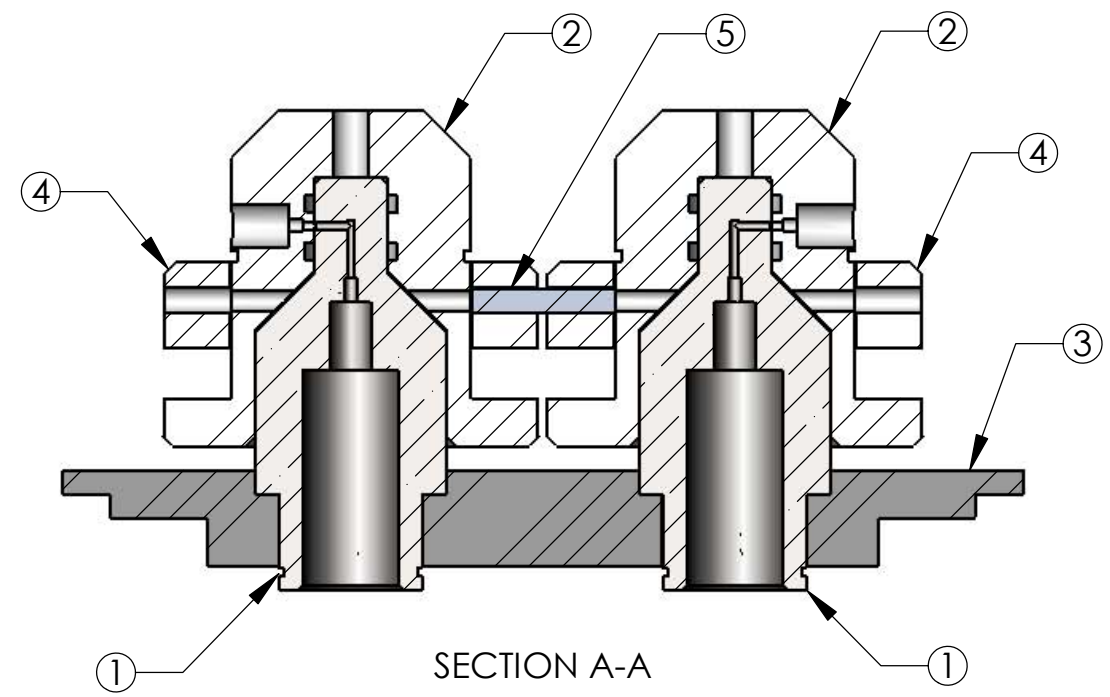
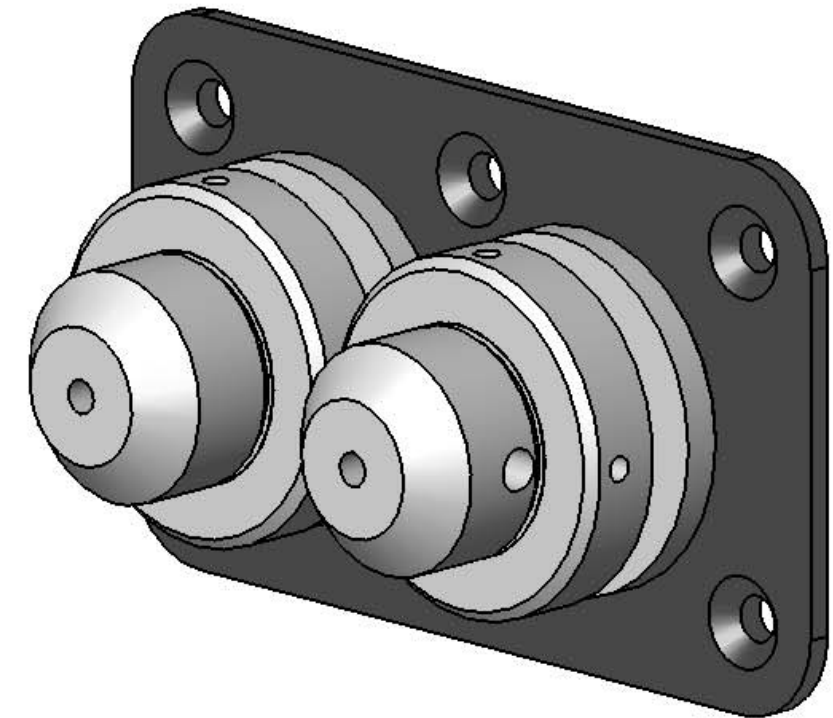
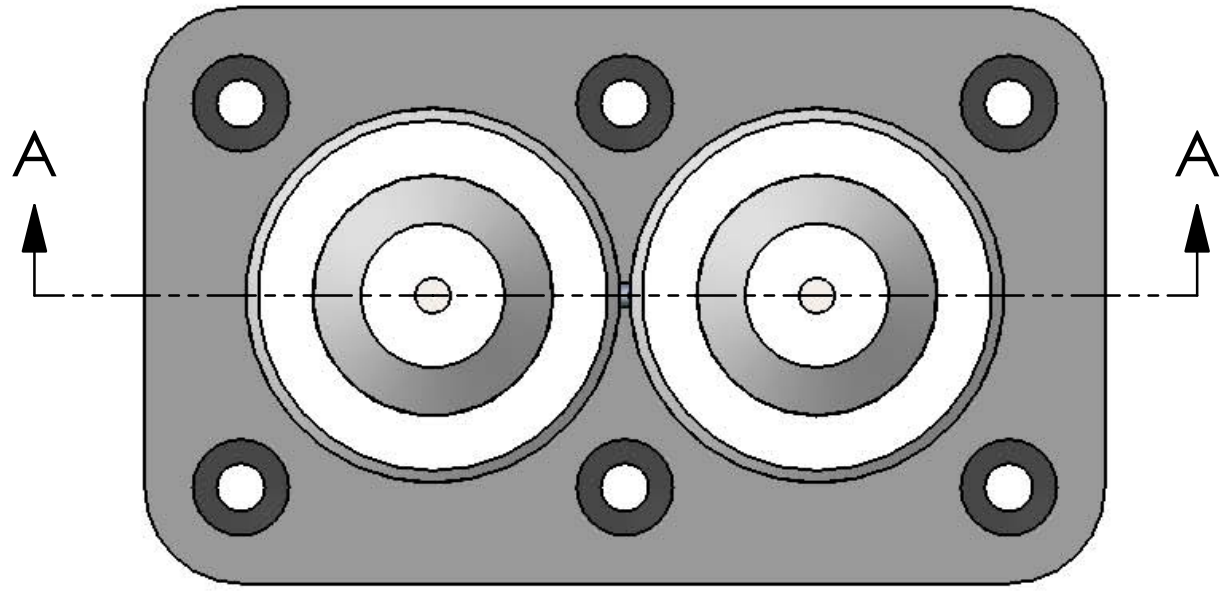


