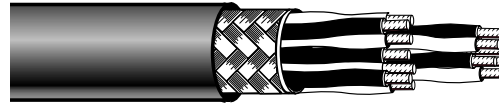


# CABLED SINGLE CONDUCTORS



## Heavy Duty

- Single Conductors (NW Series)
- Mil Spec, U.L. AWM

Recognized Style 2343 or 2344 and CSA Certified  
AWM II A/B\*\*

National Wire & Cable Corp. manufactures a complete line of multiple conductor control cable. All conductors are stranded tinned copper with .015" wall of vinyl primary insulation for use up to 105°C per MIL-W-16878/2\*. Insulated for 1000 volts working voltage. Color coded using 10 standard plus stripes on white per MIL-STD-681. View Color Table in the National Wire Cable Designers Guide, page 7-13.

All conductors are planetary cabled and contra-helically laid for optimum flexibility, with a Mylar tape serve over cable bundle. Shielded cables have a tinned copper braid overall, of 90% coverage per MIL-C-7078 and braid angles below 40° for easy pushback.

The outer jacket is black, abrasion-resistant 105°C vinyl meeting MIL-I-631 Type F. All materials are self-extinguishing and fungus resistant. Also available with Neoprene jacket as a custom product. Consult factory for details.

\*Insulated wires also meet U.L. Style 1007 or 1569 as appropriate for gauge.  
\*\*Cables are U.L. STYLE 2343 or 2344, rated 80°C, and CSA CERTIFIED for 105°C. U.L. and/or CSA certification furnished only when requested.

TECHNICAL DATA (ALL CABLES)	
<b>Insulation Breakdown Voltage:</b>	Greater than 5000 volts AC RMS, 60cps.
<b>U.L. Voltage Rating:</b>	300 volts RMS AC (appliance use). 600 volts RMS AC (electronic use).
<b>CSA Voltage Rating:</b>	300 volts RMS AC (appliance use).
<b>Military Voltage Rating:</b>	1000 volts RMS
<b>Capacitance:</b>	Nominal capacitance from a wire to all else in the cable ranges from 40 to 65 pf., @ 1000 cps, dependent on gauge and position.
<b>Insulation Leakage Res.:</b>	200 megohms/1000 ft. min. at 500 VDC from any conductor to all else in cable.
<b>Sheath Leakage Res.:</b>	10 megohms/1000 ft. min. at 500 VDC from overall shield through sheath to outside world.
<b>Usable Temp. Range:</b>	Suitable for continuous use from -40°C to +105°C.
<b>Cold Bending Capability:</b>	All cables are suitable for flexing to a circle diameter of 6 cable diameters from +105°C to -20°C. Recommended flex diameter should be greater than 20 cable diameters for flexing at -40°C. For continuous flexing application consult the factory.

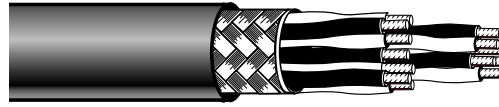
**MULTI-CONDUCTOR STOCK CABLES** Conductor sizes 22, 20, 18, 16, 14 & 12 gauge. 22 AWG is 7 stranded. All others are 19 strand.

## TO ORDER RoHS COMPLIANT PRODUCTS:

please add the letter "R" into the second position of the Part No.  
EXAMPLE: Non-RoHS Part No NK1234 EXAMPLE: RoHS Part No NRK1234

