

# PENBERTHY

## dimensions

Section 2000  
 Dimensions 2703.1  
 Issued 03/06  
 Replaces 07/05

**For: MINIMUM GAGECOCK CENTERS FOR END CONNECT MODEL RM, TM, RMR AND TMR GAGES WITH MODEL 780, N2 AND K2 GAGECOCKS USING 3" LONG STUFFING BOX NIPPLES**

### FOR END CONNECTED GAGES ONLY

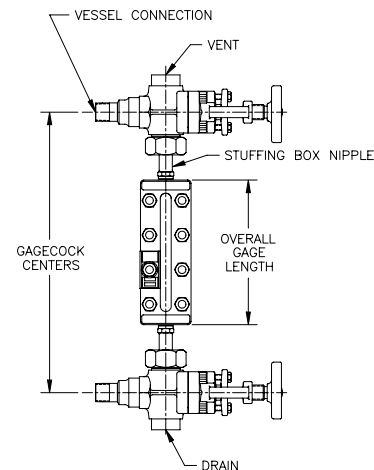
Gage Model Number				Overall Gage Length in inches & [cm]	MINIMUM GAGECOCK VESSEL CENTERS IN INCHES [CM]			
					MODEL 780 GAGECOCKS		MODEL N2 & K2 GAGECOCKS	
					ADAPTER SIZE		ADAPTER SIZE	
RM	RMR	TM	TMR		1/2" NPT X 3/4 O.D. 3/4" NPT X 3/4 O.D.	1/2" NPT X 5/8 O.D. 1/2" NPT X 3/4 O.D. 3/4" NPT X 3/4 O.D.		
1RM1	1RMR1	1TM 1	1TMR1	5 1/4 [13.3]	12 3/4 [32.4]	12 [30.5]		
1RM2	1RMR2	1TM2	1TMR2	6 1/4 [15.9]	13 3/4 [34.9]	13 [33.0]		
1RM3	1RMR3	1TM3	1TMR3	7 1/4 [18.4]	14 3/4 [37.5]	14 [35.6]		
1RM4	1RMR4	1TM4	1TMR4	8 1/4 [21.0]	15 3/4 [40.0]	15 [38.1]		
1RM5	1RMR5	1TM5	1TMR5	9 3/8 [23.8]	16 7/8 [42.9]	16 1/8 [41.0]		
1RM6	1RMR6	1TM6	1TMR6	10 5/8 [27.0]	18 1/8 [46.0]	17 3/8 [44.1]		
1RM7	1RMR7	1TM7	1TMR7	11 3/4 [29.8]	19 1/4 [48.9]	18 1/2 [47.0]		
1RM8	1RMR8	1TM8	1TMR8	13 3/8 [34.0]	20 7/8 [53.0]	20 1/8 [51.1]		
1RM9	1RMR9	1TM9	1TMR9	14 1/8 [35.9]	21 5/8 [54.9]	20 7/8 [53.0]		
2RM4	2RMR4	2TM4	2TMR4	16 1/2 [41.9]	24 [61.0]	23 1/4 [59.1]		
2RM5	2RMR5	2TM5	2TMR5	18 3/4 [47.6]	26 1/4 [66.7]	25 1/2 [64.8]		
2RM6	2RMR6	2TM6	2TMR6	21 1/4 [54.0]	28 3/4 [73.0]	28 [71.1]		
2RM7	2RMR7	2TM7	2TMR7	23 1/2 [59.7]	31 [78.7]	30 1/4 [76.8]		
2RM8	2RMR8	2TM8	2TMR8	26 3/4 [67.9]	34 1/4 [87.0]	33 1/2 [85.1]		
2RM9	2RMR9	2TM9	2TMR9	28 1/4 [71.8]	35 3/4 [90.8]	35 [88.9]		
3RM6	3RMR6	3TM6	3TMR6	31 7/8 [81.0]	39 3/8 [100.0]	38 5/8 [98.1]		
3RM7	3RMR7	3TM7	3TMR7	35 1/4 [89.5]	42 3/4 [108.6]	42 [106.7]		
3RM8	3RMR8	3TM8	3TMR8	40 1/8 [101.9]	47 5/8 [121.0]	46 7/8 [119.1]		
3RM9	3RMR9	3TM9	3TMR9	42 3/8 [107.6]	49 7/8 [126.7]	49 1/8 [124.8]		
4RM7	4RMR7	4TM7	4TMR7	47 [119.4]	54 1/2 [138.4]	53 3/4 [136.5]		
4RM8	4RMR8	4TM8	4TMR8	53 1/2 [135.9]	61 [154.9]	60 1/4 [153.0]		
4RM9	4RMR9	4TM9	4TMR9	56 1/2 [143.5]	64 [162.6]	63 1/4 [160.7]		
5RM7	5RMR7	5TM7	5TMR7	58 3/4 [149.2]	66 1/4 [168.3]	65 1/2 [166.4]		
5RM8	5RMR8	5TM8	5TMR8	66 7/8 [169.9]	74 3/8 [188.9]	73 5/8 [187.0]		
5RM9	5RMR9	5TM9	5TMR9	70 5/8 [179.4]	78 1/8 [198.4]	77 3/8 [196.5]		
6RM8	6RMR8	6TM8	6TMR8	80 1/4 [203.8]	87 3/4 [222.9]	87 [221.0]		
6RM9	6RMR9	6TM9	6TMR9	84 3/4 [215.3]	92 1/4 [234.3]	91 1/2 [232.4]		
7RM8	7RMR8	7TM8	7TMR8	93 5/8 [237.8]	101 1/8 [256.9]	100 3/8 [255.0]		
7RM9	7RMR9	7TM9	7TMR9	98 7/8 [251.1]	106 3/8 [270.2]	105 5/8 [268.3]		
8RM8	8RMR8	8TM8	8TMR8	107 [271.8]	114 1/2 [290.8]	113 3/4 [288.9]		
8RM9	8RMR9	8TM9	8TMR9	113 [287.0]	120 1/2 [306.1]	119 3/4 [304.2]		
9RM8	9RMR8	9TM8	9TMR8	120 3/8 [305.8]	127 7/8 [324.8]	127 1/8 [322.9]		
9RM9	9RMR9	9TM9	9TMR9	127 1/8 [322.9]	134 5/8 [341.9]	133 7/8 [340.0]		
10RM8	10RMR8	10TM8	10TMR8	133 3/4 [339.7]	141 1/4 [358.8]	140 1/2 [356.9]		
10RM9	10RMR9	10TM9	10TMR9	141 1/4 [358.8]	148 3/4 [377.8]	148 [375.9]		

