

# E P25E High-Temperature Choke

5 000 psig / Max Cv 45 / Max Bean Size 103

## VALVE SPECIFICATIONS

This choke-valve option, suitable for high-temperature applications, uses a hammer-union nut to retain the bonnet and flow trim in the valve body. Standard end connections range in size from 2" to 4".

Valve Model	P25E HT
Body Type	Right Angle
Body Rating	5 000 PSIG (Maximum C.W.P.)
Inlet Connection	see 'Standard End Connections'
Outlet Connection	see 'Standard End Connections'
Bonnet Type	Hammer- Union Nut
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	Semi-Balanced
Flow Characteristic	Equal Percentage
Trim Material	see 'Trim Options'
Design Cv	see 'Trim Options'
Leakage Class	Class V (Standard)



## TRIM OPTIONS

	<b>Standard Trim Cage &amp; External Sleeve 2 Row / 4 Hole</b>
Material	UNS S17400, Stellite, Tungsten Carbide *
Application	Liquid, Gas, Multiphase; Clean or Abrasive
Cv	45
Turns	12
Travel	1.50"

\* Cage Only

## STANDARD END CONNECTIONS

Connection Size ▶	Standard Dimensions & Estimated Weights											
	2" Nominal				3" Nominal				4" Nominal			
	'I' or 'O'		Weight		'I' or 'O'		Weight		'I' or 'O'		Weight	
Threaded	4.50	114	82	37	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ASME 150 RF	7.00	178	92	42	7.25	184	103	47	7.50	191	115	52
ASME 300 RF	7.25	184	96	44	7.62	194	114	52	7.88	200	135	61
ASME 600 RF	7.62	194	100	45	8.00	203	116	53	8.75	222	156	71
ASME 600 RTJ	7.69	195	100	45	8.06	205	116	53	8.81	224	156	71
ASME 900 RF	8.75	222	128	58	8.75	222	138	63	9.25	235	184	84
ASME 900 RTJ	8.81	224	128	58	8.81	224	138	63	9.31	237	184	84
ASME 1500 RF	8.75	222	128	58	9.38	238	176	80	9.62	244	220	100
ASME 1500 RTJ	8.81	224	128	58	9.44	240	176	80	9.69	246	220	100
2 000 API 6B **	7.69	195	100	45	8.06	205	116	53	8.81	224	156	71
3 000 API 6B **	8.81	224	128	58	8.81	224	138	63	9.31	237	184	84
5 000 API 6B **	8.81	224	128	58	9.44	240	177	80	9.69	246	220	100

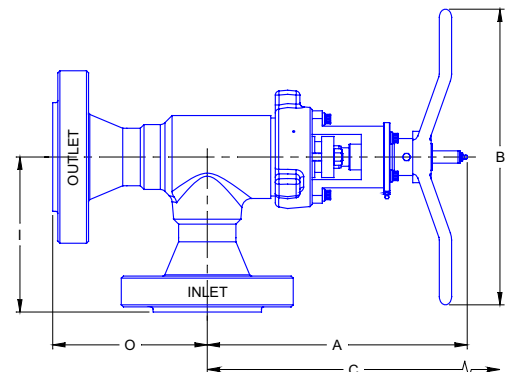
2-1/2" connections also available.

\*\* Not API monogramable due to temperature range.

## 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	15.88	403
B	18.00	457
C	21.94	557



Note: "C" is the disassembly clearance.

**MATERIAL OPTIONS**

Temperature Class	Certification Level	API - 6A Material Class Designations						
		AA	BB	CC	DD	EE	FF	HH
-20F to 800F	STD / PSL-1	BB	BB	CC	n/a	n/a	n/a	n/a
	PSL-2	BB	BB	CC	n/a	n/a	n/a	n/a
	PSL-3	BB	BB	CC	n/a	n/a	n/a	n/a

	BB-General Service	CC-General Service
Body	AISI 8620	UNS S31803
Bonnet	AISI 4130	UNS S31803
Stem	UNS S17400	UNS S17400
Bolting	AISI 4130	AISI 4130
Retaining Sleeve	ASTM A743 CF8M	ASTM A743 CF8M
Seals	Graphoil	Graphoil

