


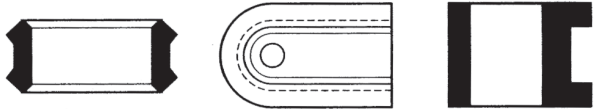

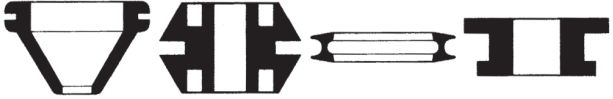



GROMMETS

11

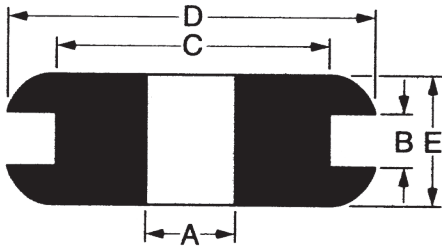
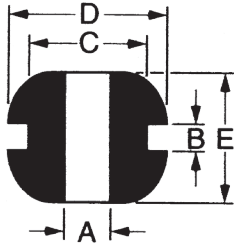
Grommets		Pg. 34
Vinyl Grommets		Pg. 38
Square Grommets		Pg. 39
Horse Shoe Grommets		Pg. 40
Large Grommets		Pg. 41
Miscellaneous Grommets		Pg. 42
Military Grommets	 MS35489 AN-931 (Army- Navy)	Pg. 46

GROMMETS



ILLUSTRATIONS BELOW NOT TO SCALE

Rubber Grommets



Grommets - By "A" Dimension

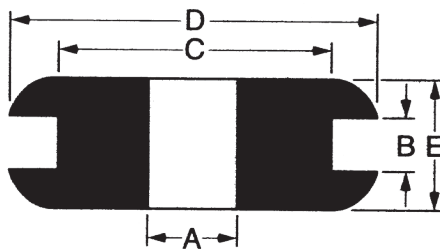
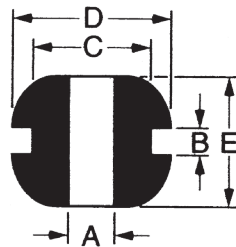
Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E
11-100	1/16	1/16	3/16	9/32	3/16
11-101	7/64	3/64	1/2	11/16	9/32
11-102	7/64	1/16	13/64	11/32	3/16
11-103	1/8	1/32	3/16	1/4	3/32
11-104	1/8	1/16	1/4	11/32	3/16
11-105	1/8	1/16	1/4	11/32	3/16
11-106	1/8	1/16	7/16	5/8	3/16
11-107	1/8	3/32	3/8	1/2	3/16
11-108	1/8	3/32	3/8	1/2	5/16
11-109	5/32	1/16	1/4	3/8	3/16
11-110	5/32	1/16	9/32	15/32	19/64
11-111	5/32	3/32	1/4	7/16	3/8
11-112	3/16	1/32	5/16	7/16	7/32
11-113	3/16	1/32	11/16	7/8	7/32
11-114	3/16	1/16	9/32	7/16	7/32
11-115	3/16	1/16	5/16	7/16	3/16
11-116	3/16	1/16	5/16	1/2	1/4
11-117	3/16	1/16	5/16	*	1/4
11-118	3/16	1/16	1/2	*	23/32
11-119	3/16	1/16	9/16	3/4	3/16
11-120	3/16	3/32	9/32	7/16	7/32
11-121	3/16	3/32	11/32	5/8	3/8
11-122	3/16	1/8	5/16	7/16	1/4
11-123	3/16	3/16	5/16	7/16	5/16
11-124	3/16	3/16	3/8	5/8	3/8
11-125	3/16	1/4	5/16	7/16	3/8
11-126	3/16	1/8	13/32	9/16	3/8
11-127	7/32	3/64	5/16	1/2	19/64
11-128	7/32	3/64	7/16	5/8	11/64
11-129	7/32	1/16	5/16	7/16	3/16
11-130	7/32	1/4	5/8	7/8	25/32
11-131	15/64	3/16	3/8	5/8	3/8
11-132	15/64	5/16	15/32	*	3/4
11-133	1/4	1/16	5/16	*	1/4
11-134	1/4	1/16	11/32	19/32	9/32
11-135	1/4	1/16	3/8+	1/2	7/32
11-136	1/4	1/16	7/16	5/8	3/16
11-137	1/4	1/16	9/16	3/4	11/64

1-800-829-7231 phone

336-272-5619 fax

ILLUSTRATIONS BELOW NOT TO SCALE

Rubber Grommets



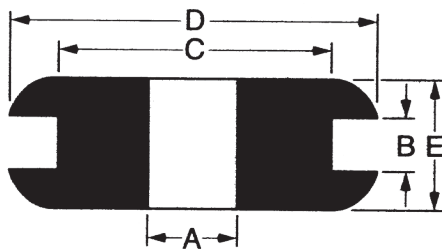
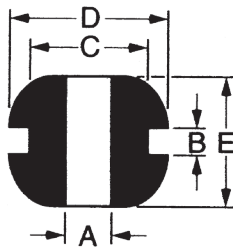
Grommets - By "A" Dimension (continued)

Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E
11-138	1/4	1/16	55/64	1 3/64	11/16
11-139	1/4	1/16	1	1 1/4	1/4
11-140	1/4	3/32	3/8+	1/2	1/4
11-141	1/4	3/32	7/16	5/8	3/8
11-142	1/4	3/32	15/32	49/64	19/64
11-143	1/4	1/8	3/8+	1/2	1/4
11-144	1/4	1/8	*	*	5/16
11-145	1/4	1/8	7/16	5/8	1/4
11-146	1/4	3/16	7/16	5/8	5/16
11-147	1/4	3/16	1/2	5/8	7/16
11-148	1/4	1/4	7/16	5/8	3/8
11-149	1/4	1/4	15/32	5/8	1/2
11-150	9/32	1/16	3/8	9/16	1/4
11-151	9/32	1/4	15/32	11/16	7/16
11-152	5/16	1/32	13/16	*	1/4
11-153	5/16	1/16	7/16	9/16	3/16
11-154	5/16	1/16	7/16	5/8	9/32
11-155	5/16	1/16	15/32	45/64	1/2
11-156	5/16	1/16	9/16	13/16	5/16
11-157	5/16	1/16	3/4	1	5/16
11-158	5/16	3/32	7/16	5/8	5/16
11-159	5/16	3/32	15/32	3/4	11/32
11-160	5/16	1/8	9/16	13/16	3/8
11-161	5/16	1/8	3/4	1	3/8
11-162	5/16	1/8	3/4	1	1/2
11-163	5/16	3/16	7/16	*	1/2
11-164	5/16	3/16	7/16	*	11/16
11-165	5/16	3/16	9/16	3/16	3/8
11-166	5/16	3/16	9/16	13/16	7/16
11-167	5/16	3/16	3/4	1	7/16
11-168	5/16	3/8	3/8	9/16	1/2
11-169	5/16	1/4	9/16	13/16	1/2
11-170	5/16	1/4	3/4	1	1/2
11-171	11/32	1/16	17/32	25/32	1/4
11-172	3/8	1/16	1/2	5/8	1/4
11-173	3/8	1/16	1/2	11/16	9/32
11-174	3/8	1/16	5/8	7/8	5/16
11-175	3/8	1/16	1	1 1/4	1/4

Longwood can custom-mold grommets

ILLUSTRATIONS BELOW NOT TO SCALE

Rubber Grommets



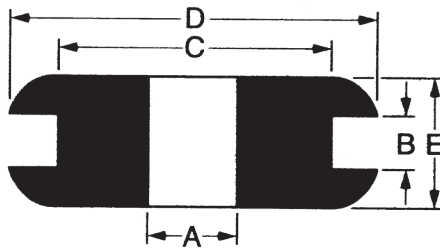
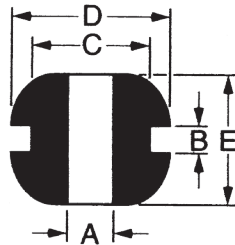
Grommets - By "A" Dimension (continued)

Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E
11-176	3/8	1/8	1/2	5/8	13/32
11-177	3/8	1/8	17/32	3/4	3/8
11-178	3/8	1/8	5/8	7/8	3/8
11-179	3/8	3/16	9/16	13/16	3/8
11-180	3/8	3/16	5/8	7/8	7/16
11-181	3/8	1/4	1/2	3/4	1/2
11-182	3/8	1/4	5/8	7/8	1/2
11-183	7/16	1/16	9/16	3/4	1/4
11-184	7/16	1/16	11/16	15/16	5/16
11-185	7/16	1/8	11/16	15/16	3/8
11-186	7/16	1/8	11/16	15/16	3/8
11-187	7/16	3/16	9/16	11/16	3/8
11-188	7/16	3/16	11/16	15/16	7/16
11-189	7/16	1/4	1/16	15/16	1/2
11-190	1/2	1/16	13/16	1 1/16	5/16
11-191	1/2	1/16	1	1 1/4	1/4
11-192	1/2	1/16	1 1/4	1 1/2	1/4
11-193	1/2	3/32	3/4	7/8	11/32
11-194	1/2	3/32	3/4	31/32	9/32
11-195	1/2	3/32	25/32	1	11/32
11-196	1/2	3/32	1 3/8	*	1
11-197	1/2	1/8	3/4	1	1/2
11-198	1/2	1/8	13/16	1 1/16	3/8
11-199	1/2	3/16	13/16	1 1/16	7/16
11-200	1/2	1/4	13/16	1 1/16	1/2
11-201	1/2	3/8	3/4	1	5/8
11-202	17/32	1/8	11/16	13/16	1/4
11-203	17/32	3/16	11/16	13/16	5/16
11-204	9/16	1/16	3/4	7/8	15/64
11-205	9/16	1/16	13/16	1 1/16	5/16
11-206	9/16	3/16	13/16	1 1/16	7/16
11-207	9/16	3/16	7/8	1 1/16	7/16
11-208	9/16	1/4	13/16	1 1/16	1/2
11-209	9/16	3/8	7/8	1 1/16	5/8
11-210	9/16	1	13/16	1 1/8	1 1/4
11-211	19/32	7/64	47/64	15/16	19/64
11-212	5/8	1/16	7/8	1 1/8	5/16
11-213	5/8	1/16	1 1/4	1 1/2	1/4

Grommets for commercial or military applications

ILLUSTRATIONS BELOW NOT TO SCALE

Rubber Grommets



Grommets - By "A" Dimension (continued)

Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E
11-214	5/8	3/32	1 3/8	*	1/4
11-215	5/8	1/8	7/8	1 1/8	3/8
11-216	5/8	3/16	7/8	1 1/8	7/16
11-217	5/8	1/4	7/8	1 1/8	1/2
11-218	5/8	5/16	*	*	11/16
11-219	5/8	5/16	29/32	1 1/8	5/8
11-220	5/8	5/8	7/8	1 1/16	7/8
11-221	41/64	7/64	57/64	1 1/16	23/64
11-222	11/16	1/16	13/16	*	15/64
11-223	11/16	1/16	1	1 5/16	3/8
11-224	11/16	1/8	1	1 5/16	7/16
11-225	11/16	3/16	1	1 5/16	1/2
11-226	11/16	1/4	1	1 5/16	9/16
11-227	3/4	1/16	15/16	1 1/8	1/4
11-228S	3/4	1/16	15/16	1 1/8	1/4
11-229W	3/4	1/16	15/16	1 1/8	1/4
11-230	3/4	1/16	1 1/16	1 3/8	3/8
11-231	3/4	1/16	1 1/4	1 5/8	1/4
11-232	3/4	1/16	1 7/16	1 13/16	3/8
11-233	3/4	1/8	1 1/16	1 3/8	7/16
11-234	3/4	3/16	1 1/16	1 3/8	1/2
11-235	3/4	1/4	1 1/16	1 3/8	9/16
11-236	3/4	1/4	1 1/4	1 5/8	7/16
11-237	3/16	9/16	15/16	1 1/4	7/8
11-238	7/8	1/16	1 3/16	*	9/32
11-239	7/8	1/16	1 1/4	1 5/8	7/16
11-240	7/8	1/16	1 5/8	2	7/16
11-241	7/8	5/64	1 3/16	1 3/8	15/32
11-242	7/8	1/8	1 1/4	1 5/8	1/2
11-243	7/8	9/64	1 3/16	1 3/8	15/32
11-244	7/8	3/16	1 1/4	1 5/8	9/16
11-245	7/8	3/16	1 15/64	1 9/16	3/4
11-246	7/8	1/4	1 1/4	1 5/8	5/8
11-247	1	1/16	1 7/8	2 1/4	7/16
11-248	1	1/16	1 3/8	1 3/4	7/16
11-249	1	1/8	1 3/8	1 3/4	1/2
11-250	1	3/16	1 3/8	1 3/4	9/16
11-251	1	1/4	1 1/4	1 1/2	1/2

1-800-829-7231 phone

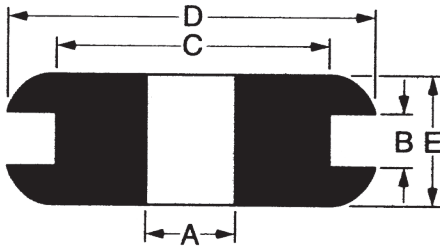
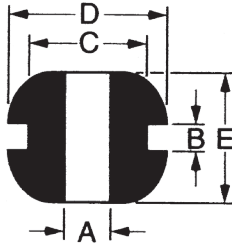
336-272-5619 fax

GROMMETS



ILLUSTRATIONS BELOW NOT TO SCALE

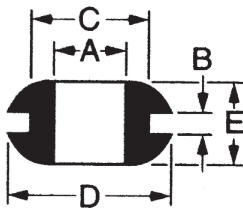
Rubber Grommets



Grommets - By "A" Dimension (continued)

Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E
11-252	1	1/4	1 3/8	1 3/4	5/8
11-253	1 1/64	1/8	1 17/64	1 33/64	3/8
11-254	1 1/8	1/16	1 1/2	1 7/8	3/8
11-255	1 1/8	3/32	1 3/8	*	1/4
11-256	1 5/16	1/16	1 5/8	2	3/8
11-257	1 5/16	1/8	1 5/8	2	7/16
11-258	1 1/2	1/16	1 3/4	2 1/8	7/16
11-259	1 1/2	1/8	1 3/4	2 1/8	1/2
11-260	1 1/2	3/16	1 3/4	2 1/8	9/16
11-261	1 1/2	1/4	1 3/4	2	1/2
11-262	1 1/2	1/4	1 3/4	2 1/8	5/8
11-263	1 5/8	1/16	1 11/16	1 7/8	3/8
11-264	2	1/32	2 1/2	3	9/32
11-265	2 1/8	1/16	2 1/2	2 7/8	7/16
11-266	2 1/8	1/8	2 1/2	2 7/8	7/16

Vinyl Grommets



Vinyl Grommets - By "C" Dimension

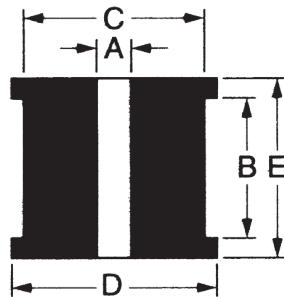
Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E
11-9000	1/8	1/16	1/4	11/32	3/16
11-9001	3/16	1/16	5/16	7/16	7/32
11-9002	1/4	1/16	3/8	9/16	1/4
11-9003	7/32	3/32	3/8	1/2	17/64
11-9004	5/16	1/16	7/16	5/8	1/4
11-9005	1/4	3/32	7/16	5/8	3/8
11-9006	3/8	1/16	1/2	5/8	1/4
11-9007	1/2	1/16	5/8	13/16	9/32
11-9008	3/8	1/16	5/8	7/8	3/16
11-9009	25/64	1/8	21/32	27/32	3/8
11-9010	9/16	1/16	11/16	15/16	5/16
11-9011**	5/16	1/32	13/16	1 X 1 1/4	1/4
11-9012	5/8	1/16	7/8	1 1/8	9/32
11-9013	11/16	1/16	1	1 5/16	3/8
11-9014	1	1/8	1 3/8	1 3/4	1/2

Vinyl:

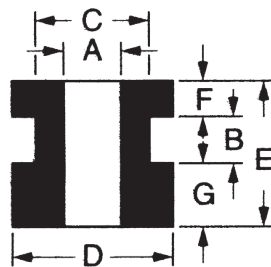
- Exceptional aging qualities
- High dielectric properties
- Oil Resistant
- Durometer hardness 60 shore "A"
- Cost less than rubber
- Custom colors available on special order, at special prices
- Will not stain most surfaces
- Excellent resistance to ozone and sunlight

