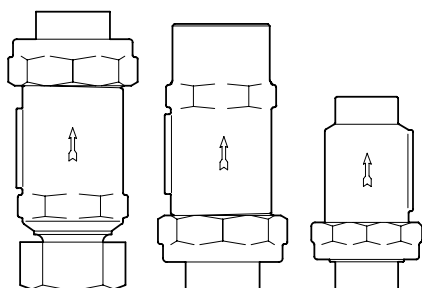


**Model 700**

**Dual Check Valve Assembly**



**APPLICATION**

Designed for installation on potable water lines to protect against both backsiphonage and backpressure of polluted water into the potable water supply. Assembly shall provide protection where a potential health hazard does not exist.

**FEATURES**

Sizes: ☐ 1/4" ☐ 3/8" ☐ 1/2" ☐ 3/4" ☐ 1"

Max. pressure: 175 PSI

Max. temp: 180°F

Connections: Threaded; ANSI B 1.20.1  
Copper sweat; ANSI B 16.22  
Meter thread; ANSI B 1.20.7

**STANDARDS COMPLIANCE**

- ☐ ASSE® Listed 1024
- ☐ CSA® Certified

**OPTIONS**

(Suffixes can be combined)

- ☐ - with female NPT connection (standard)
- ☐ C - with female copper sweat connection
- ☐ FMTC - with female meter thread connection
- ☐ M - with male NPT union connection
- ☐ MMTC - with male meter thread connection

**MATERIALS**

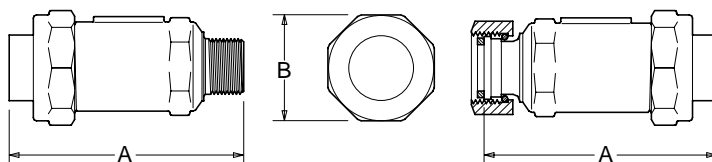
Main valve body Cast Bronze ASTM B 584  
Elastomers Buna Nitrile (FDA approved)  
Polymers Noryl™, NSF Listed (1/4"-1/2")  
Delrin™, NSF Listed (3/4"-1")  
Springs Stainless Steel, 300 Series

**ACCESSORIES**

- ☐ Repair kit (RK14-700 and RK34-700)
- ☐ Thermal expansion tank (Model WXTP)

**DIMENSIONS & WEIGHTS (do not include pkg.)**

MODEL SIZE	DIMENSIONS (INCHES)		WEIGHT (LBS)
	A	B	
1/4"	3.20	1.70	1.0
3/8"	3.20	1.70	1.0
1/2"	3.20	1.70	1.0
3/4"	4.50	2.00	2.0
1"	4.50	2.00	2.0



# Model 700 • Connections Legend

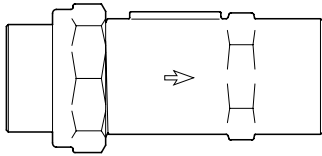
U = Indicates location of "union" connection  
 FNPT = Female National Pipe Tapered Thread  
 MNPT = Male National Pipe Tapered Thread  
 FC = Female Copper Sweat  
 FMTC = Female Meter Thread Connection (National Hose Straight Thread)  
 MMTC = Male Meter Thread Connection (National Hose Straight Thread)

## Meter Thread Connections

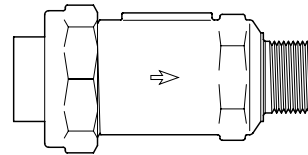
When ordering a Model 700 with meter thread connections, order the connection one size larger than the water meter. For example, if your water meter is 1/2" or 5/8" your connection size would be a 3/4" meter thread. If the water meter is 5/8" x 3/4" or 3/4", your connection size would be 1" meter thread.

## Configurations

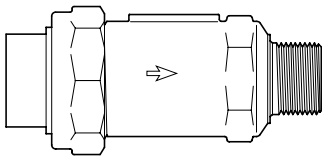
ALL CONFIGURATIONS ARE REVERSIBLE:



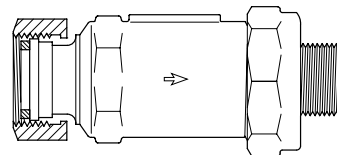
FEMALE UNION INLET X FEMALE OUTLET		
INLET (UNION)	OUTLET	PART NUMBER
3/4" FNPT	3/4" FNPT	34UFX34F-700
3/4" FMTC	3/4" FNPT	34UFMX34F-700
1" FNPT	1" FNPT	1UFX1F-700
1" FNPT	3/4" FNPT	1UFX34F-700
1" FMTC	1" FNPT	1UFMX1F-700
1" FMTC	3/4" FNPT	1UFMX34F-700



