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EWX9 - A B C D E F G H J K 9B 9C 9D

Item	Parts Contained in Item	Find Number
A	Valve Body	1
	Plug, Pipe, Hex HD	17
B	Spacer, Bonnet	32
C	Cage	3
D	Plug	2
	Pin, Groove, Flat End	8
	Seat Ring	9
	Disc Retainer	21
	Disc Seat	22
	Ring, Retaining, EXT	27
	Ring, Back-up	29
E	Disc	23
F	Gasket	10
	Gasket, Spiral Wound	12
	Gasket	13
	Gasket Shim	53
G	Ring Piston	6
	Seal Ring	28
	Ring, Back-up	29
	Rings, Anti-Extrusion	63
H	Stud Bolt, CONT THD/S	15
	Nut, Hex, Heavy	16
	Arrow, Flow Direction	18
	Screw, Drive	19
J	Stem, Plug	7
K	Screw, Drive	19
	Nameplate, SS Body	54
	Seal & Wire, Lead	55
9B	Type/Plug Action/Flow Direction	
9C	Class/Hydro	
9D	Seat Leak Test Per FGS 4L5	



## ITEM A - VALVE BODY

BODY	TEMPERATURE °F	CLASS	CWP (PSI)	END CONNECTION	DRAIN TAPPING	A
WCB	-20+800	300	740	RF	WITHOUT	9
				RF	WITH	33
		600	1480	BWE	SCHD 40	1
					SCHD 80	5
				RF	WITHOUT	13
				RTJ	WITHOUT	21
CF8M	-325+1000	600	1440	RF	WITHOUT	15

FOREIGN MANUFACTURED 300X150 MM DIN RF FLANGES, DRAIN NOT TAPPED

	PN 16	PN 25	PN 40	PN 63	PN 100
BODY	A	A	A	A	A
WCB	49	53	57	61	65
C5	50	54	58	62	66
CF8M	51	55	59	63	67
WC9	52	56	60	64	68

## ITEM B - BONNET SPACER

BODY	B
WCB	1
CF8M	2

## ITEM C - CAGE

CAGE	PLUG	RING	TEMPERATURE °F	BODY/TRIM THERMAL LIMIT	
				BODY	TEMPERATURE °F
17-4 PH	416 SST	416 SST	-20+800	WCB & WC9	-20+545
				CF8M	-20+235
	316 SST	316 SST	-20+800	CF8M	-20+245
		316 SST	-150+410	CF8M	-70+245
		316 SST/HF SEAT/GUIDE	-150+410	CF8M	-70+245
COCR-A , R31233	316 SST/HF SEAT/GUIDE	316/HF	STANDARD	CF8M	-70+245
			HI TEMP	CF8M	(M)
		316/HF	-425+600	WCB & WC9	+410+685
				CF8M	-325+520
				C5	-20+410
			HI TEMP	CF8M & C5	(M)

CAGE	C
17-4 PH	1
COCR-A	2
R31233	3

**ITEM D - VALVE PLUG, SEAT RING, GROOVE PIN**

7 INCH PORT, VSC 1L7500

MAXIMUM ΔP (PSI), CANNOT EXCEED CWP,  
SEAT LOAD NOT CONSIDERED

PLUG	RING	SHUT OFF		FLOWING
		METAL SEAT	COMPOSITION SEAT	ALL SEATS
416 SST	416 SST	1500	1500	1500
	316 SST	300	1500	1500
316 SST	316 SST	300	1500	1500
316 SST/HF SEAT/GUIDE	316/HF	1500	1500	1500

DESIGN	SEAT	SEAL RING	PLUG	SEAT RING	TRAVEL	D
EWD	METAL	STANDARD	416 SST	416 SST	4	1
			316 SST/HF SEAT/GUIDE	316/HF	4	3
				STANDARD HI TEMP	4	4
		MULTIPLE PISTON RINGS CLASS IV SEAT LEAK	416 SST	416 SST	3 1/2	7
			316 SST	316 SST	3 1/2	8
			316 SST/HF SEAT/GUIDE	316/HF	3 1/2	10
				STANDARD HI TEMP	3 1/2	9
EWT	METAL	STANDARD	416 SST	416 SST	4	1
			316 SST/HF SEAT/GUIDE	COCR-A	4	3
		SPRING LOADED WITHOUT ANTI-EXTRUSION RING	416 SST	416 SST	4	16
			316 SST/HF SEAT/GUIDE	316/HF	4	18
		SPRING LOADED WITH PEEK ANTI-EXTRUSION RING	416 SST	416 SST	3 3/4	17
			316 SST/HF SEAT/GUIDE	316/HF	3 3/4	20
				STANDARD HI TEMP	3 3/4	19
	COMP	STANDARD	416 SST	316 SST	4	5
			316 SST	316 SST	4	6

