



Product transfer applications Industrial, Chemical and Petrochemical

KLAW

Safe product transfer solutions

Minimising the risk of liquid and gas spillage

The catastrophic consequences of spillage

When fitting a KLAW Safety Breakaway Coupling you ensure that everything has been done to eliminate risk and mitigate legal action.

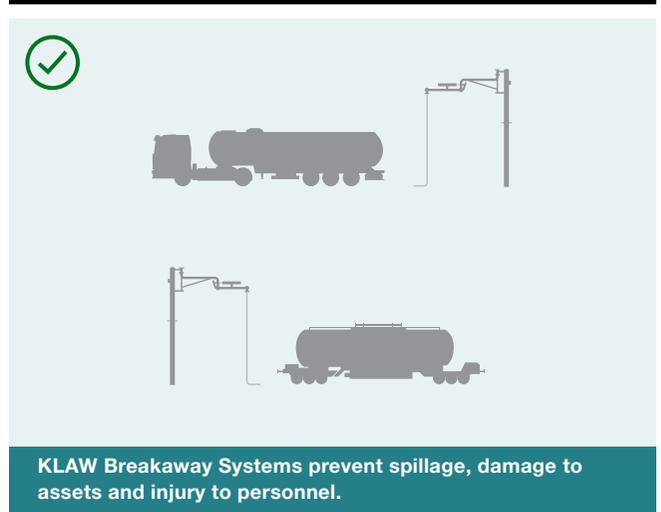
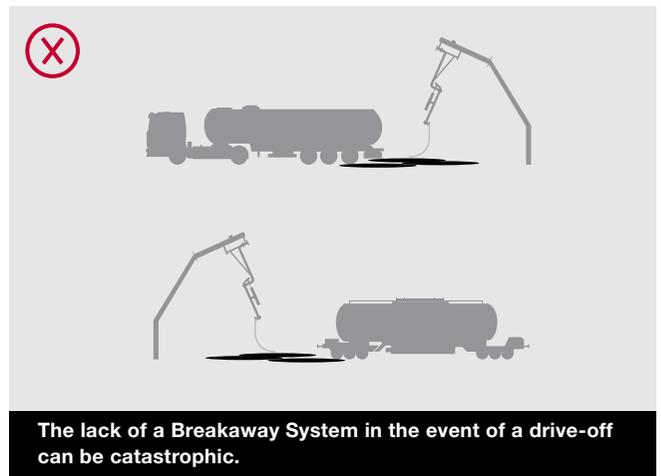
The KLAW Safety Breakaway Coupling range offers a safe and identifiable parting point within the transfer system and will stop flow in an emergency such as when drive-off or other strain on the transfer system occurs.

The experience and track-record of KLAW enables you to minimise risk to assets, personnel, the environment and reputation and protect against downtime and clean-up costs, litigation and injury.

“Fitting a KLAW Breakaway Coupling means you have ensured that everything has been done to eliminate risk and mitigate legal action.”



Avoid the consequences of drive-off



Loading Arm and hose transfer applications

Road Tankers, Railcars, Loading Bays and Ship Terminals

Typical applications

Bunkering, Refuelling, Railcar, Road Tanker and Loading Arm systems involved in the transfer of media.

KLAW Breakaway Couplings are suitable for 99% of all liquids and gases.

Typical media applications

- LPG
- Ethanol
- Propane
- Bitumen
- Hydrochloric Acids
- Chlorine
- Diesel
- Fuel oil
- Ammonia
- Sulphuric Acid
- Jet Fuel



The benefits of KLAW Safety Breakaway Couplings

KLAW Industrial Breakaway Coupling

The KLAW Flowbreak Breakaway Coupling minimises risk of media spills; this reduces the risk of damage to assets and injury to personnel in the event of a drive-off or extreme pressure flow.

