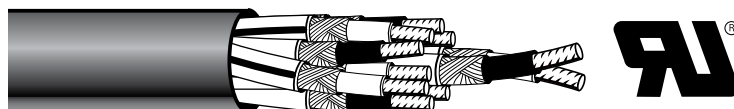


CABLED SHIELDED PAIRS



Military & UL Grade

- Pairs (NTP Series)
- RFI Shielded Cables

Meets U.L. Style 2343 or 2344 for Computer Use

National Wire & Cable Corp. manufactures a complete line of flexible signal and control cables in which each pair is individually shielded and plastic-jacketed. Conforming to MIL-C-27072, these cables provide extended temperature, rough usage, military shielding, excellent flexibility. Provides a minimum of crosstalk between signal channels, plus complete isolation between shields. Excellent for analog signals. All jackets are moisture proof and suitable for use in duct, conduit, aerial, or burial installations.

Conductors are stranded tinned copper with .010" vinyl primary insulation plus .004" nylon insulation over the vinyl per MIL-DTL-16878/17. Insulation for 600 Volts working rating at 105°C. Color-coding: Pairs - Black & White. All conductors are 19 strand.

Shielding is tinned copper braid with 85-90% coverage per MIL-C-7078, and shield angle below 40 degrees for easy pushback.

Jackets over shields are extruded 105°C white polyvinylchloride plastic per MIL-I-631, Type F. Each subcable is individually identified by color code per MIL-STD-681, starting with color #9. Refer to the Table in the National Wire Cable Designers Guide, page 7-12.

All sub-components are planetary cabled and contra-helically laid with a mylar tape serve over the cable bundle. The overall sheath is abrasion-resistant black 105°C vinyl thermoplastic per MIL-I-631, Type F.

Optional overall shielding of cabled bundle is 85-95% minimum coverage of tinned copper braid applied per MIL-C-7078 over the tape serve under sheath.

TECHNICAL DATA (ALL CABLES)

Insulation Breakdown Voltage:	Greater than 5000 volts AC RMS, 60 Hz.
Insulation Leakage Resistance:	200 Megohms/1000 ft. at 500 VDC from any conductor to all else in cable.
Sheath Leakage Resistance:	10 Megohms/1000 ft. min. at 500 VDC from overall shield through sheath to saline bath at 25°C.
Usable Temperature Range:	Suitable for continuous use from +105°C to -55°C when stationary. Flexing service: +105°C to -25°C.
Bending Characteristics:	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 applications consult factory.
Crosstalk:	Common-mode, adjacent subcables: Worst case, -50 db @ 1 Mhz; falling to -100 db below 100 kHz. (Ref. MIL-C-23437 for test method.) For 100 ft. test length.

Capacitance (pf/d.ft.):

