# MannTek Safety Break-away Couplings - Marine Version

#### Application:

· typically for 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
- 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
- working pressure: 360 PSI at ambient temperature 70°F (21°C)
- FKM (FPM) O-rings, additional seal materials are available
- optional non-closure design available, contact Dixon<sup>®</sup>





### 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 NEW



#### 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
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## 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



· 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.