

Liquid Cooling-Snap Ball Valve

Product Specification



1. Scope

A leading professional solutions provider of waterproof connectors (overmolded with cable, receptacle, field installable) in the industry, Amphenol LTW always fulfills any requirements with high functionality and reliability products; even it is a very special requirement. And it is highly recommended to be applied to harsh environment. Amphenol LTW (ALTW)

This product specification sheet describes the product application in the markets such as Renewable Energy, Industrial Automation, LED Lighting, Marine, Broadband Wireless Access, Smart Grid, Heavy Equipment, Medical, Electrical Vehicle, AI servers cooling...etc.

2. Applicable Documents

2.1 following criteria ISO 2852 designed.



3. Specification

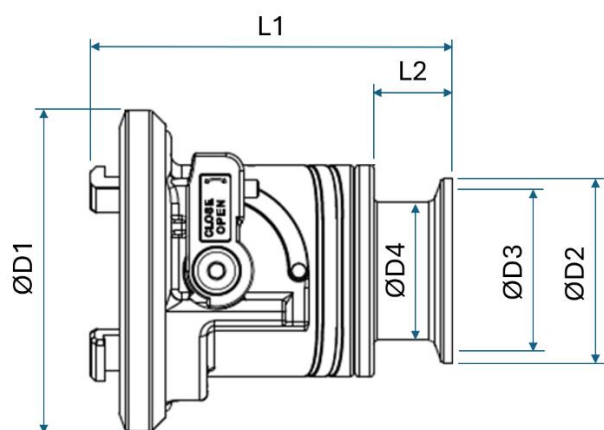
3.1 Material

Parts	Material
Body	Stainless Steel
Spring	Stainless Steel
Steel Ball	Stainless Steel
Seal	EPDM

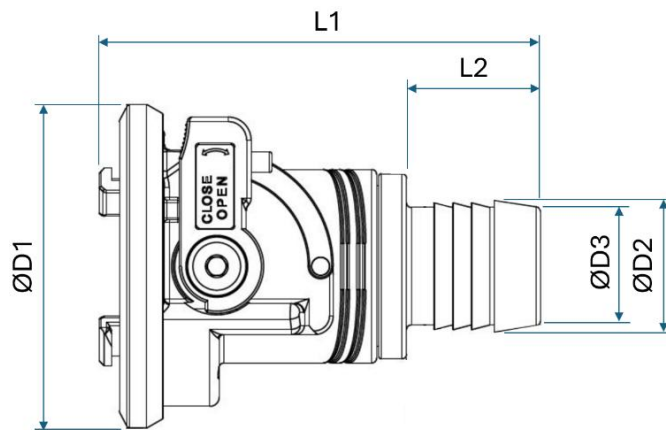
3.2 Product Special Specification

Item	SBV20	SBV32	SBV40
Nominal Diameter(mm)	DN20	DN32	DN40
Fluid Type	DI water, Ultrapure water, Ethylene glycol, Polypropylene glycol, and PFPE		
Connection Type	Hose barb/ Thread/ Sanitary Flange		
Durability Requirements	5000 times		
ROHS Compliance	●	●	●
Connection Force without Pressure	5N	10N	18N
Fluid Loss Requirement	<5ml	<7ml	<12ml
Maximum Operating Pressure	16bar		
Minimum Burst Pressure	64bar		
Flow Rating	210 LPM	445 LPM	810 LPM
Minimum Cv	34	71	132
Salt Spray	96hrs	96hrs	96hrs
Operating Temperature Range	-40°C- 120°C		
Shipping Temperature Range	-40°C- 150°C		

