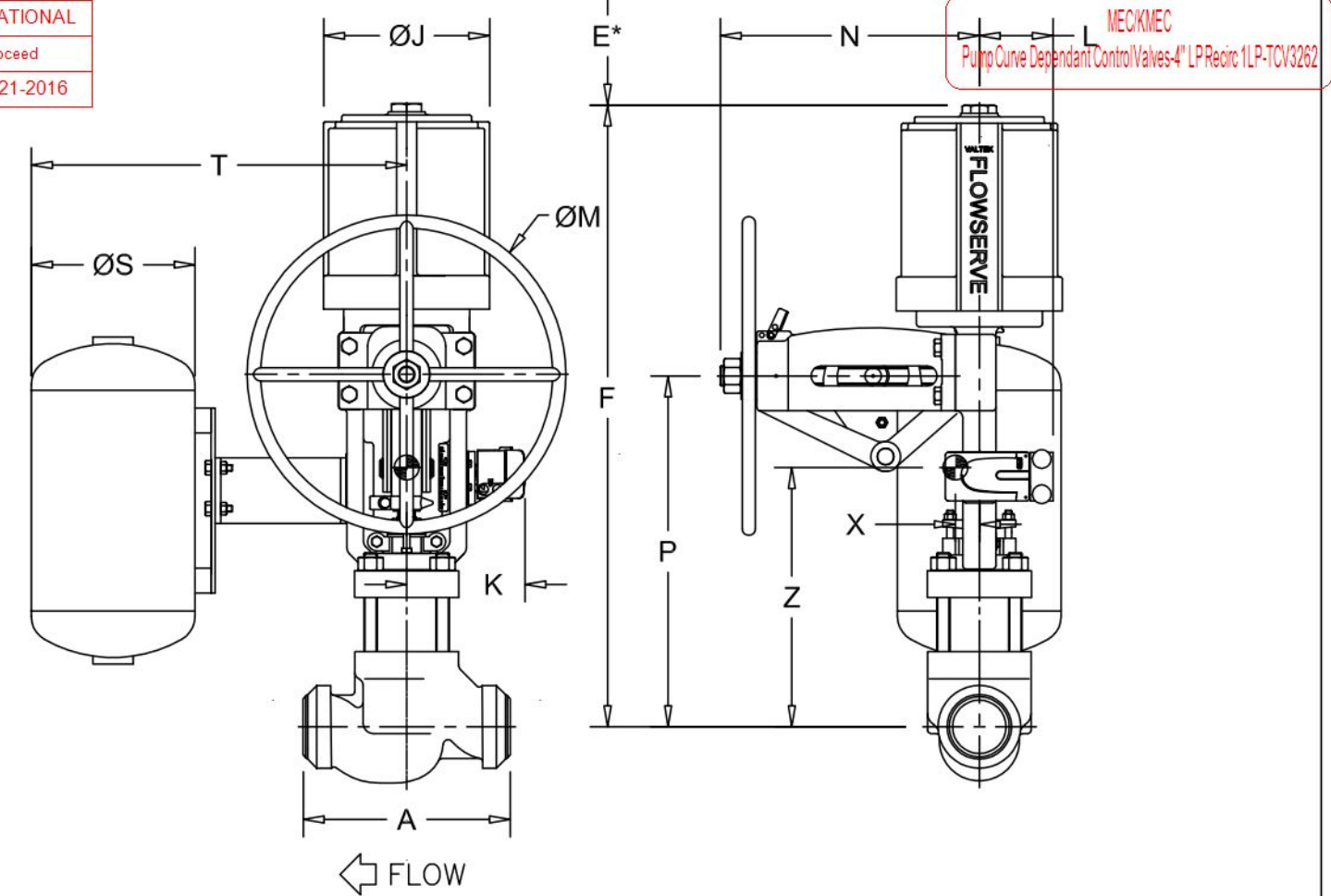


ACTUATOR SHOWN ROTATED
IN THIS VIEW FOR CLARITY

REV.	DATE	DESCRIPTION	DRAWN	CHKD
0	04-19-2016	ISSUED FOR APPROVAL	VKP	SG
1	05-18-2016	UPDATED AS PER CUSTOMER COMMENTS	BJK	SG
2	05-24-2016	UPDATED AS PER CUSTOMER COMMENTS	BJK	SG

