

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

VOGT POWER INTERNATIONAL
V17494-CIXD-7104-03
31-May-2016

NOTE:

1. BODY SOCKET WELD END PREPARATION ANSI B16.11
2. HYDROSTATIC TEST PRESSURE 1110 psi
3. LIFTING RING RATED FOR 1200 lbs

NOTE:


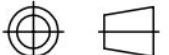
Drawing used for:
V17484-Middletown
VPI PO number V0009762
and
V17495 -Kings Mountain
VPI PO number V0009945

APPROXIMATE CENTER OF GRAVITY			
	X	Y	Z
in	0.4	0	10.3
mm	10	0	262

* - DISASSEMBLY/MAINTENANCE CLEARANCE

DESIGN CONDITIONS									
DESIGN PRESSURE	625.00 psi(g)								
DESIGN TEMPERATURE	494.00°F (257°C)								
PIPE SCH UP	3.00/40 SCH								
PIPE SCH DOWN	3.00/40 SCH								
VALVE BODY MATERIAL	CARBON STEEL(WCC)								

	A	E	F	J	K	L	M	N	P	APPROXIMATE WEIGHT
in	11.25	4.5	23.4	6.5	8.3	7.3	9.0	9.5	12.7	86 lbs
mm	286	114	594	165	211	185	229	241	323	39 kg

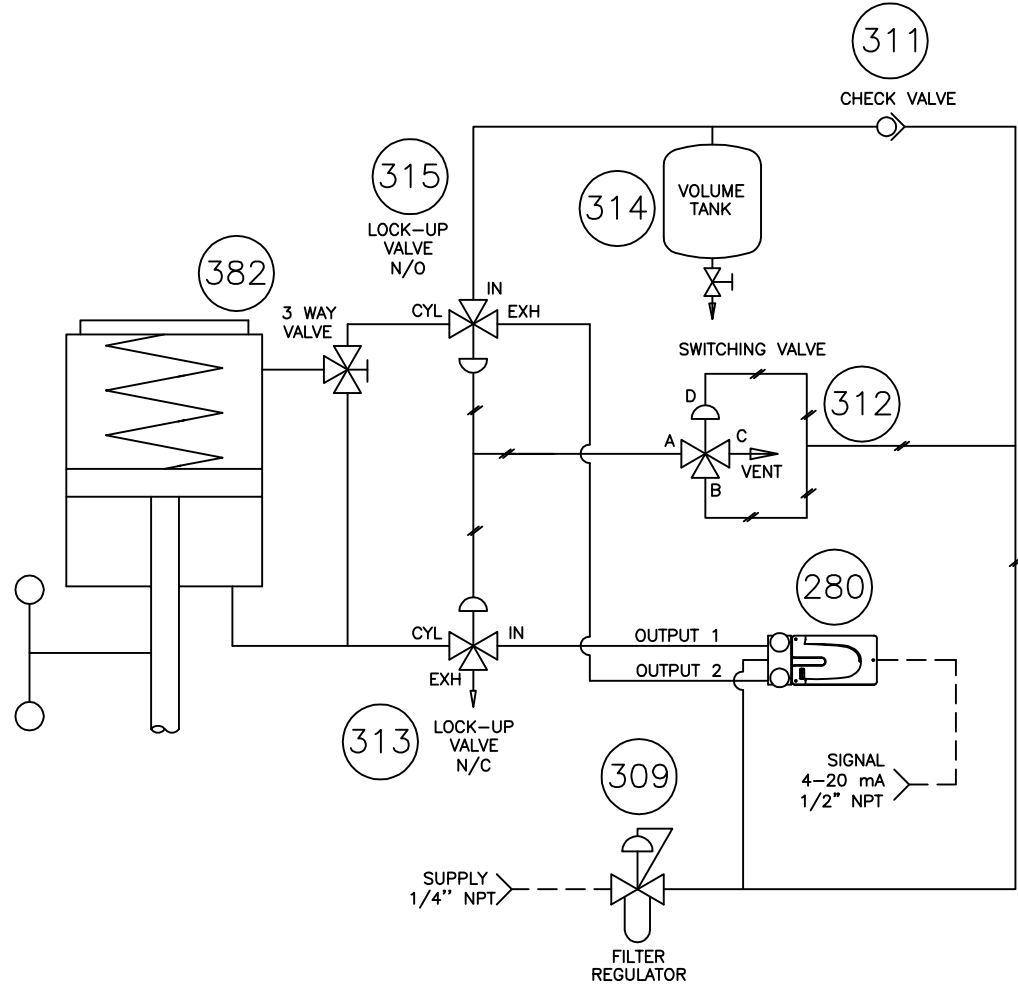
MODEL		MARK I GLOBE		DRAWN BY BJK DATE 05-24-2016		<div> CERTIFIED DIMENSIONAL DRAWING</div>				
SIZE		2.00 INCH		CERTIFIED BY SG		CUSTOMER VOGT POWER INTERNATIONAL				
RATING	STD	300	S75.08.03	DATE 05-24-2016						
END PREP.		SOC WELD		<div>THIRD ANGLE PROJECTION</div> <div></div>						
TRIM TYPE		UNBALANCED								
TRIM NO	CV	.62	10.0							
ACT. SIZE		25 SQ IN								
SPRING		STANDARD		<div>TOLERANCES DECIMALS: IN/[mm] .X ±.25/[6.4] .XX ±.12/[3.1] .XXX ±.06/[1.5] ANGLES: ±1/2°</div>		PURCHASE ORDER NO. V0009762		PROJECT OR JOB V17494-MIDDLE TOWN		
AIR ACTION		OPEN				ITEM NO.		SHEET 1 of 2		SIZE
FAIL MODE		CLOSE				TAG NO.		SCALE: NONE		C
						1LP-TCV3202 LP ECONOMIZER BYPASS CONTROL VALVE		VALTEK S/N 8004233.005		REV 2

