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Standard Cage Characteristics are Q-Open, Equal Percent, Linear & Whisper I

Alloy Design E Series Valve Body Assemblies see ALLOYECX0

Bonnet Size is for selection of Bonnet per EX0

* Foreign Manufactured Din Flanged Valve Bodies are listed on the EM

Standard Service

Class	Characteristic	Body Size	Stem Diameter	Bonnet Size	Travel	EM	Notes
125-600 PN10-100	Standard	1/2-1 1/4 (25mm)*	3/8 & 1/2	1	3/4	ECX1	
		1 1/2 (40mm)*	3/8 & 1/2	1 1/2	3/4	ECX2	
		2 (50mm)*	1/2 & 3/4	2	3/4 & 1 1/8	ECX3	
		2 1/2 (65mm)*	1/2 & 3/4	2 1/2	3/4 & 1 1/2	ECX4	
		3 (80mm)*	1/2 & 3/4	3	3/4, 1 1/8 & 1 1/2	ECX5	
		4 (100mm)*	1/2, 3/4, & 1	4	1 1/2 & 2	ECX6	
		6 (150mm)*	3/4, 1 & 1 1/4	6	2	ECX7	
		8 (200mm)*	3/4, 1 & 1 1/4	8	2 & 3	ECX8	
		10X8 EW	3/4, 1 & 1 1/4	8	2 & 3	ECX8	
	Whisper I	8	3/4, 1 & 1 1/4	8	3 & 4	ECX8	
	Whisper III	2 (50mm)*	1/2 & 3/4	2	1 1/4 & 1 3/8	ECX82	
		3 (80mm)*	1/2 & 3/4	3	1 1/2	ECX84	
		4 (100mm)*	1/2 & 3/4	4	2	ECX85	
		6 (150mm)*	3/4, 1 & 1 1/4	6	3	ECX22	
		6 (150mm)*	3/4, 1 & 1 1/4	6	2 & 3	ECX87	
		8 (200mm)*	3/4, 1 & 1 1/4	8	3 3/4 & 4	ECX86	
	WhisperFlo (Level X, Y & Z)	4 (100mm)*	3/4	4	3	ECX41	
		6 (150mm)*	3/4 & 1	6	3	ECX40	
		8 (200mm)*	3/4 & 1	8	6	ECX42	
		10X8 EW	3/4 & 1	8	6	ECX42	
	Cavitrol III	1	1/2	1	1	ECX29	
		1 1/2	1/2	1 1/2	1 1/2	ECX30	
		2	1/2 & 3/4	2	2	ECX31	
		2 1/2	3/4, 1 & 1 1/4	2 1/2	2 1/2	ECX32	
		3	1/2 & 3/4	3	2 1/2 & 3	ECX33	
		4	3/4, 1	4	3 & 4	ECX34	
		6	3/4, 1 & 1 1/4	6	2, 3 & 4	ECX35	
		8	3/4, 1 & 1 1/4	8	3, 4 & 6	ECX36	
300	Standard	10	1 1/4	10	4 & 8	ECX39	
		12	1 1/4	12	4, 5, 8 & 9	ECX38	
		16	1 1/4	16	4, 5 & 9	ECX37	
1500 PN160-250	Standard	3 (80mm)*	1/2, 3/4 & 1	3	3/4 & 1 1/2	ECX9	
		4 (100mm)*	1/2, 3/4 & 1	4	1 1/8 & 1 1/2	ECX10	
		6 (150mm)*	3/4, 1 & 1 1/4	6	1 1/2 & 2	ECX11	
	Cavitrol III	3 (80mm)*	3/4 & 1	3	2 & 3 1/2	ECX23	Obsolete
		4 (100mm)*	3/4 & 1	4	3 3/4	ECX24	
		6 (150mm)*	3/4, 1 & 1 1/4	6	5 1/4	ECX25	
2500 PN320-400	Standard	3 (80mm)*	1/2, 3/4 & 1	3	3/4 & 1 1/8	ECX12	Obsolete
		3	3/4	3	3/4	ECX21	Obsolete
		4 (100mm)*	3/4 & 1	4	3/4 & 1 1/2	ECX13	Obsolete
	Cavitrol III	6 (150mm)*	3/4, 1 & 1 1/4	6	1 1/2 & 2	ECX14	Obsolete
		3 (80mm)*	1/2 & 3/4	3	2 3/4	ECX26	Obsolete
		4 (100mm)*	3/4 & 1	4	3 1/2	ECX27	Obsolete
		6 (150mm)*	3/4, 1 & 1 1/4	6	5 1/4	ECX28	Obsolete