VOGT POWER INTERNATIONAL
Released, Work May Proceed
Bell, Milton Jun-21-2016



APPROXIMATE CENTER OF GRAVITY			
	X	Y	Z
in	1.8	0	19.4
mm	46	0	493

DESIGN CONDITIONS	
DESIGN PRESSURE	935.00 psi(g)
DESIGN TEMPERATURE	494.00°F (257.00°C)
PIPE SCH UP	6.00/40 SCH
PIPE SCH DOWN	6.00/40 SCH
VALVE BODY MATERIAL	CARBON STEEL(WCC)

NOTE:
Drawing used for:
V17484-Middletown
VPI PO number V0009762
and
V17495 -Kings Mountain
VPI PO number V0009945

* - DISASSEMBLY/MAINTENANCE CLEARANCE											
	A	E	F	J	K	L	M	N	P	S	T
in	15.50	7.5	46.3	12.5	10.5	7.8	24.0	19.5	26.4	12.3	25.0
mm	394	191	1176	318	267	198	610	495	671	312	635

MODEL	MK I/CAVCONT	DRAWN BY BJK	DATE 05-24-2016	CERTIFIED DIMENSIONAL DRAWING	
SIZE	4.00 INCH	CERTIFIED BY	SG	CUSTOMER	
RATING	STD 600	S75.08.05	DATE 05-24-2016	VOGT POWER INTERNATIONAL	
END PREP.	BW SCH 40	THIRD ANGLE PROJECTION		PURCHASE ORDER NO.	PROJECT OR JOB
TRIM TYPE	P/B O-RING			V0009762	V17494-MIDDLE TOWN
TRIM NO	CV 3.75			ITEM NO.	SHEET 1 of 2
ACT. SIZE	100 SQ IN			TAG NO.	SCALE: NONE
SPRING	STANDARD			1LP-TCV3262	VALTEK S/N
AIR ACTION	OPEN	TOLERANCES DECIMALS: IN[mm] .X ±.25/[6.4] .XX ±.12/[3.1] .XXX ±.06/[1.5] ANGLES: ±1/2°		LP RE CIRC CONTROL VALVE	8004233.006
FAIL MODE	CLOSE				REV 2

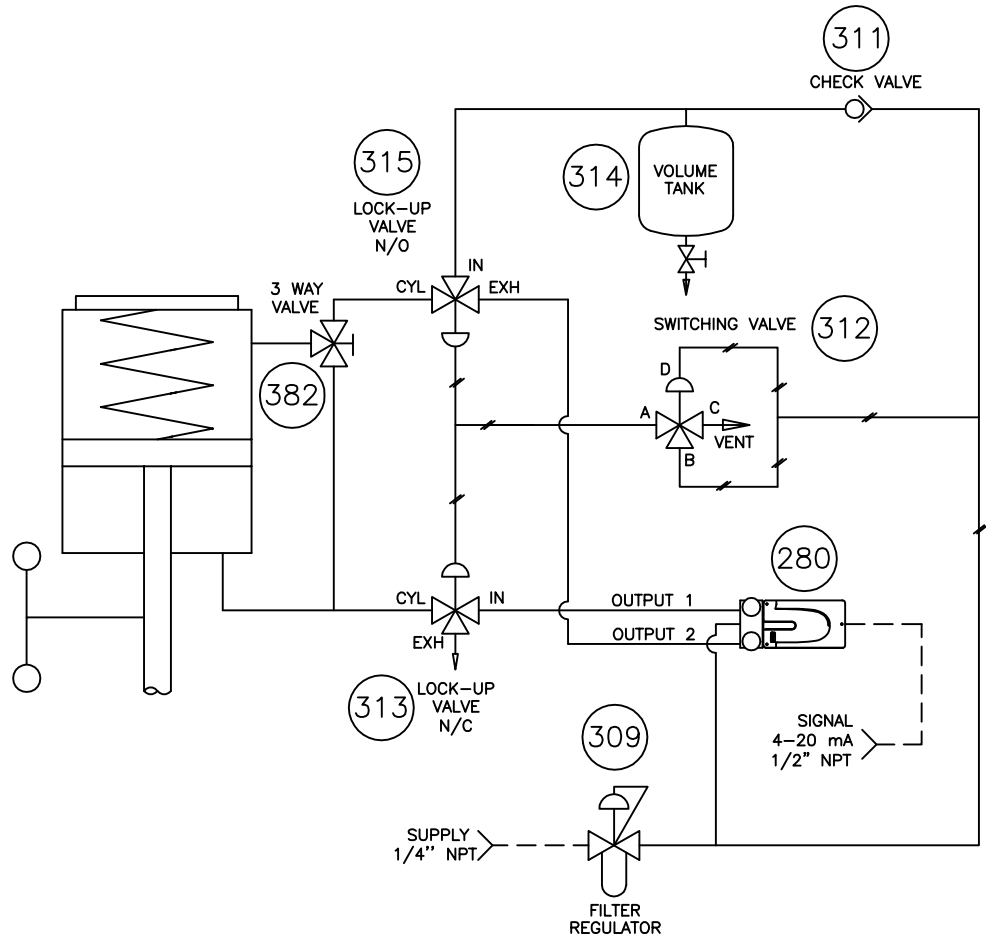
VOGT POWER INTERNATIONAL
V17494-CIXD-7105-03
31-May-2016

