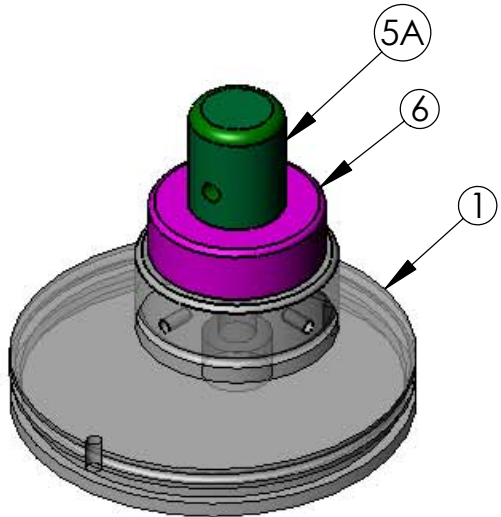
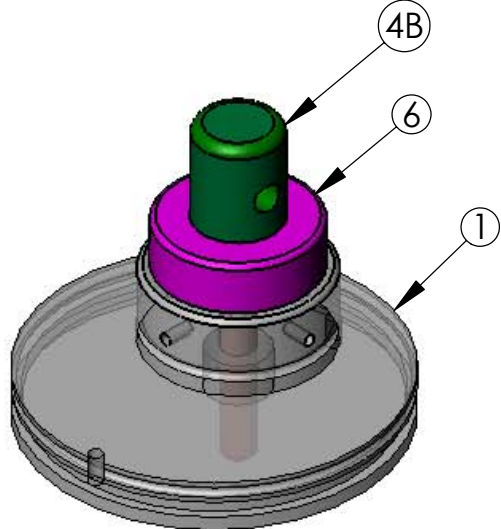


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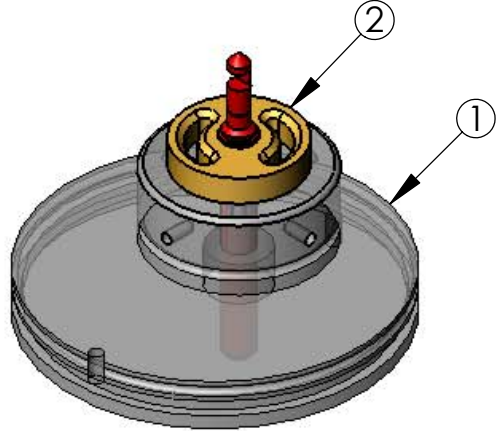
REVISIONS				
REV.	DESCRIPTION		DATE	APPROVED
	INITIAL RELEASE	128.JAHA.DWG	7/8/02	
A	3 - C TECH PROBE TIP LENGTHS	J. SCHOLFIELD	4/8/03	
B	C TECH FLOWCELL TIP RELIEF	J. SCHOLFIELD	5/23/03	
C	Remove flats, increased internal length	JAHA	11/6/06	JAHA



