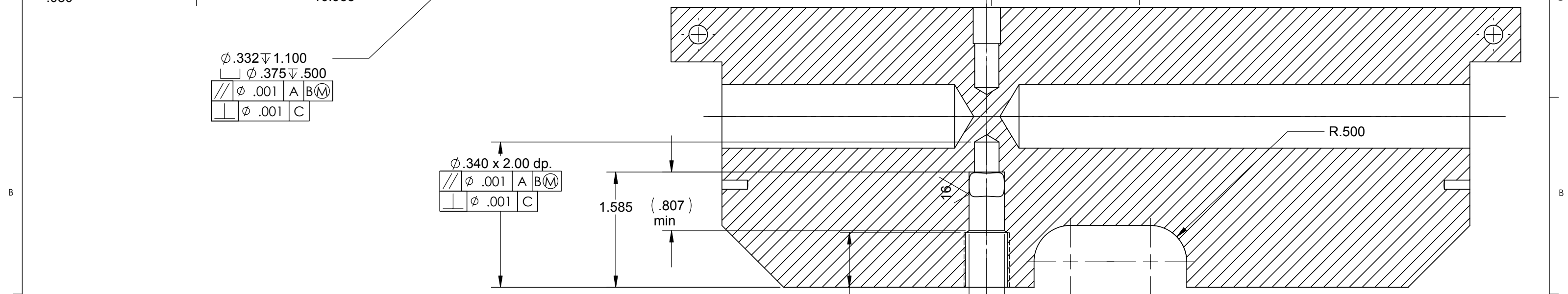
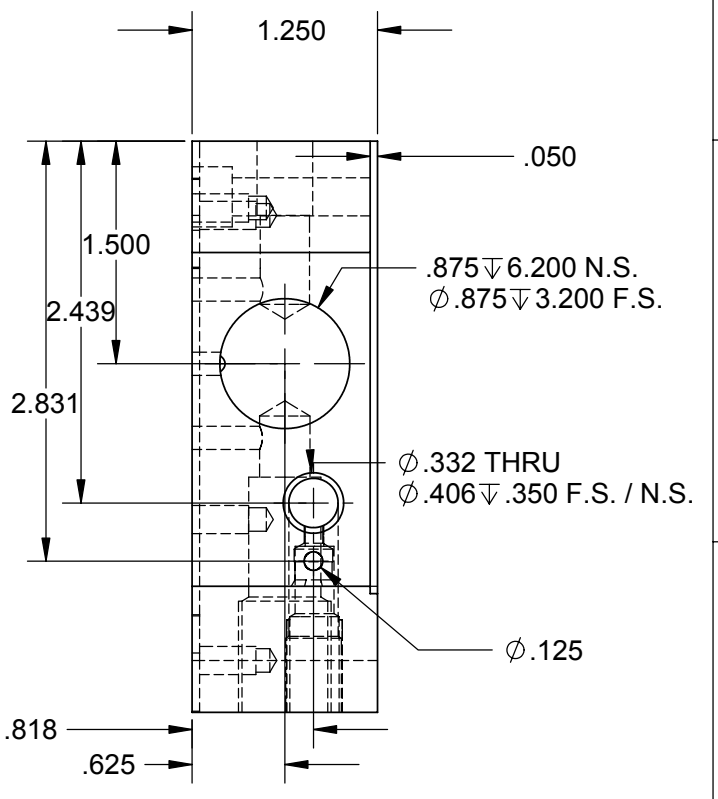
