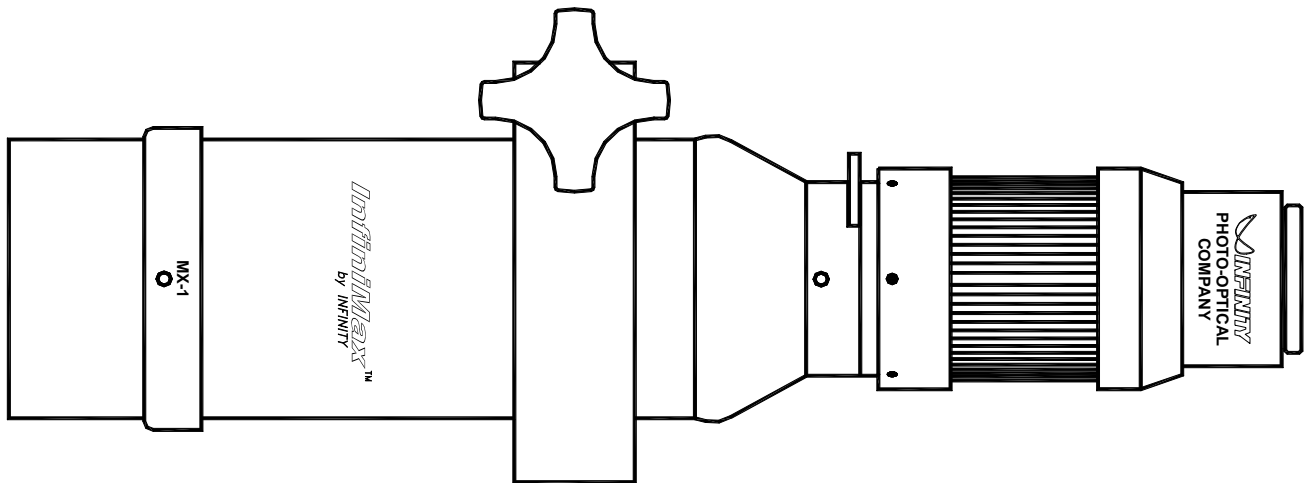


Model KX InfiniMax™

Long-Distance Microscope System



INFINITY Photo-Optical Company • *Manufacturers of precision optical instruments.*

2530 Frontier Ave., Boulder, CO 80301 • Tel: (303) 440-4544 • Fax: (303) 440-4144 • E-mail: info@infinity-usa.com • Web: www.infinity-usa.com

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InfiniMax™ Long Distance Microscope

General Description. The InfiniMax is a developmental offshoot of our latest Model KC. While the KC's AVS System is located in the traditional position, the InfiniMax, uses Infinity's latest AVS patent with the AVS system placed in a unique, "balanced" position that maintains virtually the same magnification within the specified focusing range for each objective. With performance second only to Infinity's own Models K2 and KV, InfiniMax rivals even the best telecentric lenses, making it ideally suited for high-resolution gauging/measuring applications. Six MX-Series objectives attach to the InfiniMax Main Body to obtain six basic magnification choices. Ranging InfiniMax's focus provides virtually the same magnification, regardless of working distance.

Formats. Directly, InfiniMax can be used with video formats up to 1-in. With the Large Format Adapter (LFA), InfiniMax can be used with video and photo formats up to 36x43mm (35mm SLR cameras or very large video formats).

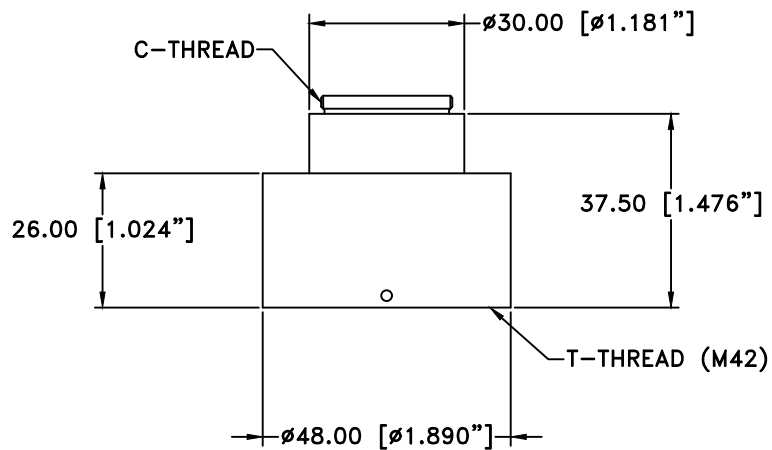
Focus-lock. InfiniMax contains an integral Focus-lock that operates as a friction brake. The Focus-lock is activated by loosening the three setscrews on the Lock Ring and the single setscrew on the tube above it. Then, by holding *both* the engraved scaled Lock Ring and fluted Focusing Ring, turn counterclockwise up tight against the tube above it. To set the lock, retighten the setscrews located on the Lock Ring the setscrew on the tube above it. Reverse the procedure to unlock. This procedure also allows the user to select the amount of rotational tension for focusing.

Care and Cleaning. The InfiniMax should be treated as the fine optical instrument that it is. Care should be taken to keep dust and dirt off external lens surfaces. The unit can be cleaned (metal parts only) by a cloth moistened with alcohol. The external optical surfaces should be cleaned only when necessary, and then, only by a soft cotton swab moistened by an approved optical glass cleaner. If you have further questions, please contact Infinity Photo-Optical Company or your authorized dealer.

Video Formats

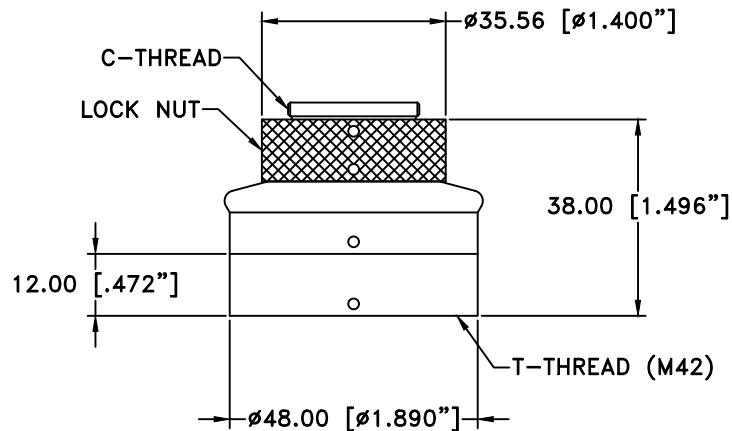
Format	Factor	Diagram
1/4"	0.5	
1/3"	0.75	
1/2"	1.0	
2/3"	1.375	
1"	2.0	

Unless otherwise noted all data is given for 1/2" camera sensors. For FOV or magnification in other sensor sizes use the factors listed. For example, a FOV of 25mm listed for a 1/3" camera would be $25 \times 0.75 = 18.75\text{mm}$.



