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ECX7-A B C D E F G H J L 9A 9C 9D 9E

C-SEAL TRIM SELECTION STRING = ECX7-A E F J L 9C & CSEALX1-A B C D E 9A 9B

Item	Parts contained in Item	Find Number
A	Valve Body	1
	Pipe Plug	17
B	Cage	3
C	Valve Plug	2
	Groove Pin	8
	Seat Ring	9
	Disc Retainer	21
	Disc Seat	22
	Ring, Retaining, Ext.	27
	Back Up Ring	29
	Thread Lock	56
	Cap Screw	57
D	Disc	23
E	Cap Screw or Stud Bolt	15
	Hex Nut	16
F	Bonnet Gasket	10
	Spiral Gasket	12
	Seat Ring Gasket	13
	Shim	51
G	Piston Ring	6
	Seal Ring	28
	Back-up Ring	29
	Rings, Anti-Extrusion	63
H	Stem	7
J	Flow Arrow	18
	Drive Screw	19
L	Drive Screw	19
	Nameplate	53
	Wire	54
9A	Design, Action & Flow Direction	
9C	Class/Hydro	
9D	Seat Leak per FGS 4L5	
9E	Nameplate Data When Item J Not Used	



ITEM A - VALVE BODY

BODY	TEMP ° F	RATING	CWP (PSI)	END CONNECTION	DRAIN TAPPING	
					WITHOUT	WITH
					A	A
CI	-100+450	CLASS 125	200	FF	1	-
		CLASS 250	600	RF	289	290
ALY 20	-325+800	CLASS 150	230	RF	77	-
WC9	-20+1050	CLASS 600	1500	BWE SHD 40	185	-
				RF	190	-
				RTJ	194	-
WCC	-20+800	CLASS 150	290	FF	287	-
				RF	17	109
				RTJ	*291	-
		CLASS 300	750	RF	45	-
				RTJ	24	116
				RTJ	*292	-
		CLASS 400	1000	RF	52	-
		CLASS 600	1500	RF	31	-
				BWE SCHD 40	3	95
				BWE SCHD 80	10	-
				RF	38	130
LCC	-50+650	CLASS 150	265	RF	*293	-
		CLASS 300	695	RF	66	-
		CLASS 600	1390	RF	18	-
		CLASS 600	1390	RTJ	25	-
				RTJ	39	-
WC1	-20+850	CLASS 600	1390	BWE SHD 40	307	-
C5	-20+1100	CLASS 150	290	RF	5	-
		CLASS 300	750	RF	20	-
		CLASS 600	1500	RTJ	27	-
				BWE SCHD 40	55	-
				BWE SCHD 80	6	-
WC6	-20+1000	CLASS 600	1500	RF	13	-
				RF	41	-
CF8M	-325+1000	CLASS 150	275	BWE SHD 40	7	-
		CLASS 300	720	RF	42	-
		CLASS 600	1440	RF	22	-
				RF	29	121
				RTJ	8	-
				RF	43	135
				RTJ	71	-



ITEM A - VALVE BODY (CONTINUED)

BODY	TEMP °F	TEMP °C	RATING	CWP (BAR/38°C)
WCC	-20+800	-29+425	PN10/16	16
			PN25/40	40
			PN63	63
			PN100	100
LCC	-50+650	-46+343	PN10/16	16
			PN25/40	40
			PN63	63
			PN100	100
CF8M	-325+1000	-198+538	PN10/16	16
			PN25/40	40
			PN63	63
			PN100	100
C5	-20+1100	-29+593	PN10/16	16
			PN25/40	40
			PN63	63
			PN100	100
WC1	-20+850	-29+454	PN10/16	16
			PN25/40	40
			PN63	63
			PN100	100
WC6	-20+1000	-29+538	PN10/16	16
			PN25/40	40
			PN63	63
			PN100	100
WC9	-20+1100	-29+593	PN10/16	16
			PN25/40	40
			PN63	63
			PN100	100
347SST	-325+1100	-198+593	PN10/16	16
			PN25/40	40
			PN63	63
			PN100	100

