



# "A" Series

Gas Meters

The Itron "A" Series commercial diaphragm meters comprise a range of positive displacement gas measurement devices with capacities of 400 to 1000 ft<sup>3</sup> hr.

These meters use proven, time-tested diaphragm meter technology in a 3-chamber design to provide accurate measurement across their respective flow ranges. Long-life and low maintenance are assured by the combination of a self-lapping orbital valve, single convolution diaphragms, and lubrication-free bearings. Attention to design makes them compact and lightweight for their capacity ratings.

#### Setting the standard

When you combine all of the "A" Series customer-driven features with our tradition for highly accurate meters, it is easy to see why these outstanding meters should have a place in your measurement operation.

#### **Instrumentation Compatible**

The "A" Series meters are designed to be fully compatible with all volume and temperature-integrating instruments available today.

#### Installation

The Easy Turn (ET) design allows 2 to 3 times more wrench swing than the competition — as much as a full 120 degrees for meters mounted directly against a wall — making the Itron 675A, 800A and 1000A 'ET' gas meters the easiest to install in North America.

#### **KEY FEATURES**

- » 3-chamber design
- » Wearless orbital valve
- » One piece, seamless, convoluted diaphragm
- » Lubrication-free bearings
- » EZ-VU Adjustment Port
- » Instrumentation compatible
- » Easy Turn (ET) top option for simple installation
- » Easy handling
- » Lightest 400 & 1000 class meters
- » 400A & 1000A retrofit into any like-class installation
- » AMR/AMI Compatible

#### Meets applicable standards

» ANSI B109.1, ANSI B109.2

#### **Product approvals**

- » Industry Canada AG-0298, AG-0385
- » State of New York Department of Public Service 91-G-0507, 96-G-0885



Meter shown with 8-1/4" top

**Hex bushing** 

In the valve cover to provide self alignment and ensure onsistent orbiting of the valve cover

Web free valve seat

Enables mainshaft and tangent crank to be replaced without removing the valve seat

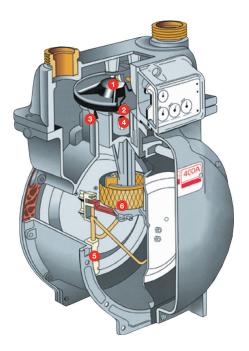
Mainshaft and tangent crank

**Lubrication-Free bearings** 

**Carrier bracket** 

Engineered with tongue and groove design allowing for consistent and precise positioning of wires and reducing wire bending adjustment

**Temperature compensation (optional)** Located in the main measurement chamber to prompt response to changes in temperature



#### **400A GAS METER**

#### The compact performer for light commercial metering

Itron's 400A meter is the most compact and lightweight 400-class meter on the market today. With a wearless orbital valve, single convolution diaphragms and lubrication free bearings, the 400A delivers initial and sustained accuracy.

#### **Designed to fit**

Available with a 6-25/32", 7" or 8-1/4" center-to-center top, the 400A can replace any existing 400-class meter with no need for expensive, time-consuming piping rework.

#### Ideally suited to light commercial and high-capacity domestic metering requirements, the Itron 400A offers:

- » Lightest 400-class meter on the market
- » Fewer moving parts than any other 400-class meter

SPECIFICATIONS									
	400A	675A	800A	1000A					
Meter Capacity (CFH Natural Gas)	400 @ .5" w.c. Diff.	790 @ .5" w.c. Diff.	890 @ .5" w.c. Diff.	1040 @ .5" w.c. Diff.					
Hub Center-to-Center	6-25/32", 7" or 8-1/4"	10"	11"	11"					
Hub Sizes	20 LT, 30 LT, 45 LT, #4 Sprague	30 LT, 45 LT, 60 LT, 100 LT, #4 Sprague and #5 Sprague	30 LT, 45 LT, 60 LT, 100 LT, #4 Sprague and #5 Sprague	45 LT, 60 LT, 100 LT, #4 Sprague and #5 Sprague					
Meter Type	(TC) Temperature Compensated or (NTC) Non-Temperature Compensated								
Units	Imperial (Cubic Feet - ft³) or Metric (Cubic Meters - m³)								
Index Drive	2 ft³/revolution 10 ft³/revolution 50 cubic decimeters/revolution .30 cubic meters/revolution								
Proving / Test Dials	ft³ - ½¹ and 2¹ Proving Dials  m³ - 10 dm³ and 50 dm³ Proving Dials  ft³ - 2.5¹ and 10¹ Proving Dials  m³3 m³ and .15 m³ Proving Dials								
Tangent Crank	9 revolutions/ft³ or .111 ft³/revolution 3.2 revolutions/dm³ or .32 liters/revolution  1.8 revolutions/ft³ or .555 ft³/revolution  3.67 revolutions/dm³ or 15 liters/revolution								
Indexes	4 Circle Dial (ft³) - Standard 7", 2 PSIG 4 Digit Direct Read (ft³ - Standard Pressure) 5 Digit Direct Read (ft³ or m³ - Standard Pressure) 6 Digit Direct Read (m³ - Standard Pressure) 7 Digit Direct Read (m³ - Standard Pressure)								
Meter M.A.O.P.	10 PSIG (25 PSIG Optional)		25 PSIG						
Meter Operating Temperature Range	-30°F to +120°F -34°C to +49°C								
Surface Treatment	ASA 49 Gray Polyester Powder Coat								

