



# “A” Series

## Gas Diaphragm Meters

The Itron “A” Series gas 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 light-weight 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

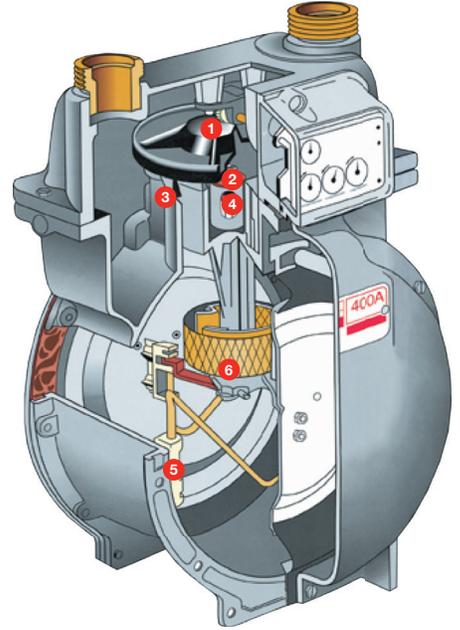
- » Industry Canada AG-0298, AG-0385
- » State of New York Department of Public Service 91-G-0507, 96-G-0885

400A



Meter shown with 8-1/4" top

- 1 Hex bushing**  
In the valve cover to provide self alignment and ensure consistent orbiting of the valve cover
- 2 Web free valve seat**  
Enables mainshaft and tangent crank to be replaced without removing the valve seat
- 3 Mainshaft and tangent crank**  
One-piece construction minimizing assembly variations
- 4 Lubrication-Free bearings**  
Ensure long maintenance-free operation
- 5 Carrier bracket**  
Engineered with tongue and groove design allowing for consistent and precise positioning of wires and reducing wire bending adjustment
- 6 Temperature compensation (optional)**  
Located in the main measurement chamber for more prompt response to changes in temperature



**400A HEAVY RESIDENTIAL AND LIGHT COMMERCIAL GAS DIAPHRAGM METER**

**The compact performer for heavy residential and light commercial metering applications**

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 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 50 cubic decimeters/revolution	10 ft³/revolution .30 cubic meters/revolution		
Proving / Test Dials	ft³ - 1/2' and 2' Proving Dials m³ - 10 dm³ and 50 dm³ Proving Dials	ft³ - 2.5' and 10' Proving Dials m³ - .3 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 .067 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)	5 Circle Dial (ft³) - Standard 7", 14" 5 Digit Direct Read (ft³ - 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

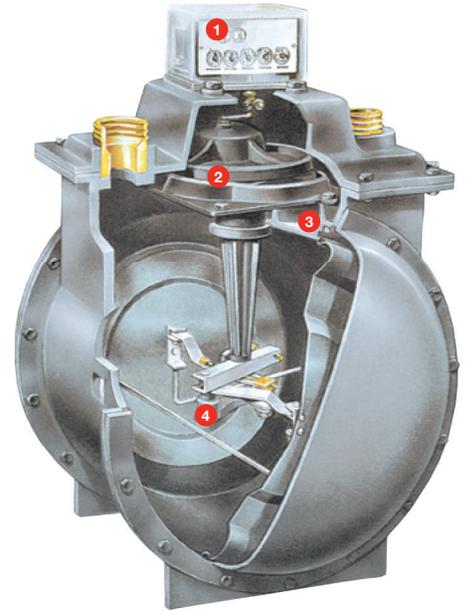


Meter shown with 'ET' top



Meter shown with standard top

- 1 Reversible top-mount index**  
Ensures easy index viewing
- 2 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
- 4 Temperature compensation (optional)**  
Located in the main measurement chamber for more prompt response to changes in temperature



## 675A, 800A, 1000A LIGHT COMMERCIAL AND INDUSTRIAL GAS DIAPHRAGM METERS

### Diaphragm accuracy for light commercial and industrial 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 ft<sup>3</sup>/h are needed.

