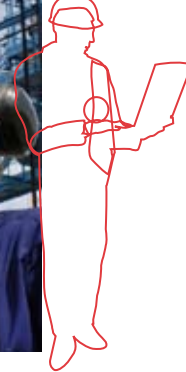


eTube™

Flow Metering



Improve production operations with the new shape in differential pressure meters.

eTube is a superior alternative to other primary flow measurement devices like the orifice meter. It works in conjunction with Zedi's Smart-Alek® intelligent flow monitoring system. Unlike the orifice meter, eTube's innovative design does not require high differential pressures in order to measure flow.

eTube:

- *better maintains accuracy, producing a stable differential pressure over a wide range of flow rates*
- *contains no moving or turning parts that are prone to wear and tear, failure or reversed installation*
- *requires very little flow conditioning in comparison to other flow meters*
- *in combination with Smart-Alek, has the capability for a high turndown ratio*

eTube's streamlined internal profile:

- *is not susceptible to damage caused by abrasives such as sand, scale and coal dust*
- *keeps fluids moving because of no stagnation areas, eliminating build-up or freezing and therefore improving measurement*



2" NPT Threaded



2" ANSI 600 Flanged



zedi

eTube™

eTube produces a stable differential pressure over a wide range of flow rates. This enables the eTube and Smart-Alek® combination to have a turndown ratio of up to 20:1. In tests, eTube was shown to produce less pressure loss than both orifice and flow nozzle-type meters.

Save time

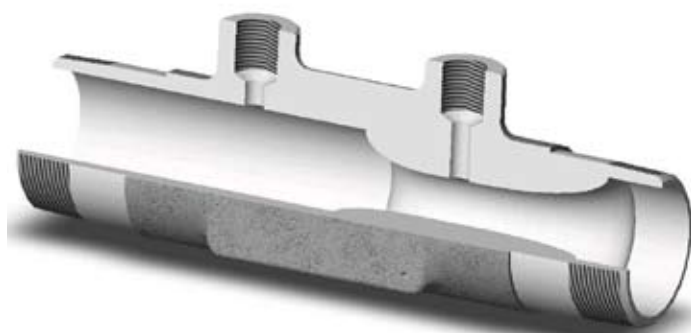
eTube saves time by eliminating time-consuming operations and accounting processes required for wells with rapid decline rates.

- Reduce maintenance time in the field.
- Eliminate the need to change orifice plates.
- Eliminate measurement errors caused by freezing or liquid pooling.

Reduce costs and increase revenue

eTube improves measurement accuracy while lowering costs and increasing earnings.

- Perform only one or two eTube changes over the entire life cycle of the well.
- Reduce the installation footprint and overall environmental impact of your meter facility by combining eTube with Zedi's Smart-Alek and Smart-Skid™.
- Increase overall earnings through less pressure loss, enabling more gas flow in some low-pressure applications.



eTube cut-away

Specifications

Type of Flow Measured	: Gas
CD ¹ Uncertainty	: ± 0.5%
Repeatability	: ± 0.1%
Turndown	: 10:1 typical, can be up to 20:1
Pressure Safety Approval:	CRN: 0F6747.2C
MAWP ²	: 600 ANSI (1440 psi)
Pipe Size	: 2" (Schedule 40 or Schedule 80)
End Connections	: 2" NPT Male
	: 2" ANSI 600 Flanged
Pressure Tap	: 1/2" NPT Female
Material	: F316 Stainless Steel
Weight	: 2" NPT Male - 4 kg
	: 2" Flanged - 11.75 kg
Standard Beta Ratio	: 0.3, 0.4, 0.5, 0.6, 0.7
Operating Temperature	: -40 to 150° C

¹ Coefficient of Discharge

² Maximum Allowable Working Pressure (MAWP) over operating temperature range

Permanent Pressure Loss Comparison as a Percentage of Change in Pressure

