

14. MARK USING INK STAMP ON SOLENOID FACE
 PREECE INC. 21392
 SV1004 "REV LTR"
 SERIAL#: "SEE Q.A. FOR NUMBER"
 DATE
 ME52292
 MAWP 900 PSI

13. SHIM ASSEMBLY IAW ASSEMBLY JT 26786

12. VIBRATION

- 12.1 SINE, SWEEP RATE, 4 OCTAVE/MIN (SAME ALL AXIS)
 - 12.1.1. 7.30 INCH/SEC 5-89 HZ
 - 12.1.2. 10.5 G 89-800 HZ
 - 12.1.3. 15.0 G 800-2000 HZ
- 12.2 RANDOM, DURATION, 20 SEC/AXIS (SAME ALL AXIS)
 - 12.2.1. SPECTRUM: 20.4 GRMS
 - 12.2.2. 0.115 G²/HZ 20 HZ
 - 12.2.3. 0.225 G²/HZ 1000 HZ
 - (ON 0.52 - DB/OCTAVE SLOPE)
 - 12.2.4. 0.225 G²/HZ 1000-2000 HZ

11. RESPONSE TIMES

- 11.1 OPENING RESPONSE TIME, 28 VDC, 300 PSIG, 70°F: 8 - 12 MS TRACKED WITH CURRENT TRACE
- 11.2 CLOSING RESPONSE TIME, 28 VDC, 300 PSIG, 70°F: 2 - 5 MS TRACKED WITH CURRENT TRACE
- 11.3 MAX. OPENING RESPONSE TIME, 24 VDC, 750 PSIG, 70°F: 20 MS MAX. TRACKED WITH CURRENT TRACE
- 11.4 MAX. CLOSING RESPONSE TIME, 24 VDC, 750 PSIG, 70°F: 10 MS MAX. TRACKED WITH CURRENT TRACE

10. LIFECYCLE

- 10.1 100,000 CYCLE MIN. AT 10 CYCLES PER SECOND, WITH 28 VDC APPLIED TO COIL AT 500 PSIG
- 10.2 50% DUTY CYCLE WITH MAXIMUM TIME OF 2 MINUTES AT 100°F
- 10.3 MAXIMUM TIME IN ENERGIZED POSITION: 30 SECONDS
- 10.4 OUTPUT FLOW RESTRICTED USING A ϕ .060" ORIFICE DURING TESTING

9. ELECTRICAL DATA

- 9.1 OPERATING VOLTAGE: 24-32 VDC
- 9.2 CURRENT: .70-1.2 AMPS
- 9.3 PULL-IN VOLTAGE 15 VDC MIN AT 70°F
- 9.4 DROP-OUT VOLTAGE 1 VDC MIN AT 70°F
- 9.5 ELECTRICAL CONNECTION SHALL BE ACCOMPLISHED USING A TWO-WIRE PIGTAIL, 6IN LONG. THESE WIRES SHALL BE STRAIN RELIEVED. WIRES CONDUCTOR SHALL BE 20 GAGE EE INSULATED TEFLON.
- 9.6 INSULATION RESISTANCE SHALL BE > 20 MEGOHMS
- 9.7 CURRENT MUST BE MET AT 32 VDC AND 70°F

8. LEAKAGE

- 8.1 INTERNAL: 6 CC/HR, USING GAS HE AT 70°F
- 8.2 EXTERNAL: ZERO BUBBLE PER 5 MINUTES USING GAS NITROGEN AT 70°F
 (BUBBLE TIGHT, MEASURED AT THE OUTLET OF THE VALVE NOSE)

