

# AMERICAN METER

## E-Class Gas Turbine Meters

### Data Sheet



American Meter's E-Class gas turbine meters are direct drop-in replacements to Equimeter Mark II Turbo and Auto-Adjust™ turbine meters. All internal components of these meters are of American Meter's proven GTS and AccuTest turbine meter design. They have mechanical or pulse outputs for all current readout devices such as mechanical index, base volume correctors, and auxiliary flow computers. The E-Class gas turbine meter is only different in the outside required flange-to-flange dimensions to field replace existing Equimeter turbine meters in the 4", 6" and 8" sizes of specified ANSI class.

#### Options

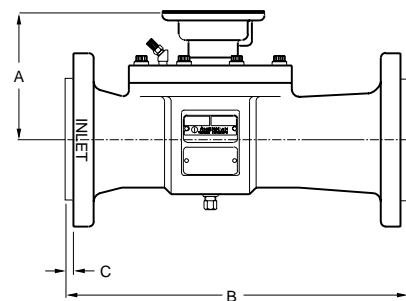
- Mechanical Drive Output
- Electronic Pulse Output Only
- Mechanical and Electronic Pulse Outputs
- Temperature Compensation
- Standard and Extended Capacity Ranges with 45° or 30° Rotors

#### Features – Benefits – Optional Accessories

- **E-Class Models** can be ordered with AccuTest “dual rotor” features for in-field proving.
- **Models with Extended Capacity Ratings** can reduce the diameter of an entire meter run, resulting in substantial savings in piping, flanges, block valves, etc. See Capacity Tables in Sales Bulletin SB 4510.
- **Mechanical Drive Models** for use with P&T Correctors or **Electronic Pulse Output Models** to interface directly with popular flow computers.
- **Electronic Temperature Compensation** with Fixed Factor Pressure and six-month data storage.
- **Flush-Type Lubrication System** flushes main bearings while meter is in operation.
- **Aluminum Rotors** for high-pressure models and for meters with high-frequency pulse outputs.
- **One Output Gear Train** for all meter sizes; reduces spare parts inventory.
- **High-Efficiency Inlet Flo-Guide®** flow conditioners to minimize the effects of flow disturbances in short-coupled installations.
- **High-Frequency RF-Type Pulser** that monitors rotor condition and allows for in-line spin testing; reduces maintenance time and costs.
- **Interchangeable Pre-Calibrated Measurement Cartridges** for easy maintenance.
- **Pre-Machined E-Class Housing** to allow upgrade to E-Class AccuTest self-test model.
- **Five-Point Accuracy Curve** supplied as standard.
- **Six-Point Accuracy Curve** (optional).
- **Medium- and High-Pressure Accuracy Curves** available on air and natural gas.
- **Cartridge Recertification and Repair Services.**
- **Mercury or Equimeter Corrector Adapter Plates.**
- **Lubricating Gun/Oil** (optional).

#### 4" E-Class Basic Specifications

MAOP psig	Material (See Note C)		Dimensions (Inches)			Flange				ANSI	Approx. Shipping Weight (lb.)	Cart-ridge Bolt Torque (lb-ft.)
						Inches		Bolts				
						O.D.	B.D.†	No.	Dia. (In.)			
175	AL	AL	5.85	15.50	NA	9.00	7.50	8	5/8	150 FF	32	20
720	CS	AL	5.85	15.50	0.06	10.00	7.87	8	3/4	300 RF	150	68
1,440	CS	AL	5.85	15.50	0.25	10.75	8.50	8	7/8	600 RF	150	90



4", 6" and 8" E-Class (typical)

#### 4" E-Class (100 mm) Basic Specifications

MAOP		Material (See Note C)		Dimensions (mm)			Flange				ANSI	Approx. Shipping Weight (kg)	Cart-ridge Bolt Torque (Nm)
							O.D.	B.D.†	Bolts				
							(mm)	(mm)	No.	Hole Size (mm)			
12	1,200	AL	AL	149	356	NA	230	190	8	19	150 FF	14.5	27
50	5,000	CS	AL	149	394	1.5	255	200	8	22	300 RF	68	92
100	10,000	CS	AL	149	394	6.5	275	216	8	25	600 RF	68	122

#### 6" E-Class Basic Specifications

MAOP psig	Material (See Note C)		Dimensions (Inches)			Flange				ANSI	Approx. Shipping Weight (lb.)	Cart-ridge Bolt Torque (lb-ft.)
						Inches		Bolts				
						O.D.	B.D.†	No.	Dia. (In.)			
175	AL	AL	6.42	16.00	NA	11.00	9.50	8	3/4	150 FF	54	35
720	CS	ST	6.92	22.50	0.06	12.50	10.62	12	3/4	300 RF	275	205

#### 6" E-Class (150 mm) Basic Specifications

MAOP		Material (See Note C)		Dimensions (mm)			Flange				ANSI	Approx. Shipping Weight (kg)	Cart-ridge Bolt Torque (Nm)
							O.D.	B.D.†	Bolts				
							(mm)	(mm)	No.	Hole Size (mm)			
12	1,200	AL	AL	163	410	NA	279	241	8	22	150 FF	24.5	47
50	5,000	CS	ST	176	572	1.5	318	270	12	22	300 RF	125	278

#### 8" E-Class Basic Specifications

MAOP psig	Material (See Note C)		Dimensions (Inches)			Flange				ANSI	Approx. Shipping Weight (lb.)	Cart-ridge Bolt Torque (lb-ft.)
						Inches		Bolts				
						O.D.	B.D.†	No.	Dia. (In.)			
175	AL	AL	7.42	21.00	NA	13.50	11.75	8	3/4	150 FF	90	70
720	CS	ST	7.92	27.25	0.06	15.00	13.00	12	7/8	300 RF	450	340

#### 8" E-Class (200 mm) Basic Specifications

MAOP		Material (See Note C)		Dimensions (mm)			Flange				ANSI	Approx. Shipping Weight (kg)	Cart-ridge Bolt Torque (Nm)
							O.D.	B.D.†	Bolts				
							(mm)	(mm)	No.	Hole Size (mm)			
12	1,200	AL	AL	188	535	NA	345	298	8	22	150 FF	47	95
50	5,000	CS	ST	201	693	1.5	385	330	12	25	300 RF	205	461

**Operating Temperature Range:**  
 -40°F to +140°F  
 -40°C to -60°C

Manufacturing standards  
 ANSI/ASME MFC - 4M - 1986  
 AGA Report #7

**Note C:**  
 AL = Aluminum  
 CS = Cast Steel  
 ST = Steel

†B.D. = Bolt Circle Diameter



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