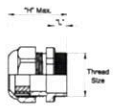
CABLE GLANDS & PANEL HOLE PLUGS

CG-M
Cable Gland – Metric Thread



Specifications:
- Material: Body and Nut: UL94 V-2 Nylon 6
  Sealing Gland: CR / NBR
  O-Ring: NBR
- Color: Black
- Material: Optional CGLN Locking Nut:
  UL94 V-2 Glass Filled Nylon 6
- Color: Black

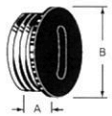
Features:
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no Sealing Washer is needed for smaller sizes to meet IP68 rating
- Two Sealing Glands are included with all but the M12 thread. Remove the inner sealing gland for larger cable diameters

Optional Parts

Locking Nuts							
Item No.	Thread Size	Across Flats In	Across Flats mm	Thickness In	Thickness mm	Pack Qty.	Bulk Pack Qty.
CGLN-M12-BK	M12	0.339	17.0	0.197	5.0	1	100
CGLN-M16-BK	M16	0.866	22.0	0.197	5.0	1	100
CGLN-M20-BK	M20	1.063	27.0	0.236	6.0	1	100
CGLN-M25-BK	M25	1.260	32.0	0.236	6.0	1	100
CGLN-M32-BK	M32	1.614	41.0	0.276	7.0	1	100
CGLN-M40-BK	M40	1.969	50.0	0.276	7.0	1	50

Item No.	UL Approval	Cable Ø Range Min In	Cable Ø Range Min mm	Cable Ø Range Max In	Cable Ø Range Max mm	Thread Size	Mounting Hole In	Mounting Hole mm	L In	L mm	SW-1 In	SW-1 mm	H Max Ref. In	H Max Ref. mm	Pack Qty.	Bulk Pack Qty.
CG-M12-1-BK	UL	0.079	2.0	0.197	5.0	M12	0.480	12.2	0.315	8.0	0.591	15.0	1.220	31.0	1	100
CG-M16-1-BK	UL	0.118	3.0	0.394	10.0	M16	0.638	16.2	0.315	8.0	0.787	20.0	1.398	35.5	1	100
CG-M20-1-BK	UL	0.197	5.0	0.512	13.0	M20	0.795	20.2	0.315	8.0	0.945	24.0	1.417	36.0	1	100
CG-M25-1-BK	UL	0.315	8.0	0.669	17.0	M25	0.992	25.2	0.315	8.0	1.142	29.0	1.623	43.0	1	50
CG-M32-1-BK	UL	0.472	12	0.827	21.0	M32	1.268	32.2	0.394	10.0	1.417	36.0	1.968	50.0	1	25
CG-M40-1-BK	UL	0.630	16	1.102	28.0	M40	1.583	40.2	0.394	10.0	1.811	46.0	2.008	51.0	1	10

TBP
Metric & PG Threaded Blind Plug



Item No.	Thread Size	A In	A mm	B Ø In	B Ø mm	Bulk Pack Qty.	Optional: LockNuts
TBP02A	M12 x 1.5	0.256	6.50	0.630	16.00	100	LNM100B
TBP04A	M16 x 1.5	0.315	8.00	0.787	20.00	100	LNM200B
TBP06A	M20 x 1.5	0.315	8.00	0.984	25.00	100	LNM300B
TBP08A	M25 x 1.5	0.335	8.50	1.181	30.00	100	LNM400B
TBP10A	M32 x 1.5	0.394	10.00	1.496	38.00	50	LNM500B
TBP12A	M40 x 1.5	0.512	13.00	1.850	47.00	50	—
TBP14A	M50 x 1.5	0.551	14.00	2.244	57.00	10	—
TBP16A	M63 x 1.5	0.591	15.00	2.756	70.00	10	—
TBP50A	PG7	0.256	6.50	0.630	16.00	100	LNPG100B
TBP52A	PG9	0.256	6.50	0.748	19.00	100	LNPG200B
TBP54A	PG11	0.256	6.50	0.886	22.50	100	LNPG300B
TBP56A	PG13.5	0.276	7.00	0.992	25.20	100	LNPG400B
TBP58A	PG16	0.315	8.00	1.083	27.50	100	LNPG500B
TBP60A	PG21	0.354	9.00	1.339	34.00	100	LNPG600B
TBP62A	PG29	0.335	8.50	1.756	44.60	50	LNPG700B
TBP64A	PG36	0.433	11.00	2.165	55.00	50	—

Specifications:
- Material: UL94 V-2 Nylon 6/6
  Color: Black
- Temperature Range: Working -40°F to 221°F (-40°C to 105°C) Intermittent up to 300°F (149°C)

Features:
- Used to give water tight protection to spare holes that need to be closed off
- Optional: Use locknuts for closing holes without a thread

Optional Parts

Locking Nuts				
Item No.	Thread Size	Across Flats In	Across Flats mm	Bulk Pack Qty.
LNM100B	M12 X 1.5	0.709	18.00	50
LNM200B	M16 X 1.5	0.866	22.00	50
LNM300B	M20 X 1.5	0.945	24.00	50
LNM400B	M25 X 1.5	1.299	33.00	50
LNM500B	M32 X 1.5	1.614	41.00	10
LNPG100B	PG7	0.669	17.00	50
LNPG200B	PG9	0.866	22.00	50
LNPG300B	PG11	0.945	24.00	50
LNPG400B	PG13.5	1.063	27.00	50
LNPG500B	PG16	1.181	30.00	50
LNPG600B	PG21	1.417	36.00	50
LNPG700B	PG29	1.811	46.00	10

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Snap Bushings and Rubber Grommets

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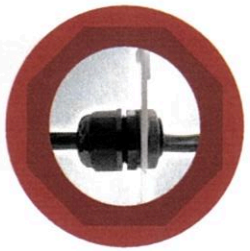
ESSENTRA COMPONENTS

FIBER, WIRE & CABLE MANAGEMENT



CABLE GLANDS

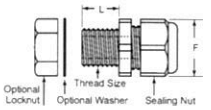
Wire Damage Potential

Wires existing within an enclosure may exit that enclosure to transmit signals to other devices or power units. The entrance and exit points of an enclosure pose real potential for wire damage. External forces pulling on the cable from outside of the enclosure can jeopardize the electrical connection within the unit.

Cable Glands are the Solution

A cable gland is used to attach and grip a cable to the enclosure which provides protection to the electrical connection within the enclosure. By mechanically attaching the cable to the enclosure, now the enclosure absorbs any shock and vibration from environmental forces outside the enclosure.

CG
NPT Cable Glands



Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: See Table
- Temperature Range: Working –40°F to 221°F (–40°C to 105°C)
- Intermittent up to 300°F (149°C)

Features:
- Parts designed with AVC – Essentra's variable clamping ranges to fit a wide range of diameters
- IP 68 rated protection – 5 bar
- Provides dust & water-tight performance and strain relief
- EPDM gasket & lock nut are sold separately
- For best results select a gland with the smallest maximum clamping range for your application

Item No. Black	Item No. Silver Grey	Thread Size	Mounting Hole In	Mounting Hole mm	Mounting Thread In	Mounting Thread mm	Flat Sealing Nut In	Flat Sealing Nut mm	Variable Clamping Range (Max/Min) In		Variable Clamping Range (Max/Min) mm		Pack Qty.	Bulk Pack Qty.
CG050B	CG050G	NPT - 1/4"	0.524	13.3	0.354	9.0	0.748	19.0	0.307	0.177	7.8	4.5	1	50
CG175B	CG175G	NPT - 3/8"	0.681	17.3	0.512	13.0	0.866	22.0	0.394	0.236	10.0	6.0	1	50
CG225B	CG225G	NPT - 1/2"	0.848	21.6	0.512	13.0	1.063	27.0	0.433	0.276	11.0	7.0	1	50
CG275B	CG275G	NPT - 1/2"	0.848	21.6	0.512	13.0	1.063	27.0	0.551	0.354	14.0	9.0	1	50
CG325B	CG325G	NPT - 3/4"	1.047	26.6	0.472	12.0	1.063	27.0	0.433	0.276	11.0	7.0	1	50
CG350B	CG350G	NPT - 3/4"	1.061	27.0	0.591	15.0	1.299	33.0	0.630	0.472	16.0	12.0	1	50
CG375B	CG375G	NPT - 3/4"	1.061	27.0	0.591	15.0	1.299	33.0	0.709	0.551	18.0	14.0	1	50
CG425B	CG425G	NPT - 1"	1.325	33.7	0.669	17.0	1.654	42.0	0.866	0.630	22.0	16.0	1	10
CG450B	CG450G	NPT - 1"	1.325	33.7	0.669	17.0	1.654	42.0	0.984	0.709	25.0	18.0	1	10

