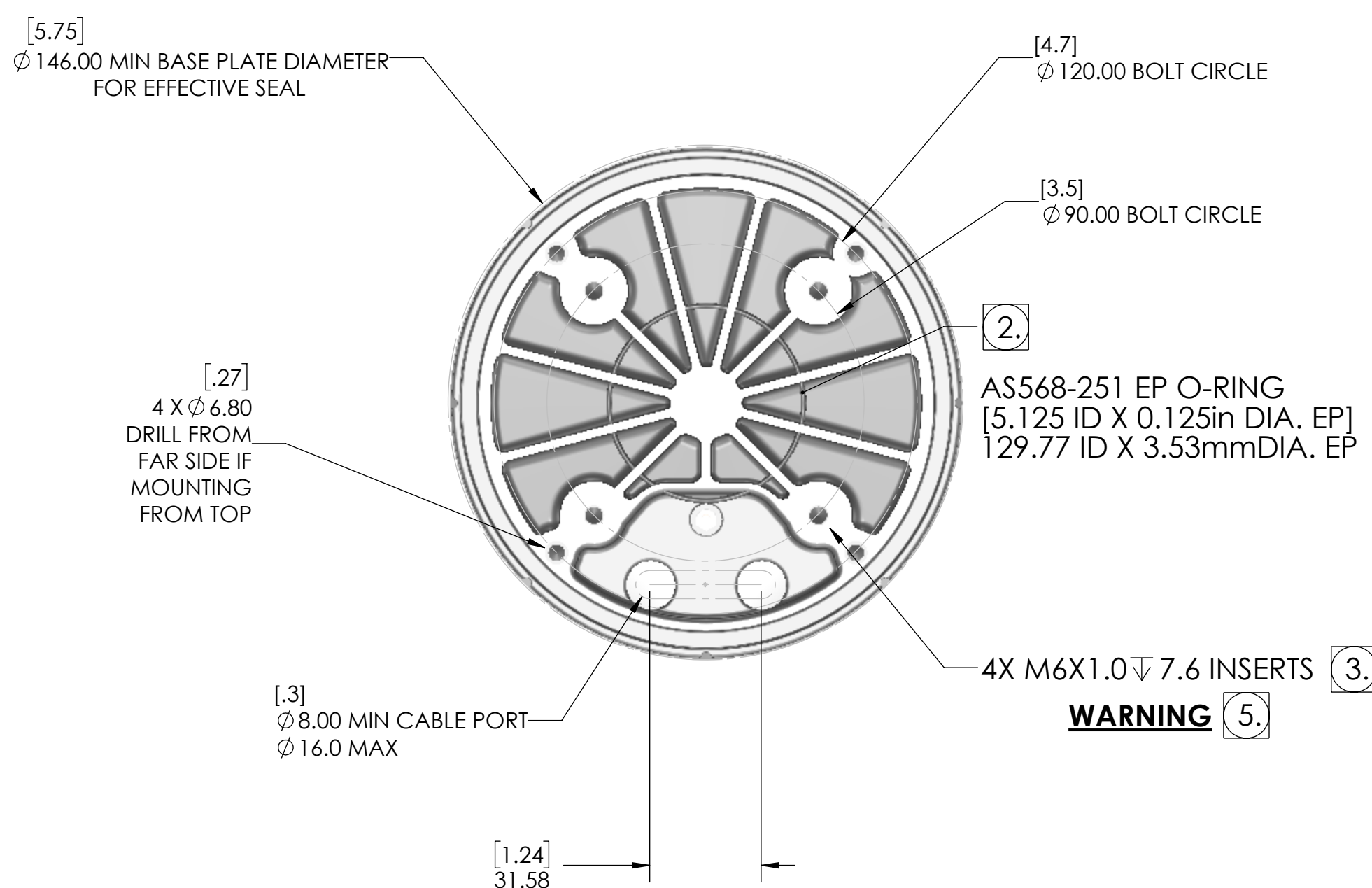
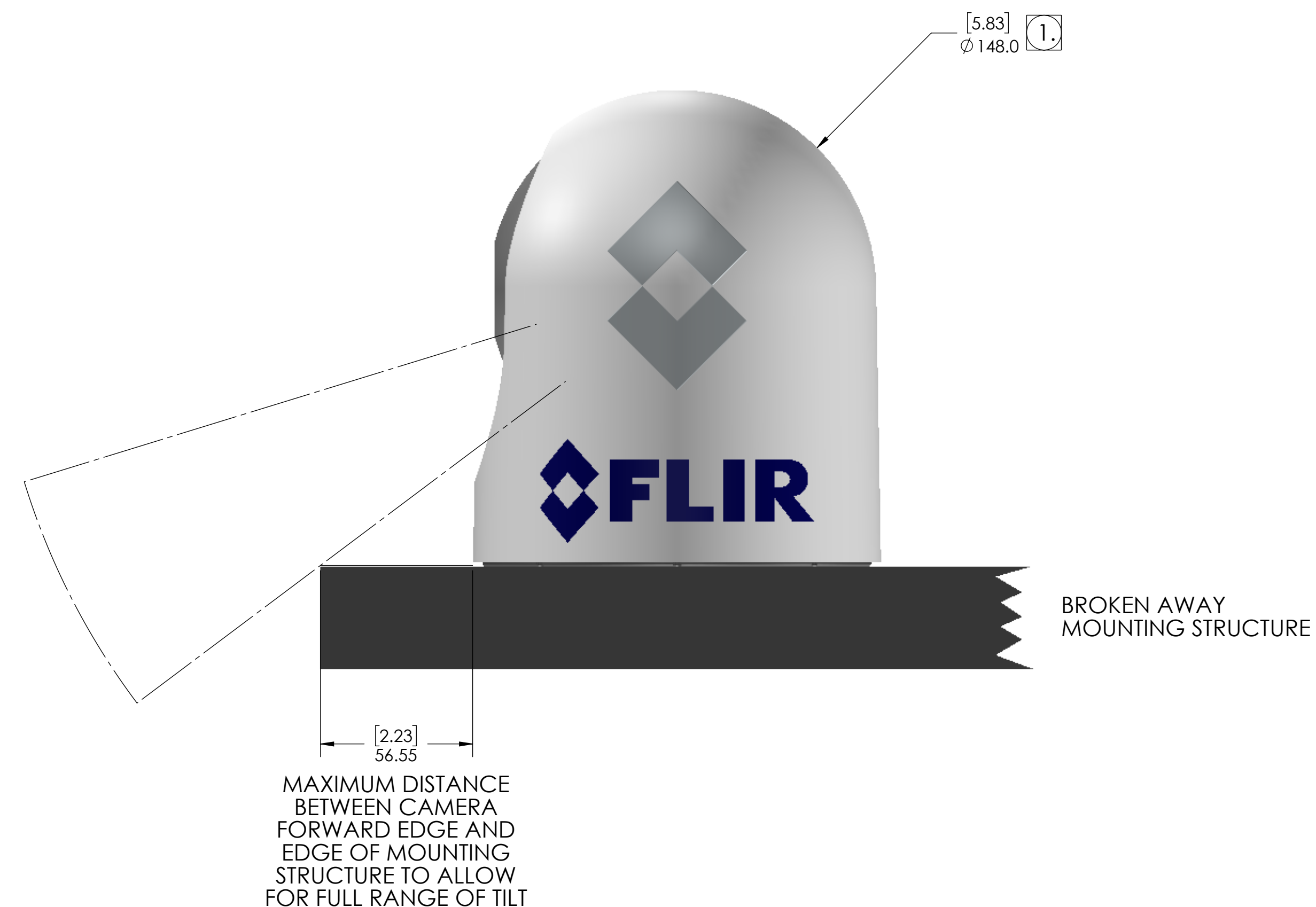
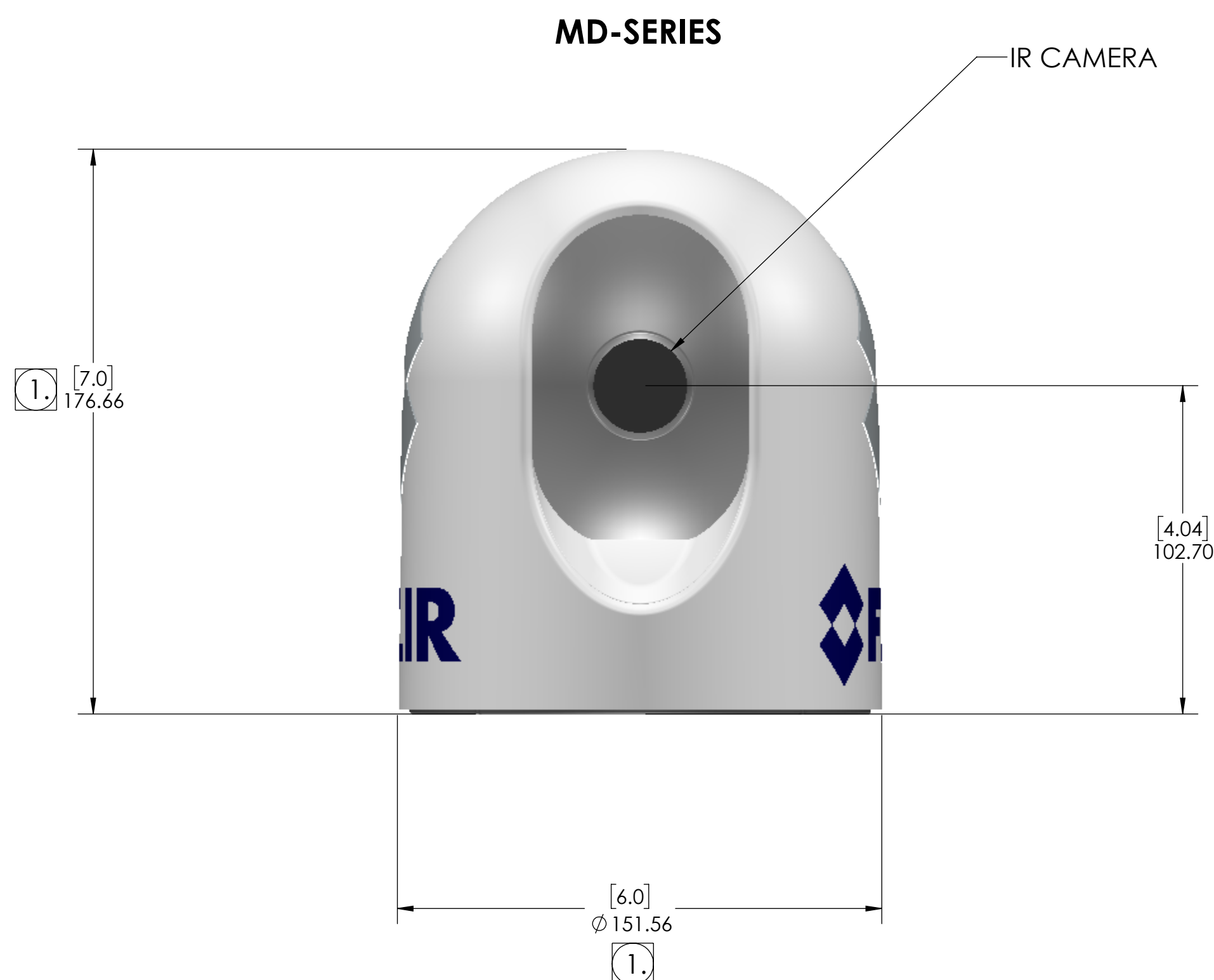


