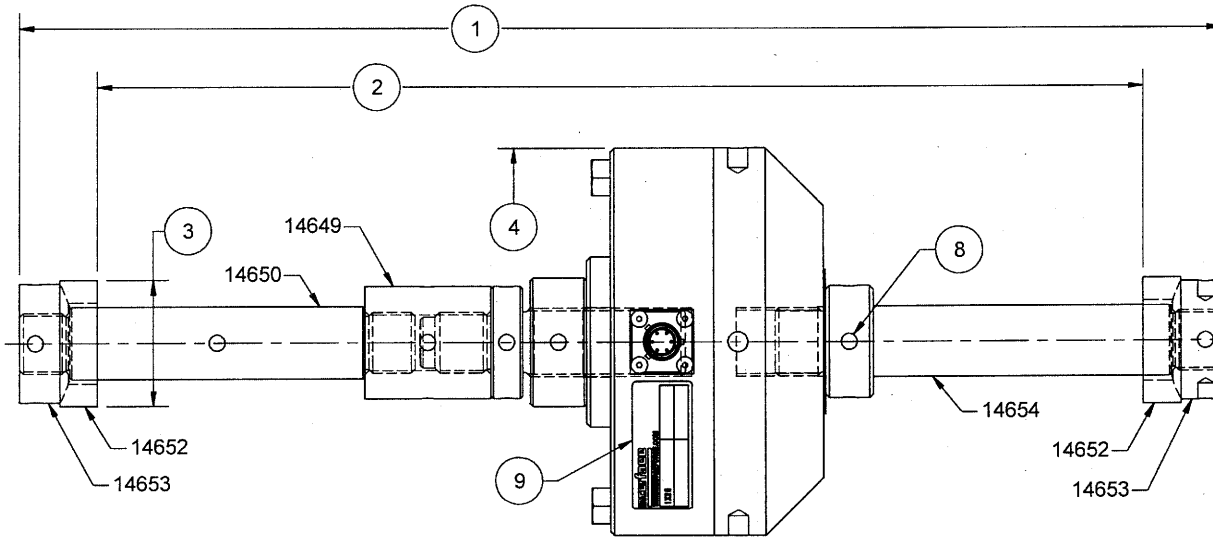


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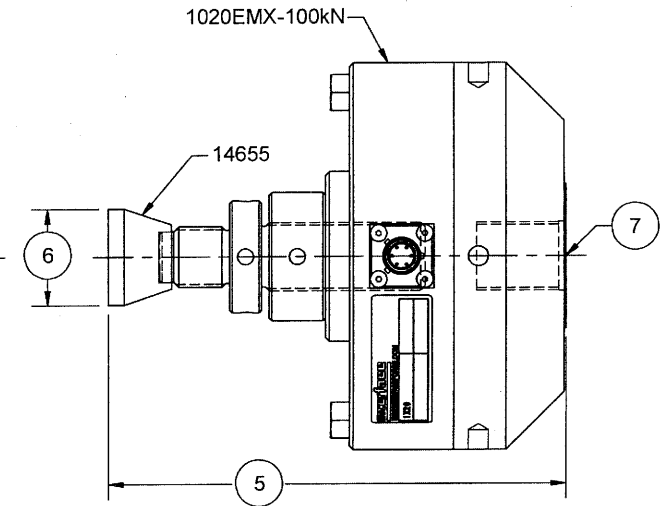
81199

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/08/12	



TENSION TESTING



COMPRESSION TESTING

CALIBRATION KIT CHARACTERISTICS		CAPACITIES
#	CAPACITY	100 kN
1	TENSION OVERALL HEIGHT	478.3 ± 5.0
2	TENSION LOAD SURFACE HEIGHT	416.1 ± 5.0
3	TENSION LOAD SURFACE DIAMETER	Ø 49.87 - Ø 49.71
4	REFERENCE LOAD CELL OUTSIDE DIAMETER	(Ø 153.9)
5	COMPRESSION OVERALL HEIGHT	181.6 ± 5.0
6	COMPRESSION LOAD SURFACE DIAMETER	Ø 38.1
7	REFERENCE LOAD CELL BASE HOLE	M27 x 2-6H ∇ 35.5 \square Ø 27.4 ∇ 3.0
8	SPANNER HOLES, TYPICAL	Ø 6.4
9	IDENTIFICATION LABEL INCLUDING: MODEL, CAPACITY, SERIAL NUMBER & OUTPUT	

