

# E P6E Choke 5CB

6 000 psig / Max Cv 400 / Max Bean Size 304



## VALVE SPECIFICATIONS

<b>Valve Model</b>	P6E
<b>Body Type</b>	Right Angle
<b>Body Rating</b>	6 000 PSIG (Maximum C.W.P.)
<b>Inlet Connection</b>	see 'Standard End Connections'
<b>Outlet Connection</b>	see 'Standard End Connections'
<b>Bonnet Type</b>	Bolted
<b>Body / Bonnet Material</b>	see 'Material Options'
<b>Stem Material</b>	see 'Material Options'
<b>Seal Material</b>	see 'Material Options'
<b>Trim Style</b>	Ported Cage with External Sleeve
<b>Balanced / Unbalanced</b>	Balanced
<b>Flow Characteristic</b>	Equal Percentage
<b>Trim Material</b>	see 'Trim Options'
<b>Design Cv</b>	see 'Trim Options'
<b>Leakage Class</b>	Class V (Standard)

## TRIM OPTIONS

	Standard Trim Cage & External Sleeve 2 Row / 4 Hole	Multistage Trim	High-Pressure Multi-stage Trim
<b>Material</b>	UNS S17400, Stellite, Tungsten Carbide	Stellite, Tungsten Carbide	Stellite, Tungsten Carbide
<b>Application</b>	Liquid, Gas, Multiphase; Abrasive	Liquid, Gas, Multiphase	Liquid, Gas, Multiphase
<b>Cv</b>	400	110	75
<b>Turns</b>	27	20	20
<b>Travel</b>	4.50"	3.35"	3.35"

## STANDARD END CONNECTIONS

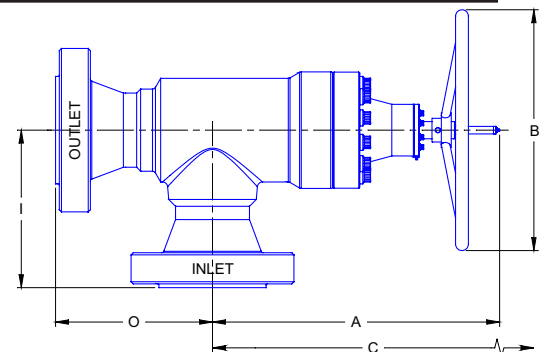
Connection Size ▶	Standard Dimensions & Estimated Weights							
	6" Nominal				8" Nominal			
	'I' or 'O'		Weight		'I' or 'O'		Weight	
Connection Type ▼	inch	mm	lbs.	kg	inch	mm	lbs.	kg
ASME 150 RF	13.00	330	835	379	13.50	343	867	394
ASME 300 RF	13.38	340	873	396	13.88	352	921	418
ASME 600 RF	14.38	365	929	422	15.00	381	1007	457
ASME 600 RTJ	14.44	368	929	422	15.06	383	1007	457
ASME 900 RF	15.25	387	1003	455	16.12	410	1157	525
ASME 900 RTJ	15.31	389	1003	455	16.12	410	1157	525
ASME 1500 RF	16.50	419	1111	504	18.12	460	1329	603
ASME 1500 RTJ	16.62	422	1111	504	18.31	465	1329	603
ASME 2500 RTJ	20.75	527	1539	699	22.56	573	1935	878
2 000 API 6B	14.44	367	929	422	15.06	383	1007	457
3 000 API 6B	15.31	389	1003	455	16.19	411	1157	525
5 000 API 6B	16.62	422	1111	504	18.31	465	1329	603

## 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
<b>A</b>	33.50	851
<b>B</b>	28.00	711
<b>C</b>	48.00	1219

**Note:** "C" is the disassembly clearance.



6A-0138

17D-0008

**MATERIAL OPTIONS**

Temperature Class	Certification Level	API - 6A Material Class Designations						
		AA	BB	CC	DD	EE	FF	HH
PU -20F to 250F	STD / PSL-1	BB	BB	FF	EE	EE	FF	HH
PX -20F to 350F	PSL-2	EE	EE	FF	EE	EE	FF	HH
-20F to 400F	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
<b>Body</b>	AISI 8620	AISI 8620	UNS S31803	AISI 8620 / Inconel 625
<b>Bonnet</b>	AISI 4130	AISI 4130	AISI 4130 / UNS S31803	AISI 4130 / Inconel 625
<b>Stem</b>	UNS S17400	UNS S17400	UNS S17400	Inconel 718
<b>Bolting</b>	ASTM A320 L7M	ASTM A320 L7M	ASTM A320 L7M	ASTM A320 L7M
<b>Retaining Sleeve</b>	ASTM A743 CF8M	ASTM A743 CF8M	ASTM A743 CF8M	Inconel 625
<b>Balance Sleeve</b>	UNS S42400	UNS S42400	UNS S31803	Inconel 625
<b>Seals</b>	Buna - N	Viton	Viton	Teflon

Other materials available upon request.

