



## NXT99

### 600V Single Core Unscreened DEF-STAN 61-12 Part 18



NXT99 cables offer a high quality, versatile interconnect solution for demanding applications requiring DEF-STAN 61-12 Part 18 approved parts where low smoke and toxicity are critical, such as those found in the military, aerospace, marine, and industrial sectors.

Featuring dual-layer electron beam crosslinked polymer insulation, NXT99 cables provide excellent durability whilst retaining flexibility, minimal diameters, reduced weight, and resistance to chemicals, fuels and carbon arc tracking.

### Construction

Conductor	Stranded Tinned Annealed Copper
Insulation Layer 1	Flame Retardant Crosslinked Polymer
Insulation Layer 2	Flame Retardant Crosslinked Polymer

### 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 <sup>2</sup>
Conductor Gauge	See Table 1	AWG
Diameter over Insulation	See Table 1	mm

### Physical Properties

Operating Temperature Range	-50 to +120	°C
Minimum Bend Radius (Dynamic)	10	x Ø
Minimum Bend Radius (Static)	4	x Ø

### Standards & Approvals

Design Standard	DEF-STAN 61-12 Part 18
Flame Test	DEF-STAN 61-12 Part 18 Clause 10.1.1

**Table 1**

Part Codes, Nominal Dimensions, Resistance & Weight

Part Codes		Conductor			Insulation		Conductor Resistance	Weight
NXT99 (X = Table 2)	NATO (X = Table 3)	Gauge (AWG)	CSA (#/mm)	Strands (#/mm)	Minimum Ø (mm)	Maximum Ø (mm)	Maximum (Ω/km @20°C)	Nominal (kg/100m)
N/A	6145-99-891-X	30	0.05	1/0.25	0.55	0.70	383.5	0.092
N/A	6145-99-891-X	26	0.12	1/0.40	0.70	0.85	145.6	0.200
N/A	6145-99-891-X	23	0.28	1/0.60	0.90	1.05	64.0	0.395
N/A	6145-99-891-X	19	0.63	1/0.90	1.20	1.35	28.5	0.790
NXT99-0111-30-X	6145-99-891-X	30	0.055	7/0.10	0.60	0.75	336.0	0.110
NXT99-0111-28-X	6145-99-891-X	28	0.079	7/0.12	0.65	0.80	259.0	0.150
NXT99-0111-26-X	6145-99-891-X	26	0.15	19/0.10	0.80	0.95	141.5	0.290
NXT99-0111-24-X	6145-99-891-X	24	0.2	19/0.12	0.90	1.05	95.6	0.345
NXT99-0111-22-X	6145-99-891-X	22	0.35	19/0.15	1.05	1.20	60.0	0.490
NXT99-0111-20-X	6145-99-891-X	20	0.6	19/0.20	1.30	1.50	33.2	0.756
NXT99-0111-18-X	6145-99-891-X	18	1.0	19/0.25	1.55	1.75	21.1	1.04
NXT99-0111-16-X	6145-99-891-X	16	1.5	19/0.30	1.80	2.00	14.5	1.65
NXT99-0111-14-X	6145-99-891-X	14	2.0	37/0.25	2.15	2.35	10.9	2.07
NXT99-0111-12-X	6145-99-891-X	12	2.5	37/0.30	2.50	2.70	7.6	2.71

**Table 2**

NXT99 Part Code Modifiers and Colours



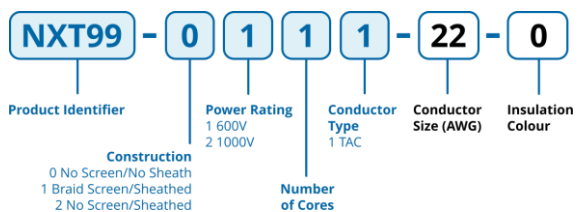
11 standard Colours are offered using the following codes within the part number. Other colours are available on special request.

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		



Additional code following the base colour and separated by / indicates stripe colour. (Example : 5/4 = Green with Yellow Stripe)













NXT99 Single Core Unscreened 600V DEF-STAN 61-12 Part 18 Cables follow the below fixed coding with Conductor Size and Insulation Colour modifiers.



**Examples**

- NXT99-0111-26-8 26 AWG (19/0.10mm) Grey
- NXT99-0111-16-2L 16 AWG (19/0.30mm) Pink
- NXT99-0111-24-5/4 24 AWG (19/0.12mm) Green / Yellow Stripe

**Table 3**  
NATO Part Code Modifiers, Sizes and Colours

Conductor Size		Colour & Code											
Gauge (AWG)	Strands (#/mm)	 Red	 Blue	 Green	 Yellow	 Black	 White	 Brown	 Violet	 Orange	 Grey	 Pink	 Gn/Yw
30	1/0.25	9431	9432	9433	9434	9435	9436	9437	9438	9439	9440	9441	9442
26	1/0.40	9443	9444	9445	9446	9447	9448	9449	9450	9451	9452	9453	9454
23	1/0.60	9455	9456	9457	9458	9459	9460	9461	9462	9463	9464	9465	9466
19	1/0.90	9467	9468	9469	9470	9471	9472	9473	9474	9475	9476	9477	9478
30	7/0.10	9479	9480	9481	9482	9483	9484	9485	9486	9487	9488	9489	9490
28	7/0.12	9491	9492	9493	9494	9495	9496	9497	9498	9499	9500	9501	9502
26	19/0.10	9503	9504	9505	9506	9507	9508	9509	9510	9511	9512	9513	9514
24	19/0.12	9515	9516	9517	9518	9519	9520	9521	9522	9523	9524	9525	9526
22	19/0.15	9527	9528	9529	9530	9531	9532	9533	9534	9535	9536	9537	9538
20	19/0.20	9539	9540	9541	9542	9543	9544	9545	9546	9547	9548	9549	9550
18	19/0.25	9551	9552	9553	9554	9555	9556	9557	9558	9559	9560	9561	9562
16	19/0.30	9563	9564	9565	9566	9567	9568	9569	9570	9571	9572	9573	9574
14	37/0.25	9575	9576	9577	9578	9579	9580	9581	9582	9583	9584	9585	9586
12	37/0.30	9587	9588	9589	9590	9591	9592	9593	9594	9595	9596	9597	9598

NATO Single Core Unscreened 600V DEF-STAN 61-12 Part 18  
Cables follow the below fixed coding with the Conductor Size and Insulation Colour contained together in a single block.



- Examples**
- 6145-99-891-9443    26 AWG (1/0.40mm) Red
  - 6145-99-891-9503    26 AWG (19/0.10mm) Red
  - 6145-99-891-9526    24 AWG (19/0.12) Green / Yellow Stripe