

TODO

 Transport Solutions

ADVANCED COUPLING SOLUTIONS FOR SAFE AND EFFICIENT FLUID AND VAPOUR MANAGEMENT



 Ingersoll Rand®

www.todocouplings.com

TODO

In the critical world of fluid and vapour transfer, pipe and hose connectors are not just components; they are the safeguard between operational excellence and potential hazards. TODO's innovative Dry-Break Couplings, with over 40 years of trusted performance, stand at the forefront of this technology, delivering on the promise of a leak-free and waste-free operation, and ensuring that safety and environmental responsibility go hand in hand. From aviation to offshore, our products set industry standards, meeting the diverse needs of our clients with precision and durability.



Secure Your Transfer, Embrace Zero Waste

TODO Dry-Break Couplings come with a suite of technical features designed for maximum efficiency and safety. Available in sizes ranging from 1 to 6 inches, they are suitable for a variety of transfer system requirements. Made from durable materials compatible with oil, gas, petrochemicals, and LPG, they maintain integrity even under high-pressure conditions. The couplings operate seamlessly with pumping and compression systems, providing secure and spill-free connections between hoses and transfer points.

TODO Dry-Break Couplings offer an advanced design for swift and secure connections, effectively minimising leakage and product waste. Equipped with cutting-edge sealing features, they are optimised to reduce residual loss and enhance safety by preventing spillage or damage during disconnection. These couplings are compatible with a variety of pumps and compressors and are designed to complement their operation in industrial transfer applications. They represent the pinnacle of industry excellence in secure fluid and vapour handling.



Dry-Break Coupling Applications

TODO Dry-Break Couplings cater to a wide array of industries, each with its own set of challenges and requirements, ensuring safety and efficiency in the transfer of liquids and vapours.



Chemical & Petrochemical: The TODO II Tank Units, TODO-MATIC and NGX Breakaway Couplings, and TODO Safety Pressure Tight Caps are ideal for the chemical and petrochemical sectors, where they handle aggressive fluids safely and with minimal residual loss.

LPG & Gas: The TODO-GAS Couplings are specifically designed for the unique needs of the gas industry, providing secure connections for both liquid and vapour LPG transfer. The TODO-MATIC and NGX Breakaway Couplings are among other TODO products that are perfectly suited for use in this demanding industry.



Offshore: Built to withstand tough offshore environments, Todo II and Todomatic offer dependable performance and are designed to prevent spillages, whilst the Marine Break-Away Couplings are designed to disconnect safely in emergency break-away situations, protecting equipment.

Aviation: The TODO-45 Aviation couplings, compliant with ISO 45 standards, offer specialised solutions with improved safety and cost-efficiency for re-fueling operations.



Railcar: In the rail industry, the TÜV-certified TODO II Tank Units and TODO-MATIC Couplings ensure safe and reliable loading and unloading of railcars.

Emergency Break-Away Situations: The NGX Breakaway and Marine Break-Away Couplings are engineered to safely disconnect under excessive load, which is crucial in marine applications and any transfer operation where quick disconnection is necessary for safety.



High-Volume Transfer: TODO products are designed to handle large product quantities efficiently, ensuring safe and rapid operations.

Loading Arm Systems: TODO's couplings, including the Todomatic Hose Units and Ball Valves are designed to integrate into loading arms, offering flexibility, safety, and ease of maintenance in loading and unloading operations across various industries.



TODO Dry-Break Couplings: Customer Benefits

TODO Dry-Break Couplings elevate operational capabilities by providing a comprehensive range of key benefits tailored to meet the demands of various industries:

