MGI CONTROLS®
42 Sherwood Terrace, Suite #5
Lake Bluff, IL 60044
Phone: (847) 604-4773
www.WaterControlValves.com

INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

Federal Public Law 111-380 (No Lead)

CHECK VALVE
CV-1, CV-2, CV-3, CV-4, CV-5 and CV-6

WARNING:

You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

FAILURE TO READ AND FOLLOW PROPER INSTALLATION AND MAINTENANCE INSTRUCTIONS MAY RESULT IN PRODUCT FAILURE WHICH CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.

CONTROLS® is not responsible for damages resulting from improper installation and/or maintenance. Installation of this valve shall be in accordance with ***Uniform Plumbing Code***.

TO ENSURE ACCURATE AND RELIABLE OPERATION OF THIS PRODUCT, IT IS ESSENTIAL TO:

- Properly design the system to minimize pressure and temperature variations.

APPLICATION:

Series CV, Check Valves are designed to allow flow in one direction and protect against crossflow. The CV features Lead Free construction suitable for water supply pressures up to 125 PSI (862 kPa) and temperatures up to 180°F (82.2°C). The Check Valve haves a Cracking Pressure <0.5 PSI (<3.5 kPa).

NOTES TO THE INSTALLER:

1. Please leave this documentation with the owner of the fixture when finished.
2. Please read this entire booklet before beginning the installation.
3. Check your installation for compliance with plumbing and other applicable codes.

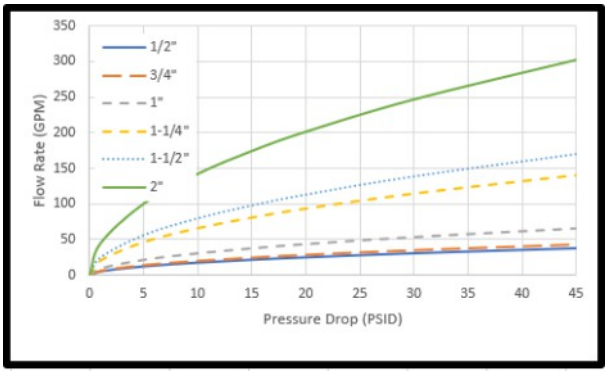
SUPPLIES REQUIRED:

(Not provided)

1. Teflon tape for sealing NPT threads.
2. Adjustable Wrench.
3. Spanner Wrench.
4. Snap Ring Pliers.

IMPORTANT

- Flush supply lines of all foreign material such as pipe dope, chips or solder prior to connecting to mixing valve.
- To ensure proper installation, review the Manual thoroughly to verify dimensional details before beginning any work.
- Installation and field adjustment are the responsibility of the installer.
- Maximum water pressure is 125 PSI (862 kPa).
- Maximum temperature rating is 180°F (82°C).



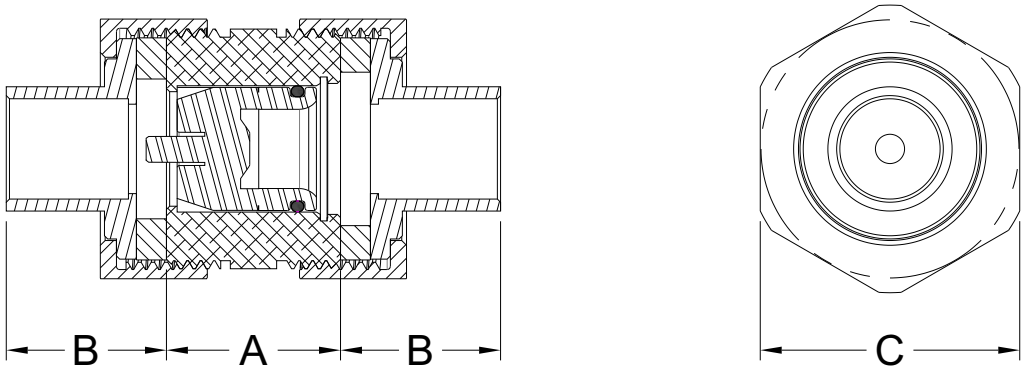
SPECIFICATIONS:

Pressure Rating ..... 125 PSI (862 kPa)
Temperature Rating ..... 180°F (82.2°C)

FLOW COEFFICIENT Cv:

