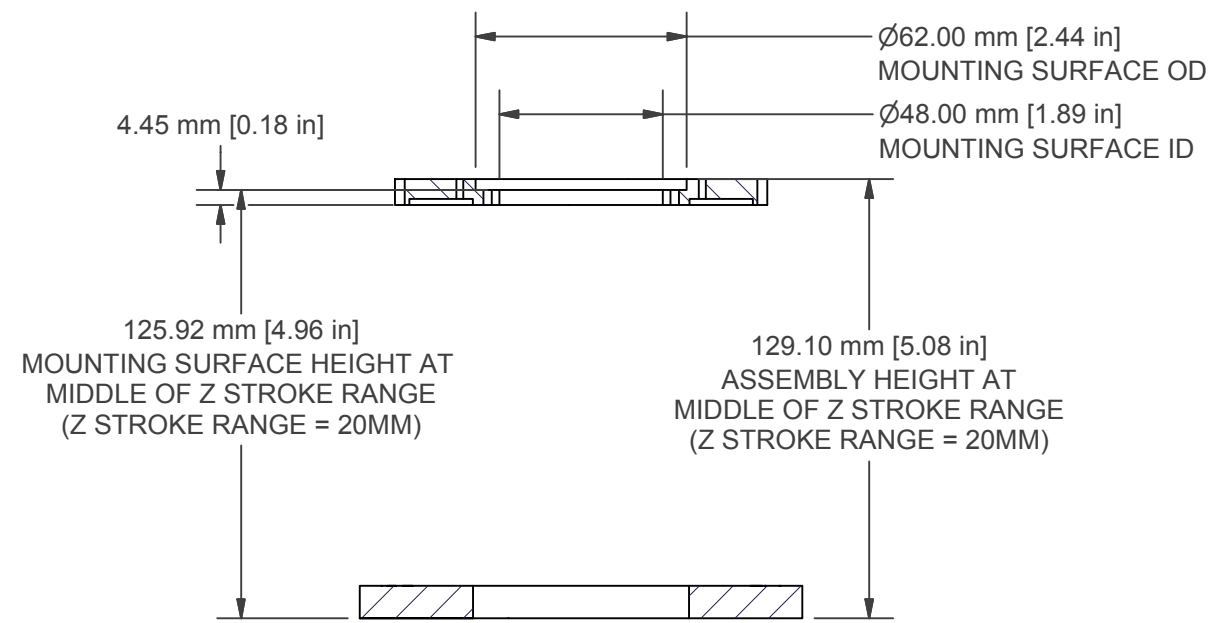
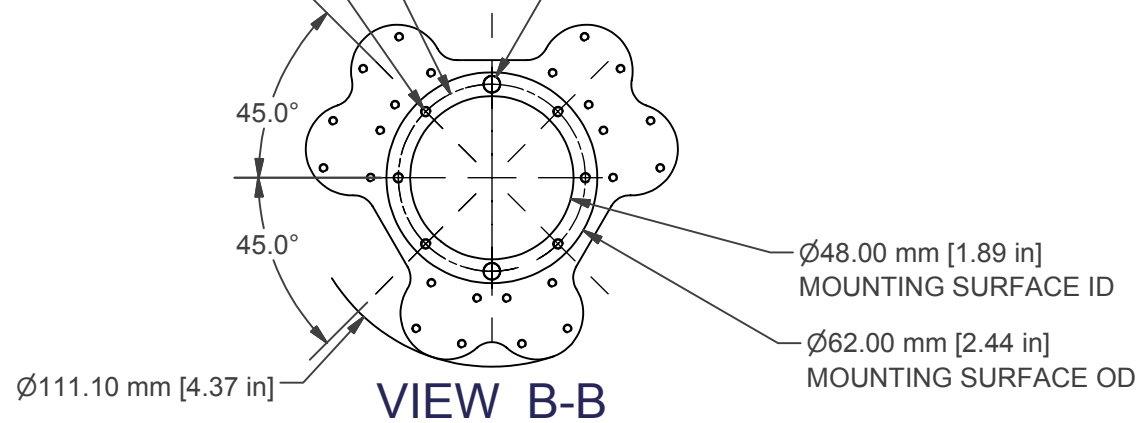


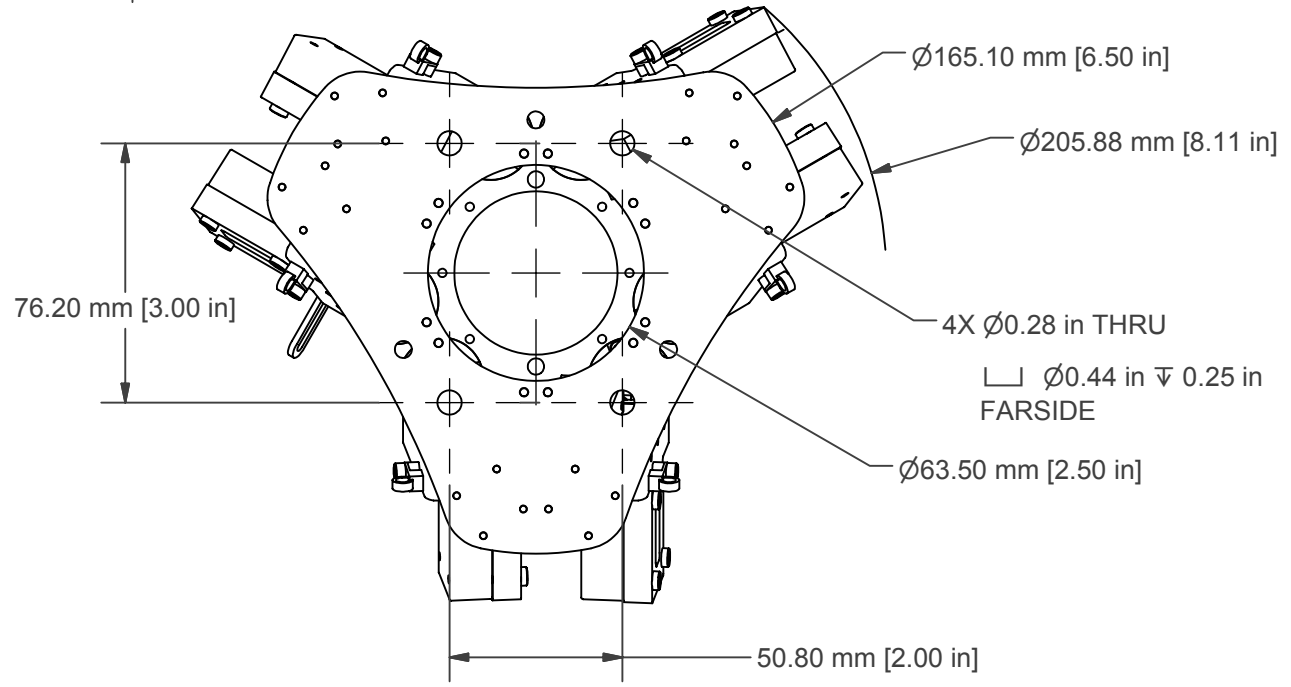
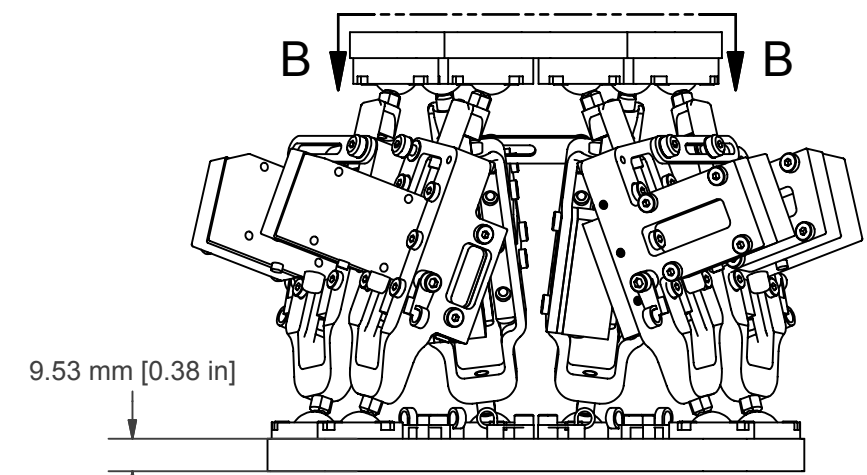
6X M3x0.5 - 6H
SP AS SHOWN ON Ø55 mm BC