- **Enhanced Safety:** TODO's innovative couplings are meticulously designed to eliminate spills and leaks, significantly reducing the risk of workplace accidents and environmental contamination. This attention to safety helps mitigate the potential for costly clean-ups and legal repercussions associated with spills.
- **Reliable Performance:** With over 40 years of experience, TODO has established a reputation for producing couplings that deliver consistent performance. The durability and reliability of these products contribute to uninterrupted operations, preventing costly downtime and equipment failures.
- **Innovative Technology:** Featuring the latest advancements, TODO couplings embody the cutting edge of design. Technological improvements translate to operational benefits including reduced service time, lower pressure drops, and lighter weight, driving process enhancements and competitive advantage.
- **Minimal Residual Loss:** TODO couplings are engineered for a dry-break connection, ensuring no leakage occurs during engagement or disengagement. This feature is crucial for maintaining a clean work environment and adhering to stringent environmental standards.
- **Quick and Efficient Operation:** Designed for ease of use, TODO couplings enable swift, tool-free connections and disconnections, streamlining the transfer process. This efficiency reduces labor time and minimises the likelihood of errors, enhancing overall productivity.
- **Durable Construction:** Manufactured with high-quality materials, TODO couplings are built to withstand the rigors of harsh industrial environments. Their robustness leads to extended equipment life, fewer replacements, and less maintenance, contributing to a lower total cost of ownership.
- **Certified Quality:** TODO couplings are recognised for their quality and safety, boasting a variety of international certifications. This collection of endorsements assures customers that their investments adhere to rigorous safety standards and are acknowledged globally for their reliability and performance.
- **Versatility and Compatibility:** The TODO couplings range includes a variety of sizes and material options, making these couplings suitable for a wide array of applications. The couplings are compatible with various pumps and compressors, ensuring seamless integration into existing systems.



These benefits highlight TODO's dedication to delivering high-quality, reliable, and user-friendly coupling solutions that align with the demands of global industries. By consistently prioritising safety and environmental standards, TODO ensures that their products not only enhance operational efficiency but also contribute to a more sustainable industrial landscape.



TODO-MATIC Dry-Break Couplings

The TODO-MATIC couplings are the culmination of over three decades of expertise in fluid handling within the oil, gas, and petrochemical sectors. These couplings, which were among the first to introduce the NATO STANAG 3756 standard, are a market-leading choice renowned for their ability to manage a wide array of applications with exceptional safety and efficiency.

Main Benefits:

- **Enhanced Safety:** Designed to ensure minimal residual loss and virtually zero spillage, the TODO-MATIC couplings prioritise operator safety and reduce environmental impact.
- **Increased Profitability:** The efficiency of these couplings translates to less product loss during transfer, allowing more product to reach the customer and boosting profit margins.
- **Durability and Reliability:** The TODO-MATIC couplings are proven to perform reliably under harsh conditions, maintaining their integrity even after repeated use.
- **Efficient Operation:** The design requires minimal operator intervention, streamlining the loading and unloading process, whether on the road, rail, offshore rig, or ship.

Applications: The versatile TODO-MATIC couplings serve applications ranging from chemical transfer to offshore ship-to-rig transfer and rail tank loading/discharge.

Technical Specifications:

- **Sizes:** Available from 1" to 6".
- **Materials:** Constructed from high-grade materials suited for aggressive fluids.
- **Working Pressure:** Up to 25 bar (363 psi), with variations depending on the material and flange rating.
- **Temperature Range:** Standard working temperature from -20°C to +80°C (-4°F to +176°F), with optional ranges available.



TODO II Tank Units

The TODO II Tank Units represent the next generation in dry-break coupling technology. Expertly engineered for the safe and efficient transfer of oils, gases, and hazardous chemicals, they offer a seamless connection experience that is virtually spill-free, underscoring a commitment to operator safety and environmental protection.

Main Benefits:

- **Maximum Safety:** With a robust 5:1 safety factor and certifications including TPED, the TODO II Tank Units set the standard for operational security.
- **Virtually Zero Spillage:** The advanced design of these tank units ensures negligible product loss upon disconnection.
- **Faster Loading/Unloading:** Thanks to computer-simulated flows and an improved piston design, the units achieve optimal flow rates, reducing pressure drop by up to 32%.
- **Ergonomic Handling:** A 33% reduction in weight without compromising safety or durability makes these tank units easier to handle, improving ergonomics for installers.

Applications: Suited for a range of demanding applications, including offshore, chemical, rail, and loading arm system applications, the TODO II Tank Units excel where a leak-proof design is crucial.

