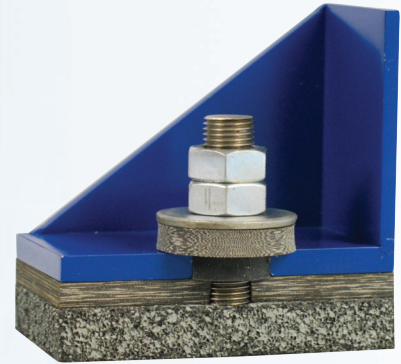


Isolation Washers & Bushings



Fabreeka isolation washers and bushings are used to eliminate metal-to-metal contact and break the vibration or shock transmission path. For example, the contact between a machine base and an anchor bolt as shown.

The properties of the Fabreeka bushing material are ideally suited for vibration isolation and structure-borne noise reduction.

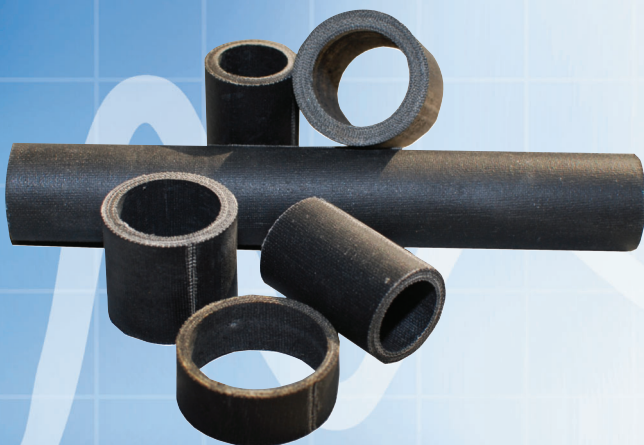


Washers & bushings are typically used in conjunction with Fabreeka pads or Fabcel pads where the reduction of impact shock or isolation of transmitted vibration is required. Bushings are manufactured with the same properties as Fabreeka pad, and therefore offer years of service under the most severe operating conditions.

Fabreeka bushings are made to specified dimensions (OD, ID, length). A minimum wall thickness of 3/32" is recommended.

Features and Attributes

- Isolation washers made from Fabreeka pad material can ultimately withstand loads up to 12,000 psi when used for "uplift" or rebound shock
- Isolation washers and bushings complete the isolation solution by eliminating the vibration and shock transmission path
- Washers can be die cut to any outside/inside diameter required for your application
- Fabreeka bushings meet the MIL-C-882 and MIL-E-5272 military specifications



Fabreeka® Washer Dimensions & Bolt Torque Recommendations

Please note, the following chart is for a Fabreeka pad and Fabreeka washer combination. For any other combination of pad and washer materials, please contact Fabreeka's Engineering department for assistance with proper torque.

Fabreeka Washer Dimension					Guide to Proper Torque		
Bolt Dia-In	Washer OD-in	Washer ID-in	Washer Thk-in	Net Area in ²	Recommended in-lbs	Torque ft-lbs	Bolt Force lbs
3/16	9/16	3/16	1/8	0.212	5	0.50	106
1/4	3/4	1/4	5/32	0.393	9	0.75	197
5/16	7/8	5/16	5/32	0.574	18	1.50	287
3/8	1	3/8	3/16	0.675	30	2.50	338
7/16	1-1/4	7/16	15/64	1.076	47	4.00	540
1/2	1-3/8	1/2	9/32	1.288	130	11.00	1,288
9/16	1-1/2	9/16	9/32	1.517	170	14.50	1,517
5/8	1-3/4	5/8	11/32	2.10	264	22.00	2,100
3/4	2	3/4	11/32	2.70	406	34.00	2,700
7/8	2-1/4	7/8	11/32	3.37	600	50.00	3,370
1	2-1/2	1	1/2	4.12	840	70.00	4,120
1-1/8	2-3/4	1-1/8	1/2	4.94	1,100	92.00	4,940
1-1/4	3	1-1/4	1/2	5.84	1,500	125.00	5,840
1-3/8	3-1/4	1-3/8	1/2	6.81	1,980	165.00	6,810
1-1/2	3-1/2	1-1/2	5/8	7.85	2,370	200.00	7,850
1-5/8	3-3/4	1-5/8	5/8	8.97	2,930	244.00	8,970
1-3/4	4	1-3/4	5/8	10.16	3,560	297.00	10,160
1-7/8	4-1/4	1-7/8	3/4	11.42	4,320	360.00	11,420
2	4-1/2	2	3/4	12.76	5,080	425.00	12,760
2-1/4	4-3/4	2-1/4	3/4	13.74	6,200	517.00	13,740
2-1/2	5	2-1/2	3/4	14.72	7,400	615.00	14,720
2-3/4	5-1/4	2-3/4	3/4	15.71	8,680	725.00	15,710
3	5-1/2	3	3/4	16.69	10,080	900.00	16,690

Notes:

- 1) The above recommended torque takes into consideration the creep/set of Fabreeka with time, therefore, **do not retorquer**. In general, creep/set will reduce the torque to about one/half the above values. This usually occurs within 7 days of the original torquing.
- 2) The guide to proper torque is an aid to developing proper bolt force without overstressing the Fabreeka washers. Steel-to-steel torque values must never be used with Fabreeka washers because they would severely overstress the Fabreeka washers.
- 3) The Fabreeka washer sizes listed are based on standard (US Wrought) steel washer dimensions. Double steel washers can be used, if necessary, to avoid "dishing", which might load the Fabreeka washer at the ID to the point of failure. For machines having oversized anchor bolt holes, use single or double steel washers on both sides of the Fabreeka washer.

If you have any questions regarding how Fabreeka's products comply with various regulations, please refer to our website at www.fabreeka.com/product-compliance.

World Headquarters
Fabreeka International, Inc.
 PO Box 210
 1023 Turnpike Street
 Stoughton, MA 02072
 Tel: (800) 322-7352
 Tel: (781) 341-3655
 Fax: (781) 341-3983
 E-mail: info@fabreeka.com
www.fabreeka.com

Germany
Fabreeka GmbH Deutschland
 Hessenring 13
 D-64572 Büttelborn
 Tel: 49 - (0)6152-9597-0
 Fax: 49 - (0)6152-9597-40
 E-mail: info@fabreeka.de
www.fabreeka.de

England
ACE Fabreeka UK
 Unit 404 Easter Park
 Haydock Lane
 Haydock WA11 9TH
 Tel: 44 - (0)1942 727440
 Fax: 44 - (0)1942 717273
 E-mail: info@ace-fabreeka.com
www.fabreeka.co.uk

Taiwan
Fabreeka International, Inc.
 PO Box 1246
 Tainan 70499
 Taiwan
 Tel: 886-935 273732
 E-mail: info@fabreeka.tw
www.fabreeka.com.cn