CONTINUOUS ETCHED SURFACE

CONDUCTOR

FEP INSULATION

Etched Part Number	Operating Voltage (kVDC)	Conductor		Plating	Conductor Diameter	Diameter over Insulation
		AWG	Strands		in/mm	in/mm
178-9908	5	29	51/46	SPC	.013 / 0.35	.025 / 0.64
178-9913	5	28	19/40	SPC	.015 / 0.40	.040 / 1.02
178-9559	10	20	19/32	SPC	.039 / 1.01	.060 / 1.52
700357	12	16	19/29	SPC	.056 / 1.43	.080 / 2.00
700358	13.5	28	41/44	SPC	.014 / 0.36	.042 / 1.07
178-5791	18	28	19/40	SPC	.015 / 0.40	.040 / 1.02
700359	18	28	19/40	SPC	.015 / 0.40	.050 / 1.27
178-5793	18	26	19/38	SPC	.019 / 0.50	.045 / 1.14
178-9556	18	26	19/38	SPC	.019 / 0.50	.050 / 1.27
178-8111	18	24	19/36	SPC	.025 / 0.64	.050 / 1.27
178-8524	18	24	19/36	SPC	.025 / 0.64	.060 / 1.52
700360	18	22	19/34	SPC	.031 / 0.80	.055 / 1.40
178-9122	20	22	19/34	SPC	.031 / 0.80	.055 / 1.40
178-8914	21	20	19/32	SPC	.039 / 1.01	.090 / 2.29
178-9035	22	22	19/34	SPC	.031 / 0.80	.080 / 2.00
178-9123	22	20	19/32	SPC	.039 / 1.01	.080 / 2.00
700361	22	14	19/26	TPC	.070 / 1.80	.150 / 3.81
178-9473	25	26	19/38	SPC	.019 / 0.50	.080 / 2.00
700362	25	16	41/32	SPC	.059 / 1.50	.125 / 3.17
178-8780	30	20	19/32	SPC	.039 / 1.01	.100 / 2.54
178-9119	30	16	19/29	SPC	.056 / 1.43	.180 / 4.57

# ETCHED FEP WIRE ATTRIBUTES

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

The standard color is Natural. Other colors are available on special order. Contact factory for color options and availability, or please specify color requested when ordering.

**Note:** Pre-conditioning of FEP wire or cable is recommended because FEP insulation 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.



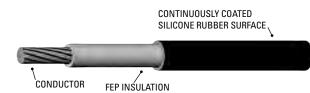
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READY-TO-BOND<sup>™</sup> SILICONE COATED FEP

HIGH VOLTAGE WIRE

# Ready-to-Bond<sup>™</sup> silicone coated FEP wire is processed with a uniform silicone rubber coating applied to a prepared surface in the form of a thin wall. This continuous coating provides potting characteristics similar to silicone rubber wire and allows the user to achieve a superior dielectric bond when using silicone rubber potting materials or adhesives. Primer should be applied to the cable as required by the bonding or potting material manufacturer.



70,000 ft (21.3km)

-55° to 125°C

### SILICONE COATED FEP WIRE ATTRIBUTES

Part Number	Operating Voltage (kVDC)	Conductor		Plating	Conductor Diameter	Diameter over Silicone Coating
		AWG	Strands		in/mm	in/mm
178-9334	12	26	19/38	SPC	.019 / 0.50	.055 / 1.40
178-5627	12	16	19/29	SPC	.056 / 1.43	.095 / 2.41
178-5186	13	28	41/44	SPC	.014 / 0.37	.048 / 1.22
178-8074	18	26	19/38	SPC	.019 / 0.50	.060 / 1.52
178-8066	18	24	19/36	SPC	.025 / 0.64	.060 / 1.52
178-8067	18	22	19/34	SPC	.031 / 0.80	.065 / 1.65
178-9277	18	22	19/34	SPC	.031 / 0.80	.070 / 1.78
178-9036	21	22	19/34	SPC	.031 / 0.80	.090 / 2.29
178-8884	22	20	19/32	SPC	.039 / 1.01	.100 / 2.54
178-8315	22	20	19/32	SPC	.039 / 1.01	.090 / 2.29
178-8781	30	20	19/32	SPC	.039 / 1.01	.110 / 2.79

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

The standard color is Natural. Other colors are available on special order. Contact factory for color options and availability, or please specify color requested when ordering.

**Note:** Pre-conditioning of FEP wire or cable is recommended because FEP insulation 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.



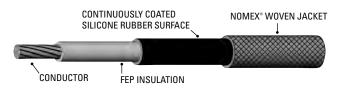
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READY-TO-BOND<sup>™</sup> SILICONE COATED FEP

with Nomex<sup>®</sup> Woven Protective Jacket

Ready-to-Bond<sup>™</sup> silicone coated FEP is processed with a silicone rubber coating applied to a prepared surface in the form of a thin wall. This continuous coating provides potting characteristics similar to silicone rubber wire and allows the user to achieve a superior dielectric bond when using silicone rubber potting or adhesives. Primer should be applied to the cable as required by the bonding or potting material manufacturer.