1/2” 5.9
3/4” 6.1
1” 9.8
1-1/4” 21.0
1-1/2” 25.3
2” 45.1

ROUGH-IN DIMENSIONS:

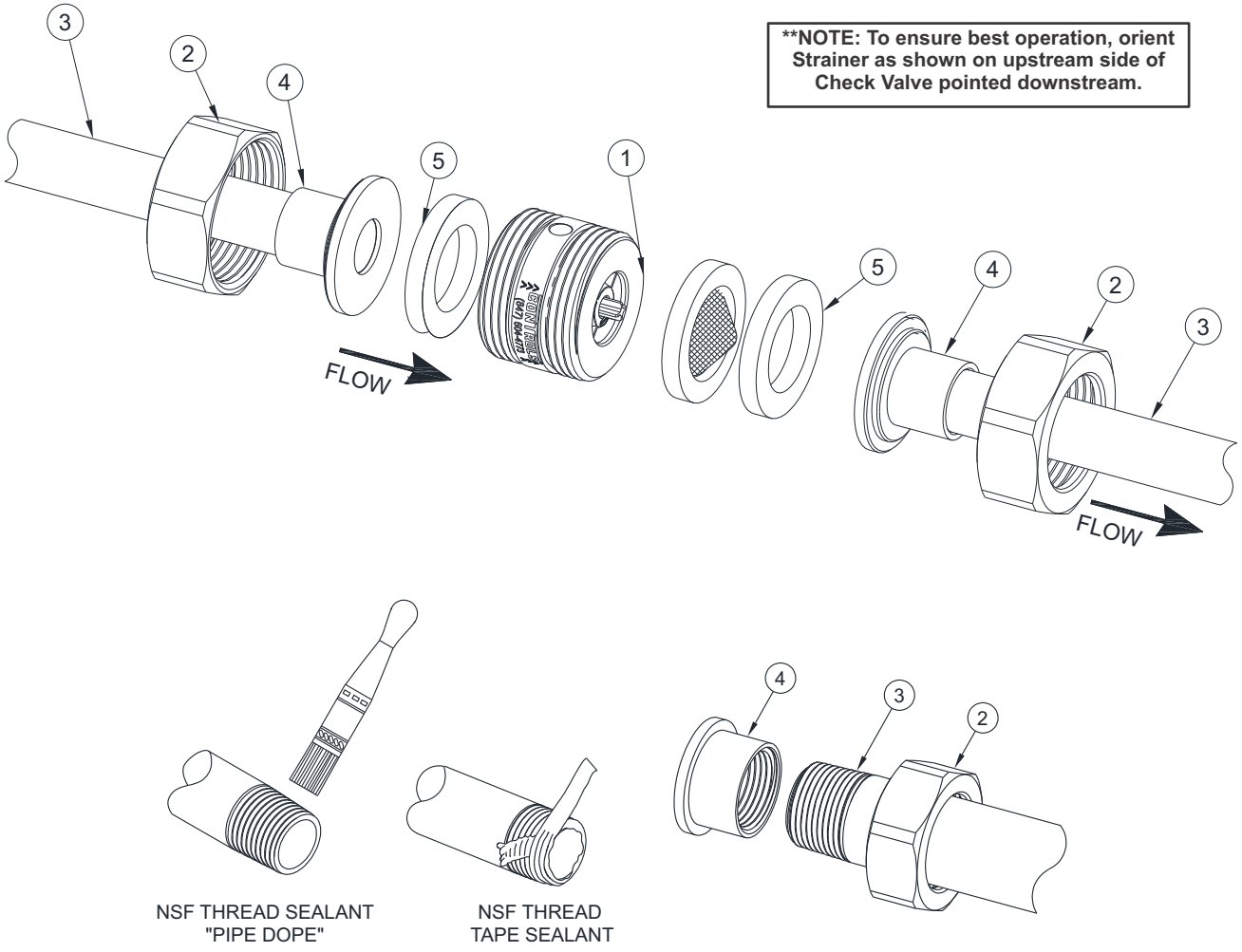


CV-1AA0 Shown

DIMENSION																
VALVE SIZE	ADAPTER	A		B		C		VALVE SIZE	ADAPTER	A		B		C	
1/2"	Sweat	1-1/8"	29mm	1"	25mm	1-5/8"	41mm	1-1/4"	Sweat	1-7/8"	48mm	1-1/4"	32mm	2-3/8"	60mm
	NPTF			7/8"	22mm				NPTF			1-1/8"	29mm		
	PEX-B			1"	25mm				PEX-B			1-1/4"	32mm		
	CPVC			7/8"	22mm				CPVC			1-1/4"	32mm		
	Press Fit			1-1/4"	32mm				Press Fit			1-5/8"	41mm		
	PEX-A			1-5/8"	41mm				PEX-A			2-3/8"	60mm		
3/4"	Sweat	1-1/8"	29mm	1"	25mm	1-5/8"	41mm	1-1/2"	Sweat	1-7/8"	48mm	1-1/4"	32mm	2-3/8"	60mm
	NPTF			7/8"	22mm				NPTF			1-1/8"	29mm		
	PEX-B			1"	25mm				PEX-B			1-1/4"	32mm		
	CPVC			1-1/8"	29mm				CPVC			1-1/4"	32mm		
	Press Fit			1-3/8"	35mm				Press Fit			1-5/8"	41mm		
	Pex-A			1-7/8"	48mm				PEX-A			2-3/8"	60mm		
1"	Sweat	1-3/8"	35mm	1-1/8"	29mm	1-7/8"	48mm	2"	Sweat	2-1/2"	64mm	1-1/4"	32mm	3-1/2"	89mm
	NPTF			1"	25mm				NPTF			1-1/8"	29mm		
	PEX-B			1-1/8"	29mm				PEX-B			1-1/4"	32mm		