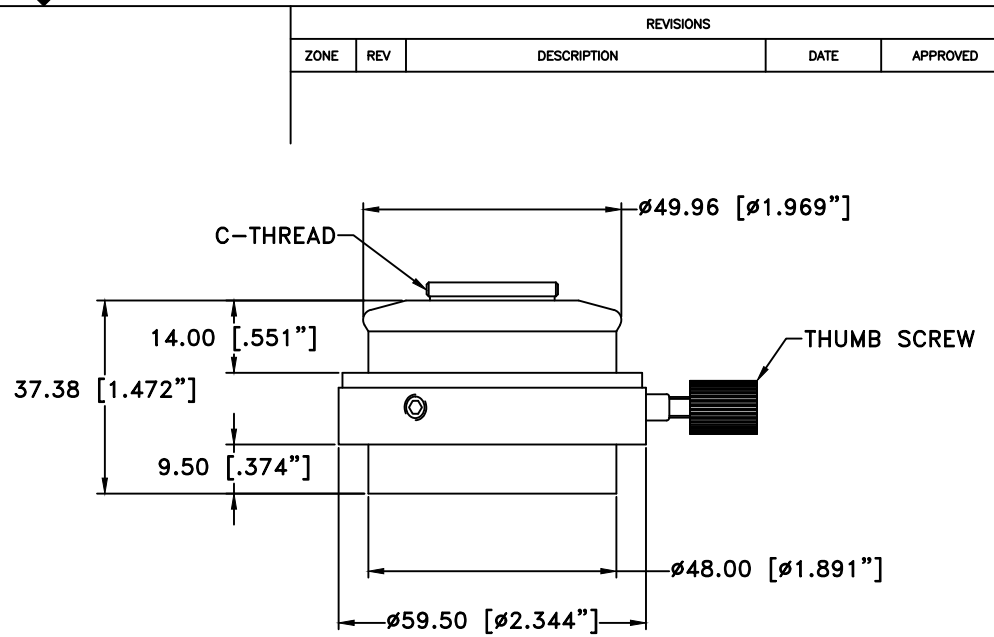
770507

C-MOUNT VIDEO ADAPTER



770511

STANDARD ROTATABLE C-MOUNT



770509

ORIENTABLE C-MOUNT VIDEO ADAPTER

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

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THIS DRAWING IS THE PROPERTY OF THE INFINITY PHOTO-OPTICAL COMPANY AND IT MUST BE TREATED AS CONFIDENTIAL. SURFACE FINISH: OUTSIDE DIAMETERS FINISH IS CRITICAL. BEAD BLAST INTERNAL RETAINERS ALL DIMS. ARE IN mm [INCH]. DIMS. ARE AFTER ANODIZING TOL. DIAMETERS: ±0.025 [±0.001"] OTHERS: ±0.102 [±0.004"] UNIFIED THREADS ARE CLASS 2 METRIC THREADS ARE MEDIUM FIT BREAK ALL SHARP EDGES TO R0.25 [R0.010"]

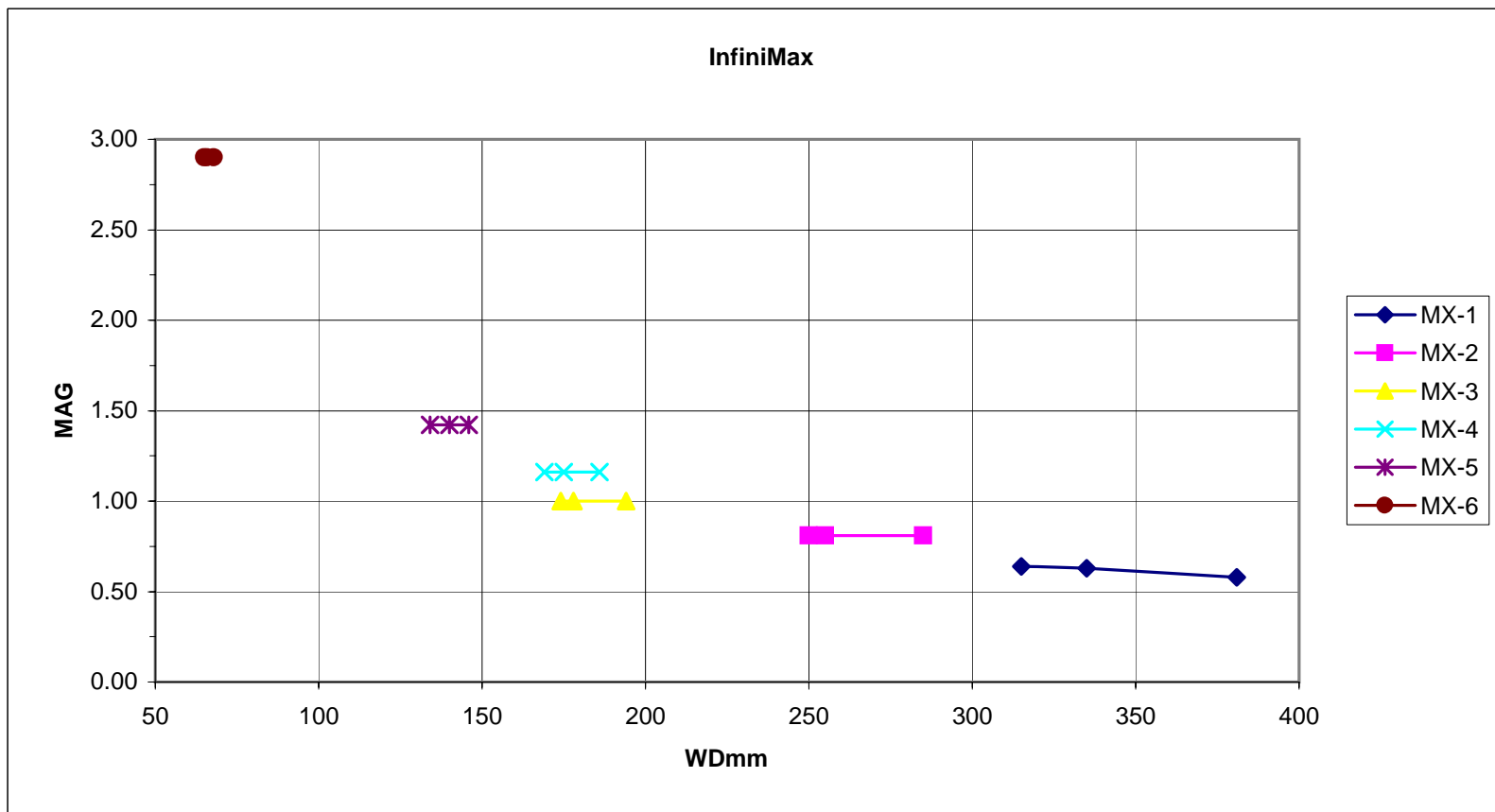
INFINITY Photo-Optical Company
www.infinity-usa.com

C-MOUNT VIDEO ADAPTERS

Date: 10/30/17 MB	SIZE B	FSCM NO.	DWG NO.	REV -
Modified:	SCALE NONE	-	SHEET 1 OF 1	