The addition of a Nomex® woven jacket over the silicone coated surface of the FEP insulation provides excellent abrasion resistance.



70,000 ft (21.3km)

-55° to 125°C

	SILCONE COATED FEF WIRE WITH NOMEX GACKET ATTRIBUTES											
Part Number	Operating Voltage (kVDC)	Conductor		Conductor		Voltage Conductor Plati		Voltage Conductor Plating Diameter		Diameter over Insulation	Diameter over Silicone Coating	Diameter over Nomex™ Jacket
		AWG	Strands		in/mm	in/mm	in/mm	in/mm				
178-5597	12	16	19/29	SPC	.056 / 1.43	.080 / 2.03	.095 / 2.41	.120 / 3.05				
178-5789	18	24	19/36	SPC	.025 / 0.64	.050 / 1.27	.060 / 1.52	.085 / 2.16				
178-5724	20	22	19/34	SPC	.031 / 0.80	.060 / 1.52	.070 / 1.78	.095 / 2.41				
178-8881	25	20	19/32	SPC	.039 / 1.01	.080 / 2.03	.090 / 2.29	.115 / 2.92				
178-9554	30	20	19/32	SPC	.039 / 1.01	.100 / 2.54	.110 / 2.79	.135 / 3.43				

### SILICONE COATED FEP WIRE WITH NOMEX® JACKET ATTRIBUTES

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

The standard color is Natural. Other colors are available on special order. Contact factory for color options and availability, or please specify color requested when ordering.

### Notes

To prevent fraying of the Nomex<sup>®</sup> jacket, apply a small band of epoxy resin about 1 inch from the end of the Nomex<sup>®</sup> jacket. Allow to cure and trim back the Nomex<sup>®</sup> to the leading edge of the cured epoxy. Alternative methods are shrink sleeving or silicone rubber sleeving in place of the epoxy resin.

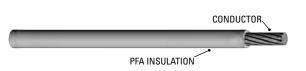
Pre-conditioning of FEP wire or cable is recommended because FEP insulation will shrink when exposed to temperature cycling. Pre-conditioning should be conducted in an air circulating oven at 204°C (400°F) for one hour. Pre-conditioning should only be performed on cut lengths prior to stripping and any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

### Nomex® is a registered trademark of Dupont

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.



Rev. 041517



### **PFA WIRE ATTRIBUTES**

Part Number	Operating Voltage (kVDC)	Conductor		Plating	Overall Diameter
		AWG Strands			in/mm
178-5765	15	20	19/32	SPC	.070 / 1.78
178-5764	15	18	19/30	SPC	.080 / 2.03
178-5763	15	16	19/29	SPC	.090 / 2.29
178-7668	18	26	19/38	SPC	.050 / 1.27
178-7669	20	22	19/34	SPC	.060 / 1.52
178-7670	25	20 19/32		SPC	.080 / 2.03
178-8790	25	20	19/32	TPC	.080 / 2.03

# ETCHED PFA WIRE ATTRIBUTES

Part Number	Operating Voltage (kVDC)	Conductor AWG Strands		Plating	Overall Diameter
					in/mm
178-8791	25	20	19/32	TPC	.080 / 2.03

### SILICONE COATED PFA WIRE ATTRIBUTES

Part Number	Operating Voltage (kVDC)	Conductor AWG Strands		Plating	Overall Diameter
					in/mm
178-8792	25	20	19/32	TPC	.090 / 2.29

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

The standard color is Natural. Other colors are available on special order. Contact factory for color options and availability, or please specify color requested when ordering.

**Note:** Pre-conditioning of PFA wire or cable is recommended because PFA insulation 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.

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# READY-TO-BOND™ PTFE AND ETFE HIGH VOLTAGE WIRE

### **Properties and Features of PTFE and ETFE**

- High dielectric strength
- Excellent chemical resistance
- Excellent high temperature properties
- Good outgassing characteristics
- Resists moisture absorption

### **Applications**

- Military harnessing
- Power supply leads
- Telecommunications
- Medical electronics



### PTFE AND ETCHED PTFE WIRE ATTRIBUTES

Part Number	Operating Voltage (kVDC)	Con	Conductor		Overall Diameter	Etched Part Number
		AWG	Strands		in/mm	
167-9899	14.7	20	19/32	SPC	.150 / 3.81	178-9120

### ETFE AND ETCHED ETFE WIRE ATTRIBUTES

Part Number	Operating Voltage (kVDC)	Conductor		Plating	Overall Diameter	Etched Part Number
		AWG	Strands		in/mm	
178-5473	5	29	51/46	SPC	.025 / .635	178-5474
178-5509	5	28	41/44	SPC	.030 / .762	178-5510
178-5568	5	26	66/44	SPC	.035 / .889	178-5569
178-5511	5	24	41/40	SPC	.040 / 1.02	178-5512

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

The standard color is Natural. Other colors are available on special order. Contact factory for color options and availability, or please specify color requested when ordering.

**Note:** Pre-conditioning of PTFE and ETFE 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.

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