



Fisher Controls Int. Inc.

Engineering Master**EWX4**

Page 1 of 13

Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600

CONFIDENTIAL. This document, including the information it bears, is the property of Fisher Controls and must be held in strict confidence and properly safeguarded by the recipient at all times. It may not be copied or reproduced, or provided or revealed to any other party, except with the prior written authorization of Fisher Controls, and any authorized copy or reproduction must include this legend. The recipient may use the same only for the purpose for which Fisher Controls has provided it to the recipient, and it must be returned to Fisher Controls, along with all copies and reproductions, upon request. By accepting this document, the recipient agrees to the forgoing. The original controlled version of this document resides in the Electronic Document Control System (EDOCS) accessible on the Fisher FishWeb. Copies of this document are uncontrolled. Engineering Standard DS40 controls the creation and maintenance of this document.

EWX4 – 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	Cage	3
C	Plug	2
	Pin, Groove	8
	Seat Ring	9
	Disc Retainer	21
	Disc Seat	22
	Ring, Retaining, EXT	27
	Ring, Back-up	29
D	Disc	23
E	Stud Bolt, CONT THD/S	15
	Nut, Hex, Heavy	16
F	Ring, Piston	6
	Seal Ring	28
	Ring, Back-up	29
	Rings, Anti-Extrusion	63
G	Gasket	10
	Gasket, Spiral Wound	12
	Gasket	13
	Gasket Shim	53
H	Stem, Plug	7
J	Arrow, Flow Direction	18
	Screw, Drive	19
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	
9E	Descriptor/Nameplate Data when Item H not used	



Fisher Controls Int. Inc.

Engineering Master**EWX4**

Page 2 of 13

**Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600****ITEM A – VALVE BODY**

BODY	TEMPERATURE °F	CLASS	CWP (PSI)	END CONNECTION	DRAIN TAP	A
WCC/WCB	-20+800	150	290	RF	W/O	163
		300	750	RF	W/O	17
		600	1500	RF	W	71
				RTJ	W/O	24
				SCHD 40 BWE	W/O	38
				SCHD 80 BWE	W	3
C5	-20+850	150	290	RF	W/O	57
		300	750	RF	W/O	10
		600	1500	RF	W/O	164
				SCHD 40 BWE	W/O	20
				SCHD 80 BWE	W/O	27
					W/O	6
LCC/LCB	-50+650	300	750	RF	W/O	13
CF8M	-325+1000	300	720	RF	W	18
		600	1440	RF	W/O	76
WC9	-20+1050	150	290	RF	W/O	29
		600	1500	SCHD 40 BWE	W/O	165

FOREIGN MANUFACTURED EN1092-1 FLANGES, NOT TAPPED, DN 100X50

MATL	TEMP ° F	RATING	C.W.P. (PSI/100° F)
WCC/WCB	-20+800	PN10/16	232
		PN25/40	580
		PN63	914
		PN100	1450
LCC/LCB	-50+650	PN10/16	232
		PN25/40	580
		PN63	914
		PN100	1450
WC1	-20+850	PN63	914
		PN100	1450
C5	-20+1100	PN63	914
		PN100	1450
WC6	-20+1100	PN25/40	580
		PN63	914
		PN100	1450
CF8M	-325+1000	PN10/16	232
		PN25/40	580
		PN63	914
		PN100	1450
347	-325+1000	PN63	914
		PN100	1450
WC9	-20+1100	PN63	914
		PN100	1450



Fisher Controls Int. Inc.