DN 150, EN1092-1

PN	TYPE B RAISED FACE					TYPE E SPIGOT				TYPE F RECESS			
	10/16	16	25/40	63	100	10/16	25/40	63	100	10/16	25/40	63	100
	A	A	A	A	A	A	A	A	A	A	A	A	A
WCC	206	206	216	226	236	-	-	-	-	308	311	314	317
C5	209	209	219	229	239	-	-	-	-	-	-	-	-
LCC	207	207	217	227	237	298	299	300	301	309	312	315	318
WC1	208	208	218	228	238	-	-	-	-	-	-	-	-
WC6	210	210	220	230	240	-	-	-	-	-	-	-	-
CF8M	211	211	221	231	241	-	306	-	-	310	313	316	319
347	212	212	222	232	242	-	-	-	-	-	-	-	-
ALLOY 20	213	213	223	233	243	-	-	-	-	-	-	-	-
HAST C	214	214	224	234	244	-	-	-	-	-	-	-	-
WC9	215	215	225	235	245	-	-	-	-	-	-	-	-



ITEM B - CAGE

ITEM C - VALVE PLUG/SEAT RING/GROOVE PIN

CAGE	VALVE PLUG		RING	TEMP ° F	TRIM/BODY TEMP LIMIT	
					BODY	TEMP ° F
17-4 PH	416 SST		410/416 SST	-20+800	CF8M/347 SST	-20+350
			316 SST	-20+800	CF8M/347 SST	-20+360
	316 SST		316 SST	-150+410	CF8M/347 SST	-150+360
	316 SST/HF SEAT		316 SST/HF SEAT	-150+300		
	316 SST/HF S/G	STD	316 SST/HF SEAT	-150+410	CF8M/347 SST	-150+360
		HI-TEMP	316 SST/HF SEAT	+410+800	CF8M/347 SST	(M)
316 SST	316 SST		316 SST	-425+300	HAST C	-325+450
316L SST	316L SST		316L SST	-425+300	HAST C	-325+450
304L SST	304L SST		304L SST	-425+300	HAST C	-325+450
ALY 20	ALY 20		ALY 20	-325+300		
HAST C	HAST C		HAST C	-325+300		
MONEL	MONEL		MONEL	-400+300		
316 SST ENC	416 SST		410/416 SST	-20+410		
	316 SST		316 SST	-425+600	C5	-20+450
					HAST C	-325+450
	316 SST/HF SEAT		316 SST/HF SEAT	-425+300		
	316 SST/HF S/G		316 SST/HF SEAT	-425+650	WCC	-20+760
					WC1/WC6/WC9	-20+640
					C5	-20+460
					HAST C	-325+460
	MONEL		MONEL	-400+500		
COCR-A	316 SST/HF SEAT		316 SST/HF SEAT	-425+300		
	316 SST/HF S/G	STD	316 SST/HF SEAT	-425+800	CF8M/347 SST	-325+770
		HI-TEMP	316 SST/HF SEAT	+800+1100	HAST C	-325+800
					347 SST	(M)
					C5	-800+1000



ITEM B - CAGE (CONT)

CAGE	SEAT	PORT	MAX SEAT LOAD (LBS)
304L SST/316 SST/316L SST/MONEL	METAL	4 3/8 7	10500 28000
	COMP	4 3/8 7	900 1400
	SOFT SEAT PLUG	5 1/4 6 7/8	28000 28000
416 SST	METAL	4 3/8 7	41000 41000
	COMP	4 3/8 7	1800 2800
	SOFT SEAT PLUG	5 1/4 6 7/8	41000 41000
ALY 20/HAST C	METAL	4 3/8 7	15000 39000
	COMP	4 3/8 7	900 1400
	SOFT SEAT PLUG	5 1/4 6 7/8	39000 39000
ALY 6	METAL	4 3/8 7	41000 41000
	COMP	4 3/8 7	2700 4200
	SOFT SEAT PLUG	5 1/4 6 7/8	41000 41000

MAX DELTA P(PSI), MUST = <CWP, NO SEAT LOAD CONSIDERED

FLOWING, DESIGN ED/ES/ET = 1500

SHUT OFF - DESIGN ED/ET

VALVE PLUG	RING	SEAT	
		METAL	COMP
416 SST	410/416 SST	1500	1500
	316 SST	300	1500
316 SST	316 SST	300	1500
316 SST/HF SEAT	316 SST/HF SEAT	1500	1500
316 SST/HF S/G	316 SST/HF SEAT	1500	1500
316L SST	316L SST	300	1500
304L SST	304 L SST	300	1500
ALY 20	ALY 20	300	1500
HAST C	HAST C	300	1500
MONEL	MONEL	300	1500