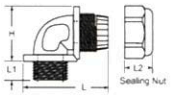
Optional Parts

LNPT - NPT Locknuts						
Locknut Item No. Black	Locknut Item No. Silver Grey	Thread Size	Flat Locknut In	Flat Locknut mm	Pack Qty.	Bulk Pack Qty.
LNPT050B	LNPT050G	NPT - 1/4"	0.748	19.0	1	50
LNPT100B	LNPT100G	NPT - 3/8"	0.866	22.0	1	50
LNPT200B	LNPT200G	NPT - 1/2"	1.063	27.0	1	50
LNPT300B	LNPT300G	NPT - 3/4"	1.299	33.0	1	50
LNPT400B	LNPT400G	NPT - 1"	1.654	42.0	1	10

CGW - Sealing Washers			
Sealing Gasket Item No.	For Thread Size	Pack Qty.	Bulk Pack Qty.
CGW050A	NPT-1/2"	1	50
CGW100A	NPT-3/8"	1	50
CGW200A	NPT-1/2"	1	50
CGW300A	NPT-3/4"	1	50
CGW400A	NPT-1"	1	10

CGRA
90° NPT Cable Glands

Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black
- Temperature Range: Working –40°F to 221°F (–40°C to 105°C) Intermittent up to 300°F (149C°)



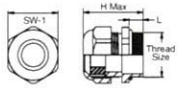
Features:
- IP 68 rated protection: 5 bar
- Provides dust & water-tight performance and strain relief
- EPDM gasket & lock nut are sold separately

Optional Parts

LNPT - NPT Locknuts				
Locknut Item No.	NPT Thread	Pack Qty.	Bulk Pack Qty.	
LNPT100B	3/8"	1	50	
LNPT200B	1/2"	1	50	
LNPT300B	3/4"	1	50	
LNPT005B	1-1/4"	1	10	

Item No.	NPT Thread	Mounting Hole	Overall Length L In	Overall Length L mm	Mounting Thread L1 In	Mounting Thread L1 mm	Nut Length L2 In	Nut Length L2 mm	Overall Height H In	Overall Height H mm	Variable Clamping Range (Max/Min) In	Variable Clamping Range (Max/Min) mm	Pack Qty.	Bulk Pack Qty.
CGRA011A	3/8"	0.687	1.909	48.5	0.461	11.7	0.657	16.7	1.181	30.0	0.197 - 0.354	5.0 - 8.0	1	20
CGRA015A	1/2"	0.875	2.031	51.6	0.579	14.7	0.724	18.4	1.228	31.2	0.393 - 0.512	10.0 - 13.0	1	20
CGRA018A	3/4"	1.0625	2.539	64.5	0.583	14.8	0.878	22.3	1.638	41.6	0.512 - 0.630	13.0 - 16.0	1	20
CGRA020A	1-1/4"	1.687	3.346	85.0	0.740	18.8	1.220	31.0	2.087	53.0	0.866 - 1.412	22.0 - 29.0	1	10

CG-NPT
NPT Cable Gland



Specifications:
- Material: Body and Nut: UL94 V-2 Nylon 6
  Sealing Gland: CR / NBR
  O-Ring: NBR
- Color: Black
- Material: Optional CGLN Locking Nut:
  UL94 V-2 Glass Filled Nylon 6
- Color: Black

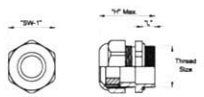
Features:
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no O-ring is needed for smaller sizes to meet IP68 rating
- Operating temperature: -4°F - 212°F (-20°C -100°C)

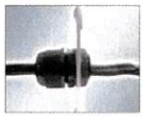
Item No.	UL Approval	Cable Ø Range Min		Cable Ø Range Max		Thread Size	Mounting Hole		L		SW-1		H Max Ref.		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm		In	mm	In	mm	In	mm	In	mm		
CG-NPT-3/8-1-BK	UL	0.118	3.0	0.276	7.0	NPT-3/8	0.670	17.0	0.571	14.5	0.866	22.0	1.750	44.5	1	100
CG-NPT-3/8-2-BK	UL	0.197	5.0	0.394	10.0	NPT-3/8	0.670	17.0	0.571	14.5	0.866	22.0	1.750	44.5	1	100
CG-NPT-1/2-1-BK	UL	0.197	5.0	0.236	9.0	NPT-1/2	0.875	22.2	0.571	14.5	0.945	24.0	1.770	45.0	1	100
CG-NPT-1/2-2-BK	UL	0.276	7.0	0.472	12.0	NPT-1/2	0.875	22.2	0.591	15.0	1.063	27.0	1.870	47.5	1	100
CG-NPT-1/2-3-BK	UL	0.394	10.0	0.551	14.0	NPT-1/2	0.875	22.2	0.591	15.0	1.063	27.0	1.870	47.5	1	100
CG-NPT-3/4-1-BK	UL	0.236	9.0	0.630	16.0	NPT-3/4	1.068	27.1	0.591	15.0	1.299	33.0	2.050	52.0	1	50
CG-NPT-3/4-1-BK	UL	0.551	14.0	0.709	18.0	NPT-3/4	1.068	27.1	0.591	15.0	1.299	33.0	2.050	52.0	1	50
CG-NPT-1-1-BK	UL	0.472	12.0	0.787	20.0	NPT-1	1.350	34.3	0.709	18.0	1.654	42.0	2.380	60.5	1	25
CG-NPT-1-1-BK	UL	0.748	19.0	0.984	25.0	NPT-1	1.350	34.3	0.709	18.0	1.654	42.0	2.380	60.5	1	25

Optional Parts

Item No.	Thread Size	Locking Nuts				Pack Qty.	Bulk Pack Qty.
		Across Flats		Thickness			
		In	mm	In	mm		
CGLN-NPT-3/8-BK	NPT-3/8	0.866	22.0	0.197	5.0	1	100
CGLN-NPT-1/2-BK	NPT-1/2	1.063	27.0	0.236	6.0	1	100
CGLN-NPT-3/4-BK	NPT-3/4	1.417	36.0	0.276	7.0	1	100
CGLN-NPT-1-BK	NPT-1	1.654	42.0	0.276	7.0	1	100

CGPG
PG Cable Gland





Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: See Table
- Temperature Range: Working –40°F to 221°F (–40°C to 105°C) Intermittent up to 300°F (149°C)

Features:
- Parts designed with AVC – Essentra's variable clamping ranges to fit a wide range of diameters
- IP 68 rated protection – 5 bar
- Provides dust & water-tight performance and strain relief
- EPDM gasket & lock nut are sold separately

Item No.			Mounting Hole		Mounting Thread L		Flat Sealing Nut F		Variable Clamping Range (Max/Min)				Pack Qty.	Bulk Pack Qty.
Black	Silver Grey	Thread Size	In	mm	In	mm	In	mm	In		mm			
									In	mm	In	mm		
CGPG150B	CGPG150G	PG7	0.492	12.5	0.335	8.50	0.748	19	0.307	0.177	7.80	4.50	1	50
CGPG250B	CGPG250G	PG9	0.598	15.2	0.354	9.00	0.748	19	0.307	0.177	7.80	4.50	1	50
CGPG350B	CGPG350G	PG11	0.732	18.6	0.394	10.0	0.866	22	0.394	0.236	10.0	6.00	1	50
CGPG450B	CGPG450G	PG13.5	0.803	20.4	0.394	10.0	0.945	24	0.472	0.276	12.0	7.00	1	50
CGPG550B	CGPG550G	PG16	0.886	22.5	0.433	11.0	1.457	37	0.551	0.354	14.0	9.00	1	50
CGPG650B	CGPG650G	PG21	1.114	28.3	0.492	12.5	1.299	33	0.709	0.551	18.0	14.0	1	50
CGPG750B	CGPG750G	PG29	1.469	37.3	0.472	12.0	1.654	42	0.984	0.709	25.0	18.0	1	10

