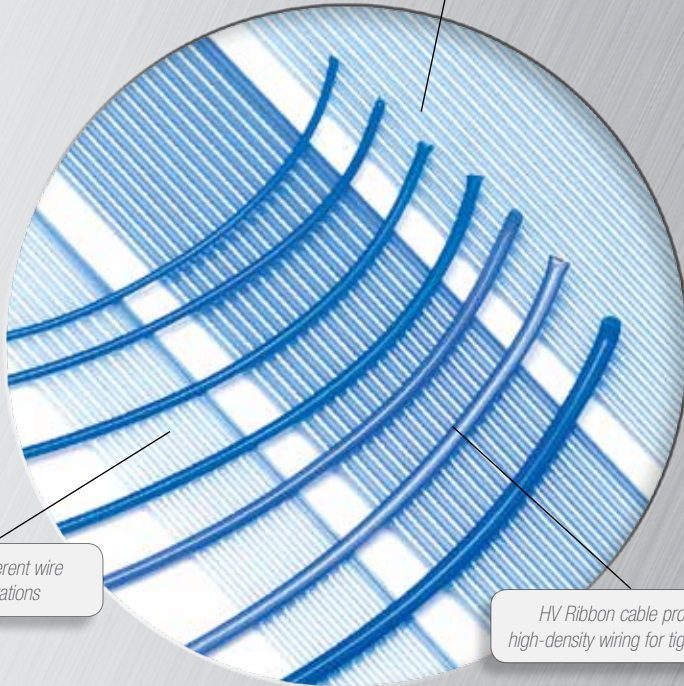




HV Teflon® Insulated Wire *High Vacuum Bulk Cable and Wire Products*

All materials are HV compatible



Twenty different wire configurations

HV Ribbon cable provides high-density wiring for tight spaces

HV Teflon® Insulated Wire

Accu-Glass Products in-vacuum wiring is designed for high vacuum environments to 1×10^{-8} Torr and are bakeable to 200°C. All conductors are constructed with silver plated copper wire.

Insulation is a non-shrinking FEP extruded Teflon® that is applied and heat treated to minimize trapped gases.

Multi-conductor cables are available in flat ribbon. For non-coded wires, Accu-Glass Products offers colored glass identification beads in six easy to distinguish colors, shown on page 125.

Did you know — Accu-Glass Products, Inc. is the only supplier to offer and ship Kapton® insulated wire on plastic spools instead of loose in a bag?



Features

- HV compatible construction
- High temperature rated to 200°C
- Fluoropolymer Extruded Teflon® insulating film
- Silver Plated Copper Conductors
- Single and ribbon wire/cable types
- Custom solutions on request

Specifications

Electrical¹

Voltage	See Tables
Current, Maximum @ 20°C	See Tables

Material

Conductor	Ag plated Cu
Insulation	FEP Extruded Teflon® and TFE Teflon®

Teflon® Properties

Dielectric Constant	2.1
Dielectric Strength (V/.001 Inch)	600
Dissipation Factor	0.0003 - 0.0007
Tensile Strength (PSI)	3,000
Elongation	300%
Moisture Absorption (@50% RH)	0.1%
Radiation Resistance	5×10^5 Rads

Vacuum Range

HV, Ultrahigh Vacuum	1×10^{-8} Torr
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Temperature Range²

Wire	-65° to 200°C
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Notes

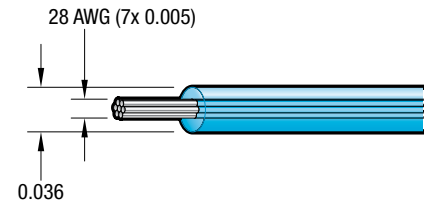
1. Electrical ratings are maximum test values. Also, see 'glow discharge' information on page 270
2. Overall assembly ratings must be adjusted to that of the lowest rated component.

§ Unless specified otherwise, dimensional units in all sections of this catalog are expressed in inches.

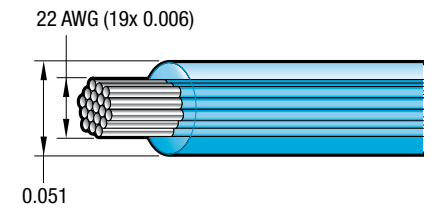


Stranded Wire — Stranded / 600VAC, 2kVDC / 200°C / UHV to 1x10⁻⁸ Torr

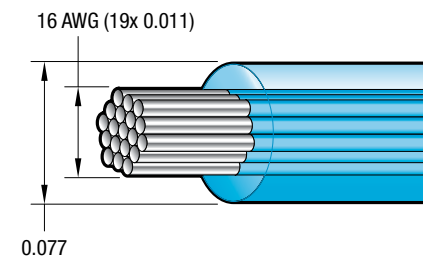
Wire		No. of Strands x Dia.	Insulation Diameter	Current Amps	Min. Bend Radius	Part Number	Unit Price \$
AWG	Length						
7 Strands							
30	30'	7x 0.004	0.028	1.5	0.10	112015	31
28	30'	7x 0.005	0.036	2	0.15	110330	31
26	30'	7x 0.006	0.040	3	0.15	110335	34
24	30'	7x 0.007	0.044	4	0.18	110340	37
19 Strands							
22	30'	19x 0.006	0.051	6	0.20	110345	44
20	30'	19x 0.007	0.059	8	0.28	110350	52
18	15'	19x 0.010	0.070	11	0.33	110355	68
16	15'	19x 0.011	0.077	14	0.33	110360	80



110330 / 28 AWG Stranded Wire

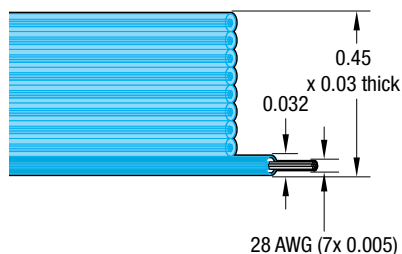


110345 / 22 AWG Stranded Wire



110360 / 16 AWG Stranded Wire

Vacuum Wire and Accessories



110010 / 28 AWG 9-Conductor Ribbon Cable



111403 / 28 AWG 50-Conductor Ribbon Cable



112705 / 28 AWG Color Coded FEP Ribbon Cable

Multi-conductor Ribbon Cable — Blue

Multi-conductor Ribbon Cable with a FEP extruded Teflon® jacket. Pitch of 0.050 with a blue polarity stripe.

