Dry Disconnect Couplings

Series 1700D

The Kamvalok® dry disconnect coupling continues to be the standard of the industry. It provides automatic closure from both directions — the coupler and the adapter. It is still the first choice for loading/unloading operations and manifold mixing/blending.

Sizes: ¾”, 1½”, 2” and 3”.

Series 1600AN

The Kamvalok® coupler and adapter are designed with female threads and can be fitted to either a male pipe end or to a hose fitting. Flanged end adapters are made for specific operations, including in-plant and transportation.

Sizes: ¾”, 1½”, 2” and 3”.

Series 1673ANF

The Civacon 1673ANF dry disconnect adapter keeps hazardous chemicals and vapors in the line and out of the environment with an easy access connection for tank cars, tank trucks, intermodal tanks, and in-process operations.

The 1673ANF dry disconnect adapter is made specifically for applications using an ANSI flange.

Features
• Raised face flange, or optional tongue and groove design.
• Connection with a D2000™ actuating coupler or Kamvalok dry disconnect coupler (1700 Series).
• Quick disassembly for easy cleaning.

Series 2173AVN

The 2173AVN has easy access in recovering vapors and provides a dry disconnect connection for top or bottom loading/unloading tank truck operations.

Features
• Vapor hose connection made with 2” Kamvalok dry disconnect or D2000 activating couplers.
• 3” straight thread mounting with 2” dry disconnect cam and groove connection. Becomes a 3” x 2” adapter for “QRB” valves.
• Low profile keeps fitting below rollover plane to minimize damage in case of rollover. Stays within IMO profile dimensions.
• Easy attachment to existing MC307, DOT407, MC312 and DOT412 trailers, no modification to trailer required.
• Quick-clean disassembly design.

Dry Disconnect Coupling Actuators

Series D2000™

If your application requires automatic closure from only one flow direction, the D2000 Actuator provides your best dry disconnect value. Ideal for vapor recovery and suction pump applications.

Series D2000 Dry Disconnect Coupling Offers
• Easy to clean design.
• Built-in valve.
• Low cost design.
• Heavy duty construction.
• Easy-to-use cam and groove design.
• Compatible with Kamvalok adapters.
• Simple design for reliable operation.

Sizes: 1½” and 2”.

Kamvalok is a registered trademark and D2000 is a trademark of Civacon.
Kamvalok® Dry Disconnects are used on multi-compartment petroleum, solvent, and chemical product delivery trucks with an onboard pumping unit.

Features
• Built-in elbow and swivel for freedom of movement when used with a hose on tank trucks.
• Swivel end is 2” female NPT.
• Poppeted adapter and coupler minimizes product loss during routine disconnect.
• Built-in valve, no additional valve required.
• Quick disconnect, cam and groove style for ease of use.
• Automatic shut-off with accidental disconnect to minimize product loss.

Size: 2”.

Dry Disconnect Couplings Transport Series

Elbow Swivel Coupler
Series 1711ES-1712ES

Features
• Two-piece aluminum construction with a rotatable hard-coated adapter for longer life.
• One-piece heavy-duty poppet with an acetal resin bearing for smoother opening characteristics.
• Computer designed cam profile provides easy opening.
• Lighter weight “Duratuff” corrosion resistant lever.
• Designed in accordance with API RP-1004 TTMA flange inlet.
• Acetal Resin Poppet Guide for smooth operation.
• Mounting lugs provided for Model 100 brake interlock valve.

Dry Disconnect Adapter
Series 1611AN-1612AN

Features
• Poppeted adapter minimizes product loss.
• Built-in valve prevents spillage.
• Quick disconnect, cam and groove style for ease of use.
• Automatic shut-off on accidental disconnect.

Sizes: 2” and 3”.

Dry Disconnect Coupling
Series 861

Features
• Hard-coat anodized for longer wear.
• Designed in accordance with API RP-1004 TTMA flange inlet.
• Acetal Resin Poppet Guide for smooth operation.
• Mounting lugs provided for Model 100 brake interlock valve.

Dry Disconnect Coupling
Series 866

Features
• Built-in elbow and swivel for freedom of movement when used with a hose on tank trucks.
• Swivel end is 2” female NPT.
• Poppeted adapter and coupler minimizes product loss during routine disconnect.
• Built-in valve, no additional valve required.
• Quick disconnect, cam and groove style for ease of use.
• Automatic shut-off with accidental disconnect to minimize product loss.

