

Principle of Operation

Flow is measured in terms of dynamic force acting on a target (solid disk) in the flow stream. Hermetically sealed, bonded strain gages in a bridge circuit configuration mounted outside the flow stream translate force into an electrical output. This output is proportional to flow rate squared.



Figure 1. Target Insertion Flowmeter shown with retractable mounting



Figure 2. Target Insertion Flowmeter shown with fixed mounting

Accessories



Figure 3. Model 1030AW Indicator/Totalizer



Figure 4. Model 1530AW Mass flow computer

Benefits

Wide Rangeability	Easily and inexpensively field modified by replacing target for extreme flow range changes
Versatile Mounting Options	Fixed, retractable (hot tap), and more
Durable	No frictional moving parts to wear Designed to withstand 100% over range
Fast Response Time	Typically less than 2 msec.

Technical Information

Functional Specifications

Fluid Types	Steam, Gas, Liquid
Pressure	Primary sensing elements: 1,000 - 5,000 - 10,000 psi max (69 - 345 - 690 bar) Pipe and end connections - according to appropriate ANSI or DIN specifications
Temperature	-65° to 425° F (-54° to 218° C) std. -65° to 500° F (-54° to 260° C) extended temp. -320° to 250° F (-195° to 121° C) cryogenic -65° to 300° F (-54° to 149° C) high sensitivity
Excitation Voltage (max)	15 VDC
Bridge Resistance	350 ohm $\pm$ 5 ohm
Operational Range	Reynolds #s of >1000

Physical Specifications

Materials of Construction	
Seals	Teflon® std., Viton, Buna-N, Grafoil
Sensing Element	316 SS/MP35N
Housing	303 SS/304 SS or 316 SS or carbon steel
Flanges	304 SS or 316 SS
Electronics Housing	Polyester coated aluminum
Options	Other materials
Connections & Mountings	
Mounting Position	Vertical, Horizontal, Angle
Typical Straight Pipe Requirements	Upstream: 10 x D Downstream: 5 x D
Process Connections	ANSI Class 150 RF to Class 2500 RF 2" or 4" DIN
Electrical Connection	¾" FNPT

Performance Specifications

Accuracy	Steam: $\pm$ 1.0% of rate Liquid: $\pm$ 1.0% of rate std $\pm$ 0.5% of rate application dependent Gas: $\pm$ 1.0% of rate
Repeatability	$\pm$ 0.15% of rate
Flow Turndown Ratio	Steam - 10:1 Gas - 15:1 application dependent Liquid - 15:1
Response Time	0.002 to 0.1 sec (transmitter dependent)
Flow Direction	Unidirectional: Standard Bidirectional: Optional - dual Model 1050 transmitters required.
Agency Approvals	*CSA: Class I Div 1 Groups B, C, D Class I Div 2 Groups A, B, C, D to 299 psig and 225° F *FM: Class I Div 2 Groups A, B, C, D to 299 psig and 225° F <i>*Fixed Insertion Only</i>

Selection and Sizing

All flowmeters are sized using an equivalent water flow. It is necessary to calculate what water flow produces a force on the target equal to the user's actual full-scale fluid flow. The following formulas are used to calculate the water flow equivalents.

Gases	$\text{gpm} = \frac{\text{SCFM}}{22.7194} \sqrt{\frac{(S_g) (T)}{P'}}$ $\text{gpm} = (1.5564) (\text{ACFM}) \sqrt{\frac{(S_g) (P')}{T}}$
Steam	$\text{gpm} = \frac{\text{pph of steam}}{63.345} \sqrt{V_g}$
Liquid	$\text{gpm} = \text{gpm}_1 \sqrt{S}$ Reynolds number must be greater than 1000 throughout entire flow range for liquids

Table 1

$$R_e = \frac{(3160) (\text{gpm}_1)}{(d)(v)}$$

P' = Operating pressure in psia (psig + 14.696)

gpm₁ = Full-scale gpm of actual liquid

d = Actual internal pipe diameter (inches)

v = Viscosity in centistokes

SCFM = Full-scale standard cubic feet per minute

ACFM = Full-scale actual cubic feet per minute

R_e = Full-scale Reynolds number

S = Specific gravity liquid

S_g = Specific gravity gas

V_g = Specific volume of steam in cubic feet per pound

T = Operating temperature in degrees

R (degrees F + 459.67)

Note: Standard conditions are considered to be

14.696 psia and 60° F (519.67° R).

