

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°



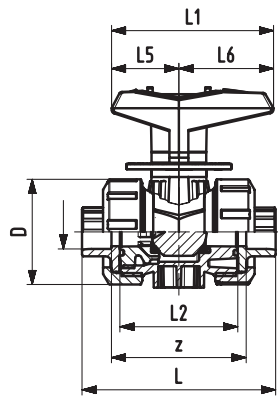
Optional Features

- 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



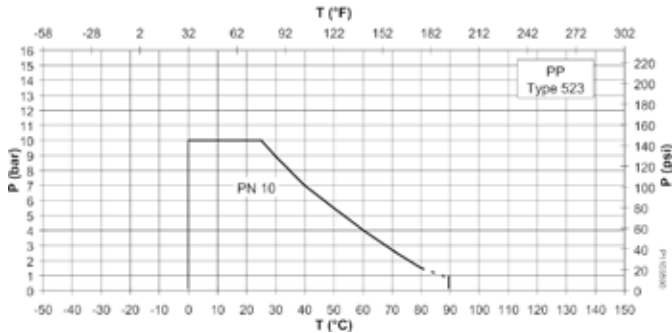
Inch size	D inch	H inch	H1 inch	H2 inch	L inch	L1 inch	L2 inch	L4 inch	L5 inch	L6 inch	M	z inch
3/8	1.97	2.68	1.06	0.47	4.13	3.03	2.20	0.98	1.26	1.77	6	2.64
1/2	1.97	2.68	1.06	0.47	4.13	3.03	2.20	0.98	1.26	1.77	6	2.40

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.

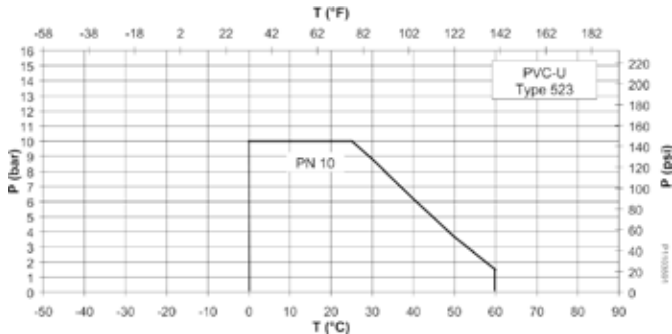
PP



P Permissible pressure in bar, psi

T Temperature in °C, °F

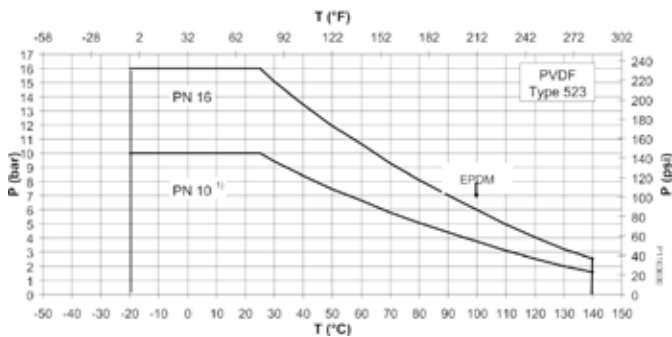
PVC-U



P Permissible pressure in bar, psi

T Temperature in °C, °F

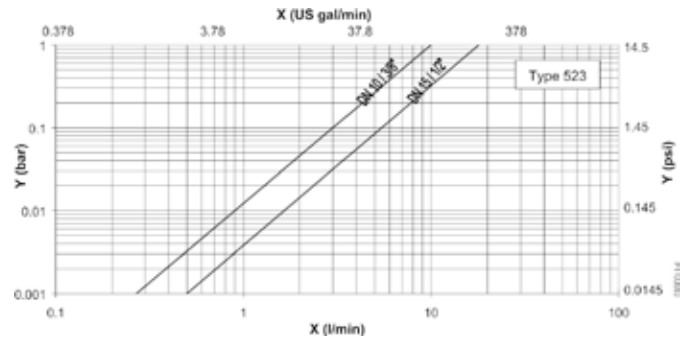
PVDF



P Permissible pressure in bar, psi

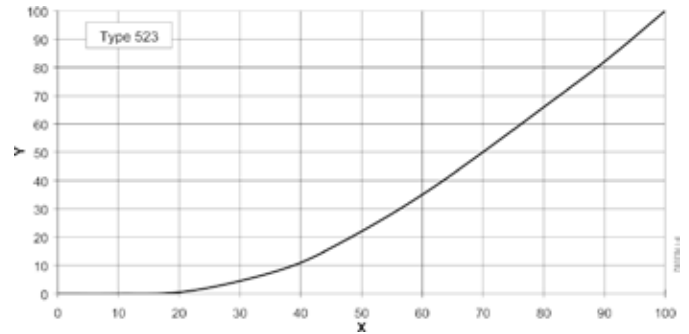
T Temperature in °C, °F

Pressure loss



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

Flow characteristics



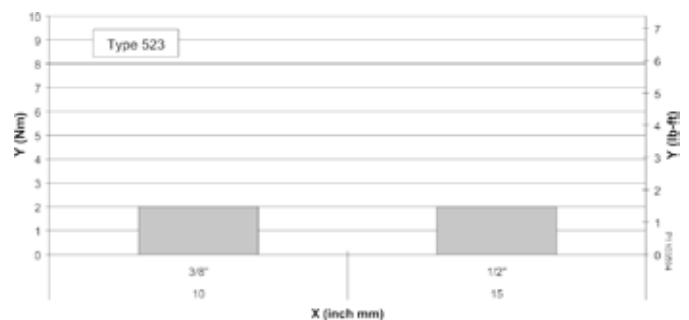
X Open angle (%)
Y Flow factor kv, cv (%)

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 ³ /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)