7. FLOW: 100 - 140 SCFM AT 300 PSIG INLET PRESSURE, 0 PSIG BACK PRESSURE, USING GAS N2

6. MATERIALS: ALUMINUM 6061-T6, ANODIZED FINISH FOR EXTERNAL MATERIALS

5. WEIGHT: 0.600 LBS. MAX.

4. OPERATING ENVIRONMENT

- 4.1 FLUID: NITROGEN, ARGON, HELIUM
- 4.2 TEMPERATURE: -40°F TO +120°F

3. PRESSURE

- 3.1 OPERATING PRESSURE: 25 - 900 PSIG
- 3.2 PROOF PRESSURE: 2000 PSIG
- 3.3 BURST PRESSURE: 3000 PSIG

2. DIMENSIONS AND TOLERANCES PER ANSI Y14.5-1982.



1. INTERPRET DWG PER DOD-STD-100C.

NOTES: UNLESS OTHERWISE SPECIFIED

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REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE PER EO 9873	3/14/06	D.L.
A	REVISED PER EO 10393	7/27/06	D.L.
B	REVISED PER EO 10677	1/15/07	D.L.
C	REVISED PER EO 10734	3/17/07	<i>[Signature]</i>

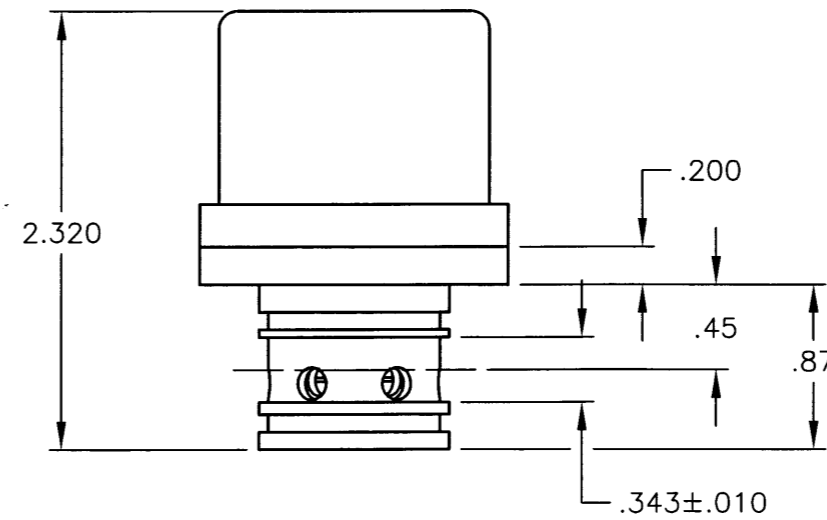
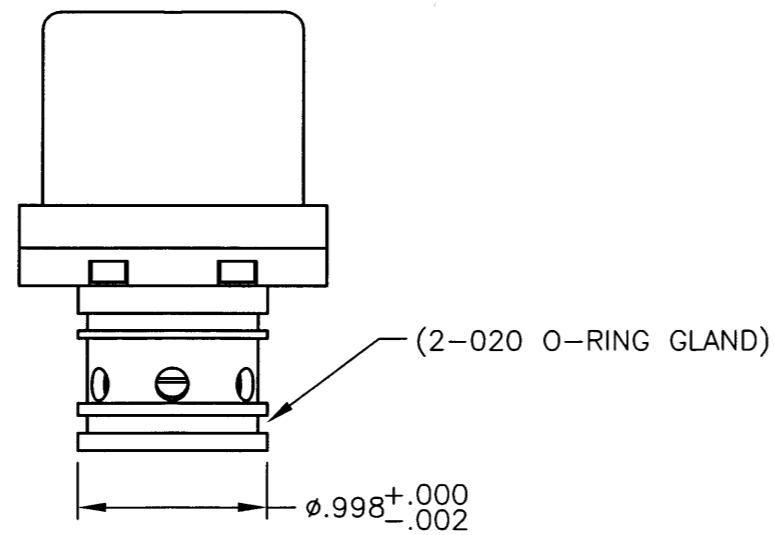
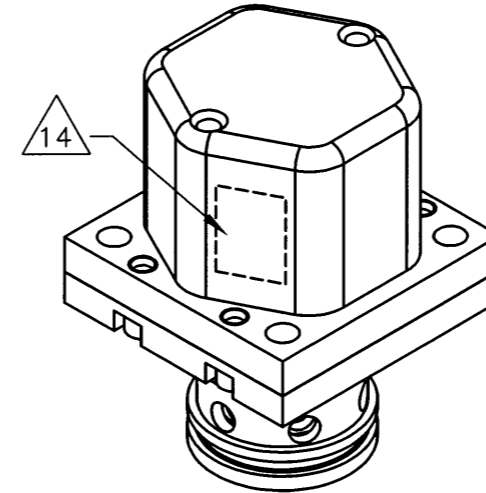
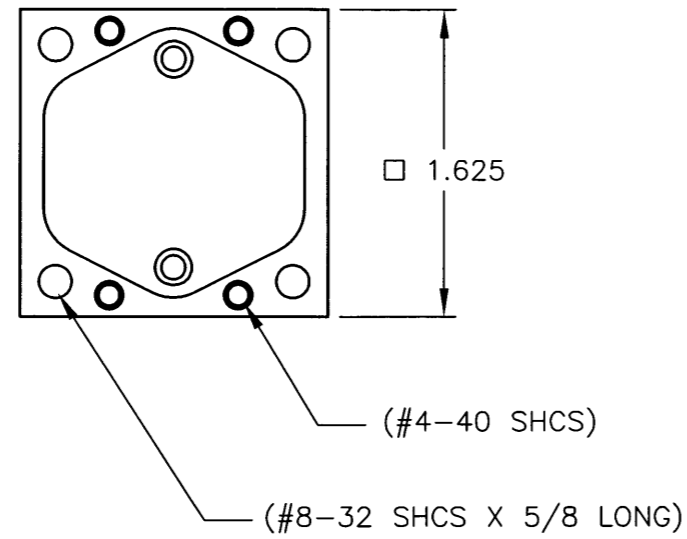
