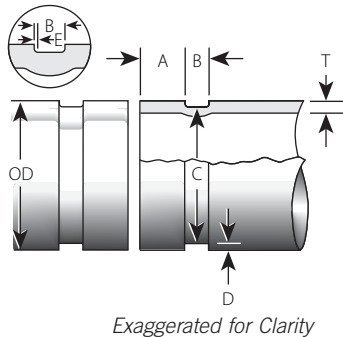


# EndSeal® Pipe Groove Specifications

DESIGNED FOR STANDARD OR HEAVIER WALL THICKNESS PIPE OR PLASTIC-COATED JOINED WITH HP-70ES COUPLINGS.

## "ES" Cut Groove Specifications †



1		2		3		4		5		6	7
Pipe Size		Pipe Outside Dia. Inches/mm		Dimensions – Inches/millimeters							
				Gasket Seat A		Groove Width B		Groove Dia. C		Groove Depth (ref.) D	Min. Allow. Wall Thick. T
Nominal Dia. Inches mm	Actual Out. Dia. Inches mm	Tolerance		Basic	Tol.	Basic	Tol. +0.010 +0.25	Basic	Tol. +0.000 +0.00		
		+	–								
2	2.375	+0.024	–0.024	0.562	±0.010	0.255	–0.005	2.250	–0.015	0.063	0.154
50	60.3	+0.61	–0.58	14.27	±0.25	6.48	–0.13	57.15	–0.38	1.60	3.91
2½	2.875	+0.029	–0.029	0.562	±0.010	0.255	–0.005	2.720	–0.018	0.078	0.188
65	73.0	+0.74	–0.71	14.27	±0.25	6.48	–0.13	69.09	–0.46	1.98	4.78
3	3.500	+0.035	–0.031	0.562	±0.010	0.255	–0.005	3.344	–0.018	0.078	0.188
80	88.9	+0.89	–0.79	14.27	±0.25	6.48	–0.13	84.94	–0.46	1.98	4.78
4	4.500	+0.045	–0.031	0.605	±0.015	0.305	–0.005	4.334	–0.020	0.083	0.203
100	114.3	+1.14	–0.79	15.37	±0.38	7.75	–0.13	110.08	–0.51	2.11	5.16
6	6.625	+0.063	–0.031	0.605	±0.015	0.305	–0.005	6.455	–0.022	0.085	0.219
150	168.3	+1.60	–0.79	15.37	±0.38	7.75	–0.13	163.96	–0.56	2.16	5.56
8	8.625	+0.063	–0.031	0.714	±0.015	0.400	–0.010	8.441	–0.025	0.092	0.238
200	219.1	+1.60	–0.79	18.14	±0.38	10.16	–0.25	214.40	–0.64	2.34	6.05
10	10.750	+0.063	–0.031	0.714	±0.015	0.400	–0.010	10.562	–0.027	0.094	0.250
250	273.0	+1.60	–0.79	18.14	±0.38	10.16	–0.25	268.28	–0.69	2.39	6.35
12	12.750	+0.063	–0.031	0.714	±0.015	0.400	–0.010	12.531	–0.030	0.109	0.279
300	323.9	+1.60	–0.79	18.14	±0.38	10.16	–0.25	318.29	–0.76	2.77	7.09

† Coatings applied to the interior surfaces, including bolt pad mating surfaces, of our bolted grooved and bolted plain end couplings should not exceed 0.010" (0.25 mm). Also, the coating thickness applied to the gasket seating surface and within the groove on the pipe exterior should not exceed 0.010" (0.25 mm).

### NOTES:

COLUMN 1 – Nominal IPS pipe size. Nominal metric (ISO) pipe size.

COLUMN 2 – IPS outside diameter. Metric (ISO) outside diameter. The outside diameter of roll grooved pipe shall not vary more than the tolerance listed. For IPS pipe, the maximum allowable tolerance from square cut ends is 0.030" for ¾ – 3½" (20 – 90 mm); 0.045" for 4 – 6" (100 – 150 mm); and 0.060" for sizes 203.2 mm and above measured from true square line. For (ISO) metric pipe, the maximum allowable tolerance from square cut ends is 0.76 mm for sizes 20 mm – 80 mm; 1.14 mm for sizes 100 mm – 150 mm; and 1.52 mm for sizes 200 mm and above, measured from the true square line.