**ITEM E - DISC**

SEAT	DISC	TEMPERATURE °F	E
COMP	PTFE	-100+400	1
METAL	N/A	N/A	N

**ITEM F - GASKETS**

SPIRAL WOUND	FLAT SHEET	TEMPERATURE °F	F
INCONEL/GRAPH	GRAPH/SST	-325+1100	26

**ITEM G - PISTON RING OR SEAL RING**

## DESIGN EWD

	PISTON RING		TEMPERATURE °F	G
SERVICE	CARBON/PTFE FMS 17F18		-100+450	1
STEAM OR NON-OXIDIZING	GRAPHITE	FMS 17F19	+450+600	2
		FMS 17F27	>600+900	3
		FMS 17F39	>900+1100	8
AIR OR OXIDIZING	GRAPHITE	FMS 17F27	+450+800	3
		FMS 17F39	>800+1000	8
CLASS IV SEAT LEAK	GRAPHITE	FMS 17F27	+450+800	9
		FMS 17F39	>800+1000	10

## DESIGN EWT

SERVICE	SEAL RING	BACK UP RING	TEMPERATURE °F	G
NACE	CARBON/PTFE FMS 17F18	VITON FMS 17G34	0+400	4
NOT WATER>100 °F, NOT STEAM				
HYDROCARBONS, AIR	CARBON/PTFE FMS 17F18	NITRILE FMS 17G14	-30+160	5
FIRE-RESISTANT HYDRAULIC OILS	CARBON/PTFE FMS 17F18	NITRILE FMS 17G14	-30+180	M
OTHER COMPATIBLE FLUIDS	CARBON/PTFE FMS 17F18	NITRILE FMS 17G14	-30+180	5

## SPRING LOADED SEAL RING

SEAL RING	ANTI-EXTRUSION RING	G
N10276/PTFE GLASS/MOS2	WITHOUT	11
R30003/PTFEPPVE	PEEK	13

**ITEM H - BOLTING**

BOLT	NUT	TEMP °F	CWP (PSI)	USE WITH	BODY/BOLT LIMIT		H
					BODY	TEMPERATURE °F	
B7	2H	-20+800	SAME AS BODY	WCB, WC9, C5 & CF8M	CF8M	-50+450	1
B16	GRADE 7	-20+1100	SAME AS BODY	WC9 & C5		+1000+1050	9
B8M CLASS 1	8M	-325+1000	975	CF8M		+800+1000	11
B8M CLASS 2	8M	-325+800	1085	CF8M		-325+800	3

**ITEM J - VALVE STEM**

STEM	VSC	ACTUATOR GROUP/AU2259	BONNET STYLE	J
316 SST	1L7500	GROUP 401 & 403	PLAIN	1
			EXTENSION STYLE 1	2
			EXTENSION STYLE 2	3
		GROUP 402	PLAIN	4

**ITEM K - NAMEPLATE**

**K**  
1

**ITEM 9B - TYPE/PLUG ACTION/FLOW DIRECTION**

ACTION	FLOW	TYPE	9B
PDTC	UP	EWD	1
		EWT	2

**ITEM 9C - CLASS/HYDRO**

BOLTING	HYDRO (PSI/MIN)
B8M CLASS 1	1475/5
B8M CLASS 2	1650/5

FLANGES	BODY	CLASS	HYDRO (PSI/MIN)	9C
ANSI	WCB & CF8M	300	1125/5	1
		600	2250/5	2
DIN	ALL	PN 16	350/3	3
		PN 25	550/3	4
		PN 40	875/3	5
		PN 63	1375/5	6
		PN 100	2175/5	7

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

TYPE	LEAK CLASS	VALUE	9D
EWD	II (SCFH)	8508	1
	IV (SCFH)	170	2
EWT	IV (SCFH)	170	2
	V AIR TEST (ML/MIN)	32.90	3
	V WATER TEST (ML/MIN)	*	4

\* CLASS V WATER MUST BE CALCULATED

ASSEMBLY DRAWING 43A6386

**Revision Change Record**

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

ECRN: 20180998

Page 2, For ITEM C - CAGE,

Update "TEMPERATURE °F" column from "+410+800" to "+410+600"; from "+425+800" to "+425+600"; from "+800+1100" to "+600+1100".

**Matrix Section:**

Item	Module	Changes
C	3	New - R31233 CAGE, 4 IN TRAVEL.