	2" 18	P-224, 2" WIDE	KAPTON TAPE
	4 17	MS21209C0615	HELICOIL
	1 16	44374	PIN
	1 15	SL-0547-051-N	O-RING, SLEEVE
	1 14	44373	SLEEVE
	AR 13	44317	SHM, .001 THICK, .187 OD, .125 ID
	1 12	SL-0335-042-N	O-RING
	1 11	SL-1395-045-N	O-RING, GASKET
	1 10	9739-2-018-N	O-RING
	1 9	44312	SPRING
	1 8	44314	GASKET
	1 7	44315	CLAPPER
	1 6	44313	BUSHING
	1 5	44318	PLUNGER FINISH
	2 4	MS9390-010	PIN, .0625 DIA X .25, CRES
	1 3	44316	VALVE BODY
	4 2	4070	SCREW #4-40 X .250 LONG, CRES, A-286
	1 1	8071	SOLENOID
	-	-	SV1004
			SOLENOID VALVE, TOP-ASSY
QTY REQD	ITEM NO.	PART NUMBER	NOMENCLATURE

← ASSY		PARTS LIST	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES .XXX = ± .010 .XX = ± .03 .X = ± .1 ANGLES = ± 0°30'		 	
CAD FILES SV1004		HIGH FLOW, SOLENOID VALVE	
DFT <i>D. Nguyen</i>	12/8/05	SIZE B	REV LTR C
CHK <i>M. Neurauter</i>	3/8/06	CODE IDENT NO. 21392	DWG NO. SV1004
DES		SCALE NONE	RLSE DATE
OTHER ACTIVITY APPD		SHEET 1 OF 3	
PREECE APPD <i>D. Lincoln</i>	3/14/06		

