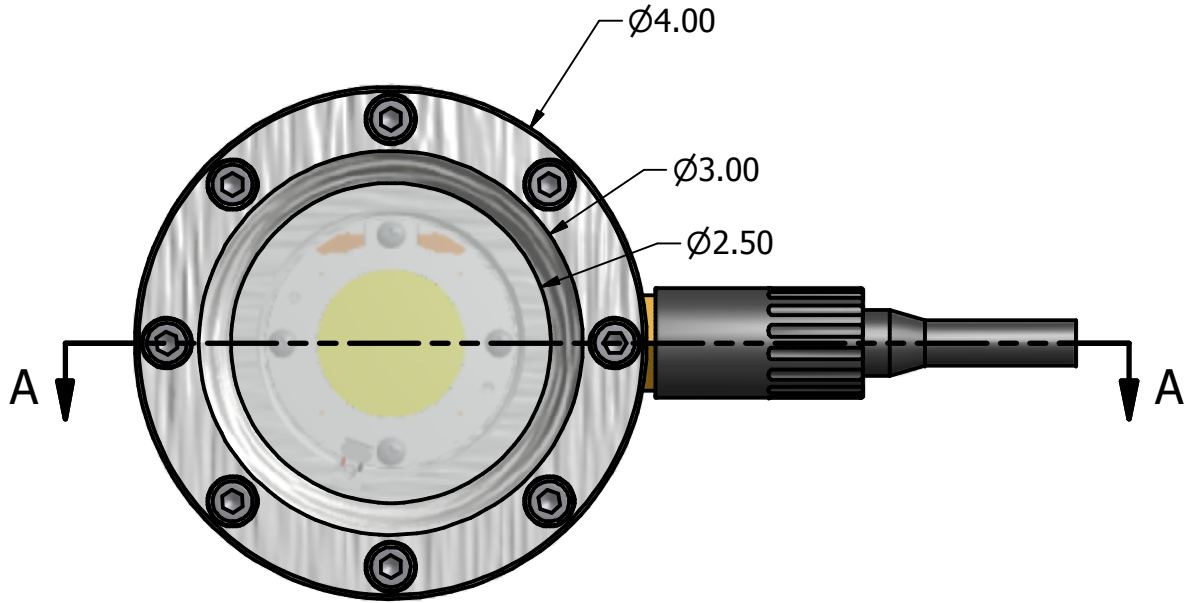
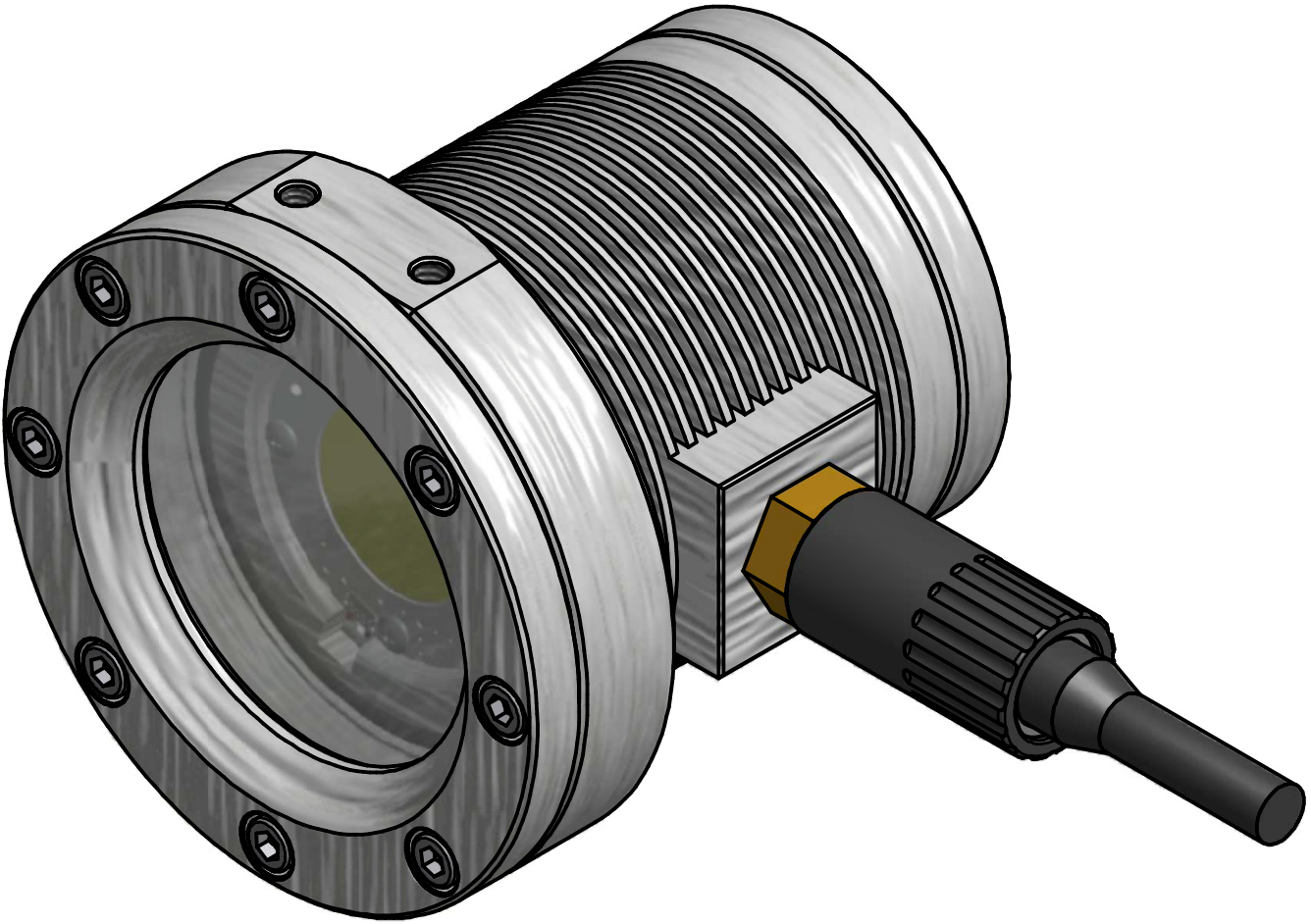
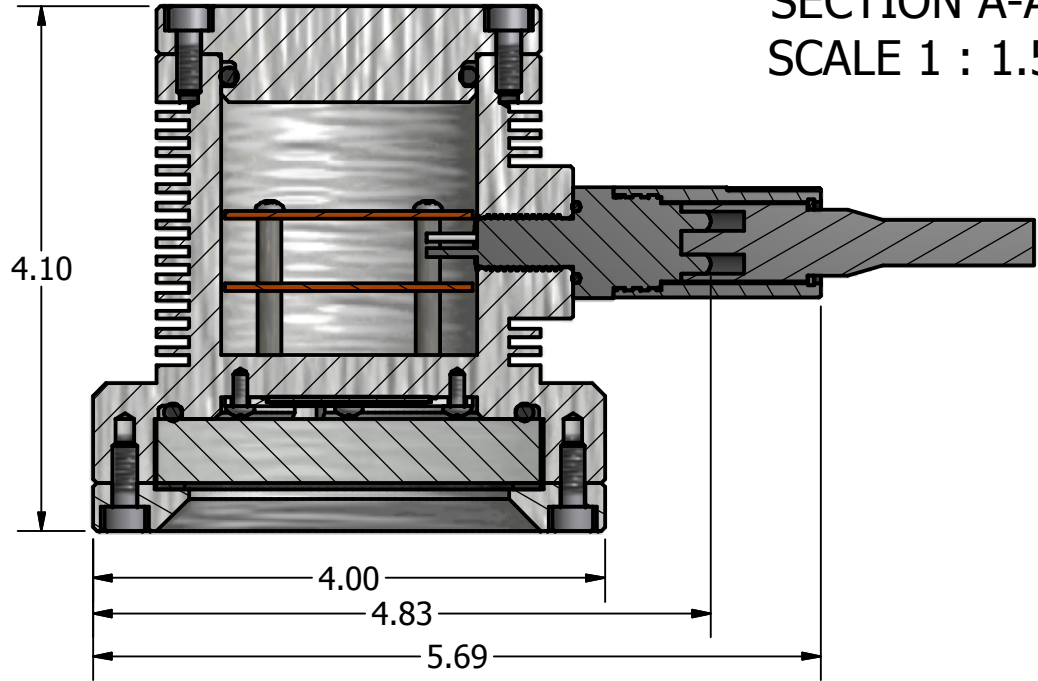


REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	INITIAL	9/16/2015	CLR

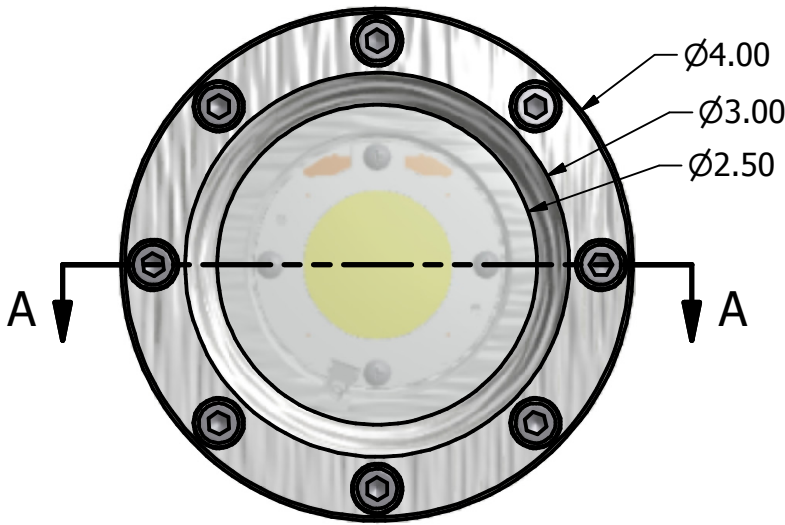
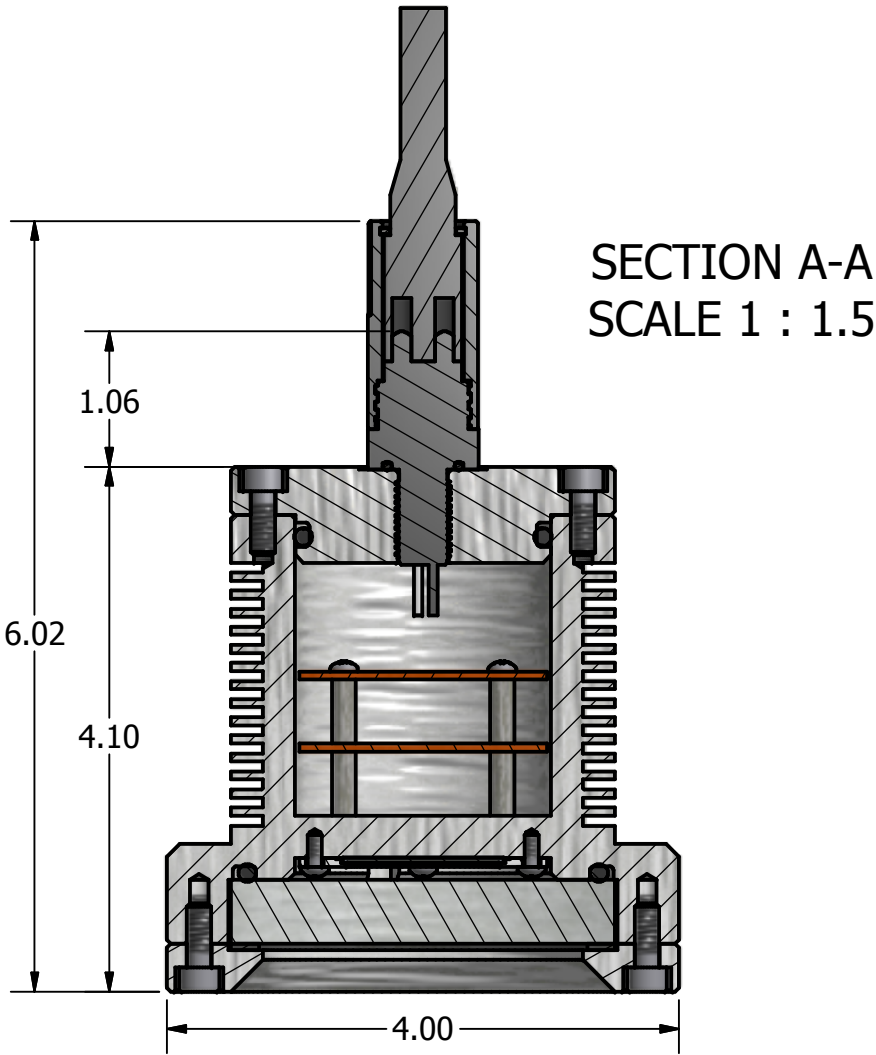
SECTION A-A
SCALE 1 : 1.5



