# Laboratory Ball Valve Type 522



# **Product description**

The laboratory ball valve type 522 is the ideal valve for use in laboratory applications. It is available in diameter DN6 in the materials PVC-U and PVDF, as well as with BSP or NPT thread. The various connection options and other accessories are supplied as standard.

### Function

The ball valve uses a rotating ball with a hole through it that allows straight-through flow in the open position and shuts off flow when the ball is rotated 90° to block the flow passage. This valve is mainly used for open/close functions and for regulating services.

## Applications

- Laboratory applications
- Dosing
- Sample taking

### **Benefits/features**

- ideal for laboratory applications
- Lock and metering ring for protection of sampling ball valve from any unwarranted opening
- Lock and metering ring for adjustment of ball opening angles
- Sampling ball valve can be 100% opened at any time by removing the lock and metering ring
- Compact design
- Low weight
- Corrosion resistant
- PVDF Sampling ball valve is Oil & Silicone-free

### Flow media

Neutral and aggressive media with a small amount of particles/solids. The chemical resistance is independent of the selected valve material (<u>see online tool ChemRes PLUS</u>).



# **Technical data**



#### 1 Handle

- 2 O rings
- 3 Blocking and dosage ring
- 4 O rings
- 5 Housing
- 6 Ball seat ring
- 7 Ball
- 8 O rings
- 9 Pressure ring
- 10 Safety clip
- 11 Hose connector AG
- 12 Double nipple
- 13 Blanking plug
- 14 Fastening clip
- 15 Hose connector IG

Specifications		
Dimensions	d10/DN6	
Materials	Valve body and lever	PVC-U, PVDF
Gasket materials	0 rings	EPDM, FPM
	Ball seating joint	PTFE
Pressure level	PN10	
Connections PVC-U	Body	BSP, NPT
	Hose nozzle	BSP, NPT
	Double nipple	BSP - NPT, NPT - NPT
	Plug	BSP
Connections PVDF	Gehäuse	BSP, NPT
	Hose nozzle - male thread	BSP
	Double nipple	BSP, NPT
	Plug	BSP
Product standard	EN ISO 16135	
Test standard	ISO 9393-2, EN 12266-1 (leackage rate A)	
Approvals	FDA, QAP/ITP	

## **Flow characteristics**



- X Opening angle (%)
- Y kv, Cv value (%)

#### Pressure-temperature diagrams

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

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

#### PVC-U, PVDF



# **Technical basics**

#### Valve handling

#### Installation notes

When installing the ball valve, ensure that it is always installed into the system in an opened ball position.

#### Maintenance notes

Ball valves require no maintenance under normal operating conditions (clear water). However, the following measures must be considered:

- Regularly check that no medium escapes to the outside.
- We recommend a function test for ball Type valves that are kept permanently in the same position 1 – 2 times per year to check functionality.

Installation and maintenance must be performed according to the corresponding installation instructions. The installation manual is included with the product, see also the online product catalogue at www.gfps.com



#### Additional features





When not in use, plug can be fixed with the clip tie on the sampling ball valve body.





In closed position, the lock and metering ring In open position, the locking ring protects protects the valve against unwarranted opening.

the valve against unwarranted closing.



The three metering marks serves as guidance for flow regulation.

# Dimensions



For further information on accessories, refer to the online product catalogue at www.gfps.com

Mobile apps and online tools to support configuration and calculation at www.gfps.com/tools



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