NACE MR0175/ISO 15156 and NACE MR0103 Service

Class	Body Size (Inch)	Stem Diameter	Bonnet Size	Travel	EM
125-600	1/2-1 1/4	3/8 & 1/2	1	3/4	ECX70
	1 1/2	3/8 & 1/2	1 1/2	3/4	ECX71
	2	1/2 & 3/4	2	3/4 & 1 1/8	ECX72
	3	1/2 & 3/4	3	3/4, 1 1/8 & 1 1/2	ECX73
	4	1/2, 3/4, & 1	4	1 1/2 & 2	ECX74
	6	3/4, 1 & 1 1/4	6	2	ECX75
	8	3/4, 1 & 1 1/4	8	2 & 3	ECX76

Find Number	Part Name
1	Valve Body
2	Valve Plug or Valve Plug Assembly
3	Cage or Cage & Ring Assembly
4	Adaptor Cage
5	Adaptor Ring
6	Piston Ring
7	Stem
8	Groove Pin or Retainer
9	Seat Ring
10	Bonnet Gasket
11	Gasket, Cage or Body
12	Spiral Gasket
13	Seat Ring Gasket or Seal Ring
14	Adaptor Gasket
15	Cap Screw or Stud Bolt
16	Hex Nut
17	Pipe Plug
18	Flow Arrow
19	Drive Screw
20	Adaptor Gasket
21	Disc Retainer
22	Disc Seat
23	Disc
24	Disc
25	Tip
26	Loading
27	Retaining Ring
28	Seal Ring, Valve Plug
29	Back Up Ring
30	Spring Seal or O-Ring Retainer Assembly
31	Cage Retainer or Cage Retainer & Baffle Assembly
32	Bonnet Spacer
35	Bonnet
36	Bellows Seal Assembly
37	Packing Flange
38	Stud
39	Nut
40	Yoke Locknut



Find Number	Part Name
41	Packing Ring
42	Wiper
43	Lantern Ring Or Spring Or Spacer
44	Packing Box Ring Or Bonnet Bushing
45	Follower
46	Pipe Plug
47	Upper Seat
48	Upper Seal Retainer
49	Cap Screw
50	Lockwasher
51	Shim
52	Gasket
53	Nameplate
54	Wire
55	Lubricant
56	Sealant
57	Cap Screw
58	O-Ring
59	Seal Ring
60	O-Ring
61	Seal Retainer
62	Seat Ring
63	Anti-Extrusion Ring
64	C-Seal
65	Warning Nameplate

Stainless Steel Temperature Limits reference FMS 20B16

CF8M 316SST To 1000 °F
316H SST Above 1000 °F

CF8 304SST To 1000 °F
304H SST Above 1000 °F

CF8C 347SST To 1000 °F
347H SST Above 1000 °F



Values listed for 316SST are for all 300 Series SST, Except 316SST ENC Cage must not exceed 650 °F.

Valve Body/Trim Temperature °F Limits

Body	Cage	Seat Ring	Minimum	Maximum			
				Body Size			
				1/2-1 1/2	2	2 1/2 & 3	4 & 6
CI	17-4 PH	416SST	-20	450	450	450	450
		316SST	-100	450	450	450	450
		COCR-A	-100	450	450	450	450
	316SST	416SST	-20	450	450	450	450
		316SST	-100	450	450	450	450
		COCR-A	-100	450	450	450	450
	COCR-A	COCR-A	-100	450	450	450	450
WCB	17-4 PH	416SST	-20	500	500	500	500
		316SST	-20	800	800	800	800
		COCR-A	-20	800	800	800	800
	316SST	416SST	-20	800	800	800	760
		316SST	-20	800	800	800	640
		COCR-A	-20	800	800	800	670
	COCR-A	COCR-A	-20	800	800	800	800
LCB	17-4 PH	416SST	-20	650	650	650	650
		316SST	-50	650	650	650	650
		COCR-A	-50	650	650	650	650
	316SST	416SST	-20	650	650	650	650
		316SST	-50	650	650	650	650
		COCR-A	-50	650	650	650	650
	COCR-A	COCR-A	-50	650	650	650	650
LC3	17-4 PH	416SST	-20	650	650	650	650
		316SST	-150	650	650	650	650
		COCR-A	-150	650	650	650	650
	316SST	416SST	-20	650	650	650	650
		316SST	-150	600	650	650	650
		COCR-A	-150	650	650	650	650
	COCR-A	COCR-A	-150	650	650	650	650
CF8M	17-4 PH	416SST	-20	670	550	420	350
		316SST	-150	700	570	440	360
		COCR-A	-150	700	570	440	360
	316SST	416SST	-20	800	800	800	800
		316SST	-325	1100	1100	1100	1100
		COCR-A	-325	1100	1100	1100	1100
	COCR-A	COCR-A	-325	1030	940	840	770
C5	17-4 PH	416SST	-20	800	800	800	800
		316SST	-20	800	800	800	800
		COCR-A	-20	800	800	800	800
	316SST	416SST	-20	800	800	700	500
		316SST	-20	1080	870	650	450
		COCR-A	-20	1100	900	660	460
	COCR-A	COCR-A	-20	1100	1100	1100	1000

