

PowerChokes®

Model SCB4 All-Purpose 4" Choke

The Model SCB is a forged body, all-purpose severe service choke which is available with electrical, hydraulic or manual actuation.

Features

- Accommodates 3" and 4" trim size. Extended stroke allows for large debris tolerance and higher Cv value that allows higher flow rates at lower pressures
- Worm gear drive actuator – eliminates backlash and provides precise control; self-locking to prevent movement even if actuation control is lost
- Quick change actuator – no need to disconnect hoses or cables for removal. Trim can be changed in 15 minutes or less without removing the choke from the line or breaking into the manifold
- Manual override capability provided on all worm gear-operated hydraulic and electric chokes in case of power loss
- Reversible gate and seat assembly – provides two uses per piece, saving parts, reducing operating costs and maximising efficiency. This can be reversed in the field
- Solid tungsten carbide gate and seat – field proven design allows maximum erosion resistance. Gate and seat are precision-ground to provide drop tight shutoff. Custom geometry allows excellent pressure control over larger stroke

All Chokes

- Pressure balanced trim – reduces operating forces, whether the choke is operated manually or automatically. Large balance ports provide protection against clogging
- Downstream wear sleeve and retainer ring – extended-length solid tungsten carbide seat provides wear protection downstream and a smooth transition for fluid into the downstream piping
- Large buffer cavity – slows velocity and distributes impact of solids, maximising trim life

Maintenance

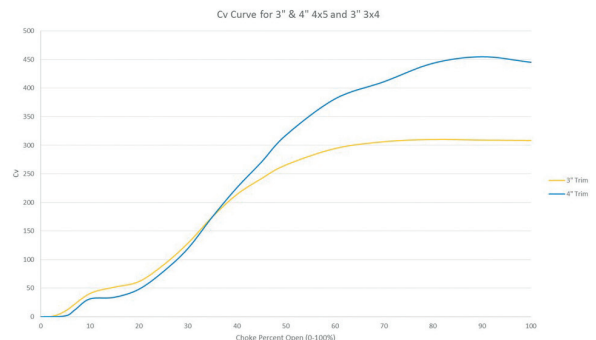
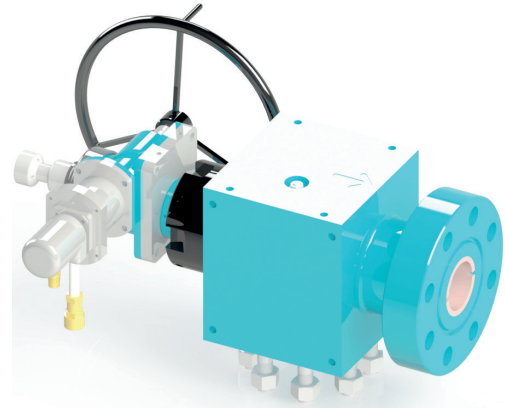
- Manipulator allows one-man, in-line servicing of chokes
- 15-minute service time
- Reversible trim
- Wear sleeve
- Trim design robust yet lightweight
- Electric motor reduces maintenance

Benefits

- Small footprint; compact design
- Fast response choke movement
- Low stroke time exceeding Application Programme Interface (API) requirements
- Easily retrofit from hydraulic to electric
- Less than + 0.1% choke control position

Control Consoles

- Electric or hydraulic offerings
- Offer operation for one, two or more chokes and / or control valves



- Speed adjusts to allow fast or slow valve actuation
- One or two hydraulic pumps plus manual backup hydraulic pump
- Bourdon tube hydraulic pressure gauges or digital pressure gauges available
- Digital position indicator gauge standard
- Accumulators available for power backup or to smooth choke operation

Adjustable Chokes supplied with:

- Bleeder port to bleed pressure from choke body prior to choke bonnet removal for inspection or maintenance
- Studded inlet flanged outlet standard. Flanged inlets available
- Position indication
- Hand wheel
- 41/8" inlet X 51/8" outlet standard for use in API 5M
- Other inlet and outlet sizes available

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Technical specifications

Standard configuration (reversible, balanced, erosion-resistant trim)	
X & Y	7,000 and 15,000
Pressure rating available	Application Programme Interface (API) 5,000
Inlet size ranges	4 1/8" (adapters available on request)
Outlet size ranges	5 1/8" (adapters available on request)
Trim sizes available	3" or 4"
Debris clearance	2"
Specifications	Application Programme Interface (API) 6A, API 16C, ABS, DNV
Hazardous area approvals	IECEX Z1, ATEX, Z1, US & Canada Class 1 Div 1
Body material	Application Programme Interface (API) 75K, Impact tested, NACE MR01-75
Throttling trim material	Tungsten carbide
Seat material	Tungsten carbide
Seat leakage	Drop tight
Cv	3" trim Cv 300 / 4" trim Cv 450
Hydraulic choke operating pressure	1,500psi
Electric choke power requirements	230 volts or 460 volts 3 phase
API temperature range	
Standard	PU or PX, -20°F to +250°F or -20°F to +350°F
Material class	EE-360 or EE-NL
API 6A PSL	1-4, 3G
API 6A PR	1-2
Standard X & Y	5.625" x 13"
API spools and adapters provided as required	

Note: Other sizes, configurations and pressure ratings are available to meet most applications, for more information contact your local Expro representative or email expro.powerchokes@exprogroup.com