D

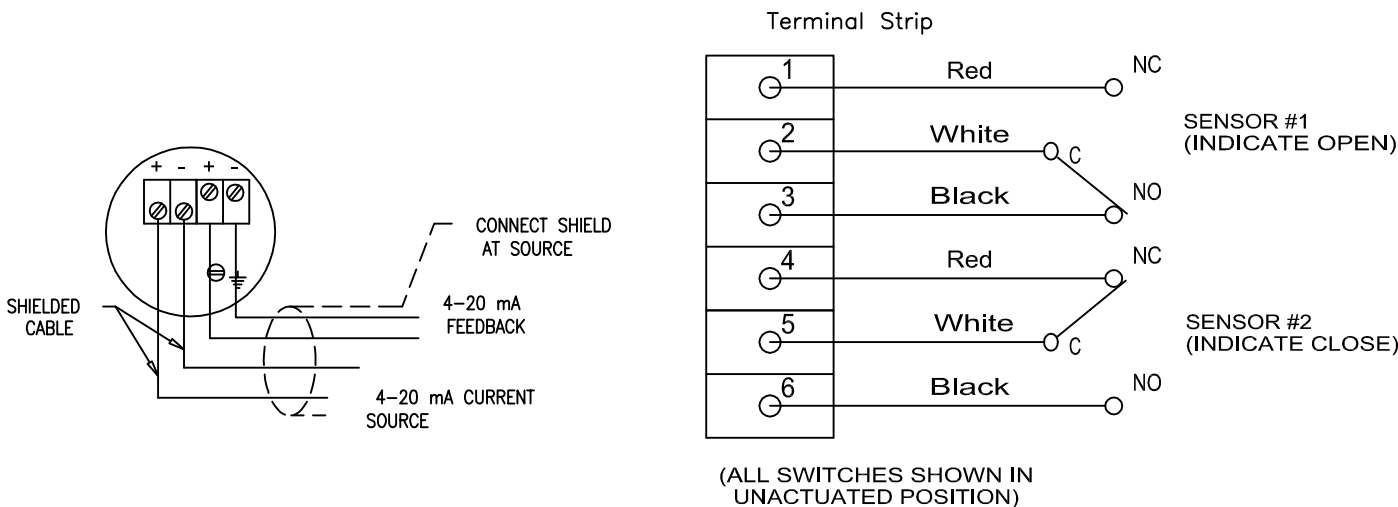
C

B

A



PNEUMATIC SCHEMATIC



(280) LOGIX 500 POSITIONER (305) POSITION PAC A2 (2 SPDT)

ELECTRICAL SCHEMATIC

NOTE:

1. BODY END PREPARATION ASME B16.25 FIG 2B
2. HYDROSTATIC TEST PRESSURE 2220 psi
3. NO LIFTING LUGS REQUIRED, VALVE CAN BE LIFTED FROM ACTUATOR YOKE AND HANDWHEEL HOUSING.