InfiniMax™ OPTICAL DATA

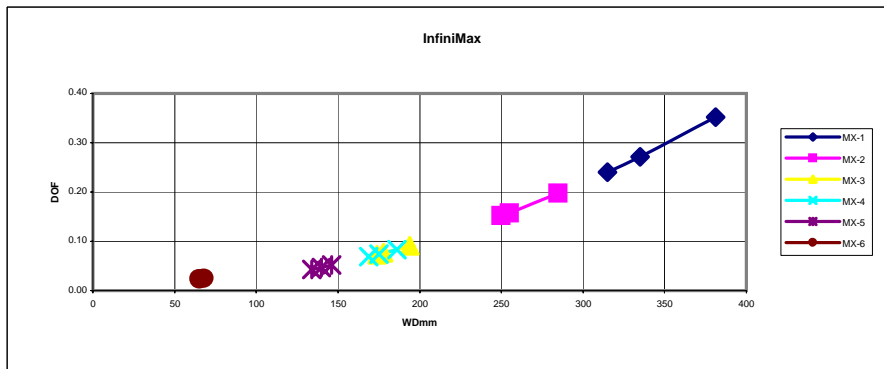
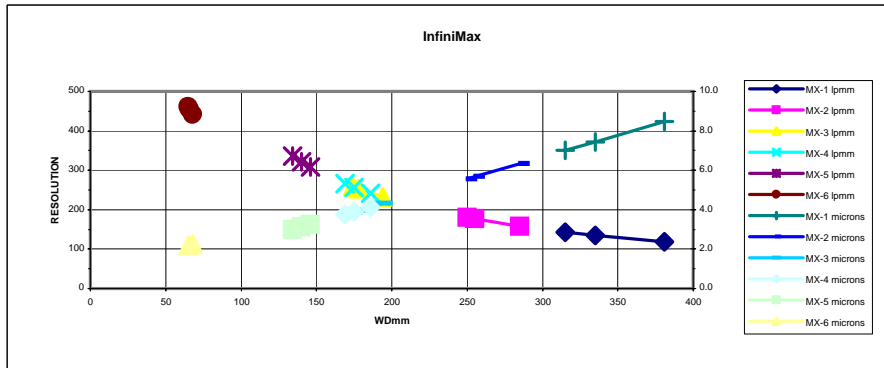
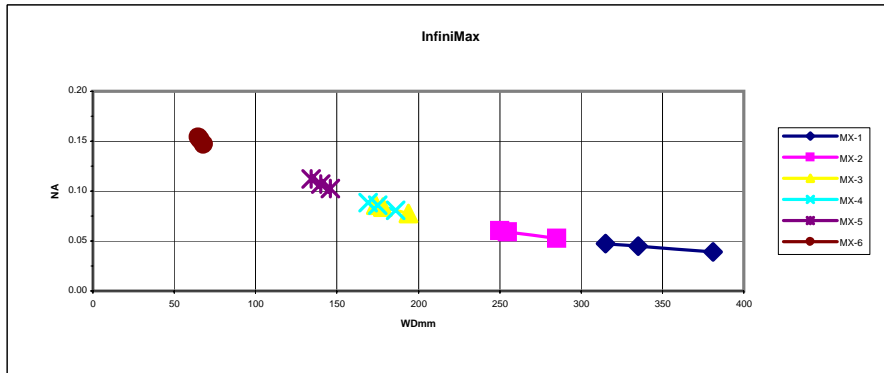
InfiniMax	Objective	MX-1			MX-2			MX-3			MX-4			MX-5			MX-6		
		Near	Mid	Far	Near	Mid	Far	Near	Mid	Far	Near	Mid	Far	Near	Mid	Far	Near	Mid	Far
	WDmm	315	335	381	250	255	285	174	178	194	169	175	186	134	140	146	65	66	68
	MAG	0.64	0.63	0.58	0.81	0.81	0.81	1.00	1.00	1.00	1.16	1.16	1.16	1.42	1.42	1.42	2.90	2.90	2.90
	FOVmm	10.0	10.2	11.0	7.9	7.9	7.9	6.4	6.4	6.4	5.5	5.5	5.5	4.5	4.5	4.5	2.2	2.2	2.2

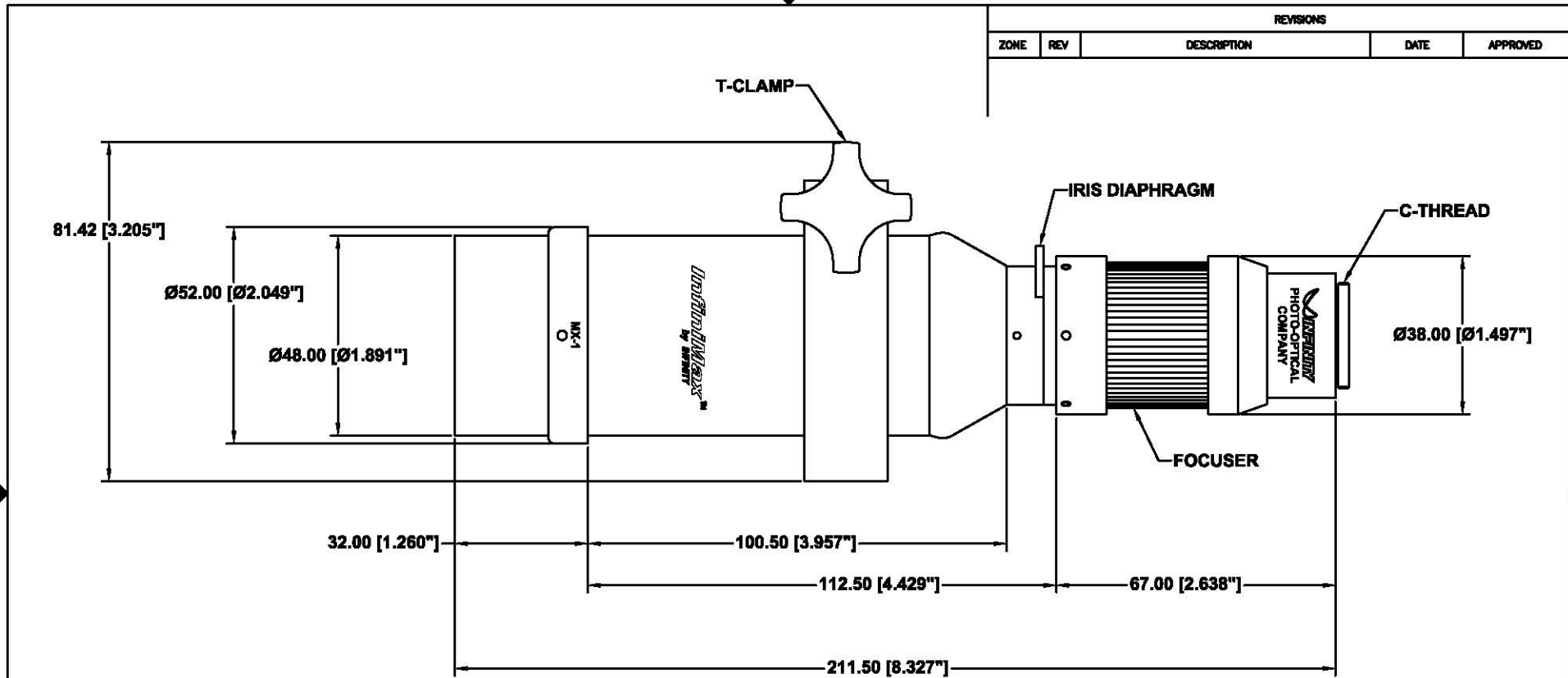


Field of View for 1/2-in. CCD Format camera.