**If Gagecock vessel center to center dimension is known:**

1. Find the dimension column matching desired gagecock series (example: 780)
2. Follow this column down to the dimension closest to required vessel center to center dimension without exceeding this dimension.
3. Follow this row to the left to the GAGE MODEL NUMBER column of the style of gage required.  
This represents the largest size gage meeting the required gagecock vessel center to center dimension.

**If Gage model number is known:**

1. Find gage model under the GAGE MODEL NUMBER column.
2. Follow that row to the right to the dimension column matching gagecock series (example: 780)  
This represents the minimum required gagecock vessel center to center for the model of gage selected.



# PENBERTHY

## dimensions

Section 2000  
 Dimensions 2703.2  
 Issued 03/06  
 Replaces 07/05

For: **MINIMUM GAGECOCK CENTERS FOR END CONNECT MODEL TSL GAGES WITH MODEL 780 GAGECOCKS USING 3" LONG STUFFING BOX NIPPLES**

### FOR 1/2" & 3/4" NPT END CONNECTED GAGES ONLY

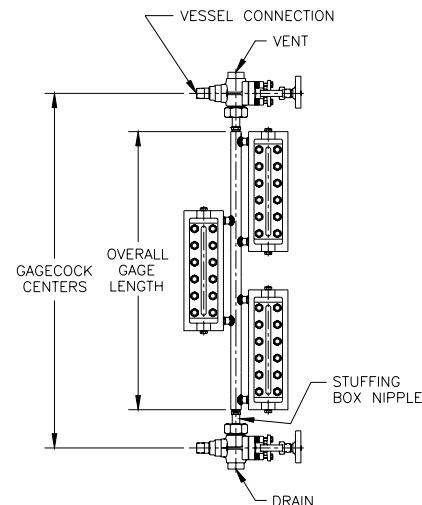
Gage Model Number	Overall Gage Length inches & [cm]	MINIMUM GAGECOCK VESSEL CENTERS IN INCHES [CM]		Gage Model Number	Overall Gage Length inches & [cm]	MINIMUM GAGECOCK VESSEL CENTERS IN INCHES [CM]	
		MODEL 780 GAGECOCKS				MODEL 780 GAGECOCKS	
		ADAPTER SIZE				ADAPTER SIZE	
TSL	1/2" NPT EC	1/2" NPT X 3/4 OD		TSL	3/4" NPT EC	3/4" NPT X 3/4 OD	
1TSL6	12 1/8 [30.8]	19 5/8 [49.8]		1TSL6	NOT AVAILABLE	NOT AVAILABLE	
1TSL7	13 1/4 [33.7]	20 3/4 [52.7]		1TSL7	NOT AVAILABLE	NOT AVAILABLE	
1TSL9	15 5/8 [39.7]	23 1/8 [58.7]		1TSL9	NOT AVAILABLE	NOT AVAILABLE	
2TSL6	20 1/8 [51.1]	27 5/8 [70.2]		2TSL6	20 5/8 [52.4]	28 1/8 [71.4]	
2TSL7	22 3/8 [56.8]	29 7/8 [75.9]		2TSL7	22 7/8 [58.1]	30 3/8 [77.2]	
2TSL9	27 1/8 [68.9]	34 5/8 [87.9]		2TSL9	27 5/8 [70.2]	35 1/8 [89.2]	
3TSL6	28 1/8 [71.8]	35 5/8 [90.5]		3TSL6	28 5/8 [72.7]	36 1/8 [91.8]	
3TSL7	31 1/2 [80.0]	39 [99.1]		3TSL7	32 [81.3]	39 1/2 [100.3]	
3TSL9	38 5/8 [98.1]	46 1/8 [117.2]		3TSL9	39 1/8 [99.4]	46 5/8 [118.4]	