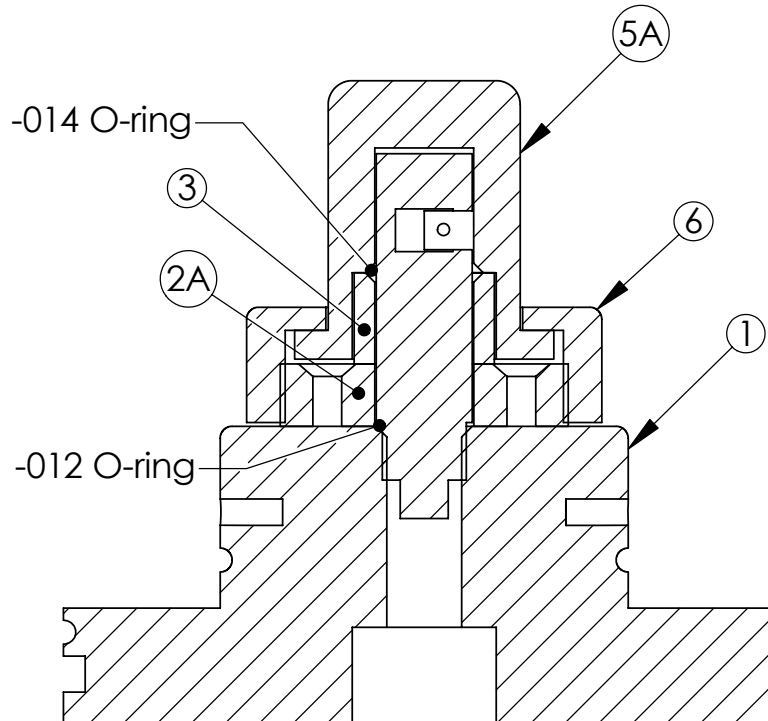
EquiTech Probe
with 1/4-28 connections



C-Tech Probe
with 1/8" NPT connection



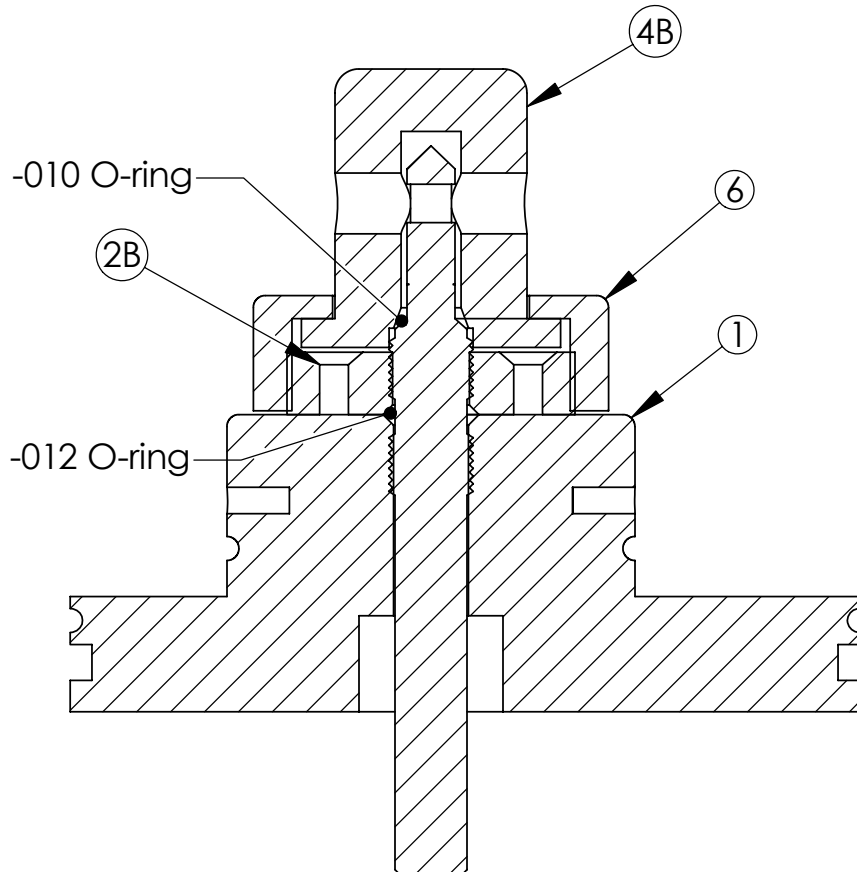
C-Tech Probe
Exposed probe



SECTION

EquiTech Probe

with 1/4-28 connections



SECTION
C-Tech Probe
with 1/8" NPT connection

Note 7
O-rings:
EquiTech Probe: -012 and -014
C-Tech Probe: -010 and -012

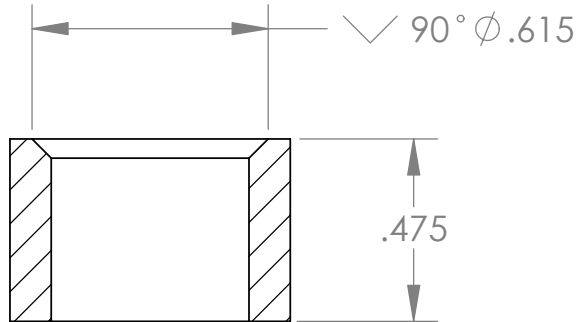
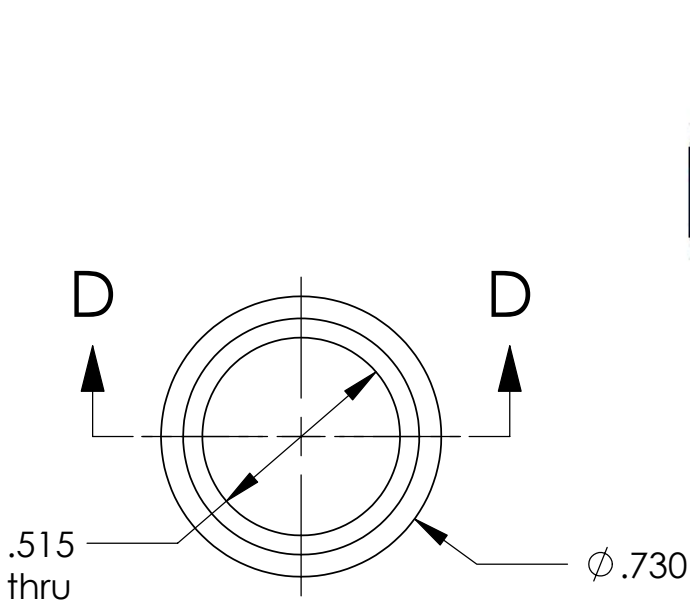
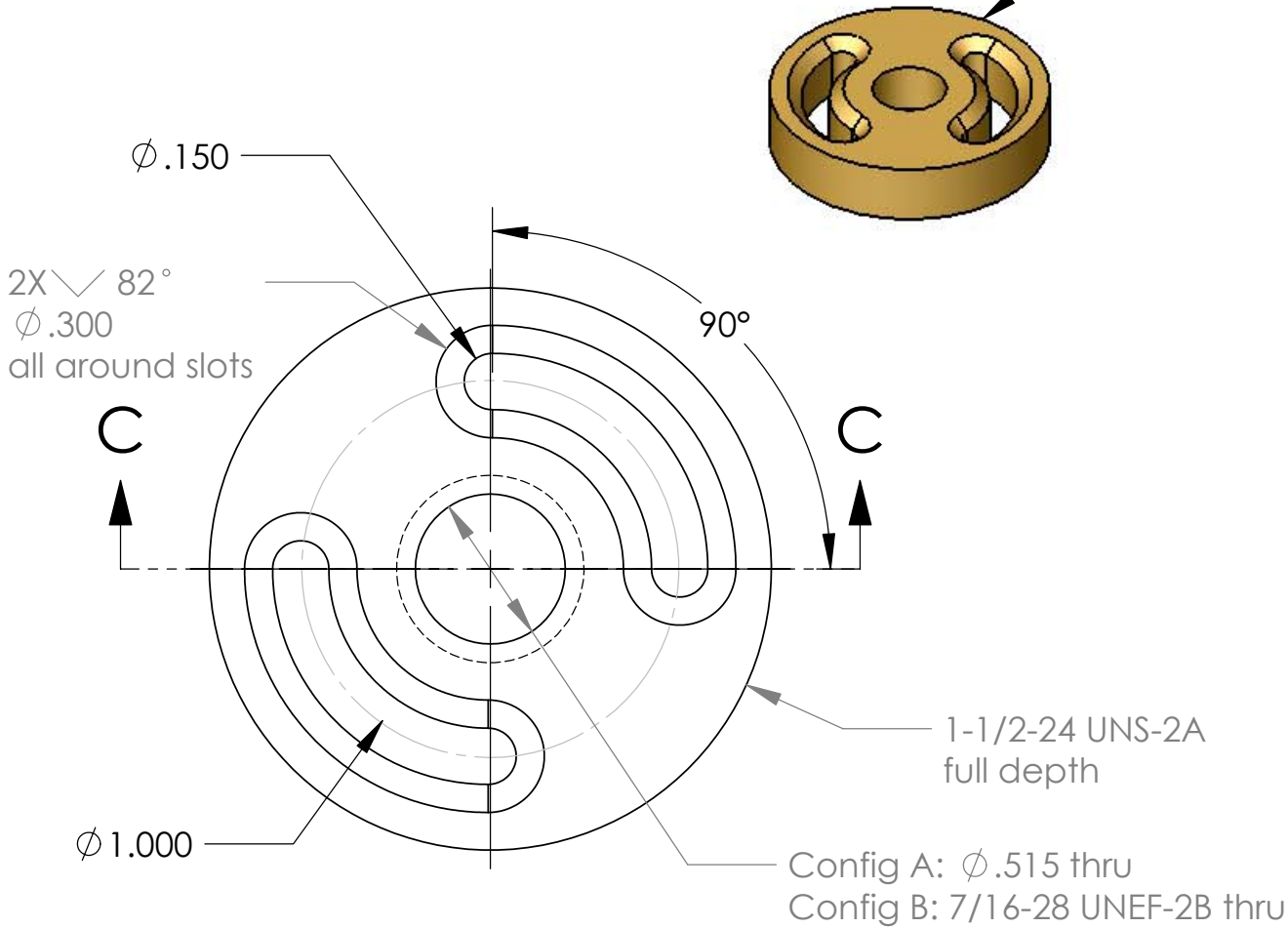
SHEET 1 - CROSS SECTIONS

6			Lock ring	PEEK
5			Equitech flowcell (Config A and B)	PEEK
4			C-tech flowcell (Config A and B)	PEEK
3			Probe riser	PEEK
2			Probe nut (Config A and B)	PEEK
1			Endcap	Polycarbonate (see 123jaha.DWG)
ITEM NO.	QTY	PART NO.	DESCRIPTION	MATERIAL SPECIFICATION

BILL OF MATERIALS				
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS	DATE	Monterey Bay Aquarium Research Institute 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (408) 775-1700 
1 PLACE DIM ±.1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±.1°	
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.				
DO NOT SCALE DRAWING		WEIGHT		
		DRAWN Hans Jannasch	7/8/02	
		ENGINEER		
		CHECKED		
		PROJECT NO.	600144	
		PROJECT	Chemical Sensors	
		SIZE B	DWG. NO. 1001897(jaha128.DWG)	REV. C
		SCALE	CAD FILE: TORNADO/CHEM/SWFILES	SHEET 1 OF 5

