

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Cast Carbon Steel Standard Wafer Silent Check Valves

Models: 101MDT, Class 150,
103MDT, Class 300,
131DT, 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
101MDT	Carbon Steel	285psi@100° F
103MDT	Carbon Steel	740psi @ 100° F
131DT	Carbon Steel	1480psi @ 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.

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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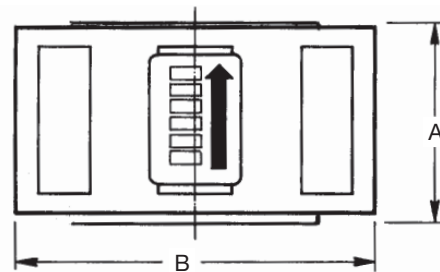
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Ordering Information

- 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

SIZE		DIMENSIONS				WEIGHT			
in.	mm	A		B		BOLTING			
		in.	mm	in.	mm	qty	size	lbs.	kgs.
101MDT									
1	25	2½	64	4⅝	117	4	½ x 5	10	4.5
1¼	30	2½	64	4⅝	117	4	½ x 5	13	5.9
1½	40	3	76	5	127	4	½ x 6	15	6
2	50	3	76	6	152	4	⅝ x 6	20	9
2½	65	3¾	95	7	178	4	⅝ x 7	25	11
3	80	4	102	7½	191	4	⅝ x 7¼	28	12
4	100	5	127	9	229	8	⅝ x 8¾	38	17
5	125	6	152	10	254	8	¾ x 10	53	24
6	150	7	178	11	279	8	¾ x 11	70	31
8	200	8¾	222	13½	343	8	¾ x 13	114	51
10	250	10	254	16	406	12	7⁄8 x 14¾	178	80
103MDT									
1	25	2½	64	5¼	133	4	⅝ x 5¾	12	5.4
1¼	30	2½	64	5¼	133	4	⅝ x 5¾	16	7.2
1½	40	3	76	6⅛	156	4	¾ x 6¾	19	8
2	50	3	76	6½	165	8	¾ x 6¾	25	11
2½	65	3¾	95	7½	191	8	¾ x 7¾	29	13
3	80	4	102	8¼	210	8	¾ x 8¼	34	15
4	100	5	127	10	254	8	¾ x 9½	54	24
5	125	6	152	11	279	8	¾ x 10¾	75	34
6	150	7	178	12½	318	12	¾ x 12	94	42
8	200	8¾	222	15	381	12	7⁄8 x 14½	150	68
10	250	10	254	17½	446	16	1 x 16½	226	102
131DT									
1	25	2⅞	73	5¼	133	4	⅝ x 6¼	13	5.9
1¼	30	2⅞	73	5¼	133	4	⅝ x 6½	17	7.7
1½	40	3⅜	85	6⅛	156	4	¾ x 7⅜	20	9
2	50	3⅜	85	6½	165	8	⅝ x 7⅜	27	12
2½	65	4⅛	105	7½	191	8	¾ x 8⅝	31	14
3	80	4⅜	121	8¼	210	8	¾ x 9⅞	37	16



Model 101M

Materials

101MDT, 103MDT, 131DT	
Body	Carbon Steel ASTM A216 WCB
Trim	Stainless Steel ASTM A351 CF8M
Spring	302 Stainless Steel, ASTM A276

Pressure Drop

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

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.

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