



FLIP FLAP

Breakaway Coupling

The “**Flip Flap**” **Breakaway Coupling** is a safety device that protects a flexible hose string from an excessive axial load, a surge pressure, or a combination of the two.

General

The standard Flip Flap coupling configuration comprises two sets of disc valves positioned either side of a circumferential calibrated titanium alloy weak-bolt flange assembly.

The unit is passive, which means it does not require any external energy source to operate.

Key Features

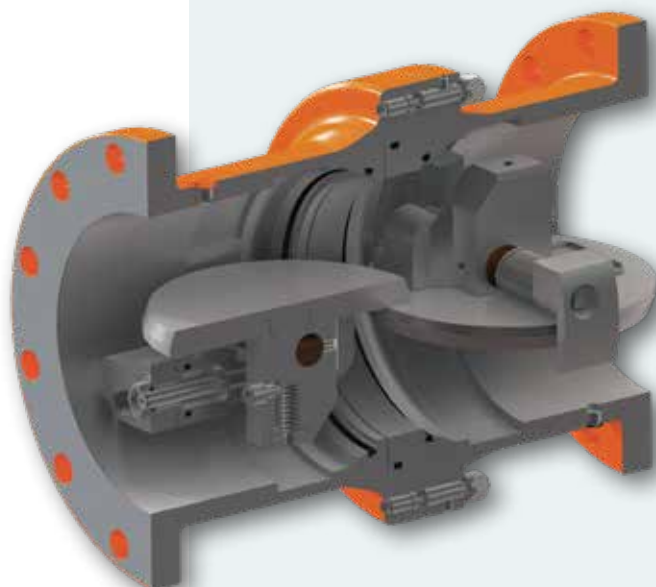
- **Reassembly on-site**
- Special **titanium weak-bolt** alloy
- Available both for **onshore and offshore installation**
- Suitable for **floating** and **submarine** application in case of offshore installation
- Suitable for **monodirectional** or **bidirectional** flow
- **100% leak-tight** after breakout
- Maintenance free for **5 years**
- **25 years** design life

Valve Closure Time

Adjustable for both upstream and downstream valves to suit the specific needs of installation.

Parting Load

Adjustable to suit any specific installation by changing the titanium alloy weak-bolts, without disassembling the unit.



sales support : marketing@bklanggeng.com

AVAILABILITY

Sizes:	4", 6", 8", 10" (different sizes can be provided upon specific project requirements)
Flanges:	ASME B16.5 CLASS 150/300 - RF or FF
Design Pressure rating:	ASME B16.5 CLASS 150/300
Test Pressure:	1,5 * Design pressure
Temperatures:	-10 °C to +85 °C (or on specific requirement)
Fluids:	Crude Oil, Refined products, Pressurized LPG and General Petrochemicals Fluids



FLIP FLAP

Breakaway Coupling

GENERAL DESCRIPTION and OPERATION

In its operational mode the two discs, being locked “face to face”, maintain the valves open allowing the fluid transfer and limiting the pressure losses at the very minimum.

The two valves of the Flip Flap MBC are held together when in service by a set of circumferential calibrated titanium-alloy weak-bolts, designed to withstand axial loads and/or internal pressure up to the calculated parting load.

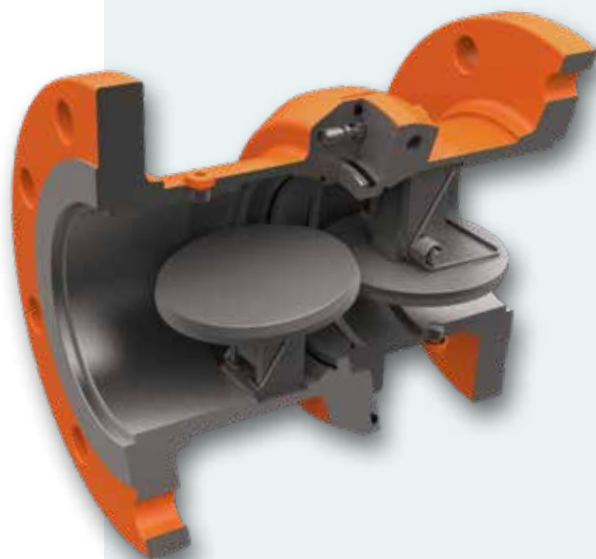
A breakout occurs when a pre-set load or internal load/pressure combination is reached into the hose string to protect the hose from damage and generally the whole installation facility.

The two disc-valve separate, as discs start closing, they snap onto their seats and the flow of the liquid being transferred is shut off and contained within each part of the separated MBC ensuring the 100% leak free shut-off.

To avoid water hammer surge pressure problem, the unit can be provided with a dampening cartridge system to close the valves at a specific closure time.

Painting and coating

For Offshore installation, depending on specific Project requirements, the “Flip Flap” can be painted following MIB standard coating cycle applied to the exposed surface of the valve or can be considered other painting specifications upon Customer request.



Materials

Bodies, Flanges:	ASTM A182 F 316 or equivalent
Discs:	ASTM A479 S31803 (DUPLEX)
Weak Bolts:	Titanium Grade 23
O-ring seals:	Depending on the fluid characteristics

Dimensions

	4"	6"	8"	10"
Overall Length:	245 mm	355 mm	435 mm	530 mm
Outside Diam.:	230 mm	279,5 mm	343 mm	406,5 mm
Dry Weight:	22,5 kg	58 kg	100 kg	166 kg
Weigh full of water:	20 kg	51 kg	87 kg	145 kg

For further information contact:



Emergency Disconnect System
for the Oil & Gas & Petrochemical
Onshore & Offshore industries

PT BERKAH KURNIA LANGGENG
Gedung Nariba Dua, unit 105
Jl. TB. Simatupang No. 49, Jakarta
Ph : +62 21-8778 2274

email : marketing@bklanggeng.com



Certificate No. CASS 00026/00