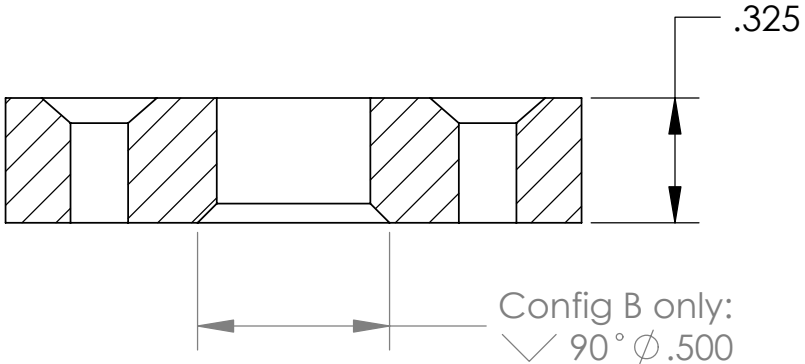
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REVISIONS				
REV.	DESCRIPTION	DATE	APPROVED	
	INITIAL RELEASE	128JAH.A.DWG	7/8/02	
A	3 - C TECH PROBE TIP LENGTHS	J. SCHOLFIELD	4/8/03	
B	C TECH FLOWCELL TIP RELIEF	J. SCHOLFIELD	5/23/03	
C	Removed flats, increased internal length	JAHA	11/6/06	JAHA



SECTION D-D

SHEET 2 - PROBE NUT



SECTION C-C

6			Lock ring	PEEK
5			Equitech flowcell (Config A and B)	PEEK
4			C-tech flowcell (Config A and B)	PEEK
3			Probe riser	PEEK
2			Probe nut (Config A and B)	PEEK
1			Endcap	Polycarbonate (see 123jaha.DWG)
ITEM NO.	QTY	PART NO.	DESCRIPTION	MATERIAL SPECIFICATION
BILL OF MATERIALS				
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE
1 PLACE DIM $\pm .016$	2 PLACE DIM $\pm .02$	3 PLACE DIM $\pm .005$	ANGLES $\pm .1$	7/8/02
1. DIMENSIONS ARE IN INCHES			DRAWN	
2. DIMENSION LIMITS HELD AFTER PLATING.			Hans Jannasch	
3. REMOVE BURRS AND SHARP EDGES .015 MAX.			ENGINEER	
4. MACHINED FILLET RADII .0150-.030.			CHECKED	
5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			PROJECT NO.	600144
6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.			PROJECT	Chemical Sensors
			WEIGHT	
NEXT ASSY			USED ON	
APPLICATION			DO NOT SCALE DRAWING	
			SCALE	
			CAD FILE: TORNADO/CHEM/SWFILES	SHEET 1 OF 5

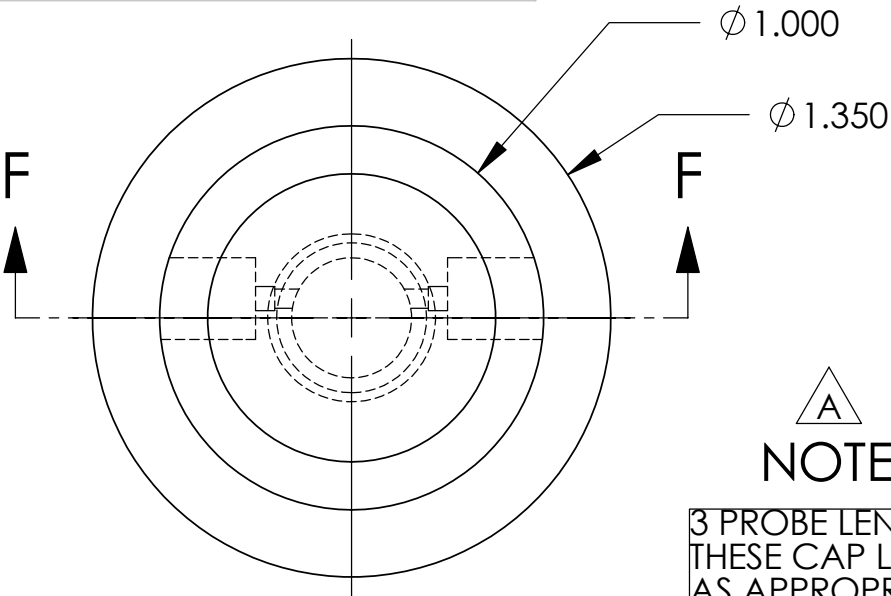
Monterey Bay Aquarium Research Institute
7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (408) 775-1700