REV.	DATE	DESCRIPTION	DRAWN	CHKD
0	04-19-2016	ISSUED FOR APPROVAL	VKP	SG
1	05-18-2016	UPDATED AS PER CUSTOMER COMMENTS	BJK	SG
2	05-24-2016	UPDATED AS PER CUSTOMER COMMENTS	BJK	SG

1	BODY, MK1, 4", CL 150/600, ISA-75.08.05, BW, SCH 40, ASME B16.25, FIG 2B	1	188246.076.041209	A-216-WCC
20	SEAT RING, MK1, CAVCONT, 4", TN 3.75, CL 150/1500	1	020731.158.000	A-582-416
30	SEAT RET, MK1, CAVCONT, 4", CL 150/600, BILIN, TN 3.75, CV 15/179, 3 STROKE	1	276774.158.000	A-582-416
31	SLEEVE, MK1, TT, PB, 4", CL 150/600, 3.88 BORE, 3 STROKE	1	025185.156.0001209	A-479-410
40	BONNET, MK1, CAVCONT, PB, 4", 2.88 SPUD, CL 150/600	1	326334.127.0411209	A-675-Gr.70
50	PLUG, MK1, CAVCONT, PB, 4", TN 3.75, CL 150/600, PTFE/O-RING, 3 STROKE, HOLLOW BOTTOM	1	352306.674.0001209	A-276-420
55	GASKET, SPIRAL, 4.88 X 4.50, 0.12 THICK, ECN 6342	1	001242.868.000	Gasket, Spiral Wound
58	GASKET, SPIRAL, 5.69 X 5.19, 0.19 THICK, ECN 6342	2	001240.868.000	Gasket, Spiral Wound
65	O-RING	1	002531.115.000	Rubber, Kalrez
66	BACKUP RING, 3.88 OD, DASH #341, HIGH TEMP	2	122087.C7T.000	Plastic, PEEK, Nyltrec 451
70	FLANGE, BONNET, MK1, 4", CL 150/600	1	001216.028.0411209	A-516-70
76	HALF CLAMP, YOKE, 2.88 SPUD, BOLT, HEX HEAD	2	096627.211.000	A-743-CF8M
80	FLANGE, GLAND, 0.88 STEM, 2.62/2.88 SPUD, CL 150/600	1	001655.211.000	A-743-CF8M
83	GUIDE, 0.88 STEM	2	001021.433.000	Bronze, B-505-C93200
88	PACKING SET, STD SQUARE, 0.88 STEM	1	024242.516.000	Packing, Garlock 1298
93	PKG SPR, 0.88 STEM, 0.04 L, NOTCHED	3	089396.150.000	316 Stainless Steel
94	PKG SPR, 0.88 STEM, 3.00 L	1	020907.150.000	316 Stainless Steel
107	BOLT, HEX HEAD, 0.62-11, 2.50 L	2	002566.015.002	SAE Grade 5
108	STUD, 1.12-BUN-2A, 8.88 L, ECN 3860	4	018039.012.0021209	A-193-B7
109	BOLT, HEX HEAD, 0.50-13, 3.00 L	2	009369.015.002	SAE Grade 5
114	NUT, 1.12-BUN-2B, HEAVY HEX, ECN 3860	4	001571.014.0021209	A-194-2H
117	NUT, 0.50-13, FINISH PATTERN	2	001730.013.002	Mild Steel
118	LOCKNUT, 5/8-11	2	001120.013.002	Mild Steel
126	PLATE, FLOW ARROW, 2.62 X 0.62	1	002442.153.000	302 Stainless Steel
201	YOKE, SIZE 100, 2.88 SPUD, 4 STROKE, SMHW	1	098281.300.040	Iron, Ductile
202	CYLINDER, SIZE 100 LIN, STD	1	001307.609.008	Aluminum
210	ADJ SCREW, SIZE 100/600, 3.50 L	1	001356.029.002	Steel, Carbon
211	ASSY, ACTUATOR STEM, SIZE 100/200 LIN, 2.88 SPUD, 0.75-16, 4 STROKE, SMHW	1	098309.159.000	A-582-416
213	PLATE, STROKE, 3 STROKE	1	001258.603.000	Aluminum
225	PISTON, SIZE 100	1	001311.601.003	Aluminum