Technical Specifications:

- **Sizes:** Available from 1" to 6".
- **Materials:** Options include aluminum or stainless steel.
- **Compatibility:** STANAG 3756 compliant for broad equipment interoperability.
- **Certifications:** TPED, ATEX, VdTÜV, ISO 9001, and ISO14001.



TODO-GAS Couplings

The TODO-GAS couplings are specifically engineered to enhance the handling and transfer of LPG in both its liquid and vapour phases. Drawing from the robust technology of the TODO-MATIC couplings, the units incorporate key adaptations to meet the unique demands of the LPG sector.

Main Benefits:

- **Optimised for LPG:** Tailored to the LPG sector's needs, these couplings offer reliable performance in various applications, ensuring excellent flow and low-pressure drops.
- **Enhanced Safety:** With a focus on operator safety, the TODO-GAS couplings are designed to prevent spillage during disconnects and virtually eliminate cross-contamination risks.
- **Material Integrity:** Manufactured with 316L and duplex stainless steel, these couplings ensure durability and ease of operation.
- **User-Friendly Design:** The couplings feature a user-friendly push-and-twist mechanism for easy and secure connection and disconnection.

Applications: The TODO-GAS couplings are versatile enough for a range of LPG applications, including vapour recovery during loading/unloading processes.

Technical Specifications:

- **Sizes:** Available from 1" to 6".
- **Materials:** 316L, Duplex stainless steel.
- **Working Pressure:** Up to 25 bar (363 psi) for stainless steel models.
- **Temperature Range:** -20°C to +80°C (-4°F to +176°F) standard, with options for -45°C to +150°C (-49°F to +302°F).
- **Certification:** Compliant with the 2014/68/EU Pressure Equipment Directive (PED).



NGX Breakaway Couplings

Designed to mitigate the consequences of unexpected separation during fluid transfer, TODO's NGX Breakaway Couplings activate under excessive force, automatically shearing break pins and triggering pistons to close off the flow on both sides of the connection, preventing spillage and safeguarding both personnel and equipment.

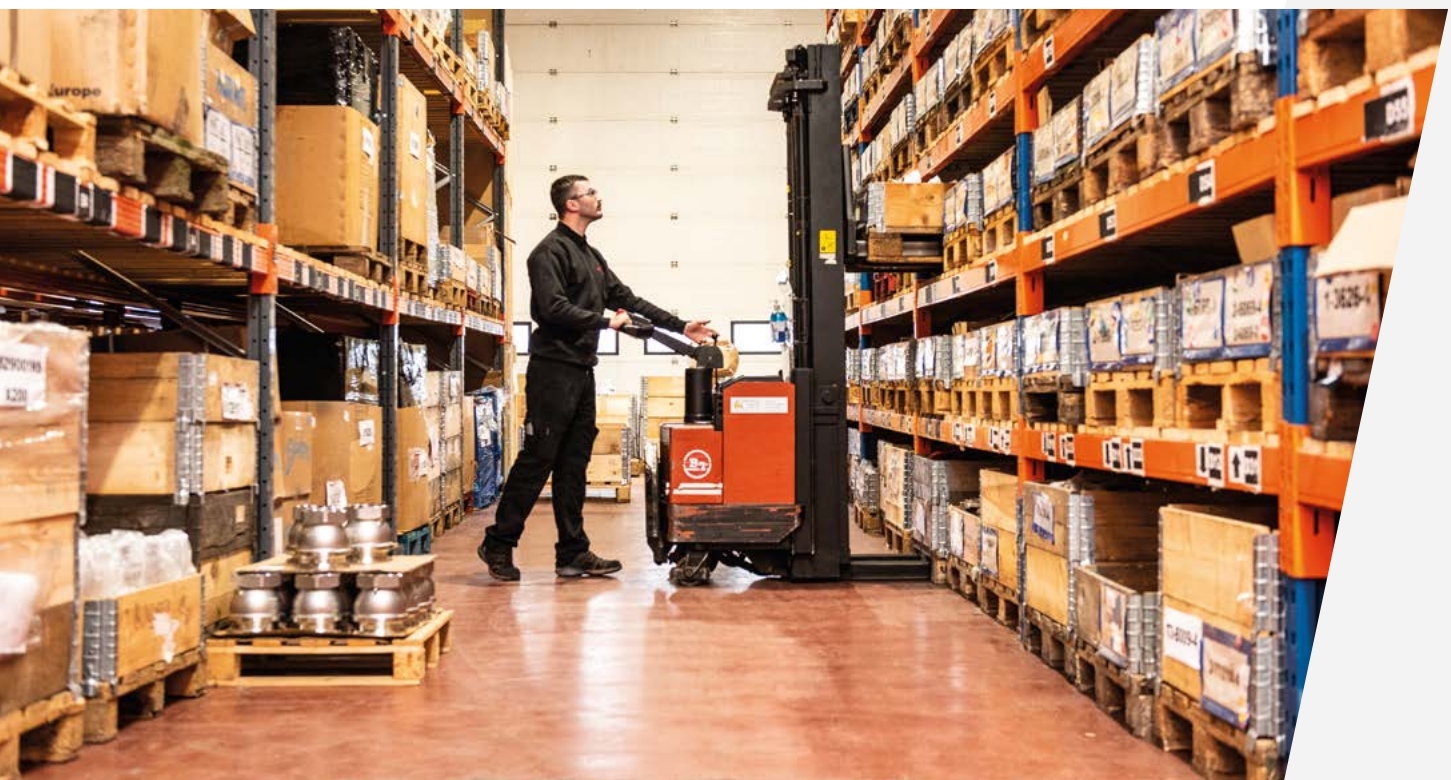
Main Benefits:

- **Spillage Prevention:** The NGX's rapid closure mechanism reduces product loss and protects the environment by sealing off flow almost instantly upon disconnection.
- **Versatile Applications:** Suitable for sectors such as chemical, LPG, aviation, and more, the NGX Breakaway Couplings ensure safe transfer of valuable or hazardous materials.
- **Reliable Performance:** With encapsulated shear bolts and a release function that activates at any force angle, the NGX couplings provide dependable protection.
- **User-Friendly:** These couplings offers simple on-site reset capabilities, minimising downtime and facilitating quick resumption of operations.

Applications: The NGX Breakaway Couplings are designed for demanding applications in the LPG and chemical sectors.

Technical Specifications:

- **Sizes:** Available in 2", 3", and 4".
- **Materials:** 316L, stainless steel.
- **Working Pressure:** Up to 40 bar (580 psi), depending on the model.
- **Temperature Range:** -20°C to +80°C (-4°F to +176°F).
- **Certification:** Compliant with the 2014/68/EU Pressure Equipment Directive (PED).
- **Mounting:** Thread or flanged variants available.



NGX Marine Breakaway Couplings

TODO's NGX Marine Breakaway Couplings address the unique challenges of maritime environments. Designed to prevent spillage and equipment damage during the loading and unloading of hazardous liquids aboard ships, they disconnect in the event of excessive straight-pull load, ensuring a safe break without spillage.

