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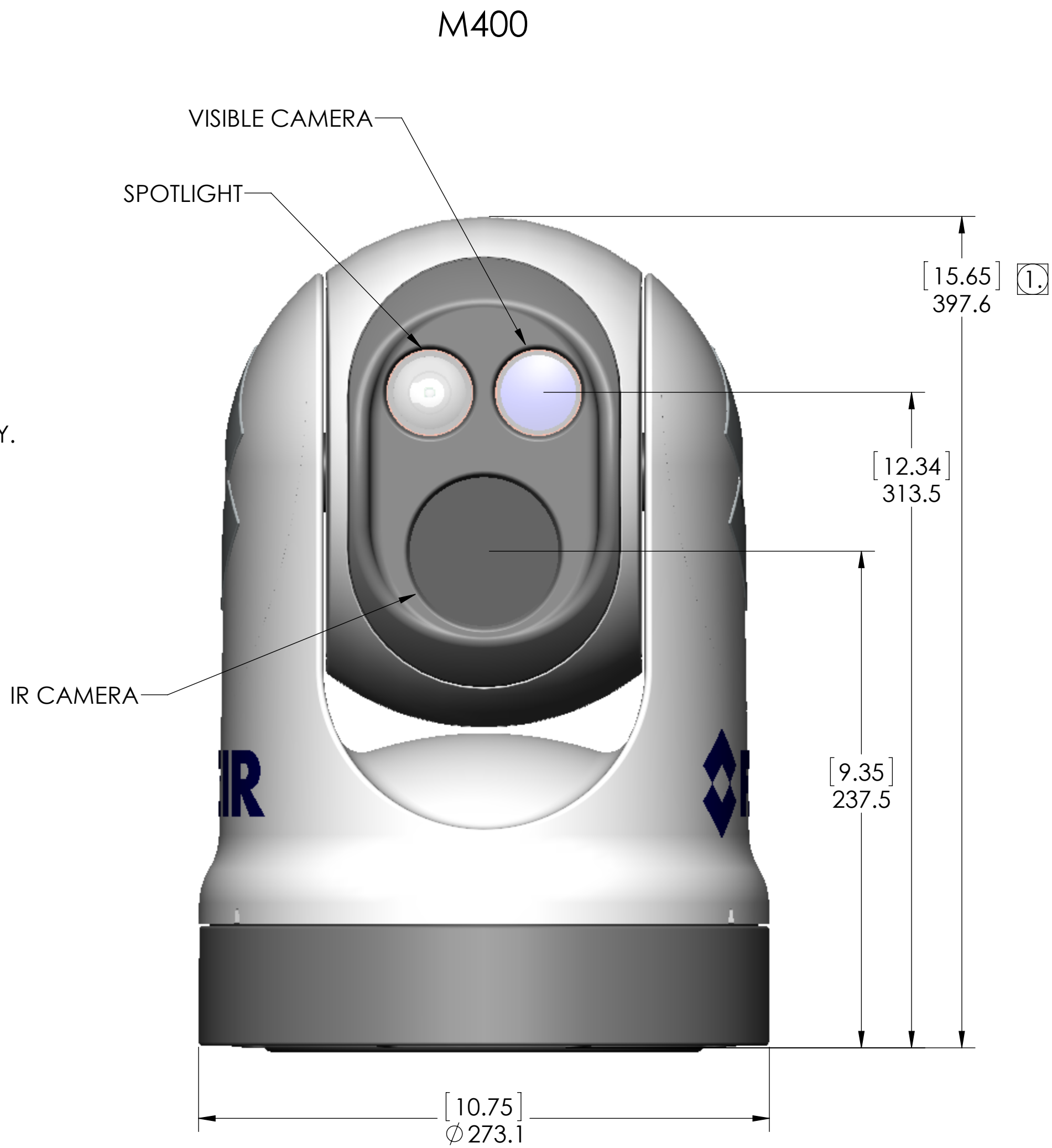
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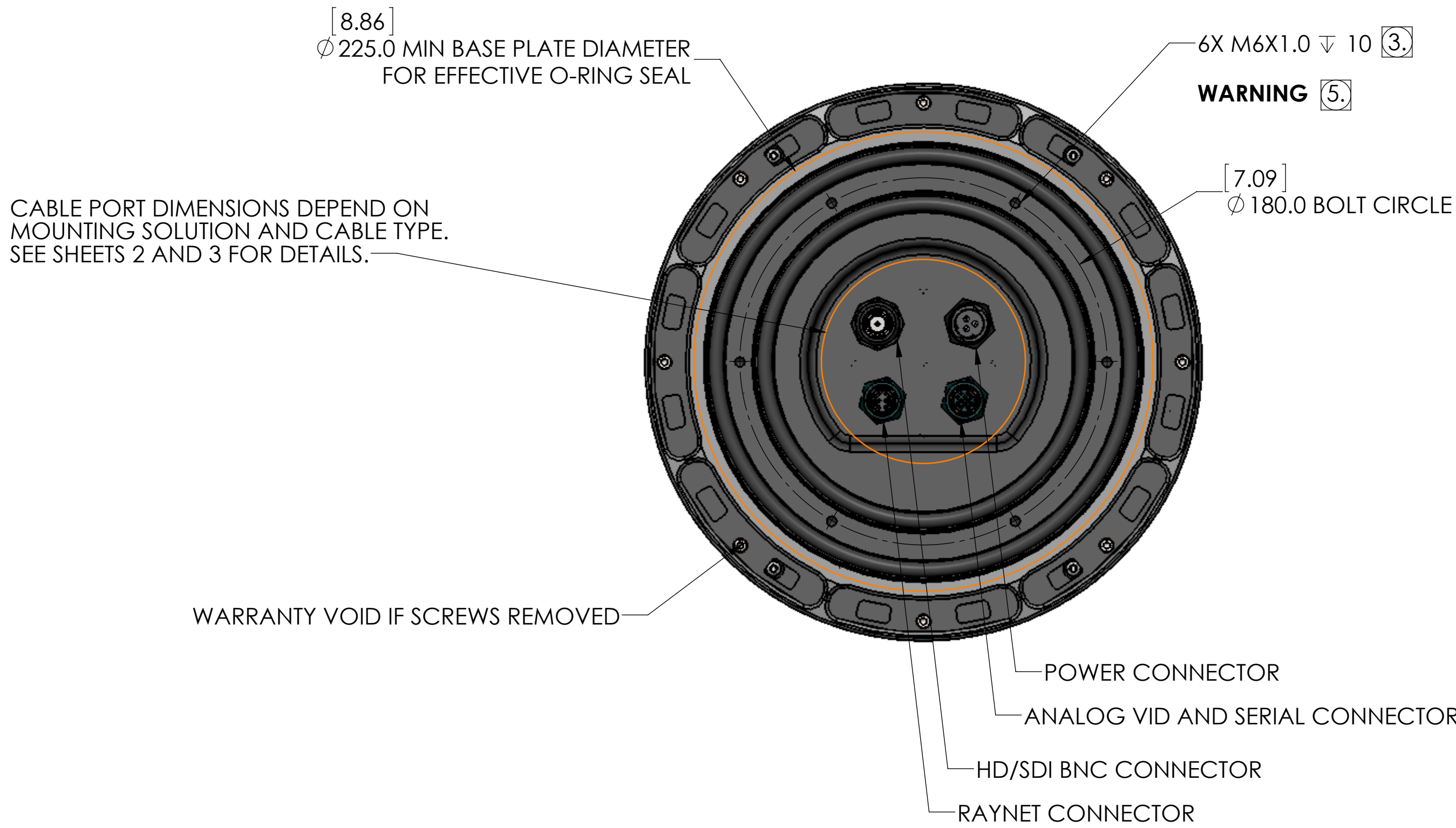
NOTES: UNLESS OTHERWISE SPECIFIED

1. CLEARANCE REQUIRED FOR FREE MOTION OF SYSTEM.
2. O-RING USED FOR SEALING SYSTEM TO MOUNTING STRUCTURE. STANDALONE UNIT MEETS IPX6 SEALING SPECIFICATION. MINIMUM MOUNTING SURFACE FLATNESS OF 1.5mm [0.60in] OVER SYSTEM DIAMETER REQUIRED FOR O-RING USE. WHEN MOUNTING TO IRREGULAR SURFACES, USE OF BEDDING COMPOUND RECOMMENDED.
3. USE WITH FLIR MOUNTING HARDWARE KITS
4. USE LOCTITE 262 WITH ALL METAL TO METAL THREADED CONNECTIONS.
5. **WARNING**
DO NOT BOTTOM FASTENERS IN BASE.
BOTH LENGTH NOT TO EXCEED 6MM INTO BASE.
ELECTRONICS WILL BE DAMAGED BY BASE PENETRATION - VOIDING WARRANTY.
BOLT TORQUE NOT TO EXCEED 9.5N-m [7 lb-ft).