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REV.	DESCRIPTION	DATE	APPROVED
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Mated Assembly
Seafloor OsmoSampler Fluid Connectors

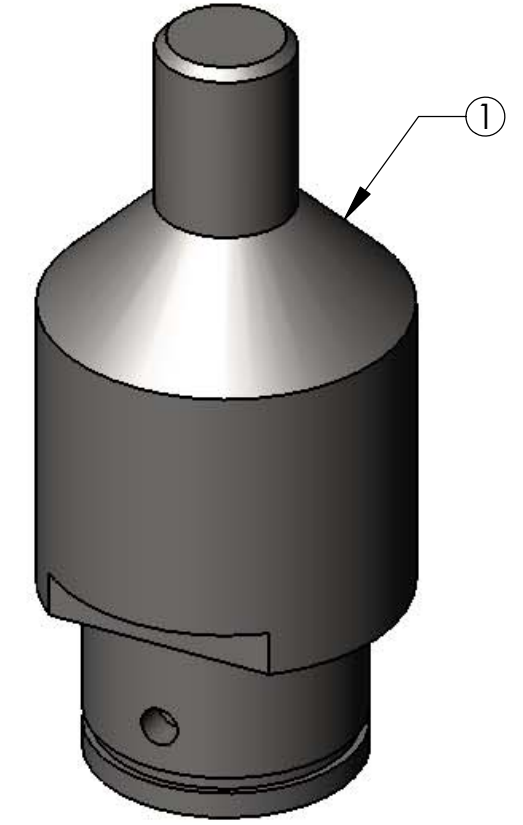
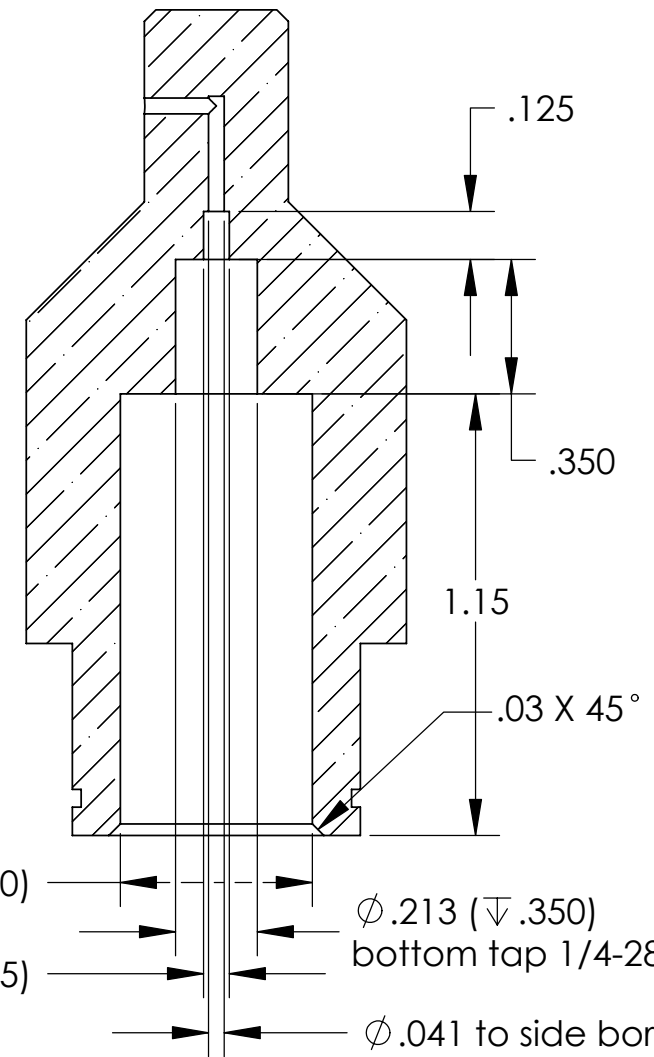
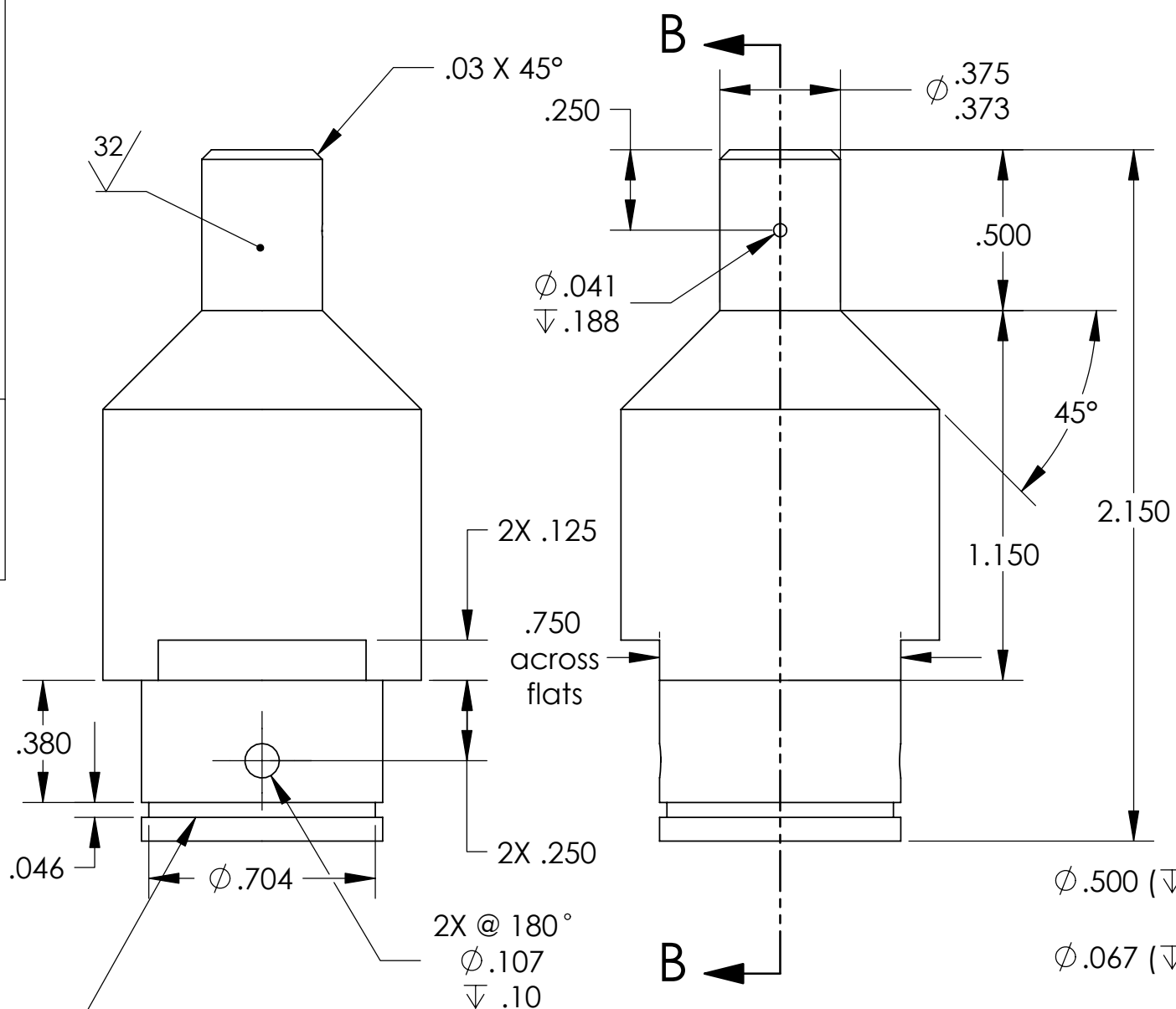
- Requires:
- 4X -012 Silicone O-rings (McMaster 9396K17)
 - 2X 3/4" Snaprings (McMaster 91590A128)
 - 2X 1-1/4" Snaprings (McMaster 91590A137)
 - 10X 8-32 X 3/8" set screws (McMaster 90251A193)
 - 6X 1/4-20 x 3/4" flathead (McMaster 91500A540)

