

Pressure Transducer Options

Special Wetted Materials – The following diaphragms may be substituted on transducer body materials of aluminum, brass, polyester and stainless steel. To order, substitute the material code below in the seventh digit of the transducer catalog number, e.g., a TF10A1 [1] with optional viton diaphragm becomes a TF10A1 [2].

Diaphragm	Material Code	Temperature Range
Buna "N"	1	-4°F (-20°C) to 180°F (82°C)
Ethylene Propylene	6	-4°F (-20°C) to 250°F (121°C)
Neoprene	3	-4°F (-20°C) to 180°F (82°C)
Fluorosilicone	7	-40°F (-40°C) to 250°F (121°C)
Viton	2	-4°F (-20°C) to 250°F (121°C)

Oxygen Cleaning – Pressure transducers for oxygen service should be specially cleaned. They are degreased and blacklight inspected, then assembled in a clean area and tested with oil-free air or nitrogen. Use metal body transducer with viton or neoprene diaphragm and add suffix "H" to transducer catalog number, e.g., TA40A13 becomes TA40A13 [H].

Pressure Snubbers – A pressure snubber (1/4" NPTF by 1/4" NPTM) installed in the transducer pressure connection will dampen the pressure spikes to a value which will not cause damage. It consists of a body with a porous metal disc of stainless steel through which the fluid passes. To order, select a snubber compatible with the fluid. Available by separate catalog number only (see table below).

Fluid	Brass Catalog No.	303 SS Catalog No.
Air, Non-Hazardous Gases	TP04G2	TP04G3
Water, Light Oil (under 225 SSU)	TP04E2	TP04E3
Oil (Heavy, (over 225 SSU)	TP04D2	TP04D3
Pressure Rating (psig)	2000	5000

Process Connection – A female process connection (1/4" NPT) is standard on all pressure transducers. A 1/2" NPT is available as an option on *gauge* pressure transducers. To order, add suffix "B" to transducer catalog number, e.g., RF10A21 becomes RF10A21 [B].

Note: Not available on nylon transducers.

P-Series and S-Series Temperature Transducer Options

Armored Capillaries – Double braided copper armor is standard for copper capillary units. Stainless steel spiral interlocked armor is available for stainless steel capillary units. Add suffix "C" to transducer catalog number.

Thermal Well



Thermal Well ① – Use with direct or remote sensors for protecting sensing bulb. This allows removal of bulb while maintaining a pressure-tight vessel. Available in 1/2" NPT or 3/4" NPT process connection in brass or 316 SS. Dimensions are in accordance with SAMA Std. RC17-9. Standard "U" dimension (insertion length) is 2-1/2" for direct mount and 6" capillary units and is 4-1/2" for 12' capillary units.

Material	Pressure Rating (psig)	"U" Dimensions (Inches)	Process Connection	
			1/2" NPT Catalog No.	3/4" NPT Catalog No.
Brass	1000	2-1/2	QP03	QP04
		4-1/2	QP13	QP14
		7-1/2	QP23	QP24
		10-1/2	QP33	QP34
316 SS	6000	2-1/2	QP07	QP08
		4-1/2	QP17	QP18
		7-1/2	QP27	QP28
		10-1/2	QP37	QP38

Longer Capillaries – Standard copper and stainless steel capillary units can be furnished in 12' lengths. To order, add suffix "D" to transducer catalog number.

Consult ASCO for longer length capillaries.

Capillary Length (Feet)	Transducer Suffix	Bulb Length (Inches)	"U" Dimension Required (Inches)
6	---	3-1/2	2-1/2
12	D	5-1/2	4-1/2
13 - 20	E	5-1/2	4-1/2
21 - 50	F	8-1/2	7-1/2
51 - 80	G	11-1/2	10-1/2

Union Connector – For use with remote units for mounting of bulb in fluid being controlled. Available in 1/2" NPT and 3/4" NPT process connections in brass or 316 SS.



Material	Pressure Rating (psig)	Process Connection	
		1/2" NPT Catalog No.	3/4" NPT Catalog No.
Brass	500	QP01	QP02
316 SS	1500	QP05	---

① Jam nuts provided with thermal wells.