**Offset grommet

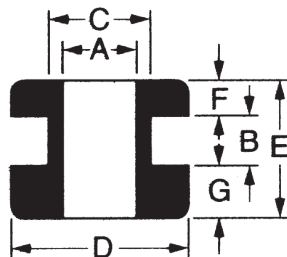
ILLUSTRATIONS BELOW NOT TO SCALE


60 Duro SBR Grommets - Plain Bore Square Shoulders

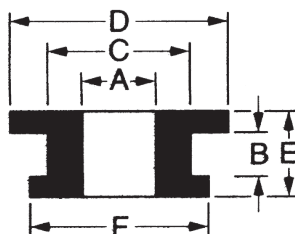
Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E	Shoulder Small Width F	Shoulder Large Width G
11-300	1/4	1/4	15/32	5/8	1/2	*	*
11-301	5/16	3/8	3/8	9/16	1/2	*	*
11-302	3/8	1/8	1/2	5/8	13/32	*	*
11-303	17/32	1/8	11/16	13/16	1/4	*	*
11-304	17/32	3/16	11/16	13/16	5/16	*	*
11-305	5/8	5/8	7/8	1 1/16	7/8	*	*
11-306	7/16	5/32	9/16	11/16	11/32	*	*


60 Duro SBR Grommets - Square Shoulders Unequal Width

Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E	Shoulder Small Width F	Shoulder Large Width G
11-307	7/32	1/4	5/8	7/8	25/32	3/16	11/32
11-308	1/4	3/32	15/32	49/64	19/64	3/32	7/64
11-309	5/16	1/16	15/32	45/64	1/2	1/16	3/8
11-310	9/16	3/16	31/32	1 7/16	21/32	3/16	9/32


60 Duro SBR Grommets - Round Shoulders Unequal Width

Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E	Shoulder Small Width F	Shoulder Large Width G
11-311	5/32	1/16	9/32	15/32	9/64	7/64	1/8
11-312	1/4	1/16	11/32	19/32	9/32	3/32	1/8
11-313	1/4	1/16	9/16	3/4	11/64	3/64	1/16
11-314	1/4	3/32	7/16	5/8	3/8	3/32	3/16


60 Duro SBR Grommets - Unequal Shoulder Diameter

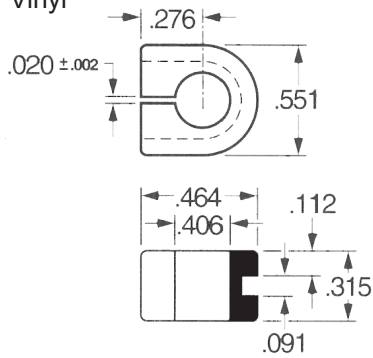
Part #	Bore Diameter A	Groove Width B	Groove Diameter C	Outside Diameter D	Overall Thickness E	Shoulder Small Diameter F	Shoulder Large Diameter G
11-315	1/2	3/32	1 3/8	1 7/8	1/4	1 5/8	
11-316	5/8	3/32	1 3/8	1 7/8	1/4	1 5/8	
11-317	1 1/8	3/32	1 3/8	1 7/8	1/4	1 5/8	

HORSE SHOE GROMMETS



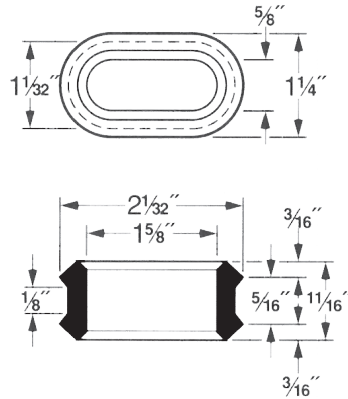
ILLUSTRATIONS BELOW NOT TO SCALE

11-9015
Vinyl

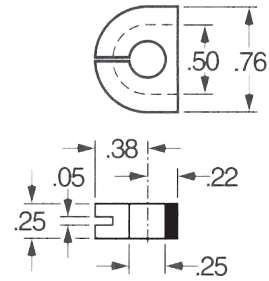


OBSOLETE

11-400

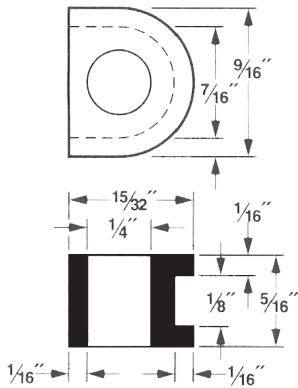


11-1655R

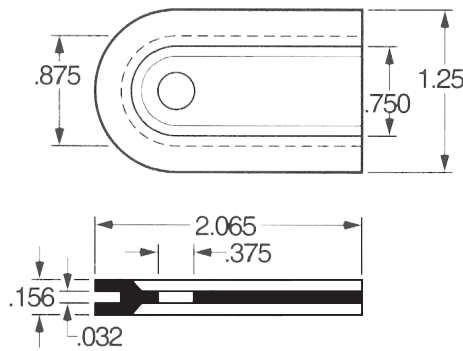


OBSOLETE

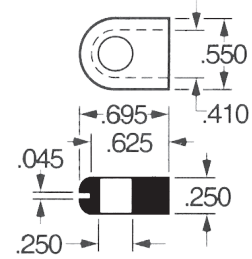
11-401



11-402



11-403



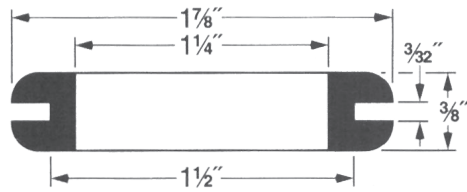
GROMMET APPLICATIONS

The primary use of a grommet is to facilitate wiring through a hole in metal or other rigid materials. The grommet snaps into a pre-determined hole, a wire or wire harness is passed through and is thus protected from the sharp edges of the panel.