WEIGHT: 2.626 LBS
HOUSING MATERIAL: 7075-T6 ALUMINUM
LENS: BOROSILICATE GLASS

DRAWN CLR	9/11/2015	PSUBS		
CHECKED CLR	9/11/2015			
QA				
MFG				
APPROVED CLR	9/11/2015	TITLE PSUBS 10K Lumen LED Light - Option A - Side Connector		
		SIZE B	DWG NO LED Assembly A	REV 1
		SCALE	SHEET 1 OF 1	

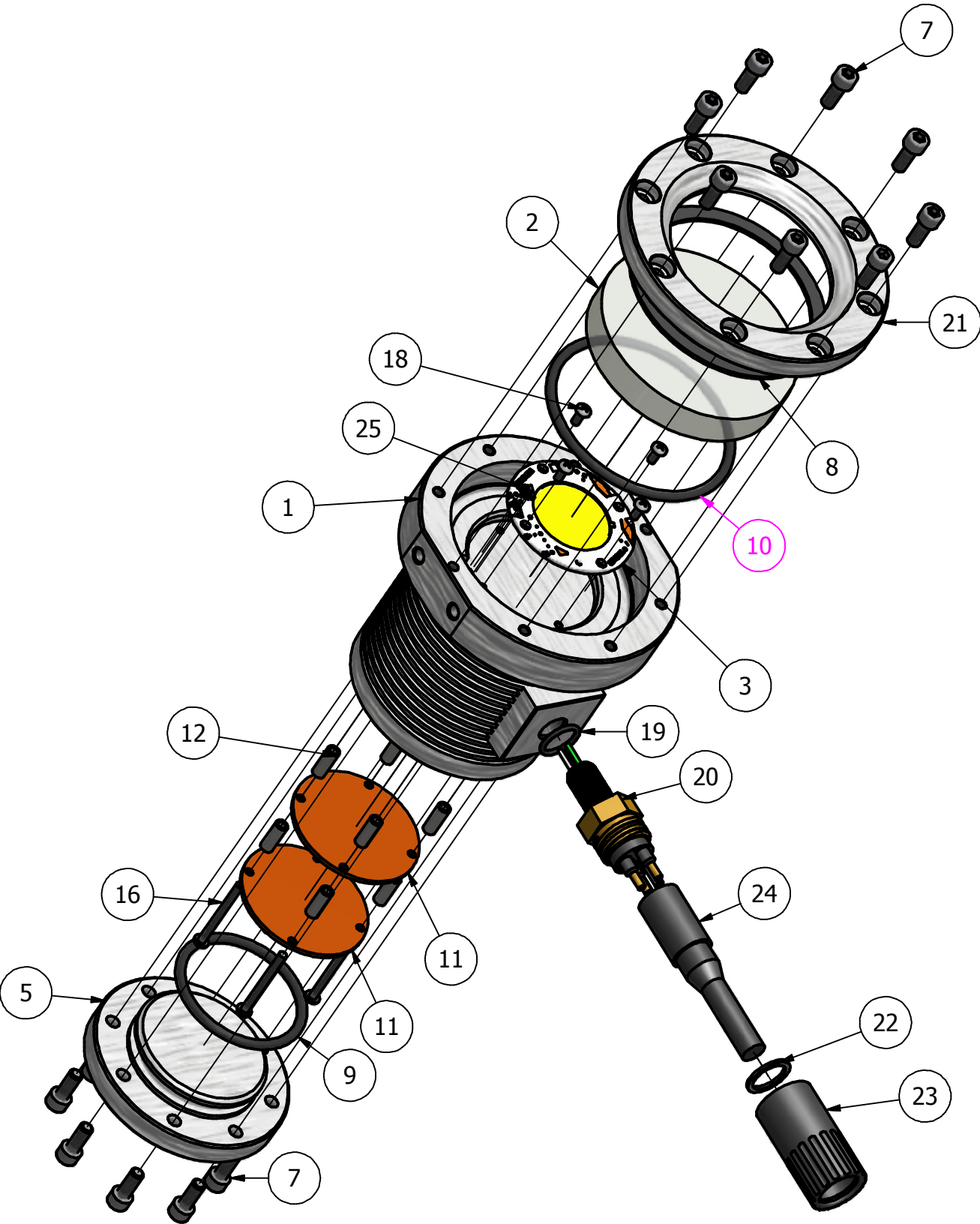
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	INITIAL	9/11/2015	CLR
	2	Size Reduction	9/15/2015	CLR



WEIGHT: 2.56 LBS
HOUSING MATERIAL: 7075-T6 ALUMINUM
LENS: BOROSILICATE GLASS

DRAWN CLR	9/11/2015	PSUBS TITLE PSUBS 10K Lumen LED Light - Option B - Back Connector		
CHECKED CLR	9/11/2015			
QA				
MFG				
APPROVED CLR	9/11/2015	SIZE B	DWG NO LED Assembly	REV 1
		SCALE	SHEET 1 OF 1	

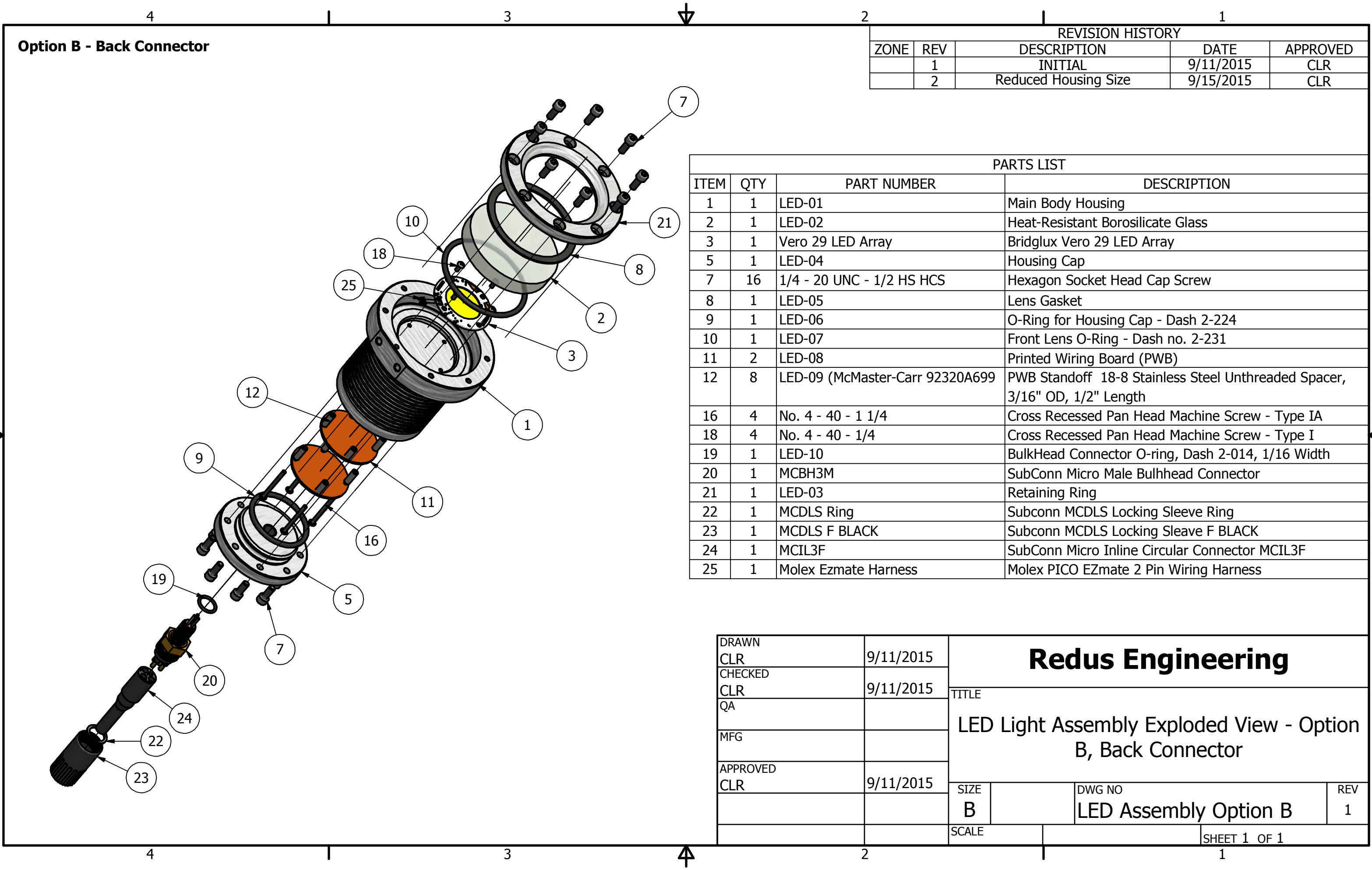
Option A - Side Connector



REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	INITIAL	9/16/2015	CLR

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LED-01A	Main Body Housing - Option A
2	1	LED-02	Heat-Resistant Borosilicate Glass
3	1	BXRC-50C10K-24	Bridglux Vero 29 LED Array
5	1	LED-04A	Housing Cap
7	16	No. 10 - 24 UNC - 1/2 HS HCS	Hexagon Socket Head Cap Screw
8	1	LED-05	Lens Gasket
9	1	LED-06	O-Ring for Housing Cap - Dash 2-224
10	1	LED-07	Front Lens O-Ring - Dash no. 2-231
11	2	LED-08	Printed Wiring Board (PWB)
12	8	LED-09 (McMaster-Carr 92320A699	PWB Standoff 18-8 Stainless Steel Unthreaded Spacer, 3/16" OD, 1/2" Length
16	4	ANSI B18.6.3 - No. 4 - 40 - 1 1/4	Cross Recessed Pan Head Machine Screw - Type IA
18	4	ANSI B18.6.3 - No. 4 - 40 - 1/4	Cross Recessed Pan Head Machine Screw - Type I
19	1	LED-10	BulkHead Connector O-ring, Dash 2-014, 1/16 Width
20	1	MCBH3M	SubConn Micro Male Bulhhead Connector
21	1	LED-03	Retaining Ring
22	1	MCDLS Ring	Subconn MCDLS Locking Sleeve Ring
23	1	MCDLS F BLACK	Subconn MCDLS Locking Sleeve F BLACK
24	1	MCIL3F	SubConn Micro Inline Circular Connector MCIL3F
25	1	Molex Ezmate Harness	Molex PICO EZmate 2 Pin Wiring Harness

