

ALIO INDUSTRIES

MANUAL MICROMETER STAGES (CLICK FOR DATASHEETS)

LINEAR MANUAL STAGES

AI-2500-ME

ROTARY MANUAL STAGES

AI-80R-DME

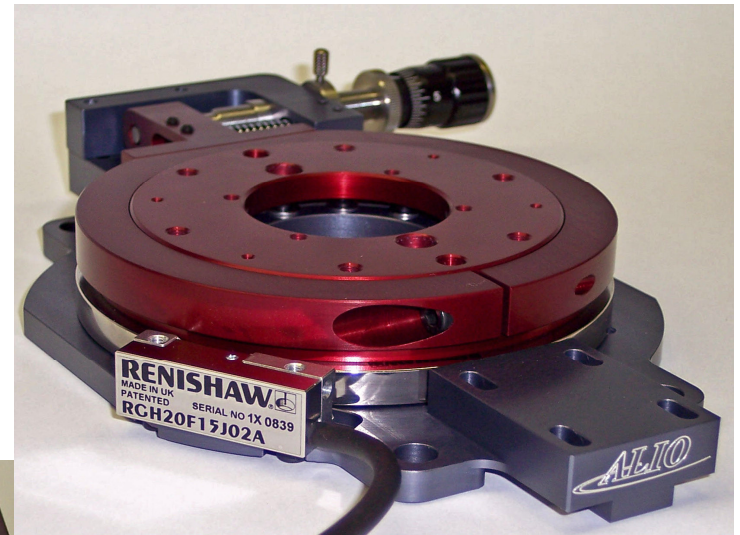
GONIOMETER STAGES

AI-GONI-064-ME

AI-GONI-090-ME

AI-GONI-116-ME

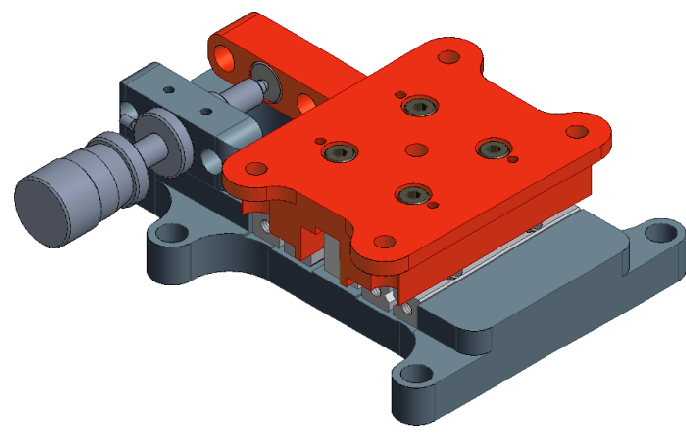
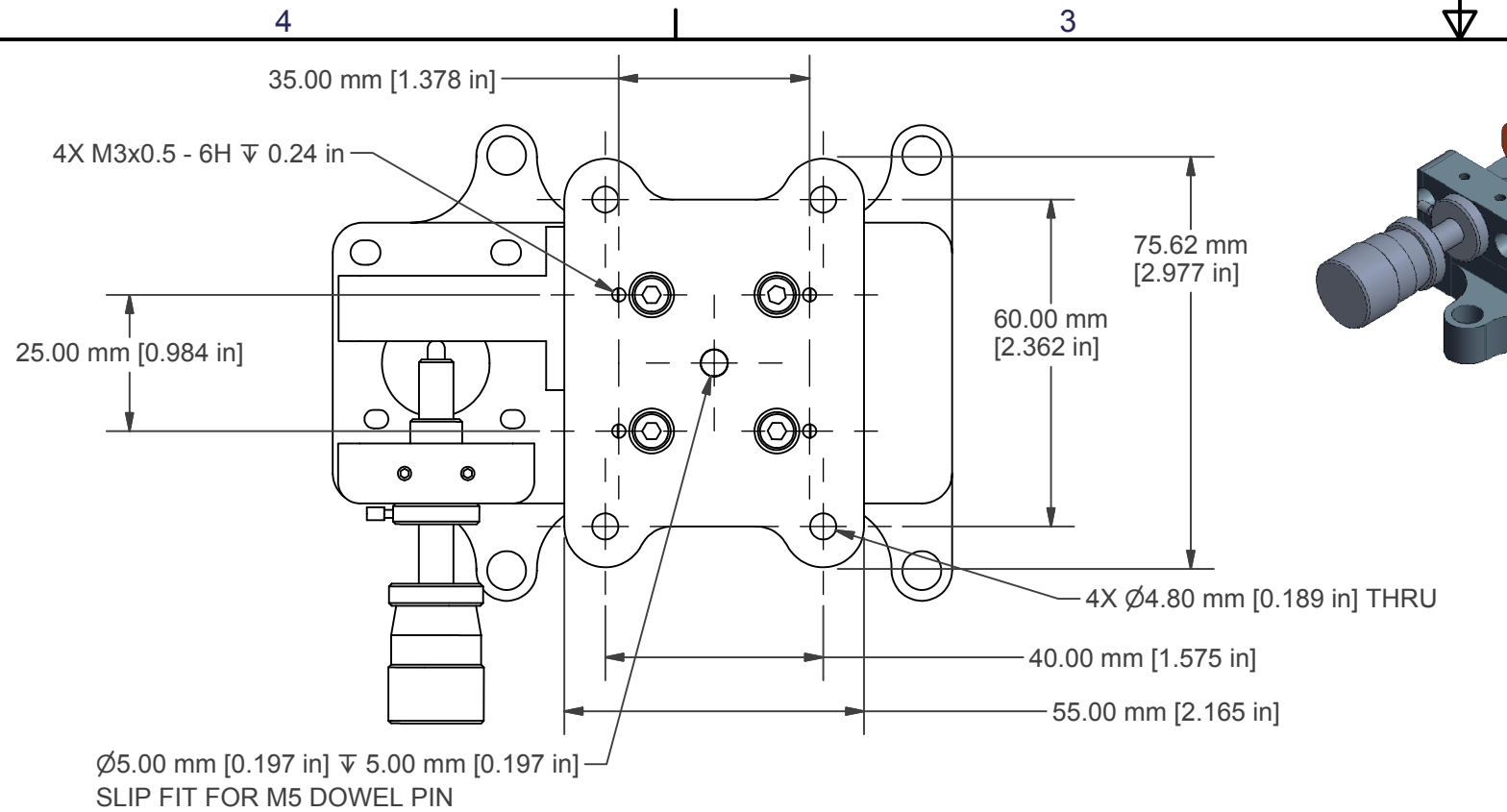
AI-GONI-064-ME-D