Air = 0.0764 lbs/ft³

Water = 62.3714 lbs/ft³

Flowmeter Pressure Rating

ANSI Flange Pressure - Temperature Ratings

Maximum Pressure in psig

Material	Temperature °F				
	-20 to 100	200	300	400	500
304 SS/150 # RF	275	235	205	180	170
304 SS/300 # RF	720	600	530	470	435
304 SS/400 # RF	960	800	705	630	585
304 SS/600 # RF	1440	1200	1055	940	875
304 SS/900 # RF	2160	1800	1585	1410	1310
304 SS/1500 # RF	3600	3000	2640	2350	2185
304 SS/2500 # RF	6000	5000	4400	3920	3640

Note: The ratings for slip-on and socket welding type flanges are two-thirds of the values shown.

Table 2

Flow Ranges

All flowmeters are sized using an equivalent water flow (see page 13). **LIQUID/GAS APPLICATION GPM EQUIVALENTS FOR INSERTION PROBE METERS.** Minimum and maximum flow rates to achieve accuracy. Higher flow rates per line size available. Consult factory.

		2" MOUNTING FLANGE								FULL SCALE
		RANGE A				RANGE B				PRESSURE
Pipe Size (in)	Pipe I.D. (in)	Min Flow GPM	Max Flow GPM	Min Flow LPM	Max Flow LPM	Min Flow GPM	Max Flow GPM	Min Flow LPM	Max Flow LPM	DROP PSI (kg/cm ²)
4.00	4.026	19.60	294.00	74.19	1112.88	30.47	457.00	115.33	1729.88	0.145 (.010)
5.00	5.047	30.80	462.00	116.59	1748.81	47.87	718.00	181.19	2717.85	0.092 (.006)
6.00	6.065	44.47	667.00	168.32	2524.80	69.07	1036.00	261.44	3921.58	0.064 (.004)
8.00	7.981	77.00	1155.00	291.47	4372.03	119.67	1795.00	452.97	6794.62	0.036 (.002)
10.00	10.020	121.33	1820.00	459.28	6889.26	188.60	2829.00	713.91	10708.63	0.023 (.001)
12.00	12.000	172.27	2584.00	652.08	9781.23	267.67	4015.00	1013.20	15198.00	0.016
14.00	13.250	212.20	3183.00	803.24	12048.63	329.73	4946.00	1248.14	18722.12	0.013
16.00	15.250	281.07	4216.00	1063.92	15958.85	436.80	6552.00	1653.42	24801.32	0.010
18.00	17.250	359.67	5395.00	1361.45	20421.73	558.93	8384.00	2115.73	31736.01	0.008
20.00	19.250	447.87	6718.00	1695.31	25429.69	696.07	10441.00	2634.83	39522.38	0.006
