

Technical Data Sheet

Driplex DDC Dry-Break Coupling

Driplex DDC dry-break couplings are designed in accordance with NATO STANAG 3756 requirements for safe, efficient and spill-free transfer of hazardous, corrosive and high-value liquids and gases. They are used in demanding applications in the chemical, pharmaceutical, oil & gas and process industries, where leak-tightness, operational safety and minimising the risk of medium leakage are of critical importance.

Key data

Parameter	Value
Size range	1", 2", 2.5", 3", 4" and 6"
Materials	Stainless steel, aluminium, brass and Hastelloy (C276); other exotic materials available on request
Seals	FKM, NBR (Nitrile), EPDM, FFKM
Threaded connections	BSP, NPT, ISO
Flanged connections	ANSI, ASME, ISO, DIN, TTMA

Thread and flange standards

Thread	Standard
NPT	ANSI B.2.1
BSP	ISO 228-G

Flange	Drilling
DIN	DIN 2631, DIN 2633
ASA	EN 1092
EN	EN 1092
TW	DIN 28459
T.T.M.A.	RP No. 28-04

Coupling dimensions

NPS	DN	Coupling diameter D
3/4"	20	56 mm
1"	25	56 mm
1 1/4"	32	56 mm

NPS	DN	Coupling diameter D
1 1/2"	40	70 mm
2"	50	70 mm
2 1/2"	65	105 mm
3"	80	119 mm
4"	100	164 mm
6"	150	238 mm

Keying system

The keying system is designed to prevent cross-connection of couplings handling incompatible media. This ensures operational safety, product purity and environmental protection.

Key features

- Prevention of cross-connection – each coupling is equipped with a unique mechanical key code so that it can only mate with its corresponding counterpart.
- Safety by design – prevents accidental connection of incompatible media, reducing the risk of contamination or hazardous reactions.
- Configurable key codes – available in multiple keying patterns to suit operational requirements.
- Durability – manufactured from corrosion-resistant materials for extended service life.
- Seamless integration – compatible with standard Driplex couplings and compatible dry-break quick couplings without affecting operating performance. Interchangeable with other brands (Manntek, TODO, etc.) in accordance with the same standards.

Operating principle

- Tank side (plug) – equipped with keyed guide pins.
- Hose side (socket) – equipped with corresponding keyed receptacles.
- Mechanical interlock – only matching key codes allow connection.
- Medium transfer – once locked, the coupling opens to allow product flow.
- The number of available keying options increases with size – e.g. 5 or 10 positions for 1" systems, 7 or 21 positions for 2"-3" systems.

When keying is recommended

Driplex recommends using keyed couplings for any operation involving multiple products, high-risk or reactive media, or where regulatory requirements mandate strict fluid segregation. They are particularly beneficial in chemical plants, refineries, pharmaceutical manufacturing and other process industries, where safe and accurate hose-to-line connection is critical. Driplex couplings can be configured to suit the plant's operating procedures and safety standards.

Dust cap and dust plug

- Dust caps (DC) and dust plugs (DP) are designed to protect against dust, dirt and environmental contaminants when dry-break couplings are not in use. They help protect sealing surfaces and internal components, ensuring reliable operation and extended service life – particularly in harsh outdoor conditions.
- Keeping connection points clean is essential for reliable, leak-tight operation during fluid transfer.

- DC caps and DP plugs are not pressure-bearing components and should be used solely as protective covers, not for sealing or pressure retention.