2. DIMENSIONAL TOLERANCE: ± 0.3.
1. DIMENSIONS IN mm.

CONNECTOR PINOUT	
PIN	FUNCTION
A	+ EXCITATION
B	+ SIGNAL
C	- SIGNAL
D	- EXCITATION
E	- SENSE
F	+ SENSE

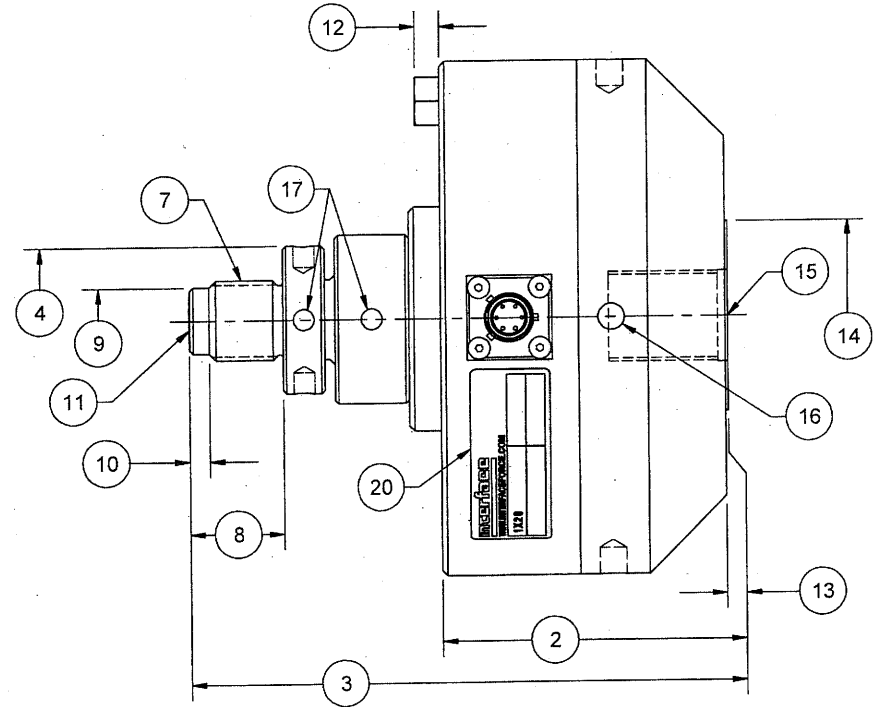
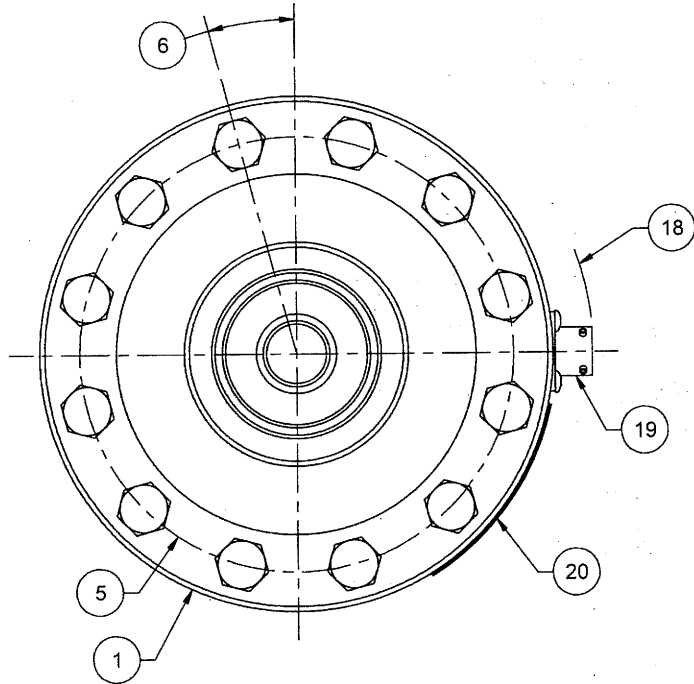
TENSION UPSCALE

REMOVE BURRS AND SHARP EDGES .02 MAX SURFACE FINISH 63 MICROINCHES		interface ADVANCED FORCE MEASUREMENT 7401 E. BUTHERUS DR. SCOTTSDALE, AZ USA 85260	
CREATOR ME	DATE 11/08/12	TITLE: 100 kN LOAD STRING ISO 376 CALIBRATION KIT	
DESIGNED: ME	DATE 11/08/12	SIZE: DWG. NO: A 81199	REV: A
CAM DATA:		SCALE: 1:3	SHEET 1 OF 1