InfiniMax™ OPTICAL RESOLUTION DATA

InfiniMax	Objective	MX-1			MX-2			MX-3			MX-4			MX-5			MX-6		
		Near	Mid	Far	Near	Mid	Far	Near	Mid	Far	Near	Mid	Far	Near	Mid	Far	Near	Mid	Far
	WDmm	315	335	381	250	255	285	174	178	194	169	175	186	134	140	146	65	66	68
	MAG	0.64	0.63	0.58	0.81	0.81	0.78	1.00	1.00	1.00	1.16	1.16	1.16	1.42	1.42	1.42	2.90	2.90	2.90
	NA	0.05	0.04	0.04	0.06	0.06	0.05	0.09	0.08	0.08	0.09	0.09	0.08	0.11	0.11	0.10	0.15	0.15	0.15
	Resolution (lpmm)	143	134	118	180	176	158	259	253	232	266	257	242	336	321	308	462	455	441
	Resolution (microns)	7.0	7.4	8.5	5.6	5.7	6.3	3.9	4.0	4.3	3.8	3.9	4.1	3.0	3.1	3.2	2.2	2.2	2.3
	DOFmm	0.24	0.27	0.35	0.15	0.16	0.20	0.07	0.08	0.09	0.07	0.07	0.08	0.043	0.047	0.051	0.023	0.024	0.025





NOTE:

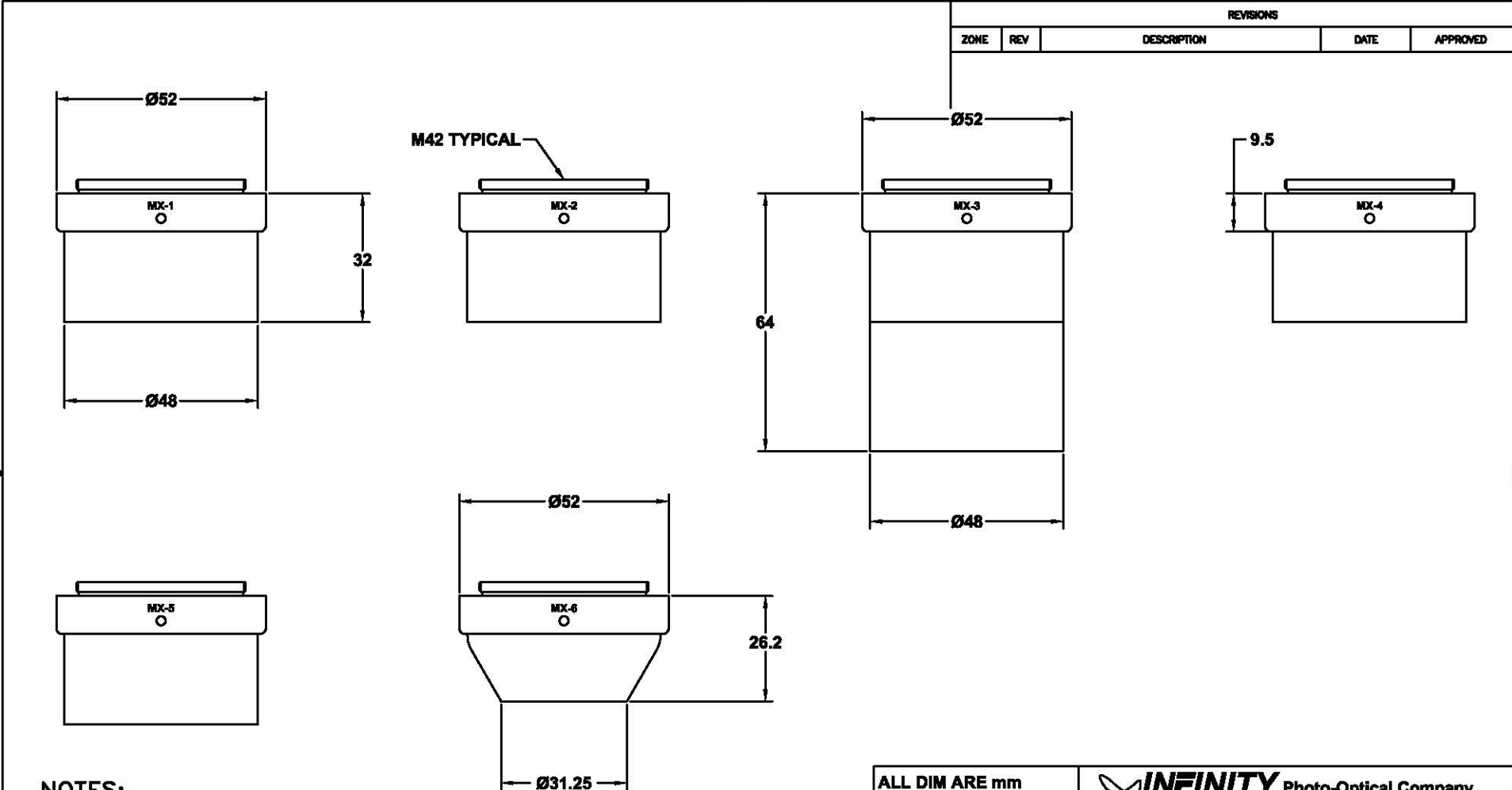
1. INFINIMAX SHOWN WITH MX-1 OBJECTIVE.

ALL DIM ARE mm [Inches] AND ARE FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE.