4TSL6	36 1/8 [91.8]	43 5/8 [110.8]		4TSL6	36 5/8 [93.0]	44 1/8 [112.1]	
4TSL7	40 5/8 [103.2]	48 1/8 [122.2]		4TSL7	41 1/8 [104.5]	48 5/8 [123.5]	
4TSL9	50 1/8 [127.3]	57 5/8 [146.4]		4TSL9	50 5/8 [128.6]	58 1/8 [147.6]	
5TSL6	44 1/8 [112.1]	51 5/8 [131.1]		5TSL6	44 5/8 [113.3]	52 1/8 [132.4]	
5TSL7	49 3/4 [126.4]	57 1/4 [145.4]		5TSL7	50 1/4 [127.6]	57 3/4 [146.7]	
5TSL9	61 5/8 [156.5]	69 1/8 [175.6]		5TSL9	62 1/8 [157.8]	69 5/8 [176.8]	
6TSL6	52 1/8 [132.4]	59 5/8 [151.4]		6TSL6	52 5/8 [133.7]	60 1/8 [152.7]	
6TSL7	58 7/8 [149.5]	66 3/8 [168.6]		6TSL7	59 3/8 [150.8]	66 7/8 [169.9]	
6TSL9	73 1/8 [185.7]	80 5/8 [204.8]		6TSL9	73 5/8 [187.0]	81 1/8 [206.1]	
7TSL6	60 1/8 [152.7]	67 5/8 [171.8]		7TSL6	60 5/8 [154.0]	68 1/8 [173.0]	
7TSL7	68 [172.7]	75 1/2 [191.8]		7TSL7	68 1/2 [174.0]	76 [193.0]	
7TSL9	84 5/8 [214.9]	92 1/8 [234.0]		7TSL9	85 1/8 [216.2]	92 5/8 [235.3]	
8TSL6	68 1/8 [173.0]	75 5/8 [192.1]		8TSL6	68 5/8 [174.3]	76 1/8 [193.4]	
8TSL7	77 1/8 [195.9]	84 5/8 [214.9]		8TSL7	77 5/8 [197.2]	85 1/8 [216.2]	
8TSL9	96 1/8 [244.2]	103 5/8 [263.2]		8TSL9	96 5/8 [245.4]	104 1/8 [264.5]	
9TSL6	76 1/8 [193.4]	83 5/8 [212.4]		9TSL6	76 5/8 [194.6]	84 1/8 [213.7]	
9TSL7	86 1/4 [219.1]	93 3/4 [238.1]		9TSL7	86 3/4 [220.3]	94 1/4 [239.4]	
9TSL9	107 5/8 [273.4]	115 1/8 [292.4]		9TSL9	108 1/8 [274.6]	115 5/8 [293.7]	
10TSL6	84 1/8 [213.7]	91 5/8 [232.7]		10TSL6	84 5/8 [214.9]	92 1/8 [234.0]	
10TSL7	95 3/8 [242.3]	102 7/8 [261.3]		10TSL7	95 7/8 [243.5]	103 3/8 [262.6]	
10TSL9	119 1/8 [302.6]	126 5/8 [321.6]		10TSL9	119 5/8 [303.8]	127 1/8 [322.9]	

**If Gagecock vessel center to center dimension is known:**

1. Find the dimension column matching desired gagecock series (example: 780)
2. Follow this column down to the dimension closest to required vessel center to center dimension without exceeding this dimension.
3. Follow this row to the left to the GAGE MODEL NUMBER column of the style of gage required.  
This represents the largest size gage meeting the required gagecock vessel center to center dimension.

