



CARGO TRANSFER SYSTEMS B.V.

Tel.: +31 (0)10 - 2622160

Fax: +31 (0)10 - 2622190

Website: www.cargotransfer.net



CTC DRY BREAK COUPLERS

Dry break couplers are extensively used in situation where frequently hose connections are connected and disconnected and spilling the medium has to be reduced to an absolute minimum. This is definitely the case when transferring hydrocarbons, chemicals, solvents and other hazardous liquids or gases. Using CTC dry break couplers prevents product spills, reducing expensive product loss and preventing expensive clean up. Also the hazardous impact on workers and the environment is significantly reduced. The couplers are designed to enable connecting and disconnecting hoses and pipelines quickly and without spillage. Typical applications include tanker top and bottom loading, rail car transfer operations, loading arms, ship-to-ship and ship-to-shore transfer, refuelling operations, blending pits, bunkering and many other applications in the safe and effective transfer of bulk materials.

Product features:

- easy to handle: push and turn - free flow, turn and pull – closed
- time saving: no need to drain hoses or pipe systems
- economical: no loss or spillage of liquids at connection or disconnection
- safety: the valve cannot be opened until the unit is coupled
- environmentally: accidental spillage eliminated
- safety and reliability: due to the rugged construction
- selectivity: optional selectivity for preventing contamination due to incorrect and cross-coupling
- product life: low number of moving parts, uncomplicated design and high quality materials ensures longer service life

Standards:

The CTC Couplers are produced according to NATO Standard STANAG 3756 and ATOFINA SGM 2049.TUY.C. They are also compatible with other existing brands.

Materials:

- CTC Couplers are as a standard manufactured in aluminium, bronze, stainless steel and PEEK. Other materials are available on request. Internal materials are as follows:
- PTFE (Teflon®) bearing between the piston shaft and the piston guide to eliminate the risk of seizure
 - conical valve seat to eliminate the risk of "piston blow out" when extreme pressure is used
 - rollers in Hastelloy C 276 on the Stainless Steel shaft to minimize the risk of seizure
 - all other inner parts in Stainless Steel AISI 316

DRY BREAK COUPLERS



- protecting ring in weather resistant rubber, electrically conductive
- riveted piston pin to minimize the risk of failure under extreme pressure conditions
- shaft journal in Stainless Steel embedded in PTFE (Teflon®) to eliminate seizure
- ball bearings in stainless steel.

Advantages CTC in stainless steel:

The CTC Coupler in stainless steel construction has all moving parts pivoted in self lubricated bearings, the coupling function has been optimised for non-lubricating media. This therefore gives you the most positive, seal safe connections available.

Standard connections:

The Tank unit is as a standard supplied with parallel BSP threads and flat sealing surface, as this allows the use of the full thread length for screwed-on parts. It is also available flanged, with tapered internal NPT threads and parallel S60X6 threads.

Dust plugs and dust caps:

To ensure that you maximise the lifespan of the couplers we can supply dust plugs (for the hose unit) and dust caps (for the tank unit). These are available in stainless steel and composite material. Other materials are available upon request.

Special couplers:

We are able to supply following special engineered couplers:

- couplers with locking device to avoid accidental disconnecting
- special handles
- tank units without projecting parts, for fitting in combination with ball valves
- tank unit with lowered eccentric flange, for easy drainage of pipes
- couplers for corrosive liquids in Peek or Hastelloy, inner parts from Hastelloy, seals of FPM, FFPM, Chemraz® or Kalrez®
- couplers for gases in PN25 (for LPG, ethylene oxide and propylene oxide), APRAGAZ certified
- couplers with integrated break away flange connection (cable and bolt)
- military couplers according NATO standard STANAG 3756 (also in green colour)
- flanged hose units for fitting on loading arms
- tank unit with integrated pressure relief valve, to enable easy connecting under pressure
- coloured handles are available in blue, green, yellow, red and black



Flow data:

Details on the pressure drop at a certain flow rate for liquids and gases are available upon request.

Dedicated connections for selected service:

Tank units and hose units can be made unique by using different pin and slot combinations for different service. This will prevent the wrong hose to be connected to a tank unit, if for instance product contamination is a concern.

Approvals

CTC Couplers have been approved by amongst others TÜV, Veritas, Apragaz, TDT, and many others.

Technical specifications:

Sizes:	DN 20 (3/4") to DN 100 (4")
Connections:	Thread BSP or NPT
Flanges:	DIN, ASA, TW, TTMA, EN 1092-1:2001 Type E Spigot
Material:	Aluminium, Bronze, Stainless Steel AISI 316, Hastelloy and PEEK, other materials available on request
Seal materials:	Standard FPM (Viton®), EPDM, HNBR, NBR (Nitril), Kalrez®, CHEMRAZ®, and FFPM, other materials available upon request
Flat seal:	PUR / Polyurethane or PTFE (Teflon®), for female BSP-threads
Working pressure:	Aluminium: PN 16 (16 bar or 220 psi) Bronze and stainless steel PN 25 (25 bar or 350 psi)
Test pressure:	WP + 50%.
Safety factor:	5 (minimum burst pressure is 5 times the operational pressure)



Offices: Tel.: +31 (0)10 - 2622160
 Coventrystraat 2 Fax: +31 (0)10 - 2622190
 3047 AD Rotterdam E-mail: info@cargotransfer.net
 The Netherlands Website: www.cargotransfer.net

Your distributor: