

# AXIAL CONTROL VALVE

## PRODUCT SUMMARY SHEET

### VALVE TYPE

Axial Control Valve

### GOODWIN MODEL

CB Series

### SIZE AND PRESSURE RANGE

- 2" – 72"
- ASME 150-2500
- API 3000-15000

### MATERIALS

Carbon, Low Temp Carbon Steels,  
Stainless, Duplex, Super Duplex Steels,  
Low-High Alloys, Nickel Alloys and  
Titanium Alloys.

### CAGE / TRIM CHARACTERISTICS

- Linear
- Equal Percentage
- Fast Opening
- Custom bespoke designs also available

### AS AN ALTERNATIVE TO

- Globe Valves
- Ball Valves
- Angle Control Valves

### APPLICATIONS

- Severe & Critical service control
- Anti-surge
- Pressure let-down
- Anti-cavitation
- Recycle control
- Noise attenuation
- Joules-Thomson

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CB SERIES



LEARN MORE



[www.goodwinflowcontrol.com](http://www.goodwinflowcontrol.com)

## GOODWIN AXIAL CONTROL VALVES COME EQUIPPED WITH INNOVATIVE FEATURES THAT SET GOODWIN APART FROM ITS COMPETITION.

### STREAMLINED AXIAL FLOW PATH

The streamlined flow path through an Axial Control Valve has minimal pressure drop. The flow is directed through the valve to avoid critical sealing areas promoting longevity of the seat sealing arrangement.

### HIGH CAPACITY

With an annular flow area and an unrestricted, symmetrical, streamlined flow path through the valve, Axial Control Valves have a higher inherent flow capacity compared to conventional globe control valves.

### PRESSURE-BALANCED DESIGN

Pressure balancing is equally effective in both forward and reverse pressure conditions. The Axial Control Valve can be opened against full differential pressure.

### TIGHT SHUT-OFF

With pressure energised seals encapsulating the piston body and pressure energised seating seals in the piston head, tight shut-off to FCI 70-2 Class VI, i.e. bubble tight, can be achieved.

### FLEXIBLE BODY DESIGN

Goodwin offers 2 body styles.

#### 3 Piece Split Body (2" to 12")

- Offers higher flow capacity
- Improvement in NDE accessibility
- Simplified casting and machining methods
- Body construction can be forged, Cast or a combination.
- Inlet / Outlet pipeline size transitioning within the valve removing the need for transition / expansion pieces.

#### Single Piece Body

- In larger sizes (14" and above) single piece body design is employed for manufacturing and cost purposes.

### CAGE / TRIM

Cage / Trims are designed in-house using cutting edge sizing package which is in compliance with the requirements of IEC 60534. This allows rapid and accurate sizing of Axial Control Valves.

### UNI-DIRECTIONAL OR BI-DIRECTIONAL FLOW

Where process conditions permit, i.e. a Single Stage pressure let down, flow can be bi-directional. Standard is uni-directional.

### LOW FUGITIVE EMISSIONS

Through FET testing witnessed by Lloyds Axial Control Valves have been certified to Rate A Class (HS) of ISO 15848-2 which is the tightest rate achievable.



### RACK-PINION-RACK GEAR TRAIN

Goodwin Axial Control Valves utilise Goodwin's patented Rack-Pinion-Rack gear train mechanism to transpose the linear motion of actuation through 90° into axial motion of the piston.

### ACTUATION OPTIONS

- Manual Operation
- Pneumatic
- Hydraulic
- Electric
- Electro-hydraulic

Goodwin does not currently manufacture actuation. However, its valves will be supplied with full integrated actuation and instrumentation packages according to customer requirements and specifications.

For more information go to:  
[www.goodwinflowcontrol.com](http://www.goodwinflowcontrol.com)

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