Optional Parts

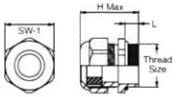
LNPG – PG Locknuts

Locknut Part Number			Flats Locknut		Pack Qty.	Bulk Pack Qty.
Black	Silver Grey	Thread Size	In	mm		
LNPG100B	LNPG100G	PG7	0.669	17.0	1	50
LNPG200B	LNPG200G	PG9	0.866	22.0	1	50
LNPG300B	LNPG300G	PG11	0.945	24.0	1	50
LNPG400B	LNPG400G	PG13.5	1.063	27.0	1	50
LNPG500B	LNPG500G	PG16	1.181	30.0	1	50
LNPG600B	LNPG600G	PG21	1.417	36.0	1	50
LNPG700B	LNPG700G	PG29	1.811	46.0	1	10

CGPW – Sealing Washers

Sealing Gasket Part Number	Thread Size	Pack Qty.	Bulk Pack Qty.
CGPW100A	PG7	1	50
CGPW200A	PG9	1	50
CGPW300A	PG11	1	50
CGPW400A	PG13.5	1	50
CGPW500A	PG16	1	50
CGPW600A	PG21	1	50
CGPW700A	PG29	1	10

CG-PG
PG Cable Gland



Specifications:
- Material: Body and Nut: UL94 V-2 Nylon 6
  Sealing Gland: CR / NBR
  O-Ring: NBR
- Color: Black
- Material: Optional CGLN Locking Nut:
  UL94 V-2 Glass Filled Nylon 6
- Color: Black
- Operating temperature: -4°F - 212°F (-20°C -100°C)

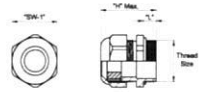
Features:
- Protection Class: IP68 - 5 Bar
- Designed for superior sealing; no O-ring needed for smaller sizes to meet IP68 rating

Optional Parts

Item No.	Thread Size	Locking Nuts				Pack Qty.	Bulk Pack Qty.
		Across Flats		Thickness			
		In	mm	In	mm		
CGLN-PG7-BK	PG7	0.748	19.0	0.197	5.0	1	100
CGLN-PG9-BK	PG9	0.866	22.0	0.197	5.0	1	100
CGLN-PG11-BK	PG11	0.945	24.0	0.197	5.0	1	100
CGLN-PG13.5-BK	PG13.5	1.063	27.0	0.236	6.0	1	100
CGLN-PG16-BK	PG16	1.181	30.0	0.236	6.0	1	100
CGLN-PG21-BK	PG21	1.417	36.0	0.276	7.0	1	100
CGLN-PG29-BK	PG29	1.811	46.0	0.276	7.0	1	100
CGLN-PG36-BK	PG36	2.362	60.0	0.315	8.0	1	50

Item No.	UL Approval	Cable Ø Range Min		Cable Ø Range Max		Thread Size	Mounting Hole		L		SW-1		H Max Ref.		Pack Qty.	Bulk Pack Qty.
		In	mm	In	mm		In	mm	In	mm	In	mm	In	mm		
CG-PG7-1-BK	UL	0.079	2.0	0.197	5.0	PG7	0.500	12.7	0.315	8.0	0.591	15.0	1.201	30.5	1	100
CG-PG7-2-BK	UL	0.118	3.0	0.256	6.5	PG7	0.500	12.7	0.315	8.0	0.591	15.0	1.201	30.5	1	100
CG-PG9-1-BK	UL	0.079	2.0	0.236	6.0	PG9	0.606	15.4	0.315	8.0	0.748	19.0	1.339	34.0	1	100
CG-PG9-2-BK	UL	0.157	4.0	0.315	8.0	PG9	0.606	15.4	0.315	8.0	0.748	19.0	1.339	34.0	1	100
CG-PG11-1-BK	UL	0.118	3.0	0.276	7.0	PG11	0.740	18.8	0.315	8.0	0.866	22.0	1.457	37.0	1	100
CG-PG11-2-BK	UL	0.197	5.0	0.394	10.0	PG11	0.740	18.8	0.315	8.0	0.866	22.0	1.457	37.0	1	100
CG-PG13.5-1-BK	UL	0.236	6.0	0.472	12.0	PG13.5	0.815	20.7	0.354	9.0	0.945	24.0	1.535	39.0	1	100
CG-PG16-1-BK	UL	0.394	10.0	0.551	14.0	PG16	0.898	22.8	0.394	10.0	1.063	27.0	1.673	42.5	1	50
CG-PG21-1-BK	UL	0.236	9.0	0.630	16.0	PG21	1.126	28.6	0.433	11.0	1.299	33.0	1.870	47.5	1	50
CG-PG21-2-BK	UL	0.512	13.0	0.709	18.0	PG21	1.126	28.6	0.433	11.0	1.299	33.0	1.870	47.5	1	50
CG-PG29-1-BK	UL	0.472	12.0	0.787	20.0	PG29	1.472	37.4	0.433	11.0	1.654	42.0	2.087	53.0	1	25
CG-PG36-1-BK	UL	0.787	20.0	1.024	26.0	PG36	1.870	47.5	0.512	13.0	2.087	53.0	2.402	61.0	1	10
CG-PG36-2-BK	UL	0.866	22.0	1.260	32.0	PG36	1.870	47.5	0.512	13.0	2.087	53.0	2.402	61.0	1	10

CGM
Metric Cable Gland



Specifications:
- Material: UL 94V-2 Nylon 6/6
- Colors: See Table
- Temperature Range: Working –40°F to 221°F (–40°C to 105°C) Intermittent up to 300°F (149°C)

Features:
- Parts designed with AVC – Essentra's variable clamping ranges to fit a wide range of diameters
- IP 68 rated protection: 5 bar
- Provides dust & water-tight performance and strain relief
- EPDM gasket & lock nut are sold separately
- For best results select a gland with the smallest maximum clamping range for your application

Item No.			Mounting Hole		Mounting Thread L		Flat Sealing Nut F		Variable Clamping Range (Max/Min)				Pack Qty.	Bulk Pack Qty.
Black	Silver Grey	Thread Size	In	mm	In	mm	In	mm	In		mm			
									In	mm	In	mm		
CGM150B	CGM150G	M12 X 1.5	0.472	12.0	0.354	9.00	0.748	19.0	0.307	0.177	7.80	4.50	1	50
CGM250B	CGM250G	M16 X 1.5	0.630	16.0	0.394	10.0	0.748	19.0	0.307	0.177	7.80	4.50	1	50
CGM325B	CGM325G	M20 X 1.5	0.787	20.0	0.394	10.0	0.866	22.0	0.394	0.236	10.0	6.00	1	50
CGM350B	CGM350G	M20 X 1.5	0.787	20.0	0.394	10.0	1.063	27.0	0.551	0.354	14.0	9.00	1	50
CGM425B	CGM425G	M25 X 1.5	0.984	25.0	0.472	12.0	1.063	27.0	0.551	0.354	14.0	9.00	1	50
CGM450B	CGM450G	M25 X 1.5	0.984	25.0	0.591	15.0	1.299	33.0	0.709	0.551	18.0	14.0	1	50
CGM550B	CGM550G	M32 X 1.5	1.260	32.0	0.591	15.0	1.654	42.0	0.866	0.630	22.0	16.0	1	10

Optional Parts

LNM – Metric Locknuts

Locknut Part Number			Flats Locknut		Pack Qty.	Bulk Pack Qty.
Black	Silver Grey	Thread Size	In	mm		
LNM100B	LNM100G	M12 X 1.5	0.709	18	1	50
LNM200B	LNM200G	M16 X 1.5	0.866	22	1	50
LNM300B	LNM300G	M20 X 1.5	0.945	24	1	50
LNM400B	LNM400G	M25 X 1.5	1.299	33	1	50
LNM500B	LNM500G	M32 X 1.5	1.614	41	1	10

CGMW – Sealing Washers

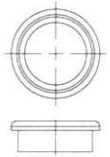
Sealing Gasket Part Number	Thread Size	Pack Qty.	Bulk Pack Qty.
CGMW100A	M12	1	50
CGMW200A	M16	1	50
CGMW300A	M20	1	50
CGMW400A	M25	1	50
CGMW500A	M32	1	10

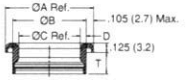
GROMMETS

GFA
NAS1368 Flip Grommet

Richco

New



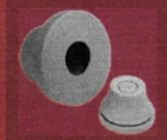


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Natural

Features:
- Installed by inserting the "un-flipped" grommet into the hole. Forming dies (not supplied by Essentra) on each side of the hole are pressed together until the grommet "flips" over itself, creating a flange on both sides of the hole
- The dies can be attached to a toggle type clamp, a pneumatic tool, or a bolt and nut through the center
- Meets NAS 1368 Standard
- Protects wires, cable, and tubing passing through holes