227	SPRING BUTTON, SIZE 100/200	1	050264.029.176	Steel, Carbon
228	SPACER, SIZE 100, 2.62/4.75 SPUD	1	008272.601.000	Aluminum
229	SPRING, COMPRESSION, 7.50 DIA, 10.75 L, 300 LBS/IN	1	001331.999.000	Purchased Item
236	FOLLOWER ARM, 0.75-3 STROKE, LINEAR, LOGIX 500SI DIGITAL POSITIONER	1	198783.151.000	304 Stainless Steel
237	PIN, FOLLOWER, LEVER ARM, POSITIONER, LOGIX 500SI	1	222516.999.000	Purchased Item
240	BOLT, HEX HEAD, 0.38-16, 2.50 L, 1.12 L, THD	1	001553.195.000	Stainless Steel 18-8
247	BELLOWS, STEM, SIZE 100/200, 4 STROKE, 3.38/4.75 SPUD	1	015526.652.000	Rubber, Neoprene
248	GASKET, ELASTOMER, 2.12 X 1.50, 0.06 THICK	1	001631.655.000	Rubber, Neoprene
249	ASSY, STEM CLAMP-TAKEOFF ARM, WELDED, SIZE 100, 2.62 SPUD, LOGIX 500SI, LIVE LOAD, SMHW	1	320349.164.000	300 Series
252	PLATE, SERIAL, VALTEK, UNIVERSAL, TEMPLATE STD TAG.CDL	1	254784.151.000	304 Stainless Steel
253	BUSHING, 2.62 OD, 2.25 ID, 0.94 L	2	017740.431.000	Bronze, B-438, Gr1
256	RET RING, CYLINDER, SIZE 100 LIN	1	001403.029.002	Steel, Carbon
271	O-RING	2	001313.650.000	Rubber, Buna-N
272	O-RING	1	001312.650.000	Rubber, Buna-N
275	O-RING	1	001718.650.000	Rubber, Buna-N
280	S20MD+37-W1D300-GM1-0100, G, ASSY, LOGIX PLUS 500	1	338926.999.000	Purchased Item
290	BRACKET, SIZE 25/50 LIN, ALL SPUDS, DOUBLE ACTING, LOGIX 500SI, ECN 2638, 2768, 2924	1	198781.151.000	304 Stainless Steel
294	BRACKET, YOKE, VOLUME TANK, SIZE 25/400 & 600, 0.50-8 STROKE	1	035198.029.040	Steel, Carbon
295	BRACKET, VOLUME TANK, SIZE 25/200, LINEAR/ROTARY, 10 GAL	1	017660.029.040	Steel, Carbon
296	BRACKET, POSITION PAC, SIZE 100/200, 2.62/4.75 SPUD, 1-4 STROKE	1	055984.029.040	Steel, Carbon
299	SPACER, BRACKET, POSITION PAC, BOLT, 0.31 HOLES, 0.75 L	2	055997.999.000	Purchased Item
302	FITTING, PIPE, PLUG, 1/4" NPT, SOCKET HEAD, VENTED, 0.03 ORIFICE	1	028269.029.002	Steel, Carbon
305	POSITION PAC, ASSY, A2, 12CX104, 2X, LIMIT SWITCH	1	055578.999.000	Purchased Item
307	LEVER, LIMIT SWITCH, MICRO LS252J	1	035457.999.000	Purchased Item
309	FILTER REGULATOR, NORGREN, B08-251-M1MA, 1/4" NPT, W/GAUGE, MPA/BAR/PSI, ECN 7673	1	138114.999.000	Purchased Item
311	VALVE, CHECK, 1/4" NPT, HOKE, 6113M4	1	019231.402.000	Brass, B-16-HO2
312	VALVE, SWITCHING, SMC MODEL L220-N02-L, 1/4" NPT	1	230670.151.000	304 Stainless Steel
313	VALVE, LOCKUP, HUMPHREY 250A-3-10-20, NORMALLY CLOSED	1	002774.999.000	Purchased Item
314	VOLUME TANK, 10 GAL, ASME, 150 PSI, MANCHESTER 304628	1	049182.999.040	Purchased Item