DRAWN CLR	9/11/2015	Redus Engineering		
CHECKED CLR	9/11/2015			
QA				
MFG				
APPROVED CLR	9/11/2015	LED Light Assembly Exploded View - Option A - Side Connector		
		SIZE B	DWG NO LED Assembly Option A	REV 1
		SCALE	SHEET 1 OF 1	

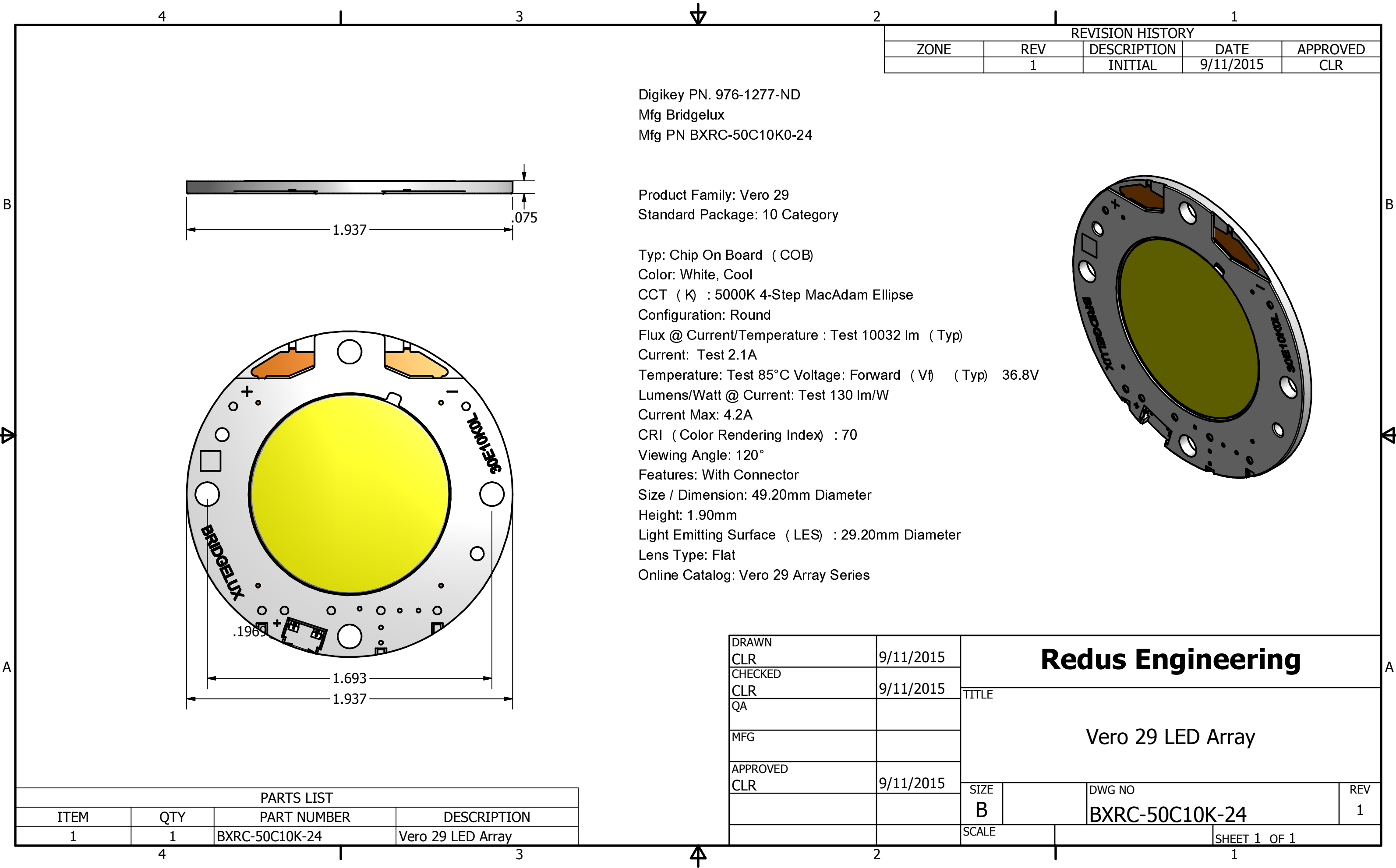


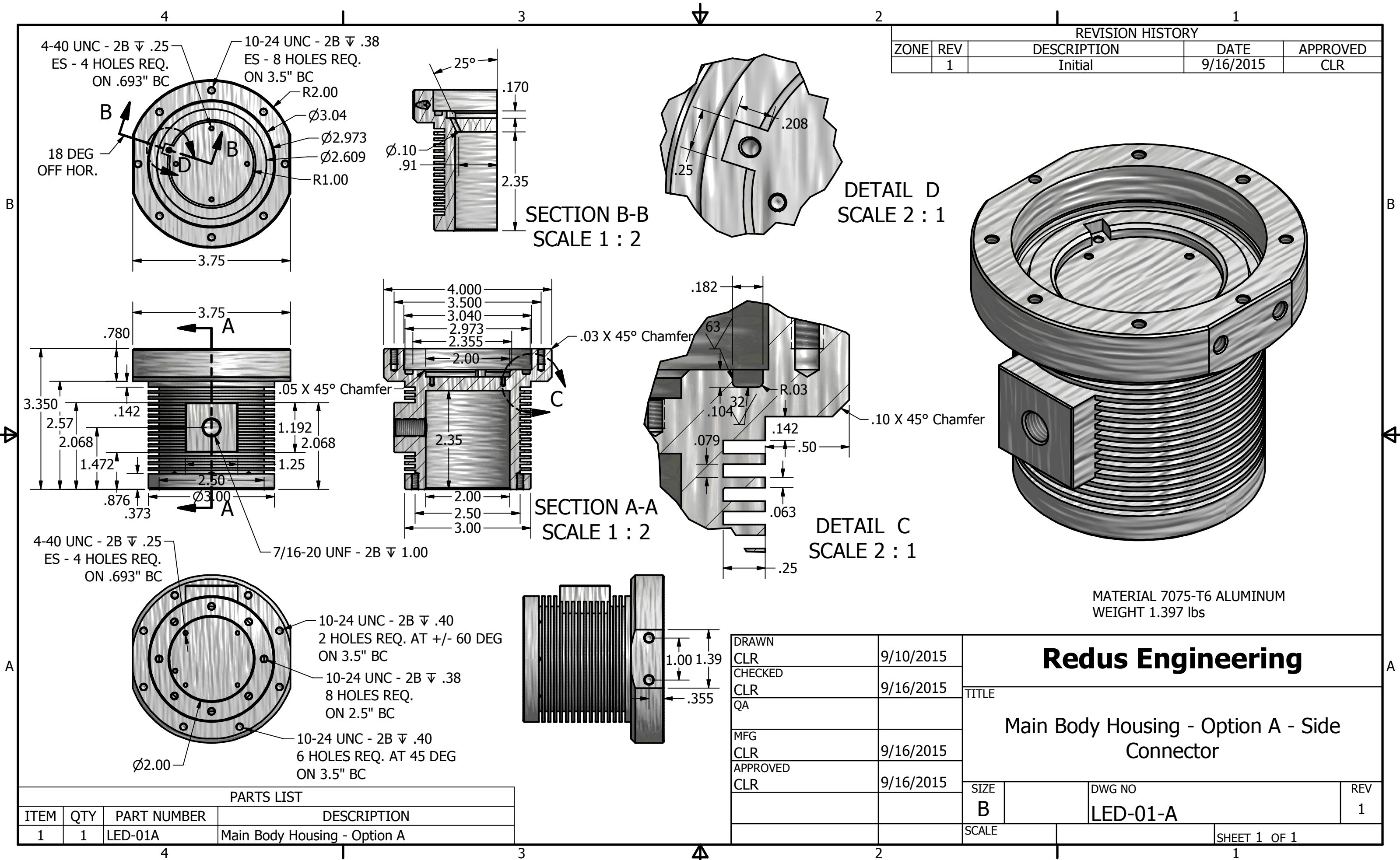
Option B - Back Connector

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	INITIAL	9/11/2015	CLR
	2	Reduced Housing Size	9/15/2015	CLR