(Ø55.00 mm [2.17 in])

2X Ø5.01 mm [0.20 in] ∇ 3.50 mm [0.138 in]
SLIP FIT FOR M5 DOWEL PIN
EQ SP ON Ø55 mm BC

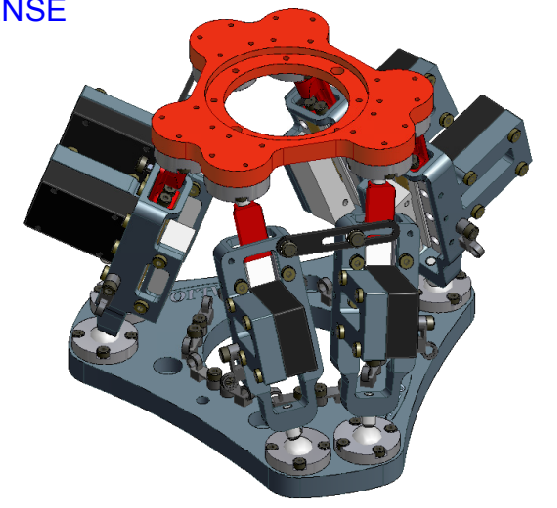


SECTION A-A



STANDARD FEATURES
 LINEAR WORKING ENVELOPE: 15mm CUBE
 MAXIMUM Z STROKE: 25mm
 PITCH, YAW, ROLL RANGE: +/- 20 degrees
 MOTORS: (6) HR-2 CERAMIC SERVO
 FORCE, STANDARD: 48 N
 HEXAPOD SPEED: 200mm/sec
 ENCODERS: (6) LINEAR OPTICAL
 ENCODER OUTPUT: ANALOG 1 VOLT, PEAK TO PEAK
 ENCODER RESOLUTION: 5nm
 SYSTEM REPEATABILITY: 50nm SERVO (10nm DC MODE)
