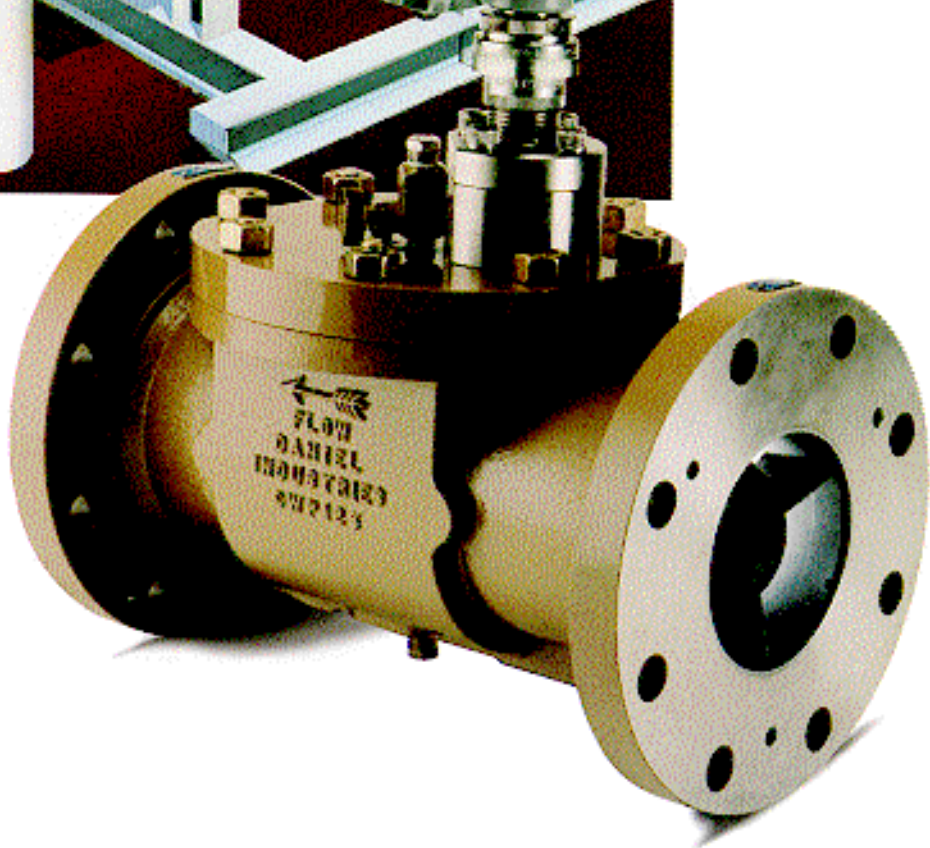
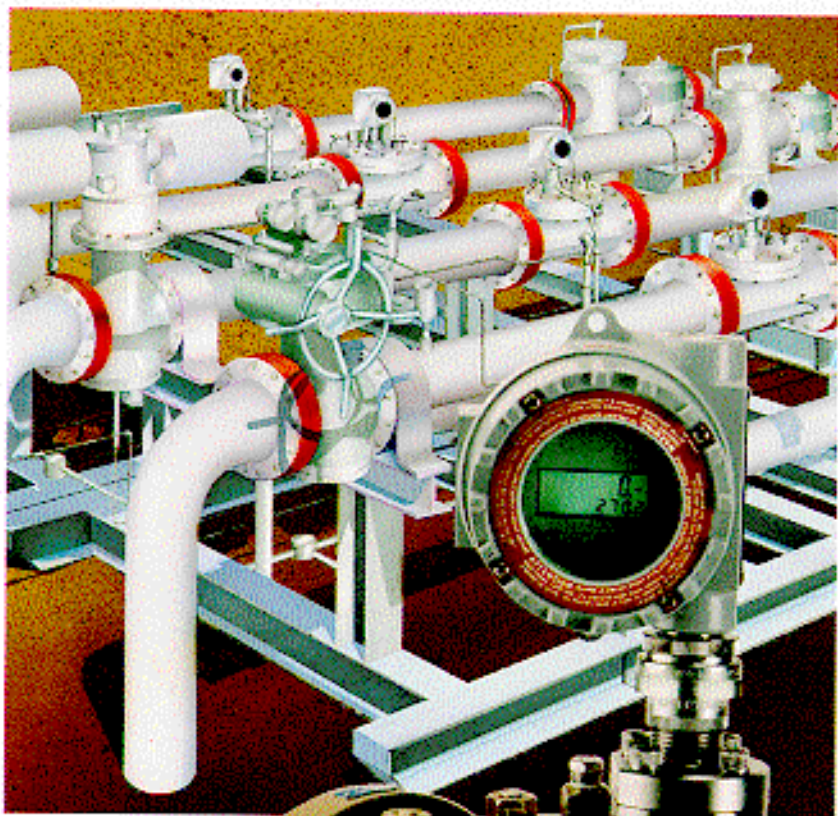


