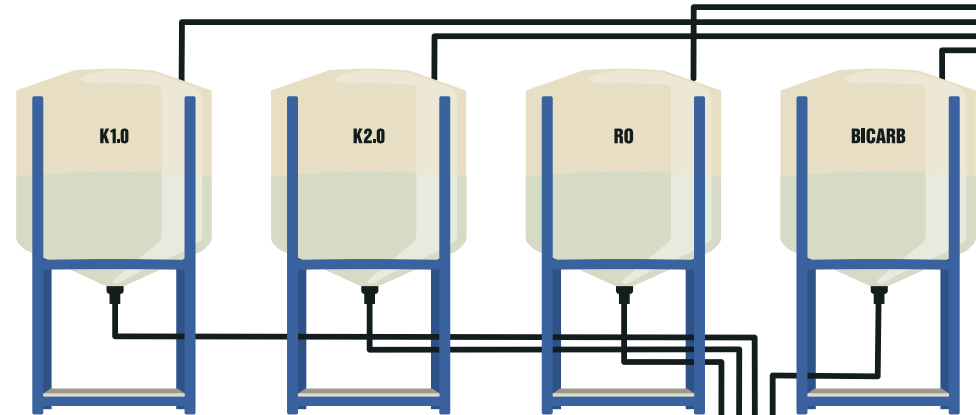


CLINICAL DIALYSIS APPLICATIONS

Used in chemical and water applications worldwide, high performance quick disconnect couplings may be used in dialysis clinics on everything from the acid and bicarbonate lines to the water lines used on reverse osmosis (RO) water treatment systems. Save time reconnecting pipe threads and tubing onto fixtures and hose barbs by installing quality quick disconnect couplings. Utilize a valved quick coupling to minimize drips and spills.



DISTRIBUTION SYSTEMS

Biomedical Technicians ("Biomed Techs") who service dialysis equipment, RO water treatment systems and dialyzer reprocessing equipment can save time and money by using couplings to disconnect equipment from acid, bicarbonate, RO water and disinfectant service lines. Replacement tubing, piping, pumps and tank vent filters can also be brought on line rapidly using quick disconnects to minimize down time. Choose a coupling with a shutoff valve to prevent spills.



Acid/bicarbonate and chemical waste pumps and line connections: Consider polypropylene HFC12 with EPDM seals.

RO water line connections: Consider polysulfone HFC35 with EPDM seals.

Tank vent filter connections: Consider polypropylene PLC12 with EPDM seals for chemical tanks or acetal PLC with Buna-N seals for RO water tanks.



DIALYSIS EQUIPMENT

Quick disconnect couplings are a great solution for connecting dialysis machines to acid, bicarbonate, RO water and chemical waste service lines or containers.* Tubing and piping internal to the dialysis machine which require frequent connect/disconnect cycles can also be fitted with couplings for ease of maintenance. With tubing hose barb connections as small as 1/16" and pipe threads as small as 1/8" NPT, there are a wide range of coupling sizes.

Acid/bicarbonate line connections: Consider polypropylene PLC12 with EPDM seals.

RO water line connections: Consider polysulfone HFC35 with EPDM seals.

Chemical waste line connections: Consider polypropylene HFC12 with EPDM seals.