4

3

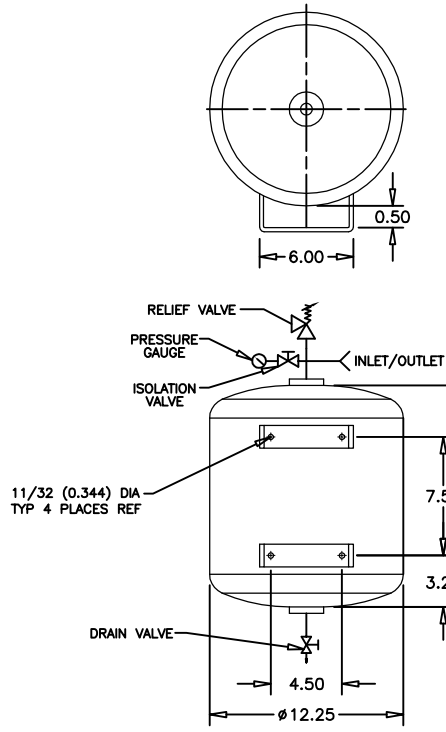
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1



PNEUMATIC SCHEMATIC

REV.	DATE	DESCRIPTION	DRAWN	CHKD
0	04-19-2016	ISSUED FOR APPROVAL	VJK	SG
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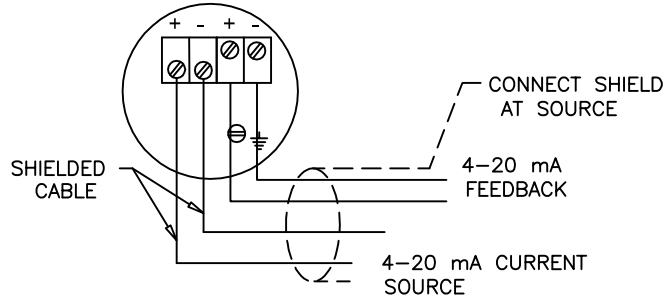


6 GAL VOLUME TANK

NOTE: 1) ALL DIMENSIONS PER MANCHESTER TANK AND EQUIPMENT (2) ALL DIMENSIONS ARE IN INCH. 2) UNLESS OTHERWISE SPECIFIED TOLERANCE= ±10*(25.4).

