



Couplings

Breakaway Couplings (BAC)

Emergency Release Couplings (ERC)

Know how & consulting directly from manufacturer with decades of experience

That's why you choose... 

- Our original **FLIP-FLAP design** not only provides minimum head loss through the unit but also ensures that under no circumstances can the seal between the two coupling body halves open to atmosphere before the internal flap valves have been released and provided a 100% shut off
- **DUPLEX, SUPERDUPLEX, HASTELLOY, ALUMINIUM...**
We machine all compatible materials
- **ASME, NACE, Norsok, DIN...**
We manufacture according to all required guidelines and directives
- **Customized connections**
- **Certifications**



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Breakaway Coupling (BAC)

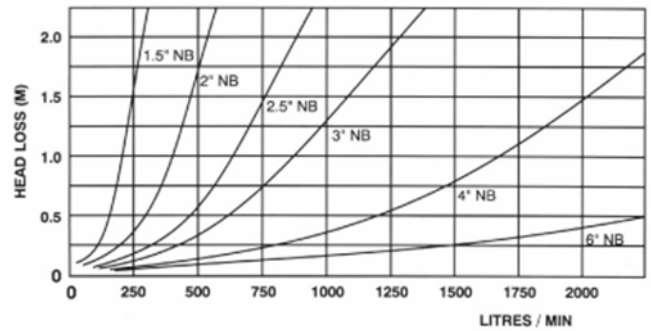
BAC Types	<ul style="list-style-type: none"> Industrial BAC Marine BAC Cryogenic BAC Full bore marine BAC Non-closure BAC
Advantages	<ul style="list-style-type: none"> Leight weight Compact design Minimal head loss because of FLIP-FLAP design 100% instant shut-off Risk of "partial break" eliminated because of FLIP-FLAP design Proven protection






How it Works:

	Two poppets lying on their sides like flaps lock each other, offering minimum head loss until the coupling parts.
	The flaps are released and allow the bias springs to rotate through a controlled arc...
	... until they have moved through 90°, where they snap onto their seats prior to the coupling fully parting.
	With 100% shut-off achieved the two halves of the coupling then part completely.

Flow Rate Characteristics:



BAC

		Industrial BAC	Marine BAC	Cryogenic BAC
Type				
Description		Utilized in all industrial product transfer installations, the industrial BAC is specifically designed to be able to activate under a bending moment with an applied force at an angle of up to 90 degrees to the plane of the coupling.	Marine BACs are designed specifically to be installed in a hose string, where the coupling would have a length of flexible hose attached to both sides. The mechanism is identical to the industrial BAC, but has the additional external features that provide increased resistance to bending moments and torsional forces.	The Cryogenic BAC is designed to activate under a bending moment. The applied force being an angle of 90 degrees to the plane of the coupling. The BAC is able to operate at cryogenic temperatures, down to -196°C / 320°F .
Standard nominal bores	Standard range	DN100 / 4" DN125 / 5" DN150 / 6" DN200 / 8" DN250 / 10" DN300 / 12"	DN50 / 2" DN80 / 3" DN100 / 4" DN125 / 5" DN150 / 6" DN200 / 8"	DN25 / 1" DN40 / 1,5" DN50 / 2" DN65 / 2,5" DN80 / 3" DN100 / 4" DN125 / 5" DN150 / 6" DN200 / 8" DN250 / 10" DN300 / 12"
	K2 range	DN25 / 1" DN40 / 1,5" DN50 / 2" DN65 / 2,5" DN80 / 3"	-	DN25 / 1" DN40 / 1,5" DN50 / 2" DN65 / 2,5" DN80 / 3" DN100 / 4"
Pressure ratings (standard range design pressure)		4" = 40 bar / 580 psi 5" = 27 bar / 391 psi 6" = 23 bar / 333 psi 8" = 17 bar / 246 psi 10" = 14 bar / 203 psi 12" = 10 bar / 145 psi	2" = 40 bar / 580 psi 3" = 40 bar / 580 psi 4" = 40 bar / 580 psi 5" = 27 bar / 391 psi 6" = 23 bar / 333 psi 8" = 17 bar / 246 psi	1" to 4" = 40 bar / 580 psi 5" = 27 bar / 391 psi 6" = 23 bar / 333 psi 8" = 17 bar / 246 psi 10" = 14 bar / 203 psi 12" = 10 bar / 145 psi
Connections		<ul style="list-style-type: none"> NPT threaded (male / female) BSP threaded (tapered / parallel) Flanged (ANSI 150 / PN16 ANSI 300 / PN40) Weld prepared ends (Schedule 40) "Hammer union" 	<ul style="list-style-type: none"> NPT threaded (male / female) BSP threaded (tapered / parallel) Flanged (ANSI 150 / PN16 ANSI 300 / PN40) Weld prepared ends (Schedule 40) "Hammer union" 	<ul style="list-style-type: none"> NPT threaded (male / female) BSP threaded (tapered / parallel) Flanged (ANSI 150 / PN16 ANSI 300 / PN40) Weld prepared ends (Schedule 40)
Material		<ul style="list-style-type: none"> Stainless steel Carbon steel Aluminium Exotic alloys <p>[other materials on request]</p>	<ul style="list-style-type: none"> Stainless steel Marine grade aluminium <p>[other materials on request]</p>	<ul style="list-style-type: none"> Stainless steel
Type of sealing		Application specific	Application specific	Application specific
Body		Two-parts	Two-parts	Two-parts