 BEARINGS: PRECISION CROSSED ROLLER &
 PRECISION SPHERICAL JOINT
 ENCLOSURES: ALUMINUM 6061-T6
 ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM
 10e-7 TORR, AND VACUUM 10e-10 TORR
 TEMPERATURE: 0 to 100 DEG C
 HUMIDITY: 10% to 80% NON-CONDENSING

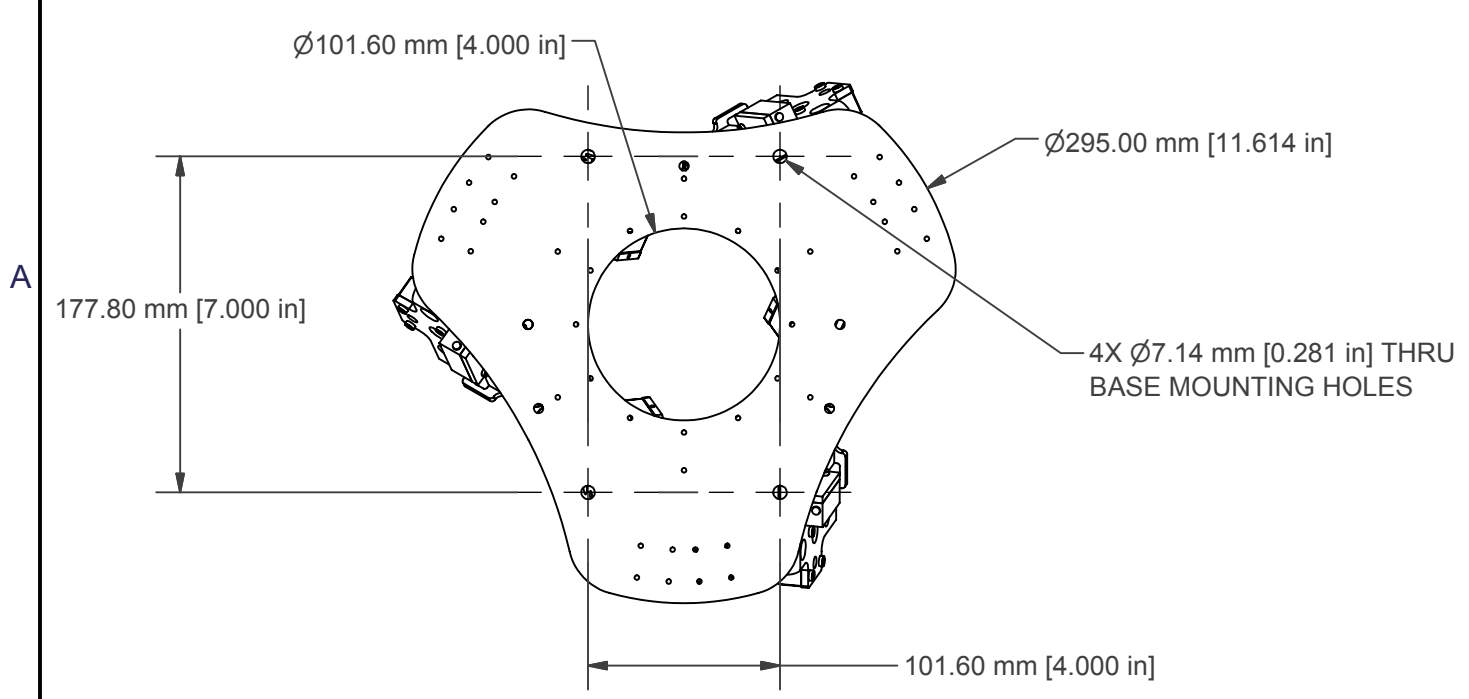
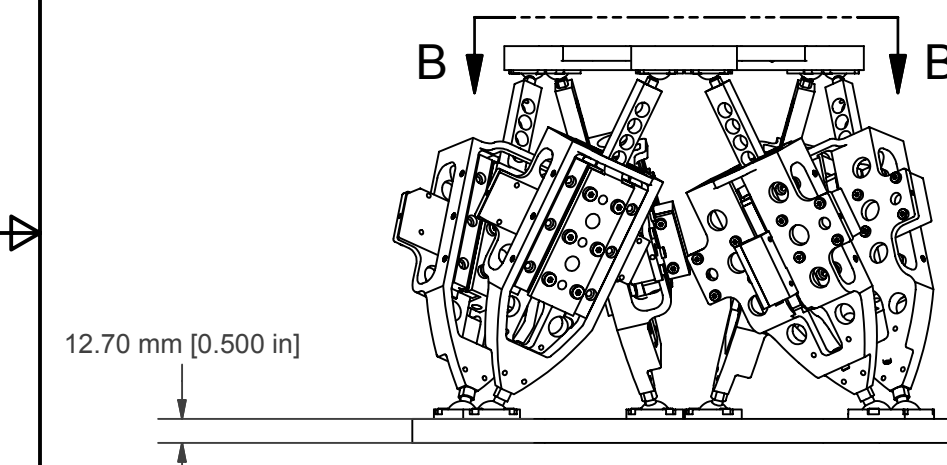
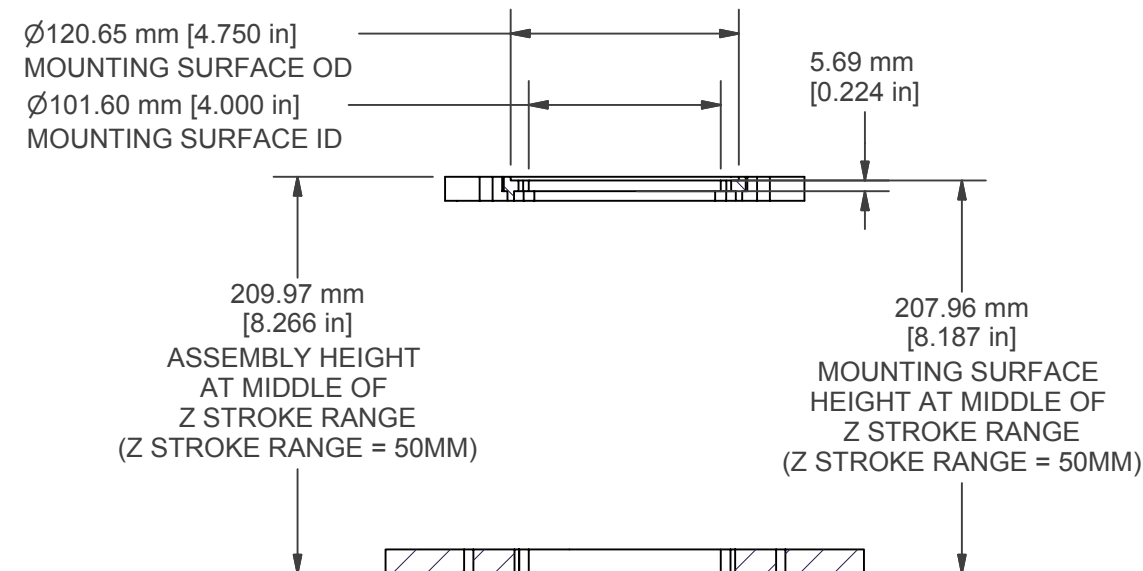
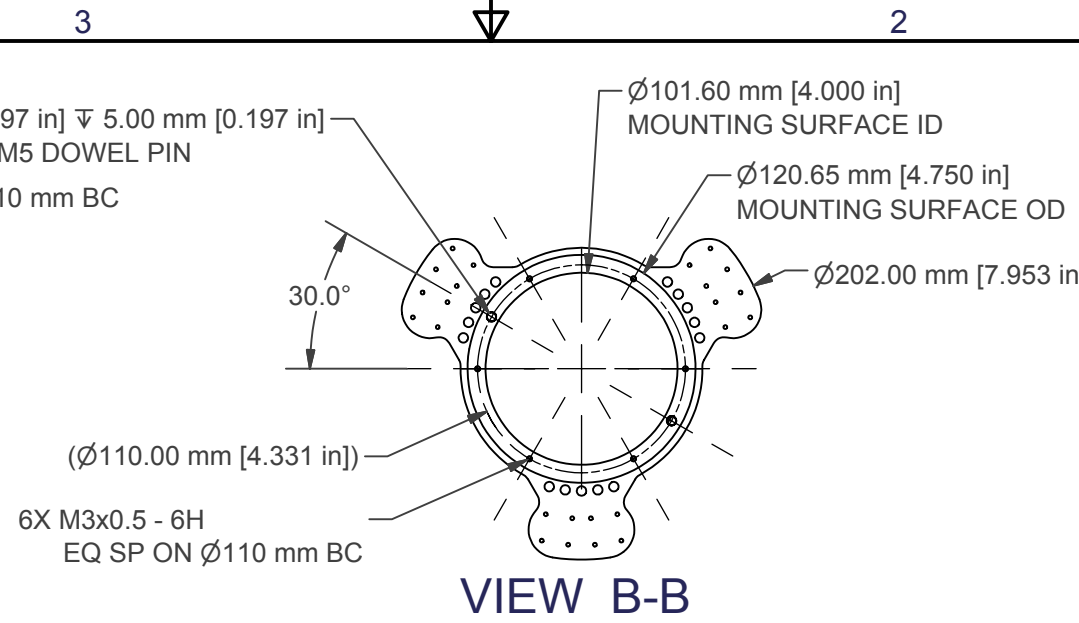
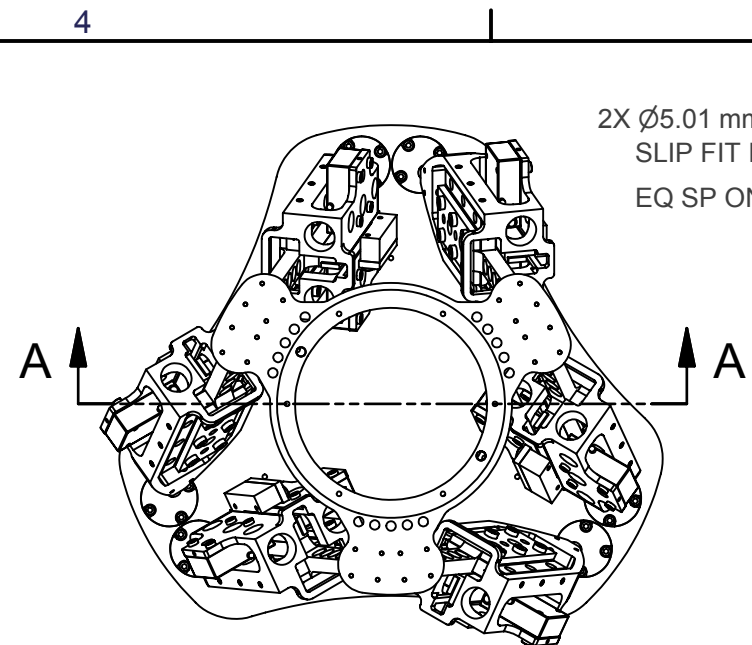
INCLUDED EQUIPMENT
 MOTION CONTROLLERS (DELTA TAU)
 MOTOR AMPLIFIERS
 SOFTWARE AND LICENSE



