



# Quality Products & Sales Inc

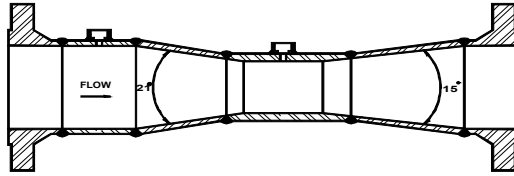
## Orifice Metering Division

PO Box 7

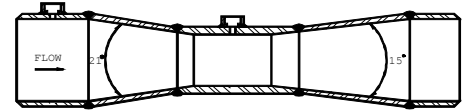
Broken Arrow Ok 74013

Local #(918) 251-0115 \* Watts #(800) 444-4634 \* Fax #(918) 455-1982

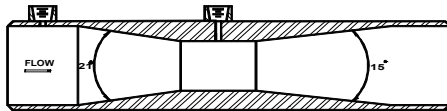
### CLASSICAL VENTURI TUBES



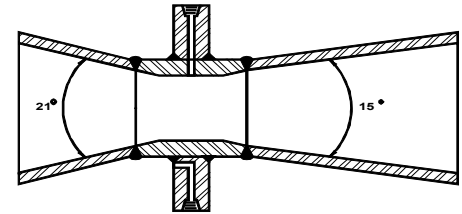
**FLANGED CLASSICAL VENTURI**



**WELD IN CLASSICAL VENTURI**



**CLASSICAL BAR VENTURI**



**INSERT CLASSICAL VENTURI**

PIPE SIZE	PIPE INSIDE DIAMETER	BETA RATIO	THROAT DIAMETER	ESTIMATED VENTURI LENGTH (INCHES)	RECOMMENDED UPSTREAM PIPE LENGTH (INCHES)	RECOMMENDED DOWNSTREAM PIPE LENGTH (INCHES)	STANDARD PRESSURE TAP	(12) POINT WEIGHT CALIBRATED ACCURACY	UNCALIBRATED ACCURACY
	<b>NOTE #1</b>			<b>NOTE #2</b>	<b>NOTE #3</b>				
<b>2</b>	<b>2.067</b>	<b>.50</b>	1.034 +/- .0005	14-15/16	12-1/2	9-1/2	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		<b>.60</b>	1.240 +/- .0006	13-13/16	14-1/2	9-1/2			
		<b>.75</b>	1.550 +/- .0007	12-1/16	20-3/4	9-1/2			
<b>2-1/2</b>	<b>2.469</b>	<b>.50</b>	1.235 +/- .0006	17-3/8	15.0	11-1/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		<b>.60</b>	1.481 +/- .0007	16	17-1/2	11-1/4			
		<b>.75</b>	1.851 +/- .0009	13-15/16	24-3/4	11-1/4			
<b>3</b>	<b>3.068</b>	<b>.50</b>	1.534 +/- .0007	20-5/16	18-1/2	14	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		<b>.60</b>	1.841 +/- .0009	18-5/8	21-1/2	14			
		<b>.75</b>	2.301 +/- .001	16-1/8	30-3/4	14			
<b>4</b>	<b>4.026</b>	<b>.50</b>	2.013 +/- .001	25-1/4	24-1/4	18-1/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		<b>.60</b>	2.415 +/- .0012	23	28-1/4	18-1/4			
		<b>.75</b>	3.019 +/- .0015	19-3/4	40-1/2	18-1/4			
<b>6</b>	<b>6.065</b>	<b>.50</b>	3.032 +/- .0015	36-1/4	36-1/2	27-1/2	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		<b>.60</b>	3.639 +/- .0017	31-15/16	42-1/2	27-1/2			
		<b>.75</b>	4.548 +/- .0022	27-15/16	60-3/4	27-1/2			
<b>8</b>	<b>7.981</b>	<b>.50</b>	3.990 +/- .0018	46-3/8	48.0	36.0	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		<b>.60</b>	4.788 +/- .0023	41-15/16	56.0	36.0			
		<b>.75</b>	5.985 +/- .0028	35-3/8	80.0	36.0			
<b>10</b>	<b>10.020</b>	<b>.50</b>	5.010 +/- .0025	56	60-1/4	45-1/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		<b>.60</b>	6.012 +/- .003	50-1/2	70-1/4	45-1/4			
		<b>.75</b>	7.515 +/- .0037	42-1/4	100-1/4	45-1/4			
<b>12</b>	<b>12.000</b>	<b>.50</b>	6.000 +/- .003	66-7/16	72.0	54.0	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		<b>.60</b>	7.200 +/- .0036	59-13/16	84.0	54.0			
		<b>.75</b>	9.000 +/- .0045	49-15/16	120.0	54.0			
<b>14</b>	<b>13.250</b>	<b>.50</b>	6.625 +/- .0033	73-3/8	79-1/2	59-3/4	(2) 1/2" FNPT	1/4 OF 1%	3/4" OF 1%
		<b>.60</b>	7.950 +/- .0039	66-1/16	92-3/4	59-3/4			
		<b>.75</b>	9.937 +/- .0049	55-3/16	132-1/2	59-3/4			