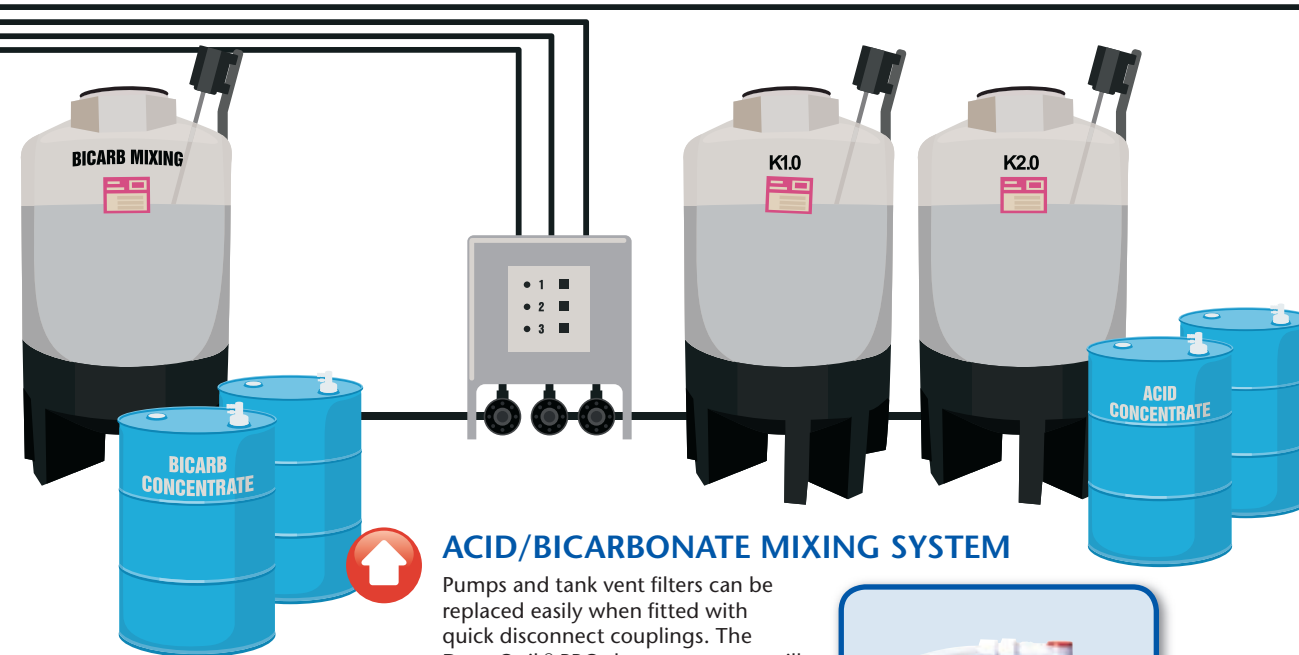
Small to medium lines internal to dialysis equipment: Consider SMC in acetal, polypropylene or polycarbonate; APC in acetal; MPC in medical-grade ABS, polycarbonate or polysulfone.

*Some dialysis OEM's require use of proprietary couplings for service connections.



Dialyzer quick connects: Consider APC in acetal, or MPC in ABS, polycarbonate or medical-grade polysulfone.

Chemical bag-in-box connections: Consider polypropylene Puncture Seal (PS) or UDC.



ACID/BICARBONATE MIXING SYSTEM

Pumps and tank vent filters can be replaced easily when fitted with quick disconnect couplings. The DrumQuik® PRO drum connector will also provide a safe, closed connection to concentrated liquid acid or bicarbonate drums.



Acid/bicarbonate pumps and line connections: Consider polypropylene HFC12 with EPDM seals.

Acid/bicarbonate tank vent filter connections: Consider polypropylene PLC12 with EPDM seals.

Dispensing line connections to drums: Consider polypropylene DrumQuik® PRO with EPDM seals.



ON-SITE DIALYZER REUSE REPROCESSING

Quick connects on dialyzer water flush manifolds and reuse reprocessing equipment quickly and securely connect the dialyzer filter element to reprocessing equipment, or to connect reprocessing equipment to chemical bag-in-box containers or service lines.

Dialyzer quick connects: Consider APC in acetal, or MPC in ABS, polycarbonate or medical-grade polysulfone.

Chemical bag-in-box connections: Consider polypropylene Puncture Seal (PS) or UDC.

