Selection Guide for OMEGA®
Quick Disconnects & Fittings

OMEGA’s couplings and fittings are widely used in industrial plants, machine shops, labs, and in the home in many consumer products. Their unique design and ease of operation add value to any plastic tubing connection.

Over 800 OMEGA® couplings and fittings make tubing connections easier. Local assistance in specifying couplings or fluid connections is available from our worldwide distributor network.

Custom designed couplings and fittings for OEM’s.
Thousands of unique coupling and fitting application solutions have come from OMEGA’s engineering staff. They’re ready to work with you and your OEM designers to meet your special requirements.

Our assortment of quick disconnects gives you many choices. Shown here: the Subminiature, Chrome-Plated Brass, MC; Delrin Acetal, FT-PLC; ¼” Extra Flow Coupling and ⅜” High Flow Coupling.

Thermoplastic Quick Disconnect Couplings

Delrin Acetal Coupling, 1/8” Flow FT-PMC, see page L-99
1/8” flow Delrin acetal couplings with general chemical resistance for all-around use. Ideal for pneumatic, liquid, gas and vacuum applications.

Delrin Acetal Coupling, 1/4” Flow FT-PLC, see page L-101
1/4” flow Delrin acetal couplings with general chemical resistance for all-around use. Ideal for pneumatic, liquid, gas and vacuum applications.

Polypropylene Coupling, FT-PMC-12 & FT-PLC-12, see page L-103
1/8” and 1/4” flow, polypropylene material for increased chemical resistance. An economical replacement for stainless steel couplings. Ideal for chemical handling, laboratories, instrumentation, and caustic environments.
New High Flow Thermoplastic Quick Disconnect Couplings...

High Flow Coupling, FT-HFC-12, see page L-105
OMEGA’s high capacity polypropylene coupling for 3/8", 1/2" and 3/4" tubing. 3/8" flow path minimizes pressure drop with high viscosity fluids or chemicals.

New Polysulfone High Flow Coupling, FT-HFC-35, see page L-107
Higher temperature and pressure quick disconnect with 3/8" flow path for minimal pressure drop. Hose barb ends for 3/8", 1/2" and 3/4" tubing.

New Sizes!

New FT-HFC-35

Streamline Coupling, 1/8" Flow FT-PMC, 1/4" Flow FT-PLC, see pages L-99 & L-101
New streamlined design makes this in-line coupling more affordable for tight budget OEM applications. Ergonomic enhancements make it easier to disconnect.

Subminiature Coupling, FT-SMC, see page L-109
The small twist lock coupling with a leak-free O-Ring seal. For 1/16" and 1/8" ID tubing.
Chrome-Plated Brass Couplings

Chrome-Plated Brass Coupling, 1/8" Flow FT-MC, see page L-111

1/8" flow brass couplings are durable and attractive. Rated to 250 psi for higher pressure applications: air supply lines, cooling lines, beverage dispensing and instrumentation.

OMEGA® standard chrome-plated brass couplings have Delrin acetal valves and Buna-N seals. Other valve and O-Ring materials are available.

Chrome-Plated Brass Coupling, 1/4" Flow FT-LC, see page L-113

1/4" flow brass couplings are a larger flow quick coupling. Rated to 250 psi for higher pressure applications: air supply lines, cooling lines, beverage dispensing and instrumentation.

Keyed & Color-Coded Chrome-Plated Brass, see page L-116

Three unique mechanically keyed and color-coded quick disconnect configurations prevent interchange of fluid lines.
Specialty Couplings

Multitube Couplings, see page L-117
Quickly connect up to ten tubing lines with a single connector. Connections for both 1/16" and 1/8" tubing.

Multiple Mount Couplings, see page L-119
Connect 3 to 5 tubing lines at once with standard quick couplings. Delrin acetal or chrome-plated brass couplings.

Shutoff Valves, see page L-122

Fittings & Accessories

Soft Tubing Fittings, see page L-123
Easy-to-use, clamp-free fittings won't damage tubing. Made for flexible vinyl tubing in 1/4", 3/8" and 1/2" ID sizes.
OMEGA® Quick Disconnect Couplings For Small Plastic Tubing

OMEGA® Couplings add the convenience of quick disconnect coupling with easy operation. Press the thumb latch and the coupling halves separate. Connection is just as easy: simply push the two halves together. An audible “click” along with a positive feel assures you of a reliable leak-free connection.

