

E P3E High-Temperature Choke 5CB

3 600 psig / Max Cv 83 / Max Bean Size 137

This choke-valve option, suitable for high-temperature applications, uses a bolted bonnet to retain the flow trim in the valve body. Standard end connections range in size from 3" to 4".

VALVE SPECIFICATIONS ▶

Valve Model	P3E HT
Body Type	Right Angle
Body Rating	3 600 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
Material	UNS S17400, Stellite
Application	Liquid, Gas, Multiphase; Clean
Cv	83
Turns	17
Travel	2.15"

STANDARD END CONNECTIONS ▶

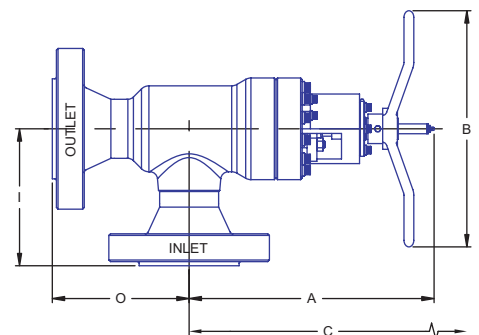
Connection Size ▶	Standard Dimensions & Estimated Weights							
	3" Nominal				4" Nominal			
	'I' or 'O'		Weight		'I' or 'O'		Weight	
Connection Type ▼	inch	mm	lbs.	kg	inch	mm	lbs.	kg
Threaded	5.25	133	154	70	n/a	n/a	n/a	n/a
ASME 150 RF	8.00	203	177	80	8.25	210	187	85
ASME 300 RF	8.38	213	190	86	8.62	219	207	94
ASME 600 RF	8.75	222	190	86	9.50	241	228	104
ASME 600 RTJ	8.81	224	190	86	9.56	243	228	104
ASME 900 RF	9.50	214	212	96	10.00	254	256	116
ASME 900 RTJ	9.56	243	212	96	10.06	256	256	116
ASME 1500 RF	10.12	257	250	114	10.38	264	292	133
ASME 1500 RTJ	10.19	259	250	114	10.44	265	292	133
2 000 API 6B	8.81	224	190	86	9.56	243	228	104
3 000 API 6B	9.56	243	212	96	10.06	256	256	116

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	18.69	475
B	18.00	457
C	26.31	668

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 850F	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	AISI 316
Bonnet	AISI 4130 or ASTM A350 LF2	AISI 316
Stem	UNS S17400	UNS S17400
Bolting	ASTM A320 L7M	ASTM A320 L7M
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	-	n/a
Body Bleed Port	-	n/a

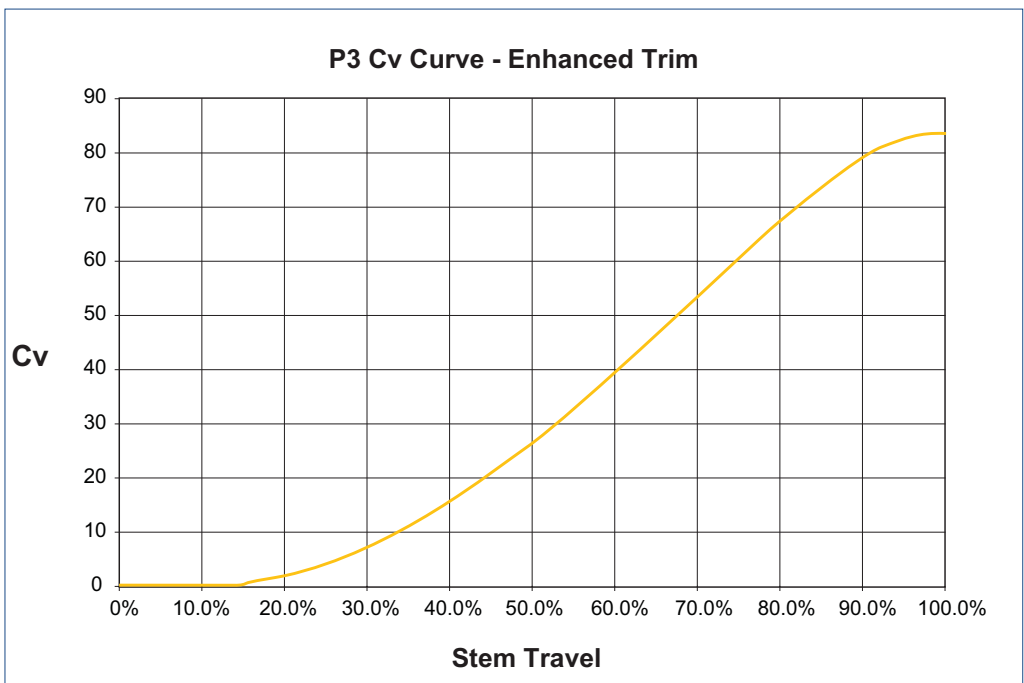
Some limitations may apply.