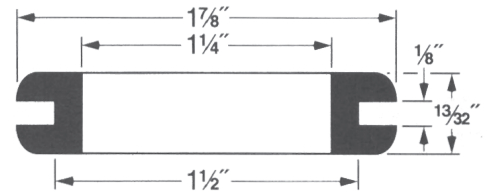
Grommets are also used as non-slip feet on the bottom of equipment, protective dampers between two pieces of metal, non-critical seals, and many other uses.

ILLUSTRATIONS BELOW NOT TO SCALE

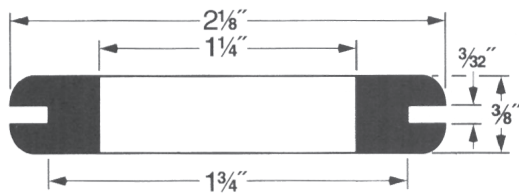
11-450



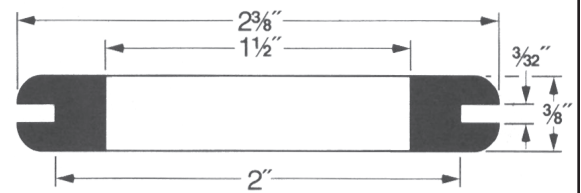
11-451



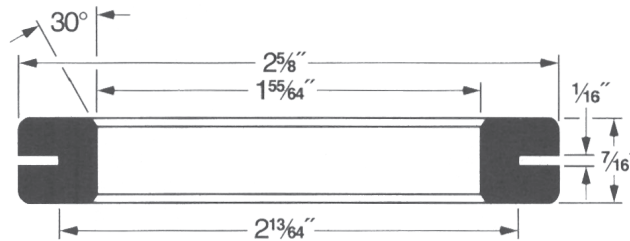
11-452



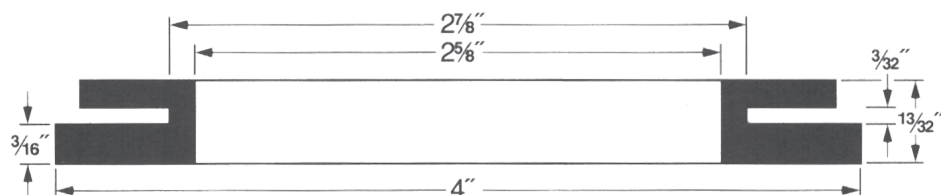
11-453



11-454

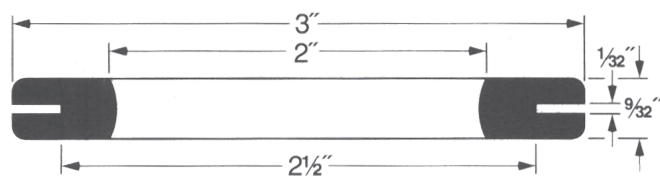


11-455

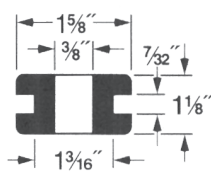
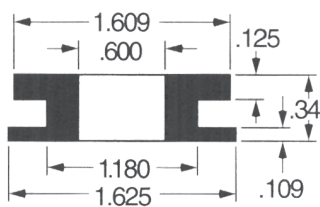
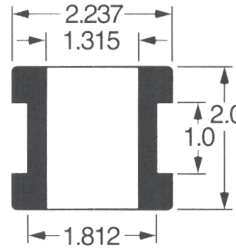
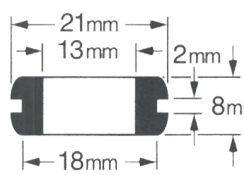
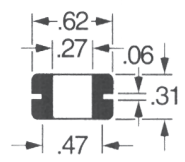
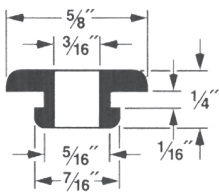
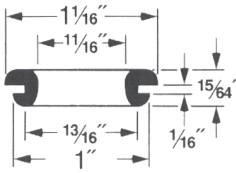
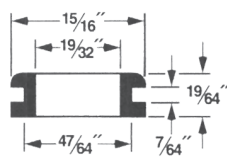
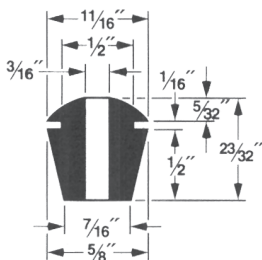
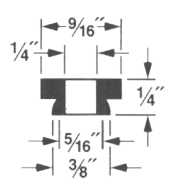
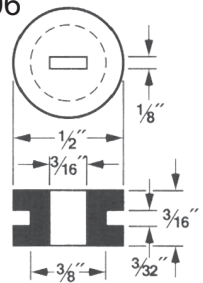
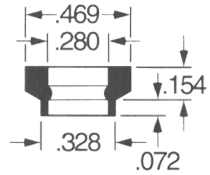
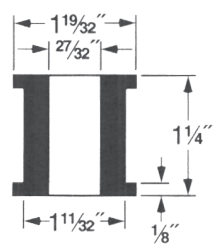
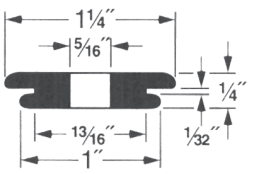
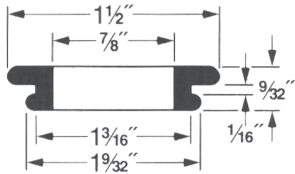
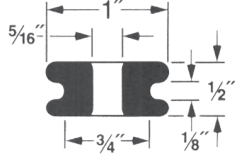
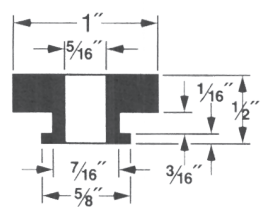
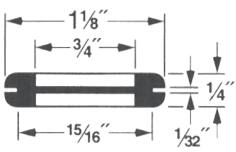
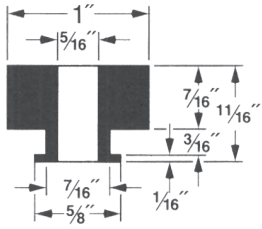
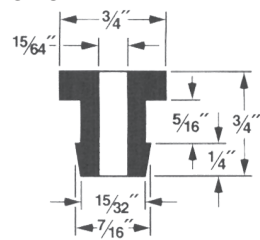