Item No.	Qty.	Part No.	Description	Material Specification
5	1@		Alignment Pin	Type 316 Stainless steel
4	2@		Retaining Ring	Natural PEEK
3	1@		Frame Insert	UHMW Polyethylene
2	2@		Female Connector	Natural PEEK
1	2@		Male Connector	Titanium (6Al4V)

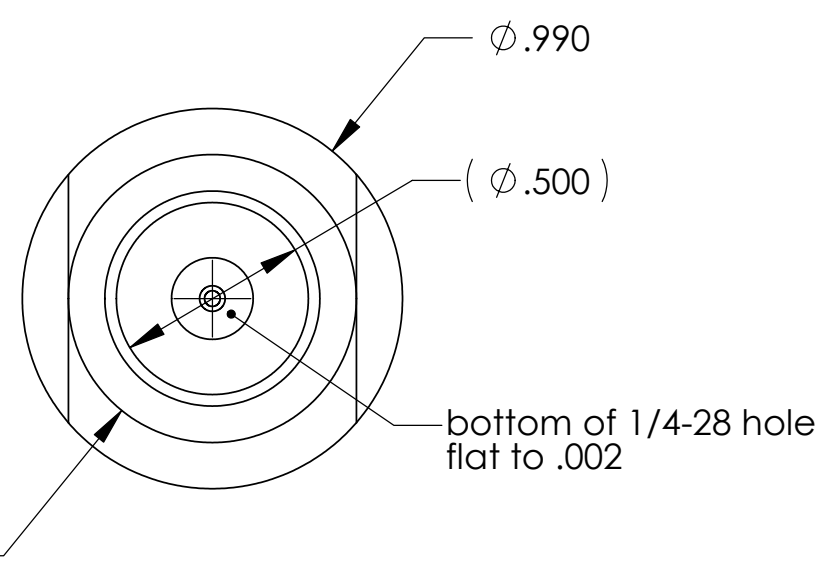
Shop / Q.C.					UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE	Monterey Bay Aquarium Research Institute					
Inspector		1 PLACE DIM	±1/16	2 PLACE DIM	±.02	3 PLACE DIM	±.005	ANGLES	±1°	DRAWN	Hans Jannasch	5/19/04	MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700				
Shop Foreman		1. DIMENSIONS ARE IN INCHES				CHECKED		PROJECT NO.		701145		152jahaSeafloorFluidConn					
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.				PROJECT		Juan de Fuca NSF Grant				Male & Female Fluid Connectors					
NEXT ASSY Description	NEXT ASSY Number	3. REMOVE BURRS AND SHARP EDGES .015 MAX.										SIZE	DWG. NO.	REV.			
		4. MACHINED FILLET RADII .0150-.030.										B	152jaha.DWG				
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005										SCALE	1:1	CAD FILE:	tornado/chem/SWfiles	SHEET	1 OF 5
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.															
Application		DO NOT SCALE DRAWING				WEIGHT											