AS568A-436 EPDM O-RING
[5.85in ID x .275in DIA]
149mm ID x 7mm DIA

AS658A-444 EPDM O-RING
[7.72in ID x .275in DIA]
196mm ID x 7mm DIA



THIRD ANGLE PROJECTION		PROPRIETARY - FLIR SYSTEMS, INC.			
		THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION TO FLIR SYSTEMS, INC. THIS INFORMATION MUST BE MAINTAINED IN CONFIDENCE AND USED ONLY IN A MANNER CONSISTENT WITH THE DOCUMENTATION AND ANY EXECUTED NON DISCLOSURE AGREEMENT, AND MAY NOT BE DISCLOSED TO ANY THIRD PERSON WITHOUT FLIR'S WRITTEN CONSENT.			
METRIC		MATERIAL		PROJECT NO.	
INTERPRET DRAWING PER ASME Y14.5M-1994		N/A		APPROVALS	
UNLESS OTHERWISE SPECIFIED SURFACE ROUGHNESS .8 µm		N/A		DATE	
X = ±.25		FINISH		DWN K. MONCINO 5/7/2015	
XX = ±.13		N/A		CHK	
ANGULAR = ±.5°		UNLESS OTHERWISE SPECIFIED ALL MEASUREMENTS ARE IN MM. ALL DIMENSIONS IN () ARE INCHES. DO NOT SCALE DRAWING.		DSGN	
FILLET RADII = .13 MAX		CALC WT: 14212.112 g GRAMS		ENG K. MONCINO 5/7/2015	
				APP	
				TITLE	
				M400 ICD	
		SIZE D		CAGE 064Y2	
		DWG NO. 432-0012-XX-YY		REV P01-WC	
		SCALE 1:1		PRINTED: 5/14/2015	
		SHEET 1 OF 11			

SOLIDWORKS MODEL: 432-0012-XX-YY TOP LEVEL ASSEMBLY, MARLIN
MODEL REVISION: P01-WC

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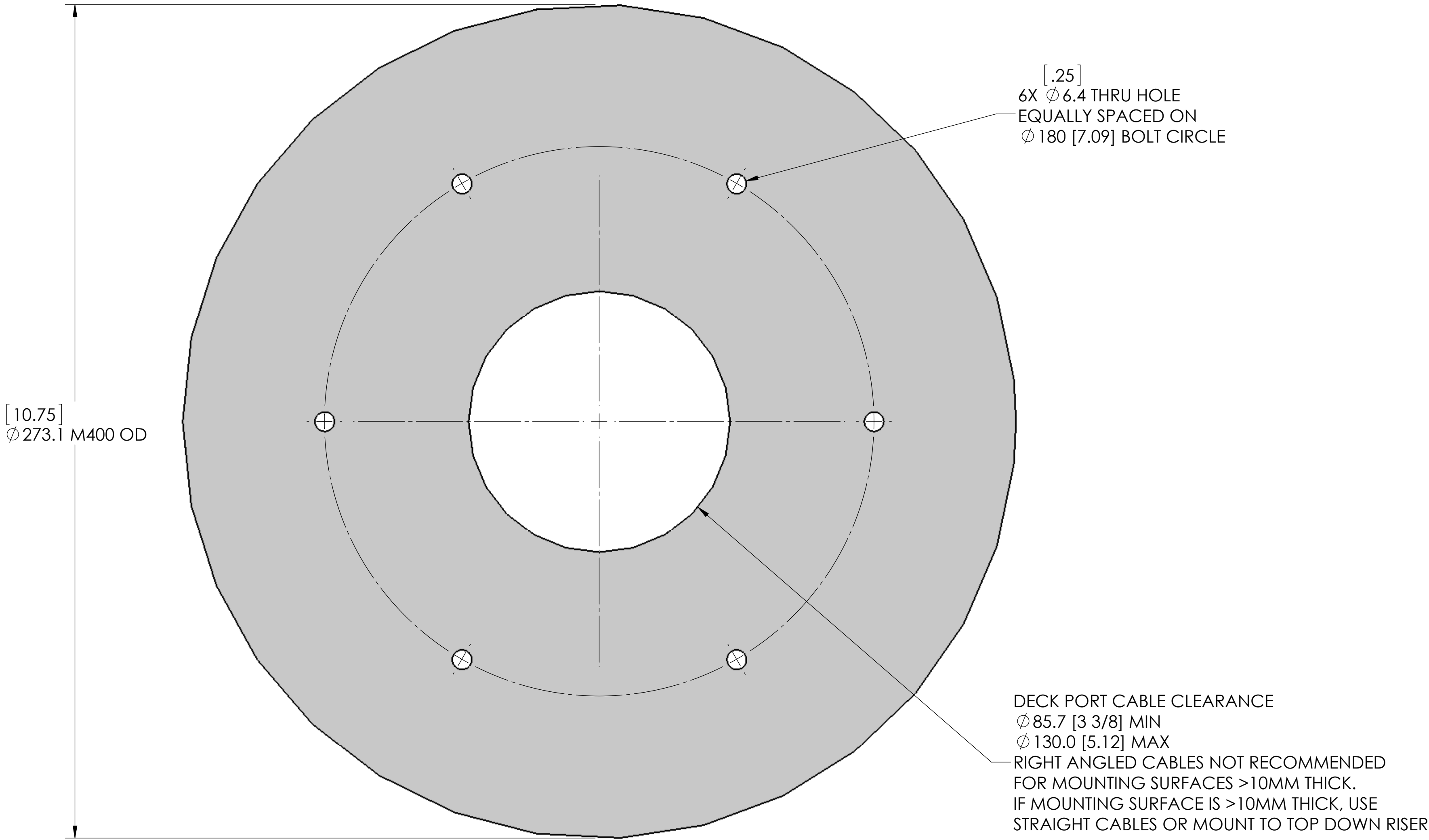
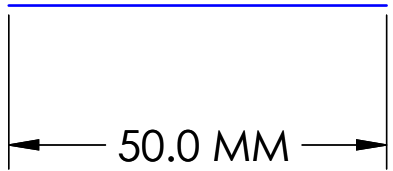
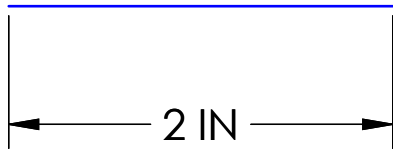
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IMPORNTANT NOTE:

PAPER SIZE: 22x34in
TEMPLATE SHOULD PRINT 1:1

DUE TO VARIATION IN SOFTWARE AND PRINTERS, PLEASE
VERIFY SCALE BELOW BEFORE MODIFYING MOUNTING
SURFACE.

ENSURE PRINTER MARGINS ARE SET TO ZERO AND SCALE
IS 100%



BASE CUP MOUNTING TEMPLATE

TOP LEVEL ASSEMBLY
M400

METRIC

PROPRIETARY - FLIR SYSTEMS, INC.