* Parts listed but not shown

ITEM	DESCRIPTION	QTY	PART NO	MATERIAL CODE
1	BODY, MK1, 2", CL 150/600, ISA-75.08.03, SOCKET WELD	1	006890.076.0411209	A-216-WCC
20	SEAT RING, MK1, 1.50/2", TN 0.62, CL 150/600, ECN 4360, 7421	1	005404.158.000	A-582-416
30	SEAT RET, MK1, 1.50/2", CL 150/600	1	001847.150.000	316 Stainless Steel
40	BONNET, MK1, 1.50/2", 2.00 SPUD, CL 150/600	1	002127.127.0411209	A-675-Gr.70
50	PLUG, MK1, 1.50/2", =%, TN 0.62, CL 150/600, 0.75 STROKE	1	004514.674.0001209	A-276-420
55	GASKET, SPIRAL, 2.50 X 2.12, 0.12 THICK	1	001027.868.000	Gasket, Spiral Wound
58	GASKET, SPIRAL, 3.25 X 2.88, 0.19 THICK, ECN 7421	1	001110.868.000	Gasket, Spiral Wound
70	FLANGE, BONNET, MK1, 1.50/2", CL 150/600, 2.00 SPUD	1	001057.028.0411209	A-516-70
76	HALF CLAMP, YOKE, 2.00 SPUD, BOLT, HEX HEAD, ECN 7421	2	094677.211.000	A-743-CF8M
80	FLANGE, GLAND, 0.88 STEM, 2.00 SPUD, CL 150/600, ECN 7421	1	008531.211.000	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, Carlock 1298
93	PKG SPR, 0.88 STEM, 0.04 L, NOTCHED	2	089398.150.000	316 Stainless Steel
94	PKG SPR, 0.88 STEM, 2.25 L	1	007739.150.000	316 Stainless Steel
107	BOLT, HEX HEAD, 0.31-18, 1.50 L	2	001116.015.002	SAE Grade 5
108	STUD, 0.75-10, 3.00 L	4	008053.012.0021209	A-193-B7
109	BOLT, HEX HEAD, 0.38-16, 2.00 L	2	001860.015.002	SAE Grade 5
114	NUT, 0.75-10, HEAVY HEX	4	002281.014.0021209	A-194-2H
117	NUT, 0.38-16, FINISH PATTERN	2	001155.013.002	Mild Steel
118	LOCKNUT, 0.31-18	2	003833.013.002	Mild Steel
126	PLATE, FLOW ARROW, 2.62 X 0.62	1	002442.153.000	302 Stainless Steel
201	YOKE, SIZE 25, 2.00 SPUD, SMHW	1	031570.300.040	Iron, Ductile
202	CYLINDER, SIZE 25 LIN, 1/4" NPT, STD	1	016881.609.008	Aluminum
209	BOLT, EYE, 0.38-16, 1.00 ID, 1.00 L, SHOULDER PATTERN	1	046117.999.002	Purchased Item
210	ADJ SCREW, SIZE 25, 2.22 L	1	001286.C65.002	Steel, Carbon
211	ASSY, ACTUATOR STEM, SIZE 25 LIN, 2.00 SPUD, 0.75-16, 1.50 STROKE, SMHW	1	031572.159.000	A-582-416
213	PLATE, STROKE, 0.75 STROKE	1	001156.603.000	Aluminum
225	PISTON, SIZE 25	1	001004.601.003	Aluminum
227	SPRING BUTTON, SIZE 25, 1.50 STROKE	1	003860.029.176	Steel, Carbon
228	SPACER, SIZE 25	1	001009.601.000	Aluminum
229	SPRING, COMPRESSION, 2.75 DIA, 4.03 L, 189 LBS/IN	1	015264.999.000	Purchased Item
233	WASHER, FLAT, 0.56 OD, 0.25 ID, 0.05 THICK, 0.25 THD	2	099692.195.000	Stainless Steel 18-8
234	BOLT, HEX HEAD, 0.25-20, 0.38 L	2	025519.195.000	Stainless Steel 18-8
235	TAKEOFF ARM, LOGIX 500SI, SIZE 25/50, 2.00 SPUD, SMHW, ECN 5718, 5898	1	228472.151.000	304 Stainless Steel
236	FOLLOWER ARM, 0.75-3 STROKE, LINEAR, LOGIX 500SI DIGITAL POSITIONER	1	198783.151.000	304 Stainless Steel
240	BOLT, HEX HEAD, 0.38-16, 2.00 L	1	001860.195.000	Stainless Steel 18-8
247	BELLOWS, STEM, SIZE 25	1	015498.652.000	Rubber, Neoprene
248	GASKET, ELASTOMER, 1.31 X 0.75, 0.06 THICK	1	001051.655.000	Rubber, Neoprene
249	STEM CLAMP, SIZE 25, 2.00 SPUD, SIZE 50, 2.00 SPUD, SMHW ONLY, LOGIX 1000, ANTI-ROTATION	1	134253.211.000	A-743-CF8M
252	PLATE, SERIAL, VALTEK, UNIVERSAL, TEMPLATE STD TAG.CDL	1	254784.151.000	304 Stainless Steel
