



MIBreak - PETAL TYPE

Marine Breakaway Coupling

"MIBreak", now available with the 12", 16" and 20" Full Bore, is the last evolution of the **dual petal valve marine** breakaway coupling, a safety device that protects flexible hose strings from an excessive axial load, a surge pressure, or a combination of the two.

Description

MIBreak comprises two sets of petal valves positioned either side of a circumferential calibrated titanium alloy weak-bolt flange assembly. The petals are housed in the annular cavity between the internal sleeve and the internal bore of the valve body. The unit is self contained and does not require any external energy source to operate.

Key Features

- **Minimum spillage** by use of an enhanced petal sealing design
- **Revolutionary damping arrangement** (no orifice) to control closure rate and prevent debris or particle ingress
- Unique **On-Site reassembling** after a disconnection
- Special **titanium weak-bolt** alloy
- **2 stage petal valve closure** to minimize surge
- **20 years** design life

Valve Closure Time

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

Parting Load

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

Options

Locking Device
Flushing Device

Design

Sizes:	12" – 16" – 20" FB
Flanges:	ASME B16.5 Class 150/300 – RF or FF
Design Pressure:	275 psig / 19 barg
Test Pressure:	413 psig / 28.5 barg
Design Fluid Temp.:	0°C +85°C
Design Ambient Temp.:	-10°C +55°C



Patented Dampener



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Unit in operating mode with weak-bolts intact and valves open. The two halves of the unit will part when a preset load, or a load/internal pressure combination is reached and the weak bolts break.



Unit shortly after "breakout": the central sleeve assembly is pulled out of the upstream half. Upstream valve start closing in two stages:

- Four large petals close first;
- Four smaller petals follow at a lower speed, controlled by hydraulic dampeners.



The central sleeve disengaged and withdrawn: the downstream petal valves begin their closure sequence (Typically 8 petals close instantaneously, but they can be adjusted to suit specific closure times).

Painting and overlay

Specific coating cycle applied to protect against corrosion the external surfaces of the valve:

- Hot zinc metallic coating
- Sand Blasting
- Cross link Epoxy primer, 80 µm
- Epoxy glass reinforced, 225 µm
- Epoxy glass reinforced, 225 µm

Optional SS Overlay of the product exposed surface (internally).

Materials

Bodies, Flanges:	A694 F52
Petals:	A747 H900 (17-4 PH)
Internal Sleeve:	A312 Tp. 316
Weak Bolts:	Titanium Grade 23
Valve Petal Sealing:	Nitrile/Viton
O Ring Seals:	Nitrile/Viton

Dimensions (for the 16")

Overall Length:	783 mm
Outside Diam.:	608 mm
Dry Weight:	760 kg
Immersed Weight:	NULL (c/w buoyancy collars)



For further information contact:



Emergency Disconnect System
for the Oil & Gas & Petrochemical

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