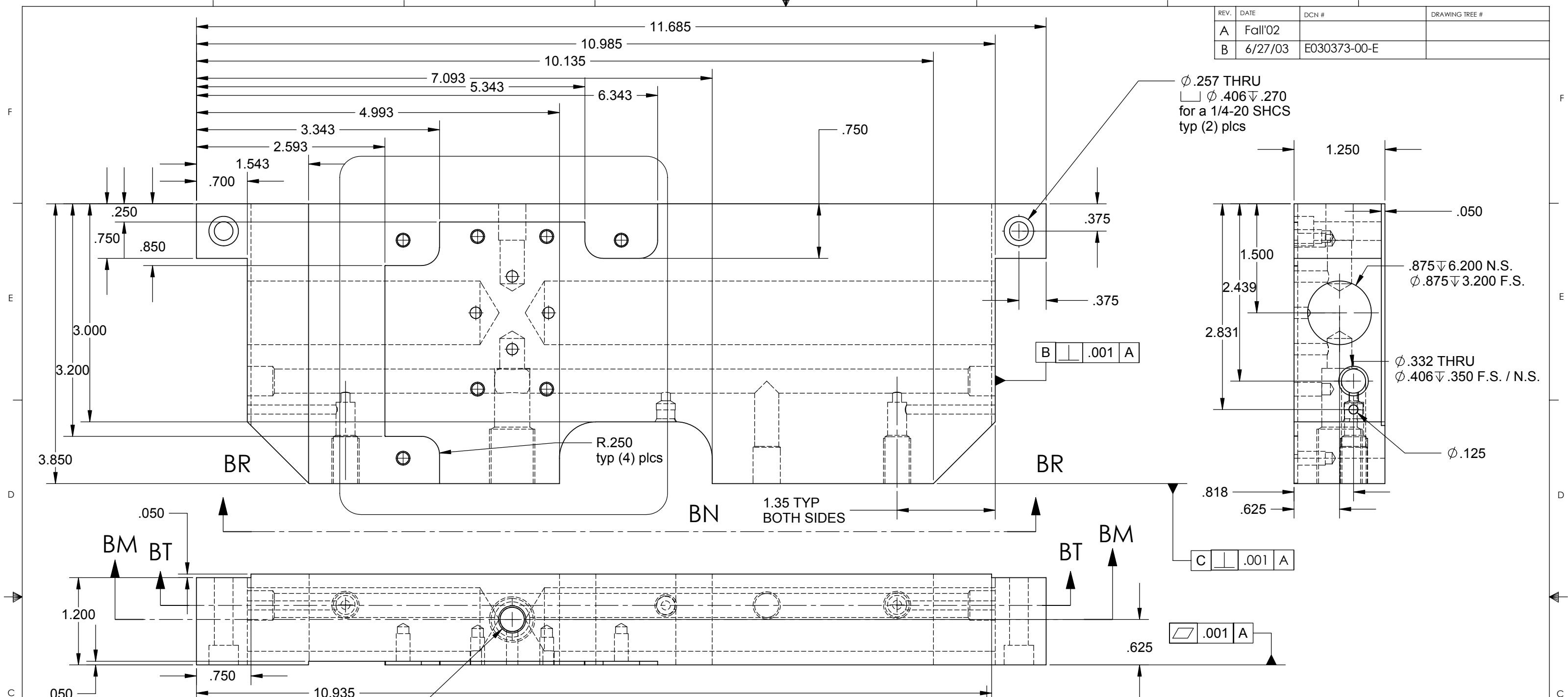


