

E P1E Choke 5CB

6 000 psig / Max Cv 14 / Max Bean Size 58

This choke valve uses a bolted bonnet to retain the flow trim in the valve body. Standard end connections range in size from 1" to 2".



VALVE SPECIFICATIONS

Valve Model	P1E
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	Unbalanced
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	Liquid, Gas, Multiphase	Liquid, Gas, Multiphase
Cv	14	4	3
Turns	6	4	4
Travel	1.00"	0.65"	0.65"

STANDARD END CONNECTIONS

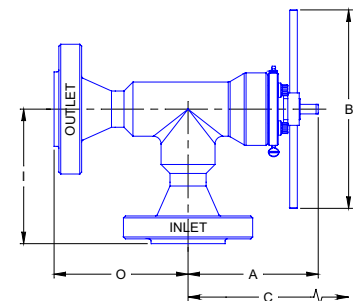
Connection Size ▶	Standard Dimensions & Estimated Weights											
	1" Nominal				1-1/2" Nominal				2" Nominal			
	'I' or 'O'		Weight		'I' or 'O'		Weight		'I' or 'O'		Weight	
Connection Type ▼	inch	mm	lbs.	kg	inch	mm	lbs.	kg	inch	mm	lbs.	kg
Threaded	4.50	114	39	18	4.50	114	39	18	4.50	114	39	18
ASME 150 RF	6.69	170	41	19	6.94	176	47	21	7.00	178	48	22
ASME 300 RF	6.94	176	44	20	7.19	183	52	24	7.25	184	52	24
ASME 600 RF	7.19	183	44	20	7.50	191	55	25	7.62	194	56	25
ASME 600 RTJ	7.19	183	44	20	7.50	191	55	25	7.69	195	56	25
ASME 900 RF	7.62	194	53	24	8.00	203	66	30	8.75	222	84	38
ASME 900 RTJ	7.62	194	53	24	8.00	203	66	30	8.81	224	84	38
ASME 1500 RF	7.62	194	53	24	8.00	203	66	30	8.75	222	84	38
ASME 1500 RTJ	7.62	194	53	24	8.00	203	66	30	8.81	224	84	38
ASME 2500 RTJ	8.25	210	62	28	9.19	233	90	41	9.81	249	120	54
2 000 API 6B	-	-	-	-	-	-	-	-	7.69	195	56	25
3 000 API 6B	-	-	-	-	-	-	-	-	8.81	224	84	38
5 000 API 6B	-	-	-	-	-	-	-	-	8.81	224	84	38

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	8.56	217
B	13.00	330
C	14.38	365

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	STD / PSL-1	BB	BB	FF	EE	EE	FF	n/a
	PSL-2	EE	EE	FF	EE	EE	FF	n/a
	PSL-3	EE	EE	FF	EE	EE	FF	n/a
LU -50F to 250F	STD / PSL-1	EE	EE	FF	EE	EE	FF	n/a
	PSL-2	EE	EE	FF	EE	EE	FF	n/a
	PSL-3	EE	EE	FF	EE	EE	FF	n/a

	BB-General Service	EE-Sour Service	FF-Sour Service
Body	ASTM A105 / AISI 8620	ASTM A105 / AISI 8620	UNS 31803
Bonnet	ASTM A350 LF2 or AISI 4130	ASTM A350 LF2	UNS 31803
Stem	UNS S17400	UNS S17400	UNS S17400
Bolting	ASTM A320 L7M	ASTM A320 L7M	ASTM A320 L7M
Retaining Sleeve	ASTM A743 CF8M	ASTM A743 CF8M	ASTM A743 CF8M
Seals	Buna - N	Viton	Viton

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	-	n/a

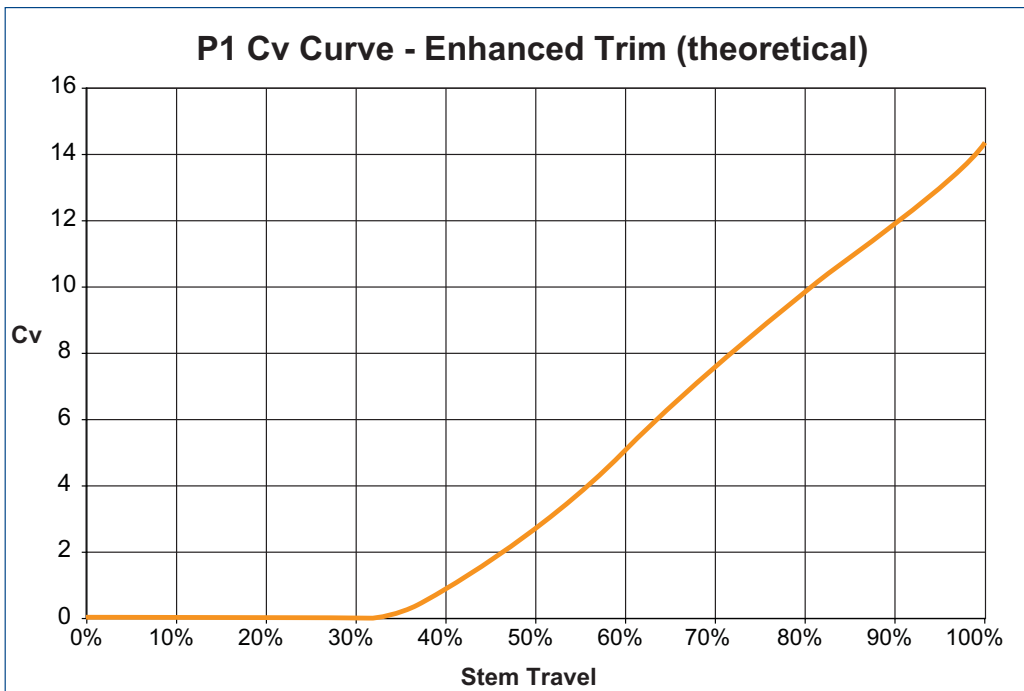
Some limitations may apply.

