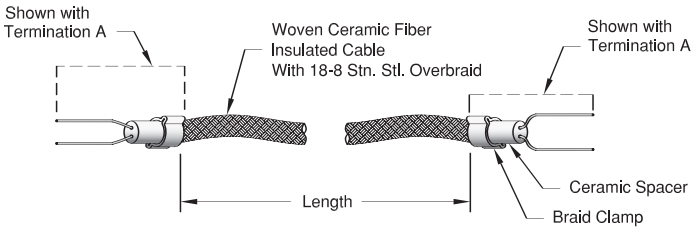
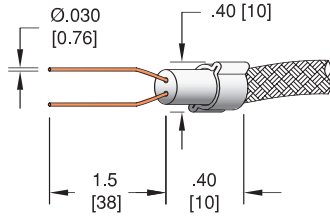


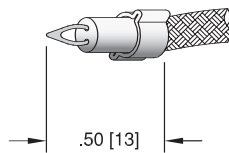
**Duplex Shielded  
.030 [0.76] Dia. Conductor**



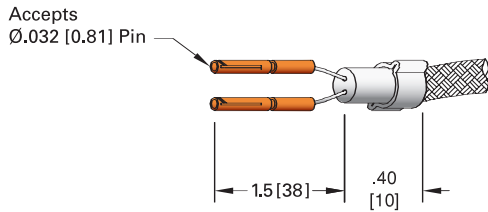
**Termination A – Bare Conductor**



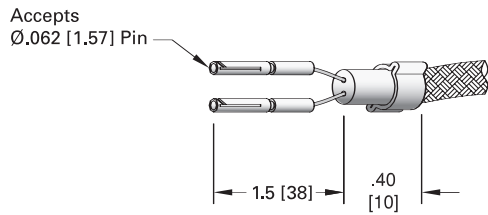
**Termination B – Thermocouple Bead**



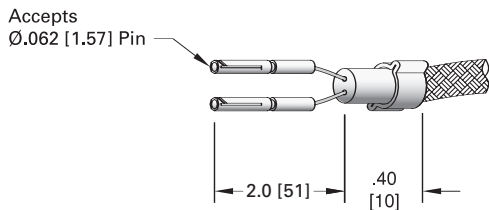
**Termination C – BeCu Contacts**



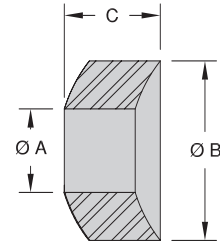
**Termination D – Nickel Contacts**



**Termination E – Chromel/Alumel Contacts**



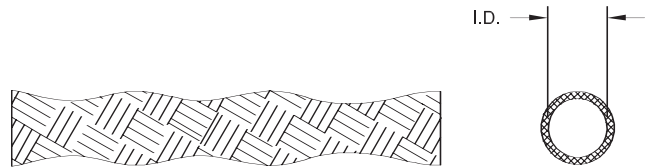
**Cable Components  
Beads**



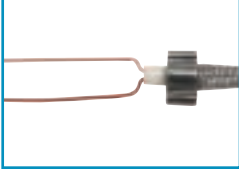
**Conductor**



**Braid**

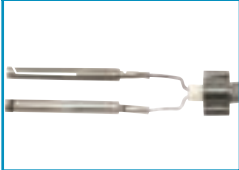


Duplex Shielded  
Two Conductors



VOLTAGE DC	TERMINATION			CONDUCTOR AMPS	CONDUCTOR MATERIAL	CONTACT MATERIAL	TEMPERATURE °C		MAGNETIC MATERIALS	PART NUMBER
	END 1	END 2	LENGTH				MIN	MAX		
500 V	A	A	12"	15	Copper/Copper	-	-269	650	No	18682-12-AA
500 V	A	C	12"	15	Copper/Copper	BeCu	-269	200	No	18682-12-AC
500 V	A	D	12"	15	Copper/Copper	Nickel Alloy	-200	400	Yes	18682-12-AD
500 V	C	C	12"	15	Copper/Copper	BeCu	-269	200	No	18682-12-CC
500 V	D	D	12"	15	Copper/Copper	Nickel Alloy	-200	400	Yes	18682-12-DD
500 V	A	A	24"	15	Copper/Copper	-	-269	650	No	18682-24-AA
500 V	A	C	24"	15	Copper/Copper	BeCu	-269	200	No	18682-24-AC
500 V	A	D	24"	15	Copper/Copper	Nickel Alloy	-200	400	Yes	18682-24-AD
500 V	C	C	24"	15	Copper/Copper	BeCu	-269	200	No	18682-24-CC
500 V	D	D	24"	15	Copper/Copper	Nickel Alloy	-200	400	Yes	18682-24-DD
500 V	A	A	36"	15	Copper/Copper	-	-269	650	No	18682-36-AA
500 V	A	C	36"	15	Copper/Copper	BeCu	-269	200	No	18682-36-AC
500 V	A	D	36"	15	Copper/Copper	Nickel Alloy	-200	400	Yes	18682-36-AD
