

## Pressure Element Selection Media Application

The media being measured must be compatible with the wetted parts of the pressure instrument. To use the chart below, locate the media whose pressure is to be measured and select a suitable material from those available. This is a simplified chart and assumes the media temperature is below

200°F except for media with a "" which must be below 100°F. **PLUS!**™ option, throttling devices and/or a liquid-filled instrument are recommended in applications with pulsation or vibration. These recommendations are only a guide, as service life is dependent on temperature, concentrations,

catalysts that may be added, or other conditions beyond our control. Consult Stratford, CT customer service for specific applications and any media not listed. Additional corrosion data is available on our web site, [www.ashcroft.com](http://www.ashcroft.com) in the Application Data Section.

MEDIA APPLICATION	Pressure Instrument Material					MEDIA APPLICATION	Pressure Instrument Material					MEDIA APPLICATION	Pressure Instrument Material				
	Brass or bronze	Steel	316 SS	Monel	Diaphragm seals**		Brass or bronze	Steel	316 SS	Monel	Diaphragm seals**		Brass or bronze	Steel	316 SS	Monel	Diaphragm seals**
Acetone*	•		•	•		Crude Oil (Sweet)			•	•		Phosphoric Acid <80%*			•		
Acetic Acid <40%			•			Ethyl Acetate	•		•	•		Picric Acid <10%			•		
Acetic Anhydride				•		Ethylene Oxide >99%*	•		•	•		Propane (Dry) DOT Quality	•	•	•	•	
Acetylene (Dry)		•	•			Ferric Chloride <40%				•		Sea Water (Flowing)				•	
Acrolein 100%				•		Ferric Sulfate <10%			•			Silver Nitrate <70%				•	
Air	•	•	•	•		Ferrous Chloride <30%				•		Sodium Bicarbonate <20%			•	•	
Alcohol, Ethyl	•		•	•		Ferrous Sulfate <50%				•		Sodium Bisulfate <30%				•	
Alum. Chloride >10%				•		Fluorine Gas (Dry) No Air			•			Sodium Carbonate <40%			•	•	
Alum. Sulfate 10-50%				•		Formaldehyde <95%			•	•		Sodium Chromate <60%	•	•	•	•	
Ammonia Gas (Dry)		•	•			Formic Acid*				•		Sodium Cyanide*			•	•	
Ammonium Chloride <40%				•		Freons		•	•			Sodium Hydroxide < 40%				•	
Ammonium Nitrate <50%			•			Furfural <10%				•		Sodium Hypochlorite <25%				•	
Ammonium Sulfate <60%				•		Gasoline (Flowing)	•		•			Sodium Phosphate, Tri <60%	•	•	•	•	
Aniline>99%			•			Glycerin >99%	•	•	•	•		Sodium Silicate <50%			•	•	
Argon	•	•	•	•		Hydrobromic Acid				•		Sodium Sulfide <50%				•	
Beer			•			Hydrochloric Acid				•		Stannous Chloride <10%				•	
Benzidine >99%				•		Hydrofluoric Acid				•		Steam (Use siphon)	•	•	•	•	
Benzene <50%			•	•		Hydrofluosilic Acid				•		Stearic Acid			•		
Benzoic Acid <70%				•		Hydrogen <sup>(2)</sup>	•		•			Sulfur Dioxide (Dry) >99%				•	
Boric Acid <25%			•			Hydrogen Peroxide <50%				•		Sulfur Trioxide (Dry) >99%				•	
Bromine (Dry)				•		Kerosene	•	•	•	•		Sulfuric Acid				•	
Butane	•	•	•	•		Lactic Acid <70%*(2)			•			Tannic Acid <80%			•	•	
Butyric Acid <10%				•		Magnesium Chloride <40%				•		Tartaric Acid <50%			•	•	
Calcium Chloride <80%				•		Mercury >99%			•			Tin Chloride (ous) <10%				•	
Calcium Hydroxide <50%				•		Milk			•			Toluene >99%	•	•	•	•	
Carbon Dioxide	•	•	•	•		Naphtha >99%	•	•	•	•		Turpentine >98%	•	•	•	•	
Carbon Monoxide (Dry) >99%	•		•	•		Naphthalene >99%			•	•		Water (tap)	•		•	•	
Chlorine (Dry)				•		Nickel Chloride >99%				•		Whiskey			•		
Chlorine (Moist)				•		Nitric Acid <95%*			•			Zinc Chloride <25%*				•	
Chloroform (Dry)			•	•		Nitrogen	•	•	•	•		Zinc Sulphate <40%				•	
Chromic Acid				•		Oleic Acid	•			•							
Citric Acid 10-50%			•			Oxalic Acid*				•							
Corn Oil			•			Oxygen (Gas) <sup>(1)</sup>	•		•	•							
Crude Oil (Sour)				•		Palmitic Acid >99%*			•								

(1) Monel and 316 stainless steel are acceptable for oxygen service, provided the instrument has been cleaned for service and is free from oil. Order variation X6B.

(2) Over 1000 psi—entire system must be 316 stainless steel.

\*Media temperature must be below 100°F.

\*\*Any standard Bourdon tube or bellows material may be used in conjunction with a diaphragm seal (with bellows use a Viton or Kalrez diaphragm), but the gauge selection should take into consideration the corrosive environment in which it is to operate.