ACTUATION OPTIONS

Master Flo	Other
Manually Operated	Rotary Electric
FC Hydraulic Piston	Pneumatic Piston
Pneumatic Piston	Pneumatic Diaphragm

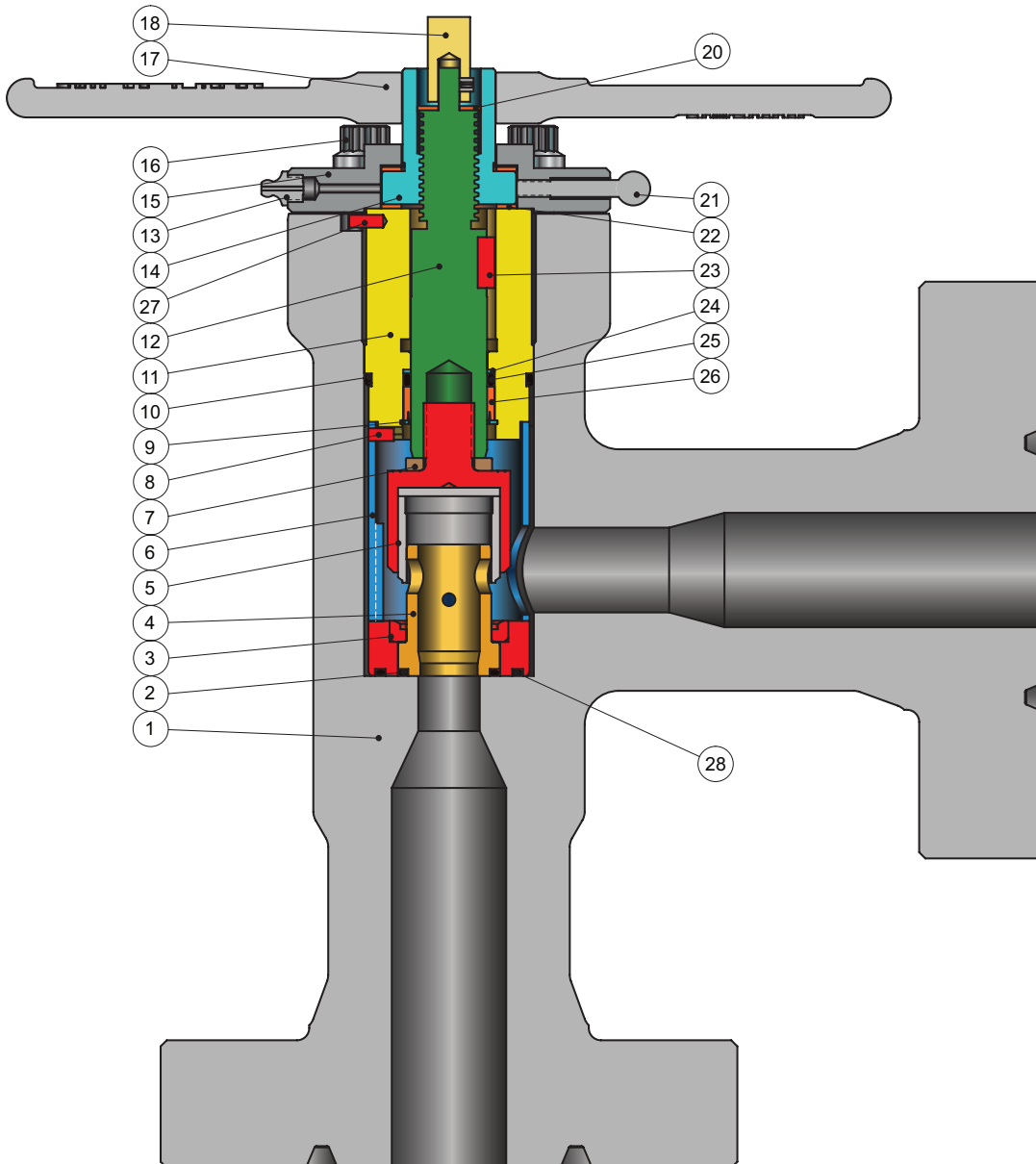
Other actuators available upon request.

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: Nozzle - Body
3. Seal: Seat - Body
4. Seat
5. Cage
6. External Sleeve
7. Retaining Sleeve
8. Lock Washer
9. Groove Pin
10. Retaining Ring
11. Seal: Bonnet - Body
12. Bonnet
13. Stem
14. Groove Pin
15. Stem Nut
16. Grease Nipple
17. Bonnet Flange
18. Cap Screw
19. Handle Ring
20. Calibration Head
21. Stem Washer
22. Handle
23. Thumb Screw
24. Thrust Washer
25. Key
26. B.U. Ring: Stem - Bonnet
27. Seal: Stem - Bonnet
28. Stem Bushing

P1E Product Family

Standard:

- P1E - Bolted Bonnet; 6 000 PSI

Other Options:

- P1E HT - Bolted Bonnet; 6 000 PSI; High-Temperature Service
- YP1E - Bolted Bonnet; 5 000 PSI; Y-Pattern Inline
- C1E - Bolted Bonnet; 3 600 PSI; Inline
- C1E HT - Bolted Bonnet; 3 600 PSI; Inline; High-Temperature Service

chokes for all applications

recycle lines



vent valves



manifold



production



blow down

overboard dumps



level controllers

glycol injection



subsea

water injection



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