500 V	C	C	36"	15	Copper/Copper	BeCu	-269	200	No	18682-36-CC
500 V	D	D	36"	15	Copper/Copper	Nickel Alloy	-200	400	Yes	18682-36-DD

Duplex Shielded  
Thermocouple



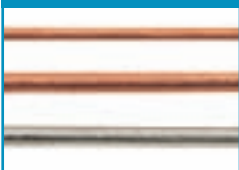
VOLTAGE DC	TERMINATION			ANSI TYPE	CONDUCTOR/CONTACT MATERIAL	TEMPERATURE °C		MAGNETIC MATERIALS	PART NUMBER
	END 1	END 2	LENGTH			MIN	MAX		
500 V	A	A	12"	K	Chromel/Alumel	-269	650	Yes	18684-12-AA
500 V	A	B	12"	K	Chromel/Alumel	-200	650	Yes	18684-12-AB
500 V	A	E	12"	K	Chromel/Alumel	-269	350	Yes	18684-12-AE
500 V	E	E	12"	K	Chromel/Alumel	-269	350	Yes	18684-12-EE
500 V	A	A	24"	K	Chromel/Alumel	-269	650	Yes	18684-24-AA
500 V	A	B	24"	K	Chromel/Alumel	-200	650	Yes	18684-24-AB
500 V	A	E	24"	K	Chromel/Alumel	-269	350	Yes	18684-24-AE
500 V	E	E	24"	K	Chromel/Alumel	-269	350	Yes	18684-24-EE
500 V	A	A	36"	K	Chromel/Alumel	-269	650	Yes	18684-36-AA
500 V	A	B	36"	K	Chromel/Alumel	-200	650	Yes	18684-36-AB
500 V	A	E	36"	K	Chromel/Alumel	-269	350	Yes	18684-36-AE
500 V	E	E	36"	K	Chromel/Alumel	-269	350	Yes	18684-36-EE

Beads



MATERIAL	DIMENSIONS			BEADS PER FOOT	TEMPERATURE °C		PART NUMBER
	A	B	C		MIN	MAX	
96% Min Alumina	0.056 [1.42]	0.110 [2.79]	0.110 [2.79]	120	-269	800	07424-01
Steatite Grade L3	0.068 [1.73]	0.170 [4.32]	0.170 [4.32]	84	-269	600	07424-03
Steatite Grade L3	0.087 [2.21]	0.180 [4.57]	0.100 [2.54]	120	-269	600	07424-06
Steatite Grade L3	0.092 [2.34]	0.200 [5.08]	0.200 [5.08]	72	-269	600	07424-02

Conductor



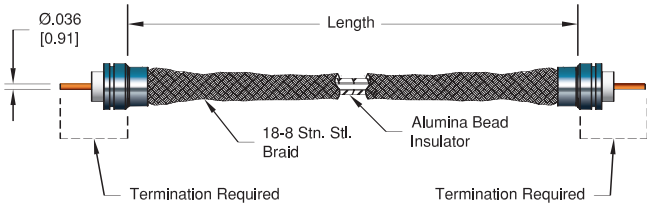
DIAMETER	CONDUCTOR MATERIAL	AMPS	PART NUMBER
0.036 [0.91]	Zirconium Copper	17	18745-02
0.050 [1.3]	Nickel	8.2	18745-03
0.050 [1.3]	Zirconium Copper	30	18745-04
0.050 [1.3]	Copper	27	18745-05

