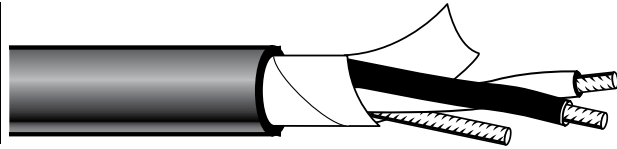


CABLED SINGLE CONDUCTORS



Standard CL2 Cables

- NEC 725 Tray Cables
- Cabled Singles (NL Series)

National Wire & Cable Corporation manufactures a complete line of DUAL-RATED multiconductor NEC TRAY CABLE Type CL2, for signal, instrumentation and control uses. Also UL rated for use as 300 Volt Appliance Wiring Material (AWM). These are available as cables singles or pairs, with optional overall shield of aluminum-Mylar foil with drain wire.

Cabled conductors use stranded tinned copper wire with 0.010" wall of tough extruded poly-vinyl-chloride (PVC) insulation, rated for 300 Volt use under U.L. Style 2464.

All wires are color coded using 10 standard solid colors plus white with stripes. Cables singles are color coded the same as our NQ and NX cable families per MIL-STD-681. Cabled pairs are color coded the same as our NQP and NXP cable families. View Color Table in the National Wire Cable Designers Guide, page 7-13.

Conductors are helically cabled and laid for optimum flexibility, with a Mylar tape barrier wrap (or Mylar + Foil) applied between cabled wire bundle and outer jacket.

Shielded cables have an overall Aluminum-Mylar foil shielding tape helically wrapped over cable and a tinned uninsulated drain wire for shield connection. (Use FSJ part Number suffix.) For optional composite tinned copper CFI braid(s) + foil shielding, consult factory.

Outer jacket is a special highly flexible abrasion-resistant gray polyvinylchloride (PVC) thermoplastic. DUAL-RATED jacket compound meets the requirements of both U.L./AWM Style 2464 and U.L. 13 Type CL2 TRAY CABLE. Jacket is surface printed with both UL AWM 2464 and U.L. 13 Type CL2 TRAY CABLE identifiers. Jacket wall thickness is .032" nom.

Finished cables comply with applicable U.L. tests for N.E.C. Type CL2 TRAY CABLE Vertical Tray Flame Spread. All materials are flame-spread retardant and fungus resistant. The products are DUAL-RATED for AWM use as U.L. Style 2464 300 Volt, 80°C, OR for U.L. 13 Type CL2 TRAY CABLE 105°C use.

Standard Putups: 500 ft. and 1000 ft. No-deposit reels. For shorter quantities or specific lengths consult factory.

TECHNICAL DATA (ALL CABLES)	
Rated Working Voltage:	300 Volts for AWM uses.
Rated Temperature:	DUAL-RATED: +105°C or +80°C dependent on AGENCY intended use.
Insulation Breakdown Voltage:	Greater than 3400 Volts AC RMS as 60 Hz.
Capacitance:	Nominal capacitance from a wire to all else in a cable ranges from 25 to 45 PF/FT at 1 kHz, depending on AWG and position.
Insulation Leakage:	100 megohms/1000 ft. min. at 500 VDC from a conductor to all else in a cable, at 25°C,
U.L. Agency Voltage & Temperature Ratings:	UL rated: +80°C AWM, 300 VOLT per UL Style 2464. UL rated +105°C CL2 TRAY CABLE per UL 13, NEC Type CL2.
Bending Characteristics:	All cables are suitable for flexing to a circle diameter of 8 cable diameters from +105°C to -10°C. Recommended flex diameter should be greater than 20 cable diameters for flexing at -20°C.
Characteristic Impedance:	RF Impedance of twisted pairs or adjacent singles is: 87 ohms in AWG 24; 80 ohms in AWG 22. Suitable for digital signals.