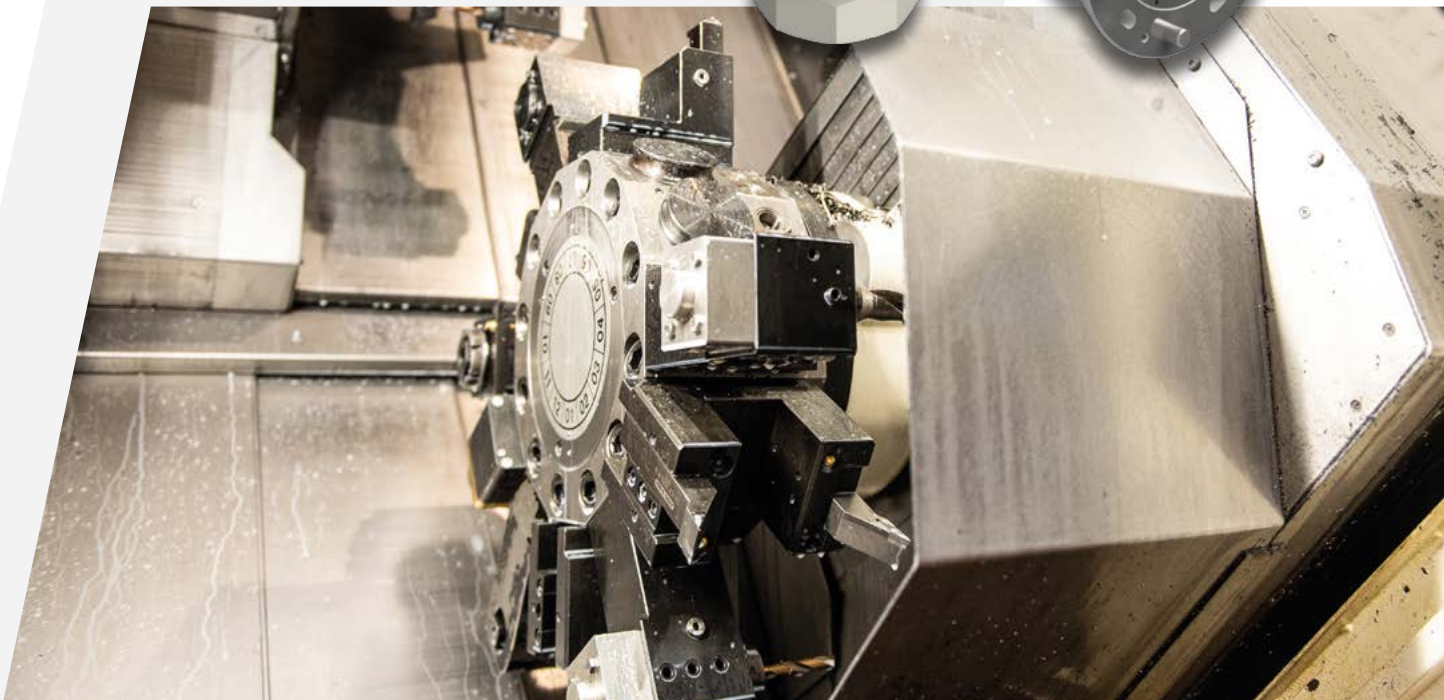
Main Benefits:

- **Marine-Grade Safety:** Built to handle the forces encountered in marine environments, these couplings disengage under extreme load, shutting valves to prevent leaks and protect against contamination.
- **High Performance:** TODO's marine couplings maintain a high flow rate and low pressure drop, ensuring efficient and effective transfer operations.
- **Reliable Durability:** Even after repeated use, the NGX Marine Breakaway's sturdy construction ensures consistent operation and longevity in marine environments.
- **Independent Operation:** Functions autonomously without the need for an external power source or shut-off safety systems with the use of spring loaded pistons, simplifying procedures and enhancing reliability.

Applications: The NGX Marine Breakaway Couplings are tailored for the offshore sector, proving essential for the transfer of hazardous liquids on oil rigs, tankers, and marine platforms.

Technical Specifications:

- **Sizes:** Available in 2", 3", and 4".
- **Material:** 316L grade stainless steel.
- **Working Pressure:** Up to 40 bar (580 psi).
- **Temperature Range:** -20°C to +80°C (-4°F to +176°F).
- **Certification:** Stringent assessments from regulatory bodies ensure compliance with the highest standards.



TODO-45 Aviation Couplings

The TODO-45 Aviation Couplings are specifically designed for ground fueling operations. While they are not intended for under-wing refueling, they play a crucial role in the loading and unloading of aviation fuel at distribution centers and during the connection to distribution vehicles at airfields.