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REV.	DESCRIPTION	DATE	APPROVED
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For 3/4" Snaprings
(McMaster 91590A128)



SECTION B-B

Item No.	Qty.	Part No.	Description	Material Specification
5	1@		Alignment Pin	Type 316 Stainless steel
4	2@		Retaining Ring	Natural PEEK
3	1@		Frame Insert	UHMW Polyethylene
2	2@		Female Connector	Natural PEEK
1	2@		Male Connector	Titanium (6Al4V)

BILL OF MATERIALS					
Shop / Q.C.	UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE
Inspector	1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	Hans Jannasch 5/19/04
Shop Foreman	1. DIMENSIONS ARE IN INCHES			ENGINEER	
Engineer	2. DIMENSION LIMITS HELD AFTER PLATING.			CHECKED	
	3. REMOVE BURRS AND SHARP EDGES .015 MAX.			PROJECT NO. 701145	
	4. MACHINED FILLET RADII .0150-.030.			PROJECT Juan de Fuca NSF Grant	
NEXT ASSY Description	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			SIZE B	
NEXT ASSY Number	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.			DWG. NO. 152jaha.DWG	
Application	DO NOT SCALE DRAWING			WEIGHT	

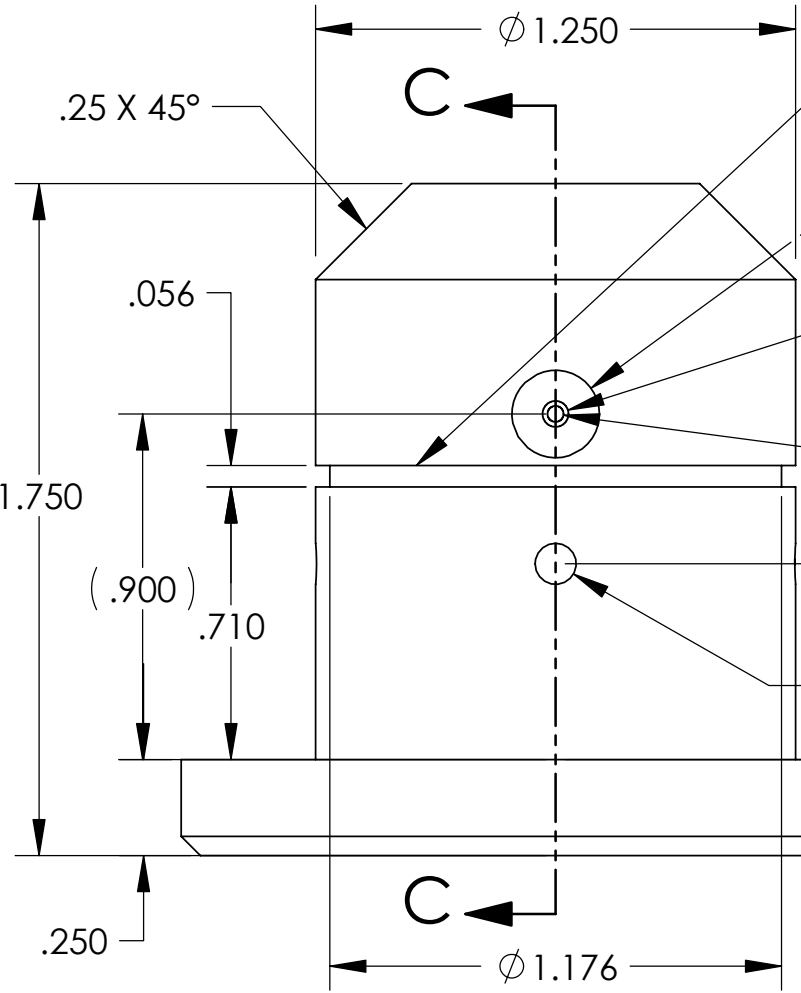
Monterey Bay Aquarium Research Institute
 MBARI
 7700 Sandholdt RD.
 Moss Landing, CA 95039
 PH: (831) 775-1700

