



Safety Instructions

INSTALLATION

The PT line of quick disconnect couplings comes with a wide range of fittings including threaded, hose connection, and flanged end. These couplings have been engineered to meet specific requirements with large safety margins.

It is the responsibility of the end user to communicate to the distributor, the application and operating conditions the coupling will be subjected to. It is up to the distributor to supply the right coupling for the application. PT Coupling Co. is available to help you with a proper coupling recommendation.

For the type of application required, care must be taken to insure proper connection and a positive seal. Improperly fitted or applied connections can result in serious accident and/or downtime. Under no circumstances shall the recommended pressure rating of the couplings be exceeded.

OPERATION

PT couplings provide for quick and frequent connections by means of the camming action on the groove surface of the male adapter. The male adapter is simply inserted into the female coupler until contact is made with the gasket. Both cam arms on the coupler are then closed simultaneously to produce a uniform gasket compression between the seal surfaces.

The compression on the gasket produces a seal when torque is applied to the cam arms. A positive seal requires that the surfaces on the gasket seat, the adapter face, and the gasket are smooth and uncontaminated. Cam arms must be in the full closed position for proper locking of coupling.

Gasket deterioration and excessive wear on cam, groove, and seal surfaces can reduce the performance of the coupler. Periodic inspection and servicing will ensure an efficient and safe performance.

MAINTENANCE

Couplings should be well maintained and inspected, particularly when the conditions of service include high working pressure and/or the transfer or storage of hazardous materials. Periodic inspection and testing will detect signs indicating deterioration, damage, or loss of performance before failure.

Gaskets: Use only gaskets approved by PT Coupling Company. The recommended seal material for a particular application has its limitations. Initial installation of a seal material should be followed by frequent inspections. This will help establish the routine inspection and service cycle.

Replacement is required when gasket becomes hard, brittle, or otherwise loses the characteristics required to perform in the intended manner.

Couplers: Periodically check seal surfaces on both coupler and adapter for signs of wear or corrosion. The adapter should be checked for excessive wear on the groove surface where contact is made with cam arms.

Cam arm and pin should also be periodically inspected for excessive wear. Worn or otherwise damaged cam arms and pins can prevent the coupler from operating in the intended manner.

To replace worn cam arm and pin, remove cam pin with hammer and punch. Install properly selected new cam arm and pin making sure the cam arm is positioned in the proper direction. The cam arm handle should always be pointed away from the female end of the cam and groove connection when the arm is in the closed position. Safety goggles should be worn during this procedure.



Recommended Materials

All recommendations are based on media temperature of 70° F. Since the resistance of metals, plastics, and elastomers can be affected by concentration, temperature, presence of other chemicals and other factors, this information should be considered as a general guide. Ultimately, the customer must determine the suitability of the material to be used.

LEGEND

Body Material		Gasket Material	
A	Aluminum	BN	Buna N (Standard)
B	Brass	BF	Buna N (Fuel)
C	Ductile Iron	NE	Neoprene
E	Stainless Steel	TF	Teflon®
S	Carbon Steel	VT	Viton®
P	Polypropylene	EP	EPDM
N	Nylon	SC	Silicone
☎	Consult PT	☎	Consult PT

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Media	Body Material	Gasket Material
Acetic Acid	AEP	EP
Acetic Anhydride	AEP	NE
Acetone	ACESPN	EP
Acetylene-dry	AEC	NE
Agricultural Lime Solutions	CESPN	BN
Air	ABCEN	BN
Alcohol-Amyl	BCESPN	BN
Alcohol-Butyl	ABCEPN	BN
Alcohol-Thyl	BCESPN	VT
Alcohol-Isopropyl	ABCESPN	BF
Alcohol-Methyl	BCESPN	BF
Alum	E	BN
Aluminum Chloride	P	BN
Aluminum Floride, 20%	ABCP	BN
Aluminum Nitrate	EP	BN
Aluminum Potassium Sulfate	AEP	BN
Aluminum Sulfate	EP	BN
Ammonia-Gas or Liquid	ACSPN	NE
Ammonium Chloride -Dry	CP	BN

Media	Body Material	Gasket Material
Ammonium Hydroxide	ACEP	EP
Ammonium Nitrate	AESP	BN
Ammonium Phosphate	EP	BN
Mono-Basic	E	BN
DI Basic or Tri-Basic	AEP	BN
Ammonium Sulfate	CEP	BN
Analine	ACESP	EP
Arsenic Acid	EP	BN
Asphalt	BCES	VT
Barium Chloride	BECP	TF
Barium Hydroxide	CESP	BN
Barium Sulfide	ESP	BN
Basic Slag	P	BN
Beer	ABEN	NE
Benzene/Benzol	ABCESN	VT
Benzine	ABCESN	BN
Bio-Diesel	☎	VT
Black Liquor (Paper Ind.)	P	VT
Bleach (12.5 Chloride)	P	VT
Borax	CESP	SC
Boric Acid	AEP	BN