Item No.	NAS Part No.	Mounting Hole Ø		Max Recommended Panel Thickness		NAS1368 Panel Thickness Range		T		A Ref.		B		C Ref.		D		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
GFA-N4A	NAS1368-N4A	0.375	9.5	0.030	0.8	0.025-0.080	0.6-2.0	0.235	6.0	0.567	14.4	0.367	9.3	0.251	6.4	0.058	1.5	100
GFA-N4B	NAS1368-N4B	0.375	9.5	0.100	2.5	0.081-0.140	2.1-3.6	0.295	7.5	0.567	14.4	0.367	9.3	0.251	6.4	0.058	1.5	100
GFA-N6A	NAS1368-N6A	0.500	12.7	0.030	0.8	0.025-0.080	0.6-2.0	0.235	6.0	0.692	17.6	0.492	12.5	0.376	9.6	0.058	1.5	100
GFA-N6B	NAS1368-N6B	0.500	12.7	0.090	2.3	0.081-0.140	2.1-3.6	0.295	7.5	0.692	17.6	0.492	12.5	0.376	9.6	0.058	1.5	100
GFA-N6C	NAS1368-N6C	0.500	12.7	0.160	4.1	0.141-0.200	3.6-5.1	0.360	9.1	0.692	17.6	0.492	12.5	0.376	9.6	0.058	1.5	100
GFA-N8A	NAS1368-N8A	0.625	15.9	0.030	0.8	0.025-0.080	0.6-2.0	0.235	6.0	0.815	20.7	0.615	15.6	0.499	12.7	0.058	1.5	100
GFA-N8B	NAS1368-N8B	0.625	15.9	0.090	2.3	0.081-0.140	2.1-3.6	0.295	7.5	0.815	20.7	0.615	15.6	0.499	12.7	0.058	1.5	100
GFA-N10A	NAS1368-N10A	0.781	19.8	0.030	0.8	0.025-0.080	0.6-2.0	0.235	6.0	0.971	24.7	0.771	19.6	0.605	15.4	0.083	2.1	100
GFA-N10B	NAS1368-N10B	0.781	19.8	0.080	2.0	0.081-0.140	2.1-3.6	0.295	7.5	0.971	24.7	0.771	19.6	0.605	15.4	0.083	2.1	100
GFA-N10D	NAS1368-N10D	0.781	19.8	0.210	5.3	0.201-0.250	5.1-6.4	0.420	10.7	0.971	24.7	0.771	19.6	0.605	15.4	0.083	2.1	100
GFA-N12A	NAS1368-N12A	0.906	23.0	0.020	0.5	0.025-0.080	0.6-2.0	0.235	6.0	1.096	27.8	0.896	22.8	0.730	18.5	0.083	2.1	100
GFA-N12B	NAS1368-N12B	0.906	23.0	0.070	1.8	0.081-0.140	2.1-3.6	0.295	7.5	1.096	27.8	0.896	22.8	0.730	18.5	0.083	2.1	100
GFA-N14A	NAS1368-N14A	1.031	26.2	0.020	0.5	0.025-0.080	0.6-2.0	0.235	6.0	1.221	31.0	1.021	25.9	0.855	21.7	0.083	2.1	100
GFA-N14B	NAS1368-N14B	1.031	26.2	0.070	1.8	0.081-0.140	2.1-3.6	0.295	7.5	1.221	31.0	1.021	25.9	0.855	21.7	0.083	2.1	100

Grommets
Hundreds **of styles in stock to protect wires and cables**


IP 67 SEALING

OPEN

QUICK FIT

STEPPED

FREE SAMPLES OVER 1 BILLION PARTS IN STOCK SHIPS TODAY

ESSENTRA COMPONENTS

We Are One
ALLIANCE Reid Supply Company Richco

The Essential Enablers

14-ECA-305-03

ESSENTRA COMPONENTS

FIBER, WIRE & CABLE MANAGEMENT

BUSHINGS

Electrical Cord Damage Potential

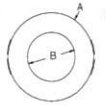
Where wires exit an enclosure, they can come in contact with rough or sharp edges that can wear or cut a wire, potentially leading to a short and even complete device failure.

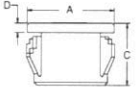
Cable Bushings are the Solution

A cable bushing inserted into holes in enclosures to protect a wire as it passes through a hole, is the perfect solution. The bushing, or grommet, has an internal hole through which the wire passes, which is designed to be smooth and cause no harm to the wire. Essentra offers many Richco cable bushing options for a variety of holes and panel thicknesses. We have innovative solutions for wire protection through our extensive offering of bushings and grommets. If your wires are already routed and connected, then we offer retro-fit options, such as snap-in bushings, for applying the grommet over the wire, and then applied to the hole. If you have a scenario where there are forces pulling on the wire, endangering the connection, we offer product that features strain-relief protection.

PGSB / BSI
Closed Insulation Bushing

Expanded Line





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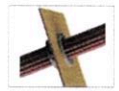


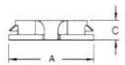
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:
- Easy to snap into common panel thicknesses
- Protects wires, cables and tubing from sharp edges of sheet metal holes