AWG	WIRE-WIRE	WIRE-SHIELD
16	63	116
18	56	102
20	47	85
22	40	72
24	34	63
26	30	54

NTP SERIES UNSHIELD - 26, 24, 22, 20, 18 and 16 AWG

Part No.	No. of Pairs	Cond AWG	Cond. Diam. Inches	Cond. Diam. MM	Jacket Wall Inches	Jacket Wall MM	Nom. Diam. Inches	Nom. Diam. MM	Weight lbs per 1000 ft	Weight KG/KM
NTP-726J	7	26	.146	3.7	.062	1.6	.566	14.38	150	223
NTP-1226J	12	26	.146	3.7	.062	1.6	.753	18.7	235	350
NTP-1926J	19	26	.146	3.7	.085	2.1	.904	23.0	378	562
NTP-2726J	27	26	.146	3.7	.085	2.1	1.073	27.3	510	759
NTP-3726J	37	26	.146	3.7	.085	2.1	1.193	30.3	660	982
NTP-4826J	48	26	.146	3.7	.085	2.1	1.357	34.5	830	1235
NTP-724J	7	24	.156	3.9	.062	1.6	.596	15.14	176	262
NTP-1224J	12	24	.156	3.9	.062	1.6	.777	19.74	278	414
NTP-1924J	19	24	.156	3.9	.085	2.1	.954	24.2	447	665
NTP-2724J	27	24	.156	3.9	.085	2.1	1.135	28.8	607	903
NTP-3724J	37	24	.156	3.9	.085	2.1	1.266	32.2	791	1177
NTP-4824J	48	24	.156	3.9	.085	2.1	1.438	36.5	998	1485
NTP-722J	7	22	.168	4.2	.062	1.6	.632	16.05	205	305
NTP-1222J	12	22	.168	4.2	.085	2.1	.873	22.17	363	540
NTP-1922J	19	22	.168	4.2	.085	2.1	1.014	25.8	524	780
NTP-2722J	27	22	.168	4.2	.085	2.1	1.209	30.7	714	1062
NTP-3722J	37	22	.168	4.2	.085	2.1	1.350	34.3	935	1391
NTP-4822J	48	22	.168	4.2	.085	2.1	1.535	38.9	1183	1760
NTP-720J	7	20	.186	4.7	.062	1.6	.686	17.42	247	368
NTP-1220J	12	20	.186	4.7	.062	2.1	.948	24.1	437	650
NTP-1920J	19	20	.186	4.7	.062	2.1	1.104	28.0	637	948
NTP-2720J	27	20	.186	4.7	.062	2.1	1.320	33.5	871	1296
NTP-3720J	37	20	.186	4.7	.062	2.1	1.476	37.5	1148	1708
NTP-718J	7	18	.206	5.2	.085	2.1	.746	18.95	303	451
NTP-1218J	12	18	.206	5.2	.085	2.1	1.031	26.2	533	793
NTP-1918J	19	18	.206	5.2	.085	2.1	1.204	30.6	785	1168
NTP-2718J	27	18	.206	5.2	.085	2.1	1.443	36.7	1079	1606
NTP-716J	7	16	.226	5.7	.062	1.6	.806	20.47	348	518
NTP-1216J	12	16	.226	5.7	.085	2.1	1.114	28.3	613	912
NTP-1916J	19	16	.226	5.7	.085	2.1	1.304	33.1	906	1348

NTP SERIES OVERALL SHIELD - 26, 24, 22, 20, 18 and 16 AWG

Part No.	No. of Pairs	Cond AWG	Cond. Diam. Inches	Cond. Diam. MM	Jacket Wall Inches	Jacket Wall MM	Nom. Diam. Inches	Nom. Diam. MM	Weight lbs per 1000 ft	Weight KG/KM
NTP-726SJ	7	26	.146	3.7	.062	1.6	.591	15.01	195	290
NTP-1226SJ	12	26	.146	3.7	.062	1.6	.761	19.33	296	440
NTP-1926SJ	19	26	.146	3.7	.062	2.1	.929	23.6	452	673
NTP-2726SJ	27	26	.146	3.7	.062	2.1	1.099	27.9	599	891
NTP-3726SJ	37	26	.146	3.7	.062	2.1	1.221	31.0	762	1134
NTP-4826SJ	48	26	.146	3.7	.062	2.1	1.382	35.1	946	1408
NTP-724SJ	7	24	.156	3.9	.062	1.6	.621	15.77	223	332
NTP-1224SJ	12	24	.156	3.9	.062	1.6	.802	20.37	343	510
NTP-1924SJ	19	24	.156	3.9	.085	2.1	.979	24.9	526	783
NTP-2724SJ	27	24	.156	3.9	.085	2.1	1.160	29.5	702	1045
NTP-3724SJ	37	24	.156	3.9	.085	2.1	1.291	32.8	899	1338
NTP-4824SJ	48	24	.156	3.9	.085	2.1	1.463	37.1	1122	1670
NTP-722SJ	7	22	.168	4.2	.062	1.6	.657	16.69	256	381
NTP-1222SJ	12	22	.168	4.2	.062	1.6	.898	22.8	433	644
NTP-1922SJ	19	22	.168	4.2	.062	1.6	1.039	26.4	608	905
NTP-2722SJ	27	22	.168	4.2	.062	1.6	1.234	31.3	817	1216
NTP-3722SJ	37	22	.168	4.2	.062	1.6	1.375	34.9	1051	1564
NTP-4822SJ	48	22	.168	4.2	.062	1.6	1.560	39.5	1317	1959
NTP-720SJ	7	20	.186	4.7	.062	1.6	.711	18.06	303	451
NTP-1220SJ	12	20	.186	4.7	.085	2.1	.973	24.7	514	765
NTP-1920SJ	19	20	.186	4.7	.085	2.1	1.129	28.7	729	1085
NTP-2720SJ	27	20	.186	4.7	.085	2.1	1.345	34.2	984	1464
NTP-3720SJ	37	20	.186	4.7	.085	2.1	1.501	38.1	1274	1896
NTP-718SJ	7	18	.206	5.2	.062	1.6	.771	19.58	365	543
NTP-1218SJ	12	18	.206	5.2	.062	2.1	1.056	26.8	619	921
NTP-1918SJ	19	18	.206	5.2	.062	2.1	1.229	31.2	887	1320
NTP-2718SJ	27	18	.206	5.2	.062	2.1	1.468	37.3	1204	1792
NTP-716SJ	7	16	.226	5.7	.085	2.1	.877	22.28	453	674
NTP-1216SJ	12	16	.226	5.7	.085	2.1	1.139	28.9	707	1052
NTP-1916SJ	19	16	.226	5.7	.085	2.1	1.329	33.8	1018	1515