UNSHIELDED 24, 22 AWG				
Part No.	No. Cond.	Cond. AWG	Nom. O.D.	Weight LB/K ft.
NL-224J	2	24	.156	11
NL-324J	3	24	.163	14
NL-424J	4	24	.174	17
NL-524J	5	24	.187	19
NL-624J	6	24	.200	22
NL-724J	7	24	.200	24
NL-824J	8	24	.231	28
NL-924J	9	24	.244	31
NL-1024J	10	24	.244	33
NL-1224J	12	24	.251	37
NL-1524J	15	24	.275	45
NL-1924J	19	24	.288	54
NL-2724J	27	24	.339	73
NL-3724J	37	24	.376	96
NL-4824J	48	24	.424	121
NL-6024J	60	24	.464	148
NL-222J	2	22	.168	14
NL-322J	3	22	.176	17
NL-422J	4	22	.188	21
NL-522J	5	22	.203	25
NL-622J	6	22	.218	29
NL-722J	7	22	.218	32
NL-822J	8	22	.253	37
NL-922J	9	22	.268	40
NL-1022J	10	22	.268	43
NL-1222J	12	22	.276	50
NL-1522J	15	22	.303	60
NL-1922J	19	22	.318	73
NL-2722J	27	22	.376	100
NL-3722J	37	22	.418	131
NL-4822J	48	22	.473	167
NL-6022J	60	22	.520	207

OVERALL BRAIDED SHIELD 24, 22 AWG				
Part No.	No. Cond.	Cond. AWG	Nom. O.D.	Weight LB/K ft.
NL-224SJ	2	24	.176	19
NL-324SJ	3	24	.183	22
NL-424SJ	4	24	.194	25
NL-524SJ	5	24	.207	29
NL-624SJ	6	24	.220	33
NL-724SJ	7	24	.220	35
NL-824SJ	8	24	.251	41
NL-924SJ	9	24	.264	44
NL-1024SJ	10	24	.264	46
NL-1224SJ	12	24	.271	51
NL-1524SJ	15	24	.295	61
NL-1924SJ	19	24	.308	70
NL-2724SJ	27	24	.359	93
NL-3724SJ	37	24	.401	127
NL-4824SJ	48	24	.450	157
NL-6024SJ	60	24	.489	187
NL-222SJ	2	22	.188	22
NL-322SJ	3	22	.196	26
NL-422SJ	4	22	.208	31
NL-522SJ	5	22	.223	35
NL-622SJ	6	22	.238	40
NL-722SJ	7	22	.238	43
NL-822SJ	8	22	.273	51
NL-922SJ	9	22	.288	56
NL-1022SJ	10	22	.288	58
NL-1222SJ	12	22	.296	65
NL-1522SJ	15	22	.323	78
NL-1922SJ	19	22	.338	91
NL-2722SJ	27	22	.401	131
NL-3722SJ	37	22	.443	167
NL-4822SJ	48	22	.498	207
NL-6022SJ	60	22	.543	249

OVERALL FOIL SHIELD WITH DRAIN 24, 22 AWG				
Part No.	No. Cond.	Cond. AWG	Nom. O.D.	Weight LB/K ft.
NL-224FSJ	2	24	.158	13
NL-324FSJ	3	24	.165	15
NL-424FSJ	4	24	.176	18
NL-524FSJ	5	24	.189	21
NL-624FSJ	6	24	.202	24
NL-724FSJ	7	24	.202	26
NL-824FSJ	8	24	.233	30
NL-924FSJ	9	24	.246	32
NL-1024FSJ	10	24	.246	34
NL-1224FSJ	12	24	.253	39
NL-1524FSJ	15	24	.277	46
NL-1924FSJ	19	24	.290	55
NL-2724FSJ	27	24	.341	75
NL-3724FSJ	37	24	.378	97
NL-4824FSJ	48	24	.427	122
NL-6024FSJ	60	24	.466	149
NL-222FSJ	2	22	.170	16
NL-322FSJ	3	22	.178	20
NL-422FSJ	4	22	.190	23
NL-522FSJ	5	22	.205	27
NL-622FSJ	6	22	.220	31
NL-722FSJ	7	22	.220	34
NL-822FSJ	8	22	.255	39
NL-922FSJ	9	22	.270	43
NL-1022FSJ	10	22	.270	46
NL-1222FSJ	12	22	.278	52
NL-1522FSJ	15	22	.305	62
NL-1922FSJ	19	22	.320	75
NL-2722FSJ	27	22	.378	102
NL-3722FSJ	37	22	.420	134
NL-4822FSJ	48	22	.475	169
NL-6022FSJ	60	22	.528	207

CABLED SINGLE CONDUCTORS - CL2, NL



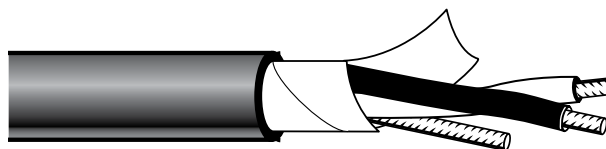
RoHS COMPLIANT PRODUCTS: all RoHS products have the letter "R" written into the second position of the Part No.

