

A. System Overview

Part Number System for Grommet Edging

B1. Cable Ties

GEE

36

F

-

A

-

C

0

B2. Cable Accessories

Type

Max. Panel Thickness

Material

Adhesive

Package Size

Color Suffix

GE = Grommet Edging Strips
 36 = 0.036" thickness
 62 = 0.062" thickness
 GEE = Slotted Grommet Edging
 99 = 0.099" thickness
 GES = Solid Grommet Edging
 144 = 0.144" thickness
 189 = 0.189" thickness

F = Polyethylene
 N = Nylon 6.6
 FR = Flame Retardant Polyethylene

A = Adhesive Lined
 Leave Blank = Non-Adhesive

Q = 25'
 L = 50'
 C = 100'

0 = Weather Resistant Black
 Leave Blank = Natural

B3. Stainless Steel Ties

C1. Wiring Duct

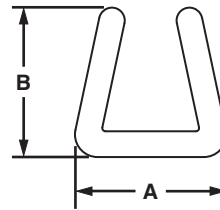
C2. Surface Raceway

C3. Abrasion Protection

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

C4. Cable Management



D1. Terminals

D2. Power Connectors

D3. Grounding Connectors

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.

E5. Lockout/Tagout & Safety Solutions

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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 – Use on straight edges only										
GES36F-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
GES36F-C0	0.11	2.7	0.12	3.0	0.026 – 0.036	0.7 – 0.9	Weather Resistant Polyethylene	Black		1
GES62F-C	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Polyethylene	Natural		1
GES62F-C0	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Weather Resistant Polyethylene	Black		1
GES99F-C	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Polyethylene	Natural		1
GES99F-C0	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Weather Resistant Polyethylene	Black		1
GES144F-C	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Polyethylene	Natural		1
GES144F-C0	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Weather Resistant Polyethylene	Black		1
GES189F-C	0.30	7.6	0.30	7.6	0.144 – 0.189	3.7 – 4.8	Polyethylene	Natural		1
GES189F-C0	0.30	7.6	0.30	7.6	0.144 – 0.189	3.7 – 4.8	Weather Resistant Polyethylene	Black		1
Slotted Adhesive Lined										
GEE62F-A-C	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Polyethylene	Natural	-40°F – 122°F (-40°C – 50°C)	1
GEE62F-A-C0	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Weather Resistant Polyethylene	Black		1
GEE99F-A-C	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Polyethylene	Natural		1
GEE99F-A-C0	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Weather Resistant Polyethylene	Black		1
GEE144F-A-C	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Polyethylene	Natural		1
GEE144F-A-C0	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Weather Resistant Polyethylene	Black		1
Solid Adhesive Lined – Use on straight edges only										
GES62F-A-C	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Polyethylene	Natural	-40°F – 122°F (-40°C – 50°C)	1
GES62F-A-C0	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Weather Resistant Polyethylene	Black		1
GES99F-A-C	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Polyethylene	Natural		1
GES99F-A-C0	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Weather Resistant Polyethylene	Black		1
GES144F-A-C	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Polyethylene	Natural		1
GES144F-A-C0	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Weather Resistant Polyethylene	Black		1
Slotted Flame Retardant										
GEE36FR-CY	0.11	2.7	0.12	3.0	0.026 – 0.036	0.7 – 0.9	Flame Retardant Polyethylene	Natural	-4°F – 167°F (-20°C – 75°C)	1
GEE62FR-CY	0.13	3.3	0.16	4.1	0.036 – 0.062	0.9 – 1.6	Flame Retardant Polyethylene	Natural		1
GEE99FR-CY	0.17	4.3	0.19	4.7	0.062 – 0.099	1.6 – 2.5	Flame Retardant Polyethylene	Natural		1
GEE144FR-CY	0.21	5.4	0.22	5.6	0.099 – 0.144	2.5 – 3.7	Flame Retardant Polyethylene	Natural		1

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

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A.
System
Overview

Grommet Edging (continued)

B1.
Cable Ties

Part Number	Width A		Height B		Panel Thickness Range		Material	Color	Temperature Range	Std. Pkg. Qty.‡
	In.	mm	In.	mm	In.	mm				

B2.
Cable
Accessories

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 – 167°F (-20°C – 75°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

B3.
Stainless
Steel Ties

C1.
Wiring
Duct

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

C2.
Surface
Raceway

C3.
Abrasion
Protection

C4.
Cable
Management

Military Standard MS21266 in 12 3/4" 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		100
GE85-C	0.18	4.5	0.16	3.9	0.052 – 0.085	1.3 – 2.2	Nylon 6.6	Natural		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		100
GE128-C	0.22	5.6	0.16	3.9	0.085 – 0.128	2.2 – 3.3	Nylon 6.6	Natural		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		100
GE192-L	0.33	8.3	0.23	5.8	0.128 – 0.192	3.3 – 4.9	Nylon 6.6	Natural		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		50
GE255-L	0.39	9.8	0.24	6.1	0.192 – 0.255	4.9 – 6.5	Nylon 6.6	Natural		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 listed under Military Standard MS21266.