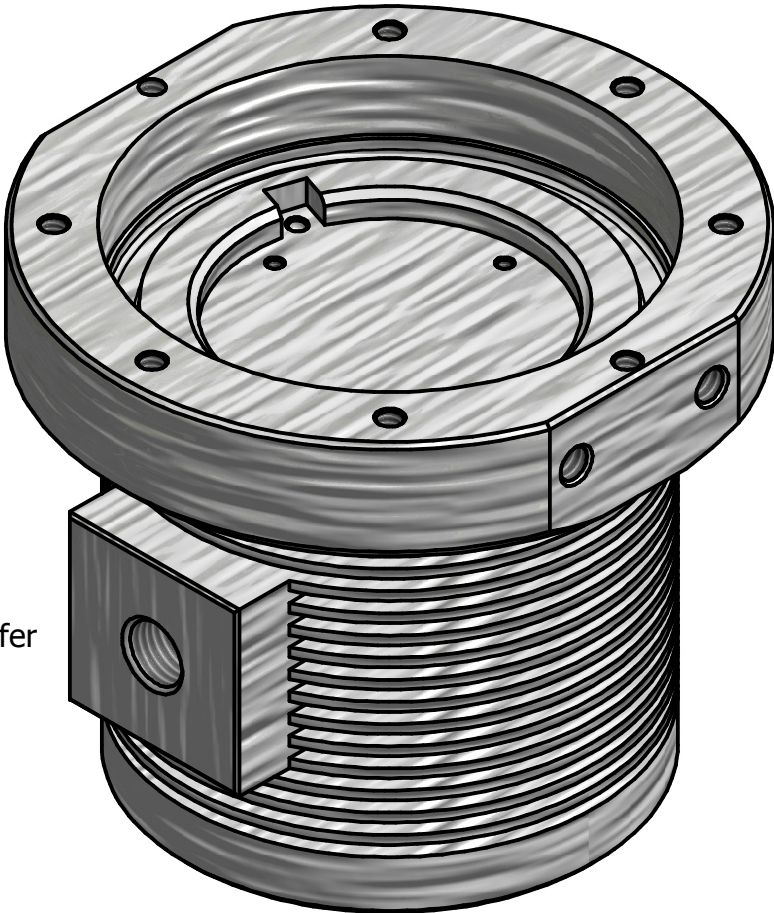
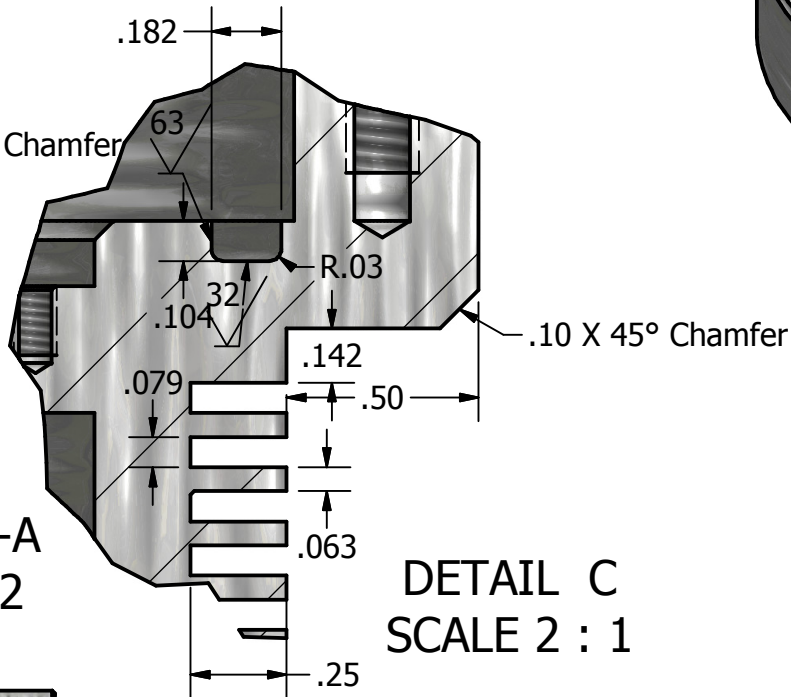
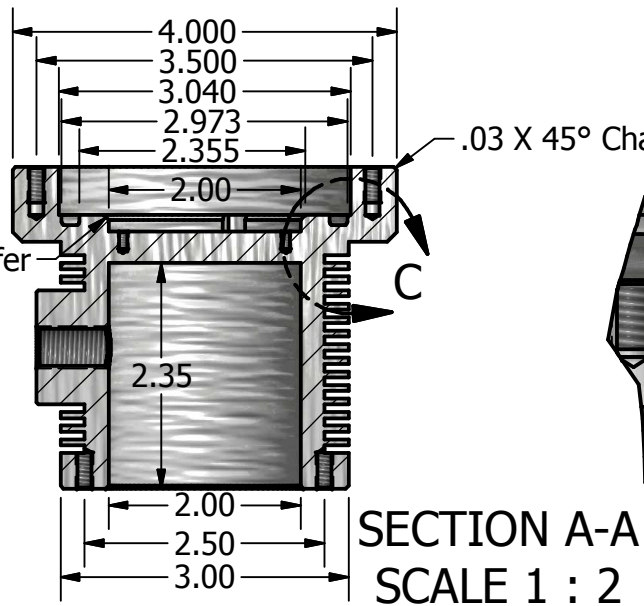
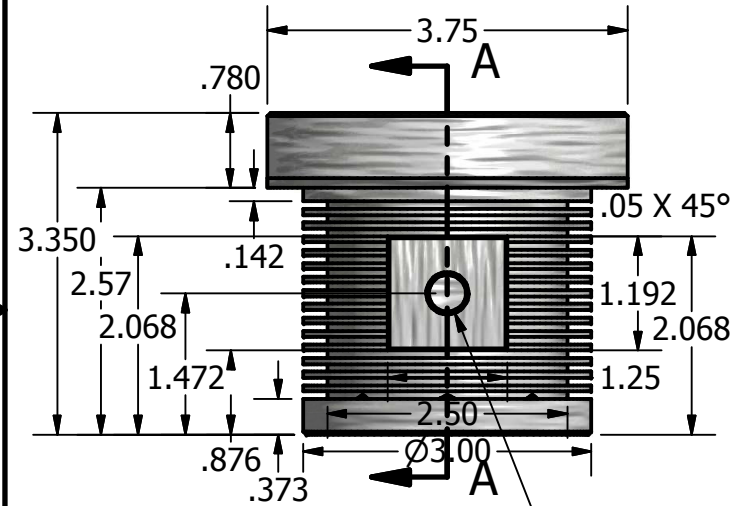
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LED-01	Main Body Housing
2	1	LED-02	Heat-Resistant Borosilicate Glass
3	1	Vero 29 LED Array	Bridglux Vero 29 LED Array
5	1	LED-04	Housing Cap
7	16	1/4 - 20 UNC - 1/2 HS HCS	Hexagon Socket Head Cap Screw
8	1	LED-05	Lens Gasket
9	1	LED-06	O-Ring for Housing Cap - Dash 2-224
10	1	LED-07	Front Lens O-Ring - Dash no. 2-231
11	2	LED-08	Printed Wiring Board (PWB)
12	8	LED-09 (McMaster-Carr 92320A699	PWB Standoff 18-8 Stainless Steel Unthreaded Spacer, 3/16" OD, 1/2" Length
16	4	No. 4 - 40 - 1 1/4	Cross Recessed Pan Head Machine Screw - Type IA
18	4	No. 4 - 40 - 1/4	Cross Recessed Pan Head Machine Screw - Type I
19	1	LED-10	BulkHead Connector O-ring, Dash 2-014, 1/16 Width
20	1	MCBH3M	SubConn Micro Male Bulhhead Connector
21	1	LED-03	Retaining Ring
22	1	MCDLS Ring	Subconn MCDLS Locking Sleeve Ring
23	1	MCDLS F BLACK	Subconn MCDLS Locking Sleeve F BLACK
24	1	MCIL3F	SubConn Micro Inline Circular Connector MCIL3F
25	1	Molex Ezmate Harness	Molex PICO EZmate 2 Pin Wiring Harness

DRAWN CLR	9/11/2015	Redus Engineering LED Light Assembly Exploded View - Option B, Back Connector		
CHECKED CLR	9/11/2015			
QA				
MFG				
APPROVED CLR	9/11/2015	TITLE		
		SIZE B	DWG NO LED Assembly Option B	REV 1
		SCALE		SHEET 1 OF 1

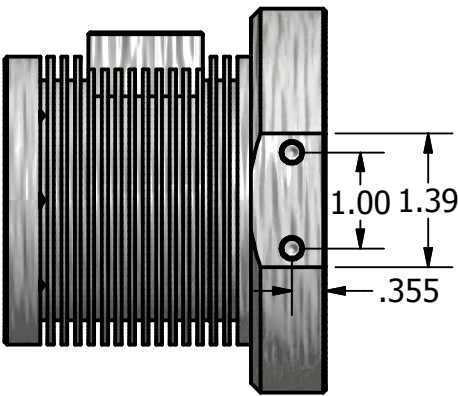
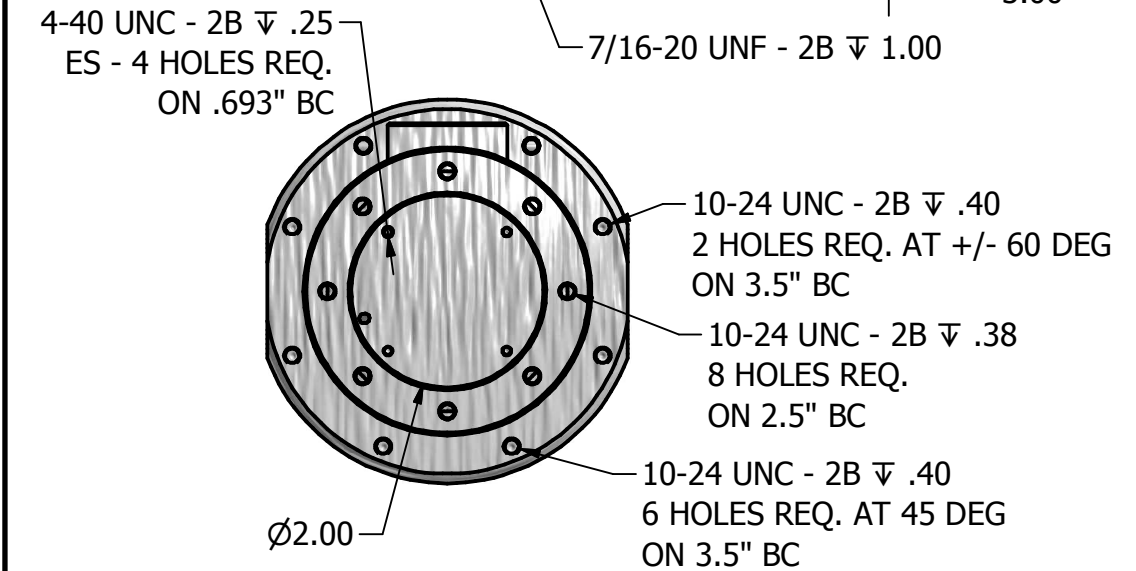




REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
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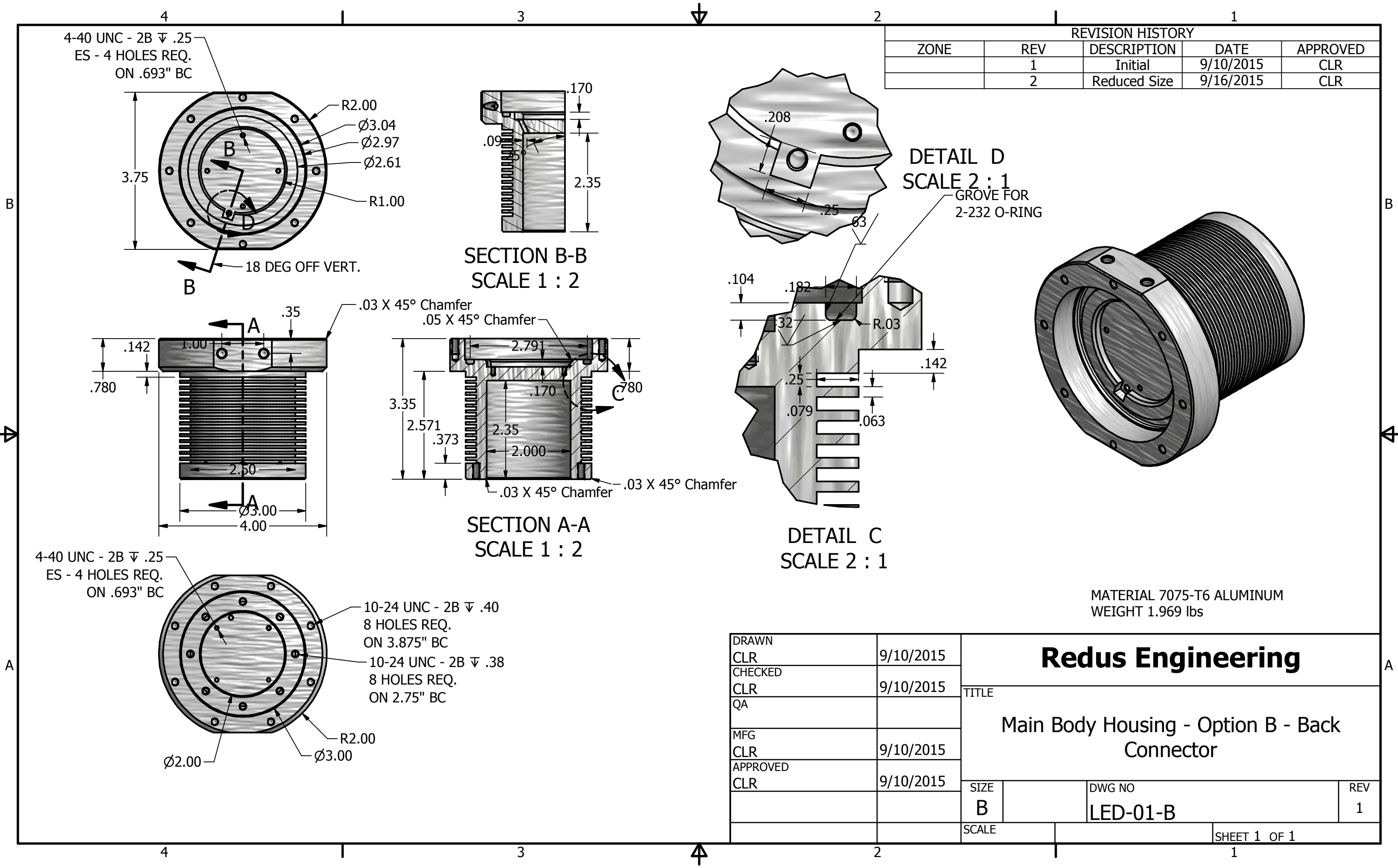


