Engineering Specification				
Job Name	Contractor	_		
Job Location	Approval			
Engineer	Contractor's P.O. No.			
Approval	Representative			

# Cast Iron Globe Body Silent Check Valves

Models: 105MAP, Class 125

107MAP, 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.
  - 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.



#### Model 105M

Pressure/Temperature-Non-Shock				
Model	Sizes	Rating		
105MAP	2"-12"	200psi @ 150° F		
105MAP	14"-30"	150psi @ 150° F		
107MAP	2"-12"	500psi @ 150° F		
107MAP	14"-30"	300psi @ 150° 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 turbulencecreating 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.

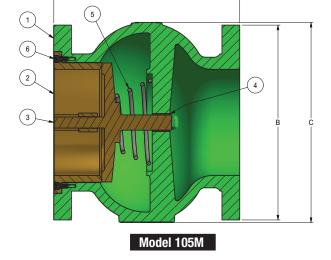


# **Ordering Information**

- 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**

-									
SI	ZE	DIMENSIONS					WEI	GHT	
			-	E			C		
in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
	AP/AT								
2	50	61/4	159	6	152	45%	117	20	9
21/2	65	7	178	7	178	5½	140	24	10
3	80	71/2	191	71/2	191	61/4	159	32	14
4	100	81/2	216	9	229	85/8	219	56	25
5	125	91/2	241	10	254	10	254	74	33
6	150	10½	267	11	279	1111/8	282	95	43
8	200	13½	343	13½	343	145/8	371	178	80
10	250	161/4	413	16	406	173/8	441	265	120
12	300	201/4	514	19	483	213/4	552	454	206
14	350	223/4	578	21	533	24	610	598	271
16	400	243/4	629	231/2	597	26%	670	840	381
18	450	221/2	572	25	635	295/8	752	892	405
20	500	24	610	271/2	698	323/4	832	1140	418
24	600	24	610	32	813	37	940	1540	700
30	750	30	762	38¾	984	421/2	1080	_	_
107M	AP/AT								
2	50	63/4	171	61/2	165	47/8	124	24	10
21/2	65	75/8	194	71/2	191	53/4	146	28	12
3	80	81/4	210	81/4	209	65/8	168	46	20
4	100	91/8	232	10	254	87/8	225	76	34
5	125	10%	264	11	279	10%	263	134	60
6	150	113/8	289	121/2	318	11½	292	144	65
8	200	14	356	15	381	15	381	242	110
10	250	17	432	171/2	445	171//8	454	367	166
12	300	201//8	530	201/2	521	221/8	561	672	305
14	350	23%	594	23	584	241/4	616	725	329
16	400	25%	651	25½	678	267/8	683	1000	454
18	450	241/8	613	28	711	30	762	1238	562
20	500	25%	651	30½	775	331/4	844	1775	806
24	600	247/8	631	36	914	37	940	2500	1136



## **Materials**

ITEM	QTY	DESCRIPTION	MATERIAL
1	1	6" 105M BODY	ASTM A126-B
2	1	6" 105M SEAT	BRONZE ASTM B62 (85-555)
3	1	6" 105M/107M DISC	BRONZE ASTM B62 (85-555)
4	1	6" 105M BUSHING	BRONZE SS2832-16
5	1	6" 105M - 113M SPRING	302 SS
6	4	1/4"-20 X 5/8"L. SHCS	18-8 SS

Also available with Stainless Steel Trim and other seat materials.

# **Pressure Drop**

 See Technical Data Section of the Mueller Steam Specialty Engineering binder for Pressure Drop Charts and Cy 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, misuse, misuse, proper installation of the product. THIS 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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