Item No.	Approval	Mounting Hole Ø		Panel Thickness		OD A		ID B		Overall Height C		Head Height D		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
PGSB-0305		0.189	4.8	0.063 - 0.067	1.6 - 1.7	0.260	6.5	0.125	3.2	0.240	6.0	0.051	1.4	1000
PGSB-1		0.250	6.4	0.062	1.6	0.312	7.9	0.125	3.2	0.312	7.9	0.063	1.6	1000
PGSB-2		0.312	7.9	0.062	1.6	0.375	9.5	0.187	4.7	0.312	7.9	0.063	1.6	1000
PGSB-3		0.312	7.9	0.062	1.6	0.375	9.5	0.240	6.1	0.237	6.0	0.050	1.3	1000
PGSB-4		0.375	9.5	0.031 - 0.125	0.8 - 3.2	0.468	11.9	0.187	4.7	0.406	10.3	0.055	1.4	1000
PGSB-5		0.375	9.5	0.031 - 0.125	0.8 - 3.2	0.468	11.9	0.250	6.4	0.406	10.3	0.055	1.4	1000
PGSB-0710		0.394	10.0	0.031 - 0.125	0.8 - 1.6	0.472	12.0	0.284	7.2	0.260	6.6	0.051	1.3	1000
PGSB-6		0.437	11.1	0.031 - 0.125	0.8 - 3.2	0.531	13.5	0.270	6.9	0.406	10.3	0.055	1.4	500
PGSB-7		0.437	11.1	0.031 - 0.125	0.8 - 3.2	0.531	13.5	0.312	7.9	0.406	10.3	0.055	1.4	500
PGSB-8		0.437	11.1	0.031 - 0.125	0.8 - 3.2	0.531	13.5	0.243	6.4	0.406	10.3	0.055	1.4	500
PGSB-9		0.468	11.9	0.062	1.6	0.531	13.5	0.343	8.7	0.250	6.4	0.050	1.3	500
PGSB-10		0.500	12.7	0.031 - 0.125	0.8 - 3.2	0.578	14.7	0.250	6.4	0.406	10.3	0.063	1.6	500
PGSB-11		0.500	12.7	0.031 - 0.125	0.8 - 3.2	0.578	14.7	0.312	7.9	0.406	10.3	0.063	1.6	500
PGSB-12		0.500	12.7	0.062	1.6	0.562	14.3	0.375	9.5	0.250	6.4	0.063	1.6	500
PGSB-1013		0.512	13.0	0.031 - 0.118	0.8	0.591	15.0	0.402	10.2	0.354	9.0	0.051	1.3	500
PGSB-13		0.531	13.5	0.062	1.6	0.593	15.1	0.406	10.3	0.250	6.4	0.063	1.6	500
PGSB-14		0.562	14.3	0.031 - 0.125	0.8 - 3.2	0.656	16.7	0.312	7.9	0.406	10.3	0.063	1.6	500
PGSB-15		0.562	14.3	0.031 - 0.125	0.8 - 3.2	0.656	16.7	0.391	9.9	0.406	10.3	0.063	1.6	500
PGSB-16		0.562	14.3	0.031 - 0.125	0.8 - 3.2	0.656	16.7	0.437	11.1	0.406	10.3	0.063	1.6	500
PGSB-17		0.625	15.9	0.031 - 0.125	0.8 - 3.2	0.718	18.2	0.250	6.4	0.406	10.3	0.063	1.6	500
PGSB-18		0.625	15.9	0.031 - 0.125	0.8 - 3.2	0.718	18.2	0.437	11.1	0.406	10.3	0.063	1.6	500
PGSB-19		0.625	15.9	0.062	1.6	0.703	17.9	0.500	12.7	0.250	6.4	0.063	1.6	500
PGSB-1316		0.630	16.0	0.055 - 0.139	1.4 - 3.5	0.709	18.0	0.504	12.8	0.413	10.5	0.059	1.5	500
PGSB-20		0.687	17.5	0.031 - 0.125	0.8 - 3.2	0.781	19.8	0.500	12.7	0.406	10.3	0.063	1.6	200
PGSB-21		0.687	17.5	0.031 - 0.125	0.8 - 3.2	0.781	19.8	0.562	14.3	0.406	10.3	0.063	1.6	200
PGSB-1519		0.748	19.0	0.039 - 0.130	1.3	0.854	21.7	0.602	15.3	0.433	11.0	0.059	1.5	200
PGSB-22		0.750	19.1	0.031 - 0.125	0.8 - 3.2	0.843	21.4	0.500	12.7	0.406	10.3	0.063	1.6	200
PGSB-23		0.750	19.1	0.031 - 0.125	0.8 - 3.2	0.843	21.4	0.562	14.3	0.406	10.3	0.063	1.6	200
PGSB-24		0.750	19.1	0.062	1.6	0.828	21.0	0.625	15.9	0.250	6.4	0.063	1.6	200
PGSB-25		0.781	19.8	0.062	1.6	0.859	21.8	0.625	15.9	0.250	6.4	0.063	1.6	200
PGSB-1822		0.866	22.0	0.035 - 0.091	0.9 - 2.3	0.976	24.8	0.717	18.2	0.453	11.5	0.059	1.5	500
PGSB-26		0.875	22.2	0.031 - 0.125	0.8 - 3.2	0.953	24.2	0.500	12.7	0.453	11.5	0.063	1.6	200
PGSB-27		0.875	22.2	0.031 - 0.125	0.8 - 3.2	0.953	24.2	0.562	14.3	0.453	11.5	0.063	1.6	200
PGSB-28		0.875	22.2	0.031 - 0.125	0.8 - 3.2	0.953	24.2	0.625	15.9	0.453	11.5	0.063	1.6	200
PGSB-29		0.875	22.2	0.031 - 0.125	0.8 - 3.2	0.953	24.2	0.687	17.5	0.453	11.5	0.063	1.6	200
PGSB-30		0.875	22.2	0.062	1.6	0.937	23.8	0.750	19.1	0.250	6.4	0.063	1.6	200
PGSB-31		1.000	25.4	0.031 - 0.125	0.8 - 3.2	1.125	28.6	0.766	19.5	0.453	11.5	0.063	1.6	200
PGSB-32		1.097	27.9	0.031 - 0.125	0.8 - 3.2	1.218	31.0	0.812	20.6	0.453	11.5	0.063	1.6	100
PGSB-33		1.097	27.9	0.031 - 0.125	0.8 - 3.2	1.218	31.0	0.875	22.2	0.453	11.5	0.063	1.6	100
PGSB-34		1.097	27.9	0.031 - 0.125	0.8 - 3.2	1.218	31.0	0.937	23.8	0.453	11.5	0.063	1.6	100
PGSB-2428		1.102	28.0	0.039 - 0.130	1.3	1.240	31.5	0.945	24.0	0.441	11.2	0.059	1.5	200
PGSB-2530		1.181	30.0	0.039 - 0.122	1.3	1.319	33.5	0.984	25.0	0.453	11.5	0.071	1.8	100
PGSB-35		1.250	31.8	0.031 - 0.125	0.8 - 3.2	1.312	33.3	0.937	23.8	0.453	11.5	0.063	1.6	100
PGSB-2634		1.347	34.2	0.039 - 0.126	1.3	1.496	38.0	1.031	26.2	0.453	11.5	0.059	1.5	100
PGSB-36		1.375	34.9	0.031 - 0.125	0.8 - 3.2	1.468	37.3	1.000	25.4	0.453	11.5	0.063	1.6	100
PGSB-37		1.500	38.1	0.031 - 0.125	0.8 - 3.2	1.609	40.9	1.062	27.0	0.453	11.5	0.063	1.6	100
PGSB-38		1.500	38.1	0.031 - 0.125	0.8 - 3.2	1.609	40.9	1.125	28.6	0.453	11.5	0.063	1.6	100
PGSB-39		1.500	38.1	0.031 - 0.125	0.8 - 3.2	1.609	40.9	1.312	33.3	0.453	11.5	0.063	1.6	100
PGSB-40		1.750	44.5	0.031 - 0.125	0.8 - 3.2	1.875	47.6	1.375	34.9	0.453	11.5	0.063	1.6	100
PGSB-41		2.000	50.8	0.031 - 0.125	0.8 - 3.2	2.125	54.0	1.640	41.7	0.453	11.5	0.063	1.6	100
PGSB-42		2.000	50.8	0.031 - 0.125	0.8 - 3.2	2.125	54.0	1.750	44.5	0.453	11.5	0.063	1.6	100
PGSB-43		2.250	57.2	0.250	6.4	2.480	63.0	1.850	47.0	0.720	18.2	0.063	1.6	100
BSI047A		3.000	76.2	0.250	6.4	3.160	80.3	2.470	62.7	720	18.2	—	—	350

BUSHINGS

PGSA
Shallow Open Insulation Bushing

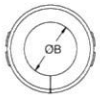


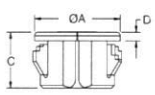
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:
- Molded with shallow overall height for applications with limited space
- Open design allows bushing to be assembled into holes that already contain a bundle
- Protects wires, cables, and tubing from sharp edges of sheet metal holes

Item No.	Approval	Mounting Hole Ø		Panel Thickness Range		OD A Ref.		ID B		Overall Height C		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	
PGSA-0407A		0.276	7.0	0.016 - 0.039	0.4 - 1.0	0.410	10.4	0.190	4.8	0.200	5.0	1000
PGSA-1013A		0.512	13.0	0.039 - 0.059	1.0 - 1.5	0.640	16.2	0.360	9.2	0.210	5.3	500
PGSA-1316A		0.630	16.0	0.039 - 0.055	1.0 - 1.4	0.760	19.4	0.480	12.2	0.210	5.4	500
PGSA-1519A		0.748	19.0	0.039 - 0.059	1.0 - 1.5	0.890	22.7	0.560	14.3	0.220	5.7	500
PGSA-1822A		0.866	22.0	0.031 - 0.063	0.8 - 1.6	1.000	25.5	0.690	17.6	0.220	5.6	500
PGSA-2024A1		0.945	24.0	0.031 - 0.047	0.8 - 1.2	1.060	27.0	0.770	19.5	0.210	5.3	500
PGSA-2024A		0.945	24.0	0.039 - 0.063	1.0 - 1.6	1.060	27.0	0.770	19.5	0.210	5.3	500
PGSA-2327A		1.067	27.1	0.016 - 0.039	0.4 - 1.0	1.380	35.1	0.900	22.9	0.240	6.0	200
PGSA-2529A		1.142	29.0	0.016 - 0.043	0.4 - 1.1	1.380	35.1	0.970	24.5	0.280	7.0	200

PGSB-A
Standard Open Insulation Bushing



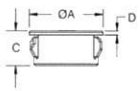


Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:
- Easy to push in design locks into place at common panel thicknesses
- Split design allows bushing to be assembled into holes that already contained a bundle
- Protects wires, cables, and tubing from sharp edges of sheet metal holes

