials are available
  - See introductory pages of the Silent Check Valves section of the mueller Steam Specialty Engineering Binder for the Standard Materials and How to Order Instructions.

### Installation

- Can be installed horizontally, vertically or at any angle
  - Consult factory for downward vertical flow applications.
- Good piping practice recommends installing a distance of 5 to 10 pipe diameters from elbows, pumps, or others turbulence-creating devices.
- Mueller Steam Specialty strongly recommends the installation of a strainer ahead of the pump to ensure protection of both the pump and the valve from foreign particles.

### Ordering Information

- All pertinent information relating to the operating conditions for which the valve is intended should be supplied. These include operating pressure, temperature, flow rates, velocity, pump type, conveyance of corrosive fluids, etc.
- For certain applications such as pump suction or handling of volatile liquids, lighter or heavier springs may be required, consult factory.
- Barring specific information, standard springs and materials will be supplied as ordered.

Job Name \_\_\_\_\_

Job Location \_\_\_\_\_

Engineer \_\_\_\_\_

Approval \_\_\_\_\_

Contractor \_\_\_\_\_

Approval \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Representative \_\_\_\_\_

## Materials

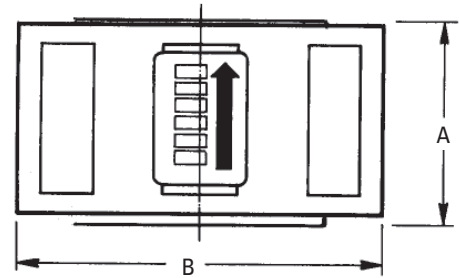
	101MAT, 103MAT
Body	Cast Iron ASTM A126-B
Trim	316 SS
Spring	302 Stainless Steel

## Pressure Drop

- See Technical Data Section of the Mueller Steam Specialty Engineering binder for Pressure Drop Charts and  $C_v$  values

## Dimensions and Weights

SIZE		DIMENSIONS				BOLTING		WEIGHT	
in.	mm	A		B		qty	size	lbs.	kgs.
		in.	mm	in.	mm				
<b>101MAT</b>									
1	25	2½	64	4⅝	118	4	½ x 5	7.5	3.4
1¼	30	2½	64	4⅝	118	4	½ x 5	8	3.6
1½	40	3	76	5	127	4	½ x 6	9.8	4
2	50	3	76	6	152	4	⅝ x 6	13.5	6.1
2½	65	3¾	95	7	178	4	⅝ x 7	25	11
3	80	4	102	7½	191	4	⅝ x 7¼	27	12
4	100	5	127	9	229	8	⅝ x 8¾	38	17
5	25	6	152	10	254	8	¾ x 10	50	22
6	150	7	178	11	279	8	¾ x 11	72	32
8	200	8¾	222	13½	343	8	¾ x 13	120	54
10	250	10	254	16	406	12	⅞ x 14¾	186	84
<b>103MAT</b>									
1	25	2½	64	5¼	133	4	⅝ x 5¾	12	5
1¼	30	2½	64	5¼	133	4	⅝ x 5¾	16	7
1½	40	3	76	6⅞	156	4	¾ x 6¾	14	6
2	50	3	76	6½	165	8	⅝ x 6¾	25	11
2½	65	3¾	95	7½	191	8	¾ x 7¾	25	11
3	80	4	102	8¼	209	8	¾ x 8¼	36	16
4	100	5	127	10	254	8	¾ x 9½	51	23
5	25	6	152	11	279	8	¾ x 10¾	75	34
6	150	7	178	12½	318	12	¾ x 12	87	39
8	200	8¾	222	15	381	12	⅞ x 14½	150	68
10	250	10	254	17½	445	16	1 x 16½	226	102



Model 101M, 103M

Apply For Certified Drawings.

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

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.



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