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

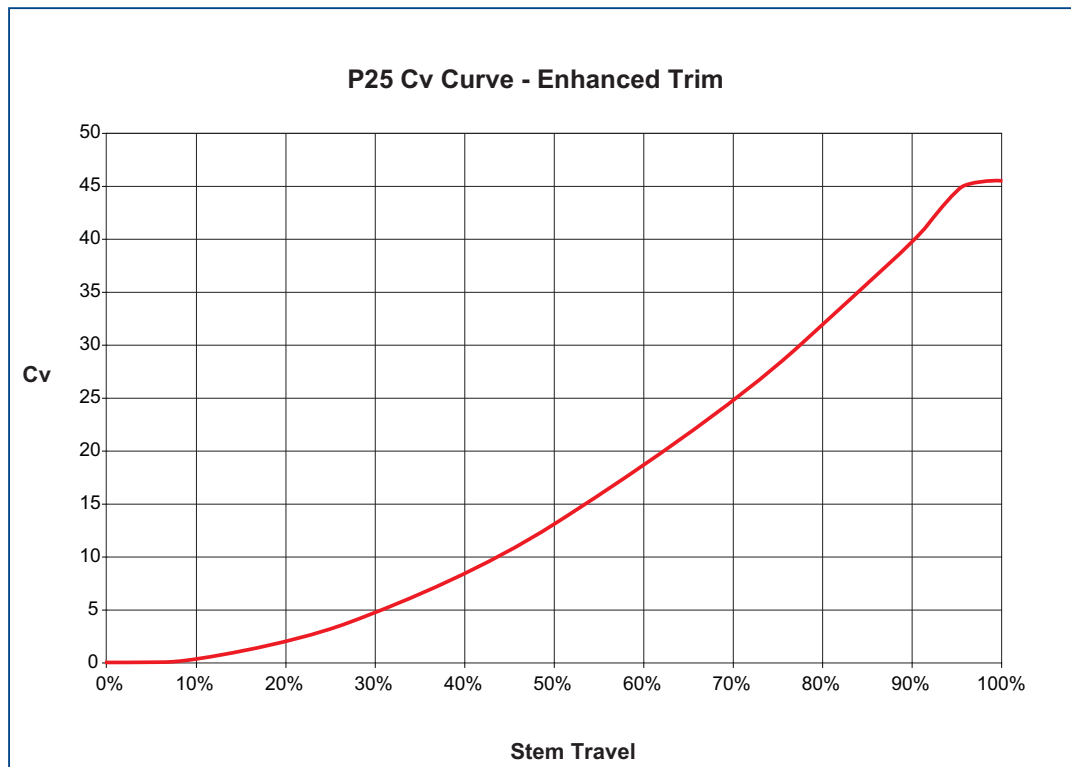
Some limitations may apply.

**ACTUATION OPTIONS**

Master Flo	Other
Manually Operated (Stemlock is optional)	Pneumatic Piston
	Pneumatic Diaphragm