FLIR Systems, Inc.
70 Castilian Drive
Goleta, CA 93117

SIZE	CAGE	PIECE PART	REV
D	064Y2	432-0012-01-00	P02

SCALE	1:1	PRINTED: 5/14/2015	SHEET 2 OF 11
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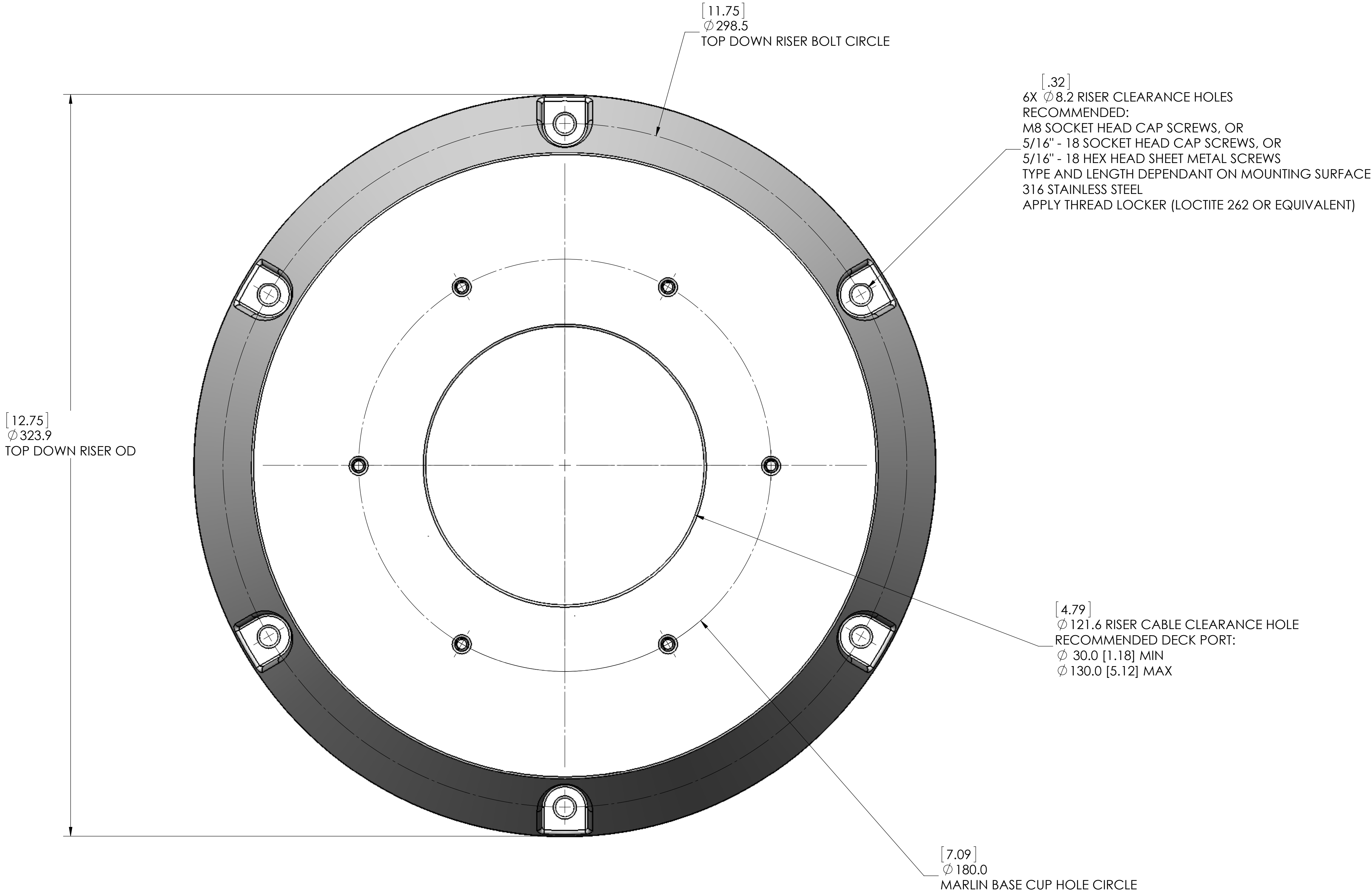
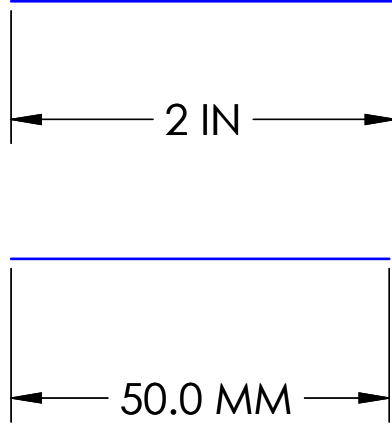
SOLIDWORKS MODEL: 432-0012-XX-YY TOP LEVEL ASSEMBLY, MARLIN	1
MODEL REVISION: P02	

IMPORNTANT NOTE:

PAPER SIZE: 22x34in
TEMPLATE SHOULD PRINT 1:1

DUE TO VARIATION IN SOFTWARE AND PRINTERS, PLEASE
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SURFACE.

ENSURE PRINTER MARGINS ARE SET TO ZERO AND SCALE
IS 100%



TOP DOWN RISER MOUNTING TEMPLATE

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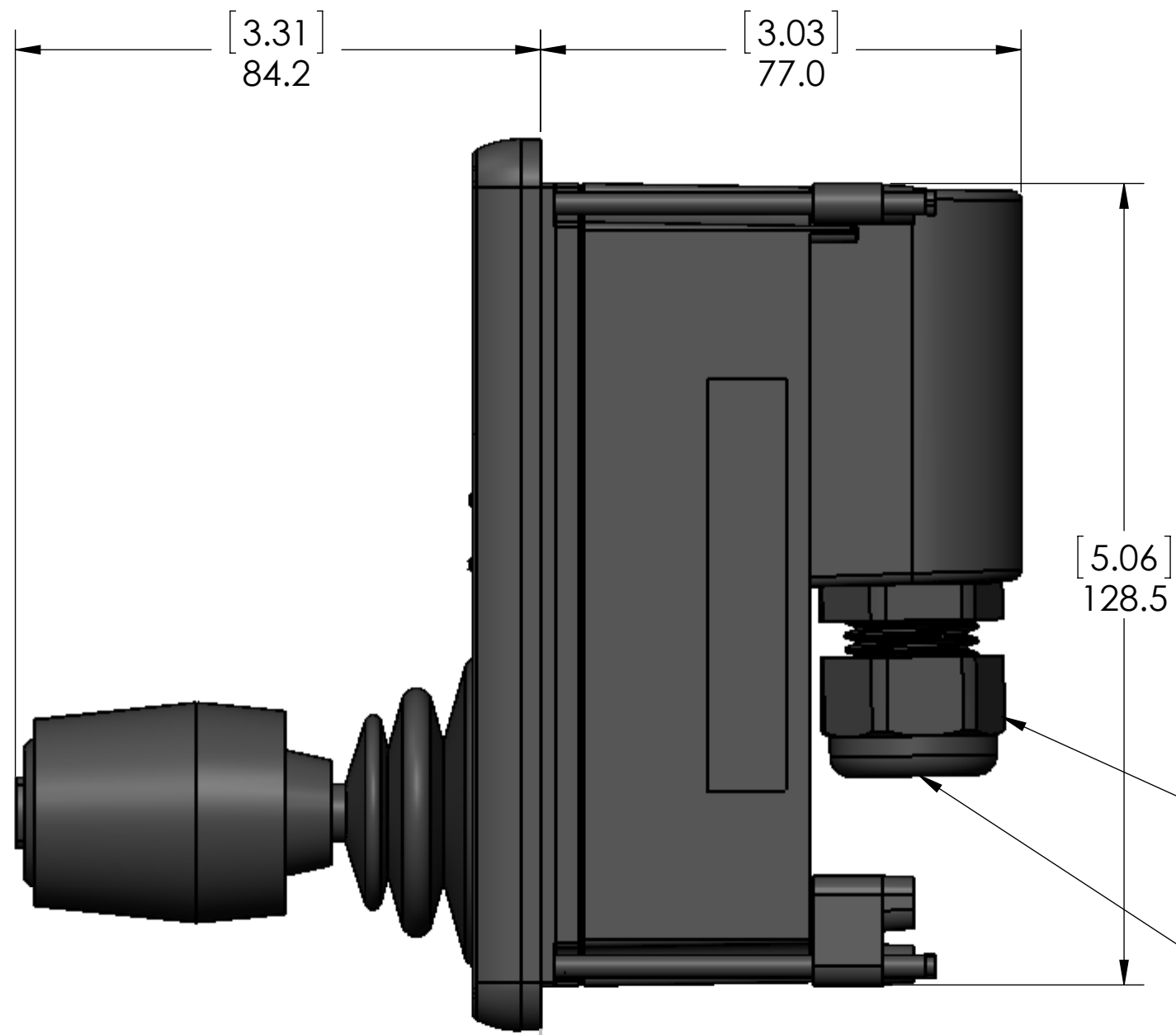
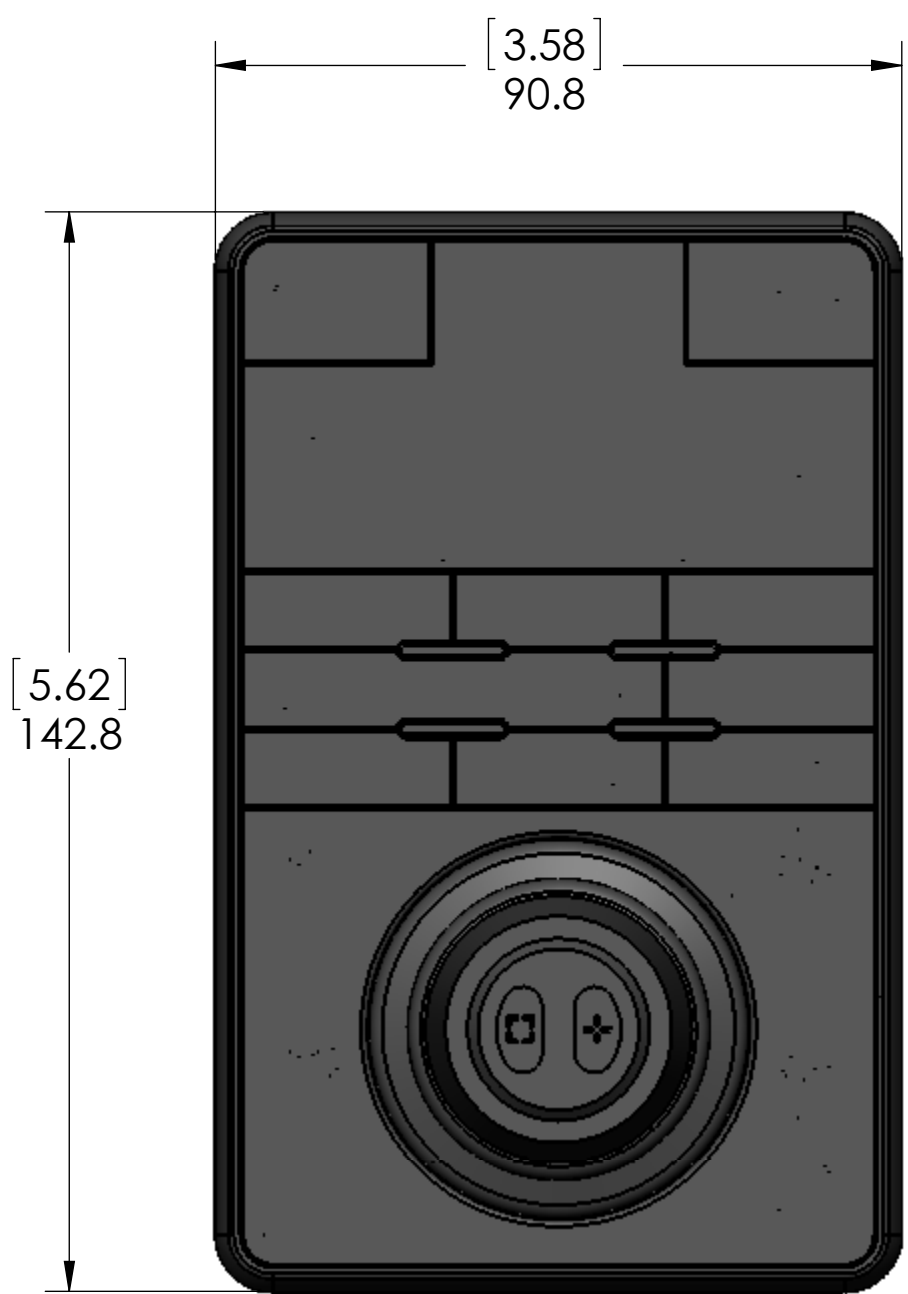
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WITH CABLE INSTALLED, TURN NUT 1/4 TURN BEYOND HAND TIGHT.

