# **Engineering Specification**

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

# Cast Stainless Steel Standard Wafer Silent Check Valves

Models: 101MHT, Class 150, 103MHT, Class 300, 131HT. Class 600

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 .5psi.
- 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.
- Full ANSI Class 150, 300 or 600 rating.
- 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.



#### Model 101M

Pressure/Temperature-Non-Shock					
Model	Material	Rating			
101MHT	Stainless Steel	275psi @ 100°F			
103MHT	Stainless Steel	720psi @ 100°F			
131HT	Stainless Steel	1440psi @ 100°F			

Max. temp. can be limited by seat or spring material. Consult Factory. Not Recommended for Steam Service.

#### 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.

#### CAUTION

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

#### 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.



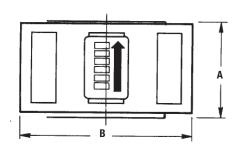
# **Ordering Information**

- 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.

# **Dimensions and Weights**

SIZ	=	DIMENSIONS				WEI	GHT		
		Α		В	В		BOLTING		
in.	mm	in.	mm	in.	mm	qty	size	lbs.	kgs.
101MHT									
1	25	21/2	64	45/8	117	4	½x5	10	4.5
11/4	30	21/2	64	45//8	117	4	½x5	13	5.9
11/2	40	3	76	5	127	4	½x 6	15	6
2	50	3	76	6	152	4	5⁄8 <b>x</b> 6	20	9
21/2	65	33/4	95	7	178	4	5⁄8x7	25	11
3	80	4	102	71/2	191	4	5/8 <b>x</b> 7 <sup>1</sup> / <sub>4</sub>	28	12
4	100	5	127	9	229	8	5/8 <b>x 8</b> 3/4	38	17
5	125	6	152	10	254	8	3/4 x10	53	24
6	150	7	178	11	279	8	3/4 <b>x11</b>	70	31
8	200	83/4	222	13½	343	8	³⁄₄x13	114	51
10	250	10	254	16	406	12	<sup>7</sup> / <sub>8</sub> x14 <sup>3</sup> / <sub>4</sub>	178	80
103MHT									
1	25	21/2	64	51/4	133	4	% x 5¾	12	5.4
11/4	30	21/2	64	51/4	133	4	5/8 x 53/4	16	7.2
11/2	40	3	76	61//8	156	4	$\frac{3}{4}$ x 6 $\frac{3}{4}$	19	8
2	50	3	76	61/2	165	8	5% x 6¾	25	11
21/2	65	33/4	95	71/2	191	8	$\frac{3}{4}$ X $\frac{7}{4}$	29	13
3	80	4	102	81/4	210	8	$\frac{3}{4}$ x 8 $\frac{1}{4}$	34	15
4	100	5	127	10	254	8	$\frac{3}{4}$ X $9\frac{1}{2}$	54	24
5	125	6	152	11	279	8	3/4x103/4	75	34
6	150	7	178	12½	318	12	3/4x12	94	42
8	200	83/4	222	15	381	12	$\frac{7}{8}$ x14 $\frac{1}{2}$	150	68
10	250	10	254	171/2	446	16	1 x 16½	226	102
131HT									
1	25	2	73	51/4	133	4	5/8 x 6 1/4	13	5.9
11/4	30	2	73	51/4	133	4	5/8 x 6 1/2	17	7.7
11/2	40	3	85	61//8	156	4	3/4 <b>x</b> 73/8	20	9
2	50	3	85	61/2	165	8	5/8 x 73/8	27	12
21/2	65	4	105	71/2	191	8	3/4 <b>x</b> 85/8	31	14
3	80	4	121	81/4	210	8	3/4x 91/8	37	16

Apply For Certified Drawings.



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#### **Materials**

	101MHT, 103MHT, 131HT
Body	Stainless Steel ASTM A351 CF8M
Trim	Stainless Steel ASTM A351 CF8M
Spring	302 Stainless Steel, ASTM A276

### **Pressure Drop**

ullet See Technical Data Section of the Mueller Steam Specialty Engineering binder for Pressure Drop Charts and  $C_V$  values.

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.

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