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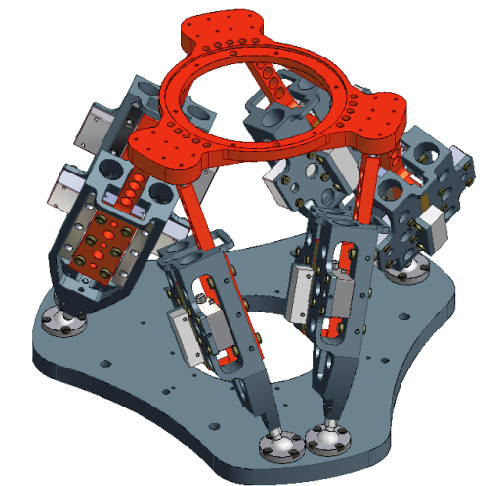
DRAWN	NBROWN	3/1/2005
CHECKED		
Tolerances:		
x.x ± .04 in		
x.xx ± .02 in		
x.xxx ± .005 in		
MATERIAL		

AI-HEX-HR2-SS		
SIZE	DWG NO	REV
B	00346	003
SCALE	SHEET 1 OF 1	



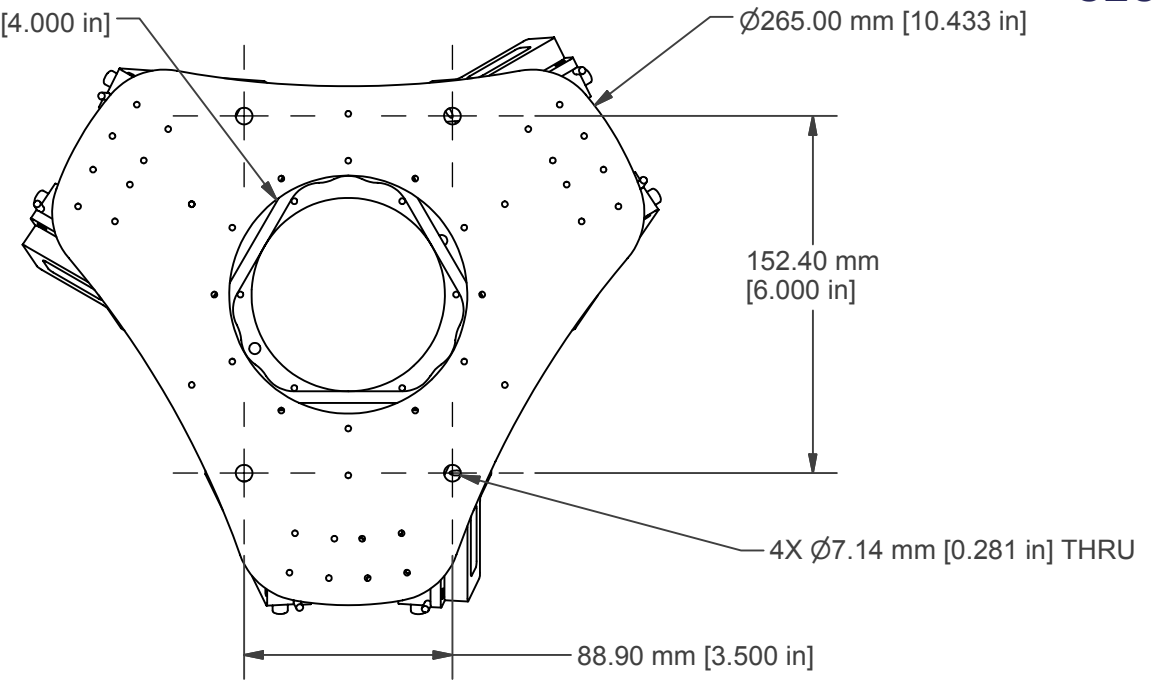
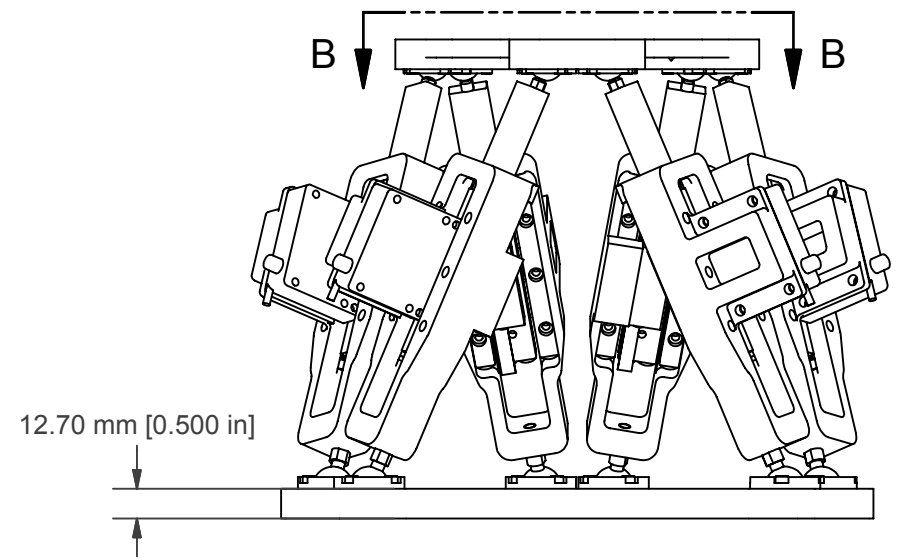
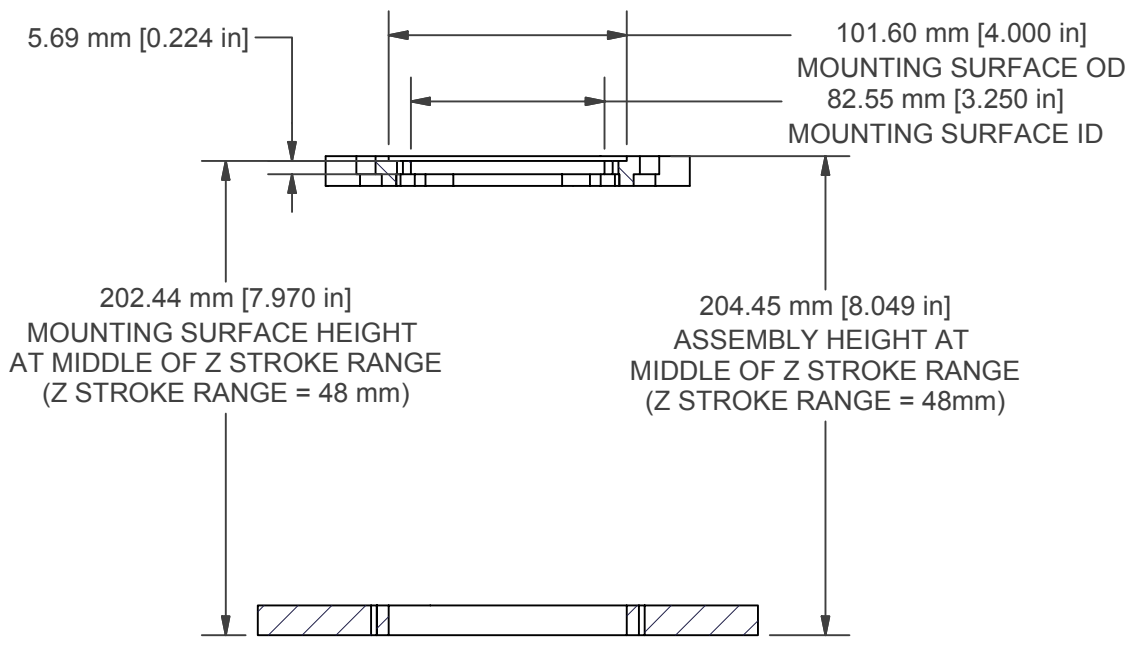
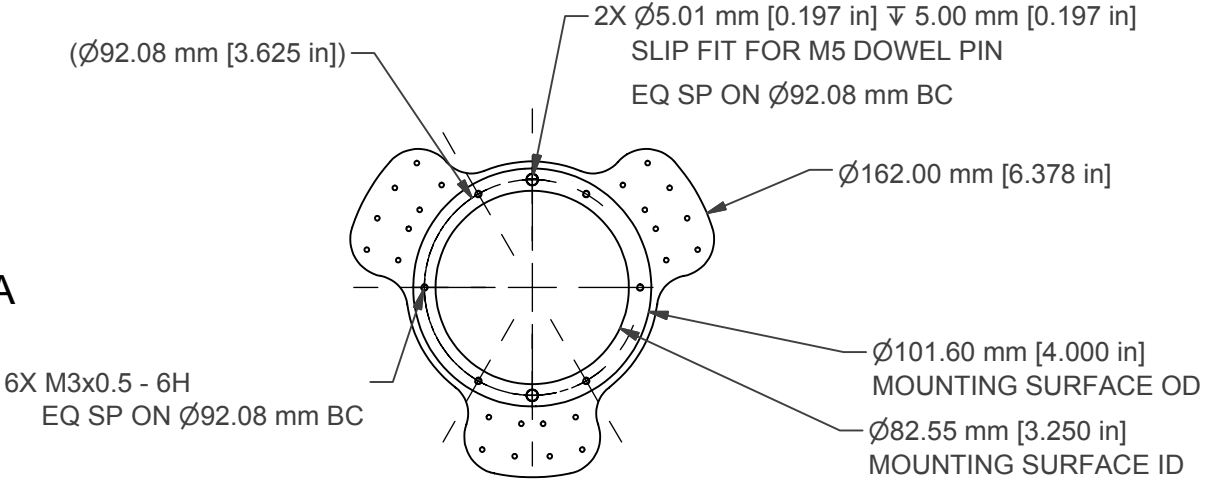
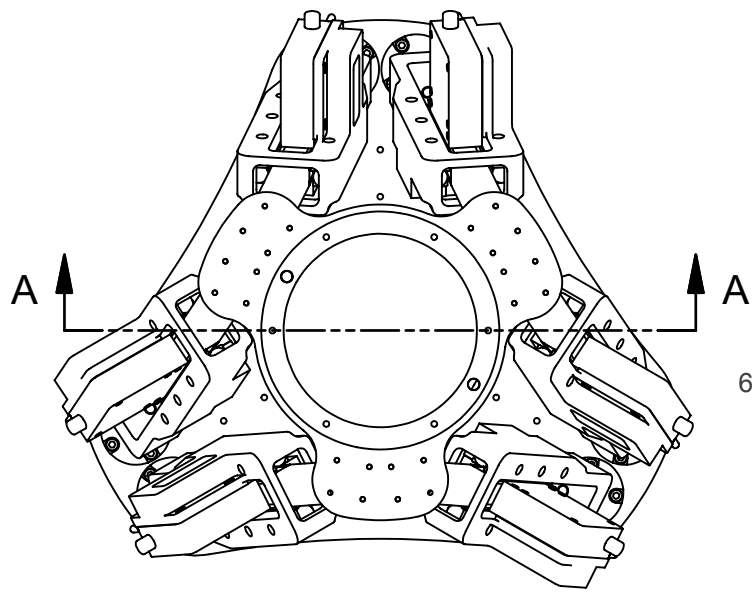
STANDARD FEATURES
 LINEAR WORKING ENVELOPE: 28mm CUBE
 MAXIMUM Z STROKE: 50mm
 PITCH, YAW, ROLL RANGE: +/- 18 degrees
 MOTORS: (12) HR-2 CERAMIC SERVO
 FORCE, STANDARD: 96 N
 HEXAPOD SPEED: 200mm/sec
 ENCODERS: (6) LINEAR OPTICAL
 ENCODER OUTPUT: ANALOG 1 VOLT, PEAK TO PEAK
 ENCODER RESOLUTION: 5nm
 SYSTEM REPEATABILITY: 50nm SERVO (10nm DC MODE)
 BEARINGS: PRECISION CROSSED ROLLER & PRECISION SPHERICAL JOINT
 ENCLOSURES: ALUMINUM 6061-T6
 ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM 10e-7 TORR, AND VACUUM 10e-10 TORR
 TEMPERATURE: 0 to 100 DEG C
 HUMIDITY: 10% to 80% NON-CONDENSING