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303/440-4544 Fax 303/440-4144

ASS'Y MODEL KX INFINIMAX

Date: 01/02/12 MB	SIZE B	FSCM NO.	DWG NO.	-	REV -
Modified:	SCALE NONE			-	SHEET 1 OF 1

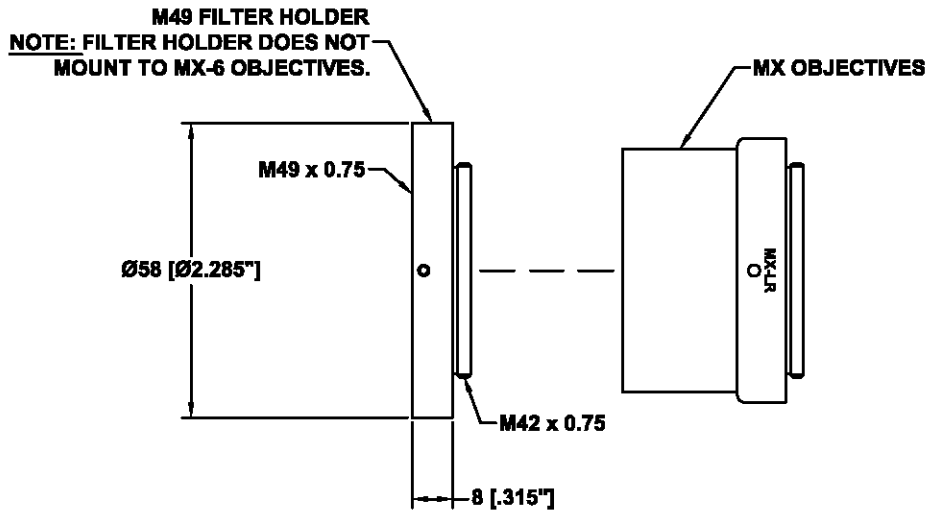


NOTES:

1. SURFACE ANODIZED BLACK.
2. DIMS. ARE IN MILLIMETERS.
3. SEE ATTACHED TABLES AND GRAPHS FOR SPECIFICATIONS.

<p>ALL DIM ARE mm [Inches] AND ARE FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE.</p>		<p>INFINITY Photo-Optical Company 2530 Frontier Ave., Boulder, CO 80301 303/440-4544 Fax 303/440-4144</p>			
<p>MX OBJECTIVES</p>					
<p>Date: 03/04/02 MB</p>		<p>SIZE B</p>	<p>FSCM NO.</p>	<p>DWG NO. -</p>	<p>REV A</p>
<p>Modified:</p>		<p>SCALE NONE</p>	<p>-</p>	<p>SHEET 1 OF 1</p>	

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



NOTES:

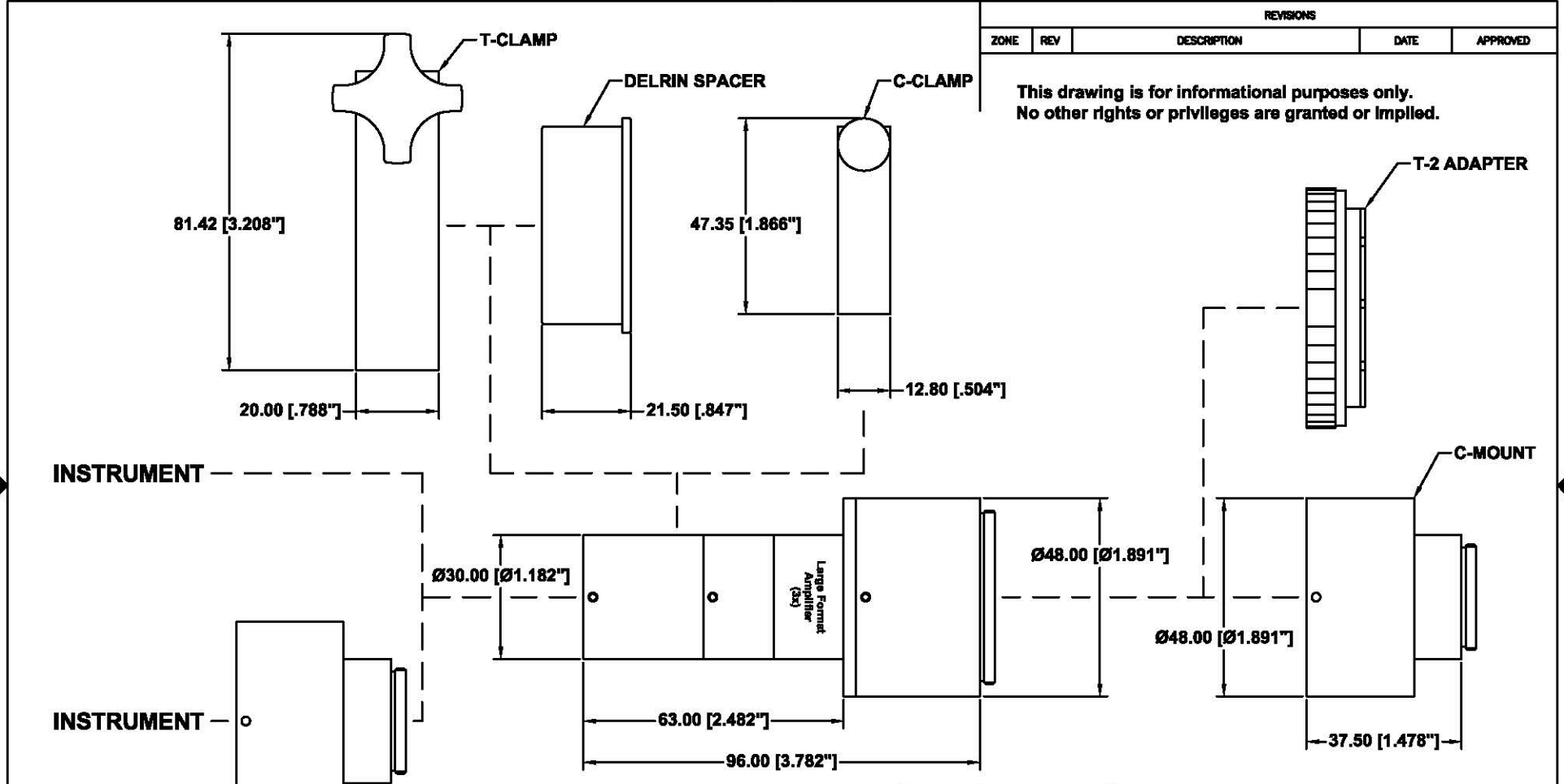
1. MX-LR USED AS EXAMPLE.
2. FILTER CAN BE MOUNTED TO THE FOLLOWING OBJECTIVES: MX-LR, MX-1 TO MX-5.
3. DIMS. ARE IN MILLIMETERS.
4. SEE ATTACHED TABLES AND GRAPHS FOR SPECIFICATIONS.

ALL DIM ARE mm [Inches] AND ARE FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE.

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MX OBJECTIVE WITH M49 FILTER HOLDER

Date: 06/25/12 MB	SIZE B	FSCM NO.	DWG NO. -	REV -
Modified:	SCALE NONE	-	SHEET 1 OF 1	



REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

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NOTE:
1. THE C-CLAMP CAN BE REPLACED BY THE DELRIN SPACER AND T-CLAMP.

ALL DIM ARE mm [Inches] AND ARE FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE.

