

“A” Series Meter

400A
 675A, 800A, 1000A (ET)

Benefits

- Lowers handling and shipping costs
- Eliminates costs of duplicate inventory
- Reduces training time
- Improves safety
- Superior accuracy over all flow rates
- Maintenance free operation
- Cost effective temperature compensation

Description

The “A” Series commercial diaphragm meters comprise a range of positive displacement gas measurement devices with capacities of 400 to 1000 ft³/hr (11m³/hr to 28m³/hr). These meters use proven diaphragm meter technology in a 3-chambered 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, a one-piece seamless diaphragm, and few moving parts. Careful attention to design makes them compact and lightweight for their capacity ratings.

Applications

400A

- Restaurants, Dry Cleaners and Service Stations
- 675A, 800A, 1000A (ET)
- Schools, Hospitals and Hotels

Features

- Lightest meters in their respective capacity ranges
- Retrofits to any competitive installation
- 3-chamber design
- Wearless orbital valve
- One piece, seamless, convoluted diaphragm
- Lubrication-free bearings
- Instrument adaptable
- EZ-VU Adjustment System (675A-1000A)
- O-ring diaphragm seal



(675A-1000A)

- Parts commonality with old style Sprague
- Easy Turn (ET) allows simple installation
- AMR compatible

Compatibility

These meters are intended primarily for use with natural gas, but are compatible with a variety of non-corrosive dry gases. A compatibility listing is found in the table to the right. For gases not listed, contact your Actaris representative.

Gas Type	Specific Gravity	Conversion Factor
Air	1.00	1.00
Argon	1.38	.85
Dry Carbon Dioxide	1.52	.81
Ethane	1.04	.98
Helium	.14	1.49
Hydrogen	.07	1.49
Krypton	2.82	.59
Methane (pure)	.55	1.35
Natural Gas	.60	1.29
Neon	.70	1.20
Nitrogen	.97	1.02
Propane	1.53	.81
Xenon	4.53	.47

Specifications

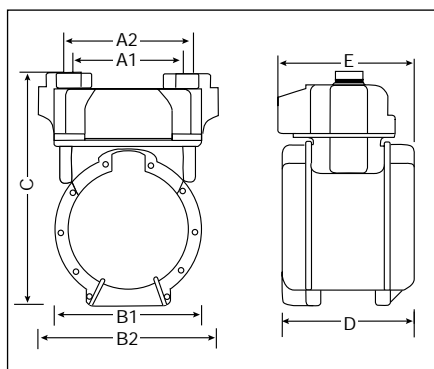
Meter Classification	400A	675A	800A	1000A
Meter Type	Non-temperature compensated or temperature compensated			
Hub Center-to-Center	6-25/32" or 8-1/4"	10"	11"	11"
Hub Sizes	#4 Sprague Standard 20LT, 30LT, 45LT	#4 Sprague Standard 30LT, 45LT	#5 Sprague Standard 30LT, 45LT, 60LT, 100LT	#5 Sprague Standard 45LT, 60LT, 100 LT
Index Type	4 circle dial (ft ³) • Standard 7", 14", 2 psig 4 digit direct read (ft ³) 5 digit direct read (ft ³ or m ³) 7 digit direct read (m ³)	5 circle dial (ft ³) • Standard 7", 14" 5 digit direct read (ft ³) 6 digit direct read (m ³) 7 digit direct read (m ³)		
Sealing	Red plastic snap-seals			
Badge information	As required			
Adjustment Information	As required			
Surface Treatment	ASA 49 Gray Paint			
Packaging	Single Pack 24 per skid	Single Pack 12 per skid		

Dimensions

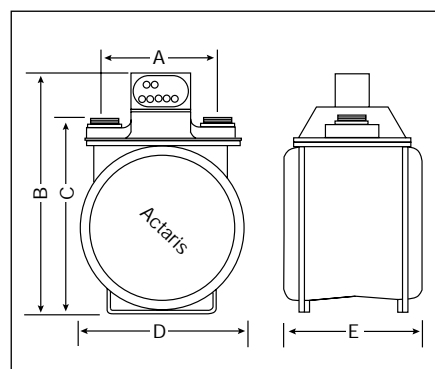
Model	Imperial - Inches							lbs Wt
	A1	A2	B1	B2	C	D	E	
400A	6.78"	8.25"	9.5"	10.9"	14.71"	8.71"	9"	12.3
	A		B		C	D	E	Wt
675A	10"		23.2"		18.6"	15.6"	13.3"	43
800A	11"		23.2"		18.6"	15.6"	13.3"	43
1000A	11"		23.2"		18.6"	15.6"	13.3"	43
675A ET	10"		24.8"		18.6"	15.6"	13.3"	43
800A ET	11"		24.8"		18.6"	15.6"	13.3"	43
1000A ET	11"		24.8"		18.6"	15.6"	13.3"	43