Engineering Master

EWX4

Page 3 of 13

Design EWD, EWT, EWS Series Valve Body Assembly Size 4X2, Class 125-600

ITEM A – VALVE BODY

EN TYPE B (RF)

	PN 10/16	PN 25/40	PN 63	PN 100
BODY	A	A	A	A
WCC/WCB	166	169	123	133
LCC/LCB	167	170	124	134
WC1	-	-	125	135
C5	-	-	126	136
WC6	-	-	127	137
CF8M	168	171	128	138
347	-	-	129	139
WC9	-	-	132	142

EN TYPE F (RECESS)

	PN 10/16	PN 25/40	PN 63	PN 100
BODY	A	A	A	A
WCC/WCB	172	175	178	181
LCC/LCB	173	176	179	182
CF8M	174	177	180	183



Fisher Controls Int. Inc.

Engineering Master**EWX4**

Page 4 of 13

Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600
ITEM B – CAGE**ITEM C – VALVE PLUG, SEAT RING, GROOVE PIN**

CAGE	PLUG	RING	TEMP °F	TRIM/BODY COMB LIMIT	
				BODY	TEMP °F
17-4 PH	416	416	-20+800	WCC, WC1, WC6, WC9, CF8M & 347	-20+750 -20+400
		316	-20+800	CF8M & 347	-20+450
	316	316	-150+410	ALY 20	-150+300
	316/HF SEAT	COCR-A	-150+300		
	316/HF SEAT/GUIDE	COCR-A	-150+410	CF8M 347	-100+400 -100+410
	HI-TEMP	COCR-A	+410+800	CF8M & 347	+410+440
316 ENC	416	416	-20+410		
	MONEL	MONEL	-400+500		
	316	316	-425+600	C5 HAST C	-20+550 -325+550
	316/HF SEAT	COCR-A	-425+300		
	316/HF SEAT/GUIDE	COCR-A	-425+650	C5 HAST C	-20+700 -325+700
316	316	316	-425+300		
316 CR PL	316/HF SEAT/GUIDE	COCR-A	-425+1100	C5 HAST C	-20+700 -325+700
316L	316L	316L	-425+300		
304	304	304	-425+300		
304L	304L	304L	-425+300		
317	317	317	-425+300		
347	347	347	-425+300		
ALY 20	ALY 20	ALY 20	-325+300		
HAST C	HAST C	HAST C	-325+300		
MONEL	MONEL	MONEL	-400+300		
NICKEL	NICKEL	NICKEL	-325+300		
347 ENC	347	347	-425+600		
COCR-A	316/HF SEAT	COCR-A	-425+300		
	316/HF SEAT/GUIDE	COCR-A	-425+800	CF8M & 347	-325+700
	HI-TEMP	COCR-A	+800+1100	CF8M & 347	(M)



Fisher Controls Int. Inc.

Engineering Master**EWX4**

Page 5 of 13

**Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600****ITEM B – CAGE (CONTINUED)****ITEM C – VALVE PLUG, SEAT RING, GROOVE PIN (CONTINUED)**MAXIMUM ΔP (PSI), CANNOT EXCEED CWP, SEAT LOAD NOT CONSIDERED