22.00	21.250	545.80	8187.00	2066.02	30990.30	848.20	12723.00	3210.70	48160.45	0.005
24.00	23.250	653.33	9800.00	2473.07	37096.00	1015.33	15230.00	3843.35	57650.21	0.004
26.00	25.250	770.60	11559.00	2916.96	43754.35	1197.53	17963.00	4533.03	67995.45	< 0.004
28.00	27.250	897.53	13463.00	3397.44	50961.57	1394.80	20922.00	5279.74	79196.17	< 0.004
30.00	29.250	1034.07	15511.00	3914.26	58713.88	1607.00	24105.00	6082.99	91244.80	< 0.004
32.00	31.250	1180.33	17705.00	4467.92	67018.84	1834.33	27515.00	6943.51	104152.69	< 0.004
34.00	33.250	1336.27	20044.00	5058.18	75872.67	2076.60	31149.00	7860.57	117908.50	< 0.004
36.00	35.250	1501.87	22528.00	5685.02	85275.37	2333.93	35009.00	8834.65	132519.78	< 0.004
38.00	37.250	1677.13	25157.00	6348.46	95226.94	2606.33	39095.00	9865.77	147986.54	< 0.004
40.00	39.250	1862.00	27930.00	7048.24	105723.60	2893.67	43405.00	10953.41	164301.21	< 0.004
42.00	41.250	2056.60	30849.00	7784.86	116772.90	3196.13	47942.00	12098.34	181475.14	< 0.004
44.00	43.250	2260.87	33913.00	8558.07	128371.08	3513.53	52703.00	13299.80	199496.98	< 0.004
46.00	45.250	2474.80	37122.00	9367.88	140518.13	3846.00	57690.00	14558.29	218374.30	< 0.004
48.00	47.250	2698.40	40476.00	10214.27	153214.05	4193.47	62902.00	15873.55	238103.32	< 0.004
50.00	49.250	2931.67	43975.00	11097.26	166458.83	4556.00	68340.00	17245.85	258687.81	< 0.004
52.00	51.250	3174.67	47620.00	12017.08	180256.27	4933.53	74003.00	18674.93	280124.00	< 0.004
54.00	53.250	3427.27	51409.00	12973.25	194598.80	5326.13	79892.00	20161.04	302415.67	< 0.004
56.00	55.250	3689.53	55343.00	13966.01	209490.19	5733.73	86006.00	21703.94	325559.03	< 0.004
58.00	57.250	3961.47	59422.00	14995.36	224930.45	6156.33	92345.00	23303.61	349554.08	< 0.004
60.00	59.250	4243.07	63646.00	16061.31	240919.59	6594.00	98910.00	24960.31	374404.62	< 0.004