INCLUDED EQUIPMENT
 MOTION CONTROLLERS (DELTA TAU)
 MOTOR AMPLIFIERS
 SOFTWARE AND LICENSE



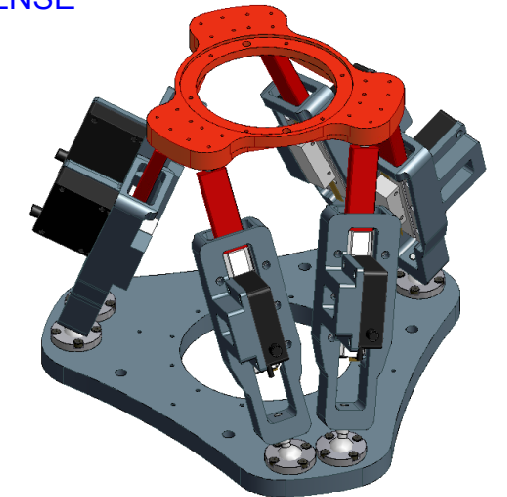
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DRAWN NBROWN		2/25/2005			
CHECKED					
Tolerances: x.x ± .04 in x.xx ± .02 in x.xxx ± .005 in				TITLE AI-HEX-HR2	
MATERIAL		SIZE B	DWG NO 00235	REV 004	
SCALE			SHEET 1 OF 1		



STANDARD FEATURES
 LINEAR WORKING ENVELOPE: 28mm CUBE
 MAXIMUM Z STROKE: 48mm
 PITCH, YAW, ROLL RANGE: +/- 20 degrees
 MOTORS: (6) HR-4 CERAMIC SERVO
 FORCE, STANDARD: 96 N
 HEXAPOD SPEED: 200mm/sec
 ENCODERS: (6) LINEAR OPTICAL
 ENCODER OUTPUT: ANALOG 1 VOLT, PEAK TO PEAK
 ENCODER RESOLUTION: 5nm
 SYSTEM REPEATABILITY: 50nm SERVO (10nm DC MODE)
 BEARINGS: PRECISION CROSSED ROLLER & PRECISION SPHERICAL JOINT
 ENCLOSURES: ALUMINUM 6061-T6
 ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM 10e-7 TORR, AND VACUUM 10e-10 TORR
 TEMPERATURE: 0 to 100 DEG C
 HUMIDITY: 10% to 80% NON-CONDENSING

INCLUDED EQUIPMENT
 MOTION CONTROLLERS (DELTA TAU)
 MOTOR AMPLIFIERS
 SOFTWARE AND LICENSE

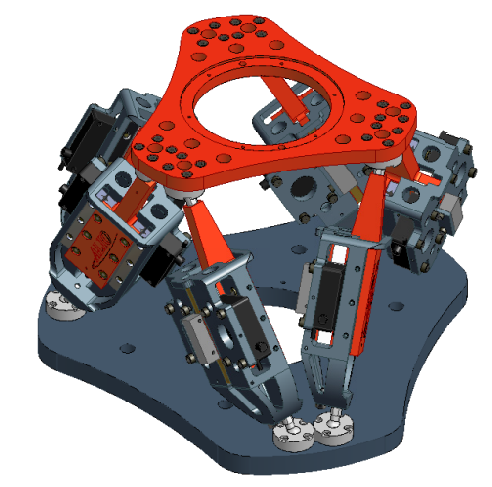


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DRAWN	NBROWN	4/22/2005			
CHECKED					
Tolerances:			TITLE		
x.x ± .04 in			AI-HEX-HR4-SS		
x.xx ± .02 in					
x.xxx ± .005 in			SIZE	DWG NO	REV
MATERIAL			B	00516	001
			SCALE	ALIO STD TEMPLATE - REV 004	SHEET 1 OF 1

STANDARD FEATURES
 LINEAR WORKING ENVELOPE: 28mm CUBE
 MAXIMUM Z STROKE: 55mm
 PITCH, YAW, ROLL RANGE: +/- 18 degrees
 MOTORS: (12) HR-4 CERAMIC SERVO
 FORCE, STANDARD: 192 N
 HEXAPOD SPEED: 200mm/sec
 ENCODERS: (6) LINEAR OPTICAL
 ENCODER OUTPUT: ANALOG 1 VOLT, PEAK TO PEAK
 ENCODER RESOLUTION: 5nm
 SYSTEM REPEATABILITY: 50nm SERVO (10nm DC MODE)
 BEARINGS: PRECISION CROSSED ROLLER &
 PRECISION SPHERICAL JOINT
 ENCLOSURES: ALUMINUM 6061-T6
 ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM
 10e-7 TORR, AND VACUUM 10e-10 TORR
 TEMPERATURE: 0 to 100 DEG C
 HUMIDITY: 10% to 80% NON-CONDENSING

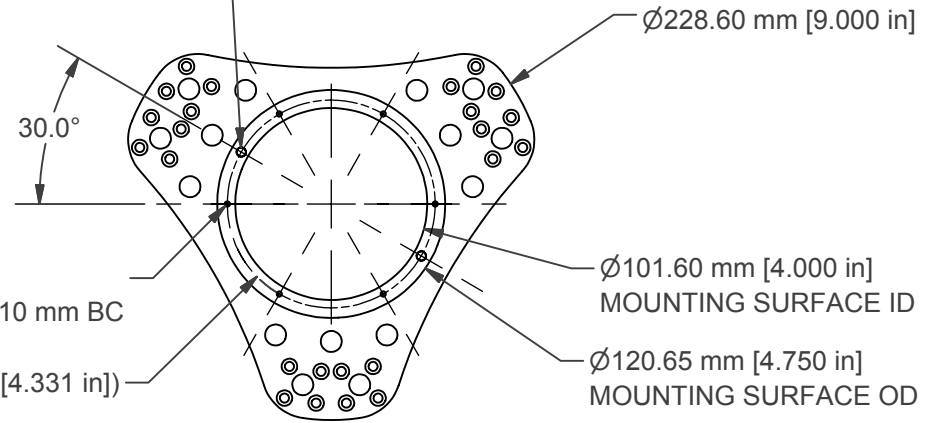
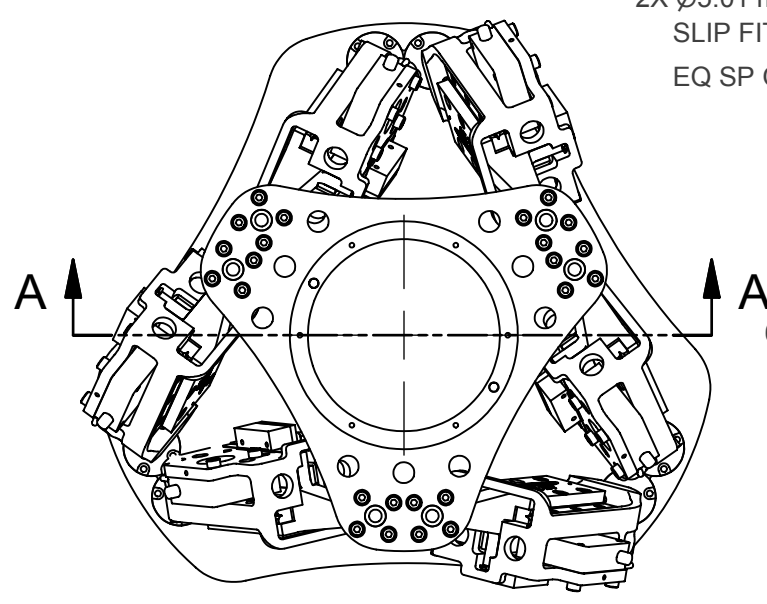
INCLUDED EQUIPMENT
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 MOTOR AMPLIFIERS
 SOFTWARE AND LICENSE