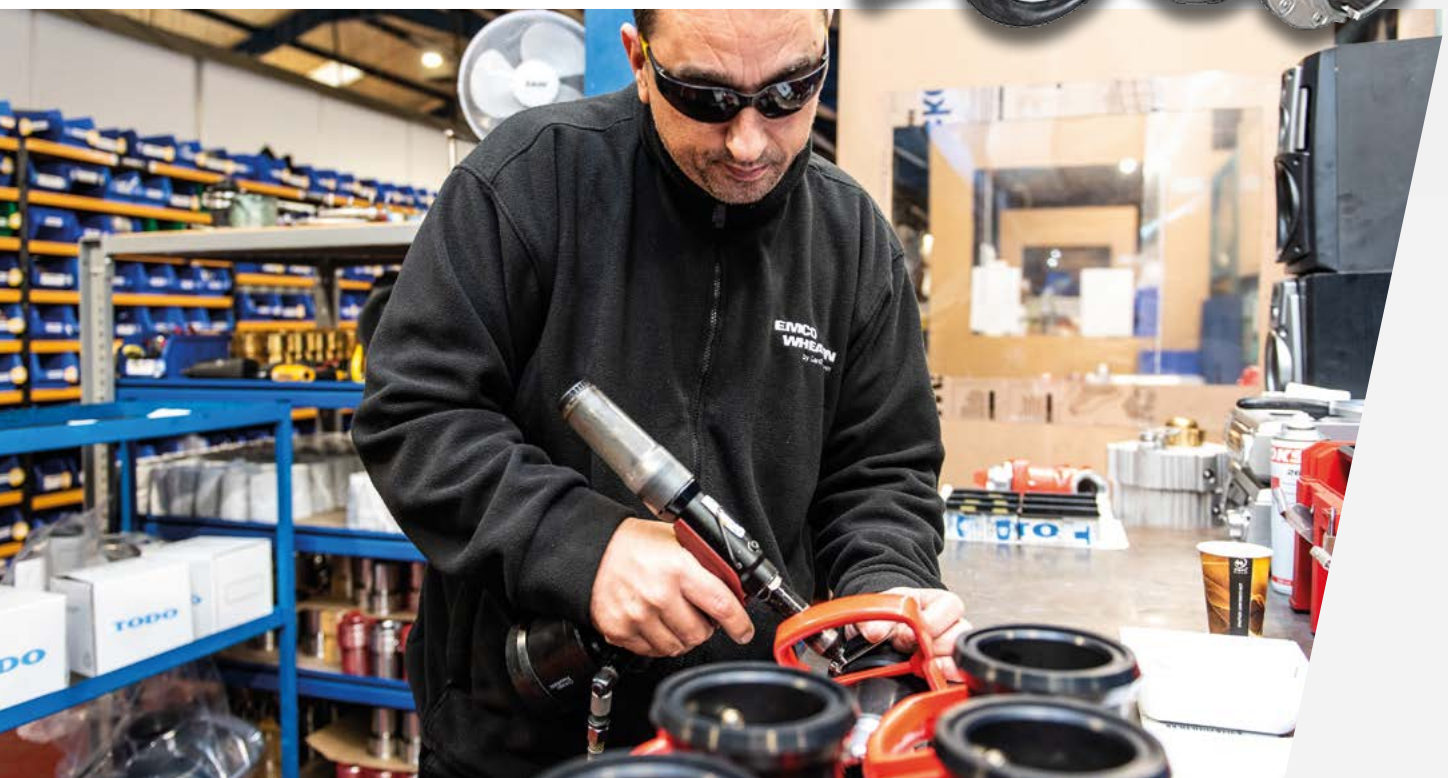
Main Benefits:

- **Standards Compliance:** The TODO-45 couplings comply with ISO 45, MS24484, STANAG 3105, and British Aerospace Specification 2C14, meeting the industry's safety standards.
- **Efficient Operation:** Utilising the same dry-break technology as the Todomatic couplings, the TODO-45 facilitate quick and efficient fuel transfers.
- **Robustness and Reliability:** These couplings' robust design and construction, free of external operational components, ensure durability and reduce the risk of contamination.
- **Ease of Use:** The couplings' straightforward, single-action operation, reducing human error and expediting fuel transfer processes.

Applications: The TODO-45 is a preferred solution within the commercial, military, and offshore aviation sectors for fuel handling and transfer.

Technical Specifications:

- **Size:** Available in 2.5".
- **Materials:** Aluminum externals and 316L grade stainless-steel internals for maximum integrity and contamination prevention.
- **Working Pressure:** Up to 10 bar (145 psi).
- **Temperature Range:** -20°C to +80°C (-4°F to +176°F).
- **Mounting:** Thread or flanged options available.



