# WILKINS® Model 700XL

Dual Check Valve

TAG

## Application

Ideal for use where Lead-Free* valves are required. Designed for installation on potable water lines to protect against both backsiphonage and backpressure of polluted water into the potable water supply. The Model 700XL shall provide protection where a potential health hazard does not exist.

3/4" 700XL

## Standards Compliance

- ASSE® Listed 1024
- CSA® Certified B64.6
- Meets the requirements of NSF/ANSI 61 and 372*

*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

## Materials

| | |
|---|---|
| Main Valve Body | Low Lead Cast Bronze ASTM B584 |
| Elastomers | Buna Nitrile (FDA approved) |
| Polymers | NORYL™ (1/4"-1/2") |
| | Delrin® (3/4"-1") |
| Springs | 300 series Stainless Steel |

## Features

Sizes 1/4", 3/8", 1/2", 3/4", 1", 1-1/4"

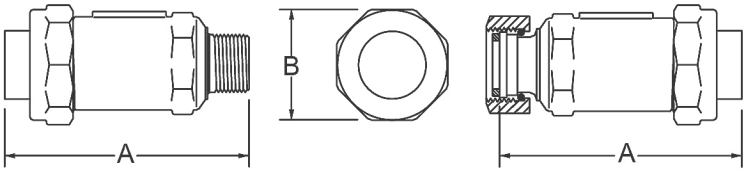
| | |
|---|---|
| Max. pressure | 175 PSI |
| Max. temp | 180°F |
| Threaded connection | ANSI B 1.20.1 |
| Copper sweat connection | ANSI B 16.22 |
| Meter thread connection | ANSI B 1.20.7 |

## Options (Suffixes can be combined)

| | |
|---|---|
| | With female NPT connection (standard) |
| **C** | With female copper sweat connection |
| **FMTC** | With female meter thread connection |
| **M** | With MNPT (male) threaded union inlet connection |
| **MMTC** | With male meter thread connection |

## Accessories

- Repair Kits (1/4" - 1" )
- Repair Part Guide - 700, 700XL & 705
- Thermal Expansion Tank XT




## Dimensions & Weights (do not include pkg.)

| MODEL SIZE | | DIMENSIONS | | | | WEIGHT | |
|---|---|---|---|---|---|---|---|
| | | A | | B | | | |
| in. | mm | in. | mm | in. | mm | lbs. | kg |
| 1/4 | 6 | 3 3/16 | 81 | 1 3/4 | 45 | 1 | 0.5 |
| 3/8 | 9 | 3 3/16 | 81 | 1 3/4 | 45 | 1 | 0.5 |
| 1/2 | 15 | 3 3/16 | 81 | 1 3/4 | 45 | 1 | 0.5 |
| 3/4 | 20 | 4 1/2 | 114 | 2 | 51 | 2 | 0.9 |
| 1 | 25 | 4 1/2 | 114 | 2 | 51 | 2 | 0.9 |
| 1-1/4 | 32 | 4 3/4 | 121 | 2 | 51 | 2 | 0.9 |

Design and dimensional data (inches and [mm]) are subject to manufacturing tolerances and change without notice.

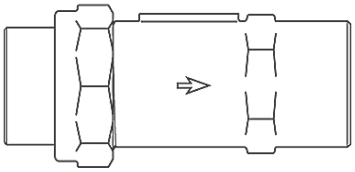
# Model 700XL • Connections Legend

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)

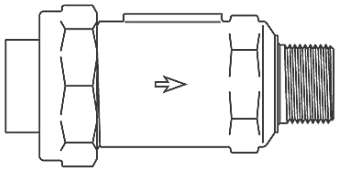
Meter Thread Connections
When ordering a Model 700XL with meter thread con nections, order the connection one size larger than the water meter. For example, if your water meter is 1/2" or 5/8" your connection size would be a 3/4" meter thread. If the water meter is 5/8" x 3/4" or 3/4", your connection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