MATERIAL 7075-T6 ALUMINUM
WEIGHT 1.397 lbs



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LED-01A	Main Body Housing - Option A

DRAWN CLR	9/10/2015	Redus Engineering		
CHECKED CLR	9/16/2015			
QA		TITLE		
MFG CLR	9/16/2015	Main Body Housing - Option A - Side Connector		
APPROVED CLR	9/16/2015			
		SIZE B	DWG NO LED-01-A	REV 1
		SCALE	SHEET 1 OF 1	

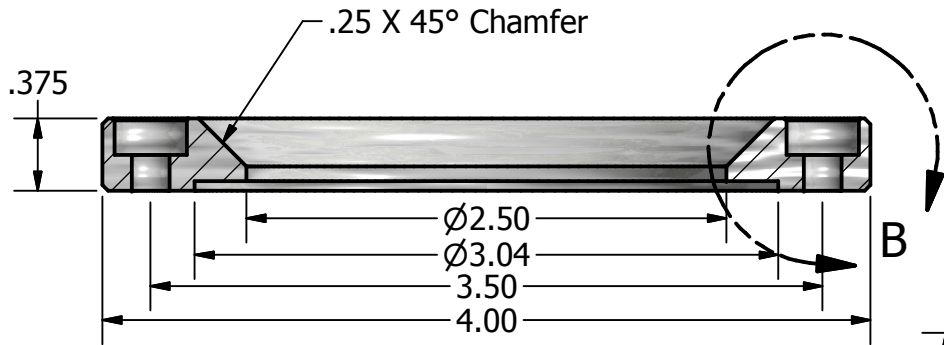


REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	Initial	9/10/2015	CLR
	2	Reduced Size	9/16/2015	CLR

MATERIAL 7075-T6 ALUMINUM
WEIGHT 1.969 lbs

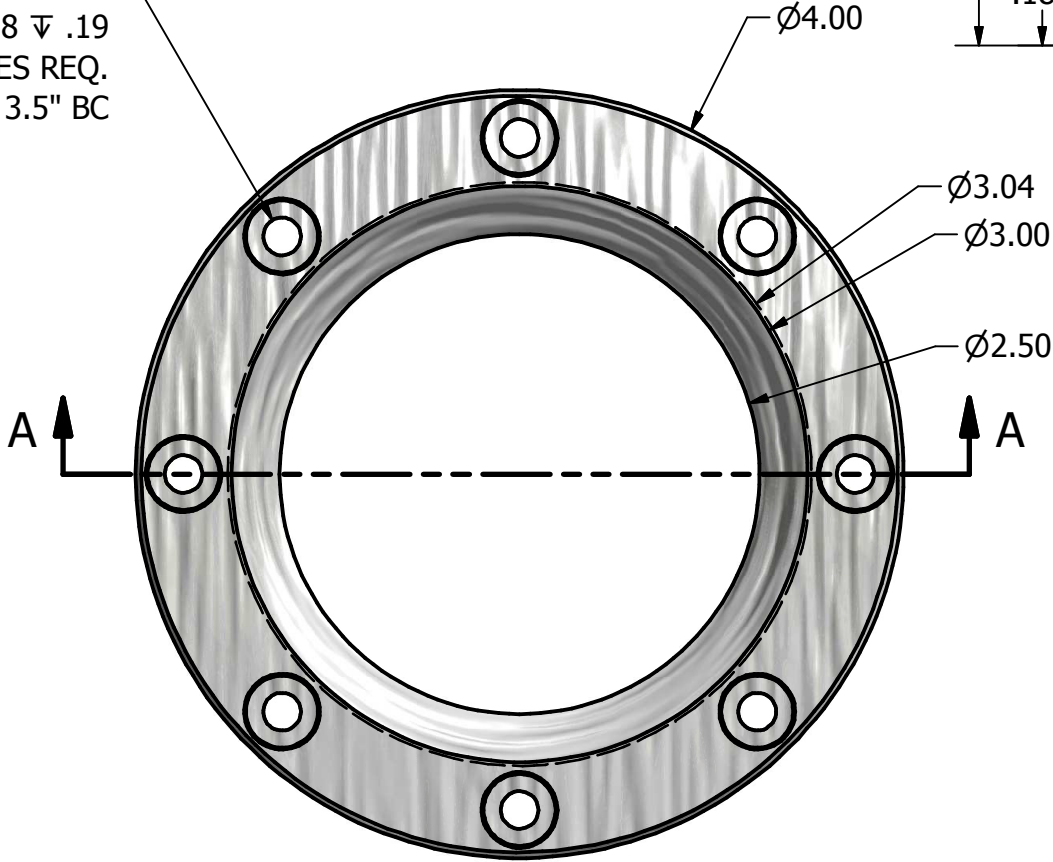
DRAWN CLR	9/10/2015	Redus Engineering		
CHECKED CLR	9/10/2015			
QA		Main Body Housing - Option B - Back Connector		
MFG CLR	9/10/2015			
APPROVED CLR	9/10/2015			
		SIZE B	DWG NO LED-01-B	REV 1
		SCALE	SHEET 1 OF 1	

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	Initial	9/11/2015	CLR
	2	Reduced Diameter	9/15/2015	CLR

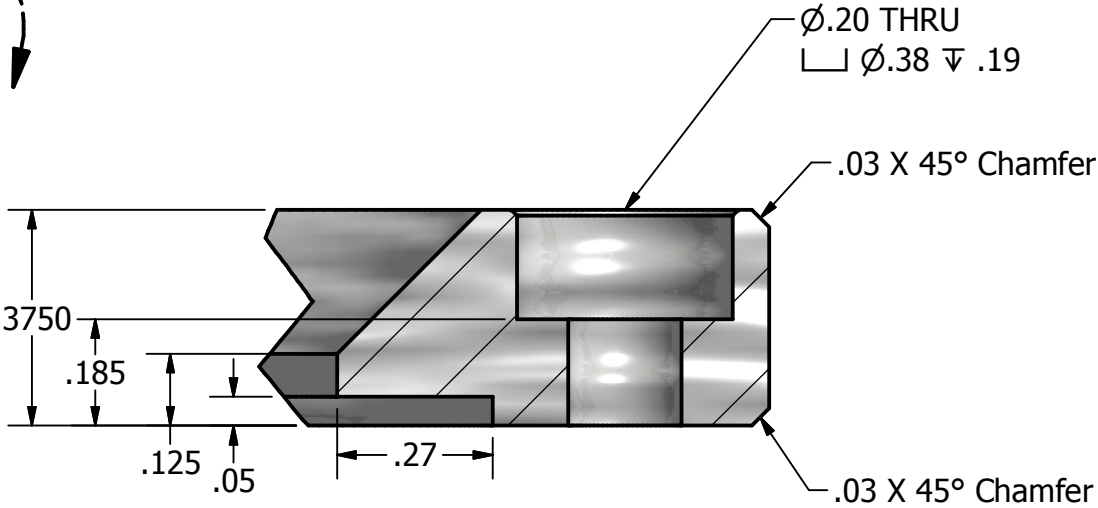


SECTION A-A
SCALE 1 : 1

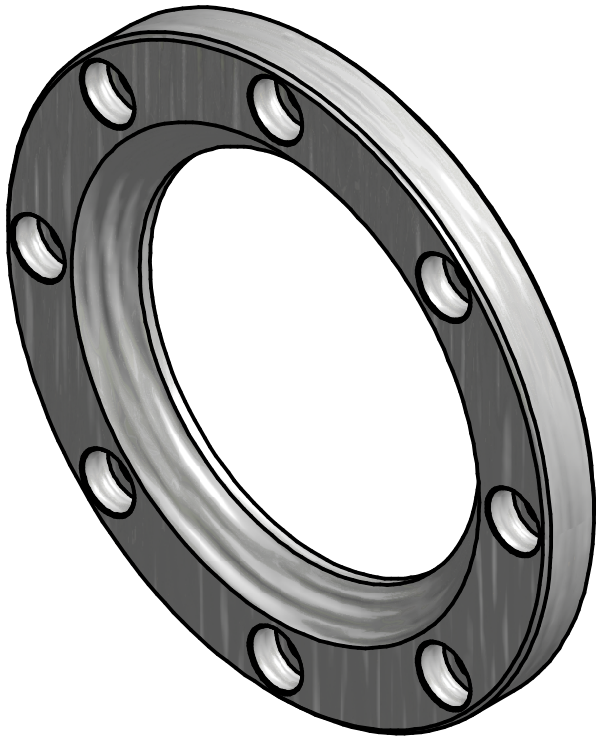
Ø.20 THRU
└─┐ Ø.38 ▽ .19
8 HOLES REQ.
ON 3.5" BC



MATERIAL 7075-T6 ALUMINUM
WEIGHT 0.230 lbs



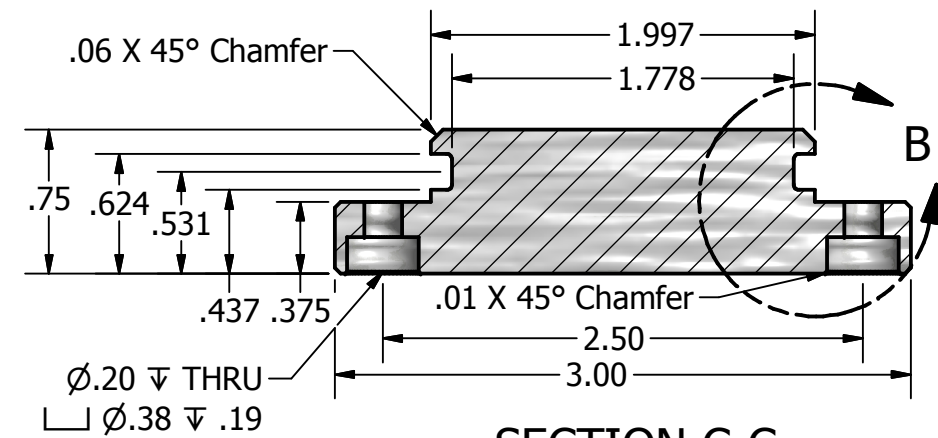
DETAIL B
SCALE 3 : 1



DRAWN CLR	9/11/2015	Redus Engineering		
CHECKED CLR	9/11/2015			
QA		Retaining Ring		
MFG CLR	9/11/2015			
APPROVED CLR	9/11/2015			
		SIZE B	DWG NO LED-03	REV 1
		SCALE	SHEET 1 OF 1	