- Reset plugs deliver easy to reset procedure after service or activation.
- Minimum headloss.
- Compact and lightweight.
- ATEX cable fitted as standard.
- No need for separate end connectors; but still maintains multiple End Connection Flexibility.
- Wrench spanner Flats for easy threaded end attachment.
- Option to include proximity switch.
- KLAW Flip-Flap Valve and Breakstud technology.

Threaded / Flanged or Weld End Connections are available.

FLOW BREAK
THE INDUSTRIAL BREAKAWAY COUPLING



Shown size 1"



Shown size 2"

Sizes available 1/2" to 12"

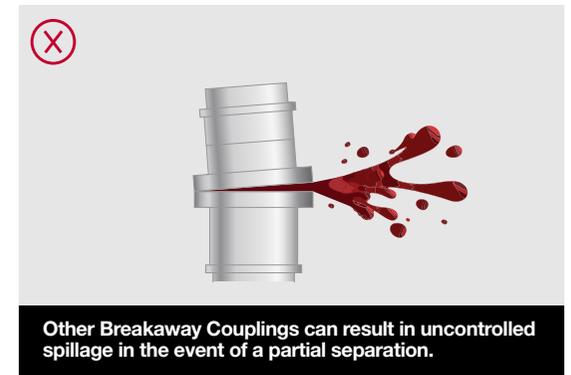


100% instantaneous closure
of both upstream and downstream flow.

Avoiding the consequences of partial break

The valve mechanism within the KLAW range is designed to avoid the risk of partial break.

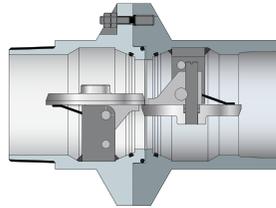
Partial break occurs when a coupling only partially separates. A partial break event provides a situation where spillage is uncontrollable.



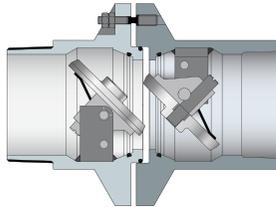
KLAW Flip-Flap Valve and Collar Release technology

Sequential Closure using KLAW Breakstud release technology

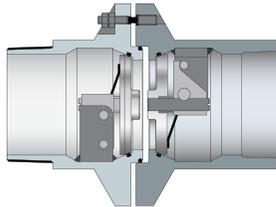
1. Internal flaps are positioned in line with the flow. These keep each other open, offering minimum headloss.



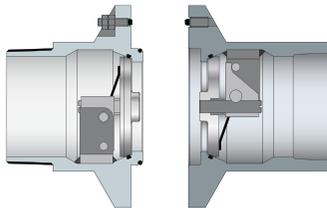
2. As the unit begins to separate, the discs flip through a controlled arc.



3. The discs snap onto their seats, providing 100% shut-off.



4. With the valves in the closed position the coupling now separates.



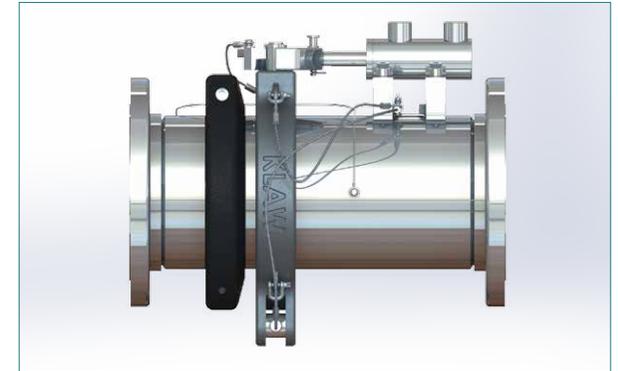
Conceptual illustrations shown. Contact KLAW for technical representations.

KLAW Emergency Release Coupling

The KLAW Emergency Release Coupling (ERC) has a Collar Release Mechanism with various release options.

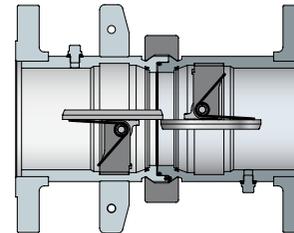
- Cable release
- Hydraulic release
- Spring retained
- Dual release

This provides the option for predetermined release of the Emergency Shutdown (ESD) system, rather than being reliant on forces applied through the transfer system.