UNSHIELDED				
24, 22 AWG				
Part No.	No. Cond.	Cond. AWG	Nom. O.D.	Weight LB/K ft.
NRL-224J	2	24	.156	11
NRL-324J	3	24	.163	14
NRL-424J	4	24	.174	17
NRL-524J	5	24	.187	19
NRL-624J	6	24	.200	22
NRL-724J	7	24	.200	24
NRL-824J	8	24	.231	28
NRL-924J	9	24	.244	31
NRL-1024J	10	24	.244	33
NRL-1224J	12	24	.251	37
NRL-1524J	15	24	.275	45
NRL-1924J	19	24	.288	54
NRL-2724J	27	24	.339	73
NRL-3724J	37	24	.376	96
NRL-4824J	48	24	.424	121
NRL-6024J	60	24	.464	148
NRL-222J	2	22	.168	14
NRL-322J	3	22	.176	17
NRL-422J	4	22	.188	21
NRL-522J	5	22	.203	25
NRL-622J	6	22	.218	29
NRL-722J	7	22	.218	32
NRL-822J	8	22	.253	37
NRL-922J	9	22	.268	40
NRL-1022J	10	22	.268	43
NRL-1222J	12	22	.276	50
NRL-1522J	15	22	.303	60
NRL-1922J	19	22	.318	73
NRL-2722J	27	22	.376	100
NRL-3722J	37	22	.418	131
NRL-4822J	48	22	.473	167
NRL-6022J	60	22	.520	207

OVERALL BRAIDED SHIELD				
24, 22 AWG				
Part No.	No. Cond.	Cond. AWG	Nom. O.D.	Weight LB/K ft.
NRL-224SJ	2	24	.176	19
NRL-324SJ	3	24	.183	22
NRL-424SJ	4	24	.194	25
NRL-524SJ	5	24	.207	29
NRL-624SJ	6	24	.220	33
NRL-724SJ	7	24	.220	35
NRL-824SJ	8	24	.251	41
NRL-924SJ	9	24	.264	44
NRL-1024SJ	10	24	.264	46
NRL-1224SJ	12	24	.271	51
NRL-1524SJ	15	24	.295	61
NRL-1924SJ	19	24	.308	70
NRL-2724SJ	27	24	.359	93
NRL-3724SJ	37	24	.401	127
NRL-4824SJ	48	24	.450	157
NRL-6024SJ	60	24	.489	187
NRL-222SJ	2	22	.188	22
NRL-322SJ	3	22	.196	26
NRL-422SJ	4	22	.208	31
NRL-522SJ	5	22	.223	35
NRL-622SJ	6	22	.238	40
NRL-722SJ	7	22	.238	43
NRL-822SJ	8	22	.273	51
NRL-922SJ	9	22	.288	56
NRL-1022SJ	10	22	.288	58
NRL-1222SJ	12	22	.296	65
NRL-1522SJ	15	22	.323	78
NRL-1922SJ	19	22	.338	91
NRL-2722SJ	27	22	.401	131
NRL-3722SJ	37	22	.443	167
NRL-4822SJ	48	22	.498	207
NRL-6022SJ	60	22	.543	249

OVERALL FOIL SHIELD WITH DRAIN				
24, 22 AWG				
Part No.	No. Cond.	Cond. AWG	Nom. O.D.	Weight LB/K ft.
NRL-224FSJ	2	24	.158	13
NRL-324FSJ	3	24	.165	15
NRL-424FSJ	4	24	.176	18
NRL-524FSJ	5	24	.189	21
NRL-624FSJ	6	24	.202	24
NRL-724FSJ	7	24	.202	26
NRL-824FSJ	8	24	.233	30
NRL-924FSJ	9	24	.246	32
NRL-1024FSJ	10	24	.246	34
NRL-1224FSJ	12	24	.253	39
NRL-1524FSJ	15	24	.277	46
NRL-1924FSJ	19	24	.290	55
NRL-2724FSJ	27	24	.341	75
NRL-3724FSJ	37	24	.378	97
NRL-4824FSJ	48	24	.427	122
NRL-6024FSJ	60	24	.466	149
NRL-222FSJ	2	22	.170	16
NRL-322FSJ	3	22	.178	20
NRL-422FSJ	4	22	.190	23
NRL-522FSJ	5	22	.205	27
NRL-622FSJ	6	22	.220	31
NRL-722FSJ	7	22	.220	34
NRL-822FSJ	8	22	.255	39
NRL-922FSJ	9	22	.270	43
NRL-1022FSJ	10	22	.270	46
NRL-1222FSJ	12	22	.278	52
NRL-1522FSJ	15	22	.305	62
NRL-1922FSJ	19	22	.320	75
NRL-2722FSJ	27	22	.378	102
NRL-3722FSJ	37	22	.420	134
NRL-4822FSJ	48	22	.475	169
NRL-6022FSJ	60	22	.528	207