NW SERIES UNSHIELDED - 22, 20 and 18 AWG										NW SERIES OVERALL BRAIDED SHIELD - 22, 20 and 18 AWG											
Part No.	No. of Pairs	Cond AWG	Cond. Diam.		Jacket Wall		Nom. Diam.		Weight lbs per 1000 ft	KG/KM	Part No.	No. of Pairs	Cond AWG	Cond. Diam.		Jacket Wall		Nom. Diam.		Weight lbs per 1000 ft	KG/KM
			Inches	MM	Inches	MM	Inches	MM						Inches	MM	Inches	MM	Inches	MM		
NW-722J	7	22	.064	1.6	.062	1.6	.320	8.1	55	82	NW-722SJ	7	22	.064	1.6	.062	1.6	.340	8.6	71	106
NW-1222J	12	22	.064	1.6	.062	1.6	.394	10.1	82	123	NW-1222SJ	12	22	.064	1.6	.062	1.6	.414	10.5	103	153
NW-1922J	19	22	.064	1.6	.062	1.6	.448	11.4	114	170	NW-1922SJ	19	22	.064	1.6	.062	1.6	.473	12.0	148	220
NW-2722J	27	22	.064	1.6	.062	1.6	.522	13.3	152	227	NW-2722SJ	27	22	.064	1.6	.062	1.6	.547	13.9	193	287
NW-3722J	37	22	.064	1.6	.062	1.6	.576	14.6	195	291	NW-3722SJ	37	22	.064	1.6	.062	1.6	.601	15.3	241	359
NW-4822J	48	22	.064	1.6	.062	1.6	.646	16.4	244	363	NW-4822SJ	48	22	.064	1.6	.062	1.6	.672	17.0	296	441
NW-6022J	60	22	.064	1.6	.062	1.6	.704	17.9	295	438	NW-6022SJ	60	22	.064	1.6	.062	1.6	.729	18.5	353	525
NW-7222J	72	22	.064	1.6	.062	1.6	.768	19.5	346	515	NW-7222SJ	72	22	.064	1.6	.062	1.6	.793	20.1	410	610
NW-8822J	82	22	.064	1.6	.080	2.0	.868	22.0	441	656	NW-8822SJ	88	22	.064	1.6	.080	2.0	.893	22.7	512	761
NW-10222J	102	22	.064	1.6	.080	2.0	.932	23.7	502	747	NW-10222SJ	102	22	.064	1.6	.080	2.0	.957	24.3	579	861
NW-720J	7	20	.072	1.8	.062	1.6	.344	8.7	71	106	NW-720SJ	7	20	.072	1.8	.062	1.6	.364	9.2	89	132
NW-1220J	12	20	.072	1.8	.062	1.6	.428	10.9	109	162	NW-1220SJ	12	20	.072	1.8	.062	1.6	.448	11.4	132	196
NW-1920J	19	20	.072	1.8	.062	1.6	.488	12.4	155	230	NW-1920SJ	19	20	.072	1.8	.062	1.6	.513	13.0	192	286
NW-2720J	27	20	.072	1.8	.062	1.6	.572	14.5	209	311	NW-2720SJ	27	20	.072	1.8	.062	1.6	.597	15.2	255	379
NW-3720J	37	20	.072	1.8	.062	1.6	.632	16.1	272	405	NW-3720SJ	37	20	.072	1.8	.062	1.6	.657	16.7	323	481
NW-4820J	48	20	.072	1.8	.062	1.6	.711	18.1	342	509	NW-4820SJ	48	20	.072	1.8	.062	1.6	.736	18.7	401	597
NW-6020J	60	20	.072	1.8	.062	1.6	.776	19.7	417	620	NW-6020SJ	60	20	.072	1.8	.062	1.6	.801	20.4	482	716
NW-7220J	72	20	.072	1.8	.080	2.0	.884	22.5	521	775	NW-7220SJ	72	20	.072	1.8	.080	2.0	.909	23.1	593	883
NW-8820J	88	20	.072	1.8	.080	2.0	.956	24.3	621	924	NW-8820SJ	88	20	.072	1.8	.080	2.0	.981	24.9	700	1042
NW-10220J	102	20	.072	1.8	.080	2.0	1.028	26.1	710	1056	NW-10220SJ	102	20	.072	1.8	.080	2.0	1.053	26.8	796	1184
NW-718J	7	18	.082	2.1	.062	1.6	.374	9.5	91	136	NW-718SJ	7	18	.082	2.1	.062	1.6	.394	10.0	111	165
NW-1218J	12	18	.082	2.1	.062	1.6	.469	11.9	142	211	NW-1218SJ	12	18	.082	2.1	.062	1.6	.494	12.6	178	265
NW-1918J	19	18	.082	2.1	.062	1.6	.538	13.7	206	306	NW-1918SJ	19	18	.082	2.1	.062	1.6	.563	14.3	248	369
NW-2718J	27	18	.082	2.1	.062	1.6	.633	16.0	280	417	NW-2718SJ	27	18	.082	2.1	.062	1.6	.658	16.7	332	493
NW-3718J	37	18	.082	2.1	.062	1.6	.702	17.8	368	547	NW-3718SJ	37	18	.082	2.1	.062	1.6	.727	18.5	425	633
NW-4818J	48	18	.082	2.1	.062	1.6	.792	20.1	465	692	NW-4818SJ	48	18	.082	2.1	.062	1.6	.817	20.8	532	791
NW-6018J	60	18	.082	2.1	.080	2.0	.922	22.9	599	891	NW-6018SJ	60	18	.082	2.1	.080	2.0	.927	23.6	673	1001
NW-7218J	72	18	.082	2.1	.080	2.0	.984	25.0	706	1051	NW-7218SJ	72	18	.082	2.1	.080	2.0	1.009	25.6	788	1173