# Gas Turbine Meters

4" THROUGH 12"

CATALOG 2000



CERTIFICATE DS18-16  
5720 OLD RAYT ROAD  
HOUSTON, TEXAS 77055 USA  
18200 HEMPSTEAD  
HOUSTON, TEXAS 77065 USA

**DANIEL**

# *High Capacity Gas Turbine Meter Brochure*

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Flow Charts for Sizing [4"](#), [6"](#), [8"](#), [12"](#)

[Characteristics and Dimensions](#)

[Outputs and Spin Times](#)

## High Capacity Gas Turbine Meters

### HIGH CAPACITY GTM 4" (100 MM)

OPERATING PRESSURE		MAXIMUM FLOW RATE		MINIMUM FLOW RATE		RANGE TURNDOWN RATIO	APPROXIMATE PRESSURE DROP	
(PSIG)	(BARS)	(SCFH)	(Nm3/hr)	(SCFH)	(Nm3/hr)		(IN WS)	(millibars)
0	1.02	30000	850	2324	66	13:1	6.8	16.9
0.25	1.03	30509	864	2343	66	13:1	6.9	17.2
1	1.08	32037	907	2401	68	13:1	7.3	18.1
10	1.71	50367	1426	3011	85	17:1	11.4	28.4
25	2.74	80916	2291	3816	108	21:1	18.3	45.7
50	4.46	131833	3733	4871	138	27:1	29.9	74.4
75	6.19	182749	5175	5735	162	32:1	41.4	103.2
100	7.91	233666	6617	6485	184	36:1	53.0	131.9
125	9.63	284582	8059	7157	203	40:1	64.5	160.7
200	14.81	437332	12384	8872	251	49:1	99.1	246.9
300	21.70	640998	18151	10741	304	60:1	145.3	361.9
400	28.59	844664	23919	12330	349	69:1	191.5	476.9
500	35.49	1048330	29686	13737	389	76:1	237.6	591.9
600	42.38	1251996	35453	15012	425	83:1	283.8	706.9
700	49.28	1455662	41221	16187	458	90:1	330.0	821.8
800	56.17	1659328	46988	17282	489	96:1	376.1	936.8
900	63.07	1862994	52755	18312	519	102:1	422.3	1051.8
1000	69.96	2066660	58522	19287	546	107:1	468.4	1166.8
1100	76.86	2270326	64290	20215	572	112:1	514.6	1281.8
1200	83.75	2473992	70057	21103	598	117:1	560.8	1396.8
1300	90.65	2677658	75824	21954	622	122:1	606.9	1511.8
1400	97.54	2881324	81592	22774	645	127:1	653.1	1626.8

The above table is based on standard conditions of 14.73 psia and 60 degrees F for 0.60 specific gravity gas. Supercompressibility is not included.

### HIGH CAPACITY GTM 6" (150 MM)

OPERATING PRESSURE		MAXIMUM FLOW RATE		MINIMUM FLOW RATE		RANGE TURNDOWN RATIO	APPROXIMATE PRESSURE DROP	
(PSIG)		(BARS)		(SCFH)			(IN WC)	(millibars)
0	1.02	60000	1699	3098	88	19:1	5.5	13.7
0.25	1.03	61018	1728	3125	88	20:1	5.6	13.9
1	1.08	64073	1814	3202	91	20:1	5.9	14.6
10	1.71	100733	2853	4015	114	25:1	9.2	23.0
25	2.74	161833	4583	5089	144	32:1	14.8	37.0
50	4.46	263666	7466	6495	184	41:1	24.2	60.2
75	6.19	365499	10350	7647	217	48:1	33.5	83.5
100	7.91	467332	13234	8647	245	54:1	42.8	106.7
125	9.63	569165	16117	9543	270	60:1	52.2	130.0
200	14.81	874664	24768	11830	335	74:1	80.2	199.7
300	21.70	1281996	36303	14322	406	90:1	117.5	292.7
400	28.59	1689328	47837	16441	466	103:1	154.9	385.7
500	35.49	2096660	59372	18316	519	114:1	192.2	478.7
600	42.38	2503992	70906	20016	567	125:1	229.5	571.7
700	49.28	2911324	82441	21583	611	135:1	266.9	664.7
800	56.17	3318656	93976	23043	653	144:1	304.2	757.7
900	63.07	3725988	105510	24416	691	153:1	341.5	850.7
1000	69.96	4133320	117045	25716	728	161:1	378.9	943.7
1100	76.86	4540652	128579	26954	763	168:1	416.2	1036.7
1200	83.75	4947984	140114	28137	797	176:1	453.6	1129.7
1300	90.65	5355316	151649	29272	829	183:1	490.9	1222.8
1400	97.54	5762648	163183	30365	860	190:1	528.2	1315.8

The above table is based on standard conditions of 14.73 psia and 60 degrees F for 0.60 specific gravity gas. Supercompressibility is not included.

