

# Engineering Specification

Job Name \_\_\_\_\_  
 Job Location \_\_\_\_\_  
 Engineer \_\_\_\_\_  
 Approval \_\_\_\_\_

Contractor \_\_\_\_\_  
 Approval \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative \_\_\_\_\_

## Series 007 Double Check Valve Assemblies

**Sizes: 1/2" – 2"**

Series 007 Double Check Valve Assemblies are designed to protect drinking water supplies from dangerous cross-connections in accordance with national plumbing codes and water authority requirements for non-potable service applications such as irrigation, fireline, or industrial processing. Only those cross-connections identified by local inspection authorities as non-health hazard shall be allowed the use of an approved double check valve assembly.

Check with local authority having jurisdiction regarding vertical orientation, frequency of testing or other installation requirements.

The valve shall meet the requirements of ASSE Std. 1015 and AWWA Std. C510. Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

### Features

- Ease of maintenance — only one cover
- Top entry
- Replaceable seats and seat discs
- Modular construction
- Compact design
- Cast bronze body construction — 1/2" – 2"
- Top mounted ball valve test cocks
- Low pressure drop
- No special tools required for servicing
- 1/2" – 1" have tee handles

### Specifications

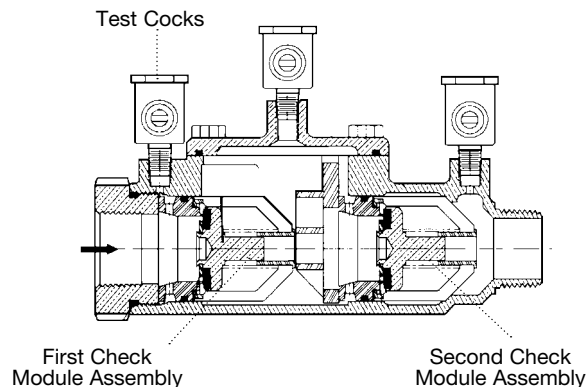
A Double Check Valve Assembly shall be installed at each noted location. The assembly shall consist of two positive seating check modules with captured springs and rubber seat discs. The check module seats and seat discs shall be replaceable. Service of all internal components shall be through a single bronze or stainless steel access cover secured with stainless steel bolts. The assembly shall also include two resilient seated isolation valves; four top mounted, resilient seated test cocks. The assembly shall meet the requirements of ASSE Std. 1015 and AWWA Std. C510. Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. Assembly shall be a Watts Series 007.



1" 007M1QT



1" 007M1QT-S



The 007 Series features a modular design concept which facilitates complete maintenance and assembly by retaining the spring load.

**Now Available**  
**WattsBox Insulated Enclosures.**  
 For more information, send for literature ES-WB.

**NOTICE**  
 Inquire with governing authorities for local installation requirements

**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.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts 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 Watts products previously or subsequently sold.



## Pressure – Temperature

1/2" – 2"

Temperature Range: 33°F – 180°F (0.5°C – 82°C).

Maximum Working Pressure: 175psi (12.1 bar).

## Standards

ASSE Std. 1015, AWWA Std. C510

IAPMO PS31, CSA B64.5

## Approvals



† ASSE, AWWA, IAPMO, CSA, UPC

▲ Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

• Models LF and S are not listed.

◆ UL Classified (LF models only) 3/4" – 2" (except 007M3LF)

\* Horizontal and vertical "flow up" approval on all sizes

Suffix:

S - bronze strainer

LF - without shutoff valves

SH - stainless steel ball valve handles

HC - 2 1/2" inlet/outlet fire hydrant fittings (2" valve)

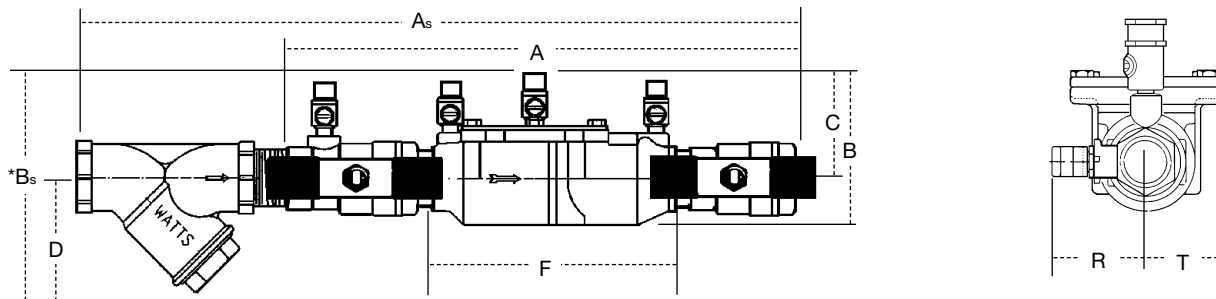
Prefix:

U - Union connections

## Dimensions – Weights

## Models

Sizes: 1/2" – 2"



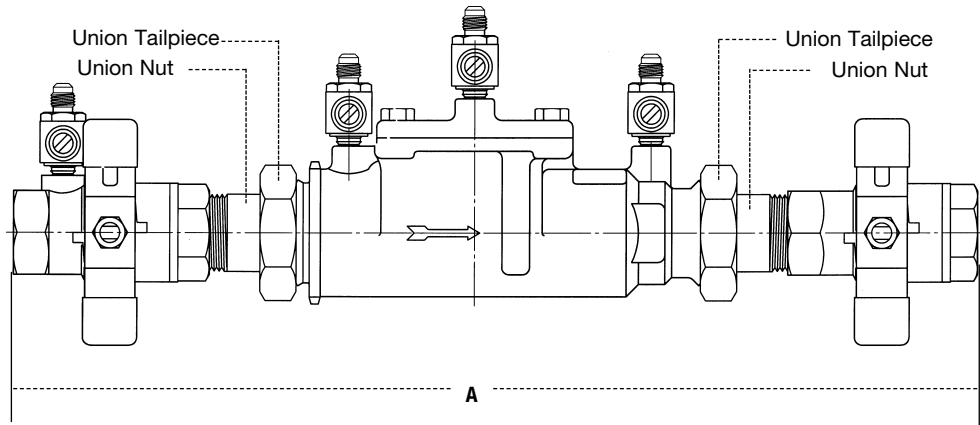
\*Subscript 'S' = strainer model

MODEL	SIZE	DIMENSIONS										WEIGHT							
		A		B		C		D		F		G		R		T		lbs.	kgs.
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
†▲ 007QT	1/2	10	254	4 9/16	117	2 1/16	62	—	—	5	127	3 3/8	85	2 5/16	59	2 1/16	52	4.5	2
†▲ 007M3QT	3/4	11 1/8	282	4	102	3 1/8	79	—	—	6 3/16	157	3 7/16	87	2 1/8	54	1 5/16	33	5	2.3
†▲ 007M1QT	1	13 3/4	337	5 1/8	130	4	102	—	—	7 1/2	191	3 3/8	85	1 11/16	43	1 11/16	43	12	5.4
†▲ 007M2QT	1 1/4	16 3/8	416	5	127	3 3/16	84	—	—	9 1/2	241	5	127	3	76	2	50	15	6.8
†▲ 007M2QT	1 1/2	16 3/4	425	4 7/8	124	3 1/2	89	—	—	9 3/4	248	5 13/16	148	3 1/8	79	2 11/16	68	15.9	7.2
†▲ 007M1QT	2	19 1/2	495	6 1/4	159	4	102	—	—	13 3/8	340	6 1/8	156	3 7/16	87	2 11/16	68	25.7	11.7
• 007QT-S	1/2	13	330	6	152	2 1/16	62	3	76	5	127	3 3/8	85	2 5/16	59	2 1/16	52	5.5	2.5
• 007M3QT-S	3/4	14 1/2	368	6 1/8	156	3 1/8	79	3	76	6 3/16	157	3 7/16	87	2 1/8	54	1 5/16	33	6.7	3.1
• 007M1QT-S	1	17 15/16	454	7 3/4	197	4	102	3 1/4	83	7 1/2	191	3 3/8	85	1 11/16	43	1 11/16	43	14	6.4
• 007M2QT-S	1 1/4	21 1/2	546	7 1/16	179	3 3/16	84	3 1/2	83	9 1/2	241	5	127	3	76	2	50	19	8.6
• 007M2QT-S	1 1/2	21 3/4	552	7 1/16	179	3 1/2	89	3 3/4	95	9 3/4	248	5 13/16	148	3 1/8	79	2 11/16	68	19.6	8.9
• 007M1QT-S	2	25 3/4	654	8 3/4	222	4	102	4	102	13 3/8	340	6 1/8	156	3 7/16	87	2 11/16	68	33.5	15.2

Suffix HC – Fire Hydrant Fittings dimension "A" = 23 1/2" (594mm)

## Dimensions – Weights

1" U007M1QT



Sizes: 1/2" – 2"