Valve Body/Trim Temperature °F Limits

Body	Cage	Seat Ring	Minimum	Maximum			
				Body Size			
				1/2-1 1/2	2	2 1/2 & 3	4 & 6
WC9	17-4 PH	416SST	-20	800	800	800	800
		316SST	-20	800	800	800	800
		COCR-A	-20	800	800	800	800
	316SST	416SST	-20	800	800	800	760
		316SST	-20	1050	1050	950	640
		COCR-A	-20	1050	1050	975	670
	COCR-A	COCR-A	-20	1050	1050	1050	1050
CF8C	17-4 PH	416SST	-20	670	550	420	350
		316SST	-150	700	570	440	360
		COCR-A	-150	700	570	440	360
	316SST	416SST	-20	800	800	800	800
		316SST	-325	1100	1100	1100	1100
		COCR-A	-325	1100	1100	1100	1100
	COCR-A	COCR-A	-325	1030	940	840	770
WC1	17-4 PH	416SST	-20	800	800	800	800
		316SST	-20	800	800	800	800
		COCR-A	-20	800	800	800	800
	316SST	416SST	-20	800	800	800	760
		316SST	-20	850	850	850	640
		COCR-A	-20	850	850	850	670
	COCR-A	COCR-A	-20	850	850	850	850
WC6	17-4 PH	416SST	-20	800	800	800	800
		316SST	-20	800	800	800	800
		COCR-A	-20	800	800	800	800
	316SST	416SST	-20	800	800	800	760
		316SST	-20	1000	1000	950	640
		COCR-A	-20	1000	1000	975	670
	COCR-A	COCR-A	-20	1000	1000	1000	1000
Alloy 20	17-4 PH	416SST	-20	300	300	300	300
		316SST	-150	300	300	300	300
		COCR-A	-150	300	300	300	300
	316SST	416SST	-20	300	300	300	300
		316SST	-325	300	300	300	300
		COCR-A	-325	300	300	300	300
	COCR-A	COCR-A	-325	300	300	300	300
Hact C	17-4 PH	416SST	-20	800	800	800	800
		316SST	-150	800	800	800	800
		COCR-A	-150	800	800	800	800
	316SST	416SST	-20	800	800	700	500
		316SST	-325	1000	870	650	450
		COCR-A	-325	1000	900	650	460
	COCR-A	COCR-A	-325	1000	1000	1000	1000



Bellows Seal Assembly, Pressure/Temperature Rating per Body Size and Bellows Material

Temperature °F	Bellows		316L SST		Monel	
	1/2-1	1/2	2-6	1/2-1	1/2	2-6
70	400		300	400		300
150	361		271	372		279
200	335		251	352		264
300	301		226	326		245
400	276		207	308		231
500	255		191	296		222
600	238		179	286		215
700	222		167	282		212
800	209		157	280		210
900	198		149	277		208
1000	192		144	266		200

Enviro-Seal

Environ Seal

		Bellows		N06625		N06022			
Ply	Temperature °F	1/2-1	1/2	2	3 & 4	1/2-1	1/2	2	3 & 4
One	100			550	550	340	550	550	340
	200			506	506	313	534	534	330
	300			479	479	296	523	523	323
	400			451	451	279	506	506	313
	500			429	429	265	484	484	299
	600			413	413	255	473	473	292
	700			402	402	248	457	457	282
	800			396	396	245	440	440	272
Two	100			1000	1000	625	1000	1000	625
	200			920	920	575	970	970	606
	300			870	870	544	950	950	594
	400			820	820	512	920	920	575
	500			780	780	488	880	880	550
	600			750	750	469	860	860	537
	700			730	730	456	830	830	519
	800			720	720	450	800	800	500

Revision Change Record

The date recorded on this document reflects the effective date of this revision.

ECRN: 20151941

On page 1, add new EM "ECX87" for NPS 6 body Whisper III characteristic, and obsolete EM ECX22 to see ECX87.
On page 2, add part name "Warning Nameplate" with find number "65" to the find number table.