

## KLAW 产品系列

船用拉断阀  
工业拉断阀  
全通路船用拉断阀  
紧急脱离阀  
紧急脱离系统  
低温紧急脱离系统  
干式接头  
凸轮锁扣  
旋转接头

## KLAW 安全传输系统的优势

KLAW 公司设计并提供的一系列系统可大大提高介质输送的安全性和效率。

这有助于用户最大程度地保护资产、人员、环境安全和商誉，并帮助用户避免因停工、清理成本、法律纠纷和人员伤亡以及更高风险所导致的保险和投资费用的增加。

KLAW 公司在创新和提供可靠解决方案方面经验丰富、业绩辉煌。

### 重要事项:

规范: KLAW 建议您在指定、订购或调试前先与 KLAW 技术部就全部信息和数据进行确认。

使用: 有关本文档中提到的任何产品的安装、处理、操作、维护和维修信息或说明, 请参阅正确的安装和维护手册。

KLAW 技术部门可提供更多建议。

## The KLAW range

Marine Breakaway Couplings  
Industrial Breakaway Couplings  
Full Bore Marine Breakaway Couplings  
Emergency Release Couplings  
Emergency Release Systems  
Cryogenic Emergency Release Systems  
Dry Disconnect Couplings  
Camlocks  
Swivel Joints

## The advantages of KLAW transfer safety systems

KLAW designs and supplies a range of systems designed to improve safety and efficiency during the transfer of media. This enables you to minimise risk to assets, personnel, the environment and reputation and protect against downtime and clean-up costs, litigation, injury, increased insurance and investment costs caused by higher risk.

KLAW offers experience and a track-record for innovation and reliable solutions.

### IMPORTANT:

**Specification:** KLAW recommends that all information and data are confirmed with the KLAW Technical Department before specifying, ordering or commissioning.

**Usage:** Please refer to the correct Installation and Maintenance Manual for information or instruction regarding the installation, handling, operation, maintenance and servicing of any product mentioned in this literature. Further advice is available from the KLAW Technical Department.

# KLAW

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产品说明和规格如有变更, 恕不另行通知。KLAW 建议您在指定、订购或调试前先与 KLAW 技术部就全部信息和数据进行确认。版权所有 © 该手册所含全部内容均受国际版权法、商标法和专利法的保护, 在未获得 KLAW Products Ltd 出具的明确书面批准前不得复制。受保护的商标包括: KLAW™ Flowbreak™ QS Square Grip™。受全球专利保护。

Product descriptions and specifications are subject to change without prior notice. KLAW recommends that all information and data are confirmed with our technical department before specifying, ordering or commissioning. Copyright © All information provided is subject to international copyright, trademark and patent laws and cannot be reproduced without the expressed and written permission of KLAW Products Ltd. Trademarks protected: KLAW™ Flowbreak™ QS Square Grip™. Protected by Worldwide Patents.