NOTES: UNLESS OTHERWISE SPECIFIED

- ① CLEARANCE REQUIRED FOR SYSTEM. AT LEAST DOUBLE OVERALL ASSEMBLY HEIGHT REQUIRED FOR DOME REMOVAL, ALLOWING FOR POINTING ADJUSTMENTS, CABLE MANAGEMENT, AND REMOVAL FROM MOUNTING LOCATION IN CERTAIN CASES.
- ② O-RING USED FOR SEALING SYSTEM TO MOUNTING STRUCTURE. STANDALONE UNIT MEETS IP66 SEALING SPECIFICATION. MINIMUM MOUNTING SURFACE FLATNESS OF 0.25mm [.010in] 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 242 WITH ALL METAL TO METAL THREADED CONNECTIONS.
- ⑤ **WARNING**
DO NOT BOTTOM OUT FASTENERS IN BASE.
BOLT LENGTH NOT TO EXCEED 8mm INTO BASE.
SEAL TO MOUNTING STRUCTURE LOST BY BASE PENETRATION.
RECOMMENDED BOLT TORQUE 3.18 N-m [2.34 ft-lbs]
BOLT TORQUE NOT TO EXCEED 9.5 N-m [7 ft-lbs].

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	100	RELEASED PER ECN 120482	2/28/2013	
	110	REVISED PER ECN 121161	5/13/2013	



THIS DOCUMENT DOES NOT CONTAIN EXPORT CONTROLLED INFORMATION

THIRD ANGLE PROJECTION

METRIC

INTERPRET DRAWING PER ASME Y14.5M-1994

UNLESS OTHERWISE SPECIFIED SURFACE ROUGHNESS 32
 .X = ±.25
 .XX = ±.13
 ANGULAR = ±.5°
 FILLET RADII = .13 MAX

MATERIAL	N/A	PROJECT NO.		 FLIR Systems, Inc. 70 Castilian Drive Goleta, CA 93117
FINISH	N/A	APPROVALS	DATE	
UNLESS OTHERWISE SPECIFIED ALL MEASUREMENTS ARE IN MM. ALL DIMENSIONS IN () ARE INCHES. DO NOT SCALE DRAWING.		DWN	J DISEPNZA	TITLE
		CHK		MD-SERIES ICD
		DSGN	J DISPENZA	SIZE D CAGE 064Y2 DWG NO. 432-0010-00-19 REV 110
CALC WT: GRAMS		ENG		SCALE 2:3 PRINTED: 10/14/2020 SHEET 1 OF 10
		APP		SOLIDWORKS MODEL: 432-0010-XX-XX Nudibranch Top Level 1 MODEL REVISION: D

BOTTOM MOUNTING HOLE PATTERN

IMPORTANT NOTE:

PAPER SIZE: 11X17
TEMPLATE SHOULD PRINT 1:1

DISABLE PAGE SCALING WHEN PRINTING FOR USE AS A TEMPLATE.

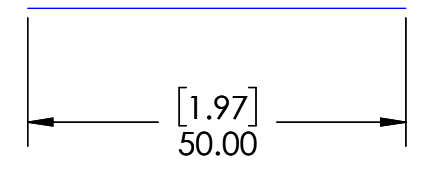
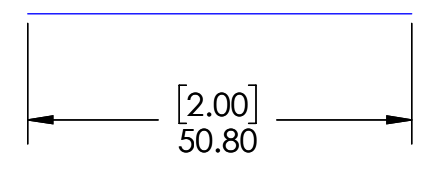
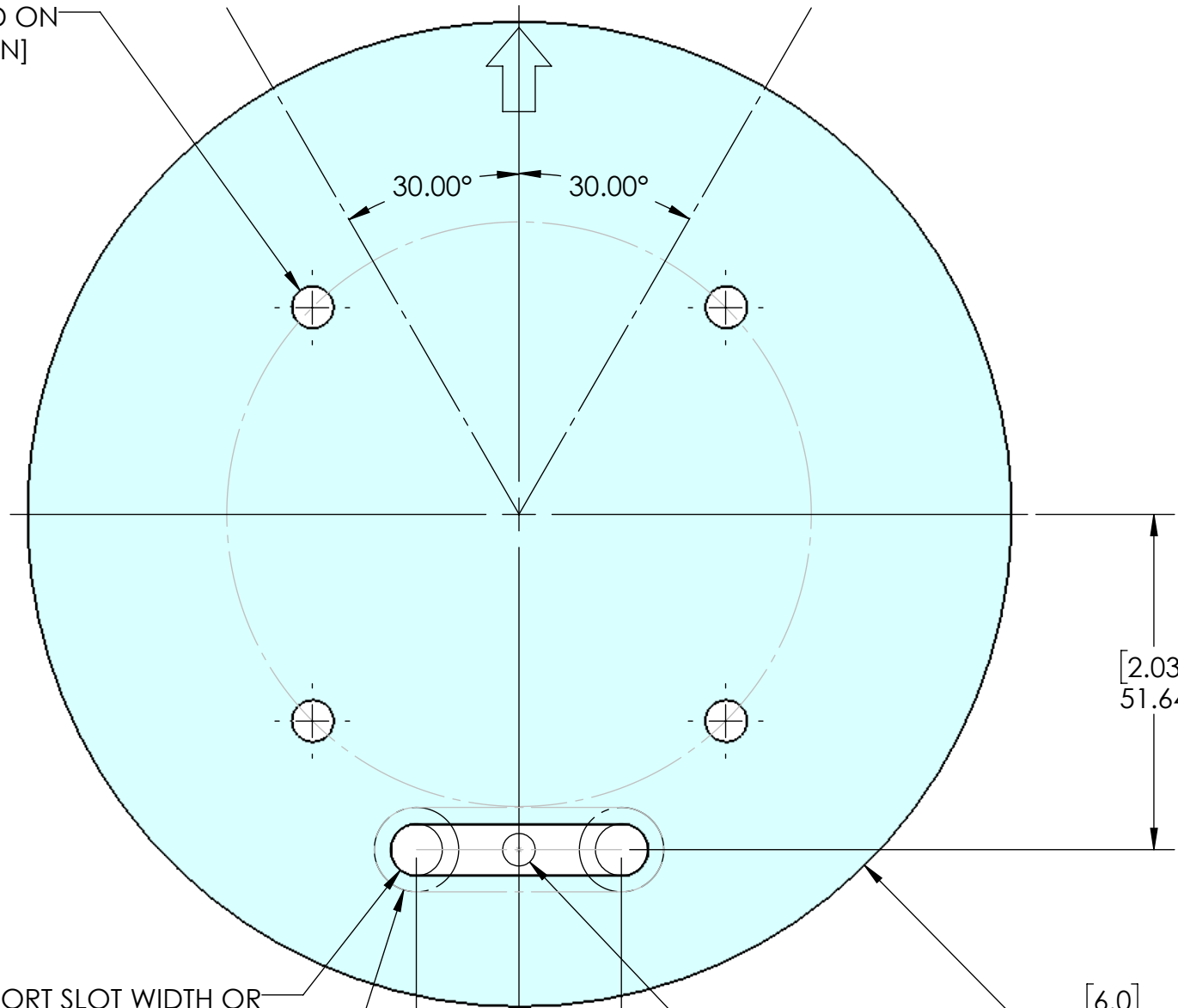
DUE TO VARIATION IN SOFTWARE AND PRINTERS, PLEASE VERIFY SCALE BELOW BEFORE MODIFYING MOUNTING SURFACE.

D

D

[.25]
4X ϕ 6.40 THRU HOLE
EQUALLY SPACED ON
 ϕ 90 mm [3.54 IN]
BOLT CIRCLE

ACCESSIBLE VIEWING DIRECTION



[2.03]
51.64

IMPORTANT NOTE:

CABLE PORT CAN BE CONFIGURED AS A SINGLE SLOT OR 3 DISCRETE HOLES.

