



Safety Break-away Couplings Breaking Bolt Series

Designed to minimize spillage and damage associated with drive away and pull-away incidents

Industrial Version

Application:

- typical applications: loading rack
- designed to be installed between a fixed point (pipe, pump, manifold) and a hose



Features:

- coupling automatically senses an excessive load, closes the valves and disconnects
- high flow rate / low pressure drop
- working pressure: stainless steel **360 PSI** and aluminum **230 PSI** at ambient temperature (70°F)
- FKM (FPM) is standard seal
- female NPT is standard, optional ANSI / DIN flanges or male NPT are available
- For detailed information on dimensions and repair kits please see Dixon's Dry Disconnect brochure



female NPT x female NPT

Size	Stainless Steel Part #	Aluminum Part #	Stainless Steel Part #	Aluminum Part #	Stainless Steel Part #	Aluminum Part #
2"	SBC200SS	SBC200AL	SBC200SSMNPT	SBC200ALMNPT	SBC200SSFL	SBC200ALFL
3"	SBC300SS	SBC300AL	SBC300SSMNPT	SBC300ALMNPT	SBC300SSFL	SBC300ALFL
4"	SBC400SS	SBC400AL	SBC400SSMNPT	SBC400ALMNPT	SBC400SSFL	SBC400ALFL
5"	SBC500SS	SBC500AL	SBC500SSMNPT	SBC500ALMNPT	SBC500SSFL	SBC500ALFL
6"	SBC600SS	SBC600AL	SBC600SSMNPT	SBC600ALMNPT	SBC600SSFL	SBC600ALFL
8"	---	---	---	---	SBC800SSFL	---

Marine Version

Applications:

- typical applications include: ship-to-offshore platform and ship-to-ship product transfer operations
- designed to be installed within a hose string where the coupling will have a length of hose attached to both sides



Features:

- coupling automatically senses an excessive load, closes the valves and disconnects, release is executed when force causes bolts to break
- working pressure: 360 PSI at ambient temperature (70°F)
- 316T1 stainless steel body with FKM (FPM) O-rings
- female NPT is standard, optional ANSI / DIN flanges or male NPT are available



male NPT x male NPT

Size	Stainless Steel Part #	Stainless Steel Part #	Stainless Steel Part #
2"	MSBC200SS	MSBC200SSMNPT	MSBC200SSFL
3"	MSBC300SS	MSBC300SSMNPT	MSBC300SSFL
4"	MSBC400SS	MSBC400SSMNPT	MSBC400SSFL
5"	MSBC500SS	MSBC500SSMNPT	MSBC500SSFL
6"	MSBC600SS	---	MSBC600SSFL
8"	---	---	MSBC800SSFL

Optional Non-Closure Version

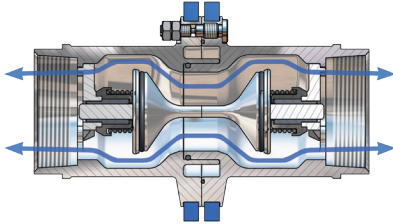
The non-closure design is an economical alternative which allows the coupling to break away due to pull-away/drive-away incidents thus protecting piping systems and equipment. This design allows spillage of product in these instances due to the lack of valving in the coupling.

Useful in applications where non-hazardous product is being conveyed and where there are no environmental concerns.



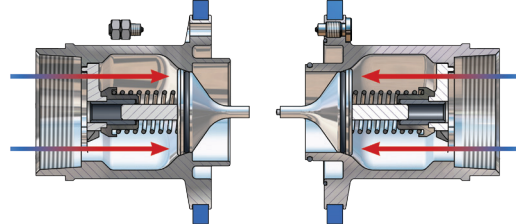
How It Works

Safety break-away couplings have 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.



