



Design EWD & EWT Whisper I Valve Body Size 8x6, 4 Inch Travel

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EWX8-A B C D E F G H J K 9B 9C 9D

C-SEAL TRIM SELECTION STRING = EWX8-A B F H K 9C & C-SEALX1-A B C D E 9A 9B

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, Pipe, Hex HD	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/Action/Flow	
9C	Class/Hydro	
9D	Seat Leak Test Per FGS 4L5	



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**Design EWD & EWT Whisper I Valve Body
Size 8x6, 4 Inch Travel****ITEM A - VALVE BODY**

BODY	TEMPERATURE °F	CLASS	CWP (PSI)	END CONNECTION		DRAIN TAPPED	A
WCB	-20+800	300	740	RF		NO	15
				RF		YES	73
		600	1480	BWE	SCH 40	NO	1
					SCH 80	NO	8
				RF		NO	22
				RTJ		NO	36
LCB	-50+650	300	695	RF		NO	16
C5	-20+1100	300	750	RF		NO	18
		600	1500	BWE SCH 80		NO	11
				RF		NO	25
CF8M	-325+1000	300	720	RF		NO	20
WC9	-20+1050	600	1500	RF		NO	52

FOREIGN MANUFACTURED 200 X 150 MM DIN RF FLANGES WITH NO DRAIN TAPPPING

	PN 25	PN 40	PN 63	PN 100
BODY	A	A	A	A
WCB	117	127	137	147
LCB	118	128	138	148
WC1	119	129	139	149
C5	120	130	140	150
WC6	121	131	141	151
CF8M	122	132	142	152
347	123	133	143	153
WC9	126	136	146	156

ITEM B - BONNET SPACER

BODY	B
WCB	1
C5	2
CF8M	3
WC9	4



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

7 INCH PORT, VSC 1L7500

CAGE	PLUG	RING	TEMPERATURE °F	BODY/TRIM THERMAL LIMIT	
				BODY	TEMP °F
17-4 PH	416	416	-20+800	WCB, WC9	-20+625
				WC1, WC6	-20+625
				LCB	-20+625
				CF8M, 347	-20+625
	316	316	-150+410	CF8M, 347	-110+300
	316/HF SEAT/GUIDE	316/HF	STANDARD	CF8M, 347	-75+300
			HI TEMP	CF8M, 347	(M)
COCR-A, R31233	316/HF SEAT/GUIDE	316/HF	STANDARD	CF8M, 347	-325+575
				C5	-20+440
				HAST C	-325+440
			HI TEMP	347	(M)
			>600+1100	C5, HAST C	(M)

CAGE	PLUG	RING	MAXIMUM ΔP (PSI) CANNOT EXCEED CWP SEAT LOAD NOT CONSIDERED		
			SHUT OFF		FLOWING
			METAL SEAT	COMP SEAT	ALL SEATS
17-4 PH	416 SST	416 SST	1500	1500	1500
	316 SST	316 SST	300	1500	1500
	316/HF SEAT/GUIDE	316/HF	1500	1500	1500
COCR-A, R31233	316/HF SEAT/GUIDE	316/HF	1500	1500	1500

EWD

METAL SEAT, 4 TRAVEL

CAGE	PLUG	RING	C	D
17-4 PH H900	416 SST	416 SST	1	1
	316 SST	316 SST	1	2
	316/HF SEAT/GUIDE	316/HF	STANDARD	3
			HI TEMP	4
COCR-A	316/HF SEAT/GUIDE	316/HF	STANDARD	2
			HI TEMP	4
R31233	316/HF SEAT/GUIDE	316/HF	STANDARD	3
			HI TEMP	4

MULTIPLE PISTON RINGS, 3 1/2 TRAVEL, CLASS IV SEAT LEAK

CAGE	PLUG	RING	C	D
17-4 PH	416 SST	416 SST	1	7
	316 SST	316 SST	1	8
	316/HF SEAT/GUIDE	316/HF	STANDARD	9
			HI TEMP	10
COCR-A	316/HF SEAT/GUIDE	316/HF	STANDARD	2
			HI TEMP	10
R31233	316/HF SEAT/GUIDE	316/HF	STANDARD	3
			HI TEMP	10