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

## DIMENSIONS

### Imperial - Inches

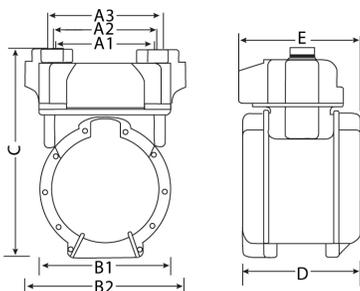
Model	A1	A2	A3	B1	B2	C	D	E	Wt. (lbs)
400A	6.78	7.0	8.25	9.5	10.9	14.7	8.6	8.8	14.1
Model	A		B	B*	C	D	E	Wt. (lbs)	
675A	10		23.4	26.1	18.5	15.7	13.9	41.2	
800A	11		23.4	26.1	18.5	15.7	13.9	41.2	
1000A	11		23.4	26.1	18.5	15.7	13.9	41.2	
675A ET	10		25	27.7	18.5	15.7	13.9	41.5	
800A ET	11		25	27.7	18.5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

### Metric - Millimeters

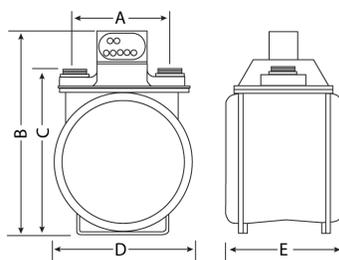
Model	A1	A2	A3	B1	B2	C	D	E	Wt. (kg)
400A	172	178	210	241	277	373	218	224	6.4
Model	A		B	B*	C	D	E	Wt. (kg)	
675A	254		594	663	470	399	353	18.7	
800A	279		594	663	470	399	353	18.7	
1000A	279		594	663	470	399	353	18.7	
675A ET	254		635	704	470	399	353	18.8	
800A ET	279		635	704	470	399	353	18.8	
1000A ET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

All dimensions and weights provided are approximate

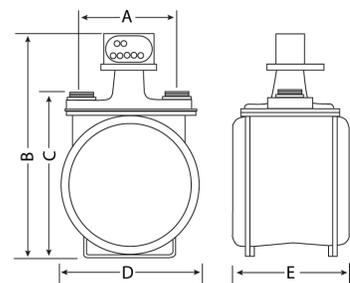
### 400A



### 675A, 800A, 1000A

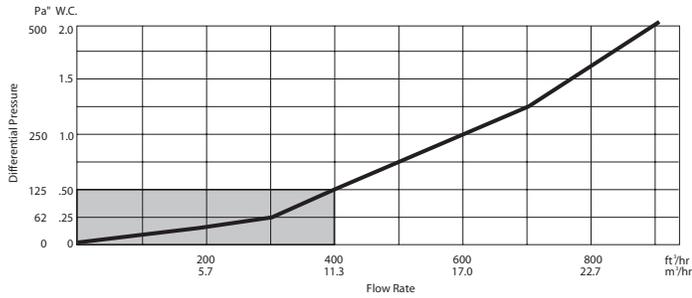


### 675A, 800A, 1000A ET

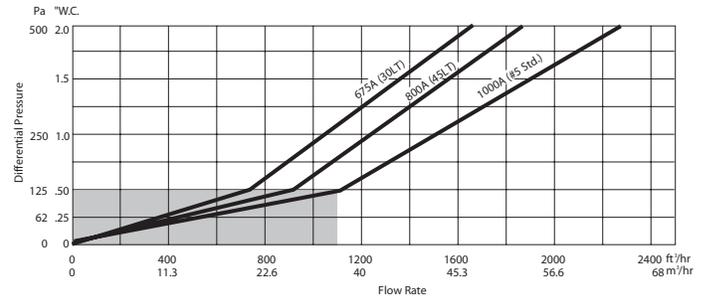


## CAPACITY & PRESSURE LOSS\*

### 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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