BEFORE emergency disconnect

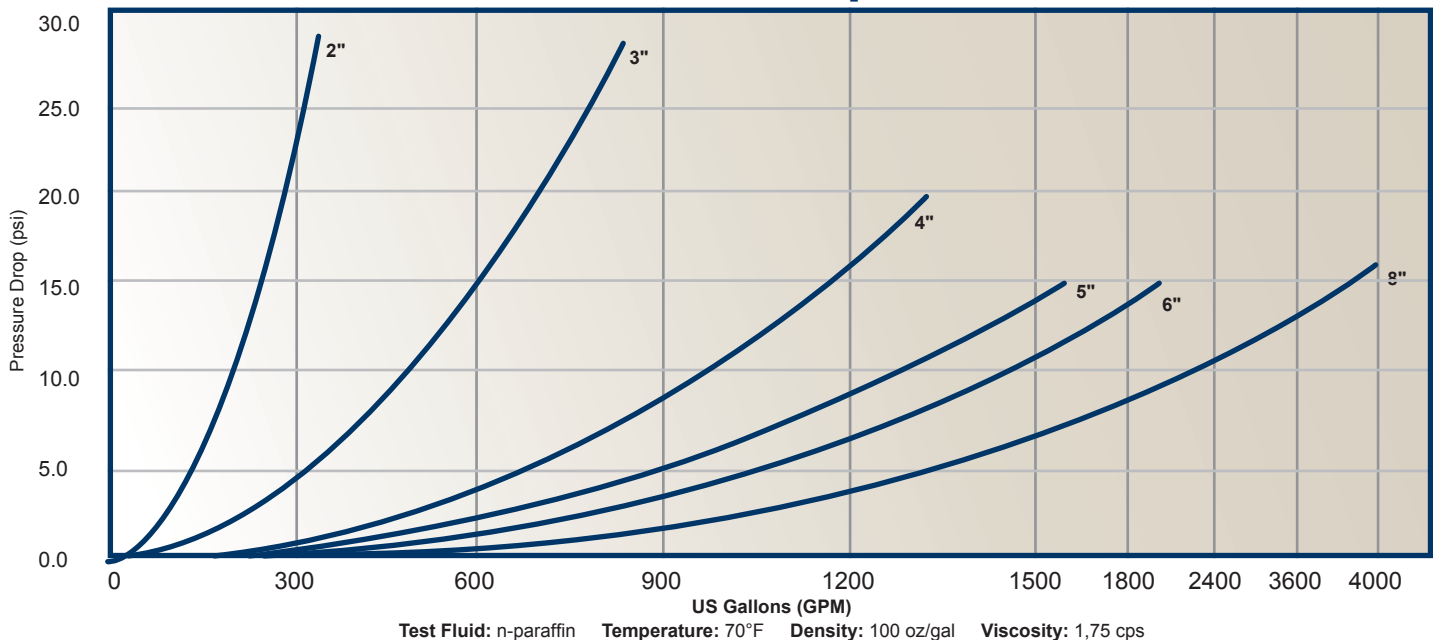
The safety break-away valve consists of two halves, each with a valve that has an O-ring seal.



AFTER emergency disconnect

When the safety break-away couplings separate, it allows the valves to close. The two valves close rapidly, minimizing exposure to personnel and the environment.

Pressure Drop



Safety



Dixon's couplings and retention devices are designed to work safely for their intended use. The selection of the proper hose, coupling and retention device, and the proper application of the coupling to the hose are of utmost importance. Users must consider the size, temperature, application, media, pressure and hose and coupling manufacturer's recommendations when selecting the proper hose assembly components. Dixon recommends that all hose assemblies be tested in accordance with the Association for Rubber Products Manufacturer's (ARPM) recommendations and be inspected regularly (before each use) to ensure that they are not damaged or have become loose. Visit ARPMINC.com for more information. Where safety devices are integral to the coupling, they must be working and utilized. The use of supplementary safety devices such as safety clips or safety cables are recommended. If any problem is detected, couplings must be removed from service immediately.

Dixon is available to consult, train and recommend the proper selection and application of all fittings we sell. We strongly recommend that distributors and end users make use of Dixon's Testing and Recommendation Services. Call 877.963.4966 or click dixonvalve.com to learn more.

Dixon

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