



INTEGRATED TRANSFER  
SOLUTIONS PTY LTD

**TODO**<sup>®</sup>  
A Gardner Denver Product

# Aviation Couplings



*Better by  
Design*

## TODO® Aviation fuel transfer equipment

TODO-45. This gives, for the first time, an economical alternative to ISO 45 under wing refuelling hose couplers for aviation fuel bunkering and transfers. Although not configured for under wing fuelling, the TODO-45 hose coupler is fully interchangeable with existing connections and suitable for all other transfer operations in the fuel logistics chain.

Hydrant. The TODO-MATIC® aviation hydrant connection with integral over pressure relief valve. This system dissipates trapped fluid pressure into hose coupler without spillage to allow easy connection.



## Features, TODO-45 Couplings

- Economical alternative to ISO 45 standard hose couplers.
- Valves open and close automatically on connection and disconnection.
- Simple single action operation, no levers or switches to operate.
- Valves are guaranteed closed prior to disconnection.
- Minimal residual loss on disconnection.
- Will connect and disconnect under pressure and flow where necessary.
- Extremely reliable, very few moving parts.
- Robust construction, no external operational components.

## Technical Details, TODO-45 Couplings

Sizes:	2½" (DN65).
Materials:	High strength aluminium body, coupling ring in gunmetal, inner parts and bayonet flange in stainless steel and aluminium.
Seals:	FKM (Viton®), Floursilicone. Other materials on request.
Working pressure:	PN 10.
Test pressure:	PN 15.
End connections:	BSP- and NPT-threads. DIN-, ASA-, TW- and TTMA-flanges (available for the tank unit). Other threads and flanges on request.
Compatibility:	ISO 45, MS24484, STANAG 3105, British Areospace Spec. 2C14.

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## Certificates / Approvals

- VdTÜV type approval, mark TÜ.AGG.162-93 towards ADR, RID, IMDG and VDI-rules 2440, part 3.3.1.3.
- CE-marked, European directives 97/23/EC (PED) and 94/9/EC (ATEX) compliant.
- TDT approval, mark TDT-UW-30/09 towards ADR/RID in Poland.
- Manufactured under EN ISO 9001:2000.
- Certified towards ISO 14001:2004 and OHSAS 18001:2007.
- Manufactured towards EN 13480 and EN 13445.

## 1½" Sampling & Drain Unit STANAG 3756

TODO 9500 is used in airport hydrant systems as follows:

*Sampling* installed at a convenient point on a riser from the main hydrant line

*Venting* installed at a high point in the hydrant line.

*Draining* installed at a low point in the hydrant line.

Equipped with a TODO-MATIC<sup>®</sup> (STANAG 3756) tank unit with pressure equalizing and relief valve, two 1½" firesafe ballvalves and a 6" ANSI class 300 flange.

Materials: Stainless Steel.

Seals: FKM (Viton<sup>®</sup>) and PTFE (Teflon<sup>®</sup>). Other materials on request.

Working pressure: PN 25.

Test pressure: PN 37.5.

Viton<sup>®</sup> and Teflon<sup>®</sup> is registered trademarks of DuPont Performance Elastomers.



## TODO-45 Couplings, Plugs and Caps



**Hose unit**



**Tank unit, flanged**



**Tank unit, threaded**



**Dust plug**



**Dust cap**



**Dust cap**