

## CheckMate™ Inline Check Valve Install With Tape

To install a CheckMate™ Inline Check Valve into a pipe in which the valve O.D. is smaller than the pipe I.D., follow the instructions below. 1/8" thick vulcanized rubber tape is used to build up the O.D. of a CheckMate™ Inline Check Valve until it fits into the I.D. of the pipe. Please note, the 1/8" thick rubber vulcanized tape can only be used on CheckMate™ Inline Check Valves size 3"-18". The example pictured below builds up the O.D. of a 9.5" CheckMate™ Inline Check Valve to fit into a pipe with a 10" I.D.

While valves 20" and larger are custom built, 4"-18" CheckMate™ Inline Check Valves are built to standard specifications and dimensions as charted below. In sizes 4"-18":

- The cuff end is interchangeable, allowing the valve to be inserted into the pipeline from either end.
- All CheckMate™ Valves have a standard back pressure rating.
- All CheckMate™ Check Valves are built to a common O.D.

CHECKMATE™ INLINE CHECK VALVE							
VALVE SIZE	LENGTH		CUFF DEPTH	CUFF/CLAMP MINIMUM	BACK PRESSURE RATING		STANDARD VALVE O.D.
	inches	millimeters			feet	meters	
4	9.3	236	1.5	1	40	12	3.75
6	13.5	343	2	1	40	12	5.5
8	16.7	424	2	1	40	12	7.88
10	19.8	503	2	1	40	12	9.5
12	23	584	2	1	40	12	11.88
14	30.2	767	4	1	20	6	13.5
16	33.3	846	4	1	20	6	15.5
18	36.5	927	4	1	20	6	17.5



**Step 1:** Clean the outside surface on the clamped end of the CheckMate™ Valve. Remove all surface dirt so the 1/8" vulcanized rubber tape will stick to the valve.



**Step 2:** Place the CheckMate™ Valve on a solid surface with the clamped end hanging slightly over the edge of the surface.



**Step 3:** Unroll a small amount of the 1/8" thick vulcanized rubber tape. Remove plastic from both sides of the unrolled tape. Leave length of tape attached to roll.



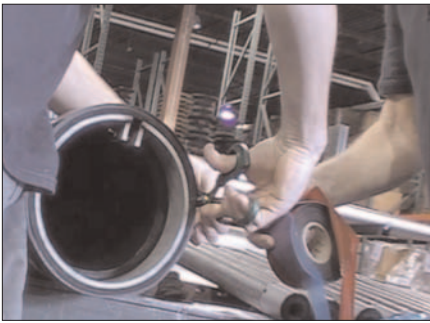
**Step 4:** Place the rubber tape, adhesive side down, against the outer edge of the clamped end of the CheckMate™ Valve. Make sure the edge of the tape is flush with the edge of the valve. Press firmly into place.



**Step 5:** Slowly rotate the CheckMate™ Valve, as you continue to press the rubber tape into place around the circumference of the valve. As you apply more of the tape, press it firmly into place and line the edge of the tape up with the edge of the valve.



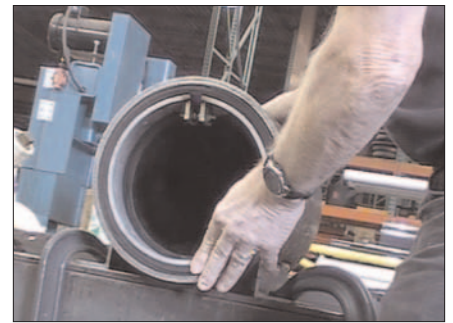
**Step 6:** Unroll more of the tape. Remove plastic from tape. Continue to apply tape to the outside circumference of the valve to build up the O.D. to the desired size. In this example, 3-4 layers of continuously wrapped tape was used. **The number of layers required is a function of the pipe I.D. dimension.**



**Step 7:** When the O.D. reaches the desired size, cut the rubber tape from the roll using sharp scissors. Press the end of the tape firmly into place on the CheckMate™ Valve.



**Step 8:** The CheckMate™ Valve is now ready to be installed into a pipe. Gently slide the valve into the end of the pipe with the clamped end facing out. Make sure the area marked top on the valve is at the 12:00 position. The edge of the CheckMate™ Valve should rest flush with the edge of the pipe opening.



**Step 9:** Once the CheckMate™ Valve has been eased into position, check the O.D. of the valve, making sure it fits snugly into the I.D. of the pipe. If the fit is loose, slide the CheckMate™ Valve out of the pipe and apply another layer of rubber tape to obtain the appropriate O.D.



**Step 10:** If you have removed the CheckMate™ Valve to apply another layer of rubber tape, gently place the CheckMate™ Valve back into the pipe. There should be no rolling or moving of the rubber tape as you slide the valve into place. The valve should fit snugly into the pipe with the area of the valve marked top at the 12:00 position.



**Step 11:** Once in place, tighten the ring clamp inside of the CheckMate™ Valve to secure it against the pipe. Using a wrench, tighten the bolts on the clamp until the valve is locked into place. The tightening of the clamp will compress the tape, making it waterproof. When properly done, water will not bypass the seal. If the valve to pipe area leaks, remove the valve and repeat steps 9-10.



**Step 12:** Once the bolts are tightened and the rubber tape is compressed, the CheckMate™ Valve is installed and ready for operation.