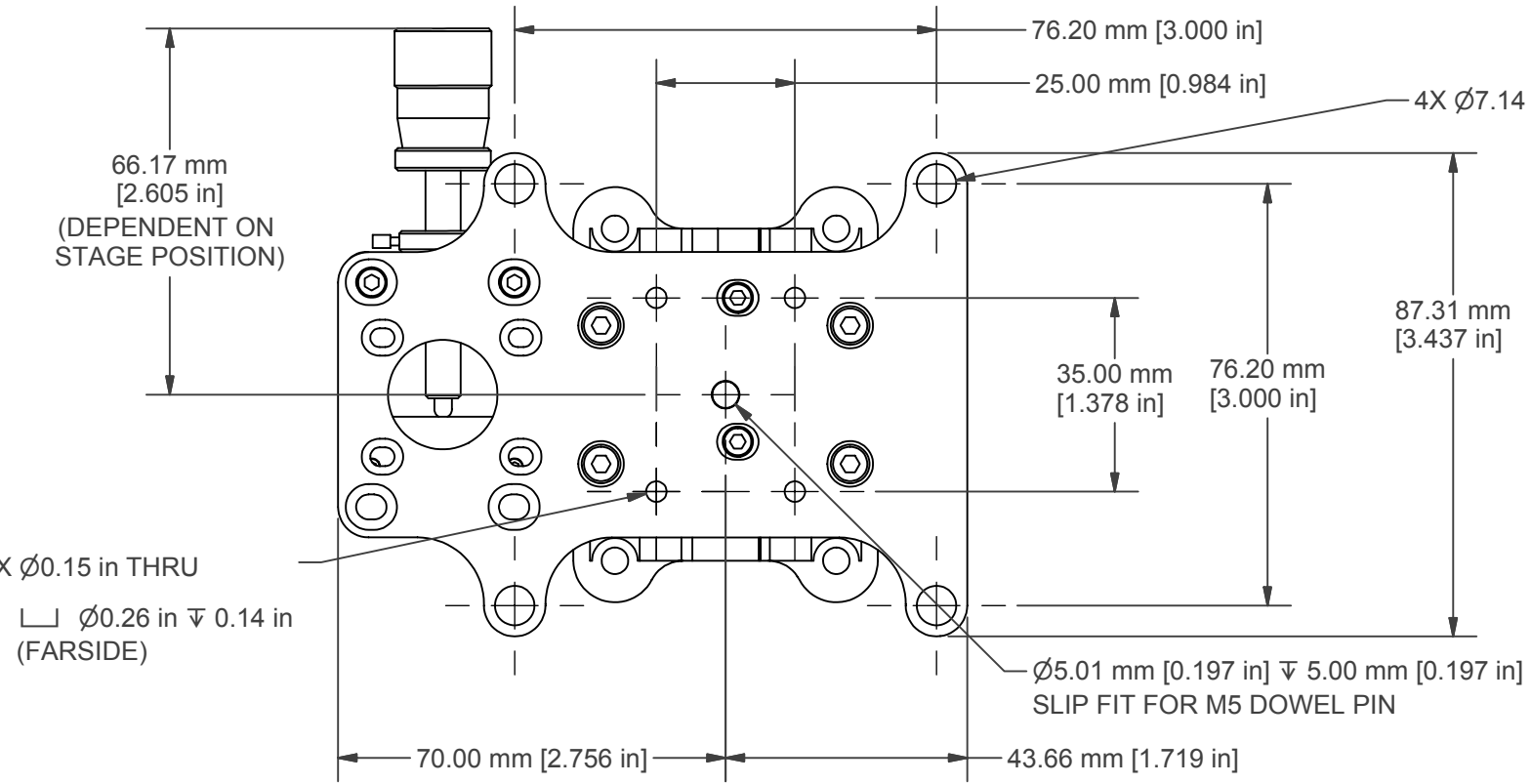
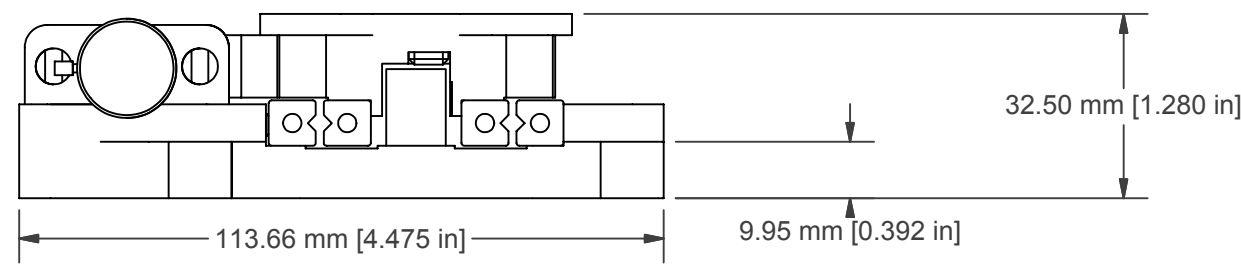
AI-80R-DME