TODO Safety Pressure Tight Caps

The TODO Safety Pressure Tight Caps are a vital safety component developed through a collaborative effort with leading European chemical companies. Adaptable and customisable, these caps are designed to ensure secure containment and enhance operational safety across various industries.

Main Benefits:

- **Enhanced Safety:** The presence of a red O-ring serves as a visual alert to operators about the pressure behind the cap, indicating potential upstream valve failures.
- **Pressure Containment:** Designed to maintain pressure integrity, these caps prevent product leakage and ensure safe handling, even in the event of a line fault.
- **Closure Assurance:** They can act as an official third point of closure, providing an additional safety layer.

Applications: TODO's Safety Pressure Tight Caps are used within the chemical and oil and gas sectors to protect operators and maintain product integrity during storage and transfer.

Technical Specifications:

- **Sizes:** Available in 2-4".
- **Material:** 316L stainless steel.
- **Working Pressure:** Up to 25 bar (363 psi).
- **Temperature Range:** -20°C to +80°C (-4°F to +176°F).
- **Seal Compatibility:** Compatible with a wide range of O-ring materials to suit diverse applications.



TODO Fueling Nozzles

TODO's Fueling Nozzles are engineered for the high-volume transfer of fuel and other mediums. Their high flow rate and low pressure drop enable efficient loading and unloading without the risk of product loss during transfer.

Main Benefits:

- **High-Volume Efficiency:** Built to deliver large volumes of fuel rapidly, the nozzles ensure quick and effective fuel delivery, maximising operational throughput.
- **User-Friendly Design:** Operators can easily initiate fuel delivery with a convenient thumb-trigger valve, allowing for precise control and simple operation.
- **Durable Construction:** With a high-quality aluminum alloy body, strong swivel, and robust handle, the TODO Fueling Nozzle maintains reliability and performance even with extensive use.

Applications: TODO's Fueling Nozzles are versatile and increasingly popular for bus refueling, as well as for transferring various other liquids, including paint, in commercial settings.

Technical Specifications:

- **Size:** Available in 2".
- **Materials:** Aluminum (EN AW 6262 T6) body with brass (CW614N) attachments.
- **Working Pressure:** Up to 10 bar (145 psi).
- **Temperature Range:** -20°C to +80°C (-4°F to +176°F).
- **Threads:** BSP (ISO 228), NPT (ANSI B1.20.1), with others available upon request.



TODO Ball Valves

The TODO Ball Valves are versatile and durable, suitable for applications that require regular compartment switching, as well as for fixed plant and mobile refueling systems. They offer reliable performance for repeated use, especially in road tanker operations.

Main Benefits:

- **Adaptable Flow Control:** TODO's Ball Valves offer both one-way and two-way flow options, with manual or pneumatic operation, to suit specific application needs.
- **Robust Construction:** The high-quality materials and sturdy design of TODO's Ball Valves promise a long operational life and consistent performance.
- **Efficient Maintenance:** Their design allows for easy maintenance and valve replacement, minimising downtime and leakage.

Applications: TODO's Ball Valves are commonly used in the road tanker sector but are equally effective in other industries where robust and reliable flow control is essential.

Technical Specifications:

- **Sizes:** Available in 2", 3", and 4".
- **Operation:** Options for one-way and two-way flow, with manual or pneumatic operation.
- **Working Pressure:** Up to 10 bar (145 psi).
- **Temperature Range:** -20°C to +80°C (-4°F to +176°F).
- **Materials:** Aluminum (EN AW 6262 T6).
- **Threads:** BSP (ISO 228), NPT (ANSI B1.20.1), with other types available upon request.



TODO Swivel Joints

The TODO Swivel Joints are designed to alleviate torque stress on hoses, facilitating their natural positioning and free movement. Initially developed as a component of the TODO-MATIC couplings, the swivel joint has evolved into a prominent standalone product, renowned for its reliability in demanding conditions for over two decades.