		4" MOUNTING FLANGE								FULL SCALE
		RANGE A				RANGE B				PRESSURE
Pipe Size (in)	Pipe I.D. (in)	Min Flow GPM	Max Flow GPM	Min Flow LPM	Max Flow LPM	Min Flow GPM	Max Flow GPM	Min Flow LPM	Max Flow LPM	DROP PSI (kg/cm ²)
4.00	4.026	9.53	143.00	36.09	541.30	30.47	457.00	115.33	1729.88	0.145 (.010)
5.00	5.047	15.00	225.00	56.78	851.69	47.87	718.00	181.19	2717.85	0.092 (.006)
6.00	6.065	21.60	324.00	81.76	1226.44	69.07	1036.00	261.44	3921.58	0.064 (.004)
8.00	7.981	37.47	562.00	141.82	2127.34	119.67	1795.00	452.97	6794.62	0.036 (.002)
10.00	10.020	59.07	886.00	223.59	3353.78	188.60	2829.00	713.91	10708.63	0.023 (.001)
12.00	12.000	83.80	1257.00	317.21	4758.13	267.67	4015.00	1013.20	15198.00	0.016
14.00	13.250	103.20	1548.00	390.64	5859.65	329.73	4946.00	1248.14	18722.12	0.013
16.00	15.250	136.73	2051.00	517.58	7763.66	436.80	6552.00	1653.42	24801.32	0.010
18.00	17.250	175.00	2625.00	662.43	9936.43	558.93	8384.00	2115.73	31736.01	0.008
20.00	19.250	217.87	3268.00	824.69	12370.38	696.07	10441.00	2634.83	39522.38	0.006
22.00	21.250	265.53	3983.00	1005.12	15076.87	848.20	12723.00	3210.70	48160.45	0.005
24.00	23.250	317.87	4768.00	1203.22	18048.34	1015.33	15230.00	3843.35	57650.21	0.004
26.00	25.250	374.87	5623.00	1418.99	21284.78	1197.53	17963.00	4533.03	67995.45	< 0.004
28.00	27.250	436.60	6549.00	1652.66	24789.97	1394.80	20922.00	5279.74	79196.17	< 0.004
30.00	29.250	503.07	7546.00	1904.26	28563.92	1607.00	24105.00	6082.99	91244.80	< 0.004
32.00	31.250	574.20	8613.00	2173.52	32602.84	1834.33	27515.00	6943.51	104152.69	< 0.004
34.00	33.250	650.07	9751.00	2460.70	36910.52	2076.60	31149.00	7860.57	117908.50	< 0.004
36.00	35.250	730.60	10959.00	2765.54	41483.17	2333.93	35009.00	8834.65	132519.78	< 0.004
38.00	37.250	815.87	12238.00	3088.30	46324.57	2606.33	39095.00	9865.77	147986.54	< 0.004
40.00	39.250	905.87	13588.00	3428.98	51434.74	2893.67	43405.00	10953.41	164301.21	< 0.004
42.00	41.250	1000.53	15008.00	3787.32	56809.87	3196.13	47942.00	12098.34	181475.14	< 0.004
44.00	43.250	1099.87	16498.00	4163.33	62449.98	3513.53	52703.00	13299.80	199496.98	< 0.004
46.00	45.250	1204.00	18060.00	4557.51	68362.63	3846.00	57690.00	14558.29	218374.30	< 0.004
48.00	47.250	1312.73	19691.00	4969.10	74536.46	4193.47	62902.00	15873.55	238103.32	< 0.004
50.00	49.250	1426.20	21393.00	5398.60	80979.05	4556.00	68340.00	17245.85	258687.81	< 0.004
52.00	51.250	1544.40	23166.00	5846.03	87690.40	4933.53	74003.00	18674.93	280124.00	< 0.004
54.00	53.250	1667.33	25010.00	6311.37	94670.50	5326.13	79892.00	20161.04	302415.67	< 0.004
56.00	55.250	1794.93	26924.00	6794.37	101915.58	5733.73	86006.00	21703.94	325559.03	< 0.004
58.00	57.250	1927.20	28908.00	7295.04	109425.63	6156.33	92345.00	23303.61	349554.08	< 0.004
60.00	59.250	2064.20	30963.00	7813.63	117204.43	6594.00	98910.00	24960.31	374404.62	< 0.004