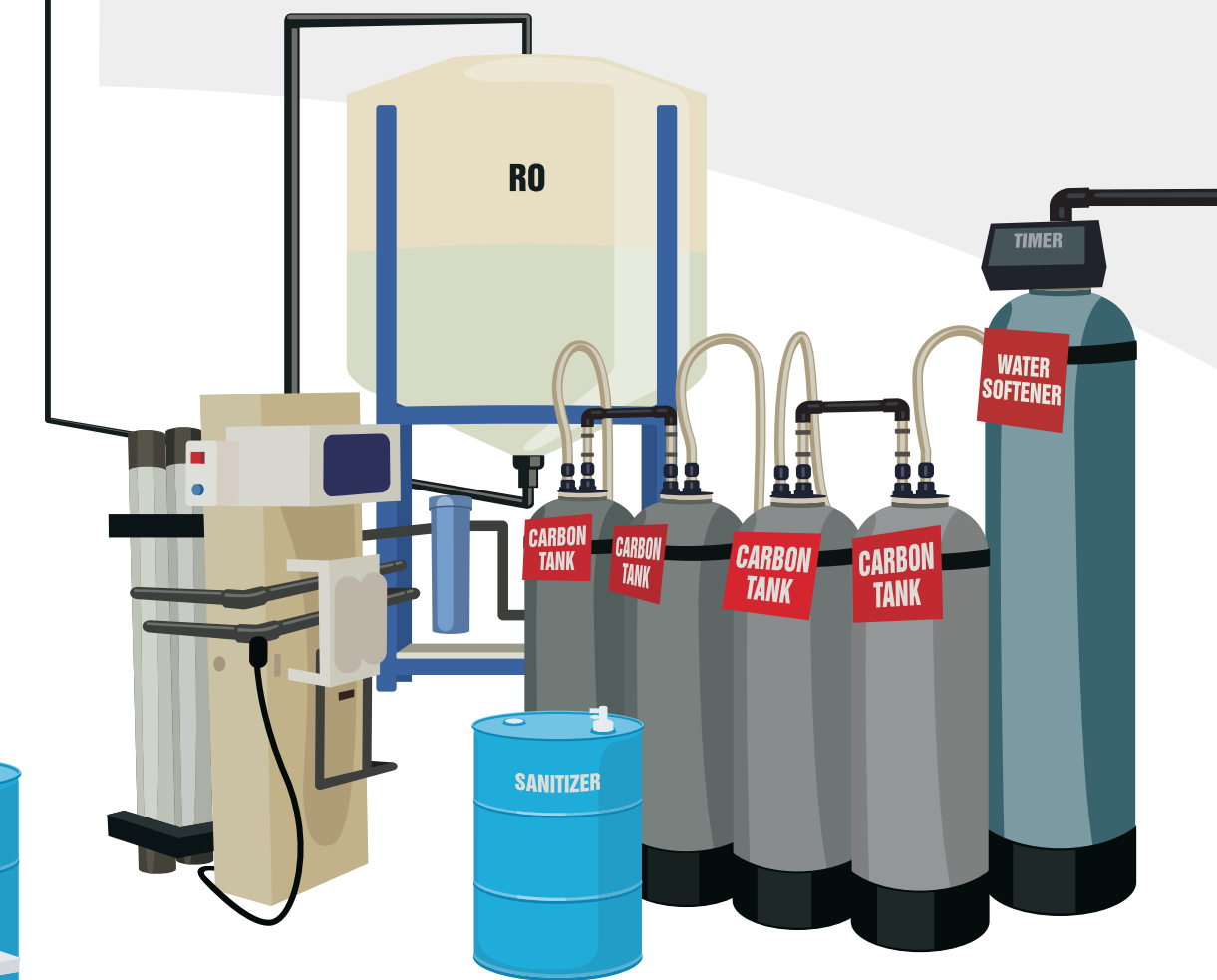


WATER TREATMENT SYSTEMS

Many RO systems already make use of PLC quick disconnect couplings to attach to pre-filtered water lines and down stream pumps, tanks or dialysis machines. Larger systems can be quickly isolated or recycled for flushing or sanitizing purposes by using HFC35 couplings. Dispensing sanitizing chemistries to water systems can also be facilitated by using polypropylene PLC12 couplings.

RO water line connections: Consider acetal PLC with Buna-N seals or polysulfone HFC35 with EPDM seals.

Sanitizing chemical connections: Consider polypropylene PLC12 and DrumQuik® PRO with EPDM seals.



PORTABLE SYSTEMS RE-CHARGING AND MAINTENANCE

By modularizing equipment with quick disconnect couplings, portable RO, carbon tanks and dialysis equipment can be quickly and easily swapped out for repair and preventative maintenance or off-site re-charging. Automatic shutoff valves minimize spillage during changeovers.

Acid/bicarbonate and chemical waste line connections: Consider polypropylene PLC12 with EPDM seals.

RO water line connections: Consider PLC with Buna-N seals.



DIALYSIS COUPLINGS

SMC: Compact design; polypropylene version with EPDM seals provides chemical resistance
Material: Acetal, polypropylene, polycarbonate
Termination Sizes: 1/8 NPT or 1/16" – 1/8" hose barb
Feature: Smallest coupling; twist to connect



PLC: Suitable for small to medium size water line connections; mates with metal LC couplings
Material: Acetal
Termination Sizes: 1/4"- 3/8" hose barb or NPT pipe thread
Feature: General purpose coupling



PLC12: EPDM seal is suitable for use with acid, bicarbonate and chemical sanitizers; mates with metal LC couplings
Material: Polypropylene
Termination Sizes: 1/4" - 3/8" hose barb or NPT pipe thread
Feature: Chemically-resistant coupling



APC: All plastic coupling for small to medium size water lines
Material: Acetal
Termination Sizes: 1/4" - 3/8" hose barb or NPT pipe thread
Feature: Plastic-latched coupling



NS2, NS4, NS6: Non-spill design for safe, secure connections
Material (NS2): Glass-filled polypropylene
Termination Sizes: 1/8" – 1/4" hose barb or 1/8" NPT pipe thread
Feature: Compact design