Ribbon Cable — 600VAC, 2kVDC / 2A / 200°C / HV to 1x10⁻⁸ Torr

Number Wires	Cable Length	Cable Width	Cable Thickness	Insulation Diameter	Wire Diameter	Min. Bend Radius	Model Number	Part Number	Unit Price \$
9	19	0.45	0.03	0.03	7x 0.005	0.45	HVB-R9-19	110010	25
9	39	0.45	0.03	0.03	7x 0.005	0.45	HVB-R9-39	110011	52
9	96	0.45	0.03	0.03	7x 0.005	0.45	HVB-R9-96	110012	125
15	19	0.75	0.03	0.03	7x 0.005	0.45	HVB-R15-19	110013	35
15	39	0.75	0.03	0.03	7x 0.005	0.45	HVB-R15-39	110014	72
15	96	0.75	0.03	0.03	7x 0.005	0.45	HVB-R15-96	110015	178
25	19	1.25	0.03	0.03	7x 0.005	0.45	HVB-R25-19	110016	55
25	39	1.25	0.03	0.03	7x 0.005	0.45	HVB-R25-39	110017	114
25	96	1.25	0.03	0.03	7x 0.005	0.45	HVB-R25-96	110018	277
50*	19	1.25	0.06	0.03	7x 0.005	0.75	HVB-R50-19	111403	110
50*	39	1.25	0.06	0.03	7x 0.005	0.75	HVB-R50-39	111404	228
50*	96	1.25	0.06	0.03	7x 0.005	0.75	HVB-R50-96	111405	554

* 50 conductor ribbon cable uses 2x 25 conductor ribbon cables.

Multi-conductor Ribbon Cable — Rainbow

Multi-conductor Ribbon Cable with a FEP extruded Teflon® jacket. Pitch of 0.050.

Ribbon Cable, FEP — 600 VAC, 2k VDC / 2A / 200°C / HV to 1x10⁻⁸ Torr

Number Wires	Cable Length	Cable Width	Cable Thickness	Insulation Diameter	Wire Diameter	Min. Bend Radius	Part Number	Unit Price \$
9	19	0.46	0.03	0.03	7x 0.005	0.24	112705	35
9	39	0.46	0.03	0.03	7x 0.005	0.24	112706	60
9	96	0.46	0.03	0.03	7x 0.005	0.24	112707	140
15	19	0.75	0.03	0.03	7x 0.005	0.24	112761	35
15	39	0.75	0.03	0.03	7x 0.005	0.24	112762	70
15	96	0.75	0.03	0.03	7x 0.005	0.24	112763	175
25	19	1.25	0.03	0.03	7x 0.005	0.24	112764	55
25	39	1.25	0.03	0.03	7x 0.005	0.24	112765	110
25	96	1.25	0.03	0.03	7x 0.005	0.24	112766	275
50*	19	1.25	0.06	0.03	7x 0.005	0.48	112767	110
50*	39	1.25	0.06	0.03	7x 0.005	0.48	112768	220
50*	96	1.25	0.06	0.03	7x 0.005	0.48	112769	550

* 50 conductor ribbon cable uses 2x 25 conductor ribbon cables.



Multi-conductor Ribbon Cable — Clear / Silver

Multi-conductor Ribbon Cable with a FEP extruded Teflon® jacket. Pitch of 0.050.

Ribbon Cable, FEP — 600 VAC, 2k VDC / 2A / 200°C / HV to 1x10⁻⁸ Torr

Number Wires	Cable Length	Cable Width	Cable Thickness	Insulation Diameter	Wire Diameter	Min. Bend Radius	Part Number	Unit Price \$
24 AWG — Stranded Silver Plated Copper								
9	19	0.46	0.04	0.04	19x 0.0045	0.32	112749	28
9	39	0.46	0.04	0.04	19x 0.0045	0.32	112750	55
9	96	0.46	0.04	0.04	19x 0.0045	0.32	112751	140
15	19	0.75	0.04	0.04	19x 0.0045	0.32	112752	35
15	39	0.75	0.04	0.04	19x 0.0045	0.32	112753	70
15	96	0.75	0.04	0.04	19x 0.0045	0.32	112754	175
25	19	1.25	0.04	0.04	19x 0.0045	0.32	112755	55
25	39	1.25	0.04	0.04	19x 0.0045	0.32	112756	110
25	96	1.25	0.04	0.04	19x 0.0045	0.32	112757	275
50*	19	1.25	0.08	0.04	19x 0.0045	0.64	112758	110
50*	39	1.25	0.08	0.04	19x 0.0045	0.64	112759	220
50*	96	1.25	0.08	0.04	19x 0.0045	0.64	112760	550

* 50 conductor ribbon cable uses 2x 25 conductor ribbon cables.



112749 / 24 AWG FEP Ribbon Cable