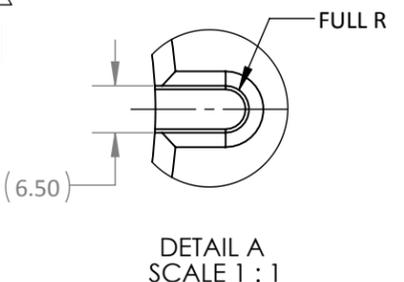
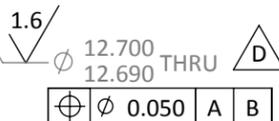
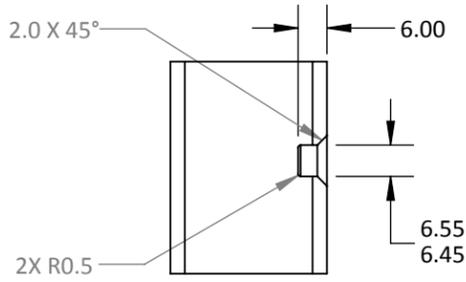
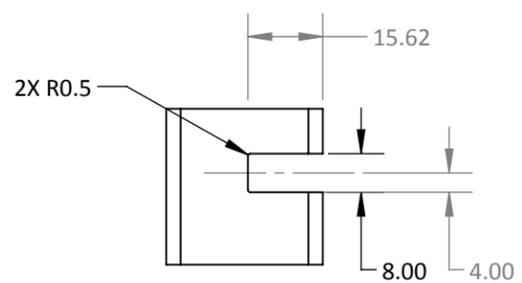
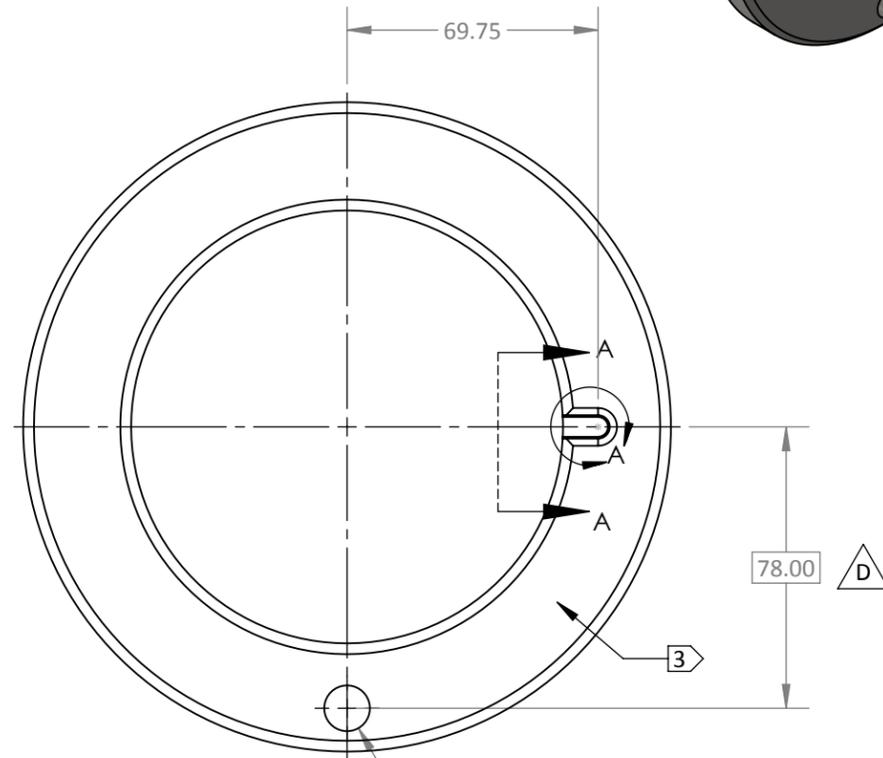


APPROXIMATELY 1MM EXTRA ON "X" & "Y"  
FINAL DIMENSIONS FOR "X" & "Y" TO BE  
DETERMINED AT ASSEMBLY



NOTES:

- MATERIAL: 34CrNiMo, ALT AISI 4140H, 4142H, 4340H STEEL BAR STOCK. PROVIDE INSPECTION REPORTS OR PROOF ACCORDING TO THE PROVISIONS EN-10204-3.1.
- HEAT TREAT: PRE-HEAT TREATED 269-321 BHN
- IDENTIFY WITH PART NUMBER, REV LEVEL, SUPPLIER INITIALS, JOB NUMBER, AND SHOP ORDER NUMBER
- NON SPECIFIED FILLETS - R3, NON SPECIFIED CHAMFERS -1x45°

REV	CHANGED FROM	BY	DATE	APRD
A	INITIAL CREATION	JMG	9/24/12	
B	PRE-RELEASE. REVIEWED PER 1509-ENC-004	CPS	1/14/13	
C	CHANGES PER NREL DRW REVIEW. UPDATED BORDER	CPS	3/13/13	
D	RELEASE FOR PRODUCTION	CPS	4/19/13	
E	CHANGES REQUESTED PER MANUFACTURER DRW REVIEW	CPG	12/18/13	

REPORT ERRORS & CHANGES  
REMOVE ALL BURRS AND SHARP EDGES  
DIMENSIONS ARE IN MILLIMETERS.  
UNSPECIFIED TOLERANCES:  
DECIMALS: FINISH: ANGLES:

X. ±1.0 3.2  $\sqrt{\mu m Ra}$  <math>\le \pm 0.5^\circ</math>  
.X ±0.5  
.XX ±0.25

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OTHER DRAWINGS OR MACHINERY

DRAWN JMG DATE: 9/24/12  
CHECKED NJB THIRD ANGLE PRJ

**National Renewable Energy Laboratory**

TITLE: **SPACER, PLANET PIN BEARING**

SIZE **B** DWG. NO. **254548** REV **E**

SCALE: 1:2 WEIGHT: 2.26 kgs SHEET 1 OF 1