

SM05 Threading: Ø1/2" Lens Tubes, 16 mm Cage Systems

External Thread, 0.535"-40.0 UNS-2A

Internal Thread, 0.535"-40.0 UNS-2B

Max Major Diameter	0.5340"	Min Major Diameter	0.5350"
Min Major Diameter	0.5289"	Min Pitch Diameter	0.5188"
Max Pitch Diameter	0.5178"	Max Pitch Diameter	0.5230"
Min Pitch Diameter	0.5146"	Min Minor Diameter (and 83.3% of Thread)	0.508"
Max Minor Diameter	0.5069"	Max Minor Diameter (and 64.9% of Thread)	0.514"

THIS DOCUMENT CONTAINS VALUABLE PROPRIETARY TO RAFAEL. THE RECIPIENTS OF THIS DOCUMENT SHALL NOT DISCLOSE ITS CONTENTS IN WHOLE OR IN PART TO ANY THIRD PARTY UNLESS OTHERWISE AGREED BY RAFAEL.

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS. INTERPRET DRAWING ACCORDING TO RAFAEL PROCEDURE 18.00.10

REVISIONS




REV	DESCRIPTION	ECN	ID	DATE
B	.		dvirf	05-Mar-2024

COLOR SCHEME FOR ATTACHED 3D PDF FILE
ALL FACES WITH THE SAME COLOR SHOULD BE TREATED ACCORDING TO DRAWING REQUIREMENTS

COLOR SCHEME	RC REFERENCE
YELLOW - ONLY CONVERSION	SEE NOTE 40.2
BROWN - COVERSION AND BLASTING	SEE NOTES 40.2 & 40.4
GREY -COVERSION AND DESOTHANE	SEE NOTES 40.2 & 60.2

PRODUCTION ROUTING CHART

No.	DESCRIPTION	OPER	DATE
10	GENERAL INSTRUCTIONS		
10.1	THIS DRAWING SHALL BE USED WITH ITS MODEL FOR COMPLETE PRODUCT DEFINITION		
10.2	DIMENSIONAL LIMITS APPLY AFTER SURFACE TREATMENT UNLESS OTHERWISE SPECIFIED		
20	MATERIAL		
	DESCRIPTION	CAT.NO.	QTY UM
20.1	ALUMINUM ALLOY 6061-T6511 ROUND ROD L=144. D=1. INCH COMMERCIAL, GEN_1111-1	5010978314	0.048 KG
20.2	OTHER SIZE AND/OR SHAPE OF SAME MATERIAL AND THERMAL CONDITION IS APPROVED		
30	MACHINING		
30.1	REMOVE BURRS ~0.3, UNLESS OTHERWISE SPECIFIED		
30.2	INNER RADII ~0.3, UNLESS OTHERWISE SPECIFIED		
40	SURFACE TREATMENT		
40.1	SEE ATTACHED 3D-PDF FILE FOR REFERENCE.SEE COLOR TABLE LEGEND		
40.2	CONVERSION COATING FOR IMPROVED CORROSION RESISTANCE PER PS-111.21 (RAFDOS-434847)		
40.3	MASK ALL THREADS AND SURFACES MARKED YELLOW		
40.4	SURFACE BLASTING: ALUMINA, 60-100 MESH 2.5±0.5 ATM. ACCORDING TO RAFAEL PS 36-400060		
50	INSPECTION		
50.1	VISUAL INSPECTION FOR THE ENTIRE LOT		
50.2	ACTUAL RESULTS TO BE REPORTED, EXCEPT GAUGE MEASUREMENTS		
50.3	SAMPLING INSPECTION ACC. TO PURCHASING DOCUMENTS		
60	PAINTING		
60.1	MASK THREADS AND MARKED SURFACES BEFORE PAINTING		
60.2	PAINTING ON GREY SURFACES: ONE PRIMER LAYER PER MIL-PRF-85285 ONE DESOTHANE POLYURETHANE LAYER PER MIL-PRF-85285 COLOR No. 37038 PER STD-595 BLACK		
70	FINAL APPROVAL		
70.1	VISUAL INSPECTION & VERIFICATION OF DOCUMENTS		
70.2	SERVICEABILITY TAG		
80	PACKING		
80.1	PACKING SHALL PREVENT CORROSION AND PHYSICAL DAMAGE DURING PROCESS, STORAGE AND SHIPMENT		
80.2	PACKING ACC. PROJECT SPECIFICATION FOR A CLASS 10,000 CLEAN ROOM (SEE EDR)(RAFDOS-44344690)		

TOLERANCES UNLESS OTHERWISE SPECIFIED	CAGE CODE S9285	ID	SIGNATURE	<div>RAFAEL  COPYRIGHT PROTECTED ©</div> <div>TITLE</div> <div>SPD BASE</div> <div>PN</div> <div>BC11841A</div> <div>SEE EDR</div> <div>1 1</div> <div>SHT OF</div> <div>1</div> <div>DRAWING NO</div> <div>BC11841A</div> <div>SIZE</div> <div>A2</div> <div>REV</div> <div>B</div>		
THREADS POSITION ⊕ Ø0.3 A B	DESIGNED	GALFRID	<div>DIGITALLY SIGNED</div> <div>DATE: 2024-03-07</div> <div>RELEASED FOR PRODUCTION</div>			
HOLES POSITION ⊕ Ø0.20 A B	DESIGNED					
SURFACE PROFILE  0.3 A B	CHECKED	ozf				
HOLES +0.10 -0.03	APPROVED					
	APPROVED	dvirf				
SURFACE TEXTURE  Ra1.6	SCALE 5:2	CLASS Unclassified	