

## PT-100A Go/No-Go Pipe Diameter Tape



ANSI B36.10/B36.19/ISO 4200 Pipe Sizes

¾ – 12 inches/26.9 – 323.9 mm for Original Groove System

14 – 24 inches/355.6 – 610.0-mm for Advanced Groove System (AGS)

### ⚠ WARNING



- Read and understand all instructions before attempting to use this Go/No-Go pipe diameter tape.
- Wear safety glasses, hardhat, foot protection, and hearing protection when working with Victaulic pipe preparation tools. Failure to follow all instructions could cause improper product assembly, resulting in serious personal injury and property damage.

THE PT-100A PIPE DIAMETER TAPE IS NOT A REPLACEMENT FOR A ROUTINELY CALIBRATED DIAMETER MEASURING INSTRUMENT AND PROPER INSPECTION PROCEDURES. THIS PIPE DIAMETER TAPE SHOULD BE USED ONLY AS AN AID FOR CHECKING PIPE AND GROOVE DIAMETERS. A MEASURING INSTRUMENT THAT IS ROUTINELY CALIBRATED TO TRACEABLE STANDARDS IS RECOMMENDED FOR MOST ACCURATELY VERIFYING PIPE AND GROOVE DIMENSIONS.

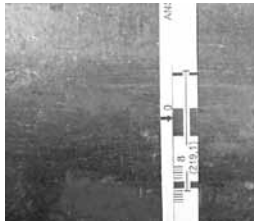
### NOTICE

- The PT-100A contains Go/No-Go markings on one side for use with ANSI B36.10/B36.19 pipe sizes and many ISO 4200 pipe sizes. In addition, the PT-100A contains markings in .01-inch/.3-mm increments on the opposite side.
- The Go/No-Go side must be used ONLY to check cut-grooved or roll-grooved pipe to Victaulic original groove specifications (¾ - 12-inch/ 26.9 - 323.9-mm pipe sizes), Machining for Rubber Lining (MRL) specifications, and Advanced Groove System (AGS) specifications (14 - 24-inch/ 355.6 - 610.0-mm pipe sizes).
- DO NOT use the Go/No-Go side to check EndSeal® “ES” grooves, copper tubing, AWWA cast or ductile iron pipe, 14 – 24-inch/355.6 – 610.0-mm pipe grooved to original groove specifications, and some metric pipe sizes.
- The opposite side of the pipe diameter tape, marked in .01-inch/.3-mm increments, can be used to check Victaulic original groove specifications in 14 - 24-inch/355.6 - 610.0-mm pipe sizes (including China pipe sizes) and JIS specifications (8 - 12-inch/219.1 - 323.9-mm pipe sizes).

## INSTRUCTIONS

### ⚠ WARNING

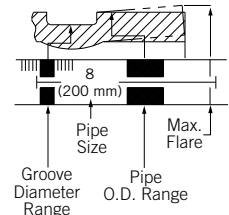
- Verify that the outside diameter of the pipe is within Victaulic specifications.
  - After grooving pipe, make sure all diameters are measured in accordance with Victaulic specifications.
- Installation and pressurization of grooved pipe that does not conform to Victaulic specifications could cause joint failure, resulting in serious personal injury and/or property damage.



#### CHECK PIPE OUTSIDE DIAMETER:

Remove all loose dirt, scale, and paint from the pipe surface. Choose the appropriate side of the tape (refer to the NOTICE above). Wrap the tape around the pipe, and overlap the two ends, as shown. Make sure the tape is not twisted.

When using the Go/No-Go side of the tape to measure the outside diameter, firmly pull on each end of the overlapped tape. Determine if the origin arrow is within the “Pipe OD Range” band for the applicable pipe size. The origin arrow must be within this band to conform to Victaulic specifications, as shown. When using the side of the tape marked in .01-inch/.3-mm increments, compare the reading to the applicable Victaulic specification to determine if the pipe OD is within specification.



# INSTRUCTIONS (Continued)

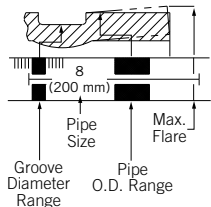


## CHECK GROOVE DIAMETER:

Remove all loose dirt, scale, and paint from the groove and gasket sealing surface. Choose the appropriate side of the tape (refer to the NOTICE on the opposite side of this sheet). Wrap the tape around the pipe groove, and overlap the two ends, as shown. Make sure the tape is not twisted and that it seats in the base of the groove.

When using the Go/No-Go side of the tape to check the groove diameter, firmly pull on each end of the overlapped tape, and determine if the origin arrow is within the "Groove Diameter Range" band for the applicable pipe size. The origin arrow must be within this band for conformance to Victaulic specifications. The graduations on both sides of the groove diameter band are in .01-inch/.3-mm increments and can be used as a guide for adjusting the grooving tool's groove diameter setting.

When using the side of the tape marked in .01-inch/.3-mm increments to check the groove diameter, firmly pull in each end of the overlapped tape, and compare the reading to the applicable Victaulic specification to determine if the groove diameter is within specification.

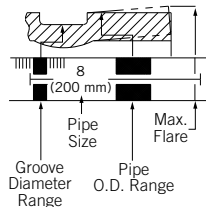


## CHECK MAXIMUM FLARE DIAMETER (FOR ROLL-GROOVED PIPE ONLY):

Choose the appropriate side of the tape (refer to the NOTICE on the opposite side of this sheet). Wrap the tape around the pipe end or edge of the pipe level, and overlap the two ends, as shown. Make sure the tape is not twisted.