BAC

	Industrial BAC	Marine BAC	Cryogenic BAC
Breaking loads	According to customers spec.	According to customers spec.	According to customers spec.
Application	<ul style="list-style-type: none"> All industrial product transfer installations Loading arm and hose assemblies, where at least one side of the coupling is attached to a rigid and fixed point. 	<ul style="list-style-type: none"> Ship to offshore platform product transfer operations Ship-to-ship product transfer operations 	<ul style="list-style-type: none"> LNG, LPG, fuels, chemicals, industrial gases e.g. liquid nitrogen, liquid helium, liquid oxygen
Fluid & Gas	Petrochemicals & Gases	Petrochemicals & Gases	Multiple LNG transfer solutions, liquid oxygen, ethylene, ethane
Certifications	TUV		TUV

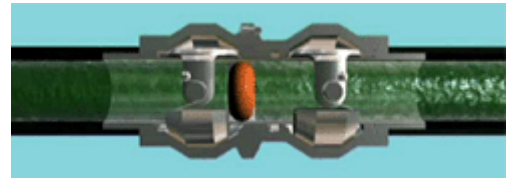
Full Bore Marine BAC

This patented full bore marine BAC is designed to be installed between two sections of hose and provides an identified and safe parting point within the transfer system. The unit has a full unrestricted bore and is therefore piggable.

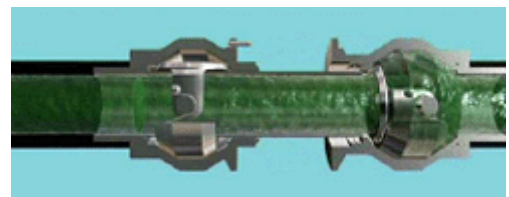


Standard nominal bores	Standard range	DN100 / 4" DN125 / 5" DN150 / 6" DN200 / 8" DN250 / 10"
	K2 range	-
Pressure ratings (standard range design pressure)		4" = 40 bar / 580 psi 5" = 27 bar / 391 psi 6" = 23 bar / 333 psi 8" = 17 bar / 246 psi 10" = 14 bar / 203 psi
Connections		<ul style="list-style-type: none"> NPT threaded (male / female) Flanged (ANSI 150 / PN16 ANSI 300 / PN40)
Material		<ul style="list-style-type: none"> Stainless steel Marine grade aluminium
Type of sealing		Application specific
Body		Two-parts
Breaking loads		According to customers spec.
Application		Hose string
Fluid		Dry powder, viscous or abrasive media, e.g. cement, bitumen, mud and waste products
Further advantages		<ul style="list-style-type: none"> Fully piggable No line restriction Working mechanisms isolated from media until activation

How it Works:



With no line restriction and the operating mechanism totally isolated from the media, the unit is also fully piggable.



As a tensile load is applied the coupling begins to part and allows the release of the first internal valve.



With further withdrawal of the retaining tube, the second valve is released.



100% shut off is achieved. The coupling has now completed its separation with line integrity maintained throughout the safety breakaway process.

Non-Closure BAC

Available in both industrial and marine versions, these couplings can be installed between a flexible hose string or fixed to a rigid point. Non-Closure BACs are specifically designed to incorporate an identifiable safe parting point within the transfer.



Standard nominal bores	Standard range	DN25 / 1" DN40 / 1,5" DN50 / 2" DN65 / 2,5" DN80 / 3" DN100 / 4" DN125 / 5" DN150 / 6" DN200 / 8" DN250 / 10" DN300 / 12"
	K2 range	-
Pressure ratings (standard range design pressure)		1" to 4" = 40 bar / 580 psi 5" = 27 bar / 391 psi 6" = 23 bar / 333 psi 8" = 17 bar / 246 psi 10" = 14 bar / 203 psi 12" = 10 bar / 145 psi
Connections		<ul style="list-style-type: none"> • NPT threaded (male / female) • BSP threaded (tapered / parallel) • Flanged (ANSI 150 / PN16 ANSI 300 / PN40) • Weld prepared ends (Schedule 40) • "Hammer union"
Material		<ul style="list-style-type: none"> • Stainless steel • Carbon steel • Aluminium <p>[other materials on request]</p>
Type of sealing		Application specific
Body		Two-parts
Breaking loads		According to customers spec.
Application		Non-hazardous, media spillage is acceptable
Fluid		Water, food
Certifications		TUV