

## Thermocouple Wire - Duplex Insulated Iron-Constantan Duplex ANSI Type J

**ANSI Color Code:** Positive Wire, White; Negative Wire, Red; Overall, Brown

NEWPORT Electronics does not use reprocessed PFA, FEP, or PVC in manufacturing thermocouple wire.



Insulation <sup>1</sup>	Model #	AWG	Type Wire	Insulation		Max. Temp		Nominal Size	Wt.† lb/1000'		
				Conductor	Overall	°F	°C				
Ceramic**	XC-J-14	14	Solid	Nextel Ceramic		1100	590	.140 x .200	38		
	XC-J-20	20				900	480	.135 x .190	16		
	XT-J-20	20						.105 x .155	15		
	XL-J-20	20						.095 x .135	14		
	XC-J-24	24				700	370	.115 x .175	12		
	XT-J-24	24						.088 x .132	11		
	XL-J-24	24						.078 x .116	10		
Silica*	XS-J-14	14	Solid	Silica		1100	590	.140 x .200	35		
	XS-J-20	20				900	480	.105 x .155	12		
	XS-J-24	24				700	370	.088 x .132	10		
High Temp. Glass**	HH-J-20	20	Solid	High Temp. Glass		900	480	.060 x .105	9		
	HH-J-24	24				700	370	.055 x .090	5		
Glass	GG-J-14	14	Solid	Glass Braid		900	480	.060 x .095	9		
	GG-J-20	20	Solid					.060 x .100	9		
	GG-J-20S	20	7 X 28					.050 x .080	5		
	GG-J-24	24	Solid					.050 x .085	5		
	GG-J-24S	24	7 X 32	700	370	.045 x .075	4				
	GG-J-28	28	Solid			.040 x .055	3				
	GG-J-30	30	Solid			Glass Wrap	Glass Braid	700	370	.040 x .055	3
	GG-J-36	36	Solid					600	320	.037 x .050	3
PFA Glass	TG-J-30	30	Solid	PFA	Glass Braid	500	260	.034 x .047	2		
	TG-J-36	36						.028 x .038	2		
	TG-J-40	40						.026 x .035	2		
PFA High Performance	TT-J-20	20	Solid	PFA		500	260	.068 x .116	11		
	TT-J-20S	20	7 X 28					.073 x .126	11		
	TT-J-22S	22	7 X 30					.065 x .133	9		
	TT-J-24	24	Solid					.056 x .093	6		
	TT-J-24S	24	7 X 32					.063 x .102	6		
	TT-J-30††	30	Solid					.024 x .040	2		
	TT-J-36††	36	Solid					.019 x .030	2		
	TT-J-40††	40	Solid					.017 x .026	2		
FEP	FF-J-20	20	Solid	FEP		392	200	.068 x .116	11		
	FF-J-24	24						.056 x .092	5		
Polyvinyl	PR-J-24	24	Solid	Polyvinyl	Rip Cord***	221	105	.050 x .085	5		
	PR-J-24S	24	7 X 32		Polyvinyl			.082 x .134	5		

<sup>1</sup> Additional Type J insulated wires are available. See Fused Tape Insulated **TFE-J** and **KK-J** Series.

†Weight of spool and wire rounded up to the next highest lb. (does not include packing material).

††Overall color clear

\*Has color tracers on jacket and conductors.

\*\*Has trace thread in Positive leg, Negative leg is red, overall has trace thread.

\*\*\* Two insulated leads bonded together, but with no overjacket.

Some wires available with Special Limits of Error; consult Sales for pricing and availability.

Ceramic Weave Note:	
<b>XC</b>	standard ceramic insulation with maximum insulation density.
<b>XT</b>	more tightly woven with reduced insulation density.
<b>XL</b>	loosely woven with the minimum insulation density.



NEWPORT can cover any insulated wire in our handbook with metal overbraiding to protect against wear and abrasion. **Overbraiding** adds durability and electrical shielding for improved performance.

Part Number	Description
GG-J-24-50	50 ft, Glass Insulated, 24 AWG, Type J
GG-J-20-1000	1000 ft, Glass Insulated, 20 AWG, Type J
TG-J-36-1000	1000 ft, PFA Glass, 36 AWG, Type J
TT-J-24-100	100 ft, PFA Insulated, 24 AWG, Type J
TT-J-24S-500	500 ft, PFA Insulated, Stranded 24 AWG, Type J
PR-J-24-100	100 ft, Polyvinyl (Rip Cord)***, 24 AWG, Type J

## Part Number Builder

(1)                      (2)                      (3)  
HH           -J-           20           -           25

### Option Descriptions

#### (1) Insulation

*Select*

**HH** for High Temp Glass (20 & 24 AWG Only)

**GG** for Glass

**TG** for PFA and Glass

**TT** for Neoflon PFA (High Performance)

**FF** for Neoflon FEP (20 & 24 AWG Only)

**PP** for Polyvinyl (24 Gauge Stranded Only)

**PR** for Polyvinyl Rip Cord (24 AWG Only)

**XC** for Ceramic(14 20 24 AWG Only)

**XT** for Ceramic(20 & 24 AWG Only)

**XL** for Ceramic(20 & 24 AWG Only)

**XS** for Silica (14 20 24 AWG Only)

#### (2) Gage

*Select*

**20** for 20 AWG

**20S** for 20 AWG (Stranded)

**24** for 24 AWG

**24S** for 24 AWG (Stranded)

**28** for 28 AWG

**30** for 30 AWG

**36** for 36 AWG

**40** for 40 AWG

#### (3) Spool Length

*Select*

**25** for 25 Feet

**50** for 50 Feet

**100** for 100 Feet

**200** for 200 Feet

**500** for 500 Feet

**1000** for 1000 Feet

**NOTE:** All combinations may not be valid, check spec sheet for valid part numbers.