CABLED SHIELDED PAIRS - NTP Series



RoHS COMPLIANT PRODUCTS:

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

NRTP SERIES UNSHIELD - 26, 24, 22, 20, 18 and 16 AWG										
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
NRTP-726J	7	26	.146	3.7	.062	1.6	.566	14.38	150	223
NRTP-1226J	12	26	.146	3.7	.062	1.6	.753	18.7	235	350
NRTP-1926J	19	26	.146	3.7	.085	2.1	.904	23.0	378	562
NRTP-2726J	27	26	.146	3.7	.085	2.1	1.073	27.3	510	759
NRTP-3726J	37	26	.146	3.7	.085	2.1	1.193	30.3	660	982
NRTP-4826J	48	26	.146	3.7	.085	2.1	1.357	34.5	830	1235
NRTP-724J	7	24	.156	3.9	.062	1.6	.596	15.14	176	262
NRTP-1224J	12	24	.156	3.9	.062	1.6	.777	19.74	278	414
NRTP-1924J	19	24	.156	3.9	.085	2.1	.954	24.2	447	665
NRTP-2724J	27	24	.156	3.9	.085	2.1	1.135	28.8	607	903
NRTP-3724J	37	24	.156	3.9	.085	2.1	1.266	32.2	791	1177
NRTP-4824J	48	24	.156	3.9	.085	2.1	1.438	36.5	998	1485
NRTP-722J	7	22	.168	4.2	.062	1.6	.632	16.05	205	305
NRTP-1222J	12	22	.168	4.2	.085	2.1	.873	22.17	363	540
NRTP-1922J	19	22	.168	4.2	.085	2.1	1.014	25.8	524	780
NRTP-2722J	27	22	.168	4.2	.085	2.1	1.209	30.7	714	1062
NRTP-3722J	37	22	.168	4.2	.085	2.1	1.350	34.3	935	1391
NRTP-4822J	48	22	.168	4.2	.085	2.1	1.535	38.9	1183	1760
NRTP-720J	7	20	.186	4.7	.062	1.6	.686	17.42	247	368
NRTP-1220J	12	20	.186	4.7	.062	2.1	.948	24.1	437	650
NRTP-1920J	19	20	.186	4.7	.062	2.1	1.104	28.0	637	948
NRTP-2720J	27	20	.186	4.7	.062	2.1	1.320	33.5	871	1296
NRTP-3720J	37	20	.186	4.7	.062	2.1	1.476	37.5	1148	1708
NRTP-718J	7	18	.206	5.2	.085	2.1	.746	18.95	303	451
NRTP-1218J	12	18	.206	5.2	.085	2.1	1.031	26.2	533	793
NRTP-1918J	19	18	.206	5.2	.085	2.1	1.204	30.6	785	1168
NRTP-2718J	27	18	.206	5.2	.085	2.1	1.443	36.7	1079	1606
NRTP-716J	7	16	.226	5.7	.062	1.6	.806	20.47	348	518
NRTP-1216J	12	16	.226	5.7	.085	2.1	1.114	28.3	613	912
NRTP-1916J	19	16	.226	5.7	.085	2.1	1.304	33.1	906	1348