COLUMN 3 – Gasket seat: the pipe surface shall be free from indentations, roll marks, and projections from the end of the pipe to the groove, to provide a leak-tight seal for the gasket. All loose paint, scale, dirt, chips, grease and rust must be removed. Square cut pipe must be used with FlushSeal® and End-Seal® gaskets. Gasket seat "A" is measured from the end of the pipe.

COLUMN 4 – Groove width: bottom of groove to be free of loose dirt, chips, rust and scale that may interfere with proper coupling assembly. Corners at bottom of roll groove must be radiused. For IPS pipe, 0.04R on 1½ – 12" (40 – 300 mm). For (ISO) metric pipe, 1.2R mm on 20 – 300 mm.

COLUMN 5 – Groove outside diameter: the groove must be uniform depth for the entire pipe circumference. Groove must be maintained within the "C" diameter tolerance listed.

COLUMN 6 – Groove depth: for reference only. Groove must conform to the groove diameter "C" listed.

COLUMN 7 – Minimum allowable wall thickness: this is the minimum wall thickness which may be grooved.

COLUMN 8 – Maximum allowable end flare diameter. Measured at the most extreme pipe end diameter square cut or beveled.

### JOB/OWNER

System No. \_\_\_\_\_

Location \_\_\_\_\_

### CONTRACTOR

Submitted By \_\_\_\_\_

Date \_\_\_\_\_

### ENGINEER

Spec Sect \_\_\_\_\_ Para \_\_\_\_\_

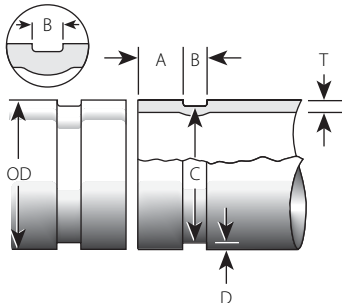
Approved \_\_\_\_\_

Date \_\_\_\_\_

## EndSeal® Pipe Groove Specifications

DESIGNED FOR STANDARD OR HEAVIER WALL THICKNESS PIPE OR PLASTIC-COATED JOINED WITH HP-70ES COUPLINGS.

### "ES" Cut Groove Specifications †



Exaggerated for Clarity

1		2		3		4		5		6	7	
Pipe Size		Pipe Outside Dia. Inches/mm		Dimensions – Inches/millimeters								
Nominal Dia. Inches mm	Actual Out. Dia. Inches mm	Tolerance		Gasket Seat A		Groove Width B		Groove Dia. C		Groove Depth (ref.) D	Min. Allow. Wall Thick. T	Max. Allow. Flare Dia.
		+	–	Basic	Tol.	Basic	Tol. +0.000 +0.00	Basic	Tol. +0.000 +0.00			
2 50	2.375 60.3	+0.024 +0.61	–0.024 –0.61	0.572 14.53	–0.020 –0.51	0.250 6.35	+0.015 +0.38	2.250 57.15	–0.015 –0.38	0.063 1.60	0.065 1.65	2.48 63.0
2½ 65	2.875 73.0	+0.029 +0.74	–0.029 –0.74	0.572 14.53	–0.020 –0.51	0.250 6.35	+0.015 +0.38	2.720 69.09	–0.018 –0.46	0.078 1.98	0.083 2.11	2.98 75.7
3 80	3.500 88.9	+0.035 +0.89	–0.031 –0.79	0.572 14.53	–0.020 –0.51	0.250 6.35	+0.015 +0.38	3.344 84.94	–0.018 –0.46	0.083 2.11	0.083 2.11	3.60 91.4
4 100	4.500 114.3	+0.045 +1.14	–0.031 –0.79	0.610 15.49	–0.020 –0.51	0.300 7.62	+0.020 +0.51	4.334 110.08	–0.020 –0.51	0.083 2.11	0.083 2.11	4.60 116.8
6 150	6.625 168.3	+0.063 +1.60	–0.031 –0.79	0.610 15.49	–0.020 –0.51	0.300 7.62	+0.020 +0.51	6.455 163.96	–0.022 –0.56	0.085 2.16	0.109 2.77	6.73 170.9
8 200	8.625 219.1	+0.063 +1.60	–0.031 –0.79	0.719 18.26	–0.020 –0.51	0.390 9.91	+0.020 +0.51	8.441 214.40	–0.025 –0.64	0.092 2.34	0.109 2.77	8.80 223.5
10 250	10.750 273.0	+0.063 +1.60	–0.031 –0.79	0.719 18.26	–0.020 –0.51	0.390 9.91	+0.020 +0.51	10.562 268.28	–0.027 –0.69	0.094 2.39	0.134 3.40	10.92 277.4
12 300	12.750 323.9	+0.063 +1.60	–0.031 –0.79	0.719 18.26	–0.020 –0.51	0.390 9.91	+0.020 +0.51	12.531 318.29	–0.030 –0.76	0.109 2.77	0.156 3.96	12.92 328.2

