

Media Application Table

Ashcroft® Stainless Steel Case Pressure Gauges

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 an * which must be below 100°F. 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 for any media not listed.

Media Application	Pressure Instrument Material				
	Brass or bronze	Steel	Stainless steel	Monel	Diaphragm seals**
Acetone*	•		•	•	
Acetic Acid <40%			•		
Acetic Anhydride					•
Acetylene (Dry)		•	•		
Acrolein 100%					•
Air	•	•	•	•	
Alcohol, Ethyl	•		•	•	
Alum. Chloride >10%					•
Alum. Sulfate 10-50%			•		
Ammonia Gas (Dry)		•	•		
Ammonium Chloride <40%					•
Ammonium Nitrate <50%			•		
Ammonium Sulfate <60%					•
Aniline>99%			•		
Argon	•	•	•	•	
Beer			•		
Benzidine >99%					•
Benzene <50%			•	•	
Benzoic Acid <70%					•
Boric Acid <25%			•		
Bromine (Dry)					•
Butane	•	•	•	•	
Butyric Acid <10%					•
Calcium Chloride <80%					•
Calcium Hydroxide <50%					•
Carbon Dioxide	•	•	•	•	
Carbon Monoxide >99%	•	•	•	•	
Chlorine (Dry)					•
Chlorine (Moist)*					•
Chloroform (Dry)			•	•	
Chromic Acid					•
Citric Acid 10-50%			•		
Corn Oil			•		

Media Application	Pressure Instrument Material				
	Brass or bronze	Steel	Stainless steel	Monel	Diaphragm seals**
Crude Oil (Sour)				•	
Crude Oil (Sweet)			•	•	
Ethyl Acetate	•		•	•	
Ethylene Oxide >99%	•		•	•	
Ferric Chloride <40%					•
Ferric Sulfate <10%*			•		
Ferrous Chloride <30%					•
Ferrous Sulfate <50%					•
Fluorine Gas (Dry)			•	•	
Formaldehyde <95%			•	•	
Formic Acid*					•
Freons			•		
Furfural <10%					•
Gasoline			•		
Glycerin >99%	•	•	•	•	
Hydrobromic Acid					•
Hydrochloric Acid					•
Hydrofluoric Acid					•
Hydrofluosilic Acid					•
Hydrogen ①	•		•		
Hydrogen Peroxide <50%			•		
Kerosene	•	•	•	•	
Lactic Acid <70%*			•		
Magnesium Chloride <40%					•
Mercuric Chloride <60%					•
Mercury >99%		•	•		
Milk			•		
Naphtha >99%	•	•	•	•	
Naphthalene >99%			•		
Nickel Chloride >99%					•
Nitric Acid <95%*			•		
Nitrogen	•	•	•	•	
Oleic Acid					•

Media Application	Pressure Instrument Material				
	Brass or bronze	Steel	Stainless steel	Monel	Diaphragm seals**
Oxalic Acid *					•
Oxygen (Gas)②	•		•	•	
Palmitic Acid >99%*			•		
Phosphoric Acid <80%*			•		
Picric Acid <10%			•		
Propane (Dry)		•	•	•	
Sea Water (Flowing)					•
Silver Nitrate <70%					•
Sodium Bicarbonate <20%			•	•	
Sodium Bisulfate <30%					•
Sodium Carbonate <40%					•
Sodium Chromate <60%	•	•	•	•	
Sodium Cyanide *		•	•		
Sodium Hydroxide < 40%					•
Sodium Hypochlorite <25%					•
Sodium Phosphate, Tri <60%		•	•	•	
Sodium Silicate <50%		•	•	•	
Sodium Sulfide <50%					•
Stannous Chloride <10%					•
Steam (Use siphon)	•	•	•	•	
Stearic Acid			•		
Sulfur Dioxide (Dry) >99%					•
Sulfur Trioxide (Dry) >99%					•
Sulfurous Acid					•
Tannic Acid <80%	•	•	•	•	
Tartaric Acid <50%			•	•	
Tin Chloride (ous) <10%					•
Toluene >99%	•	•	•	•	
Turpentine >98%	•		•	•	
Water (Tap)	•		•	•	
Whiskey			•		
Zinc Chloride <25%*					•
Zinc Sulphate <40%					•

① Over 1000 psi — entire system must be 316 stainless steel.

② Bronze and 316 stainless steel are acceptable for oxygen service, provided the instrument has been cleaned for oxygen service and is free from oil.

* Below 100°F

** Any standard bourdon tube material may be used in conjunction with a diaphragm seal, but the gauge selection should take into consideration the corrosive environment in which it is to operate. For diaphragm seals see Bulletin DS-1.