STEAM APPLICATION GPM EQUIVALENTS FOR INSERTION PROBE METERS. Minimum and maximum flow rates to achieve accuracy
Higher flow rates per line size available. Contact factory.

		2" MOUNTING FLANGE								FULL SCALE PRESSURE DROP PSI (kg/cm ²)
		RANGE A				RANGE B				
Pipe Size (in)	Pipe I.D. (in)	Min Flow GPM	Max Flow GPM	Min Flow LPM	Max Flow LPM	Min Flow GPM	Max Flow GPM	Min Flow LPM	Max Flow LPM	
4.00	4.026	20.79	207.86	78.68	786.81	32.31	323.10	122.30	1223.03	0.073 (.005)
5.00	5.047	32.66	326.63	123.64	1236.41	50.76	507.63	192.15	1921.52	0.046 (.003)
6.00	6.065	47.16	471.57	178.50	1785.03	73.25	732.45	277.26	2772.55	0.032 (.002)
8.00	7.981	81.66	816.59	309.10	3091.02	126.91	1269.07	480.38	4803.80	0.018 (.001)
10.00	10.020	128.67	1286.74	487.07	4870.70	200.01	2000.10	757.10	7571.00	0.012
12.00	12.000	182.69	1826.89	691.53	6915.33	283.86	2838.61	1074.50	10744.99	0.008
14.00	13.250	225.04	2250.38	851.84	8518.38	349.68	3496.82	1323.65	13236.54	0.007
16.00	15.250	298.07	2980.71	1128.29	11282.91	463.23	4632.26	1753.45	17534.54	0.005
18.00	17.250	381.43	3814.27	1443.82	14438.16	592.75	5927.49	2243.74	22437.36	0.004
20.00	19.250	474.96	4749.63	1797.88	17978.79	738.18	7381.79	2794.23	27942.32	< 0.004
22.00	21.250	578.82	5788.21	2191.01	21910.14	899.52	8995.16	3404.94	34049.44	< 0.004
24.00	23.250	692.86	6928.60	2622.69	26226.87	1076.76	10767.61	4075.87	40758.70	< 0.004
26.00	25.250	817.22	8172.21	3093.43	30934.33	1269.98	12699.84	4807.28	48072.78	< 0.004
28.00	27.250	951.83	9518.34	3602.98	36029.83	1479.19	14791.85	5599.17	55991.69	< 0.004
30.00	29.250	1096.63	10966.28	4151.07	41510.71	1704.22	17042.24	6451.01	64510.07	< 0.004
32.00	31.250	1251.74	12517.44	4738.23	47382.32	1945.31	19453.11	7363.60	73635.96	< 0.004
34.00	33.250	1417.11	14171.11	5364.20	53641.98	2202.23	22022.34	8336.13	83361.31	< 0.004
36.00	35.250	1592.73	15927.30	6028.97	60289.69	2475.14	24751.36	9369.15	93691.48	< 0.004
38.00	37.250	1778.60	17786.00	6732.54	67325.45	2764.02	27640.17	10462.65	104626.48	< 0.004
40.00	39.250	1974.65	19746.51	7474.66	74746.58	3068.73	30687.34	11616.10	116160.95	< 0.004
42.00	41.250	2181.02	21810.24	8255.84	82558.44	3389.50	33894.99	12830.29	128302.92	< 0.004
44.00	43.250	2397.65	23976.49	9075.84	90758.36	3726.10	37261.02	14104.44	141044.37	< 0.004
46.00	45.250	2624.53	26245.25	9934.63	99346.32	4078.68	40786.83	15439.06	154390.63	< 0.004
48.00	47.250	2861.65	28616.53	10832.23	108322.33	4447.17	44471.71	16833.90	168339.05	< 0.004
50.00	49.250	3109.03	31090.33	11768.64	117686.39	4831.64	48316.38	18289.23	182892.28	< 0.004
52.00	51.250	3366.73	33667.34	12744.12	127441.18	5232.01	52320.12	19804.77	198047.67	< 0.004
54.00	53.250	3634.62	36346.16	13758.13	137581.35	5648.36	56483.64	21380.79	213807.88	< 0.004
56.00	55.250	3912.75	39127.50	14810.96	148109.56	6080.62	60806.24	23017.02	230170.23	< 0.004
58.00	57.250	4201.14	42011.35	15902.58	159025.83	6528.79	65287.92	24713.47	247134.74	< 0.004
60.00	59.250	4499.77	44997.72	17033.01	170330.15	6992.94	69929.37	26470.41	264704.06	< 0.004