[.31]
 ϕ 8.00 MIN CABLE PORT SLOT WIDTH OR
 ϕ 8.0 MIN CABLE PORT HOLE

[.51]
 ϕ 13.00 MAX CABLE PORT SLOT WIDTH OR
 ϕ 13.0 MAX CABLE PORT HOLE

[6.0]
 ϕ 151.56 MD-SERIES O.D.

[1.24]
31.58
CABLE PORT LENGTH
(CENTER TO CENTER)

OPTIONAL, DEDICATED
GROUNDING PORT
 ϕ 4.0 [0.16] MIN
 ϕ 7.5 [0.29] MAX

A

A

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Goleta, CA 93117

SIZE B	CAGE 064Y2	DWG NO. 432-0010-00-19	REV 110
SCALE 1:1	PRINTED: 10/14/2020	SHEET 2	OF 10

TOP MOUNTING DRILL PATTERN

IMPORTANT NOTE:

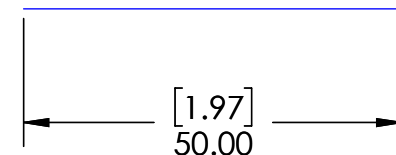
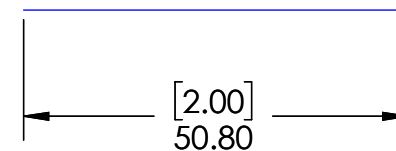
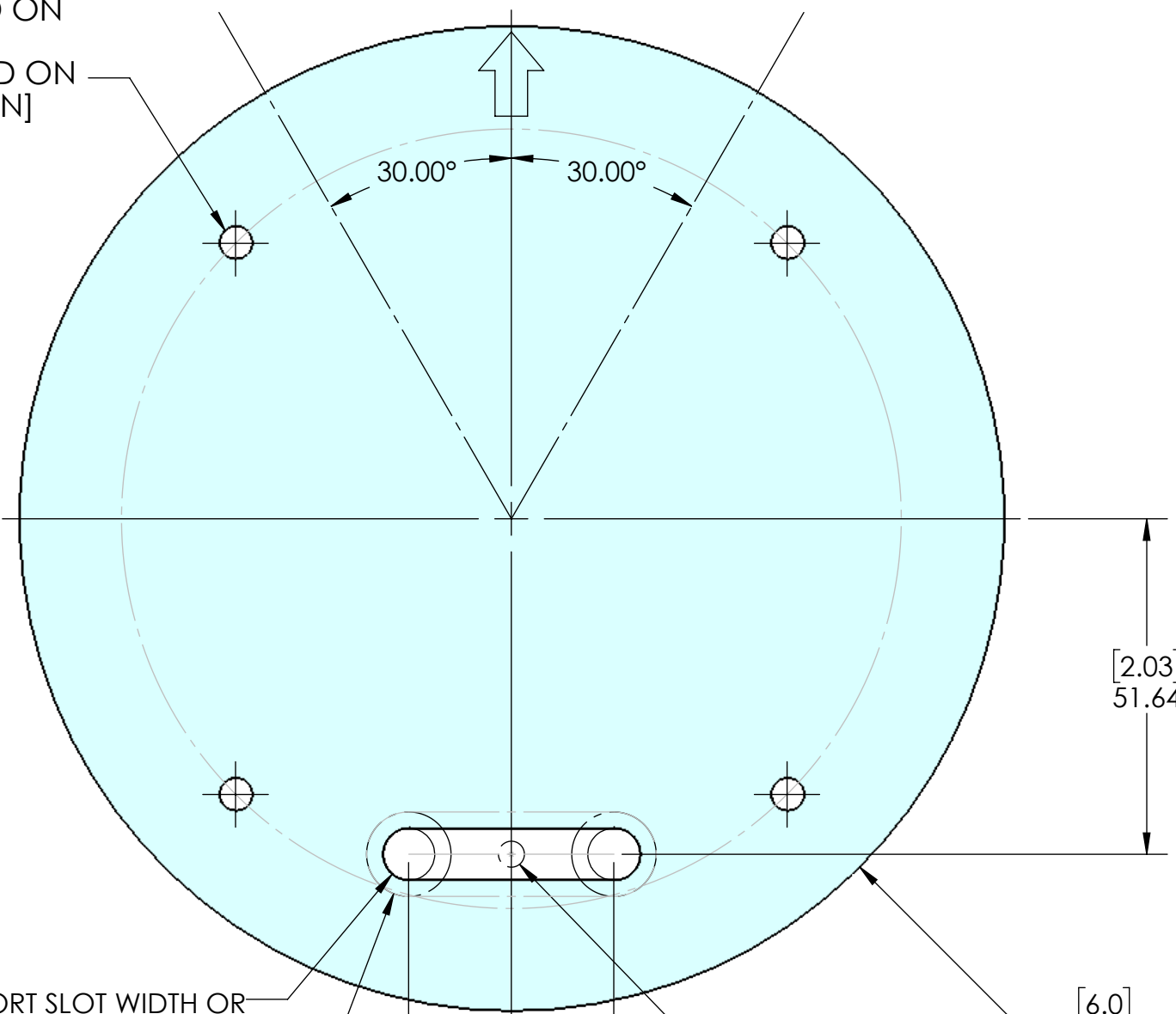
PAPER SIZE: 11X17
TEMPLATE SHOULD PRINT 1:1

DISABLE PAGE SCALING WHEN PRINTING FOR USE AS A TEMPLATE.

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

4X PILOT LOCATIONS
PIOLET HOLE
DIAMETER BASED ON
FASTENER SIZE
EQUALLY SPACED ON
Ø 120 mm [4.72 IN]
BOLT CIRCLE

ACCESSIBLE VIEWING DIRECTION



IMPORTANT NOTE:

CABLE PORT CAN BE CONFIGURED AS A SINGLE SLOT OR 3 DISCRETE HOLES.

[.31]
Ø 8.0 MIN CABLE PORT SLOT WIDTH OR
Ø 8.0 MIN CABLE PORT HOLE

[.51]
Ø 13.0 MAX CABLE PORT SLOT WIDTH OR
Ø 13.0 MAX CABLE PORT HOLE

[1.24]
31.58
CABLE PORT LENGTH
(CENTER TO CENTER)

[6.0]
Ø 151.6 MD-SERIES O.D.

OPTIONAL, DEDICATED
GROUNDING PORT
Ø 4.0 [0.16] MIN
Ø 7.5 [0.29] MAX

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SIZE B	CAGE 064Y2	DWG NO. 432-0010-00-19	REV 110
SCALE 1:1	PRINTED: 10/14/2020	SHEET 3	OF 10

D

D



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 SINGLE 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.

C

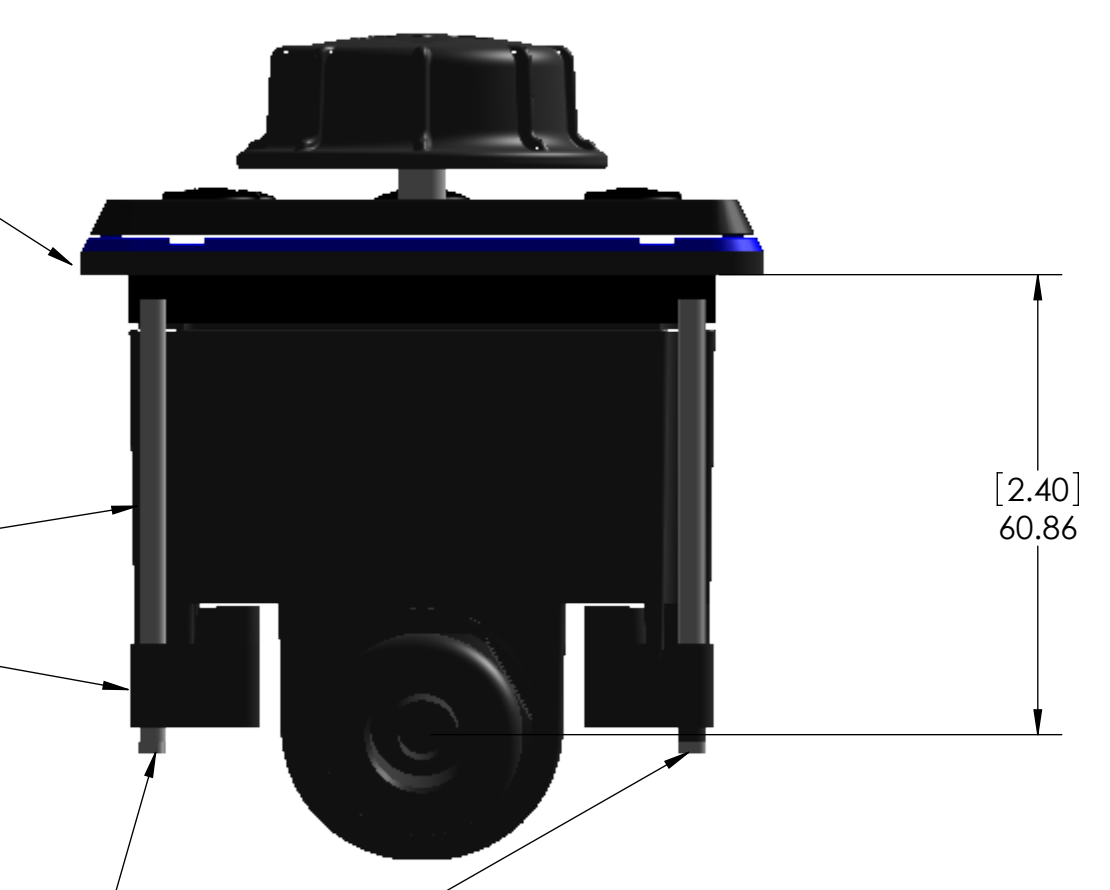
C

B

B

APPLY ADHESIVE SIDE OF GASKET TO JCU BODY.

