Chemline SP2 Series Proportional Ball Valve is designed for proportional (linear) flow control of chemicals or clean fluids. The ball is specially designed to provide linear characterized flow control 20° through 90° rotation of the handle. This valve is similar but not of the same design as other V-port ball valves. It offers excellent control and Cv values higher or similar to those of diaphragm valves. With a positioning actuator, this becomes an inexpensive control valve.

**features**

**Linear Flow Control**

**Full Size Range**
- 1/2” to 2” offers a large selection of Cv values

**Integral Scale**
- 5° increments from 0° to 90°

**Top Quality Ball Valve Features**
- Full Blocking design
- Double Stem O-Rings for safety
- PTFE seats with elastomer cushion
  - Automatically compensates for seat wear or expansion
- 230 psi pressure rated (PVC and PVDF)

**Low Stem Torques**
- Due to floating ball design and cushioned PTFE seats

**Compact**
- Space saving

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**Integral 90° Scale with 5° Increments**
- Linear flow control and settable flow rates

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Bar Detail

1 Butt ends for fusion to Chemline metric PP or PVDF piping
2 For ChemFlare™ end connectors, consult Chemline
**SP2 Series Proportional Ball Valves**

**PARTS**

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**ELECTRICALLY OR PNEUMATICALLY ACTUATED**

The metering ball valve becomes a proportional control valve with the addition of an E Series electric or P Series pneumatic actuator with 4-20 mA positioner

- Thermoplastic housing and mounting bracket
- Manual override
- Position indication
- Mechanical travel stops
- Different voltages are available
SP2 Series Proportional Ball Valves

Chemline Proportional Ball Valves SP2

VACUUM RATING

• 29.9 inches mercury

OPTIONS & ACCESSORIES

• Reduced Ends
• Electric or Pneumatic Actuator with Positioner
  – Operates as a linear control valve

A 010 E S

Valve Material

A – PVC
B – PP
K – PVDF

Size

005 – 1/2”
007 – 3/4”
010 – 1”
012 – 1-1/4”
015 – 1-1/2”
020 – 2”

Seals

E – EPDM
V – FPM (Viton®)

Ends

S – Socket
T – Threaded
B – Butt
CF – ChemFlare™

Example: SP2 Series Ball Valve, PVC, 1”, EPDM seals, socket ends.

1 PP and PVDF metric butt fusion ends connect to Chemline PP and PVDF piping systems.

ORDERING EXAMPLE

1. All flow control valves, 1/2” to 2”, will be Chemline SP2 Series proportional ball valves.
2. Body material will be PVC, PP or PVDF, and o-rings will be EPDM or FPM (Viton®).
3. Body will be full blocking design with double stem o-rings for safety, rated at 230 psi maximum working pressure for PVC and PVDF and 150 psi for PP material.
4. Ball will be floating design for low stem torque, molded solid with a special patented profile for linear flow control over a 90° range of handle rotation.
5. Seats will be PTFE with elastomer cushions for positive closure with minimum stem torques and automatic compensation for seat wear and expansion.
6. Position indicating scale will be 0° to 90° with 5° increments for fine flow control and settable flow rates.
7. End connections will be 1/2” to 2” ANSI socket or FNPT threaded or 150 lb flanged or butt fusion for Chemline metric PP, PVDF or ECTFE (Halar®) pipe or ChemFlare™ for PFA tubing.

SAMPLE SPECIFICATION

WORKING PRESSURES

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NET WEIGHTS LB.

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</table>

Cv VALUE vs. VALVE OPENING

SCALE GRADUATION (°)

Cv VALUE

0 10 20 30 40 50 60

FLOW AT 1 PSI

USGPM

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CHEMLINE PLASTICS

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