AI-GONI-096-ME

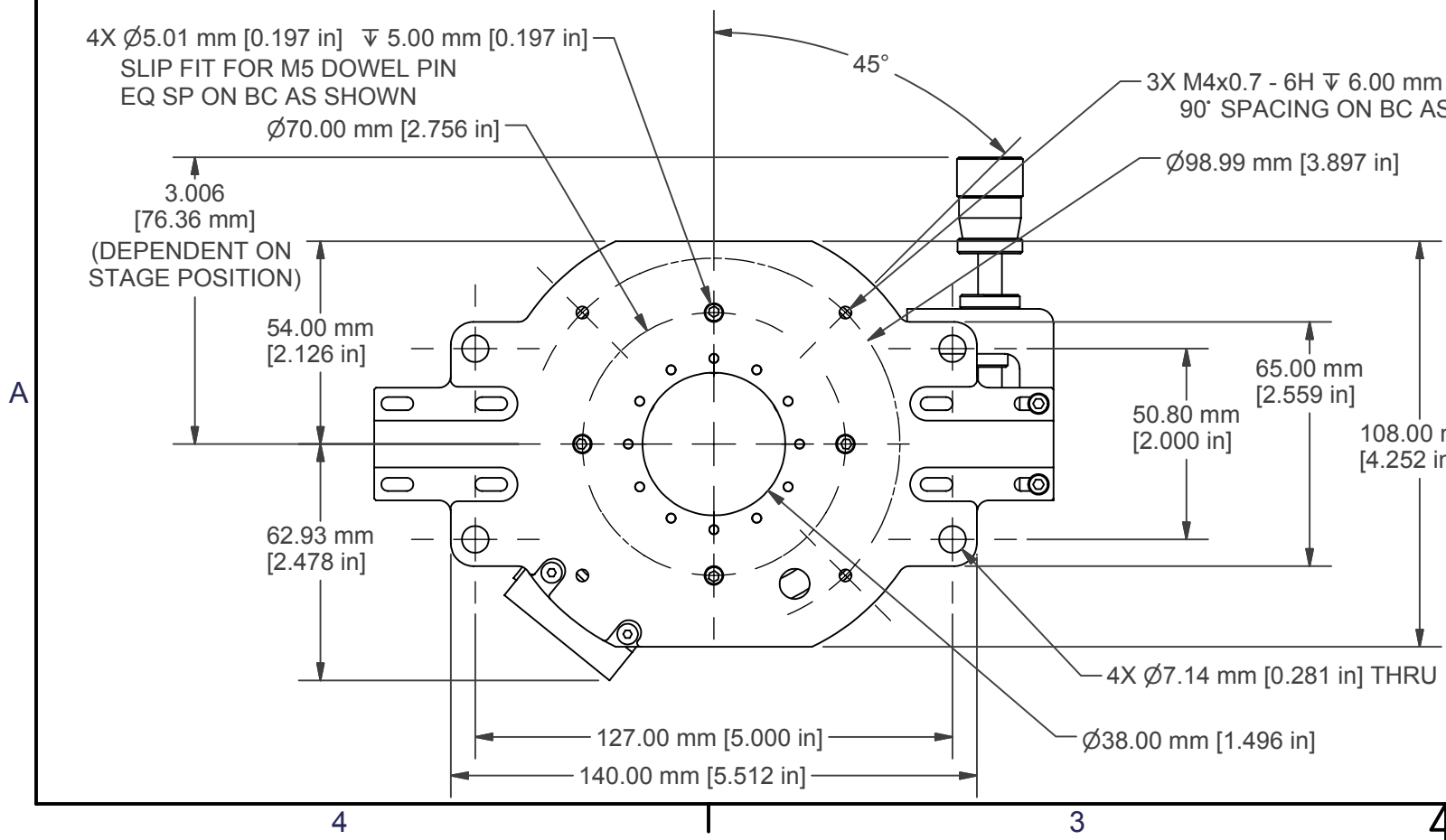
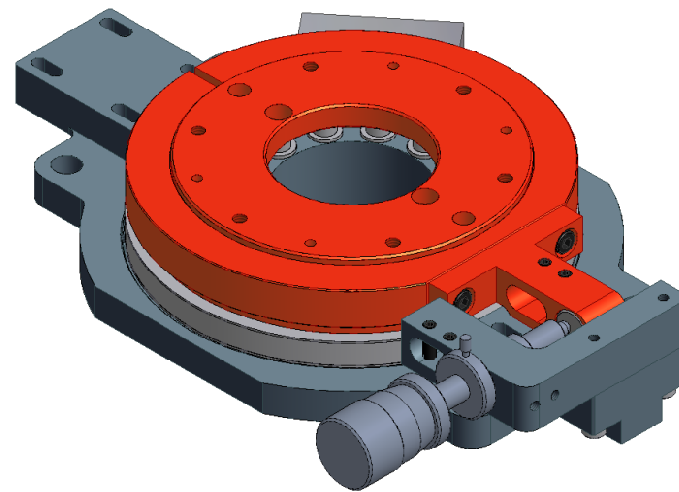
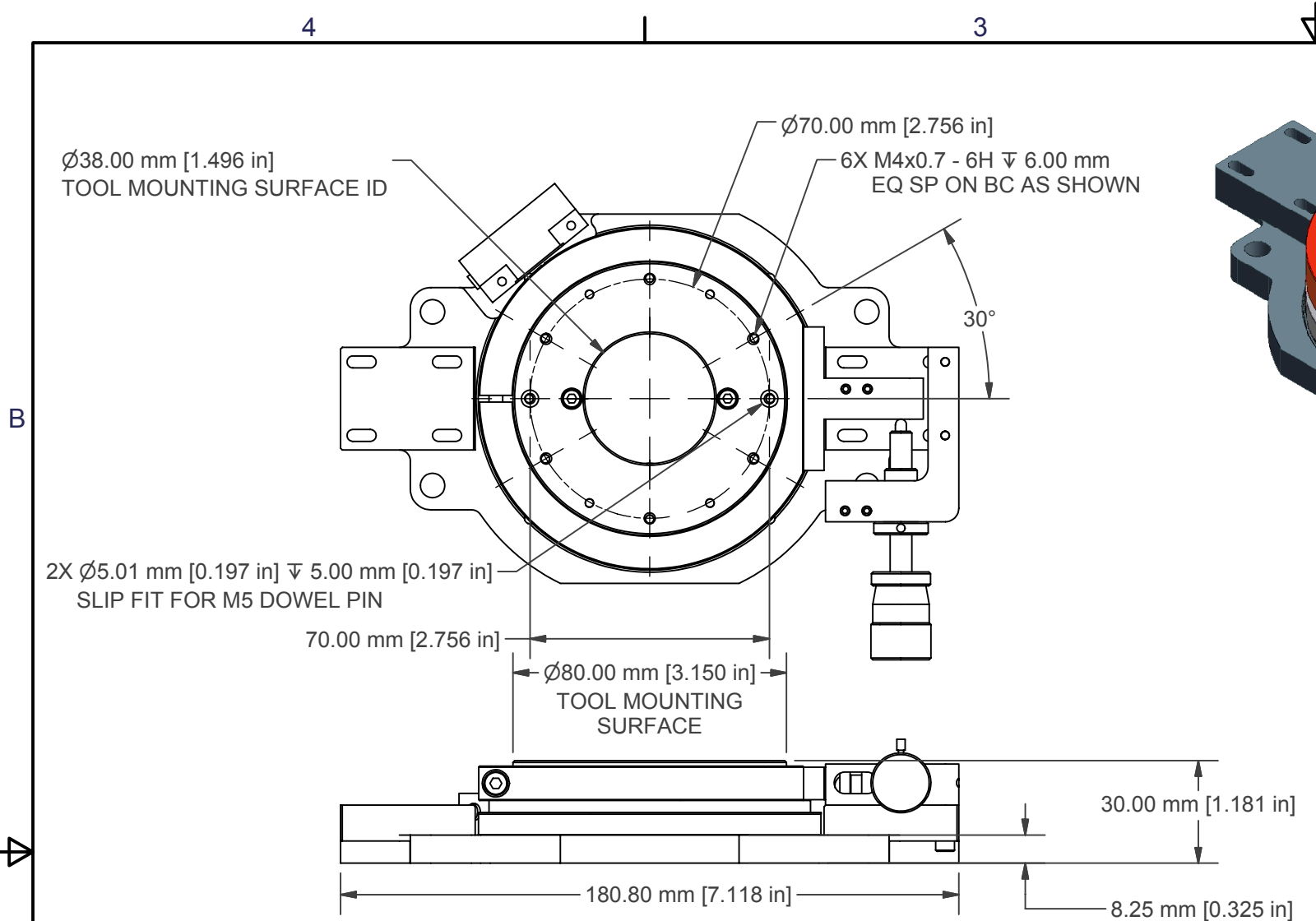