315	VALVE, LOCKUP, HUMPHREY 250A-3-11-20, NORMALLY OPEN	1	017396.999.000	Purchased Item
321	CONDUIT BOX, SANDELIUS, E44D-CP140-4	1	121582.999.000	Purchased Item
333	BOLT, HEX HEAD, 0.75-10, 2.25 L	4	015894.015.002	SAE Grade 5
345	LOCKNUT, 3/8-16	1	003834.195.000	Stainless Steel 18-8
348	LOCKNUT, 1.12-7	1	001357.013.002	Mild Steel
370	KEY, WOODRUFF 808	1	001883.029.000	Steel, Carbon
382	VALVE, 3-WAY, 1/4" NPT-F, TYPE L, 700-4F4F-B, SPECIALTY 3420590	1	034747.402.000	Brass, B-16-HO2
386	STICKER, INDICATOR, AUTO-MANUAL	1	007194.675.000	Plastic, Mylar
391	NUT, 1.50-12 THD	1	015828.013.002	Mild Steel
393	HW, 24.00 DIA, SIZE 100/200, SMHW	1	098299.999.040	Purchased Item
395	ASSY, SMHW, SIZE 100/200 LIN, 2.88/4.75 SPUD, 4 STROKE, ECN 2607	1	104358.999.000	Purchased Item
396	LOCKNUT, 0.31-18	8	003833.013.002	Mild Steel
397	WASHER, FLAT, 0.81 OD, 0.41 ID, 0.06 THICK, 0.38 THD	2	005771.029.002	Steel, Carbon
399	BOLT, HEX HEAD, 0.31-18, 0.75 L	6	001290.010.002	SAE Grade 2, 4, or 5
400	STICKER, FLOWSERVE, SIZE 100, LINEAR, CYLINDER	2	216068.999.000	Purchased Item
401	SCREW, PHILLIPS, #4-40, 0.25 L, THD CUTTING	2	001118.012.002	A-193-B7
403	BOLT, HEX HEAD, 0.31-18, 0.62 L	4	004403.195.000	Stainless Steel 18-8
404	LOCKNUT, M8 X 1, NYLON INSERT	1	185159.195.000	Stainless Steel 18-8
404	BOLT, HEX HEAD, 0.31-18, 1.50 L	2	001116.015.002	SAE Grade 5
405	WASHER, FLAT, 0.69 OD, 0.34 ID, 0.07 THICK, 0.31 THD	2	044390.195.000	Stainless Steel 18-8
406	NUT, 6MM	1	034142.195.000	Stainless Steel 18-8
406	BOLT, HEX HEAD, 0.31-18, 1.00 L	4	002792.010.002	SAE Grade 2, 4, or 5
407	WASHER, FLAT, M6	1	106296.195.000	Stainless Steel 18-8
414	BOLT, HEX HEAD, 0.31-18, 1.75 L	4	002482.010.002	SAE Grade 2, 4, or 5
419	LOCKNUT, 0.31-18	4	003833.013.002	Mild Steel
421	STICKER, 150 PSI	1	076564.675.000	Plastic, Mylar
426	STICKER, CAUTION, PINCH POINT, CONSULT MANUAL	2	187800.999.000	Purchased Item

* Parts listed but not shown

MODEL	MK I/CAVCONT	DRAWN BY BJK	DATE 05-24-2016	FLOWERVE CERTIFIED DIMENSIONAL DRAWING		
SIZE	4.00 INCH	CERTIFIED BY	SG	CUSTOMER		
RATING	STD 600	S75.08.05	DATE 05-24-2016	VOGT POWER INTERNATIONAL		
END PREP.	BW SCH 40	THIRD ANGLE PROJECTION		PURCHASE ORDER NO. V0009762		
TRIM TYPE	P/B O-RING			PROJECT OR JOB V17494-MIDDLE TOWN		
TRIM NO	CV 3.75	179.0			SHEET 2 of 2	
ACT. SIZE	100 SQ IN			ITEM NO.		SIZE
SPRING	STANDARD			TAG NO.		C
AIR ACTION	OPEN			1LP-TCV3262		REV
FAIL MODE	CLOSE			LP RE CIRCLE CONTROL VALVE		2
				SCALE: NONE		
				VALTEK S/N 8004233.006		