

E C2E High-Temperature Valve 5CB

6 000 psig / Max Cv 27 / Max Bean Size 81

This control-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 3".

VALVE SPECIFICATIONS ▶

Valve Model	C2E HT
Body Type	Inline
Body Rating	6 000 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)

image not available

TRIM OPTIONS ▶

	Standard Trim Cage & External Sleeve 2 Row / 4 Hole
Material	UNS S17400, Stellite, Tungsten Carbide*
Application	Liquid, Gas, Multiphase
Cv	27
Turns	11
Travel	1.38"

* Cage only.

STANDARD END CONNECTIONS ▶

Connection Size ▶	Standard Dimensions & Estimated Weights							
	2" Nominal				3" Nominal			
	'F'		Weight		'F'		Weight	
Connection Type ▼	inch	mm	lbs.	kg	inch	mm	lbs.	kg
Threaded	11.25	286	87	40	-	-	-	-
ASME 150 RF	10.00	254	93	42	*12.50	*318	101	46
ASME 300 RF	10.50	267	96	44	12.50	318	101	46
ASME 600 RF	11.25	286	99	45	13.25	337	110	50
ASME 600 RTJ	11.38	289	99	45	13.38	340	110	50
ASME 900 RF	14.75	375	127	58	17.38	441	145	66
ASME 900 RTJ	14.88	378	127	58	17.50	445	145	66
ASME 1500 RT	14.75	375	127	58	18.12	460	168	76
ASME 1500 RTJ	14.88	378	127	58	18.25	464	168	76

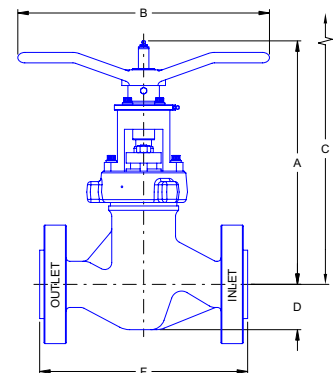
* Not a standard ISA face-to-face dimension.

ENVELOPE DIMENSIONS ▶

Dimensions 'A', 'B', and 'C' apply to manually operated valves and are tabulated below. 'F' (face-to-face) and dimension depends on the end connection and is tabulated above. Special dimensions and other end connections are available upon request.

Dimensions		
	inch	mm
A	17.50	445
B	18.00	457
C	23.38	594
D	3.50	89

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 750F	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	ASTM A352 LCC / ASTM A216 WCB	ASTM A351 CF8M
Bonnet	ASTM A350 LF2 or AISI 4130	AISI 316
Stem	UNS S17400	UNS S17400
Bolting	AISI 4130	AISI 4130
Retaining Sleeve	ASTM A743 CF8M	ASTM A743 CF8M
Seals	SS / Graphoil	SS / Graphoil

* Other materials available upon request.

OTHER VALVE OPTIONS

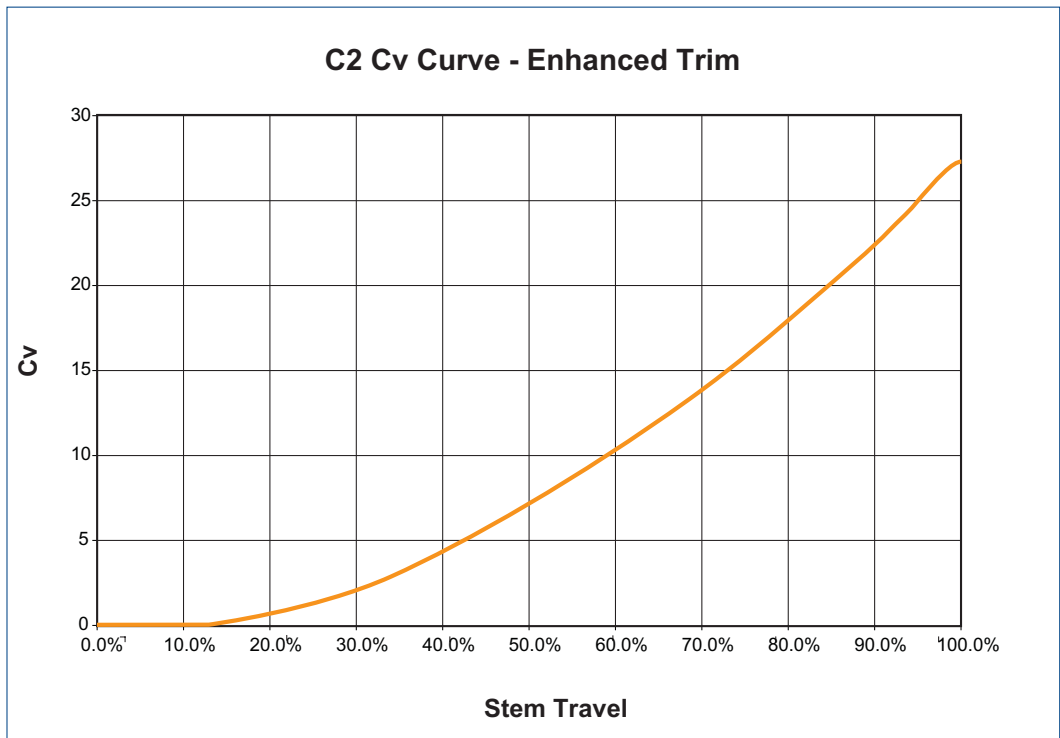
	Standard	Optional
Calibration Head / Serial Plaque	Aluminum	Stainless Steel
Outlet Sleeve	-	n/a
Body Bleed Port	-	n/a

