Fact Sheet

Quick Connect Valve 700

Fast, safe and reliable rack integration into the main cooling distribution lines

Superior in material properties and design

GF's advanced quick connect dual ball valve is engineered for direct-to-chip liquid cooling applications in mission-critical facilities, where exceptional reliability, safety, and performance are essential.

The design is based on GF's full-bore Ball Valve 546 Pro, renowned for its high performance across various markets for decades. The new Quick Connect Valve 700 features two identical halves and a patented locking mechanism that only allows disconnection when both valves are in the closed position. This ensures maximum safety during both operation and maintenance.

Patented
Dual interlock lever mechanism that prevents accidental decoupling.

50% less weight
From 1.8kg to 0.8kg, with same strength, performance, and reliability*.

*compared to metal alternatives

25% better flow
Full-bore valve design for optimal flow and reduced pressure drop*.

*compared to metal alternatives

Easy handling
Safe, easy, and ergonomic to handle and color coding for supply/return lines.

100% reliable
Corrosion-free, proven design, and thoroughly tested for long service life.

Technical data

Dimension	DN25 / 1"
Pressure	Nominal: PN10
Min. Burst Pressure	Connected: 3× PN Half: 4× PN
Valve body material	PVDF
Flammability standard	UL 94 V-0
Gasket material	Face seal EPDM Ball seat PTFE
Temperature	10°C to 90°C
Flow rate	Kv 100 = 570 l/min Cv 100 = 39 gal/min
Decoupling fluid loss	Approx. 5.5cc
Weight (pair)	0.75kg
Test standard	ISO 9393

Environmental Product Declaration (EPD)

Download EPD

Swivel end connections

	Material	Jointing
NPT 1"	PVDF	Threaded connection
Spigot d32	PP-H, PVDF	Infrared fusion
BSPP G1"	PVDF	Threaded connection
Sanitary Adaptor 1"	PVDF	Mechanical
Sanitary Adaptor 1" 90° Elbow	PVDF	Mechanical

Media

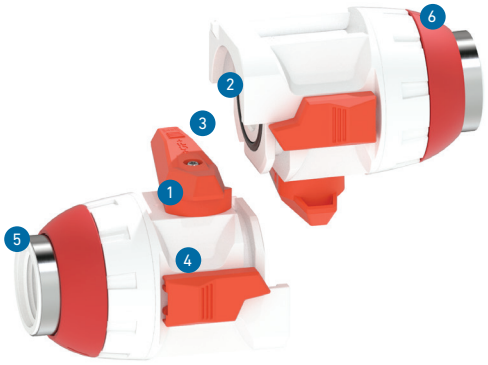
The valve is compatible with standard liquid coolants used in the direct liquid cooling application (e.g. 25% monopropylene glycol solution).

For chemical compatibility, check our free Chemical Resistance Tool.

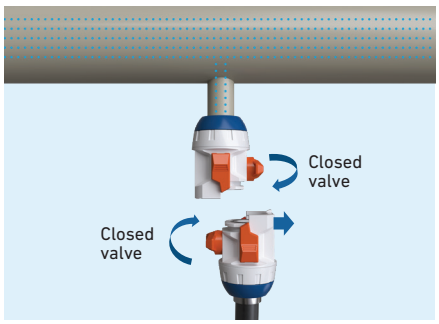
More information gfps.com/chemres

Features

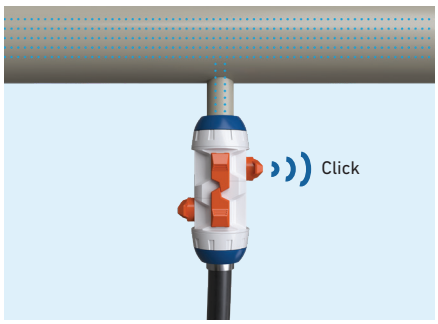
Item No.	Description
1	Patented dual interlock lever mechanism prevents accidental decoupling
2	Secure face seal (EPDM) with minimal fluid loss
3	Ergonomic lever (open/close)
4	Two-handed safety lock for vertical release
5	Variety of end connections for flexibility in application
6	Interchangeable rings for color coding the supply and return lines



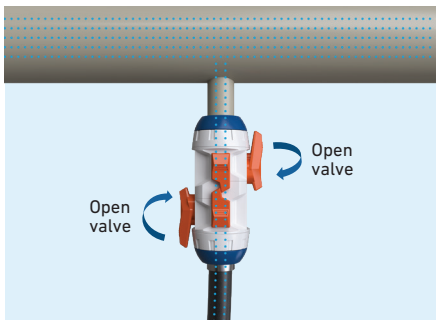
Operating steps



Decoupling
Safe decoupling of the halves is only possible once both valves are closed.

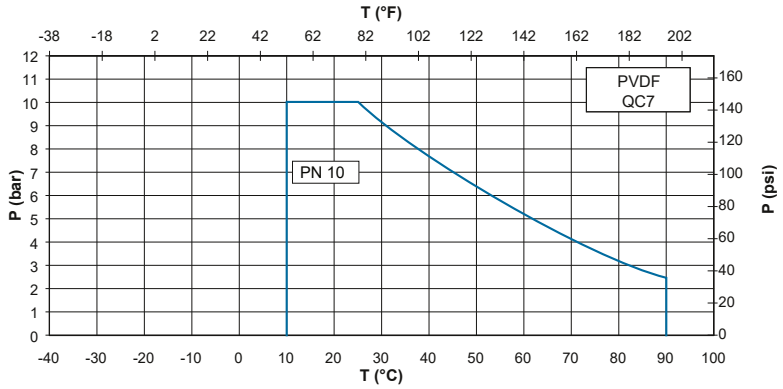


Coupling
Safe coupling of the halves is indicated by an audible click.



Operation
Full flow operation is ensured once both valves are opened.

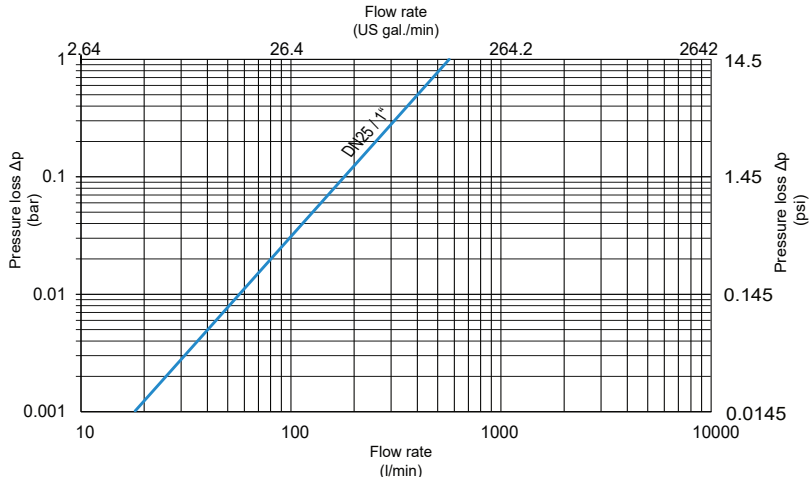
Pressure/Temperature Diagram



The following pressure-temperature diagrams are based on an expected service life of 25 years and water or similar media.

T Temperature (°C, °F)
P Permissible pressure (bar, psi)

Flow Characteristics



X Flow rate (l/min, US gal/min)
Y Pressure loss Δp (bar, psi)

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www.gfps.com/data-centers

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