

# TODO®

*A Gardner Denver Product*

## SAFETY BREAK AWAY COUPLINGS

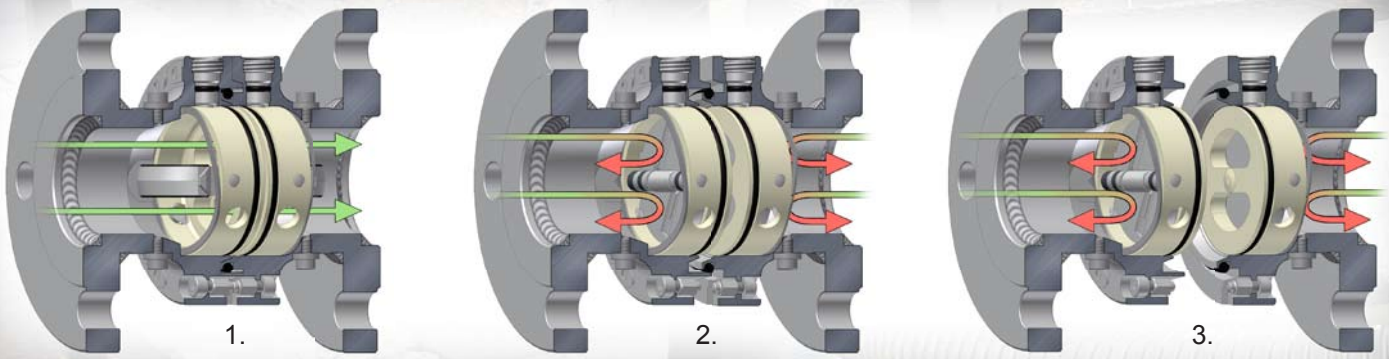


**The TODO® Safety Break Away couplings are designed to eliminate spillage and damage associated with drive / pull away incidents.**

The consequences of such incidents can be very serious without breakaway 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 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.



## HOW IT WORKS

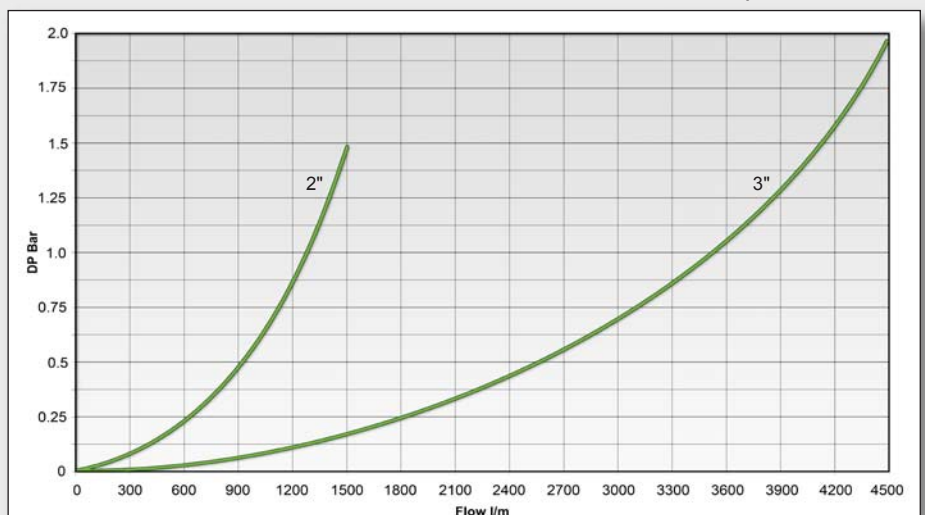
The coupling (normal operating condition, 1) automatically senses an excessive load, closes its valves (2) and then permits disconnection (3).

## FEATURES

- Exceptionally high flow rate / low pressure drop.
- Valves in both halves close automatically before the main fluid seal releases to atmosphere.
- Ultra compact design.
- Encapsulated shear bolts.
- Operates independently of shut off safety systems and does not require an external power source.
- Will release at any angle of pull.
- Marine midhose versions available.
- Easy to re-set on site with one person.

## FLOW CAPACITY

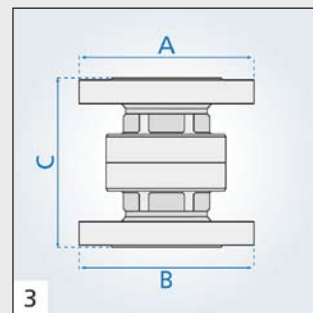
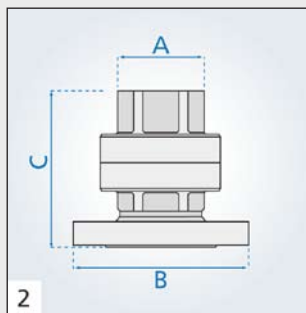
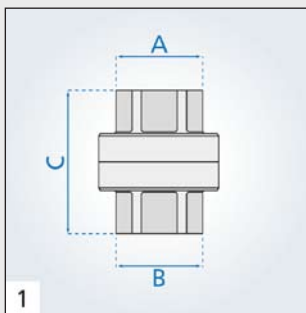
**TODO® SAFETY BREAK AWAY couplings offer exceptionally high flow capacity for their size.** Media: water. Temperature: 20°C.



Alternative designs of coupling often need to step up at least one size to achieve comparable flow rates.



## DIMENSIONS EXAMPLES (OTHERS AVAILABLE)



Size	Picture	Connections		Dimensions (mm)			Weight Kg
		One side	Other side	A	B	C**	
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.

\*\* Dimensions of the units with flanges can vary because of different flange-standards.

## TECHNICAL DETAILS

Sizes:	2" (DN50) to 3" (DN80).
Materials:	Stainless Steel AISI 316L.
Seals:	FKM (Viton®) as standard, EPDM and FFKM on request.
Working pressure:	PN 25 bar.
Test pressure:	37.5 bar.
Break envelope:	90° 3D in all directions from centre reference plane.
End connections:	BSP- and NPT-threads, different kind of flanges.

Viton® is a registered trademark of DuPont Performance Elastomers.

## CERTIFICATES / APPROVALS

European directives 97/23/EC (PED).  
Manufactured under EN ISO 9001:2000.



## **TODO® is the world's leading manufacturer of DRY-BREAK® couplings**

TODO® was established as a family concern in 1971 based in Töreboda, Sweden. In 2006 TODO® was acquired by Gardner Denver International and now form part of the companies Fluid Transfer Division. With 35 years of experience in the fluid handling industry TODO® is now established as the world's leading manufacturer of DRY-BREAK® couplings. These couplings are supplied globally into a diverse range of industrial applications for the transfer of oil, gases, chemicals etc.

TODO-MATIC® DRY-BREAK® couplings provide easy, quick, safe and environmentally friendly handling of liquids and gases. They minimise risk of operator exposure to emissions, provide better ergonomics, reduce human error and achieve commercial benefits through time saving / clean up costs.

*TODO® design and manufacture to EN ISO 9001:2000 accredited quality procedures and provide a product range that conforms to all relevant international quality, performance and safety standards. TODO-MATIC® couplings carry the highest level of certification and approvals available.*

### **PRODUCT RANGE**



TODO-MATIC®



TODO-GAS®



TODO® Safety Break Away



TODO-45 aviation



PTC (Pressure Tight Cap)



Ball Valves



Fuel Nozzles



API couplings



Swivels

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