Media	Body Material	Gasket Material
Brine	EPN	BN
Bromic Acid	P	VT
Burnt Limt (CA O)	ABCESPN	BN
Butadiene	ABCES	SC
Butane	ABCEN	BN
Butenes	ABCES	VT
Butyl Acetate-Dry	ABCES	EP
Butyle Stearate	ABE	BN
Butylene	ABCE	BN
Cadium Cyanide	P	BN
Calcium Acetate	BEP	EP
Calcium Bisulfite	EP	BN
Calcium Chloride	P	BN
Calcium Hydroxide	BCESP	BN
Calcium Hypochlorite	P	HP
Calcium Nitrate, 40%	ACEP	BN
Carbolic Acid (Phenol)	E	VT
Carbon Dioxide -Dry	ABCEN	BN
Carbon Disulfide	ABCES	VT
Carbon Tetrachloride	CEN	VT
Carbonated Beverages	AEN	NE
Carbonic Acid	AEN	BN
Castor Oil	EPN	BN
Caustic Potash (KOH)	CPN	EP
Caustic Soda (NA OH)	CPN	EP
“Cellosolves”		
Butyl or Ethyl	ABCES	TF
Methyl	ABCES	BN
Chlorobromomethane	BE	VT
Chloroform-Dry	ABN	NE
“Chlorex”	BN	NE
Chromic Acid, 50%	CEP	HP
Citric Acid	EPN	NE
Cobaltized Super Compound	P	BN
Copper Chloride-Dry	CSP	BN
Copper Sulfate	EP	BN
Copperized Super Compound	P	BN
Corn Oil	EPN	BN
Cottonseed Oil	AEPN	BN

Media	Body Material	Gasket Material
Cresote	ABCES	VT
Cresylic Acid	ABCES	VT
Cyclohexane	ABCESN	VT
Detergents	EPN	BN
Developer Solution	P	BN
Dextrose	AEN	BN
Diesel Fuels	ABCESPN	BF
Deithylene Glycol	ABCESP	BF
Deithyl Sebacate	☎	☎
Disodium Phosphate	P	BN
Dowtherm	S	VT
Ethanolamine	ACES	NE
Ether	ABEN	BN
Ethyl Acetate	CESPN	EP
Ethyl Chloride-Dry	ABE	BN
Ethylene	BCE	BF
Ethylene Dichloride-Dry	ABCES	VT
Ethylene Glycol	ABCESPN	BF
Ethylene Oxide	E	TF
Fatty Acids	EPN	BN
Ferric Chloride	BP	BN
Ferric Hydroxide	P	BN
Ferric Nitrate	EP	BN
Ferric Sulfate	EP	BN
Flourboric Acid	EP	☎
Formaldehyde, 40%	AEP	NE
Formalin	AEP	NE
Formic Acid	AEP	NE
Freon	ACESPN	NE
Fruit Juices		
Grapefruit	EN	NE
Lemon	EN	NE
Pineapple	EN	NE
Furfural	ABCE	NE
Gas -Coke Oven	☎	☎
Gasoline-Refined	ABCESN	BF
Gasoline-Sour	AEN	BF
Gelatin	AEPN	NE
Glucose	AEPN	NE
Glue	ABCESPN	BN
Glycerin	ABCESPN	BF



Media	Body Material	Gasket Material
Glycols	PN	BF
Green Liquors (Paper Ind.)	P	VT
Hexane	ABCESN	VT
Hydrobromic Acid	P	VT
Hydrochloric Acid	P	VT
Hydrocyanic Acid, 50%	AEP	EP
Hydrofluoric Acid, 48%	E	☎
Hydrogen Gas	ABCEN	BN
Hydrogen Peroxide	EP	VT
Hydrogen Sulfate	E	☎
“Hypo”	E	BN
Hypochlorous Acid, 20%	☎	VT
Isobutyl Acetate	ABESPN	EP
Isopropyl Acetate	CEP	EP
Jet Fuel	ABCESN	VT
Kerosene	ABCESN	BN
Lacquers	ABEN	BN
Lactic Acid, 20%	EPN	NE
Lactic Acid, 50%	EP	NE
Lard	EPN	NE
Lead Chloride Sulfate	P	BN
Lime Slurry	EPN	BN
Lime Sulfur	CESPN	BN
Linoleic Acid	EP	SC
Linseed Oil	EPN	BN
L.P.G.	ABCEN	BF
Magnesium Carbonate	BCESPN	BN
Magnesium Chloride	EP	BN
Magnesium Hydroxide	BCESPN	EP
Magnesium Nitrate	AEP	BN
Magnesium Sulfate	AEP	NBN
Meat and Bone Meal	APN	BN
Mercuric Chloride	P	BN
Mercury	CESPN	BN
Methane	ACEN	BF
Methanol	ABCESPN	BF
Methyl Amyl Acetate	P	EP
Methylene Chloride	EN	T
Methyl Benzene	ABCESN	VT