FLOWING = 1500

DESIGN	CAGE	VALVE PLUG	SEAT RING OR RETAINER	METAL		COMPOSITION	
				1/2 STEM	3/4 STEM	1/2 STEM	3/4 STEM
EWD & EWT	17-4 PH	416	416	1500	1500	1500	1500
			316	300	300	1500	1500
		316	316	300	300	1500	1500
		316/HF SEAT	COCR-A	1500	1500	1500	1500
		316/HF SEAT/GUIDE	COCR-A	1500	1500	1500	1500
	316 ENC	416	416	1500	1500	1500	1500
		MONEL	MONEL	300	300	1500	1500
		316	316	300	300	1500	1500
		316/HF SEAT	COCR-A	1500	1500	1500	1500
		316/HF SEAT/GUIDE	COCR-A	1500	1500	1500	1500
	316	316	316	300	300	1500	1500
	316L	316L	316L	300	300	1500	1500
	316 CR PL	316/HF SEAT/GUIDE	COCR-A	1500	1500	1500	1500
	304	304	304	300	300	1500	1500
	304L	304L	304L	300	300	1500	1500
	317	317	317	300	300	1500	1500
	347	347	347	300	300	1500	1500
	ALY 20	ALY 20	ALY 20	300	300	1500	1500
	HAST C	HAST C	HAST C	300	300	1500	1500
	MONEL	MONEL	MONEL	300	300	1500	1500
	NICKEL	NICKEL	NICKEL	300	300	1500	1500
	347 ENC	347	347	300	300	1500	1500
	COCR-A	316/HF SEAT	COCR-A	1500	1500	1500	1500
		316/HF SEAT/GUIDE	COCR-A	1500	1500	1500	1500
EWS	17-4 PH	416	416	1212	1500	1212	1500
			316	300	300	1212	1500
		316	316	300	300	1212	1500
		316/HF SEAT	COCR-A	1212	1500	1212	1500
		316/HF SEAT/GUIDE	COCR-A	1212	1500	1212	1500
	316 ENC	416	416	1212	1500	1212	1500
		MONEL	MONEL	300	300	447	1005
		316	316	300	300	1212	1500
		316/HF SEAT	COCR-A	1212	1500	1212	1500
		316/HF SEAT/GUIDE	COCR-A	1212	1500	1212	1500
	316	316	316	300	300	1212	1500
	316L	316L	316L	300	300	447	1005
	316 CR PL	316/HF SEAT/GUIDE	COCR-A	1212	1500	1212	1500
	304	304	304	300	300	535	1203
	304L	304L	304L	300	300	447	1005
	317	317	317	300	300	535	1203
	347	347	347	300	300	535	1203
	ALY 20	ALY 20	ALY 20	300	300	797	1500
	HAST C	HAST C	HAST C	300	300	816	1500
	MONEL	MONEL	MONEL	300	300	447	1005
	NICKEL	NICKEL	NICKEL	300	300	384	865
	COCR-A	316/HF SEAT	COCR-A	1212	1500	1212	1500
		316/HF SEAT/GUIDE	COCR-A	1212	1500	1212	1500



Fisher Controls Int. Inc.

Engineering Master**EWX4**

Page 6 of 13

**Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600****ITEM B – CAGE (CONTINUED)****ITEM C – VALVE PLUG, SEAT RING, GROOVE PIN (CONTINUED)**

DESIGN EWD, 4X2, 2 5/16 PORT, 1 1/8 TRAVEL, METAL SEAT

VSC	CAGE	VALVE	RING	STEM	EQ %	LIN	QO	WHISP	C	TEMP LIMIT °F
					B	B	B	B		
1L5000	17-4PH H900	416	416	316	1	23	45	68	361	
		316	316	316	1	23	45	68	362	<=410
	316 ENC	416	416	316	20	42	--	251	361	
		316	316	316	20	42	--	251	362	
		MONEL	MONEL	R-MONEL	20	42	--	251	376	
	316 MONEL M-35W	316	316	316	2	--	--	--	362	
		MONEL	MONEL	R-MONEL	R	R	R	252	376	
	HARD FACED PLUG SEAT AND SEAT RING									
	17-4PH H900	316	COCR-A	316	1	23	45	68	779	<=410
	COCR-A	316	COCR-A	316	12	--	--	247	779	<=800
	316 ENC	316	COCR-A	316	20	42	--	251	779	
	HARD FACED PLUG SEAT/GUIDE AND SEAT RING									
	17-4PH H900	316	COCR-A	316	1	23	45	68	780	<=410
									781	=>410<=800
	17-4PH H1100	316	COCR-A	316	16	--	--	--	780	<=410
									780	<=800
1L7500	COCR-A	316	COCR-A	316	12	--	--	247	781	>800
	316 ENC	316	COCR-A	316	20	42	--	251	780	
	17-4PH H900	416	416	316	1	23	45	68	378	
									378	
	316 ENC	MONEL	MONEL	R-MONEL	20	42	--	251	393	
	316	316	316	316	2	--	--	--	379	



Fisher Controls Int. Inc.