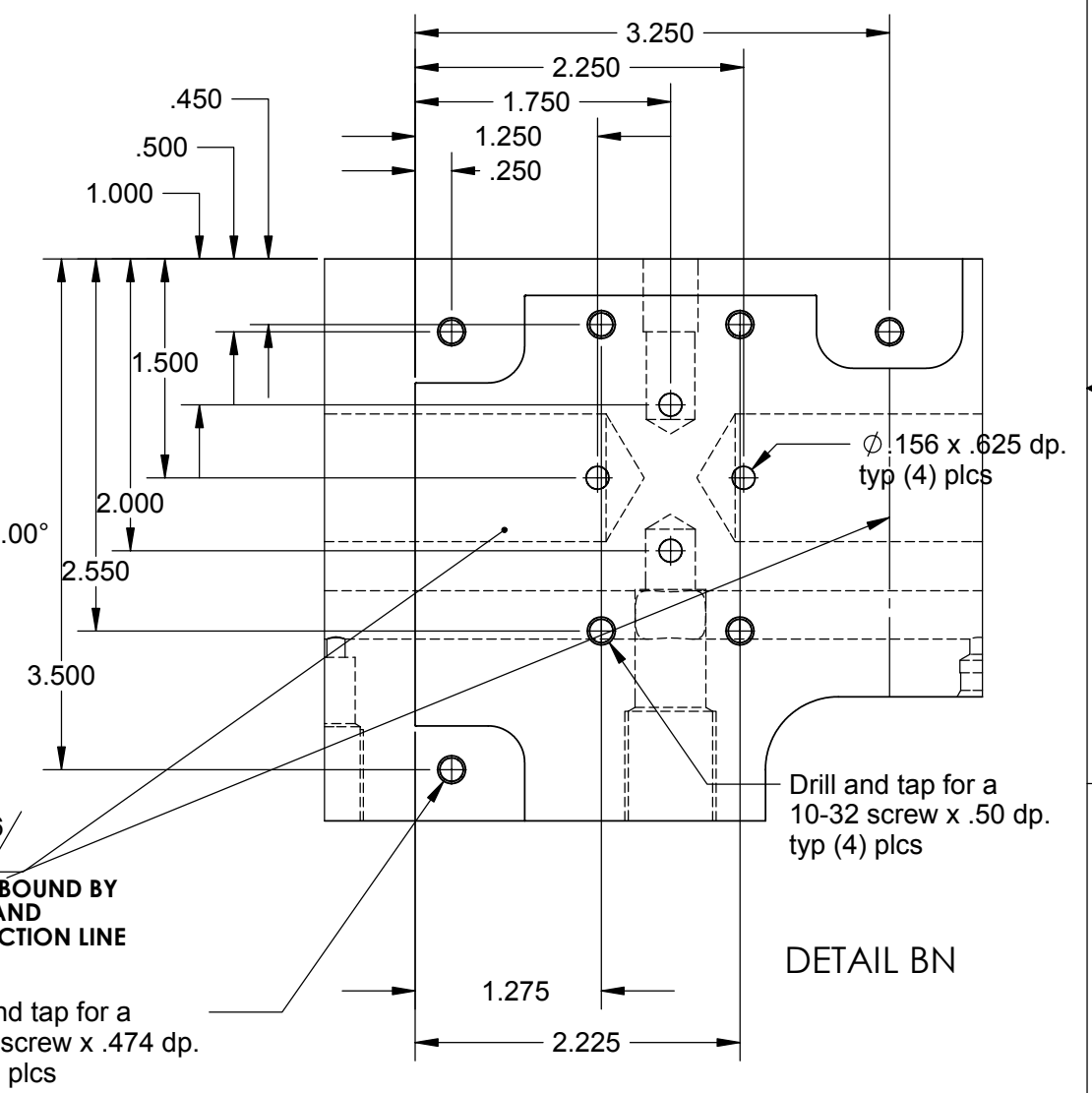
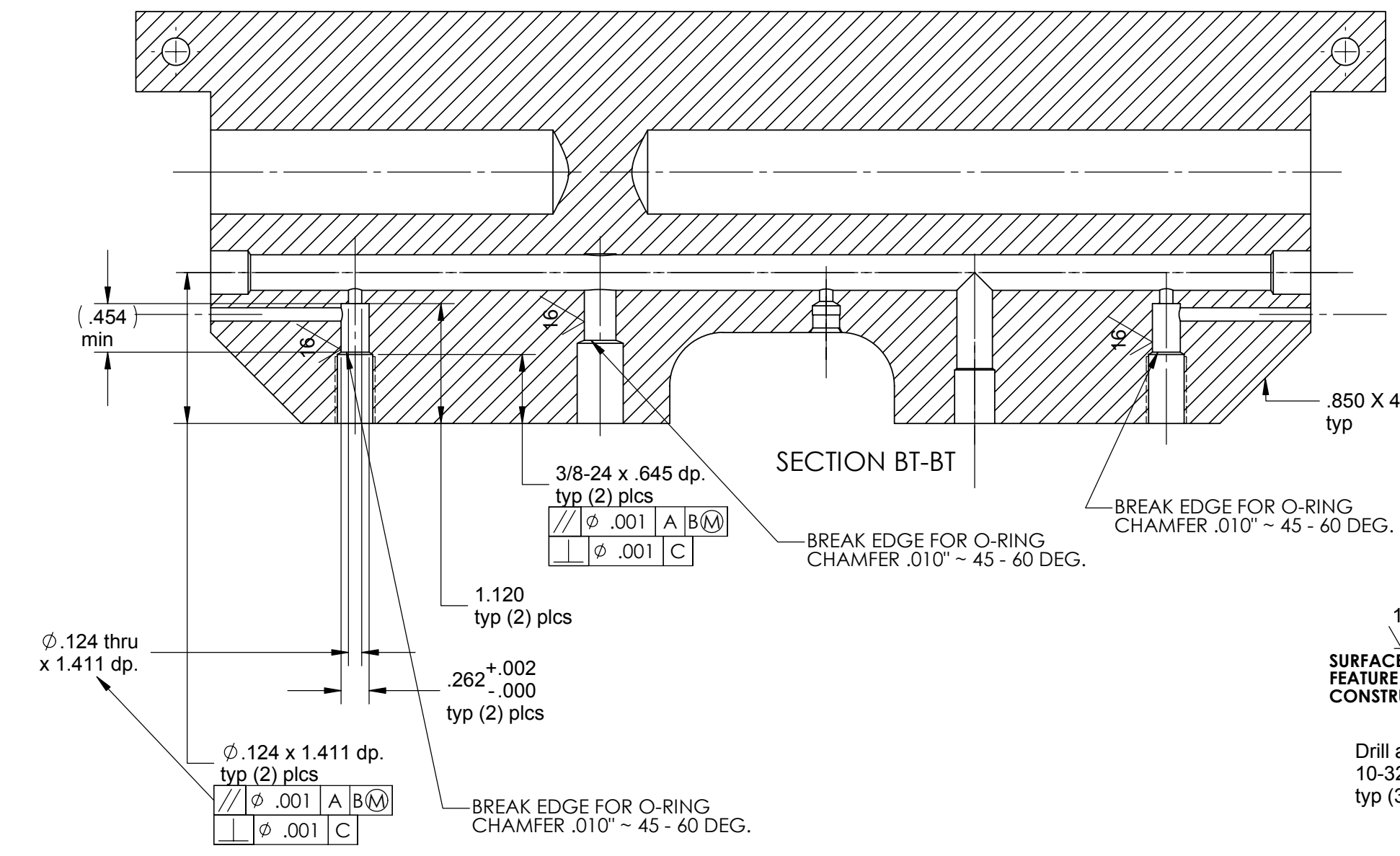