# Configurations

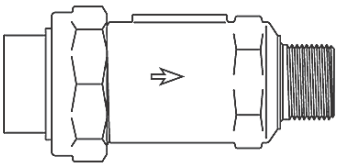
**All Configurations Are Reversible**



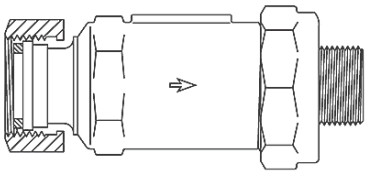
| FEMALE UNION INLET X FEMALE OUTLET | | |
|---|---|---|
| INLET (UNION) | OUTLET | PART NUMBER |
| 3/4" FNPT | 3/4" FNPT | 34UFX34F-700XL |
| 3/4" FMTC | 3/4" FNPT | 34UFMX34F-700XL |
| 1" FNPT | 1" FNPT | 1UFX1F-700XL |
| 1" FNPT | 3/4" FNPT | 1UFX34F-700XL |
| 1" FMTC | 1" FNPT | 1UFMX1F-700XL |
|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



| FEMALE UNION INLET X MALE OUTLET | | |
|---|---|---|
| INLET (UNION) | OUTLET | PART NUMBER |
| 3/4" FNPT | 3/4" MNPT | 34UFX34M-700XL |
| 3/4" FNPT | 3/4" MMTC | 34UFX34MM-700XL |
| 3/4" FMTC | 3/4" MNPT | 34UFMX34M-700XL |
| 3/4" FMTC | 3/4" MMTC | 34UFMX34MM-700XL |
| 3/4" FNPT | 1" MMTC | 34UFX1MM-700XL |
| 3/4" FMTC | 1" MNPT | 34UFMX1M-700XL |
| 1" FNPT | 1" MNPT | 1UFX1M-700XL |
| 1" FNPT | 1" MMTC | 1UFX1MM-700XL |
| 1" FMTC | 1" MNPT | 1UFMX1M-700XL |
| 1" FMTC | 1" MMTC | 1UFMX1MM-700XL |
| 1" FNPT | 3/4" MNPT | 1UFX34M-700XL |
| 1" FNPT | 3/4" MMTC | 1UFX34MM-700XL |
| 1" FMTC | 3/4" MNPT | 1UFMX34M-700XL |
| 1" FMTC | 3/4" MMTC | 1UFMX34MM-700XL |



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



| FEMALE "METER" UNION INLET X MALE UNION | | |
|---|---|---|
| INLET (UNION) | OUTLET (UNION) | PART NUMBER |
| 1" FMTC | 1" MNPT | 1UFMX1UM-700XL |
| 1-1/4" FMTC | 1" FNPT | 114UFMX1UF-700XL |

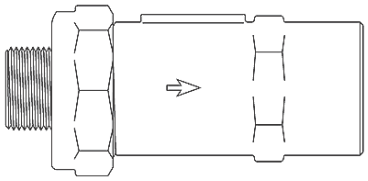
# Model 700XL • How to Order

The Model 700XL 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.

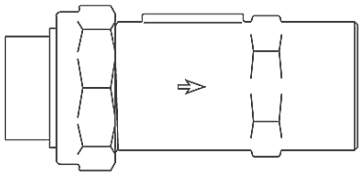
Example: A dual check valve is to be located on the outlet side of a 3/4" water meter with male inlet and outlet connections (see "Meter Thread Connections" on previous page). The union will be located on the inlet side of the valve. The outlet requires a 1" female NPT connection.

| Inlet | Outlet | Model No. |
|---|---|---|
| 1UFM | 1F | **1UFMX1F-700XL** |

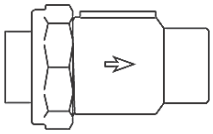
# Configurations (cont.)



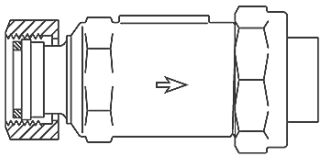
| MALE UNION INLET X FEMALE OUTLET | | |
|---|---|---|
| INLET (UNION) | OUTLET | PART NUMBER |
| 1" MNPT | 1" FNPT | 1UMX1F-700XL |



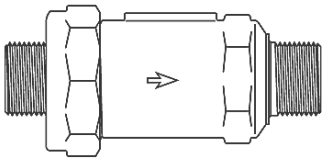
| FEMALE UNION "COPPER SWEAT" INLET X FEMALE | | |
|---|---|---|
| INLET (UNION) | OUTLET | PART NUMBER |
| 3/4" FC | 3/4" FNPT | 34UFCX34F-700XL |
| 3/4" FC | 1" FNPT | 34UFCX1F-700XL |
| 1" FC | 1" FNPT | 1UFCX1F-700XL |
| 1" FC | 3/4" FNPT | 1UFCX34F-700XL |



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



| FEMALE "METER UNION INLET X FEMALE UNION | | |
|---|---|---|
| INLET (UNION) | OUTLET (UNION) | PART NUMBER |
| 1" FMTC | 3/4" FNPT | 1UFMX34UF-700XL |
| 1" FMTC | 1" FNPT | 1UFMX1UF-700XL |
| 1" FMTC | 1" FMTC | 1UFMX1UFM-700XL |
| 1-1/4" FMTC | 1" FNPT | 114UFMX1UF-700XL |