CABLED SINGLE CONDUCTORS



LISTED



Standard CL2 Cables

- NEC 725 Tray Cables
- Cabled Singles (NL Series)

UNSHIELDED 20, 18 AWG				
Part No.	No. Cond	Cond AWG.	Nom. O.D.	Weight LB/K ft
NL-220J	2	20	.184	18
NL-320J	3	20	.193	24
NL-420J	4	20	.207	29
NL-520J	5	20	.225	35
NL-620J	6	20	.242	41
NL-720J	7	20	.242	46
NL-820J	8	20	.283	53
NL-920J	9	20	.300	58
NL-1020J	10	20	.300	63
NL-1220J	12	20	.309	73
NL-1520J	15	20	.341	89
NL-1920J	19	20	.358	109
NL-2720J	27	20	.425	151
NL-3720J	37	20	.474	201
NL-218J	2	18	.204	24
NL-318J	3	18	.215	32
NL-418J	4	18	.231	40
NL-518J	5	18	.252	48
NL-618J	6	18	.272	56
NL-718J	7	18	.272	63
NL-818J	8	18	.320	73
NL-918J	9	18	.340	81
NL-1018J	10	18	.340	88
NL-1218J	12	18	.351	102
NL-1518J	15	18	.388	126
NL-1918J	19	18	.408	155
NL-2718J	27	18	.487	215

OVERALL BRAIDED SHIELDED 20, 18 AWG				
Part No.	No. Cond	Cond AWG.	Nom. O.D.	Weight LB/K ft
NL-220SJ	2	20	.204	28
NL-320SJ	3	20	.213	34
NL-420SJ	4	20	.227	40
NL-520SJ	5	20	.245	47
NL-620SJ	6	20	.262	54
NL-720SJ	7	20	.262	59
NL-820SJ	8	20	.303	69
NL-920SJ	9	20	.320	76
NL-1020SJ	10	20	.320	80
NL-1220SJ	12	20	.329	91
NL-1520SJ	15	20	.361	109
NL-1920SJ	19	20	.378	130
NL-2720SJ	27	20	.450	187
NL-3720SJ	37	20	.499	242
NL-218SJ	2	18	.224	35
NL-318SJ	3	18	.235	43
NL-418SJ	4	18	.251	52
NL-518SJ	5	18	.272	62
NL-618SJ	6	18	.292	71
NL-718SJ	7	18	.293	78
NL-818SJ	8	18	.340	91
NL-918SJ	9	18	.360	101
NL-1018SJ	10	18	.360	108
NL-1218SJ	12	18	.371	123
NL-1518SJ	15	18	.413	158
NL-1918SJ	19	18	.433	189
NL-2718SJ	27	18	.512	257

OVERALL FOIL SHIELD WITH DRAIN 20, 18 AWG				
Part No.	No. Cond	Cond AWG.	Nom. O.D.	Weight LB/K ft
NL-220FSJ	2	20	.186	22
NL-320FSJ	3	20	.195	28
NL-420FSJ	4	20	.209	33
NL-520FSJ	5	20	.227	39
NL-620FSJ	6	20	.244	45
NL-720FSJ	7	20	.244	49
NL-820FSJ	8	20	.285	56
NL-920FSJ	9	20	.302	62
NL-1020FSJ	10	20	.300	63
NL-1220FSJ	12	20	.311	77
NL-1520FSJ	15	20	.343	90
NL-1920FSJ	19	20	.360	113
NL-2720FSJ	27	20	.427	155
NL-3720FSJ	37	20	.476	205
NL-218FSJ	2	18	.206	20
NL-318FSJ	3	18	.217	38
NL-418FSJ	4	18	.233	46
NL-518FSJ	5	18	.254	54
NL-618FSJ	6	18	.274	62
NL-718FSJ	7	18	.274	69
NL-818FSJ	8	18	.322	79
NL-918FSJ	9	18	.342	87
NL-1018FSJ	10	18	.342	94
NL-1218FSJ	12	18	.353	108
NL-1518FSJ	15	18	.390	131
NL-1918FSJ	19	18	.410	180
NL-2718FSJ	27	18	.489	221

CABLED SINGLE CONDUCTORS - CL2, NL



RoHS COMPLIANT PRODUCTS: all RoHS products have the letter "R" written into the second position of the Part No.