GLAND SEAL DESIGNED FOR USE WITH DOUBLE SHIELDED CAT 5 ETHERNET CABLE. USE OF SINGL SHIELDED CABLE MAY REQUIRE THE USE OF ADDITIONAL SEALANT SUCH AS SILICON OR RTV TO ENSURE SEALING OF ENCLOSURE

INSERT NETWORK CABLE RJ45 THROUGH GLAND NUT AND SEAL BEFORE INSTALLING

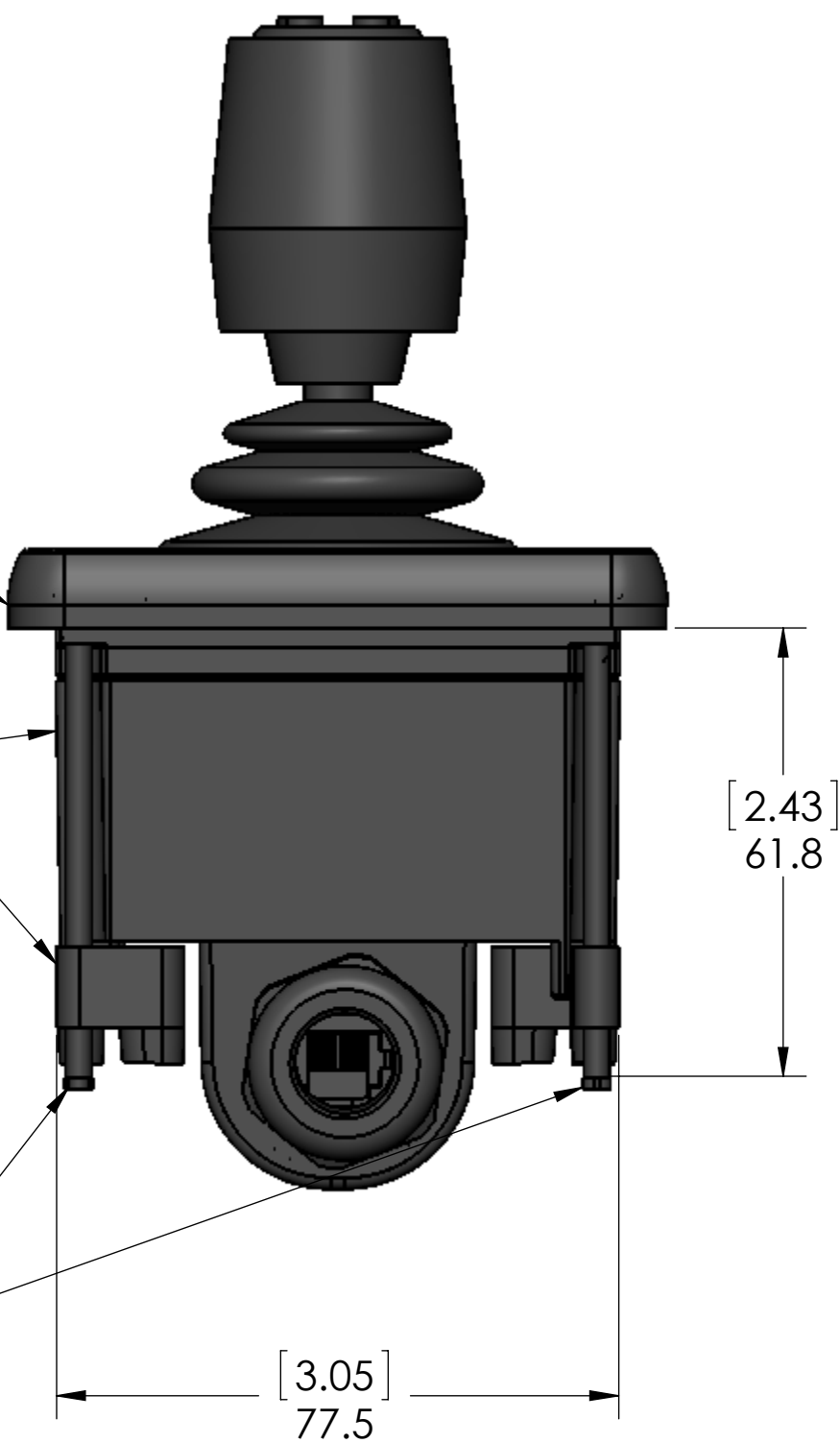
IP66 RATED ABOVE GASKET.

IP64 RATED BEHIND GASKET.

APPLY ADHESIVE SIDE OF GASKET TO JCU BODY.

MOUNTING PANEL THICKNESS RANGE 1.6-45 [0.036-1.750]. WHEN MOUNTING TO PANEL LESS THAN 6.3 [0.25] REVERSE PADDLES.

DURING INITIAL TIGHTENING, ENSURE MOUNTING TABS ON SCREWS SWING FREE OF REAR OUSING. WITH TABS RUN UP AGAINST REAR OF INSTRUMENT PANEL, TIGHTEN 1/4 - 1/2 TURN BEYOND HAND TIGHT.



TOP LEVEL ASSEMBLY
M400

METRIC

PROPRIETARY - FLIR SYSTEMS, INC.