Item No.	Approval	Mounting Hole		Panel Thickness Range		OD A Ref.		ID B		Overall Height C		Head Height D		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
PGSB-0609A		0.375	9.5	0.028 - 0.067	0.7 - 1.7	0.450	11.4	0.260	6.6	0.260	6.5	0.051	1.3	1000
PGSB-1A		0.375	9.5	0.031 - 0.125	0.8 - 3.2	0.420	10.7	0.265	6.7	0.390	9.9	0.051	1.3	1000
PGSB-2A		0.437	11.1	0.031 - 0.125	0.8 - 3.2	0.50	12.7	0.312	7.9	0.406	10.3	0.063	1.6	1000
PGSB-1013A		0.512	13.0	0.031 - 0.138	0.8 - 3.5	0.590	14.9	0.350	9.0	0.410	10.5	0.059	1.5	500
PGSB-3A		0.562	14.3	0.031 - 0.125	0.8 - 3.2	0.640	16.3	0.390	9.9	0.406	10.3	0.063	1.6	500
PGSB-1216A		0.650	16.5	0.028 - 0.130	0.7 - 3.3	0.730	18.6	0.480	12.3	0.390	10.0	0.039	1.0	500
PGSB-1316A		0.630	16.0	0.047 - 0.138	1.2 - 3.5	0.710	18.0	0.410	10.5	0.410	10.5	0.063	1.6	500
PGSB-1519A		0.748	19.0	0.047 - 0.130	1.2 - 3.3	0.810	20.6	0.570	14.5	0.430	11.0	0.051	1.3	200
PGSB-1822A		0.866	22.0	0.039 - 0.138	1.0 - 3.5	0.980	24.8	0.680	17.3	0.450	11.5	0.063	1.6	200
PGSB-9A		0.984	25.0	0.031 - 0.118	0.8 - 3.0	1.039	26.4	0.803	20.4	0.406	10.3	0.063	1.6	200
PGSB-4A		1.000	25.4	0.031 - 0.125	0.8 - 3.2	1.047	26.6	0.812	20.6	0.406	10.3	0.063	1.6	200
PGSB-5A		1.093	27.8	0.031 - 0.125	0.8 - 3.2	1.156	29.4	0.875	22.2	0.406	10.3	0.063	1.6	200
PGSB-6A		1.250	31.8	0.031 - 0.125	0.8 - 3.2	1.343	34.1	1.046	26.6	0.406	10.3	0.063	1.6	200
PGSB-7A		1.375	34.9	0.031 - 0.125	0.8 - 3.2	1.468	37.3	1.171	29.7	0.406	10.3	0.063	1.6	200
PGSB-8A		1.500	38.1	0.031 - 0.125	0.8 - 3.2	1.578	40.1	1.250	31.7	0.421	10.7	0.063	1.6	200

PGSD
Universal Bushing



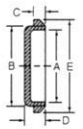
Specifications:
- Material: UL94 V-2 Nylon 6/6
- Color: Black

Features:
- Absorbs vibration and cushions and insulates bundles

Item No.	Approval	Mounting Hole		Max Panel Thickness		OD A		Max ID		Overall Height C		Head Height D		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
PGSD-1		0.500	12.7	0.062	1.8	0.600	15.2	0.312	7.9	0.250	6.4	0.063	1.6	500
PGSD-5		0.500	12.7	0.125	3.2	0.600	15.2	0.312	7.9	0.385	9.8	0.041	1.0	500
PGSD-2		0.625	15.9	0.062	1.8	0.729	18.5	0.437	11.1	0.250	6.4	0.063	1.6	500
PGSD-6		0.625	15.9	0.125	3.2	0.729	18.5	0.437	11.1	0.406	10.3	0.063	1.6	500
PGSD-3		0.750	19.1	0.062	1.8	0.844	21.4	0.500	12.7	0.250	6.4	0.063	1.6	200
PGSD-7		0.750	19.1	0.125	3.2	0.844	21.4	0.500	12.7	0.390	9.9	0.047	1.2	200
PGSD-4		0.875	22.2	0.062	1.8	0.937	23.8	0.560	14.2	0.250	6.4	0.063	1.6	200
PGSD-8		0.875	22.2	0.125	3.2	0.937	23.8	0.560	14.2	0.453	11.5	0.063	1.6	200
PGSD-9		1.000	25.4	0.125	3.2	1.063	27.0	0.750	19.1	0.453	11.5	0.063	1.6	200
PGSD-10		1.375	34.9	0.125	3.2	1.490	37.8	1.000	25.4	0.453	11.5	0.063	1.6	100
PGSD-11		1.500	38.1	0.125	3.2	1.609	40.9	1.062	27.0	0.450	11.4	0.059	1.5	100

PLUGS

SR
Recessed Sheet Metal Plug

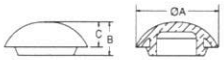


Specifications:
- Material: Low-Density Polyethylene
- Color: Black

Features:
- Economical snap-in plug that provides an attractive finish and a secure fit for entry holes in sheet metal

Item No.	Hole Size	Max Metal Thickness		A		B		C		D		E		Pack Qty.	Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
SR1/2A	0.500	0.110	2.8	0.510	13.1	0.550	14.0	0.090	2.3	0.290	7.4	0.850	21.6	1	3000
SR3/4A	0.750	0.180	4.6	0.750	19.2	0.800	20.3	0.190	4.8	0.380	9.7	1.156	29.4	1	4000
SR7/8A	0.875	0.180	4.6	0.875	22.2	0.920	23.4	0.190	4.8	0.380	9.7	1.250	31.8	1	3500
SR1A	1.000	0.150	3.8	1.000	25.4	1.043	26.5	0.096	2.4	0.319	8.1	1.377	35.0	1	3500
SR1-1/4A	1.250	0.120	3.0	1.280	32.5	1.330	33.8	0.120	3.1	0.350	8.9	1.615	41.0	1	2000
SR1-3/8A	1.375	0.190	4.8	1.375	34.9	1.437	36.5	0.200	5.1	0.410	10.4	1.750	44.5	1	1800
SR1-1/2A	1.500	0.125	3.2	1.515	38.5	1.555	39.5	0.120	3.1	0.350	8.9	1.875	47.6	1	1500
SR1-5/8A	1.625	0.190	4.8	1.625	41.3	1.688	42.9	0.200	5.1	0.410	10.4	2.000	50.8	1	1000
SR1-3/4A	1.750	0.190	4.8	1.750	44.5	1.812	46.0	0.200	5.1	0.410	10.4	2.125	54.0	1	1000
SR1-7/8A	1.875	0.190	4.8	1.875	47.6	1.937	49.2	0.200	5.1	0.410	10.4	2.250	57.2	1	900
SR2A	2.000	0.190	4.8	2.000	50.8	2.060	52.3	0.170	4.3	0.390	9.9	2.500	63.5	1	800
SR3A	3.000	0.190	4.8	3.000	76.2	3.065	77.9	0.200	5.1	0.410	10.4	3.500	88.9	1	300

LTP
IP67 Liquid Tight Plug

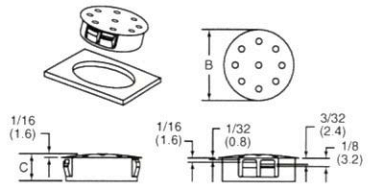


Specifications:
- Material: UL94 V-0 Silicone
- Color: Black

Features:
- Offers protection up to IP67
- Temperature Rating: -40°F to 302°F (-40°C - 150°C)

Item No.	Mounting Hole Ø		Head Ø A		Overall Height B		Head Height C		Max Panel Thickness		Pack Qty.	Bulk Pack Qty.
	in	mm	in	mm	in	mm	in	mm	in	mm		
LTP-4	0.500	12.7	0.92	23.4	0.449	11.4	0.287	7.3	0.125	3.2	1	1000
LTP-7	0.625	15.9	1.09	27.7	0.455	11.6	0.319	8.1	0.125	3.2	1	500
LTP-5	0.750	19.1	1.15	29.2	0.512	13.0	0.350	8.9	0.125	3.2	1	500
LTP-1	0.875	22.2	1.26	32.0	0.500	12.7	0.374	9.5	0.125	3.2	1	1000
LTP-6	1.000	25.4	1.41	35.8	0.559	14.2	0.398	10.1	0.125	3.2	1	200
LTP-2	1.093	27.8	1.54	39.2	0.539	13.7	0.413	10.5	0.125	3.2	1	500
LTP-3	1.375	34.9	1.82	46.2	0.579	14.7	0.433	11.0	0.125	3.2	1	200

PLV
Vented Locking Plug



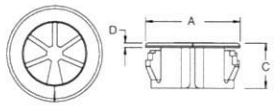
Specifications:
- Material: UL94 V-2 Heat-Stabilized Nylon
- Color: Black

Features:
- Each part is designed to lock into multiple standard sheet metal thicknesses (1/64 to 1/8)
- Provides a clean and easy way to close optional wiring or production access holes
- Vents allow heat/emissions to escape

Item No.	Approvals	Hole Ø		Max Panel Thickness		Head Ø B		Thickness C		Bulk Pack Qty.
		in	mm	in	mm	in	mm	in	mm	
PLV001A		0.750	19.1	0.125	3.2	0.906	23.0	0.406	10.3	1000
PLV002A		0.875	22.2	0.125	3.2	1.016	25.8	0.453	11.5	1000
PLV003A		1.000	25.4	0.125	3.2	1.203	30.6	0.453	11.5	500