152jahaSeafloorFluidConn
 Male & Female Fluid Connectors

SCALE 2:1 CAD FILE: tornado/chem/SWfiles SHEET 2 OF 5

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		

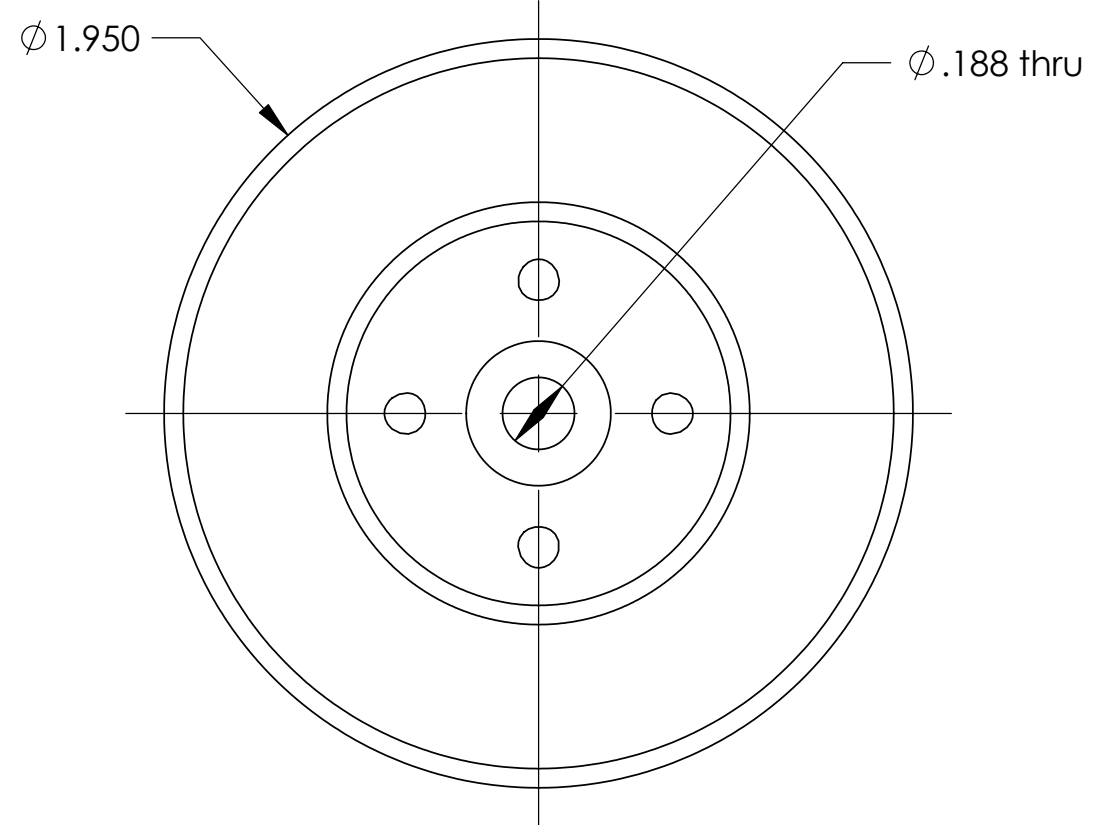
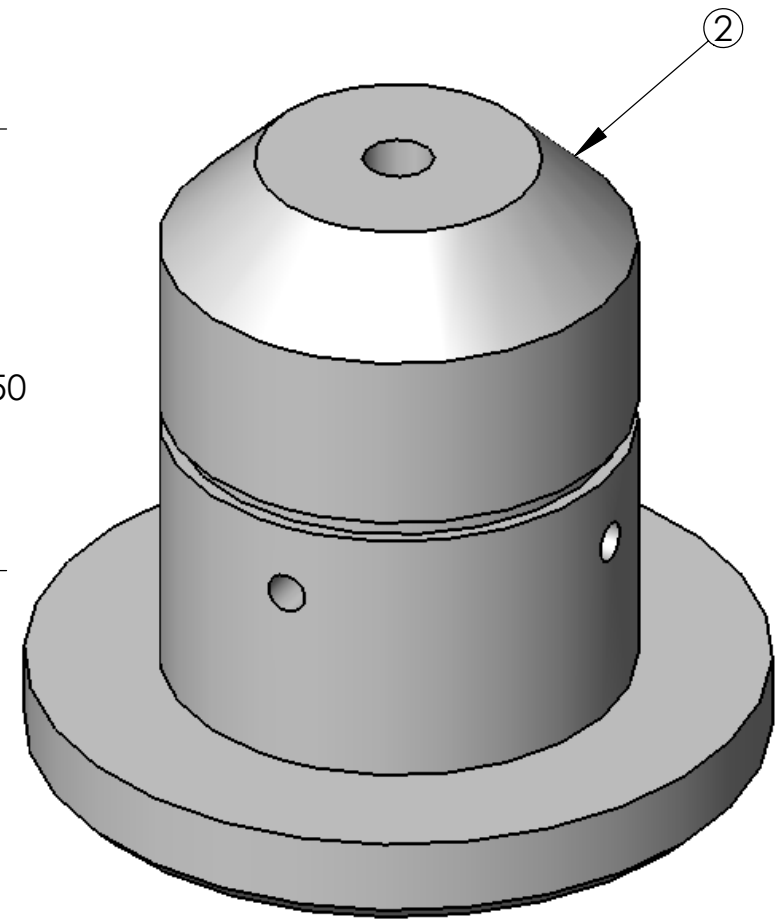
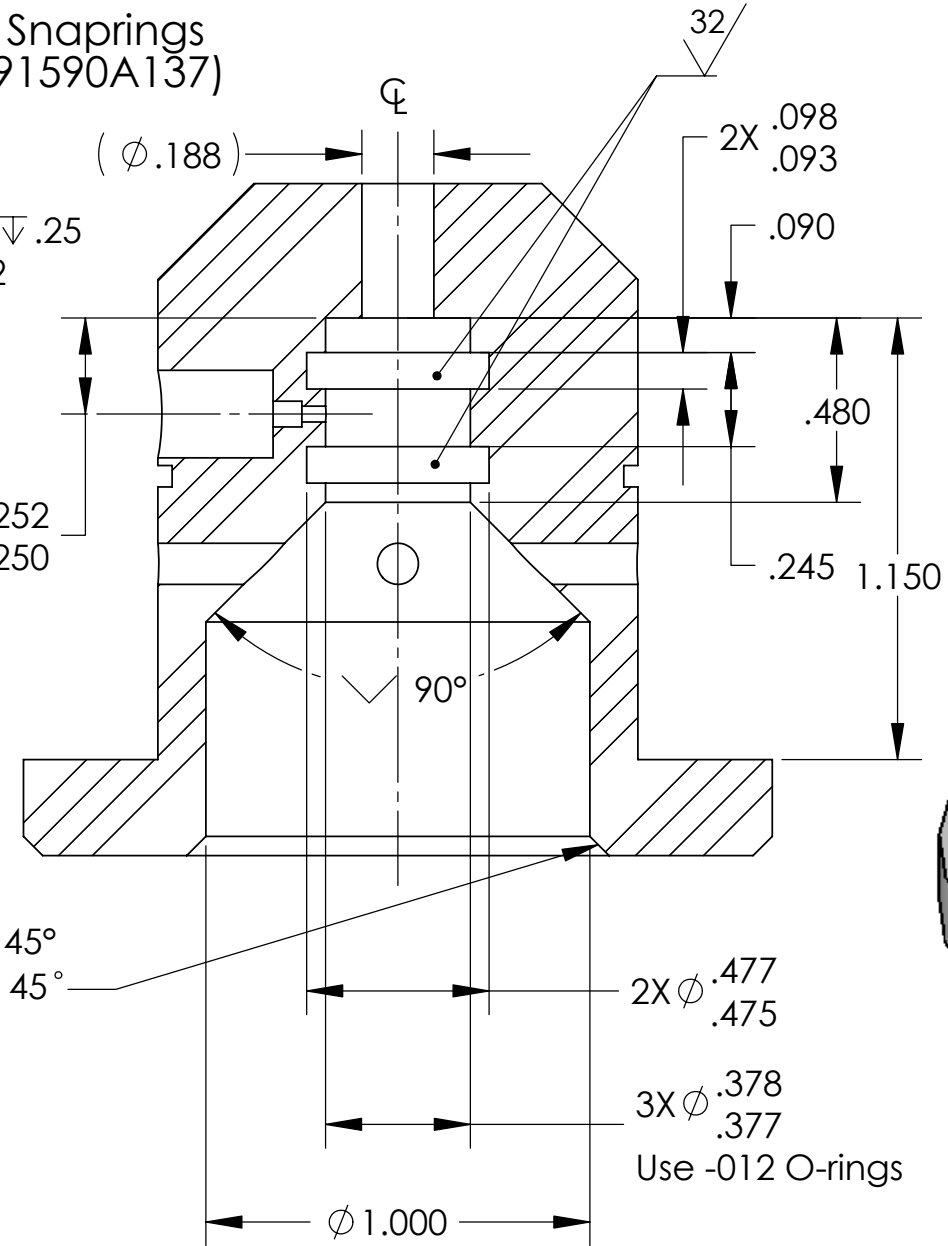


