Aljac MEMBER OF THE ELAFLEX GROUP

DRY DISCONNECT COUPLINGS

- PUSH AND TURN TO CONNECT OR DISCONNECT
- NO SPILLAGE WHEN CONNECTING OR DISCONNECTING
- LOW PRESSURE LOSS
- WIDE RANGE OF BODY MATERIALS AND SEAL OPTIONS
- 3/4 INCH TO 8 INCH SIZES
- FLANGED OR THREADED CONNECTIONS
- SELECTIVITY AVAILABLE

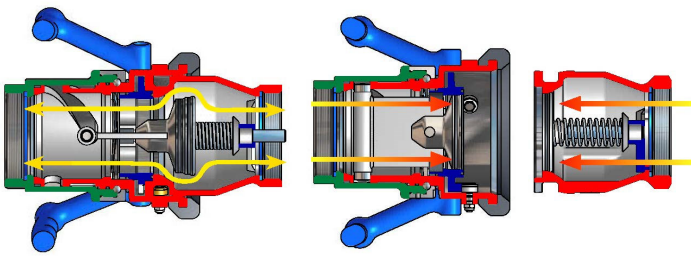
Introduction

Three point bayonet (industrial) hose couplings in accordance with STANAG 3756 are extensively used all over the world for transferring a wide range of liquids when spill free connection and disconnection is required. Aljac now offers the Mann Tek Dry Disconnect Coupling range to fulfil this requirement.

Description

The Mann Tek Dry Disconnect Coupling (DDC) connects and disconnects by gently pushing the hose unit towards the tank unit and rotating it through approximately 100°. Connection automatically opens the poppet valve in each half, so the valves do not open until the mating halves are connected. Disconnection is a reverse of this procedure and the valves close before the mating halves disconnect.

The hose unit has a built in swivel which allows the connection/disconnection operation to be performed, but this also means that the hose will not be subjected to potentially harmful torsional forces when the DDC is connected.



Connected. Full flow.

Disconnected. No spill.

The DDC is very robust in order to deal with the most arduous operating conditions, and it allows high flow rates to be achieved with a very low pressure loss. Because of the wide range of possible applications for the DDC, it is available in Aluminium, Brass/Gunmetal, Stainless Steel, Hastelloy C, Titan, Duplex, PVDF or PEEK, and can be fitted with Fluorocarbon (Viton®), NBR (Nitrile), EPDM, Chemraz®, Kalrez® and other seal materials to suit the fluid being processed.

The DDC is available in sizes from 3/4 inch to 8 inch and it is possible to supply the DDC with BSP or NPT threads, or with DIN, ASME (ANSI), TW, TTMA, or EN 1092-1:2001 flanges, or with other thread and flange types on request.

Dust caps and plugs are available for all sizes in a variety of materials.

DDC couplings are electrically conductive when connected (with the exception of PEEK and PVDF) with a resistance of less than 10Ω, which is required when processing flammable liquids. All DDCs are CE marked and are certified to PED and ATEX.

