

NoDrop®

FLUID TRANSFER SPECIALIST

Break-Away Couplings



Break-Away Features and Applications

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 flowrate / 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.

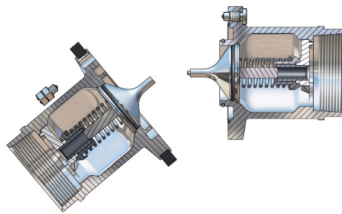
Speciality

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

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

Industrial Break-away

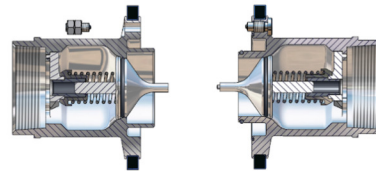
Typically installed into loading arm and hose assemblies, where at least one side of the coupling is attached to a rig and fixed point.



Release with a tensile force being applied at an angle to the plane of the coupling housing, up to 90 degrees.

Marine Break-away

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



Release by inline pull only.



Break-Away Overview

Industrial Breakaway Couplings minimising risk of spills

The latest in industrial transfer protection
Operational advantages
Typical applications
Typical media
Breaking loads
Specifications
Contact the Matec Team



Flowbreak

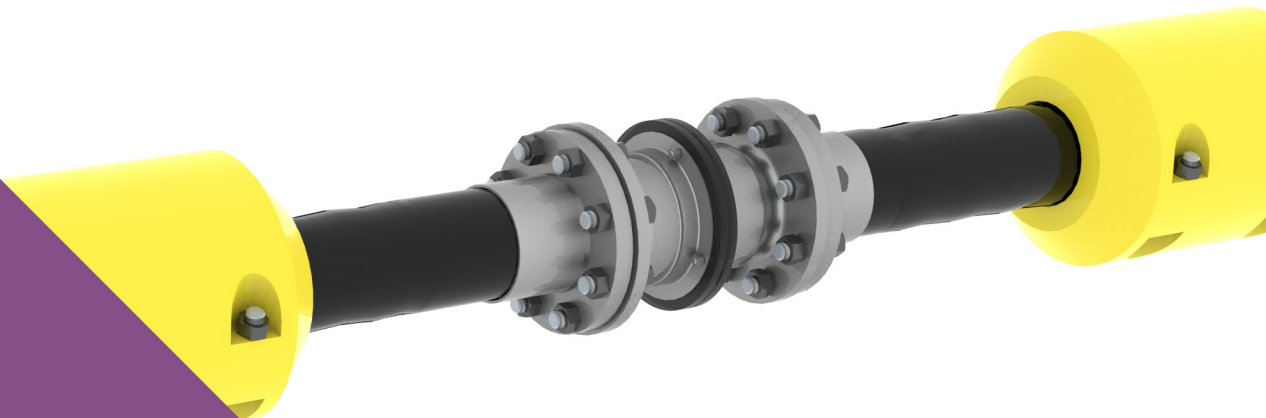
The industrial breakaway coupling
Minimises risk of spills and reduces risk of damage to assets
and injury during Industrial transfer operations.



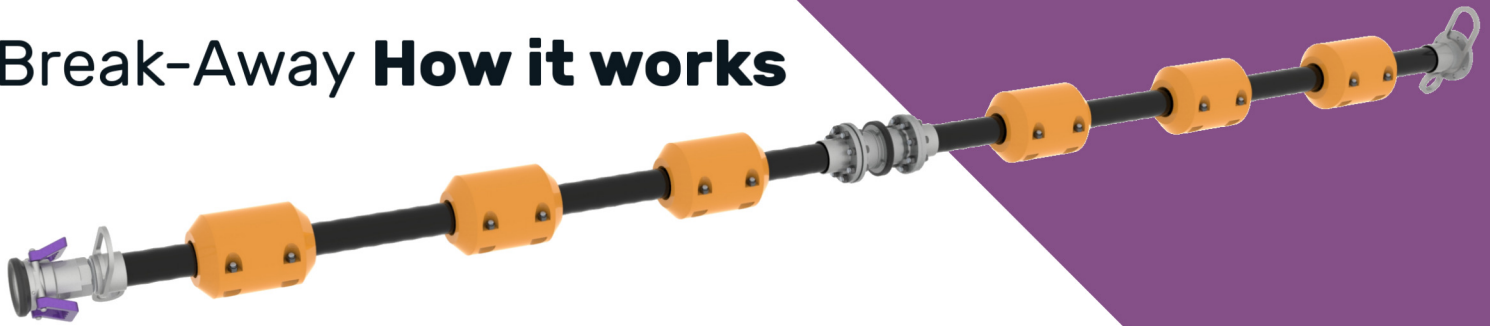
The latest in industrial transfer protection

In the event of drive-off or extreme pressure surge the Flowbreak activates and delivers 100% instantaneous closure of both upstream and downstream flow.

