

Abrasion Protection

Panduit® abrasion protection products provide an economical and easy way to insulate, protect, bundle and color-code components and cable. A wide variety of sizes and materials are available to meet a broad range of indoor and outdoor applications. To help assure optimum quality, Panduit abrasion protection products are designed and manufactured to meet applicable quality standards including International, UL, Military, ISO, and Aerospace.



- **Pan-Wrap™ Split Harness Wrap features a patented slot pattern to improve flexibility and abrasion protection**
- **Spiral wrap bundles and protects wire and cable while providing the largest variety of colors, materials, and sizes to meet a variety of needs**
- **Grommet edging protects wire and cable from damage caused by sharp panel edges**
- **Heat shrink is available in many different materials and sizes to meet a variety of needs**
- **Corrugated loom tubing is crush, impact, and abrasion resistant to reduce the risk of damage to wire and cable**
- **Braided expandable sleeving provides continuous abrasion resistance and lightweight durable protection, with a flexible open weave that will not trap heat or humidity**

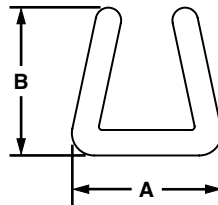
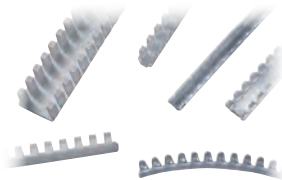
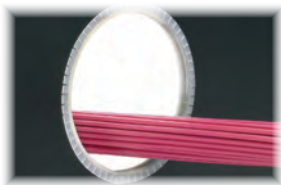
Panduit abrasion protection products provide quality at the lowest installed cost. With a continued focus on new product development, Panduit continues to meet customer needs.

Part Number System for Grommet Edging

<u>GEE</u>	<u>36</u>	<u>F</u>	<u>—</u>	<u>A</u>	<u>—</u>	<u>C</u>	<u>0</u>
Type	Max. Panel Thickness	Material		Adhesive		Package Size	Color Suffix
GE = Grommet Edging Strips	36 = 0.036" thickness	F = Polyethylene		A = Adhesive Lined		Q = 25'	0 = Weather Resistant Black
GEE = Slotted Grommet Edging	62 = 0.062" thickness	N = Nylon 6.6		Leave Blank = Non-Adhesive		L = 50'	Leave Blank = Natural
GES = Solid Grommet Edging	99 = 0.099" thickness	FR = Flame Retardant Polyethylene				C = 100'	
	144 = 0.144" thickness						
	189 = 0.189" thickness						

Grommet Edging

- Use slotted product on irregularly shaped and round panel holes
- Solid product is used only on straight edges
- Provided in 0.030" (0.8mm) thick material making it highly flexible
- UL File: E351393 (Nylon Materials is not UL Recognized)
- Adhesive Lined Grommet Edging: 3 year shelf life



Part Number	Width A		Height B		Panel Thickness Range		Material	Color	Temperature Range	Std. Pkg. Qty.‡
	In.	mm	In.	mm	In.	mm				
Slotted										
GEE36F-C	0.11	2.7	0.12	3.0	0.026 – 0.036	0.7 – 0.9	Polyethylene	Natural	-40°F – 122°F (-40°C – 50°C)	1
GEE36F-C0	0.11	2.7	0.12	3.0	0.026 – 0.036	0.7 – 0.9	Weather Resistant Polyethylene	Black		1
GEE62F-C	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Polyethylene	Natural		1
GEE62F-C0	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Weather Resistant Polyethylene	Black		1
GEE99F-C	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Polyethylene	Natural		1
GEE99F-C0	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Weather Resistant Polyethylene	Black		1
GEE144F-C	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Polyethylene	Natural		1
GEE144F-C0	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Weather Resistant Polyethylene	Black		1

‡Reel packaging may contain splices. Contact Panduit Customer Service for further information. Natural color can range from opaque to clear.