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REVISIONS

LTR	DESCRIPTION	DATE	APPROVED
	SEE SHEET 1		



SIZE	CODE IDENT NO.	DWG NO.	REV	LTR
B	21392	SV1004	C	
SCALE 1/1		RLSE DATE	SHEET 2 OF 3	

14 SHIM ASSEMBLY IAW ASSEMBLY JT 27421

13 MARK USING INK STAMP ON SOLENOID FACE
PREECE INC. 21392
SV1005 "REV LTR"
SERIAL #: "SEE Q.A. FOR NUMBER"
DATE
ME44426
MAWP 900 PSI

12. VIBRATION

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 - 12.1.1: 7.30 INCH/SEC 5-89 HZ
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11. RESPONSE TIMES

- 11.1 OPENING RESPONSE TIME, 28 VDC, 300 PSIG, 70°F: 6-10 MS TRACKED WITH CURRENT TRACE
- 11.2 CLOSING RESPONSE TIME, 28 VDC, 300 PSIG, 70°F: 2-5 MS TRACKED WITH CURRENT TRACE
- 11.3 MAX. OPENING RESPONSE TIME, 24 VDC, 750 PSIG, 70°F: 17 MS MAX. TRACKED WITH CURRENT TRACE
- 11.4 MAX. CLOSING RESPONSE TIME, 24 VDC, 750 PSIG, 70°F: 5 MS MAX. TRACKED WITH CURRENT TRACE

10. LIFECYCLE

- 10.1 100,000 CYCLE MIN. AT 10 CYCLES PER SECOND, WITH 28 VDC APPLIED TO COIL AND AT 700 PSIG SUPPLY PRESSURE
- 10.2 50% DUTY CYCLE WITH MAXIMUM TIME OF 2 MINUTES AT 100°F
- 10.3 MAXIMUM TIME IN ENERGIZED POSITION: 30 SECONDS
- 10.4 OUTPUT FLOW RESTRICTED USING A ϕ .046" ORIFICE DURING TEST

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(BUBBLE TIGHT, MEASURED AT THE OUTLET OF THE VALVE NOSE)