Engineering Master**EWX4**

Page 7 of 13

**Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600****ITEM B – CAGE (CONTINUED)****ITEM C – VALVE PLUG, SEAT RING, GROOVE PIN (CONTINUED)**

DESIGN EWT, 4X2, 2 5/16 PORT, 1 1/8 TRAVEL

SEAT	VSC	CAGE	VALVE	RING	EQ%	LIN	QO	WHISP	C
					B	B	B	B	
METAL	1L5000	17-4 PH H900	416	416	1	23	45	68	361
			316	316	1	23	45	68	362
			316/HF S/G	COCR-A	1	23	45	68	780
		316 ENC	416	416	20	42	--	251	361
			316	316	20	42	--	251	362
			MONEL	MONEL	20	42	--	251	376
			316/HF S/G	COCR-A	20	42	--	251	780
		316 MONEL M-35W 17-4 PH H1100 COCR-A	316	316	2	--	--	--	362
			MONEL	MONEL	R	R	R	252	376
			316/HF S/G	COCR-A	16	--	--	--	780
			316/HF S/G	COCR-A	12	--	--	247	780
	1L7500	17-4 PH H900	416	416	1	23	45	68	378
		316 ENC	416	416	20	42	--	251	378
			MONEL	MONEL	20	42	--	251	393
		316	316	316	2	--	--	--	379
COMPOSITION	1L5000	17-4 PH H900	416	316	1	23	45	68	770
			316	316	1	23	45	68	456
		316 ENC	316	316	20	42	--	251	456
			316	316	2	--	--	--	456

SPRING LOADED SEAL RING W/O ANTI-EXTRUSION RING, VSC 1L5000

CAGE	PLUG	DISC SEAT/SEAT RING	EQ %	LIN	QO	WHISP	METAL	COMP
			B	B	B	B	C	C
17-4PH H900	416	416	1	23	45	68	775	--
		316	1	23	45	68	--	777

SPRING LOADED SEAL RING W/ANTI-EXTRUSION RING, METAL SEAT

CAGE	PLUG	SEAT RING	EQ %	LIN	QO	WHISP	VSC	
							1L5000	1L7500
17-4PH H900	416	416	1	23	45	68	814	815
316 ENC	316/HF S/G	COCR-A	20	42	64	251	822	823
17-4PH H900	316/HF S/G	COCR-A	1	23	45	68	820	821
	316/HF S/G HI-TEMP +410+800	COCR-A	1	23	45	68	818	819

RADIUS SEAT VALVE PLUG FOR CLASS V SEAT LEAK

SPRING LOADED SEAL RING W/O ANTI-EXTRUSION RING, METAL SEAT

CAGE	PLUG	SEAT RING	EQ %	LIN	QO	WHISP	VSC	
							1L5000	1L7500
17-4PH H900	416 SST	416 SST	1	23	45	68	816	817
	316 SST/HF S/G	COCR-A	1	23	45	68	824	826
316 SST ENC	316 SST/HF S/G	COCR-A	20	42	64	251	825	827



Fisher Controls Int. Inc.

Engineering Master**EWX4**

Page 8 of 13

**Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600****ITEM B – CAGE (CONTINUED)****ITEM C – VALVE PLUG, SEAT RING, GROOVE PIN (CONTINUED)**

