

NXT99

600V Multi Core Screened & Sheathed High Performance Cables

			
Oil & Fuel Resistant	Low Smoke & Gas Generation	Chemical & Fluid Resistance	Braid Screen Protected

NXT99 cables offer a high quality interconnect designed for demanding applications which require a screened and sheathed multicore DEF STAN 61-12 Part 18 solution designed generally in accordance with DEF STAN 61-12 Part 25* where low smoke and toxicity are critical, such as those found in the military, aerospace, marine, and industrial sectors.

Featuring dual-layer polymer insulation and electron beam crosslinked sheathing in accordance with DEF STAN 61-12 Part 31, NXT99 cables provide excellent durability whilst retaining flexibility, EMC protection and resistance to chemicals, fuels and carbon arc tracking.

Construction

Conductor	Stranded Tinned Annealed Copper
Insulation	Extruded Dual Layer Polymer
Lay Up	Multiple Cores Laid Up with Non-Hydroscopic LSZH (Low Smoke Zero Halogen) Fillers where Required
Tape	Polyester Binding & Separation Tape
Braid	Tinned Annealed Copper Wire Braid Screen (≥80% Optical Coverage)
Tape	Polyester Binding & Separation Tape
Sheath	Extruded IRLX-LSZH (Irradiation Crosslinked Low Smoke Zero Halogen)

Electrical Properties

Voltage Rating	600	V RMS
	800	V DC
Max Conductor Resistance (@20°C)	See Table 1	Ω/km

Nominal Dimensions

Conductor Cross Sectional Area	See Table 1	mm ²
Conductor Gauge	See Table 1	AWG
Diameter over Insulation	See Table 1	mm
Outer Sheath Diameter	See Table 1	mm

Physical Properties

Operating Temperature Range	-30 to +105	°C
Service Life >40,000 Hrs Continuous	+85	°C
Minimum Bend Radius (Dynamic)	10	x Ø
Minimum Bend Radius (Static)	4	x Ø

Standards & Approvals

Cores	DEF STAN 61-12 Part 18 (Type 1)
Sheath	DEF STAN 61-12 Part 31
Design	Generally to DEF STAN 61-12 Part 25

Table 1

Part Codes, Nominal Dimensions and Resistance

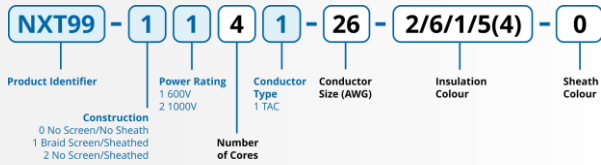
Part Codes NXT99 (X = Table 2)	Configuration No. of Cores	Conductor			Insulation		Outer Sheath Nominal Ø (mm)	Conductor Resistance Maximum (Ω/km @20°C)
		Gauge (AWG)	CSA (#/mm)	Strands (#/mm)	Minimum Ø (mm)	Maximum Ø (mm)		
NXT99-1121-26-X	2	26	0.15	19/0.10	0.80	0.95	3.09	141.5
NXT99-1131-26-X	3	26	0.15	19/0.10	0.80	0.95	3.23	141.5
NXT99-1141-26-X	4	26	0.15	19/0.10	0.80	0.95	3.46	141.5
NXT99-1121-24-X	2	24	0.20	19/0.12	0.90	1.05	3.29	95.6
NXT99-1131-24-X	3	24	0.20	19/0.12	0.90	1.05	3.45	95.6
NXT99-1141-24-X	4	24	0.20	19/0.12	0.90	1.05	3.70	95.6
NXT99-1121-22-X	2	22	0.35	19/0.15	1.05	1.20	3.59	60.0
NXT99-1131-22-X	3	22	0.35	19/0.15	1.05	1.20	3.77	60.0
NXT99-1141-22-X	4	22	0.35	19/0.15	1.05	1.20	4.06	60.0
NXT99-1121-20-X	2	20	0.60	19/0.20	1.30	1.50	4.14	33.2
NXT99-1131-20-X	3	20	0.60	19/0.20	1.30	1.50	4.36	33.2
NXT99-1141-20-X	4	20	0.60	19/0.20	1.30	1.50	4.73	33.2
NXT99-1121-18-X	2	18	1.00	19/0.25	1.55	1.75	4.64	21.1
NXT99-1131-18-X	3	18	1.00	19/0.25	1.55	1.75	4.90	21.1
NXT99-1141-18-X	4	18	1.00	19/0.25	1.55	1.75	5.33	21.1
NXT99-1121-16-X	2	16	1.50	19/0.30	1.80	2.00	5.14	14.5
NXT99-1131-16-X	3	16	1.50	19/0.30	1.80	2.00	5.44	14.5
NXT99-1141-16-X	4	16	1.50	19/0.30	1.80	2.00	5.94	14.5
NXT99-1121-14-X	2	14	2.00	37/0.25	2.15	2.35	5.84	10.9
NXT99-1131-14-X	3	14	2.00	37/0.25	2.15	2.35	6.20	10.9
NXT99-1141-14-X	4	14	2.00	37/0.25	2.15	2.35	6.79	10.9
NXT99-1121-12-X	2	12	2.50	37/0.30	2.50	2.70	6.54	7.6
NXT99-1131-12-X	3	12	2.50	37/0.30	2.50	2.70	6.96	7.6
NXT99-1141-12-X	4	12	2.50	37/0.30	2.50	2.70	7.63	7.6

Table 2

NXT99 Part Code Modifiers and Colours



11 standard Colours are offered using the following codes within the part number. Other colours are available on special request.



Additional code following the base colour and contained within brackets indicates stripe colour. Example: 5(4) = Green with Yellow Stripe

Colour	Code	Colour	Code	Colour	Code
Black	0	Orange	3	Violet	7
Brown	1	Yellow	4	Grey	8
Red	2	Green	5	White	9
Pink	2L	Blue	6	Special Instruction	SP

Examples

NXT99-1131-20-2/6/9-0
20 AWG 3 Core
Red, Blue, White Cores with Black Sheath

NXT99-1151-26-2/6/1/5(4)-0
26 AWG 5 Core
Red, Blue, Brown, Green/Yellow Cores with Black Sheath

NXT99-1181-24-SP-9
24 AWG 8 Core
Special Instruction Core Colour Configuration with White Sheath

Note

“SP” can be used in place of a colour code to indicate that a more complex instruction such as unique colours are specified separately.

*General Accordance

‘Generally in Accordance with’ or ‘Generally to’ describes a cable or element that is designed in line with an existing standard / specification but may not be approved or may have new variables such as size, number of cores or colour requirements that may be otherwise out of scope. It is the customer’s responsibility to ascertain which standards are or are not strictly required, including suitability for any specified application. Amokabel group accepts no liability in this regard.