KCAEM1910





产品输送应用  
工业、化学和石化

**Product transfer applications**  
**Industrial, Chemical and Petrochemical**

**KLAW**

安全产品输送解决方案

**Safe product transfer solutions**

# 最大程度地降低液体和气体溢出的风险

## Minimising the risk of liquid and gas spillage

### 溢出的灾难性后果

#### The catastrophic consequences of spillage

安装 KLAW 拉断阀，可为您最大程度地消除潜在风险，减少法律纠纷。

KLAW 安全拉断阀不但能为输送系统提供安全可靠又便于识别的分离点，而且能在输送系统分离或承受张力等紧急状况下切断流动。

KLAW 公司经验丰富，业绩辉煌，可以帮助您最大程度地保护资产、人员、环境和商誉安全，免受停工、清理成本，法律纠纷和人员伤亡。

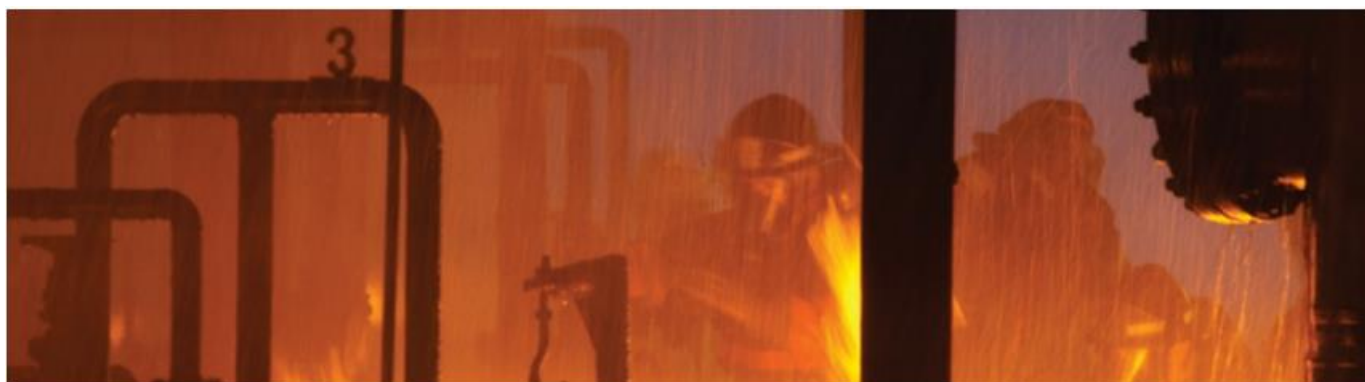
**When fitting a KLAW Safety Breakaway Coupling you ensure that everything has been done to eliminate risk and mitigate legal action.**

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.

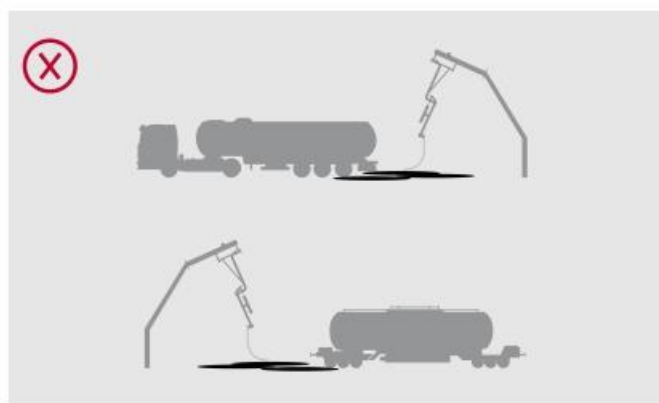
“安装 KLAW 拉断阀，可为您最大程度地消除潜在风险，减少法律纠纷。”

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



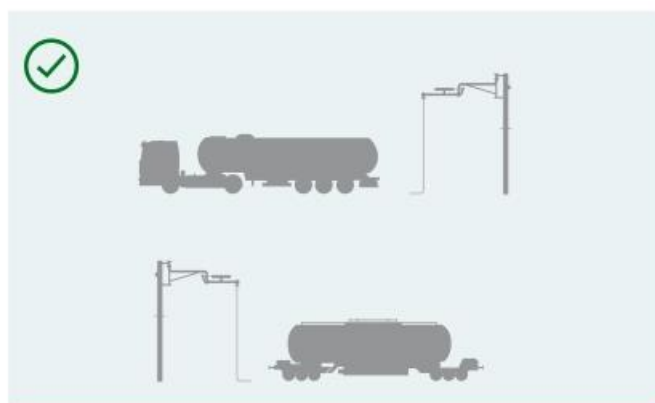
### 避免无拉断驾车驶离的后果

### Avoid the consequences of drive-off



在无拉断系统情况下驶离，会引发灾难。

**The lack of a Breakaway System in the event of a drive-off can be catastrophic.**



KLAW 拉断系统可防止溢漏、避免财产损失和人员伤亡。

**KLAW Breakaway Systems prevent spillage, damage to assets and injury to personnel.**



# 装载臂及软管输送应用

## Loading Arm and hose transfer applications

公路罐车、轨道车、货场及船码头

### Road Tankers, Railcars, Loading Bays and Ship Terminals

#### 典型应用

输送介质过程中涉及的船舶加油、燃料加注、轨道车、公路罐车和装载臂系统。

#### 典型介质应用

- 液化石油气
- 乙醇
- 丙烷
- 沥青
- 盐酸
- 氯
- 柴油
- 燃油
- 氨
- 硫酸
- 喷气燃料

#### Typical applications

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

#### Typical media applications

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

KLAW 拉断阀适用于 99% 的液体和气体。

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



# KLAW 安全拉断阀的主要优势

## The benefits of KLaw Safety Breakaway Couplings

### KLAW 工业拉断阀

KLAW Flowbreak 拉断阀最大限度地减少介质泄漏的风险；这样可以降低资产损坏的风险，避免在发生分离或极端压力的情况下对人员造成伤害。

- 复位插头在服务或激活后提供易于复位的过程。
- 压头损失最小。
- 结构轻巧紧凑。
- ATEX 缆索作为标准配置。
- 扳手空间设计，易于端部螺纹连接。
- 可选配接近开关。
- KLaw 翻板阀芯和 Breakstud 断裂螺栓技术。