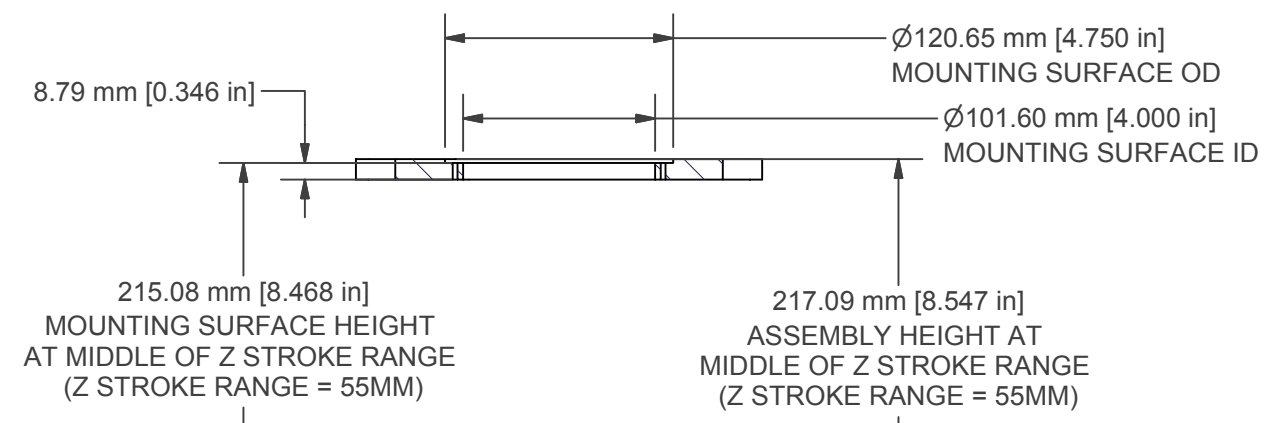
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DRAWN NBROWN		3/2/2005			
CHECKED					
Tolerances: x.x ± .04 in x.xx ± .02 in x.xxx ± .005 in MATERIAL				TITLE AI-HEX-HR4	
SIZE B		DWG NO 00040		REV 002	
SCALE				SHEET 1 OF 1	

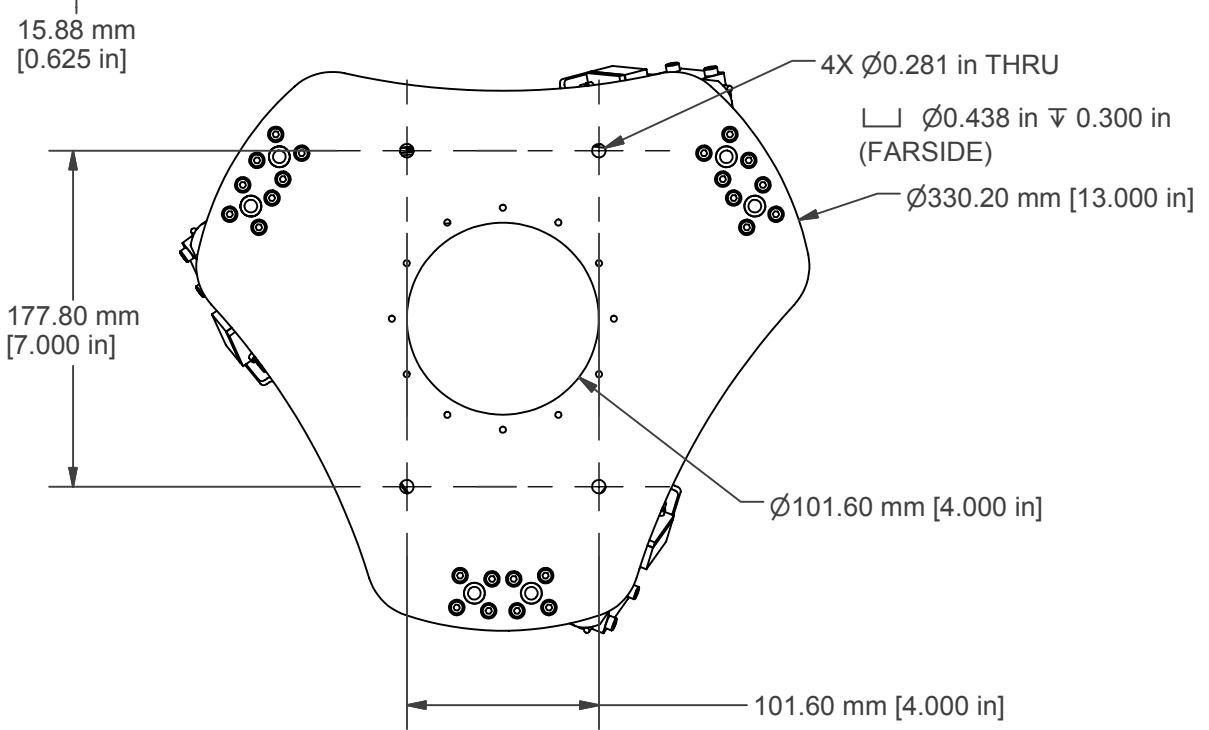
2X Ø5.01 mm [0.197 in] ± 5.00 mm [0.197 in]
 SLIP FIT FOR M5 DOWEL PIN
 EQ SP ON Ø110 mm BC



