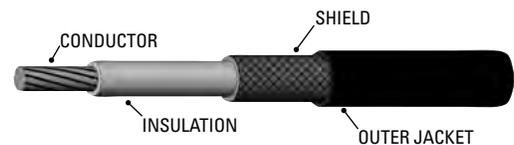


COAXIAL/SHIELDED HIGH VOLTAGE CABLE

70,000 ft (21.3km)
-55° to 125°C

Coaxial and shielded cables offered by Teledyne Reynolds have been used in space, military, medical and industrial high voltage applications including radar, electronic countermeasure (ECM) systems, power supplies and instrumentation. Many of the cables have controlled impedance.

- ◆ Cables 167-2669 and 178-8793 have **controlled impedance, inductance and capacitance** for fast response times and are used extensively to connect Exploding Bridgewire Detonators (EBW) to a Capacitor Discharge Unit (CDU).
- ◆ Cable 178-5065 has **foam insulation**, giving **lower capacitance and higher impedance**. It has been used in cockpit displays.



Silicone rubber insulated high voltage wire and cable offer excellent dielectric strength, flexibility and ease of silastic bonding. Due to the relatively softer nature of silicone insulation, when compared to other insulation materials, these wires are more susceptible to "pin-hole" breakdown, abrasion and some dielectric/coolant fluid incapacibilities exist.

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High Voltage Coaxial/Shielded Cable Attributes

Part Number	Operating Voltage (kVDC)	Conductor			Insulation		Shielding			Jacket		Imp. (Ohms)	Atten. dB/100 ft @ 400 MHz	Cap. pF/ft @ 1 kHz
		AWG	Strands	Plating	Material	Diameter in/mm	AWG	Plating	Diameter in/mm	Material	Diameter in/mm			
178-5065	0.60	30	7/38	SPC	FEP	.072 / 1.82	38	SPC	.089 / 2.26	FEP	.103 / 2.61	95	†	13.5
178-8022 ¹	5	26	19/38	SPC	PO	.050 / 1.27	36	SPC	.075 / 1.90	PO	.095 / 2.41	46	25.0	33.7
178-6653	6	22	65/40	SPC	PFA	.041 / 1.04	42	SPC	.053 / 1.35	PFA	.070 / 1.78	12	25.0	76.0
167-2896 ²	18	26	19/38	SPC	FEP	.050 / 1.27	36	SPC	.075 / 1.90	FEP	.095 / 2.41	46	25.0	33.7
167-2669 ³	20	16	19/29	TPC	PE	.118 / 2.99	36	TPC	.150 / 3.51	PE	.195 / 4.95	31	16.0	48.0
178-6053 ⁴	20	16	19/29	SPC	PFA	.118 / 2.99	36	SPC	.150 / 3.51	PFA	.195 / 4.95	35	13.0	40.4
178-8793	20	16	19/29	SPC	PFA	.118 / 2.99	36	TPC	.150 / 3.51	PE	.195 / 4.95	31	16.0	48.0
167-9346	21	22	19/34	SPC	FEP	.080 / 2.03	36	SPC	.100 / 2.54	FEP	.125 / 3.17	43	10.6	31.0
167-9596	22	18	19/30	SPC	SIL	.150 / 3.81	36	SPC	.180 / 4.57	SIL	.250 / 6.35	†	†	†
178-7201	22	16	41/32	SPC	SIL	.165 / 4.19	34	SPC	.197 / 5.00	FG	.306 / 7.77*	†	†	†
167-8726	26	22	19/34	SPC	FEP	.100 / 2.54	36	SPC	.120 / 3.04	FEP	.145 / 3.68	50	8.1	29.3
167-9785	40	20	19/32	TPC	FEP	.150 / 3.81	36	TPC	.180 / 4.57	FEP	.220 / 5.58	50	12.2	26.0
167-8556	40	20	19/32	SPC	FEP	.150 / 3.81	2x36	SPC	.200 / 5.08	FEP	.230 / 5.84	50	12.2	26.0
167-9470	50	16	19/29	SPC	SIL	.280 / 7.11	34	SPC	.304 / 7.72	FG	.340 / 8.64*	†	†	†
178-7221	50	16	41/32	SPC	SIL	.280 / 7.11	34	SPC	.304 / 7.72	FG	.340 / 8.64*	†	†	†
178-6795	60	14	19/27	SPC	FEP	.180 / 4.57	36	SPC	.202 / 5.13	FEP	.255 / 6.47	40	5.56	36.0

¹ Irradiated, cross-linked, polyolefin insulation and jacket rated for use in high radiation from -65° to 110°C

² Type "L" cable

³ Type "C" cable. Rated for use to 85°C

⁴ Rated for use to 150°C

† TBD

* Braided jacket

FEP (Fluorinated Ethylene Propylene)

FG (Fiberglass)

PE (Polyethylene)

PFA (Perfluoroalkoxy)

PO (Polyolefin)

SIL (Silicone)

Notes:

When ordering, use part number and specify length in feet.

Colors: 167-2896 standard cable jacket is white. 167-2669 standard cable jacket is red. 178-6053 standard color is yellow. All other cable jackets are black.

Contact factory for color options and availability or please specify color needed when ordering.

Pre-conditioning of FEP and PFA wire or cable is recommended because these insulations will shrink when exposed to temperature cycling. Pre-conditioning should be conducted in an air circulating oven at 204°C (400°F) for one hour. Pre-conditioning should only be performed on cut lengths prior to stripping and any termination procedure. **No attempt should be made to condition wire or cable in bulk form or while spooled.**

Product numbers and specs subject to change without notice. Products listed represent only a small selection of Teledyne Reynolds' products. Please visit www.teledynereynolds.com for the most up to date product information. Contact Teledyne Reynolds' Engineering to discuss custom designs.