MOUNTING PANEL THICKNESS RANGE 1.6-45 [0.063-1.750]. WHEN MOUNTING TO PANELS LESS THAN 6.3 [0.25] REVERSE PADDLES.



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

A

A

METRIC

THIRD ANGLE PROJECTION

INTERPRET DRAWING PER ASME Y14.5M-1994

UNLESS OTHERWISE SPECIFIED
 SURFACE ROUGHNESS 32
 .X = ±.25
 .XX = ±.13
 ANGULAR = ±.5°
 FILLET RADII = .13 MAX

MARITIME JCU
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SIZE	CAGE	PIECE PART	REV
D	064Y2	432-0010-00-19	110
SCALE	1:1	PRINTED: 10/14/2020	SHEET 4 OF 10

IMPORTANT NOTE:

PAPER SIZE: 11x17in
TEMPLATE SHOULD PRINT 1:1

DISABLE PAGE SCALING WHEN PRINTING FOR USE AS A
TEMPLATE.

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

D

D

CORNERS SHALL
BE SHARP.

[2.85]
72.39
OPTIONAL
DRILL GUIDE

C

C

[4.85]
123.19
OPTIONAL
DRILL GUIDE

[5.100±.049]
129.54±1.25
CUTOUT

[5.6]
141.4
OUTSIDE
OF JCU



B

B

[.25]
Ø6.35

[3.100±.049]
78.74±1.25
CUTOUT

[3.6]
90.4
OUTSIDE
OF JCU

A

A

MOUNTING TEMPLATE
MARITIME JCU

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SIZE B	CAGE 064Y2	DWG NO. 432-0010-00-19	REV 110
SCALE 1:1		PRINTED: 10/14/2020 SHEET 5 OF 10	

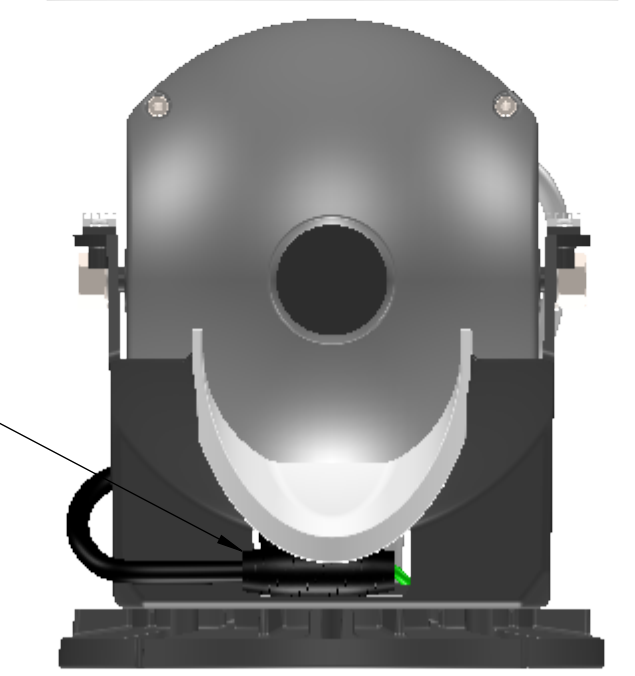
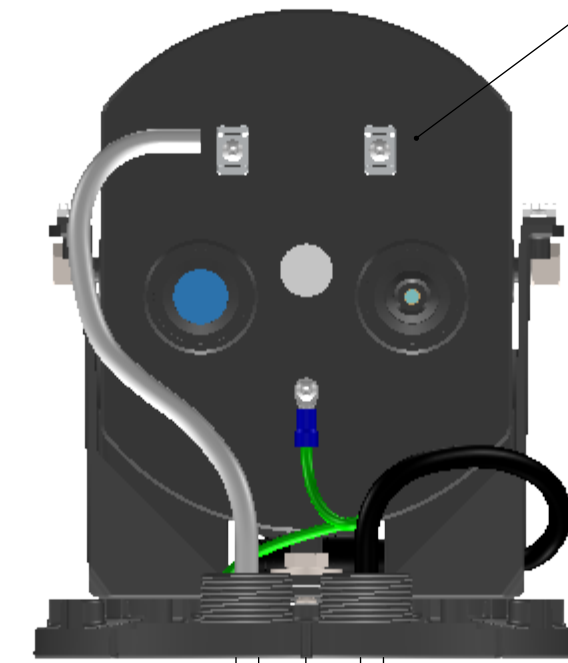
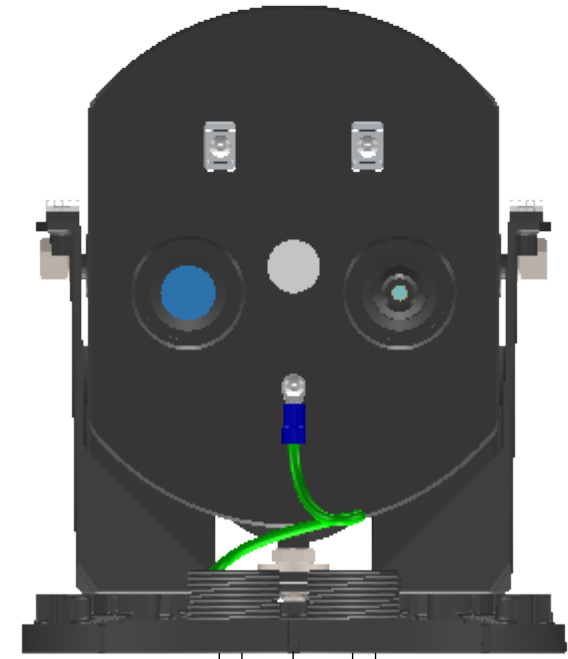
CONNECTIONS EXTERNAL

CONNECTIONS INTERNAL

MD-SERIES

MD-SERIES

MD-SERIES



CONNECTOR RJ45 WATERPROOF ENCLOSURE FLIR PN 4115028

RG59U VIDEO CABLE MALE TERMINATION

CONNECTOR F-TYPE FEMALE TO FEMALE FLIR PN 4115330

SEAL CONNECTION WITH MARITIME GRADE SEALING TAPE (3M SCOTCH-SEAL 229) OR EQUIVALENT

CONNECTOR RJ45 WATERPROOF ENCLOSURE FLIR PN 4115028

CONNECTOR F-TYPE FEMALE TO FEMALE FLIR PN 4115330

SEAL CONNECTION WITH MARITIME GRADE SEALING TAPE (3M SCOTCH-SEAL 229) OR EQUIVALENT

SUPPLIED VIDEO CABLE (FLIR PN 308-0164-25 OR EQUIVALENT) SHALL BE RATED RG59U OR BETTER

INJECTOR DC/DC POWER OVER ETHERNET FLIR PN 4113746

VESSEL POWER

FOLLOW MANUFACTURER SPECIFIC SEALING REQUIREMENTS

CONTROL CAPABLE MULTI-FUNCTION DISPLAY (MFD) REQUIRED FOR CONTROL OF CAMERA

DISPLAY

DISPLAY

INJECTOR DC/DC POWER OVER ETHERNET FLIR PN 4113746

VESSEL POWER

FOLLOW MANUFACTURER SPECIFIC SEALING REQUIREMENTS

SUPPLIED VIDEO CABLE (FLIR PN 308-0164-25 OR EQUIVALENT) SHALL BE RATED RG59U OR BETTER

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 COMPLIANCE, USE OF DOUBLE SHIELDED CABLE REQUIRED.

CONTROL CAPABLE MULTI-FUNCTION DISPLAY (MFD) REQUIRED FOR CONTROL OF CAMERA

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 COMPLIANCE, USE OF DOUBLE SHIELDED CABLE REQUIRED.