BUSHINGS

PGSC
Open Universal Bushing

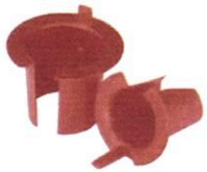


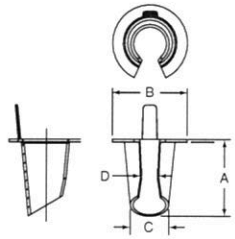
Specifications:
- Material: UL94V-2 Nylon 6/6
- Color: Black

Features:
- Easy to push in design locks into place at common panel thicknesses
- Open design allows bushing to be assembled into holes that already contain a bundle
- Adjust to accept various diameters and shapes

Item No.	Approval	Mounting Hole		Max Panel Thickness		OD A		Max ID		Overall Height C		Head Height D		Bulk Pack Qty.
		In	mm	In	mm	In	mm			In	mm	In	mm	
PGSC-1319A		0.748 - 0.752	19.0 - 19.1	0.031 - 0.118	0.8 - 3.0	0.858	21.8	0.500	12.7	0.390	9.9	0.039	1.0	500
PGSC-1422A		0.874 - 0.882	22.2 - 22.4	0.031 - 0.118	0.8 - 3.0	0.937	23.8	0.563	14.3	0.453	11.5	0.039	1.0	200
PGSC-1926A		1.000 - 1.004	25.4 - 25.5	0.031 - 0.118	0.8 - 3.0	1.063	27.0	0.748	19.0	0.453	11.5	0.039	1.0	200
PGSC-2128A		1.095 - 1.102	27.8 - 28.0	0.031 - 0.118	0.8 - 3.0	1.161	29.5	0.815	20.7	0.453	11.5	0.039	1.0	200

ASB
Armor Bushing



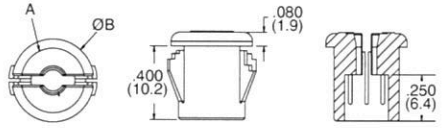


Specifications:
- Material: Polypropylene
- Color: Red

Features:
- Fits armored cable and flexible metal conduit sizes
- Features high dielectric strength and assures insulation on all sharp edges

Item No.	Approvals	Size	A		B		C		D		Cable Size	Trade Size In	Bulk Pack Qty.
			In	mm	In	mm	In	mm	In	mm			
ASB0A		0	0.560	14.22	0.671	17.04	0.380	9.650	0.312	7.92	14/2, 14/3, 12/2	5/16	30000
ASB1A		1	0.650	16.51	0.671	17.04	0.450	11.43	0.312	7.92	14/4, 12/3, 6/1, 4/1	3/8	20000
ASB2A		2	0.610	15.49	0.859	21.82	0.580	14.73	0.125	3.18	12/4, 10/2, 10/3, 2/1	7/16	15000
ASB3A		3	0.670	17.02	1.046	26.57	0.790	20.07	0.109	2.77	10/4, 8/2, 8/3, 1/1	1/2	7500
ASB4A		4	0.830	21.08	1.266	32.15	1.000	25.40	0.156	3.96	8/4, 6/4, 6/3, 6/2, 4/3, 4/2	3/4	4000

SB
Snub Bushing



Specifications:
- Material: UL94V-2 Nylon 6/6
- Color: Black

Features:
- Bushing opens to accept cable then closes firmly when installed into hole
- Provides insulation and slight strain relief

Part Number	Panel Hole		Max Panel Thickness		ID		Ø A		Overall OD B		Bulk Pack Qty.
	In	mm	In	mm	In	mm			In	mm	
SB-1	0.375	9.5	0.125	3.2	0.150	3.8	0.360	9.1	0.450	11.4	500
SB-2	0.437	11.1	0.125	3.2	0.220	5.6	0.430	10.9	0.550	14.0	500
SB-3	0.500	12.7	0.125	3.2	0.280	7.1	0.490	12.4	0.630	16.0	500

PLUGS

PGM / PLH
Standard Locking Hole Plug

Richco

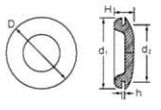
Expanded Line

Specifications:
- Material: UL94V-2 Nylon 6/6
- Color: Black

Features:
- Each part fits multiple common sheet metal thicknesses
- Closes access sheet metal panel holes

Item No.	Mounting Hole In	Mounting Hole mm	Max Panel Thickness In	Max Panel Thickness mm	OD A In	OD A mm	Overall Height B In	Overall Height B mm	Pack Qty.	Bulk Pack Qty.
PGM-4	0.189	4.8	0.067	1.7	0.236	6.0	0.205	5.2	1	1000
PGM-1	0.250	6.4	0.062	1.6	0.312	7.9	0.312	7.9	1	1000
PGM-6	0.252	6.4	0.067	1.7	0.299	7.6	0.221	5.6	1	1000
PGM-7	0.278	7.1	0.063	1.6	0.433	11.0	0.276	7.0	1	1000
PGM-8	0.307	7.8	0.063	1.6	0.375	9.5	0.236	6.0	1	1000
PGM-2	0.312	7.9	0.062	1.6	0.375	9.5	0.312	7.9	1	1000
PGM-33	0.375	9.5	0.125	3.2	0.468	11.9	0.406	6.4	1	1000
PGM-9	0.376	9.6	0.047	1.2	0.511	13.0	0.256	6.5	1	1000
PGM-10	0.386	9.8	0.055	1.4	0.511	13.0	0.236	6.0	1	1000
PGM-34	0.437	11.1	0.125	3.2	0.531	13.5	0.406	10.3	1	1000
PGM-3	0.468	11.9	0.062	1.6	0.531	13.5	0.250	6.4	1	1000
PGM-24	0.500	12.7	0.125	3.2	0.578	14.7	0.406	10.3	1	1000
PGM-5	0.500	12.7	0.062	1.6	0.562	14.3	0.250	6.4	1	1000
PGM-13	0.506	12.8	0.083	2.1	0.669	17.0	0.315	8.0	1	1000
PGM-11	0.531	13.5	0.062	1.6	0.593	15.1	0.250	6.4	1	500
PGM-26	0.562	14.3	0.125	3.2	0.656	16.7	0.406	10.3	1	200
PGM-27	0.625	15.9	0.125	3.2	0.718	18.2	0.406	10.3	1	200
PGM-12	0.625	15.9	0.062	1.6	0.718	18.2	0.250	6.4	1	500
PGM-16	0.628	16.0	0.079	2.0	0.787	20.0	0.315	8.0	1	500
PGM-28	0.687	17.5	0.125	3.2	0.781	19.8	0.406	10.3	1	200
PGM-19	0.746	19.0	0.125	3.2	0.925	23.5	0.413	10.5	1	500
PGM-14	0.750	19.1	0.062	1.6	0.843	21.4	0.250	6.4	1	500
PGM-15	0.781	19.8	0.062	1.6	0.890	22.6	0.250	6.4	1	500
PGM-22	0.864	22	0.118	3.0	1.024	26.0	0.378	9.6	1	500
PGM-17	0.875	22.2	0.062	1.6	0.968	24.6	0.250	6.5	1	500
PGM-29	0.875	22.2	0.125	3.2	1.125	28.6	0.453	11.5	1	200
PGM-25	1.004	25.5	0.125	3.2	1.102	28.0	0.500	12.7	1	200
PGM-32	1.097	27.9	0.125	3.2	1.218	30.9	0.465	11.8	1	200
PGM-30	1.203	30.6	0.125	3.2	1.339	34.0	0.512	13.0	1	200
PGM-18	1.250	31.8	0.125	3.2	1.375	34.9	0.465	11.8	1	200
PGM-20	1.375	35.0	0.125	3.2	1.500	38.1	0.465	11.8	1	200
PGM-31	1.500	38.1	0.125	3.2	1.671	42.4	0.465	11.8	1	200
PGM-21	1.750	44.5	0.125	3.2	1.906	48.4	0.465	11.8	1	100
PGM-23	2.000	50.8	0.125	3.2	2.170	55.1	0.470	11.9	1	100
PLH023A	2.500	63.5	0.250	6.4	2.775	70.5	0.750	19.1	1	500