81206

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/12/12	



LOAD CELL CHARACTERISTICS		CAPACITIES
#	CAPACITY	100 (kN)
1	OUTSIDE DIAMETER	Ø 153.9
2	FLEXURE & BASE OVERALL HEIGHT	85.7
3	OVERALL HEIGHT	161.5
4	HUB SURFACE DIAMETER	Ø 44.4
5	MOUNTING BOLT CIRCLE	Ø 130.18
6	MOUNTING BOLT OFFSET ANGLE	15°
7	ADAPTOR THREAD	M24 x 2-4h
8	ADAPTOR THREAD LENGTH	28.2
9	PILOT DIAMETER	Ø 20.00 - 0.05
10	PILOT DIAMETER LENGTH	6.0
11	SPHERICAL RADIUS	SR 152.4
12	BOLT HEAD HEIGHT	7.4
13	BASE PAD HEIGHT	0.8
14	BASE PAD DIAMETER	Ø 57.2
15	BASE THREAD, DEPTH & COUNTERBORE	M27 x 2-6H ∇ 35.5, \square Ø 27.4 ∇ 3.0
16	(4) SPANNER HOLES SPACED AT 90°	Ø 7.9 ∇ 7.9
17	(6) SPANNER HOLES SPACED AT 90°	Ø 6.4 ∇ 6.4
18	ROTATIONAL CLEARANCE	R 89.4 MIN
19	CONNECTOR TYPE	PT02E-10-6P
20	IDENTIFICATION LABEL INCLUDING: MODEL, CAPACITY, SERIAL NUMBER & OUTPUT	

2. DIMENSIONAL TOLERANCE: ± 0.3.
1. DIMENSIONS IN mm.

CONNECTOR PINOUT	
PIN	FUNCTION
A	+ EXCITATION
B	+ SIGNAL
C	- SIGNAL
D	- EXCITATION
E	- SENSE
F	+ SENSE

TENSION UPSCALE

REMOVE BURRS AND SHARP EDGES .02 MAX SURFACE FINISH 63 MICROINCHES	
CREATOR	DATE
DESIGNED: ME	11/12/12
DETAILED: ME	11/12/12
CAM DATA:	

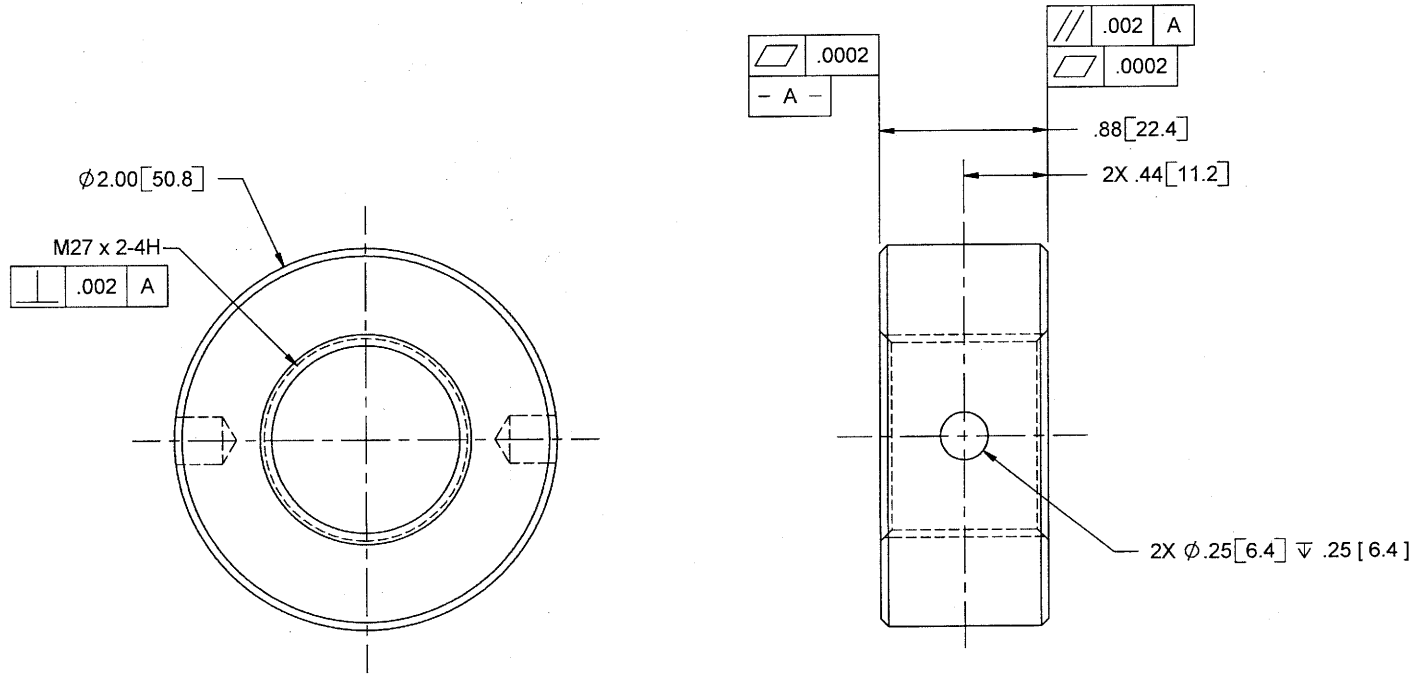
Interface ADVANCED FORCE MEASUREMENT 7401 E. BUTHERUS DR. SCOTTSDALE, AZ USA 85260	
TITLE: OUTLINE, 1020EMX-100kN ISO 376 CALIBRATION CELL	
SIZE: DWG. NO: A 81206	REV: A
SCALE: 1:2.25	SHEET 1 OF 1