STANDARD FEATURES
 DRIVE: MANUAL MICROMETER
 COARSE ADJUSTMENT: 25mm RANGE
 FINE ADJUSTMENT: 250um RANGE, 25um/rev
 CONSULT FACTORY FOR ADDITIONAL OPTIONS
 TRAVEL: 25mm
 CONSULT FACTORY FOR ADDITIONAL OPTIONS
 ENCODER RESOLUTION: ANALOG 1 VOLT, PEAK TO PEAK
 OPTIONAL: 5um, 1um, 0.5um, 0.1um, 0.05um, 0.02um, 0.01um or 5nm USING 4096 INTERPOLATION (CONTROLLER DEPENDENT)
 HOME SENSOR: STANDARD
 BEARINGS: PRECISION CROSS ROLLER
 < 1.5um PARALLELISM
 BEARING DYNAMIC LOAD RATING: 1.8kN
 SYSTEM LOAD CAPACITY: APPLICATION DEPENDENT
 PLEASE CONSULT THE FACTORY
 ENCLOSURES: ALUMINUM 6061-T6
 STAINLESS STEEL OPTIONAL
 ENVIRONMENT: STANDARD ATMOSPHERE
 TEMPERATURE: 0 to 50 DEG C
 HUMIDITY: 10% to 80% NON-CONDENSING
 ASSEMBLY MASS: 0.52 kg



ALIO INDUSTRIES PROPRIETARY INFORMATION
 11919 W I-70 FRONTAGE ROAD NORTH, UNIT 119, WHEAT RIDGE, CO 80033 USA
 (Tel) 303.339.7500 - SALES@ALIOINDUSTRIES.COM - WWW.ALIOINDUSTRIES.COM

DRAWN		NBROWN		4/20/2005	
CHECKED					
Tolerances:		x.x ± .04 in		TITLE	
		x.xx ± .02 in		AI-2500-ME	
		x.xxx ± .005 in			
MATERIAL		SIZE	DWG NO		REV
		B	00418		002
SCALE		ALIO STD TEMPLATE - REV 004		SHEET	1 OF 1



STANDARD FEATURES

DRIVE: MANUAL MICROMETER

COARSE ADJUSTMENT: ± 9.6 DEGREE RANGE
 FINE ADJUSTMENT: 0.18 DEGREE RANGE
 CONSULT FACTORY FOR ADDITIONAL OPTIONS

ROTATION: ± 9.6 DEGREES

CONSULT FACTORY FOR ADDITIONAL OPTIONS
 ENCODER RESOLUTION: 0.02 ARC-SEC TO 20 ARC-SEC
 0.02 ARC-SEC USING 4096 INTERPOLATION
 (CONTROLLER DEPENDENT)

HOME SENSOR: STANDARD

BEARINGS: PRECISION CROSSED ROLLER
 BEARING DYNAMIC LOAD RATING: 5 kN
 SYSTEM LOAD CAPACITY: APPLICATION DEPENDENT
 PLEASE CONSULT THE FACTORY

