

From: Dennis Coyne <coyne@ligo.caltech.edu>
Subject: **Re: Viton waiver request**
Date: 4 September 2012 2:11:29 PM AEST
To: Peter Fritschel <pf@ligo.mit.edu>
Cc: Calum Torrie <ctorrie@ligo.caltech.edu>, Bram Slagmolen <bram.slagmolen@anu.edu.au>, Suresh Doravari <doravari@caltech.edu>

Waiver granted.

Dennis Coyne
Chief Engineer, Advanced LIGO & LIGO Laboratory
California Institute of Technology
MC 100-36, 1200 E. California Blvd.
Pasadena, CA 91125 USA
Telephone 626.395.2034

On 9/3/2012 6:22 AM, Peter Fritschel wrote:

Dennis, Calum,

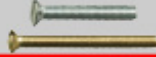
Each Tip-Tilt Mirror Mount contains two 3/8" diameter viton o-rings for passive damping of the blade springs. Bram had some time ago procured these o-rings from smallparts.com.au, who source them from Seagull Industries. They have been C&B'd (not sure where), and are at LHO ready to be assembled into mounts. However, it was recently realized that the o-rings did not come with a materials certification, according to our requirements for viton use in vacuum. I am wondering if this requirement can be waived in this case, given the small quantity of viton involved.

The reason I'm bringing this up now is that Suresh has a trip scheduled to go to LHO from 5-14 September to finish assembling the Tip-Tilt Mounts. He didn't know about this issue with the o-rings when he made those plans. Bram and Suresh have looked into getting new o-rings with mat'l certs, and getting these C&B'd at Caltech and sent to LHO in time. Perhaps it can be done (actually, at this point I don't think Bram has found anyone who can supply them from stock w/ the certs), but the timing seems very dicey to me, and is it worth going through this effort for such a small amount of viton? (at most there are 3 TT mounts in HAM6, so 6 o-rings)

I attach the Bram's original o-ring order for info.

Peter

Small Parts & Bearings



We keep your project moving!

ABN 79 121 865 414

PRO-FORMA INVOICE / QUOTATION

REFERENCE: 001005993

Small Parts and Bearings Pty Ltd

ABN: 79 121 865 414

PO Box 2161 Mansfield, Queensland Australia 4122

Phone: 07 3349 3002 - Fax: 07 3349 1003

e-mail: sales@smallparts.com.au - web: http://www.smallparts.com.au

Australian National University
The Australian National University
College of Physical Sciences
CANBERRA ACT 2601
Phone:

Customer Contact / Quoted By	Account No.	Customer Fax	Trading Terms	Date
Centre Gravitational Ph / BARRY	SAU00001		30 Days Nett	23/08/10

Product Code	Description	Availability	Qty	Unit	Price Excl. GST
OR-009.25x1.78-VBR75-012	O-Rings - Fluoroelastomer Inside Diameter (I.D.): 9.25 Section (t): 1.78 Material: Brown Fluoroela	28/08/10	100	EA	0.410 41.00
OR-010.82x1.78-VBR75-013	O-Rings - Fluoroelastomer Inside Diameter (I.D.): 10.82 Section (t): 1.78 Material: Brown Fluoroel	28/08/10	100	EA	0.500 50.00

OR-009.25x1.78-VBR75-012



Pictures are indicative only.

OR-010.82x1.78-VBR75-013



PAYMENT OPTIONS		
Bank Transfer	Credit Card	Cheque/Money Order
Bank: CBA BSB: 064-118 ACCOUNT: 10196793 SWIFT: CTBAAU2S	07 3349 3002 or 03 8677 5169 Please have your invoice ready	PO Box 2161 Mansfield Queensland 4122

AU\$ Subtotal	91.00
AU\$ Freight And Charges	8.50
GST	9.95
AU\$ Total	109.45

This quotation is valid until: 22/09/10. Subject to our standard terms and conditions as published on our internet web site. All items are subject to prior sale. We thank you for the opportunity to quote your requirements.

RoHs and Certificate of Conformity: Certificates MUST be added as a line item on your order as a charge will apply.



A surcharge may apply to some credit card transactions.