

E P35E Series-2 Choke 5CB

6 000 psig / Cv 129 / Bean Size 179

This choke valve uses a bolted bonnet to retain the flow trim in the valve body. The flow trim is pressure balanced to minimize the stem loads and provide low operating torques. Standard end connections range in size from 3" to 6".



VALVE SPECIFICATIONS ▶

Valve Model	P35E
Body Type	Right Angle
Body Rating	6 000 PSIG (Maximum C.W.P.)
Inlet Connection	see 'Standard End Connections'
Outlet Connection	see 'Standard End Connections'
Bonnet Type	Bolted
Body / Bonnet Material	see 'Material Options'
Stem Material	see 'Material Options'
Seal Material	see 'Material Options'
Trim Style	Ported Cage with External Sleeve
Balanced / Unbalanced	Balanced
Flow Characteristic	Equal Percentage
Trim Material	see 'Trim Options'
Design Cv	see 'Trim Options'
Leakage Class	Class V (Standard)

TRIM OPTIONS ▶

	Standard Trim Cage & External Sleeve 2 Row / 4 Hole	Multistage Trim	High-Pressure Multi-stage Trim
Material	UNS S17400, Stellite, Tungsten Carbide	Stellite, Tungsten Carbide	Stellite, Tungsten Carbide
Application	Liquid, Gas, Multiphase; Abrasive	Liquid, Gas, Multiphase	Liquid, Gas, Multiphase
Cv	129	54	35
Turns	16	15	15
Travel	2.65"	2.55"	2.55"

* For abrasive service, tungsten carbide is recommended.

STANDARD END CONNECTIONS ▶

Connection Size ▶	Standard Dimensions & Estimated Weights											
	4" Nominal				5" Nominal				6" Nominal			
	'I' or 'O'		Weight		'I' or 'O'		Weight		'I' or 'O'		Weight	
Connection Type ▼	inch	mm	lbs.	kg	inch	mm	lbs.	kg	inch	mm	lbs.	kg
ASME 150 RF	9.50	241	410	185	10.00	254	420	190	10.00	254	430	195
ASME 300 RF	9.88	251	430	195	10.38	264	450	205	10.38	264	470	215
ASME 600 RF	10.75	273	455	205	11.25	286	510	230	11.38	289	535	245
ASME 600 RTJ	10.81	275	455	205	11.31	287	510	230	11.44	291	535	245
ASME 900 RF	11.25	286	480	220	11.75	298	540	245	12.25	311	590	270
ASME 900 RTJ	11.31	287	480	220	11.81	300	540	245	12.31	313	590	270
ASME 1500 RT	11.62	295	520	235	12.88	327	645	295	13.50	343	700	320
ASME 1500 RTJ	11.69	297	520	235	12.94	329	645	295	13.62	346	700	320
ASME 2500 RTJ	14.44	367	645	295	16.00	406	820	375	17.75	451	1070	485
2 000 API 6B	10.81	275	455	205	11.31	287	510	230	11.44	291	535	245
3 000 API 6B	11.31	287	485	220	11.81	300	550	250	12.31	313	605	275
5 000 API 6B	11.69	297	520	235	12.94	329	645	295	13.62	346	700	320

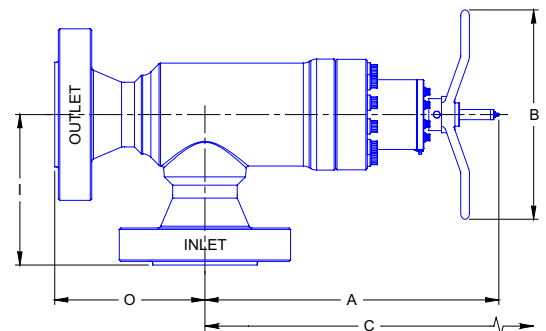
3" connections also available

ENVELOPE DIMENSIONS ▶

Dimensions 'A', 'B', and 'C' apply to manually operated chokes and are tabulated below. 'I' (inlet) and 'O' (outlet) dimensions depend on the end connections and are tabulated above. Special dimensions and other end connections are available upon request.

Dimensions		
	inch	mm
A	25.31	645
B	18.00	457
C	36.94	938

Note: "C" is the disassembly clearance.