Size: 2”.

A Petroleum Industry application for dispensing product from tank trucks.
# Dry Disconnect Couplings — Kamvalok® Series

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*Stainless Steel Corrosion Resistance is comparable to 304 Stainless Steel.

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# D2000™ Series

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Kamvalok is a registered trademark and D2000 is a trademark of Civacon. Viton and Teflon are registered trademarks of the DuPont Co. and Chemraz is a registered trademark of Greene Tweed.
Dry Disconnect Hose Coupling Assembly

Pressure Data

Maximum working pressure:
- 1” size – 210 psi
- 1½” size – 210 psi
- 2” size – 150 psi
- 3” size – 120 psi

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

Vacuum: Tested to 28” vacuum in all positions without leakage.

Miscellaneous test data: Bending Moments (coupled assembly): Maximum 200 ft/lbs at the swivel.

Temperature: The Dry Link™ adapter/coupler assembly has an operating temperature range of -20°F to 230°F (-29°C to 110°C), using Viton® or EPDM seals and 20°F to 230°F (-7°C to 110°C) using Teflon® seals.

Materials: Wetted Metal Parts: All 316 Stainless Steel.

Seals: Choice of Viton, EPDM or Teflon (1” and 1½” available only with Teflon seals).
Todo-Matic® Dry-Break® Hose Coupling

Todo-Matic® range of Dry-Break® couplings come in sizes from \( \frac{3}{4} \) to 6", a wide range of material options, and offer advanced fluid handling solutions for a diverse range of industries. Designed for safe and easy use with minimum operator intervention. Todo-Matic® couplings offer an unbeatable combination of technical, safety and performance features.

- Valves open and close automatically on connection and disconnection.
- Simple single action operation, no levers or switches to operate.
- Valves are guaranteed closed prior to disconnection.
- Minimal residual loss on disconnection (e.g., maximum 0.35cc for 2” DN50).
- Will connect and disconnect under pressure and flow where necessary.
- Extremely reliable, very few moving parts.
- Robust construction, no external operational components.
- Available with selectivity system to prevent cross contamination.
- Reduces spillages to virtually zero.
- Dramatically improves both operational and fugitive emission performance.
- Reduces the possibility of human error in transfer operations and improves efficiency.

1” Todo-Matic® (DN19 – DN32, 56mm)
Todo-Matic® Dry-Break® couplings in 1” size are designed for smaller bore applications where compact dimensions are required. One handed operation, high flow rate and minimal release on disconnection make Todo-Matic® perfect for transferring high value or sensitive medias with confidence.

2” Todo-Matic® (DN40 – DN50, 70mm)
The 2” coupling size probably covers the most diverse selection of applications in the Todo-Matic® family. Available in a range of material and connection configurations, Todo-Matic® 2” is designed for rapid and safe transfers — offshore chemical dosing, pharmaceutical feedstock and aggressive chemical vapor transfer.

2½” Todo-Matic® (DN65 – DN80, 105mm)
The 2½” Todo-Matic® coupling is generally used in road tanker and aviation applications transferring a variety of liquids and vapors. The 2½” is available in a full range of materials to offer compatibility with most applications — strong integral swivel, ergonomic design and rugged construction.

3” Todo-Matic® (DN60, 119mm)
A true 3” coupling, similar in size to the 2½” but with greater flow. Typically used for road and rail tank loading/discharge, in plant chemical transfers etc. — tough construction, ease of handling, no spillage and high flow.

4” Todo-Matic® (DN100, 164mm)
Without exception, the most compact, lightweight, high flow 4” self sealing coupling system available. Used extensively for offshore ship to rig transfers of fuels and drinking water, aviation fuel bunkering, rail tank loading/discharge, chemicals, etc.

6” Todo-Matic® (DN150, 238mm)
The 6” Todo-Matic® makes the ideal ship/barge to shore connection and much faster and safer than any flange coupling. Not only environmental standards compliance but real turn around time savings. Full marine construction with rotating lifting loop as standard and equally suitable for flexible hose or loading arm applications.

Hose Unit with Flange
All sizes of the hose unit are also available with flange.

Todo-Matic and Dry-Break are trademarks of The NovaFlex Group.