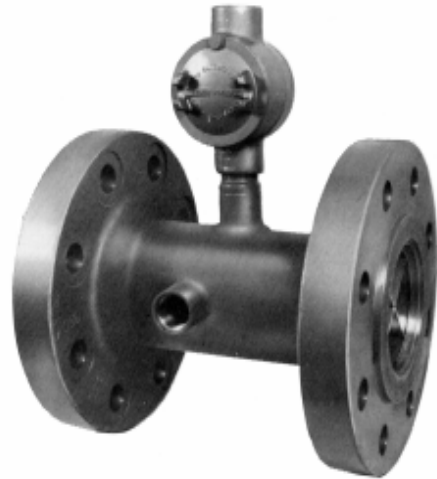


The Parity Turbine Meter Sizes 3" - 16"

High Performance Turbine Technology

DESCRIPTION

The Parity Turbine Flowmeter utilizes advanced turbine meter technology to assure higher flow rates, extended flow range and sustained performance capability. It is designed for use within the guidelines of API Standards Chapter 5.3, formerly Standard 2534 (The Measurement of Liquid Hydrocarbons by Turbine Meter Systems) and the test procedures of API Standards Chapter 4 (Prover Systems). Typical areas of operation include pipeline control, blending and loading rack applications.



DESIGN FEATURES

- Output linear with flow rate
- Rangeability of 10 to 1
- Explosion proof amplifier housing
- Superior accuracy and repeatability
- Compact design
- Carbide journal bearings - no lubrication required
- Variety of readout instrumentation instruments available

PERFORMANCE - Meter

Linearity: $\pm 0.15\%$
 Repeatability: $\pm 0.02\%$
 Output: -15 to 20 mVac at minimum flow
 2 to 3 Vac at maximum flow

K-FACTOR

Size	K-FACTOR (PULSES/BBL)
3"	2,000
4"	1,000
6"	1,000
8"	500
10"	500
12"	250
16"	100

NOTE: See Model Code for meter options configurations and accessories.

WARNING

Do not operate this instrument in excess of the specifications listed. Failure to heed this warning could result in serious injury and/or damage to the equipment.

MATERIALS OF CONSTRUCTION

Body (All sizes): Steel, Standard
 Optional - Stainless Steel

Internal Components:

Sizes 3" and 4": Standard - Stainless Steel
 6" and larger: Stainless Steel and Aluminum
 For all Stainless Steel (meter and internal), Consult Factory.

Bearings: Tungsten Carbide

RATINGS - Meter

Pressure: ANSI pressure/temperature rating corresponds to flanges used.

Temperature:

Standard: -20 to 180°F (-29 to 82°C)
 Optional - (Consult factory)
 High temperature Pick-off -30 to 400°F (-34 to 204°C)

PERFORMANCE - Pre-amplifier

Power Required: 6 to 28Vdc at 20mA maximum
 Input Sensitivity: 15 mV minimum
 Output Signal: 0 to 5V pulsating dc, TTL compatible
 or pulse amplitude = Vs - 1.5Vdc
 Transmission distance: 3000 ft. (Belden 8770
 or equivalent)
 Frequency Range: 4 Hz to 10 KHz
 Temperature: -30°F to 185°F (-34°C to 85°C)

Electrical: Class I, Group D, Division 1 Explosion
 Proof conduit with terminal strip connections
 U/L - not available
 CENELEC EExd II C T6, EEx ib II C T4/T6
 (85° C max)

Weights & Measures:

CSA - LR 32408 (Pre-amp only)
 CCA - AV-2264 (Consult factory for specific
 models)
 Connecting Cable: Recommended Belden 8770,
 3 conductor shielded cable length is 3,000 feet
 (914 meters)
 Rotor Shroud: Standard 6" and larger. Optional 4"
 (Recommended with viscosities above 40 SSU)