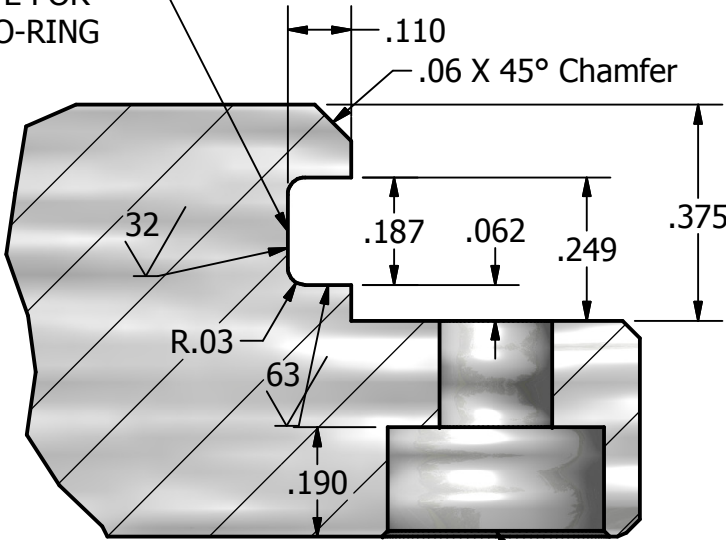
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LED-03	Retaining Ring

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	INITIAL	9/11/2015	CLR
B-3	2	Changed Chamfer	9/15/2015	CLR

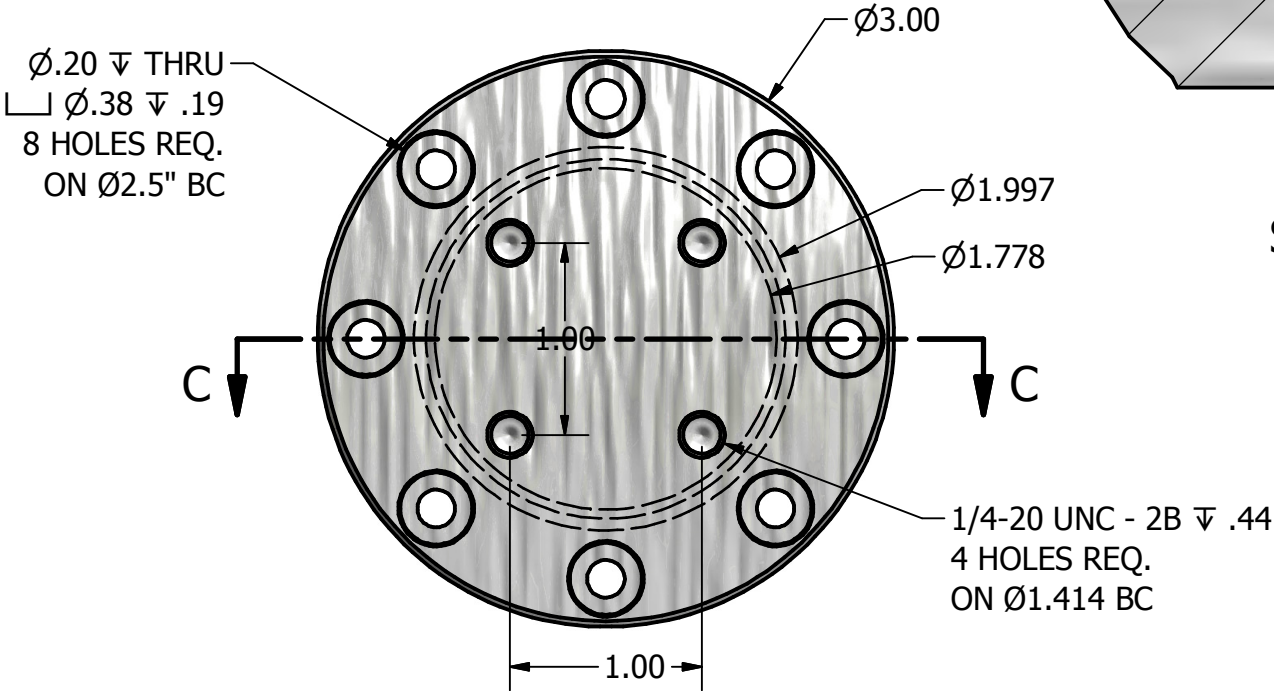
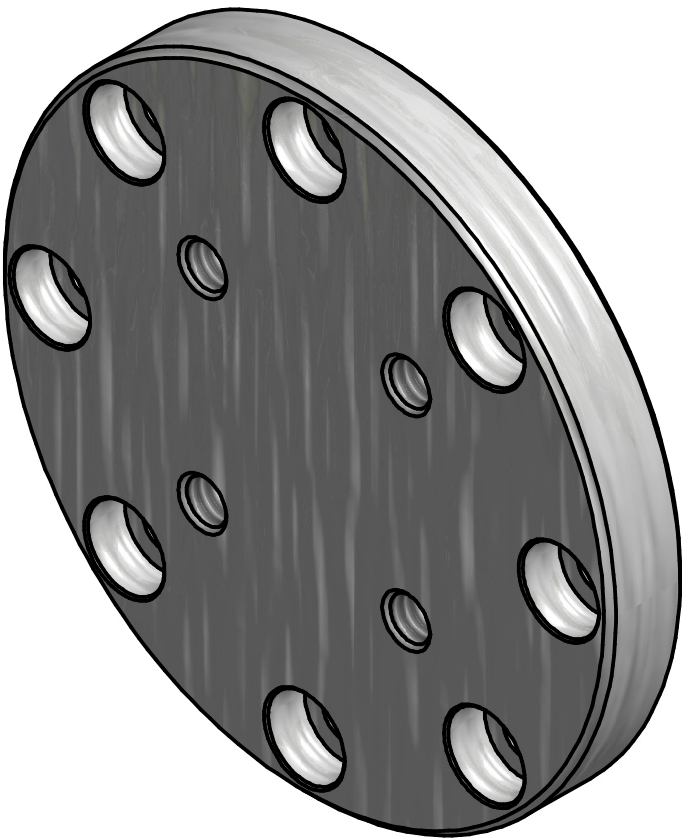


SECTION C-C
SCALE 1 : 1

GROVE FOR
2-224 O-RING



DETAIL B
SCALE 3 : 1

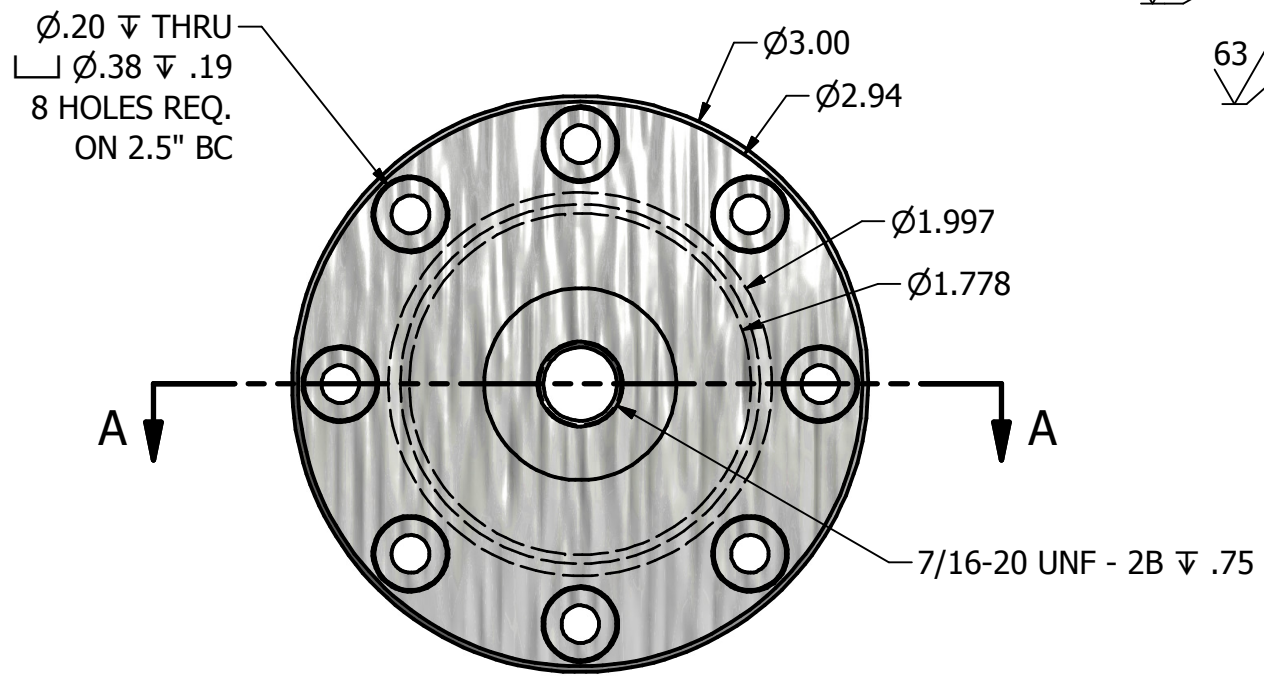
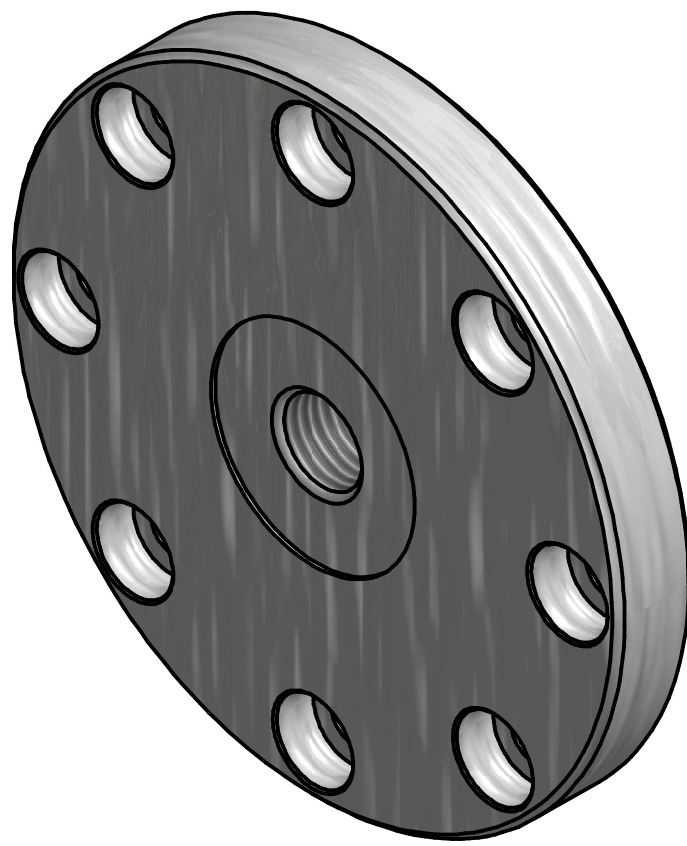
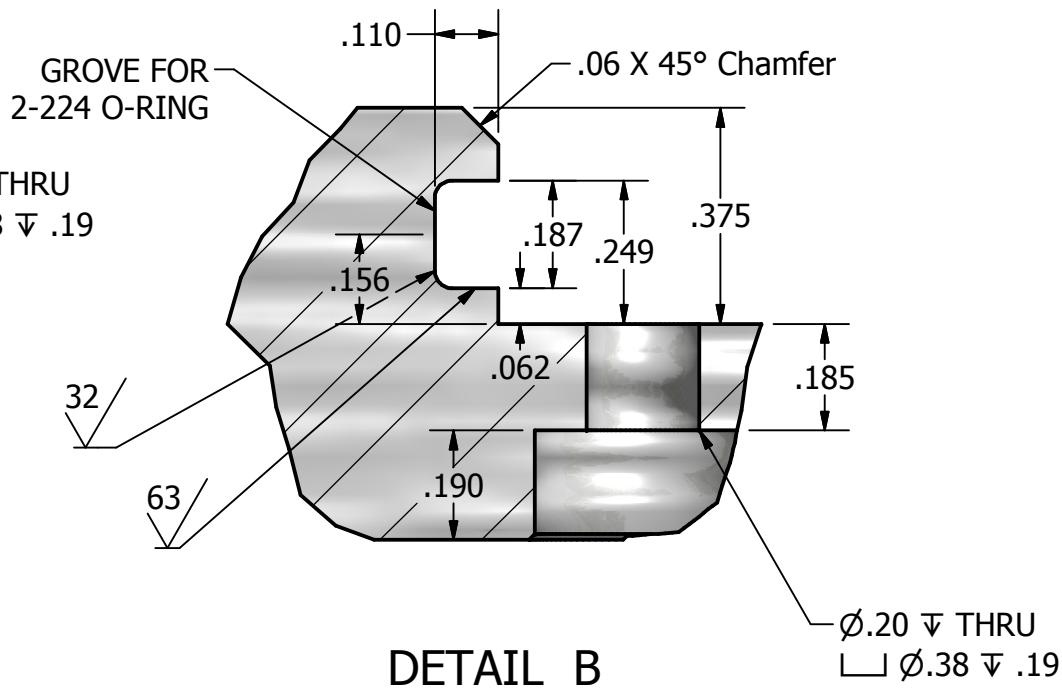
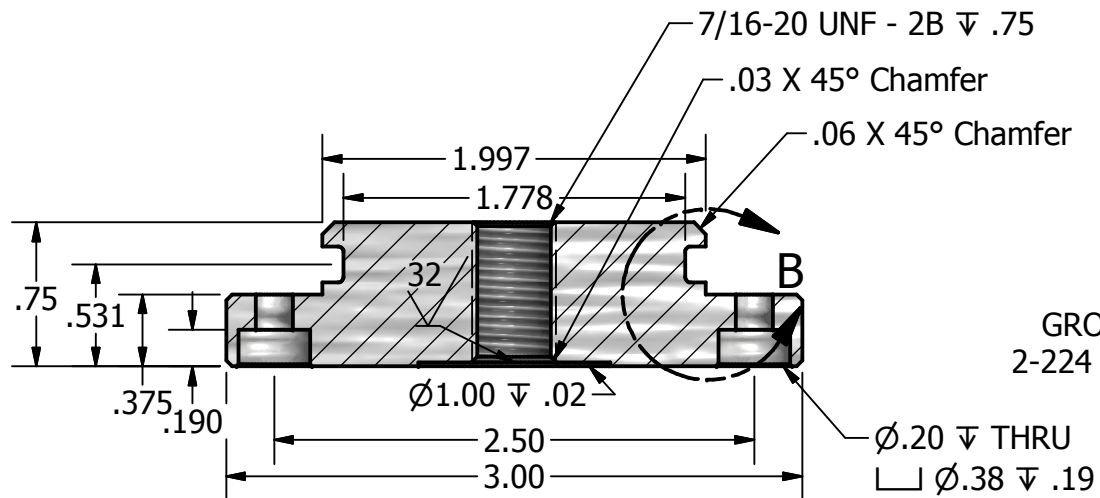