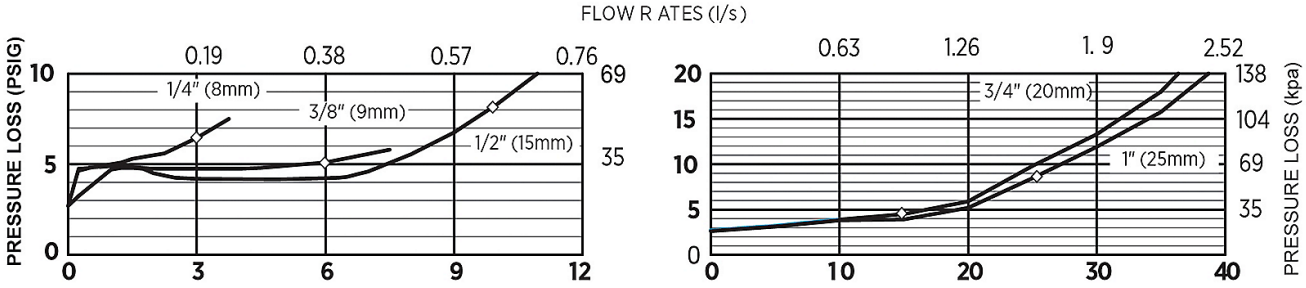


| MALE UNION INLET X MALE OUTLET | | |
|---|---|---|
| INLET (UNION) | OUTLET | PART NUMBER |
| 1" MNPT | 1" MNPT | 1UMX1M-700XL |

**Flow Characteristics**

◇ Rated Flow (established by approval agencies)

**MODE L 700XL 1/4", 3/8", 1/2", 3/4" & 1" (STANDARAD & METRIC)**



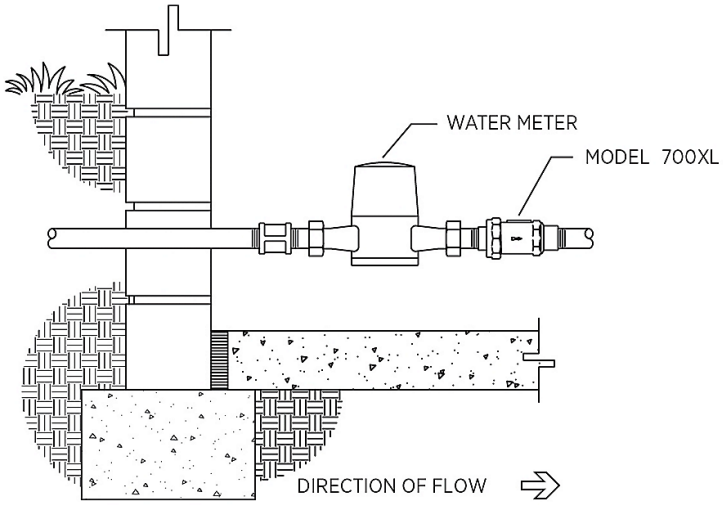

**FLOW RATES (GPM)**

◇ Rated Flow (Established by approval agencies)

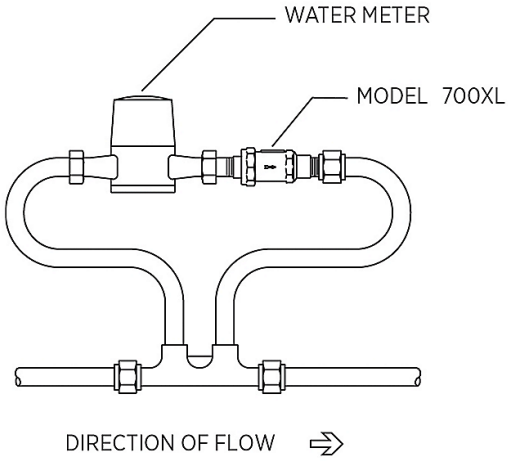
**Typical Installation**

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.

| 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**

Installation and Maintenance Instructions - Model 700XL

**Specifications**

The Dual Check Valve Backflow Preventer shall be certified to NSF/ANSI/CAN 61, and ASSE® Listed 1024. The main body shall be low lead cast bronze (ASTM B 584), the check assemblies shall be NORYL™ (1/4"-1/2") or DELRIN® (3/4"-1"). The seal ring and o-rings shall be Buna Nitrile. The Dual Check Valve shall be a WILKINS Model 700XL.