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**Design EWD & EWT Whisper I Valve Body
Size 8x6, 4 Inch Travel****ITEM C - CAGE (CONTINUED)****ITEM D - VALVE PLUG, SEAT RING, GROOVE PIN (CONTINUED)****EWT**

SEAT	TRAVEL	CAGE	PLUG	SEAT RING	C	D
COMPOSITION	4	17-4 PH H900	416	316	1	5
			316	316	1	6

METAL SEAT

SEAL RING		TRAVEL	CAGE	PLUG	SEAT RING	C	D
STANDARD		4	17-4 PH H900	416	416	1	1
				316	316	1	2
				316 HF S&G	316/HF	1	3
				COCR-A	316 HF S&G	2	3
SPRING LOADED	WITHOUT ANTI-EXTRUSION RING	4	17-4 PH H900	R31233	316 HF S&G	3	3
				416	416	1	16
				316 HF S&G	316/HF	1	18
				COCR-A	316 HF S&G	2	18
	PEEK ANTI-EXTRUSION RING	3 3/4	17-4 PH H900	R31233	316 HF S&G	3	18
				416	416	1	17
				316 HF S&G	316/HF STD HI TEMP	1	20
				COCR-A	316 HF S&G	2	20
				R31233	316 HF S&G	3	20

ITEM E - DISC

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

ITEM F - GASKET

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



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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	10
	FMS 17F39	>800+1000	11

DESIGN EWT

SERVICE	SEAL RING	BACK UP RING	TEMP °F	G
NACE NOT WATER>100 DEG F NOT STEAM	CARBON/PTFE FMS 17F18	VITON FMS 17G34	0+400	4
NOT HYDROCARBON (OIL)		ETHYL PROPYL FMS 17G39	-40+450	9

SPRING LOADED SEAL RING

SEAL RING	ANTI-EXTRUSION RING	G
N10276/PTFE GLASS/MOS2	W/O	12
R30003/PTFEPPVE	PEEK	14

ITEM H - BOLTING

BOLT	NUT	TEMP °F	CWP (PSI)	HYDRO (PSI/MIN)	USE WITH	H
B7	2H	-50+450	BODY	BODY	WCB, LCB, WC9, C5, 347 & CF8M	12
	2H LUB	-50+800	BODY	BODY	WCB, LCB, WC9, C5, 347 & CF8M	13
	GR 7 LUB	-50+1000	BODY	BODY	WC9 & C5	14
B16	GR 7 LUB	>450+1100	BODY	BODY	WC9 & C5	15
B8M CLASS 1	8M LUB	>450+1000	975	1475/3	CF8M & 347	16
B8M CLASS 2	8M LUB	>450+800	1085	1650/3	CF8M & 347	17

ITEM J - VALVE STEM

STEM	VSC	ACTUATOR GROUP/AU2259	BONNET	J
316 SST	1L7500	401 & 403	PLAIN	1
			EXTENSION STYLE 1	2
		402	PLAIN	4
			EXTENSION STYLE 1	5

ITEM K - NAMEPLATE**K**

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ITEM 9B - TYPE/ACTION/FLOW

ACTION	FLOW	TYPE	9B
PDTC	UP	EWD	1
		EWT	2

ITEM 9C - CLASS/HYDRO

FLANGES	BODY	CLASS	HYDRO (PSI/MIN)	9C
ANSI	WCB	300	1125/3	1
		600	2250/3	2
	LCB	300	1050/3	5
	C5	300	1125/3	1
		600	2250/3	2
	WC9	600	2250/3	2
DIN	CF8M	300	1125/3	1
		PN 25	550/2	7
		PN 40	875/2	8
		PN 63	1375/3	9
		PN 100	2175/3	10
	ALL			

ITEM 9D - SEAT LEAK TEST PER FGS 4L5

TYPE	LEAK CLASS	SEAT LEAK	9D
EWD	II (SCFH)	6470	1
	IV (SCFH)	130	2
EWT	IV (SCFH)	130	2
	V AIR TEST (ML/MIN)	32.90	3
	V WATER TEST (ML/MIN)	*	4

* CLASS V WATER MUST BE CALCULATED

ASSEMBLY DRAWING 43A6386



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Revision Change Record

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

ECRN: 20180998

Page 3, For ITEM C - CAGE,

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

Update "CAGE" column from "COCR-A" to "COCR-A, R31233".

Matrix Section:

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