Braid

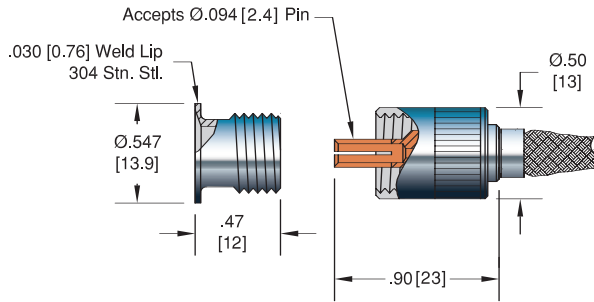


BRAID INSIDE DIAMETER	PART NUMBER
0.125 [3.18]	18746-01
0.250 [6.35]	18746-02

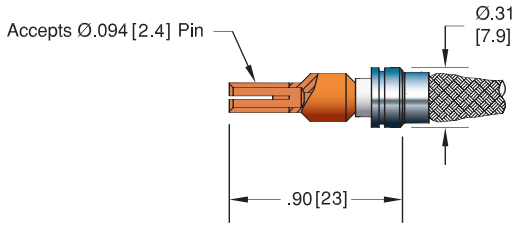
**Coaxial: 1/8" Diameter  
.036 [0.91] Dia. Conductor**



