



## INNOVCABLE Instrumentation and Communication 150/250(300)V BU(i&c) – SHF2 Resistance – IEC 60331



- 1) Conductor formed by tinned electrolytic copper wires, soft temper, class 5 stranding, in accordance with IEC 60228. \*1
- 2) Application of Mica ceramics and insulation of conductors in special halogen-free compound LSOH – IEC 60331 (Code B)
- 3) Twisted conductors forming Pairs, Triples or Quads.
- 4) Individual shielding in aluminized polyester tape + drain wire (Code (i))
- 5) Pairs or Trios brought together and identified by sequential numbers, non-hygroscopic flame retardant filaments can be used in the construction of the conductor and tapes can be applied to the conductors.
- 6) Collective shielding in aluminized polyester tape + drain wire (Code (c))
- 7) Final covering in halogen-free polyolefin compound LSOH (SHF2). (U Code)
- 8) Outer cover in gray (Not Intrinsically Safe) or Blue (Intrinsically Safe – IS)

### Identification

Conductors in the colors:

Pair: Black - Light Blue

Trio: Black - Light Blue - Brown

Quad: Black - Light Blue - Brown - Gray

Identification on outer jacket (example): "year" INNOVCABLE 01 BU(i&c) 250V 4 PAIR 0.75 mm<sup>2</sup>  
FLEX - FLAME IEC 60092-376 IEC 60331-1 or IEC 60331-2 IEC 60331-21 IEC 60332-3-22

### Applicable Specifications

Design: NEK TS 606 and IEC 60092-376

Conductor: IEC 60228 class 2 or 5

Insulation: IEC 60092-360

Coverage: IEC 60092-360

Flame Resistant: IEC 60331-1, -2, -21



Flame Retardant: IEC 60332-1-2 and IEC 60332-3-22

Halogen content: IEC 60754-1.2 0.5%.

Luminosity transmission in smoke: IEC 61034-1.2, 60% > 60

Bending Cold / impact : CSA 22.2 No.0.3-01 (-40°C/-35°C) and IEC 60092-352 Annex E  
NEK-606

#### Applications

Instrumentation, communication, control and alarm cable, for fixed installations in Ex areas (Zone 2) and areas of security, emergency and critical systems where fire resistance is required IEC 60331. Meets the resistance requirement NEK TS 606: 2009 .

Maximum Conductor Temperature  
90°C

#### Notes

1) Tinned copper conductor can be manufactured in class 2.

2) Operating voltage: 150/250(300)V

\*\*Innovcable reserves the right to change this catalog without prior notice.



## Códigos (NOMENCLATURAS)

Materiais (Nomenclaturas)	Isolamento	Capa Intermediária	Armação / Blindagem	Capa Externa
Fire Resistant (IEC 60331) Mica + Isolamento (LSZH) - Livre de Halogênio	B			
EPR / Especial HEPR	R			
XLPE	T			
Composto Termoplástico (Livre de Halogênio)	I			
Composto Elastomérico Livre de Halogênio ou EVA	U			
Capa Intermediária LSZH (Livre de Halogênio)		F		
Anteparo (Enfitamento PE or PP)		Y		
Não armado			X	
Malha de fios cobre nu ou estanhada			O	
Malha de fios de bronze			B	
Malha de fios de aço galvanizado			C	
Composto (Livre de Halogênio) SHF1		I		I
Composto (Livre de Halogênio) SHF2				U
Composto SHF Resistente a "Mud" - Livre de halogênio				U
Composto Resistente a "Mud" - Livre de halogênio				B

### Nomenclatura acional

(i)	Blindagem fita de poliéster aluminizada individual
(c)	Blindagem fita de poliéster coletiva
(i & c)	Blindagem fita de poliéster aluminizada individual e coletiva



### Código cabos tipo NEK 606

Nomenclatura	Código H-F	Código H-F-M-R
0.6/1kV RFOU	P1	P1/P8
0.6/1kV BFOU	P5	P5/P12
0.6/1kV RU	P18	-
0.6/1kV BU	P17	-
0.6/1kV UX	P15	P2/P9
250V RFOU(i)	S1	S1/S5
250V RFOU(c)	S2	S2/S6
250V BFOU(i)	S3	S3/S7
250V BFOU(c)	S4	S4/S8

#### Nota:

H-F - Cabos Livres de Halogênio

H-F-M-R - Cabos Livre de Halogênio e "Mud" Resistente

### Exemplo:



- 1 Voltagem
- 2 Camada "Fire Resisting" + isolamento (EPR)
- 3 Capa intermediária LSZH
- 4 Armação (Cobre)
- 5 Capa Externa (SHF2 ou SHF "mud")



## Range and dimensions

Number of elements	No of cores in element	Cross section core, mm²	Conductor Diameter, mm	Insulation Thickness, mm	Thickness Outer Sheath, mm	Weight of Cable Approx. (Kg/Km)	Copper content Approx. (kg/km)
1	2	0.75	1.1	0.6	1	95	17
1	2	0.75	1.1	0.6	1	95	17
2	2	0.75	1.1	0.6	1.2	165	34
2	2	0.75	1.1	0.6	1.2	165	34
4	2	0.75	1.1	0.6	1.2	260	67
8	2	0.75	1.1	0.6	1.4	490	133
12	2	0.75	1.1	0.6	1.6	700	199
12	2	0.75	1.1	0.6	1.6	700	199
16	2	0.75	1.1	0.6	1.7	900	265
24	2	0.75	1.1	0.6	1.9	1300	397
1	3	0.75	1.1	0.6	1	105	23
2	3	0.75	1.1	0.6	1.2	200	46
4	3	0.75	1.1	0.6	1.3	340	92
8	3	0.75	1.1	0.6	1.5	640	184
12	3	0.75	1.1	0.6	1.7	900	276
16	3	0.75	1.1	0.6	1.8	1170	368
24	3	0.75	1.1	0.6	2	1690	552
1	2	1.5	1.6	0.7	1	130	34
1	2	1.5	1.6	0.7	1	130	34
2	2	1.5	1.6	0.7	1.3	250	68
2	2	1.5	1.6	0.7	1.3	250	68
4	2	1.5	1.6	0.7	1.4	420	136
4	2	1.5	1.6	0.7	1.4	420	136
8	2	1.5	1.6	0.7	1.6	770	271
8	2	1.5	1.6	0.7	1.6	770	271
12	2	1.5	1.6	0.7	1.7	1100	406
12	2	1.5	1.6	0.7	1.7	1100	406
16	2	1.5	1.6	0.7	1.9	1440	541
24	2	1.5	1.6	0.7	2.2	2120	812
24	2	1.5	1.6	0.7	2.2	2120	812
1	3	1.5	1.6	0.7	1.1	165	48
1	3	1.5	1.6	0.7	1.1	165	48
2	3	1.5	1.6	0.7	1.3	310	96
4	3	1.5	1.6	0.7	1.4	530	192
8	3	1.5	1.6	0.7	1.7	1020	384
12	3	1.5	1.6	0.7	1.9	1470	575
16	3	1.5	1.6	0.7	2	1910	767
24	3	1.5	1.6	0.7	2.4	2860	1150
1	2	2.5	2	0.7	1.1	170	55