DESIGN ES	SEAT	METAL				COMP		SOFT SEAT PLUG
	PORT	4 3/8	7			7		ALL
	STEM	3/4	3/4	1	1 1/4	3/4	1 1/4	ALL
VALVE PLUG	RING							
416 SST	410/416 SST 316 SST	762	298	427	546	298		1500
316 SST	316 SST	300	298	300	300	298	546	
316 SST/HF SEAT	316 SST/HF SEAT	762	298	427	546			
316 SST/HF S/G	316 SST/HF SEAT	762	298	427	546			



ITEM B - CAGE (CONT)

CHARACTERISTIC	PORT	TRAVEL	CAGE	B
EQ PERCENT	4 3/8	2	17-4 PH H900	78
			316 SST	81
			316 SST ENC	85
			COCR-A	108
			ALY 20	109
			COCR-A	108
			MONEL	R
	5 1/4	4	17-4 PH H1075	158
	6 7/8	2	17-4 PH H900	1
			316 SST ENC	8
	7	2	17-4 PH H900	1
			17-4 PH H1100	2
			304L SST	7
			316 SST ENC	8
			316L SST	5
			ALY 20	41
			COCR-A	40
			MONEL	R
LINEAR	4 3/8	2	17-4 PH H900	87
			316 SST ENC	94
			COCR-A	115
			MONEL	R
	6 7/8	2	17-4 PH H900	10
			316 SST ENC	17
Q-OPEN	7	2	17-4 PH H900	10
			316 SST ENC	17
			HAST C	68
	4 3/8	2	COCR-A	47
			MONEL	R
			17-4 PH H900	96
WHISPER	7	2	316 SST ENC	103
			MONEL	R
			17-4 PH H900	19
	4 3/8	2	304L SST	7
			316 SST ENC	26
			316L SST	23
Q-OPEN	7	2	ALY 20	55
			COCR-A	54
			MONEL	R
	4 3/8	2	17-4 PH H900	96
			316 SST ENC	103
			MONEL	R
Q-OPEN	7	2	17-4 PH H900	19
			304L SST	7
			316 SST ENC	26
	4 3/8	2	316L SST	23
			ALY 20	55
			COCR-A	54
Q-OPEN	7	2	MONEL	R
			17-4 PH H900	19
			304L SST	7
	4 3/8	2	316 SST ENC	26
			316L SST	23
			ALY 20	55
Q-OPEN	7	2	COCR-A	54
			MONEL	R
			17-4 PH H900	19
	4 3/8	2	304L SST	7
			316 SST ENC	26
			316L SST	23
Q-OPEN	7	2	ALY 20	55
			COCR-A	54
			MONEL	R
	4 3/8	2	17-4 PH H900	96
			316 SST ENC	103
			MONEL	R

**ITEM C - VALVE PLUG/SEAT RING/GROOVE PIN**

DESIGN ED, METAL SEAT

PORT	TRAVEL	VSC	SEAT LEAK	VALVE PLUG	SEAT RING	C
4 3/8	2	1L7500	STD	416 SST	410/416 SST	271
				316 SST	316 SST*	272
				316 SST/HF SEAT	316 SST/HF SEAT	494
				316 SST/HF S/G	STD	487
				HI-TEMP	316 SST/HF SEAT	513
				ALY 20	ALY 20	279
				MONEL	MONEL	283
			CLASS IV	416 SST	410/416 SST	570
				316 SST	316 SST	571
				316 SST/HF SEAT	316 SST/HF SEAT	572
				316 SST/HF S/G	STD	573
				HI-TEMP	316 SST/HF SEAT	574
7	2	1L5000	STD	416 SST	410/416 SST	541
		1L7500	STD	416 SST	410/416 SST	229
				316 SST	316 SST*	230
				316L SST	316L SST	231
				304L SST	304L SST	233
				316 SST/HF SEAT	COCR-A	491
				316 SST/HF S/G	STD	485
				HI-TEMP	COCR-A	509
				ALY 20	ALY 20	237
				MONEL	MONEL	241
			CLASS IV	416 SST	410/416 SST	560
				316 SST	316 SST	561
				316 SST/HF SEAT	COCR-A	562
				316 SST/HF S/G	STD	563
				HI-TEMP	COCR-A	564
		1L1000	STD	416 SST	410/416 SST	243
				316 SST/HF S/G	STD	486
				HI-TEMP	COCR-A	510
			CLASS IV	416 SST	410/416 SST	565
				316 SST	316 SST	566
				316 SST/HF SEAT	COCR-A	567
				316 SST/HF S/G	STD	568
				HI-TEMP	COCR-A	569