Continues on next page

Grommet Edging (continued)

Part Number	Width A		Height B		Panel Thickness Range		Material	Color	Temperature Range	Std. Pkg. Qty. ‡
	In.	mm	In.	mm	In.	mm				
Solid Flame Retardant – Used on straight edges only										
GES36FR-CY	0.11	2.7	0.12	3.0	0.026 – 0.036	0.7 – 0.9	Flame Retardant Polyethylene	Natural	-4°F – 122°F (-20°C – 50°C)	1
GES62FR-CY	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Flame Retardant Polyethylene	Natural		1
GES99FR-CY	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Flame Retardant Polyethylene	Natural		1
GES144FR-CY	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Flame Retardant Polyethylene	Natural		1

Slotted Nylon

GEE47N-C	0.13	3.2	0.14	3.6	0.039 – 0.055	1.0 – 1.4	Nylon 6	Natural	-40°F – 149°F (-40°C – 65°C)	1
GEE55N-C	0.13	3.4	0.14	3.6	0.047 – 0.063	1.2 – 1.6	Nylon 6	Natural		1
GEE71N-C	0.15	3.8	0.14	3.6	0.063 – 0.079	1.6 – 2.0	Nylon 6	Natural		1
GEE98N-C	0.18	4.6	0.14	3.6	0.091 – 0.106	2.3 – 2.7	Nylon 6	Natural		1
GEE134N-C	0.21	5.3	0.14	3.6	0.126 – 0.142	3.2 – 3.6	Nylon 6	Natural		1

National Aerospace Standard** NAMS21266 in 12.75" Lengths

GE52-C	0.15	3.8	0.16	3.9	0.015 – 0.052	0.4 – 1.3	Nylon 6.6	Natural	-40°F – 149°F (-40°C – 65°C)	100
GE52-C69*	0.15	3.8	0.16	3.9	0.015 – 0.052	0.4 – 1.3	Flame Retardant Nylon 6.6	Natural	-40°F – 212°F (-40°C – 100°C)	100
GE85-C	0.18	4.5	0.16	3.9	0.052 – 0.085	1.3 – 2.2	Nylon 6.6	Natural	-40°F – 149°F (-40°C – 65°C)	100
GE85-C69*	0.18	4.5	0.16	3.9	0.052 – 0.085	1.3 – 2.2	Flame Retardant Nylon 6.6	Natural	-40°F – 212°F (-40°C – 100°C)	100
GE128-C	0.22	5.6	0.16	3.9	0.085 – 0.128	2.2 – 3.3	Nylon 6.6	Natural	-40°F – 149°F (-40°C – 65°C)	100
GE128-C69*	0.22	5.6	0.16	3.9	0.085 – 0.128	2.2 – 3.3	Flame Retardant Nylon 6.6	Natural	-40°F – 212°F (-40°C – 100°C)	100
GE192-L	0.33	8.3	0.23	5.8	0.128 – 0.192	3.3 – 4.9	Nylon 6.6	Natural	-40°F – 149°F (-40°C – 65°C)	50
GE192-L69*	0.33	8.3	0.23	5.8	0.128 – 0.192	3.3 – 4.9	Flame Retardant Nylon 6.6	Natural	-40°F – 212°F (-40°C – 100°C)	50
GE255-L	0.39	9.8	0.24	6.1	0.192 – 0.255	4.9 – 6.5	Nylon 6.6	Natural	-40°F – 149°F (-40°C – 65°C)	50
GE318-L	0.46	11.3	0.26	6.5	0.255 – 0.318	6.5 – 8.1	Nylon 6.6	Natural		50
GE380-Q	0.52	13.1	0.26	6.5	0.318 – 0.380	8.1 – 9.7	Nylon 6.6	Natural		25
GE510-Q	0.64	16.3	0.26	6.5	0.380 – 0.510	9.7 – 13.0	Nylon 6.6	Natural		25

‡Reel packaging may contain splices. Contact Panduit Customer Service for further information.

*This material is not specified under NAMS21266

**Formerly Military Standard MS21266