		4" MOUNTING FLANGE								FULL SCALE
		RANGE A				RANGE B				PRESSURE
Pipe Size (in)	Pipe I.D. (in)	Min Flow GPM	Max Flow GPM	Min Flow LPM	Max Flow LPM	Min Flow GPM	Max Flow GPM	Min Flow LPM	Max Flow LPM	DROP PSI (kg/cm ²)
4.00	4.026	10.11	101.10	38.27	382.70	32.31	323.10	122.30	1223.03	0.073 (.005)
5.00	5.047	15.91	159.08	60.21	602.15	50.76	507.63	192.15	1921.52	0.046 (.003)
6.00	6.065	22.91	229.07	86.71	867.09	73.25	732.45	277.26	2772.55	0.032 (.002)
8.00	7.981	39.73	397.33	150.40	1504.03	126.91	1269.07	480.38	4803.80	0.018 (.001)
10.00	10.020	62.64	626.40	237.11	2371.12	200.01	2000.10	757.10	7571.00	0.012
12.00	12.000	88.87	888.70	336.40	3364.00	283.86	2838.61	1074.50	10744.99	0.008
14.00	13.250	109.44	1094.44	414.28	4142.78	349.68	3496.82	1323.65	13236.54	0.007
16.00	15.250	145.01	1450.06	548.89	5488.91	463.23	4632.26	1753.45	17534.54	0.005
18.00	17.250	185.59	1855.88	702.51	7025.05	592.75	5927.49	2243.74	22437.36	0.004
20.00	19.250	231.05	2310.48	874.59	8745.86	738.18	7381.79	2794.23	27942.32	< 0.004
22.00	21.250	281.60	2815.98	1065.93	10659.35	899.52	8995.16	3404.94	34049.44	< 0.004
24.00	23.250	337.10	3370.98	1276.02	12760.18	1076.76	10767.61	4075.87	40758.70	< 0.004
26.00	25.250	397.55	3975.46	1504.83	15048.34	1269.98	12699.84	4807.28	48072.78	< 0.004
28.00	27.250	463.01	4630.14	1752.65	17526.51	1479.19	14791.85	5599.17	55991.69	< 0.004
30.00	29.250	533.50	5335.02	2019.47	20194.69	1704.22	17042.24	6451.01	64510.07	< 0.004
32.00	31.250	608.94	6089.39	2305.02	23050.21	1945.31	19453.11	7363.60	73635.96	< 0.004
34.00	33.250	689.40	6893.96	2609.57	26095.74	2202.23	22022.34	8336.13	83361.31	< 0.004
36.00	35.250	774.80	7748.01	2932.86	29328.60	2475.14	24751.36	9369.15	93691.48	< 0.004
38.00	37.250	865.23	8652.27	3275.15	32751.47	2764.02	27640.17	10462.65	104626.48	< 0.004
40.00	39.250	960.67	9606.72	3636.44	36364.36	3068.73	30687.34	11616.10	116160.95	< 0.004
42.00	41.250	1061.07	10610.66	4016.46	40164.58	3389.50	33894.99	12830.29	128302.92	< 0.004
44.00	43.250	1166.41	11664.09	4415.21	44152.13	3726.10	37261.02	14104.44	141044.37	< 0.004
46.00	45.250	1276.84	12768.42	4833.24	48332.38	4078.68	40786.83	15439.06	154390.63	< 0.004
48.00	47.250	1392.15	13921.54	5269.73	52697.28	4447.17	44471.71	16833.90	168339.05	< 0.004
50.00	49.250	1512.49	15124.85	5725.22	57252.19	4831.64	48316.38	18289.23	182892.28	< 0.004
52.00	51.250	1637.84	16378.36	6199.71	61997.11	5232.01	52320.12	19804.77	198047.67	< 0.004
54.00	53.250	1768.21	17682.07	6693.20	66932.05	5648.36	56483.64	21380.79	213807.88	< 0.004
56.00	55.250	1903.53	19035.27	7205.43	72054.31	6080.62	60806.24	23017.02	230170.23	< 0.004
58.00	57.250	2043.80	20437.96	7736.39	77363.92	6528.79	65287.92	24713.47	247134.74	< 0.004
60.00	59.250	2189.08	21890.84	8286.35	82863.53	6992.94	69929.37	26470.41	264704.06	< 0.004

