

SAFETY BREAK-AWAY COUPLINGS



The TODO® Safety Break-Away Couplings are designed to eliminate spillage and damage associated with drive / pull away incidents.

The consequences of such incidents can be very serious without break-away protection and occur more frequently than you would think. The effectiveness of alternative protection systems is often compromised by human error. Measures such as brake interlocks, barriers and even removing the keys from a tanker driver can all be defeated, either intentionally or otherwise. The Todo Safety Break-Away coupling system removes the human error element in this area of product transfer.

The TODO® Safety Break-Away Coupling System uses a double valve arrangement that ensures closure of both halves before the main seal release to atmosphere. The coupling halves seal automatically as soon as a movement greater than 1.5 mm is detected between the halves. This important feature removes the possibility of incomplete closure in partial break away or excessive strain conditions.







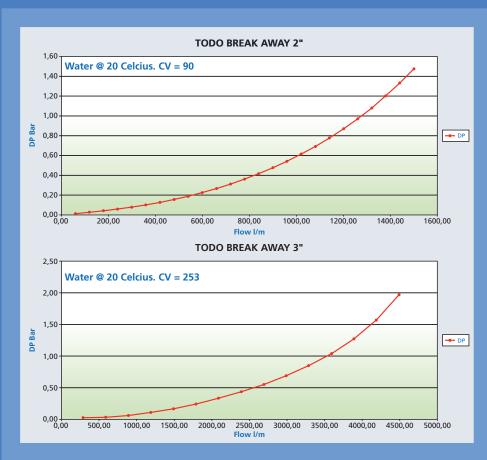






FLOW CAPACITY

TODO[®] Safety Break-Away Couplings offer exceptionally high flow capacity for their size.

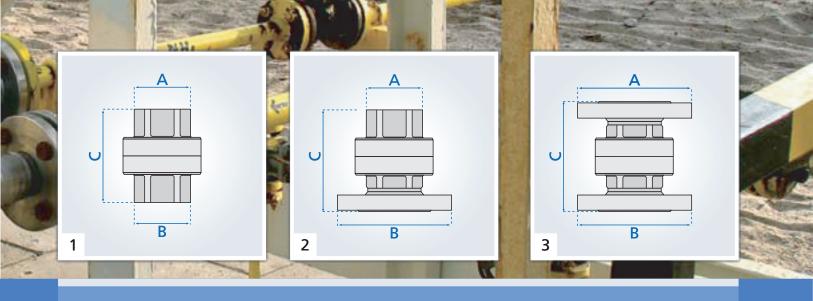


Alternative designs of coupling often need to step up at least one size to achieve comparable flow rates. The TODO® Safety Break-Away Couplings are rated to 25 bar-g working pressure with a safety factor of 5:1.

Further advantages:

Resetting the couplings after a break away incident is possible on site without removing the coupling halves from the hose or pipe-work. Protected break stud mountings that permit visual inspections.





DIMENSIONS EXAMPLES (OTHERS AVAILABLE)

		CONNECTIONS		DIMENSIONS in MM			WEIGHT
SIZE	PICTURE	ONE SIDE	OTHER SIDE	Α	В	C**	KG
DN 50	1	2" BSP or NPT FT	2" BSP or NPT FT	76	76	142	4,90
DN 50	2	2" BSP or NPT FT	Flange DN 50	76	A.S.*	152	7,55
DN 50	3	Flange DN 50	Flange DN 50	A.S.*	A.S.*	162	10,25
DN 80	1	3" BSP or NPT FT	3" BSP or NPT FT	104	104	171	8,45
DN 80	2	3" BSP or NPT FT	Flange DN 80	104	A.S.*	181	12,05
DN 80	3	Flange DN 80	Flange DN 80	A.S.*	A.S.*	190	15,65

^{*} According Standard

TECHNICAL DETAILS

Sizes available: DN 50 (2") and DN 80 (3") Material available: Stainless Steel AISI 316L

Seals: FKM as standard, EPDM, FFKM on request

Maximum working pressure: 25 bar-g Test pressure: 37,5 bar-g

Break envelope: 90° 3D in all directions from centre reference plane.

End connections available: BSP / NPT male and female thread, different kinds of flanges.







 $[\]hbox{** Dimensions of the units with flanges can vary because of different flange-standards}$



APPLICATIONS

Todo Safety Break-Away couplings can be used effectively in many applications and are equally suitable for both hose and loading arm use. Typically mounted to a fixed point, the coupling is usually arranged in a way that ensures a breaking strain is applied at an angle.

This arrangement reduces the break load required for separation and helps the coupling resist normal manual handling strains. A special version is available for mounting mid hose string (typical in ship to shore and offshore service vessel applications) where the coupling is adjusted to recognize only tensile loads.





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