VFD CABLES & EMC GROUNDING SOLUTIONS FOR AUTOMATION

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SPECIAL CABLES
SAB North America

VFD Cables for Automation

SAB North America

SAB North America is a focused supplier for the automation, industrial machinery, 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.

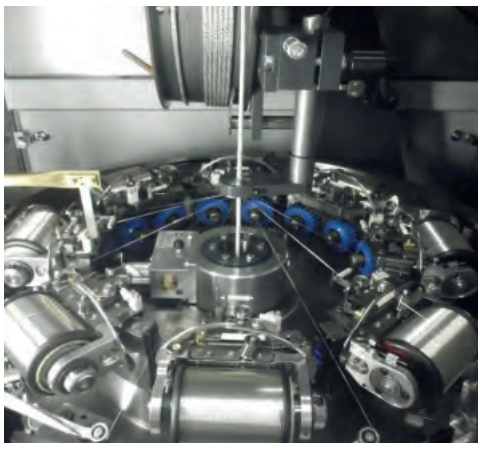
Whatever the need may be, look to SAB North America for Special Cables that can, for example, help minimize maintenance costs and increase productivity, reduce downtime, and solve specific problems. Here is a small sample of some of the challenges that Special Cables from SAB North America can help address:

- Hybrid designs for multiple functions
- Harsh environments
- Difficult applications
- Industry-specific requirements.

SPECIAL CABLES

SAB North America offers a well-stocked line of UL and CSA-listed VFD cables for use in paper mills, cement plants, mining controls, automotive plants, and steel mills and HVAC applications as well. Anywhere VFD motors are used SAB has a cable to offer. We have one ground or symmetrical ground options, power only or power with 1 or 2 pairs. We also offer continuous flex options and 2KV for larger motors. Combine with our EMC grounding glands and protect your installation from EMI interference.

SAB's level of speed and service as a 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
- Specialty cable designs (1500 ft minimum)
- No minimum on orders from stock
- Free drop shipments (no surcharges)
- 24-hour shipments from stock
- Cord Grips for securing shielded and unshielded cables

VFD Cables for Automation

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Construction	Numbered conductors	●	●	●	●	●	●	●
	Black conductors with green/yellow ground	●	●	●	●	●	●	●
	Pair: PVC/Nylon				●			
	Insulation: Special formulated crosslinked PE, PVC ground	●	●	●	●			
	Insulation: Special formulated crosslinked PE					●	●	●
	Drain wire		●		●[1]			
	Stranding: in layers	●	●	●	●	●		
	Stranding: in layers with 3 ground wires						●	●
	Double shield: foil and tinned copper braiding	●	●	●	●	●	●	
	Uncoated 5 mil copper tape shield with 50% overlap							●
Jacket	Special sunlight and oil resistant copolymer	●	●	●	●	●	●	
	Special sunlight resistant & flame retardant PVC							●
Temperature range static*	+105°C							
	+ 90°C							
	- 25°C							
	- 40°C							
Voltage	600 V	●	●	●	●	●	●	
	1000 V CSA AWM	●	●	●	●	●	●	
	1000 V (UL) WTTC	●	●	●	●	●	●	
	2000 V (UL)							●
	Test voltage: 3000 V	●	●	●	●	●	●	
	Test voltage: 7500 V							●
Standards & Approvals	Burning characteristics: FT1, FT2, FT4	●	●	●	●	●	●	●
	Cold bend test -40°C	●	●	●	●	●	●	
	Oil resistance I & II	●	●	●	●	●	●	
	Sunlight resistance	●	●	●	●	●	●	●
	Exposed runs	●	●	●	●	●	●	●
	Direct burial	●	●	●	●	●	●	●
	Machinery area	●	●	●	●	●	●	●
	Long installations (over 100 ft)	●	●		●	●	●	●

from
to

[1] Drain wire with 16 AWG pair configuration only. Available with the other sized upon special request.

**The temperature range for flexible application is mentioned on the corresponding catalog page

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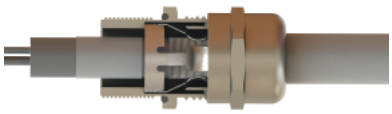

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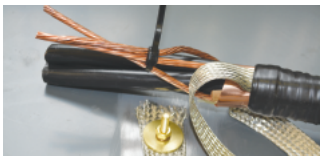


VFD Cables for Automation

VFD XLPE TR / VFD XLPE TR D

XLPE insulated, oil resistant and flexible VFD cable, available with drain wire
Type TC-ER-JP

NFPA 79 for industrial machinery

SABVFD

(UL) Type TC-ER 14AWG/3C RHW-2 CDRS + GNDG CDR 90C Dry/Wet 600V, Oil Res I & II, Sunlight Resistant, Direct Burial, (UL) WTTC 1000V, (UL) Flexible Motor Supply Cable, c(UL) CIC-TC XLPE 600V FT4, CSA AWM I/II A/B 90C 1000V FT4 RoHS CE

UL SA c UL us CE RoHS

Construction:

Conductor:	class K tinned copper stranding
Insulation:	special formulated XLPE
Color code:	blackish gray #'d conductors with green/yellow ground
Shielding:	double shield, AMA foil and tinned copper braiding (85% coverage)
Jacket material:	special sunlight and oil resistant black PVC

Technical data:

Voltage:	*UL/c(UL):*	600 V
	CSA-AWM:	1000 V
	UL WTTC:	1000 V
Temperature:	*UL/c(UL)/ CSA-AWM:*	up to +90°C
	static:	-40/105°C
Burning characteristics:	UL/c(UL) FT4	

Outstanding features:

- XLPE insulation for excellent capacitance values
- Oil resistant meeting Oil Res 1 & 2
- Sun Res and Direct Burial approved
- Tinned copper class K stranding for improved flexibility
- UL TC-ER-JP, UL MTW, UL WTTC & UL Flexible Motor Supply Cable
- c(UL) CIC-TC, CSA AWM FT 4
- Conductors rated for RHW-2

Part Number	AWG/c	Drain Wire AWG	nominal OD-Ø		Cable weight	Amperage†		Maximum Horse Power Rating*			Capacitance (pF/ft)		Impedance (Ohms)	
			inch	mm	lbs/mft	75°	90°	230V	460V	575V	Mutual	Ground	Mutual	Ground
35681604	16/4c	-	0.477	12.1	125	-	18	2	3	5	15.0	27.0	104	57
35681604D	16/4c	-	0.493	12.3	144	-	18	2	3	5	15.0	27.0	104	57
35681404	14/4c	-	0.522	13.3	159	20	25	5	10	15	18.0	32.0	86	48
35681404D	14/4c	14	0.522	13.3	180	20	25	5	10	15	18.0	32.0	86	48
35681204	12/4c	-	0.592	15.0	214	25	30	7 1/2	15	20	20.0	35.0	79	43
35681204D	12/4c	12	0.592	15.0	237	25	30	7 1/2	15	20	20.0	35.0	79	43
35681004	10/4c	-	0.680	17.3	294	35	40	10	20	30	24.0	42.0	66	36
35681004D	10/4c	10	0.680	17.3	327	35	40	10	20	30	24.0	42.0	66	36
35680804	8/4c	-	0.886	22.5	556	50	55	15	30	40	24.0	42.0	66	36
35680804D	8/4c	4x14	0.886	22.5	550	50	55	15	30	40	24.0	42.0	66	36
35680604	6/4c	-	0.952	24.2	736	65	75	20	40	50	26.0	47.0	59	32
35680604D	6/4c	4x12	1.000	25.4	805	65	75	20	40	50	26.0	47.0	59	32
35680404	4/4c	-	1.090	27.7	1079	85	95	25	50	60	29.0	53.0	53	29
35680404D	4/4c	4x10	1.090	27.7	1150	85	95	25	50	60	29.0	53.0	53	29
35680204	2/4c	-	1.247	31.7	1550	115	130	40	75	100	33.0	60.0	46	25
35680204D	2/4c	4x8	1.247	31.7	1600	115	130	40	75	100	33.0	60.0	46	25

Part Number		EMC Cable Gland						VFD Termination Kit
		Metric Thread		PG Thread		NPT Thread		
Without Drain Wire	With Drain Wire	EMC-2	EMC-4	EMC-2	EMC-4	EMC-2	EMC-4	
35681604	35681604D	EM2-25	EM4-20C	EP2-16	EP4-16	EN2-3/4	EN4-1/2C	-
35681404	35681404D	EM2-25	EM4-20C	EP2-16	EP4-16	EN2-3/4	EN4-1/2C	VFD GRD KIT 14-1
35681204	35681204D	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35681004	35681004D	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35680804	35680804D	EM2-32C	EM4-32	EP2-29	EP4-29	EN2-1	EN4-1	VFD GRD KIT 14-1
35680604	35680604D	EM2-40C	EM4-40	EP2-36	EP4-36	EN2-1	EN4-1 1/4	VFD GRD KIT 14-1
35680404	35680404D	EM2-40C	EM4-40	EP2-36	EP4-36	-	EN4-1 1/4	VFD GRD KIT 14-1
35680204	35680204D	EM2-50C	EM4-50	EP2-42	EP4-42	-	EN4-1 1/2	VFD GRD KIT 14-1

Table shows recommended cable glands. Other thread sizes may be available. Refer to EMC gland pages at the end of this brochure.

† Allowable ampacities are based on no more than three current carrying conductors in a raceway, cable, or direct buried and an ambient temperature of 30°C (2011 NEC Table 310.15(B)(16))
* Maximum Horse Power rating represents the largest HP motor the AWG is recommended for based on horse power (HP) and the full load current (FLC) x 125% per NEC Art. 430-122 (A). Amperes (FLC) were determined from NEC Art. 430-250

VFD XLPE TR Lean

XLPE insulated, double shielded and flexible VFD cable with reduced O.D.
Type TC-ER-JP

NFPA 79 for industrial machinery

SAB VFD

(UL) Type TC-ER 14AWG/3C XHHN-2 CDRS + GNDG CDR 90C Dry/Wet 600V, Oil Res I & II, Sunlight Resistant, Direct Burial, (UL) WTTC 1000V, (UL) Flexible Motor Supply Cable, c(UL) CIC-TC XLPE 600V FT4, CSA AWM I/II A/B 90C 1000V FT4 RoHS CE

Construction:

Conductor:	class K tinned copper stranding
Insulation:	special formulated XLPE
Color code:	blackish gray #'d conductors with green/yellow ground
Shielding:	double shield, AMA foil and tinned copper braiding (85% coverage)
Jacket material:	special sunlight and oil resistant black PVC

Technical data:

Voltage:	*UL/c(UL):*	600 V
	CSA-AWM:	1000 V
	UL WTTC:	1000 V
Temperature:	*UL/c(UL)/ CSA-AWM:*	up to +90°C
	static:	-40/105°C
Burning characteristics:	UL/c(UL) FT4	

Outstanding features:

- **Interconnection of variable frequency drive control device to variable frequency motors**
- **UL 90°C wet**
- **WTTC: UL subject 2277**
- **TC-ER-JP: UL standard 1277**
- **UL flexible motor supply cable 1000V**
- **recommended for installations up to 100ft**
- **Oil Res I & II**
- **double shield (100% shielded)**

Part Number	AWG/C	nominal OD-Ø		Cable weight	Amperage†		Maximum Horse Power Rating*		
		inch	mm	lbs/mft	75°	90°	230V	460V	575V
35661804	18/4c	0.383	9.7	94		14	1	2	3
35661604	16/4c	0.423	10.7	120		18	2	3	5
35661404	14/4c	0.468	11.9	153	20	25	5	10	15
35661204	12/4c	0.530	13.4	207	25	30	7 1/2	15	20
35661004	10/4c	0.606	15.4	286	35	40	10	20	30
35660804	8/4c	0.814	20.7	471	50	55	15	30	40

Part Number	EMC Cable Gland						VFD Termination Kit
	Metric Thread		PG Thread		NPT Thread		
	EMC-2	EMC-4	EMC-2	EMC-4	EMC-2	EMC-4	
35661804	EM2-20	EM4-20	EP2-13	EP4-13	EN2-1/2	EN4-1/2	VFD GRD KIT 14-1
35661604	EM2-20	EM4-20	EP2-13	EP4-13	EN2-1/2	EN4-1/2	VFD GRD KIT 14-1
35661404	EM2-25	EM4-20	EP2-16	EP4-16	EN2-1/2	EN4-1/2C	VFD GRD KIT 14-1
35661204	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35661004	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35660804	EM2-32	EM4-32	EP2-29	EP4-29	EN2-1	EN4-3/1	VFD GRD KIT 14-1

Table shows recommended cable glands. Other thread sizes may be available. Refer to EMC gland pages at the end of this brochure.

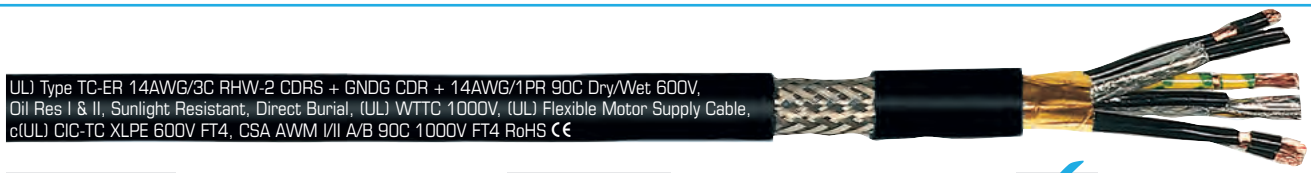
† Allowable ampacities are based on no more than three current carrying conductors in a raceway, cable, or direct buried and an ambient temperature of 30°C (2011 NEC Table 310.15(B)(16))
* Maximum Horse Power rating represents the largest HP motor the AWG is recommended for based on horse power (HP) and the full load current (FLC) x 125% per NEC Art. 430-122 (A). Amperes (FLC) were determined from NEC Art. 430-250

VFD Combo XLPE

XLPE insulation plus shielded pair
Type TC-ER-JP

NFPA 79 for industrial machinery

SABVFD



UL) Type TC-ER 14AWG/3C RHW-2 CDRS + GNDG CDR + 14AWG/1PR 90C Dry/Wet 600V, Oil Res I & II, Sunlight Resistant, Direct Burial, (UL) WTTC 1000V, (UL) Flexible Motor Supply Cable, c(UL) CIC-TC XLPE 600V FT4, CSA AWM I/II A/B 90C 1000V FT4 RoHS CE

Construction:

Conductor:	class K tinned copper stranding
Insulation:	special formulated XLPE
Shielding:	
pair:	aluminum foil and drain wire (drain wire same size as pair)
overall:	double shield, AMA foil and tinned copper braiding
Jacket material:	special sunlight and oil resistant black PVC

Technical data:

Voltage:	*UL/c(UL):*	600 V
	CSA-AWM:	1000 V
	UL WTTC:	1000 V
Temperature:	*UL/c(UL)/ CSA-AWM:*	up to +90°C
	static:	-40/105°C
Burning characteristics:	UL/c(UL) FT4	
Color code:	blackish gray #'d conductors with green/yellow ground	

Outstanding features:

- **XLPE insulation for excellent capacitance values**
- **Shielded pair for temperature sensor or brake**
- **Oil resistant meeting Oil Res 1& 2**
- **Sun Res and Direct Burial approved**
- **UL TC-ER-JP, UL MTW, UL WTTC & UL Flexible Motor Supply Cable**
- **c(UL) CIC-TC, CSA AWM FT 4**
- **Conductors rated for RHW-2**

Part Number	AWG/C	Pair	nominal OD-Ø		Cable weight	Amperage†		Maximum Horse Power Rating*		
			inch	mm	lbs/mft	75°	90°	230V	460V	575V
35691614	16/4c	18/1pr	0.573	14.6	144	-	18	-	3	3
35691624D	16/4c	16/1pr	0.580	14.7	210	-	18	-	3	3
35691414	14/4c	18/1pr	0.616	15.6	175	20	25	5	10	10
35691464	14/4c	18/2pr	0.662	16.8	254	20	25	5	10	10
35691424D	14/4c	16/1pr	0.626	15.9	257	20	25	5	10	10
35691404	14/4c	14/1pr	0.628	16.0	213	20	25	5	10	10
35691214	12/4c	18/1pr	0.654	16.6	231	25	30	5	10	15
35691264	12/4c	18/2pr	0.698	17.7	299	25	30	5	10	15
35691224D	12/4c	16/1pr	0.662	16.8	308	25	30	5	10	15
35691204	12/4c	14/1pr	0.667	16.9	277	25	30	5	10	15
35691064	10/4c	18/2pr	0.762	19.4	383	35	40	7 1/2	15	20
35691024D	10/4c	16/1pr	0.738	18.7	417	35	40	7 1/2	15	20
35691004	10/4c	14/1pr	0.736	18.7	354	35	40	7 1/2	15	20
35690864	8/4c	18/2pr	0.961	24.4	576	50	55	10	25	30
35690804	8/4c	14/1pr	0.960	24.4	536	50	55	10	25	30
35690664	6/4c	16/2pr	1.032	26.2	766	65	75	15	30	40
35690604	6/4c	14/1pr	1.030	26.2	726	65	75	15	30	40
35690404	4/4c	14/1pr	1.140	29.0	1011	85	95	20	40	50
35690204	2/4c	14/1pr	1.280	32.5	1401	115	130	30	60	75

D in P/N includes drain wire with overall shield (same AWG as power conductors)

Part Number		EMC Cable Gland						VFD Termination Kit
without Drain Wire	with Drain Wire	Metric Thread		PG Thread		NPT Thread		
		EMC-2	EMC-4	EMC-2	EMC-4	EMC-2	EMC-4	
35691614	35691624D	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	-
35691414	35691424D	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35691404	-	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35691464	-	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35691214	-	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35691204	35691224D	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35691264	-	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35691004	35691024D	EM2-32C	EM4-32	EP2-29	EP4-29	EN2-1	EN4-1	VFD GRD KIT 14-1
35691064	-	EM2-32C	EM4-32	EP2-29	EP4-29	EN2-1	EN4-1	VFD GRD KIT 14-1
35690804	-	EM2-40C	EM4-40	EP2-36	EP4-36	EN2-1	EN4-1 1/4	VFD GRD KIT 14-1
35690864	-	EM2-40C	EM4-40	EP2-36	EP4-36	EN2-1	EN4-1 1/4	VFD GRD KIT 14-1
35690604	-	EM2-40C	EM4-40	EP2-36	EP4-36	-	EN4-1 1/4	VFD GRD KIT 14-1
35690664	-	EM2-40C	EM4-40	EP2-36	EP4-36	-	EN4-1 1/4	VFD GRD KIT 14-1
35690404	-	EM2-40C	EM4-40	EP2-36	EP4-36	-	EN4-1 1/4	VFD GRD KIT 14-1
35690204	-	EM2-50C	EM4-50	EP2-42	EP4-42	-	EN4-1 1/2	VFD GRD KIT 14-1

† Allowable ampacities are based on no more than three current carrying conductors in a raceway, cable, or direct buried and an ambient temperature of 30°C (2011 NEC Table 310.15(B)(16))

* Maximum Horse Power rating represents the largest HP motor the AWG is recommended for based on horse power (HP) and the full load current (FLC) x 125% per NEC Art. 430-122 (A). Amperes (FLC) were determined from NEC Art. 430-250

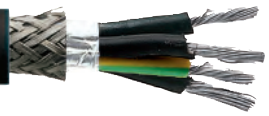
VFD XLPE Auto TR

Continuous flex and oil resistant VFD Cable with XLPE insulation
Type TC-ER

NFPA 79 for industrial machinery

SAB VFD

(UL) Type TC-ER 14AWG/4C RHW-2 90C Dry/Wet 600V, Oil Res I & II, Sunlight Resistant, Direct Burial, (UL) WTTC 1000V, (UL) Flexible Motor Supply Cable, c(UL) CIC-TC XLPE 600V FT4, CSA AWM I/II A/B 90C 1000V FT4 RoHS CE



Construction:

Conductor:	class M tinned copper stranding
Insulation:	special formulated XLPE
Color code:	blackish gray #'d conductors with green/yellow ground
Shielding:	double shield, AMA foil and tinned copper braiding (85% coverage)
Jacket material:	special sunlight and oil resistant black PVC

Technical data:

Voltage:	*UL/c(UL):*	600 V
	CSA-AWM:	1000 V
	UL WTTC:	1000 V
Temperature:	*UL/c(UL)/ CSA-AWM:*	up to +90°C
	static:	-40/105°C
Burning characteristics:	UL/c(UL) FT4	

Outstanding features:

- **XLPE insulation for excellent capacitance values**
- **Oil resistant meeting Oil Res 1& 2**
- **Sun Res and Direct Burial approved**
- **Class M stranding for continuous flexing**
- **UL TC-ER, UL MTW, UL WTTC & UL Flexible Motor Supply Cable**
- **c(UL) CIC-TC, CSA AWM FT 4**
- **Conductors rated for RHW-2**

Part Number	AWG/C	nominal OD-Ø		Cable weight	Amperage†		Maximum Horse Power Rating*		
		inch	mm	lbs/mft	75°	90°	230V	460V	575V
35781604	16/4c	0.512	13.0	129	-	18	2	3	5
35781404	14/4c	0.569	14.5	164	20	25	5	10	15
35781204	12/4c	0.646	16.4	220	25	30	7 1/2	15	20
35781004	10/4c	0.704	17.9	303	35	40	10	20	30
35780804	8/4c	0.909	23.1	567	50	55	15	30	40
35780604	6/4c	0.988	25.1	758	65	75	20	40	50
35780404	4/4c	1.173	29.8	1111	85	95	25	50	60

Part Number	EMC Cable Gland						VFD Termination Kit
	Metric Thread		PG Thread		NPT Thread		
	EMC-2	EMC-4	EMC-2	EMC-4	EMC-2	EMC-4	
35781604	EM2-25	EM4-20C	EP2-16	EP4-16	EN2-3/4	EN4-1/2C	-
35781404	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35781204	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35781004	EM2-32C	EM4-32	EP2-29	EP4-29	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35780804	EM2-32C	EM4-32	EP2-29	EP4-29	EN2-1	EN4-1	VFD GRD KIT 14-1
35780604	EM2-40C	EM4-40	EP2-36	EP4-36	-	EN4-1 1/4	VFD GRD KIT 14-1
35780404	EM2-40C	EM4-40	EP2-36	EP4-36	-	EN4-1 1/4	VFD GRD KIT 14-1

Table shows recommended cable glands. Other thread sizes may be available. Refer to EMC gland pages at the end of this brochure.

† Allowable ampacities are based on no more than three current carrying conductors in a raceway, cable, or direct buried and an ambient temperature of 30°C (2011 NEC Table 310.15(B)(16))
* Maximum Horse Power rating represents the largest HP motor the AWG is recommended for based on horse power (HP) and the full load current (FLC) x 125% per NEC Art. 430-122 (A). Amperes (FLC) were determined from NEC Art. 430-250

VFD Symmetrical XLPE TR

Flexible VFD cable with 3 symmetrical grounds
Type TC-ER

NFPA 79 for industrial machinery

SABVFD

(UL) TC-ER 10AWG/3C RHW-2 CDRS + 3 x 14 AWG GNDS 90C Dry/Wet, Oil Resistant I/II, Sunlight Resistant, Direct Burial, (UL) WTTC 1000V, (UL) Flexible Motor Supply Cable, c(UL) CIC-TC XLPE 600V FT4, CSA AWM I/II A/B 90C 1000V FT4 RoHS CE

UL SA c UL us CE RoHS

Construction:

Conductor:	class K tinned copper stranding
Insulation:	special formulated XLPE
Color code:	blackish gray #'d conductors with green/yellow ground
Stranding:	in layers with 3 tinned ground wires in the interstices
Shielding:	double shield, AMA foil and tinned copper braiding (85% coverage)
Jacket material:	special sunlight and oil resistant black PVC

Technical data:

Voltage:	*UL/c(UL):*	600 V
	CSA-AWM:	1000 V
	UL WTTC:	1000 V
Temperature:	*UL/c(UL)/ CSA-AWM:*	up to +90°C
	static:	-40/105°C
Burning characteristics:	UL/c(UL) FT4	

Outstanding features:

- **XLPE insulation for excellent capacitance values**
- **Oil resistant meeting Oil Res 1& 2**
- **3 symmetrical grounds for CMC**
- **Tinned Class K stranding for improved flexibility**
- **UL TC-ER, UL MTW, UL WTTC & UL Flexible Motor Supply Cable**
- **c(UL) CIC-TC, CSA AWM FT 4**
- **Conductors rated for RHW-2**

Part Number	AWG/C	Ground	nominal OD-Ø		Cable weight	Amperage†		Maximum Horse Power Rating*		
			inch	mm	lbs/mft	75°	90°	230V	460V	575V
35681403	14/3c	3 x 18	0.501	12.7	170	-	25	5	10	15
35681203	12/3c	3 x 16	0.570	14.5	230	25	30	7 1/2	15	20
35681003	10/3c	3 x 14	0.642	16.3	312	35	40	10	20	30
35680803	8/3c	3 x 14	0.811	20.6	465	50	55	15	30	40
35680603	6/3c	3 x 12	0.954	24.2	674	65	75	20	40	50
35680403	4/3c	3 x 12	1.062	27.0	877	85	95	25	50	60
35680203	2/3c	3 x 10	1.226	31.1	1266	115	130	40	75	100

Part Number	EMC Cable Gland						VFD Termination Kit
	Metric Thread		PG Thread		NPT Thread		
	EMC-2	EMC-4	EMC-2	EMC-4	EMC-2	EMC-4	
35681403	EM2-25C	EM4-25	EP2-16	EP4-21	-	EN4-3/4	VFD GRD KIT 14-1
35681203	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35681003	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35680803	EM2-32C	EM4-32	EP2-29	EP4-29	EN2-1	EN4-1	VFD GRD KIT 14-1
35680603	EM2-32C	EM4-40	EP2-36	EP4-36	EN2-1	EN4-1 1/4	VFD GRD KIT 14-1
35680403	EM2-40C	EM4-40	EP2-36	EP4-36	-	EN4-1 1/4	VFD GRD KIT 14-1
35680203	EM2-50C	EM4-50	EP2-42	EP4-42	-	EN4-1 1/2	VFD GRD KIT 14-1

Table shows recommended cable glands. Other thread sizes may be available. Refer to EMC gland pages at the end of this brochure.

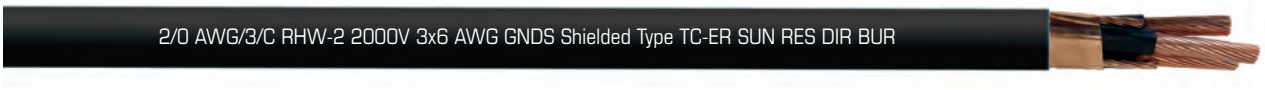
† Allowable ampacities are based on no more than three current carrying conductors in a raceway, cable, or direct buried and an ambient temperature of 30°C (2011 NEC Table 310.15(B)(16))
* Maximum Horse Power rating represents the largest HP motor the AWG is recommended for based on horse power (HP) and the full load current (FLC) x 125% per NEC Art. 430-122 (A). Amperes (FLC) were determined from NEC Art. 430-250

VFD XLPE 2KV TR

Shielded VFD cable 2kV with 3 symmetrical grounds
Type TC-ER

NFPA 79 for industrial machinery

SAB VFD



UL RoHS

Construction:

Conductor:	class B bare copper stranding
Insulation:	special formulated XLPE
Color code:	blackish gray #'d conductors with green/yellow ground
Stranding:	in layers with three uninsulated bare ground wires in the filler
Shielding:	uncoated 5 mil copper tape shield with 50% overlap
Jacket material:	special sunlight and oil resistant black PVC

Technical data:

Voltage:	*UL:*	2000 V
Temperature:	*UL:*	up to +90°C
	static:	-25°C
Burning characteristics:		UL FT4

Outstanding features:

- **XLPE insulation for excellent capacitance values**
- **3 symmetrical grounds for better common mode current flow**
- **Sun Res and Direct Burial approved**
- **Copper tape shield (50% overlap) for premium EMI & RFI protection**
- **UL TC-ER**
- **Conductors rated for RHW-2**

Part Number	AWG/C	Ground	nominal OD-Ø		Cable weight	Amperage†		Maximum Horse Power Rating*		
			inch	mm	lbs/mft	75°	90°	230V	460V	575V
8690203	1/3c	3 x 8	1.266	32.2	1465	130	150	40	75	100
8691103	1/0-3c	3 x 6	1.384	35.2	1822	150	170	50	100	125
8692103	2/0-3c	3 x 6	1.476	37.5	2130	175	195	60	125	150
8693103	3/0-3c	3 x 5	1.582	40.2	2650	200	225	60	150	150
8694103	4/0-3c	3 x 4	1.800	45.7	3251	230	260	75	150	200
8692513	250-3c	3 x 4	1.835	46.6	3720	255	290	75	150	200
8693503	350-3c	3 x 2	2.130	54.1	5025	310	350	100	200	250
8695003	500-3c	3 x 1	2.402	61.0	6805	380	430	125	250	350

Part Number	EMC Cable Gland						VFD Termination Kit
	Metric Thread		PG Thread		NPT Thread		
	EMC-2	EMC-4	EMC-2	EMC-4	EMC-2	EMC-4	
8690203	EM2-50C	EM4-50	EP2-42	EP4-42	-	EN4-1 1/2	VFD GRD KIT 1-4/0
8691103	EM2-50C	EM4-50	EP2-42	EP4-42	-	EN4-1 1/2	VFD GRD KIT 1-4/0
8692103	EM2-63	EM4-63	EP2-48	EP4-48	-	EN4-2	VFD GRD KIT 1-4/0
8693103	EM2-63	EM4-63	EP2-48	EP4-48	-	EN4-2	VFD GRD KIT 1-4/0
8694103	-	EM4-63C	-	-	-	-	VFD GRD KIT 1-4/0
8692513	-	EM4-63C	-	-	-	-	VFD GRD KIT 250-500
8693503	-	EM2-75-EX	-	-	-	-	VFD GRD KIT 250-500
8695003	-	EM2-75-EX	-	-	-	-	VFD GRD KIT 250-500

Table shows recommended cable glands. Other thread sizes may be available. Refer to EMC gland pages at the end of this brochure.

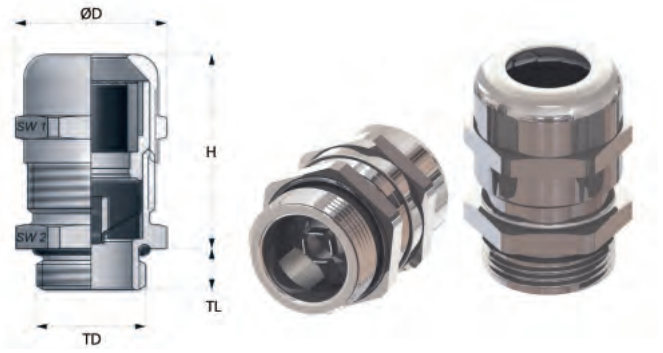
† Allowable ampacities are based on no more than three current carrying conductors in a raceway, cable, or direct buried and an ambient temperature of 30°C (2011 NEC Table 310.15(B)(16))
* Maximum Horse Power rating represents the largest HP motor the AWG is recommended for based on horse power (HP) and the full load current (FLC) x 125% per NEC Art. 430-122 (A). Amperes (FLC) were determined from NEC Art. 430-250

CG EMC-2 Metric Grounding Cable Gland

Nickel plated brass EMC cable gland, standard & longer thread

Metric Thread

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



Technical data:

Material:	Brass, Nickel Plated
Contact spring:	Special Copper Alloy
Clamping Insert:	Polyamide 6
Seal:	Chloroprene (CR)
O-Ring:	Neoprene (NBR)
Protection type:	IP 68 - 5 Bar NEMA 4X
Temperature range: *permanent:* *intermittent:*	 -20°C to +100°C -40°C to +150°C
Flammability:	V2 (according to UL 94)
Approvals:	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	mm	mm	mm	
Metric											
EM2-12	M12x1.5	0.118 - 0.256	3.0 - 6.5	0.098	2.5	0.551	14	12	6	22.0	UR
EM2-16	M16x1.5	0.158 - 0.315	4.0 - 8.0	0.118	3.0	0.669	17	16	7	23.0	UR
EM2-16C	M16x1.5	0.177 - 0.394	5.0 - 10.0	0.138	3.5	0.787	20	16	6.5	29.0	UR
EM2-20	M20x1.5	0.236 - 0.472	6.0 - 12.0	0.177	4.5	0.866	22	20	8	24.5	UR
EM2-25	M25x1.5	0.394 - 0.551	10.0 - 14.0	0.335	8.5	0.945	24	25	8	28.0	UL
EM2-25C	M25x1.5	0.512 - 0.709	13.0 - 18.0	0.413	10.5	1.181	30	25	8	37.5	UL
EM2-32	M32x1.5	0.512 - 0.709	13.0 - 18.0	0.433	11.0	1.181	30	32	9	32.5	UL
EM2-32C	M32x1.5	0.709 - 0.984	18.0 - 25.0	0.551	14.0	1.575	40	32	9	44.0	UL
EM2-40	M40x1.5	0.709 - 0.984	18.0 - 25.0	0.630	16.0	1.575	40	40	9	38.0	UL
EM2-40C	M40x1.5	0.866 - 1.261	22.0 - 32.0	0.787	20.0	1.969	50	40	9	52.5	UL
EM2-50	M50x1.5	0.866 - 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
Metric with Long Thread *											
EM2-12L	M12x1.5	0.118 - 0.256	3.0 - 6.5	0.098	2.5	0.551	14	12	12	22.0	-
EM2-16L	M16x1.5	0.158 - 0.315	4.0 - 8.0	0.118	3.0	0.669	17	16	12	23.0	-
EM2-20L	M20x1.5	0.236 - 0.472	6.0 - 12.0	0.177	4.5	0.866	22	20	12	24.5	-
EM2-25L	M25x1.5	0.394 - 0.551	10.0 - 14.0	0.335	8.5	0.945	24	25	12	28.0	-
EM2-32L	M32x1.5	0.512 - 0.709	13.0 - 18.0	0.433	11.0	1.181	30	32	15	32.5	-
EM2-40L	M40x1.5	0.709 - 0.984	18.0 - 25.0	0.630	16.0	1.575	40	40	15	38.0	-
EM2-50L	M50x1.5	0.866 - 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	-

* Long thread version is not NEMA 4X rated

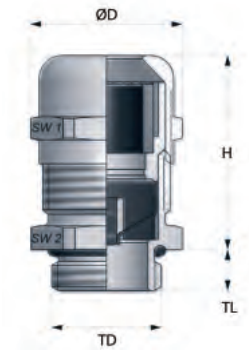
Locknuts need to be purchased separately, see page N/20

PG, & NPT Thread

CG EMC-2 PG / CG EMC-2 NPT Grounding Cable Gland

Nickel plated brass EMC cable gland, standard & longer thread

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



Technical data:

Material:	Brass, Nickel Plated
Contact spring:	Special Copper Alloy
Clamping Insert:	Polyamide 6
Seal:	Chloroprene (CR)
O-Ring:	Neoprene (NBR)
Protection type:	IP 68 - 5 Bar NEMA 4X
Temperature range: *permanent:* *intermittent:*	 -20°C to +100°C -40°C to +150°C
Flammability:	V2 (according to UL 94)
Approvals:	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	mm	mm	mm	
PG*											
EP2-7	PG 7	0.118 - 0.256	3.0 - 6.5	0.098	2.5	0.551	14	12.5	6.0	22.0	UR
EP2-9	PG 9	0.157 - 0.315	4.0 - 8.0	0.118	3.0	0.669	17	15.2	6.0	23.2	UR
EP2-11	PG 11	0.197 - 0.394	5.0 - 10.0	0.157	4.0	0.787	20	18.6	6.0	26.0	UR
EP2-13	PG 13.5	0.236 - 0.473	6.0 - 12.0	0.197	5.0	0.866	22	20.4	6.5	24.5	UR
EP2-16	PG 16	0.394 - 0.551	10.0 - 14.0	0.335	8.5	0.945	24	22.5	6.5	28.0	UL
EP2-21	PG 21	0.512 - 0.709	13.0 - 18.0	0.433	11.0	1.181	30	28.3	7.2	32.5	UL
EP2-29	PG 29	0.709 - 0.984	18.0 - 25.0	0.630	16.0	1.575	40	37.0	8.0	38.0	UL
EP2-36	PG 36	0.866 - 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
PG with Long Thread*											
EP2-7L	PG 7	0.118 - 0.256	3.0 - 6.5	0.098	2.5	0.551	14	12.5	8.0	22.0	-
EP2-9L	PG 9	0.157 - 0.315	4.0 - 8.0	0.118	3.0	0.669	17	15.2	10.0	23.2	-
EP2-11L	PG 11	0.197 - 0.394	5.0 - 10.0	0.157	4.0	0.787	20	18.6	10.0	26.0	-
EP2-13L	PG 13.5	0.236 - 0.473	6.0 - 12.0	0.197	5.0	0.866	22	20.4	10.0	24.5	-
EP2-16L	PG 16	0.394 - 0.551	10.0 - 14.0	0.335	8.5	0.945	24	22.5	10.0	28.0	-
EP2-21L	PG 21	0.512 - 0.709	13.0 - 18.0	0.433	11.0	1.181	30	28.3	12.0	32.5	-
EP2-29L	PG 29	0.709 - 0.984	18.0 - 25.0	0.630	16.0	1.575	40	37.0	12.0	38.0	-
EP2-36L	PG 36	0.866 - 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	-
NPT											
EN2-3/8	NPT 3/8	0.196 - 0.394	5.0 - 10.0	0.157	4.0	0.787	20	17.1	11.5	29.5	UR
EN2-1/2	NPT 1/2	0.236 - 0.472	6.0 - 12.0	0.196	5.0	0.866	22	21.3	13.0	25.5	UL
EN2-3/4R*	NPT 3/4	0.354 - 0.630	9.0 - 16.0	0.335	8.5	1.181	30	26.7	13.0	35.5	UL
EN2-3/4	NPT 3/4	0.512 - 0.709	13.0 - 18.0	0.433	11.0	1.181	30	26.7	13.0	35.5	UL
EN2-1	NPT 1	0.709 - 0.984	18.0 - 25.0	0.629	16.0	1.574	40	33.4	13.0	43.0	UL

* PG version and EN2-3/4R are not NEMA 4X rated

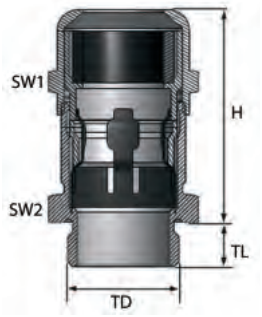
Locknuts need to be purchased separately, see page N/20

CG EMC-4 Metric / CG EMC-4 PG / CG EMC-4 NPT

Nickel plated brass EMC cable gland, vibration proof

Metric, PG, & NPT Thread

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



Technical data:

Material:	Brass, Nickel Plated
Contact spring:	Special Copper Alloy
Clamping Insert:	Polyamide 6
Seal:	Chloroprene (CR)
O-Ring:	Neoprene (NBR)
Protection type:	IP 68 - 5 Bar NEMA 4X
Temperature range: *permanent:* *intermittent:*	 -20°C to +100°C -40°C to +150°C
Flammability:	V2 (according to UL 94)
Approvals:	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	mm	mm	mm	
Metric											
EM4-12	M12x1.5	0.118 - 0.256	3.0 - 6.5	0.079 - 0.197	2.0 - 5.0	0.551	14	12.0	6.0	28.0	UR
EM4-16	M16x1.5	0.197 - 0.394	5.0 - 10.0	0.138 - 0.315	3.5 - 8.0	0.787	20	16.0	6.0	33.0	UR
EM4-20	M20x1.5	0.236 - 0.472	6.0 - 12.0	0.177 - 0.394	4.5 - 10.0	0.866	22	20.0	6.0	32.0	UL
EM4-20C	M20x1.5	0.295 - 0.551	7.5 - 14.0	0.217 - 0.453	5.5 - 11.5	0.945	24	20.0	8.0	40.0	UL
EM4-25	M25x1.5	0.394 - 0.709	10.0 - 18.0	0.276 - 0.551	7.0 - 14.0	1.181	30	25.0	8.0	43.0	UL
EM4-32	M32x1.5	0.630 - 0.984	16.0 - 25.0	0.472 - 0.787	12.0 - 20.0	1.575	40	32.0	9.0	53.0	UL
EM4-40	M40x1.5	0.866 - 1.260	22.0 - 32.0	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
PG[1]*											
EP4-7	PG 7	0.118 - 0.256	3.0 - 6.5	.079 - .197	2.0 - 5.0	0.551	14	12.5	6.0	28.0	-
EP4-11	PG 11	0.197 - 0.394	5.0 - 10.0	.138 - .315	3.5 - 8.0	0.787	20	18.6	6.0	33.0	-
EP4-13	PG 13.5	0.236 - 0.472	6.0 - 12.0	.177 - .394	4.5 - 10.0	0.866	22	20.4	6.5	31.5	-
EP4-16	PG 16	0.295 - 0.551	7.5 - 14.0	.217 - .453	5.5 - 11.5	0.945	24	22.5	6.5	39.5	-
EP4-21	PG 21	0.394 - 0.709	10.0 - 18.0	.276 - .551	7.0 - 14.0	1.260	32	28.3	7.0	42.5	-
EP4-29	PG 29	0.630 - 0.984	16.0 - 25.0	.472 - .787	12.0 - 20.0	1.575	40	37.0	9.0	52.5	-
EP4-36	PG 36	0.866 - 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	-
NPT[1]*											
EN4-1/4	NPT 1/4	0.118 - 0.256	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	0.197 - 0.394	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	0.236 - 0.472	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	0.295 - 0.551	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	0.394 - 0.709	10.0 - 18.0	.276 - .551	7.0 - 14.0	1.181	30	26.7	15.0	42.5	-
EN4-1	NPT 1	0.630 - 0.984	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	0.866 - 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	-

[1]PG & NPT DNV-GL & CE only
* PG & NPT are not NEMA 4X rated

Locknuts need to be purchased separately, see page N/20

PG, & NPT Thread

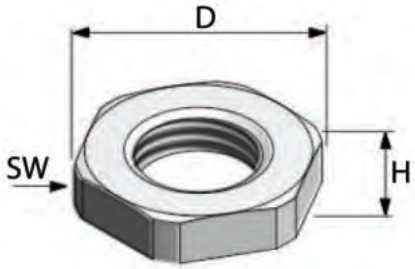
Metal EMC Locknuts

Nickel plated brass locknuts with grounding teeth

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

Technical data:

Material:	Brass, Nickel Plated



Part Number	Thread Type	Height (H) mm	Diameter (D) mm	Wrenching Flats (SW) mm
Metric-EMC				
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
PG-EMC				
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
NPT-EMC				
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

VFD Termination Kit

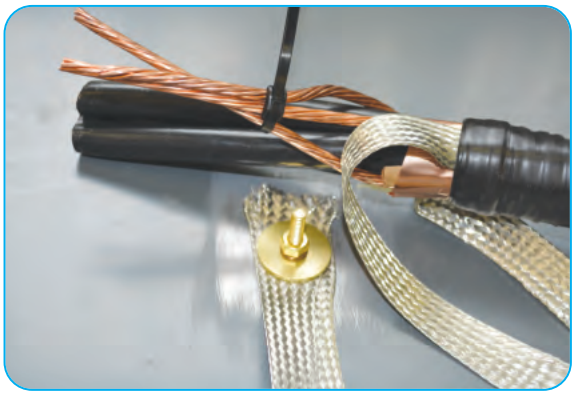
Grounding kits for larger AWG cables

14 AWG to 500 KCMIL

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

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



Installation Prep Photo

Attach to Enclosure

SAB CABLES

DESIGNED TO SPECIFICATION

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^2 - 300 mm^2 (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
- Aluminum foil
- Fiberglass
- Aramid

Approvals

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

SPECIAL CABLES

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Nov 2021