

# Accurate Measurement and Control Solutions for the Propane Industry



Technology for an intelligent world



## Accurate Measurement and Control Solutions for Propane

### We help you gain a competitive advantage.

- **Individual measurement points**

...allow you to manage deliveries and inventory, and reduce your number of delivery vehicles

- Schedule your deliveries ahead of time
- No more emergency dispatches to will-call customers

...help your customers overcome fears of large bulk delivery billing

- Offer actual usage billing by the month
- Provide the flexibility of estimated or actual billing
- Provides you and your customers confidence with a means to track usage through actual meter reading

- **Meters are built and calibrated to accurately measure propane**

...requiring no complicated formulas or correction factors (at 11" w.c. delivery)

...offering reliable measurement and many years of trouble-free service

...allowing flexible installation options with 3/4" NPT or top connections (in all industry standard ferrule sizes)

- **Meters compatible with most automatic meter reading (AMR) devices**

...eliminate high meter reading costs

...take the place of unreliable customer reading responses

- **Sensus propane meters are easy to install and replace**

...with new universal mounting brackets

- Factory-installed, saving you installation time
- Easily mount to wall or post with flexible mounting arrangements and extra room to access bolts
- Heavy-duty – stronger construction ensures a secure meter installation
- Can replace existing mounting brackets (requires pressure leak testing of meter)

...saving you time and money

- With our single-joint modular design, you add new life to worn meters with a one-step module replacement, reducing your repair inventory and standardizing repairs

- **Regulator options offer flexibility and convenience**

...available in angle or straight bodies

...inlet and outlet pressure taps with easy frontal access put an end to difficult, hard-to-connect taps

- **Regulators are built to strict safety and quality requirements, with the user in mind**

...providing you peace of mind with overpressure protection

...offering convenient access to new inlet and outlet pressure taps on the front of the regulator

- **Reliable meters and regulators**

...provide you peace-of-mind – they're built by a proven leader that has been in the energy industry since 1886

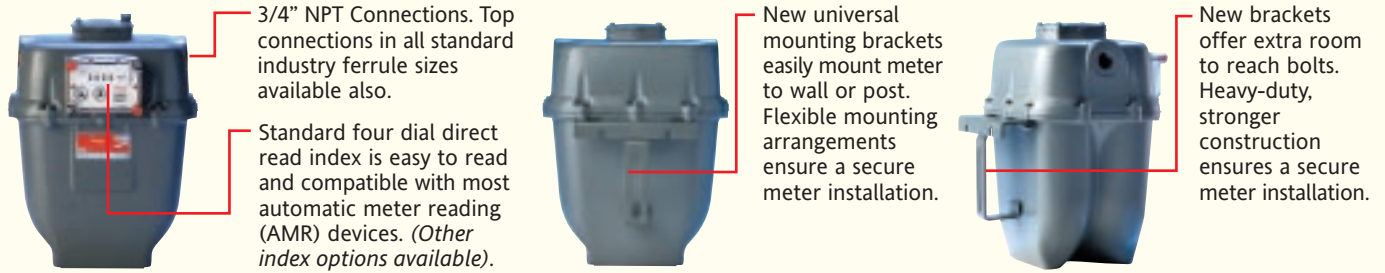
...are maintenance-free\*

...packaged together, affording you a single source solution

\*Inspection of regulators must be conducted with frequency determined by severity of service and applicable laws and regulations.



## The S-275 Meter



### • Meter Pressure Multiplier

- If the delivery pressure to the meter is 11" w.c., no correction to the meter index volume readings are necessary.
- If the delivery pressure to the meter is 2 psig, index readings must be multiplied by 1.1075 to convert the volumes to equivalent 11" w.c. pressure values. That is,  
 $Q (@ 11" \text{ w.c., pressure}) = 1.1075 \times Q (@ 2 \text{ psig pressure})$

### • Meter Capacity Ratings

- @ 11" w.c. - The propane service capacity rating for the S-275 Meter at 1/2 w.c. differential and ANSI B109.1 base conditions (base pressure of 14.73 psia) is 155 scfh. This capacity rating converted to 11" w.c. base pressure is the same, rounded to the nearest 5 cfh. Therefore, the meter capacity rating to the 11" w.c. base pressure conditions above is,

**$C (@ 11" \text{ w.c. base pressure}) = 155 \text{ scfh}$**

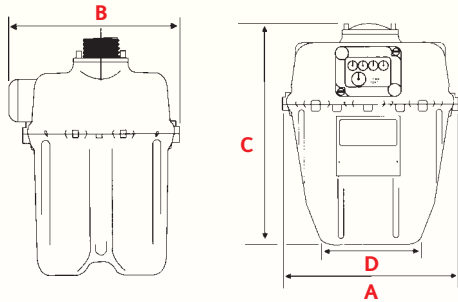
Using an energy conversion factor of 2500 BTU/ft<sup>3</sup>, this capacity can be expressed as,

**$C (@ 11" \text{ w.c. base pressure}) = 387,500 \text{ BTU/hr}$**

- @ 2 psig - The capacity rate at the meter (i.e. dial rate) for a meter delivery pressure of 2 psig:  
 **$C (@ 2 \text{ psig meter delivery pressure and } 1/2" \text{ w.c. differential}) = 147 \text{ acfh or } 407,800 \text{ BTU/hr}$**

Base (standard) Conditions for 11" w.c. Base Pressure: Temperature = 60 deg F  
 Atmospheric Pressure = 14.48 psia  
 Base Pressure = 11" w.c. (14.88 psia)

Other Definitions: Q = volume flow rate (cfh)  
 C = meter flow rate @ 1/2" w.c. differential (capacity)



Meter Model	A	B	C	D
S-275	10 1/8"	8 1/2"	13 1/4"	5 1/4"

**Note:**

The S-275 has a 5 psig maximum allowable working pressure (MAOP). The meter must be handled and mounted in an upright position. A leak test using an internal pressure of 10 psig shall be performed on any meter where hanger bracket mounting bolts have been loosened or removed. See Invensys Energy Metering bulletin M-1002 for additional information on residential meters. See Invensys Energy Metering bulletin MP-1002A for part numbers, illustrations and descriptions.

**Limited Warranty**

Seller warrants the Goods to be free from defects in materials manufactured by Seller and in Seller's workmanship for a period of one (1) year after tender of delivery (the "Warranty Period"). THIS LIMITED WARRANTY (a) IS IN LIEU OF, AND SELLER DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, STATUTORY, EXPRESS OR IMPLIED, INCLUDING, WITH LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR OF CONFORMITY TO MODELS OR SAMPLES; (b) does not apply to any Goods which have been (i) repaired, altered or improperly installed; (ii) subjected to improper use or storage, (iii) used or incorporated with other materials or equipment, after buyer or anyone using the Goods has, or reasonably should have, knowledge of any defect or nonconformance of the Goods; or (iv) manufactured, fabricated or assembled by anyone other than Seller, (c) shall not be effective unless buyer notifies Seller in writing of any purported defect or nonconformance with (thirty days) after Buyer discovers or should have reasonably discovered such purported defect or nonconformance; and (d) shall only extend to Buyer and not to any subsequent buyers or users of the Goods. Buyer shall provide Seller access to the Goods as to which Buyer claims a purported defect or nonconformance, upon request by Seller, buyer shall, at its own risk and expense, promptly return the Goods in question to Seller's Plant.