### HIGH CAPACITY GTM 8" (200 MM)

OPERATING PRESSURE		MAXIMUM FLOW RATE		MINIMUM FLOW RATE		RANGE TURNDOWN RATIO	APPROXIMATE PRESSURE DROP	
(PSIG)		(BARS)		(SCFH)			(IN WC)	(millibars)
0	1.02	100000	2832	5000	142	20:1	5.5	13.7
0.25	1.03	101697	2880	5042	143	20:1	5.6	13.9
1	1.08	106789	3024	5167	146	21:1	5.9	14.6
10	1.71	167889	4754	6479	183	26:1	9.2	23.0
25	2.74	269722	7638	8212	233	33:1	14.8	37.0
50	4.46	439443	12444	10481	297	42:1	24.2	60.2
75	6.19	609165	17250	12341	349	49:1	33.5	83.5
100	7.91	778887	22056	13954	395	56:1	42.8	106.7
125	9.63	948608	26862	15400	436	62:1	52.2	130.0
200	14.81	1457773	41280	19090	541	76:1	80.2	199.7
300	21.70	2136660	60505	23112	654	92:1	117.5	292.7
400	28.59	2815547	79729	26531	751	106:1	154.9	385.7
500	35.49	3494433	98953	29557	837	118:1	192.2	478.7
600	42.38	4173320	118177	32301	915	129:1	229.5	571.7
700	49.28	4852206	137402	34829	986	139:1	266.9	664.7
800	56.17	5531093	156626	37186	1053	149:1	304.2	757.7
900	63.07	6209980	175850	39402	1116	158:1	341.5	850.7
1000	69.96	6888866	195075	41500	1175	166:1	378.9	943.7
1100	76.86	7567753	214299	43497	1232	174:1	416.2	1036.7
1200	83.75	8246640	233523	45406	1286	182:1	453.6	1129.7
1300	90.65	8925526	252748	47238	1338	189:1	490.9	1222.8
1400	97.54	9604413	271972	49001	1388	196:1	528.2	1315.8

The above table is based on standard conditions of 14.73 psia and 60 degrees F for 0.60 specific gravity gas. Supercompressibility is not included.

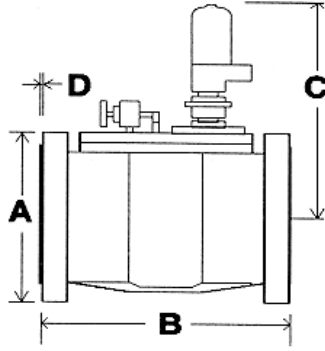
### HIGH CAPACITY GTM 12" (300MM)

OPERATING PRESSURE		MAXIMUM FLOW RATE		MINIMUM FLOW RATE		RANGE TURNDOWN RATIO	APPROXIMATE PRESSURE DROP	
(PSIG)		(BARS)		(SCFH)			(IN WC)	(millibars)

0	1.02	270000	7646	11619	329	23:1	6.0	14.9
0.25	1.03	274582	7775	11717	332	23:1	6.1	15.2
1	1.08	288330	8165	12007	340	24:1	6.4	16.0
10	1.71	453299	12836	15055	426	30:1	10.1	25.1
25	2.74	728248	20622	19082	540	38:1	16.2	40.3
50	4.46	1186497	33598	24357	690	49:1	26.4	65.7
75	6.19	1644745	46575	28677	812	57:1	36.5	91.0
100	7.91	2102994	59551	32427	918	65:1	46.7	116.4
125	9.63	2561242	72528	35786	1013	72:1	56.9	141.8
200	14.81	3935988	111457	44362	1256	89:1	87.5	217.9
300	21.70	5768982	163362	53707	1521	107:1	128.2	319.3
400	28.59	7601976	215268	61652	1746	123:1	168.9	420.8
500	35.49	9434969	267174	68684	1945	137:1	209.7	522.2
600	42.38	11267963	319079	75060	2125	150:1	250.4	623.7
700	49.28	13100957	370985	80935	2292	162:1	291.1	725.2
800	56.17	14933951	422890	86412	2447	173:1	331.9	826.6
900	63.07	16766945	474796	91561	2593	183:1	372.6	928.1
1000	69.96	18599939	526702	96436	2731	193:1	413.3	1029.5
1100	76.86	20432933	578607	101077	2862	202:1	454.1	1131.0
1200	83.75	22265927	630513	105513	2988	211:1	494.8	1232.5
1300	90.65	24098921	682418	109770	3108	220:1	535.5	1333.9
1400	97.54	25931914	734324	113868	3224	228:1	576.3	1435.4