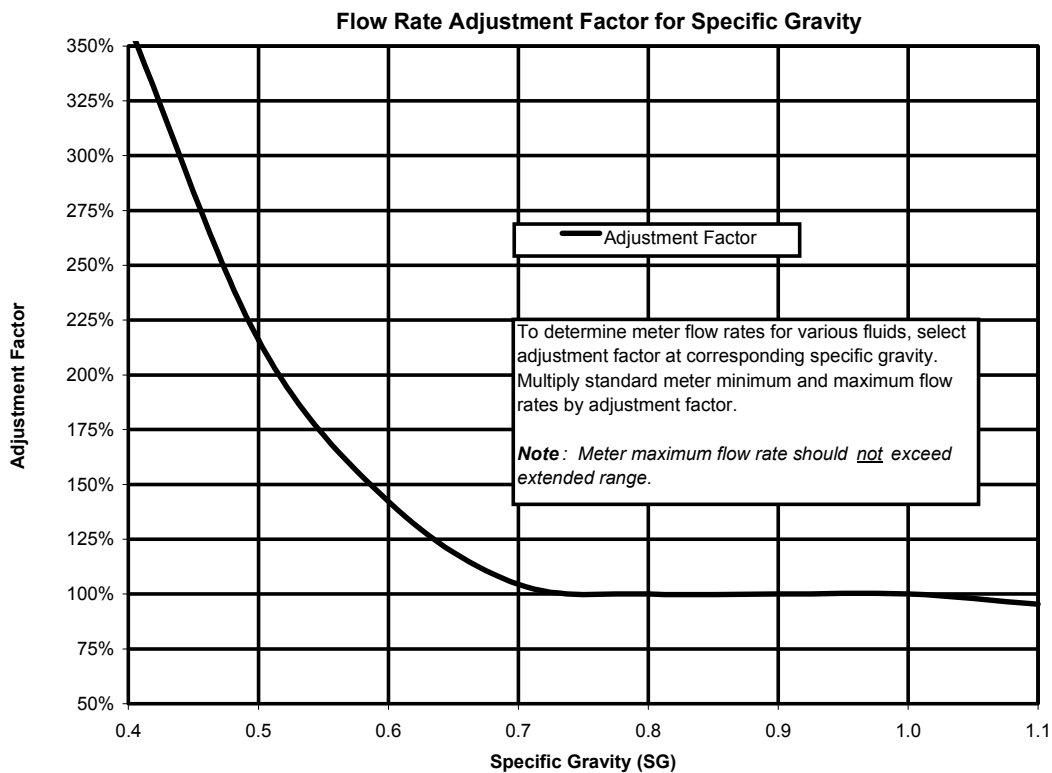
CONNECTIONS

Mechanical

Standard: 150, 300 and 600 lb. ANSI R. F.
 Flanges
 DIN PN16, PN25, PN40, PN64, PN100
 (See Flange Connections Table)
 Optional: 900lb. ANSI available

FLOW RANGE Products having a specific gravity of 0.7 to 1.0 and a viscosity of 0.3 to 3.0 cst

Size	Standard	Extended	Standard	Extended	Pressure	
	Flow Range	Flow Range	Flow Range	Flow Range	Loss	
	BBL/Hr	BBL/Hr	M ³ /Hr	M ³ /Hr	psi	kPa
3"	100 - 1,000	1,300	15.9 - 159	207	3	21
4"	185 - 1,850	2,300	29.4 - 294	366	3	21
6"	420 - 4,200	5,400	66.8 - 668	859	3	21
8"	850 - 8,500	9,500	135 - 1350	1,511	3	21
10"	1,200 - 12,000	15,000	190.9 - 1909	2,386	4	28
12"	1,800 - 18,000	22,000	286 - 2860	3,500	3	21
16"	2,800 - 28,000	35,000	445 - 4450	5,568	4	28