† Coatings applied to the interior surfaces, including bolt pad mating surfaces, of our bolted grooved and bolted plain end couplings should not exceed 0.010" (0.25 mm). Also, the coating thickness applied to the gasket seating surface and within the groove on the pipe exterior should not exceed 0.010" (0.25 mm).

#### NOTES:

COLUMN 1 – Nominal IPS pipe size. Nominal metric (ISO) pipe size.

COLUMN 2 – IPS outside diameter. Metric (ISO) outside diameter. The outside diameter of roll grooved pipe shall not vary more than the tolerance listed. For IPS pipe, the maximum allowable tolerance from square cut ends is 0.030" for ¾ – 3 ½" (20 – 90 mm); 0.045" for 4 – 6" (100 – 150 mm); and 0.060" for sizes 203.2 mm and above measured from true square line. For (ISO) metric pipe, the maximum allowable tolerance from square cut ends is 0.76 mm for sizes 20 mm – 80 mm; 1.14 mm for sizes 100 mm – 150 mm; and 1.52 mm for sizes 200 mm and above, measured from the true square line.

COLUMN 3 – Gasket seat: the pipe surface shall be free from indentations, roll marks, and projections from the end of the pipe to the groove, to provide a leak-tight seal for the gasket. All loose paint, scale, dirt, chips, grease and rust must be removed. Square cut pipe must be used with FlushSeal® and End-Seal® gaskets. Gasket seat "A" is measured from the end of the pipe.

COLUMN 4 – Groove width: bottom of groove to be free of loose dirt, chips, rust and scale that may interfere with proper coupling assembly. Corners at bottom of roll groove must be radiused. For IPS pipe, 0.04R on 1 ½ – 12" (40 – 300 mm). For (ISO) metric pipe, 1.2R mm on 20 – 300 mm.

COLUMN 5 – Groove outside diameter: the groove must be uniform depth for the entire pipe circumference. Groove must be maintained within the "C" diameter tolerance listed.

COLUMN 6 – Groove depth: for reference only. Groove must conform to the groove diameter "C" listed.

COLUMN 7 – Minimum allowable wall thickness: this is the minimum wall thickness which may be grooved.

COLUMN 8 – Maximum allowable end flare diameter. Measured at the most extreme pipe end diameter square cut or beveled.

---

# EndSeal® Pipe Groove Specifications

DESIGNED FOR STANDARD OR HEAVIER WALL THICKNESS PIPE OR PLASTIC-COATED JOINED WITH HP-70ES COUPLINGS.

---

**INSTALLATION**

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at [www.victaulic.com](http://www.victaulic.com).

---

**WARRANTY**

Refer to the Warranty section of the current Price List or contact Victaulic for details.

---

**NOTE**

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

## EndSeal® Pipe Groove Specifications

DESIGNED FOR STANDARD OR HEAVIER WALL THICKNESS PIPE OR PLASTIC-COATED JOINED WITH HP-70ES COUPLINGS.

---



WCAS-73NGU9

---

For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

**25.02 1964 REV B UPDATED 7/2007**

VICTAULIC IS A REGISTERED TRADEMARK OF VICTAULIC COMPANY. © 2007 VICTAULIC COMPANY. ALL RIGHTS RESERVED. PRINTED IN THE USA.