**If Gage model number is known:**

1. Find gage model under the GAGE MODEL NUMBER column.
2. Follow that row to the right to the dimension column matching gagecock series (example: 780)  
This represents the minimum required gagecock vessel center to center for the model of gage selected.



# PENBERTHY dimensions

Section 2000  
Dimensions 2703.3  
Issued 03/06  
Replaces 07/05

For: **MINIMUM GAGECOCK CENTERS FOR END CONNECT MODEL TSM GAGES WITH MODEL 780 GAGECOCKS USING STUFFING BOX NIPPLES \*\***

## FOR 1/2" & 3/4" NPT END CONNECTED GAGES ONLY

Gage Model Number	Overall Gage Length inches & [cm]	MINIMUM GAGECOCK VESSEL CENTERS IN INCHES [CM]		Gage Model Number	Overall Gage Length inches & [cm]	MINIMUM GAGECOCK VESSEL CENTERS IN INCHES [CM]	
		MODEL 780 GAGECOCKS				MODEL 780 GAGECOCKS	
		ADAPTER SIZE				ADAPTER SIZE	
TSM	1/2" NPT EC	1/2" NPT X 3/4 OD		TSM	3/4" NPT EC	3/4" NPT X 3/4 OD	
		std adapter	locking collar			std adapter	locking collar
1TSM6	12 1/2 [31.8]	20 [50.8]	21 [53.3]	1TSM6	NOT AVAILABLE	NOT AVAILABLE	
1TSM7	13 5/8 [34.6]	21 1/8 [53.7]	22 1/8 [56.2]	1TSM7	NOT AVAILABLE	NOT AVAILABLE	
1TSM9	16 [40.6]	23 1/2 [59.7]	24 1/2 [62.2]	1TSM9	NOT AVAILABLE	NOT AVAILABLE	
2TSM6	21 3/4 [55.2]	29 1/4 [74.3]	30 1/4 [76.8]	2TSM6	21 3/4 [55.2]	29 1/4 [74.3]	30 1/4 [76.8]
2TSM7	24 [61.0]	31 1/2 [80.0]	32 1/2 [82.6]	2TSM7	24 [61.0]	31 1/2 [80.0]	32 1/2 [82.6]
2TSM9	28 3/4 [73.0]	36 1/4 [92.1]	37 1/4 [94.6]	2TSM9	28 3/4 [73.0]	36 1/4 [92.1]	37 1/4 [94.6]
3TSM6	29 3/4 [75.6]	37 1/4 [94.6]	38 1/4 [97.2]	3TSM6	29 3/4 [75.6]	37 1/4 [94.6]	38 1/4 [97.2]
3TSM7	33 1/8 [84.1]	40 5/8 [103.2]	41 5/8 [105.7]	3TSM7	33 1/8 [84.1]	40 5/8 [103.2]	41 5/8 [105.7]
3TSM9	40 1/4 [102.2]	47 3/4 [121.3]	48 3/4 [123.8]	3TSM9	40 1/4 [102.2]	47 3/4 [121.3]	48 3/4 [123.8]
4TSM6	37 3/4 [95.9]	45 1/4 [114.9]	46 1/4 [117.5]	4TSM6	37 3/4 [95.9]	45 1/4 [114.9]	46 1/4 [117.5]
4TSM7	42 1/4 [107.3]	49 3/4 [126.4]	50 3/4 [128.9]	4TSM7	42 1/4 [107.3]	49 3/4 [126.4]	50 3/4 [128.9]
4TSM9	51 3/4 [131.4]	59 1/4 [150.5]	60 1/4 [153.0]	4TSM9	51 3/4 [131.4]	59 1/4 [150.5]	60 1/4 [153.0]
5TSM6	45 3/4 [116.2]	53 1/4 [135.3]	54 1/4 [137.8]	5TSM6	45 3/4 [116.2]	53 1/4 [135.3]	54 1/4 [137.8]
5TSM7	51 3/8 [130.5]	58 7/8 [149.5]	59 7/8 [152.1]	5TSM7	51 3/8 [130.5]	58 7/8 [149.5]	59 7/8 [152.1]
5TSM9	63 1/4 [160.7]	70 3/4 [179.7]	71 3/4 [182.2]	5TSM9	63 1/4 [160.7]	70 3/4 [179.7]	71 3/4 [182.2]