ITEM C - VALVE PLUG/SEAT RING/GROOVE PIN (CONTINUED)
DESIGN ES

PORT	TRAVEL	SEAT	VSC	VALVE PLUG	SEAT RING	C
4 3/8	2	METAL	1L7500	416 SST 316 SST 316 SST/HF SEAT/GUIDE HI-TEMP	416 SST 316 SST 316 SST/HF SEAT	400 537 519
5 1/4	4	SOFT SEAT PLUG	1L1250	416 SST/HT	416 SST/HT	579
6 7/8	2	SOFT SEAT PLUG	1L1250	416 SST/HT	416 SST/HT	578
7	2	METAL	1L7500	416 SST	416 SST	349
				316 SST	316 SST	528
				316 SST/HF SEAT	COCR-A	529
				316 SST/HF SEAT/GUIDE STANDARD HI-TEMP	COCR-A COCR-A	530 516
		COMP	1L1000	416 SST	416 SST	366
				316 SST	316 SST	531
				316 SST/HF S/G	316 SST/HF SEAT	533
				416 SST	416 SST	383
			1L1250	316 SST/HF SEAT/GUIDE STANDARD HI-TEMP	COCR-A COCR-A	536 518
				416 SST	416 SST	479
				316 SST	316 SST	417
				316 SST/HF SEAT/GUIDE	316 SST	577
			1L1250	316 SST	316 SST	435

DESIGN ET
WITHOUT SPRING LOADED SEAL RING

PORT	TRAVEL	SEAT	VSC	VALVE PLUG	DISK SEAT/RETAINER OR SEAT RING	C
4 3/8	2	METAL	1L7500	416 SST	410 SST	271
				316 SST	316 SST*	272
				316 SST/HF	316 SST/HF SEAT	494
				316 SST/HF SEAT/GUIDE	316 SST/HF SEAT	487
				ALLOY 20	ALY 20	279
				MONEL	MONEL	283
		COMP	1L7500	416 SST	316 SST	478
				316 SST	316 SST	342
				316 SST/HF SEAT/GUIDE	COCR-A/316 SST	490
					316 SST	576
7	2	METAL	1L5000	416 SST	410 SST	541
			1L7500	416 SST	410 SST	229
				316L SST	316L SST	231
				304L SST	304L SST	233
				316 SST	316 SST	230
				316 SST/HF SEAT	COCR-A	491
				316 SST/HF SEAT/GUIDE	COCR-A	485
				ALLOY 20	ALY 20	237
				MONEL	MONEL	241
			1L1000	416 SST	410 SST	243
				316 SST/HF SEAT/GUIDE	COCR-A	486
		COMP	1L7500	416 SST	316 SST	475
				316 SST	316 SST	321
				316 SST/HF SEAT/GUIDE	COCR-A/316 SST	488
						575
			1L1000	416 SST	316 SST	476

