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There's no match for Alsecure® NX600 Enhanced SWA Fire Resistant Cable





Nexans Alsecure[®] NX600 is a fire resistant armoured power cable that meets BS7846-F120 requirements to maintain circuit integrity in the event of a fire. It is designed for use in large, multi-storey and complex buildings such as stadia, airports, hospitals, universities, hi-rise offices and residential and public buildings.

Alsecure® NX600 is approved for 30, 60 and 120 minute applications as described in BS8519 and is designed for use with fire safety engineering systems in buildings such as fire-fighting and evacuation lifts, sprinkler systems, wet riser pumps and other systems which help to ensure the safest evacuation and assist in the fire fighting stages of a fire.

The cables are designed to meet the requirements of the demanding BS8491 fire test which simulates both direct impact and also the effects of a high pressure water hose along with a continuous flame.

The NX600 is a halogen free, mica and XLPE insulated, LSF bedded, steel wire armoured and LSF sheathed cable with annealed copper conductors. For sizes up to and including 35mm² the conductors are circular. 50mm²-300mm² have sector shaped conductors. The armour is a single layer of galvanized steel wires. The cores are identified by colours and are laid up in a right hand direction and covered with an extruded layer of polymeric compound.

Current Ratings

The current ratings are detailed in BS 7671:2008 (2011) tables 4E4A and 4E4B.

Quality System

Designed, manufactured and tested in accordance with ISO 9001.

Standards

BS 8491 120 min
BS EN 50266-2-4, IEC 60332-3-24
BS EN 61034
BS 7846
Certified by BASEC and LPCB

Characteristics

Construction Characteristics	
Conductor material	Copper
Conductor Flexibility	Standard Class 2
Insulation	XLPE + Mica tape
Outer Sheath	LSF
Colour	Black
Inner Sheath	Halogen Free Compound
Electrical Characteristics	
Rated Voltage Uo/U (Um)	0.6/1kV
Usage Characteristics	
Minimum installation temperature	0°C
Maximum operating temperature	90°C
Short-circuit max. Conductor temperature	250°C
Fire Resistant	BS 8491-120 min
Flame Retardant	IEC 60332-3 Cat.C



Conductor Flexibility Standard Class 2



Rated Voltage Uo/U (Um) 0.6/1kv



Minimum Installation Temperature 0°C



Maximum
Operating
Temperature
90°C



Fire Resistant BS 8491-120



Flame Retardant IEC 60332-3

NX600 Technical Details

3 Core									
Cross Section	Approx Insulation thickness mm	Nominal Armour Wire diameter	Approx Sheath Thickness mm	Approx overall diameter mm	Approx Cable weight (kg/ km)	Maximum Conductor Resistance @ 20°C	Minimum Bend Radius		
4	0.7	1.25	1.4	20.0	520	4.61	6D		
6	0.7	1.25	1.4	20.0	600	3.08	6D		
10	0.7	1.25	1.5	20.0	910	1.83	6D		
16	0.7	1.25	1.6	22.0	1150	1.15	6D		
25	0.9	1.6	1.7	26.0	1650	0.727	6D		
35	0.9	1.6	1.8	28.0	1850	0.524	6D		
50	1.0	1.6	1.8	31.0	2500	0.387	8D		
70	1.1	1.6	1.9	34.0	3100	0.268	8D		
95	1.1	2	2.1	39.0	4450	0.193	8D		
120	1.2	2	2.2	42.0	5250	0.153	8D		
150	1.4	2.5	2.3	47.0	6650	0.124	8D		
185	1.6	2.5	2.4	51.0	8050	0.0991	8D		
240	1.7	2.5	2.6	56.5	10050	0.0754	8D		
300	1.8	2.5	2.7	62.0	12150	0.0601	8D		

4 Core									
Cross Section	Approx Insulation thickness mm	Nominal Armour Wire diameter	Approx Sheath Thickness mm	Approx overall diameter mm	Approx Cable weight (kg/ km)	Maximum Conductor Resistance @ 20°C	Minimum Bend Radius		
4	0.7	1.25	1.4	20.0	610	4.61	6D		
6	0.7	1.25	1.5	20.1	890	3.08	6D		
10	0.7	1.25	1.5	23.5	1020	1.83	6D		
16	0.7	1.25	1.6	24.5	1300	1.15	6D		
25	0.9	1.6	1.7	28.0	1900	0.727	6D		
35	0.9	1.6	1.8	31.0	2430	0.524	6D		
50	1.0	1.6	1.9	33.5	3100	0.387	8D		
70	1.1	1.6	2.1	40.0	4400	0.268	8D		
95	1.1	2	2.2	44.5	5600	0.193	8D		
120	1.2	2	2.3	48.0	7100	0.153	8D		
150	1.4	2.5	2.4	57.5	8600	0.124	8D		
185	1.6	2.5	2.6	60.0	10200	0.0991	8D		
240	1.7	2.5	2.7	63.5	12800	0.0754	8D		
300	1.8	2.5	2.9	69.5	15500	0.0601	8D		



Approvals

The external surface on the outer sheath is embossed "NEXANS GS BASEC ELECTRIC CABLE BS 7846 F120 600/1000V LPCB ALSECURE NX 600 NUMBER OF CORES X NOMINAL AREA OF THE CONDUCTOR YEAR OF MANUFACTURE" + meter marking. The cable is certified by BASEC and LPCB.





Cables you can trust







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Nexans is a founder member of Voltimum and strong supporter of UK industry associations.



Nexans App

Cable information at your fingertips. Nexans offers a comprehensive range of innovative cable solution to ensure the safety and environmental friendliness of today's buildings.









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