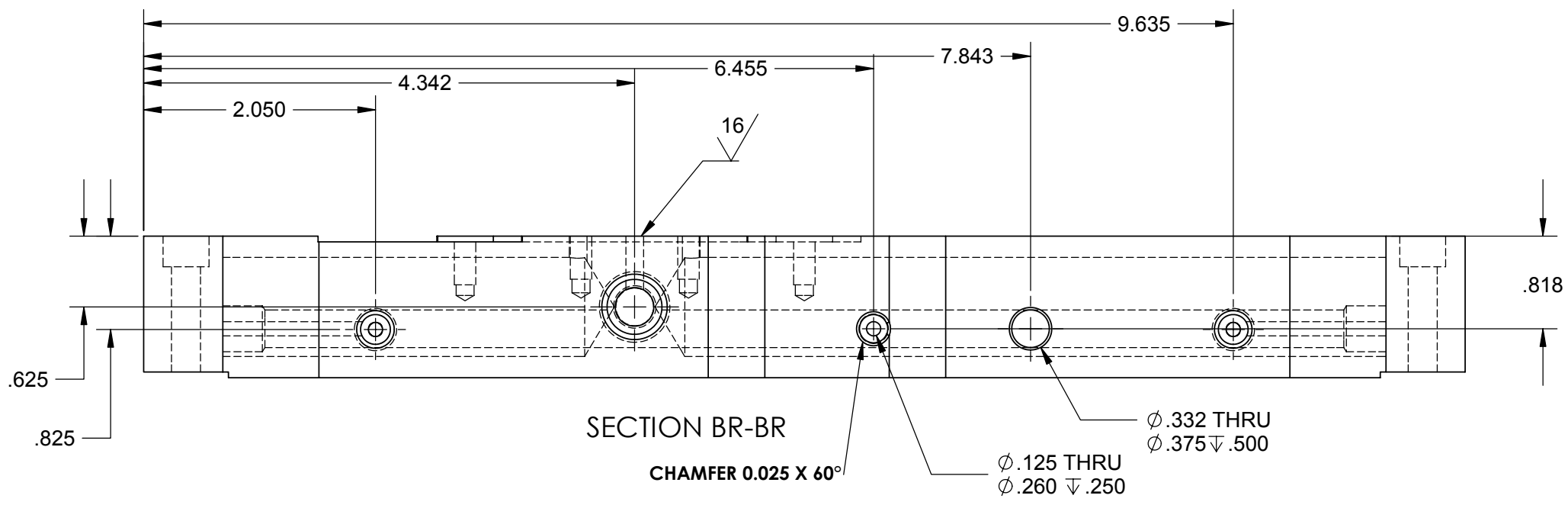
REV.	DATE	DCN #	DRAWING TREE #
A	Fall'02		
B	6/27/03	E030373-00-E	