128jaha1SUSflowcell
ISUS Flowcell

SIZE B DWG. NO. 1001897(jaha128.DWG) REV. C

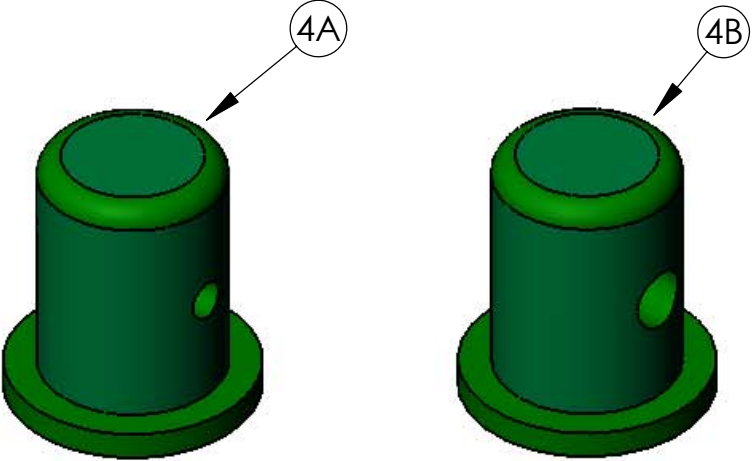
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REVISIONS				
REV.	DESCRIPTION	DATE	APPROVED	
	INITIAL RELEASE	128JAH.DWG	7/8/02	
A	3 - C TECH PROBE TIP LENGTHS	J. SCHOLFIELD	4/8/03	
B	C TECH FLOWCELL TIP RELIEF	J. SCHOLFIELD	5/23/03	
C	Removed flats, increased internal length	JAHA	11/6/06	JAHA