Proven reliable, OMEGA® couplings are used for liquid, air and gas connections in instrumentation, biomedical and general industrial applications. The variety of mounting options and end configurations fits even the most difficult tubing applications. Economical OMEGA® couplings are an excellent choice for reusable or disposable applications.

Built-in terminations include: pipe threads, hose barbs, and ferruleless compression fittings for easy connection to soft or semi rigid plastic tubing from 1/16” to 3/4” and 3 mm to 19 mm ID.

Automatic latching
To connect coupling—slide insert into body, feel the latch engage, hear the click. It’s secure.
One-hand disconnect—press thumb latch and separate the halves.

Flow options include:
- **Straight through** – open flow path with no valve.
- **Single shutoff** – valves in either coupling insert or the coupling body.
- **Double shutoff** – valves in both the insert and the body of the coupling.

Coupling materials – Delrin acetal, polycarbonate, polypropylene, ABS, polysulfone or chrome plated brass ensure media and application compatibility.

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Coupling Materials

**DELRIN ACETAL THERMOPLASTIC**
A general purpose thermoplastic material that is lightweight, non-corrosive, strong and economical.

**Applications:** Air, oil, water, or gas supply and drainage lines, beverage or food handling.

**POLYPROPYLENE THERMOPLASTIC**
Chemically resistant; replaces heavy brass or stainless steel couplings. Gamma sterilizable.

**Applications:** Chemicals, photo processing, laboratory work, caustic fluid and gas transfer, medical disposables.

**POLYSULFONE THERMOPLASTIC**
Superior strength and good chemical resistance, ideal for strong oxidants, hot/cold liquids. Withstands repeated sterilization.

**Applications:** Bleach, chemicals, hot water, gas transfer, potable water systems, medical uses requiring autoclaving.

**CHROME-PLATED BRASS**
Durable and attractive, chrome-plated brass quick couplings are excellent for higher pressures and temperatures.

**Applications:** Pneumatic air supply, instrumentation, cooling and high temperature lines.
Mounting Configurations

Quick couplings and connectors add versatility and convenience to any fluid handling system. OMEGA® couplings are economical and easy to install. They quickly pay for themselves in labor and maintenance cost savings. OMEGA’s leak-free couplings include a variety of built-in end fitting and mounting options.

RIGID MOUNT
Pipe threads are standard for body and insert halves of most plastic and brass couplings. Sizes include 1/8” to 3/4” NPT, BSPT, GHT, JTPT and 10-32 UNF threads.

PANEL MOUNT
Easy to mount in panels up to 1/2” thick. Available for both insert and body halves of the coupling.

IN LINE
Convenient configuration for tube splicing. Built-in thumb latch shroud protects against accidental disconnections.

ELBOW
OMEGA’s 90° elbows are available for inserts with both hose barbs and ferruleless fitting connections.

Interchangeable Bodies & Inserts
Delrin and chrome-plated brass coupling halves are interchangeable. Polypropylene coupling halves cannot be interchanged with other materials.

Valving Options
Valves stop flow automatically when the coupling is disconnected. Shutoff valves are available in both the body and insert half of the coupling.

STRAIGHT THRU FLOW - no valve in either half.
Insert, straight thru

SINGLE END SHUTOFF - one valve in either half.
Insert, straight thru

DOUBLE END SHUTOFF - valves in both halves.
Insert, with valve

High Flow Valves
OMEGA® couplings provide the highest flowrate with the smallest pressure drop of any comparable coupling on the market. Two different OMEGA® valve designs fit most applications:

FT-MC/PMC & FT-LC/PLC Series valves

High Flow coupling, FT-HFC Series valves

Tubing Connections

HOSE BARBS
Ideal for PVC, polyurethane and other rubber and plastic tubing. Available for 1/16” to 3/4” and 3 mm to 19 mm ID tubing sizes.

FERRULELESS, PTF
OMEGA’s unique ferruleless design ensures leak-free connections to semi-rigid tubing such as polyethylene or nylon. Available for 5/32”, 1/4” and 3/8” OD tubing (and metric equivalents).
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