11-456

Chamfered Bore



ILLUSTRATIONS BELOW NOT TO SCALE

<p>11-5247R</p> 	<p>11-6711R</p> 	<p>11-5704R</p> 	<p>11-5821R</p> 
<p>11-5905R</p> 	<p>11-501</p> 	<p>11-502</p> 	<p>11-503</p> 
<p>11-504</p> 	<p>11-505</p> 	<p>11-506</p> 	<p>11-6836R</p> 
<p>11-5937R</p> 	<p>11-507</p> 	<p>11-508</p> 	<p>11-509</p> 
<p>11-510</p> 	<p>11-511</p> 	<p>11-512</p> 	<p>11-513</p> 

ILLUSTRATIONS BELOW NOT TO SCALE

<p>11-530</p>	<p>11-531</p>	<p>11-532</p>
<p>11-533</p>	<p>11-534</p>	<p>11-535</p>
<p>11-536</p>	<p>11-537</p>	<p>11-538</p>
<p>11-539</p>	<p>11-540</p>	<p>11-541</p>

<p>11-542</p>	<p>11-543</p>	<p>11-544</p>	<p>11-545</p>
---------------	---------------	---------------	---------------

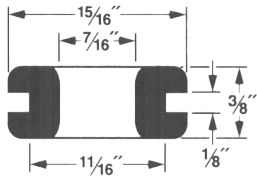
Longwood can custom-mold grommets to your specifications out of any material

MISCELLANEOUS GROMMETS

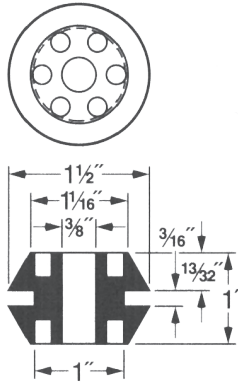


ILLUSTRATIONS BELOW NOT TO SCALE

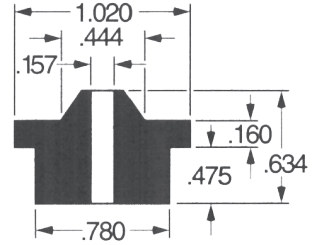
11-560



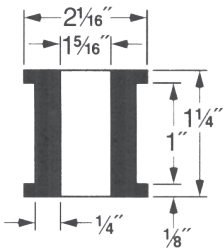
11-561



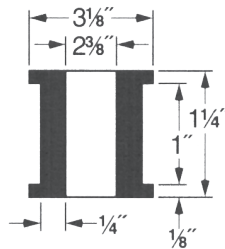
11-1776R



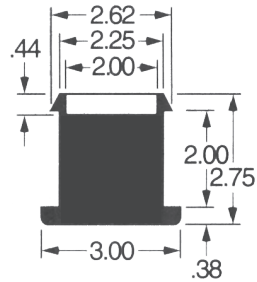
11-5118R



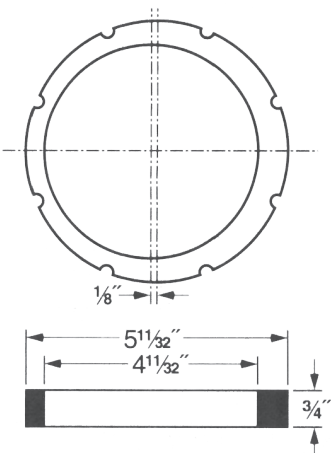
11-5124R



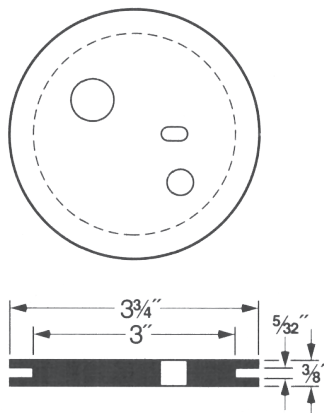
11-6253R



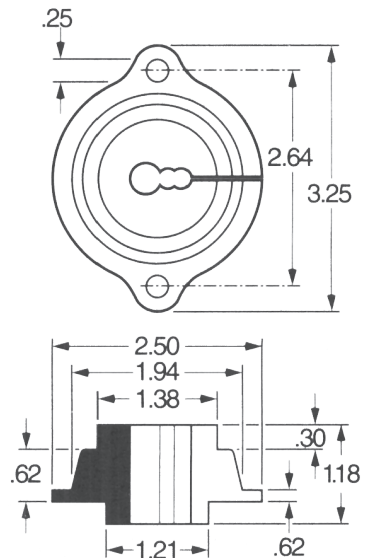
11-6584R



11-6816R



11-6191R



ILLUSTRATIONS BELOW NOT TO SCALE

<p>11-5669R</p>	<p>11-570</p>	<p>11-571</p>
<p>11-572</p>	<p>11-573</p>	<p>11-574</p>
<p>11-575</p>	<p>11-576</p>	<p>11-577 Split Web</p>
<p>11-578</p>	<p>11-579</p>	<p>11-580</p>