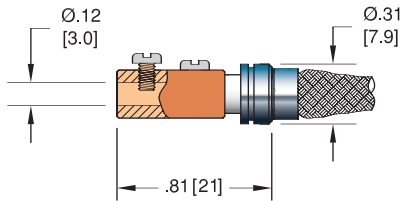
**Termination A – Coaxial**



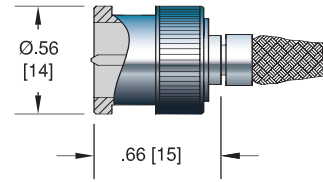
**Termination B – Contact**



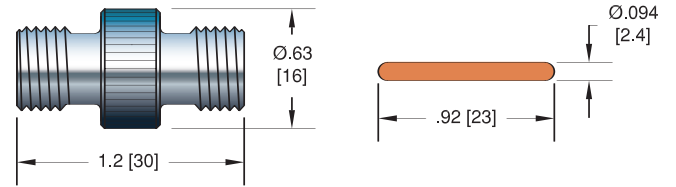
**Termination C – In-Line**



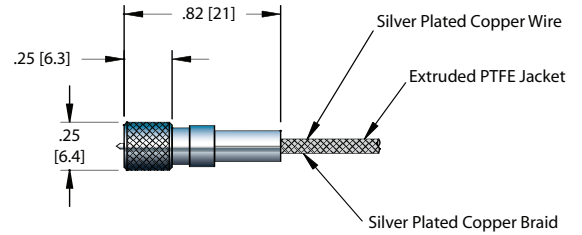
**Termination – BNC & MHV**



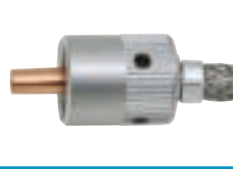
**1/8" Cable Splice**



**Microdot**



Coaxial Cables  
1/8" Diameter



VOLTAGE DC	TERMINATION		LENGTH	CONDUCTOR AMPS	CONDUCTOR MATERIAL	TEMPERATURE °C		MAGNETIC MATERIALS	PART NUMBER
	END 1	END 2				MIN	MAX		
1.5 V	A	A	12"	15	Zirconium Copper	-269	200	No	18680-12-AA
1.5 V	A	B	12"	15	Zirconium Copper	-269	200	No	18680-12-AB
1.5 V	A	C	12"	15	Zirconium Copper	-269	200	No	18680-12-AC
1.5 V	A	BNC	12"	15	Zirconium Copper	-269	200	No	18680-12-AE
1.5 V	A	MHV	12"	15	Zirconium Copper	-269	200	No	18680-12-AF
1.5 V	B	B	12"	15	Zirconium Copper	-269	200	No	18680-12-BB
1.5 V	B	C	12"	15	Zirconium Copper	-269	200	No	18680-12-BC
1.5 V	C	C	12"	15	Zirconium Copper	-269	350	No	18680-12-CC
1.5 V	A	A	24"	15	Zirconium Copper	-269	200	No	18680-24-AA
1.5 V	A	B	24"	15	Zirconium Copper	-269	200	No	18680-24-AB
1.5 V	A	C	24"	15	Zirconium Copper	-269	200	No	18680-24-AC
1.5 V	A	BNC	24"	15	Zirconium Copper	-269	400	No	18680-24-AE
1.5 V	A	MHV	24"	15	Zirconium Copper	-269	200	No	18680-24-AF
1.5 V	B	B	24"	15	Zirconium Copper	-269	400	No	18680-24-BB
1.5 V	B	C	24"	15	Zirconium Copper	-269	400	No	18680-24-BC
1.5 V	C	C	24"	15	Zirconium Copper	-269	350	No	18680-24-CC
1.5 V	A	A	36"	15	Zirconium Copper	-269	200	No	18680-36-AA
1.5 V	A	B	36"	15	Zirconium Copper	-269	200	No	18680-36-AB
1.5 V	A	C	36"	15	Zirconium Copper	-269	200	No	18680-36-AC
1.5 V	A	BNC	36"	15	Zirconium Copper	-269	400	No	18680-36-AE
1.5 V	A	MHV	36"	15	Zirconium Copper	-269	200	No	18680-36-AF
1.5 V	B	B	36"	15	Zirconium Copper	-269	400	No	18680-36-BB
1.5 V	B	C	36"	15	Zirconium Copper	-269	400	No	18680-36-BC
1.5 V	C	C	36"	15	Zirconium Copper	-269	350	No	18680-36-CC

Cable Splice



SIZE	VOLTAGE DC	CONDUCTOR AMPS	CONDUCTOR MATERIAL	TEMPERATURE °C		MAGNETIC MATERIALS	PART NUMBER
				MIN	MAX		
1/8"	1.5 kV	15	Copper	-269	400	No	18727-01-A

Microdot Cable Assembly

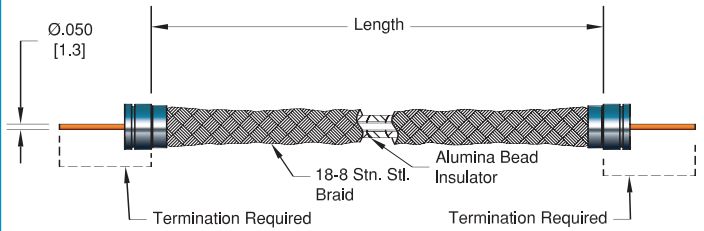


VOLTAGE DC	TERMINATION		LENGTH	CONDUCTOR AMPS	CONDUCTOR MATERIAL	TEMPERATURE °C		MAGNETIC MATERIALS	PART NUMBER
	END 1	END 2				MIN	MAX		
500 V	Microdot	Microdot	12"	2	Silver Plated Copper	-65	125	No	15767-12-A
500 V	Microdot	Microdot	24"	2	Silver Plated Copper	-65	125	No	15767-24-A
500 V	Microdot	Microdot	36"	2	Silver Plated Copper	-65	125	No	15767-36-A†

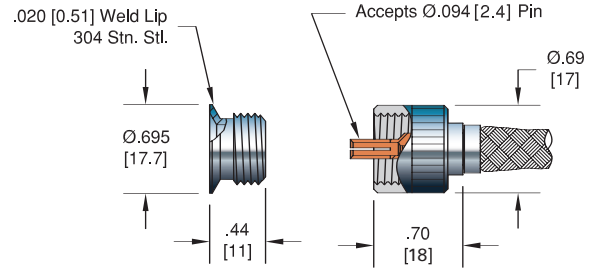
†Shown in photo.