PICK-OFF SPECIFICATIONS

Type: Reluctance

Output: 15-20 mVac Peak to Peak @ minimum flow,
2-3 Vac @ maximum flow

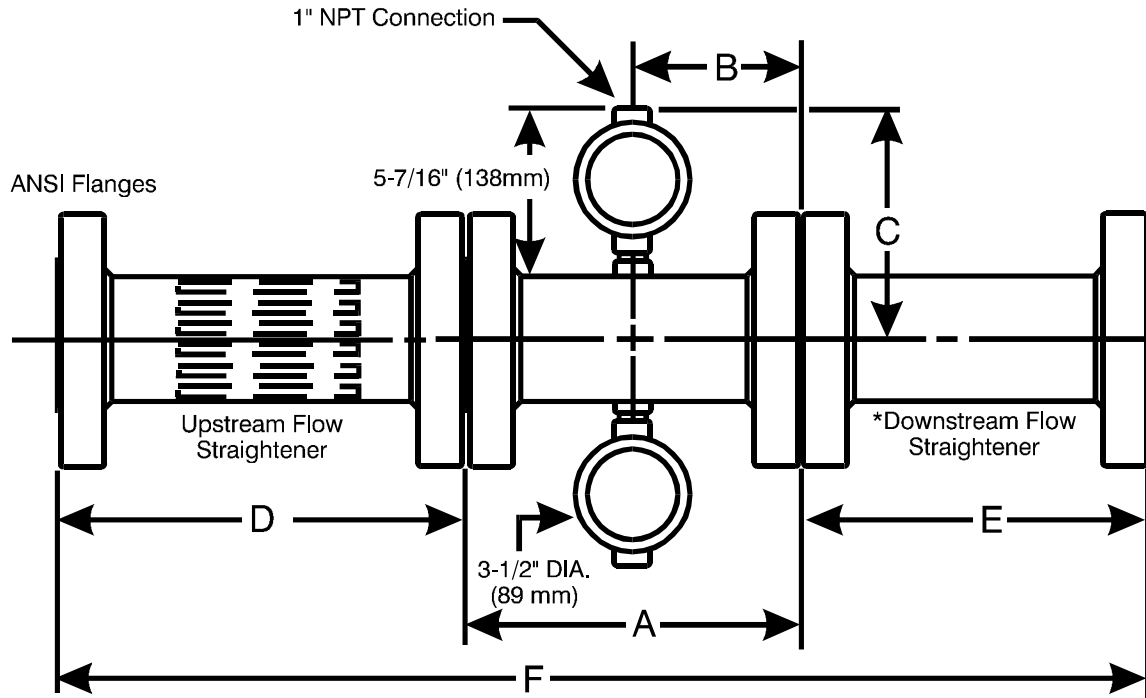
FLANGE CONNECTIONS

MODEL	ANSI Connections	MAXIMUM WORKING PRESSURE @ 100°F		DIN Connections	MAXIMUM WORKING PRESSURE
		Stainless Steel	Carbon Steel		
		T03	3", 150 lb. ANSI		
T03	3", 300 lb. ANSI	720 psi	740 psi	DN 80 PN 64	64 Bar
T03	3", 600 lb. ANSI	1,440 psi	1,480 psi	DN 80 PN 100	100 Bar
T04	4", 150 lb. ANSI	275 psi	285 psi	DN 100 PN 16	16 Bar
T04	4", 300 lb. ANSI	720 psi	740 psi	DN 100 PN 25	25 Bar
				DN 100 PN 40	40 Bar
T04	4", 600 lb. ANSI	1,440 psi	1,480 psi	DN 100 PN 64	64 Bar
				DN 100 PN 100	100 Bar
T06	6", 150 lb. ANSI	275 psi	285 psi	DN 150 PN 16	16 Bar
T06	6", 300 lb. ANSI	720 psi	740 psi	DN 150 PN 25	25 Bar
				DN 150 PN 40	40 Bar
T06	6", 600 lb. ANSI	1,440 psi	1,480 psi	DN 150 PN 64	64 Bar
				DN 150 PN 100	100 Bar
T08	8", 150 lb. ANSI	275 psi	285 psi	DN 200 PN 16	16 Bar
T08	8", 300 lb. ANSI	720 psi	740 psi	DN 200 PN 25	25 Bar
				DN 200 PN 40	40 Bar
T08	8", 600 lb. ANSI	1,440 psi	1,480 psi	DN 200 PN 64	64 Bar
				DN 200 PN 100	100 Bar
T010	10", 150 lb. ANSI	275 psi	285 psi	DN 250 PN 16	16 Bar
T010	10", 300 lb. ANSI	720 psi	740 psi	DN 250 PN 25	25 Bar
				DN 250 PN 40	40 Bar
T010	10", 600 lb. ANSI	1,440 psi	1,480 psi	DN 250 PN 64	64 Bar
				DN 250 PN 100	100 Bar
T012	12", 150 lb. ANSI	275 psi	285 psi	DN 300 PN 16	16 Bar
				DN 300 PN 25	25 Bar
T012	12", 300 lb. ANSI	720 psi	740 psi	DN 300 PN 40	40 Bar
				DN 300 PN 64	64 Bar
T012	12", 600 lb. ANSI	1,440 psi	1,480 psi	DN 300 PN 100	100 Bar
T016	16", 150 lb. ANSI	275 psi	285 psi	DN 400 PN 16	16 Bar
				DN 400 PN 25	25 Bar
T016	16", 300 lb. ANSI	720 psi	740 psi	DN 400 PN 40	40 Bar
				DN 400 PN 64	64 Bar
T016	16", 600 lb. ANSI	1,440 psi	1,480 psi	DN 400 PN 100	100 Bar

SHIPPING WEIGHT & VOLUME (Approximate)

Meter Size	150 lbs.				300 lbs.				600 lbs.			
	lbs.	Kg.	Cu. Ft.	Cu. Mtr.	lbs.	Kg.	Cu. Ft.	Cu. Mtr.	lbs.	Kg.	Cu. Ft.	Cu. Mtr.
3"	60	27.2	1.13	0.032	65	29.5	1.25	0.035	85	38.6	1.25	0.035
4"	60	27.2	1.53	0.043	80	36.3	1.78	0.05	110	49.9	1.93	0.055
6"	90	40.1	2.3	0.065	135	61.2	2.81	0.08	245	111.1	3.17	0.09
8"	140	63.5	3.52	0.10	215	97.5	3.94	0.112	320	145.2	4.62	0.131
10"	235	106.6	5.5	0.156	320	145.5	6.39	0.181	560	254	7.33	0.208
12"	385	174.6	6.42	0.182	510	231.3	9.32	0.264	750	340.2	10.11	0.286
16"	745	337.9	15.17	0.43	990	449.1	15.75	0.446	1,370	621.4	18.33	0.52

DIMENSIONS - (For Certified Dimension Prints - Consult Factory)



Second pickoff optional.
 *Down stream flow straightener optional.

Size	A		B		C		D		E		F	
	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
3"	10	254	5	127	7 3/4	197	30	762	15	381	55	1,397
4"	12	305	5	152	8 1/4	209	40	1,016	20	508	72	1,829
6"	14	356	7	178	9 5/16	236	60	1,524	30	762	104	2,642
8"	16	406	8	203	10 5/16	262	80	2,032	40	1,016	136	3,454
10"	20	508	10	254	11 3/8	289	100	2,540	50	1,270	170	4,318
12"	24	610	12	305	12 3/8	314	120	3,048	60	1,524	204	5,182
16"	32	813	16	406	14	356	160	4,064	80	2,032	272	6,909

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