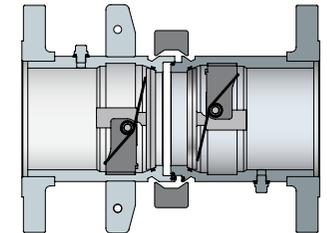


ERC Flip-Flap valve: Sequential Closure using KLAW Collar Release technology

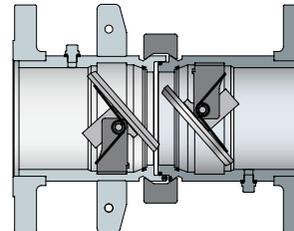
1. Flip-Flap Valve mechanism is in open flow status.



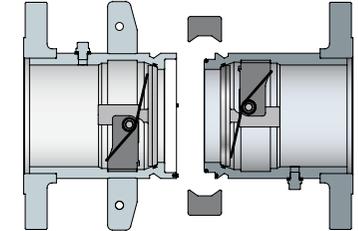
3. Body seal retains media until the valves close. With the Flip-Flap Valves closed, the separation sequence continues.



2. Collar Release is activated (via Cable or Hydraulic system).



4. Collar Release is detached and the coupling is separated.



QS Dry Break Couplers

Dry Break Hose Couplings, Tank Adaptors and End Connections

Connects and disconnects transfer lines with no spillage. The QS is designed for demanding operating conditions and the rigours of marine and industrial environments.

- Valves open and close automatically on connection and disconnection. This reduces the possibility of human error in transfer operations and reduces spillages to virtually zero.
- The selectivity system prevents cross contamination.
- Locking pin as standard, providing additional safety.
- Multiple seal options to suit all types of liquids and gases.
- The QS features a single easy grip and turn action. This improves safety and time efficiency.
- Completely interchangeable with other manufacturers such as TODO, Avery Hardoll, Mann-Tek and Roman Seliger.

Materials

Aluminium
Stainless Steel

Sizes from
1" to 8"



Shown: Typical QS Tank Unit



SQUARE GRIP

DRY DISCONNECT

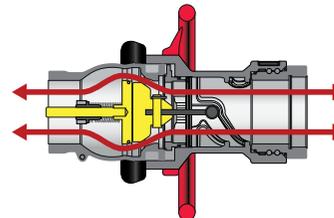
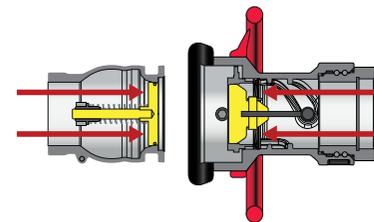
Square handle twin grip



ROUND GRIP

DRY DISCONNECT

All round handle grip



Efficient flow design for maximum operational performance

Reducing stress and fatigue on hose systems

Flange Camlocks - up to 50 times quicker than traditional flange connections

The fast, reliable and safe way of making and breaking hose connections.

The flanges are automatically positioned within the cam blocks and locked together. The cam is then turned by hand using a locking bar.

- Permanently positioned seal increases efficiency and safety.
- Cams cannot be loosened when line is pressurised.
- Extensive range of options and finishes.



Short Spool Piece



Weld Neck



Studded



Slip-on



Special paint finishes



Other variants



Takes approximately 5 seconds to fit each cam.

Swivel Joints

The KLAW range of Swivel Joints is designed to reduce wear and tear on hoses and equipment.

- Extends the life of the hose
- Aids hose handling
- Reduces maintenance costs and downtime
- Available sizes 1/4" to 40"

A range of options to suit your specific application.

- Pressure
- Materials
- Temperatures
- End connections
- Top side or subsea



Shown: Hose system with Stainless Steel Swivel Joint



Shown: Swivel in Hose Reel application



Shown: 20" Carbon Steel Swivel Joint.