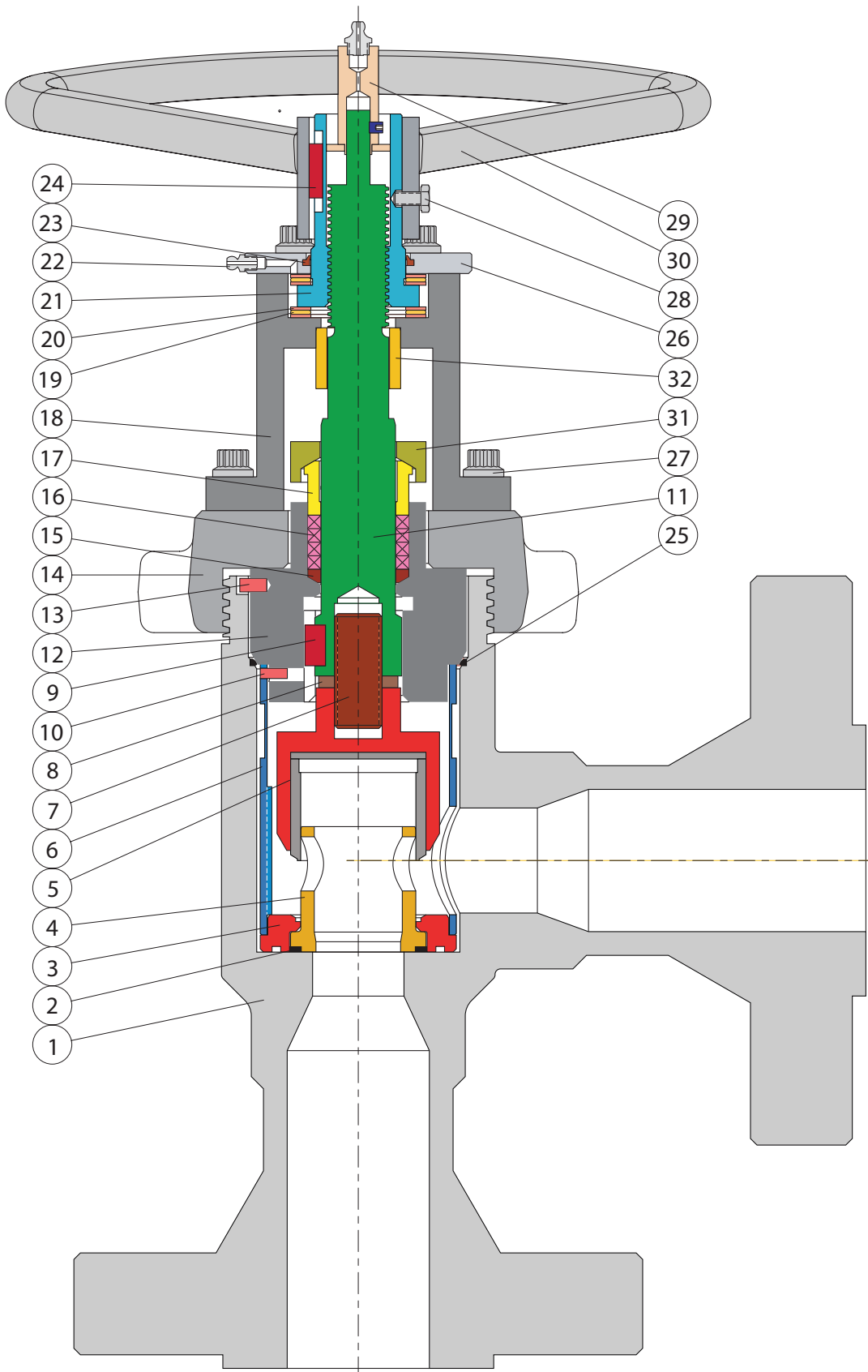
Other actuators available upon request.

**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: Cage/Seat - Body
3. Seat
4. Cage
5. External Sleeve
6. Retaining Sleeve
7. Stud
8. Lockwasher
9. Key
10. Pin
11. Stem
12. Bonnet
13. Pin
14. Bonnet Nut
15. Packing Leader
16. Packing
17. Packing Follower
18. Yoke
19. Thrust Bearing
20. Thrust Washer
21. Stem Nut
22. Grease Nipple
23. Wiper
24. Key
25. Metal Bonnet Seal
26. Cover Plate
27. Capscrew
28. Capscrew
29. Calibration Head
30. Handwheel
31. Packing Gland
32. Yoke Sleeve

**P25 Product Family****Standard:**

- P25E - Hammer-Union Bonnet; 5 000 PSI

**Other Options:**

- P25E BB - Bolted Bonnet; 6 000 PSI
- P25E 15k - Bolted Bonnet; 15 000 PSI
- **P25E HT - Hammer Union; 5 000 PSI; High-Temperature Service**
- C25E - Hammer Union; 3 600 PSI; Inline
- C25E BB - Bolted Bonnet; 3 600 PSI; Inline
- C25E HT - Hammer Union; 3 600 PSI; Inline; High-Temperature Service

## chokes for all applications

recycle lines



manifold



vent valves



production



blow down

glycol injection

overboard dumps



subsea



level controllers

water injection