FEMALE UNION INLET X MALE OUTLET		
INLET (UNION)	OUTLET	PART NUMBER
3/4" FNPT	3/4" MNPT	34UFX34M-700
3/4" FNPT	3/4" MMTC	34UFX34MM-700
3/4" FMTC	3/4" MNPT	34UFMX34M-700
3/4" FMTC	3/4" MMTC	34UFMX34MM-700
3/4" FNPT	1" MMTC	34UFX1MM-700
3/4" FMTC	1" MNPT	34UFMX1M-700
1" FNPT	1" MNPT	34UFMX1M-700
1" FNPT	1" MMTC	1UFX1M-700
1" FMTC	1" MNPT	1UFX1MM-700
1" FMTC	1" MMTC	1UFMX1M-700
1" FNPT	3/4" MNPT	1UFX34M-700
1" FNPT	3/4" MMTC	1UFX34MM-700
1" FMTC	3/4" MNPT	1UFX34M-700
1" FMTC	3/4" MMTC	1UFMX34MM-700



FEMALE UNION "COPPER SWEAT" INLET X MALE		
INLET (UNION)	OUTLET	PART NUMBER
3/4" FC	3/4" MNPT	34UFCX34M-700
3/4" FC	1" MNPT	34UFCX1M-700
1" FC	1" MNPT	1UFCX1M-700



FEMALE "METER" UNION INLET X MALE UNION		
INLET (UNION)	OUTLET (UNION)	PART NUMBER
1" FMTC	3/4" MNPT	1UFMX34UM-700
1" FMTC	1" MNPT	1UFMX1UM-700

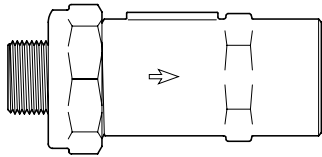
## Model 700 • How to Order

The Model 700 is available in a variety of inlet and outlet sizes, thread types and connection types. Simply determine the inlet and outlet connection as well as the location of the union, then, select from the available configurations. The inlet connection will always be specified first in the model number. A union inlet connection with integral body outlet connection is standard. For connections other than shown below, such as BSP threads, contact your local WILKINS representative or factory.

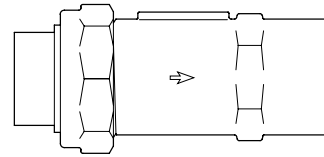
Example: A dual check valve is to be located on the outlet side of a 3/4" water meter with male inlet and outlet connections (see "Meter Thread Connections" on previous page). The union will be located on the inlet side of the valve. The outlet requires a 1" female NPT connection.

<u>Inlet</u>	<u>Outlet</u>	<u>Model No.</u>
1UFM	1F	<b>1UFMX1F-700</b>

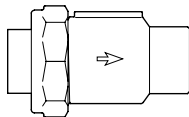
## Configurations (cont.)



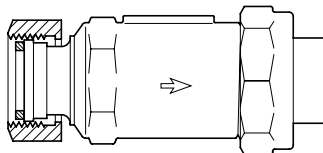
FEMALE UNION INLET X FEMALE OUTLET		
INLET (UNION)	OUTLET	PART NUMBER
1/4" FNPT	1/4" FNPT	14UFX14F-700
3/8" FNPT	3/8" FNPT	38UFX38F-700
1/2" FNPT	1/2" FNPT	12UFX12F-700
1/2" FC	1/2" FC	12UFCX12FC-700



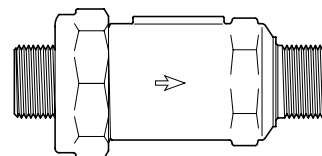
FEMALE UNION "COPPER SWEAT" INLET X FEMALE		
INLET (UNION)	OUTLET	PART NUMBER
3/4" FC	3/4" FNPT	34UFCX34F-700
3/4" FC	1" FNPT	34UFCX1F-700
1" FC	1" FNPT	1UFCX1F-700
1" FC	3/4" FNPT	1UFCX34F-700



FEMALE UNION INLET X FEMALE OUTLET		
INLET (UNION)	OUTLET	PART NUMBER
1/4" FNPT	1/4" FNPT	14UFX14F-700
3/8" FNPT	3/8" FNPT	38UFX38F-700
1/2" FNPT	1/2" FNPT	12UFX12F-700
1/2" FC	1/2" FC	12UFCX12FC-700