For 1-1/4" Snaprings
(McMaster 91590A137)

□ $\phi .228 \nabla .300$
tap 1/4-28 UNF-2B $\nabla .25$
bottom flat to .002

$\phi .067 \nabla .075$
 $\phi .041$
thru to center

4X thru $\phi .107$
4X@90°
.510



SECTION C-C

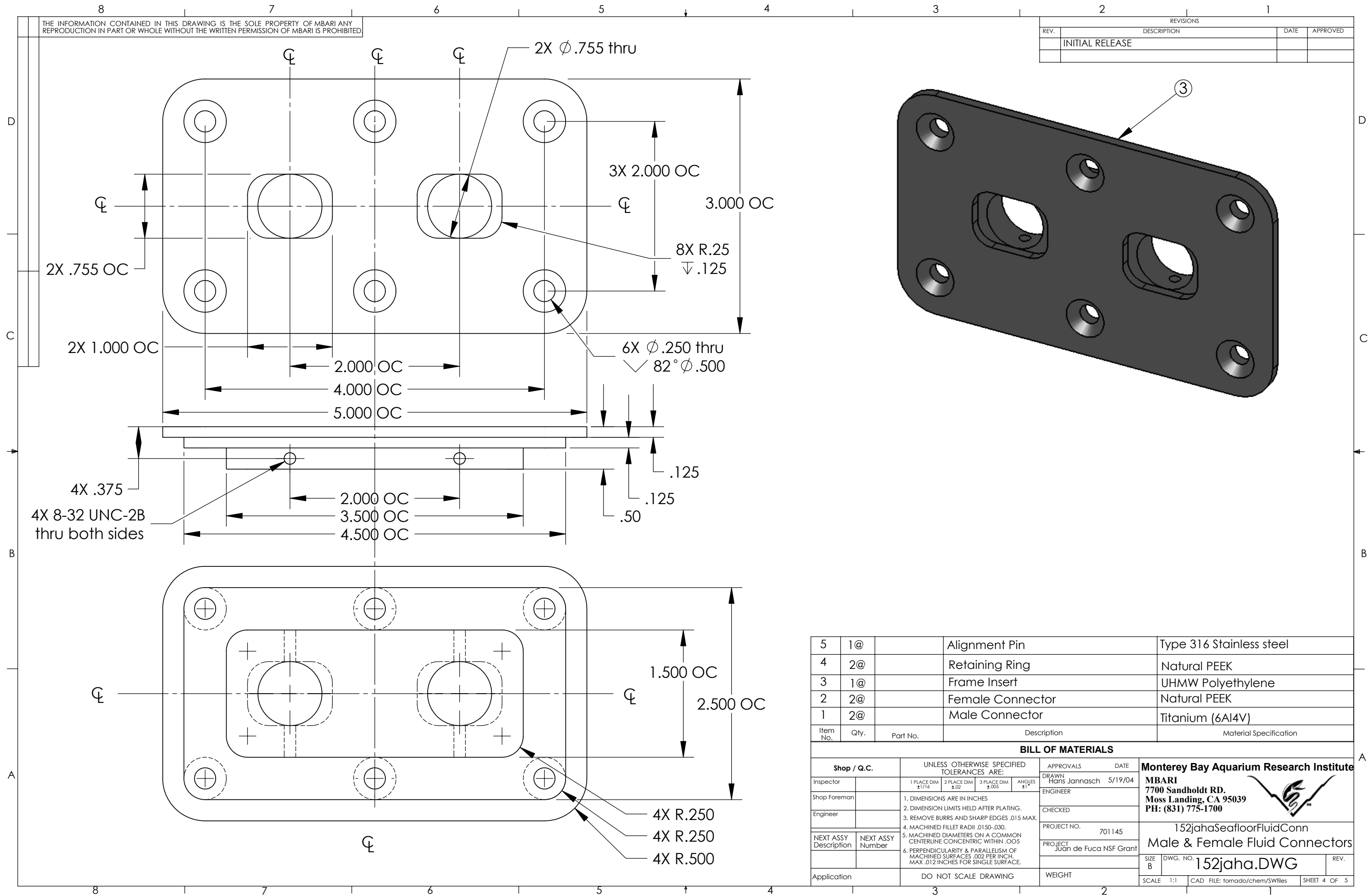
Item No.	Qty.	Part No.	Description	Material Specification
5	1@		Alignment Pin	Type 316 Stainless steel
4	2@		Retaining Ring	Natural PEEK
3	1@		Frame Insert	UHMW Polyethylene
2	2@		Female Connector	Natural PEEK
1	2@		Male Connector	Titanium (6Al4V)