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METRIC



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SIZE D

CAGE 064Y2

PIECE PART 432-0010-00-19

REV 110

SCALE 1:2

PRINTED: 10/14/2020

SHEET 6 OF 10

JCU CONTROL - NO POE SWITCH

JCU CONTROL - POE SWITCH

D

D

C

C

B

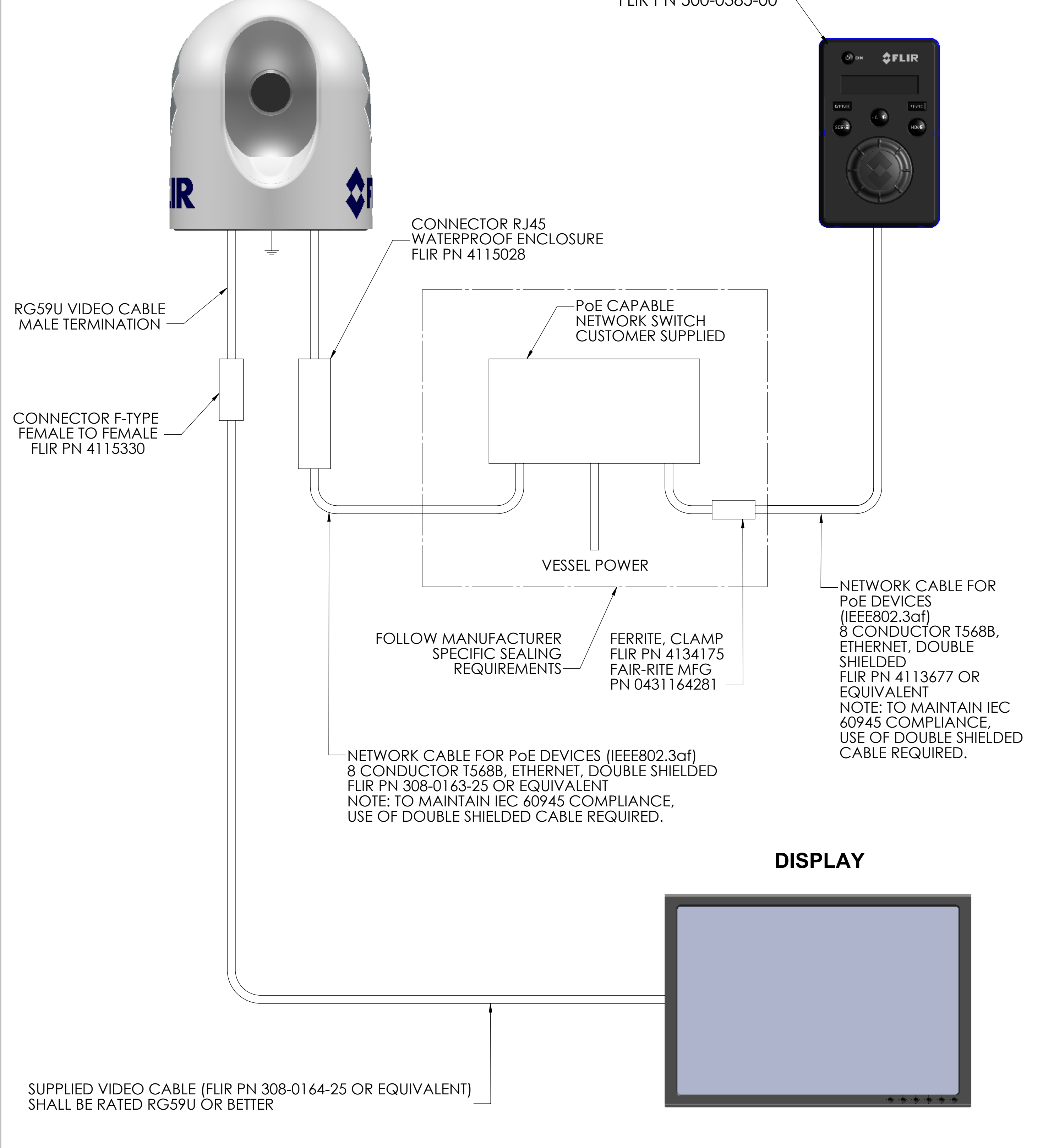
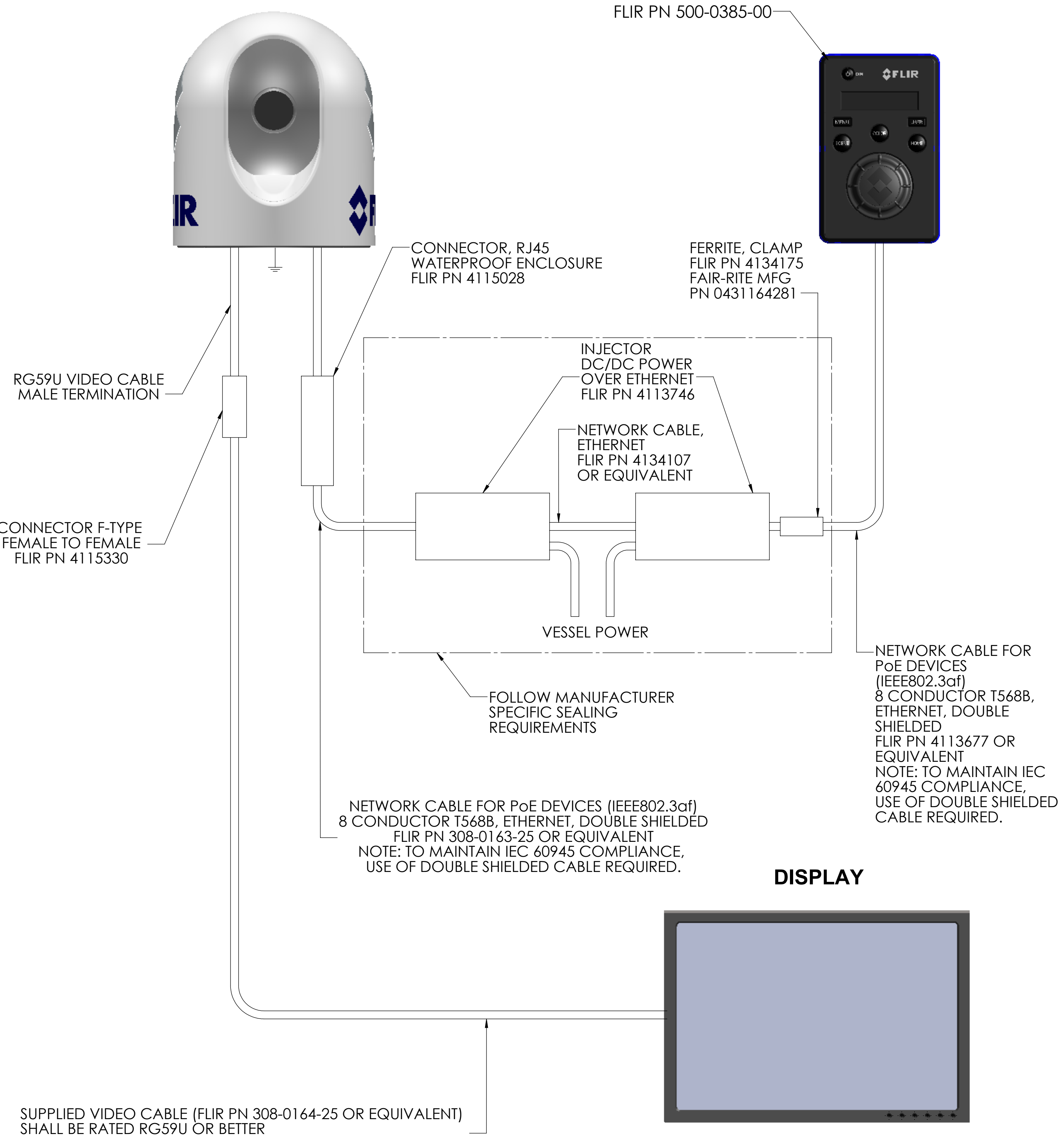
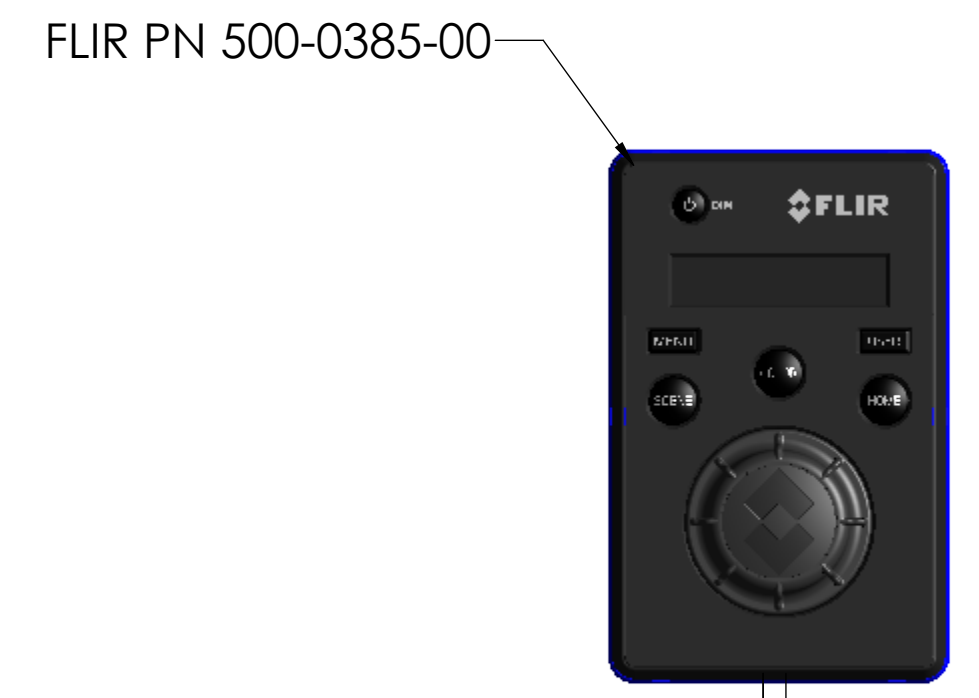
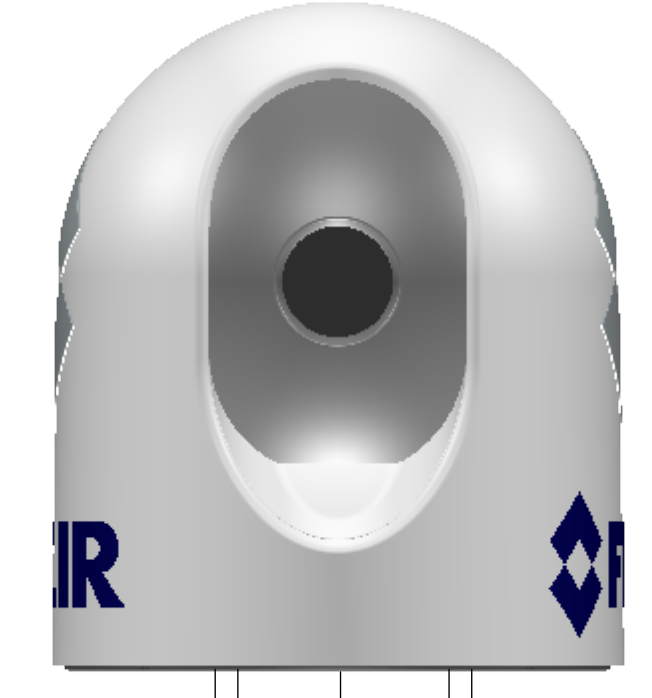
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A