NRTP SERIES OVERALL SHIELD - 26, 24, 22, 20, 18 and 16 AWG										
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
NRTP-726SJ	7	26	.146	3.7	.062	1.6	.591	15.01	195	290
NRTP-1226SJ	12	26	.146	3.7	.062	1.6	.761	19.33	296	440
NRTP-1926SJ	19	26	.146	3.7	.062	2.1	.929	23.6	452	673
NRTP-2726SJ	27	26	.146	3.7	.062	2.1	1.099	27.9	599	891
NRTP-3726SJ	37	26	.146	3.7	.062	2.1	1.221	31.0	762	1134
NRTP-4826SJ	48	26	.146	3.7	.062	2.1	1.382	35.1	946	1408
NRTP-724SJ	7	24	.156	3.9	.062	1.6	.621	15.77	223	332
NRTP-1224SJ	12	24	.156	3.9	.062	1.6	.802	20.37	343	510
NRTP-1924SJ	19	24	.156	3.9	.085	2.1	.979	24.9	526	783
NRTP-2724SJ	27	24	.156	3.9	.085	2.1	1.160	29.5	702	1045
NRTP-3724SJ	37	24	.156	3.9	.085	2.1	1.291	32.8	899	1338
NRTP-4824SJ	48	24	.156	3.9	.085	2.1	1.463	37.1	1122	1670
NRTP-722SJ	7	22	.168	4.2	.062	1.6	.657	16.69	256	381
NRTP-1222SJ	12	22	.168	4.2	.062	1.6	.898	22.8	433	644
NRTP-1922SJ	19	22	.168	4.2	.062	1.6	1.039	26.4	608	905
NRTP-2722SJ	27	22	.168	4.2	.062	1.6	1.234	31.3	817	1216
NRTP-3722SJ	37	22	.168	4.2	.062	1.6	1.375	34.9	1051	1564
NRTP-4822SJ	48	22	.168	4.2	.062	1.6	1.560	39.5	1317	1959
NRTP-720SJ	7	20	.186	4.7	.062	1.6	.711	18.06	303	451
NRTP-1220SJ	12	20	.186	4.7	.085	2.1	.973	24.7	514	765
NRTP-1920SJ	19	20	.186	4.7	.085	2.1	1.129	28.7	729	1085
NRTP-2720SJ	27	20	.186	4.7	.085	2.1	1.345	34.2	984	1464
NRTP-3720SJ	37	20	.186	4.7	.085	2.1	1.501	38.1	1274	1896
NRTP-718SJ	7	18	.206	5.2	.062	1.6	.771	19.58	365	543
NRTP-1218SJ	12	18	.206	5.2	.062	2.1	1.056	26.8	619	921
NRTP-1918SJ	19	18	.206	5.2	.062	2.1	1.229	31.2	887	1320
NRTP-2718SJ	27	18	.206	5.2	.062	2.1	1.468	37.3	1204	1792
NRTP-716SJ	7	16	.226	5.7	.085	2.1	.877	22.28	453	674
NRTP-1216SJ	12	16	.226	5.7	.085	2.1	1.139	28.9	707	1052
NRTP-1916SJ	19	16	.226	5.7	.085	2.1	1.329	33.8	1018	1515