DESIGN EWS, 2 5/16 PORT, 1 1/8 TRAVEL

METAL SEAT

VSC	CAGE	VALVE	RING	STEM	EQ %	LIN	QO	WHISP	C	TEMP LIMIT °F
					B	B	B	B		
1L5000	17-4 PH H900	416	416	316	1	23	45	68	501	
		316	316	316	1	23	45	68	785	<=410
		316/HF SEAT/GUIDE	COCR-A	316	1	23	45	68	788	<=410
	17-4 PH H1100	316/HF SEAT/GUIDE	COCR-A	316	16	--	--	--	789	=>410<=800
		316	316	316	20	42	--	251	788	<=410
		316	316	316	20	42	--	251	785	
		316/HF SEAT/GUIDE	COCR-A	316	20	42	--	251	788	
	316	316	316	316	2	--	--	--	785	
		COCR-A	316/HF SEAT/GUIDE	COCR-A	12	--	--	247	788	<=800
									789	>800
1L7500	17-4PH H900	416	416	316	1	23	45	68	521	
		316/HF SEAT/GUIDE	COCR-A	316	1	23	45	68	792	<=410
	17-4 PH H1100	316/HF SEAT/GUIDE	COCR-A	316	16	--	--	--	793	=>410<=800
		COCR-A	316/HF SEAT/GUIDE	COCR-A	12	--	--	247	792	<=410
	316 ENC	316/HF SEAT/GUIDE	COCR-A	316	20	42	--	251	792	<=800
									793	>800

COMPOSITION SEAT

VSC	CAGE	PLUG	DISC RETAINER /SEAT	EQ %	LIN	QO	WHISP	C
				B	B	B	B	
1L5000	17-4 PH H900	416	316	1	23	45	68	773
		316	316	1	23	45	68	794
	316 ENC	316	316	20	42	--	251	794
		316	316	2	--	--	--	794
1L7500	17-4 PH H900	316/HF SEAT/GUIDE	COCR-A	1	23	45	68	799
	17-4 PH H1100	316/HF SEAT/GUIDE	COCR-A	16	--	-	--	799
	COCR-A	316/HF SEAT/GUIDE	COCR-A	12	--	--	247	799
	316 ENC	316/HF SEAT/GUIDE	COCR-A	20	42	--	251	799

ITEM D – DISC

DISC	TEMPERATURE °F	D
PTFE FMS 17F3	-100+400	1



Fisher Controls Int. Inc.

Engineering Master**EWX4**

Page 9 of 13

**Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600****ITEM E – BOLTING**

BOLTING	NUT	TEMP °F	CWP (PSI)	HYDRO(PSI/MIN)	BODY	TEMP ° F
B7	2H	-50+800	BODY	BODY		-50+800
	GRADE 7	-50+1000	BODY	BODY		-50+1000
B16	GRADE 7	-20+1100	BODY	BODY		-20+1100
B8M CLASS 1	8M	-	880	1325/2		-325+1000
B8M CLASS 2	8M	-325+800	1200	1800/2		-325+800
SAE GRADE 5	-	-20+650	BODY	BODY	HAST	-20+650
B8	GRADE 8	-425+100	880	1325/2		-425+100
B7M	2HM	-50+800	1000	1500/2		-50+800