**ITEM C - VALVE PLUG/SEAT RING/GROOVE PIN (CONTINUED)**

DESIGN ET
WITH SPRING LOADED SEAL RING
WITHOUT ANTI-EXTRUSION RING

PORT	TRAVEL	SEAT	VSC	VALVE PLUG	SEAT RING	CAGE	C
4 3/8	2	METAL	1L7500	416 SST	410 SST	17-4 PH	551
				316 SST	316 SST	316 SST 316 SST ENC	552 552
				316 SST/HF SEAT/GUIDE	316 SST/HF SEAT	17-4 PH 316 SST ENC COCR-A	554 555 555
		COMPOSITION	1L7500	416 SST	316 SST	17-4 PH	556
				316 SST	316 SST	316 SST 316 SST ENC	557 557
				316 SST/HF S/G	316 SST/HF SEAT	17-4 PH 316 SST ENC COCR-A	559 558 558
		COMPOSITION	1L7500	416 SST	410 SST	17-4 PH	495
				316 SST	316 SST	316 SST ENC	542
				316 SST/HF SEAT/GUIDE	COCR-A	ALL	514
7	2	METAL	1L1000	416 SST	410 SST	17-4 PH	496
				316 SST	316 SST	17-4 PH	500
				316 SST/HF SEAT/GUIDE	316 SST	316 SST ENC	547
		COMPOSITION	1L7500	416 SST	410 SST	17-4 PH	496
				316 SST	316 SST	17-4 PH	500
				316 SST/HF SEAT/GUIDE	316 SST	316 SST ENC	547

WITH ANTI-EXTRUSION RING, METAL SEAT

PORT	TRAVEL	VSC	VALVE PLUG		SEAT RING	CAGE	C
4 3/8	2	1L7500	416 SST		416 SST	17-4 PH	584
			316 SST/HF SEAT/GUIDE	STANDARD	316 SST/HF SEAT	17-4 PH 316 SST ENC	590 594
				HI-TEMP	316 SST/HF SEAT	17-4 PH	585
		1L1000	416 SST		416 SST	17-4 PH	586
			316 SST/HF SEAT/GUIDE	STANDARD	316 SST/HF SEAT	17-4 PH 316 SST ENC	591 595
				HI-TEMP	316 SST/HF SEAT	17-4 PH	587
7	2	1L7500	416 SST		416 SST	17-4 PH	602
			316 SST/HF SEAT/GUIDE	STANDARD	COCR-A	17-4 PH 316 SST ENC	598 600
				HI-TEMP	COCR-A	17-4 PH	596
		1L1000	416 SST		416 SST	17-4 PH	603
			316 SST/HF SEAT/GUIDE	STANDARD	COCR-A	17-4 PH 316 SST ENC	599 601
				HI-TEMP	COCR-A	17-4 PH	597

ITEM D - DISC

SEAT	DISC	TEMP ° F	PORT	D
COMP	PTFE FMS 17F3	-100+400	7 4 3/8	1 6
METAL	N/A	-	ALL	N



ITEM E - BOLTING

BOLTING	NUT	TEMP ° F	CWP (PSI)	HYDRO (PSI/MIN)	BODY	TEMP ° F
SAE GRADE 5		-20+650	BODY	BODY		
B7	2H	-50+800	BODY	BODY		
	GRADE 7	-50+1000	BODY	BODY		
B16	GRADE 7	-20+1100	BODY	BODY		
B8	GRADE 8	-425+100	975	1475/3		
B7M	2HM	-50+800	1085	1650/3		
B8M CLASS 1	8M	-325+1000	975	1475/3		
B8M CLASS 2	8M	-325+800	1085	1650/3	HAST C	-325+250

BODY	° F	BOLT	NUT	PLAIN	EXT	BELLOWS SEAL
				E	E	E
CAST IRON	-20+450	SAE GR 5	-----	1	M	M
	-50+450	B7	2H	—	2	5
WCC	-20+450	B7	2H	2	2	5
		B7M	2HM	15	15	-
	450+800	B7	2H LUB	17	17	23
		B7M	2HM LUB	21	21	-
LCC	-20+450	B7	2H	2	2	5
		B7M	2HM	15	15	-
	450+650	B7	2H LUB	17	17	23
		B7M	2HM LUB	21	21	-
WC1	-20+450	B7	2H	2	2	5
	450+800	B7	2H LUB	17	17	23
	801+850	B7	GR 7 LUB	16	16	22
WC6	-20+450	B7	2H	2	2	5
	450+800	B7	2H LUB	17	17	23
	801+1000	B7	GR 7 LUB	16	16	22
WC9	-20+450	B7	2H	2	2	5
	450+800	B7	2H LUB	17	17	23
	801+1000	B7	GR 7 LUB	16	16	22
	1001+1050	B16	GR 7 LUB	18	18	24
C5	-20+450	B7	2H	2	2	5
	450+800	B7	2H LUB	17	17	23
	801+1000	B7	GR 7 LUB	16	16	22
	1001+1100	B16	GR 7 LUB	18	18	24
HAST C	-50+450	B7	2H	2	2	5
	450+800	B7	2H LUB	17	17	23
CF8M	-425+-325	B8	GR 8	-	-	11
	-325+450	B8M CL2	8M	4	4	7
	450+800	B8M CL2	8M LUB	19	19	25
	-50+450	B7 STD	2H	2	2	5
		B7M	2HM	15	15	-
	450+800	B7	2H LUB	17	17	23
		B7M	2HM LUB	21	21	-
	801+1000	B8M CL1	8M LUB	20	20	26