图示尺寸 1"  
Shown size 1"

图示尺寸 2"  
Shown size 2"

### KLAW Industrial Breakaway Couplings

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.
- Wrench spanner Flats for easy threaded end attachment.
- Option to include proximity switch.
- KLaw Flip-Flap Valve and Breakstud technology.

100% 瞬时关闭上游和下游流量。  
100% instantaneous closure of both upstream and downstream flow.

可用尺寸 1/2" 至 12"  
Sizes available 1/2" to 12"

螺纹/法兰或焊接端接头可用。  
Threaded / Flanged or Weld End Connections are available.

## FLOW BREAK

THE INDUSTRIAL BREAKAWAY COUPLING

### 避免局部断裂的后果

KLAW 系列产品的阀门设计旨在避免局部断裂的风险。

拉断阀局部分离会引发局部断裂，进而导致无法控制的溢漏

### Avoid the consequences of partial break

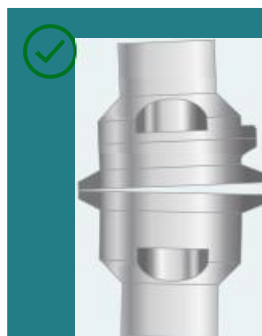
The valve mechanism within the KLaw range is designed to avoid the risk of partial break.

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



其他拉断阀在局部断裂的情况下可能导致不受控制地溢出。

Other Breakaway Couplings can result in uncontrolled spillage in the event of a partial separation.



KLaw 拉断阀即使在局部断裂时也能 100% 关闭。

KLaw Breakaway Couplings provide 100% closure even on partial separation.

# KLAW 翻板阀芯和环脱扣技术

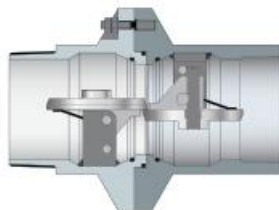
## KLAW Flip-Flap Valve and Collar Release technology

采用 KLAW 拉断螺柱脱扣技术可实现依次关闭

### Sequential Closure using KLAW Breakstud release technology

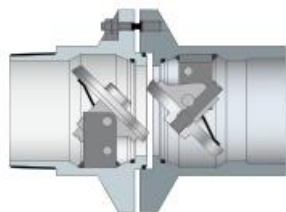
1. 内部翻板位置与内部介质流向一致。这使每个翻板部件打开，压头损失最小。

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



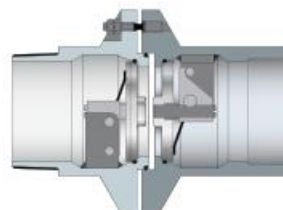
2. 当拉断阀即将分离时，阀盘在受控状态下沿弧旋转。

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



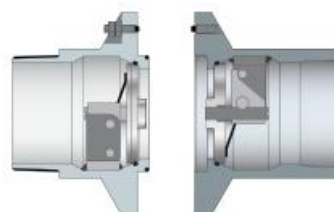
3. 翻板阀盘旋紧卡在阀座上，实现 100% 关闭。

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



4. 当阀处于关闭位置时，拉断阀立即分离。

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



仅为概念性示意图，技术描述，请联系KLAW代表 Conceptual illustrations shown. Contact KLAW for technical representations.

### KLAW 紧急脱离阀

### KLAW Emergency Release Coupling

KLAW 紧急脱离阀（ERC）的阀环脱扣装置配有多种脱离方式可供选择。

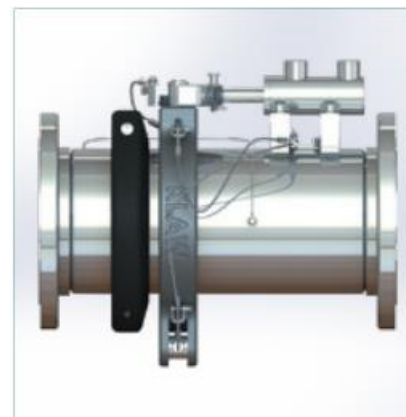
- 绳索脱离
- 液压脱离
- 弹簧固定
- 双脱离方式

紧急脱离阀通过预设的脱离方式实现紧急切断（ESD），无需依赖对输送系统施力。

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

- 1 Cable release
- 1 Hydraulic release
- 1 Spring retained
- 1 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.