Model	Metric - mm							kg Wt
	A1	A2	B1	B2	C	D	E	
400A	172	210	241	277	374	221	229	5.6
	A		B		C	D	E	Wt
675A	254		589		472	396	338	19.5
800A	279		589		472	396	338	19.5
1000A	279		589		472	396	338	19.5
675A ET	254		630		472	396	338	19.5
800A ET	279		630		472	396	338	19.5
1000A ET	279		630		472	396	338	19.5

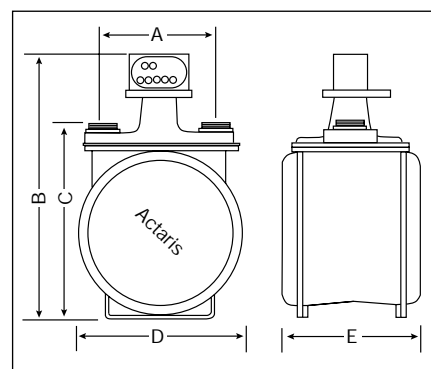
400A



675A, 800A, 1000A



675A ET, 800A ET, 1000A ET



Construction

400A

Badges	Aluminum
Carrier wire brackets	Acetyl
Carrier wires	C117 Steel, Zinc Dichromate Plate
Case screws	Grade 1
Center shaft	416 Stainless Steel
Diaphragm	Nitrile Rubber, Dacron Polyester Voile Fabric
Diaphragm tin	Center : #500S-H22 Aluminum Outer: Tin Plate Outer Flange: Tin Plate
Gaskets	Cork/Neoprene
Hubs	Zinc-plated steel
IDM Seal	Acetyl
Index box	Polycarbonate
Index drive movement	Shaft: 416 Stainless Steel Housing: Acetyl
Index face plate	ABS
Index gears	Acetyl
Links	Acetyl
Lower main	Die Cast zinc ZA-3
Meter center, sides, topcase	Die-cast aluminum alloy 13380 or 13383
Tangent Crank	Die cast zinc ZA-3
Timing Arm	360 Brass
Valve seat and cover	Thermoset phenolic

675A, 800A, 1000A

Badges	Aluminum
Carrier wire brackets	Acetyl
Carrier wires	C117 Steel, Zinc Dichromate Plate
Case screws	Grade 1
Center bracket	Glass-reinforced nylon
Center shaft	416 Stainless Steel
Diaphragm	Nitrile Rubber, Dacron Polyester Voile Fabric
Diaphragm tin	Center : #500S-H22 Aluminum Outer: Tin Plate Outer Flange: Tin Plate
Gaskets/O-Rings	Nitrile rubber
Hubs	Zinc-plated steel
IDM Seal	Acetyl
Index box	Polycarbonate
Index drive movement	Shaft: 416 Stainless Steel Housing: Acetyl
Index face plate	ABS
Index gears	Acetyl
Links	Acetyl
Lower main	Lead
Meter center, sides, topcase	Die-cast aluminum alloy 13380 or 13383
Tangent Crank	360 Brass
Timing Arm	360 Brass
Valve seat and cover	Thermoset phenolic
ET Mounting Plate	Die-cast aluminum alloy 13380 or 13383

Warranty

Actaris U.S. Gas, Inc., 970 Highway 127 North, Owenton, Kentucky 40359-9802, warrants this gas product against defects in materials and workmanship for the earlier of one (1) year from the date the product is shipped by Actaris or a period of one year from the date the product is installed by Actaris at the original purchaser's site. During such one-year period, provided that the original purchaser continues to own the product, Actaris will, at its sole option, repair any defects, replace the product or repay the purchase price.

This warranty will be void if the purchaser fails to observe the procedures for installation, operation or service of the product as set forth in the Operating Manual and Specifications for the product or if the defect is caused by tampering, physical abuse or misuse of the product.
ACTARIS SPECIFICALLY DISCLAIMS ALL

IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES WILL ACTARIS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER.

Actaris' liability for any claim of any kind, including negligence and breach of warranty for the sale and use of any product covered by or furnished, shall in no case exceed the price allocable to the product or part thereof which gives rise to the claim.

In the event of a malfunction of the product, consult your Actaris Service Representative or Actaris Metering Systems, 970 Highway 127 North, Owenton, Kentucky 40359-9802.

Reference Information

- Performance Data A15H
- Ordering Specifications A15J

- Price Bulletin A0R
- Parts List A15S

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