VIEW B-B



SECTION A-A



4 3 2 1

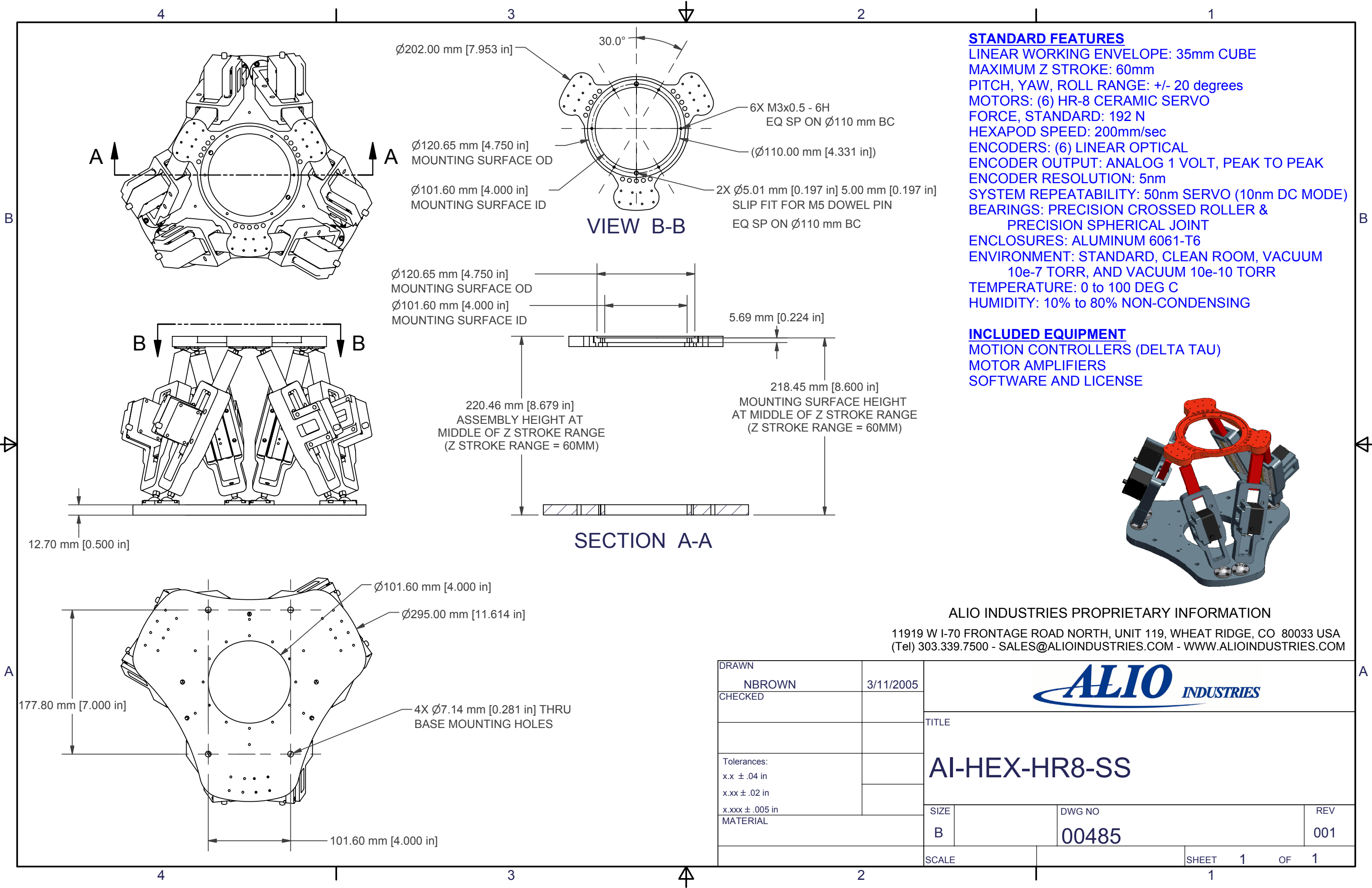
A B

A B

A B

4 3 2 1

A B

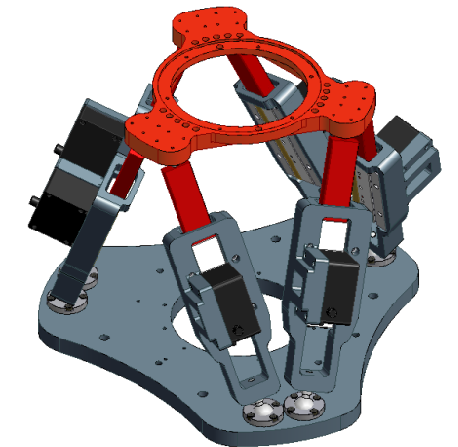


STANDARD FEATURES

LINEAR WORKING ENVELOPE: 35mm CUBE
 MAXIMUM Z STROKE: 60mm
 PITCH, YAW, ROLL RANGE: +/- 20 degrees
 MOTORS: (6) HR-8 CERAMIC SERVO
 FORCE, STANDARD: 192 N
 HEXAPOD SPEED: 200mm/sec
 ENCODERS: (6) LINEAR OPTICAL
 ENCODER OUTPUT: ANALOG 1 VOLT, PEAK TO PEAK
 ENCODER RESOLUTION: 5nm
 SYSTEM REPEATABILITY: 50nm SERVO (10nm DC MODE)
 BEARINGS: PRECISION CROSSED ROLLER & PRECISION SPHERICAL JOINT
 ENCLOSURES: ALUMINUM 6061-T6
 ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM 10e-7 TORR, AND VACUUM 10e-10 TORR
 TEMPERATURE: 0 to 100 DEG C
 HUMIDITY: 10% to 80% NON-CONDENSING