BODY	° F	BOLT	NUT	STD	EXT	BELLOWS
				E	E	E
CI	-20 TO 410	SAE GRADE 5	-	--	M	M
	-50 TO 410	SA-193-B7	SA-194-2H	--	1	--
WCC	-20 TO 450	SA-193-B7	SA-194-2H	1	1	--
	450 TO 800	SA-193-B7	SA-194-2H LUB	17	17	23
LCC	-50 TO 450	SA-193-B7	SA-194-2H	1	1	--
	450 TO 650	SA-193-B7	SA-194-2H LUB	17	17	23
WC1	-20 TO 450	SA-193-B7	SA-194-2H	1	1	--
	450 TO 800	SA-193-B7	SA-194-2H LUB	17	17	23
	801 TO 850	SA-193-B7	SA-194-7 LUB	16	16	22
WC6	-20 TO 450	SA-193-B7	SA-194-2H	1	1	--
	450 TO 800	SA-193-B7	SA-194-2H LUB	17	17	23
	801 TO 1000	SA-193-B7	SA-194-7 LUB	16	16	22
WC9	-20 TO 450	SA-193-B7	SA-194-2H	1	1	--
	450 TO 800	SA-193-B7	SA-194-2H LUB	17	17	23
	801 TO 1000	SA-193-B7	SA-194-7 LUB	16	16	22
	1001 TO 1050	SA-193-B16	SA-194-7 LUB	18	18	24
C5	-20 TO 450	SA-193-B7	SA-194-2H	1	1	--
	450 TO 800	SA-193-B7	SA-194-2H LUB	17	17	23
	801 TO 1000	SA-193-B7	SA-194-7 LUB	16	16	22
	1001 TO 1100	SA-193-B16	SA-194-7 LUB	18	18	24
HAST C	-50 TO 450	SA-193-B7	SA-194-2H	1	1	--
	450 TO 800	SA-193-B7	SA-194-2H LUB	17	17	23
316 & 347	-325 TO 450	SA-193-B8M	SA-194-8M	3	3	--
	450 TO 800	SA-193-B8M	SA-194-8M LUB	19	19	25
	450 TO 800	SA-193-B7	SA-194-2H LUB	17	17	23
	-50 TO 450	SA-193-B7 STD	SA-194-2H	1	1	--
	801 TO 1000	SA-193-B8M	SA-194-8M LUB	20	20	26
ALLOY 20	-325 TO 300	SA-193-B8M	SA-194-8M	3	3	--
	-50 TO 300	SA-193-B7 STD	SA-194-2H	1	1	--
*WCC, WC9, C5	-20 TO 800	SA-193-B7M	SA-194-2HM	15	15	--
*LCC	-50 TO 650	SA-193-B7M	SA-194-2HM	15	15	--
*WC1	-20 TO 800	SA-193-B7M	SA-194-2HM	15	15	--
*316	-50 TO 450	SA-193-B7M	SA-194-2HM	15	15	--



Design EWD, EWT, EWS Series Valve Body Assembly

Size 4X2, Class 125-600

ITEM F – PISTON RING OR SEAL RING

	PISTON RING MATERIAL	TEMPERATURE °F	F
DESIGN EWD	CARBON FILLED PTFE	-100 +450	1
STEAM OR NON-OXIDIZING FLUIDS	GRAPHITE FMS 17F19	-425+600	2
	GRAPHITE FMS 17F26	-425+900	9
	GRAPHITE FMS 17F39	-425+1100	15
AIR OR OXIDIZING FLUIDS	GRAPHITE FMS 17F27	-425+800	9
	GRAPHITE FMS 17F39	-425+1100	15

DESIGN EWT

SEAL RING	BACK UP RING	TEMPERATURE °F	SERVICE	F
PTFE FMS 17F3	VITON FMS 17G34	0+400	OXYGEN	12
CARBON/PTFE FMS 17F18	VITON FMS 17G34	0+400	NACE	6
			NOT WATER >180 °F NOR STEAM	
	NITRILE FMS 17G14	-30+160	HYDROCARBONS, AIR	5
		-30+180	FIRE-RESISTANT HYDRAULIC OILS OTHER COMPATIBLE FLUIDS	M 5
	ETHYL PROPYL FMS 17G39	-40+450	NOT HYDROCARBON(OIL)	17

SPRING LOADED SEAL RING CONSTRUCTION

ANTI-EXTRUSION RING	W/O	PEEK	
SEAL RING	N10276/PTFE	R30003/PTFEPPVE	
	GLASS/MOS 2	OXIDIZING SERVICE	NON-OXIDIZING SERVICE
° F	-100+450	-100+500	-100+600
	F	F	F
FULL CAPACITY	14	18	18