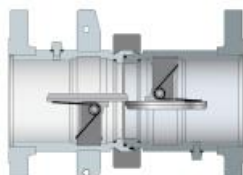


紧急脱离阀翻板阀芯采用 KLAW 阀环脱扣技术实现依次关闭

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

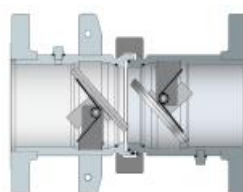
1. 翻板阀芯装置处于流通打开状态。

Flip-Open Valve mechanism is in open flow status.



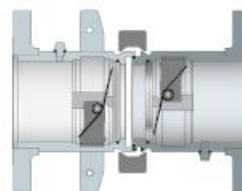
2. 通过绳索或液压系统激活阀环脱扣。

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



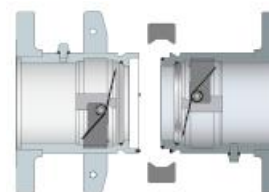
3. 阀体密封保持介质直到阀芯关闭。关闭翻板阀芯，分离顺序会继续。

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



4. 阀环脱扣装置脱离，接头的两半分离。

Collar Release is detached and the coupling is separated.



概念图示。联系 KLAW 技术代表。

Conceptual illustrations shown. Contact KLAW for technical representations.



# 干式快速接头

## QS Dry Break Couplers

### 干式快速接头母头、公头及其端部连接方式

### Dry Break Hose Couplings, Tank Adaptors and End Connections

连接/断开输送管，无溢漏。QS 系列产品专门针对严苛的作业条件和严酷的海洋及工业环境而设计。

- 连接/断开时，阀芯自动打开/关闭。此举可降低输送作业过程中人为失误的可能性，并几乎完全排除溢漏可能性。
- 机械防错系统防止管路错误连接。
- 防松栓为标准配件，可进一步确保安全。
- 多重密封配件适合所有类型的液体和气体。
- **QS** 采用单一简易手柄，并可旋转，提高了安全性和时间效率。
- 完全可与其他制造商的产品互换使用，如 **TODO**、**Avery Hardoll**、**Mann-Tek** 和 **Roman Seliger**。

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.

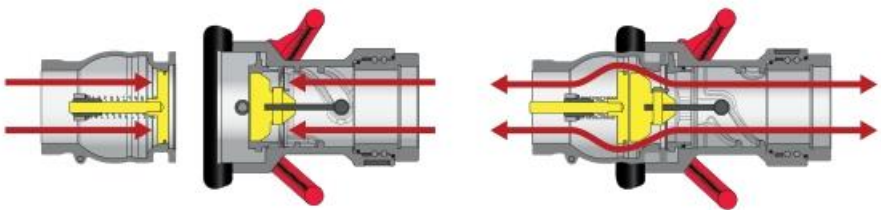


DRY DISCONNECT

方形双手柄

Square handle twin grip

材质:	尺寸:	Materials	Sizes from
铝、不锈钢	1" 至 8"	Aluminium Stainless Steel	1" to 8"



图示：典型 QS 公头  
Shown: Typical QS Tank Unit

高效的流量设计，实现最大的运行性能  
Efficient flow design for maximum operational performance

且完全符合 **NATO/STANAG 3756**。  
Fully compliant to NATO/STANAG 3756.

# 降低软管系统所受压力和劳损 Reducing stress and fatigue on hose systems

法兰凸轮锁扣 - 比传统法兰连接快 50 倍

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

快速、可靠、安全的软管连接/断开方式。

法兰自动定位于凸轮区，咬合。然后采用锁条手动旋转凸轮。

- 永久定位密封件提高效率 and 安全性。
- 管线加压过程中，凸轮不会松动。
- 可选配范围和表面涂层种类丰富。



**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.

每个凸轮最多需要 5 秒的安装时间。

**Takes approximately 5 seconds to fit each cam.**

短管件

**Short Spool Piece**



对焊法兰

**Weld Neck**



螺栓式

**Studded**



滑动式

**Slip-on**



特种表面涂层

**Special paint finishes**



其他变体

**Other variants**