ITEM E – BOLTING (CONTINUED)

BODY	° F	BOLT	NUT	PLAIN	EXT	BELLOWS SEAL
				E	E	E
347	-425+-325	B8	GR 8	-	-	11
	-325+450	B8M CL2	8M	4	4	7
	450+800	B8M CL2	8M LUB	19	19	25
	-50+450	B7 STD	2H	2	2	5
	450+800	B7	2H LUB	17	17	23
	801+1000	B8M CL1	8M LUB	20	20	26
ALY 20	-325+400	B8M CL2	8M	4	4	7
	-50+450	B7 STD	2H	2	2	5
	450+800	B7	2H LU	17	17	23

ITEM F - GASKET

SPIRAL WOUND GASKET	FLAT SHEET GASKETS	TEMP °F	PORT	F
MONEL & GRAPHITE	GRAPHITE/SST	-100+450	7	31
MONEL & PTFE	MONEL/PTFE	-100+300	7 & 4 3/8	27
INCONEL & GRAPHITE	GRAPHITE/SST	-325+1100	7 & 4 3/8	30

ITEM G - PISTON RING OR SEAL RING

DESIGN	SEAL RING	BACK UP RING	TEMP °F	SERVICE	PORT	7	4 3/8
						G	G
ED	CARBON PTFE	N/A	-100+450	STEAM OR NON-OXIDIZING		*1	*3
	GRAPH FMS 17F19	N/A	+450+600	STEAM OR NON-OXIDIZING		*2	*4
	GRAPH FMS 17F27	N/A	+601+900	STEAM OR NON-OXIDIZING		*11	*12
			+450+800	AIR OR OXIDIZING		11	12
ED CLASS IV PLUGS	GRAPH FMS 17F39	N/A	+901+1100	STEAM OR NON-OXIDIZING		*19	*20
			+801+1000	AIR OR OXIDIZING		19	20
	GRAPH FMS 17F27	N/A	+601+900	STEAM OR NON-OXIDIZING		21	23
			+450+800	AIR OR OXIDIZING		21	23
ET	GRAPH FMS 17F39	N/A	+901+1100	STEAM OR NON-OXIDIZING		*22	*24
			+801+1000	AIR OR OXIDIZING		22	24
	PTFE FMS17F3	FKM FMS17G34	0+400	OXYGEN		13	14
	CARBON/PTFE FMS17F18	FKM FMS17G34	0+400	NOT WATER >180 °F NOR STEAM		*5	*7
		NBR, FMS 41G14	-40+160	HYDROCARBONS, AIR		6	—
			-40+180	FIRE-RESIST HYDRAULIC OIL OTHER COMPATIBLE FLUIDS		6	—
		ETHYL PROP FMS17G39	-40+450	NOT HYDROCARBON(OIL)		27	28

DESIGN ET SPRING LOADED SEAL RING CONSTRUCTION

ANTI-EXTRUSION RING	W/O	PEEK
SEAL RING	N10276/PTFE	R30003/PTFEPPVE
	GLASS/MOS2	OXIDIZING SERV
° F	-100+450	-100+500
		NON-OXIDIZING SERV
	G	G
		G
FULL CAPACITY	16	29
RESTD 6 X 4	18	30