MILITARY GROMMETS



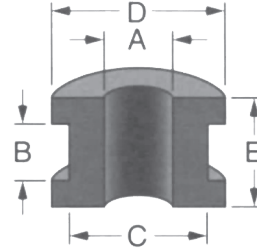
ILLUSTRATIONS BELOW NOT TO SCALE

MS-35489 Military Standard Grommets:

Supersedes AN-931. Rubber, hot-oil and coolant resistant material specification.

AN-931 Army-Navy Standard Grommets:

To procurement specification AN-G-21. Rubber, hot-oil and coolant resistant specification MIL-G-3036.



Military Grommets

Part #	MS35489	AN931	A Inside Diameter	B Groove Width	C Groove Diameter	D Outside Diameter	E Overall Thickness
11-104M	MS35489-1	—	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{4}$	$1\frac{1}{32}$	$\frac{3}{16}$
11-115M	MS35489-4	AN931-3-5	$\frac{3}{16}$	$\frac{1}{16}$	$\frac{5}{16}$	$\frac{7}{16}$	$\frac{3}{16}$
11-122M	MS35489-33	AN931-3-A-5	$\frac{3}{16}$	$\frac{1}{8}$	$\frac{5}{16}$	$\frac{7}{16}$	$\frac{1}{4}$
11-123M	MS35489-62	AN931-3-B-5	$\frac{3}{16}$	$\frac{3}{16}$	$\frac{5}{16}$	$\frac{7}{16}$	$\frac{5}{16}$
11-125M	MS35489-91	AN931-3-C-5	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{7}{16}$	$\frac{3}{8}$
11-119M	MS35489-134	AN931-3-9	$\frac{3}{16}$	$\frac{1}{16}$	$\frac{9}{16}$	$\frac{3}{4}$	$\frac{3}{16}$
11-580M	MS35489-34	AN931-3-A-10	$\frac{3}{16}$	$\frac{1}{8}$	$\frac{5}{8}$	$\frac{7}{8}$	$\frac{1}{4}$
11-136M	MS35489-6	AN931-4-7	$\frac{1}{4}$	$\frac{1}{16}$	$\frac{7}{16}$	$\frac{5}{8}$	$\frac{3}{16}$
11-145M	MS35489-35	AN931-4-A-7	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{7}{16}$	$\frac{5}{8}$	$\frac{1}{4}$
11-146M	MS35489-64	AN931-4-B-7	$\frac{1}{4}$	$\frac{3}{16}$	$\frac{7}{16}$	$\frac{5}{8}$	$\frac{5}{16}$
11-148M	MS35489-93	AN931-4-C-7	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{7}{16}$	$\frac{5}{8}$	$\frac{3}{8}$
11-139M	MS35489-8	AN931-4-16	$\frac{1}{4}$	$\frac{1}{16}$	1	1 $\frac{1}{4}$	$\frac{1}{4}$
11-156M	MS35489-9	AN931-5-9	$\frac{5}{16}$	$\frac{1}{16}$	$\frac{9}{16}$	$1\frac{3}{16}$	$\frac{5}{16}$
11-160M	MS35489-38	AN931-5-A-9	$\frac{5}{16}$	$\frac{1}{8}$	$\frac{9}{16}$	$1\frac{3}{16}$	$\frac{3}{8}$
11-166M	MS35489-67	AN931-5-B-9	$\frac{5}{16}$	$\frac{3}{16}$	$\frac{9}{16}$	$1\frac{3}{16}$	$\frac{7}{16}$
11-169M	MS35489-96	AN931-5-C-9	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{9}{16}$	$1\frac{3}{16}$	$\frac{1}{2}$
11-157M	MS35489-10	AN931-5-12	$\frac{5}{16}$	$\frac{1}{16}$	$\frac{3}{4}$	1	$\frac{5}{16}$
11-161M	MS35489-39	AN931-5-A-12	$\frac{5}{16}$	$\frac{1}{8}$	$\frac{3}{4}$	1	$\frac{3}{8}$
11-167M	MS35489-68	AN931-5-B-12	$\frac{5}{16}$	$\frac{3}{16}$	$\frac{3}{4}$	1	$\frac{7}{16}$
11-170M	MS35489-97	AN931-5-C-12	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{3}{4}$	1	$\frac{1}{2}$
11-174M	MS35489-11	AN931-6-10	$\frac{3}{8}$	$\frac{1}{16}$	$\frac{5}{8}$	$\frac{7}{8}$	$\frac{5}{16}$
11-178M	MS35489-40	AN931-6-A-10	$\frac{3}{8}$	$\frac{1}{8}$	$\frac{5}{8}$	$\frac{7}{8}$	$\frac{3}{8}$
11-180M	MS35489-69	AN931-6-B-10	$\frac{3}{8}$	$\frac{3}{16}$	$\frac{5}{8}$	$\frac{7}{8}$	$\frac{7}{16}$
11-175M	MS35489-12	AN931-6-16	$\frac{3}{8}$	$\frac{1}{16}$	1	1 $\frac{1}{4}$	$\frac{1}{4}$
11-184M	MS35489-13	AN931-7-11	$\frac{7}{16}$	$\frac{1}{16}$	$1\frac{1}{16}$	$1\frac{5}{16}$	$\frac{5}{16}$
11-185M	MS35489-42	AN931-7-A-11	$\frac{7}{16}$	$\frac{1}{8}$	$1\frac{1}{16}$	$1\frac{5}{16}$	$\frac{3}{8}$
11-189M	MS35489-100	AN931-7-C-11	$\frac{7}{16}$	$\frac{1}{4}$	$1\frac{1}{16}$	$1\frac{5}{16}$	$\frac{1}{2}$