500-0398-00 MARITIME JCU

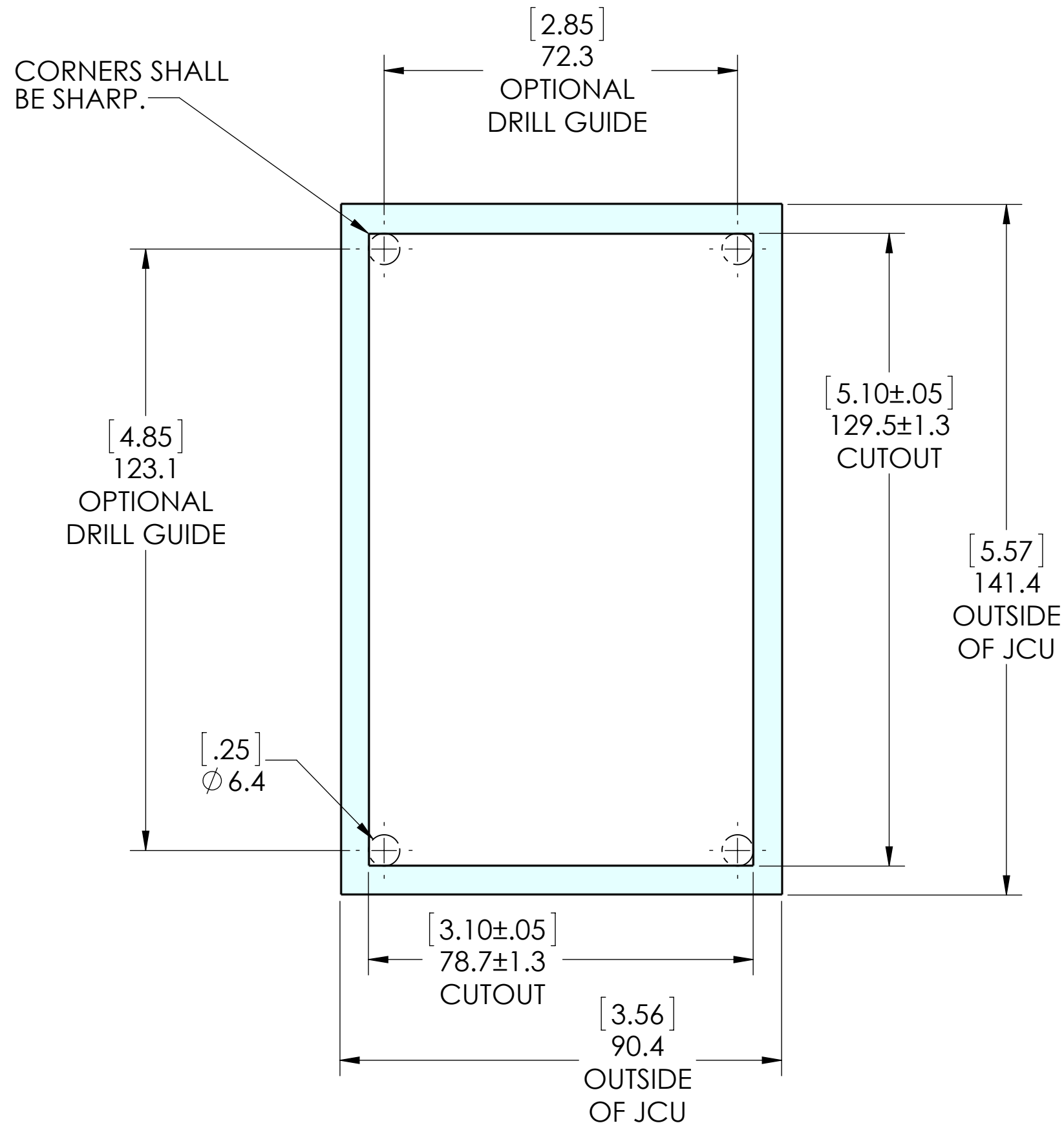


FLIR Systems, Inc.
70 Castilian Drive
Goleta, CA 93117

SIZE	CAGE	PIECE PART	REV
D	064Y2	432-0012-01-00	P02

SCALE 1:1 PRINTED: 5/14/2015 SHEET 4 OF 11

SOLIDWORKS MODEL: 432-0012-XX-YY TOP LEVEL ASSEMBLY, MARLIN
MODEL REVISION: P02



NOTE: CABLE CONFIGURATIONS SHOWN ARE FOR SHORT CABLES INCLUDED WITH EACH UNIT. LONG ACCESSORY CABLES ARE AVAILABLE WHERE NO IN-LINE COUPLING IS NECESSARY. FOR MORE INFORMATION, SEE SHEET 9

M400

JCU

FLIR PN 500-0398-00

NETWORK CABLE FOR PoE DEVICES (IEEE802.3af)
8 CONDUCTOR T568B, ETHERNET, DOUBLE SHIELDED
FLIR PN 308-0163-25 OR EQUIVALENT
NOTE: TO MAINTAIN IEC 60945 EMI COMPLIANCE,
USE OF DOUBLE SHIELDED CABLE REQUIRED.

CONNECTOR
RJ45 WATERPROOF ENCLOSURE
FLIR PN 4115028

POWER CABLE
12AWG TINNED STRANDED WIRE
RED WIRE: +12-24 VDC (3.8-1.9 AMP MAX)
BLK WIRE: DC RETURN
DRAIN WIRE: EARTH GROUND

BUTT SPLICE OR INSTALLER
SUPPLIED CONNECTOR

INSTALLER SUPPLIED POWER CABLE
GAUGE OF WIRE TO BE APPROPRIATE
FOR SUPPLY VOLTAGE AND LENGTH OF
CABLE RUN TO ENSURE ADEQUATE
CURRENT CARRYING CAPABILITY.

HD/SDI CABLE - RG6 BNC

COUPLER
BNC FEMALE TO FEMALE

COUPLER
F-TYPE FEMALE TO FEMALE

ANALOG VIDEO CABLE
RG179 F-TYPE

HD/SDI CABLE

ANALOG VIDEO CABLE

INSTALLER SUPPLIED VIDEO CABLE
SHALL BE RATED RG6

PELCO INTERFACE

NMEA INTERFACE

DISPLAY

INTERCONNECT DIAGRAM
SINGLE JCU

TOP LEVEL ASSEMBLY
M400

METRIC

PROPRIETARY - FLIR SYSTEMS, INC.



FLIR Systems, Inc.
70 Castilian Drive
Goleta, CA 93117

SIZE

CAGE

064Y2

PIECE PART

432-0012-01-00

REV

P02

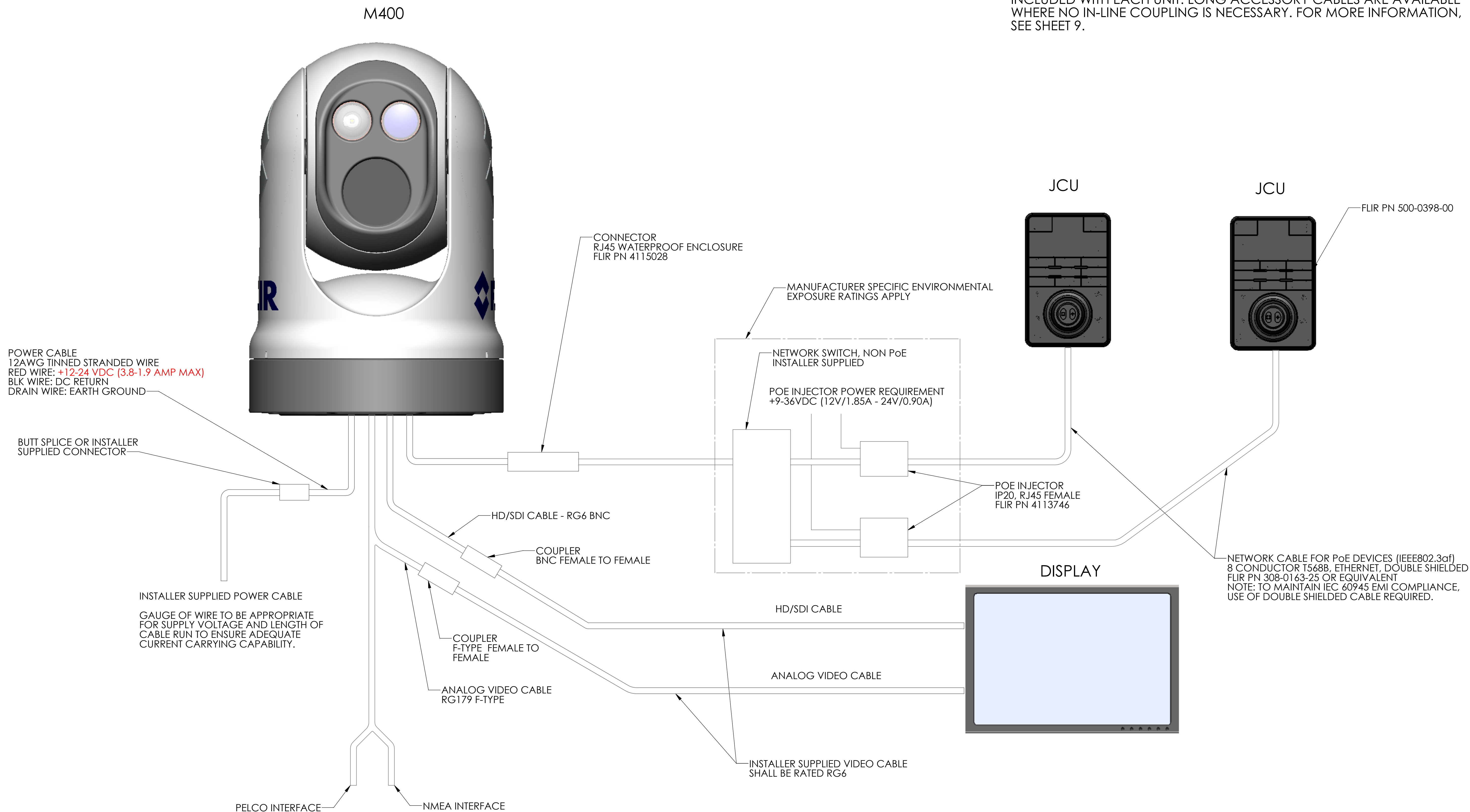
SCALE 1:1

PRINTED: 5/14/2015

SHEET 6 OF 11

SOLIDWORKS MODEL: 432-0012-XX-YY TOP LEVEL ASSEMBLY, MARLIN
MODEL REVISION: P02

NOTE: CABLE CONFIGURATIONS SHOWN ARE FOR SHORT CABLES INCLUDED WITH EACH UNIT. LONG ACCESSORY CABLES ARE AVAILABLE WHERE NO IN-LINE COUPLING IS NECESSARY. FOR MORE INFORMATION, SEE SHEET 9.