Shop / Q.C.					UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS	DATE	Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700	
Inspector	Shop Foreman	Engineer	NEXT ASSY Description	NEXT ASSY Number	1 PLACE DIM $\pm 1/16$	2 PLACE DIM $\pm .02$	3 PLACE DIM $\pm .005$	ANGLES $\pm 1'$	DRAWN Hans Jannasch	5/19/04		
1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.					CHECKED PROJECT NO. 701145 PROJECT Juan de Fuca NSF Grant		ENGINEER WEIGHT		152jahaSeafloorFluidConn Male & Female Fluid Connectors			
Application					DO NOT SCALE DRAWING				SCALE 2:1		CAD FILE: tornado/chem/SWfiles	SHEET 3 OF 5

SIZE B DWG. NO. 152jaha.DWG REV.

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		



Item No.	Qty.	Part No.	Description	Material Specification
5	1@		Alignment Pin	Type 316 Stainless steel
4	2@		Retaining Ring	Natural PEEK
3	1@		Frame Insert	UHMW Polyethylene
2	2@		Female Connector	Natural PEEK
1	2@		Male Connector	Titanium (6Al4V)

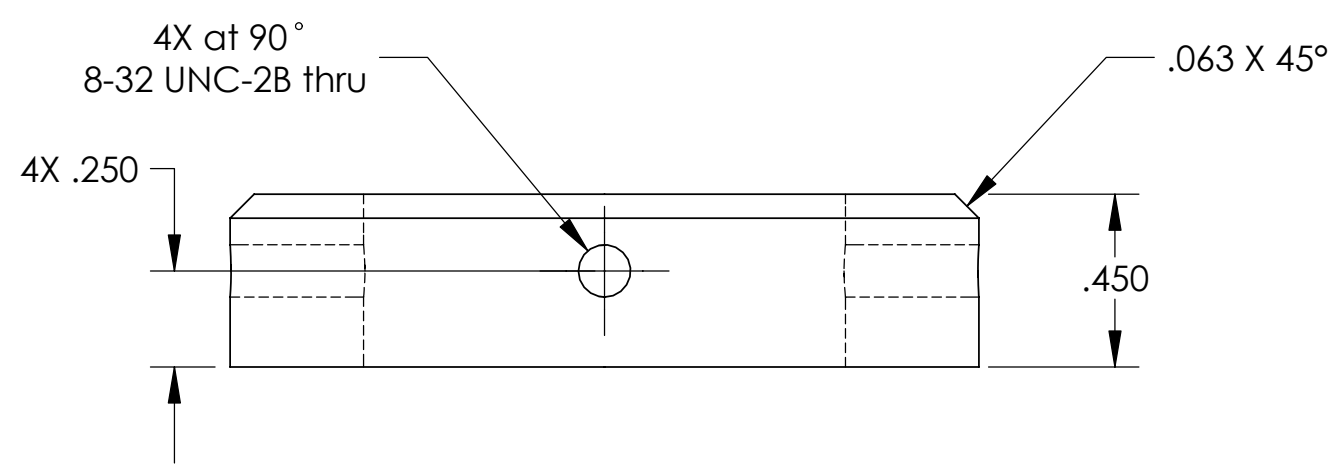
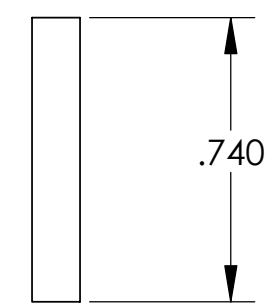
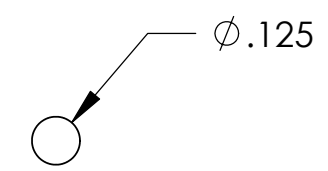
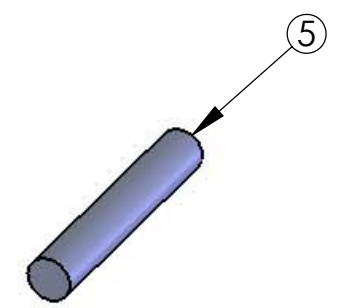
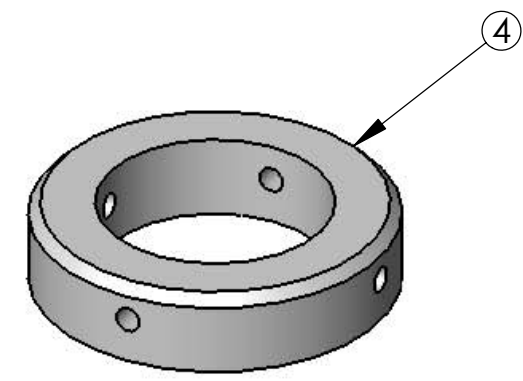
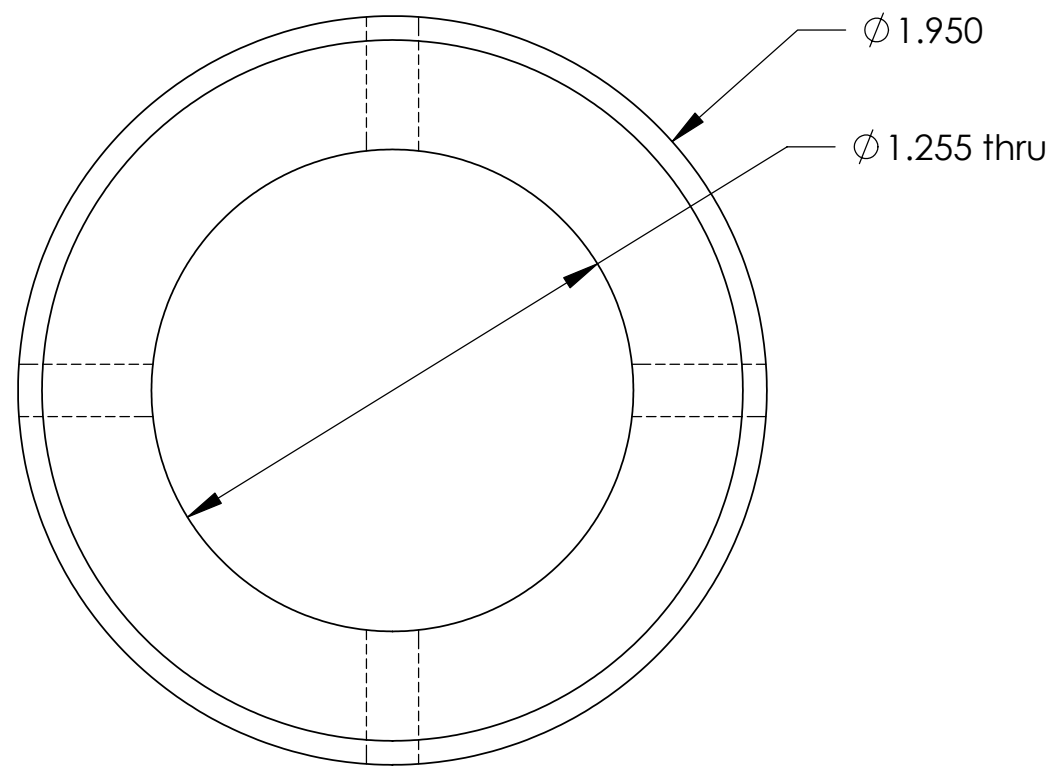
BILL OF MATERIALS					
Shop / Q.C.	UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE
Inspector	1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN Hans Jannasch 5/19/04
Shop Foreman	1. DIMENSIONS ARE IN INCHES			ENGINEER	
Engineer	2. DIMENSION LIMITS HELD AFTER PLATING.			CHECKED	
	3. REMOVE BURRS AND SHARP EDGES .015 MAX.			PROJECT NO. 701145	
