

INNOVCABLE Instrumentation and Communication 150/250(300)V BFOU(i), BFBU(i), BFCU(i) – S3 and S3/S7 – 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) Inner cover in halogen-free polyolefin compound LSOH (Code F)















- 7) Frame: \*2
- Mesh of tinned copper wires (Code 0)
- Bronze wire mesh (Code B)
- Galvanized steel wire mesh (Code C)
- 8) Final covering in halogen-free polyolefin compound LSOH (SHF2). (U Code)
- 9) External 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 BFOU(c) 250V S4/S8 4 PAIR 0.75 mm2 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 0,1 and 2) and areas of security, emergency and critical systems where fire resistance is required IEC 60331. Meets NEK resistance requirement TS 606: 2009.

Maximum Conductor Temperature

90°C















#### Notes

- 1) Tinned Copper Conductor can be manufactured in class 2.
- 2) Separating tape may be applied before/after the frame.
- 3) Operating voltage: 150/250(300)V
- \*\*Innovcable reserves the right to change this catalog without prior notice.















# Códigos (NOMENCLATURAS)

Materiais (Nomenclaturas)	Isolamento	Capa Intermediaria	Armação / Blindagem	Capa Externa
Fire Resistant (IEC 60331) Mica + Isolamento (LSZH) - Livre de Halogênio	В			
EPR / Especial HEPR	R			
XLPE	Т			
Composto Termoplástico (Livre de Halogênio)	1			
Composto Elastomérico Livre de Halogênio ou EVA	U			
Capa Intermediaria LSZH (Livre de Halogênio)		F		
Anteparo (Enfitamento PE or PP)		Y		
Não armado			X	
Malha de fios cobre nu ou estanhada			0	
Malha de fios de bronze			В	
Malha de fios de aço galvanizado			С	
Composto (Livre de Halogênio) SHF1		1		1
Composto (Livre de Halogênio) SHF2				U
Composto SHF Resistente a "Mud" - Livre de halogênio				U
Composto Resistente a "Mud" - Livre de halogênio				В

### 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	\$1/\$5	
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



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















#### CABLE TYPE: 250V BFOU(i), 250V BFBU(i), 250V BFCU(i)

No. of	Conductor			Thickness	Cable	Conductor	Insulation
Pairs I	Nominal Area	Strand	Dia. (ca.)	of Insulation	Weight.	Resistance [at 20°C) [Max.]	Resistance lat 20°Cl [Min.]
	SGMM	No Zee	-		Approx. kg/km	s2/km	M. Q/km
1000	DOMM	No./mm	mm	mm		36'8(1)	Dr. PRINCE
1P		7/027	7/0.37 1.11	0.6	260	24.8	1,170
2P				0.6	420		
3P				0.6	480 540		
4P				0.6	7000000		
7P				0.6	760 830		
8P 1P	0.75			0.6	990		
12P	0.75	77037		0.6	1,100		
IAP				0.6	1,200		
16P				0.6	1,350		
19P		l 1		0.6	1,500		
24P		T I		0.6	1,970		
32P				0.6	2,460	1	
1P		$\overline{}$		0.6	280		
2P				0.6	460		
3P		1 1		0.6	530		
4P				0.6	610		
7P		1 1		0.6	850		
8P				0.6	950		
IOP	1.0	1.0 7/0.43	1,29	0.6	1,120	18.2	1,050
12P	1.00			0.6	1,250		
14P				0.6	1,370		
16P				0.6	1,540		
19P				0.6	1,770		
24P				0.6	2,260		
32P				0.6	2,820		
1P		0.7 320					
2P				0.7	540		
3P			0.7	630			
4P				0.7	740		
7P		1 1		0.7	1,040		
8P				0.7	1,160		
10P	1.5	7/0.53	1.59	0.7	1,380	12.2	1,010
12P				0.7	1,540		
14P				0.7	1,760		
16P				0.7	2,060		
19P				0.7	2,330		
24P				0.7	2,820		
32P				0.7	3,640		
1P				0.7	370	7.56	840
2P				0.7	620		
3P		2.5 7/0.67	0.67 2.01	0.7	750		
4P				0.7	870		
7P				0.7	1,280		
8P				0.7	1,420		
10P	2.5			0.7	1,750		
12P	1000			0.7	1,980		
14P		[* ]		0.7	2,290		
16P				0.7	2,560		
19P				0.7	2,910		
24P				0.7	3,620		
32P				0.7	4,590		















#### CABLE TYPE: 250V BFOU(i), 250V BFBU(i), 250V BFCU(i)

No. of	Conductor		Thickness	Cable	Conductor	Insulation	
Triads	Nominal Dia		Dia.	of	Weight	Resistance	Resistance
100000	Area	Strand	(ca.)	Insulation	Approx.	(at 20°C) (Max.)	lat 20°C) (Min.
No.	SGMM	No./mm	mm	mm	kg/km	.Q/km	M Q/km
1T				0.6	290		
2T				0.6	480	10	
3T		1 1		0.6	570		
4T	0.75	0.75 7/0.37		0.6	660	24.8	1,170
7T			len line	0.6	960		
18			1.11	0.6	1,060		
OT				0.6	1,270		
2T				6.0	1,420		
4T				0.6	1,620		
6T				0.6	1,890		
9T				0.6	2,150		
24T				0.6	2,560		
ZT				0.6	3,310		
1T				0.6	310		1,050
2T				0.6	530		
3T		1 1		0.6	620		
4T				0.6	740		
71		1 1		0.6	1,070		
8T				0.6	1,190	***	
OT	1.0	7/0.43	3 1.29	0.6	1,430	18.2	
2T		0.6 1,670 0.6 1,850 0.6 2,160 0.6 2,460 0.6 3,000		6.000			
4T							
6T					The second second second		
19T				100000			
24T							
32T				0.6	3,810	-	
1T		0.7 360					
2T 3T			7/0.53 1.59	0.7	630 760	12.2	1,010
4T				0.7	910		
7T				0.7	1,350		
BT BT	1.5 7/0.5	7/0.53		0.7	1,490		
OT	1.5	770.33	1,07	0.7	1,950	12.2	1,010
2T			0.7	2,210			
4T				0.7	2,460		
16T				0.7	2,710		
19T		ľ I		0.7	3,180		
24T				0.7	3,840		
32T				0.7	4,970		
1T				0.7	420		840
2T				0.7	750	7.56	
3T		2.5 7/0.67	7/0.67 2.01	0.7	900		
4T				0.7	1,090		
71				0.7	1,670		
BT TB	2.5			0.7	1,890		
TOT	2.0			0.7	2,400		
2T				0.7	2,740		
14T				0.7	3,060		
16T				0.7	3,480		
19T				0.7	3,990		
24T				0.7	4,920		
32T		1		0.7	6,300		