	CPVC			1-1/8"	29mm				CPVC			1-1/4"	32mm		
	Press Fit			1-3/8"	35mm				Press Fit			1-5/8"	41mm		
	PEX-A			2"	51mm				PEX-A			2-3/8"	60mm		

INSTALLATION: CU, CPVC & NPTF

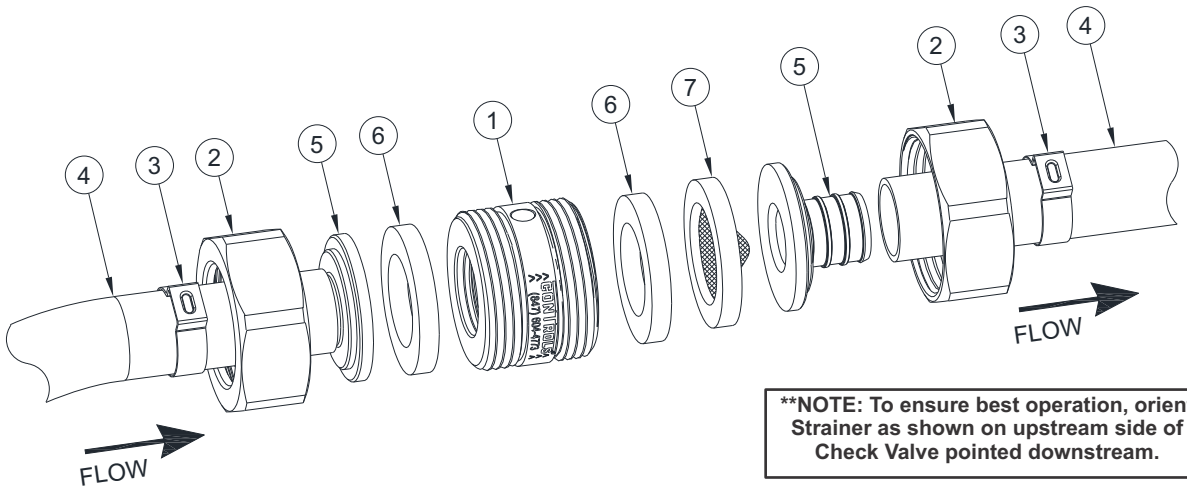
1. Locate Check Valve ***1*** in a suitable place accessible for servicing and replacing.
2. Turn OFF water supply prior to installing Check Valve.
3. Drain water lines by opening lowest water faucet, then opening highest water faucet to alleviate possible vacuum.
4. Thoroughly flush supplies.
5. Slide Brass Nut ***2***, onto supply and outlet Tubing ***3***.
6. Insert Tubing Adapter ***4*** onto the end of the Tubing/Pipe Ends ***3***,
   a. For CU, sweat Adapter ***4*** to pipe end ***3***.
   b. For CPVC, Glue Adapter ***4*** to pipe end ***3*** using appropriate PVC Pipe Cement.
   c. Using NSF Pipe Tape or Pipe Dope assemble NPTF adapter ***4*** onto pipe end ***3***.
6. Insert Gasket ***5*** between Valve body ***1*** and Adapter ***4*** then tighten Brass Nut ***2***.
7. Slowly turn on supplies, check for leaks and tighten as needed.