E4.
Permanent
Identification

E5.
Lockout/
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& Safety
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Abrasion Protection Materials Technical Data

	Ratings and Approvals			Physical Properties				Chemical Resistance					
	UL Temperature Index	Flammability (UL 94)	Melting Temperature	Abrasion Resistance (Lower number is better)	Specific Gravity (D792)	Minimum Tensile @23°C (psi) (D368)	Water Absorption (Max. 24 hrs.)	Organic Solvents	Alkalies	Acids	Petro-Chemicals		
SPIRAL WRAP	Natural Polyethylene Lowest cost material for indoor use up to 122°F. Natural is available in all sizes.	-40°F (-40°C) to 122°F (50°C)	HB	239°F (115°C)	22 mg	0.91 – 0.93	1400 (D368)	0.01%	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	Some Discoloration	
	Weather Resistant Polyethylene This material has the same properties as natural polyethylene, and also has additives which allow it to resist the effects of ultraviolet light and acid rain in an outdoor environment. This product is available in black only.	-40°F (-40°C) to 122°F (50°C)	HB	239°F (115°C)	20 mg	0.93 – 1.09	2000 (D368)	0.03%	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	No Discoloration	
	Fire Resistant Polyethylene* UL94-V-2 Rating. This material is self extinguishing and passes the UL 94 flame retardant test with V-2 rating.	-40°F (-40°C) to 122°F (50°C)	V-2	239°F (115°C)	27 mg	1.00 – 1.30	1400 (D368)	0.02%	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	Some Discoloration	
	Flame Retardant Polyethylene* UL94-V-0 Rating. This material is self extinguishing and passes the UL94 flame retardant test with a V-0 rating.	-4°F (-20°C) to 167°F (75°C)	V-0	270°F (132°C)	22 mg	1.23 – 1.37	1500 (D368)	0.02%	Resistant except to halogenated hydrocarbons	Resistant	Resistant	Resistant Some Discoloration	
	Weather Resistant Polypropylene This material is resistant to chemical attack and is suitable for harsh environment applications requiring UV/weather resistance and withstanding high temperatures.	-40°F (-40°C) to 239°F (115°C)	HB	334°F (168°C)	—	0.902	4000 (D638)	0.1%	Resistant except to halogenated hydrocarbons	Resistant	Resistant	Resistant No Discoloration	
	Nylon 6.6 Nylon is strong, durable material for indoor use up to 149°F. It offers a combination of lightweight, wide temperature range, and high abrasion resistance. This material is suitable for applications where heavy vibration or stress exists on the wiring or tubing.	-40°F (-40°C) to 149°F (65°C)	HB	505°F (263°C)	7 mg	1.13 – 1.15	12,400 (D368)	1.2%	Resistant except to halogenated hydrocarbons	Resistant	Not recommended	Resistant No Discoloration	
	Weather Resistant Nylon 6.6 This material has the same properties as natural Nylon and also has additives which allow it to resist the effects of ultraviolet light in an outdoor environment. This product is available in black only.	-40°F (-40°C) to 149°F (65°C)	HB	505°F (263°C)	7 mg	1.13 – 1.15	12,400 (D368)	1.2%	Resistant except to halogenated hydrocarbons	Resistant	Not recommended	Resistant No Discoloration	
	TFE† This material is a non-flammable, fluorocarbon resin material. Suitable for use in any application (including nuclear containment). It is rated up to 356°F. Color: Opaque to Translucent.	-40°F (-40°C) to 500°F (260°C)	V-0	648°F (342°C)	7 mg	2.13 – 2.22	3000 (D876)	0.01%	Resistant	Resistant	Resistant	Resistant No Discoloration	
	PAN-WRAP™	Natural Polyethylene Lowest cost material for indoor use up to 122°C. Natural is available in all sizes.	-40°F (-40°C) to 122°F (50°C)	HB	239°F (115°C)	22 mg	0.91 – 0.93	1400 (D638)	0.01%	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	Some Discoloration
		Flame Retardant Polyethylene* UL94-V-0 Rating. This material is self extinguishing and passes the UL94 flame retardant test with a V-0 rating.	-4°F (-20°C) to 167°F (75°C)	V-0	270°F (132°C)	22 mg	1.15	1500 (D876)	0.02%	Resistant except to halogenated hydrocarbons	Resistant	Resistant	Resistant Some Discoloration

Note: Typical operating temperature ranges are extended based on end use application and specific environment tests.