6TSM6	53 3/4 [136.5]	61 1/4 [155.6]	62 1/4 [158.1]	6TSM6	53 3/4 [136.5]	61 1/4 [155.6]	62 1/4 [158.1]
6TSM7	60 1/2 [153.7]	68 [172.7]	69 [175.3]	6TSM7	60 1/2 [153.7]	68 [172.7]	69 [175.3]
6TSM9	74 3/4 [189.9]	82 1/4 [208.9]	83 1/4 [211.5]	6TSM9	74 3/4 [189.9]	82 1/4 [208.9]	83 1/4 [211.5]
7TSM6	61 3/4 [156.8]	69 1/4 [175.9]	70 1/4 [178.4]	7TSM6	61 3/4 [156.8]	69 1/4 [175.9]	70 1/4 [178.4]
7TSM7	69 5/8 [176.8]	77 1/8 [195.9]	78 1/8 [198.4]	7TSM7	69 5/8 [176.8]	77 1/8 [195.9]	78 1/8 [198.4]
7TSM9	86 1/4 [219.1]	93 3/4 [238.1]	94 3/4 [240.7]	7TSM9	86 1/4 [219.1]	93 3/4 [238.1]	94 3/4 [240.7]
8TSM6	69 3/4 [177.2]	77 1/4 [196.2]	78 1/4 [198.8]	8TSM6	69 3/4 [177.2]	77 1/4 [196.2]	78 1/4 [198.8]
8TSM7	78 3/4 [200.0]	86 1/4 [219.1]	87 1/4 [221.6]	8TSM7	78 3/4 [200.0]	86 1/4 [219.1]	87 1/4 [221.6]
8TSM9	97 3/4 [248.3]	105 1/4 [267.3]	106 1/4 [270.0]	8TSM9	97 3/4 [248.3]	105 1/4 [267.3]	106 1/4 [270.0]
9TSM6	77 3/4 [197.5]	85 1/4 [216.5]	86 1/4 [219.1]	9TSM6	77 3/4 [197.5]	85 1/4 [216.5]	86 1/4 [219.1]
9TSM7	87 7/8 [223.2]	95 3/8 [242.3]	96 3/8 [245.0]	9TSM7	87 7/8 [223.2]	95 3/8 [242.3]	96 3/8 [245.0]
9TSM9	109 1/4 [277.5]	116 3/4 [296.5]	117 3/4 [299.1]	9TSM9	109 1/4 [277.5]	116 3/4 [296.5]	117 3/4 [299.1]
10TSM6	85 3/4 [217.8]	93 1/4 [236.9]	94 1/4 [239.4]	10TSM6	85 3/4 [217.8]	93 1/4 [236.9]	94 1/4 [239.4]
10TSM7	97 [246.4]	104 1/2 [265.4]	105 1/2 [268.0]	10TSM7	97 [246.4]	104 1/2 [265.4]	105 1/2 [268.0]
10TSM9	120 3/4 [306.7]	128 1/4 [325.8]	129 1/4 [329.0]	10TSM9	120 3/4 [306.7]	128 1/4 [325.8]	129 1/4 [329.0]

\*\* Minimum adapter length for assemblies using standard adapters is 3" long.

\*\* Minimum adapter length for assemblies using adapters with a locking collar on the upper gagecock is 3 1/2" long.

If Gagecock vessel center to center dimension is known:

1. Find the dimension column matching desired gagecock series (example: 780)
2. Follow this column down to the dimension closest to required vessel center to center dimension without exceeding this dimension.
3. Follow this row to the left to the GAGE MODEL NUMBER column of the style of gage required.  
This represents the largest size gage meeting the required gagecock vessel center to center dimension.

If Gage model number is known:

1. Find gage model under the GAGE MODEL NUMBER column.
2. Follow that row to the right to the dimension column matching gagecock series (example: 780)  
This represents the minimum required gagecock vessel center to center for the model of gage selected.