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14648

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/08/12	



3. FINISH: NONE.
2. HEAT TREAT PER MIL-H-6875 TO Rc 36-39.
1. MATERIAL: 4140/42 STEEL ϕ 2-5/8 (11031-14).

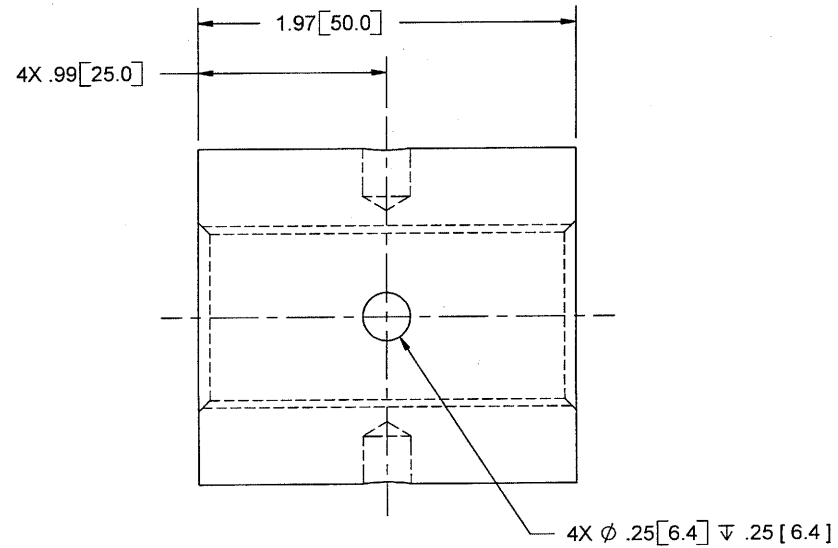
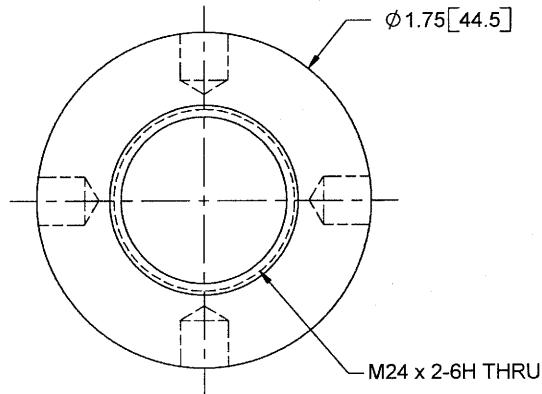
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		REMOVE BURRS AND SHARP EDGES .02 MAX SURFACE FINISH 63 MICROINCHES		interface	
ANGLES	$\pm 0^{\circ}30'$	CREATOR	DATE	ADVANCED FORCE MEASUREMENT	
.XX	$\pm .010$	DESIGNED:	11/08/12	7401 E. BUTHERUS DR. SCOTTSDALE, AZ USA 85260	
.XXX	$\pm .005$	ME		TITLE:	
STD. RADII	.015 - .035	DETAILED:	11/08/12	JAM NUT, ISO 376	
ϕ RUNOUT	.002	ME		M27 x 2	
MATERIAL:	WEIGHT:			SIZE:	DWG. NO:
FINISH:	OUTPUT:	CAM DATA:	No	A	14648
				SCALE: 1:1	SHEET 1 OF 1