ACTUATION OPTIONS

Master Flo	Other
Manually Operated	Pneumatic Piston
	Pneumatic Diaphragm

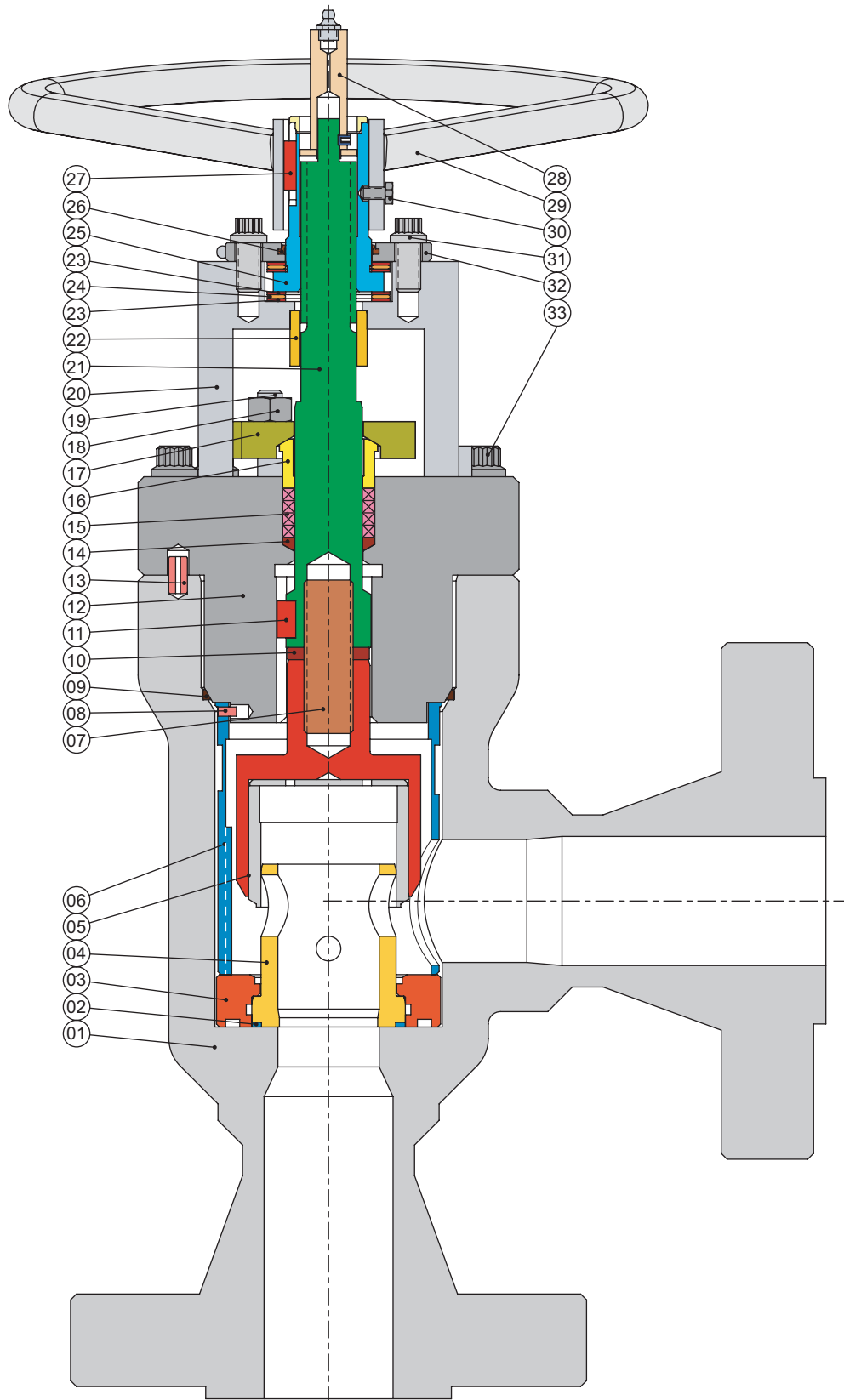
Other actuators available upon request.

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

P3 Product Family

Standard:

- P3E - Bolted Bonnet; 6 000 PSI

Other Options:

- P3E 10k - Bolted Bonnet; 10 000 PSI
- P3E HT - Bolted Bonnet; 3 600 PSI;
High-Temperature Service
- C3E - Bolted Bonnet; 3 600 PSI; Inline
- C3E HT - Bolted Bonnet; 3 600 PSI;
High-Temperature Service

chokes for all applications

recycle lines



manifold



vent valves



production



blow down

glycol injection



overboard dumps



level controllers

water injection



subsea