3.3 Dimensions



Sanitary flange type



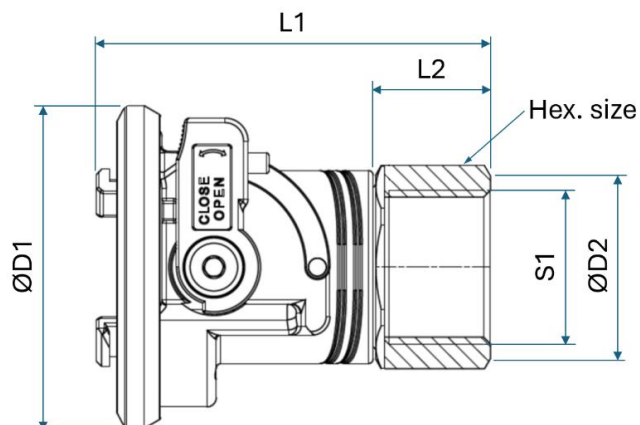
Hose Barb type

Sanitary flange type dimensions

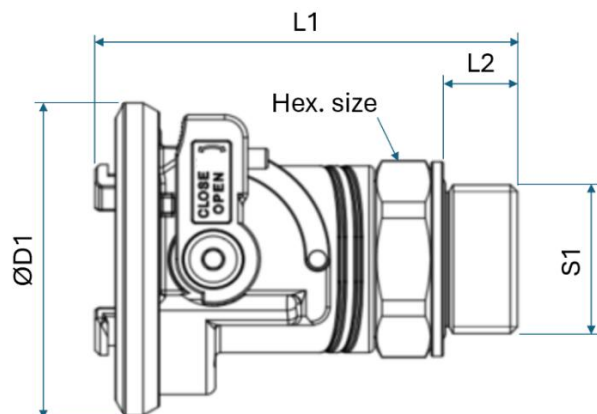
Nominal Diameter(mm)	L1	L2	ØD1	ØD2	ØD3	ØD4
DN20	88.1mm	21.5mm	Ø69.9mm	Ø50.5mm	Ø43.5mm	Ø25.6mm
DN32	99.0mm	21.5mm	Ø88.0mm	Ø50.5mm	Ø43.5mm	Ø38.0mm
DN40	109.9mm	21.5mm	Ø103.0mm	Ø64.0mm	Ø56.5mm	Ø51.6mm

Hose Barb type dimensions

Nominal Diameter(mm)	L1	L2	ØD1	ØD2	ØD3
DN20	95.6mm	29.0mm	Ø69.9mm	Ø28.5mm	Ø25.4mm
DN32	115.2mm	37.5mm	Ø88.0mm	Ø42.0mm	Ø38.8mm
DN40	129.0mm	40.0mm	Ø103.0mm	Ø55.2mm	Ø51.7mm



Female thread type



Male thread type

Female thread type dimensions

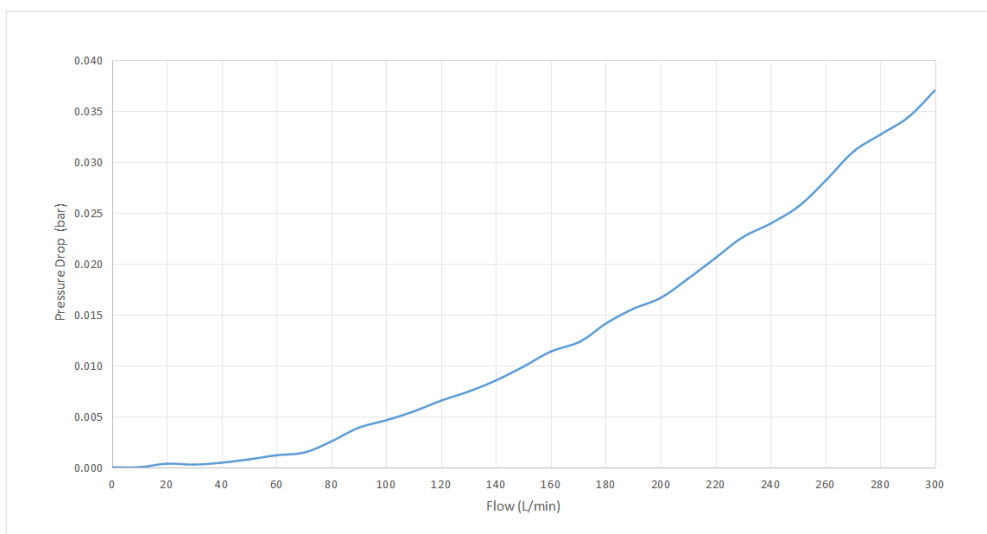
Nominal Diameter(mm)	L1	L2	ØD1	ØD2	S1	Hex.
DN20	85.6mm	25.0mm	Ø69.9mm	Ø39.6mm	G1"	40mm
DN32	106.7mm	34.2mm	Ø88.0mm	Ø54.5mm	G1-1/2"	55mm
DN40	119.5mm	36.4mm	Ø103.0mm	Ø69.0mm	G2"	70mm

