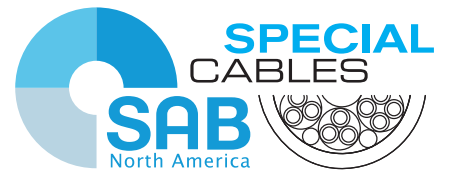
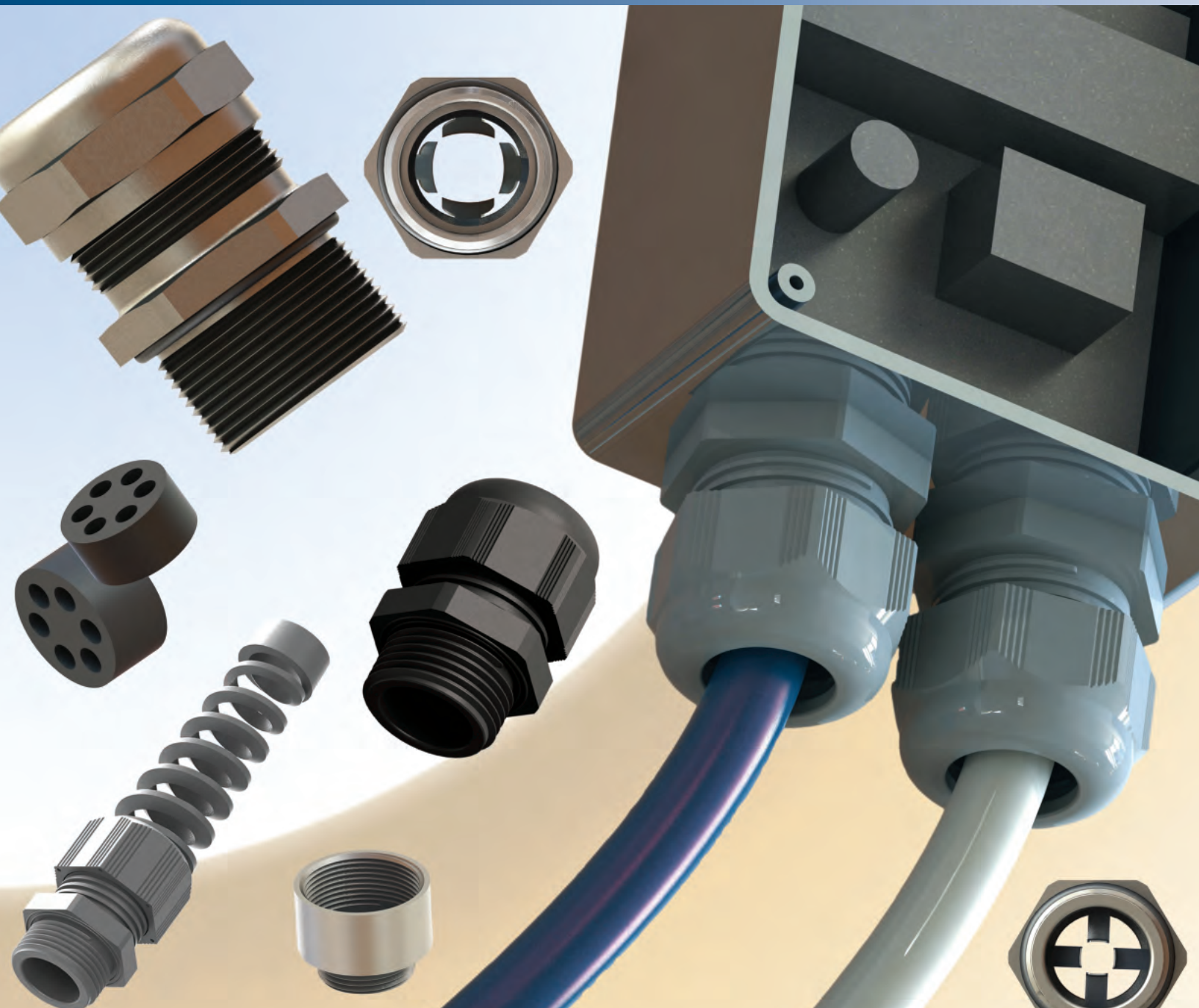


POLYAMIDE & METAL CORD GRIPS  
EMC SHIELDING  
ACCESSORIES & FITTINGS



# CORD GRIPS & ACCESSORIES FOR SECURING & SHIELDING YOUR CABLE



866-722-2974 • [www.sabcable.com](http://www.sabcable.com)

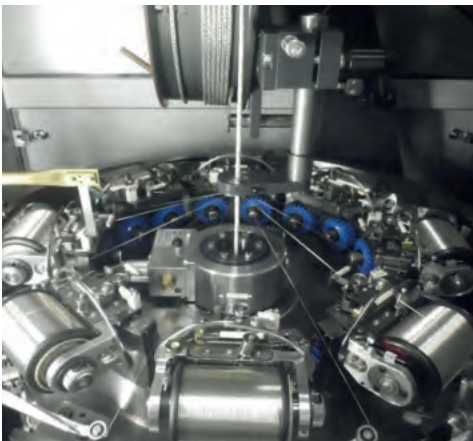
# SAB NORTH AMERICA

## ABOUT US



SAB North America is a focused supplier for the automation, medical, high temperature, and robotics industries, providing cable solutions that meet, exceed, and set new standards in the flexible cable market. In addition to flexible cable products, we offer an extensive inventory of high-quality cable accessories including cord grips, grounding glands and other accessories that complement our flexible control and automation cables.

Our parent company, SAB Bröckskes, is located in Viersen, Germany where the manufacturing and testing of our products is done. SAB Bröckskes has been a proven leader in the development and manufacturing of industrial cables for over 70 years. SAB Bröckskes adherence to product quality, ISO 9001 certified, has proven itself in thousands of the world's most demanding robotic and automated applications. SAB's level of speed and service as a capable supplier is unmatched. SAB lives up to its name in not only flexible cable but also flexible manufacturing. Special cables can be designed, manufactured and delivered in just 6-8 weeks, and even faster in special circumstances!



### **SAB Service Advantage...We make it Easy**

- Cut to length with no cut charges
- Prepaid freight within US for orders over \$2,500
- Specialty cable designs (1500 ft minimum)
- No minimum on orders
- Free drop shipments (no surcharges)
- 24-hour shipments from large inventory in stock in NJ
- No minimum on orders
- Cord grips



# CORD GRIPS & ACCESSORIES

## TABLE OF CONTENTS

### Polyamide 6 Cord Grips

■ CG 100 Metric	Polyamide cord grip, dome cap, black or gray, metric thread	5
■ CG 100 PG	Polyamide cord grip, dome cap, black or gray, PG thread	6
■ CG 100 NPT	Polyamide cord grip, dome cap, black or gray, NPT thread	7
■ CG 200 Metric	Polyamide cord grip, flex cap, black or gray, metric thread	8
■ CG 200 PG	Polyamide cord grip, flex cap, black or gray, PG thread	9
■ CG 200 NPT	Polyamide cord grip, flex cap, black or gray, NPT thread	10
■ Locknuts	Polyamide locknuts, black or gray, metric & PG & NPT thread	10

### Metal Cord Grips

■ CG 300 Metric	Nickel plated brass cord grip, standard & longer thread, metric thread	11
■ CG 300 PG	Nickel plated brass cord grip, standard & longer thread, PG thread	12
■ CG 300 NPT	Nickel plated brass cord grip, NPT thread	13
■ CG 350 Metric	Stainless steel cord grip, SS303 or SS316, metric thread	14
■ CG 350 PG	Stainless steel cord grip, SS303 or SS316, PG thread	14
■ CG 350 NPT	Stainless steel cord grip, SS303 or SS316, NPT thread	14
■ Locknuts	Nickel plated brass locknuts, metric & PG thread	19

### EMC Grounding Cord Grips

■ EMC Overview	EMC-2 & EMC-4 Overview	15
■ CG EMC-2 Metric	Nickel plated brass EMC cable gland, standard & longer thread, metric thread	16
■ CG EMC-2 PG	Nickel plated brass EMC cable gland, standard & longer thread, PG thread	17
■ CG EMC-2 NPT	Nickel plated brass EMC cable gland, NPT thread	17
■ CG EMC-4 Metric	Nickel plated brass EMC cable gland, vibration proof, metric thread	18
■ CG EMC-4 PG	Nickel plated brass EMC cable gland, vibration proof, PG thread	18
■ CG EMC-4 NPT	Nickel plated brass EMC cable gland, vibration proof, NPT thread	18
■ EMC Locknuts	Nickel plated brass locknuts with grounding teeth, metric & PG thread	19
■ VFD Grounding Kit	Grounding kits for larger AWG Cables	20

### Cable Gland Accessories & Fittings

■ Enlargers	Nickel plated brass fittings, PG to PG, metric to PG, metric to metric	21
■ Reducers	Nickel plated brass fittings, PG to PG, metric to PG, metric to metric	22
■ Multi-Hole Bushing	NBR multi-hole bushing for use with metric, PG or NPT cord grips	23
■ Hole Plug	Round or Hex polyamide hole plugs, black or gray, metric or PG threads	24
■ Dome Plug	Sealing plug for cable glands based on clamping range	25
■ Metal Plug	Metal round hole plug	26
■ O-Ring	NBR sealing ring	27

# CORD GRIPS & ACCESSORIES

## TABLE OF CONTENTS

### Stainless Steel Hygienic Cable Gland and Conduit Fitting

■ Overview	Hygienic Conduit & Cable Gland	28
■ CG Clean	Stainless steel hygienic cable gland, standard and EMC, metric threads	29
■ CF Clean	Stainless Steel hygienic conduit fitting, metric threads	30

### Ventilation Glands & Plugs

■ VG Vent PA6	Polyamide vent gland, black or gray, metric & PG thread	31
■ VG Vent NPB	Nickel plated brass vent gland, metric & PG thread	31
■ VP Vent PA6	Polyamide vent plug, black or gray, metric thread or quick fit	32
■ VP Vent NPB	Stainless steel vent plug, metric & PG thread	33

### Technical Reference

■ Thread Dimensions	Metric, PG, NPT thread dimensions	34
■ Torque Charts	Polyamide Cord Grips	35
■ Torque Charts	Metal Cord Grips	36
■ Torque Charts	EMC-2 Cord Grips	37
■ Torque Charts	EMC-4 Cord Grips	38
■ Installation	EMC-2 & EMC-4 Installation guide	39

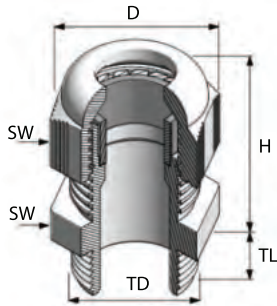
### Additional Products

■ Temperature Measurement	41
■ Cable Harnessing	41
■ Special / Hybrid Cables	42

# CORD GRIPS & ACCESSORIES

## CG 100 Metric Polyamide Cable Glands Metric Thread

Liquid tight seal, fast and easy installation, wide clamping range, multi-purpose applications, easy handling.



### Technical details:

<b>Material:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>Color:</b>	RAL 7001 (gray) RAL 9005 (black)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, cCSAus, VDE, DNV-GL, CE

Part Number		Thread Type	Clamping Range Ø min-max		Thread Diameter (TD)		Wrenching Flats (SW)		Thread Length (TL)	Height (H)	UL
gray	black		inches	mm	inches	mm	inches	mm			
<b>Metric</b>											
PMG-12 <sup>2</sup>	PMB-12	M12x1.5	.118 - .256	3.0 - 6.5	0.472	12	0.591	15	0.315	0.886	UR
PMG-16* <sup>2</sup>	PMB-16*	M16x1.5	.197 - .394	5.0 - 10.0	0.630	16	0.866	22	0.394	1.181	UR
PMG-20*	PMB-20*	M20x1.5	.236 - .473	6.0 - 12.0	0.787	20	0.945	24	0.394	1.161	UL
PMG-20C*	PMB-20C*	M20x1.5	.394 - .552	10.0 - 14.0	0.787	20	1.063	27	0.394	1.220	UL
PMG-25* <sup>2</sup>	PMB-25*	M25x1.5	.512 - .709	13.0 - 18.0	0.984	25	1.299	33	0.394	1.457	UL
PMG-32 <sup>2</sup>	PMB-32	M32x1.5	.709 - .984	18.0 - 25.0	1.260	32	1.654	42	0.591	1.614	UL
PMG-40 <sup>2</sup>	PMB-40	M40x1.5	.866 - 1.260	22.0 - 32.0	1.575	40	2.087	53	0.709	2.028	UL
PMG-50	PMB-50	M50x1.5	1.181 - 1.496	30.0 - 38.0	1.969	50	2.362	60	0.709	2.087	UL
PMG-63	PMB-63	M63x1.5	1.339 - 1.732	34.0 - 44.0	2.480	63	2.559	65	0.709	2.087	UL
<b>Metric with Reducer Bushings</b>											
PMG-12R	PMB-12R	M12x1.5	.079 - .197	2.0 - 5.0	0.472	12	0.591	15	0.315	0.886	UR <sup>1</sup>
PMG-16R*	PMB-16R*	M16x1.5	.118 - .276	3.0 - 7.0	0.630	16	0.866	22	0.394	1.181	UR <sup>1</sup>
PMG-20R*	PMB-20R*	M20x1.5	.197 - .355	5.0 - 9.0	0.787	20	0.945	24	0.394	1.161	UL <sup>1</sup>
PMG-20RC*	PMB-20RC*	M20x1.5	.276 - .473	7.0 - 12.0	0.787	20	1.063	27	0.394	1.220	UL <sup>1</sup>
PMG-25R*	PMB-25R*	M25x1.5	.354 - .630	9.0 - 16.0	0.984	25	1.299	33	0.394	1.457	UL <sup>1</sup>
PMG-32R	PMB-32R	M32x1.5	.472 - .788	12.0 - 20.0	1.260	32	1.654	42	0.591	1.614	UL <sup>1</sup>
PMG-40R	PMB-40R	M40x1.5	.788 - 1.024	20.0 - 26.0	1.575	40	2.087	53	0.709	2.028	UL <sup>1</sup>
PMG-50R	PMB-50R	M50x1.5	.984 - 1.220	25.0 - 31.0	1.969	50	2.362	60	0.709	2.087	UL <sup>1</sup>
PMG-63R	PMB-63R	M63x1.5	1.142 - 1.378	29.0 - 35.0	2.480	63	2.559	65	0.709	2.087	UL <sup>1</sup>

Locknut included

\*Available with longer thread of 0.591". Add an "L" to end of the P/N.

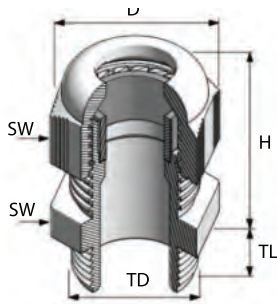
<sup>1</sup>Product is UR/UL tested to cCSAus

<sup>2</sup>Other clamping ranges available

# CORD GRIPS & ACCESSORIES

## CG 100 PG Polyamide Cable Glands PG Thread

Liquid tight seal, fast and easy installation, wide clamping range, multi-purpose applications, easy handling.



### Technical details:

<b>Material:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>Color:</b>	RAL 7001 (gray) RAL 9005 (black)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, cCSAus, DNV-GL, CE

Part Number		Thread Type	Clamping Range Ø min-max		Thread Diameter (TD)		Wrenching Flats (SW)		Thread Length (TL)	Height (H)	UL
gray	black		inches	mm	inches	mm	inches	mm			
<b>PG</b>											
PPG-7	PPB-7	PG 7	.118 - .256	3.0 - 6.5	0.492	12.5	0.591	15	0.315	0.866	UR
PPG-9	PPB-9	PG 9	.157 - .315	4.0 - 8.0	0.598	15.2	0.748	19	0.315	1.043	UR
PPG-11	PPB-11	PG 11	.197 - .394	5.0 - 10.0	0.732	18.6	0.866	22	0.315	1.142	UR
PPG-13	PPB-13	PG 13.5	.236 - .472	6.0 - 12.0	0.803	20.4	0.945	24	0.394	1.142	UL
PPG-16	PPB-16	PG 16	.394 - .551	10.0 - 14.0	0.886	22.5	1.063	27	0.394	1.220	UL
PPG-21	PPB-21	PG 21	.512 - .709	13.0 - 18.0	1.114	28.3	1.299	33	0.433	1.457	UL
PPG-29	PPB-29	PG 29	.709 - .984	18.0 - 25.0	1.457	37.0	1.654	42	0.433	1.614	UL
PPG-36	PPB-36	PG 36	.866 - 1.261	22.0 - 32.0	1.850	47.0	2.087	53	0.512	2.028	UL
PPG-42	PPB-42	PG 42	1.181 - 1.496	30.0 - 38.0	2.126	54.0	2.362	60	0.512	2.106	UL
PPG-48	PPB-48	PG 48	1.339 - 1.732	34.0 - 44.0	2.335	59.3	2.559	65	0.552	2.106	UL
<b>PG with Reducer Bushings</b>											
PPG-7R	PPB-7R	PG 7	.079 - .197	2.0 - 5.0	0.492	12.5	0.591	15	0.315	0.866	UR <sup>1</sup>
PPG-9R	PPB-9R	PG 9	.079 - .236	2.0 - 6.0	0.598	15.2	0.748	19	0.315	1.043	UR <sup>1</sup>
PPG-11R	PPB-11R	PG 11	.118 - .276	3.0 - 7.0	0.732	18.6	0.866	22	0.315	1.142	UR <sup>1</sup>
PPG-13R	PPB-13R	PG 13.5	.197 - .355	5.0 - 9.0	0.803	20.4	0.945	24	0.394	1.142	UL <sup>1</sup>
PPG-16R	PPB-16R	PG 16	.276 - .473	7.0 - 12.0	0.886	22.5	1.063	27	0.394	1.220	UL <sup>1</sup>
PPG-21R	PPB-21R	PG 21	.354 - .630	9.0 - 16.0	1.114	28.3	1.299	33	0.433	1.457	UL <sup>1</sup>
PPG-29R	PPB-29R	PG 29	.472 - .788	12.0 - 20.0	1.457	37.0	1.654	42	0.433	1.614	UL <sup>1</sup>
PPG-36R	PPB-36R	PG 36	.788 - 1.024	20.0 - 26.0	1.850	47.0	2.087	53	0.512	2.028	UL <sup>1</sup>
PPG-42R	PPB-42R	PG 42	.984 - 1.220	25.0 - 31.0	2.126	54.0	2.362	60	0.512	2.106	UL <sup>1</sup>
PPG-48R	PPB-48R	PG 48	1.142 - 1.378	29.0 - 35.0	2.335	59.3	2.559	65	0.552	2.106	UL <sup>1</sup>

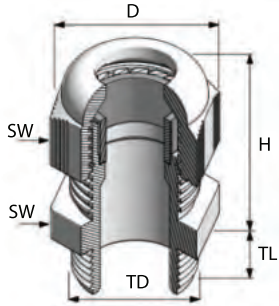
Locknut included  
<sup>1</sup>Product is UR/UL tested to cCSAus

# CORD GRIPS & ACCESSORIES

## CG 100 NPT Polyamide Cable Glands

### NPT Thread

Liquid tight seal, fast and easy installation, wide clamping range, multi-purpose applications, easy handling.



