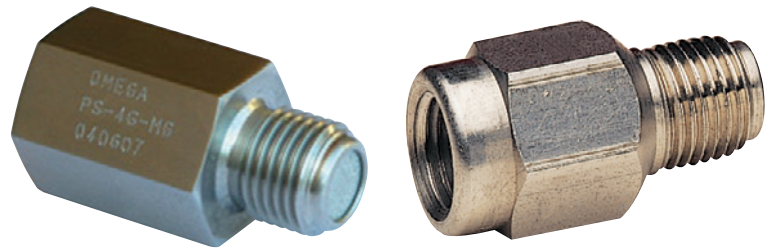


omega.com[®]

Ω OMEGA[®]

PS Series Pressure Snubbers



INSTRUCTION
SHEET

M1180/0107

Shop online at: omega.com e-mail: info@omega.com
For latest product manuals: omegamanual.info

This envelope contains a
POROUS METALLIC PRESSURE SNUBBER

Materials of Construction

Housings: 303 Stainless Steel
Porous Discs: 316 Stainless Steel

NOTE

OMEGA[®] Snubbers are available in other shapes, sizes, threads and materials on special order. Prices quoted on application.

Maximum Pressure Ratings:

Material: Stainless Steel		
Catalog No.	Thread Size	Pressure Rating
PS-8*	1/8" x 1/8" NPT	5,000 PSI
PS-8*-M	1/8" x 1/8" BSPT	
PS-8*-MG	1/8" x 1/8" G	
PS-4*	1/4" x 1/4" NPT	10,000 PSI
PS-4*-M	1/4" x 1/4" BSPT	
PS-4*-MG	1/4" x 1/4" G	
PS-2*	1/2" x 1/2" NPT	10,000 PSI
PS-2*-M	1/2" x 1/2" BSPT	
PS-2*-MG	1/2" x 1/2" G	

* Porosity Grade D, E or G.

Recommended Porosity				
Porosity Designation	Porosity Opening mm (in)		Cap CFH@ 1-PSI -Diff. Pressure	Type of Usage
	Mean	Max.		
D	0.0635 (0.0025)	0.1270 (0.0050)	6.5	Oil (Heavy 225 to 500 S. S. U.)
E	0.0330 (0.0013)	0.0635 (0.0025)	3.0	Water and Light Oils 30 to 25 S. S. U)
G	0.0102 (0.0004)	0.0025 (0.0001)	1.1	Air or Other Gases

Porous Element Snubbers Used As A Flow Restrictor

Because OMEGA[®] Porous Metal Snubbers are capable of precise flow control, it is possible to use them as flow restrictors or bleed controls.

If the snubber is to be used as a flow controller, it is recommended that the snubber be protected by a suitable filter to prevent change in flow characteristics as a result of the collection of random entrained solids on the porous element.

Instructions For Use Of Porous Element Pressure Snubbers

The accompanying porosity recommendations will accommodate approximately 85% of all pressure sensitive device applications. For violently surging or pulsing systems, the next finer porosity snubber may be indicated. If the instrument seems to be sluggish or to lack responsiveness to transient pressure changes within the system, the next more porous snubber should be substituted. Consistency of performance from one snubber to another of the same porosity is guaranteed.

All industrial type snubbers are equipped with dry-seal type pipe threads. If possible, the snubber should be assembled to the system without the use of pipe joint compound or other similar material. If pipe joint compound is used, extreme care should be taken to prevent coating the porous element with the compound. If pipe joint compound is necessary, it is strongly advised that one of the solid resinous types of compound be used. Teflon[®] plastic tape is suggested as being the most efficient of these materials.

Teflon[®] is a registered trademark of DuPont.

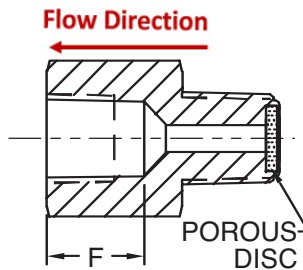
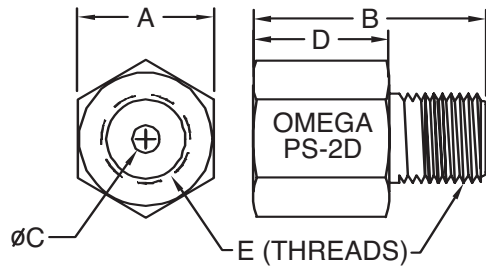
Cleaning Instructions

All snubbers may be washed in solvents such as carbon tetrachloride, benzene, naphtha, etc. Where chemical cleaning is required, boiling in any of the following solutions will be found effective, depending on which solution the contaminant is most soluble in:

Stainless Steel: 15% caustic soda (1 part soda; 6 parts water) or 15% nitric acid (1 part acid; 6 parts water). Boil 15 to 45 minutes.