MD-SERIES

MD-SERIES



SUPPLIED VIDEO CABLE (FLIR PN 308-0164-25 OR EQUIVALENT) SHALL BE RATED RG59U OR BETTER

SUPPLIED VIDEO CABLE (FLIR PN 308-0164-25 OR EQUIVALENT) SHALL BE RATED RG59U OR BETTER

THIS DOCUMENT DOES NOT CONTAIN EXPORT CONTROLLED INFORMATION METRIC

CONNECTIONS EXTERNAL

CONNECTIONS INTERNAL

D

D

C

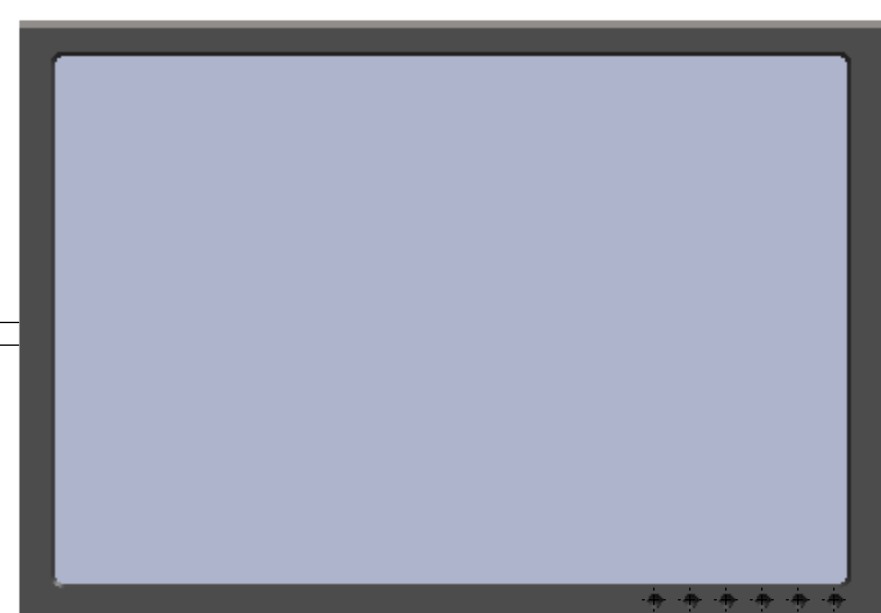
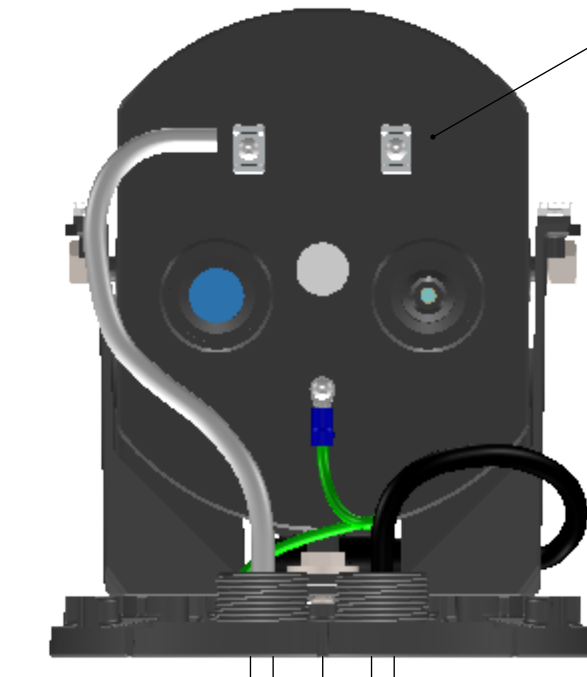
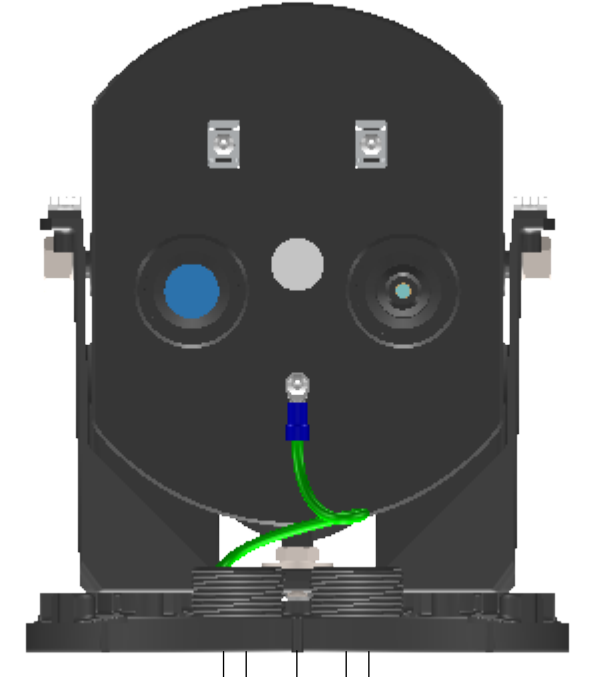
C

B

B

A

A



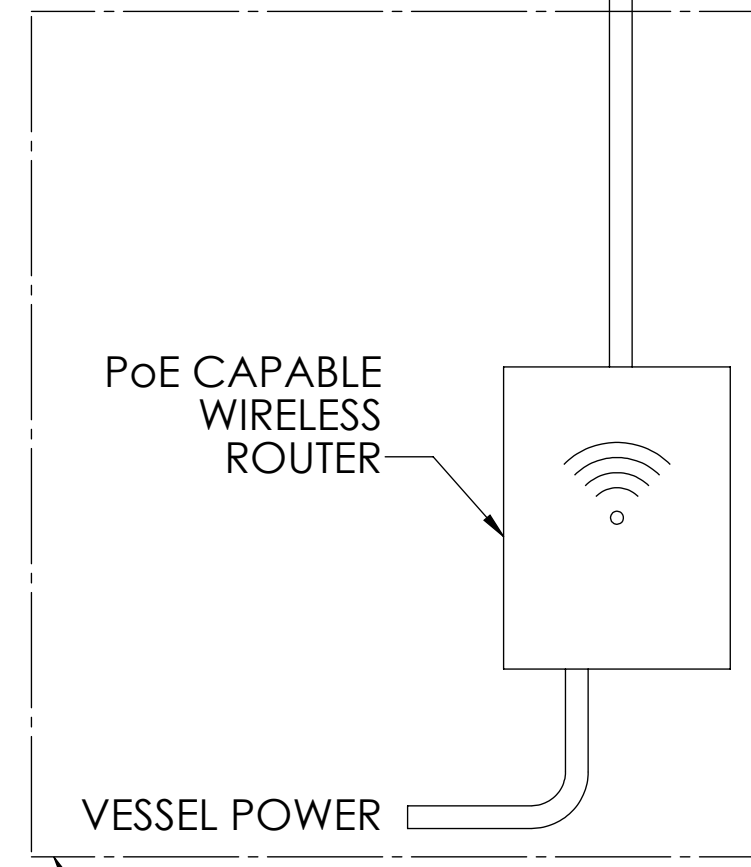
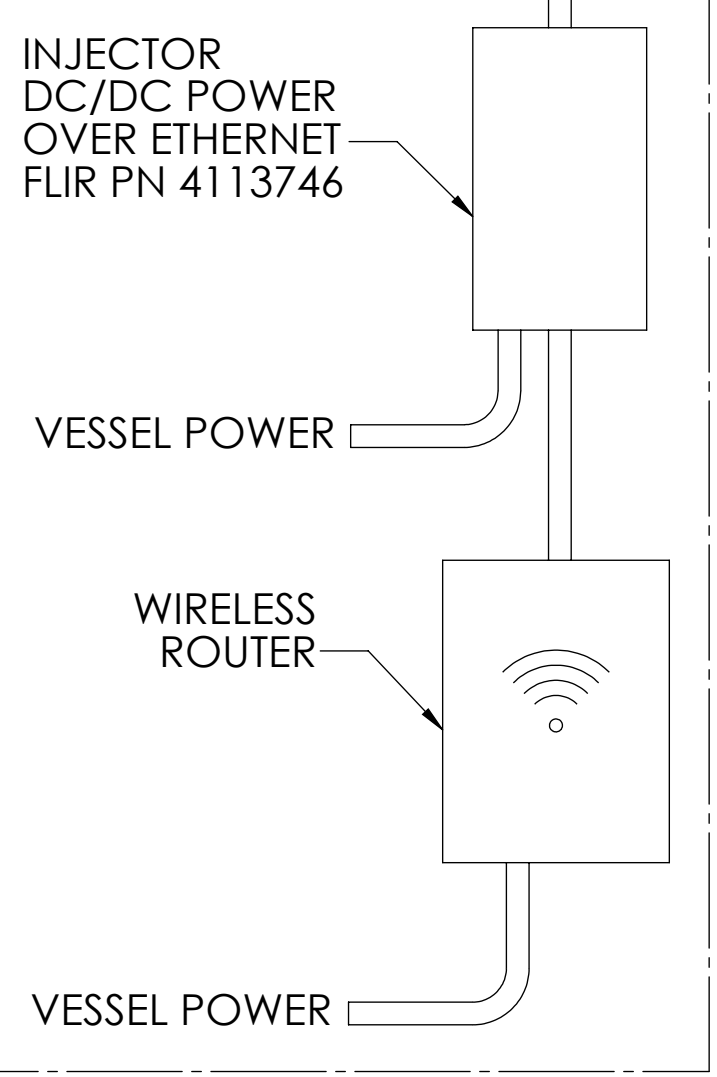
CONNECTOR RJ45 WATERPROOF ENCLOSURE FLIR PN 4115028

CONNECTOR F-TYPE FEMALE TO FEMALE FLIR PN 4115330

SEAL CONNECTION WITH MARITIME GRADE SEALING TAPE (3M SCOTCH-SEAL 2229) OR EQUIVALENT

SUPPLIED VIDEO CABLE (FLIR PN 308-0164-25 OR EQUIVALENT) SHALL BE RATED RG59U OR BETTER

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 COMPLIANCE, USE OF DOUBLE SHIELDED CABLE REQUIRED.