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Options

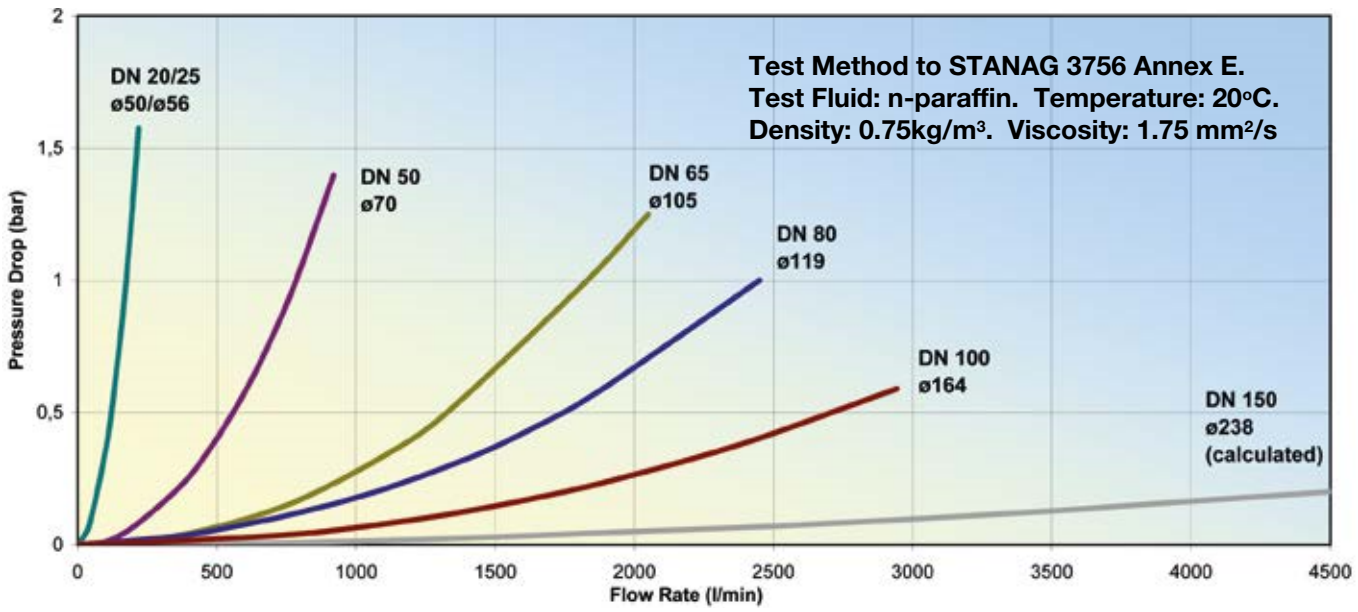
The DDC can be supplied with the following additional options:-

⇒ Pin and slot selectivity which avoids product contamination caused by connecting a hose unit to the wrong tank unit.
⇒ Integral break away capability.
⇒ Pressure equalising valves for connection when there is a high locked in system pressure.
⇒ Automatic thermal pressure relief.
⇒ Drain connections.
⇒ Locking devices to eliminate unintentional disconnection due to vibration.
⇒ Locking dust plugs and caps for security.
⇒ Integral non return valves.
⇒ Grounding wires/clips.
⇒ Integral electronic position sensors.
⇒ Sight glasses/strainers.
⇒ Extended handles.
…. and many other features to special order.

Interchangeability

The DDC is fully interchangeable with any equivalent couplings which meet the dimensions defined in STANAG 3756, including Todo, Fulcrum and Avery-Hardoll. However, in order to ensure that hose units and tank units will connect together, it is important to know the Socket Size **'D'** (see below) when ordering a mating part. The options are 70mm, 105mm, 119mm, 164mm, 238mm or 272mm.

Pressure Loss Curves



Applicable Standards

Stanag 3756, PED, ATEX EEx. II 2G.

Materials Of Construction

Material Options: Stainless Steel, Aluminium, Brass/Gunmetal, Hastelloy C, Titan, Duplex, PEEK, PVDF.
Seal Options: Fluorocarbon (Viton®), NBR (Nitrile), EPDM, Chemraz®, Kalrez®.

Operating Conditions

Maximum Working Pressure (MWP): 6/10/16/25 bar (dependant on the body material).
Test Pressure: 1.5 times MWP.
Maximum Connection Pressure: 7 bar.
An Automatic Pressure Equalising Valve can be fitted to the Poppet for use with higher locked in pressures. Contact the Aljac Sales Department.
Connections: BSP and NPT threads. DIN, ASME (ANSI), TW, TTMA, EN 1092-1:2001 flanges. Other threads or flanges on request.
Electrical Resistance (When Connected): 10Ω maximum (except PEEK and PVDF).
Operating Temperature Range: Minus 20°C to plus 80°C (dependant on the body material).