# CABLED SINGLE CONDUCTORS



## Heavy Duty

- Single Conductors (NW Series)
- Mil Spec, U.L. AWM

Recognized Style 2343 or 2344 and CSA Certified

AWM II A/B\*\*

## MULTI-CONDUCTOR STOCK CABLES

The products shown in the following tables are MIL-SPEC only. UL and CSA do not recognize 19 strand conductors in this gauge. See the NWC table below for UL/CSA.

### TO ORDER RoHS COMPLIANT PRODUCTS:

please add the letter "R" into the second position of the Part No.

EXAMPLE: Non-RoHS Part No NK1234 EXAMPLE: RoHS Part No NRK1234

NW SERIES UNSHIELDED - 16, 14 and 12 AWG							NW SERIES OVERALL SHIELDED - 16, 14 and 12 AWG														
Part No.	No. of Pairs	Cond AWG	Cond. Diam.		Jacket Wall		Nom. Diam.		Weight		Part No.	No. of Pairs	Cond AWG	Cond. Diam.		Jacket Wall		Nom. Diam.		Weight	
			Inches	MM	Inches	MM	Inches	MM	lbs per 1000 ft	KG/KM				Inches	MM	Inches	MM	Inches	MM	lbs per 1000 ft	KG/KM
NW-716J	7	16	.091	2.3	.062	1.6	.401	10.2	108	161	NW-716SJ	7	16	.091	2.3	.062	1.6	.421	10.7	129	192
NW-1216J	12	16	.091	2.3	.062	1.6	.507	12.9	170	253	NW-1216SJ	12	16	.091	2.3	.062	1.6	.532	13.5	209	311
NW-1916J	19	16	.091	2.3	.062	1.6	.583	14.8	248	369	NW-1916SJ	19	16	.091	2.3	.062	1.6	.608	15.4	294	437
NW-2716J	27	16	.091	2.3	.062	1.6	.689	17.5	339	504	NW-2716SJ	27	16	.091	2.3	.062	1.6	.714	18.1	395	588
NW-3716J	37	16	.091	2.3	.062	1.6	.765	19.4	446	664	NW-3716SJ	37	16	.091	2.3	.062	1.6	.790	20.0	510	759
NW-4816J	48	16	.091	2.3	.080	2.0	.901	22.9	576	857	NW-4816SJ	48	16	.091	2.3	.080	2.0	.926	23.5	670	997
NW-6016J	60	16	.091	2.3	.080	2.0	.983	25.0	270	1071	NW-6016SJ	60	16	.091	2.3	.080	2.0	1.008	25.6	808	1202
NW-714J	7	14	.105	2.7	.062	1.6	.443	11.2	146	217	NW-714SJ	7	14	.105	2.7	.062	1.6	.468	11.9	175	260
NW-1214J	12	14	.105	2.7	.062	1.6	.565	14.3	233	347	NW-1214SJ	12	14	.105	2.7	.062	1.6	.590	15.0	270	402
NW-1914J	19	14	.105	2.7	.062	1.6	.653	16.6	345	513	NW-1914SJ	19	14	.105	2.7	.062	1.6	.678	17.2	399	594
NW-2714J	27	14	.105	2.7	.062	1.6	.775	19.7	476	708	NW-2714SJ	27	14	.105	2.7	.062	1.6	.805	20.4	530	789
NW-512J	5	12	.124	3.1	.062	1.6	.463	11.7	157	234	NW-512SJ	5	12	.124	3.1	.062	1.6	.488	12.4	192	286
NW-712J	7	12	.124	3.1	.062	1.6	.500	12.7	205	305	NW-712SJ	7	12	.124	3.1	.062	1.6	.525	13.3	244	363
NW-1212J	12	12	.124	3.1	.062	1.6	.644	16.4	332	494	NW-1212SJ	12	12	.124	3.1	.062	1.6	.669	17.0	385	573
NW-1912J	19	12	.124	3.1	.062	1.6	.748	19.0	499	743	NW-1912SJ	19	12	.124	3.1	.062	1.6	.773	19.6	562	836

The following cables in 16-12 gauge are similar to NW series but utilize materials to qualify for CSA certification for AWM II A/B 105°C service at 300 volts as well as styles 2343 and 2344. Items below are not stocked and are subject to minimum run quantities.