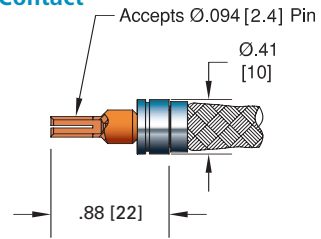
**Coaxial: 1/4" Diameter  
.050 [1.3] Dia. Conductor**



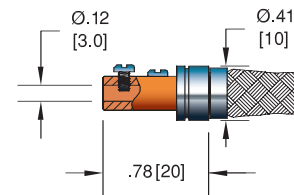
**Termination A – Coaxial**



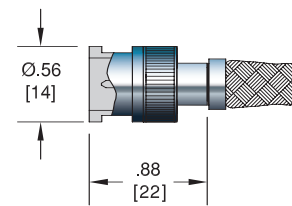
**Termination B – Contact**



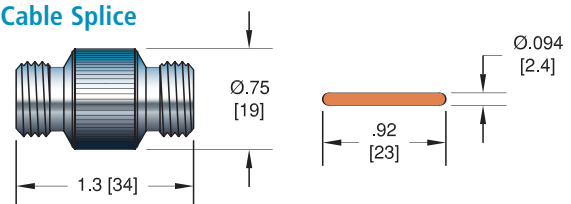
**Termination C – In-Line**



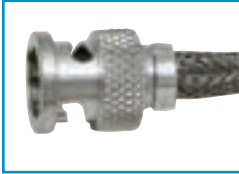
**Termination – BNC & MHV**



**1/4" Cable Splice**



Coaxial Cables  
1/4" Diameter



VOLTAGE DC	TERMINATION		LENGTH	AMPS	CONDUCTOR MATERIAL	TEMPERATURE °C		MAGNETIC MATERIALS	PART NUMBER
	END 1	END 2				MIN	MAX		
3 kV	A	A	12"	25	Zirconium Copper	-269	200	No	18681-12-AA
3 kV	A	B	12"	25	Zirconium Copper	-269	200	No	18681-12-AB
3 kV	A	C	12"	25	Zirconium Copper	-269	200	No	18681-12-AC
3 kV	A	BNC	12"	25	Zirconium Copper	-269	200	No	18681-12-AE
3 kV	A	MHV	12"	25	Zirconium Copper	-269	200	No	18681-12-AF
3 kV	B	B	12"	25	Zirconium Copper	-269	200	No	18681-12-BB
3 kV	B	C	12"	25	Zirconium Copper	-269	200	No	18681-12-BC
3 kV	C	C	12"	25	Zirconium Copper	-269	350	No	18681-12-CC
3 kV	BNC	BNC	12"	25	Zirconium Copper	-269	350	No	18681-12-EE
3 kV	MHV	MHV	12"	25	Zirconium Copper	-269	350	No	18681-12-FF
3 kV	A	A	24"	25	Zirconium Copper	-269	200	No	18681-24-AA
3 kV	A	B	24"	25	Zirconium Copper	-269	200	No	18681-24-AB
3 kV	A	C	24"	25	Zirconium Copper	-269	200	No	18681-24-AC
3 kV	A	BNC	24"	25	Zirconium Copper	-269	200	No	18681-24-AE
3 kV	A	MHV	24"	25	Zirconium Copper	-269	200	No	18681-24-AF
3 kV	B	B	24"	25	Zirconium Copper	-269	200	No	18681-24-BB
3 kV	B	C	24"	25	Zirconium Copper	-269	200	No	18681-24-BC
3 kV	C	C	24"	25	Zirconium Copper	-269	350	No	18681-24-CC
3 kV	BNC	BNC	24"	25	Zirconium Copper	-269	350	No	18681-24-EE
3 kV	MHV	MHV	24"	25	Zirconium Copper	-269	350	No	18681-24-FF
3 kV	A	A	36"	25	Zirconium Copper	-269	200	No	18681-36-AA
3 kV	A	B	36"	25	Zirconium Copper	-269	200	No	18681-36-AB
3 kV	A	C	36"	25	Zirconium Copper	-269	200	No	18681-36-AC
3 kV	A	BNC	36"	25	Zirconium Copper	-269	200	No	18681-36-AE
3 kV	A	MHV	36"	25	Zirconium Copper	-269	200	No	18681-36-AF
3 kV	B	B	36"	25	Zirconium Copper	-269	200	No	18681-36-BB
3 kV	B	C	36"	25	Zirconium Copper	-269	200	No	18681-36-BC
3 kV	C	C	36"	25	Zirconium Copper	-269	350	No	18681-36-CC
3 kV	BNC	BNC	36"	25	Zirconium Copper	-269	350	No	18681-36-EE
3 kV	MHV	MHV	36"	25	Zirconium Copper	-269	350	No	18681-36-FF