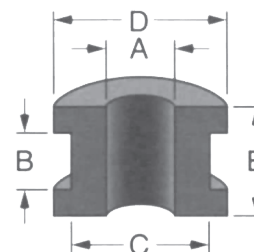
ILLUSTRATIONS BELOW NOT TO SCALE

MS-35489 Military Standard Grommets:

Supersedes AN-931. Rubber, hot-oil and coolant resistant material specification.

AN-931 Army-Navy Standard Grommets:

To procurement specification AN-G-21. Rubber, hot-oil and coolant resistant specification MIL-G-3036.



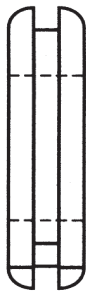
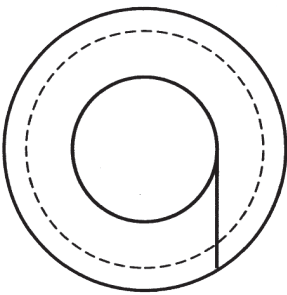
Military Grommets							
Part #	MS35489	AN931	A Inside Diameter	B Groove Width	C Groove Diameter	D Outside Diameter	E Overall Thickness
11-190M	MS35489-14	AN931-8-13	1/2	1/16	13/16	1 1/16	5/16
11-198M	MS35489-43	AN931-8-A-13	1/2	1/8	13/16	1 1/16	3/8
11-200M	MS35489-101	AN931-8-C-13	1/2	1/4	13/16	1 1/16	1/2
11-192M	MS35489-15	AN931-8-20	1/2	1/16	1 1/4	1 1/2	1/4
11-205M	MS35489-16	AN931-9-13	9/16	1/16	13/16	1 1/16	5/16
11-206M	MS35489-74	AN931-9-B-13	9/16	3/16	13/16	1 1/16	7/16
11-212M	MS35489-17	AN931-10-14	5/8	1/16	7/8	1 1/8	5/16
11-215M	MS35489-46	AN931-10-A-14	5/8	1/8	7/8	1 1/8	3/8
11-216M	MS35489-75	AN931-10-B-14	5/8	3/16	7/8	1 1/8	7/16
11-217M	MS35489-104	AN931-10-C-14	5/8	1/4	7/8	1 1/8	1/2
11-213M	MS35489-18	AN931-10-20	5/8	1/16	1 1/4	1 1/2	1/4
11-224M	MS35489-48	AN931-11-A-16	11/16	1/8	1	1 5/16	7/16
11-226M	MS35489-106	AN931-11-C-16	11/16	1/4	1	1 5/16	9/16
11-230M	MS35489-20	AN931-12-17	3/4	1/16	1 1/16	1 3/8	3/8
11-233M	MS35489-49	AN931-12-A-17	3/4	1/8	1 1/16	1 3/8	7/16
11-235M	MS35489-107	AN931-12-C-17	3/4	1/4	1 1/16	1 3/8	9/16
11-231M	MS35489-135	AN931-12-20	3/4	1/16	1 1/4	1 5/8	1/4
11-239M	MS35489-22	AN931-14-20	7/8	1/16	1 1/4	1 5/8	7/16
11-242M	MS35489-51	AN931-14-A-20	7/8	1/8	1 1/4	1 5/8	1/2
11-246M	MS35489-109	AN931-14-C-20	7/8	1/4	1 1/4	1 5/8	5/8
11-248M	MS35489-23	AN931-16-22	1	1/16	1 3/8	1 3/4	7/16
11-249M	MS35489-52	AN931-16-A-22	1	1/8	1 3/8	1 3/4	1/2
11-252M	MS35489-110	AN931-16-C-22	1	1/4	1 3/8	1 3/4	5/8
11-258M	MS35489-27	AN931-24-28	1 1/2	1/16	1 3/4	2 1/8	7/16
11-259M	MS35489-56	AN931-24-A-28	1 1/2	1/8	1 3/4	2 1/8	1/2
11-262M	MS35489-114	AN931-24-C-28	1 1/2	1/4	1 3/4	2 1/8	5/8

SPECIAL GROMMETS

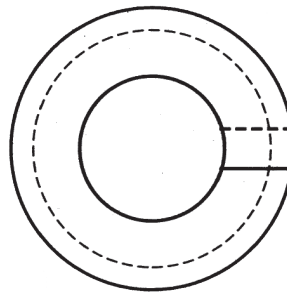


ILLUSTRATIONS BELOW NOT TO SCALE

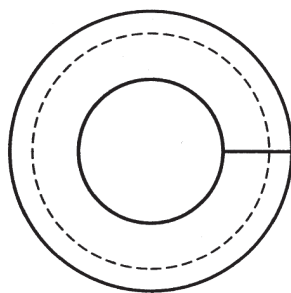
Longwood can mold grommets out of special elastomers or fabricate them by slitting in our fabrication shop!



TANGENT SPLIT



DIAGONAL SPLIT



STRAIGHT SPLIT

1-800-829-7231 phone

336-272-5619 fax