Pictured: NS2

Material (NS4): Glass-filled polypropylene, ABS
Termination Sizes: 1/8" – 3/8" hose barb
Feature: Plastic, non-spill design

Material (NS6): Glass-filled polypropylene
Termination Sizes: 3/8" – 1/2" hose barb
Feature: Higher flow, non-spill design

MPC: Small to medium size coupling with Class V or Class VI seal material options
Material: Medical-grade ABS, polycarbonate and polysulfone
Termination Sizes: 1/4" and 3/8" hose barbs, non-valved only
Feature: Medical-grade coupling



HFC12: For larger fluid lines that require chemical resistance such as spent dialysate lines or acid and bicarbonate connections

HFC35: For larger raw or RO water lines; includes female garden hose thread termination for connection to water spigots
Material: HFC12: Polypropylene (as shown)
 HFC35: Polysulfone (white)

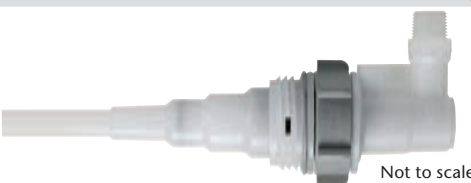
Termination Sizes: 3/8" – 3/4" hose barb or NPT pipe thread
Feature: High flow family of couplings



DrumQuik® PRO: Secure, easy-to-use connection to acid or bicarbonate concentrate and sanitizer drums

Material: Food grade, virgin polypropylene and polyethylene
Termination Sizes: 3/8" – 3/4" hose barb, 1/2" NPT or 3/4" BSPP. Fits 2" buttress or BCS 56x4 threaded drum bungs.

Feature: Integrated dip-tube and drum closure



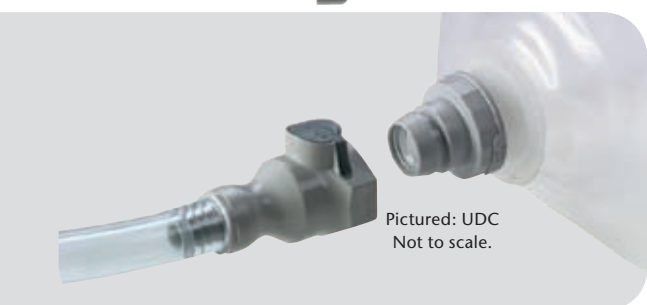
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Flexible Packaging: Provide closed connection to bag-in-box chemical packaging; insert/cap with connector body

Material (Puncture Seal): Polyethylene (LDPE) and polypropylene
Termination Sizes: 1/4" - 3/8" hose barb - cap fits 38mm bag-in-box thread-on spout

Feature: Puncture seal coupling

Material (UDC): Polypropylene
Termination Sizes: 3/8" – 3/4" hose barb
Feature: 38mm threaded cap



Pictured: UDC
Not to scale.

Colder Products Company

Colder Products Company is the leading provider of quick disconnect couplings for life sciences, industrial and chemical markets. Used in a broad range of applications, innovative coupling and fitting technologies from Colder allow flexible tubing to be quickly and safely connected and disconnected. Colder's engineered solutions improve the overall function and design of the equipment and processes in which they are used. Special product features include built-in shutoff valves to minimize product spills and an easy-to-use, push-button thumb latch for quick connecting and disconnecting.

Couplings are used to connect critical parts of the dialysis process such as the RO water systems, waste lines and cleaning chemical connections. Couplings are also used to connect tubing to the dialysis filter and inside dialysis machines to connect flexible tubing to the various pumps, filters and monitors. Couplings are also found in larger dialysis clinics as part of installed plumbing systems delivering the different media to each dialysis station. RO water systems and the equipment used to prepare media all employ couplings to rapidly transfer fluids and set up systems. In clinics that reprocess dialyzers, connectors attach the dialyzer to reprocessing units. Leak-free couplings virtually eliminate messy drips and spills due to their simple, intuitive design.

Cleaner, Faster, Safer, Smarter



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Colder Patent Statement: Colder Products Company takes pride in its innovative quick disconnect coupling solutions, many of which have been awarded United States and International patents. Colder Products Company has a strong tradition of leadership in the quick disconnect market, and aggressively pursues and protects its proprietary information and intellectual property. In cases where it is practical and as a benefit to its customers, Colder Products Company has licensed its proprietary technology. Please contact Colder Products to discuss your unique needs.

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Couplings for Clinical Dialysis Systems

Pure Water Systems
 Dialysate Acid & Bicarbonate Systems
 Dialyzer Reprocessing