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14649

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/08/12	



3. FINISH: BLACK OXIDE & OIL.
2. HEAT TREAT PER MIL-H-6875 TO Rc 43-46.
1. MATERIAL: 4140/42 STEEL ϕ 2-5/8 (11031-14).

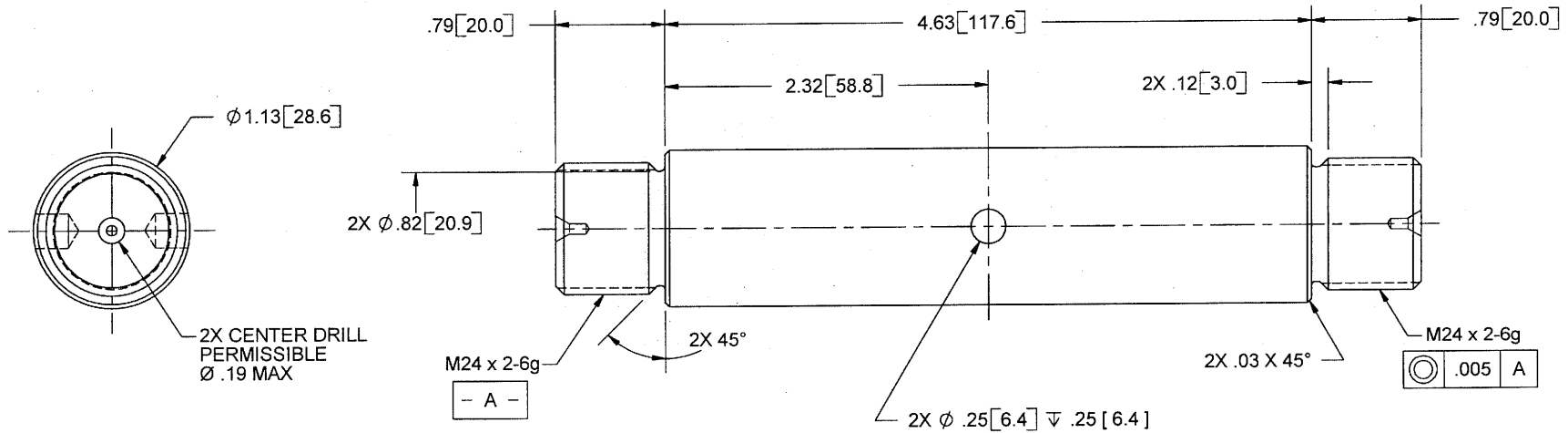
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		REMOVE BURRS AND SHARP EDGES .02 MAX SURFACE FINISH 63 MICROINCHES		interface ADVANCED FORCE MEASUREMENT 7401 E. BUTHERUS DR. SCOTTSDALE, AZ USA 85260	
ANGLES	$\pm 0^{\circ}30'$	CREATOR	DATE	TITLE:	
.XX	$\pm .010$	DESIGNED:	11/08/12	ROD ADAPTOR ISO 376	
.XXX	$\pm .005$	DETAILED:	11/08/12	100 kN	
STD. RADII	.015 - .035	MATERIAL:	WEIGHT:	SIZE:	DWG. NO:
ϕ RUNOUT	.002	FINISH:	OUTPUT:	A	14649
		CAM DATA:	No	SCALE: 1:1	SHEET 1 OF 1
					REV: A

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14650

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/08/12	



3. FINISH: ELECTROLESS NICKEL PLATE 0.0003 TO 0.0005 THICK PER MIL-C-26074.
2. HEAT TREAT PER MIL-H-6875 TO Rc 43-46.
1. MATERIAL: 4140/42 STEEL Ø 2-5/8 (11031-14).