INCLUDED EQUIPMENT

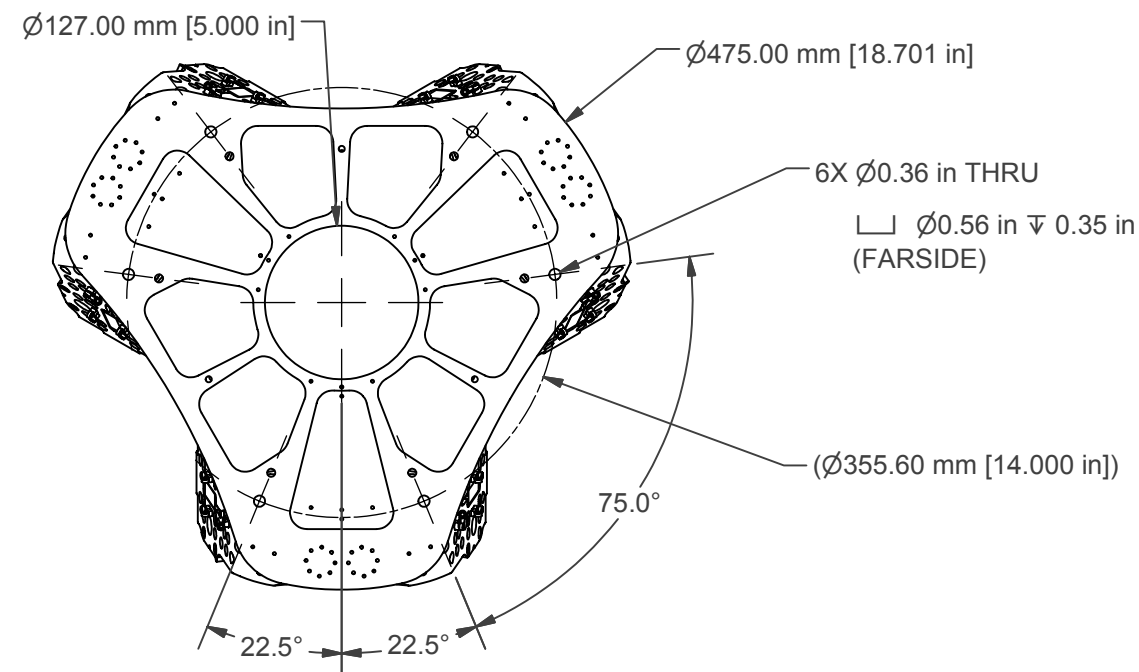
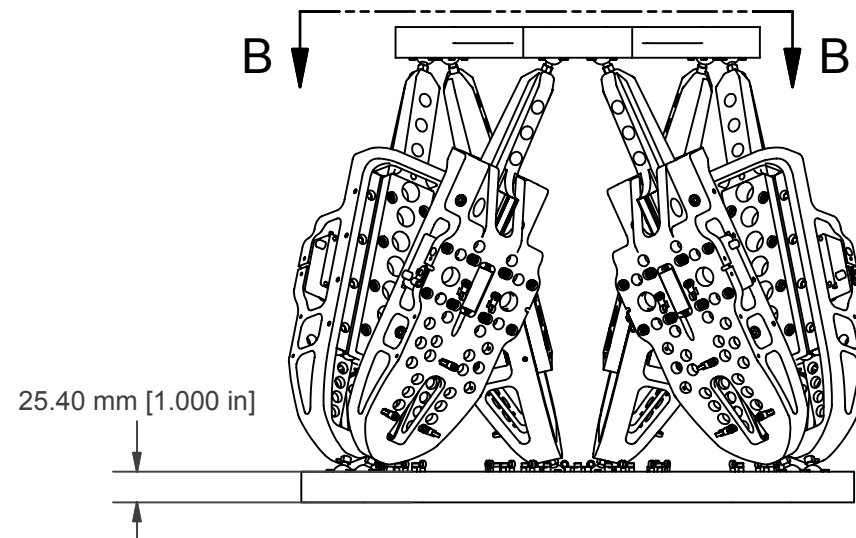
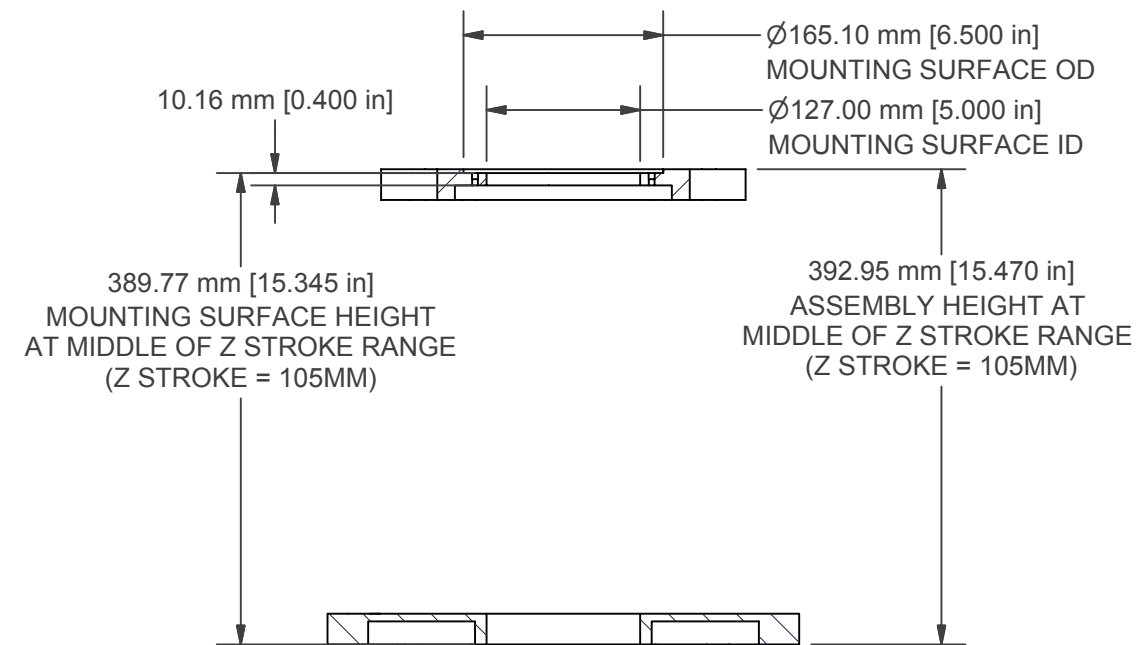
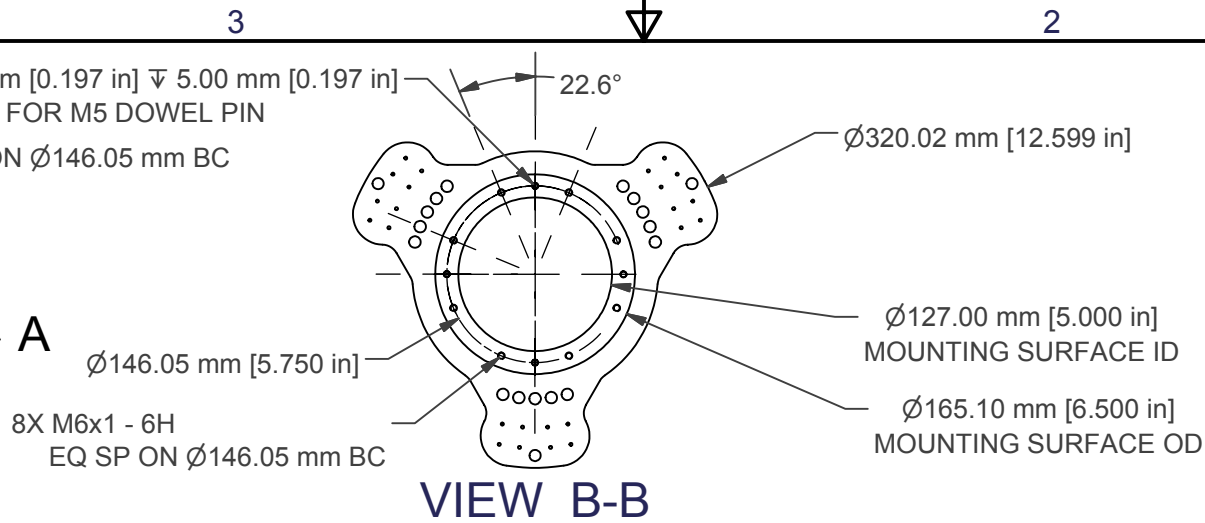
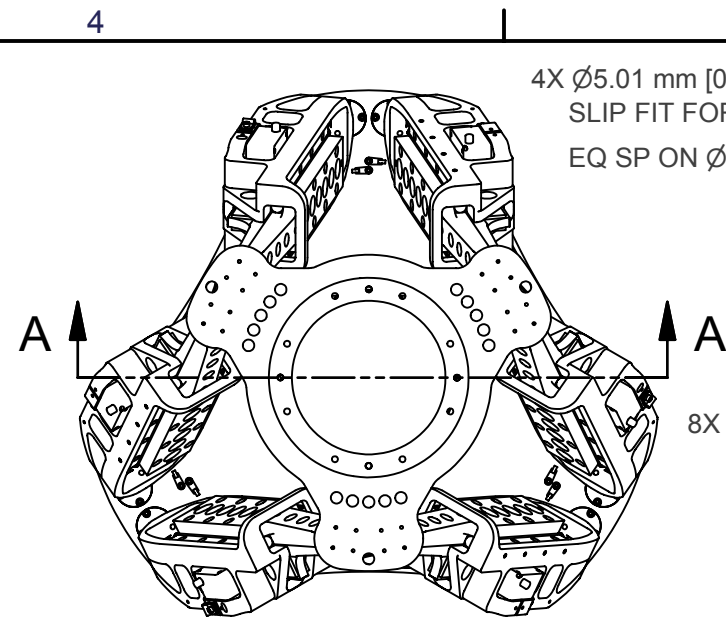
MOTION CONTROLLERS (DELTA TAU)
 MOTOR AMPLIFIERS
 SOFTWARE AND LICENSE



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DRAWN			
NBROWN			
CHECKED		TITLE	
Tolerances:		AI-HEX-HR8-SS	
x.x ± .04 in			
x.xx ± .02 in		SIZE	
x.xxx ± .005 in		DWG NO	
MATERIAL		REV	
B		00485	
SCALE		SHEET 1 OF 1	

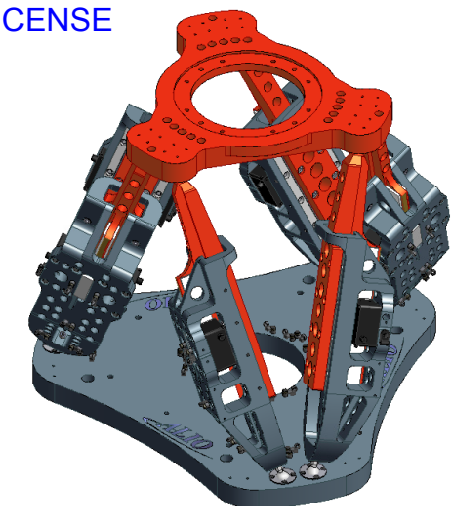


STANDARD FEATURES

LINEAR WORKING ENVELOPE: 60mm CUBE
 MAXIMUM Z STROKE: 105mm
 PITCH, YAW, ROLL RANGE: +/- 20 degrees
 MOTORS: (12) HR-8 CERAMIC SERVO
 FORCE, STANDARD: 384 N
 HEXAPOD SPEED: 200mm/sec
 ENCODERS: (6) LINEAR OPTICAL
 ENCODER OUTPUT: ANALOG 1 VOLT, PEAK TO PEAK
 ENCODER RESOLUTION: 5nm
 SYSTEM REPEATABILITY: 50nm SERVO (10nm DC MODE)
 BEARINGS: PRECISION CROSSED ROLLER & PRECISION SPHERICAL JOINT
 ENCLOSURES: ALUMINUM 6061-T6
 ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM
 10e-7 TORR, AND VACUUM 10e-10 TORR
 TEMPERATURE: 0 to 100 DEG C
 HUMIDITY: 10% to 80% NON-CONDENSING

INCLUDED EQUIPMENT

MOTION CONTROLLERS (DELTA TAU)
 MOTOR AMPLIFIERS
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DRAWN NBROWN		4/8/2005			
CHECKED					
Tolerances: x.x ± .04 in x.xx ± .02 in x.xxx ± .005 in				TITLE AI-HEX-HR8	
MATERIAL				SIZE B	DWG NO 00489
SCALE				SHEET	1 OF 1