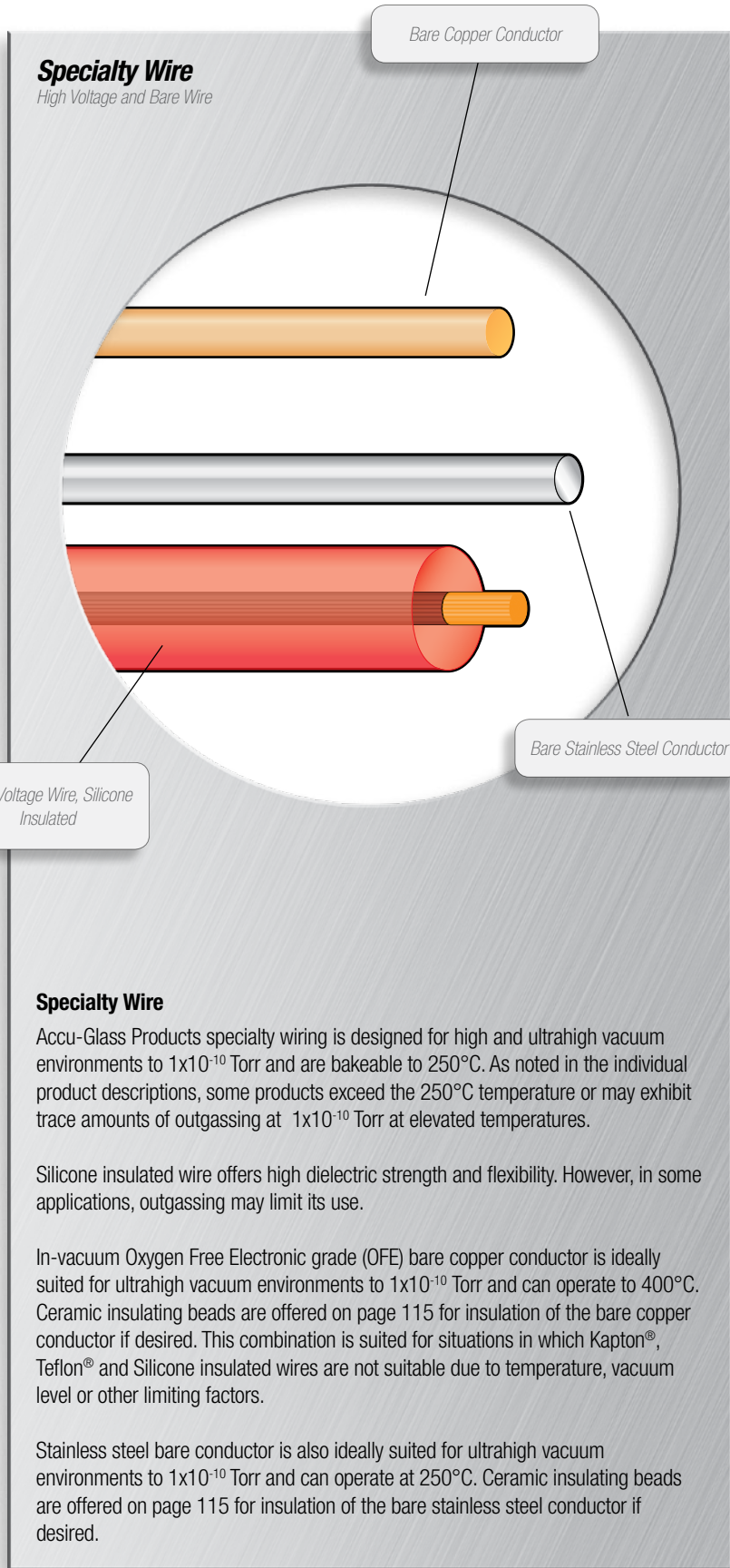




Specialty Wire

High Voltage and Bare Wire



Features

- HV and UHV compatible construction
- Bare Metal Conductor rated up to 400°C
- Silicone or non-insulated
- Copper and Stainless Steel conductors
- Multi-stranded or solid core

Specifications

Electrical^{1,2}

Voltage / Current	See Tables
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Vacuum Range

HV, High Vacuum	1x10 ⁻⁸ Torr
UHV, Ultrahigh Vacuum	1x10 ⁻¹⁰ Torr

Temperature Range²

Bare Metal Conductors	400°C
Silicone Insulated	250°C

See each product table for complete specifications.

Notes

1. Electrical ratings are maximum test values. Also, see 'glow discharge' information on page 270
 2. Overall assembly ratings must be adjusted to that of its lowest rated component.
- § Unless specified otherwise, dimensional units in all sections of this catalog are expressed in inches.

