

# Type 523 Metering Ball Valve

## Standard Features

- **Size**  
3/8" - 1/2"
- **Material**  
Polypropylene, PVC, PVDF  
(CPVC, ABS on request)
- **Connection Ends**  
Socket, Threaded, Fusion
- **Seat**  
PTFE
- **Seals**  
EPDM or FPM
- **Scale**  
0° to 180°



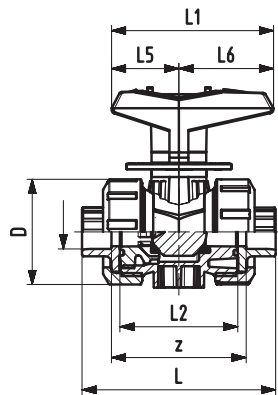
## Optional Features

- Electric actuation
- Positioner for actuation

## General

The Type 523 metering ball valve is ideal solution where precise flow control is needed. It has a special V-notch ball and operates with a 180° turn versus a 90° turn most ball valves have. The Type 523 has an integrated scale to indicate degrees of opening and provides a very linear flow curve. Polypropylene, PVDF, and PVC are the available materials (CPVC and ABS on request).

## Dimensions



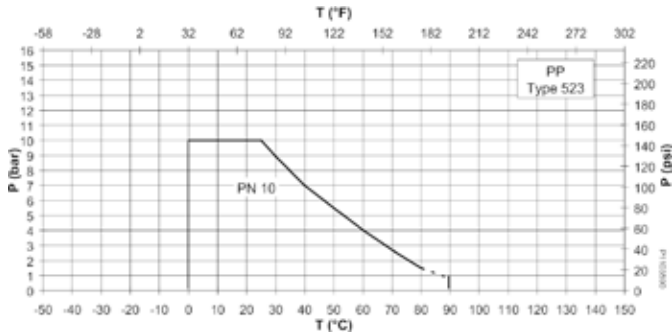
Inch size	D inch	H inch	H1 inch	H2 inch	L inch	L1 inch	L2 inch	L4 inch	L5 inch	L6 inch	M	z inch
3/8	1.97	2.68	1.06	0.47	4.13	3.03	2.20	0.98	1.26	1.77	6	2.64
1/2	1.97	2.68	1.06	0.47	4.13	3.03	2.20	0.98	1.26	1.77	6	2.40

## Technical facts

### Pressure-Temperature-Diagram

The following pressure temperature diagrams are based on a lifetime of 25 years and the medium water or similar media.

