

Fluid Compatibility Guide

The following chart is intended only as a guide in selecting various elastomers and metals for use with fluids to be conveyed through Dixon Quick Disconnect Couplings. This list does not guarantee suitability for a particular application. Final selection is dependent upon operating pressure, fluid and ambient temperature, concentration of media, duration of exposure, environmental conditions, and frequency of connect and disconnect.



Attention
Required!

Shown below are the seal choices with their associated temperature ranges. Unless otherwise noted in the catalog, Nitrile (Buna-N) is the standard seal material supplied in all couplings. To designate non-standard seal materials, simply prefix the coupling model number with the appropriate seal code. (For explanation of Part Numbering Format, see page 176)

Seal Material Specifications

Seal Material	Prefix Code	Tradename Designation	Typical Availability	Temperature Range °C	Temperature Range °F
Buna-N	-	Nitrile	Stock	-40°C to +121°C	-40°F to +250°F
Buna-N (MIL-H-5606 Fluids)	M-	Nitrile	3-5 Days	-54°C to +135°C	-65°F to +275°F
Buna-N (Hydrocarbon Fuels)	JF-	Nitrile	3-5 Days	-54°C to +71°C	-65°F to +160°F
Fluorocarbon Rubber (FKM)	F-	Viton™	Stock	-29°C to +204°C	-20°F to +400°F
Ethyl Propylene Diene Monomer	P-	EPDM	5-7 Days	-54°C to +149°C	-65°F to +300°F
Neoprene	E-	Neoprene	7-10 Days	-43°C to +149°C	-45°F to +300°F
Silicone	S-	Silicone	7-10 Days	-73°C to +177°C	-100°F to +350°F
Fluorosilicone (FVMQ)	FS-	Silastic™	7-10 Days	-60°C to +180°C	-76°F to +376°F
Urethane	U-	Urethane	7-10 Days	-40°C to +82°C	-65°F to +180°F
Perfluoroelastomer (1)	K4-	Kalrez™ 4079	5-7 Days	-20°C to +316°C	-4°F to +600°F
Perfluoroelastomer (2)	K6-	Kalrez™ 6375	7-10 Days	-20°C to +275°C	-4°F to +525°F
Perfluoroelastomer (3)	K7-	Kalrez™ 7075	7-10 Days	-20°C to +327°C	-4°F to +620°F
Fluoroelastomer	H-	Aflas™	7-10 Days	-5°C to +204°C	+23°F to +400°F

Fluid Compatibility Chart

Media Name 21°C (70°F) Operating	Suggested Seal Material	Suggested Body Material	Media Name 21°C (70°F) Operating	Suggested Seal Material	Suggested Body Material
Acetic Anhydride	EPDM	316 stainless steel	Jet Fuel	Nitrile (JF)	brass
Acetone	EPDM	brass	Kerosene	Nitrile	steel
Air	Nitrile	steel or brass	Magnesium Hydroxide	Viton™	316 stainless steel
Alkalies, General	Nitrile	316 stainless steel	Methane	Nitrile	303 stainless steel
Ammonia, Aqueous	EPDM	316 stainless steel	Methanol	Nitrile	316 stainless steel
Ammonia, Gas	EPDM	316 stainless steel	Methyl Bromide	Viton™	brass
Ammonia, Gas Anhydrous	EPDM	316 stainless steel	Methyl Ethyl Ketone (MEK)	EPDM	brass
Benzene (Benzol)	Viton™	steel	MIL-F-81912 (JP-9)	EPDM	steel
Bleach Solutions	EPDM	brass	MIL-H-5606	Nitrile (M1)	steel
Brake Fluid, Non-Petroleum	EPDM	316 stainless steel	MIL-H-5806	Nitrile	steel
Bromine Gas	Viton™	brass	MIL-H-6083	Nitrile	steel
Butyl Alcohol	Nitrile	steel or brass	MIL-H-7083	Nitrile	steel
Carbon Dioxide, Dry	Nitrile	brass	Mineral Oils	Nitrile	303 stainless steel
Carbon Dioxide, Wet	Nitrile	brass	Mineral Spirits	Nitrile	316 stainless steel
Carbon Monoxide	Nitrile	316 stainless steel	Nickel Acetate	EPDM	brass
Chlorine, Wet	Viton™	undetermined	Nickel Sulphate	EPDM	316 stainless steel
Creosote	Viton™	steel	Nitrogen, Gas	Nitrile	brass
Crude Oil	Viton™	303 stainless steel	Nitrous Oxide	Nitrile	brass
Cutting Oil	Nitrile	brass	Oleum Spirits	Nitrile	316 stainless steel
Diesel Fuel	Nitrile	steel	Paint Thinner	Viton™	steel
Ethanol	Nitrile	brass	Paraffin	Nitrile	brass
Ethyl Alcohol	Nitrile	steel	Peanut Oil	Nitrile	steel
Ethyl Chloride	Nitrile	303 stainless steel	Phosphoric Acid (100%)	EPDM	316 stainless steel
Ethylene Glycol	EPDM	steel	Photographic Solutions	EPDM	316 stainless steel
Ferric Hydroxide	Nitrile	303 stainless steel	Potassium Acetate	EPDM	316 stainless steel
Formaldehyde (50%)	EPDM	303 stainless steel	Propylene	Viton™	303 stainless steel
Fuel Oils, General	Nitrile	steel	Propylene Glycol	Nitrile	316 stainless steel
Gasoline	Nitrile	steel	Silicone Oil	Nitrile	brass
Glycerine (Glycerol)	Nitrile	steel	Steam, General Service	Aflas™	steel
Glycols	EPDM	steel	Stoddard Solvent	Nitrile	steel
Helium	Nitrile	steel	Sulfuric Acid (100%)	Viton™	316 stainless steel
Heptane	Nitrile	steel	Toluene	Viton™	steel
Hexane	Nitrile	steel	Transmission Fluid, Type'A	Nitrile	brass
Hydraulic Oils, Aircraft	Nitrile	steel	Turpentine	Nitrile	303 stainless steel
Hydraulic Oils, Petroleum	Nitrile	steel	Vegetable Oil	Nitrile	303 stainless steel
Hydraulic Oils, Phosphate	EPDM	steel	Water	Nitrile	303 stainless steel
Hydrogen Gas	Nitrile	steel	Water, Distilled	Nitrile	303 stainless steel
Isobutyl Alcohol	EPDM	303 stainless steel	Water, Dionized	Nitrile	303 stainless steel
Isopropyl Alcohol	Viton™	303 stainless steel	Water, Sea	EPDM	316 stainless steel

Please Note: Some materials may not be available for certain coupling sizes or series, check with the factory for availability.