### Technical details:

<b>Material:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>Color:</b>	RAL 7001 (gray) RAL 9005 (black)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, cCSAus, DNV-GL, CE

Part Number		Thread Type	Clamping Range Ø min-max		Thread Diameter (TD)		Wrenching Flats (SW)		Thread Length (TL)	Height (H)	UL
gray	black		inches	mm	inches	mm	inches	mm			
<b>NPT</b>											
PNG-3/8	PNB-3/8	NPT 3/8	.197 - .394	5.0 - 10.0	0.675	17.1	0.866	22	0.591	1.141	UR
PNG-1/2	PNB-1/2	NPT 1/2	.236 - .472	6.0 - 12.0	0.840	21.3	0.945	24	0.591	1.141	UL
PNG-1/2C	PNB-1/2C	NPT 1/2	.394 - .551	10.0 - 14.0	0.840	21.3	1.063	27	0.433	1.220	UL
PNG-3/4	PNB-3/4	NPT 3/4	.512 - .709	13.0 - 18.0	1.050	26.7	1.299	33	0.591	1.456	UL
PNG-1	PNB-1	NPT 1	.709 - .984	18.0 - 25.0	1.315	33.4	1.654	42	0.709	1.614	UL
<b>NPT with Reducer Bushings</b>											
PNG-3/8R	PNB-3/8R	NPT 3/8	.118 - .276	3.0 - 7.0	0.675	17.1	0.866	22	0.591	1.141	UR <sup>1</sup>
PNG-1/2R	PNB-1/2R	NPT 1/2	.197 - .354	5.0 - 9.0	0.840	21.3	0.945	24	0.591	1.141	UL <sup>1</sup>
PNG-1/2RC	PNB-1/2RC	NPT 1/2	.276 - .472	7.0 - 12.0	0.840	21.3	1.063	27	0.433	1.220	UL <sup>1</sup>
PNG-3/4R	PNB-3/4R	NPT 3/4	.354 - .630	9.0 - 16.0	1.050	26.7	1.299	33	0.591	1.456	UL <sup>1</sup>
PNG-1R	PNB-1R	NPT 1	.472 - .787	12.0 - 20.0	1.315	33.4	1.654	42	0.709	1.614	UL <sup>1</sup>

<sup>1</sup> Product is UR/UL tested to cCSAus

## Locknuts

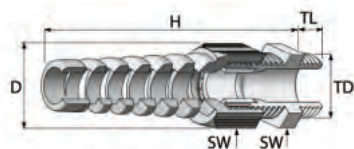


Part Number		Thread Type	Height		Diameter		Wrenching Flats	
gray	black		inches	mm	inches	mm	inches	mm
<b>NPT</b>								
LNG-3/8	LNB-3/8	NPT 3/8	0.276	7	0.984	25.0	0.866	22
LNG-1/2	LNB-1/2	NPT 1/2	0.276	7	1.201	30.5	1.063	27
LNG-3/4	LNB-3/4	NPT 3/4	0.276	7	1.476	37.5	1.299	33
LNG-1	LNB-1	NPT 1	0.276	7	1.831	46.5	1.614	41

# CORD GRIPS & ACCESSORIES

## CG 200 Metric Spiral Cable Glands Metric Thread

Strain relief gland offers maximum protection against conductor fatigue caused by flexing cables.



### Technical details:

<b>Material:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>Color:</b>	RAL 7001 (gray) RAL 9005 (black)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, cCSAus, VDE, DNV-GL, CE

Part Number		Thread Type	Clamping Range Ø min-max		Thread Diameter (TD)		Wrenching Flats (SW)		Thread Length (TL)	Height (H)	UL
gray	black		inches	mm	inches	mm	inches	mm			
<b>Metric*</b>											
FMG-12	FMB-12	M12x1.5	.118 - .256	3.0 - 6.5	0.472	12	0.591	15	0.315	2.244	UR
FMG-12L	FMB-12	M12x1.5	.118 - .256	3.0 - 6.5	0.472	12	0.591	15	0.591	2.244	UR
FMG-16	FMB-16	M16x1.5	.197 - .394	5.0 - 10.0	0.630	16	0.866	22	0.394	3.209	UR
FMG-16L	FMB-16L	M16x1.5	.197 - .394	5.0 - 10.0	0.630	16	0.866	22	0.591	3.209	UR <sup>1</sup>
FMG-20	FMB-20	M20x1.5	.236 - .472	6.0 - 12.0	0.787	20	0.945	24	0.394	3.661	UL
FMG-20L	FMB-20L	M20x1.5	.236 - .472	6.0 - 12.0	0.787	20	0.945	24	0.591	3.661	UL <sup>1</sup>
FMG-20C	FMB-20C	M20x1.5	.394 - .551	10.0 - 14.0	0.787	20	1.063	27	0.394	4.173	UL
FMG-20CL	FMB-20CL	M20x1.5	.394 - .551	10.0 - 14.0	0.787	20	1.063	27	0.591	4.173	UL <sup>1</sup>
FMG-25	FMB-25	M25x1.5	.512 - .709	13.0 - 18.0	0.984	25	1.299	33	0.394	4.626	UL
FMG-25L	FMB-25L	M25x1.5	.512 - .709	13.0 - 18.0	0.984	25	1.299	33	0.591	4.626	UL <sup>1</sup>
<b>Metric with Reducer Bushings</b>											
FMG-12R	FMB-12R	M12x1.5	.079 - .197	2.0 - 5.0	0.472	12	0.591	15	0.315	2.244	UR <sup>1</sup>
FMG-12RL	FMB-12RL	M12x1.5	.079 - .197	2.0 - 5.0	0.472	12	0.591	15	0.591	2.244	UR <sup>1</sup>
FMG-16R	FMB-16R	M16x1.5	.118 - .276	3.0 - 7.0	0.630	16	0.866	22	0.394	3.209	UR <sup>1</sup>
FMG-16RL	FMB-16RL	M16x1.5	.118 - .276	3.0 - 7.0	0.630	16	0.866	22	0.591	3.209	UR <sup>1</sup>
FMG-20R	FMB-20R	M20x1.5	.197 - .354	5.0 - 9.0	0.787	20	0.945	24	0.394	3.661	UL <sup>1</sup>
FMG-20RL	FMB-20RL	M20x1.5	.197 - .354	5.0 - 9.0	0.787	20	0.945	24	0.591	3.661	UL <sup>1</sup>
FMG-20RC	FMB-20RC	M20x1.5	.276 - .472	7.0 - 12.0	0.787	20	1.063	27	0.394	4.173	UL <sup>1</sup>
FMG-20RCL	FMB-20RCL	M20x1.5	.276 - .472	7.0 - 12.0	0.787	20	1.063	27	0.591	4.173	UL <sup>1</sup>
FMG-25R	FMB-25R	M25x1.5	.354 - .630	9.0 - 16.0	0.984	25	1.299	33	0.394	4.626	UL <sup>1</sup>
FMG-25RL	FMB-25RL	M25x1.5	.354 - .630	9.0 - 16.0	0.984	25	1.299	33	0.591	4.626	UL <sup>1</sup>

\*L\* indicates longer thread

<sup>1</sup>Product is UR/UL tested to cCSAus

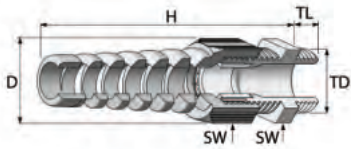
<sup>1</sup>VDE approval for metric only



# CORD GRIPS & ACCESSORIES

## CG 200 PG & NPT Spiral Cable Glands PG & NPT Thread

Strain relief gland offers maximum protection against conductor fatigue caused by flexing cables.



### Technical details:

<b>Material:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>Color:</b>	RAL 7001 (gray) RAL 9005 (black)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, cCSAus, DNV-GL, CE

Part Number		Thread Type	Clamping Range Ø min-max		Thread Diameter (TD)		Wrenching Flats (SW)		Thread Length (TL)	Height (H)	UL
gray	black		inches	mm	inches	mm	inches	mm			
<b>PG</b>											
FPG-7	FPB-7	PG 7	.118 - .256	3.0 - 6.5	0.492	12.5	0.591	15	0.315	2.264	UR
FPG-9	FPB-9	PG 9	.157 - .315	4.0 - 8.0	0.598	15.2	0.748	19	0.315	2.732	UR
FPG-11	FPB-11	PG 11	.197 - .394	5.0 - 10.0	0.732	18.6	0.866	22	0.315	3.213	UR
FPG-13	FPB-13	PG 13.5	.236 - .472	6.0 - 12.0	0.803	20.4	0.945	24	0.394	3.681	UL
FPG-16	FPB-16	PG 16	.394 - .551	10.0 - 14.0	0.886	22.5	1.063	27	0.394	4.173	UL
FPG-21	FPB-21	PG 21	.512 - .709	13.0 - 18.0	1.114	28.3	1.299	33	0.433	4.642	UL
<b>PG with Reducer Bushings</b>											
FPG-7R	FPB-7R	PG 7	.079 - .197	2.0 - 5.0	0.492	12.5	0.591	15	0.315	2.264	UR <sup>1</sup>
FPG-9R	FPB-9R	PG 9	.079 - .236	2.0 - 6.0	0.598	15.2	0.748	19	0.315	2.732	UR <sup>1</sup>
FPG-11R	FPB-11R	PG 11	.118 - .276	3.0 - 7.0	0.732	18.6	0.866	22	0.315	3.213	UR <sup>1</sup>
FPG-13R	FPB-13R	PG 13.5	.197 - .354	5.0 - 9.0	0.803	20.4	0.945	24	0.394	3.681	UL <sup>1</sup>
FPG-16R	FPB-16R	PG 16	.276 - .472	7.0 - 12.0	0.886	22.5	1.063	27	0.394	4.173	UL <sup>1</sup>
FPG-21R	FPB-21R	PG 21	.354 - .630	9.0 - 16.0	1.114	28.3	1.299	33	0.433	4.642	UL <sup>1</sup>
<b>NPT</b>											
FNG-3/8	FNB-3/8	NPT 3/8	.197 - .394	5.0 - 10.0	0.675	17.1	0.866	22	0.591	3.169	UR
FNG-1/2	FNB-1/2	NPT 1/2	.236 - .472	6.0 - 12.0	0.840	21.3	0.945	24	0.591	3.720	UL
FNG-1/2C	FNB-1/2C	NPT 1/2	.394 - .551	10.0 - 14.0	0.840	21.3	1.063	27	0.591	4.173	UL
FNG-3/4	FNB-3/4	NPT 3/4	.512 - .709	13.0 - 18.0	1.050	26.7	1.299	33	0.591	4.606	UL
<b>NPT with Reducer Bushings†</b>											
FNG-3/8R	FNB-3/8R	NPT 3/8	.118 - .276	3.0 - 7.0	0.675	17.1	0.866	22	0.591	3.169	UR <sup>1</sup>
FNG-1/2R	FNB-1/2R	NPT 1/2	.197 - .354	5.0 - 9.0	0.840	21.3	0.945	24	0.591	3.720	UL <sup>1</sup>
FNG-1/2RC	FNB-1/2RC	NPT 1/2	.276 - .472	7.0 - 12.0	0.840	21.3	1.063	27	0.591	4.173	UL <sup>1</sup>
FNG-3/4R	FNB-3/4R	NPT 3/4	.354 - .630	9.0 - 16.0	1.050	26.7	1.299	33	0.591	4.606	UL <sup>1</sup>

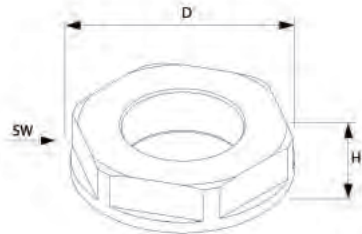
<sup>1</sup> Product is UR/UL tested to cCSAus

# CORD GRIPS & ACCESSORIES

## Polyamide Locknuts

Metric, PG, & NPT

Hexagonal locknuts made of polyamide, glass fiber reinforced.



### Technical details:

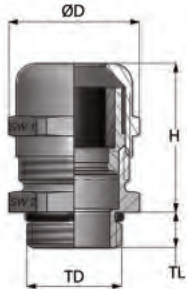
<b>Material:</b>	Polyamide 6 (30% Glass Fiber reinforced)
<b>Color:</b>	RAL 7001 (Gray) RAL 9005 (Black)
<b>Temperature range</b> <i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C
<b>Flammability:</b>	UL 94 HB

Part Number		Thread Type	Height (H)		Diameter (TD)		Wrenching Flats (SW)	
gray	black		inches	mm	inches	mm	inches	mm
<b>Metric</b>								
LMG-12	LMB-12	M12x1.5	0.197	5	0.768	19.5	0.709	18
LMG-16	LMB-16	M16x1.5	0.197	5	0.953	24.2	0.866	22
LMG-20	LMB-20	M20x1.5	0.236	6	1.126	28.6	1.024	26
LMG-25	LMB-25	M25x1.5	0.236	6	1.378	35.0	1.260	32
LMG-32	LMB-32	M32x1.5	0.276	7	1.815	46.1	1.614	41
LMG-40	LMB-40	M40x1.5	0.276	7	2.177	55.3	1.969	50
LMG-50	LMB-50	M50x1.5	0.315	8	2.602	66.1	2.362	60
LMG-63	LMB-63	M63x1.5	0.315	8	3.248	82.5	2.953	75
<b>PG</b>								
LPG-7	LPB-7	PG 7	0.197	5	0.827	21.0	0.748	19
LPG-9	LPB-9	PG 9	0.197	5	0.945	24.0	0.866	22
LPG-11	LPB-11	PG 11	0.197	5	1.024	26.0	0.945	24
LPG-13	LPB-13	PG 13.5	0.236	6	1.142	29.0	1.063	27
LPG-16	LPB-16	PG 16	0.236	6	1.299	33.0	1.181	30
LPG-21	LPB-21	PG 21	0.276	7	1.535	39.0	1.417	36
LPG-29	LPB-29	PG 29	0.276	7	1.969	50.0	1.811	46
LPG-36	LPB-36	PG 36	0.315	8	2.598	66.0	2.362	60
LPG-42	LPB-42	PG 42	0.315	8	2.874	73.0	2.559	65
LPG-48	LPB-48	PG 48	0.315	8	3.071	78.0	2.756	70
<b>NPT</b>								
LNG-3/8	LNB-3/8	NPT 3/8	0.276	7	0.984	25.0	0.866	22
LNG-1/2	LNB-1/2	NPT 1/2	0.276	7	1.201	30.5	1.063	27
LNG-3/4	LNB-3/4	NPT 3/4	0.276	7	1.476	37.5	1.299	33
LNG-1	LNB-1	NPT 1	0.276	7	1.831	46.5	1.614	41

# CORD GRIPS & ACCESSORIES

## CG 300 Metric Metal Cable Glands Metric Thread

Impact resistant, suitable for industrial applications, water tight, corrosion resistant.