MATERIAL 7075-T6 ALUMINUM
WEIGHT 0.346 lbs

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LED-04A	Housing Cap

DRAWN CLR	9/11/2015	Redus Engineering		
CHECKED CLR	9/11/2015			
QA				
MFG				
APPROVED CLR	9/11/2015	Housing Cap - Option A - Side Connector		
		SIZE B	DWG NO LED-04 A	REV 1
		SCALE	SHEET 1 OF 1	

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	INITIAL	9/11/2015	CLR
B-3	2	Changed Chamfer	9/15/2015	CLR



MATERIAL 7075-T6 ALUMINUM
WEIGHT 0.340 lbs

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LED-04	Housing Cap

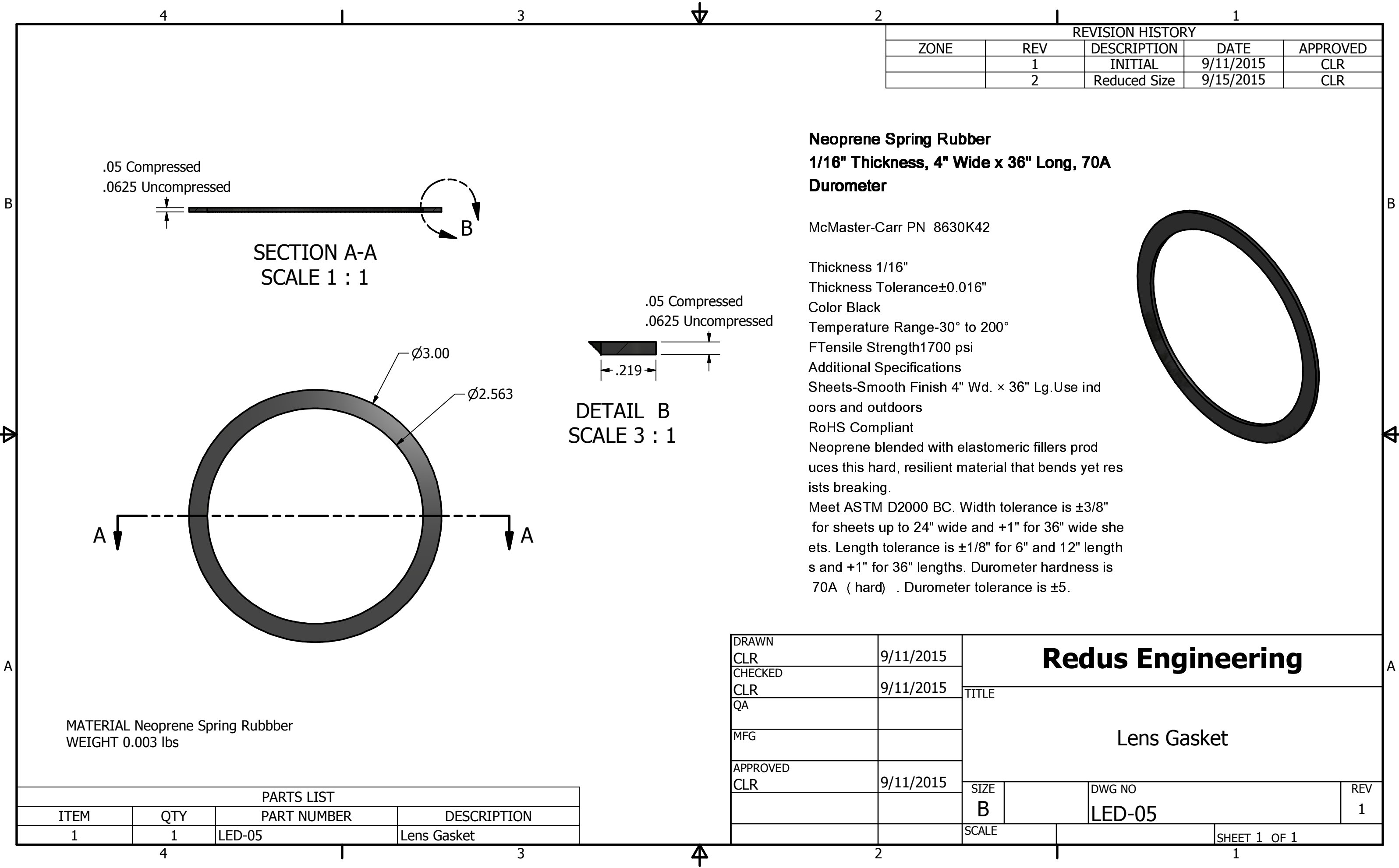
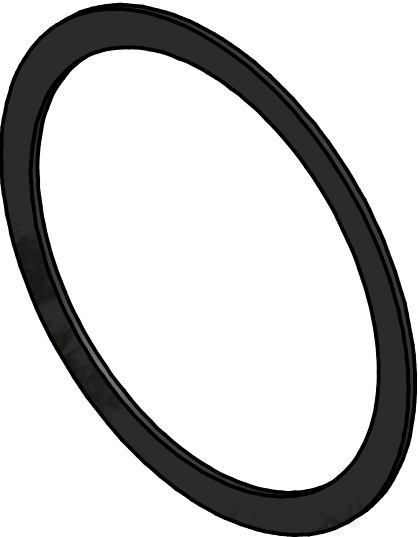
DRAWN CLR	9/11/2015	Redus Engineering		
CHECKED CLR	9/11/2015			
QA		TITLE Housing Cap - Option B - Back Connector		
MFG				
APPROVED CLR	9/11/2015	SIZE B	DWG NO LED-04 B	REV 1
		SCALE	SHEET 1 OF 1	

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	INITIAL	9/11/2015	CLR
	2	Reduced Size	9/15/2015	CLR

Neoprene Spring Rubber
1/16" Thickness, 4" Wide x 36" Long, 70A
Durometer

McMaster-Carr PN 8630K42

Thickness 1/16"
Thickness Tolerance±0.016"
Color Black
Temperature Range-30° to 200°
FTensile Strength1700 psi
Additional Specifications
Sheets-Smooth Finish 4" Wd. × 36" Lg.Use ind
oors and outdoors
RoHS Compliant
Neoprene blended with elastomeric fillers prod
uces this hard, resilient material that bends yet res
ists breaking.
Meet ASTM D2000 BC. Width tolerance is ±3/8"
for sheets up to 24" wide and +1" for 36" wide she
ets. Length tolerance is ±1/8" for 6" and 12" length
s and +1" for 36" lengths. Durometer hardness is
70A (hard) . Durometer tolerance is ±5.



