

Engineering Specification

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

LEAD FREE*

Cast Iron Globe Body Silent Check Valves

Models: 105MAT, Class 125
 107MAT, Class 250
 Sizes: 2" – 30" (50 – 750mm)

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

- Globe body design for greatest flow capacity in a silent check valve.
- Integrally cast flanges for ease of installation, Class 125 or 250 patterns.
- 302SS springs are standard. Many variations in material and weight are available on specification, consult factory.
- Designed to fit ANSI flanges.
- Variety of trim and seat materials are available.



Model 105M

Pressure/Temperature-Non-Shock

Model	Sizes	Rating
105MAT	2" – 12"	200psi @ 150° F
105MAT	14" – 30"	150psi @ 150° F
107MAT	2" – 12"	500psi @ 150° F
107MAT	14" – 30"	300psi @ 150° F

NOTICE

- Not for use with reciprocating compressors or pumps.
- Not for use in sewage ejector piping.
- Max. temp. can be limited by seat or spring material. Consult Factory.
- Not Recommended for Steam Service.
- Consult factory for other specific service conditions.

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.

- 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.
- Silicon Bronze guide pins and bushings supplied with Bronze trim.
- Stainless Steel guide pins and bushings supplied with Stainless Steel trim.

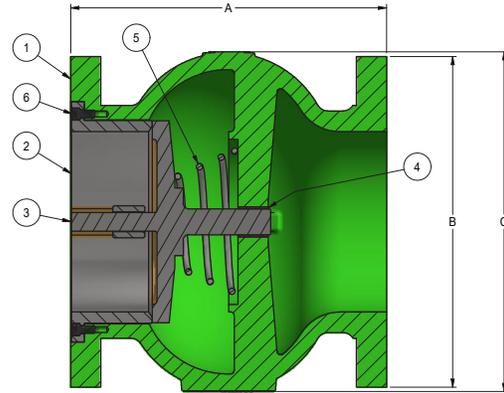
Mueller Steam Specialty product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Mueller Steam Specialty Technical Service. Mueller Steam Specialty reserves the right to change or modify product design, construction, 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.

Mueller Steam Specialty™

A WATTS Brand

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.



Model 105M

Dimensions and Weights

SIZE		DIMENSIONS						WEIGHT	
in.	mm	A		B		C		lbs.	kgs.
		in.	mm	in.	mm	in.	mm		
105MAT									
2	50	6¼	159	6	152	4⅝	117	20	9
2½	65	7	178	7	178	5½	140	24	10
3	80	7½	191	7½	191	6¼	159	32	14
4	100	8½	216	9	229	8⅝	219	56	25
5	125	9½	241	10	254	10	254	74	33
6	150	10½	267	11	279	11⅝	282	95	43
8	200	13½	343	13½	343	14⅝	371	178	80
10	250	16¼	413	16	406	17⅞	441	265	120
12	300	20¼	514	19	483	21¼	552	454	206
14	350	22¾	578	21	533	24	610	598	271
16	400	24¾	629	23½	597	26⅞	670	840	381
18	450	22½	572	25	635	29⅝	752	892	405
20	500	24	610	27½	698	32¾	832	1140	418
24	600	24	610	32	813	37	940	1540	700
30	750	30	762	38¾	984	42½	1080	–	–
107MAT									
2	50	6¼	171	6½	165	4⅞	124	24	10
2½	65	7⅞	194	7½	191	5¾	146	28	12
3	80	8¼	210	8¼	209	6⅝	168	46	20
4	100	9⅞	232	10	254	8⅞	225	76	34
5	125	10⅞	264	11	279	10⅞	263	134	60
6	150	11⅞	289	12½	318	11½	292	144	65
8	200	14	356	15	381	15	381	242	110
10	250	17	432	17½	445	17⅞	454	367	166
12	300	20⅞	530	20½	521	22⅞	561	672	305
14	350	23⅞	594	23	584	24¼	616	725	329
16	400	25⅞	651	25½	678	26⅞	683	1000	454
18	450	24⅞	613	28	711	30	762	1238	562
20	500	25⅞	651	30½	775	33¼	844	1775	806
24	600	24⅞	631	36	914	37	940	2500	1136

Apply For Certified Drawings.

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

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.



A WATTS Brand