INTERCONNECT DIAGRAM
MULTIPLE JCU - POE SWITCH

TOP LEVEL ASSEMBLY
M400

METRIC

PROPRIETARY - FLIR SYSTEMS, INC.



FLIR Systems, Inc.
70 Castilian Drive
Goleta, CA 93117

SIZE
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CAGE
064Y2

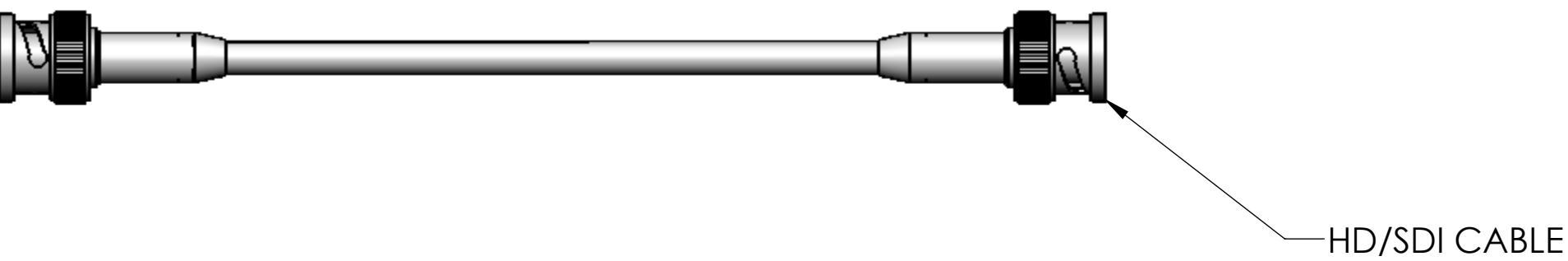
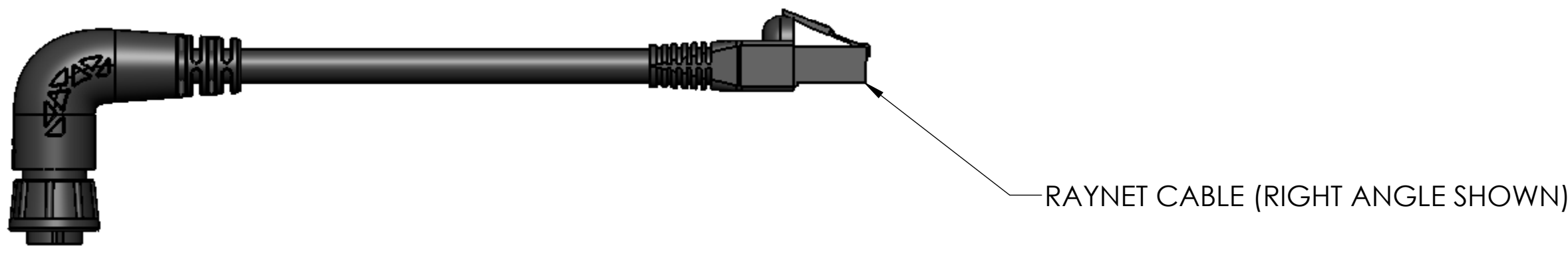
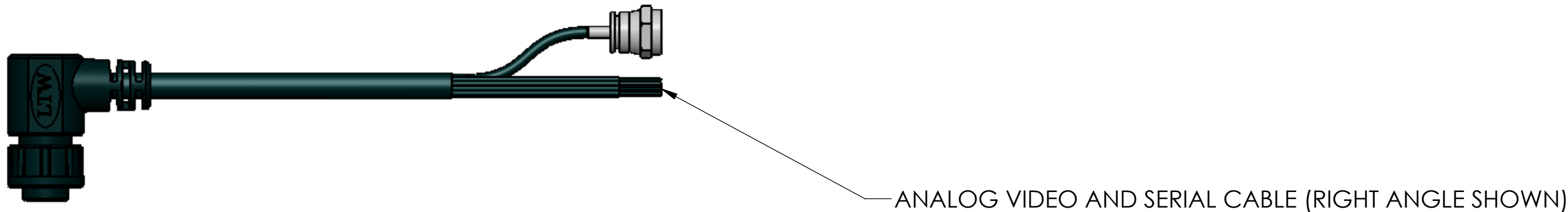
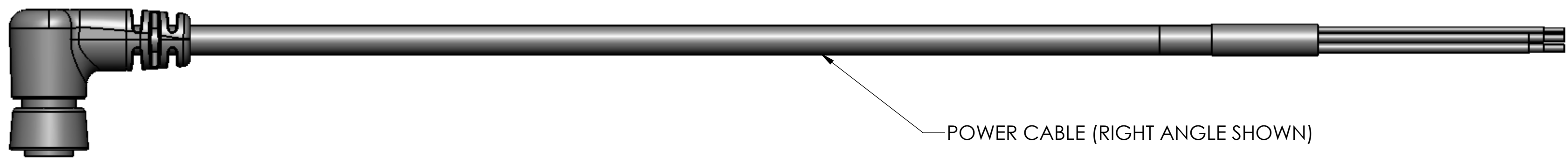
PIECE PART
432-0012-01-00

REV
P02

SCALE 1:1 PRINTED: 5/14/2015 SHEET 8 OF 11

SOLIDWORKS MODEL: 432-0012-XX-YY TOP LEVEL ASSEMBLY, MARLIN
MODEL REVISION: P02

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ANALOG VIDEO AND SERIAL CABLE PINOUT TABLE	
WIRE COLOR	SINGAL NAME
GREEN	NMEA TX-P
GREEN/WHITE	NMEA TX-N
RG179	ANALOG VIDEO OUT
NATURAL	ANALOG VIDEO RETURN
BROWN/WHITE	PELCO RX-N
BROWN	PELCO RX-P
BLUE	PELCO TX-P
ORANGE/WHITE	NMEA RX-N
ORANGE	NMEA RX-P
DRAIN	PELCO SHIELD
DRAIN	NMEA SHIELD
BLUE/WHITE	PELCO TX-N

IMPORTANT: CHASSIS GROUND WIRE TO BE TIED SECURELY TO THE NEGATIVE BATTERY TERMINAL

POWER CABLE PINOUT TABLE	
WIRE COLOR	SIGNAL NAME
RED	BATT +
BLACK	BATT -
DRAIN	CHASSIS GROUND

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CABLE OPTIONS

	FLIR PART NUMBER	CABLE DESCRIPTION
INCLUDED WITH EACH M400 UNIT	308-0261-01-00	CABLE - RAYNET RA TO RJ45, 1M
	308-0263-01-00	POWER CABLE - RA 12 AWG, 1M
	308-0265-01-00	CABLE - AV AND SERIAL RA, 1M
	4141863	CABLE - HD/SDI, 1M
AVAILABLE AS ACCESSORIES	308-0260-01-00	CABLE - RAYNET TO RJ45, 1M
	308-0262-01-00	POWER CABLE - 12 AWG, 1M
	308-0264-01-00	CABLE - AV AND SERIAL, 1M
	4141864	CABLE - HD/SDI, 100FT
	308-0251-30-00	CABLE - RAYNET TO RJ45, 100ft, LSZH
	308-0252-30-00	CABLE - RAYNET RA TO RJ45, 100ft, LSZH
	308-0253-30-00	CABLE - POWER, 12 AWG, 100ft, LSZH
	308-0254-30-00	CABLE - POWER, RA, 12 AWG, 100ft, LSZH
	308-0255-30-00	CABLE - AV AND SERIAL, 100ft, LSZH
	308-0256-30-00	CABLE - AV AND SERIAL RA, 100ft, LSZH