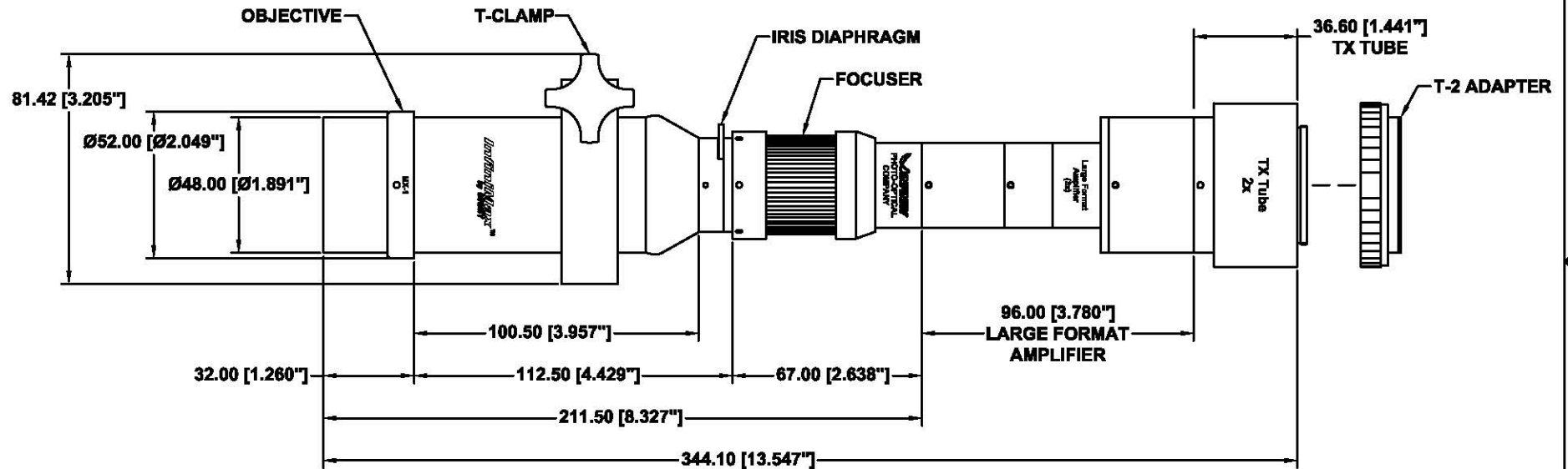
INFINITY Photo-Optical Company
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303/440-4544 Fax 303/440-4144

LARGE FORMAT AMPLIFIER

Date: 06/19/02 MB	SIZE B	FSCM NO.	DWG NO. -	REV B
Modified: 06/07/11 MB	SCALE NONE	-	SHEET 1 OF 1	

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



NOTE:

1. INFINIMAX SHOWN WITH MX-1 OBJECTIVE.

ALL DIM ARE mm
[Inches] AND ARE FOR
REFERENCE ONLY AND
ARE SUBJECT TO
CHANGE.

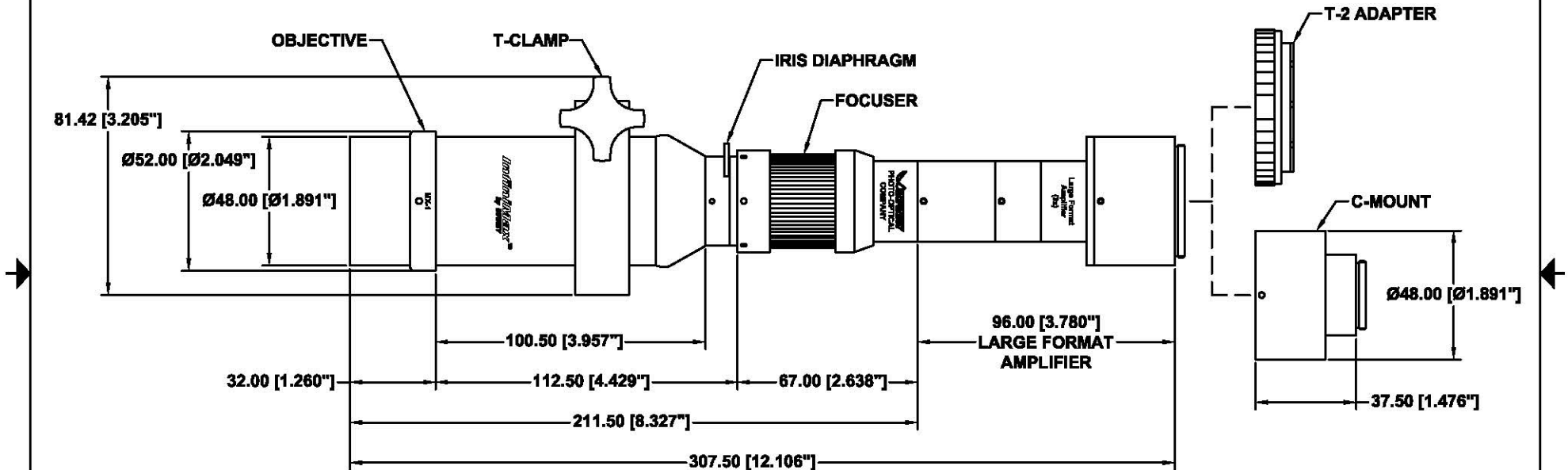
INFINITY Photo-Optical Company
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303/440-4544 Fax 303/440-4144

**MODEL KX INFINIMAX w/LARGE
FORMAT AMPLIFIER & TX TUBE**

Date: 01/02/12 MB	SIZE B	PSCM NO.	DWG NO.	REV
Modified: 06/25/12 MB	SCALE NONE	-	-	-
SHEET 1 OF 1				

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



NOTE:

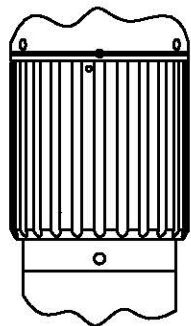
1. INFINIMAX SHOWN WITH MX-1 OBJECTIVE.

ALL DIM ARE mm
[Inches] AND ARE FOR
REFERENCE ONLY AND
ARE SUBJECT TO
CHANGE.

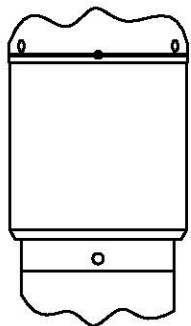
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303/440-4544 Fax 303/440-4144

**MODEL KX INFINIMAX w/LARGE
FORMAT AMPLIFIER**

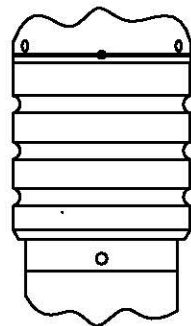
Date: 01/02/12 MB	SIZE B	FSCM NO.	DWG NO.	-	REV -
Modified: 06/25/12 MB	SCALE NONE	-	SHEET	1 OF 1	