Table 4

Dimensions

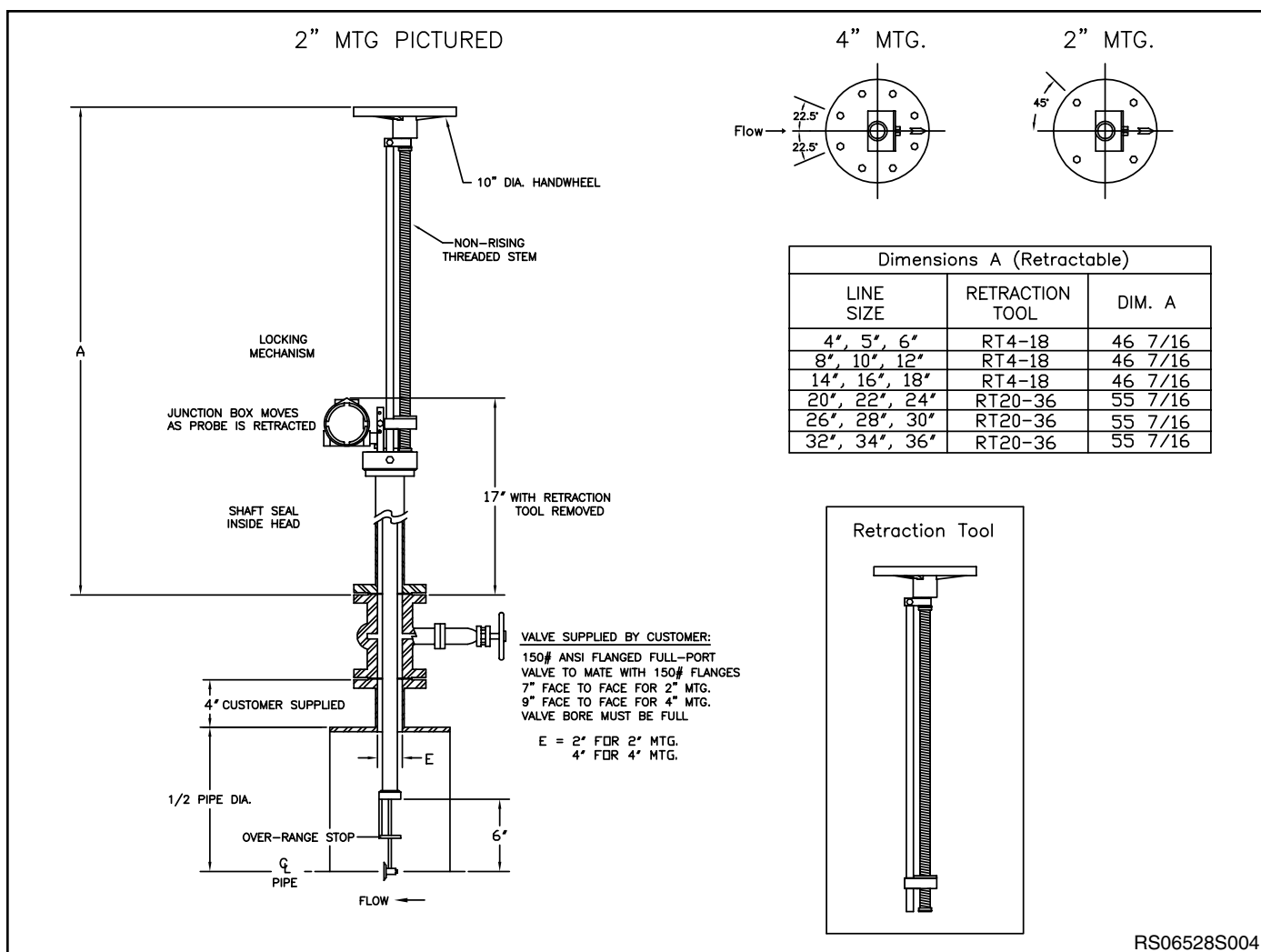


Figure 5. Retractable Mounting Dimensions

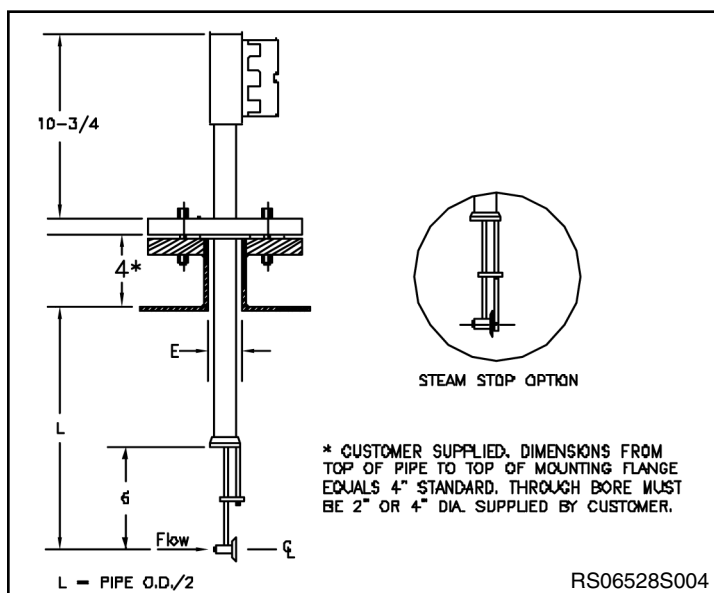


Figure 6. Fixed Mounting Dimensions

Ordering Information

Please provide completed application data sheet (found at www.aaliant.com) to allow us to confirm selection.

1. After calculating the water flow rate equivalent (see selection and sizing page 13), refer to the range charts on pages 14-15.
2. If the water flow rate equivalent falls between the A and B flow rate in the range charts, a 15:1 flow range of the actual user's flow may be obtained for liquids and gases, and a 10:1 flow range of the actual user's flow may be obtained for steam.
3. Select line size.
4. Select mounting connections.
5. Confirm maximum pressure capability of flange/meter rating with process conditions and select flange rating from Table 2. Wafer connections require selection of mating flange.
6. Select desired materials of construction.
7. Confirm maximum pressure requirements and select element pressure rating.
8. Confirm maximum temperature requirements and select element temperature rating.
9. Confirm suitability of standard local mounted electronics. Ambient temperature at electronics not to exceed 140° F. Select transmitter model from page 23-29. Specify if remote mounted electronics are required.
10. Provide: Fluid, Fluid Viscosity, Minimum & Maximum Operating Pressure, Minimum & Maximum Operating Temperature, Density/Specific Gravity or Specific Volume
11. Provide minimum and maximum flow range. Targets are custom sized to each application allowing a full turndown from actual maximum flow.