MATERIAL OPTIONS

Temperature Class	Certification Level	API - 6A Material Class Designations						
		AA	BB	CC	DD	EE	FF	HH
PU -20F to 250F PX -20F to 350F	STD / PSL-1	BB	BB	FF	EE	EE	FF	HH
	PSL-2	EE	EE	FF	EE	EE	FF	HH
	PSL-3	EE	EE	FF	EE	EE	FF	HH
LU -50F to 250F	STD / PSL-1	EE	EE	FF	EE	EE	FF	HH
	PSL-2	EE	EE	FF	EE	EE	FF	HH
	PSL-3	EE	EE	FF	EE	EE	FF	HH

	BB-General Service	EE-Sour Service	FF-Sour Service	HH-Sour Service
Body	AISI 8620	AISI 8620	UNS S31803	AISI 8620 / Inconel 625
Bonnet	AISI 4130	AISI 4130	AISI 4130 / UNS S31803	AISI 4130 / Inconel 625
Stem	UNS S17400	UNS S17400	UNS S17400	Inconel 718
Bolting	ASTM A320 L7M	ASTM A320 L7M	ASTM A320 L7M	ASTM A320 L7M
Retaining Sleeve	ASTM A743 CF8M	ASTM A743 CF8M	ASTM A743 CF8M	Inconel 625
Balance Sleeve	UNS S42400	UNS S42400	UNS S31803	Inconel 625
Seals	Buna - N	Viton	Viton	Teflon

Other materials available upon request.

OTHER VALVE OPTIONS

	Standard	Optional
Calibration Head / Serial Plaque	Aluminum	Stainless Steel
Outlet Sleeve	-	Stainless Steel , Tungsten Carbide
Body Bleed Port	-	1/2" NPT, API Autoclave

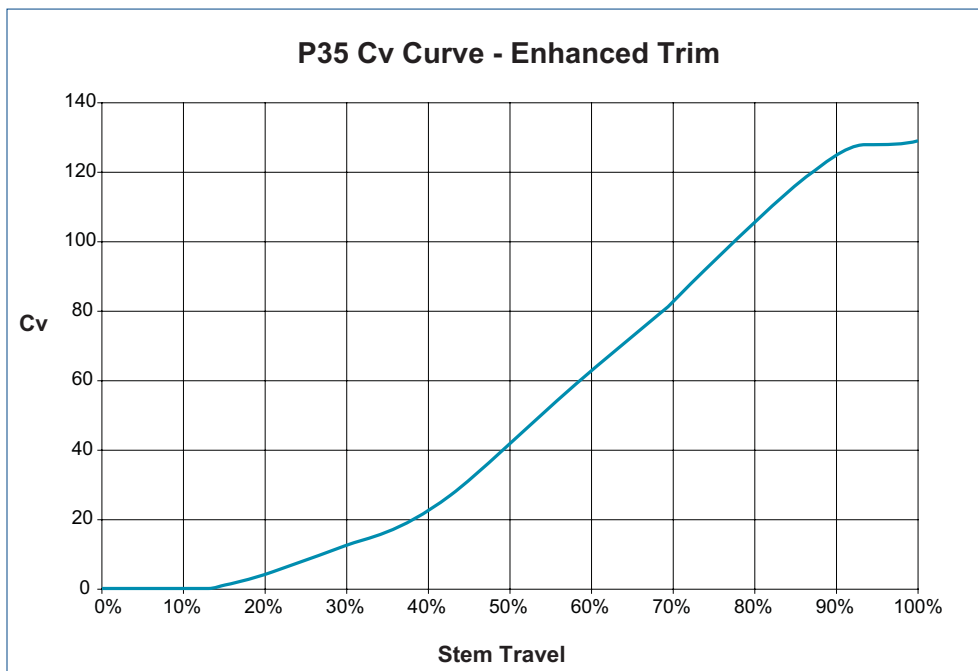
Some limitations may apply.

ACTUATION OPTIONS

Master Flo	Other
Manually Operated (Stemlock is optional)	Rotary Electric
Rotary Stepping (Pneumatic)	Pneumatic Piston
Rotary Stepping (Hydraulic)	Electro-Hydraulic Piston
FC Hydraulic Piston	
Pneumatic Piston	

