Earthing & Bonding wire

O-Route®
NEK-606, IEC 60092-350, 353, 354, 376

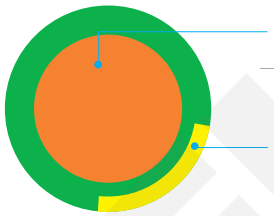
Cable Designation (P108)

0.6/1kV UX, FX - UX

Application Standard

- Design guide : NEK-606 & IEC 60092-353
- Flame retardant : IEC 60332-1 & IEC 60332-3 Category A
- Halogen content : IEC 60754-1, 0.5%↓
- Cold bend / impact : CSA C22.2 No. 2556 or IEC 60092-350 Annex.E Method 1 (-40℃/-35℃)
- Mud / Oil resistant : NEK 606 (Category a,b,c,d)
- Smoke light transmittance : IEC 61034, 60%↑
- Sunlight (UV) resistant : UL 1581

Construction

Sectional view	Classification	Code	Construction detail
	Conductor		Stranded tinned annealed copper wires as per IEC 60228, Class 2
	Insulation	UX	- SHF2 as per IEC 60092-360 - **Option** : NEK 606 Category a,b,c,d Mud or oil resistant
		-	Insulation color : Yellow/Green (Green base with yellow strip) or Green

0.6/1kV UX (CLASS 2 CONDUCTOR)

No. of Cores	Conductor			Thickness of Sheath	Overall diameter		Conductor Resistance (at 20℃) (Max.)	Test Voltage	Cable Weight
	Nominal Area	Min. No. of wires	Max. overall dia.		Nominal	Toler-ance			
No.	mm²	EA	mm	mm	mm	±mm	Ω/km	V/5min.	kg/km
1	1.0	7	1.4	1.0	3.5	0.4	18.2	3,500	26
	1.5	7	1.7	1.0	3.8	0.5	12.2	3,500	33
	2.5	7	2.2	1.0	4.2	0.5	7.56	3,500	43
	4	7	2.7	1.0	4.7	0.5	4.70	3,500	59
	6	7	3.3	1.0	5.3	0.5	3.11	3,500	81
	10	7	4.2	1.0	6.2	0.5	1.84	3,500	120
	16	7	5.3	1.0	7.2	0.6	1.16	3,500	180
	25	7	6.6	1.2	8.9	0.7	0.734	3,500	280
	35	7	7.9	1.2	10.0	0.7	0.529	3,500	380
	50	19	9.1	1.4	11.8	0.8	0.391	3,500	510
	70	19	11.0	1.6	13.9	0.9	0.270	3,500	730
	95	19	12.9	1.6	15.8	0.9	0.195	3,500	980
	120	37	14.5	1.6	17.3	1.0	0.154	3,500	1,210
	150	37	16.2	1.8	19.2	1.1	0.126	3,500	1,480
	185	37	18.0	2.0	21.5	1.2	0.100	3,500	1,860
	240	61	20.6	2.2	24.5	1.3	0.0762	3,500	2,440
	300	61	23.1	2.4	27.2	1.4	0.0607	3,500	3,030

Earthing & Bonding wire

0.6/1kV FX-UX (CLASS 5 CONDUCTOR)

No. of Cores	Conductor			Thickness of Sheath	Overall diameter		Conductor Resistance (at 20) (Max.)	Test Voltage	Cable Weight
	Nominal Area	Min. No. of wires	Max. overall dia.		Nominal	Toler-ance			
No.	mm^2	EA	mm	mm	mm	±mm	Ω/km	V/5min.	kg/km
	1.0	0.21	1.5	1.0	3.5	0.4	20.0	3,500	26
	1.5	0.26	1.8	1.0	3.8	0.5	13.7	3,500	32
	2.5	0.26	2.4	1.0	4.3	0.5	8.21	3,500	44
	4	0.31	3.0	1.0	4.8	0.5	5.09	3,500	60
	6	0.31	3.9	1.0	5.4	0.5	3.39	3,500	81
	10	0.41	5.1	1.0	6.3	0.6	1.95	3,500	120
	16	0.41	6.3	1.0	7.8	0.6	1.24	3,500	180
	25	0.41	7.8	1.2	9.7	0.7	0.795	3,500	270
1	35	0.41	9.2	1.2	10.9	0.7	0.565	3,500	370
	50	0.41	11.0	1.4	12.9	0.8	0.393	3,500	530
	70	0.51	13.1	1.6	15.2	0.9	0.277	3,500	750
	95	0.51	15.1	1.6	16.9	1.0	0.210	3,500	960
	120	0.51	17.0	1.6	18.7	1.0	0.164	3,500	1,210
	150	0.51	19.0	1.8	20.9	1.1	0.132	3,500	1,510
	185	0.51	21.0	2.0	22.8	1.2	0.108	3,500	1,840
	240	0.51	24.0	2.2	25.9	1.3	0.0817	3,500	2,410
	300	0.51	27.0	2.4	28.9	1.5	0.0654	3,500	3,040