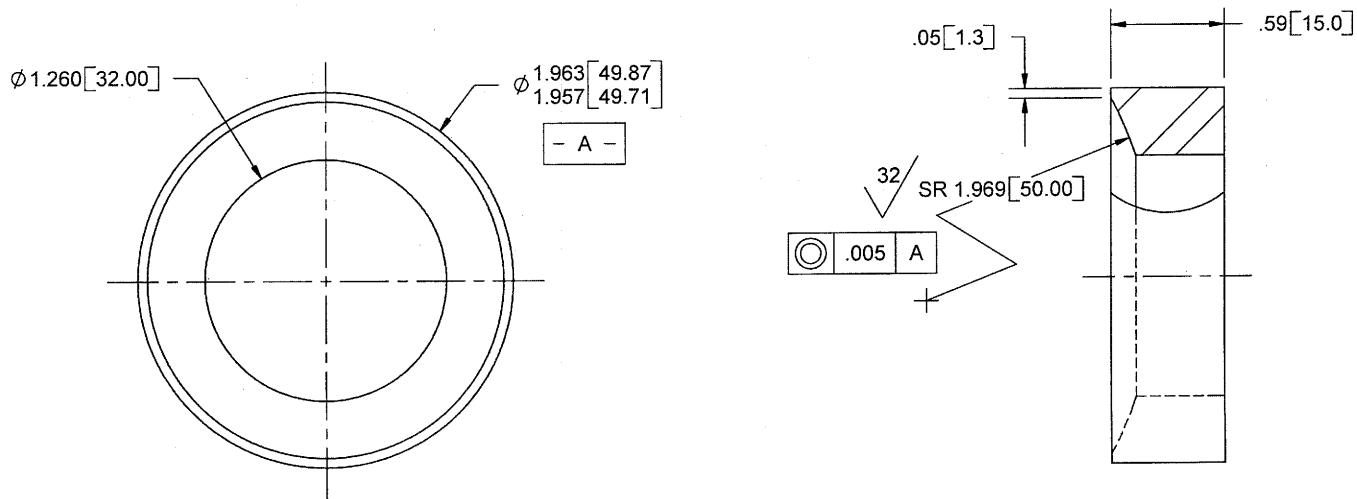
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		REMOVE BURRS AND SHARP EDGES .02 MAX SURFACE FINISH 63 MICROINCHES		interface ADVANCED FORCE MEASUREMENT 7401 E. BUTHERUS DR. SCOTTSDALE, AZ USA 85260	
ANGLES	± 0°30'	CREATOR	DATE	TITLE: UPPER CONNECTING ROD ISO 376 100kN	
.XX	± .010	DESIGNED: ME	11/08/12	SIZE: DWG. NO: A 14650	
.XXX	± .005	DETAILED: ME	11/08/12	SCALE: 0.8:1	
STD. RADII	.015 - .035	MATERIAL:	WEIGHT:	SHEET 1 OF 1	
Ø RUNOUT	.002	FINISH:	OUTPUT:	REV: A	
				CAD FILE <N:\14650A.SLD***>	

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14652

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/08/12	



3. BLACK OXIDE & OIL.
2. HEAT TREAT PER MIL-H-6875 TO Rc 43-46.
1. MATERIAL: 4140/42 STEEL Ø 2-5/8 (11031-14).

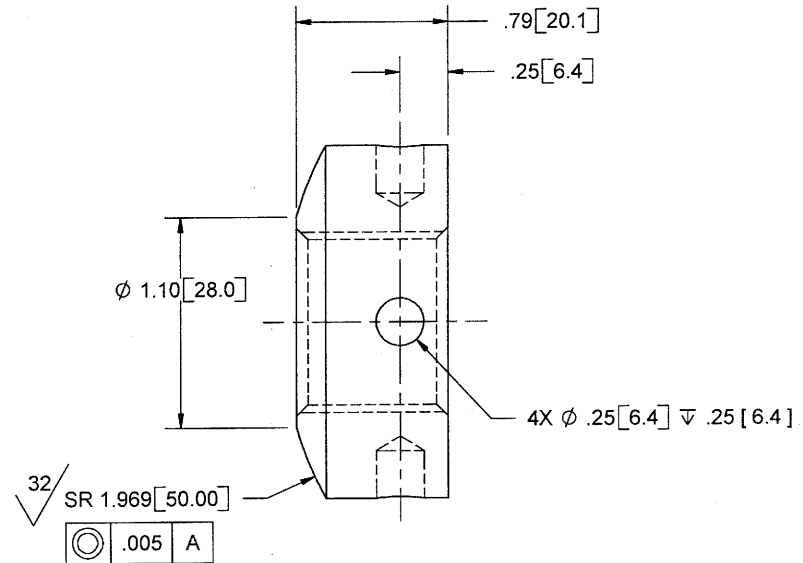
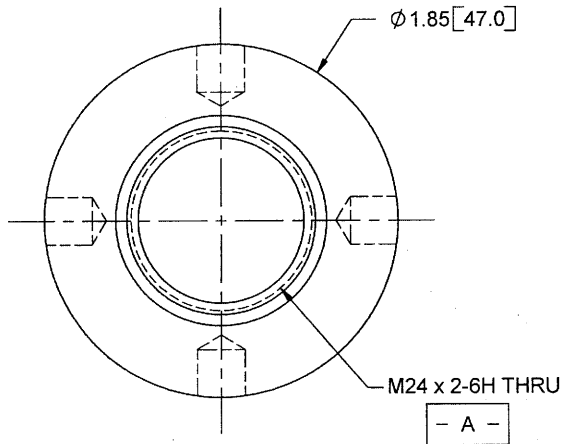
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		REMOVE BURRS AND SHARP EDGES .02 MAX SURFACE FINISH 63 MICROINCHES		interface ADVANCED FORCE MEASUREMENT 7401 E. BUTHERUS DR. SCOTTSDALE, AZ USA 85260	
ANGLES	± 0°30'	CREATOR	DATE	TITLE:	
.XX	± .010	DESIGNED:	11/08/12	CONCAVE LOAD WASHER	
.XXX	± .005	DETAILED:	11/08/12	ISO 376 100kN	
STD. RADII	.015 - .035	MATERIAL:	WEIGHT:	SIZE:	DWG. NO:
Ø RUNOUT	.002	FINISH:	OUTPUT:	A	14652
		CAM DATA:	No	SCALE: 1:1	SHEET 1 OF 1
					REV: A