UNSHIELDED 20, 18 AWG				
Part No.	No. Cond	Cond AWG.	Nom. O.D.	Weight LB/K ft
NRL-220J	2	20	.184	18
NRL-320J	3	20	.193	24
NRL-420J	4	20	.207	29
NRL-520J	5	20	.225	35
NRL-620J	6	20	.242	41
NRL-720J	7	20	.242	46
NRL-820J	8	20	.283	53
NRL-920J	9	20	.300	58
NRL-1020J	10	20	.300	63
NRL-1220J	12	20	.309	73
NRL-1520J	15	20	.341	89
NRL-1920J	19	20	.358	109
NRL-2720J	27	20	.425	151
NRL-3720J	37	20	.474	201
NRL-218J	2	18	.204	24
NRL-318J	3	18	.215	32
NRL-418J	4	18	.231	40
NRL-518J	5	18	.252	48
NRL-618J	6	18	.272	56
NRL-718J	7	18	.272	63
NRL-818J	8	18	.320	73
NRL-918J	9	18	.340	81
NRL-1018J	10	18	.340	88
NRL-1218J	12	18	.351	102
NRL-1518J	15	18	.388	126
NRL-1918J	19	18	.408	155
NRL-2718J	27	18	.487	215

OVERALL BRAIDED SHIELDED 20, 18 AWG				
Part No.	No. Cond	Cond AWG.	Nom. O.D.	Weight LB/K ft
NRL-220SJ	2	20	.204	28
NRL-320SJ	3	20	.213	34
NRL-420SJ	4	20	.227	40
NRL-520SJ	5	20	.245	47
NRL-620SJ	6	20	.262	54
NRL-720SJ	7	20	.262	59
NRL-820SJ	8	20	.303	69
NRL-920SJ	9	20	.320	76
NRL-1020SJ	10	20	.320	80
NRL-1220SJ	12	20	.329	91
NRL-1520SJ	15	20	.361	109
NRL-1920SJ	19	20	.378	130
NRL-2720SJ	27	20	.450	187
NRL-3720SJ	37	20	.499	242
NRL-218SJ	2	18	.224	35
NRL-318SJ	3	18	.235	43
NRL-418SJ	4	18	.251	52
NRL-518SJ	5	18	.272	62
NRL-618SJ	6	18	.292	71
NRL-718SJ	7	18	.293	78
NRL-818SJ	8	18	.340	91
NRL-918SJ	9	18	.360	101
NRL-1018SJ	10	18	.360	108
NRL-1218SJ	12	18	.371	123
NRL-1518SJ	15	18	.413	158
NRL-1918SJ	19	18	.433	189
NRL-2718SJ	27	18	.512	257

OVERALL FOIL SHIELD WITH DRAIN 20, 18 AWG				
Part No.	No. Cond	Cond AWG.	Nom. O.D.	Weight LB/K ft
NRL-220FSJ	2	20	.186	22
NRL-320FSJ	3	20	.195	28
NRL-420FSJ	4	20	.209	33
NRL-520FSJ	5	20	.227	39
NRL-620FSJ	6	20	.244	45
NRL-720FSJ	7	20	.244	49
NRL-820FSJ	8	20	.285	56
NRL-920FSJ	9	20	.302	62
NRL-1020FSJ	10	20	.300	63
NRL-1220FSJ	12	20	.311	77
NRL-1520FSJ	15	20	.343	90
NRL-1920FSJ	19	20	.360	113
NRL-2720FSJ	27	20	.427	155
NRL-3720FSJ	37	20	.476	205
NRL-218FSJ	2	18	.206	20
NRL-318FSJ	3	18	.217	38
NRL-418FSJ	4	18	.233	46
NRL-518FSJ	5	18	.254	54
NRL-618FSJ	6	18	.274	62
NRL-718FSJ	7	18	.274	69
NRL-818FSJ	8	18	.322	79
NRL-918FSJ	9	18	.342	87
NRL-1018FSJ	10	18	.342	94
NRL-1218FSJ	12	18	.353	108
NRL-1518FSJ	15	18	.390	131
NRL-1918FSJ	19	18	.410	180
NR L-2718FSJ	27	18	.489	221