253	BUSHING, 1.25 OD, 1.00 ID, 0.31 L, SIZE 25, STEM	1	017665.431.000	Bronze, B-438, Gr1
254	RETAINER, 1.50 X 1.00, 0.06 THICK	1	032266.402.000	Brass, B-16-HQ2
256	RET RING, CYLINDER, SIZE 25 LIN	1	016680.029.002	Steel, Carbon
271	O-RING	2	001114.650.000	Rubber, Buna-N
272	O-RING	1	001112.650.000	Rubber, Buna-N
275	O-RING	1	001113.650.000	Rubber, Buna-N
280	S20MD+37-W1D300-GM1-0100, G, ASSY, LOGIX PLUS 500	1	338926.999.000	Purchased Item
289	TRIP, LIMIT SWITCH, SIZE 25	1	035108.151.000	304 Stainless Steel
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
296	BRACKET, VOLUME TANK, SIZE 25/600, LINEAR, SIZE 25/200, ROTARY, 6 GAL	1	099599.029.040	Steel, Carbon
296	BRACKET, POSITION PAC, 2.00/2.62 SPUD, SIZE 25/50, 1.50-3 STROKE, ECN 8228	1	055972.029.040	Steel, Carbon
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 LS25J	1	035457.999.000	Purchased Item
309	FILTER REGULATOR, NORGREN, B08-251-MMA, 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-HQ2
312	VALVE, SWITCHING, SMC MODEL IL220-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 ASSY, 6 GAL, ASME, CL 150, MANCHESTER 3325	1	062750.999.040	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, 0.38-16, 1.00 L	4	001713.010.002	SAE Grade 2, 4, or 5
345	LOCKNUT, 0.38-16, FLEX LOCK, 50 FAF-616	1	063619.195.000	Stainless Steel 18-8
348	LOCKNUT, 5/8-11	1	001120.013.002	Mild Steel
371	RET RING, SNAP, INSIDE, 1.56 DIA	1	032265.029.002	Steel, Carbon
382	VALVE, 3-WAY, 1/4" NPT-F, TYPE L, 700-4F4F-B, SPECIALTY 3420590	1	034747.402.000	Brass, B-16-HQ2
386	STICKER, INDICATOR, AUTO-MANUAL	1	007194.675.000	Plastic, Mylar
393	ASSY, SMHW, SIZE 25, ACTUATOR, HANDWHEEL, 9.00 DIA	1	021535.999.000	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	4	005771.029.002	Steel, Carbon
398	BOLT, HEX HEAD, 0.31-18, 1.00 L	4	002792.010.002	SAE Grade 2, 4, or 5
399	BOLT, HEX HEAD, 0.31-18, 0.75 L	6	001290.010.002	SAE Grade 2, 4, or 5
400	STICKER, FLOWSERVE, SIZE 25, LINEAR, CYLINDER	2	216066.999.000	Purchased Item
401	SCREW, PHILLIPS, #4-40, 0.25 L, THD CUTTING	2	001118.012.002	A-193-B7
401	SCREW, PHILLIPS, #4-40, 0.25 L, THD CUTTING	2	001118.012.002	A-193-B7
402	SCREW, DRIVE, #4, 0.25 L	4	007516.195.000	Stainless Steel 18-8
403	BOLT, HEX HEAD, 0.31-18, 0.62 L	4	004403.195.000	Stainless Steel 18-8
404	WASHER, FLAT, 0.69 OD, 0.34 ID, 0.07 THICK, 0.31 THD	2	044390.195.000	Stainless Steel 18-8
406	BOLT, HEX HEAD, 0.38-16, 1.00 L	2	001713.010.002	SAE Grade 2, 4, or 5
414	BOLT, HEX HEAD, 0.31-18, 0.75 L	2	001290.010.002	SAE Grade 2, 4, or 5
415	BOLT, HEX HEAD, 0.31-18, 1.75 L	4	002482.010.002	SAE Grade 2, 4, or 5
416	WASHER, FLAT, 0.69 OD, 0.34 ID, 0.07 THICK, 0.31 THD	4	044390.006.002	Steel, Spring
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	167900.999.000	Purchased Item
461	BOLT, HEX HEAD, M8 X 1.25, 15MM L	2	166114.195.000	Stainless Steel 18-8
462	LOCKNUT, M8 X 1, NYLON INSERT	1	185159.195.000	Stainless Steel 18-8
463	PIN, FOLLOWER, LEVER ARM, POSITIONER, LOGIX 500SI	1	222516.999.000	Purchased Item
464	WASHER, FLAT, M6	1	106296.195.000	Stainless Steel 18-8
465	NUT, 6MM	1	034142.195.000	Stainless Steel 18-8