Consult factory for RoHS compliance.

NWC SERIES UNSHIELDED - 16, 14 and 12 AWG							NWC SERIES OVERALL SHIELDED - 16, 14 and 12 AWG														
Part No.	No. of Pairs	Cond AWG	Cond. Diam.		Jacket Wall		Nom. Diam.		Weight		Part No.	No. of Pairs	Cond AWG	Cond. Diam.		Jacket Wall		Nom. Diam.		Weight	
			Inches	MM	Inches	MM	Inches	MM	lbs per 1000 ft	KG/KM				Inches	MM	Inches	MM	Inches	MM	lbs per 1000 ft	KG/KM
NWC-716J	7	16	.091	2.3	.062	1.6	.401	10.2	108	161	NWC-716SJ	7	16	.091	2.3	.062	1.6	.421	10.7	129	192
NWC-1216J	12	16	.091	2.3	.062	1.6	.507	12.9	170	253	NWC-1216SJ	12	16	.091	2.3	.062	1.6	.532	13.5	209	311
NWC-1916J	19	16	.091	2.3	.062	1.6	.583	14.8	248	369	NWC-1916SJ	19	16	.091	2.3	.062	1.6	.608	15.4	294	437
NWC-2716J	27	16	.091	2.3	.062	1.6	.689	17.5	339	504	NWC-2716SJ	27	16	.091	2.3	.062	1.6	.714	18.1	395	588
NWC-3716J	37	16	.091	2.3	.062	1.6	.765	19.4	446	664	NWC-3716SJ	37	16	.091	2.3	.062	1.6	.790	20.0	510	759
NWC-4816J	48	16	.091	2.3	.080	2.0	.901	22.9	576	857	NWC-4816SJ	48	16	.091	2.3	.062	1.6	.926	23.5	670	997
NWC-6016J	60	16	.091	2.3	.080	2.0	.983	25.0	720	1071	NWC-6016SJ	60	16	.091	2.3	.062	1.6	1.008	25.6	808	1202
NWC-714J	7	14	.105	2.7	.062	1.6	.443	11.2	146	217	NWC-714SJ	7	14	.105	2.7	.062	1.6	.468	11.9	175	260
NWC-1214J	12	14	.105	2.7	.062	1.6	.565	14.3	233	347	NWC-1214SJ	12	14	.105	2.7	.062	1.6	.590	15.0	270	402
NWC-1914J	19	14	.105	2.7	.062	1.6	.653	16.6	345	513	NWC-1914SJ	19	14	.105	2.7	.062	1.6	.678	17.2	399	594
NWC-2714J	27	14	.105	2.7	.062	1.6	.775	19.7	476	708	NWC-2714SJ	27	14	.105	2.7	.062	1.6	.805	20.4	530	789
NWC-512J	5	12	.124	3.1	.062	1.6	.463	11.7	157	234	NWC-512SJ	5	12	.124	3.1	.062	1.6	.488	12.4	192	286
NWC-712J	7	12	.124	3.1	.062	1.6	.500	12.7	205	305	NWC-712SJ	7	12	.124	3.1	.062	1.6	.525	13.3	244	363
NWC-1212J	12	12	.124	3.1	.062	1.6	.644	16.4	332	494	NWC-1212SJ	12	12	.124	3.1	.062	1.6	.669	17.0	385	573
NWC-1912J	19	12	.124	3.1	.062	1.6	.748	19.0	499	743	NWC-1912SJ	19	12	.124	3.1	.062	1.6	.773	19.6	562	836

### UL/CSA -- CONDUCTOR SIZE & STRANDING

16 AWG (26 x 30)

14 AWG (41 x 30)

12 AWG (65 x 30)