Main Benefits:

- **Flexibility and Ease of Use:** These swivel joints add flexibility to hose assemblies, and are simple to operate and maintain, ensuring an uninterrupted full-bore flow.
- **Durability:** Proven to be reliable under tough conditions, TODO's Swivel Joints are built to last, offering consistent performance and longevity.
- **Material Versatility:** Available in various materials and configurable to specific applications, TODO's Swivel Joints can be tailored to meet different operational needs.

Applications: The TODO Swivel Joints are utilised in a multitude of sectors, including oil and gas, petrochemical, and LPG, wherever hose torque stress reduction is essential.

Technical Specifications:

- **Sizes:** Ranging from 0.75" to 4".
- **Materials:** Options include aluminum, brass, stainless steel, among others, to suit diverse operational environments.
- **Working Pressure:** Aluminum and brass at 10 bar (145 psi), stainless steel at 25 bar (363 psi), with specific pressure adjustments for flanged variants.
- **Temperature Range:** -20°C to +80°C (-4°F to +176°F).
- **Threads:** BSP (ISO 228), NPT (ANSI B1.20.1), with other types available upon request.



Aftermarket & Support

TODO offers comprehensive repair and seal kits for all TODO-MATIC, TODO II, TODO-GAS, and TODO-45 aviation couplings, as well as fuel nozzle swivels and ball valves. These kits include O-rings, lip seals (where appropriate), connection rollers, and other wear-prone items.

Additionally, reset kits are available for NGX units, containing break pins, screws, a pairing O-ring, and guide pin. These reset kits are essential for quickly resuming work after an unexpected pull-away incident.

1 Year Warranty and Aftermarket Support

Every unit comes with a 1-year warranty from TODO. In case any issues arise during this period, our dedicated aftermarket department will arrange for the unit to be returned, inspected, and repaired at our facility in Margate.

On-Site Repair and Seal Kits

All units are equipped with available repair and seal kits, enabling users to change seals or service the units on site. While hose units have repair and seal kits available, tank units only have repair kits available.

Aftermarket Inspection and Repair Service

We offer aftermarket inspection and repair services at our facility in Margate, subject to COSHH assessments prior to receiving goods.

Global Network of Certified Service Centres

Our valued TODO customers are supported by a global network of certified service centres.

These partnering sites undergo rigorous assessments to ensure they can correctly service our products. Staff at these centres are trained to disassemble, fit, and reassemble TODO products, ensuring maintenance standards are on par with the units' initial manufacturing at our facility in Margate.

Only sites that meet TODO's strict assessment criteria are allowed to join the servicing network.

Certified Service Centre (CSC) Program

Our Certified Service Centre (CSC) program is designed for distributors of TODO products who have completed the training course performed by our Aftermarket Manager.

To qualify for the program, CSCs must meet specific criteria:

- Successfully represents and promotes the brand within their dedicated region.
- Appropriate on-site testing facilities, including air test up to 6Bar, and Hydrostatic test up to 40Bar minimum, 60Bar ideally.
- Adequate on-site stock holding of finished goods and spare parts. Approx. 10-20% of annual turnover for mentioned products.
- Successfully demonstrating the capabilities to service all mentioned products to the Aftermarket Manager during the training course.
- Purchasing required tools from Todo to perform all servicing.

If you require service from one of our certified centres please contact your local partner or contact us.



TODO

Secure Your Operations with TODO

For operations where precision, safety, and environmental responsibility are non-negotiable, TODO Dry-Break Couplings stand as the definitive choice. Why settle for less when you can have the best in safety and efficiency? By choosing our products, you align with a global community that relies on our unmatched commitment to safety and performance.

[Get in touch](#) with TODO today to discuss your needs and [request a quote](#). Our team of experts is ready to assist you in selecting the ideal coupling solution to elevate your application. Let us help you find the perfect match for your specific process requirements. Contact us now and take the first step toward optimising your operations with TODO Dry-Break Couplings.



About TODO.

We develop market leading designs and products that give you operational excellence and minimal whole life cost. We are innovative with applications, systems and controls. Our Performance ranges from the lowest vacuum to the highest pressure and we are focused on providing environmentally friendly solutions.

For more information,
visit www.todocouplings.com



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