BLANKING PLUG
PVC Hole Plug

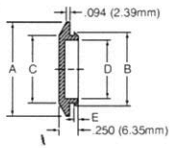


Specifications:
- Materials: PVC or TPR
- Color: Black

Features:
- PVC material: Non-staining; resistant to ozone, acids, and sunlight; with excellent aging qualities
- TPR Material: Very resistant to oils, acids and alkalies; resistant temperatures (up to 350°F, 176°C short term)

Item No. PVC	Item No. TPR	Panel Hole d2 In	Panel Hole d2 mm	Panel Thickness h In	Panel Thickness h mm	OD D In	OD D mm	Depth H In	Depth H mm	d1 In	d1 mm	Pack Qty.	Bulk Pack Qty
10860B	15150B	0.187	4.70	0.063	1.60	0.366	9.30	0.181	4.60	0.366	9.30	1	10000
10825B	15151B	0.250	6.40	0.063	1.60	0.374	9.50	0.197	5.00	0.374	9.50	1	10000
10832B	—	0.313	8.00	0.031	0.80	0.571	14.50	0.157	4.00	0.417	10.60	1	10000
10233B	—	0.313	8.00	0.063	1.60	0.571	14.50	0.177	4.50	0.417	10.60	1	10000
10488B	—	0.354	9.00	0.063	1.60	0.591	15.00	0.260	6.60	0.488	12.40	1	10000
10912B	15155B	0.438	11.10	0.063	1.60	0.697	17.70	0.244	6.20	0.504	12.80	1	10000
10768B	—	0.453	11.50	0.063	1.60	0.669	17.00	0.276	7.00	0.610	15.50	1	5000
15511B	—	0.469	11.90	0.047	1.20	0.689	17.50	0.280	7.10	0.626	15.90	1	10000
10502B	15157B	0.500	12.70	0.063	1.60	0.736	18.70	0.220	5.60	0.610	15.50	1	5000
11321B	15158B	0.587	14.90	0.051	1.30	0.787	20.00	0.276	7.00	0.724	18.40	1	10000
10213B	15159B	0.610	15.50	0.063	1.60	0.866	22.00	0.295	7.50	0.748	19.00	1	5000
40043B	—	0.625	15.90	0.063	1.60	0.748	19.00	0.280	7.10	0.748	19.00	1	10000
12914B	—	0.642	16.30	0.051	1.30	0.787	20.00	0.276	7.00	0.728	18.50	1	5000
10678B	15160B	0.750	19.00	0.063	1.60	0.984	25.00	0.256	6.50	0.846	21.50	1	5000
10499A	15161B	0.781	20.00	0.063	1.60	0.984	25.00	0.256	6.50	0.846	21.50	1	5000
11152B	15162B	0.866	22.00	0.094	2.40	1.122	28.50	0.323	8.20	1.047	26.60	1	3000
10902B	—	0.875	22.50	0.063	1.60	1.122	28.50	0.295	7.50	1.063	27.00	1	3000
11027B	15164B	0.968	24.50	0.094	2.40	1.181	30.00	0.343	8.70	1.083	27.50	1	2000
11323B	—	0.984	25.00	0.031	0.80	1.516	38.50	0.181	4.60	1.122	28.50	1	3000
10705B	15166B	1.000	25.40	0.063	1.60	1.260	32.00	0.354	9.00	1.114	28.30	1	3000
11148B	15165B	1.000	25.40	0.094	2.40	1.260	32.00	0.354	9.00	1.114	28.30	1	3000
11239B	—	1.250	31.50	0.031	0.80	1.504	38.20	0.276	7.00	1.240	31.50	1	2000
11059B	15168B	1.250	31.50	0.063	1.60	1.504	38.20	0.295	7.50	1.394	35.40	1	2000
11281B	15170B	1.260	32.00	0.122	3.10	1.504	38.20	0.354	9.00	1.394	35.40	1	2000
10877B	15171B	1.500	38.20	0.063	1.60	1.720	43.70	0.323	8.20	1.693	43.00	1	1500
10320B	15172B	2.031	51.50	0.063	1.60	2.264	57.50	0.488	12.40	2.071	52.60	1	500

S
Sheet Metal Plug



Specifications:
- Material: Low-Density Polyethylene
- Color: Black

Features:
- Economical snap-in plug that provides an attractive finish and a secure fit for entry holes in sheet metal

Item No.	Hole Size	Max Metal Thickness In	Max Metal Thickness mm	A In	A mm	B In	B mm	C In	C mm	D In	D mm	E In	E mm	Pack Qty.	Bulk Pack Qty.
S1/4A	0.250	0.110	2.8	0.500	12.7	0.280	7.1	0.250	6.4	0.188	4.8	0.250	6.4	1	5000
SM3/8A	0.375	0.065	1.7	0.740	18.8	0.400	10.2	0.370	9.4	0.240	6.1	0.250	6.4	1	5000
S3/8A	0.375	0.110	2.8	0.730	18.5	0.412	10.5	0.370	9.4	0.270	6.9	0.110	2.8	1	5000
S7/16A	0.438	0.110	2.8	0.688	17.5	0.471	12.0	0.438	11.1	0.375	9.5	0.250	6.4	1	6000
S1/2A	0.500	0.075	1.9	0.875	22.2	0.570	14.5	0.510	13.0	0.375	9.5	0.115	2.9	1	6000
S9/16A	0.563	0.110	2.8	0.813	20.6	0.600	15.2	0.563	14.3	0.500	12.7	0.250	6.4	1	6000
S5/8A	0.625	0.075	1.9	0.813	20.7	0.670	17.0	0.620	15.8	0.540	13.7	0.100	2.5	1	6000
S11/16A	0.688	0.110	2.8	1.000	25.4	0.720	18.3	0.688	17.5	0.925	23.5	0.250	6.4	1	5000
SM3/4A	0.750	0.094	2.4	1.120	28.5	0.810	20.6	0.760	19.3	0.610	15.5	0.250	6.4	1	5000
S3/4A	0.750	0.110	2.8	1.125	28.6	0.790	20.1	0.760	19.3	0.623	15.8	0.115	2.9	1	6500
S13/16A	0.813	0.110	2.8	1.125	28.6	0.845	21.5	0.813	20.7	0.750	19.1	0.250	6.4	1	5000
S7/8A	0.875	0.110	2.8	1.250	31.8	0.900	22.9	0.870	22.1	0.745	18.9	0.094	2.4	1	5000
S15/16A	0.937	0.111	2.8	1.251	31.8	0.980	24.9	0.937	23.8	0.875	22.2	0.250	6.4	1	5000
S1A	1.000	0.110	2.8	1.438	36.5	1.040	26.4	1.010	25.7	0.875	22.2	0.110	2.8	1	3500
S1-3/32A	1.094	0.110	2.8	1.375	34.9	1.150	29.2	1.094	27.8	1.031	26.2	0.250	6.4	1	4000
S1-1/8A	1.125	0.110	2.8	1.500	38.1	1.180	30.0	1.125	28.6	1.063	27.0	0.250	6.4	1	3000
S1-5/16A	1.313	0.110	2.8	1.688	42.9	1.360	34.5	1.313	33.4	1.250	31.8	0.250	6.4	1	2500
S1-1/2A	1.500	0.110	2.8	1.875	47.6	1.540	39.1	1.500	38.1	1.400	35.6	0.110	2.8	1	2000
S1-3/4A	1.750	0.110	2.8	2.130	54.1	1.835	46.6	1.730	43.9	1.610	40.9	0.105	2.7	1	1500
S2A	2.000	0.110	2.8	2.375	60.3	2.060	52.3	2.000	50.8	1.938	49.2	0.250	6.4	1	1000
S2-1/8A	2.125	0.110	2.8	2.500	63.5	2.175	55.3	2.125	54.0	2.063	52.4	0.250	6.4	1	1000
S2-1/2A	2.500	0.110	2.8	3.000	76.2	2.560	65.0	2.500	63.5	2.438	61.9	0.250	6.4	1	700
S2-5/8A	2.625	0.110	2.8	3.125	79.4	2.685	68.2	2.625	66.7	2.563	65.1	0.250	6.4	1	1200
S3A	3.000	0.110	2.8	3.375	85.7	3.060	77.7	3.000	76.2	2.938	74.6	0.250	6.4	1	1000
S3-3/8A	3.375	0.110	2.8	3.750	95.3	3.435	87.3	3.375	85.7	3.313	84.2	0.250	6.4	1	500
S3-1/2A	3.500	0.110	2.8	3.875	98.4	3.560	90.4	3.500	88.9	3.438	87.3	0.250	6.4	1	600