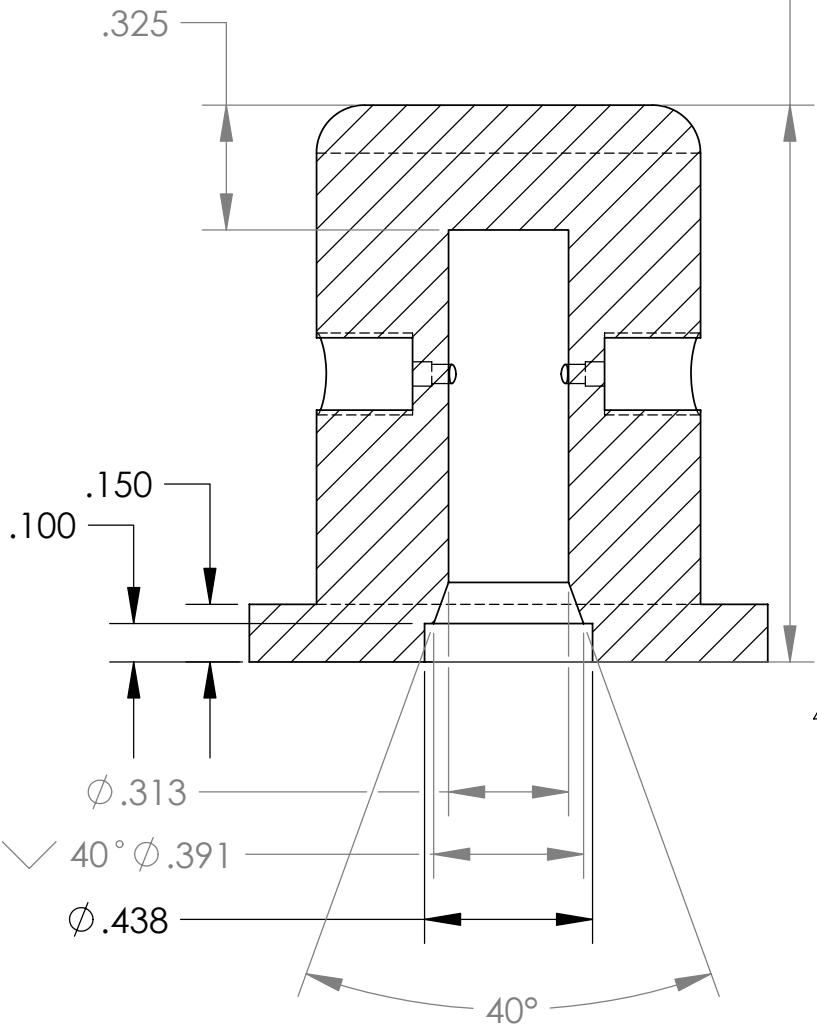
NOTE:
3 PROBE LENGTHS AVAIL.
THESE CAP LENGTHS REQ'D
AS APPROPRIATE

1.450, 1.647, 2.041
1/8" NPT SIMILAR

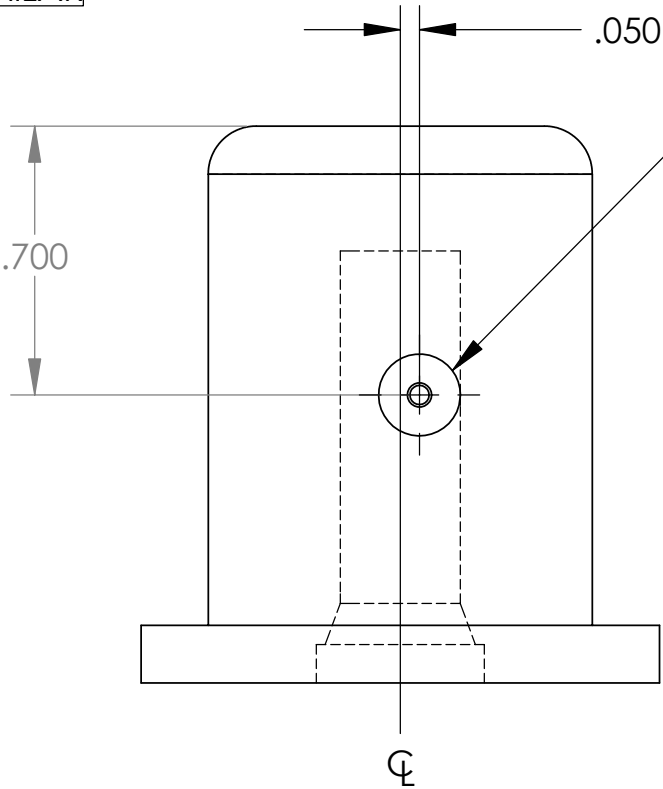


1/4- 28 UNF

1/8" FNPT



SECTION F-F



Config A (1/4-28))
2X $\phi .213 \downarrow .250$
tap 1/4-28 UNF-2B $\downarrow .200$
Bottom flat to .002
 $\phi .063 \downarrow .300$
 $\phi .050$ thru

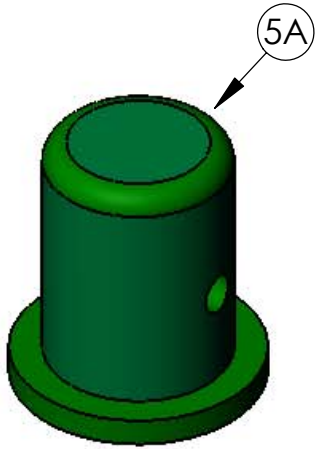
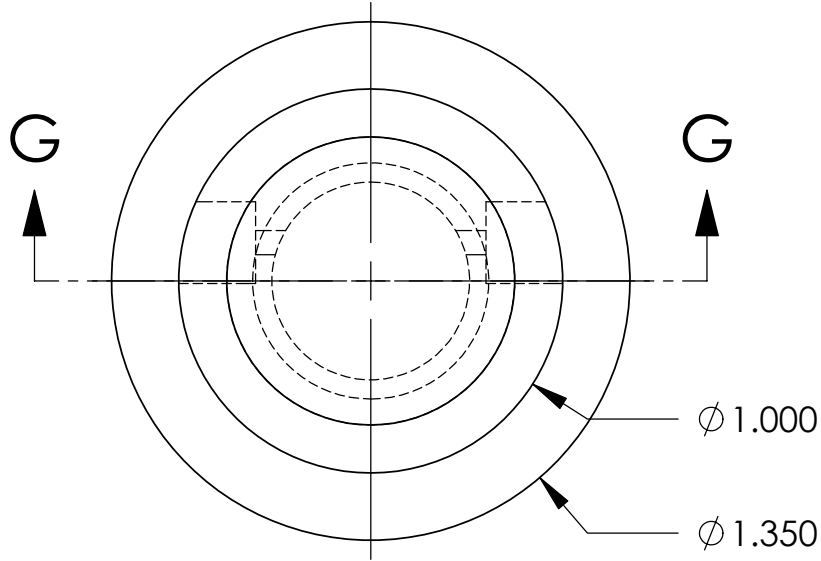
Config B (1/8" NPT)
 $\phi .332$ thru
2X tap 1/8"-27 NPT (both sides)

SHEET 3 -C TECH FLOWCELL VARIATIONS

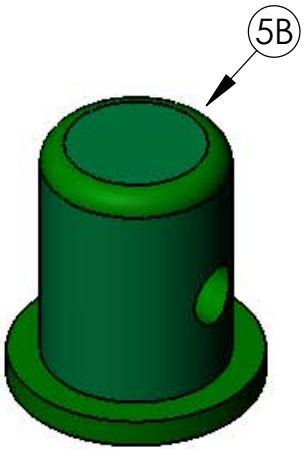
6			Lock ring	PEEK
5			Equitech flowcell (Config A and B)	PEEK
4			C-tech flowcell (Config A and B)	PEEK
3			Probe riser	PEEK
2			Probe nut (Config A and B)	PEEK
1			Endcap	Polycarbonate (see 123jaha.DWG)
ITEM NO.	QTY	PART NO.	DESCRIPTION	MATERIAL SPECIFICATION
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				
1 PLACE DIM $\pm .016$	2 PLACE DIM $\pm .02$	3 PLACE DIM $\pm .005$	ANGLES $\pm 1^\circ$	
1. DIMENSIONS ARE IN INCHES			APPROVALS	DATE
2. DIMENSION LIMITS HELD AFTER PLATING.			DRAWN	7/8/02
3. REMOVE BURRS AND SHARP EDGES .015 MAX.			Hans Jannasch	
4. MACHINED FILLET RADII .0150-.030.			ENGINEER	
5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			CHECKED	
6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.			PROJECT NO.	600144
			PROJECT	Chemical Sensors
			WEIGHT	
BILL OF MATERIALS				
Monterey Bay Aquarium Research Institute				MBARI
7700 Sandholdt RD. Moss Landing, CA 95039 PH: (408) 775-1700				
128jahaUSflowcell				
ISUS Flowcell				
SIZE B	DWG. NO.	REV.		
	1001897(jaha128.DWG)	C		
SCALE	CAD FILE: TORNADO/CHEM/SWFILES	SHEET 1 OF 5		