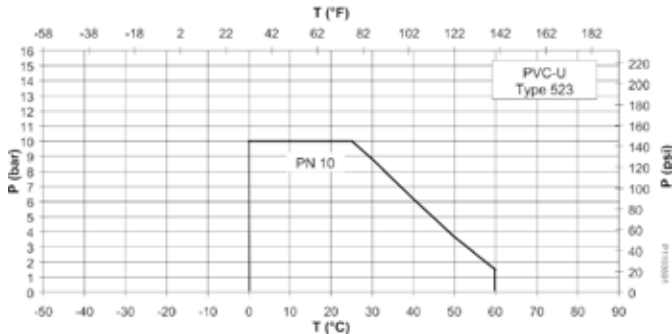
#### PP



P Permissible pressure in bar, psi

T Temperature in °C, °F

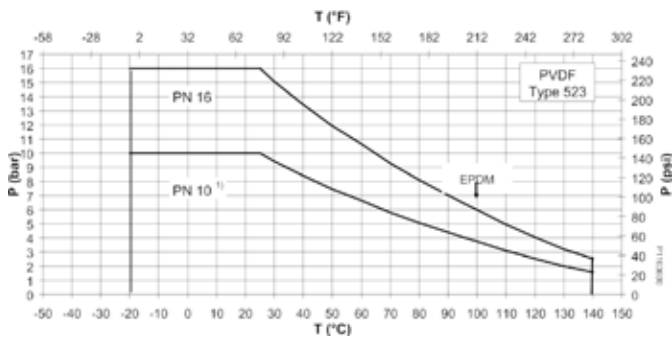
#### PVC-U



P Permissible pressure in bar, psi

T Temperature in °C, °F

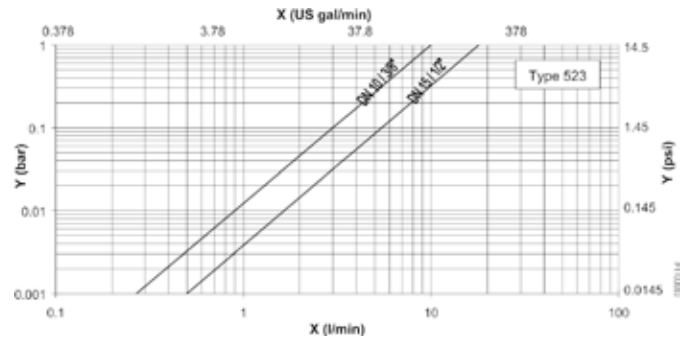
#### PVDF



P Permissible pressure in bar, psi

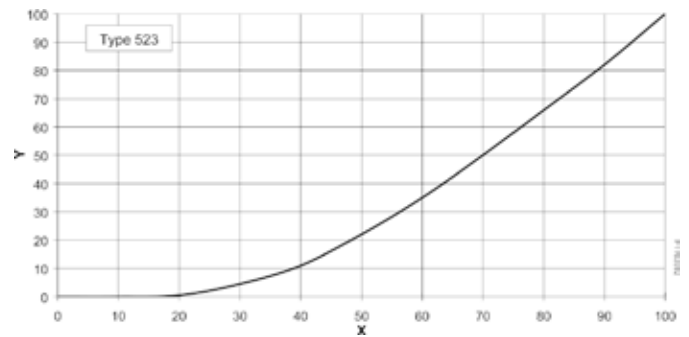
T Temperature in °C, °F

## Pressure loss



X Medium: water, 20 °C  
Y Flow rate (l/min), (US gal./min)  
Pressure loss  $\Delta p$  (bar), (psi)

## Flow characteristics



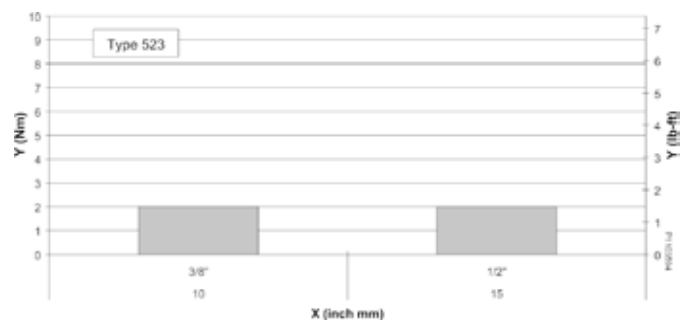
X Open angle (%)  
Y Flow factor kv, cv (%)

## kv 100 values

The kv values for each intermediate valve position can be determined using the flow value characteristics and the kv 100 values.

DN [mm]	DN [inch]	d [mm]	kv 100 l/min ( $\Delta p = 1$ bar)	Cv 100 gal/min ( $\Delta p = 1$ psi)	kv 100 m <sup>3</sup> /h ( $\Delta p = 1$ bar)
10	3/8	16	11	0.8	0.7
15	1/2	20	20	1.4	1.2

## Operating torque

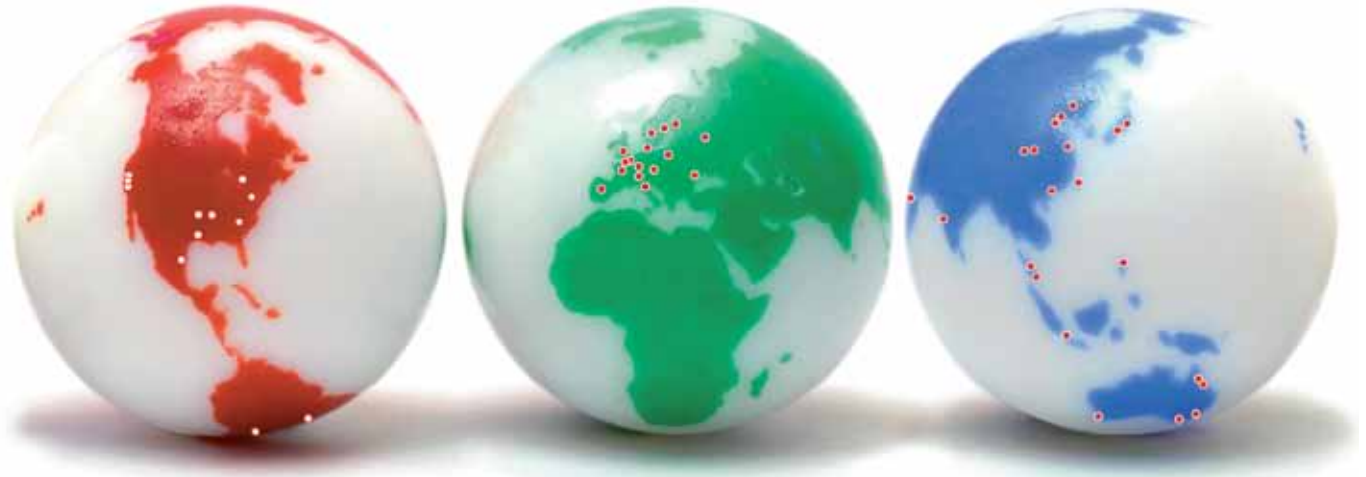


X Size DN (mm, inch)  
Y Torque (Nm, lb-ft)

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