

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Cast Iron or Cast Bronze Compact Wafer Silent Check Valves

Models: 91, 92, 93

Sizes: 2"– 12" (50 – 300mm)

Typical Service

- Designed for liquids and gases where flow reversal can cause surge and water hammer.

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 (34.5 kPa).
- Disc opens 1/3" per inch of line size, greater than similar competitive products, for enhanced flow.

Construction

- Compact Wafer design for lightweight and space saving.
- Bodies are designed to accommodate 110% flow of equivalent pipe size.
- 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 standard materials and How To Order Instructions.

Installation

- Can be installed horizontally, vertically or at any angle.
 - Consult factory for downward vertical flow applications.

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 91

Pressure/Temperature–Non-Shock

Model	Sizes	Rating
91	2" - 6"(50-150)	200psi @ 150°F
92	8" - 12"(200-300)	200psi @ 150°F
93	8" - 10"(200-250)	200psi @ 150°F

Max. temp. can be limited by seat material. Consult Factory.
Not recommended for Steam Service.

- 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.

NOTICE

- 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™

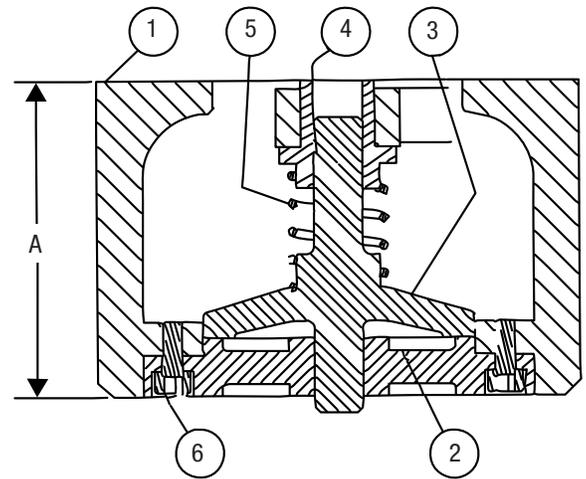
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Ordering Information

- 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 as ordered.

Bill of Materials

ITEM	QTY	DESCRIPTION	MATERIALS
1	1	Body	Cast Iron A126 GR B
2	1	Valve Seat	A351 CF8M SS
3	1	Valve Disc	A351 CF8M SS
4	1	Flange Bushing	A351 CF8M SS
5	1	Valve Spring	302SS
6	2	Cap Screw	316SS



SECTION VIEW

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										WEIGHT						
in.	mm	Face to Face in. mm		Bolting									91AT/AT lbs. kgs.		92AT lbs. kgs.		93AT lbs. kgs.	
				91AT/AT			92AT			93AT								
		in.	mm	Qty.	Size	Length	Qty.	Size	Length	Qty.	Size	Length						
2	50	2 ⁵ / ₈	67	4	5 ⁸ / ₈	5 ³ / ₄	-	-	-	-	-	-	5	2	-	-	-	-
2 ¹ / ₂	65	2 ⁷ / ₈	73	4	5 ⁸ / ₈	6	-	-	-	-	-	-	8	4	-	-	-	-
3	80	3 ¹ / ₈	87	4	5 ⁸ / ₈	6 ¹ / ₂	-	-	-	-	-	-	10	5	-	-	-	-
4	100	4	102	8	5 ⁸ / ₈	7 ³ / ₄	-	-	-	-	-	-	17	8	-	-	-	-
5	125	4 ⁵ / ₈	118	8	3 ⁴ / ₄	8 ¹ / ₂	-	-	-	-	-	-	27	12	-	-	-	-
6	150	5 ⁵ / ₁₆	141	8	3 ⁴ / ₄	9 ¹ / ₂	-	-	-	-	-	-	39	18	-	-	-	-
8	200	6 ¹ / ₂	165	-	-	-	8	3 ⁴ / ₄	10 ³ / ₄	12	7 ⁸ / ₈	12 ¹ / ₄	-	-	86	39	98	45
10	250	8 ³ / ₄	210	-	-	-	12	7 ⁸ / ₈	13	16	1	14 ³ / ₄	-	-	159	72	170	77
12	300	11 ¹ / ₄	286	-	-	-	24	7 ⁸ / ₈	4	-	-	-	-	-	337	153	-	-

Apply For Certified Drawings.

Models 91BT, 92BT, 93BT available upon request. Consult factory for weights and dimensions and pressure / temperature ratings.

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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USA: T: (800) 334-6259 • F: (800) 421-6772 • MuellerSteam.com

Latin America: T: (52) 55-4122-0138 • MuellerSteam.com