



Modbus Multivariable Temperature Performance

266JST

The ABB 266JST was designed to be highly accurate for custody transfer flow measurement over full temperature ranges. With datasheet comparisons you will find that the standard 266JST's accuracy of $\pm 0.04\%$ of value from 5 to 100% of fully calibrated span, is the highest accuracy multivariable pressure transmitter on the market. The combination of the electronic design and component selection, along with the extended unique characterization process of each transmitter and the factory calibration process results in this market leading accuracy.



For more details on the 266JST performance see the datasheet at:
abb.com/upstream



Measuring error

Consisting of terminal based non-linearity, hysteresis, and non-repeatability.

266JST	Sensor	Measurement area	Measuring error
DP	1, 2	From 5% to 100% FCS	$\pm 0.04\%$ Value
		From 0% to 5% FCS	$\pm 0.05\%$ of 5% FCS
SP	5, 6, 7	Barometric < Value < 100% FCS	$\pm 0.05\%$ Value

Ambient temperature effect for $\pm 100^\circ\text{F}$ ($\pm 55.6^\circ\text{C}$) change from calibration temperature within the thermal limits of -40°F (-40°C) to 185°F (85°C).

Includes the effects of Thermal Hysteresis and Thermal Repeatability.

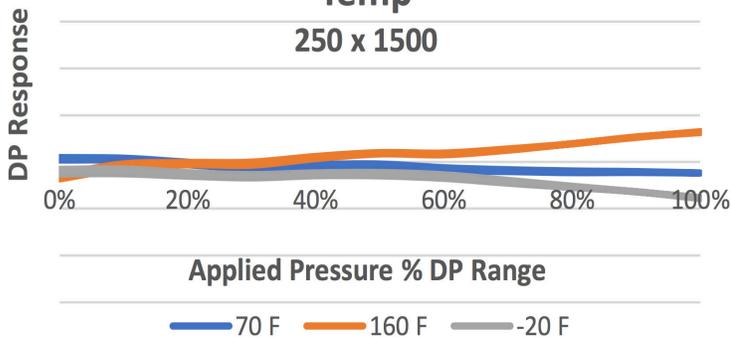
266JST	Sensor	Measurement area	Measuring error
DP	1, 2	From 10 to 100% FCS	$\pm (0.0025\% \text{ FCS} + 0.05\% \text{ reading})$
		From 0 to 10% FCS	$\pm (0.005\% \text{ FCS} + 0.125\% \text{ reading})$
SP	5, 6, 7	Barometric to 100% FCS	$\pm 0.025\% \text{ FCS}$

A sample of extended testing data, shows that datasheet performance as detailed in the specifications.

- These graphs show relative performance over temperature and pressure of actual data taken from group testing.
- The performance shown is well within stated specifications of the datasheet.
- The XMV design and the factory calibration provide enough margin to ensure the units stay within their specifications over time.

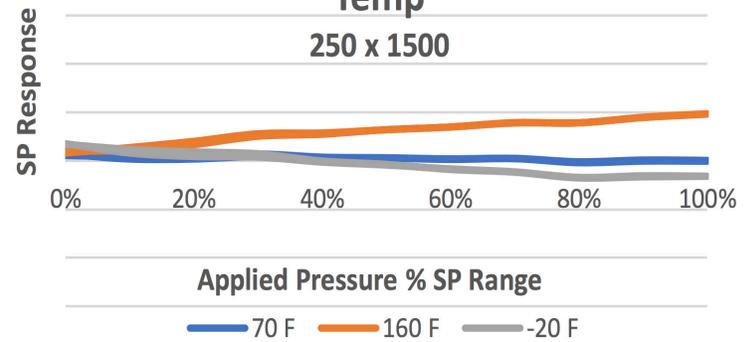
DP Response @ Mid, Low & High Temp

250 x 1500



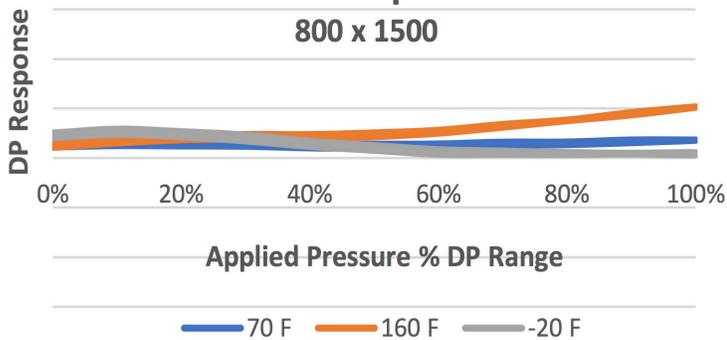
SP Response @ Mid, Low & High Temp

250 x 1500



DP Response @ Mid, Low & High Temp

800 x 1500



SP Response @ Mid, Low & High Temp

800 x 1500