### Technical details:

<b>Material:</b>	Brass, Nickel Plated
<b>Clamping insert:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>O-Ring:</b>	Neoprene (NBR)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-40°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, VDE, DNV-GL, CE

Part Number	Thread Type	Clamping Range Ø min-max		Thread Diameter (TD)		Wrenching Flats Cap (SW1)		Thread Length (TL)	Height (H)	UL
		inches	mm	inches	mm	inches	mm			
<b>Metric</b>										
MMS-12*	M12x1.5	.118 - .256	3.0 - 6.5	0.472	12	0.551	14	0.236	0.846	UR
MMS-16	M16x1.5	.157 - .315	4.0 - 8.0	0.630	16	0.669	17	0.276	0.906	UR
MMS-16C*	M16x1.5	.197 - .394	5.0 - 10.0	0.630	16	0.669	17	0.276	1.122	UR
MMS-20	M20x1.5	.236 - .472	6.0 - 12.0	0.787	20	0.866	22	0.315	1.043	UL
MMS-20C*	M20x1.5	.394 - .551	10.0 - 14.0	0.787	20	0.866	22	0.315	1.102	UL
MMS-25	M25x1.5	.394 - .551	10.0 - 14.0	0.984	25	0.945	24	0.315	1.091	UL
MMS-25C*	M25x1.5	.512 - .709	13.0 - 18.0	0.984	25	0.945	24	0.315	1.260	UL
MMS-32	M32x1.5	.512 - .709	13.0 - 18.0	1.260	32	1.181	30	0.354	1.299	UL
MMS-32C*	M32x1.5	.709 - .984	18.0 - 25.0	1.260	32	1.575	40	0.354	1.732	UL
MMS-40	M40x1.5	.709 - .984	18.0 - 25.0	1.575	40	1.575	40	0.354	1.496	UL
MMS-40C*	M40x1.5	.866 - 1.260	22.0 - 32.0	1.575	40	1.969	50	0.354	2.063	UL
MMS-50	M50x1.5	.866 - 1.260	22.0 - 32.0	1.969	50	1.969	50	0.354	1.890	UL
MMS-50C*	M50x1.5	1.063 - 1.732	27.0 - 44.0	1.969	50	2.520	64	0.354	2.079	UL
MMS-63	M63x1.5	1.339 - 1.732	34.0 - 44.0	2.480	63	2.520	64	0.551	2.087	UL
MMS-63C*	M63x1.5	1.457 - 2.087	37.0 - 53.0	2.480	63	2.953	75	0.394	1.969	UL
<b>Metric with Long Thread</b>										
MMS-12L	M12x1.5	.118 - .256	3.0 - 6.5	0.472	12	0.551	14	0.472	0.846	UR
MMS-16L	M16x1.5	.157 - .315	4.0 - 8.0	0.630	16	0.669	17	0.472	0.906	UR
MMS-20L	M20x1.5	.236 - .472	6.0 - 12.0	0.787	20	0.866	22	0.472	1.043	UL
MMS-25L	M25x1.5	.394 - .551	10.0 - 14.0	0.984	25	0.945	24	0.472	1.091	UL
MMS-32L	M32x1.5	.512 - .709	13.0 - 18.0	1.260	32	1.181	30	0.591	1.299	UL
MMS-40L	M40x1.5	.709 - .984	18.0 - 25.0	1.575	40	1.575	40	0.591	1.496	UL
MMS-50L	M50x1.5	.866 - 1.260	22.0 - 32.0	1.969	50	1.969	50	0.591	1.890	UL
MMS-50CL	M50x1.5	1.063 - 1.732	27.0 - 44.0	1.969	50	2.520	64	0.591	2.079	UL
MMS-63L	M63x1.5	1.339 - 1.732	34.0 - 44.0	2.480	63	2.520	64	0.709	2.087	UL
MMS-63CL	M63x1.5	1.457 - 2.087	37.0 - 53.0	2.480	63	2.953	75	0.709	1.969	UL

\*Other clamping ranges available

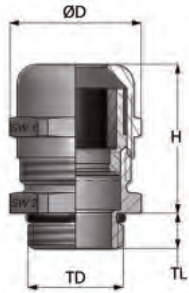
Larger thread sizes (M72 to M120) available upon request

# CORD GRIPS & ACCESSORIES

## CG 300 PG Metal Cable Glands

### PG Thread

Impact resistant, suitable for industrial applications, water tight, corrosion resistant.



### Technical details:

<b>Material:</b>	Brass, Nickel Plated
<b>Clamping insert:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>O-Ring:</b>	Neoprene (NBR)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-40°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, DNV-GL, CE

Part Number	Thread Type	Clamping Range Ø min-max		Thread Diameter (TD)		Wrenching Flats Cap (SW1)		Thread Length (TL)	Height (H)	UL
		inches	mm	inches	mm	inches	mm			
<b>PG</b>										
MPS-7R	PG 7	.079 - .197	2.0 - 5.0	0.492	13	0.551	14	0.236	0.866	-
MPS-7	PG 7	.118 - .256	3.0 - 6.5	0.492	13	0.551	14	0.236	0.866	UR
MPS-9R	PG 9	.079 - .236	2.0 - 6.0	0.598	15	0.669	17	0.236	0.925	-
MPS-9	PG 9	.157 - .315	4.0 - 8.0	0.598	15	0.669	17	0.236	0.925	UR
MPS-11R	PG 11	.118 - .276	3.0 - 7.0	0.732	19	0.787	20	0.236	1.024	-
MPS-11	PG 11	.197 - .394	5.0 - 10.0	0.732	19	0.787	20	0.236	1.024	UR
MPS-13R	PG 13.5	.197 - .355	5.0 - 9.0	0.803	20	0.866	22	0.256	0.965	-
MPS-13	PG 13.5	.236 - .472	6.0 - 12.0	0.803	20	0.866	22	0.256	0.965	UL
MPS-16R	PG 16	.276 - .473	7.0 - 12.0	0.886	23	0.945	24	0.256	1.102	-
MPS-16	PG 16	.394 - .551	10.0 - 14.0	0.886	23	0.945	24	0.256	1.102	UL
MPS-21R	PG 21	.354 - .630	9.0 - 16.0	1.114	28	1.181	30	0.283	1.280	-
MPS-21	PG 21	.512 - .709	13.0 - 18.0	1.114	28	1.181	30	0.283	1.280	UL
MPS-29R	PG 29	.472 - .788	12.0 - 20.0	1.457	37	1.575	40	0.315	1.547	-
MPS-29	PG 29	.709 - .984	18.0 - 25.0	1.457	37	1.575	40	0.315	1.547	UL
MPS-36R	PG 36	.788 - 1.024	20.0 - 26.0	1.850	47	1.969	50	0.354	1.890	-
MPS-36	PG 36	.866 - 1.260	22.0 - 32.0	1.850	47	1.969	50	0.354	1.890	UL
MPS-42R	PG 42	.984 - 1.220	25.0 - 31.0	2.126	54	2.283	58	0.472	1.909	-
MPS-42	PG 42	1.182 - 1.496	30.0 - 38.0	2.126	54	2.283	58	0.472	1.909	UL
MPS-48R	PG 48	1.142 - 1.378	29.0 - 35.0	2.335	59	2.520	64	0.551	2.087	-
MPS-48	PG 48	1.339 - 1.732	34.0 - 44.0	2.335	59	2.520	64	0.551	2.087	UL
<b>PG with Long Thread</b>										
MPS-7L	PG 7	.118 - .256	3.0 - 6.5	0.492	12.5	0.551	14	0.394	0.858	UR
MPS-9L	PG 9	.157 - .315	4.0 - 8.0	0.598	15.2	0.669	17	0.394	0.890	UR
MPS-11L	PG 11	.197 - .394	5.0 - 10.0	0.732	18.6	0.787	20	0.394	0.996	UR
MPS-13L	PG 13.5	.236 - .472	6.0 - 12.0	0.803	20.4	0.866	22	0.394	0.949	UL
MPS-16L	PG 16	.394 - .551	10.0 - 14.0	0.886	22.5	0.945	24	0.394	1.083	UL
MPS-21L	PG 21	.512 - .709	13.0 - 18.0	1.114	28.3	1.181	30	0.472	1.228	UL
MPS-29L	PG 29	.709 - .984	18.0 - 25.0	1.457	37.0	1.575	40	0.472	1.547	UL
MPS-36L	PG 36	.866 - 1.260	22.0 - 32.0	1.850	47.0	1.969	50	0.551	1.858	UL
MPS-42L	PG 42	1.182 - 1.496	30.0 - 38.0	2.126	54.0	2.283	58	0.63	1.878	UL
MPS-48L	PG 48	1.339 - 1.732	34.0 - 44.0	2.335	59.3	2.520	64	0.709	2.047	UL

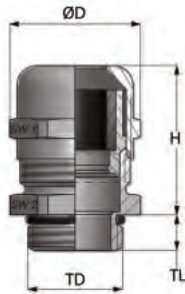


# CORD GRIPS & ACCESSORIES

## CG 300 NPT Metal Cable Glands

### NPT Thread

Impact resistant, suitable for industrial applications, water tight, corrosion resistant.



### Technical details:

<b>Material:</b>	Brass, Nickel Plated
<b>Clamping insert:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>O-Ring:</b>	Neoprene (NBR)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-40°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, DNV-GL, CE

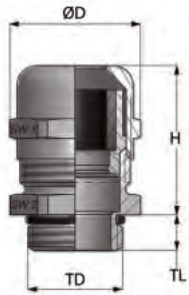
Part Number	Thread Type	Clamping Range Ø min-max		Thread Diameter (TD)		Wrenching Flats Cap (SW1)		Thread Length (TL)	Height (H)	UL
		inches	mm	inches	mm	inches	mm			
<b>NPT</b>										
MNS-3/8R	NPT 3/8	.118 - .236	2.0 - 6.0	0.675	17.1	0.669	17	0.453	0.906	-
MNS-3/8RC	NPT 3/8	.118 - .276	3.0 - 7.0	0.675	17.1	0.787	20	0.453	1.161	-
MNS-3/8	NPT 3/8	.157 - .315	4.0 - 8.0	0.675	17.1	0.669	17	0.453	0.906	UR
MNS-3/8C	NPT 3/8	.197 - .394	5.0 - 10.0	0.675	17.1	0.787	20	0.453	1.161	UR
MNS-1/2R	NPT 1/2	.197 - .355	5.0 - 9.0	0.840	21.3	0.866	22	0.512	1.004	-
MNS-1/2	NPT 1/2	.236 - .472	6.0 - 12.0	0.840	21.3	0.866	22	0.512	1.004	UL
MNS-1/2RC	NPT 1/2	.276 - .473	7.0 - 12.0	0.840	21.3	0.945	24	0.512	1.102	-
MNS-1/2C	NPT 1/2	.394 - .551	10.0 - 14.0	0.840	21.3	0.945	24	0.512	1.102	UL
MNS-3/4R	NPT 3/4	.354 - .630	9.0 - 16.0	1.050	26.7	1.181	30	0.512	1.398	-
MNS-3/4	NPT 3/4	.512 - .709	13.0 - 18.0	1.050	26.7	1.181	30	0.512	1.398	UL
MNS-1R	NPT 1	.472 - .788	12.0 - 20.0	1.315	33.4	1.575	40	0.512	1.693	-
MNS-1	NPT 1	.709 - .984	18.0 - 25.0	1.315	33.4	1.575	40	0.512	1.693	UL
MNS-1 1/4	NPT 1 1/4	.866 - 1.260	22.0 - 32.0	1.903	48.3	1.969	50	0.984	1.882	-
MNS-1 1/2	NPT 1 1/2	1.182 - 1.496	30.0 - 38.0	1.903	48.3	2.283	58	0.787	1.882	-
MNS-2	NPT-2	1.339 - 1.732	34.0 - 44.0	2.374	60.3	2.520	64	1.063	2.165	-

# CORD GRIPS & ACCESSORIES

## CG 350 Metric & PG Stainless Steel Cable Glands

Metric, PG, NPT Thread

Impact resistant, suitable for industrial and food and beverage applications, water tight, corrosion resistant.



### Technical details:

<b>Material:</b>	Stainless steel (AISI 303) or (AISI 316L)
<b>Clamping insert:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>O-Ring:</b>	Neoprene (NBR)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-40°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, VDE, DNV-GL, CE

Part Number		Thread Type	Clamping Range Ø min-max		Thread Diameter (TD)		Wrenching Flats Cap (SW1)		Thread Length (TL)	Height (H)	UL
SS 303	SS 316		inches	mm	inches	mm	inches	mm			
<b>Metric</b>											
SM3-12*	SM6-12	M12x1.5	.118 - .256	3.0 - 6.5	0.472	12.0	0.551	14	6.0	22.0	-
SM3-16*	SM6-16	M16x1.5	.157 - .315	4.0 - 8.0	0.630	16.0	0.669	17	7.0	23.0	UR
SM3-20*	SM6-20	M20x1.5	.236 - .473	6.0 - 12.0	0.787	20.0	0.866	22	8.0	24.0	UL
SM3-25*	SM6-25	M25x1.5	.394 - .551	10.0 - 14.0	0.984	25.0	0.945	24	8.0	27.5	UL
SM3-32*	SM6-32	M32x1.5	.512 - .709	13.0 - 18.0	1.260	32.0	1.181	30	9.0	32.5	UL
SM3-40*	SM6-40	M40x1.5	.709 - .984	18.0 - 25.0	1.575	40.0	1.614	41	9.0	40.6	UL
SM3-50*	SM6-50	M50x1.5	.866 - 1.260	22.0 - 32.0	1.969	50.0	1.969	50	9.0	46.0	UL
SM3-63*	SM6-63	M63x1.5	1.339 - 1.732	34.0 - 44.0	2.480	63.0	2.559	65	14.0	53.0	UL
<b>PG<sup>1</sup></b>											
SP3-7*	SP6-7	PG 7	.118 - .256	3.0 - 6.5	0.492	12.5	0.551	14	6.0	22.0	UR
SP3-9*	SP6-9	PG 9	.157 - .315	4.0 - 8.0	0.598	15.2	0.669	17	6.0	23.0	UR
SP3-11*	SP6-11	PG 11	.197 - .394	5.0 - 10.0	0.732	18.6	0.866	22	6.0	25.5	UR
SP3-13*	SP6-13	PG 13.5	.236 - .472	6.0 - 12.0	0.803	20.4	0.866	22	6.5	24.0	UL
SP3-16*	SP6-16	PG 16	.394 - .551	10.0 - 14.0	0.886	22.5	0.945	24	6.5	27.5	UL
SP3-21*	SP6-21	PG 21	.512 - .709	13.0 - 18.0	1.114	28.3	1.181	30	7.2	32.5	UL
SP3-29*	SP6-29	PG 29	.709 - .984	18.0 - 25.0	1.457	37.0	1.614	41	8.0	38.5	UL
SP3-36*	SP6-36	PG 36	.866 - 1.261	22.0 - 32.0	1.850	47.0	1.969	50	9.0	46.0	UL
SP3-42*	SP6-42	PG 42	1.181 - 1.496	30.0 - 38.0	2.126	54.0	2.362	60	12.0	48.0	UL
SP3-48*	SP6-48	PG 48	1.339 - 1.732	34.0 - 44.0	2.335	59.3	2.559	65	14.0	49.5	UL
<b>NPT<sup>1</sup></b>											
SN3-3/8*	SN6-3/8	NPT 3/8	.157 - .315	4.0 - 8.0	0.675	17.1	0.669	17	11.5	23.0	UR
SN3-3/8C*	SN6-3/8C	NPT 3/8	.197 - .394	5.0 - 10.0	0.675	17.1	0.787	20	11.5	29.5	UR
SN3-1/2*	SN6-1/2	NPT 1/2	.236 - .472	6.0 - 12.0	0.840	21.3	0.866	22	13.0	29.1	UL
SN3-1/2C*	SN6-1/2C	NPT 1/2	.394 - .551	10.0 - 14.0	0.840	21.3	0.945	24	13.0	28.0	UL
SN3-3/4*	SN6-3/4	NPT 3/4	.512 - .709	13.0 - 18.0	1.050	26.7	1.181	30	13.0	35.5	UL
SN3-1*	SN6-1	NPT 1	.709 - .984	18.0 - 25.0	1.315	33.4	1.575	40	13.0	43.0	UL
SN3-1 1/2	SN6-1 1/2	NPT 1 1/2	1.181 - 1.496	30.0 - 38.0	1.902	48.3	2.362	60	26.0	50.0	-
SN-2	SN6-2	NPT 2	1.339 - 1.732	34.0 - 44.0	2.374	60.3	2.559	65	27.0	55.0	-

<sup>1</sup>PG & NPT is not VDE approved  
Stainless steel locknut available upon request  
\*More clamping ranges available

# CORD GRIPS & ACCESSORIES

## EMC Cable Glands

### EMC-2 & EMC-4

The EMC cable glands combine several advantages into one product. With the EMC gland, you get the same clamping range as a normal brass gland with a protection class of IP 68 and the added feature of EMC grounding springs to quickly ground a shielded cable to a metal enclosure or motor. To create the ground path, remove 5-10mm of the jacket to expose the braid and position the gland on the cable. The large surface of the fingers come in contact with the braid to provide a completed grounding connection. Furthermore, the EMC design will give you a low impedance electrical contact between the body and the cable braid without having to open the gland. The shielding for electromagnetic purposes will be perfect by just tightening the gland delivered in a ready to use assembly.

EMC-2



- ▶ Optimal grounding of shielded cable
- ▶ One direction installation
- ▶ Impact resistant
- ▶ Suitable for the highest demands of today's technology
- ▶ Easy installation
- ▶ Easy handling
- ▶ High corrosion resistance
- ▶ Water tight
- ▶ Strain relief

EMC-4



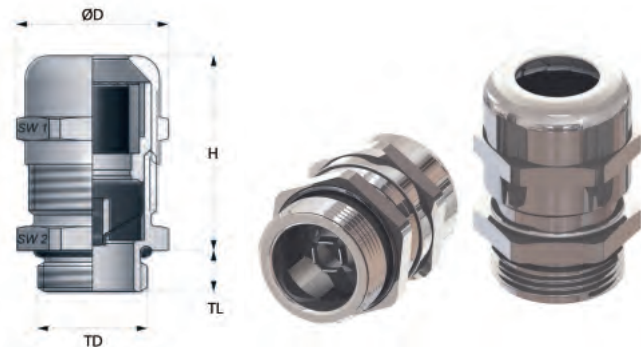
- ▶ Optimal grounding of shielded cable
- ▶ Bi-directional installation
- ▶ Impact resistant
- ▶ Free radial and axial movement of the cable without any damage to the braid
- ▶ Easy installation
- ▶ Large contact surface of the fingers allowing low contact resistance
- ▶ High contact performance under vibrating conditions
- ▶ Water tight
- ▶ Strain relief



# CORD GRIPS & ACCESSORIES

## CG EMC-2 Metric Grounding Cable Gland Metric Thread

Optimal grounding of shielded cable, easy installation, water tight, impact resistant.



### Technical details:

<b>Material:</b>	Brass, Nickel Plated
<b>Contact spring:</b>	Special Copper Alloy
<b>Clamping insert:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>O-Ring:</b>	Neoprene (NBR)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-40°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, VDE, DNV-GL, CE



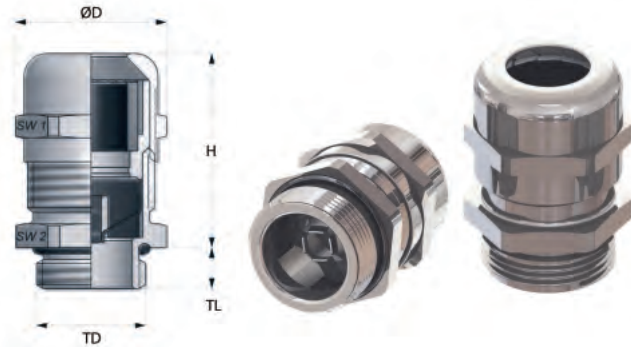
Part Number	Thread Type	Clamping Range Ø min-max		Shield Diameter (Ø min)		Wrenching Flats Cap (SW1)		Thread Diameter (TD)	Thread Length (TL)	Height (H)	UL
		inches	mm	inches	mm	inches	mm				
<b>Metric</b>											
EM2-12	M12x1.5	.118 - .256	3.0 - 6.5	0.098	2.5	0.551	14	12	6	22.0	UR
EM2-16	M16x1.5	.158 - .315	4.0 - 8.0	0.118	3.0	0.669	17	16	7	23.0	UR
EM2-16C	M16x1.5	.177 - .394	5.0 - 10.0	0.138	3.5	0.787	20	16	6.5	29.0	UR
EM2-20	M20x1.5	.236 - .472	6.0 - 12.0	0.177	4.5	0.866	22	20	8	24.5	UR
EM2-25	M25x1.5	.394 - .551	10.0 - 14.0	0.335	8.5	0.945	24	25	8	28.0	UL
EM2-25C	M25x1.5	.512 - .709	13.0 - 18.0	0.413	10.5	1.181	30	25	8	37.5	UL
EM2-32	M32x1.5	.512 - .709	13.0 - 18.0	0.433	11.0	1.181	30	32	9	32.5	UL
EM2-32C	M32x1.5	.709 - .984	18.0 - 25.0	0.551	14.0	1.575	40	32	9	44.0	UL
EM2-40	M40x1.5	.709 - .984	18.0 - 25.0	0.630	16.0	1.575	40	40	9	38.0	UL
EM2-40C	M40x1.5	.866 - 1.261	22.0 - 32.0	0.787	20.0	1.969	50	40	9	52.5	UL
EM2-50	M50x1.5	.866 - 1.261	22.0 - 32.0	0.787	20.0	1.969	50	50	9	48.0	UL
EM2-50C	M50x1.5	1.063 - 1.734	27.0 - 44.0	1.024	26.0	2.520	64	50	9	54.0	-
EM2-63	M63x1.5	1.340 - 1.734	34.0 - 44.0	1.220	31.0	2.520	64	63	14	53.0	UL
<b>Metric with Long Thread</b>											
EM2-12L	M12x1.5	.118 - .256	3.0 - 6.5	0.098	2.5	0.551	14	12	12	22.0	-
EM2-16L	M16x1.5	.158 - .315	4.0 - 8.0	0.118	3.0	0.669	17	16	12	23.0	-
EM2-20L	M20x1.5	.236 - .472	6.0 - 12.0	0.177	4.5	0.866	22	20	12	24.5	-
EM2-25L	M25x1.5	.394 - .551	10.0 - 14.0	0.335	8.5	0.945	24	25	12	28.0	-
EM2-32L	M32x1.5	.512 - .709	13.0 - 18.0	0.433	11.0	1.181	30	32	15	32.5	-
EM2-40L	M40x1.5	.709 - .984	18.0 - 25.0	0.630	16.0	1.575	40	40	15	38.0	-
EM2-50L	M50x1.5	.866 - 1.261	22.0 - 32.0	0.787	20.0	1.969	50	50	15	48.0	-
EM2-63L	M63x1.5	1.340 - 1.734	34.0 - 44.0	1.220	31.0	2.520	64	63	18	53.0	-



# CORD GRIPS & ACCESSORIES

## CG EMC-2 PG & NPT Grounding Cable Glands PG & NPT Thread

Optimal grounding of shielded cable, easy installation, water tight, impact resistant.



### Technical details:

<b>Material:</b>	Brass, Nickel Plated
<b>Contact spring:</b>	Special Copper Alloy
<b>Clamping insert:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>O-Ring:</b>	Neoprene (NBR)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-40°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, DNV-GL, CE



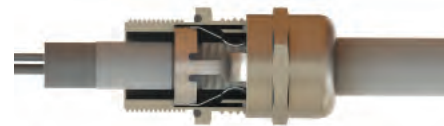
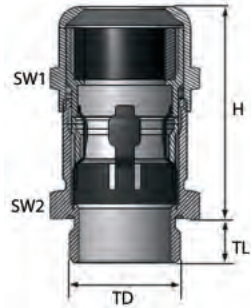
Part Number	Thread Type	Clamping Range Ø min-max		Shield Diameter (Ø min)		Wrenching Flats Cap (SW1)		Thread Diameter (TD)	Thread Length (TL)	Height (H)	UL
		inches	mm	inches	mm	inches	mm				
<b>PG</b>											
EP2-7	PG 7	.118 - .256	3.0 - 6.5	0.098	2.5	0.551	14	12.5	6.0	22.0	UR
EP2-9	PG 9	.157 - .315	4.0 - 8.0	0.118	3.0	0.669	17	15.2	6.0	23.2	UR
EP2-11	PG 11	.197 - .394	5.0 - 10.0	0.157	4.0	0.787	20	18.6	6.0	26.0	UR
EP2-13	PG 13.5	.236 - .473	6.0 - 12.0	0.197	5.0	0.866	22	20.4	6.5	24.5	UR
EP2-16	PG 16	.394 - .551	10.0 - 14.0	0.335	8.5	0.945	24	22.5	6.5	28.0	UL
EP2-21	PG 21	.512 - .709	13.0 - 18.0	0.433	11.0	1.181	30	28.3	7.2	32.5	UL
EP2-29	PG 29	.709 - .984	18.0 - 25.0	0.630	16.0	1.575	40	37.0	8.0	38.0	UL
EP2-36	PG 36	.866 - 1.260	22.0 - 32.0	0.787	20.0	1.969	50	47.0	9.0	48.0	UL
EP2-42	PG 42	1.181 - 1.497	30.0 - 38.0	1.102	28.0	2.283	58	54.0	12.0	48.0	UL
EP2-48	PG 48	1.339 - 1.732	34.0 - 44.0	1.220	31.0	2.520	64	59.3	14.0	52.4	UL
<b>PG with Long Thread</b>											
EP2-7L	PG 7	.118 - .256	3.0 - 6.5	0.098	2.5	0.551	14	12.5	8.0	22.0	-
EP2-9L	PG 9	.157 - .315	4.0 - 8.0	0.118	3.0	0.669	17	15.2	10.0	23.2	-
EP2-11L	PG 11	.197 - .394	5.0 - 10.0	0.157	4.0	0.787	20	18.6	10.0	26.0	-
EP2-13L	PG 13.5	.236 - .473	6.0 - 12.0	0.197	5.0	0.866	22	20.4	10.0	24.5	-
EP2-16L	PG 16	.394 - .551	10.0 - 14.0	0.335	8.5	0.945	24	22.5	10.0	28.0	-
EP2-21L	PG 21	.512 - .709	13.0 - 18.0	0.433	11.0	1.181	30	28.3	12.0	32.5	-
EP2-29L	PG 29	.709 - .984	18.0 - 25.0	0.630	16.0	1.575	40	37.0	12.0	38.0	-
EP2-36L	PG 36	.866 - 1.260	22.0 - 32.0	0.787	20.0	1.969	50	47.0	14.0	48.0	-
EP2-42L	PG 42	1.181 - 1.497	30.0 - 38.0	1.102	28.0	2.283	58	54.0	16.0	48.0	-
EP2-48L	PG 48	1.339 - 1.732	34.0 - 44.0	1.220	31.0	2.520	64	59.3	18.0	52.4	-
<b>NPT</b>											
EN2-3/8	NPT 3/8	.196 - .394	5.0 - 10.0	0.157	4.0	0.787	20	17.1	11.5	29.5	UR
EN2-1/2	NPT 1/2	.236 - .472	6.0 - 12.0	0.196	5.0	0.866	22	21.3	13.0	25.5	UL
EN2-3/4	NPT 3/4	.512 - .709	13.0 - 18.0	0.433	11.0	1.181	30	26.7	13.0	35.5	UL
EN2-1	NPT 1	.709 - .984	18.0 - 25.0	0.629	16.0	1.574	40	33.4	13.0	43.0	UL

# CORD GRIPS & ACCESSORIES

## CG EMC-4 Grounding Cable Glands

Metric, PG & NPT Thread

Optimal grounding of shielded cable, bi-directional cable installation, impact resistant.



### Technical details:

<b>Material:</b>	Brass, Nickel Plated
<b>Contact spring:</b>	Special Copper Alloy
<b>Clamping insert:</b>	Polyamide 6
<b>Seal:</b>	Chloroprene (CR)
<b>O-Ring:</b>	Neoprene (NBR)
<b>Protection class:</b>	IP 68 - 5 Bar
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-40°C to +150°C
<b>Flammability:</b>	V2 (according to UL 94)
<b>Approvals:</b>	cURus, cULus, VDE, DNV-GL, CE

Part Number	Thread Type	Clamping Range Ø min-max		Shield Diameter Ø min-max		Wrenching Flats Cap (SW1)		Thread Diameter (TD)	Thread Length (TL)	Height (H)	UL
		inches	mm	inches	mm	inches	mm				
<b>Metric</b>											
EM4-12	M12x1.5	.118 - .256	3.0 - 6.5	.079 - .197	2.0 - 5.0	0.551	14	12.0	6.0	28.0	UR
EM4-16	M16x1.5	.197 - .394	5.0 - 10.0	.138 - .315	3.5 - 8.0	0.787	20	16.0	6.0	33.0	UR
EM4-20	M20x1.5	.236 - .472	6.0 - 12.0	.177 - .394	4.5 - 10.0	0.866	22	20.0	6.0	32.0	UL
EM4-20C	M20x1.5	.295 - .551	7.5 - 14.0	.217 - .453	5.5 - 11.5	0.945	24	20.0	8.0	40.0	UL
EM4-25	M25x1.5	.394 - .709	10.0 - 18.0	.276 - .551	7.0 - 14.0	1.181	30	25.0	8.0	43.0	UL
EM4-32	M32x1.5	.630 - .984	16.0 - 25.0	.472 - .787	12.0 - 20.0	1.575	40	32.0	9.0	53.0	UL
EM4-40	M40x1.5	.866 - 1.260	22.0 - 32.0	.709 - 1.063	18.0 - 27.0	1.969	50	40.0	9.0	60.5	UL
EM4-50	M50x1.5	1.181 - 1.496	30.0 - 38.0	1.024 - 1.339	26.0 - 34.0	2.283	58	50.0	9.0	73.0	UL
EM4-63	M63x1.5	1.339 - 1.732	34.0 - 44.0	1.181 - 1.575	30.0 - 40.0	2.520	64	63.0	14.0	59.0	UL
EM4-63C	M63x1.5	1.457 - 2.087	37.0 - 53.0	1.299 - 1.929	33.0 - 49.0	2.953	75	63.0	10.0	75.0	UL
<b>PG<sup>1</sup></b>											
EP4-7	PG 7	.118 - .256	3.0 - 6.5	.079 - .197	2.0 - 5.0	0.551	14	12.5	6.0	28.0	-
EP4-11	PG 11	.197 - .394	5.0 - 10.0	.138 - .315	3.5 - 8.0	0.787	20	18.6	6.0	33.0	-
EP4-13	PG 13.5	.236 - .472	6.0 - 12.0	.177 - .394	4.5 - 10.0	0.866	22	20.4	6.5	31.5	-
EP4-16	PG 16	.295 - .551	7.5 - 14.0	.217 - .453	5.5 - 11.5	0.945	24	22.5	6.5	39.5	-
EP4-21	PG 21	.394 - .709	10.0 - 18.0	.276 - .551	7.0 - 14.0	1.260	32	28.3	7.0	42.5	-
EP4-29	PG 29	.630 - .984	16.0 - 25.0	.472 - .787	12.0 - 20.0	1.575	40	37.0	9.0	52.5	-
EP4-36	PG 36	.866 - 1.260	22.0 - 32.0	.709 - 1.063	18.0 - 27.0	1.969	50	47.0	9.0	60.5	-
EP4-42	PG 42	1.181 - 1.496	30.0 - 38.0	1.024 - 1.339	26.0 - 34.0	2.283	58	54.0	12.0	72.5	-
EP4-48	PG 48	1.339 - 1.732	34.0 - 44.0	1.181 - 1.575	30.0 - 40.0	2.520	64	59.3	14.0	58.5	-
<b>NPT<sup>1</sup></b>											
EN4-1/4	NPT 1/4	.118 - .256	3.0 - 6.5	.079 - .197	2.0 - 5.0	0.551	14	13.7	11.5	28.0	-
EN4-3/8	NPT 3/8	.197 - .394	5.0 - 10.0	.138 - .315	3.5 - 8.0	0.787	20	17.1	11.5	33.0	-
EN4-1/2	NPT 1/2	.236 - .472	6.0 - 12.0	.177 - .394	4.5 - 10.0	0.866	22	21.3	15.0	37.5	-
EN4-1/2C	NPT 1/2	.295 - .551	7.5 - 14.0	.217 - .453	5.5 - 11.5	0.945	24	21.3	15.0	39.5	-
EN4-3/4	NPT 3/4	.394 - .709	10.0 - 18.0	.276 - .551	7.0 - 14.0	1.181	30	26.7	15.0	42.5	-
EN4-1	NPT 1	.630 - .984	16.0 - 25.0	.472 - .787	12.0 - 20.0	1.575	40	33.4	20.0	52.5	-
EN4-1 1/4	NPT 1 1/4	.866 - 1.260	22.0 - 32.0	.709 - 1.063	18.0 - 27.0	1.969	50	42.2	20.0	62.0	-
EN4-1 1/2	NPT 1 1/2	1.181 - 1.496	30.0 - 38.0	1.024 - 1.339	26.0 - 34.0	2.283	58	48.3	22.0	72.0	-
EN4-2	NPT 2	1.339 - 1.732	34.0 - 44.0	1.181 - 1.575	30.0 - 40.0	2.519	68	60.3	22.0	71.5	-

<sup>1</sup> PG & NPT DNV-GL & CE only

# CORD GRIPS & ACCESSORIES

## Metal & EMC Locknuts

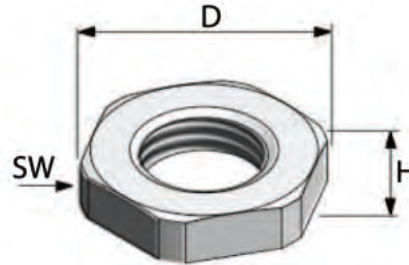
Metric, PG, & NPT Thread

EMC locknut has grounding teeth to make connection to metal panels or control boxes.

Technical details:

Material:

Brass, Nickel Plated



Part Number	Thread Type	Height (H) mm	Diameter (D) mm	Wrenching Flats (SW) mm
<b>Metric-Standard</b>				
LMM-12	M12x1.5	2.8	16.6	15
LMM-16	M16x1.5	3.0	21.0	19
LMM-20	M20x1.5	3.5	26.5	24
LMM-25	M25x1.5	4.0	33.0	30
LMM-32	M32x1.5	5.0	39.5	36
LMM-40	M40x1.5	5.0	51.0	46
LMM-50	M50x1.5	5.0	66.0	60
LMM-63	M63x1.5	6.0	77.0	70
LMM-72	M72x2.0	7.0	86.0	77
LMM-75	M75x2.0	7.0	89.6	80
LMM-80	M80x2.0	8.0	100.0	90
LMM-85	M85x2.0	8.0	106.2	95
LMM-90	M90x2.0	8.0	112.0	100
<b>PG-Standard</b>				
LPM-7	PG 7	2.8	16.6	15
LPM-9	PG 9	2.8	20.0	18
LPM-11	PG 11	3.0	23.5	21
LPM-13	PG 13.5	3.0	25.5	23
LPM-16	PG 16	3.0	29.0	26
LPM-21	PG 21	3.5	35.5	32
LPM-29	PG 29	4.0	45.0	41
LPM-36	PG 36	5.0	56.0	51
LPM-42	PG 42	5.0	66.0	60
LPM-48	PG 48	5.5	70.5	64
<b>NPT-Standard</b>				
LNM-3/8	NPT 3/8	5.0	24.5	22
LNM-1/2	NPT 1/2	5.0	30.0	27
LNM-3/4	NPT 3/4	5.0	36.5	33
LNM-1	NPT 1	5.0	46.5	43

Part Number	Thread Type	Height (H) mm	Diameter (D) mm	Wrenching Flats (SW) mm
<b>Metric-EMC</b>				
LME-12	M12x1.5	3.3	16.5	15
LME-16	M16x1.5	3.5	21.0	19
LME-20	M20x1.5	3.5	26.5	24
LME-25	M25x1.5	3.5	33.0	30
LME-32	M32x1.5	4.0	39.5	36
LME-40	M40x1.5	4.6	51.0	46
LME-50	M50x1.5	5.6	66.0	60
LME-63	M63x1.5	6.7	77.0	70
<b>PG-EMC</b>				
LPE-7	PG 7	3.3	16.6	15
LPE-9	PG 9	3.3	20.0	18
LPE-11	PG 11	3.5	23.5	21
LPE-13	PG 13.5	3.5	25.5	23
LPE-16	PG 16	3.5	29.0	26
LPE-21	PG 21	4.0	35.5	32
LPE-29	PG 29	4.6	45.0	41
LPE-36	PG 36	5.6	56.0	51
LPE-42	PG 42	5.6	66.0	60
LPE-48	PG 48	6.1	70.5	64
<b>NPT-EMC</b>				
LNE-1/4	NPT 1/4"	5.5	18.8	17
LNE-3/8	NPT 3/8"	5.7	24.0	22
LNE-1/2	NPT 1/2"	6.7	26.5	24
LNE-3/4	NPT 3/4"	6.5	33.0	30
LNE-1	NPT 1"	7.6	44.5	40
LNE-1 1/4	NPT 1 1/4"	7.6	55.5	50
LNE-1 1/2	NPT 1 1/2"	8.7	64.0	58
LNE-2	NPT 2"	10.8	78.0	70

Stainless steel locknuts are available upon request

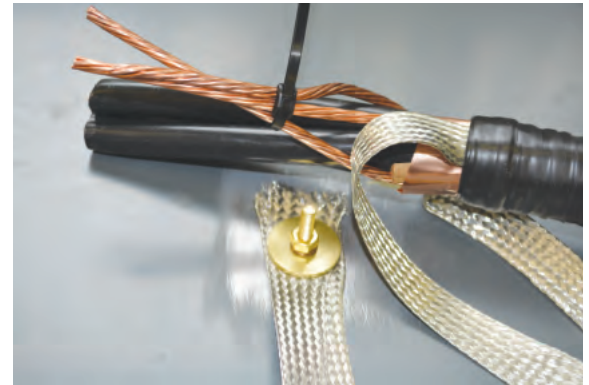
# CORD GRIPS & ACCESSORIES

## VFD Termination Kits: 14 AWG to 500 KCMIL VFD Cables



VFD Termination Kits are used to ground the shield of VFD cables to a metal enclosure. It is an effective way to remove noise associated with VFD motors and drives. Improve the effectiveness by also using a SAB EMC grounding gland where the cable enters the enclosure.

Kit P/N	Kit Components	Quantity
VFD GRD KIT 14-1	1/4" flat Tinned copper braid	2 x 3ft
	3/4" Copper tape	2 x 1ft
	Bolt assembly (see parts below)	1 bag
	Rubber splicing tape	1 roll
	Low profile tie wrap 7"	2 pcs
	Metal sand paper 3" x 3"	1 pc
	Alcohol wipes	2 pcs
VFD GRD KIT 1-4/0	3/4" flat Tinned copper braid	2 x 3ft
	3/4" Copper tape	2 x 2ft
	Bolt assembly (see parts below)	1 bag
	Rubber splicing tape	1 roll
	Low profile tie wrap 7"	2 pcs
	Metal sand paper 3" x 3"	1 pc
	Alcohol wipes	2 pcs
VFD GRD KIT 250-500	1" flat Tinned copper braid	2 x 3ft
	3/4" Copper tape	2 x 2ft
	Bolt assembly (see parts below)	1 bag
	Rubber splicing tape	1 roll
	Low profile tie wrap 10"	2 pcs
	Metal sand paper 3" x 3"	1 pc
	Alcohol wipes	2 pcs



Installation Prep Photo



Attach to Enclosure

Bolt assembly	
brass bolt 1/4"-20 x 1-1/4"	2 pcs
brass nut 1/4"-20	2 pcs
bronze locking washer 1/4"-20	2 pcs
brass washer 1/4"-20 x 9/16" OD	2 pcs
brass washer 1/4"-20 x 1 1/4" OD	2 pcs



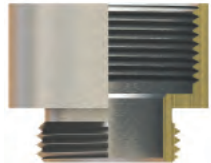
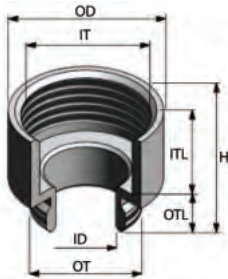
# CORD GRIPS & ACCESSORIES

## Metal Enlargers Metric & PG Thread

Enlargers are ideal when a threaded hole exists and you need to secure a larger thread or different style of thread. Made of nickel plated brass, SAB's enlargers are very durable.

### Technical details:

<b>Material:</b>	Brass, Nickel Plated
<b>Attachment thread:</b>	EN 60423 (Metric) DIN 40430 (PG)



Part Number	Thread Type OT (male)	Thread Type IT (female)	Inner Thread Length ITL (mm)	Outer Thread Length OTL (mm)	Outer Diameter OD (mm)	Inner Diameter ID (mm)
<b>PG-PG</b>						
ENL-01	PG 7	PG 9	5.0	5.0	17.0	8.0
ENL-02	PG 9	PG 11	7.0	6.0	20.0	11.7
ENL-03	PG 9	PG 13.5	9.0	6.0	22.0	11.5
ENL-04	PG 11	PG 13.5	8.5	6.0	22.0	13.8
ENL-05	PG 11	PG 16	8.5	6.5	24.0	13.8
ENL-06	PG 11	PG 21	10.0	6.5	30.0	13.8
ENL-07	PG 13.5	PG 16	8.5	6.5	24.0	16.4
ENL-08	PG 13.5	PG 21	10.0	6.5	30.0	16.5
ENL-09	PG 16	PG 21	10.0	6.5	29.7	17.6
ENL-10	PG 16	PG 29	12.0	7.0	40.0	17.5
ENL-11	PG 21	PG 29	14.0	7.0	39.0	24.0
ENL-12	PG 29	PG 36	17.5	8.0	50.0	32.0
ENL-13	PG 36	PG 42	19.0	9.0	57.0	38.0
ENL-14	PG 42	PG 48	19.5	10.0	64.0	49.2
<b>Metric-PG</b>						
ENL-15	M12x1.5	PG 9	7.0	6.0	17.0	8.0
ENL-16	M16x1.5	PG 11	7.5	6.0	20.0	12.0
ENL-17	M20x1.5	PG 16	8.5	8.0	24.0	16.0
ENL-18	M25x1.5	PG 21	10.0	9.0	30.0	20.5
ENL-19	M32x1.5	PG 29	13.0	8.0	40.0	27.5
ENL-20	M40x1.5	PG 36	14.0	9.0	50.0	35.5
ENL-21	M50x1.5	PG 42	18.0	9.0	57.0	45.5
ENL-22	M63x1.5	PG 48	18.0	9.0	64.0	56.0
<b>Metric-Metric</b>						
ENL-23	M12x1.5	M16x1.5	7.0	6.0	18.0	8.0
ENL-24	M16x1.5	M20x1.5	10.0	6.0	22.0	12.0
ENL-25	M20x1.5	M25x1.5	8.5	7.0	27.0	16.0
ENL-26	M25x1.5	M32x1.5	9.5	8.0	34.0	20.5
ENL-27	M32x1.5	M40x1.5	8.5	8.0	42.0	26.0
ENL-28	M40x1.5	M50x1.5	15.0	8.0	52.0	35.5
ENL-29	M50x1.5	M63x1.5	9.5	9.0	65.0	45.0

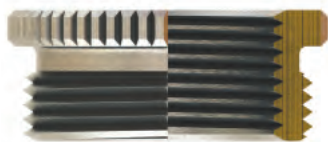
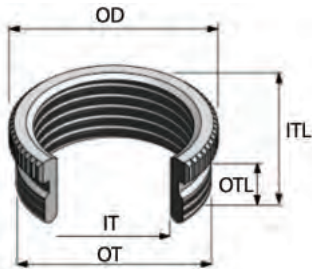
# CORD GRIPS & ACCESSORIES

## Metal Reducers Metric & PG Thread

Reducers are ideal when a threaded hole exists and you need to secure a smaller thread or different style of thread. Made of nickel plated brass, SAB's reducers are very durable.

### Technical details:

<b>Material:</b>	Brass, Nickel Plated
<b>Attachment thread:</b>	EN 60423 (Metric) DIN 40430 (PG)



Part Number	Thread Type OT (male)	Thread Type IT (female)	Inner Thread Length ITL (mm)	Outer Thread Length OTL (mm)	Outer Diameter OD (mm)
<b>PG-PG</b>					
RED-01	PG 9	PG 7	8.5	6.0	17.0
RED-02	PG 11	PG 7	9.0	6.0	20.0
RED-03	PG 11	PG 9	9.0	6.0	20.0
RED-04	PG 13.5	PG 7	9.0	6.5	22.0
RED-05	PG 13.5	PG 9	9.0	6.5	22.0
RED-06	PG 13.5	PG 11	9.0	6.5	22.0
RED-07	PG 16	PG 7	9.5	6.5	24.0
RED-08	PG 16	PG 9	9.5	6.5	24.0
RED-09	PG 16	PG 11	9.0	6.0	24.0
RED-10	PG 16	PG 13.5	9.0	6.0	24.0
RED-11	PG 21	PG 11	10.0	7.0	30.0
RED-12	PG 21	PG 13.5	10.0	7.0	30.0
RED-13	PG 21	PG 16	10.0	7.0	30.0
RED-14	PG 29	PG 13.5	11.5	8.0	39.0
RED-15	PG 29	PG 16	11.5	8.0	39.0
RED-16	PG 29	PG 21	11.4	8.0	39.0
RED-17	PG 36	PG 21	12.4	9.0	50.0
RED-18	PG 36	PG 29	12.5	9.1	50.0
RED-19	PG 42	PG 29	14.0	10.0	57.0
RED-20	PG 42	PG 36	14.1	10.0	57.0
RED-21	PG 48	PG 36	14.0	10.0	64.0
RED-22	PG 48	PG 42	14.0	10.0	64.0
<b>PG-Metric</b>					
RED-23	PG 16	M20x1.5	9.0	6.0	24.0
RED-24	PG 21	M20x1.5	10.0	7.0	30.0
RED-25	PG 21	M25x1.5	10.0	7.0	30.0
RED-26	PG 29	M25x1.5	11.5	8.0	39.0
<b>Metric-Metric</b>					
RED-27	M16x1.5	M12x1.5	9.5	6.5	18.0
RED-28	M20x1.5	M12x1.5	9.5	6.5	22.0
RED-29	M20x1.5	M16x1.5	9.0	6.5	22.0
RED-30	M25x1.5	M16x1.5	9.0	6.5	28.0
RED-31	M25x1.5	M20x1.5	11.5	7.0	30.0
RED-32	M32x1.5	M20x1.5	11.5	8.0	39.0
RED-33	M32x1.5	M25x1.5	11.5	8.0	39.0
RED-34	M40x1.5	M25x1.5	12.5	9.0	50.0
RED-35	M40x1.5	M32x1.5	12.5	9.0	50.0
RED-36	M50x1.5	M32x1.5	14.0	10.0	64.0
RED-37	M50x1.5	M40x1.5	14.0	10.0	64.0
RED-38	M63x1.5	M40x1.5	18.0	10.0	71.6
RED-39	M63x1.5	M50x1.5	18.0	10.0	71.6

# CORD GRIPS & ACCESSORIES

## Multi-Hole Bushings Metric, PG, & NPT Thread

Multi-hole bushings are ideal for when there is limited space on a control cabinet or when you have multiple smaller cables that need to be secured. They are made of black neoprene and, when used with a SAB cord grip, will provide an excellent seal.

### Technical details:

**Material:** Chloroprene (CR)  
**Color:** Black



Part Number	Thread Type			Hole Quantity	Hole Diameter Ø mm	Outside Diameter Ø mm	Thickness (mm)
	PG	Metric	NPT				
MHB-01	PG 9	—	—	2	4.0	10.9	7.0
MHB-02	PG 9	—	—	2	3.0	10.9	7.0
MHB-03	PG 9	—	—	4	3.0	10.9	7.0
MHB-04	PG 11	M16	3/8"	2	4.0	13.7	10.4
MHB-05	PG 11	M16	3/8"	2	4.5	13.7	10.4
MHB-07	PG 11	M16	3/8"	2	3.0	13.7	10.4
MHB-08	PG 11	M16	3/8"	2	5.0	13.7	10.4
MHB-09	PG 11	M16	3/8"	3	4.0	13.7	10.4
MHB-10	PG 13.5	M20	1/2"	2	6.0	16.0	8.4
MHB-11	PG 13.5	M20	1/2"	3	4.0	16.0	8.4
MHB-12	PG 13.5	M20	1/2"	3	5.0	16.0	8.4
MHB-13	PG 13.5	M20	1/2"	4	3.0	16.0	8.4
MHB-14	PG 13.5	M20	1/2"	2	5.0	16.0	8.4
MHB-15	PG 13.5	M20	1/2"	4	4.0	16.0	8.4
MHB-16	PG 16	M20C	1/2"C	2	6.0	18.0	9.3
MHB-17	PG 16	M20C	1/2"C	2	7.0	18.0	9.3
MHB-18	PG 16	M20C	1/2"C	3	4.0	18.0	9.3
MHB-19	PG 16	M20C	1/2"C	2	4.0	18.0	9.3
MHB-20	PG 16	M20C	1/2"C	4	5.0	18.0	9.3
MHB-23	PG 16	M20C	1/2"C	5	4.0	18.0	9.3
MHB-25	PG 21	M25C	3/4"	2	6.6	22.9	12.2
MHB-26	PG 21	M25C	3/4"	2	7.0	22.9	12.2
MHB-27	PG 21	M25C	3/4"	2	8.0	22.9	12.2
MHB-28	PG 21	M25C	3/4"	2	9.0	22.9	12.2
MHB-29	PG 21	M25C	3/4"	3	6.6	22.9	12.2
MHB-30	PG 21	M25C	3/4"	3	8.0	22.9	12.2
MHB-31	PG 21	M25C	3/4"	4	6.0	22.9	12.2
MHB-32	PG 21	M25C	3/4"	4	6.6	22.9	12.2
MHB-33	PG 21	M25C	3/4"	4	7.0	22.9	12.2
MHB-43	PG 29	M32C	1"	2	8.0	30.4	14.0
MHB-44	PG 29	M32C	1"	2	9.0	30.4	14.0
MHB-45	PG 29	M32C	1"	3	7.5	30.4	14.0
MHB-47	PG 29	M32C	1"	4	8.0	30.4	14.0
MHB-48	PG 29	M32C	1"	5	8.5	30.4	14.0
MHB-49	PG 29	M32C	1"	6	6.0	30.4	14.0
MHB-50	PG 29	M32C	1"	6	7.5	30.4	14.0
MHB-51	PG 29	M32C	1"	6	5.0	30.4	14.0

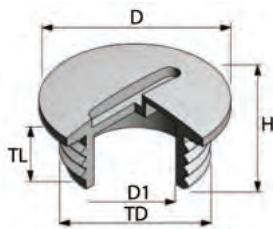
# CORD GRIPS & ACCESSORIES

## Round & Hex Hole Plugs Metric & PG Thread

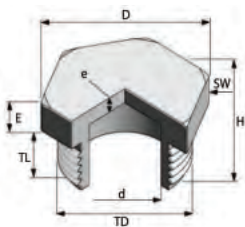
Hole plugs are used where a pre-existing threaded hole exists with no cable that needs to be closed and protected. SAB offers a round and hex top Polyamide 6 product in gray or black & PG and metric thread.

### Technical details:

<b>Material:</b>	Polyamide 6
<b>Flammability:</b>	V2 (according to UL 94)
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C



Part Number		Thread Type	Plug Diameter (TD)		Thread Length (TL)		Overall Height (H)		
Gray	Black		inches	mm	inches	mm	inches	mm	
<b>Metric: Round</b>									
HPR-17	HPR-24	M12x1.5	0.591	15	0.236	6	0.413	10.5	
HPR-18	HPR-25	M16x1.5	0.787	20	0.276	6	0.453	11.5	
HPR-19	HPR-26	M20x1.5	0.945	24	0.276	7	0.492	12.5	
HPR-20	HPR-27	M25x1.5	1.181	30	0.394	10	0.591	15.0	
HPR-21	HPR-28	M32x1.5	1.457	37	0.315	8	0.551	14.0	
HPR-22	HPR-29	M40x1.5	1.811	46	0.236	6	0.492	12.5	
HPR-23	HPR-30	M50x1.5	2.205	56	0.394	10	0.551	14.0	
<b>PG: Round</b>									
HPR-01	HPR-09	PG 7	0.591	15	0.236	6	0.315	8.0	
HPR-02	HPR-10	PG 9	0.748	19	0.236	6	0.335	8.5	
HPR-03	HPR-11	PG 11	0.866	22	0.236	6	0.335	8.5	
HPR-04	HPR-12	PG 13.5	0.984	25	0.236	6	0.335	8.5	
HPR-05	HPR-13	PG 16	1.063	27	0.236	6	0.354	9.0	
HPR-06	HPR-14	PG 21	1.299	33	0.315	8	0.472	12.0	
HPR-07	HPR-15	PG 29	1.732	44	0.315	8	0.453	11.5	
HPR-08	HPR-16	PG 36	2.165	55	0.394	10	0.551	14.0	



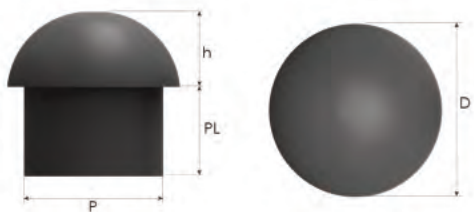
Part Number		Thread Type	Plug Diameter (TD)		Thread Length (TL)		Wrenching Flat (SW)		Overall Height (H)	
Gray	Black		inches	mm	inches	mm	inches	mm	inches	mm
<b>Metric: Hex</b>										
HPH-01	HPH-13	M12x1.5	0.669	17.0	0.394	10.0	0.591	15	0.591	15.0
HPH-02	HPH-14	M16x1.5	0.866	22.0	0.472	12.0	0.748	19	0.642	16.3
HPH-03	HPH-15	M16x1.5	0.866	22.0	0.591	15.0	0.748	19	0.760	19.3
HPH-04	HPH-16	M20x1.5	1.024	26.0	0.433	11.0	0.906	23	0.669	17.0
HPH-06	HPH-18	M20x1.5	1.024	26.0	0.591	15.0	0.906	23	0.827	21.0
HPH-07	HPH-19	M25x1.5	1.260	32.0	0.394	10.0	1.102	28	0.662	15.8
HPH-08	HPH-20	M25x1.5	1.260	32.0	0.591	15.0	1.102	28	0.819	20.8
HPH-09	HPH-21	M32x1.5	1.634	41.5	0.591	15.0	1.417	36	0.898	22.8
HPH-10	HPH-22	M40x1.5	2.087	53.0	0.709	18.0	1.811	46	1.043	26.5
HPH-11	HPH-23	M50x1.5	2.500	63.5	0.709	18.0	2.165	55	1.083	27.5
HPH-12	HPH-24	M63x1.5	3.150	80.0	0.709	18.0	2.717	69	1.083	27.5

# CORD GRIPS & ACCESSORIES

## Dome Plugs

### Based on Clamping Range

Dome Plugs are used for sealing cable glands when no cable is being used.



#### Technical details:

<b>Material:</b>	Polyamide 6
<b>Flammability:</b>	V2 (according to UL 94)
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C

Part Number		Dome Plug Fit into Clamping Range Ø min - max		Plug Ø P mm	Length PL mm	Outer Ø D mm	Height h mm
Gray	Black	Standard Seal mm	Reducing Seal mm				
DPG-01	DPB-01	-	2.0 - 5.0	4.0	12.0	9.2	4.0
DPG-02	DPB-02	3.0 - 6.5	-	6.4	12.0	9.2	4.0
DPG-03	DPB-03	-	2.0 - 6.0	5.0	14.0	10.5	5.0
DPG-04	DPB-04	4.0 - 8.0	-	8.0	13.7	10.5	4.7
DPG-05	DPB-05	-	3.0 - 7.0	7.0	15.0	13.3	5.7
DPG-06	DPB-06	5.0 - 10.0	-	9.7	15.0	13.3	5.7
DPG-07	DPB-07	-	5.0 - 9.0	8.5	13.0	15.8	7.7
DPG-08	DPB-08	6.0 - 12.0	-	12.0	13.0	15.8	8.0
DPG-09	DPB-09	7.0 - 13.0	-	13.0	14.0	15.8	7.5
DPG-10	DPB-10	-	7.0 - 12.0	11.0	13.5	18.0	8.5
DPG-11	DPB-11	10.0 - 14.0	-	13.6	13.5	18.0	8.7
DPG-12	DPB-12	-	9.0 - 13.0	13.0	14.5	20.0	7.0
DPG-13	DPB-13	11.0 - 17.0	-	16.4	14.5	19.9	7.3
DPG-14	DPB-14	-	11.0 - 15.0	14.0	14.0	22.0	9.5
DPG-15	DPB-15	13.0 - 18.0	-	17.8	14.0	22.0	10
DPG-16	DPB-16	-	9.0 - 16.0	16.1	15.5	24.0	9.0
DPG-17	DPB-17	15.0 - 21.0	-	20.4	15.5	24.1	9.2
DPG-18	DPB-18	-	12.0 - 20.0	19.7	15.0	28.5	9.7
DPG-19	DPB-19	18.0 - 25.0	-	25.0	15.0	28.5	9.7
DPG-20	DPB-20	-	16.0 - 23.0	20.5	15.8	31.5	9.2
DPG-21	DPB-21	19.0 - 28.0	-	27.3	15.8	31.5	9.2
DPG-22	DPB-22	-	20.0 - 26.0	25.7	17.0	36.8	10.7
DPG-23	DPB-23	22.0 - 32.0	-	31.8	17.0	36.8	10.7
DPG-24	DPB-24	-	25.0 - 31.0	30.6	20.2	43.3	11.9
DPG-25	DPB-25	30.0 - 38.0	-	38.0	20.2	43.3	11.9
DPG-26	DPB-26	-	29.0 - 35.0	34.6	22.5	51.0	16.0
DPG-27	DPB-27	34.0 - 44.0	-	44.2	22.5	51.0	16.0



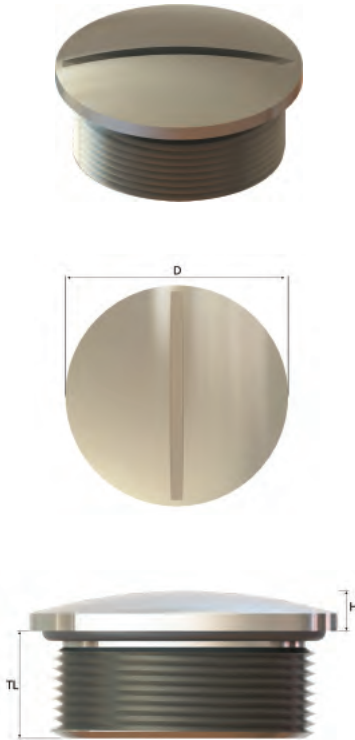
# CORD GRIPS & ACCESSORIES

## Metric Round Hole Plugs Metric & PG Thread

Hole plugs are used where a pre-existing threaded hole exists with no cable that needs to be closed and protected. SAB offers a round nickel plated brass hole plug with PG and metric thread

### Technical details:

<b>Material:</b>	Brass, Nickel Plated
<b>Protection Class:</b>	IP 68- 5 Bar
<b>Temperature range</b>	-30°C to +100°C



Part Number	Thread Type	Plug Diameter (TD)		Thread Length (TL)		Overall Height (H)	
		inches	mm	inches	mm	inches	mm
<b>Metric:</b>							
HPM-01	M12X1.5	0.591	15	0.236	6.0	0.335	8.5
HPM-02	M16X1.5	0.748	19	0.276	7.0	0.394	10.0
HPM-03	M20X1.5	0.906	23	0.315	8.0	0.433	11.0
HPM-04	M25X1.5	1.142	29	0.315	8.0	0.472	12.0
HPM-05	M32X1.5	1.417	36	0.354	9.0	0.512	13.0
HPM-06	M40X1.5	1.732	44	0.354	9.0	0.512	13.0
HPM-07	M50X1.5	2.126	54	0.354	9.0	0.551	14.0
HPM-08	M63X1.5	2.717	69	0.394	10.0	0.630	16.0
<b>PG:</b>							
HPM-09	PG 7	0.630	16	0.236	6.0	0.354	9.0
HPM-10	PG 9	0.748	19	0.236	6.0	0.354	9.0
HPM-11	PG 11	0.866	22	0.236	6.0	0.354	9.0
HPM-12	PG 13.5	0.945	24	0.256	6.5	0.374	9.5
HPM-13	PG 16	1.024	26	0.256	6.5	0.374	9.5
HPM-14	PG 21	1.299	33	0.276	7.0	0.433	11.0
HPM-15	PG 29	1.654	42	0.315	8.0	0.472	12.0
HPM-16	PG 36	2.047	52	0.354	9.0	0.591	15.0

\* Available with O-Ring  
+Available in stainless steel

# CORD GRIPS & ACCESSORIES

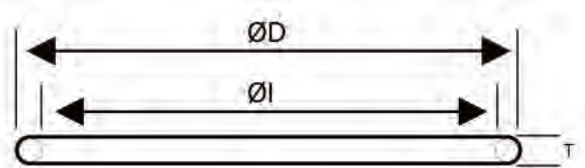
## O-Rings

Fits Metric, PG, & NPT Thread

Technical details:

Material:

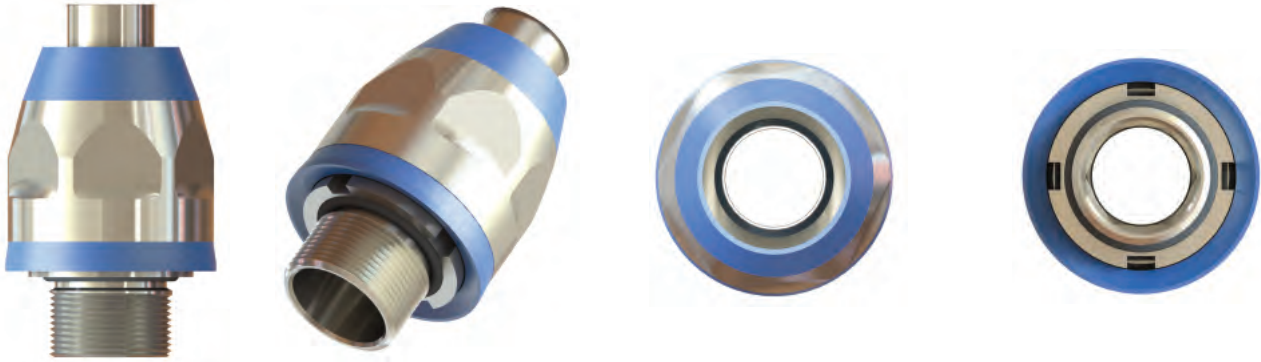
Butadiene-Nitrile 70 (NBR)



Part Number	metric	PG	NPT	O.D. (D) mm	I.D. (I) mm	thickness (T) mm
OR-12	M12 x 1.5			12.81	9.25	1.78
OR-07		PG 7		14.38	10.82	1.78
OR-38	M16 x 1.5	PG 9	NPT 3/8	15.98	12.42	1.78
OR-11		PG 11		19.16	15.60	1.78
OR-20	M20 x 1.5			20.73	17.17	1.78
OR-13		PG 13	NPT 1/2	22.33	18.77	1.78
OR-16		PG 16		23.91	20.35	1.78
OR-25	M25 x 1.5			25.51	21.95	1.78
OR-21		PG 21	NPT 3/4	28.68	25.12	1.78
OR-32	M32 x 1.5			30.00	26.00	2.00
OR-01			NPT 1	35.06	29.82	2.62
OR-40	M40 x 1.5	PG 29	NPT 1 1/4	39.84	34.60	2.62
OR-36	M50 x 1.5	PG 36	NPT 1 1/2	49.36	44.12	2.62
OR-42		PG 42	NPT 1 3/4	55.71	50.47	2.62
OR-48	M63 x 1.5	PG 48	NPT 2	62.06	56.82	2.62

# CORD GRIPS & ACCESSORIES

## Hygienic Product Conduit Fitting & Cable Gland



These fittings are made especially for areas of public health, safety, and protection of the environment. Applications range from the food and beverage industry to the chemical processing industry to cleanrooms because the stainless steel cable fittings and gland boast a smooth surface, with all of the threads beneath the cap nut, preventing the depositing of harmful microorganisms.

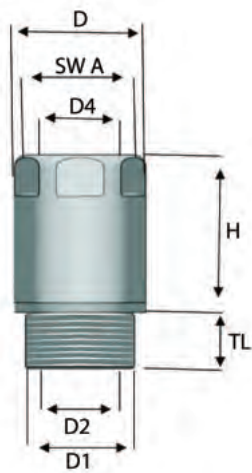
### The benefits of this range include:

- ▶ Much easier, faster, and less expensive to clean
- ▶ Reduced energy and use of chemicals compared to conventional stainless steel conduit fittings
- ▶ Resistant to high-pressure water jet cleaning (IP 69K)
- ▶ Greater durability because of superior product quality
- ▶ Reliable strain relief due to duplicate cable attachment
- ▶ Chemical resistant
- ▶ Sustains disinfectant, cleaners, and acids or alkalies
- ▶ Suitable for high pressure steam cleaning



# CORD GRIPS & ACCESSORIES

## CG Clean Hygienic Cable Gland Standard & EMC, Metric Thread

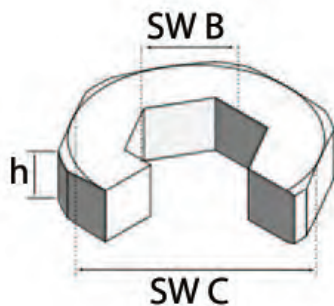


Technical details:	
<b>Material:</b>	Stainless steel 1.4404 (AISI 316L)
<b>Seals:</b>	TPE conform to FDA Guideline 21 CFR 177.2600
<b>Clamping insert:</b>	POM
<b>Protection categories:</b>	IP 68 (5 bar, 30 min.) acc. to EN 60529 IP 69K to DIN 40050-9
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-40°C to +150°C
<b>Locknut:</b>	Stainless steel
<b>Approvals:</b>	VDE, DNV-GL, CE

Part Number	Thread Type	Clamping Range Ø min-max		Wrenching Flats (SW A)		Outer Diameter (D)	Thread Diameter (D1)	Thread Length (TL)	Height (H)	Locknut Dimensions (mm)		
		inches	mm	inches	mm					SW L	e	
<b>Metric</b>												
HCGM-12	M12x1.5	.118 - .256	3.0 - 6.5	0.551	14	15.6	12	6	21.5	15	2.8	
HCGM-16	M16x1.5	.197 - .394	5.0 - 10.0	0.709	18	20.2	16	7	23.0	19	3.0	
HCGM-20	M20x1.5	.236 - .472	6.0 - 12.0	0.866	22	24.1	20	10	27.0	24	3.5	
HCGM-25	M25x1.5	.472 - .669	12.0 - 17.0	1.102	28	30.1	25	14	29.5	30	4.0	
<b>Metric: EMC</b>												
HCGE-16	M16x1.5	.197 - .394	5.0 - 10.0	0.709	18	20.2	16	7	28.5	19	3.0	
HCGE-20	M20x1.5	.236 - .472	6.0 - 12.0	0.866	22	24.1	20	10	33.0	24	3.5	
HCGE-25	M25x1.5	.472 - .669	12.0 - 17.0	1.102	28	30.1	25	14	38.0	30	4.0	

Locknut included

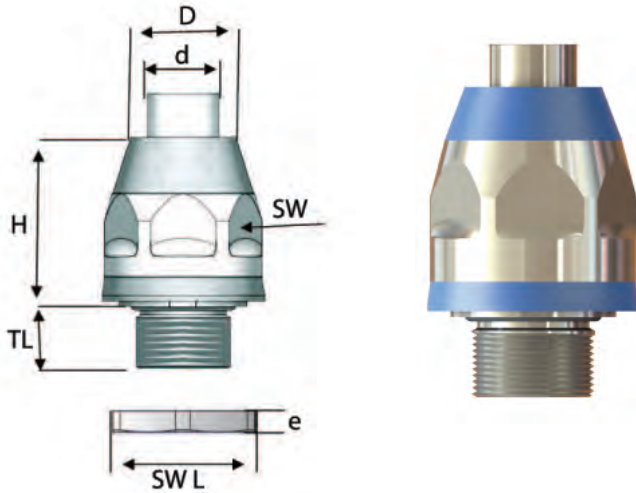
## Tools for Installation



Part Number	Thread Type	Clamping Range Ø min-max		
		SW B	SW C	h
HCGT-01	M12	5	7	5
HCGT-02	M16	6	10	5
HCGT-03	M20	8	13	8
HCGT-04	M25	10	17	8

# CORD GRIPS & ACCESSORIES

## CF Clean Hygienic Conduit Fitting Metric Thread



### Technical details:

<b>Material:</b>	Stainless steel 1.4404 (AISI 316L)
<b>Seals:</b>	TPE conform to FDA Guideline 21 CFR 177.2600
<b>Ferrule:</b>	Brass, Nickel Plated
<b>Protection categories:</b>	IP 68 (5 bar, 30 min.) acc. to EN 60529 IP 69K to DIN 40050-9
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-40°C to +150°C
<b>Locknut:</b>	Stainless steel 1.4305 (AISI 303L)

Part Number	Thread Type	Outer Diameter (D)		Inner Diameter (d)		Wrenching Flats (SW A)		Thread Length (TL)	Height (H)	Locknut Dimensions (mm)	
		inches	mm	inches	mm	inches	mm			SW L	e
<b>Metric</b>											
HCFM-16	M16x1.5	0.677	17.2	0.472	12.0	1.063	27	11.5	36.8	19	3.0
HCFM-20	M20x1.5	0.087	20.5	0.591	15.0	1.181	30	13.0	37.3	24	3.5
HCFM-25	M25x1.5	1.016	25.8	0.787	20.0	1.417	36	15.0	42.4	30	4.0
HCFM-32	M32x1.5	1.276	32.4	1.012	25.7	1.811	46	15.0	51.3	36	5.0
HCFM-40	M40x1.5	1.622	41.2	1.346	34.2	2.126	54	16.0	58.9	46	5.0
HCFM-50	M50x1.5	1.846	46.9	1.543	39.2	2.480	63	18.0	63.3	60	5.0
HCFM-63	M63x1.5	2.323	59.0	1.969	50.0	3.031	77	20.0	68.6	70	6.0

Locknut included

## Tools for Installation



Part Number	Thread Type	Tool Dimension (mm)	
		Ø T	SW T
HCFT-01	M16	24	11
HCFT-02	M20	27	14
HCFT-03	M25	33	19
HCFT-04	M32	42	25
HCFT-05	M40	50	32
HCFT-06	M50	58	36
HCFT-07	M63	72	48



# CORD GRIPS & ACCESSORIES

## VG Vent PA6 & NPB Plastic & Metal Vent Glands Metric & PG Thread

Vent glands are used to secure a cable and balance the pressure in an enclosure to protect electronic connections from condensation. They are UL approved and chemical resistant. The vent plugs come in black or gray polyamide or nickel plated brass with different air flow ratings.

### Technical details:

<b>Body:</b>	Brass, Nickel Plated or Polyamide 6
<b>Cap:</b>	Brass, Nickel Plated or Polyamide 6
<b>Vent element:</b>	PTFE
<b>Seal:</b>	Chloroprene (CR)
<b>Washer:</b>	Neoprene (NBR)
<b>Protection type:</b>	IP 66/67
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C
<b>Approvals:</b>	cURus, cCSAus, VDE, DNV-GL, CE



Part Number		Average Air Flow l/h	Water Intrusion Pressure bar	Size	Clamping Range		Thread Length (mm)	Thread Diameter (mm)	Wrenching Flats (mm)	Outer Diameter (mm)	max. Height (mm)
Gray	Black				inches	mm					
<b>Plastic Vent Glands</b>											
VGMG-12	VGMB-12	25	0.1	M12x1.5	.157 - .315	4.0 - 8.0	8.0	12.0	19	21.9	25.5
VGPG-9	VGPB-9	25	0.1	PG 9	.157 - .315	4.0 - 8.0	8.0	15.2	19	21.9	25.5
VGMG-16	VGMB-16	25	0.1	M16x1.5	.157 - .315	4.0 - 8.0	10.0	16.0	19	21.9	25.5
VGPG-11	VGPB-11	25	0.1	PG 11	.157 - .315	4.0 - 8.0	8.0	18.6	19	24.9	24
VGMG-20	VGMB-20	40	0.1	M20x1.5	.236 - .472	6.0 - 12.0	10.0	20.0	24	27.0	30
VGPG-13	VGPB-13	40	0.1	PG 13.5	.236 - .472	6.0 - 12.0	9.0	20.4	24	27.0	30
<b>Metal Vent Glands</b>											
VGMM-12		25	0.1	M12x1.5	.157 - .315	4.0 - 8.0	6.0	12.0	17	18.9	30.5
VGPM-7		25	0.1	PG 7	.157 - .315	4.0 - 8.0	8.0	12.5	17	18.9	30.5
VGPM-9		25	0.1	PG 9	.157 - .315	4.0 - 8.0	6.0	15.2	17	18.9	27.0
VGMM-16		25	0.1	M16x1.5	.157 - .315	4.0 - 8.0	5.0	16.0	17	18.9	27.0
VGMM-16L		35	0.1	M16x1.5	.197 - .394	5.0 - 10.0	8.0	16.0	20	22.0	33.5
VGPM-11		35	0.1	PG 11	.197 - .394	5.0 - 10.0	8.0	18.6	20	22.0	33.5
VGMM-20		50	0.1	M20x1.5	.236 - .472	6.0 - 12.0	8.0	20.0	22	24.5	29.5
VGPM-13		50	0.1	PG 13.5	.236 - .472	6.0 - 12.0	6.5	20.4	22	24.5	29.5

cCSAus approval for plastic glands only.  
VDE approved for metric threads only

# CORD GRIPS & ACCESSORIES

## VP Vent NPB Polyamide Vent Plugs Metric & PG Thread

Vent plugs are used to balance the pressure in an enclosure to protect electronic connections from condensation. They are UL approved and chemical resistant. The vent plugs come in black or gray polyamide with different air flow ratings.



### Technical details:

<b>Body:</b>	Polyamide 6
<b>Cap:</b>	Polyamide 6
<b>Vent element:</b>	Acrylic Co-Polymer on Nylon
<b>Support</b>	
<b>Seal:</b>	Chloroprene (CR)
<b>Washer:</b>	Neoprene (NBR)
<b>Protection type:</b>	IP 67/68 (for water intrusion pressure oil bar)
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C
<b>Approvals:</b>	cURus, CE

Part Number		Average Air Flow l/h	Water Intrusion Pressure bar	Thread Size	Thread Length (mm)	Thread Diameter (mm)	Hole Diameter (mm)	Outer Diameter (mm)	max. Height (mm)	UL
Gray	Black									
VPG-01	VPB-01	16	0.9	QUICK FIT	7.5	5.5	6.4	17.0	9.3	-
VPG-02	VPB-02	16	0.9	M12x1.5	6.0	12.0	12.5	18.5	7.6	UR
VPG-02L	VPB-02L	16	0.9	M12x1.5	10.0	12.0	12.5	18.5	7.6	UR
VPG-03	VPB-03	25	0.5	QUICK FIT	7.5	5.5	6.4	17.0	9.3	-
VPG-04	VPB-04	25	0.5	M12x1.5	6.0	12.0	12.5	18.5	7.6	UR
VPG-04L	VPB-04L	25	0.5	M12x1.5	10.0	12.0	12.5	18.5	7.6	UR
VPG-04H	VPB-04H	42	0.9	M12x1.5	10.0	12.0	12.5	26.0	11.7	-
VPG-05	VPB-05	42	0.9	M16x1.5	10.0	16.0	16.5	26.0	11.7	-
VPG-06	VPB-06	42	0.9	M20x1.5	10.0	20.0	20.5	26.0	11.7	-
VPG-07	VPB-07	120	0.2	QUICK FIT	7.5	5.5	6.4	17.0	9.3	-
VPG-08H	VPB-08H	120	0.5	M12x1.5	10.0	12.0	12.5	26.0	11.7	-
VPG-08	VPB-08	120	0.2	M12x1.5	6.0	12.0	12.5	18.5	7.6	UR
VPG-08L	VPB-08L	120	0.2	M12x1.5	10.0	12.0	12.5	18.5	7.6	UR
VPG-09	VPB-09	120	0.5	M16x1.5	10.0	16.0	16.5	26.0	11.7	-
VPG-10	VPB-10	120	0.5	M20x1.5	10.0	20.0	20.5	26.0	11.7	-
VPG-11	VPB-11	120	0.9	M40x1.5	18.0	40.0	40.5	55.3	15.5	-
VPG-12	VPB-12	300	0.1	QUICK FIT	7.5	5.5	6.4	17.0	9.3	-
VPG-13	VPB-13	300	0.1	M12x1.5	6.0	12.0	12.5	18.5	7.6	UR
VPG-13L	VPB-13L	300	0.1	M12x1.5	10.0	12.0	12.5	18.5	7.6	UR
VPG-14	VPB-14	375	0.5	M40x1.5	18.0	40.0	40.5	55.3	15.5	-
VPG-15	VPB-15	450	0.2	M12x1.5	10.0	12.0	12.5	26.0	11.7	-
VPG-16	VPB-16	450	0.2	M16x1.5	10.0	16.0	16.5	26.0	11.7	-
VPG-17	VPB-17	450	0.2	M20x1.5	10.0	20.0	20.5	26.0	11.7	-
VPG-18	VPB-18	750	0.1	M12x1.5	10.0	12.0	12.5	26.0	11.7	-
VPG-19	VPB-19	750	0.1	M16x1.5	10.0	16.0	16.5	26.0	11.7	-
VPG-20	VPB-20	750	0.1	M20x1.5	10.0	20.0	20.5	26.0	11.7	-
VPG-21	VPB-21	1350	0.2	M40x1.5	18.0	40.0	40.5	55.3	15.5	-
VPG-22	VPB-22	2200	0.1	M40x1.5	18.0	40.0	40.5	55.3	15.5	-

# CORD GRIPS & ACCESSORIES

## VP Vent NPB Metal Vent Plugs Metric & PG Thread

Vent plugs are used to balance the pressure in an enclosure to protect electronic connections from condensation. They are UL approved and chemical resistant. The vent plugs are stainless steel AISI 303 and come with different air flow ratings.



### Technical details:

<b>Body:</b>	Stainless steel AISI 303
<b>Cap:</b>	Stainless steel AISI 303
<b>Vent element: Support</b>	Acrylic Co-Polymer on Nylon
<b>Seal:</b>	Chloroprene (CR)
<b>Washer:</b>	Neoprene (NBR)
<b>Protection type:</b>	IP 67/68 (for water intrusion pressure oil bar)
<b>Temperature range</b>	
<i>permanent:</i>	-20°C to +100°C
<i>intermittent:</i>	-30°C to +150°C
<b>Approvals:</b>	cURus

Part Number	Average Air Flow l/h	Water Intrusion Pressure bar	Thread Size	Thread Length (mm)	Thread Diameter (mm)	Outer Diameter (mm)	max. Height (mm)	UL
VPM-01	4	0.9	M4x0.7	3.0	4.0	12.3	2.7	-
VPM-02	7	0.5	M4x0.7	3.0	4.0	12.3	2.7	-
VPM-03	16	0.9	M12x1.5	6.0	12.0	18.8	11.0	UR
VPM-03L	16	0.9	M12x1.5	10.0	12.0	18.8	11.0	UR
VPM-04	16	0.9	PG 7	10.5	12.5	18.8	11.0	UR
VPM-05	16	0.9	M16x1.5	6.0	16.0	18.8	12.0	-
VPM-05H	16	0.9	M16x1.5	6.0	16.0	18.8	16.0	-
VPM-06	16	0.9	M20x1.5	6.0	20.0	24.5	13.0	-
VPM-06H	16	0.9	M20x1.5	6.0	20.0	24.5	17.0	-
VPM-07	25	0.5	M12x1.5	6.0	12.0	18.8	11.0	UR
VPM-07L	25	0.5	M12x1.5	10.0	12.0	18.8	11.0	UR
VPM-08	25	0.5	PG 7	10.5	12.5	18.8	11.0	UR
VPM-09	25	0.5	M16x1.5	6.0	16.0	18.8	12.0	-
VPM-09L	25	0.5	M16x1.5	6.0	16.0	18.8	16.0	-
VPM-10	25	0.5	M20x1.5	6.0	20.0	24.5	13.0	-
VPM-10H	25	0.5	M20x1.5	6.0	20.0	24.5	17.0	-
VPM-11	35	0.2	M4x0.7	3.0	4.0	12.3	2.7	-
VPM-12	100	0.1	M4x0.7	3.0	4.0	12.3	2.7	-
VPM-13	120	0.2	M12x1.5	6.0	12.0	18.8	11.0	UR
VPM-13L	120	0.2	M12x1.5	10.0	12.0	18.8	11.0	UR
VPM-14	120	0.2	PG 7	10.5	12.5	18.8	11.0	UR
VPM-15	120	0.2	M16x1.5	6.0	16.0	18.8	12.0	-
VPM-15H	120	0.2	M16x1.5	6.0	16.0	18.8	16.0	-
VPM-16	120	0.2	M20x1.5	6.0	20.0	24.5	13.0	-
VPM-16H	120	0.2	M20x1.5	6.0	20.0	24.5	17.0	-
VPM-17	120	0.9	M40x1.5	10.0	40.0	58.0	20.7	-
VPM-18	300	0.1	M12x1.5	6.0	12.0	18.8	11.0	UR
VPM-18L	300	0.1	M12x1.5	10.0	12.0	18.8	11.0	UR
VPM-19	300	0.1	PG 7	10.5	12.5	18.8	11.0	UR
VPM-20	300	0.1	M16x1.5	6.0	16.0	18.8	12.0	-
VPM-20H	300	0.1	M16x1.5	6.0	16.0	18.8	16.0	-
VPM-21	300	0.1	M20x1.5	6.0	20.0	24.5	13.0	-
VPM-22	375	0.5	M40x1.5	10.0	40.0	58.0	20.7	-
VPM-23	1350	0.2	M40x1.5	10.0	40.0	58.0	20.7	-
VPM-24	2200	0.1	M40x1.5	10.0	40.0	58.0	20.7	-

# CORD GRIPS & ACCESSORIES

## Thread Dimensions & Hole Sizes

### Thread Standard Metric acc. to EN 60423

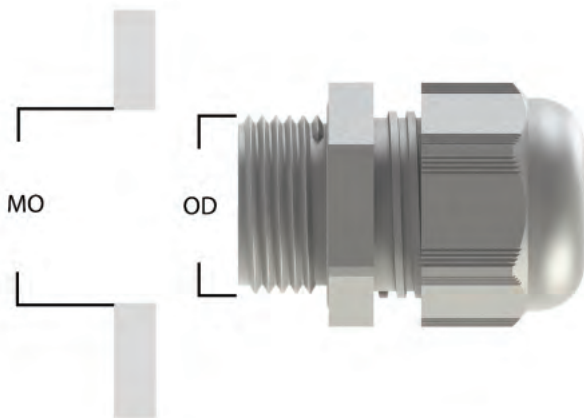
Size	Outer Diameter max. (OD)		Mounting Hole Diameter max. (MO)	
	mm	inch	mm	inch
M12	12	0.47	12.2	0.48
M16	16	0.63	16.2	0.64
M20	20	0.79	20.2	0.80
M25	25	0.98	25.2	0.99
M32	32	1.26	32.2	1.27
M40	40	1.57	40.2	1.66
M50	50	1.97	50.3	1.98
M63	63	2.48	63.3	2.49
M72	72	2.83	72.3	2.85
M75	75	2.95	75.3	2.96
M80	80	3.15	80.3	3.16
M85	85	3.35	85.3	3.36
M90	90	3.54	90.3	3.56
M100	100	3.94	100.3	3.95
M110	110	4.33	110.3	4.34

### Thread Standard PG acc. to DIN 40430

Size	Outer Diameter max. (OD)		Mounting Hole Diameter max. (MO)	
	mm	inch	mm	inch
PG 7	12.5	0.49	12.7	0.50
PG 9	15.2	0.60	15.4	0.61
PG 11	18.6	0.73	18.8	0.74
PG 13.5	20.4	0.80	20.7	0.81
PG 16	22.5	0.89	22.7	0.89
PG 21	28.3	1.11	28.5	1.12
PG 29	37.0	1.46	37.2	1.46
PG 36	47.0	1.85	47.3	1.86
PG 42	54.0	2.13	54.3	2.14
PG 48	59.3	2.33	59.6	2.35

### Thread Standard NPT acc. to ANSI B1.20.1

Size	Outer Diameter max. (OD)		Mounting Hole Diameter max. (MO)	
	mm	inch	mm	inch
NPT 1/4"	13.72	0.54	14.0	0.55
NPT 3/8"	17.15	0.68	17.5	0.69
NPT 1/2"	21.34	0.84	21.5	0.85
NPT 3/4"	26.67	1.05	27.0	1.06
NPT 1"	33.40	1.31	34.0	1.34
NPT 1 1/4"	42.16	1.66	42.5	1.67
NPT 1 1/2"	48.26	1.90	48.5	1.91
NPT 2"	60.33	2.38	60.5	2.38



# CORD GRIPS & ACCESSORIES

## Torque Values for Polyamide 6 Cable Glands

Cable Gland Plastic (NPT)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
NPT 3/8"	5 - 10	2.5	± 0.5	1.0	± 0.5	7.0
NPT 1/2"	6 - 12	5.0	± 0.5	2.0	± 0.5	7.0
NPT 1/2"	10 - 14	5.5	± 0.5	2.0	± 0.5	7.0
NPT 3/4"	13 - 18	9.0	± 0.5	3.0	± 0.5	7.0
NPT 1"	18 - 25	9.5	± 0.5	4.0	± 1.0	7.0

Cable Gland Plastic (Metric)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
M12 X 1.5	3 - 6.5	2.0	± 0.5	2.0	± 0.5	5.0
M16 x 1.5	4 - 10	2.5	± 0.5	2.5	± 0.5	5.0
M16 x 1.5	5 - 10	2.5	± 0.5	2.5	± 0.5	5.0
M20 x 1.5	6 - 12	4.0	± 0.5	3.5	± 1.0	6.0
M20 x 1.5	10 - 14	5.5	± 0.5	3.5	± 1.0	6.0
M25 x 1.5	13 - 18	9.0	± 1.0	3.5	± 1.0	6.0
M32 x 1.5	18 - 25	10.0	± 1.0	5.0	± 1.5	7.0
M40 x 1.5	22 - 32	20.0	± 1.5	5.0	± 1.5	7.0
M50 x 1.5	30 - 38	20.0	± 2.0	8.0	± 1.5	8.0
M63 x 1.5	34 - 44	20.0	± 2.5	12.0	± 1.5	8.0

Cable Gland Plastic (PG)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
PG 7	3 - 6.5	2.0	± 0.5	1.5	± 0.3	5.0
PG 9	4 - 8	2.0	± 0.5	1.5	± 0.3	5.0
PG 11	5 - 10	2.5	± 0.5	2.0	± 0.5	5.0
PG 13.5	6 - 12	4.0	± 0.5	3.0	± 0.5	6.0
PG 16	10 - 14	5.5	± 0.5	3.5	± 1.0	6.0
PG 21	13 - 18	9.0	± 0.5	4.0	± 1.0	7.0
PG 29	18 - 25	7.7	± 0.5	9.0	± 1.5	7.0
PG 36	22 - 32	16.0	± 0.5	11.0	± 1.5	8.0
PG 42	30 - 38	20.0	± 1.0	14.0	± 2.0	8.0
PG 48	34 - 44	20.0	± 1.0	14.0	± 2.0	8.0

\* When locknut is used, the screwing length must be at 1.5 times the locknut thickness.

\*\*When a threaded enclosure is used, the wall thickness must be at least equal to the locknut thickness



# CORD GRIPS & ACCESSORIES

## Torque Values for Metal Cable Glands

Cable Gland Nickel Plated Brass (NPT)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
NPT 3/8"	5 - 10	6.5	± 0.5	3.0	± 0.5	7.0
NPT 1/2"	6 - 12	17.5	± 0.5	3.0	± 0.5	7.0
NPT 1/2"	10 - 14	15.0	± 0.5	4.0	± 0.5	7.0
NPT 3/4"	13 - 18	17.0	± 0.5	5.5	± 0.5	7.0
NPT 1"	18 - 25	40.0	± 1.0	8.0	± 1.0	7.0
NPT 1 1/2"	22 - 32	40.0	± 1.0	10.0	± 1.0	7.0
NPT 2"	30 - 38	45.0	± 2.0	16.0	± 1.0	7.0

Cable Gland Nickel Plated Brass (Metric)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
M12 X 1.5	3 - 6.5	5.0	± 0.5	5.0	± 0.5	5.0
M16 x 1.5	4 - 8.0	6.0	± 0.5	6.0	± 0.5	5.0
M16 x 1.5	5 - 10	7.0	± 0.5	7.0	± 0.5	5.0
M20 x 1.5	6 - 12	8.0	± 0.5	8.0	± 1.0	6.0
M20 x 1.5	10 - 14	11.0	± 0.5	11.0	± 1.0	6.0
M25 x 1.5	13 - 18	17.0	± 1.0	17.0	± 1.0	6.0
M32 x 1.5	18 - 25	22.5	± 1.0	22.5	± 1.5	7.0
M40 x 1.5	22 - 32	41.0	± 1.5	41.0	± 1.5	7.0
M50 x 1.5	30 - 38	45.0	± 2.0	45.0	± 1.5	8.0
M63 x 1.5	34 - 44	50.0	± 2.5	50.0	± 1.5	8.0

Cable Gland Nickel Plated Brass (PG)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
PG 7	3 - 6.5	5.0	± 0.5	5.0	± 0.3	5.0
PG 9	4 - 8.0	6.0	± 0.5	6.0	± 0.3	5.0
PG 11	5 - 10	7.0	± 0.5	7.0	± 0.5	5.0
PG 13.5	6 - 12	8.0	± 0.5	8.0	± 0.5	6.0
PG 16	10 - 14	11.0	± 0.5	11.0	± 1.0	6.0
PG 21	13 - 18	17.0	± 0.5	17.0	± 1.0	7.0
PG 29	18 - 25	22.5	± 0.5	22.5	± 1.5	7.0
PG 36	22 - 32	41.0	± 0.5	41.0	± 1.5	8.0
PG 42	30 - 38	45.0	± 1.0	45.0	± 2.0	8.0
PG 48	34 - 44	50.0	± 1.0	50.0	± 2.0	8.0

\* When locknut is used, the screwing length must be at 1.5 times the locknut thickness.

\*\*When a threaded enclosure is used, the wall thickness must be at least equal to the locknut thickness

# CORD GRIPS & ACCESSORIES

## Torque Values for CG EMC-2 Nickel Plated Brass Glands

Cable Gland Nickel Plated Brass (NPT)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
NPT 3/8"	5 - 10	7.0	± 0.5	7.0	± 0.5	7.0
NPT 1/2"	6 - 12	8.0	± 1.0	8.0	± 1.0	7.0
NPT 1/2"	10 - 14	11.0	± 1.0	11.0	± 1.0	7.0
NPT 3/4"	13 - 18	17.0	± 1.0	17.0	± 1.0	7.0
NPT 1"	18 - 25	22.5	± 1.0	22.5	± 1.0	7.0

Cable Gland Nickel Plated Brass (Metric)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
M12 X 1.5	3 - 6.5	5.0	± 0.5	5.0	± 0.5	2.8
M16 x 1.5	4 - 8.0	6.0	± 0.5	6.0	± 0.5	3.0
M16 x 1.5	4.5 - 10	7.0	± 0.5	7.0	± 0.5	3.0
M20 x 1.5	6 - 12	8.0	± 1.0	8.0	± 1.0	3.5
M25 x 1.5	10 - 14	11.0	± 1.0	11.0	± 1.0	4.0
M25 x 1.5	13 - 18	17.0	± 1.0	17.0	± 1.0	4.0
M32 x 1.5	13 - 18	17.0	± 1.0	17.0	± 1.0	5.0
M32 x 1.5	18 - 25	22.5	± 1.0	22.5	± 1.0	5.0
M40 x 1.5	18 - 25	22.5	± 1.0	22.5	± 1.0	5.0
M40 x 1.5	22 - 32	41.0	± 1.0	41.0	± 1.5	5.0
M50 x 1.5	22 - 32	41.0	± 1.5	41.0	± 1.5	5.0
M63 x 1.5	34 - 44	45.0	± 2.0	45.0	± 2.0	6.0
M63 x 1.5	37 - 53	50.0	± 2.0	50.0	± 2.0	6.0

Cable Gland Nickel Plated Brass (PG)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
PG 7	3 - 6.5	5.0	± 0.5	5.0	± 0.5	2.8
PG 9	4 - 8.0	6.0	± 0.5	6.0	± 0.5	2.8
PG 11	5 - 10	7.0	± 0.5	7.0	± 0.5	3.0
PG 13.5	6 - 12	8.0	± 1.0	8.0	± 1.0	3.0
PG 16	10 - 14	11.0	± 1.0	11.0	± 1.0	3.0
PG 21	13 - 18	17.0	± 1.0	17.0	± 1.0	3.5
PG 29	18 - 25	22.5	± 1.0	22.5	± 1.0	4.0
PG 36	22 - 32	41.0	± 1.0	41.0	± 1.5	5.0
PG 42	30 - 38	45.0	± 2.0	45.0	± 2.0	5.0
PG 48	34 - 44	50.0	± 2.0	50.0	± 2.0	5.5

\* When locknut is used, the screwing length must be at 1.5 times the locknut thickness.

\*\*When a threaded enclosure is used, the wall thickness must be at least equal to the locknut thickness

# CORD GRIPS & ACCESSORIES

## Torque Values for CG EMC-4 Nickel Plated Brass Glands

Cable Gland Nickel Plated Brass (NPT)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
NPT 3/8"	5 - 10	6.0	± 0.5	6.0	± 0.5	7.0
NPT 1/2"	6 - 12	8.0	± 1.0	8.0	± 1.0	7.0
NPT 1/2"	7.5 - 14	10.0	± 1.0	10.0	± 1.0	7.0
NPT 3/4"	10 - 18	15.0	± 1.0	15.0	± 1.0	7.0
NPT 1"	16 - 25	22.0	± 1.0	22.0	± 1.0	7.0
NPT 1 1/4"	22 - 32	42.0	± 1.0	42.0	± 1.0	7.0
NPT 1 1/2"	30 - 38	42.0	± 1.5	42.0	± 1.5	7.0
NPT 2"	34 - 44	43.0	± 1.5	43.0	± 1.5	7.0

Cable Gland Nickel Plated Brass (Metric)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
M12 X 1.5	3 - 6.5	7.0	± 0.5	7.0	± 0.5	2.8
M16 x 1.5	5 - 10	6.0	± 0.5	6.0	± 0.5	3.0
M20 x 1.5	6 - 12	8.0	± 1.0	8.0	± 1.0	3.5
M20 x 1.5	7.5 - 14	10.0	± 1.0	10.0	± 1.0	3.5
M25 x 1.5	10 - 18	15.0	± 1.0	15.0	± 1.0	4.0
M32 x 1.5	16 - 25	22.0	± 1.0	22.0	± 1.0	5.0
M40 x 1.5	22 - 32	42.0	± 1.0	42.0	± 1.0	5.0
M50 x 1.5	30 - 38	42.0	± 1.5	42.0	± 1.5	5.0
M63 x 1.5	34 - 44	43.0	± 1.5	43.0	± 1.5	6.0

Cable Gland Nickel Plated Brass (PG)	CAP BODY LOCK NUT			Body to Enclosure or locknut to body* (Min Torque Value to Ensure Declared IP rate)		Locknut thickness
	Cable Range (mm)	Recommended tightening torque		Recommended tightening torque		Height (mm)
		Nm	Tolerance	Nm	Tolerance	
PG 7	3 - 6.5	7.0	± 0.5	7.0	± 0.5	2.8
PG 11	5 - 10	6.0	± 0.5	6.0	± 0.5	3.0
PG 13.5	6 - 12	8.0	± 1.0	8.0	± 1.0	3.0
PG 16	7.5 - 14	10.0	± 1.0	10.0	± 1.0	3.0
PG 21	10 - 18	15.0	± 1.0	15.0	± 1.0	3.5
PG 29	16 - 25	22.0	± 1.0	22.0	± 1.0	4.0
PG 36	22 - 32	42.0	± 1.0	42.0	± 1.0	5.0
PG 42	30 - 38	42.0	± 1.5	42.0	± 1.5	5.0
PG 48	34 - 44	43.0	± 1.5	43.0	± 1.5	5.5

\* When locknut is used, the screwing length must be at 1.5 times the locknut thickness.

\*\*When a threaded enclosure is used, the wall thickness must be at least equal to the locknut thickness

# CORD GRIPS & ACCESSORIES

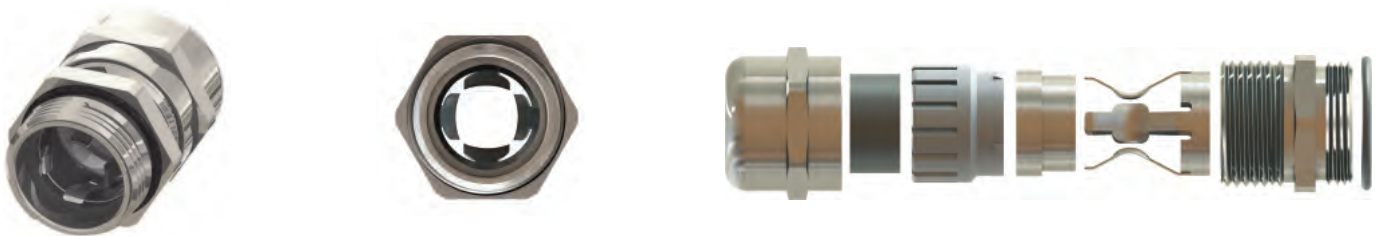
## EMC Grounding Gland Installation Guide

SAB's EMC grounding glands are designed to create a path to ground and remove EMI from the cable shield at the enclosure and eventually to earth ground. We offer two designs, CG EMC-2 and CG EMC-4. SAB's EMC glands work perfectly with VFD cables. CG EMC-2 is a more cost-effective solution for permanent installation. CG EMC-4 is designed to withstand high vibration applications and multiple reinstallations of the cable. The cable can be installed in either direction when using the EMC-4 style but must be installed from the dome end for the CG EMC-2 style.

EMC-2



EMC-4



## Steps for Installation

### Step 1:

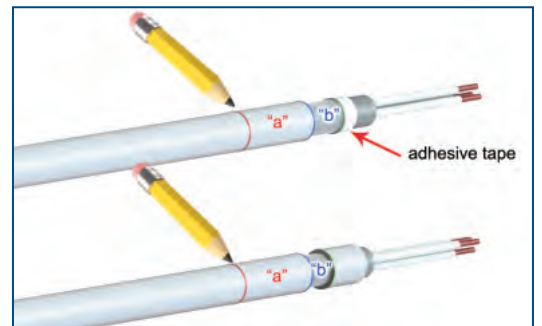
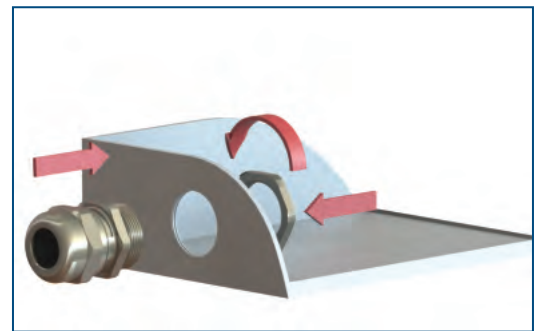
Install the EMC cable gland on the enclosure. Use our EMC locknut for optimal contact with the enclosure. If enclosure hole is threaded, refer to the Torque Value Tables for recommended tightening torques for cap, body, and locknut.

### Step 2:

Prepare the cable shield for connection. Determine the spot where the cable will enter the enclosure and mark the jacket. From that first mark, measure out from the direction leaving the enclosure with "b" then "a" using the sizing chart on the next page.

*Option 1:* Remove the complete jacket and trim the braid beyond the connection to the gland. Use adhesive tape to secure the end of the shield to avoid fraying.

*Option 2:* Leave the jacket on the cable exposing only section "b", so contact is made with the shield. If the jacket moves during installation, gently move it back into position.



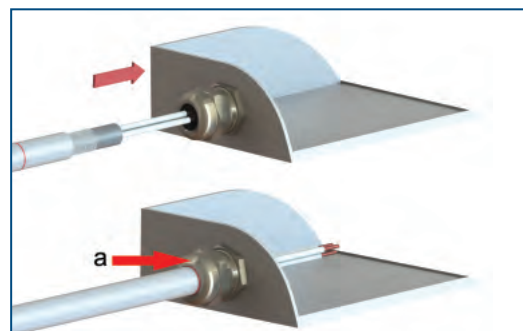
# CORD GRIPS & ACCESSORIES

## EMC Grounding Gland Installation Guide

### Step 3:

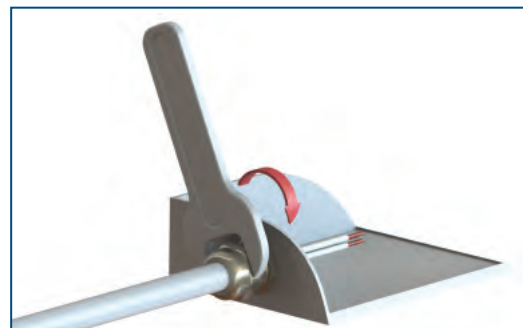
Insert cable through gland aligning mark “a” with top of gland. Make sure the gland’s grounding springs are in contact with the shield of the cable.

- For CG-EMC-2, do not try to rotate or pull out the cable.
- For CG-EMC-4, the cable can be moved to ensure best position



### Step 4:

Tighten the cap. Refer to Torque Values Tables for proper tightening. Once the gland is secured, do not pull or rotate the cable because this could damage the cable.



CG EMC-2

Metric	PG	NPT	Marking “a”		Exposed Shield “b”	
			inch	mm	inch	mm
EM2-12	EP2-7	-	0.591	15.0	0.492	12.5
EM2-16	EP2-9	-	0.709	18.0	0.433	11.0
EM2-16C	EP2-11	EN2-3/8	0.748	19.0	0.512	13.0
EM2-20	EP2-13	EN2-1/2	0.728	18.5	0.492	12.5
EM2-25	EP2-16	-	0.807	20.5	0.531	13.5
EM2-25C, EM2-32	EP2-21	EN2-3/4	0.945	24.0	0.591	15.0
EM2-32C, EM2-40	EP2-29	EN2-1	1.142	29.0	0.650	16.5
EM2-40C, EM2-50	EM2-50	-	1.378	35.0	0.827	21.0
EM2-50C	EP2-42	-	1.260	32.0	0.906	23.0
EM2-63	EP2-48	-	1.339	34.0	1.280	32.5

CG EMC-4

Metric	PG	NPT	Marking “a”		Exposed Shield “b”	
			inch	mm	inch	mm
EM4-12	EP4-7	EN4-1/4	0.413	10.5	0.551	14.0
EM4-16	EP4-11	EN4-3/8	0.591	15.0	0.551	14.0
EM4-20	EP4-13	EN4-1/2	0.551	14.0	0.748	19.0
EM4-20C	EP4-16	EN4-1/2C	0.591	15.0	0.748	19.0
EM4-25	EP4-21	EN4-3/4	0.748	19.0	0.787	20.0
EM4-32	EP4-29	EN4-1	0.827	21.0	1.024	26.0
EM4-40	EP4-36	EN4-1 1/4	1.024	26.0	1.102	28.0
EM4-50	EP4-42	EN4-1 1/2	1.024	26.0	1.575	40.0
EM4-63	EP4-48	EN4-2	1.083	27.5	1.378	35.0
EM4-63C	-	-	1.220	31.0	1.378	35.0



# ADDITIONAL PRODUCTS

## TEMPERATURE MEASUREMENT

WITH US YOU GET **TEMPERATURE MEASUREMENT**

AND **ACCESSORIES** FOR A WIDE VARIETY OF REQUIREMENTS AND INDUSTRIES.



SAB North America has expertise in thermocouples, resistance thermometers and the cabling you need to build an optimal assembly. We're well-positioned to answer cabling questions that pertain to your temperature measurement needs.

- Protecting armatures and gauge slides
- Mineral insulated thermocouples
- Mineral insulated resistance thermometers
- Temperature measurement in plastics processing industry/Hot runner process
- Temperature measurement in test vehicles
- Probe with stainless steel sleeve
- Compensating and extension cables
- Accessories

## CABLE HARNESSING

WE SUPPLY **HARNESSED CABLES AND WIRES**

FROM A SINGLE SOURCE.

- Helix cables
- Harnessed cables according to customers' specification
- Cable harnesses
- Harnessed motor and transmission cables for Siemens and Indramat drives
- Harnessed track cable
- Various combinations of connector types and terminals
- Many application of various materials and sheath materials
- Complete solutions
- High quality standard by continuous quality control





WE DEVELOP AND PRODUCE **CABLES AND WIRES**  
AS WELL AS **SPECIAL SOLUTIONS**  
PARTICULARLY ACCORDING TO YOUR REQUIREMENTS AND APPLICATIONS.

Whatever the need may be, look to SAB North America for Special Cables that can, for example, help minimize maintenance costs and increase productivity, reduce downtime, and solve specific problems.

Here is a small sample of some of the challenges that Special Cables from SAB North America can help address:

- **Hybrid Designs for multiple functions-** In situations with space and budget constraints, a hybrid cable accommodates multiple functions like communications and control, fiber optics, power, pneumatics, and hydraulics.
- **Harsh Environments-** Because cables must endure inhospitable environments, standard cables can be customized with the right materials to resist threats such as temperature extremes from -50°C to 200°C, tears and abrasions, oils, solvents, and flames.
- **Difficult applications-** In many cases, cables must function reliably despite distinctive operating conditions such as high-speed data handling, unique motion and mechanical stresses in robotics and automated machines, reeling and pulley structures hoists and transport systems, resistance to EMI and RFI in motors and drives as well as use with disinfectants and cleaning substances in medical and other sanitary environments.
- **Industries-** SAB North America customizes Special Cables for a diversity of industries such as industrial automation, renewable energy, transportation, medical, and entertainment and amusements.



Special cables and hybrid cables can help solve design problems or perform in challenging operating environments where standard cables may fall short. Customers can select from a large catalog of materials and jacket combinations, and SAB North America can assist customers in modifying or designing a completely new cable. Order minimums are as low as 1,500 feet, and we can test your unique product in our lab. No matter your application's requirements, SAB North America Special Cables expand the possibilities of standard cables and address your design challenges.

Order minimums are as low as 1,500 feet, and we can test your unique product in our lab. No matter your application's requirements, SAB North America Special Cables expand the possibilities of standard cables and address your design challenges.

### Conductor Materials

- Bare copper
- Tinned copper
- Silver plated copper
- Nickel plated copper
- Nickel
- Nickel pure
- Compensating cable alloys

### Conductor Sizes

- 0.14 mm<sup>2</sup> - 300 mm<sup>2</sup>  
(26 AWG to 500 MCM)
- variety of stranding styles

### Insulation and Jacketing Materials

- PVC (many varieties)
- Polyethylene
- Polypropylene
- TPE
- Fiberglass
- Besilen®/Silicone
- Pi foil
- FEP, ETFE, PFA, PTFE
- SABIX® zero halogen
- Polyurethane

### Conductor Count Ranges

- unshielded - up to 125 conductors
- shielded - up to 100 conductors

### Temperature Ranges (based on material)

- Thermoplastic Elastomers -50°C up to +145°C
- Besilen®/Silicone -40°C up to +220°C
- FEP, ETFE, PFA, PTFE -90°C up to +260°C
- Halogen-free -50°C up to +220°C
- Fiberglass up to +600°C

### Shielding and Braiding Materials

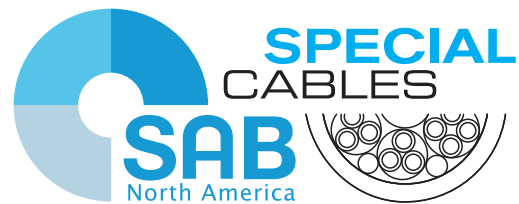
- Bare copper
- Tinned copper
- Galvanized steel
- Stainless steel
- Aluminium foil
- Fiberglass
- Aramid

### Approvals

- UL, CSA, CE, EAC, VDE, HAR, IEC, EN, ISO, DNV-GL, LR, ABS, RINA, RMRS, BSI







344 Kaplan Drive  
Fairfield, NJ 07004  
Toll Free: 866-722-2974  
[www.sabcable.com](http://www.sabcable.com)  
[info@sabcable.com](mailto:info@sabcable.com)