ENCLOSURES: ALUMINUM 6061-T6

STAINLESS STEEL OPTIONAL

ENVIRONMENT: STANDARD ATMOSPHERE

TEMPERATURE: 0 to 50 DEG C

HUMIDITY: 10% to 80% NON-CONDENSING

ASSEMBLY MASS: 0.85 kg

UPGRADE OPTIONS

UPGRADES TO SINGLE, DUAL, AND QUAD HR2 MOTOR
 VERSIONS ARE AVAILABLE - CONSULT FACTORY FOR
 DETAILS

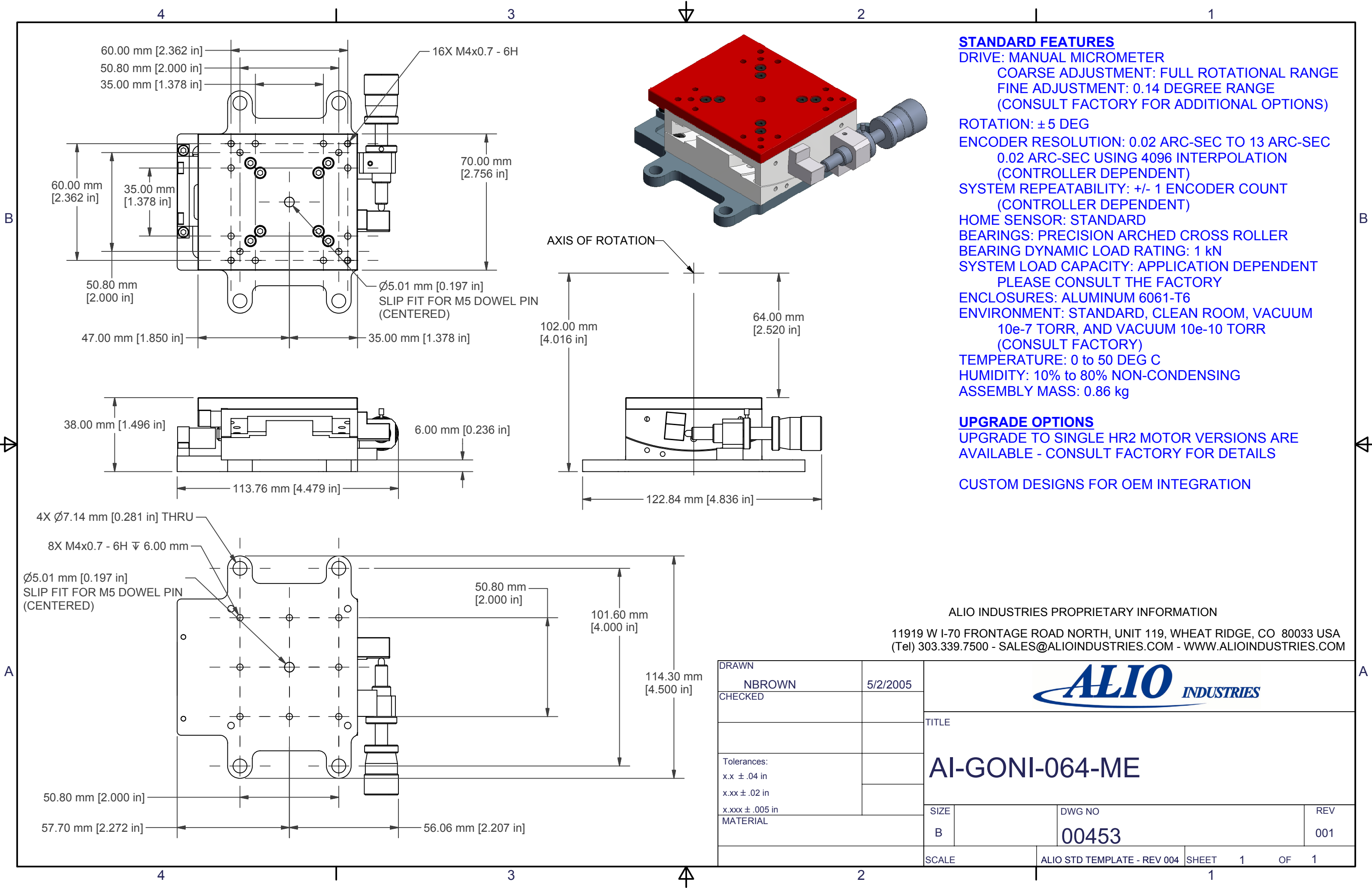
CUSTOM DESIGNS FOR OEM INTEGRATION

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DRAWN	NBROWN	4/20/2005
CHECKED		
Tolerances:		
x.x \pm .04 in		
x.xx \pm .02 in		
x.xxx \pm .005 in		
MATERIAL		

		
TITLE		
<h1>AI-80R-DME</h1>		
SIZE	DWG NO	REV
B	00153	002
SCALE	ALIO STD TEMPLATE - REV 004	SHEET 1 OF 1



STANDARD FEATURES

- DRIVE: MANUAL MICROMETER
- COARSE ADJUSTMENT: FULL ROTATIONAL RANGE
- FINE ADJUSTMENT: 0.14 DEGREE RANGE
(CONSULT FACTORY FOR ADDITIONAL OPTIONS)
- ROTATION: ± 5 DEG
- ENCODER RESOLUTION: 0.02 ARC-SEC TO 13 ARC-SEC
0.02 ARC-SEC USING 4096 INTERPOLATION
(CONTROLLER DEPENDENT)
- SYSTEM REPEATABILITY: +/- 1 ENCODER COUNT
(CONTROLLER DEPENDENT)
- HOME SENSOR: STANDARD
- BEARINGS: PRECISION ARCHED CROSS ROLLER
- BEARING DYNAMIC LOAD RATING: 1 kN
- SYSTEM LOAD CAPACITY: APPLICATION DEPENDENT
PLEASE CONSULT THE FACTORY
- ENCLOSURES: ALUMINUM 6061-T6
- ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM
10e-7 TORR, AND VACUUM 10e-10 TORR
(CONSULT FACTORY)
- TEMPERATURE: 0 to 50 DEG C
- HUMIDITY: 10% to 80% NON-CONDENSING
- ASSEMBLY MASS: 0.86 kg