Cable Splice

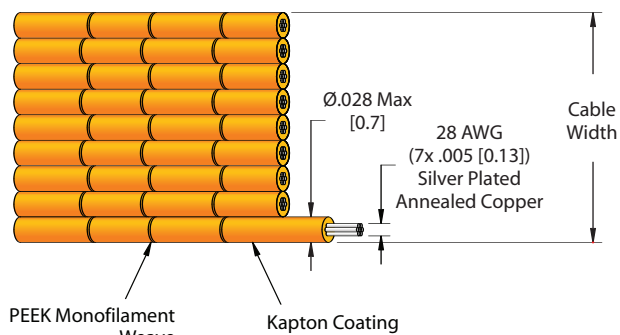


SIZE	VOLTAGE DC	AMPS	CONDUCTOR MATERIAL	TEMPERATURE °C		MAGNETIC MATERIALS	PART NUMBER
				MIN	MAX		
1/4"	3 kV	25	Copper	-269	400	No	18728-01-A

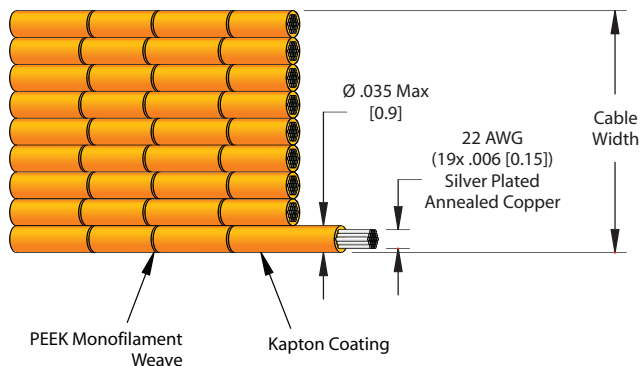
**In-Vacuum Ribbon Cable**

CeramTec's in-vacuum ribbon cable is designed to complement our Micro D Type (MIL-DTL-83513) & Sub D Type (MIL-C-24308) hermetic multipin connector product lines and therefore cable configurations include 9, 15 or 25 conductor cable. Note that 50 conductor cables are created by using two 25 conductor cables. Each of the Kapton® wrapped stranded 28 AWG (7 x 0.005) or 22 AWG (19 x 0.0063) silver plated copper conductors are woven with a PEEK (polyether ether ketone) monofilament in order to achieve the ribbon cable form. The multistranded wrapped cable offers the most flexible solution and has a temperature range up to 200° C. All ribbon cable assembly materials are ultra-high vacuum (UHV) compatible. The ribbon cables are vacuum baked out prior to shipping. Additional vacuum bakeout is also recommended prior to use. All cable assembly components are sold separately.

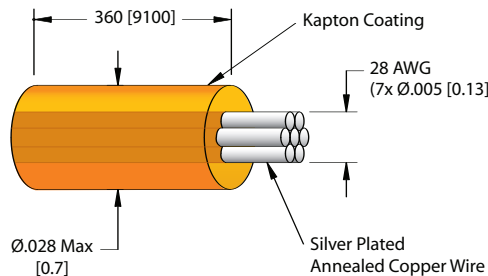
**28 AWG Ribbon Cable**



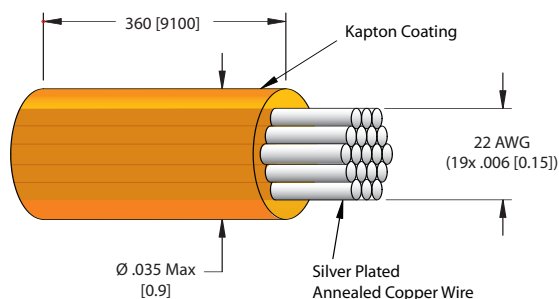
**22 AWG Ribbon Cable**



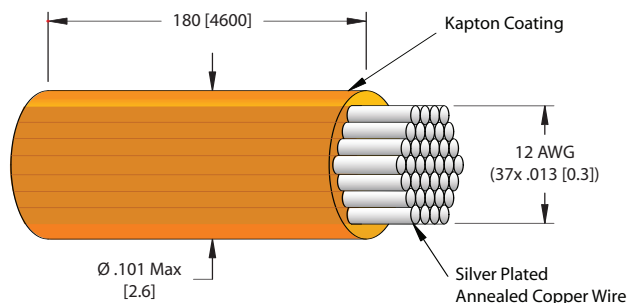
**Single Conductor  
28 AWG Stranded Wire**