ACTUATION OPTIONS

Master Flo	Other
Manually Operated	Pneumatic Piston
	Pneumatic Diaphragm

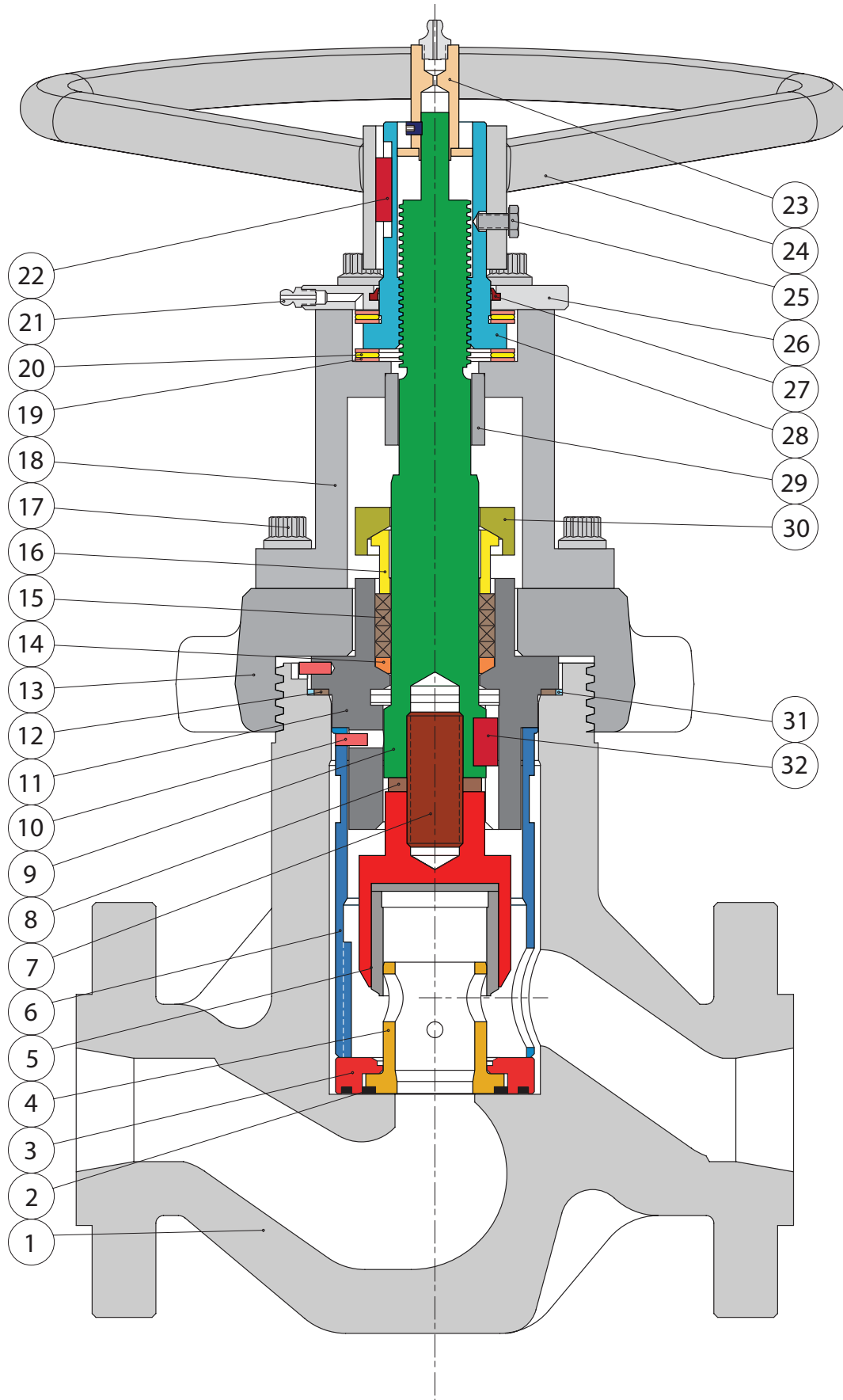
Other actuators available upon request.

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: Cage - Body
3. Seat
4. Cage
5. External Sleeve
6. Retaining Sleeve
7. Stud
8. Lockwasher
9. Stem
10. Pin
11. Bonnet
12. Seal: Bonnet - Body
13. Bonnet Nut
14. Packing Leader
15. Packing: Stem - Bonnet
16. Packing Follower
17. Capscrew
18. Yoke
19. Thrust Washer
20. Thrust Bushing
21. Grease Nipple
22. Key
23. Calibration Head
24. Handwheel
25. Capscrew
26. Cover Plate
27. Wiper
28. Stem Nut
29. Yoke Sleeve
30. Packing Gland
31. Retainer Ring
32. Key
33. Nut (not visible)
34. Stud (not visible)

P2 Product Family

Standard:

- P2E - Hammer-Union Bonnet; 10000 PSI

Other Options:

- P2E BB - Bolted Bonnet; 6 000 PSI
- P2E 10k BB - Bolted Bonnet; 10 000 PSI
- P2E HT - Hammer Union; 6 000 PSI; High-Temperature Service
- C2E - Hammer Union; 6 000 PSI; Inline
- C2E BB - Bolted Bonnet; 6 000 PSI; Inline
- C2E HT - Hammer Union; 6 000 PSI; Inline; High-Temperature Service

chokes
for all applications

recycle lines



vent valves



manifold



production



blow down

glycol injection



overboard dumps



level controllers

water injection

subsea



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