TOP LEVEL ASSEMBLY
M400

FLIR Systems, Inc.
70 Castilian Drive
Goleta, CA 93117

SIZE D
CAGE 064Y2
SCALE 1:5

PIECE PART
432-0012-01-00
PRINTED: 5/14/2015
SHEET 9 OF 11

REV P02

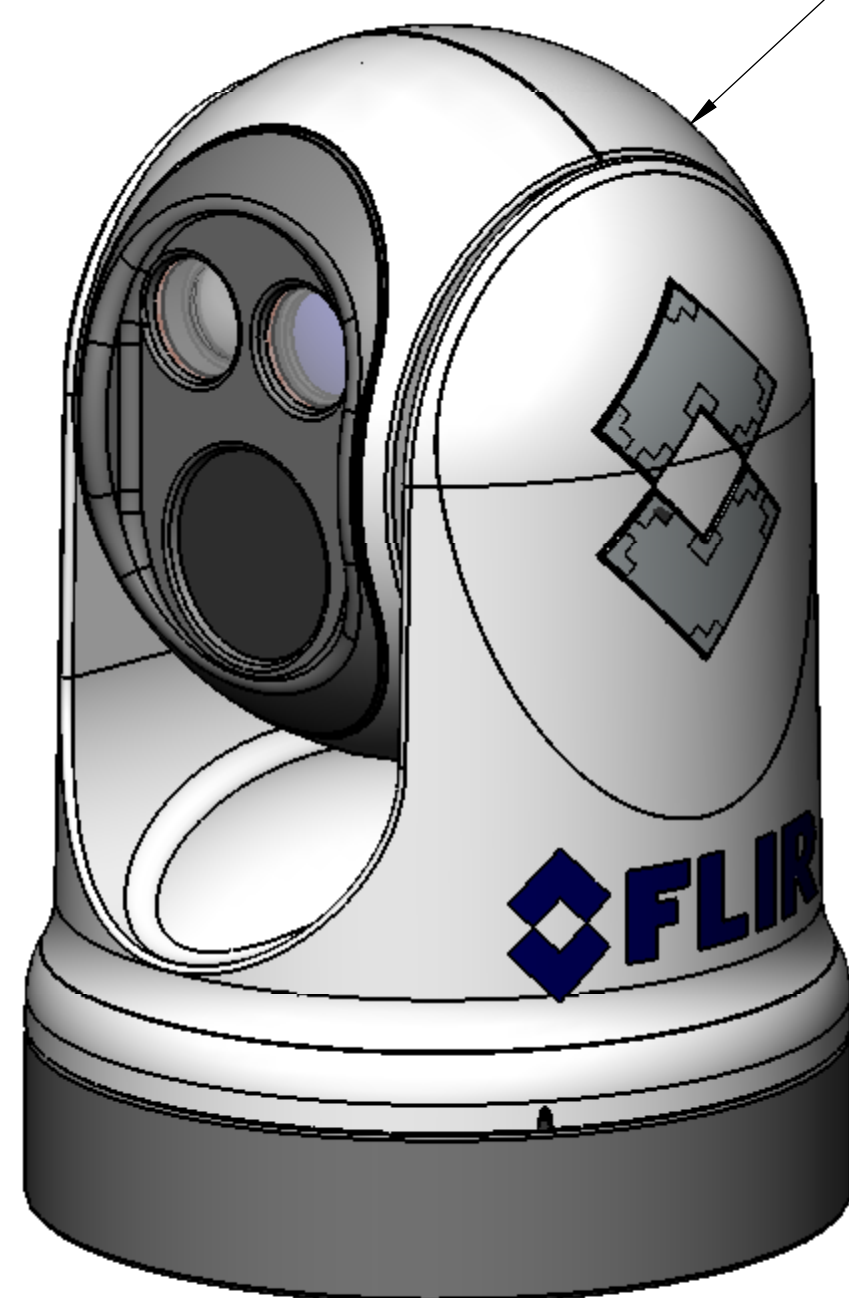
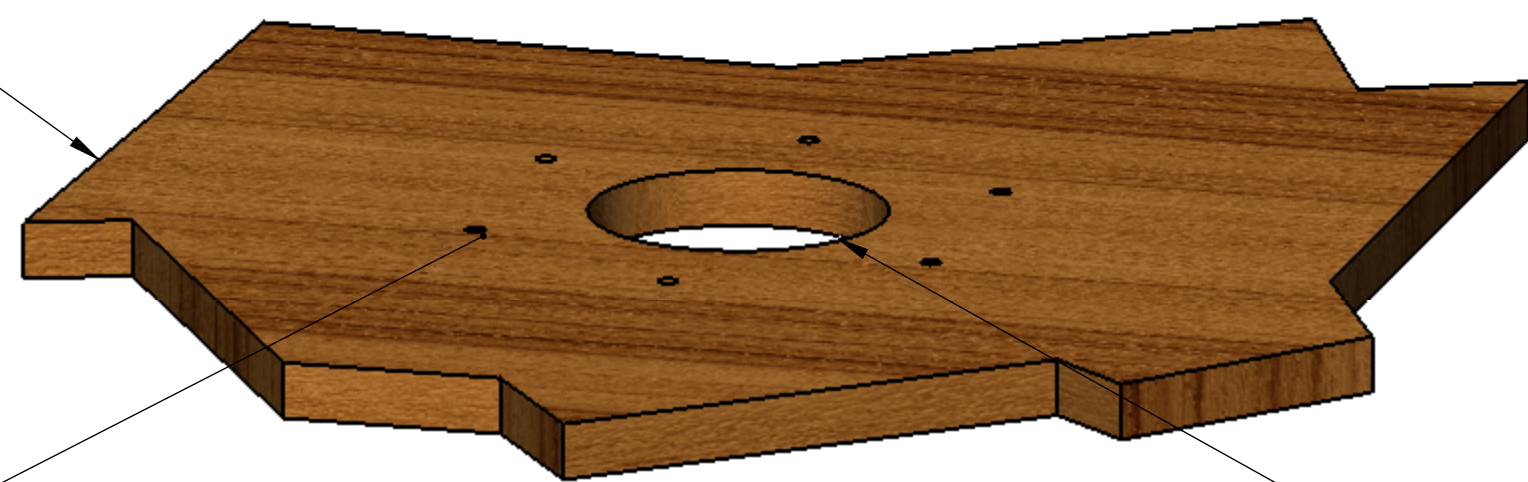
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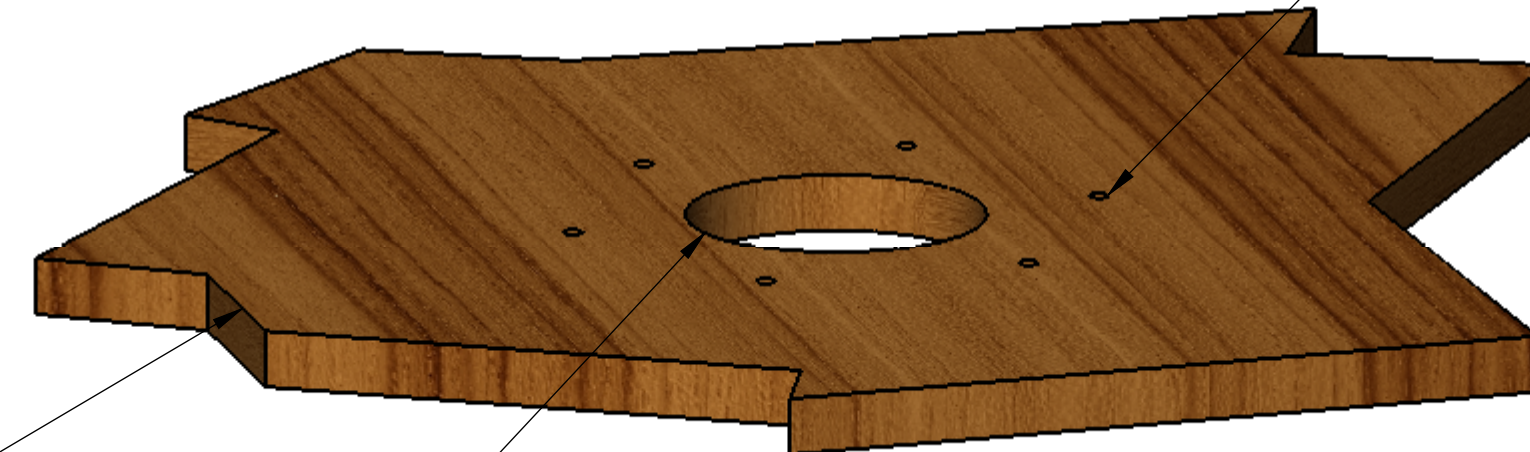
M400 WEIGHT: <12.25 kg (27lb)