Detail
NPTF Threaded Connection

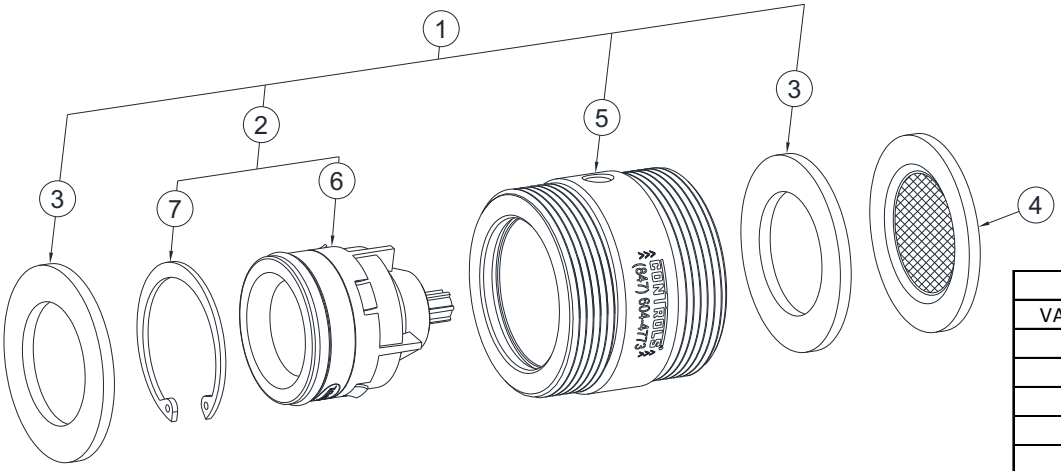
INSTALLATION: -PEX

1. Locate Check Valve ***1*** in a suitable place accessible for servicing and replacing.
2. Turn OFF water supply prior to installing Check Valve.
3. Drain water lines by opening lowest water faucet, then opening highest water faucet to alleviate possible vacuum.
4. Thoroughly flush supplies.
5. Slide Brass Nut ***2*** and installer provided Gripper/Clamp ***3*** onto the end of Tubing ***4***
6. Insert PEX Adapter ***5*** into Tubing ***4*** and tighten Crimp Rings ***3***.
7. Insert Gasket ***6*** and Gasket Strainer ***7*** between Spool body ***1*** and Adapter ***3*** then tighten Hex Nut ***2***.
8. Slowly turn on supplies, check for leaks and tighten Hex Nut ***2*** if needed.



****NOTE: To ensure best operation, orient Strainer as shown on upstream side of Check Valve pointed downstream.**

REPAIR PARTS



ADAPTER GASKET KITS	
VALVE SIZE	KIT NUMBER (10 PK)
CV-1	7816-128-001
CV-2	7816-128-001
CV-3	7852-205-001
CV-4	7853-205-001
CV-5	7854-204-001
CV-6	7855-209-001

		CV-1 (1/2")	CV-2 (3/4")	CV-3 (1")	CV-4 (1-1/4")	CV-5 (1-1/2")	CV-6 (2")
ITEM	DESCRIPTION	KIT NUMBER	KIT NUMBER	KIT NUMBER	KIT NUMBER	KIT NUMBER	KIT NUMBER
1	COMPLETE REBUILD KIT	7860-500-001	7860-500-002	7860-500-003	7860-500-004	7860-500-005	7860-500-006
2	INTERNAL REBUILD KIT	7860-501-001	7860-501-002	7860-501-003	7860-501-004	7860-501-005	7860-501-006
3	RUBBER GASKETS (2)	7851-504-001	7851-504-001	7852-504-001	7853-504-001	7854-504-001	7855-504-001
4	FILTER/STRAINER (1)	7850-206-000	7850-206-000	7852-209-000	7853-210-000	7854-209-000	7855-211-000

ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION
5	CHECK VALVE BODY	6	CHECK VALVE	7	SNAP RING