Media	Body Material	Gasket Material
Methylethyl Keton	ABCESPN	EP
Milk	EN	NE
Mineral Oil	ABCESPN	BN
Molasses	BCESPN	NE
Muriate of Potash (K CL)	CPN	BN
Muriatic Acid (H CL)	☎	VT
Naptha	ABESN	VT
Napthalene	ABCES	VT
Napthenic Acid	BCES	BN
Natural Gas	ACEN	BF
Nickel Chloride	EP	BN
Nickel Sulfate	BEP	BN
Nitric Acid	EP	VT
Nitrobenzene	ACESN	EP
Nitro Lime	P	BN
Octane	ABCESN	VT
Oil-Core	BCESN	BN
Oil-Fuel	ABCESN	BF
Oil-Hydraulic	ABCESPN	BN
Oil-Petroleum	☎	☎
Crude	CESN	BF
Refined	ABCESN	BN
Oil-Transmission	BCESPN	VT
Oil-Vegetable	EPN	NE
Oleic Acid	CESPN	BN
Oleum	CS	VT
Oxalic Acid	APN	BN
Oxygen	ABCEN	BN
Palmitic Acid	EPN	BN
Paraffin	ABCESPN	BN
Pentachlorophenol-Dru	S	TF
Perchloroethylene	CEN	VT
Phosphoric Acid	EP	☎
Photographic Solutions	PN	VT
Phthalic Anhydride	ABCESPN	NE
Picric Acid		
Molten E	E	☎
Aqueous Solution	EP	☎
Plating Solutions	P	EP
Potassium Acetate	BCE	EP



Media	Body Material	Gasket Material
Potassium Chloride	PN	BN
Potassium Cyanide	ESN	BN
Potassium Dichromate	ABCESN	BN
Potassium Flouride	ABCESPN	☎
Potassium Hydroxide,30%	EPN	EP
Potassium Nitrate	ABCEPN	BN
Potassium Sulfate	ABEPN	BN
Propionic Acid	EPN	NE
Propylene Glycol	ABCPN	BN
Propylene Oxide	ESN	EP
Rosi	AEPN	BN
Salt Water	BEPN	BN
Shellac	AEPN	BN
Silicone Fluid	EN	EP
Silicone Oil	EPN	NE
Silver Nitrate	PN	EP
Soap Solutions	EPN	BN
Soda Ash	CESPN	BN
Sodium Bicarbonate	BEPN	BN
Sodium Bisulfate	EP	BN
Sodium Borate	ABEPN	BN
Sodium Carbonate	CESPN	BN
Sodium Chloride	BCESPN	BN
Sodium Cyanide,10%	CESPN	BN
Sodium Dichromate, 10%	AESP	HP
Sodium Hydroxide, 40%	CEPN	NE
Sodium Hypochlorite, 20%	P	☎
Sodium Metaphosphate	BEPN	BN
Sodium Nitrate	ACESPN	EP
Sodium Peroxide	CESP	EP
Sodium Phosphate		
Mon-Basic	BCESP	BN
Di-Basic	BCESP	BN
Tri-Basic	BCESP	BN
Sodium Silicate	BCEP	BN
Sodium Sulfate	BEPN	BN
Sodium Sulfide	ESP	BN
Sodium Thiosulfate	SP	BN
Soybean Oil	SPN	BN

Media	Body Material	Gasket Material
Stannic Chloride	P	☎
Stannous Chloride, 15%-Dry	CE	HP
Steam 400>F	CE	VT
Stearic Acid	EP	BN
Stoddard Solvent	ABCES	BF
Styrene	VT	VT
Sugar Liquors		
Cane	ABCESPN	NE
Beet	ACESPN	NE
Sulfate Liquors	EP	BN
Sulphite Liquors	EP	VT
Sulfuric Acid	☎	☎
Sulfurous Acid	EP	HP
Superphosphate	P	BN
Tannic Acid, 10%	EP	HP
Tar-Wood	ABCESP	BN
Tartaric Acid	EPN	BN
Titanium Tetrachloride-Dry	ESPN	VT
Toluene/Toluol	ABCESN	VT
Tetrachloroethylene	EN	VT
Trichloroethylene-Dry	BCESN	VT
Triethanolamine	ACEP	EP
Trisodium Phosphate	ESPN	BN
Urea	AEP	BN
Urine	PN	NE
Varnish	AEN	VT
Vinegar	EPN	NE
Water		
Acid Mine	EN	BN
Deionized	PN	NE
Demineralized	PN	NE
Distilled	AEPN	NE
Fresh	ABEPN	BN
Salt	BEPN	BN
White Liquor (Paper Ind.)	E	BN
Wine	EN	NE
Xylene/Xylol	ABESN	VT
Zinc Chloride	P	BN
Zinc Nitrate, Sulfate	AEPN	BN