**OTHER VALVE OPTIONS**

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

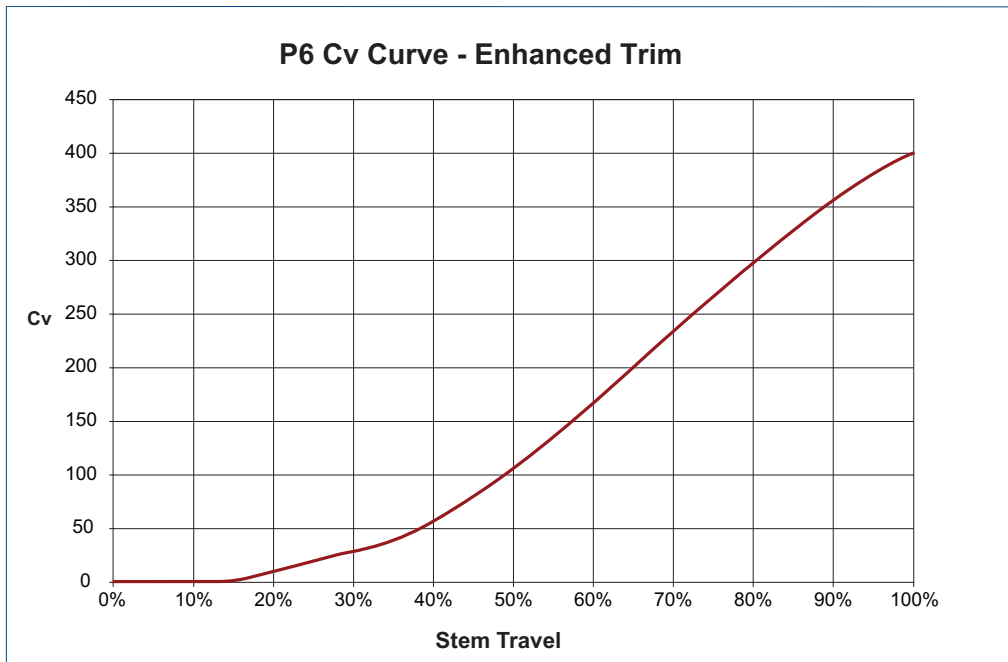
Some limitations may apply.

**ACTUATION OPTIONS**

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

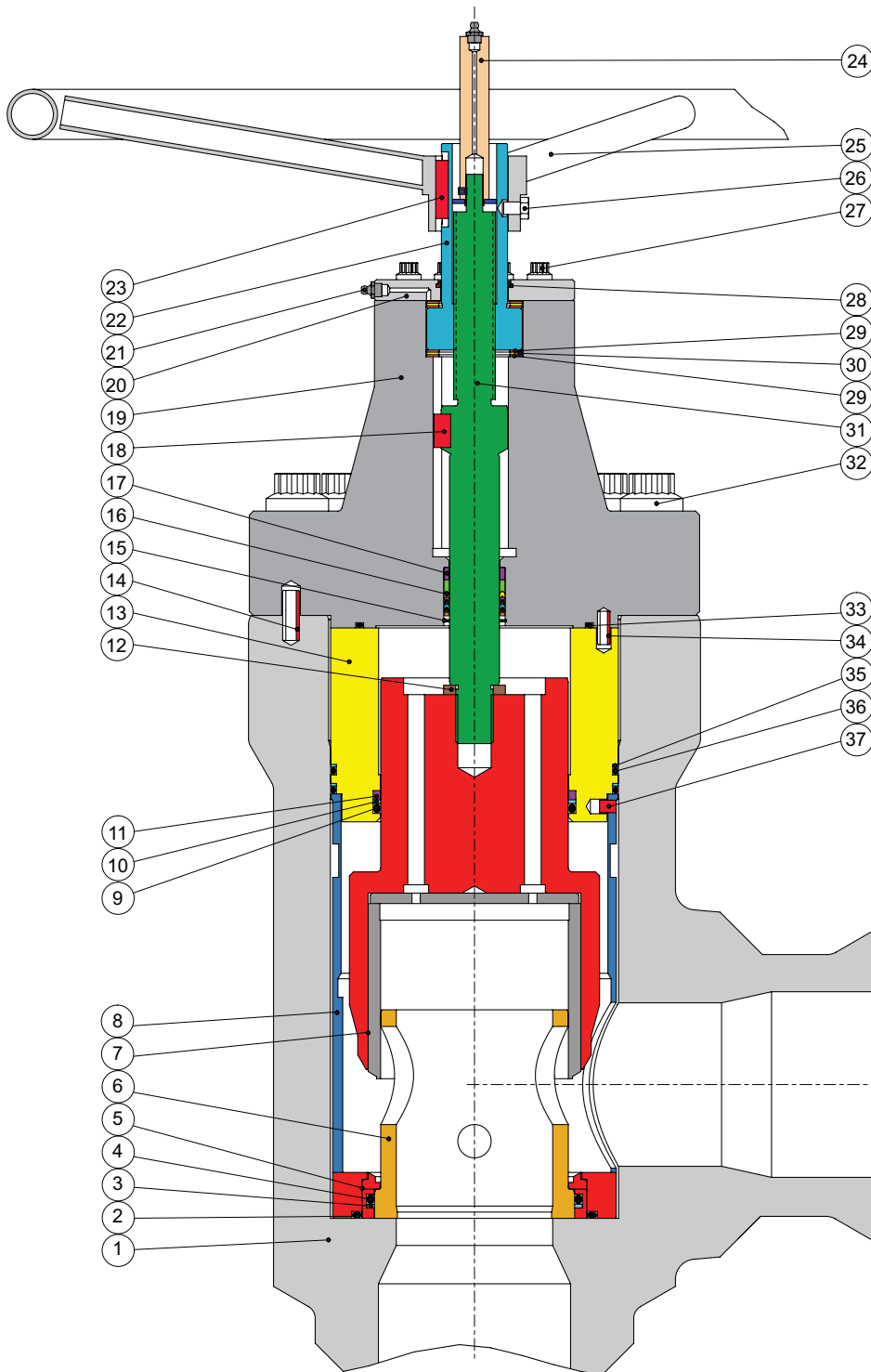
Other actuators available upon request.

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

**chokes**  
for all applications

recycle lines



vent valves



manifold



production



blow down

glycol injection

overboard dumps



subsea



level controllers

water injection



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