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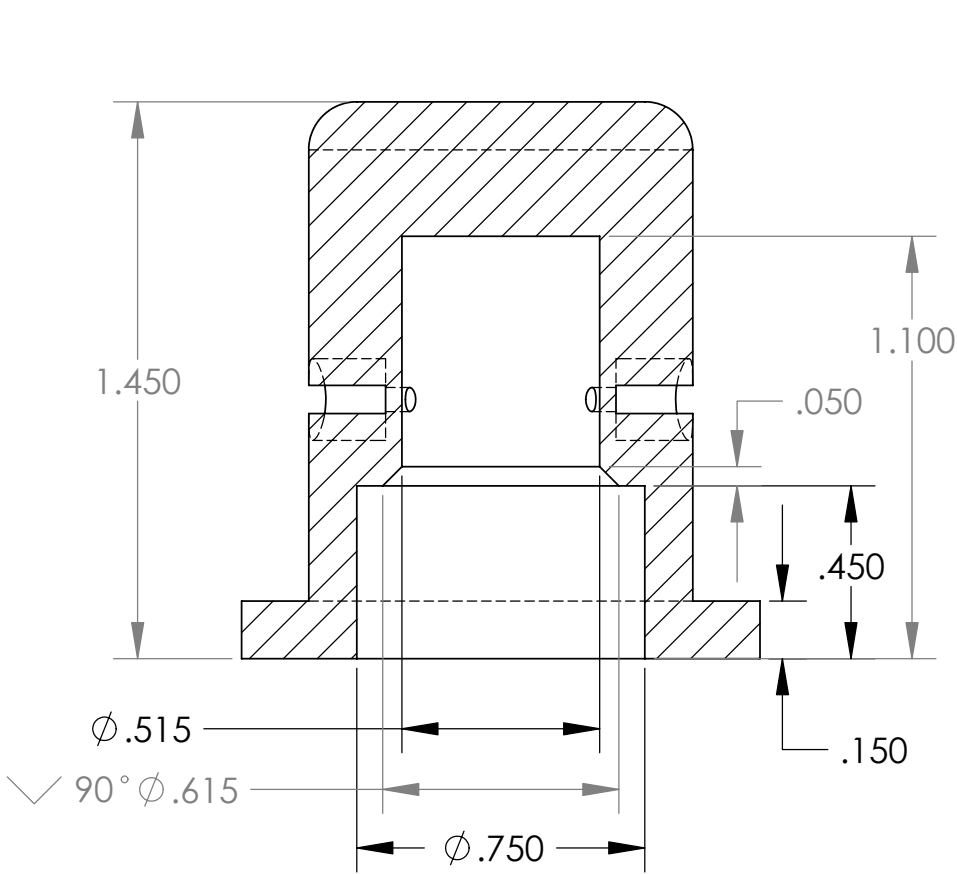
REVISIONS				
REV.	DESCRIPTION	DATE	APPROVED	
	INITIAL RELEASE	128JAHA.DWG	7/8/02	
A	3 - C TECH PROBE TIP LENGTHS	J. SCHOLFIELD	4/8/03	
B	C TECH FLOWCELL TIP RELIEF	J. SCHOLFIELD	5/23/03	
C	Removed flats, increased internal length	JAHA	11/6/06	JAHA



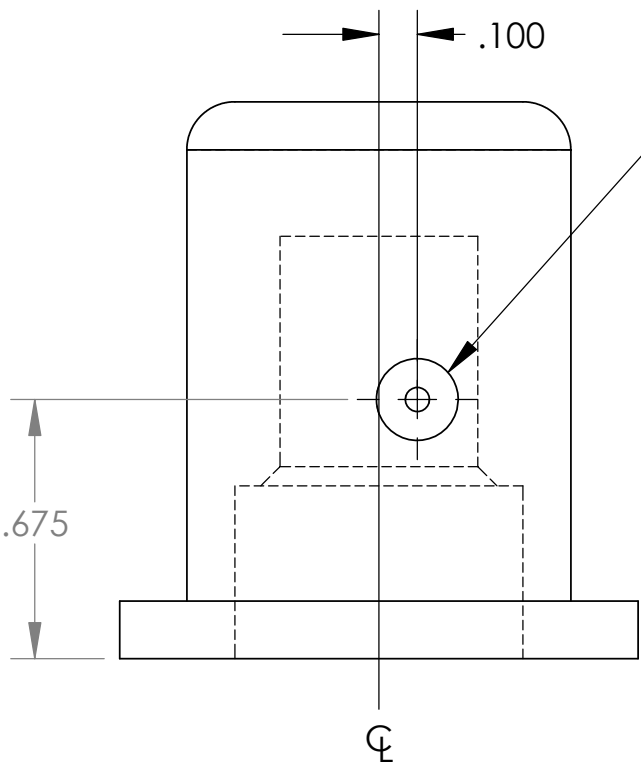
1/4-28 UNF



1/8" NPT



SECTION G-G



Config A (1/4-28))
2X $\phi .213 \downarrow .250$
tap 1/4-28 UNF-2B $\downarrow .200$
Bottom flat to .002
 $\phi .063$ thru

