

## Engineering Specification

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

## Cast Iron Standard Wafer Silent Check Valves

Models: 101MAT, Class 125,  
103MAT, Class 250,  
Sizes: 1"– 10" (25 – 250mm)

### 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.

### 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.



Model 101M, 103M

### Pressure/Temperature–Non-Shock

Model	Material	Rating
101 MAT	Cast Iron	200psi @ 150°F
103 MAT	Cast Iron	500psi @ 150°F

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

### 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.

### 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.
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**Mueller Steam Specialty™**

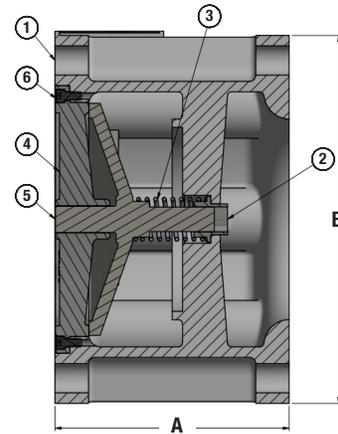
A WATTS Brand

## 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.

## Pressure Drop

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



Models: 101M, 103M

## Dimensions and Weights

SIZE		DIMENSIONS				WEIGHT			
in.	mm	A in.	A mm	B in.	B mm	BOLTING qty	BOLTING size	lbs.	kgs.
<b>101MAT</b>									
1	25	2½	64	4⅝	118	4	½x5	7.5	3.4
1¼	30	2½	64	4⅝	118	4	½x5	8	3.6
1½	40	3	76	5	127	4	½x6	9.8	4
2	50	3	76	6	152	4	⅝x6	13.5	6.1
2½	65	3¾	95	7	178	4	⅝x7	25	11
3	80	4	102	7½	191	4	⅝x7¼	27	12
4	100	5	127	9	229	8	⅝x8¾	38	17
5	25	6	152	10	254	8	¾x10	50	22
6	150	7	178	11	279	8	¾x11	72	32
8	200	8¾	222	13½	343	8	¾x13	120	54
10	250	10	254	16	406	12	⅞x14¾	186	84
<b>103MAT</b>									
1	25	2½	64	5¼	133	4	⅝x5¾	12	5
1¼	30	2½	64	5¼	133	4	⅝x5¾	16	7
1½	40	3	76	6⅞	156	4	¾x6¾	14	6
2	50	3	76	6½	165	8	⅝x6¾	25	11
2½	65	3¾	95	7½	191	8	¾x7¾	25	11
3	80	4	102	8¼	209	8	¾x8¼	36	16
4	100	5	127	10	254	8	¾x9½	51	23
5	25	6	152	11	279	8	¾x10¾	75	34
6	150	7	178	12½	318	12	¾x12	87	39
8	200	8¾	222	15	381	12	⅞x14½	150	68
10	250	10	254	17½	445	16	1x16½	226	102

Apply For Certified Drawings.

**Limited Warranty:** Mueller Steam Specialty warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge. This shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** Any implied warranties that are imposed by law are limited in duration to one year.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights.



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