

949.458.3731 www.ipolymer.com | info@ipolymer.com



## IPS is a Quality Supplier of High Purity Flow Control Products

for the Life Sciences, Semiconductor, Alternative Energy and Chemical Process Industries

International Polymer Solutions Incorporated is the proud manufacturer of BECO and TEQCOM products offering a full line of plastic pneumatic, solenoid, and manual valves. We always welcome opportunities to accommodate custom fluid control products to meet our customers' application specific needs.







**Pneumatic Valves** 



**PTFE Solenoid Valves** 



**PTFE Manual Valves** 



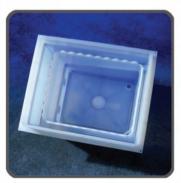
**PTFE Hand Sprays** 



**PTFE Fittings** 



Air Cylinders



**High Purity Tanks** 



**Teflon Pneumatic Valve** 



**Corrosion Resistant Valve** 



**Quick Dump Valve** 



international polymer solutions

## **IPS Product Cross Reference Chart**

Product NameImage ConstraintsImage ConstraintsMiniature "M" Series PTFE Solenoid ValveM-*M-*Sub Mini "S" Series PTFE Solenoid ValveS-*S-*Miniature Pneumatic ValveM-*MTV-*PTFE Suck Back ValveSBV-*SBV-*PTFE Liquid AspiratorTA-A-*A-*PTFE Dilution Drain ValveDDV-*DDV-*Diverter ValveDVTR-*DTR-*Air CylinderTAAC-*AC-*Pneumatic Drain ValveDV-*DV-*Chemical / Corrosion Resistant ValveACR-*CR-*H2O - Pneumatic & Foot Operated ValveTA-*WV-*DI Water ValveDI-*MP-*Teflon Pneumatic ValveTA-CV-*BCV-*PTFE Check ValveTA-CV-*BCV-*PTFE StopcockTA-SC-*SC-*PTFE StopcockTA-SC-*SC-*PTFE Ball ValveBV-*BV-*PTFE Disc FilterTDF-*BDF-*	0
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PTFE Ball Valve BV-* BV-*	
PTFE Disc Filter TDF-* BDF-*	
PTFE Eye Wash TA-EW-* EW-*	
PTFE D.I. Spray Gun TA-SG-* SG-*	
N2 Dispensing / Drying Gun TA-N2-* Nitro-*	
Dispensing Liquid Gun TA-DG-* DG-*	
Recirculation Spray Gun RECIRC* RC-*	
PTFE Barrier / TA-GI-* ~	
PTFE Pressure RVX-* RV-*	
Inline Diaphragm Valve ~ IDF-*	
Quick Dump Valve ~ QD-*	
Various High Purity See Literature See Literature Fittings & Connectors	iture

## **Fitting Description & Uses**

**Pipe:** National Pipe Thread (NPT) threads are tapered at a rate of 1/16"/inch. The threads should be treated with joint compound or Teflon Tape. These connections are common for day-to-day use of low pressure gas and liquids.

Flared: Flared connections offer long term reliability and high pressure sealing. Mission critical connections and considered an ultra clean connection. Requires field flaring of tube with special tool after mating nut is installed.

common connection for plastic applications. They accommodate fast assembly. Nut can include an integral gripper or external gripper.

tube with special tool after mating nut is installed.

Compression: This fitting accepts straight tube with ferrule & nut (with/without gripper).
Compression Tube fittings are the most

**Barbed:** Low pressure fitting to mate with hose and tube connections. The angled barbs grab the ID of the hose or tube. Fast connection and reusable. Not intended for corrosive fluids and gases.



## **Common Polymers & their Descriptive Use**

**PTFE polytetrafluoroethylene:** Material of choice for low friction applications. Excellent heat and chemical resistance. Suited for most corrosive and high temperatures 240°C (460°F) applications. Chemical inertness makes it difficult to bond and weld. See TFM-1600 & PFA as high performance alternatives.

**TFM Dyneon-1600 Enhanced PTFE:** TFM is a modified PTFE blend. Designed for molding with good free flowing properties. Commonly used as liners for the Chemical Industry. Excellent material for sealing and seating in valve components. Good weld ability with service temperatures up to 260°C (500°F).

**PFA perfluoroalkoxy:** PFA has exceptional heat resistance, excellent chemical and weather resistance. Ideal for corrosive and high temperatures 260°C (500°F) applications. Suitable for molding and critical components in valves and pumps.

**PVDF polyvinylidenefluoride:** PVDF is ideal for a variety of applications such as pumps, valves, sheet products, pipes, tubes and fittings needing excellent chemical resistance and operating temperatures up to 150°C (300°F).

**PEEK polyetheretherketone:** PEEK is a strong, chemical and heat- resistant thermoplastic. Biocompatibility allows for use in medical applications. Frequently used as bearing material and as structural components in high performance plastic devices. Service temperatures up to 150°C (300°F).

**POL polypropylene:** POL is a common thermoplastic polymer. One of most versatile high purity polymers used in a wide variety of clean and corrosive applications. It is rugged and resistant to many chemical solvents, bases and acids. Service temperature up to 60°C (140°F).

Hard PVC polyvinylchloride: PVC is a rigid strong polymer. The work horse of daily-use plastics. PVC is common for enclosures, plumbing and flow devices. However, it will degrade with UV exposure and is susceptible to chemical corrosive attack. Service temperatures up to 70°C (160°F).