†TFE is Polytetrafluoroethylene material.

*Contains halogens. Other materials are halogen free.

Abrasion Protection Materials Technical Data (continued)

	Ratings and Approvals			Physical Properties				Chemical Resistance			
	UL Temperature Index	Flammability (UL 94)	Melting Temperature	Abrasion Resistance (Lower number is better)	Specific Gravity (D792)	Minimum Tensile @ 23°C (psi)	Water Absorption (Max. 24 hrs.)	Organic Solvents	Alkalies	Acids	Petro-Chemicals
SLEEVING	Polyethylene Terephthalate (PET) This material is a thermoplastic polyester material designed for indoor applications. It is rated for use up to 257°F and will tolerate short-term exposure up to 446°F. Colors: Black, White and Gray.	HB	500°F (260°C)	—	1.39	100,000 (D876)	0.08%	Resistant to some solvents	Resistant to most weak bases	Resistant	Some Discoloration
	Flame Retardant Polyethylene* Terephthalate (PET) This material is a self-extinguishing thermoplastic polyester that can be used indoors. It is also rated for use up to 257°F and will tolerate short term exposure up to 446°F. It is provided with tracers to identify the flame retardant material.	UL 1441 VW-1	469°F (243°C)	—	1.39	39,295 (D876)	0.08%	Resistant to some solvents	Resistant to most weak bases	Resistant	Resistant Some Discoloration
CLT	Black Polypropylene Lowest cost material is for use up to 122°F. Other colors may be available.	HB	—	—	0.926 – 0.940	1500 (D638)	—	Resistant except to halogenated hydrocarbons	Resistant	Resistant	Resistant No Discoloration
	Nylon 6 Nylon is a strong, impact modified, heat stabilized, durable high abrasion resistant material.	HB	410°F (211°C)	—	1.06 – 1.16	8000 (D638)	—	Resistant except to halogenated hydrocarbons	Resistant	Not recommended	Resistant No Discoloration
PVC	PVC Non-Shrink Tubing* This material provides insulation and protection for continuous use at temperature -4°F (-20°C) to 221°F (105°C).	UL 224 VW-1	—	—	1.35	2500 (D876)	—	Resistant except to aromatic hydrocarbons, ketones and esters	Resistant	Resistant	Resistant No Discoloration
CLT FITTINGS	Black Polyethylene Lowest cost material is for use up to 122°F. Other colors may be available.	UL94 HB	—	—	1.04	3,900 (D638)	0.02 – 0.03%	Resistant except to halogenated hydrocarbons	Resistant	Resistant except to oxidizing acids	Resistant Some Discoloration
	Natural Polyethylene Lowest cost material for indoor use up to 122° F. Natural is available in all sizes.	HB	239°F (115°C)	22 mg	0.91 – 1.09	1400 (D638)	—	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	Some Discoloration
GROMMET EDGING	Weather Resistant Polyethylene This material has the same properties as natural polyethylene, and also has additives which allow it to resist the effects of ultraviolet light and acid rain in an outdoor environment. This product is available in black only.	HB	239°F (115°C)	20 mg	0.93 – 1.09	2000 (D638)	0.03%	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	No Discoloration
	Flame Retardant Polyethylene* UL94-V-0 Rating This material is self-extinguishing and passes the UL94 flame retardant test with a V-0 rating.	V-0	270°F (132°C)	22 mg	1.23 – 1.37	1200	0.02%	Resistant below 194°F (90°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	Some Discoloration
	Nylon Nylon is strong, durable, self-extinguishing material for indoor use up to 149°F. It offers a combination of lightweight, wide temperature range, and high abrasion resistance. This material is suitable for applications where heavy vibration or stress exists on the wiring or tubing.	V-2	491°F (255°C)	7 mg	1.03 – 1.15	12,400 (D638)	1.5%	Resistant except to phenols and formic acid	Resistant	Resistant to most weak acids	No Discoloration

Note: Typical operating temperature ranges are extended based on end use application and specific environment tests.

*Contains halogens. Other materials are halogen free.

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B2. Cable Accessories

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