CONNECTOR RJ45 WATERPROOF ENCLOSURE FLIR PN 4115028

SUPPLIED VIDEO CABLE (FLIR PN 308-0164-25 OR EQUIVALENT) SHALL BE RATED RG59U OR BETTER

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 COMPLIANCE, USE OF DOUBLE SHIELDED CABLE REQUIRED.

PoE CAPABLE WIRELESS ROUTER

WIRELESS CLIENT DEVICE

FOLLOW MANUFACTURER SPECIFIC SEALING REQUIREMENTS

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

SIZE D

CAGE 064Y2

PIECE PART 432-0010-00-19

REV 110

SCALE 1:2

PRINTED: 10/14/2020

SHEET 8 OF 10

D

C

B

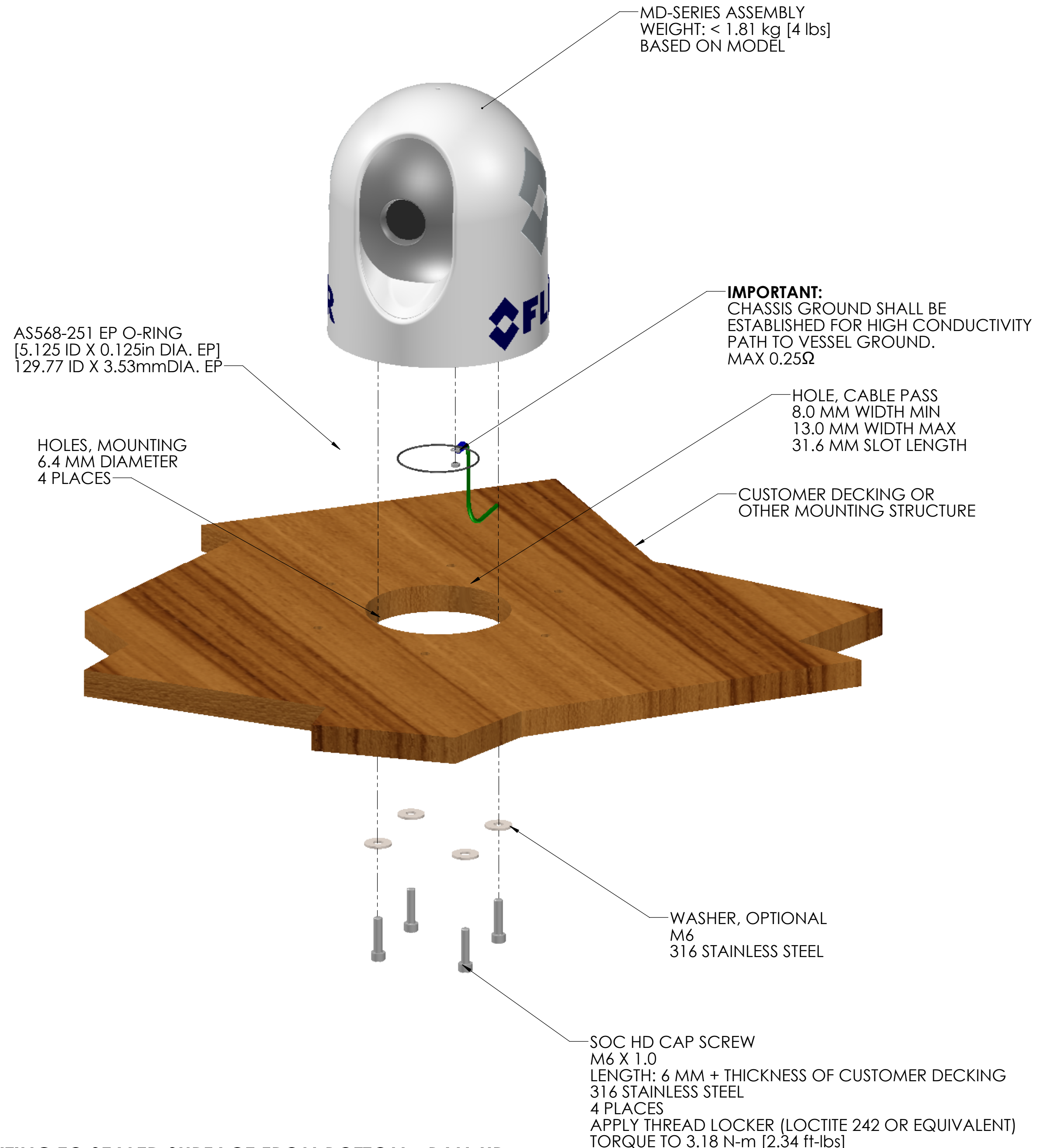
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D

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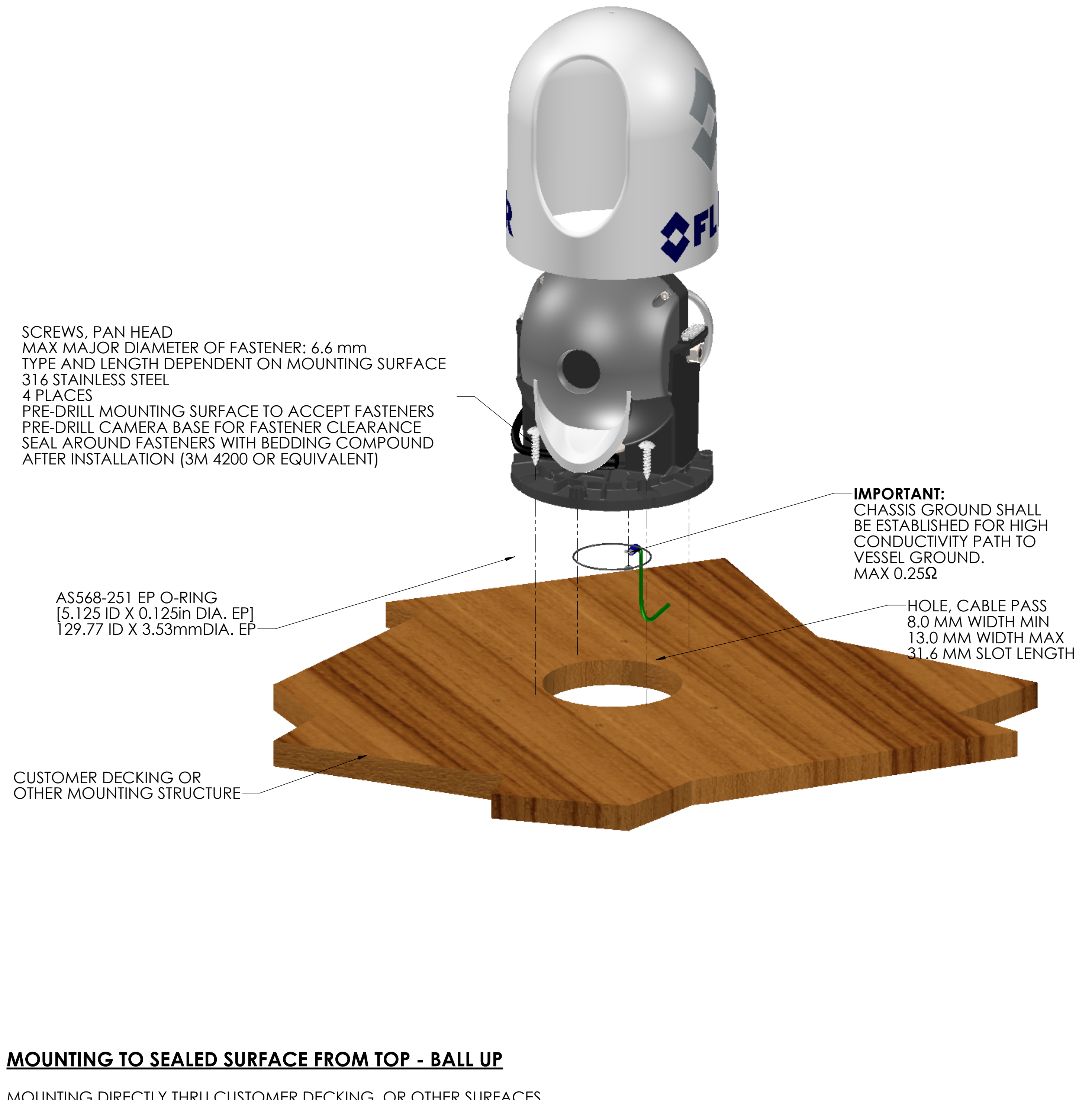


MOUNTING TO SEALED SURFACE FROM BOTTOM - BALL UP

MOUNTING DIRECTLY THRU CUSTOMER DECKING, OR OTHER SURFACES STRUCTURE OPPOSITE CAMERA TO BE SEALED ENCLOSURE AND A DRY SPACE CAMERA BALL UP CONFIGURATION SHOWN