The coupling then separates therefore minimising risk of damage to assets such as loading arms, hoses, mountings and other parts of the transfer system.



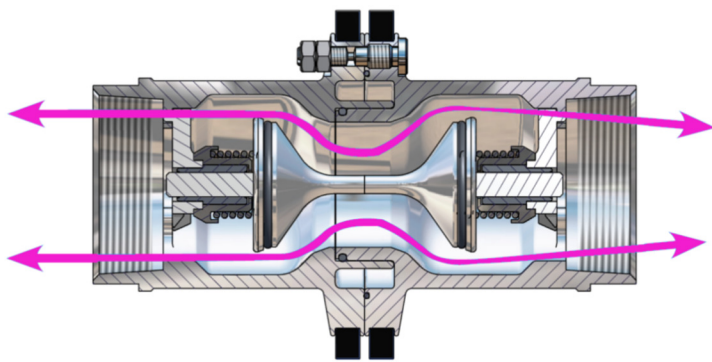
Break-Away **How it works**



BEFORE and **AFTER** emergency disconnect

BEFORE emergency disconnect

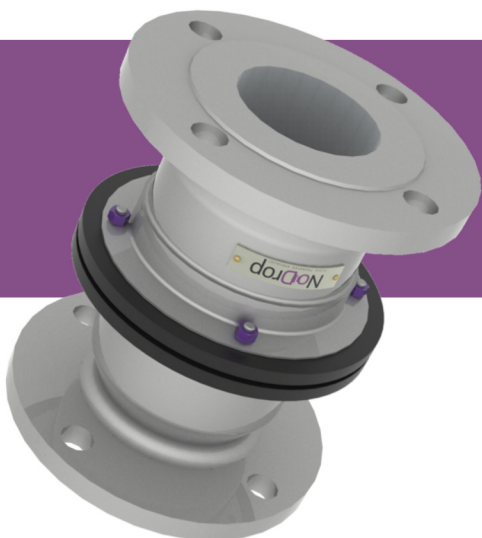
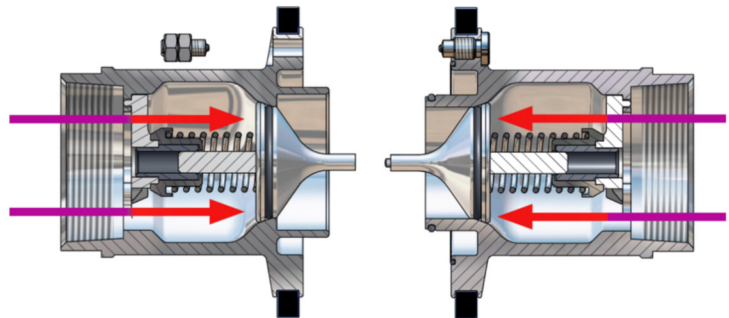
The safety break-away valve consists of two halves, each with a valve that has a o-ring seal.



- The No-Drop, Safety breakaway couplings has three external break 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.
- 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.

AFTER emergency disconnect

When the No-Drop couplings separate, it allows the valves to close. The two valves closes rapidly, minimizing exposure to personnel and the environment.



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 down time, save money, equipment and the environment.

NoDrop®

COUPLINGS PRODUCT LINE

NoDrop® Couplings, are produced according to NATO Standard STANAG 3756 Compatible with other existing brands.

1" NoDrop® Couplings (Socket 56 mm): Used in different range of applications from Pharmaceutical processing to Auto gas vehicle, fueling, perfume dosing to freon gas transfer.

2" NoDrop® Couplings (Socket 70 mm): The 2" probably covers the widest selection of applications in the range: Diesel refueling, Pharmaceutical and Chemical processing and blending

2 1/2" NoDrop® Couplings (Socket 105 mm): Mainly used for road tanker bottom loading, aviation fuel bunkering (AVGAS), acid transfer, and lubrication oil blending.

3" NoDrop® Couplings (Socket 119 mm): A full flow 3" coupling, similar in size to the 2 1/2" but with greater flow. Typically used for road and rail tank loading/discharge, in plant chemical transfers etc.

4" NoDrop® Couplings (Socket 164 mm): Used for offshore bunkering transfer of fuels and drinking water, aviation fuel bunkering, rail tank loading/discharge

QUALITY ASSURANCE AND CERTIFICATIONS

Matec quality management system is certified according to ISO 9001:2008. Our quality assurance department ensures that our quality procedures are followed and improved throughout the complete manufacturing process cycle.

Welders and welding procedures are certified by DNV.

PED 2014/68/UE - ATEX 2014/34/UE





Made in Italy

NoDrop® engineering is part of a group which has a proud 40 year legacy in the field of engineering within the fluid transfer industry. We have the expertise and commitment to manufacture the perfectly engineered Drybreak Couplings that we call NoDrop® Drybreak Coupling.

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