



GAS MEASUREMENT SENSOR SOLUTION

For most gas pipeline companies, flow computers are used to measure the volume of the gas flowing through the line. This allows them to properly charge their customers for product delivered. One of the required inputs needed for the flow computer to calculate volume is the temperature of the material. 100- Ω RTDs are typically used for this measurement, due to their precision, output and easy availability. Since inaccuracy or failure can mean lost revenue, it is very important to have reliable measurement.

Unfortunately, many RTDs used in this application are not designed specifically for this service. The cable exits the sheath straight, so that when bent to the pipe, a wear point is created between sheath and cable, leading to failure. Many do not properly seal out moisture, with customers wrongly assuming that the armor alone is waterproof. And, finally, many customers use a stainless steel compression fitting to

hold the RTD into the wall – if there is vibration present in the pipeline, this can lead to a fatigue point at the ferrule, resulting in failure of the sheath.

AST has designed a dynamic new assembly to prevent these problems from occurring. The sheath is pre-bent at a 90° angle to make it easy on the installers and eliminate the stress point. The armor is coated with a PVC jacket and sealed to the sheath, preventing any moisture from gaining entrance. The compression fitting was changed to Teflon®, removing the potential for fatigue and making it easier to install. This design is available with a variety of sheath lengths and diameters, and PVC or Teflon® coated armor. The length of the armor can be specified by the customer. Also available is a J thermocouple version.

Call us at 617-923-6966 or visit our website at www.appliedsensortech.com for more information about Applied Sensor Technologies' newest sensor assembly.