AS568-436 EPDM O-RING
[5.85in ID x .275in DIA]
[49mm ID x 7mm DIA]AS568-444 EPDM O-RING
[7.72in ID x .275in DIA]
[96mm ID x 7mm DIA]CUSTOMER DECKING, OR
OTHER STRUCTURE.MAX DECK THICKNESS FOR
RIGHT ANGLED CABLES WITHOUT
TOP DOWN RISER: 10mmHOLES, MOUNTING
6.4 mm DIAMETER
6 PLACESCABLE PORT
FOR DIMENSIONS SEE
SHEETS 2 AND 3WASHER, OPTIONAL
M6
316 STAINLESS STEELSOCKET HEAD CAP SCREW
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY THREAD LOCKER (LOCTITE 262 OR EQUIVALENT)
TORQUE TO 9.5 N-m (7 lb-ft)

WARNING 5

HIDDEN CABLE MOUNTING SCHEME:MOUNTING DIRECTLY THROUGH CUSTOMER DECKING, OR OTHER SURFACES
STRUCTURE OPPOSITE M400 TO BE A SEALED ENCLOSURE AND A DRY SPACE
CAMERA SHOWN IN BALL UP CONFIGURATIONSOCKET HEAD CAP SCREW
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY THREAD LOCKER (LOCTITE 262 OR EQUIVALENT)
TORQUE TO 9.5 N-m (7 lb-ft)

WARNING 5

WASHER, OPTIONAL
M6
316 STAINLESS STEELHOLES, MOUNTING
6.4 mm DIAMETER
6 PLACESCUSTOMER DECKING, OR
OTHER STRUCTURE.MAX DECK THICKNESS FOR
RIGHT ANGLED CABLES WITHOUT
TOP DOWN RISER: 10mmCABLE PORT
FOR DIMENSIONS SEE
SHEETS 2 AND 3AS568-436 EPDM O-RING
[5.85in ID x .275in DIA]
[49mm ID x 7mm DIA]AS568-444 EPDM O-RING
[7.72in ID x .275in DIA]
[96mm ID x 7mm DIA]

M400 WEIGHT: <12.25 kg (27lb)

HIDDEN CABLE MOUNTING SCHEME:MOUNTING DIRECTLY THROUGH CUSTOMER STRUCTURE.
ACTUAL STRUCTURES MAY VARY.
STRUCTURE OPPOSITE M400 TO BE A SEALED ENCLOSURE
AND A DRY SPACE
CAMERA SHOWN IN BALL DOWN CONFIGURATION**TOP LEVEL ASSEMBLY
M400**

METRIC

PROPRIETARY - FLIR SYSTEMS, INC.

FLIR Systems, Inc.
70 Castilian Drive
Goleta, CA 93117SIZE
DCAGE
064Y2PIECE PART
432-0012-01-00REV
P02SCALE
1:5PRINTED:
5/14/2015SHEET
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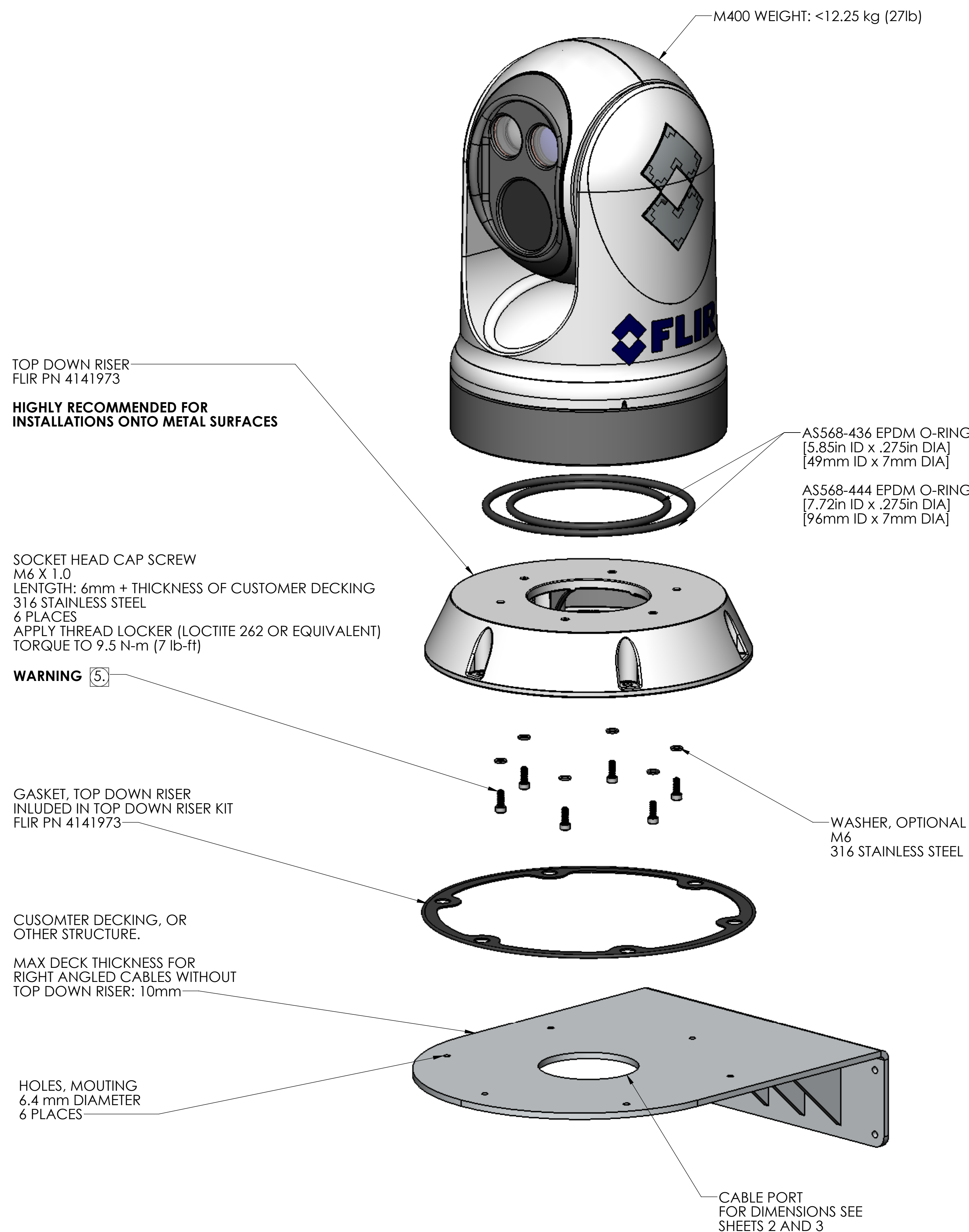
SOLIDWORKS MODEL: 432-0012-XX-YY TOP LEVEL ASSEMBLY, MARLIN
MODEL REVISION: P02

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**EXPOSED CABLE MOUNTING SCHEME:**

CUSTOMER SUPPLIED MOUNTING BRACKET/SURFACE
BALL UP CONFIGURATION SHOWN

CABLE PORT
FOR DIMENSIONS SEE
SHEETS 2 AND 3

HOLES, MOUNTING
6.4 mm DIAMETER
6 PLACES

WASHER, OPTIONAL
M6
316 STAINLESS STEEL

AS568-436 EPDM O-RING
[5.85in ID x .275in DIA]
[49mm ID x 7mm DIA]

AS568-444 EPDM O-RING
[7.72in ID x .275in DIA]
[96mm ID x 7mm DIA]

EXPOSED CABLE MOUNTING SCHEME:

CUSTOMER SUPPLIED MOUNTING BRACKET/SURFACE
BALL DOWN CONFIGURATION SHOWN

CUSTOMER DECKING, OR
OTHER STRUCTURE.

MAX DECK THICKNESS FOR
RIGHT ANGLED CABLES WITHOUT
TOP DOWN RISER: 10mm

GASKET, TOP DOWN RISER
INCLUDED IN TOP DOWN RISER KIT
FLIR PN 4141973

SOCKET HEAD CAP SCREW
M6 X 1.0
LENGTH: 6mm + THICKNESS OF CUSTOMER DECKING
316 STAINLESS STEEL
6 PLACES
APPLY THREAD LOCKER (LOCTITE 262 OR EQUIVALENT)
TORQUE TO 9.5 N-m (7 lb-ft)

WARNING [5]

TOP DOWN RISER
FLIR PN 4141973

**HIGHLY RECOMMENDED FOR
INSTALLATIONS ONTO METAL SURFACES**

M400 WEIGHT: <12.25 kg (27lb)

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**TOP LEVEL ASSEMBLY
M400**

METRIC

PROPRIETARY - FLIR SYSTEMS, INC.



FLIR Systems, Inc.
70 Castilian Drive
Goleta, CA 93117

SIZE
DCAGE
064Y2PIECE PART
432-0012-01-00REV
P02SCALE
1:5

PRINTED: 5/14/2015

SHEET 11 OF 11

MODEL REVISION: P02