UPGRADE OPTIONS

UPGRADE TO SINGLE HR2 MOTOR VERSIONS ARE AVAILABLE - CONSULT FACTORY FOR DETAILS

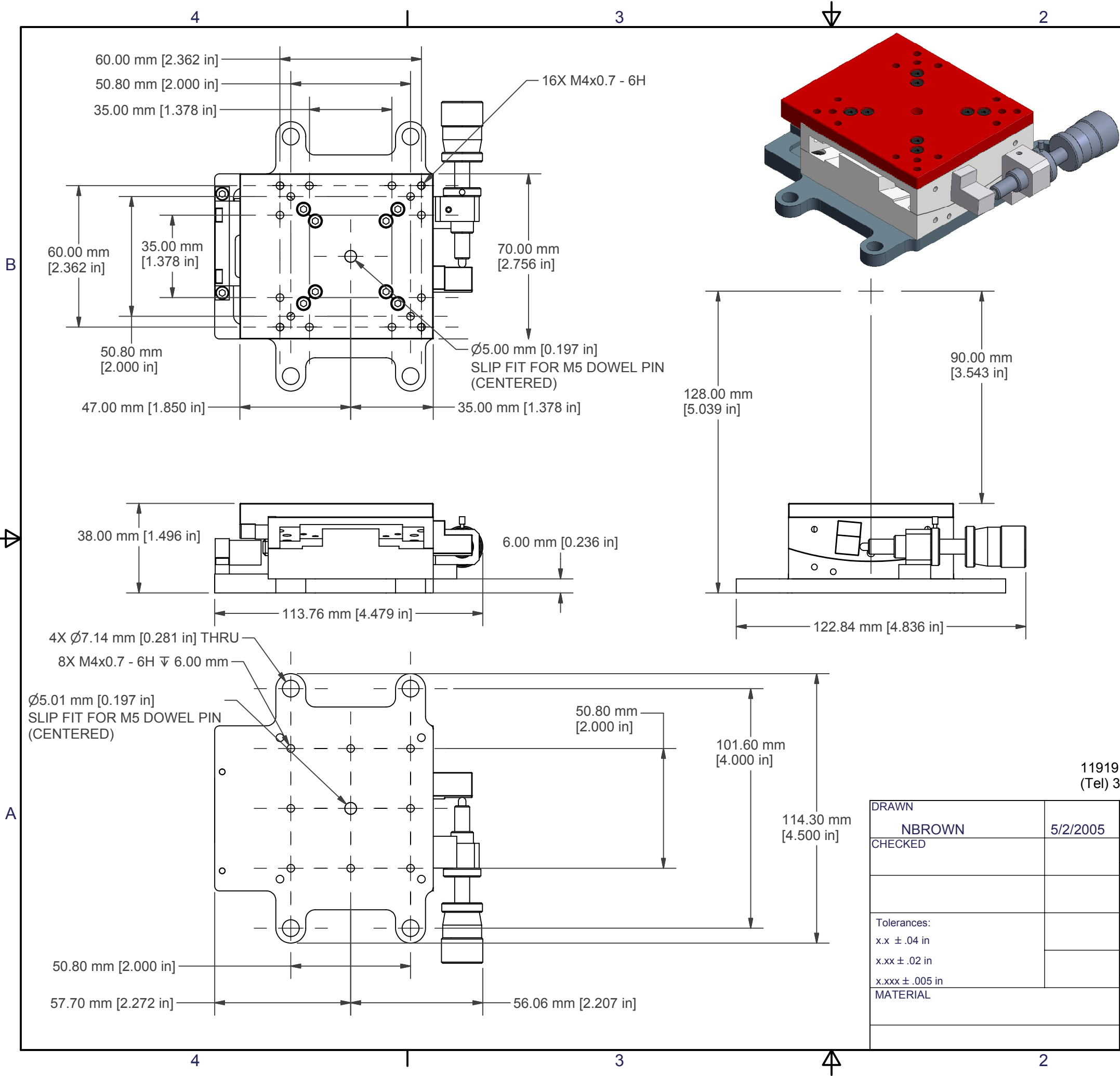
CUSTOM DESIGNS FOR OEM INTEGRATION

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DRAWN NBROWN 5/2/2005 CHECKED	TITLE AI-GONI-064-ME		
Tolerances: x.x ± .04 in x.xx ± .02 in x.xxx ± .005 in MATERIAL	SIZE B	DWG NO 00453	REV 001
SCALE	ALIO STD TEMPLATE - REV 004	SHEET 1 OF 1	1



STANDARD FEATURES

- DRIVE: MANUAL MICROMETER
- COARSE ADJUSTMENT: FULL ROTATIONAL RANGE
- FINE ADJUSTMENT: 0.11 DEGREE RANGE
(CONSULT FACTORY FOR ADDITIONAL OPTIONS)
- ROTATION: ± 5 DEG
- ENCODER RESOLUTION: 0.02 ARC-SEC TO 13 ARC-SEC
0.02 ARC-SEC USING 4096 INTERPOLATION
(CONTROLLER DEPENDENT)
- SYSTEM REPEATABILITY: +/- 1 ENCODER COUNT
(CONTROLLER DEPENDENT)
- HOME SENSOR: STANDARD
- BEARINGS: PRECISION ARCHED CROSS ROLLER
- BEARING DYNAMIC LOAD RATING: 1 kN
- SYSTEM LOAD CAPACITY: APPLICATION DEPENDENT
PLEASE CONSULT THE FACTORY
- ENCLOSURES: ALUMINUM 6061-T6
- ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM
10e-7 TORR, AND VACUUM 10e-10 TORR
(CONSULT FACTORY)
- TEMPERATURE: 0 to 50 DEG C
- HUMIDITY: 10% to 80% NON-CONDENSING
- ASSEMBLY MASS: 0.86 kg