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14653

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/08/12	



- BLACK OXIDE & OIL.
- HEAT TREAT PER MIL-H-6875 TO Rc 43-46.
- MATERIAL: 4140/42 STEEL Ø 2-5/8 (11031-14).

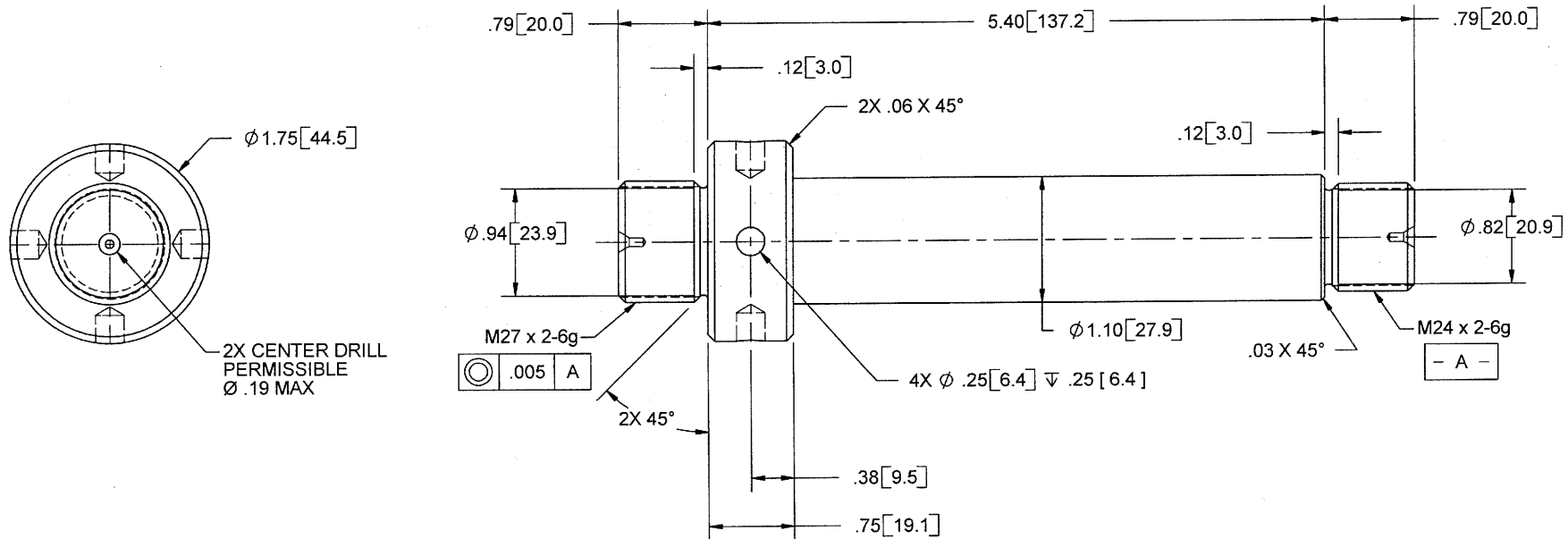
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		REMOVE BURRS AND SHARP EDGES .02 MAX SURFACE FINISH 63 MICROINCHES		interface ADVANCED FORCE MEASUREMENT 7401 E. BUTHERUS DR. SCOTTSDALE, AZ USA 85260	
ANGLES	± 0°30'	CREATOR	DATE	TITLE: SPHERICAL NUT, ISO 376 100kN	
.XX	± .010	DESIGNED: ME	11/08/12	SIZE: A	DWG. NO: 14653
.XXX	± .005	DETAILED: ME	11/08/12	SCALE: 1:1	SHEET 1 OF 1
STD. RADII	.015 - .035	MATERIAL:	WEIGHT:	REV: A	
Ø RUNOUT	.002	FINISH:	OUTPUT:		
		CAM DATA: No			

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14654

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/08/12	



3. FINISH: ELECTROLESS NICKEL PLATE 0.0003 TO 0.0005 THICK PER MIL-C-26074.
2. HEAT TREAT PER MIL-H-6875 TO Rc 43-46.
1. MATERIAL: 4140/42 STEEL $\phi 2-5/8$ (11031-14).