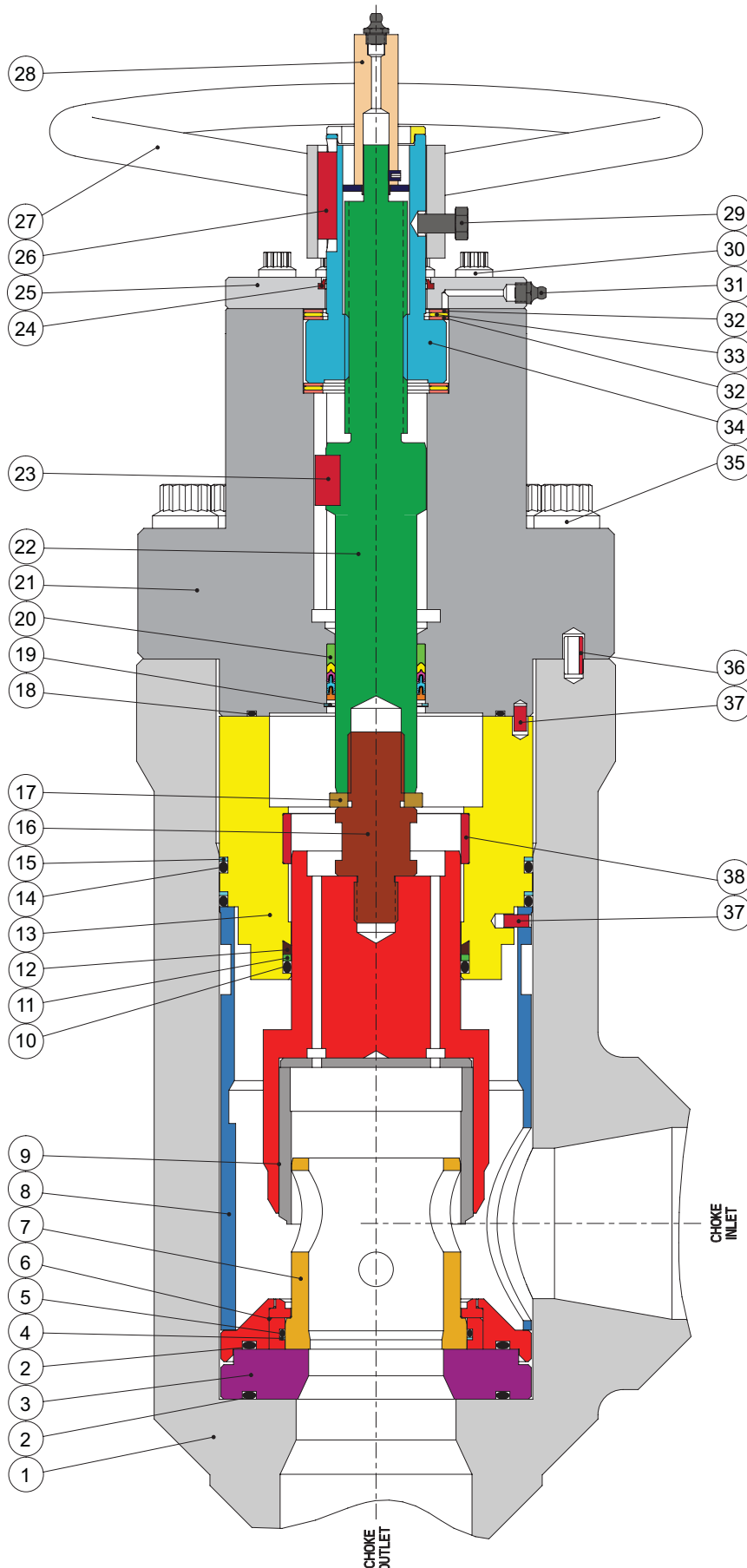
Other actuators available upon request.

PERFORMANCE CHARACTERISTICS



LIQUID PRESSURE RECOVERY FACTOR (FL)

Master Flo's trim geometry has been designed to achieve high F_L numbers. This results in a decreased cavitation potential, lower noise generation, increased flow capacity, and longer trim life. The high F_L numbers of Master Flo's trims have been verified experimentally as per the test procedures of ISA-S75.02-1996.



PARTS LIST

1. Body
2. Seal: Spacer - Seat and Body
3. Spacer
4. B/U Ring: Cage - Seat
5. Seal: Cage - Seat
6. Seat
7. Cage
8. Retaining Sleeve
9. External Sleeve
10. Seal: External Sl. - Balance Sl.
11. B/U Ring: External Sl. - Balance Sl.
12. External-Sleeve Bushing
13. Balance Sleeve
14. Seal: Balance Sleeve - Body
15. B/U Ring: Balance Sleeve - Body
16. Stud
17. Lockwasher
18. Seal: Balance Sleeve - Bonnet
19. Retaining Ring
20. Seal Pack: Stem - Bonnet
21. Bonnet
22. Stem
23. Key
24. Wiper
25. Cover Plate
26. Key
27. Handwheel
28. Calibration Head
29. Capscrew
30. Capscrew
31. Grease Nipple
32. Thrust Washer
33. Thrust Bearing
32. Thrust Washer
34. Stem Nut
35. Capscrew
36. Spring Pin
37. Pin
38. External Sl. Bushing

P35 Product Family

Standard:

- P35E Bolted Bonnet; 6 000 PSI

Other Options:

- P35E 15K - Bolted Bonnet; 15 000 PSI

chokes for all applications

recycle lines



manifold



vent valves



production



blow down

glycol injection

overboard dumps



subsea



level controllers

water injection

