

Title:

LIGO VACUUM EQUIPMENT; V59049

O RING SPECIFICATION

PROJECT ENGINEER A. Moten

TECHNICAL DIRECTOR D.A. McWilliam

QUALITY ASSURANCE R. C. Bullard

PROJECT MANAGER Paul R. King

6	Am 1/7/97		Released per DEU 0401
5	Am 11/29/96	D.A. McWilliam	Released per DEU 0367
4	Am 10/19/96	D.A. McWilliam	Released per DEU 0297
3	Am 9/17/96	D.A. McWilliam	Released per DEU 0268
2	Am 8/21/96	D.A. McWilliam	Released per DEU 0247
1	Am 7/16/96	D.A. McWilliam	RELEASED PER DEU 0223
0	Am 12/27/95	D.A. McWilliam	RELEASED PER DEU 0035

REV LTR.	BY-DATE	APPD. DATE	DESCRIPTION OF CHANGE		
PROCESS SYSTEMS INTERNATIONAL INC.			SPECIFICATION		
INITIAL APPROVALS	PREPARED	DATE	APPROVED	DATE	Number
	Am	12/27/95	[Signature]	12/27/95	A V049-2-045
					Rev 5

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O RING SPEC. V049-2-045

6M LIGOV7.VB1

SERVICE : ULTRA HIGH VACUUM SEALS

MATERIAL: EXTRUDED CORD STOCK; CERTIFIED DUPONT VITON A-500

DJROMETER : 70-75

JOINTS : VULCANIZED SPLICE

CROSS-SECTION DIAMETER : 0.275 + . 0.006 INCHES

DEVELOPED LENGTH : SEE TABLE 1

SPECIAL REQUIREMENTS:

1. O RINGS SHALL BE SUPPLIED SUITABLE FOR ULTRA HIGH VACUUM SERVICE. ORINGS MUST BE SUPPLIED CONSISTENT WITH CLASS 100 CLEAN ROOM STANDARDS. HANDLING AND PACKAGING TO PREVENT CONTAMINATION FROM DIRT, HYDROCARBONS (OILS, GREASES, FINGERPRINTS ETC.), GRIT, CHIPS, MANUFACTURING RESIDUES, PARTICULATES (DUST, HAIR, LINT ETC.) IS REQUIRED. SUPPLIER MUST SUBMIT HANDLING AND PACKAGING PROCEDURES TO PSI, FOR APPROVAL, PRIOR TO MANUFACTURING O RINGS.

2. O RINGS SHALL BE INDIVIDUALLY PACKAGED IN SEALED PROTECTIVE POLYETHYLENE PLASTIC BAGS. BAGS SHALL BE PUNCTURE RESISTANT AND AIR TIGHT. BAGS SHALL BE MARKED WITH PART NO., FLANGE SIZE, CORD LENGTH, AND LOT NO.

3. O RINGS WILL BE VACUUM BAKED BY PSI TO REMOVE (OFF-GAS) WATER, VOLATILE COMPOUNDS, AND GASSES, REMAINING IN THE BULK VITON. BAKING WILL BE DONE AT 170 C (338 F) IN A PURE N2 ATMOSPHERE, AT A PRESSURE = 1 TORR, FOR A 12 HOUR DURATION. AFTER BAKING, THE O-RING PART NO. WILL HAVE THE SUFFIX "V" REMOVED. (SEE TABLE 1)

4. PRIOR TO OBTAINING A RELEASE FOR SHIPMENT, VENDOR MUST CERTIFY THAT ALL SPICED JOINTS HAVE BEEN VISUALLY INSPECTED AND TESTED IN ACCORDANCE WITH ASTM STANDARD D2527-83 (REAPPROVED 1992). JOINT CLASSIFICATION IS CLASS 3.

5. THE O-RING VENDOR WILL SUPPLY UNBAKED O-RINGS WITH THE SUFFIX "V" ADDED TO THE PART NUMBER. (SEE TABLE 1)

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				SEE LOG#7.W81	
TABLE 1					
PART NO. UNBAKED	PART NO. BAKED	FLANGE SIZE	CROSS SECT. INCHES	CORD LENGTH INCHES	REF. DWG.
V049M016V	V049M016	104	0.275 + - 0.006	337.5	V049-4-022
V049M017V	V049M017	104	0.275 + - 0.006	328.125	V049-4-022
V049M018V	V049M018	84	0.275 + - 0.006	274.375	V049-4-021
V049M018V	V049M018	84	0.275 + - 0.006	265.125	V049-4-021
V049M020V	V049M020	72	0.275 + - 0.006	237.125	V049-4-020
V049M021V	V049M021	72	0.275 + - 0.006	227.75	V049-4-020
V049M022V	V049M022	60	0.275 + - 0.006	200.625	V049-4-019
V049M023V	V049M023	60	0.275 + - 0.006	191.25	V049-4-019
V049M024V	V049M024	48	0.275 + - 0.006	162.5	V049-4-018
V049M025V	V049M025	48	0.275 + - 0.006	153.125	V049-4-018
V049M026V	V049M026	44.25	0.275 + - 0.006	150	V049-4-017
V049M027V	V049M027	44.25	0.275 + - 0.006	140.75	V049-4-017
V049M030V *	V049M030 *	60	0.275 + - 0.006	213	V049-4-067
V049M031V *	V049M031 *	60	0.275 + - 0.006	203.75	V049-4-067
V049M032V	V049M032	44.625	0.275 + - 0.006	151.25	V049-4-132
V049M033V	V049M033	44.625	0.275 + - 0.006	141.93	V049-4-132

* RE-3A'S ONLY

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