7. FLOW: 50 SCFM AT 300 PSIG INLET PRESSURE, USING NITROGEN GAS

6. MATERIALS: ALUMINUM 6061-T6, ANODIZED FINISH FOR EXTERNAL MATERIALS

5. WEIGHT: 0.400 LBS. MAX.

4. OPERATING ENVIRONMENT

- 4.1 FLUID: NITROGEN, ARGON, HELIUM
- 4.2 TEMPERATURE: -40°F TO +120°F

3. PRESSURE

- 3.1 OPERATING PRESSURE: 25-900 PSIG
- 3.2 PROOF PRESSURE: 1500 PSIG
- 3.3 BURST PRESSURE: 2000 PSIG

2. DIMENSIONS AND TOLERANCES PER ANSI Y14.5-1982.



1. INTERPRET DWG PER DOD-STD-100C.

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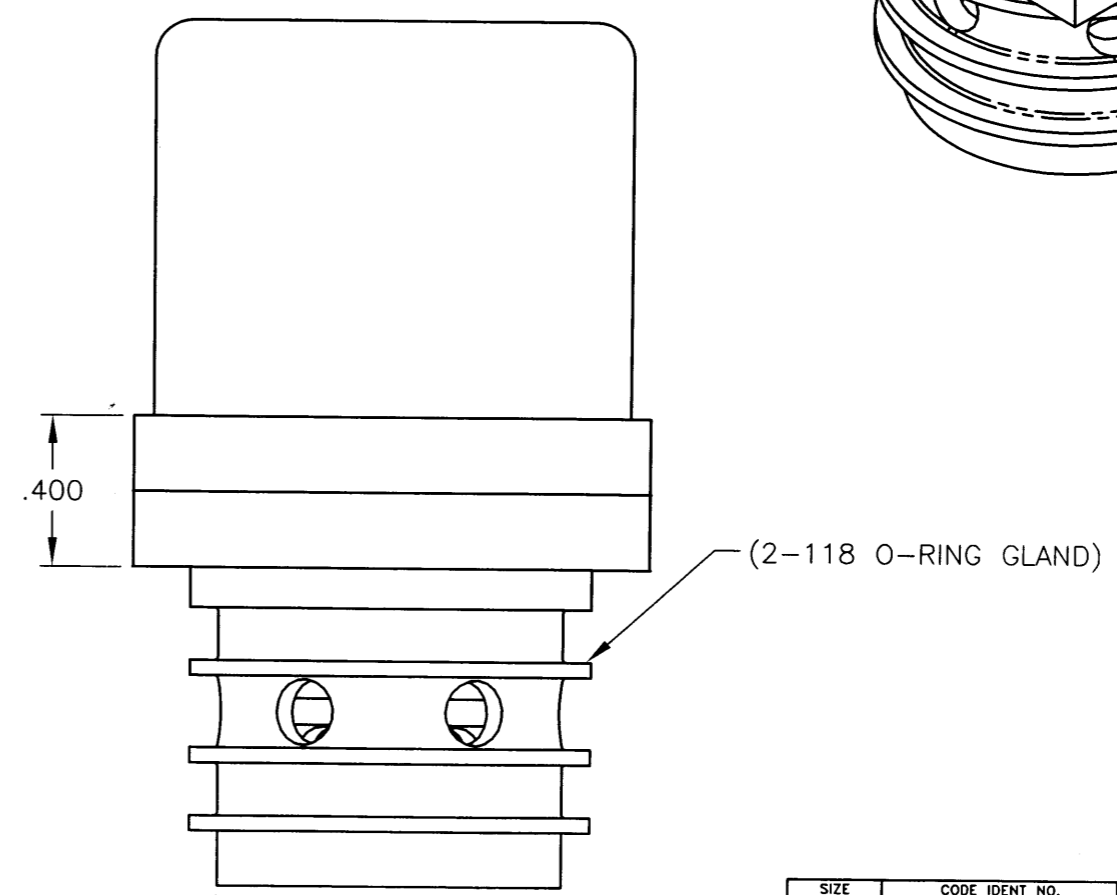