**22 AWG Stranded Wire**



**12 AWG Stranded Wire**



**Specifications**

**Materials**

Insulation: Kapton® Type FN  
Weave: PEEK (polyether ether ketone) monofilament

**Number of Conductors** Single, 9, 15, 25

**Conductor**

28 AWG 7 / 0.005" stranded silver plated copper  
22 AWG 19 / 0.0063" stranded silver plated copper  
12 AWG 37 / 0.013" stranded silver plated copper

**Voltage Rating** 600 V AC, 850 V DC

**Current Rating**

28 AWG - 2.5 Amps per conductor  
22 AWG - 5 Amps per conductor  
12 AWG - 20 Amps per conductor

**Temperature Range** -55°C to 200°C

**Resistance**

28 AWG - 244Ω/km at 20°C max.  
22 AWG - 119Ω/km at 20°C max.  
12 AWG - 6.2Ω/km at 20°C max.



VOLTAGE DC	CONDUCTOR AMPS	TYPE	LENGTH	WIRE DIAMETER	INSULATION DIAMETER	PART NUMBER
850 V	2.5	Stranded	30'	7 x 0.005	Ø .028	21621-01-A



VOLTAGE DC	CONDUCTOR AMPS	TYPE	LENGTH	WIRE DIAMETER	INSULATION DIAMETER	PART NUMBER
850 V	5	Stranded	30'	19 x 0.0063	Ø .035	21643-01-A



VOLTAGE DC	CONDUCTOR AMPS	TYPE	LENGTH	WIRE DIAMETER	INSULATION DIAMETER	PART NUMBER
850 V	20	Stranded	15'	37 x 0.013	Ø .101	21702-02-A



NO. WIRES	CABLE LENGTH	CABLE WIDTH	WIRE DIAMETER	INSULATION DIAMETER	PART NUMBER
9	19"	0.4	7 x 0.005	Ø .028	21622-19-WW
9	39"	0.4	7 x 0.005	Ø .028	21622-39-WW
9	96"	0.4	7 x 0.005	Ø .028	21622-96-WW
15	19"	0.7	7 x 0.005	Ø .028	21623-19-WW
15	39"	0.7	7 x 0.005	Ø .028	21623-39-WW
15	96"	0.7	7 x 0.005	Ø .028	21623-96-WW
25	19"	1.2	7 x 0.005	Ø .028	21624-19-WW
25	39"	1.2	7 x 0.005	Ø .028	21624-39-WW
25	96"	1.2	7 x 0.005	Ø .028	21624-96-WW



NO. WIRES	CABLE LENGTH	CABLE WIDTH	WIRE DIAMETER	INSULATION DIAMETER	PART NUMBER
9	19"	0.4	19 X 0.0063	Ø .035	20370-19-WW
9	39"	0.4	19 X 0.0063	Ø .035	20370-39-WW
9	96"	0.4	19 X 0.0063	Ø .035	20370-96-WW
15	19"	0.7	19 X 0.0063	Ø .035	20371-19-WW
15	39"	0.7	19 X 0.0063	Ø .035	20371-39-WW
15	96"	0.7	19 X 0.0063	Ø .035	20371-96-WW
25	19"	1.2	19 X 0.0063	Ø .035	20372-19-WW
25	39"	1.2	19 X 0.0063	Ø .035	20372-39-WW
25	96"	1.2	19 X 0.0063	Ø .035	20372-96-WW

Note that 50 conductor cables are created by using two 25 conductor cables.



DESCRIPTION	PART NUMBER
Adjustable wire stripper, 20-30 AWG (.25 - .80mm)	21128-01