

JT400 PRESSURE RANGES

The JT400 Multivariable Transmitter (MVT) offering from FlowWorx is available with the following pressure ranges:

150 inH₂O DP
/ 1000 PSI_s

150 inH₂O DP
/ 2000 PSI_s

300 inH₂O DP
/ 1000 PSI_s

300 inH₂O DP
/ 2000 PSI_s

400 inH₂O DP
/ 2000 PSI_s

700 inH₂O DP
/ 2000 PSI_s

*PLANNED FOR 2021 RELEASE

WHERE DP CORRESPONDS TO DIFFERENTIAL PRESSURE UPPER RANGE LIMIT (URL) AND PSI_s CORRESPONDS TO STATIC PRESSURE URL.

OPTIMIZED FOR GAS FLOW

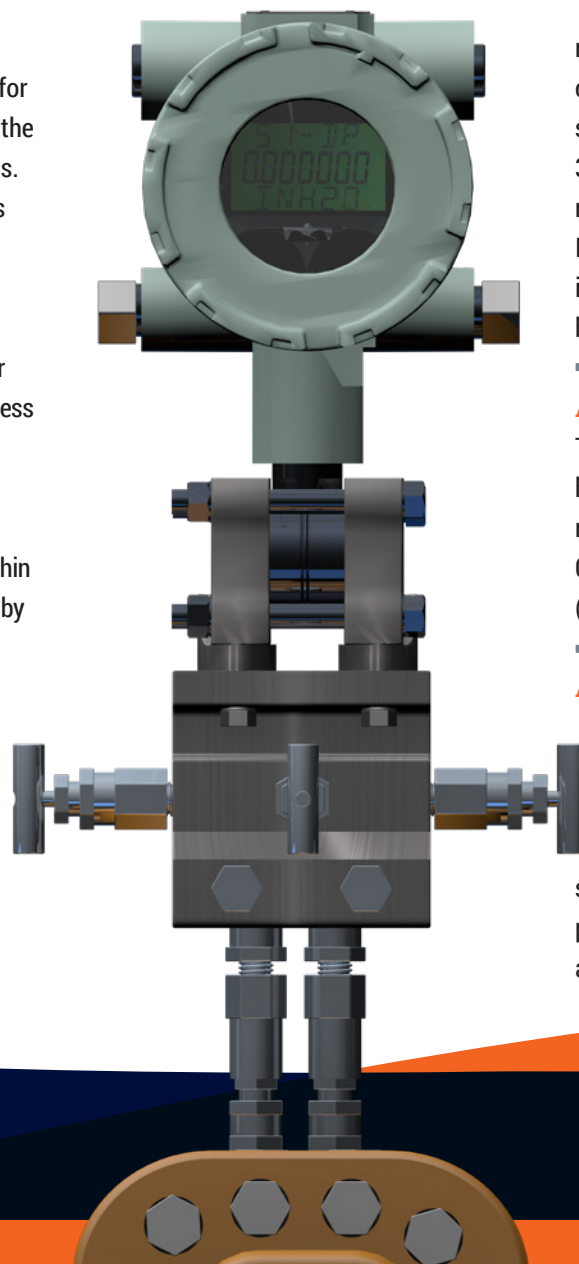
The design of the JT400 was optimized for orifice plate gas flow measurement and the available ranges reflect 99% of use cases. This is just one way FlowWorx separates the JT400 from the competition.

WHERE OTHERS FALL SHORT

Other manufacturers tend to leverage their standard DP offerings for the general process market, resulting in most of the available ranges being either too low or too high for orifice plate measurement. They therefore provide only 1 or 2 DP pressure ranges within their MVT families that can be considered by a gas customer. These tend not to be optimized for gas flow measurement.

THE FACTS

The "sweet spot" for DP orifice plate measurement seems to be around 250 inH₂O. Selecting between "few and far between" range offerings forces the customer to choose a less-than-ideal



range to accommodate their specific flow conditions. Most performance accuracy specs are expressed in %URL, so using a 3-4x higher URL than necessary effectively multiplies the error in the desired DP range. If a smaller diameter orifice plate is used to increase the DP, other undesirable effects become accentuated.

A CUT ABOVE THE REST

The 300 inH₂O JT400 not only has a 50 inH₂O headroom in the "sweet spot" operating range but it will indicate accurately (within 0.1% URL or better) up to 30% overrange (almost an additional 100 inH₂O!)

ACCURACY WHERE IT COUNTS

The same advantages apply for the JT400 static pressure sensor in terms of available range for the job and the overpressure indication. The JT400 static pressure sensor also has the best performance accuracy (+/- 0.035%) available at no extra cost.