#### 675A, 800A, 1000A

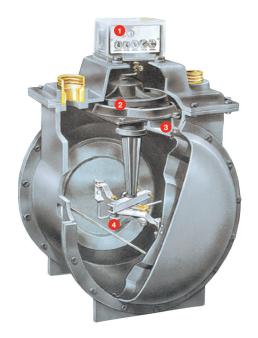


Meter shown with 'ET' top



Meter shown with standard top

- Reversible top-mount index
  - Ensures easy index viewing
- Self-dressing orbital valve and seat Contribute to superior valve wear, lending to improved accuracy and repeatability over the life of the meter
- 3 "O"-Ring diaphragm seal Ensures consistent sealing throughout wide environmental temperature variations. Neoprene gasket material makes repairs simple - eliminates the need for costly cork gasket removal
- Temperature compensation (optional)
  Located in the main measurement chamber for more
  prompt response to changes in temperature



#### 675A, 800A, 1000A GAS METERS

#### Diaphragm accuracy for higher capacity metering applications

The larger members of the "A" Series combine accuracy and long life, adding advantages achieved in easier shipping, handling and installation. These meters can be applied wherever capacities of 675-1000 ft3/h are needed.

Ideally suited for higher capacity commercial metering requirements such as dry cleaners, restaurants, schools, hospitals and hotels.

#### **DIMENSIONS**

#### **Imperial - Inches**

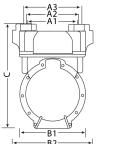
Model	<b>A1</b>	A2	A3	B1	B2	С	D	E	Wt. (lbs)
400A	6.78	7.0	8.25	9.5	10.9	14.7	8.6	8.8	14.1
Model		Α		В	B*	С	D	E	Wt. (lbs)
675A		10		23.4	26.1	18.5	15.7	13.9	41.2
800A		11		23.4	26.1	18.5	15.7	13.9	41.2
1000A		11		23.4	26.1	18.5	15.7	13.9	41.2
675A ET		10		25	27.7	18.5	15.7	13.9	41.5
800A ET		11		25	27.7	18.5	15.7	13.9	41.5
1000A ET		11		25	27.7	18.5	15.7	13.9	41.5

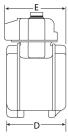
#### **Metric - Millimeters**

Model         A1         A2         A3         B1         B2         C         D         E         Wt. (kg)           400A         172         178         210         241         277         373         218         224         6.4           Model         A         B         B*         C         D         E         Wt. (kg)           675A         254         594         663         470         399         353         18.7           800A         279         594         663         470         399         353         18.7           675A ET         254         635         704         470         399         353         18.8           800A ET         279         635         704         470         399         353         18.8           800A ET         279         635         704         470         399         353         18.8           1000A ET         279         635         704         470         399         353         18.8           1000A ET         279         635         704         470         399         353         18.8										
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800A       279       594       663       470       399       353       18.7         1000A       279       594       663       470       399       353       18.7         675A ET       254       635       704       470       399       353       18.8         800A ET       279       635       704       470       399       353       18.8	Model		Α		В	B*	С	D	E	Wt. (kg)
1000A     279     594     663     470     399     353     18.7       675A ET     254     635     704     470     399     353     18.8       800A ET     279     635     704     470     399     353     18.8	675A		254		594	663	470	399	353	18.7
675A ET     254     635     704     470     399     353     18.8       800A ET     279     635     704     470     399     353     18.8	800A		279		594	663	470	399	353	18.7
800A ET 279 635 704 470 399 353 18.8	1000A		279		594	663	470	399	353	18.7
	675A ET		254		635	704	470	399	353	18.8
1000A ET 279 635 704 470 399 353 18.8	800A ET		279		635	704	470	399	353	18.8
	1000A ET		279		635	704	470	399	353	18.8

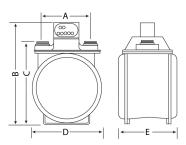
All dimensions and weights provided are approximate

#### 400A

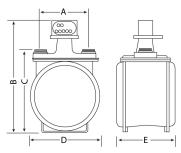




#### 675A, 800A, 1000A

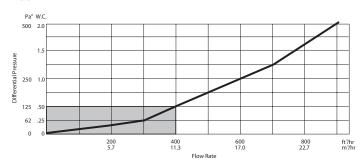


#### 675A, 800A, 1000A ET

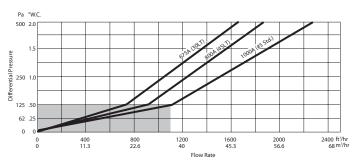


#### **CAPACITY & PRESSURE LOSS\***

#### 400A



#### 675A, 800A, 1000A



\*Individual meter performance may vary

	Meters per Layer	Layers per Pallet	Meters per Pallet	Pallet Dimensions	Pallet Weight (lbs)
400A	20	3	60	48" x 46" x 53"	906
400A with AMR/AMI	16	3	48	48" x 46" x 53"	785
675A, 800A and 1000A	9	2	18	48" x 46" x 65"	845
675A, 800A and 1000A with AMR/AMI	9	2	18	48" x 46" x 65"	905

All dimensions and weights provided are approximate

#### **ADDITIONAL INFORMATION**

- » Diaphragm Type Gas Meters Installation Instructions (TDC-0841-XXX)
- » Diaphragm Meter Product Line (TDC-0858-XXX)
- » 3-Chamber Meter Adjustment (TDC-0848-XXX)

#### **AMR/AMI COMPATIBLE**

Itron gas meters are compatible with leading AMR/AMI devices.







Meters shown with 100G Gas ERT Module



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