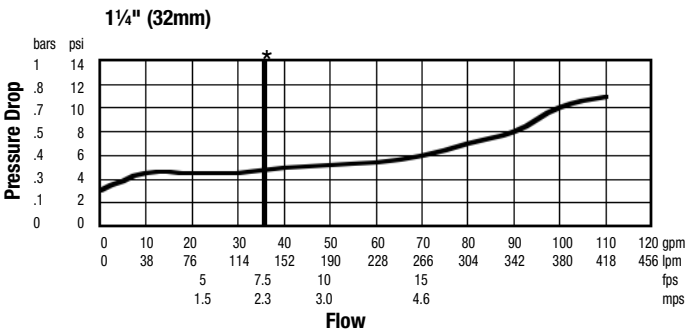
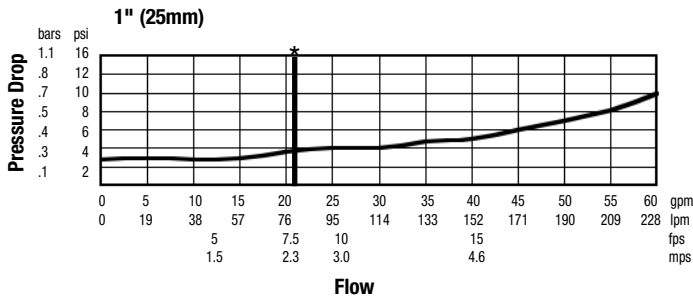
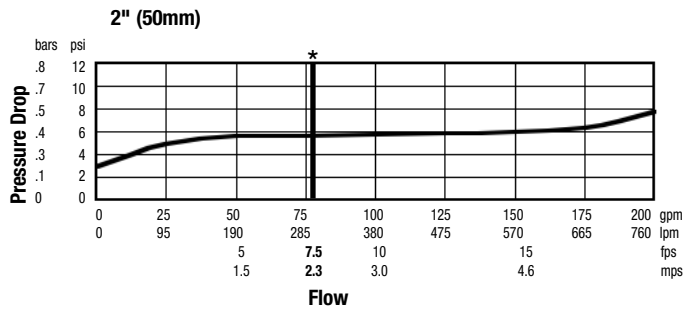
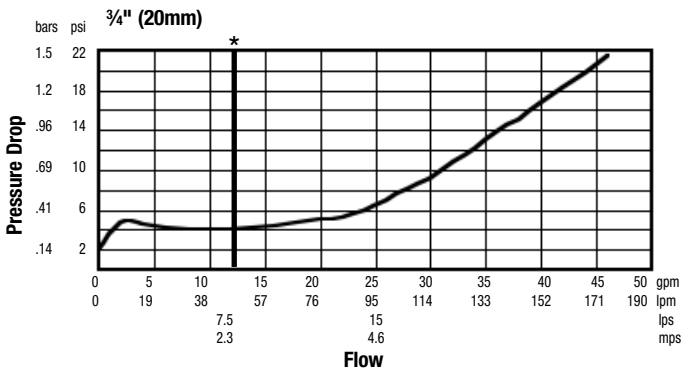
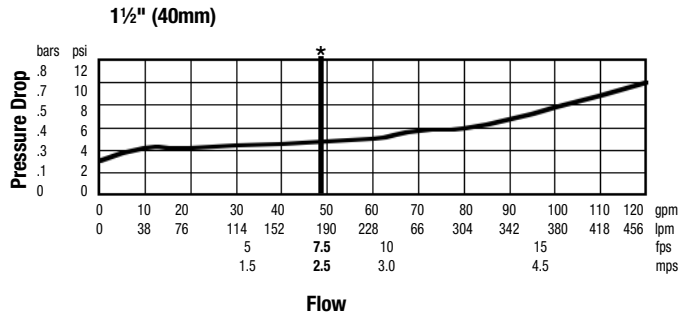
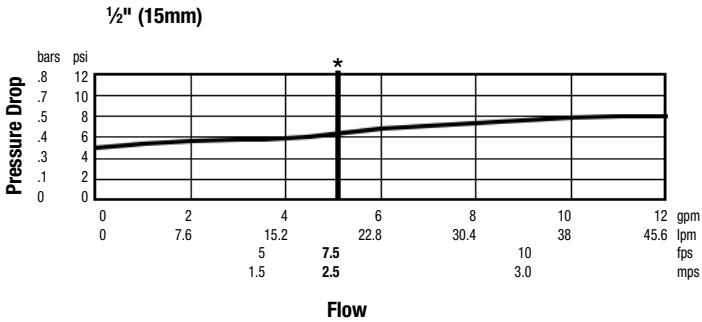
MODEL	SIZE	DIMENSIONS	
		A	
	<i>in.</i>	<i>in.</i>	<i>mm</i>
U007QT	1/2	12 <sup>13</sup> / <sub>16</sub>	326
U007M2QT	3/4	13 <sup>13</sup> / <sub>16</sub>	350
U007M2QT	1	16 <sup>5</sup> / <sub>8</sub>	422
U007M2QT	1 1/4	20 <sup>3</sup> / <sub>4</sub>	527
U007M2QT	1 1/2	21 1/2	546
U007M1QT	2	24 1/2	622

# Capacity

As compiled from documented Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California lab tests.

\* Typical maximum system flow rate (7.5 feet/sec., 2.3 meters/sec.)

\*\* UL rated flow



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