Config B (1/8" NPT)
 $\phi .332$ thru
2X tap 1/8"-27 NPT (both sides)

SHEET 4- EQUITECH FLOWCELL TOP

6			Lock ring	PEEK
5			Equitech flowcell (Config A and B)	PEEK
4			C-tech flowcell (Config A and B)	PEEK
3			Probe riser	PEEK
2			Probe nut (Config A and B)	PEEK
1			Endcap	Polycarbonate (see 123jaha.DWG)
ITEM NO.	QTY	PART NO.	DESCRIPTION	MATERIAL SPECIFICATION
BILL OF MATERIALS				
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE
1 PLACE DIM $\pm .016$	2 PLACE DIM $\pm .02$	3 PLACE DIM $\pm .005$	ANGLES $\pm 1^\circ$	DRAWN Hans Jannasch 7/8/02
1. DIMENSIONS ARE IN INCHES			ENGINEER	
2. DIMENSION LIMITS HELD AFTER PLATING.			CHECKED	
3. REMOVE BURRS AND SHARP EDGES .015 MAX.			PROJECT NO. 600144	
4. MACHINED FILLET RADII .0150-.030.			PROJECT Chemical Sensors	
5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			WEIGHT	
6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.			SCALE	
NEXT ASSY			USED ON	
APPLICATION			DO NOT SCALE DRAWING	
			CAD FILE: TORNADO/CHEM/SWFILES	
			SHEET 1 OF 5	
			REV. ϕ	

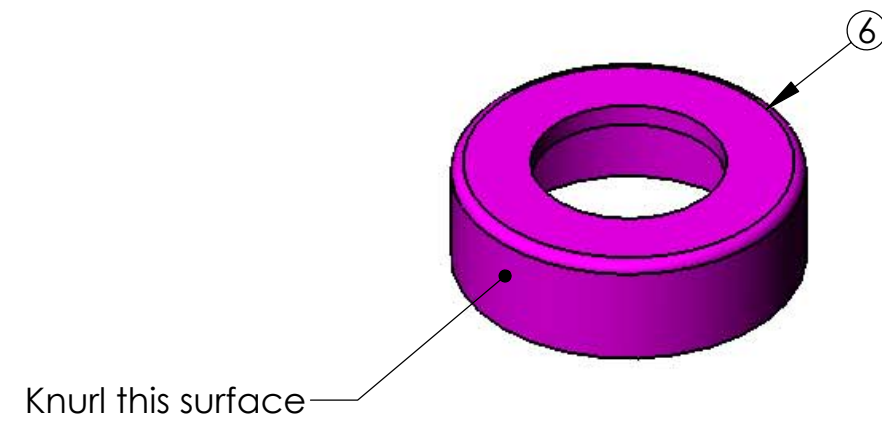
Monterey Bay Aquarium Research Institute
7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (408) 775-1700



128jahaUSflowcell
ISUS Flowcell

SIZE B DWG. NO. 1001897(jaha128.DWG)

REVISIONS				
REV.	DESCRIPTION		DATE	APPROVED
	INITIAL RELEASE	128.JAHA.DWG	7/8/02	
A	3 - C TECH PROBE TIP LENGTHS	J. SCHOLFIELD	4/8/03	
B	C TECH FLOWCELL TIP RELIEF	J. SCHOLFIELD	5/23/03	
C	Removed flats, increased internal length	JAHA	11/6/06	JAHA



6			Lock ring	PEEK
5			Equitech flowcell (Config A and B)	PEEK
4			C-tech flowcell (Config A and B)	PEEK
3			Probe riser	PEEK
2			Probe nut (Config A and B)	PEEK
1			Endcap	Polycarbonate (see 123jaha.DWG)

ITEM NO.	QTY	PART NO.	DESCRIPTION	MATERIAL SPECIFICATION
BILL OF MATERIALS				
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE
1 PLACE DIM ±.1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±.1°	DRAWN Hans Jannasch 7/8/02
1. DIMENSIONS ARE IN INCHES			ENGINEER	
2. DIMENSION LIMITS HELD AFTER PLATING.			CHECKED	
3. REMOVE BURRS AND SHARP EDGES .015 MAX.			PROJECT NO. 600144	
4. MACHINED FILLET RADII .0150-.030.			PROJECT Chemical Sensors	
5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			SIZE B DWG. NO. 1001897(jaha128.DWG)	
6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.			REV. C	
DO NOT SCALE DRAWING			SCALE CAD FILE: TORNADO/CHEM/SWFILES SHEET 1 OF 5	

SECTION Z-Z