UPGRADE OPTIONS

UPGRADE TO SINGLE HR2 MOTOR VERSIONS ARE AVAILABLE - CONSULT FACTORY FOR DETAILS

CUSTOM DESIGNS FOR OEM INTEGRATION

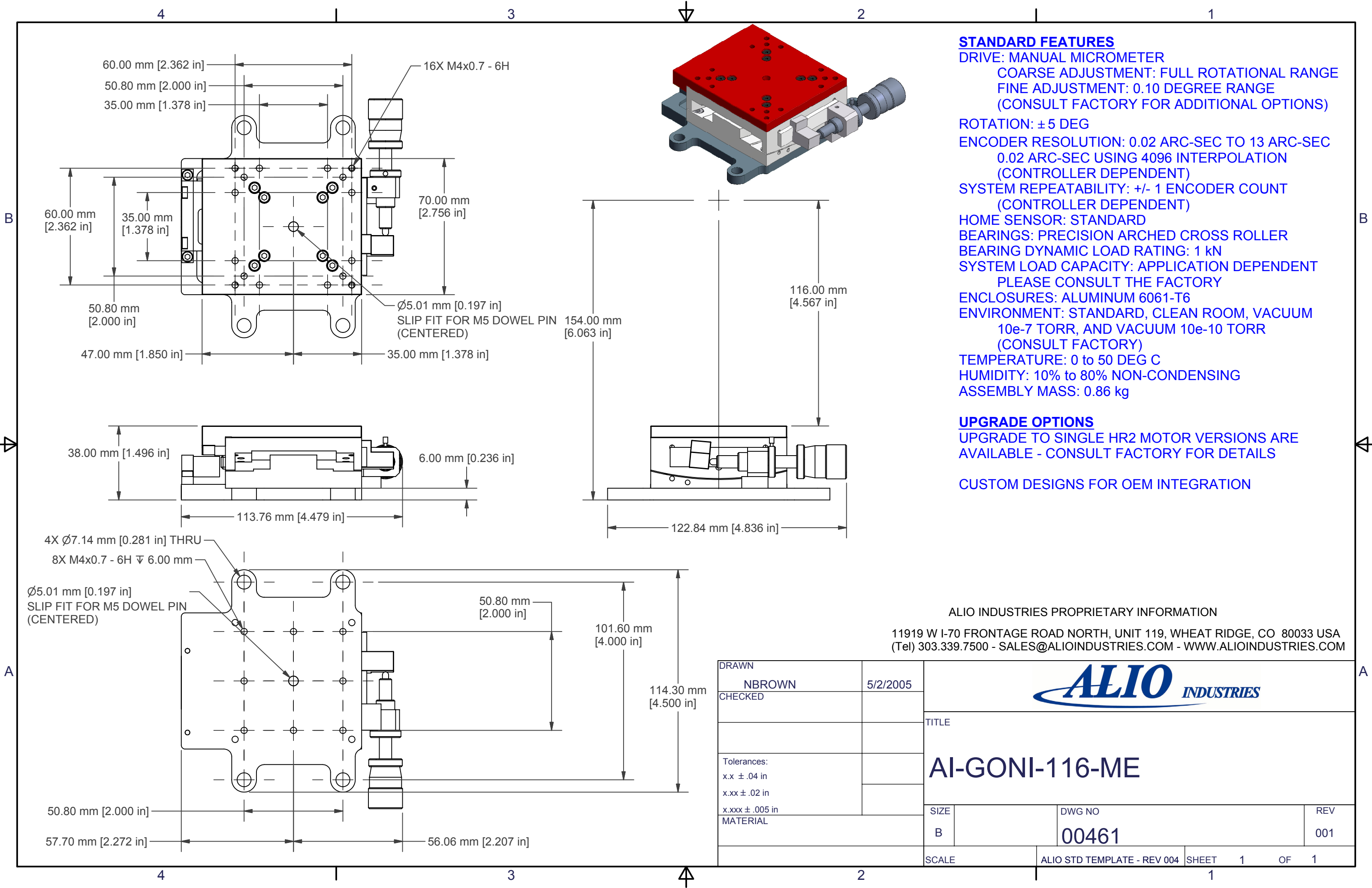
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DRAWN	NBROWN	5/2/2005
CHECKED		
Tolerances: x.x ± .04 in x.xx ± .02 in x.xxx ± .005 in		
MATERIAL		

TITLE		
AI-GONI-090-ME		
SIZE	DWG NO	REV
B	00459	001
SCALE	ALIO STD TEMPLATE - REV 004	SHEET 1 OF 1



STANDARD FEATURES

- DRIVE: MANUAL MICROMETER
- COARSE ADJUSTMENT: FULL ROTATIONAL RANGE
- FINE ADJUSTMENT: 0.10 DEGREE RANGE
(CONSULT FACTORY FOR ADDITIONAL OPTIONS)
- ROTATION: ± 5 DEG
- ENCODER RESOLUTION: 0.02 ARC-SEC TO 13 ARC-SEC
0.02 ARC-SEC USING 4096 INTERPOLATION
(CONTROLLER DEPENDENT)
- SYSTEM REPEATABILITY: +/- 1 ENCODER COUNT
(CONTROLLER DEPENDENT)
- HOME SENSOR: STANDARD
- BEARINGS: PRECISION ARCHED CROSS ROLLER
- BEARING DYNAMIC LOAD RATING: 1 kN
- SYSTEM LOAD CAPACITY: APPLICATION DEPENDENT
PLEASE CONSULT THE FACTORY
- ENCLOSURES: ALUMINUM 6061-T6
- ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM
10e-7 TORR, AND VACUUM 10e-10 TORR
(CONSULT FACTORY)
- TEMPERATURE: 0 to 50 DEG C
- HUMIDITY: 10% to 80% NON-CONDENSING
- ASSEMBLY MASS: 0.86 kg