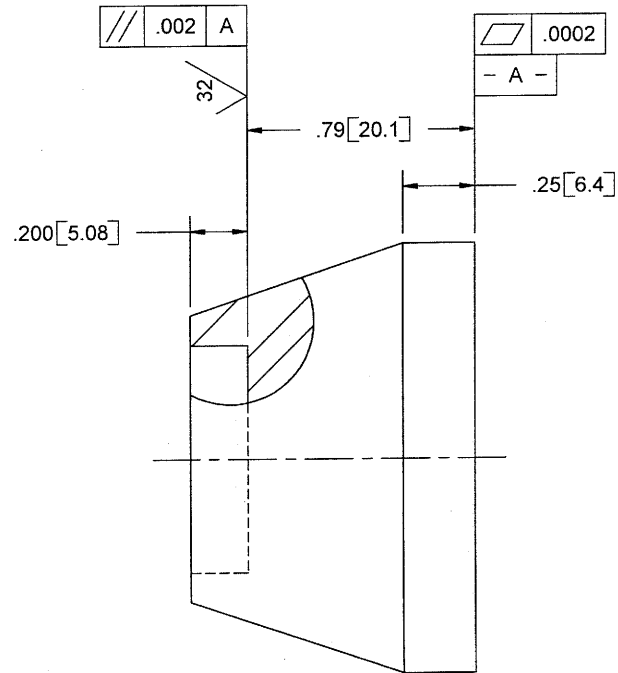
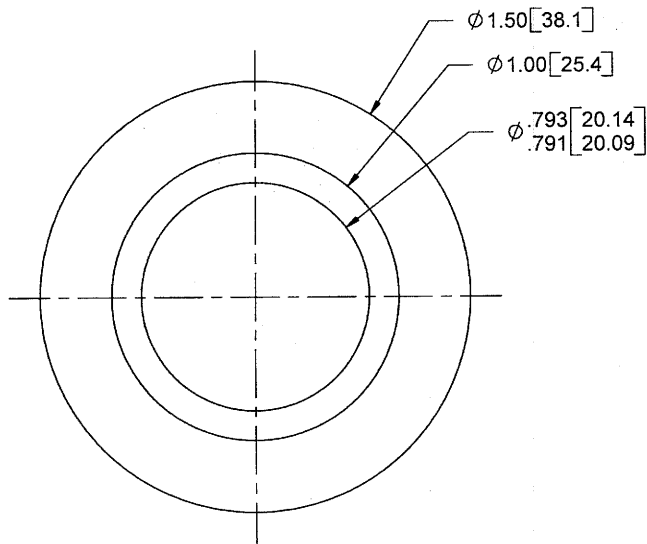
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		REMOVE BURRS AND SHARP EDGES .02 MAX SURFACE FINISH 63 MICROINCHES		Interface ADVANCED FORCE MEASUREMENT 7401 E. BOTHERUS DR. SCOTTSDALE, AZ USA 85260	
ANGLES	$\pm 0^\circ 30'$	CREATOR	DATE	TITLE:	
.XX	$\pm .010$	DESIGNED:	11/08/12	BASE CONNECTING ROD	
.XXX	$\pm .005$	ME		ISO 376 100kN	
STD. RADII	.015 - .035	DETAILED:	11/08/12	SIZE: DWG. NO:	14654
ϕ RUNOUT	.002	ME		SCALE: 1:1.5	SHEET 1 OF 1
MATERIAL:	WEIGHT:	CAM DATA:	No	REV:	A
FINISH:	OUTPUT:				

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14655

REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/08/12	



- 3. BLACK OXIDE & OIL.
- 2. HEAT TREAT PER MIL-H-6875 TO Rc 43-46.
- 1. MATERIAL: 4140/42 STEEL Ø 2-5/8 (11031-14).

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		REMOVE BURRS AND SHARP EDGES .02 MAX SURFACE FINISH 63 MICROINCHES		interface ADVANCED FORCE MEASUREMENT 7401 E. BUTHERUS DR. SCOTTSDALE, AZ USA 85260	
ANGLES	± 0°30'	CREATOR	DATE	TITLE:	
.XX	± .010	DESIGNED:	11/08/12	COMPRESSION FITTING	
.XXX	± .005	ME		ISO 376 100kN	
STD. RADII	.015 - .035	DETAILED:	11/08/12	SIZE:	DWG. NO:
Ø RUNOUT	.002	ME		A	14655
MATERIAL:	WEIGHT:	CAM DATA:		SCALE: 1.5:1	SHEET 1 OF 1
FINISH:	OUTPUT:	No			
				REV: A	