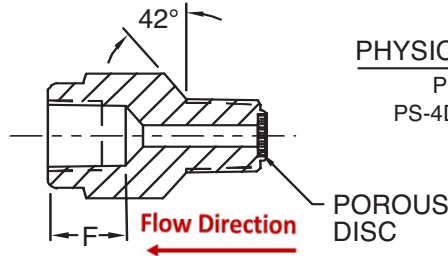
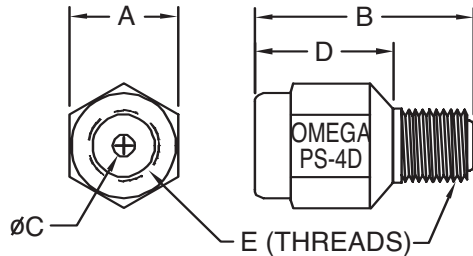
After boiling, wash snubber in running tap water for approximately 45 minutes. DO NOT FORCE TAP WATER THROUGH THE SNUBBER AS THIS WILL PLUG IT.

PRESSURE SNUBBERS REFERENCE DIMENSIONS



PHYSICAL PROFILE FOR

- PS-8D, -8E, -8G
- PS-2D, -2E, -2G
- PS-8D-M, -8E-M, -8G-M
- PS-2D-M, -2E-M, -2G-M
- PS-8D-MG, -8E-MG, -8G-MG
- PS-4D-MG, -4E-MG, -4G-MG
- PS-2D-MG, -2E-MG, -2G-MG



PHYSICAL PROFILE FOR

- PS-4D, -4E, -4G
- PS-4D-M, -4E-M, -4G-M

PART NUMBER	DIM. A HEX SIZE	DIM. B LENGTH	DIM. C DIA. THRU	DIM. D BODY LENGTH	DIM. E EXTERNAL/ INTERNAL THREADS	DIM. F INTERNAL MIN DIA. DEPTH
PS-8D, -8E, -8G	5/8"	1 3/16"	3/16"	21/32"	1/8 NPT	29/64"
PS-4D, -4E, -4G	3/4"	1 15/32"	1/4"	31/32"	1/4 NPT	11/16"
PS-2D, -2E, -2G	1 1/4"	2 5/32"	1/4"	1 1/4"	1/2 NPT	1"
PS-8D-M, -8E-M, -8G-M	17 mm	1 3/16"	3/16"	21/32"	1/8-28 BSPT	29/64"
PS-4D-M, -4E-M, -4G-M	19 mm	1 15/32"	1/4"	31/32"	1/4-19 BSPT	11/16"
PS-2D-M, -2E-M, -2G-M	32 mm	2 5/32"	1/4"	1 1/4"	1/2-14 BSPT	1"
PS-8D-MG, -8E-MG, -8G-MG	17 mm	1 3/16"	3/16"	21/32"	1/8-28 G	29/64"
PS-4D-MG, -4E-MG, -4G-MG	19 mm	1 15/32"	1/4"	31/32"	1/4-19 G	11/16"
PS-2D-MG, -2E-MG, -2G-MG	32 mm	2 5/32"	1/4"	1 1/4"	1/2-14 G	1"

Caution: Flow direction must be from male threaded port to female threaded port. Improper flow direction may result in failure.



OMEGAnet On-Line Service
omega.com
Internet e-mail
info@omega.com

Servicing North America:

U.S.A.:
ISO 9001 Certified
One Omega Drive, Box 4047
Stamford, CT 06907-0047
Tel: (203) 359-1660
FAX: (203) 359-7700
e-mail: info@omega.com

Canada:
976 Bengar
Laval (Quebec) H7L 5A1, Canada
Tel: (514) 856-6928
FAX: (514) 856-6886
e-mail: info@omega.ca

For immediate technical or application assistance:

U.S.A. and Canada: Sales Service: 1-800-826-6342 / 1-800-TC-OMEGA®
Customer Service: 1-800-622-2378 / 1-800-622-BEST®
Engineering Service: 1-800-872-9436 / 1-800-USA-WHEN®
Mexico: En Español: (001) 203-359-7803
FAX: (001) 203-359-7807
e-mail: espanol@omega.com
info@omega.com.mx

Servicing Europe:

Czech Republic: Frystatska 184, 733 01 Karvina, Czech Republic
Tel: +420 (0)59 6311899
FAX: +420 (0)59 6311114
Toll Free: 0800-1-66342
e-mail: info@omegashop.cz

Germany/Austria: Daimlerstrasse 26, D-75392 Deckenpfronn, Germany
Tel: +49 (0)7056 9398-0
FAX: +49 (0)7056 9398-29
Toll Free in Germany: 0800 639 7678
e-mail: info@omega.de

United Kingdom:
ISO 9002 Certified
One Omega Drive, River Bend Technology Centre
Northbank, Irlam, Manchester
M44 5BD United Kingdom
Tel: +44 (0)161 777 6611
FAX: +44 (0)161 777 6622
Toll Free in United Kingdom: 0800-488-488
e-mail: sales@omega.co.uk



WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 2007 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.

It is the policy of OMEGA Engineering, Inc. to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. **WARNING:** These products are not designed for use in, and should not be used for, human applications.