ENTIRE ASSEMBLY VIEW CAN BE ROTATED 180° FOR BALL DOWN INSTALLATION

WARNING (5)



MOUNTING TO SEALED SURFACE FROM TOP - BALL UP

MOUNTING DIRECTLY THRU CUSTOMER DECKING, OR OTHER SURFACES STRUCTURE OPPOSITE CAMERA TO BE SEALED ENCLOSURE AND A DRY SPACE CAMERA BALL UP CONFIGURATION SHOWN

ENTIRE ASSEMBLY VIEW CAN BE ROTATED 180° FOR BALL DOWN INSTALLATION

THIS DOCUMENT DOES NOT CONTAIN EXPORT CONTROLLED INFORMATION METRIC

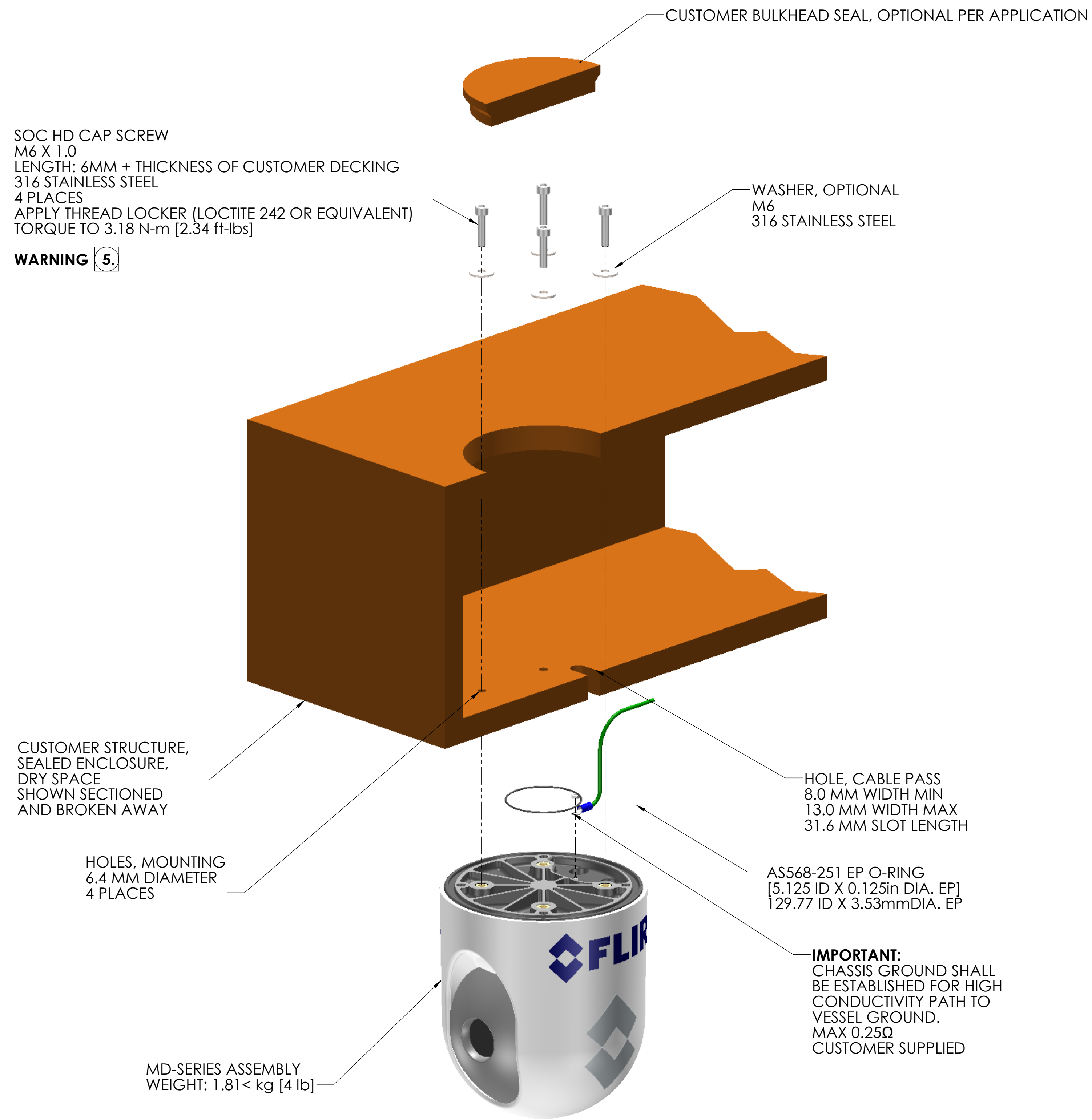
	FLIR Systems, Inc. 70 Castilian Drive Goleta, CA 93117	SIZE D	CAGE 064Y2	PIECE PART	REV 110
		SCALE 1:2	PRINTED: 10/14/2020	SHEET 9 OF 10	

D

C

B

A



MOUNTING TO SEALED SURFACE FROM BOTTOM - BALL DOWN

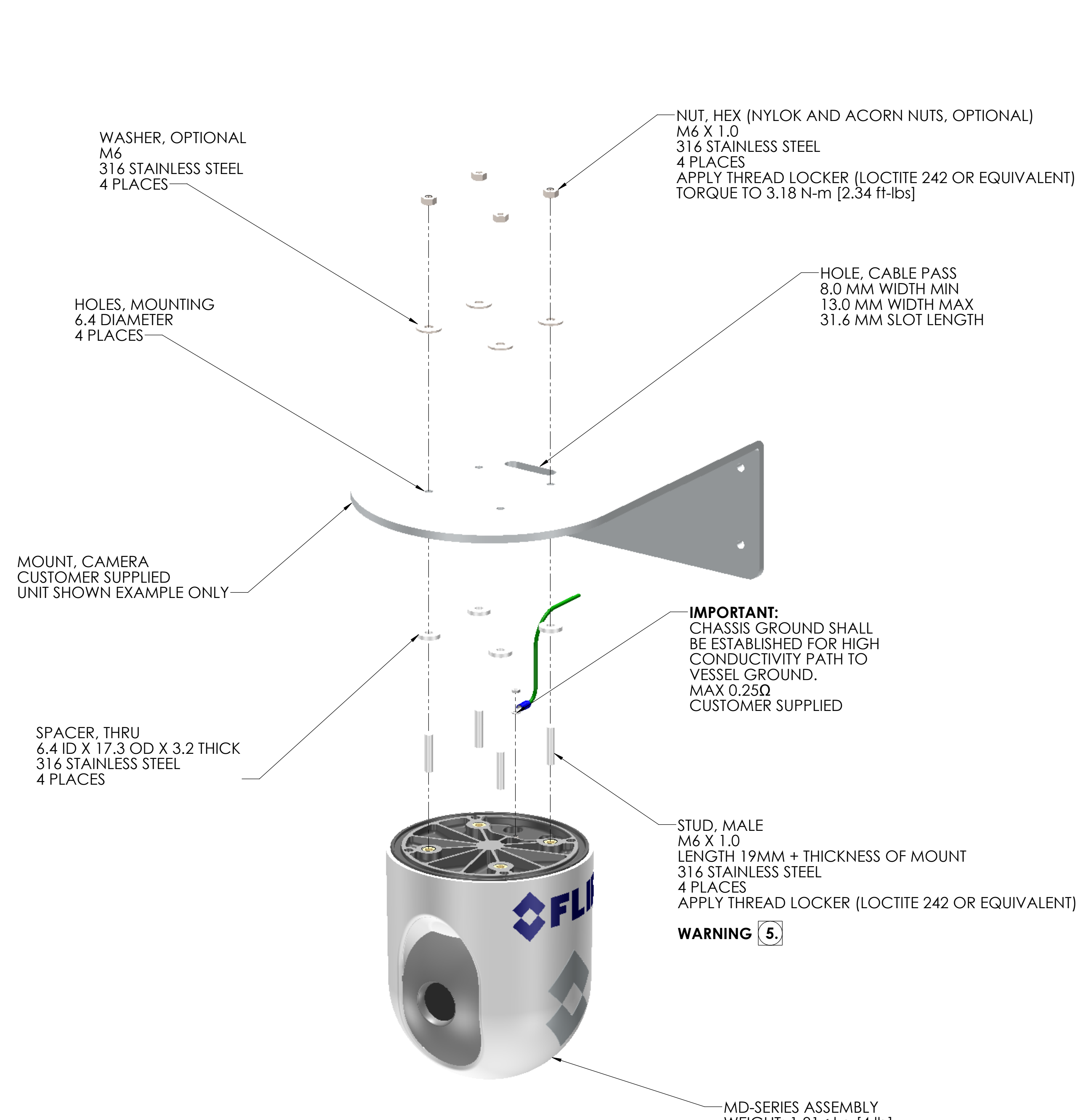
MOUNTING DIRECTLY TO CUSTOMER STRUCTURE, ACTUAL STRUCTURES MAY VARY
CAMERA BALL DOWN CONFIGURATION SHOWN
ENTIRE ASSEMBLY VIEW CAN BE ROTATED 180° FOR BALL UP INSTALLATION

D

C

B

A



MOUNTING TO UNSEALED SURFACE FROM BOTTOM - BALL DOWN

CUSTOMER SUPPLIED MOUNTING BRACKET/SURFACE
CAMERA BALL DOWN CONFIGURATION SHOWN
ENTIRE ASSEMBLY VIEW CAN BE ROTATED 180° FOR BALL UP INSTALLATION

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	FLIR Systems, Inc. 70 Castilian Drive Goleta, CA 93117	SIZE D	CAGE 064Y2	PIECE PART 432-0010-00-19	REV 110
	SCALE 1:5	PRINTED: 10/14/2020	SHEET 10 OF 10		