NEXT ASSY Description	NEXT ASSY Number	4. MACHINED FILLET RADII .0150-.030.			PROJECT Juan de Fuca NSF Grant
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			SIZE B
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.			DWG. NO. 152jaha.DWG
Application	DO NOT SCALE DRAWING			WEIGHT	SCALE 1:1

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 7700 Sandholdt RD.
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152jahaSeafloorFluidConn
 Male & Female Fluid Connectors

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Item No.	Qty.	Part No.	Description	Material Specification
5	1@		Alignment Pin	Type 316 Stainless steel
4	2@		Retaining Ring	Natural PEEK
3	1@		Frame Insert	UHMW Polyethylene
2	2@		Female Connector	Natural PEEK
1	2@		Male Connector	Titanium (6Al4V)

Shop / Q.C.					UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE	Monterey Bay Aquarium Research Institute								
Inspector		1 PLACE DIM	$\pm 1/16$	2 PLACE DIM	$\pm .02$	3 PLACE DIM	$\pm .005$	ANGLES	$\pm 1^\circ$	DRAWN	Hans Jannasch	5/19/04	MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 							
Shop Foreman		1. DIMENSIONS ARE IN INCHES							ENGINEER											
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030.							CHECKED											
NEXT ASSY Description	NEXT ASSY Number	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.							PROJECT NO.	701145	PROJECT	Juan de Fuca NSF Grant	152jahaSeafloorFluidConn							
Application		DO NOT SCALE DRAWING							WEIGHT		SIZE	B	DWG. NO.	152jaha.DWG	REV.		SCALE 2:1		CAD FILE: tornado/chem/SWfiles	SHEET 5 OF 5