

# BOURDON TUBE SELECTION MEDIA APPLICATION BASIS

MEDIA APPLICATION	Bourdon Tube or Bellows Material					MEDIA APPLICATION	Bourdon Tube or Bellows Material					MEDIA APPLICATION	Bourdon Tube or Bellows Material				
	Brass or Bronze	Steel	AISI 316 Stain. Steel	Monel®	Diaphragm Seals*		Brass or Bronze	Steel	AISI 316 Stain. Steel	Monel	Diaphragm Seals*		Brass or Bronze	Steel	AISI 316 Stain. Steel	Monel	Diaphragm Seals*
Acetone			●	●		Chromic Acid				●	Nitric Acid (25°C/75°F)			●			
Acetic Acid <40%			●			Cider			●		Nitrogen	●	●	●	●		
Acetic Anhydride					●	Citric Acid			●		Oleic Acid	●					
Acetylene		●	●			Coffee			●		Oleum				●		
Acrolein					●	Corn Oil			●		Oxalic Acid				●		
Air	●	●	●	●		Crude Oil (Sour)			●	●	Oxygen ①	●		●			
Alcohols	●		●	●		Crude Oil (Sweet)			●	●	Palmitic Acid			●			
Alkali Cleaners			●	●		Ethyl Acetate				●	Perchloric Acid				●		
Alum. Chloride					●	Ethylene Oxide				●	Phosphoric Acid				●		
Alum. Hydroxide					●	Fatty Acids			●		Photographic Bleach			●			
Alum. Sulfate <60%			●			Ferric Chloride				●	Picric Acid				●		
Ammonia Gas			●			Ferric Sulfate				●	Propane	●	●	●	●		
Ammonium Chloride					●	Ferrous Chloride				●	Quinine				●		
Ammonium Nitrate			●			Ferrous Sulfate				●	Rochelle Salt				●		
Ammonium Sulfate					●	Fluorine Gas			●	●	Sea Water			●			
Aniline			●			Formaldehyde			●		Silicate Solution			●	●		
Argon	●	●	●	●		Formic Acid				●	Silver Nitrate				●		
Beer					●	Freon	●	●	●	●	Soap			●			
Bauxite & Water			●			Furfural				●	Sodium Bicarbonate			●	●		
Benzene				●		Gasoline	●		●		Sodium Bisulfate				●		
Benzidine					●	Glycerine	●	●	●	●	Sodium Carbonate			●			
Benzoic Acid					●	Hydrobromic Acid				●	Sodium Chromate				●		
Black Liquor					●	Hydrochloric Acid				●	Sodium Cyanide		●				
Boric Acid					●	Hydrofluoric Acid				●	Sodium Phosphate			●			
Brine				●		Hydrofluosilic Acid				●	Sodium Sulfide				●		
Bromine					●	Hydrogen ②	●		●	●	Steam	●	●	●			
Butane	●	●	●	●		Hydrogen Peroxide				●	Stearic Acid			●			
Butyric Acid					●	Hydrogen Sulphide (under 93°C/200°F)			●	●	Sulfur Chloride				●		
Calcium Chloride					●	Hydroxy Acetic Acid			●		Sulfur Dioxide				●		
Calcium Hydroxide					●	Kerosene	●	●	●	●	Sulfur Trioxide				●		
Carbolic Acid			●			Lacquers	●		●	●	Sulfuric Acid				●		
Carbon Dioxide		●	●	●		Lactic Acid				●	Sulfurous Acid				●		
Carbon Monoxide		●	●	●		Lime Water				●	Tall Oil				●		
Carbon Tetrachloride				●		Linseed Oil		●	●		Tannic Acid		●	●	●		
Carbonated Water			●			Magnesium Chloride				●	Tartaric Acid			●			
Caustic Soda					●	Mercuric Chloride				●	Tin Chloride				●		
Caustic Potash					●	Mercury		●	●		Toluene	●	●	●	●		
Cement Slurry					●	Methylene Chloride				●	Turpentine			●	●		
Chlorine Dioxide					●	Milk			●		Varnish		●	●	●		
Chlorine, Dry					●	Naphtha	●	●	●	●	Water	●		●	●		
Chlorine, Moist					●	Naphthalene			●		Whisky			●			
Chloroform, Dry				●		Nickel Chloride				●	Zinc Chloride				●		
											Zinc Sulphate <30%			●			

① Bronze and AISI 316 SS are acceptable for oxygen service, provided the gauge has been cleaned for oxygen service and is free from oil.  
 ② Over 1000 psi—entire system must be AISI 316 SS.

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



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