

SAFETY BREAK-AWAY COUPLINGS



Safety Break-away couplings are used to prevent pull away accidents, protect terminal and loading/unloading equipment and eliminated unwanted product release. The break-away couplings has a diverted breaking point which will break at a determined break-load where upon the internal valves will automatically close on both sides. This will in a longer time frame minimize downtime, save money, equipment and the environment.

The Safety Break-away couplings are available as Industrial and Marine type.

Industrial Break-away

Typically installed into loading arm and hose assemblies, where at least one side of the coupling is attached to a rig and fixed point.

Marine Break-away

Marine Safety Break-aways are designed to only release by inline pull and used between two strings of hose.

Safety break-away Coupling function

The SB Couplings, Safety break-away couplings has three external brake bolts. In the case of axial tension all of the bolts take up the force corresponding to the break force on the hose with a safety margin.

Features

- Passive security against situations where a hose or loading arm could be subjected to inadvertent excessive loads.
- Design features are a simple mechanism and no loose components which could be lost after release.
- Operates independently of shut off safety system and does not require an external power source.
- Easy to reset on site with one person High flow rate / low pressure drop
- Very low loss, positive shut-off of both coupling halves results in minimum product loss.
- Lightweight and robust design.
- Available with ANSI/DIN flanges or threaded (BSP or NPT).

Applications

Liquified gases

- LPG, Butane, Propane and Blends.
- Co2, DME, LNG

Chemicals and Hydrocarbons

- Aromatics, Ethylenes and Propylenes, VCM, Alcohols and Acids, Diesel, Jet A1.
- Refrigerants Forane.

Oil and Petrochemical

- Bulk Loading/Unloading, Road Tankers
- Rail Tankers, Process Product Transfer
- Tank Cleaning

Marine and Offshore

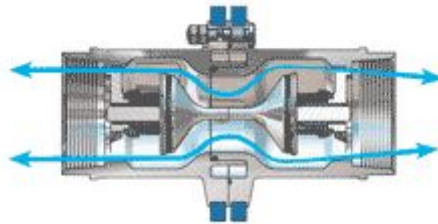
- Ship to Rig Fluid Transfer
- Ship to Shore Fluid Transfer
- Ship to Ship Fluid Transfer
- Bunkering, Marine Refuelling

Speciality

- Hydraulic Oils, Inks, Paints, Solvents, Locomotive Fuelling, Helicopter Fuelling
- Food processing industry
- Plant engineering and construction
- Power plant construction, Food processing industry

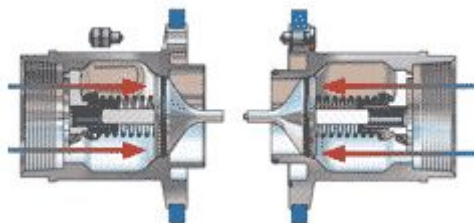
How it works - before and after emergency disconnect

Non-axial forces concentrate the tension forces more strongly on one bolt, so that the safety break-away coupling reacts in a natural way to the reduction of the hose break forces.



Before emergency disconnect

The safety break-away valve consists of two halves, each with a valve that has a o-ring seal.



After emergency disconnect

When the SB Couplings separate, it allows the valves to close. The two valves closes rapidly, minimizing exposure to personnel and the environment.

This is a completely different type of coupling than, for example, Dry Break Couplings.