Specialty Wire

Accu-Glass Products specialty wiring is designed for high and ultrahigh vacuum environments to 1x10⁻¹⁰ Torr and are bakeable to 250°C. As noted in the individual product descriptions, some products exceed the 250°C temperature or may exhibit trace amounts of outgassing at 1x10⁻¹⁰ Torr at elevated temperatures.

Silicone insulated wire offers high dielectric strength and flexibility. However, in some applications, outgassing may limit its use.

In-vacuum Oxygen Free Electronic grade (OFE) bare copper conductor is ideally suited for ultrahigh vacuum environments to 1x10⁻¹⁰ Torr and can operate to 400°C. Ceramic insulating beads are offered on page 115 for insulation of the bare copper conductor if desired. This combination is suited for situations in which Kapton®, Teflon® and Silicone insulated wires are not suitable due to temperature, vacuum level or other limiting factors.

Stainless steel bare conductor is also ideally suited for ultrahigh vacuum environments to 1x10⁻¹⁰ Torr and can operate at 250°C. Ceramic insulating beads are offered on page 115 for insulation of the bare stainless steel conductor if desired.



High Voltage Cable, Silicone Insulated

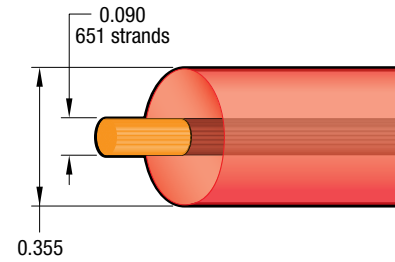
High Voltage Wire is halogen-free silicone insulated with a dielectric strength of 30kVDC. This high voltage wire is suitable for most HV applications. See page 95 for 10kVDC Kapton® insulated wire.

High Voltage Cable — Stranded / 30kVDC / 250 to 300°C / HV to 1x10⁻⁶ Torr

Length Feet	Insulation Diameter	Insulation Thickness	Strands x Dia.	Voltage kVDC	Current Amp	Model Number	Part Number	Unit Price \$
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High Voltage Cable — 12 AWG

15'	0.355	0.130	651x0.007	30	20	SIL-TYP26-15	111660	220
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111660 / Silicone Insulated High Voltage Wire

Bare Metal Conductors

Copper Conductor is an ultra-pure electronic grade copper. Suitable for ultrahigh vacuum and high temperature use. Stainless Steel Conductor is type 303 stainless steel. It is both ultrahigh and high vacuum compatible. Multiple quantities will be sold in one continuous length.

See pages 115, 207 and 208 for ceramic insulator beads, larger diameter copper, and stainless steel rod material respectively.

Bare Metal Conductors — 400°C / UHV to 1x10⁻¹⁰ Torr

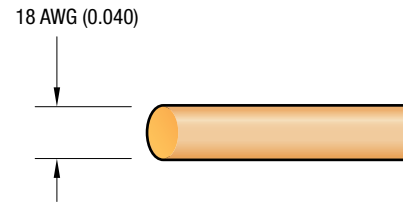
Size AWG	Conductor Diameter	Length / Quantity Feet	Model Number	Part Number	Unit Price \$
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Copper — Solid OFE Electronic Grade Bare Conductor

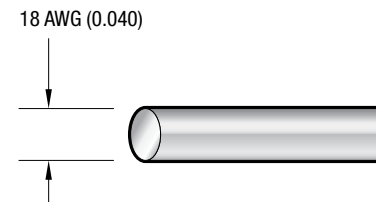
34	0.006	1	CU-BC-006-1	112080	2
32	0.008	1	CU-BC-008-1	112081	5
30	0.010	1	CU-BC-010-1	112082	5
28	0.013	1	CU-BC-013-1	112083	5
26	0.016	1	CU-BC-016-1	112084	5
24	0.020	1	CU-BC-020-1	112085	5
22	0.025	1	CU-BC-025-1	112086	5
20	0.032	1	CU-BC-032-1	111320	6
18	0.040	1	CU-BC-040-1	112088	6
16	0.050	1	CU-BC-050-1	111321	6
14	0.064	1	CU-BC-064-1	112090	6
—	0.094	1	CU-BC-094-1	111322	8

Stainless Steel — Solid 303 Grade Bare Conductor

26	0.015	1	SS-BC-015-1	112095	4
24	0.020	1	SS-BC-020-1	112096	4
20	0.032	1	SS-BC-032-1	112097	5
18	0.040	1	SS-BC-040-1	112098	5
16	0.050	1	SS-BC-050-1	112099	6
14	0.064	1	SS-BC-064-1	112100	6



112088 / Copper Bare Conductor



112098 / Stainless Steel Bare Conductor

Vacuum Wire and Accessories