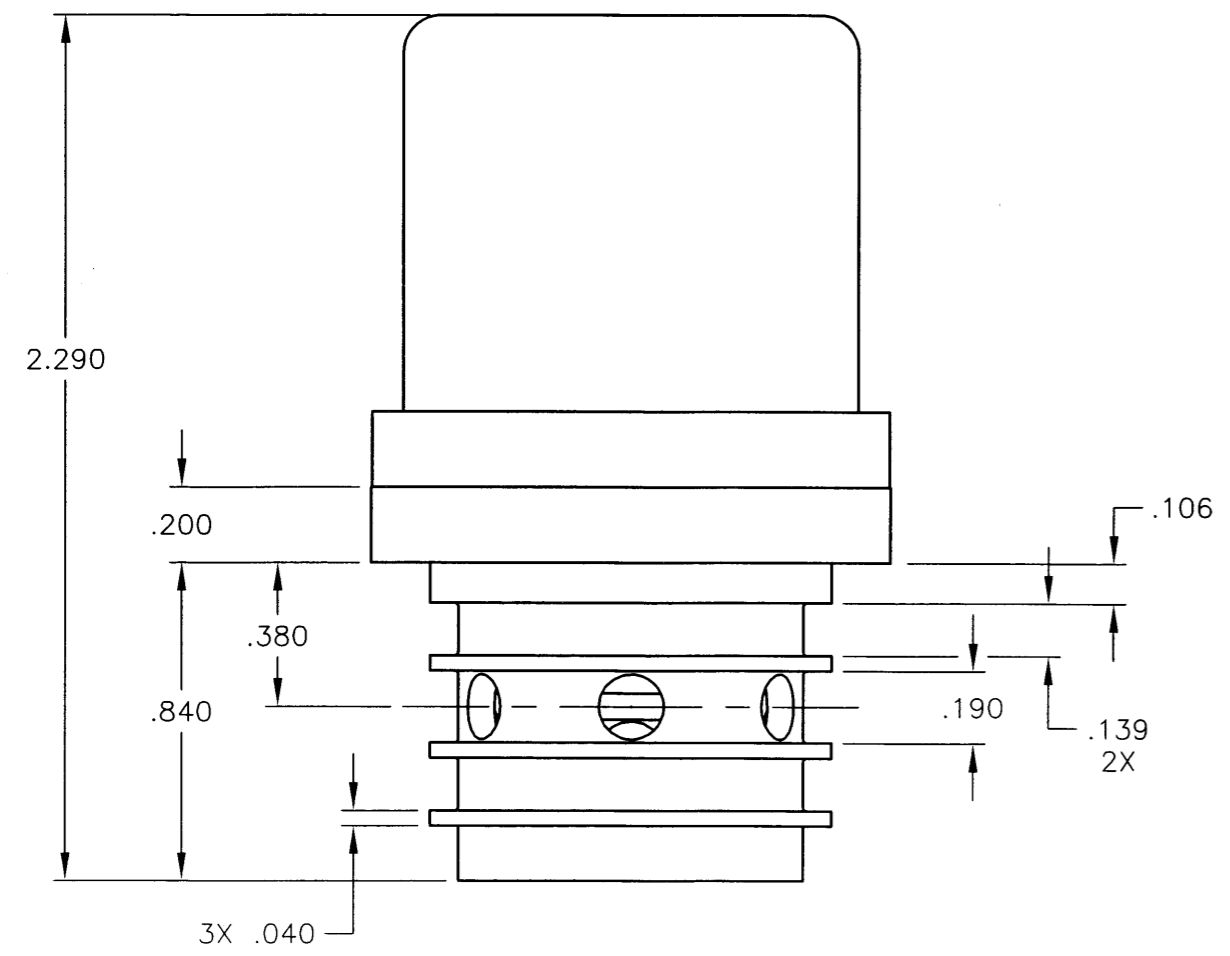
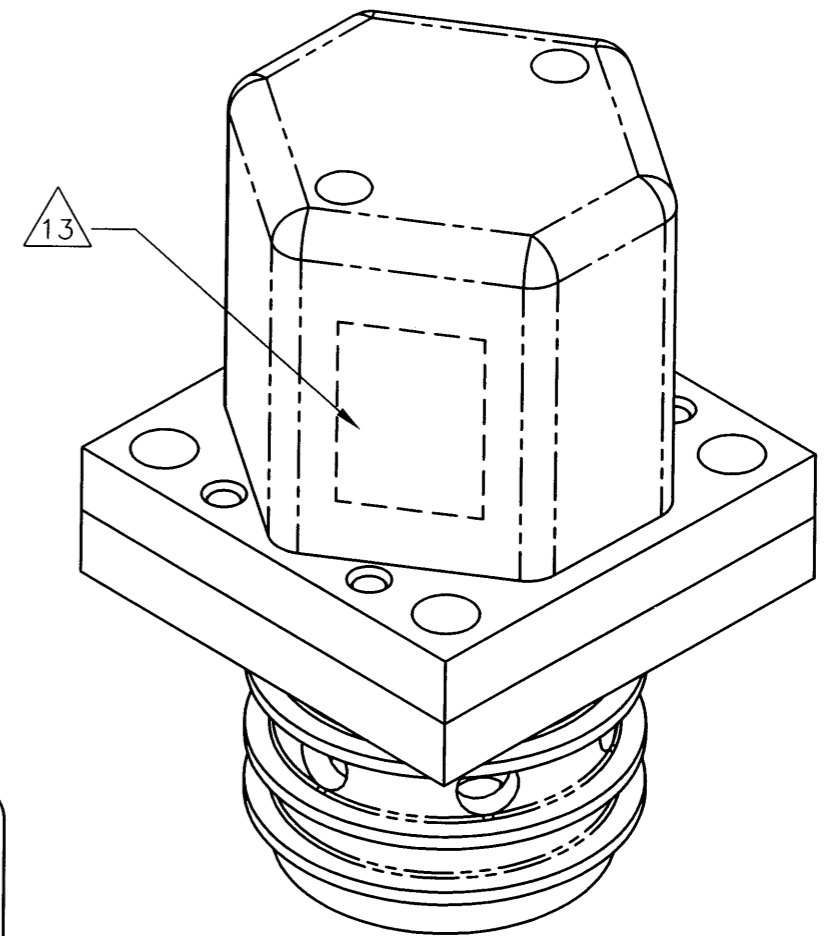
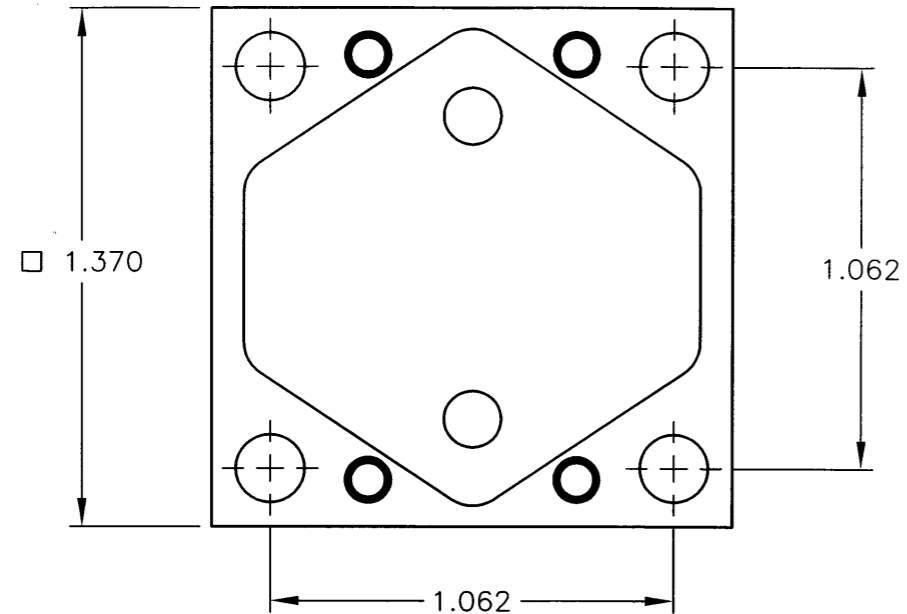
REVISIONS

LTR	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE PER EO 10583	11/1/06	D.L.
A	REVISED PER EO 10724	2/20/07	D.L.
B	REVISED PER EO 10735	3/13/07	D.L.
C	REVISED PER EO 11006	1/08/08	D.L.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES .XXX = ± .010 .XX = ± .03 .X = ± .1 ANGLES = ± 0°30'		 PREECE INC. 11 CHRYSLER IRVINE, CA 92618		 DECCA VALVES A DIVISION OF PREECE INC.			
CAD FILES		SV1005		HIGH SPEED SOLENOID VALVE			
DFT	D.NGUYEN	10/23/06					
CHK	M.NEURAUTER	10/30/06					
DES				SIZE	CODE IDENT NO.	DWG NO.	REV LTR
OTHER ACTIVITY APPD				B	21392	SV1005	C
PREECE APPD	D.LINCOLN	11/1/06		SCALE	NONE	RLSE DATE	SHEET 1 OF 3

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REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
	SEE SHEET 1		



SIZE B	CODE IDENT NO. 21392	DWG NO. SV1005	REV LTR C
SCALE 2/1	RLSE DATE	SHEET 2 OF 3	