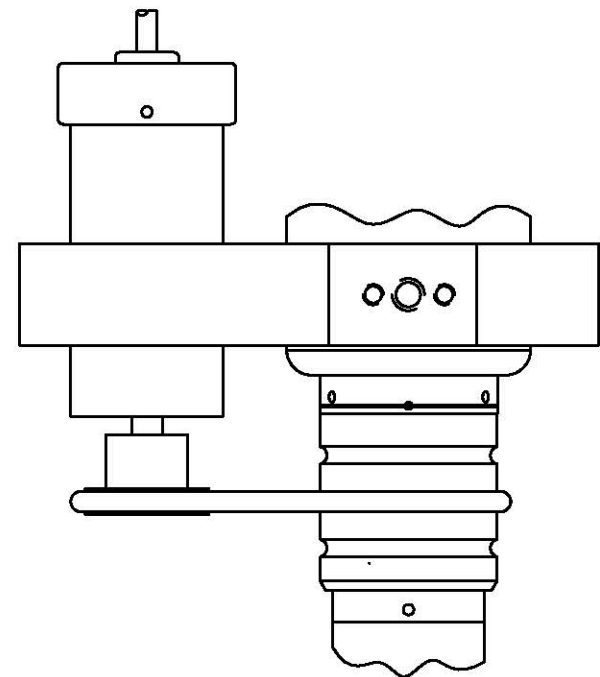
FOCUSER WITH
FLUTED GRIP



FOCUSER WITH
SMOOTH BARREL
FOR GEAR DRIVES



FOCUSER WITH
O-RING GROOVES



FOCUSER WITH
MOTOR DRIVE

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

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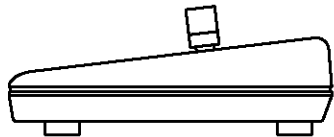
ALL DIM ARE mm
[Inches] AND ARE FOR
REFERENCE ONLY AND
ARE SUBJECT TO
CHANGE.

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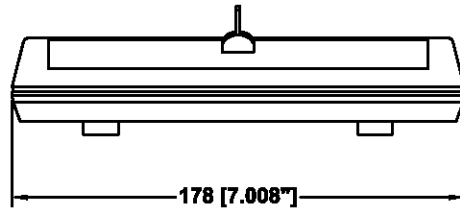
FOCUSER CONFIGURATIONS

Date: 06/28/11 MB	SIZE B	FSCM NO.	DWG NO.	-	REV -
Modified:	SCALE NONE	-	SHEET	1 OF 1	

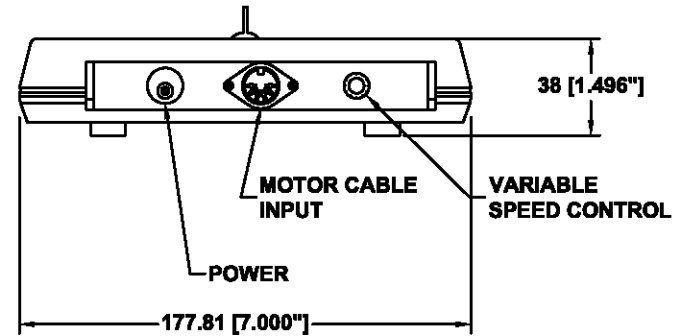
SIDE



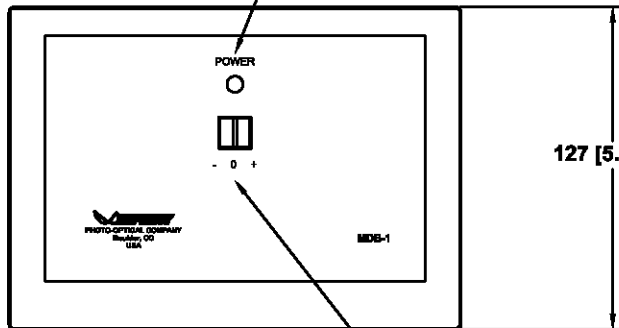
FRONT



REAR



POWER LED



FORWARD AND REVERSE TOGGLE SWITCH

TOP

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



Cables are 3 meters long. Other lengths can be supplied.

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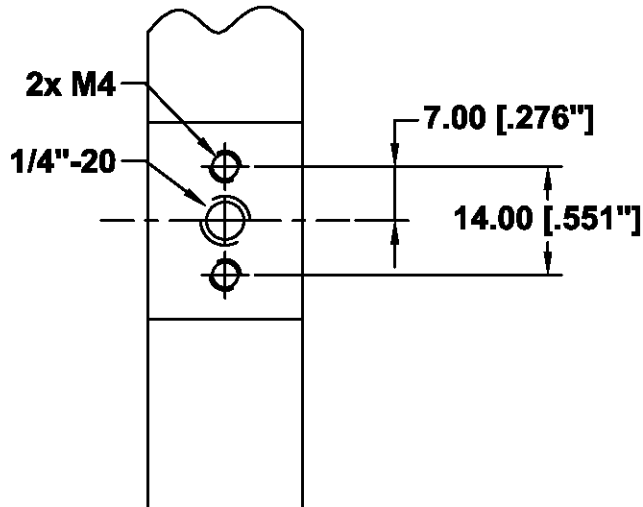
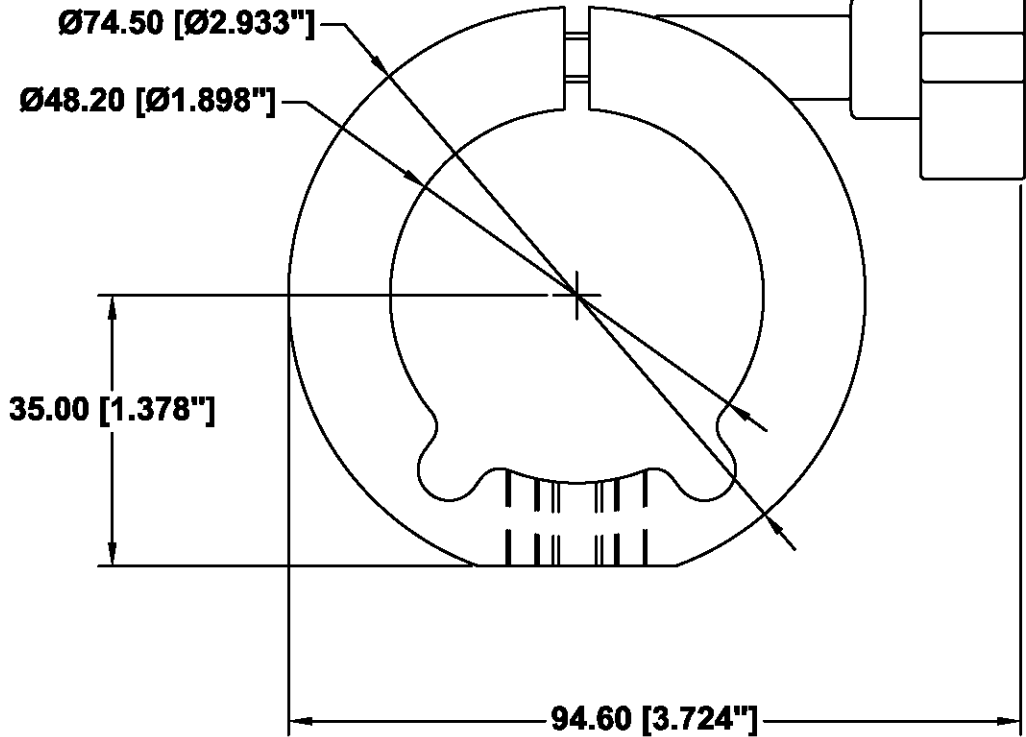
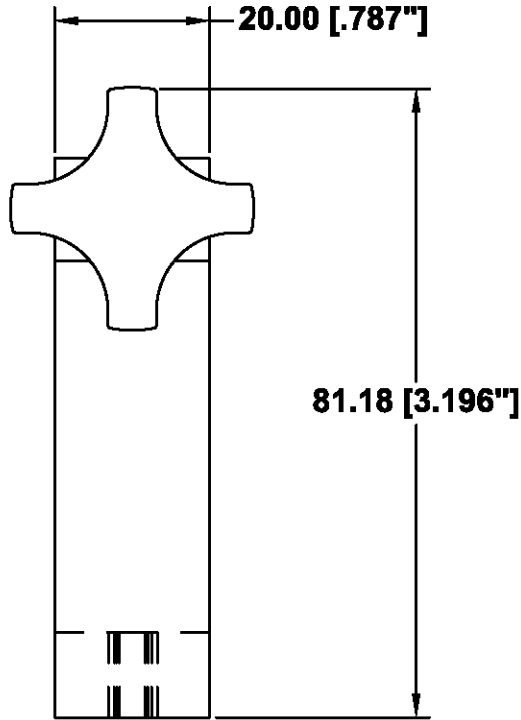
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MDB-1 CONTROLLER