Terminal Strip	Color	Wiring
1	Red	NC
2	White	C
3	Black	NO
4	Red	NC
5	White	C
6	Black	NO

(ALL SWITCHES SHOWN IN UNACTUATED POSITION)

SENSOR #1 (INDICATE OPEN)

SENSOR #2 (INDICATE CLOSE)

280 LOGIX 500 POSITIONER

305 POSITION PAC A2 (2 SPDT)

ELECTRICAL SCHEMATIC

MODEL	MARK I GLOBE	DRAWN BY BJK	DATE 05-24-2016	CERTIFIED DIMENSIONAL DRAWING		
SIZE	2.00 INCH	CERTIFIED BY	SG			
RATING	STD 300	S75.08.03	DATE 05-24-2016	CUSTOMER		
END PREP.	SOC WELD	THIRD ANGLE PROJECTION		VOGT POWER INTERNATIONAL		
TRIM TYPE	UNBALANCED			PURCHASE ORDER NO. V0009762		
TRIM NO	CV .62			PROJECT OR JOB V17494-MIDDLE TOWN		
ACT. SIZE	25 SQ IN			ITEM NO.		
SPRING	STANDARD			TAG NO.		
AIR ACTION	OPEN			1LP-TCV3202		
FAIL MODE	CLOSE			LP ECONOMIZER BYPASS CONTROL VALVE		
				SHEET 2 of 2		
				SCALE: NONE		
				VALTEK S/N 8004233.005		
				SIZE C		
				REV 2		