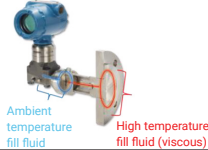

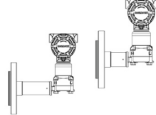



COLD AMBIENT

Hot Process System Comparison

	Thermal Range Expander	Thermal Optimizer	Extensions	Heat Tracing
				
Temperature Range (above atm. pressure)	-103°F (-75°C) ambient to 770°F (410°C) process	-76°F (-60°C) ambient to 698°F (370°C) process	Coplanar: 2-in. (50 mm): 464°F (240°C) 4-in. (100 mm): 500 F (260 C) Inline: 4-in. (100 mm): 572°F (300°C)	Depends on fill fluid
Pressure Range	3750psi (25855 kPa) MWP	4000psi (27579kPa) MWP	Determined by the system	Determined by the system
Transmitter Type	Coplanar (AP,GP,DP) In-line (AP,GP,DP with ERS)	In-line (AP,GP,DP with ERS)	Coplanar (AP, GP, DP) In-line (AP,GP,DP with ERS)	Any transmitter with capillaries
Connection Type	Direct Mount Remote Mount	Direct Mount	Direct Mount	Remote Mount
Technology	Intermediate diaphragm separating a high temperature fill fluid and a low temperature fill fluid Requires: <ul style="list-style-type: none"> • Transmitter • Thermal Range Expander Seal system • Capillaries(optional) 	Copper tube insulated high temperature fill fluid, requires hot process to maintain the fill fluids temperature. Limited by hot ambient environments. Requires: <ul style="list-style-type: none"> • In-line transmitter • Thermal Optimizer seal system 	Eliminates transmitter mounting hardware. Minimizes internal oil volume for improved performance. Need to consider process temperature to prevent from exceeding limits. Requires: <ul style="list-style-type: none"> • Transmitter • Seal System 	Uses electricity to heat fill fluid inside capillaries. Requires ongoing maintenance and electricity costs. Requires: <ul style="list-style-type: none"> • Transmitter • Capillaries • Heat trace • Temperature controller • Power supply