ITEM G – GASKET

FLAT SHEET	SPIRAL WOUND	TEMPERATURE °F	G
GRAPHITE/SST	316L & COMPOSITION	-100+450	15
	INCONEL & GRAPHITE	-325+1100	35

ITEM H – STEM**ITEM 9E – DESCRIPTOR/NAMEPLATE DATA WHEN ITEM H NOT USED**

ACTUATOR GROUP/AU2259	STEM	VSC	BONNET STYLE	H	9E
1	316 SST	1L5000	PLAIN	1	N
			EXTENSION STYLE 1	17	N
		1L7500	PLAIN	145	N
			EXTENSION STYLE 1	161	N
	NIT 50	1L5000	PLAIN	176	N
			EXTENSION STYLE 1	177	N
	SST	ALL	ENVIRO-SEAL BELLOW SEAL	N	1
	HAST C	ALL	ENVIRO-SEAL BELLOW SEAL	N	2



Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600

ITEM J – FLOW ARROW & DRIVE SCREW

J
1

ITEM K – NAMEPLATE

K
1

ITEM 9B – TYPE/PLUG ACTION/FLOW DIRECTION

ACTION	TYPE	FLOW	9B
PDTC	EWD	UP	4
		DOWN	1
	EWS	UP	5
		DOWN	3
	EWT	UP	6
		DOWN	2

ITEM 9C – CLASS/HYDRO

BODY	RATING	HYDRO PSI/MIN	9C
WCC/WCB, LCC/LCB, C5, CF8M, WC9	CL150	450/2	7
	CL300	1125/2	1
	CL600	2250/2	2
WCC/WCB, LCC/LCB, WC1, C5, WC6, CF8M, 347 & WC9	PN10/16	350/2	8
	PN25/40	875/2	9
	PN63	1375/2	10
	PN100	2175/2	11



Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600

ITEM 9D- SEAT LEAK TEST PER FGS 4L5

DESIGN	SEAT	SEAL OR PISTON RING	FLOW	CHARACTER	LEAK CLASS	VALUE	9D
EWD	METAL	PISTON RING	DOWN	Q-OPEN	II(SCFH)	1336	1
				LINEAR	II(SCFH)	1119	2
				EQ PCT	II(SCFH)	815	3
			UP	WHISPER	II(SCFH)	866	4
EWT	METAL	STD & SPRING LOADED WITHOUT ANTI-EXTRUSION RING	DOWN	Q-OPEN	IV(SCFH)	26.7	5
				LINEAR	IV(SCFH)	22.3	6
				EQ PCT	IV(SCFH)	16.3	7
			UP	WHISPER	IV(SCFH)	17.3	8
	COMP	SPRING LOADED WITH PEEK ANTI-EXTRUSION	ALL	ALL	V WATER TEST (ML/MIN)	CALCULATE	14
		STD & SPRING LOADED W/O ANTI-EXTRUSION RING	ALL	ALL	V AIR TEST (ML/MIN))	10.86	15
EWS	METAL	N/A	UP	Q-OPEN	IV(SCFH)	28.3	9
				LINEAR	IV(SCFH)	22.1	10
				EQ PCT	IV(SCFH)	15.3	11
				WHISPER	IV(SCFH)	17.3	12
	COMP	N/A	UP	ALL	VI(BUBBLE/MIN)	4	13

* CLASS V WATER MUST BE CALCULATED

DESIGN	DRAWING
EWT SPRING LOADED SEAL RING W/ANTI-EXTRUSION RING ASSY DWG	21B2120
GASKET ASSY DWG	16A1943
EWD ASSY DWG	41A9275
EWS ASSY DWG	31A9274
EWT ASSY DWG	43A8592



Design EWD, EWT, EWS Series Valve Body Assembly
Size 4X2, Class 125-600

Revision Change Record

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

ECRN: 20171399

Add a new 9E Item for "DESCRIPTOR/NAMEPLATE DATA WHEN ITEM H NOT USED".

Matrix Section:

Item	Module	Changes
9E	1	New Descriptor for SST stem paired to Enviro-Seal Bellow Seal Bonnet.
9E	2	New Descriptor for HAST C stem paired to Enviro-Seal Bellow Seal Bonnet.