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Dixon® MannTek Safety Break-away Couplings - Marine Version

Application
- Typically for ship-to-offshore platform and ship-to-ship product transfer operations

Features
- Designed to be installed within a hose string where the coupling will have a length of hose attached to both sides
- Minimizes spillage and damage associated with pull-away incidents
- Coupling automatically senses excessive load, closes the valves and disconnects. Release is executed when force causes bolts to break
- FKM (FPM) O-rings, additional seal materials are available
- Optional non-closure design available; contact Dixon

Specification
- Working pressure: **360 PSI** at ambient temperature **70°F (21°C)**

Female NPT x Female NPT

Size	DN Size	316 Stainless Steel Part #
2"	50	MSBC200SS
3"	80	MSBC300SS
4"	100	MSBC400SS
5"	125	MSBC500SS
6"	150	MSBC600SS

Male NPT x Male NPT

Size	DN Size	316 Stainless Steel Part #
2"	50	MSBC200SSMNPT
3"	80	MSBC300SSMNPT
4"	100	MSBC400SSMNPT
5"	125	MSBC500SSMNPT
6"	150	MSBC600SSMNPT

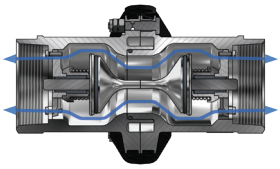
150# Flange x 150 Flange

Size	DN Size	316 Stainless Steel Part #
2"	50	MSBC200SSFL
3"	80	MSBC300SSFL
4"	100	MSBC400SSFL
5"	125	MSBC500SSFL
6"	150	MSBC600SSFL
8"	200	MSBC800SSFL

NOTE: For flange dimensions, diagrams, and additional information, please reference dixonvalve.com.

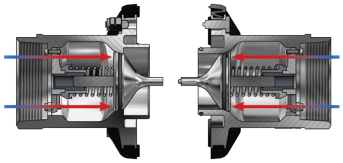
How it Works

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 a 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.