UPGRADE OPTIONS

- UPGRADE TO SINGLE HR2 MOTOR VERSIONS ARE AVAILABLE - CONSULT FACTORY FOR DETAILS
- CUSTOM DESIGNS FOR OEM INTEGRATION

ALIO INDUSTRIES PROPRIETARY INFORMATION

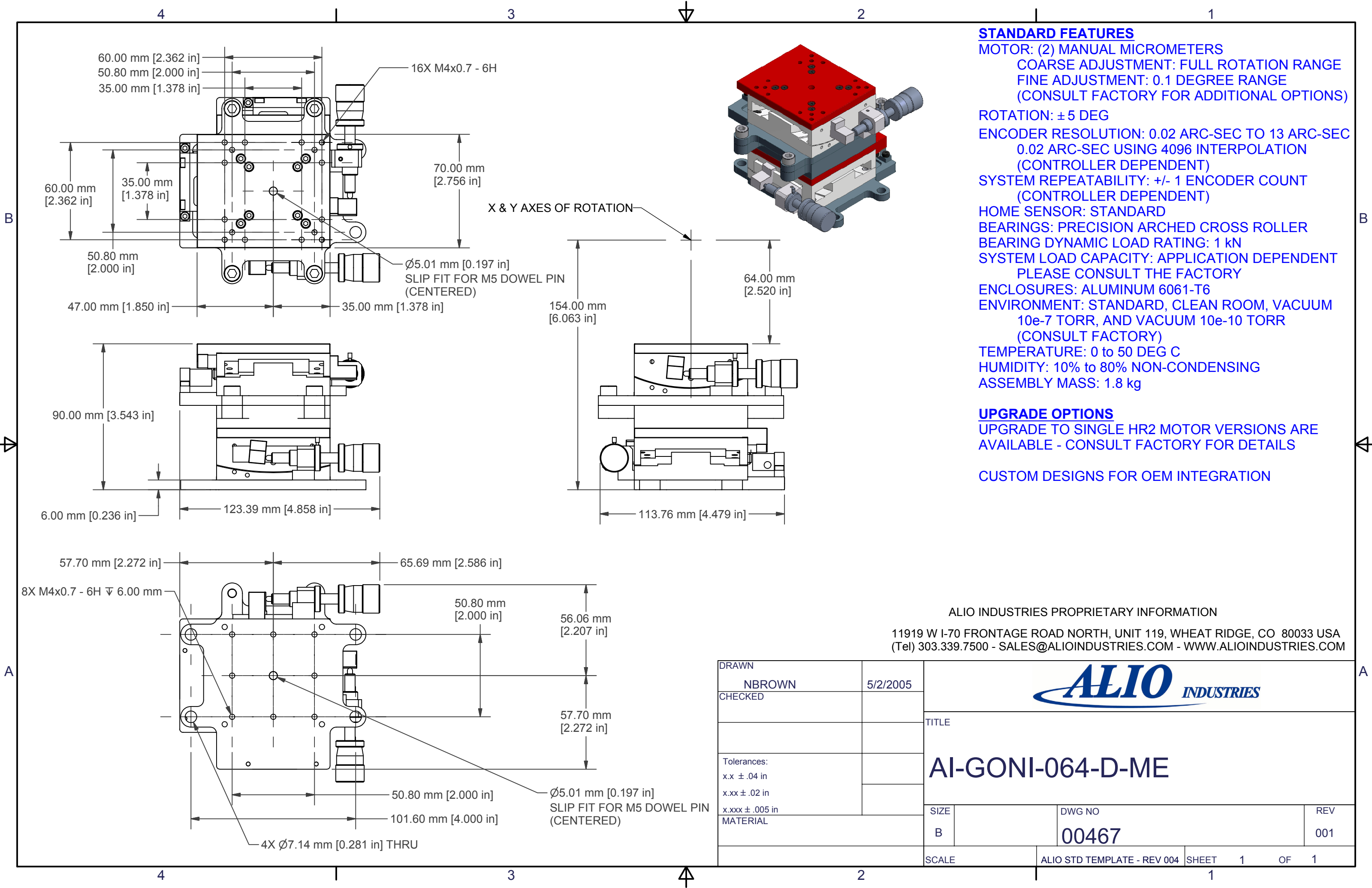
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DRAWN	NBROWN	5/2/2005
CHECKED		
Tolerances:		
x.x ± .04 in		
x.xx ± .02 in		
x.xxx ± .005 in		
MATERIAL		

AI-GONI-116-ME

SIZE	DWG NO	REV
B	00461	001



STANDARD FEATURES
 MOTOR: (2) MANUAL MICROMETERS
 COARSE ADJUSTMENT: FULL ROTATION RANGE
 FINE ADJUSTMENT: 0.1 DEGREE RANGE
 (CONSULT FACTORY FOR ADDITIONAL OPTIONS)
 ROTATION: ± 5 DEG
 ENCODER RESOLUTION: 0.02 ARC-SEC TO 13 ARC-SEC
 0.02 ARC-SEC USING 4096 INTERPOLATION
 (CONTROLLER DEPENDENT)
 SYSTEM REPEATABILITY: +/- 1 ENCODER COUNT
 (CONTROLLER DEPENDENT)
 HOME SENSOR: STANDARD
 BEARINGS: PRECISION ARCHED CROSS ROLLER
 BEARING DYNAMIC LOAD RATING: 1 kN
 SYSTEM LOAD CAPACITY: APPLICATION DEPENDENT
 PLEASE CONSULT THE FACTORY
 ENCLOSURES: ALUMINUM 6061-T6
 ENVIRONMENT: STANDARD, CLEAN ROOM, VACUUM
 10e-7 TORR, AND VACUUM 10e-10 TORR
 (CONSULT FACTORY)
 TEMPERATURE: 0 to 50 DEG C
 HUMIDITY: 10% to 80% NON-CONDENSING
 ASSEMBLY MASS: 1.8 kg

UPGRADE OPTIONS
 UPGRADE TO SINGLE HR2 MOTOR VERSIONS ARE
 AVAILABLE - CONSULT FACTORY FOR DETAILS

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DRAWN	NBROWN	5/2/2005
CHECKED		
Tolerances: x.x ± .04 in x.xx ± .02 in x.xxx ± .005 in MATERIAL		

TITLE		
AI-GONI-064-D-ME		
SIZE	DWG NO	REV
B	00467	001
SCALE	ALIO STD TEMPLATE - REV 004	SHEET 1 OF 1