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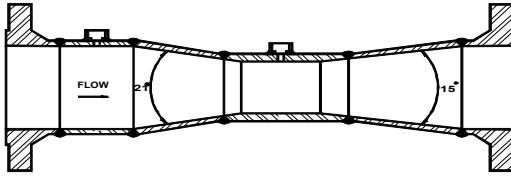
## Orifice Metering Division

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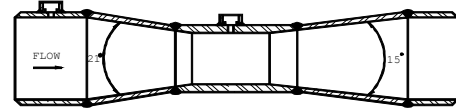
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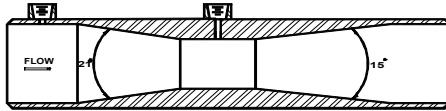
### CLASSICAL VENTURI TUBES



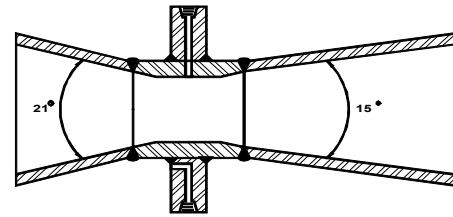
**FLANGED CLASSICAL VENTURI**



**WELD IN CLASSICAL VENTURI**



**CLASSICAL BAR VENTURI**



**INSERT CLASSICAL VENTURI**

PIPE SIZE	PIPE INSIDE DIAMETER	BETA RATIO	THROAT DIAMETER	ESTIMATED VENTURI LENGTH (INCHES)	RECOMMENDED UPSTREAM PIPE LENGTH (INCHES)	RECOMMENDED DOWNSTREAM PIPE LENGTH (INCHES)	STANDARD PRESSURE TAP	(12) POINT WEIGHT CALIBRATION ACCURACY	UNCALIBRATED ACCURACY
	<b>NOTE #1</b>			<b>NOTE #2</b>	<b>NOTE #3</b>				
16	15.250	.50	7.625 +/- .0033	82-7/8	91-1/2	68-3/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		.60	9.150 +/- .0045	74-1/2	106-3/4	68-3/4		1/4 OF 1%	3/4 OF 1%
		.75	11.437 +/- .0057	61-7/8	152-1/2	68-3/4		1/4 OF 1%	3/4 OF 1%
18	17.250	.50	8.625 +/- .0043	93-3/8	103-1/2	77-3/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		.60	10.350 +/- .0051	83-7/8	120-3/4	77-3/4		1/4 OF 1%	3/4 OF 1%
		.75	12.937 +/- .0064	69-5/8	172-1/2	77-3/4		1/4 OF 1%	3/4 OF 1%
20	19.250	.50	9.625 +/- .0048	103-1/4	115-1/2	86-3/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		.60	11.550 +/- .0057	92-5/8	134-3/4	86-3/4		1/4 OF 1%	3/4 OF 1%
		.75	14.437 +/- .0072	76-3/4	192-1/2	86-3/4		1/4 OF 1%	3/4 OF 1%
24	23.250	.50	11.625 +/- .0058	122-13/16	139-1/2	104-3/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		.60	13.950 +/- .0069	110-1/6	162-3/4	104-3/4		1/4 OF 1%	3/4 OF 1%
		.75	17.437 +/- .0087	90-7/8	232-1/2	104-3/4		1/4 OF 1%	3/4 OF 1%
30	29.250	.50	14.625 +/- .0073	150-1/16	175-1/2	131-3/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		.60	17.550 +/- .0087	134	204-3/4	131-3/4		1/4 OF 1%	3/4 OF 1%
		.75	21.937 +/- .011	109-7/8	292-1/2	131-3/4		1/4 OF 1%	3/4 OF 1%
36	35.250	.50	17.625 +/- .0088	180-1/16	211-1/2	158-3/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		.60	21.150 +/- .010	160-3/4	246-3/4	158-3/4		1/4 OF 1%	3/4 OF 1%
		.75	26.437 +/- .013	131-5/8	352-1/2	158-3/4		1/4 OF 1%	3/4 OF 1%
42	41.250	.50	20.625 +/- .010	209-3/4	247-1/2	185-3/4	(2) 1/2" FNPT	1/4 OF 1%	3/4 OF 1%
		.60	24.750 +/- .012	187-1/8	288-3/4	185-3/4		1/4 OF 1%	3/4 OF 1%
		.75	30.937 +/- .015	153-1/8	412-1/2	185-3/4		1/4 OF 1%	3/4 OF 1%

**NOTE #1:** Other pipe schedules and beta ratios are standardly available.

**NOTE #2:** Estimated lengths are based ASME 150# flanged short form venturis.

**NOTE #3:** Recommended pipe lengths are based on ASME Fluid Metering 6th. Edition Fig. II-II-I

**MATERIALS:** Carbon Steel, Stainless Steel, Chromoly, Monel, Hastelloy, PVC, Fiberglass, Teflon, Cast Iron

**STYLES:** Short Form (15°) Recovery Cone

Long Form (7°) Recovery Cone

**Fabrication Codes:** ASME B31.1 & B31.3

Calculations available using equations

Other material available

ASME MFC-3M