Model #		V	-	-	-	-	-	-	-
Add S For Steam									
Line Size									
4, 5, or 6	4"-6" (100-150mm)								
8, 10, or 12	8"-12" (200-300mm)								
14, 16, or 18	14-18" (350-450mm)								
20, 22, or 24	20-24" (500-600mm)								
26, 28, or 30	26-30" (650-750mm)								
32, 34, or 36	32-36" (800-900mm)								
42	42" (1000mm)								
48	48" (1200mm)								
54	54" (1350mm)								
60	60" (1500mm)								
Mounting Connections									
K	4" RF Flanged, retractable probe (4" - 36")								
U	2" RF Flanged, retractable probe (4" - 36")								
M	2" RF Flanged, fixed probe (4" - 36")								
P	4" RF Flanged, fixed probe (4" - 60")								
Flange Rating									
0	N/A								
1	150# RF ANSI (standard)								
2	300# RF ANSI								
3	400# RF ANSI								
4	600# RF ANSI								
5	900# RF ANSI								
6	1500# RF ANSI								
7	2500# RF ANSI								
Max. pressure on FM meters cannot exceed 299 psig. Refer to flange specifications on 150# flanges.									
Body Material									
S	303/304 Stainless Steel								
Y	316 Stainless Steel								
Element Pressure Rating									
1	1,000 PSI								
5	5,000 PSI								
0	10,000 PSI								
Element Temperature Rating									
K	425° F								
T	500° F								
N	-320° F								
E	300° F (P.T. gaging, gases only)								

Options

- Remote Mount Electronics: Up to 100 ft (30m) (transmitter dependent)
- Higher Pressure Connections
- Materials of Construction – Hastelloy

venture
MEASUREMENT

TAR-B Rev. C

©2002 Venture Measurement. 05/02

All rights reserved. All data subject to change without notice.