SECTION BM-BM

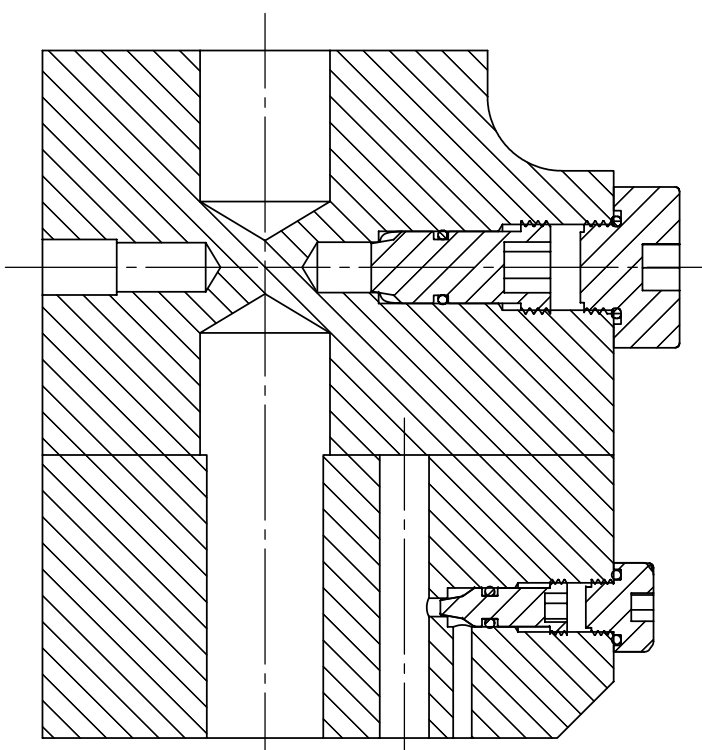
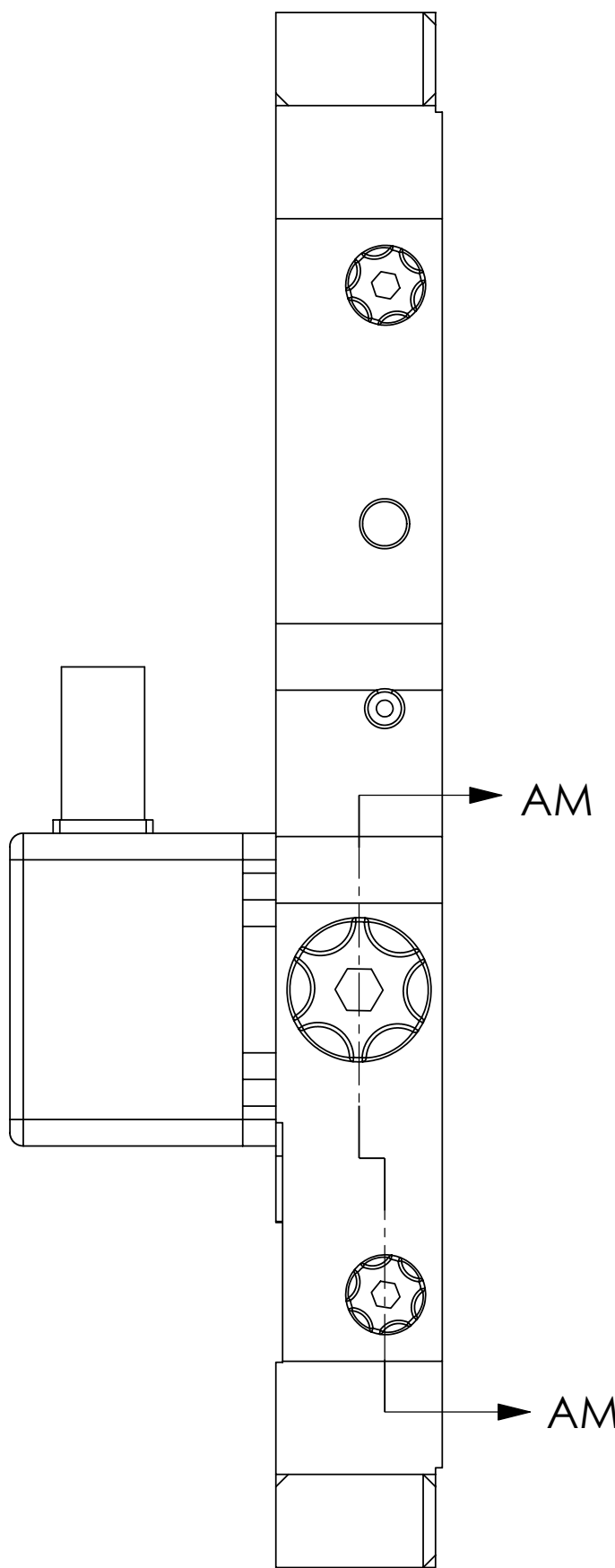
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES		DATE	NAME	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
TOLERANCES: .XX ± 0.020"		DRAWN	4/02		Hardham
.XXX ± 0.005"		REDRAWN	Fall' 02		Hammond
ANGULAR ± 30°		REDRAWN	6/27/03		Spjeld
MATERIAL	304L	CHECKED	2/9/03	Kern	
FINISH	32 RMS unless noted	COMMENTS:			
		1 Required for each actuator			
SIZE	DWG. NO.	PART NAME			
C	D020300 Sheet 1 of 3	HEPI Manifold Sheet 1 of 3			
SCALE:	1:1 unless noted	REV	B		
		Sht. No. 31 / 43			