When using the Go/No-Go side of the tape to check the maximum flare diameter, firmly pull on each end of the overlapped tape, and determine if the origin arrow is within the "Pipe O.D. Range" band and the "Maximum Flare" band for the applicable pipe size. **NOTE:** The origin arrow MUST NOT exceed the "Maximum Flare" band for conformance to Victaulic specifications.

When using the side of the tape marked in .01-inch/.3-mm increments to check the maximum flare diameter, firmly pull on each end of the overlapped tape, and compare the reading to the applicable Victaulic specification to determine if the flare diameter is within specification.



## Victaulic Grooved Pipe Diameter Specifications for Steel and Stainless Steel Pipe (Specifications listed are applicable to the PT-100A Go/No-Go side of the tape)

Size		Dimensions – inches/millimeters					Size		Dimensions – inches/millimeters				
Nominal Size in./mm	Actual Out. Dia. in./mm	Pipe Outside Dia.		Groove Dia. "C"		Max. Allow. Flare Dia.	Nominal Size in./mm	Actual Out. Dia. in./mm	Pipe Outside Dia.		Groove Dia. "C"		Max. Allow. Flare Dia.
		Maximum	Minimum	Maximum	Minimum				Maximum	Minimum	Maximum	Minimum	
3/4	1.050	1.060	1.040	0.938	0.923	1.15 ±	6	6.625	6.688	6.594	6.455	6.433	6.73
20	26.9	26.9	26.4	23.8	23.4	29.2	150	168.3	169.9	167.5	164.0	163.4	170.9
1	1.315	1.328	1.302	1.190	1.175	1.43 ±	8	8.625	8.688	8.594	8.441	8.416	8.80
25	33.7	33.7	33.1	30.2	29.9	36.3	200	219.1	220.7	218.3	214.4	213.8	223.5
1¼	1.660	1.676	1.644	1.535	1.520	1.77 ±	10	10.750	10.813	10.719	10.562	10.535	10.92
32	42.4	42.6	41.8	39.0	38.6	45.0	250	273.0	274.7	272.3	268.3	267.6	277.4
1½	1.900	1.919	1.881	1.775	1.760	2.01	12	12.750	12.813	12.719	12.531	12.501	12.92
40	48.3	48.7	47.8	45.1	44.7	51.1	300	323.9	325.5	323.1	318.3	317.5	328.2
2	2.375	2.399	2.351	2.250	2.235	2.48	14	14.000	14.094	13.969	13.500	13.455	14.23
50	60.3	60.9	59.7	57.2	56.8	63.0	350	355.6	358.0	354.8	342.9	341.8	361.4
2½	2.875	2.904	2.846	2.720	2.702	2.98	16	16.000	16.094	15.969	15.500	15.455	16.23
65	73.0	73.8	72.3	69.1	68.6	75.7	400	406.4	408.8	405.6	393.7	392.6	412.2
3	3.500	3.535	3.469	3.344	3.326	3.60	18	18.000	18.094	17.969	17.500	17.455	18.23
80	88.9	89.8	88.1	84.9	84.5	91.4	450	457.0	459.6	456.4	444.5	443.4	463.0
3½	4.000	4.040	3.969	3.834	3.814	4.10	20	20.000	20.094	19.969	19.500	19.455	20.23
90	101.6	102.6	100.8	97.4	96.9	104.1	500	508.0	510.4	507.2	495.3	494.2	513.8
4	4.500	4.545	4.469	4.334	4.314	4.60	22	22.000	22.094	21.969	21.500	21.455	22.23
100	114.3	115.4	113.5	110.1	109.6	116.8	550	559.0	561.2	558.0	546.1	544.9	564.6
5	5.563	5.619	5.532	5.395	5.373	5.66	24	24.000	24.094	23.969	23.500	23.455	24.23
125	141.3	142.7	140.5	137.0	136.5	143.8	600	610.0	612.0	608.8	596.9	595.8	615.4
159.0 mm	6.250	6.313	6.219	6.032	6.002	6.35							
	159.0	160.4	158.0	153.2	152.5	161.3							

**NOTE:** Shaded rows identify Advanced Groove System (AGS) sizes and dimensions.

± The flare diameter for ¾ – 1¼-inch/20 – 32-mm sizes should be checked with the side of the tape marked in 0.01-inch increments.

**Nominal Pipe Size (NPS) and actual outside diameters** – Inch sizes per ANSI B36.10 and B36.19. Millimeter sizes per ISO 4200. The average pipe outside diameter must not vary from the specifications listed in the table above. Maximum allowable pipe ovality should not vary by more than 1%. Greater variations between the major and minor diameters will result in difficult coupling assembly. For IPS pipe, the maximum allowable tolerance from square-cut pipe ends is 0.030 inch/0.8 mm for ¾ – 3½-inch/20 – 90-mm sizes; 0.045 inch/1.1 mm for 4 – 6-inch/100 – 150-mm sizes; and 0.060 inch/1.5 mm for 8-inch/200-mm and larger sizes. This dimension is measured from the true square line. Any internal and external weld beads or seams must be ground flush to the pipe surface. The inside diameter of the pipe end must be cleaned to remove coarse scale, dirt, and other foreign material that might interfere with or damage grooving rolls.

**"C" Dimension** – The "C" Dimension is the proper diameter at the base of the groove. This dimension must be within the diameter's tolerance and concentric with the OD for proper coupling fit. The groove must be of uniform depth for the entire pipe circumference.

**Maximum Allowable Pipe-End Flare (for roll-grooved pipe only)** – This dimension is measured at the extreme pipe-end diameter of square-cut or beveled-end grooved pipe.