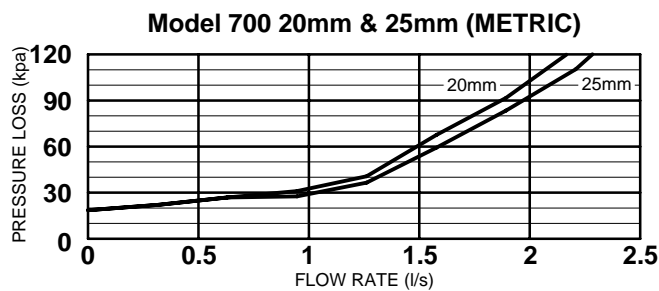
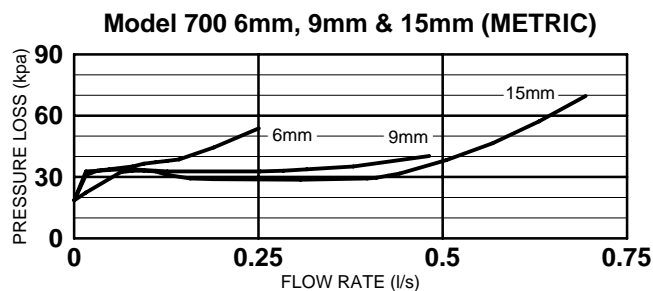
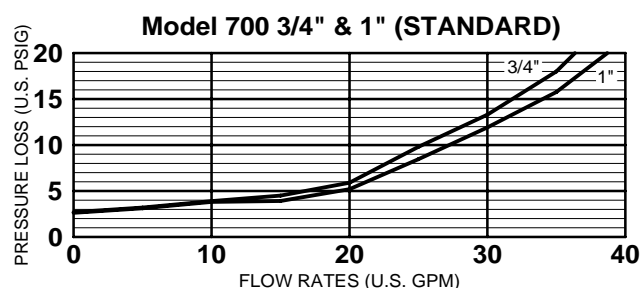
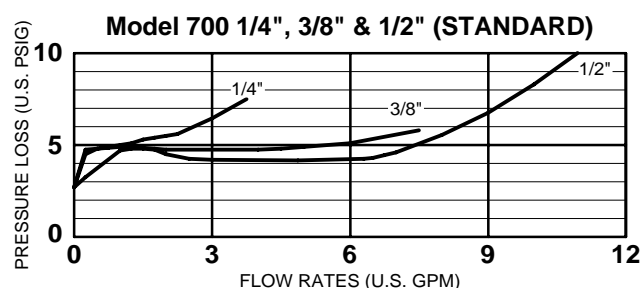


FEMALE "METER UNION INLET X FEMALE UNION		
INLET (UNION)	OUTLET (UNION)	PART NUMBER
1" FMTC	3/4" FNPT	1UFMX34UF-700
1" FMTC	1" FNPT	1UFMX1UF-700
1" FMTC	1" FMTC	1UFMX1UFM-700



MALE UNION INLET X MALE OUTLET		
INLET (UNION)	OUTLET	PART NUMBER
3/4" MNPT	3/4" MNPT	34UMX34M-700
1" MNPT	1" MNPT	1UMX1M-700

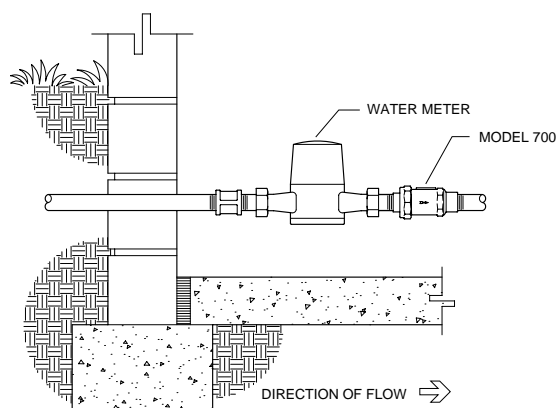
## FLOW CHARACTERISTICS



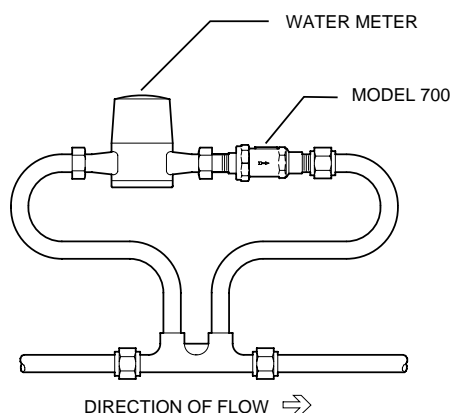
## TYPICAL INSTALLATION

Local codes shall govern installation requirements. Unless otherwise specified, the installation shall be in accordance with the manufacturer's instructions and the latest edition of the Uniform Plumbing Code. The installation shall be made so that no part of the unit can be submerged.

Capacity thru Schedule 40 Pipe				
Pipe size	5 ft/sec	7.5 ft/sec	10 ft/sec	15 ft/sec
1/8"	1	1	2	3
1/4"	2	2	3	5
3/8"	3	4	6	9
1/2"	5	7	9	14
3/4"	8	12	17	25
1"	13	20	27	40
1 1/4"	23	35	47	70
1 1/2"	32	48	63	95
2"	52	78	105	167



INDOOR INSTALLATION



METER SETTER INSTALLATION

## SPECIFICATIONS

The dual check valve backflow preventer shall be ASSE® Listed 1024. The main body shall be cast bronze (ASTM B 584), the check assemblies shall be NORLYL™ (1/4"-1/2") or DELRIN™ (3/4"-1"). The seal ring and o-rings shall be Buna Nitrile. The dual check valve assembly shall be a WILKINS Model 700.