REV.	DATE	DCN #	DRAWING TREE #
A	Fall'02		
B	6/25/03	E030373-00-E	

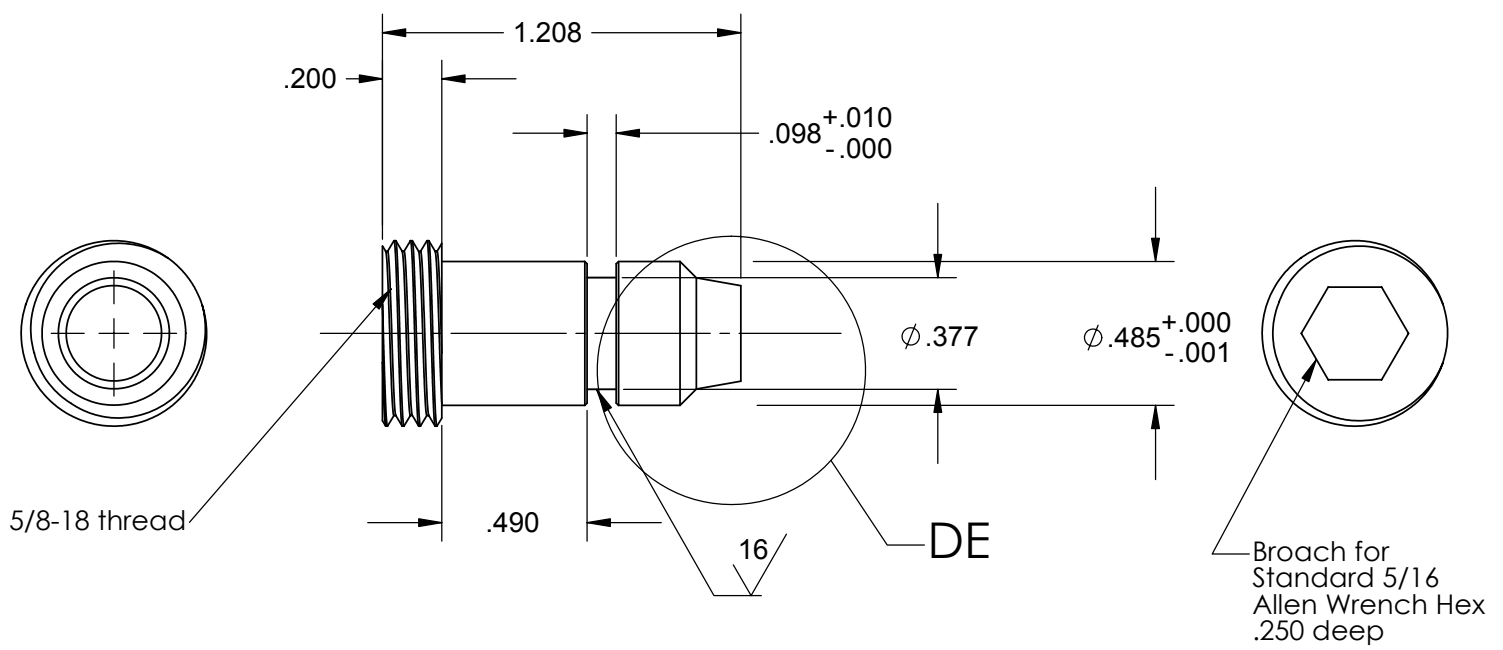


UNLESS OTHERWISE SPECIFIED:		DATE	NAME	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY
DIMENSIONS ARE IN INCHES		4/02	Hardham	
TOLERANCES:		REDRAWN	Fall' 02	SYSTEM
.XX ± 0.020"		REDRAWN	6/25/03	SUB-SYSTEM
.XXX ± 0.005"		CHECKED	2/9/03	NEXT ASSY
ANGULAR ± 30°		COMMENTS:		PART NAME
MATERIAL	304 L			HEPI Manifold Sheet 2 of 3
FINISH	.32 RMS unless noted			SIZE DWG. NO.
				C D020300 Sheet 2 of 3
				REV B
				SCALE: 1:1 unless noted
				Sht. No. 32 / 43

REV.	DATE	DCN #	DRAWING TREE #
A	Fall'02		

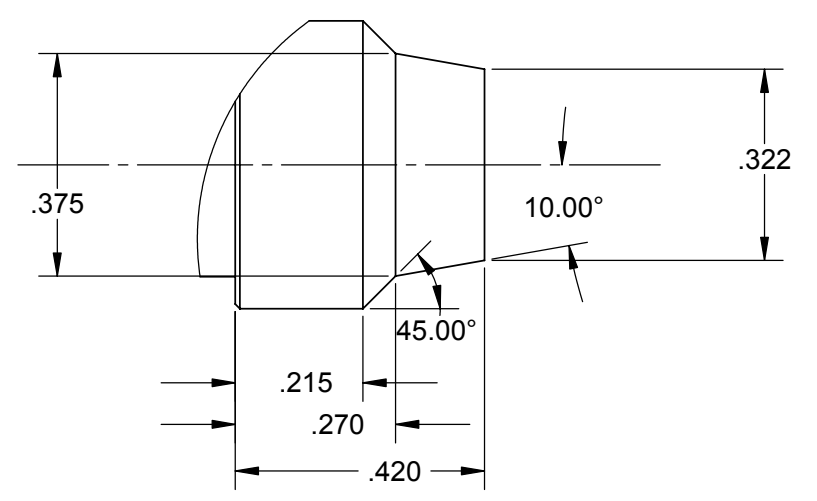


SECTION AM-AM



Broach for Standard 5/16 Allen Wrench Hex .250 deep

**Manifold
Large Pin Valve
D020367-1
Mat'l: 17-4PH
Heat Treat
H-900
(1) required**



DETAIL DE
SCALE 4 : 1

UNLESS OTHERWISE SPECIFIED:		DATE	NAME	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY
DIMENSIONS ARE IN INCHES		4/02	Hardham	
TOLERANCES: .XX ± 0.020"		REDRAWN	Fall' 02	SYSTEM LASTI
.XXX ± 0.005"		CHECKED	2/9/03	SUB-SYSTEM HEPI
ANGULAR ± 30'				NEXT ASSY
MATERIAL 304 L		COMMENTS:		PART NAME HEPI Manifold Sheet 3 of 3 with Large Pin Valve
FINISH 32 RMS unless noted				SIZE DWG. NO. C D020300 Sheet 3 of 3
				SCALE: 1:1 unless noted
				Sht. No. 33 / 43