Male thread type dimensions

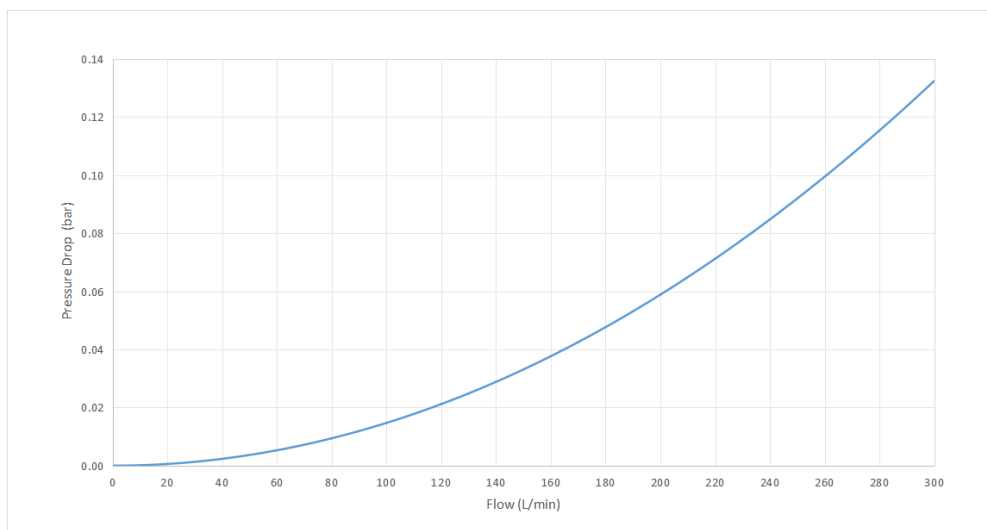
Nominal Diameter(mm)	L1	L2	ØD1	S1	Hex.
DN20	91.1mm	16.0mm	Ø69.9mm	G1"	40mm

3.4 Test performance

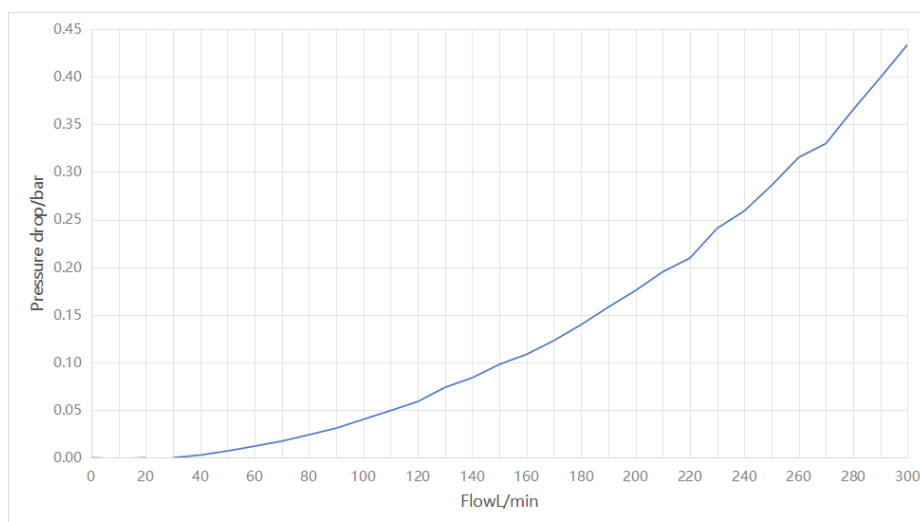
Liquid: Water, 23°C



DN40mm



DN32mm



DN20mm

4. Quality Assurance Provisions

Unless otherwise specified, in the contract or purchase order, we will be responsible for the quality of the part as it is delivered to client. We will be responsible for having controlled processes to ensure product is in total compliance with this specification. Failing lots shall be subject to return or other corrective action.

Re-qualification Testing

If changes significantly affecting form, fit or function are made to the product or manufacturing process, product assurance shall coordinate requalification testing, consisting of all or part of the original testing sequence as determined by development/product, quality and reliability engineering.

Our products perform per the specification and criteria described in this document; any usage outside and/or deviating from the specification and criteria described in this document, and/or any alteration, modification, transformation, and application not mentioned in this document must be checked and agreed with ALTW in prior. Failure to check and get our agreement, ALTW will bear no responsibility for any consequence that might arise. It is strongly advised to always check with ALTW for any product application not mentioned in this document and/or applications that need clarifications.