DRAWN CLR	9/11/2015	Redus Engineering		
CHECKED CLR	9/11/2015			
QA		TITLE Lens Gasket		
MFG				
APPROVED CLR	9/11/2015			
		SIZE B	DWG NO LED-05	REV 1
		SCALE	SHEET 1 OF 1	

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LED-05	Lens Gasket

SubConn Circular Micro

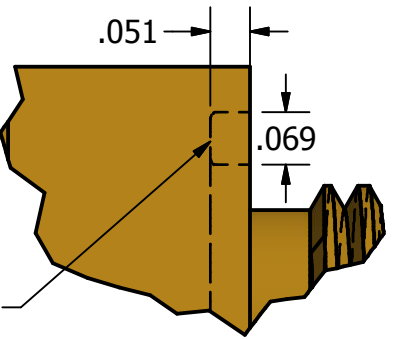
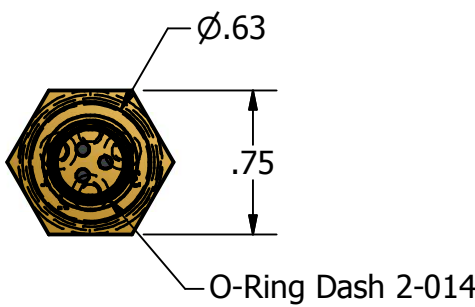
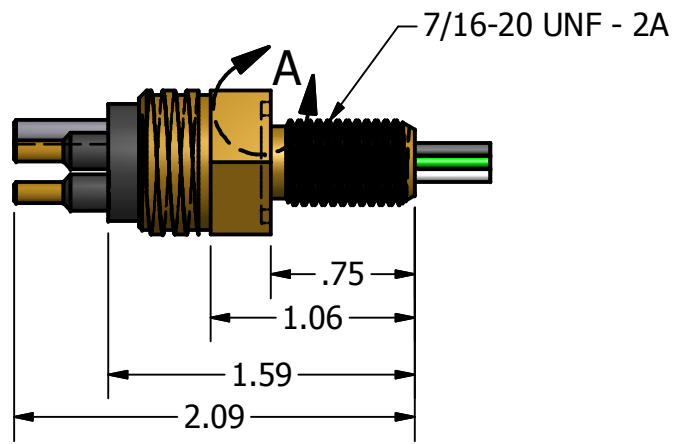
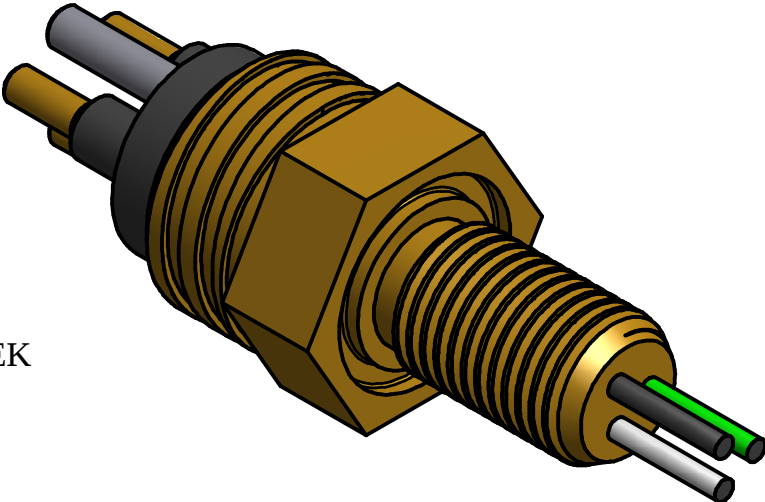
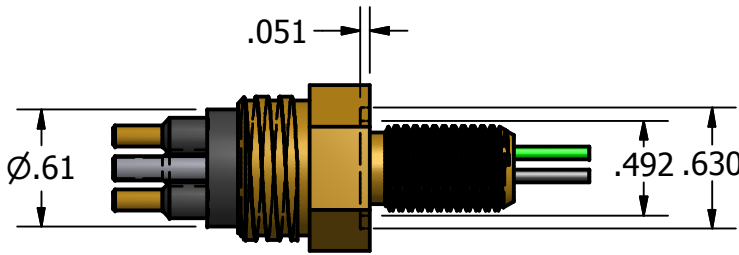
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	INITIAL	9/15/2015	CLR

Connector specifications

Voltage rating: 300 V AC rms
2, 3 and 4 pin connector current rating: 10 A per pin (max 20 A per connector)
Insulation resistance: > 200 Mohm
Contact resistance: < 0.01 ohm
Wet matings: > 500
Temperature rating (water): - 4 to 60°C, 25 to 140°F
Temperature rating (air): - 40 to 60°C, - 40 to 140°F
Storage temperature rating: - 40 to 60°C, - 40 to 140°F
Depth rating: 700 bar, 10,000 psi
Depth rating PEEK: 300 bar, 4,350 psi

Material specifications

Connector body: Chloroprene rubber
Bulkhead body: Brass, stainless steel, titanium, anodised aluminium or PEEK
2, 3 and 4 pin contacts: Gold plated brass UNS - C36000
Location pin: Stainless steel AISI 303
O-rings: Nitrile
Locking sleeves: ABS
Snap rings: Stainless steel AISI 302
2, 3 and 4 bulkhead leads (30 cm, 1 ft): 20 AWG 0.5 mm2 coloured PTFE



GROVE for
O-Ring Dash 2-014

DETAIL A
SCALE 4 : 1

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	MCBH3M	SubConn Micro Male Bulkhead Connector

DRAWN CLR	9/15/2015	Redus Engineering		
CHECKED CLR	9/15/2015			
QA				
MFG				
APPROVED CLR	9/15/2015	SubConn MCBH3M Micro Circular Bulkhead Connector		
		SIZE B	DWG NO MCBH3M	REV 1
		SCALE	SHEET 1 OF 1	

SubConn Circular Micro - Female Inline

Part No. MCIL3F

Connector specifications

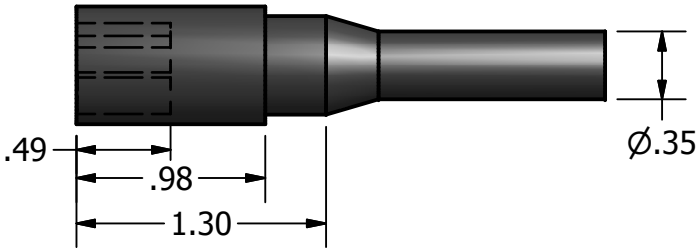
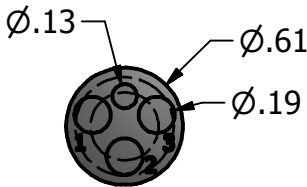
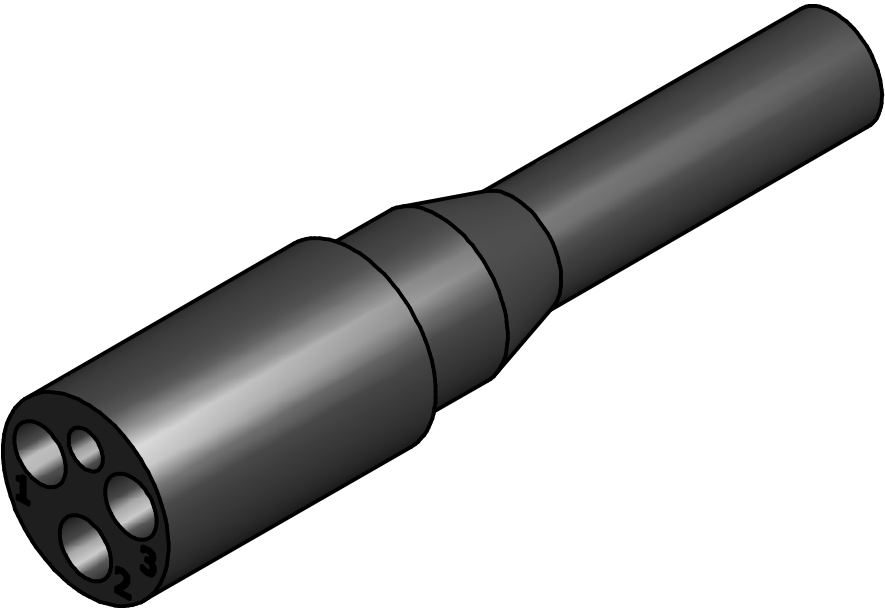
Voltage rating: 300 V AC rms
2, 3 and 4 pin connector current rating: 10 A per pin (max 20 A per connector)
Insulation resistance: > 200 Mohm
Contact resistance: < 0.01 ohm
Wet matings: > 500
Temperature rating (water): - 4 to 60°C, 25 to 140°F
Temperature rating (air): - 40 to 60°C, - 40 to 140°F
Storage temperature rating: - 40 to 60°C, - 40 to 140°F
Depth rating: 700 bar, 10,000 psi
Depth rating PEEK: 300 bar, 4,350 psi

Material specifications

Connector body: Chloroprene rubber
Bulkhead body: Brass, stainless steel, titanium, anodised aluminium or PEEK
2, 3 and 4 pin contacts: Gold plated brass UNS - C36000
Location pin: Stainless steel AISI 303
O-rings: Nitrile
Locking sleeves: ABS
Snap rings: Stainless steel AISI 302
2, 3 and 4 bulkhead leads (30 cm, 1 ft): 20 AWG 0.5 mm2 coloured PTFE

Inline cable colour code

- 1: Black
- 2: White
- 3: Red



Pigtail available in various lengths. Typical is 24".

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	MCIL3F	SubConn Micro Inline Circular Connector MCIL3F

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	INITIAL	9/15/2015	CLR

DRAWN Cliff	9/15/2015	Redus Engineering SubConn Circular Micro Inline Female connector		
CHECKED CLR	9/15/2015			
QA				
MFG				
APPROVED CLR				
		SIZE B	DWG NO MCIL3F	REV 1
		SCALE	SHEET 1 OF 1	

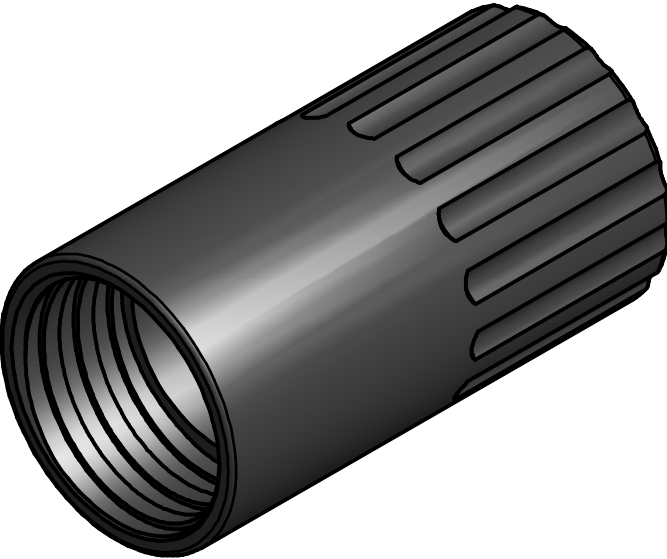
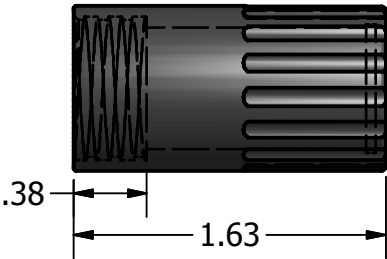
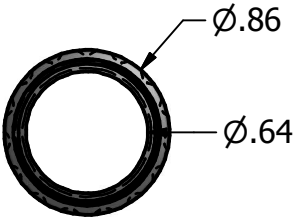
SubConn Circular Micro - Locking Sleeve

Part No. MCDLSF - BLACK

Material specifications

Locking sleeves: ABS

Snap rings: Stainless steel AISI 302



REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	Initial	9/15/2015	CLR

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	MCDLS F BLACK	Subconn MCDLS Locking Sleeve F BLACK

DRAWN CLR	9/15/2015	Redus Engineering		
CHECKED CLR	9/15/2015			
QA		SubConn Micro Circular Locking Sleeve		
MFG				
APPROVED CLR				
		SIZE B	DWG NO MCDLS F BLACK	REV 1
		SCALE	SHEET 1 OF 1	