**ITEM H - STEM****ITEM 9E - SUPPLY NAMEPLATE DATA WHEN ITEM H NOT USED**

ALL EXCEPT ED CLASS IV, PDTC

ACTR	TRAVEL	BONNET	VSC	CHARACTERISTIC	STEM	H	9E
GROUP 1/ AU2259	1/2-1 1/2	PLAIN	1L5000	FULL/RESTRICTED 6 X 4	316 SST NIT 50	274 295	N N
	2	PLAIN	1L5000	FULL/RESTRICTED 6 X 4	316 SST NIT 50	297 298	N N
					316 SST NIT 50	1 296	N N
					316L SST	2	N
					HAST B	31	N
					HAST C	32	N
					ALY 20	33	N
					K-MONEL	34	N
					INCONEL	57	N
		EXT STYLE 1	1L7500	FULL/RESTRICTED 6 X 4	316 SST NIT 50	8 293	N N
					304 SST	11	N
					316L SST	9	N
					HAST B	38	N
		EXT STYLE 2	1L7500	FULL/RESTRICTED 6 X 4	316 SST	15	N
		EXT STYLE 4	1L7500	FULL/RESTRICTED 6 X 4	316 SST	279	N
		STYLE NS	1L7500	FULL/RESTRICTED 6 X 4	316 SST	282	N
		BELLOWS SEAL	1L7500	FULL/RESTRICTED 6 X 4	316 SST	22	N
					HAST C	53	N

**ITEM H - STEM (CONT)****ITEM 9E - SUPPLY NAMEPLATE DATA WHEN ITEM H NOT USED (CONT)**

ALL EXCEPT ED CLASS IV, PDT C

ACTR	TRAVEL	BONNET	VSC	CHARACTERISTIC	STEM	H	9E
GROUP 100 AU2259	ALL	PLAIN	1L1000	FULL	316 SST	65	N
			1L1250	FULL	316 SST	97	N
				DESIGN ES SOFT SEAT RESTRICTED 5 1/4 PORT 4 TRAVEL	316 SST	292	N
		EXT STYLE 1	1L1250	FULL	316 SST	104	N
GROUP 101 AU2259	ALL	PLAIN	1L1000	FULL	316 SST NIT 50	161 294	N N
GROUP 103 AU2259	ALL	PLAIN	1L7500	FULL/RESTRICTED 6 X 4	316 SST	273	N
350	2	PLAIN	1L7500	FULL/RESTRICTED 6 X 4	316 SST	275	N
3 9/16 YOKE BOSS		EXT STYLE 1	1L7500	FULL/RESTRICTED 6 X 4	316 SST	276	N
795	ALL	N/A	N/A	N/A	N/A	N	1
796	ALL	N/A	N/A	N/A	N/A	N	1
1008	2	PLAIN	1L7500	FULL/RESTRICTED 6 X 4	316 SST	299	N

ED CLASS IV

ACTR	BONNET	VSC	CHARACTERISTIC	STEM	H	9E
GROUP 1/ AU2259	PLAIN	1L7500	FULL/RESTRICTED 6 X 4	316 SST	287	N
	EXT STYLE 1	1L7500	FULL/RESTRICTED 6 X 4	316 SST	288	N
	STYLE NS	1L7500	FULL/RESTRICTED 6 X 4	316 SST	289	N
GROUP 100 AU2259	PLAIN	1L1000	FULL	316 SST	285	N
GROUP 101 AU2259	PLAIN	1L1000	FULL	316 SST	286	N
350	PLAIN	1L7500	FULL/RESTRICTED 6 X 4	316 SST	283	N
3 9/16 YOKE BOSS	EXT STYLE 1	1L7500	FULL/RESTRICTED 6 X 4	316 SST	284	N
1008	PLAIN	1L7500	FULL/RESTRICTED 6 X 4	316 SST	300	N

ITEM J - FLOW ARROW & DRIVE SCREW

J
1

ITEM L - NAMEPLATE

L
1



ITEM 9A - TYPE, ACTION, FLOW

ACTION	TYPE	FLOW	UP	DOWN
			9A	9A
PDTC	EC		1	5
	ED		2	6
	ET		3	7
	ES		4	8

ITEM 9C - CLASS/HYDRO

BODY	RATING	HYDRO PSI/MIN	9C
CAST IRON	CLASS 125	300/2	1
	CLASS 250	750/3	2
WCC, LCC, WC1, C5, WC6, CF8M, WC9, 347	CLASS 150	450/2	3
	CLASS 300	1125/3	4
	CLASS 400	1500/3	5
	CLASS 600	2250/3	6
ALLOY 20	CLASS 150	350/2	7
	CLASS 300	900/3	8
	CLASS 400	1200/3	9
	CLASS 600	1800/3	10
WC1	CLASS 150	400/2	15
	CLASS 300	1050/3	16
	CLASS 600	2100/3	17
HAST C	CLASS 150	450/2	11
	CLASS 300	1125/3	12
	CLASS 400	1500/3	13
	CLASS 600	2250/3	14