The above table is based on standard conditions of 14.73 psia and 60 degrees F for 0.60 specific gravity gas. Supercompressibility is not included.

## CHARACTERISTICS AND DIMENSIONS (Inches / Millimeters)



Size	ANSI Class	Work Pressure		A		B		C		D		Bolt Circle Diameter		Flange Bolt Holes			Weight (Approx)	
		psig	kPa											No	Diam	lbs	kg	
4 in <small>(100 mm)</small>	125	175	1200	9	280	14	355	17 5/8	447	Flat Face		7 1/2	190.5	8	1/2	12.8	38	17
	150	285	1900	9	280	15 1/2	394	17 5/8	447	1/16	1.59	7 1/2	190.5	8	3/4	19.1	125	57
	300	740	5000	10	255	15 1/2	394	17 5/8	447	1/16	1.59	7 7/8	200	8	7/8	22.2	130	59
	600	1480	10k	10 3/4	275	15 1/2	394	17 5/8	447	1/4	6.35	8 1/2	216	8	1	25.4	160	73
	900	2220	15.3k	11 1/2	295	17 1/2	444	18 3/8	466	1/4	6.35	9 1/4	235	8	1 1/4	31.8	260	118
6 in <small>(150 mm)</small>	125	175	1200	11	280	16	407	19 3/8	340	Flat Face		9 1/2	241.5	8	5/8	15.9	76	35
	150	285	1900	11	280	22 1/2	572	19 3/8	340	1/16	1.59	9 1/2	241.5	8	7/8	22.2	270	123
	300	740	5000	12 1/2	320	22 1/2	572	19 3/8	340	1/16	1.59	10 5/8	270	12	7/8	22.2	280	127
	600	1480	10k	14	355	22 1/2	572	19 3/8	340	1/4	6.35	11 1/2	292	12	1 1/8	28.6	365	166
	900	2220	15.3k	15	380	24	610	20 1/4	514	1/4	6.35	12 1/2	317.5	12	1 1/4	31.8	450	204
8 in <small>(200 mm)</small>	125	175	1200	13 1/2	345	21	533	19 5/8	499	Flat Face		12 3/8	298.5	8	3/4	19.1	137	62
	150	285	1900	13 1/2	345	27 1/4	692	19 5/8	499	1/16	1.59	12 3/8	298.5	8	7/8	22.2	530	240
	300	740	5000	15	380	27 1/4	692	19 5/8	499	1/16	1.59	13	330	12	1	25.4	550	250
	600	1480	10k	16 1/2	420	27 1/4	692	20 5/8	514	1/4	6.35	13 3/8	349	12	1 1/4	31.8	675	284
	900	2220	15.3k	18 1/2	470	27 1/4	692	21 5/8	549	1/4	6.35	15 1/2	393.5	12	1 1/2	38.1	850	386

<b>12 in</b> (300 mm)	150	285	1900	19	485	36	914	$\frac{23}{8}$	606	1/16	1.59	17	432	12	1	25.4	605	274
	300	740	5000	$20\frac{1}{2}$	520	36	914	$\frac{24}{38}$	619	1/16	1.59	$17\frac{3}{4}$	451	16	$1\frac{1}{4}$	31.8	630	331
	900	1480	10k	22	560	36	914	25	635	1/4	6.35	$19\frac{1}{4}$	489	20	$1\frac{3}{8}$	34.9	1100	499

## High Capacity Gas Turbine Meter Outputs and Spin Times

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<b>Meter Size</b>	<b>Pulses Per Actual Cu Ft</b>	<b>Pulses Per Actual Cu Meter</b>
4" (100mm)	74	2610
6" (150mm)	18	640
8" (200mm)	12	424
12" (300mm)	3.5	124

<b>Meter Size</b>	<b>Max Flow (Hz)</b>	<b>Minimum Spin Time (Seconds)</b>
4" (100mm)	616	130
6" (150mm)	300	200
8" (200mm)	330	260
12" (300mm)	262	300