

SmartLine

Technical Information

STD700 SmartLine Differential Pressure Specification 34-ST-03-121, November 2016



Introduction

Part of the SmartLine® family of products, the STD700 models are suitable for monitoring, control and data acquisition. These products feature piezoresistive sensor technology combining pressure sensing with on chip temperature compensation capabilities providing high accuracy, stability and performance over a wide range of application pressures and temperatures. The SmartLine family is also fully tested and compliant with Experion® PKS providing the highest level of compatibility assurance and integration capabilities. SmartLine easily meets the most demanding application needs for pressure measurement applications.

Best in Class Features:

- Accuracies up to 0.065% of span
- Stability up to 0.025% of URL per year for 5 years
- Automatic static pressure & temperature compensation
- Rangeability up to 100:1
- Response times as fast as 100ms
- Easy to use and intuitive display capabilities
- Intuitive External Zero, Span and configuration capability
- On-board diagnostic capabilities
- Integral Dual Seal design for highest safety based on ANSI/NFPA 70-202 and ANSI/ISA 12.27.0
- World class overpressure protection
- Full compliance to SIL 2/3 requirements.

Communications/Output Options:

- HART® (version 7.0)



Figure 1 – STD725/735/775 Differential Pressure Transmitters feature field-proven piezoresistive sensor technology

Span & Range Limits:

Model	URL “H ₂ O (mbar)	LRL “H ₂ O (mbar)	Max Span “H ₂ O (mbar)	Min Span “H ₂ O (mbar)
STD725	400 (1000)	-400 (1000)	400 (1000)	4 (10)
Model	psi (bar)	psi (bar)	psi (bar)	psi (bar)
STD735	100 (7.0)	-100 (-7.0)	100 (7.0)	1 (0.07)
STD775	3000 (210)	-100 (-7.0)	3000 (210)	30 (2.1)