FOREIGN MANUFACTURED PN FLANGES

BODY	RATING	HYDRO BAR/MIN	9C
WCC, LCC, WC1, C5, WC6, CF8M, WC9, 347	PN 10/16	24/2	18
	PN 25/40	60/2	19
	PN 63	94.5/3	20
	PN 100	150/3	21
WC1	PN 10/16	22.7/2	22
	PN 25/40	56.8/2	23
	PN 63	89.5/3	24
	PN 100	142.1/3	25
HAST C	PN 10/16	19.6/2	26
	PN 25/40	49/2	27
	PN 63	77.2/3	28
	PN 100	122.5/3	29

**ITEM 9D - SEAT LEAK TEST PER FGS 4L5**

DESIGN EC & ES

FLOW	CHARACTERISTIC	METAL SEAT (SCFH) CLASS IV				COMPOSITION SEAT (BUBBLES/MIN) CLASS VI			
		4 3/8 PORT	9D	7 PORT	9D	4 3/8 PORT	9D	7 PORT	9D
UP	EQUAL PERCENT	54.2	1	83.5	4	14	9	36	10
	LINEAR	63.4	2	93.2	5	14	9	36	10
	QUICK OPEN	72.5	3	101.6	6	14	9	36	10
	WHISPER	—	—	75.7	7	14	9	36	10

DESIGN ED METAL SEAT

FLOW	CHARACTERISTIC	PORT	CLASS II (SCFH)	9D	CLASS IV (SCFH)	9D
DOWN	EQUAL PERCENT	4 3/8	2957	11	59.1	19
		7	4497	12	89.9	20
	LINEAR	4 3/8	3494	13	69.9	21
		7	4820	14	96.4	22
	QUICK OPEN	4 3/8	3850	15	77	23
		7	5014	16	100	24
	WHISPER	4 3/8	—	—	—	—
		7	3558	18	71.2	25

ITEM 9D - SEAT LEAK TEST PER FGS 4L5 (CONT)

DESIGN ET

SEAT	CONSTRUCTION	FLOW	CHARACTERISTIC	TEST CLASS	PORT	VALUE	9D
METAL	STD & SPRING LOADED SEAL W/O ANTI-EXTRUSION RING	DOWN	EQ PERCENT	IV (SCFH)	4 3/8	59.1	19
					7	89.9	20
			LINEAR	IV (SCFH)	4 3/8	69.9	21
					7	96.4	22
		UP	Q OPEN	IV (SCFH)	4 3/8	77	23
					7	100	24
	SPRING LOADED SEAL W/ANTI-EXTRUSION	ALL	ALL	IV (SCFH)	7	71.2	25
				V WATER TEST (ML/MIN)	ALL	CALC	27
				V AIR TEST (ML/MIN)	4 3/8	20.59	29
COMP	ALL	ALL	ALL	V AIR TEST (ML/MIN)	7	32.90	30
					4 3/8	20.59	29
					7	32.90	30

ET, SPRING LOADED SEAL RING W/ANTI-EXTRUSION RING ASSEMBLY DWG	21B2120
ED, FULL CAPACITY & RESTRICTED 6X4 ASSY DWG	30A9542
ES, FULL CAPACITY & RESTRICTED 6X4 ASSY DWG	30A9543
ET, FULL CAPACITY & RESTRICTED 6X4 ASSY DWG	44A7928
ED, CLASS IV FULL CAPACITY & RESTRICTED 6X4 ASSY DWG	37A3993



Revision Change Record

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

ECRN: 20140788

Page 2, added “DRAIN TAPPING” in the head of the ITEM A – VALVE BODY module description and list table for the module list column.

Matrix Section:

Item	Module	Changes
A	291	Added “*” in front of the module number.
	292	Added “*” in front of the module number.
	293	Added “*” in front of the module number.