Date: 06/20/12 MB	SIZE B	PSCM NO.	DWG NO.	REV -
Modified:	SCALE NONE	-	SHEET 1 OF 1	

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



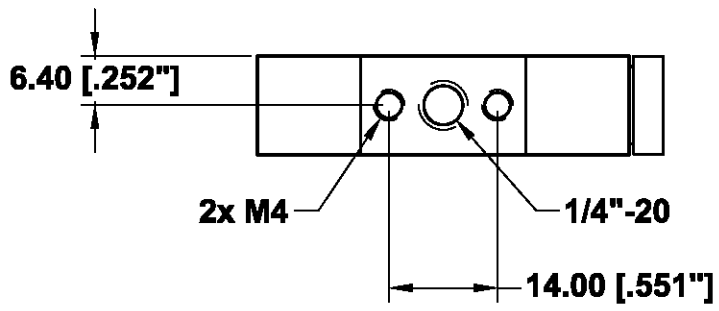
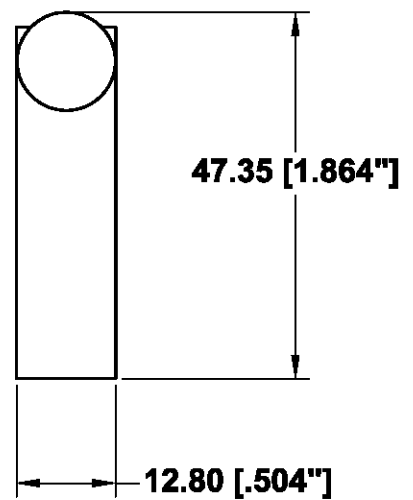
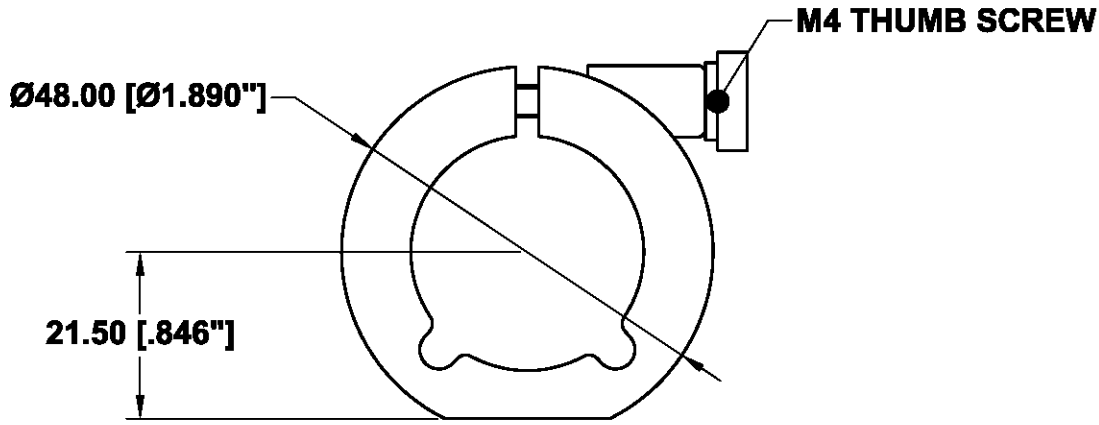
**ALL DIM ARE mm
[inches] AND ARE FOR
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LARGE MOUNTING CLAMP

Date: 07/24/97 MS		SIZE A	FSCM NO.	DWG NO. 770 170	REV -
Modified: 08/10/05 MB		SCALE NONE	-	SHEET 1 OF 1	

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



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SMALL MOUNTING CLAMP

Date: 03/19/01 MB		SIZE A	FSCM NO.	DWG NO. 990 170	REV A
Modified: 04/06/01 MB		SCALE NONE	SHEET 1 of 1		

INFINITY PHOTO-OPTICAL COMPANY LIMITED WARRANTY

INFINITY PHOTO-OPTICAL COMPANY hereby warrants its products to be free from defects in workmanship or materials for the warranty period set forth below. INFINITY PHOTO-OPTICAL COMPANY, at its option, shall repair or replace the defective product without cost to the purchaser, and such repair or replacement shall be the full extent of this express limited warranty. INFINITY PHOTO-OPTICAL COMPANY shall not be liable for any other damages either direct or consequential.

This warranty is made to the original purchaser, and is effective only on new equipment purchased from INFINITY PHOTO-OPTICAL COMPANY, or a dealer authorized by INFINITY PHOTO-OPTICAL COMPANY to sell the product.

This warranty is valid only when the product is returned to the authorized dealer from whom it was purchased, or returned directly to INFINITY PHOTO-OPTICAL COMPANY, freight prepaid, with proof of date of purchase.

This warranty does not extend to any defect, malfunction or failure caused by misuse, abuse or the use of the product with equipment for which it may not have been intended. Any unauthorized repair voids this warranty.

The warranty period for all products manufactured by INFINITY PHOTO-OPTICAL COMPANY is five (5) years from date of original purchase. Parts or components made or sourced from other manufacturers shall be solely covered by that manufacturer's warranty.

The warranty contained herein is the only warranty made by INFINITY PHOTO-OPTICAL COMPANY. Any implied warranty of merchantability and/or fitness for a particular purpose is expressly excluded from this warranty. INFINITY PHOTO-OPTICAL COMPANY shall not be liable for any expense, loss, incidental or consequential damages which may arise in connection with the use of this equipment. Recovery under this warranty is limited to repair or replacement of the equipment as provided above.

INFINITY PHOTO-OPTICAL COMPANY reserves the right to modify designs, equipment and accessories without notice.