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Evolucable Industria de Cabos Especiais
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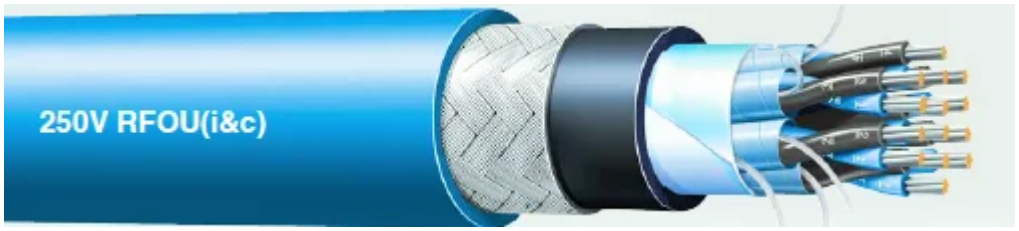
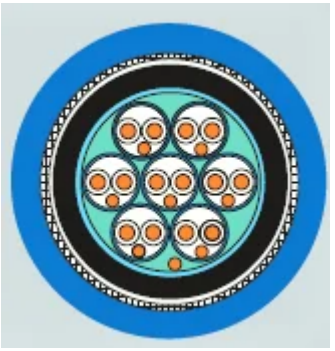
INNOVCABLE Instrumentation and Communication 150/250(300)V RFOU(i&c), RFBU(i&c), RFCU(i&c), TFOU(i&c), TFBU(i&c), TFCU(i&c) – SHF2 Resistance





1) Conductor formed by tinned electrolytic copper wires, soft temper, class 5 stranding, in accordance with IEC 60228. *1

2) Insulation of conductors in special halogen-free compound LSOH – (Code R(HEPR/EPR), T(XLPE)) – in accordance with IEC 60092-351.

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.

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6) Collective shielding in aluminized polyester tape + drain wire (Code (c))

7) Inner cover in halogen-free polyolefin compound LSOH – (Code F)

8) Frame: *2

– Mesh of tinned copper wires (Code 0)

– Bronze wire mesh (Code B)

– Galvanized steel wire mesh (Code C)

9) Final cover in halogen-free polyolefin compound LSOH (SHF2). (U Code)

10) 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

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Identification on outer jacket (example): "Year" Innovcable 01 RFOU(i&c) 250V 4PAIR 0.75mm2 IEC 60092-376 IEC 60332-3-22 ARCTIC GRADE Cold bend (-40 deg. C) / Cold impact (-35deg. C)

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

Halogen content: IEC 60754-1.2 0.5%.

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

NEK-606

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

Applications

Instrumentation, communication, control and alarm cable, for fixed installations in Ex – and safe areas. Individual and collective shielding. Meets NEK TS 606:2009

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resistance requirement. Meets cold/cold curve impact requirement in CSA 22.2 0.3-01 and IEC 60092-350 Clause 8.9 and Annex E at -40°C/-35°C.

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.

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Códigos (NOMENCLATURAS)

Materiais (Nomenclaturas)	Isolamento	Capa Intermediaria	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 Intermediaria 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

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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 intermediaria LSZH
④ Armação (Cobre)
⑤ Capa Externa (SHF2 ou SHF "mud")

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CABLE TYPE : 250V RFOU(i&c), 250V RFBU(i&c), 250V RFCU(i&c)

No. of Pairs	Conductor			Thickness of Insulation	Nominal dia. inner covering	Overall diameter		Cable Weight Approx.	Conductor Resistance (at 20°C) (Max.)	Insulation Resistance (at 20°C)(Min.)
	Nominal Area	Strand	Dia. (ca.)			Nominal	Tolerance			
No.	SQMM	No. / mm	mm	mm	mm	mm	±mm	kg / km	Ω/km	M Ω/km
2P	0.75	7 / 0.37	1.11	0.6	11.0	15.7	0.9	380	24.8	1,170
3P				0.6	11.7	16.4	1.0	430		
4P				0.6	12.5	17.4	1.0	490		
7P				0.6	15.1	20.2	1.1	680		
8P				0.6	16.1	21.2	1.1	740		
10P				0.6	18.1	23.4	1.2	870		
12P				0.6	18.9	24.2	1.3	960		
14P				0.6	19.6	25.1	1.3	1,060		
16P				0.6	21.2	26.7	1.4	1,180		
19P				0.6	22.2	27.9	1.4	1,330		
24P				0.6	25.3	31.2	1.5	1,600		
32P				0.6	29.2	35.3	1.7	2,040		
2P	1.0	7 / 0.43	1.29	0.6	11.7	16.4	1.0	410	18.2	1,050
3P				0.6	12.5	17.4	1.0	490		
4P				0.6	13.3	18.2	1.0	550		
7P				0.6	16.1	21.2	1.1	770		
8P				0.6	17.2	22.5	1.2	850		
10P				0.6	19.4	24.9	1.3	1,010		
12P				0.6	20.2	25.7	1.3	1,120		
14P				0.6	21.0	26.5	1.4	1,230		
16P				0.6	22.7	28.4	1.4	1,370		
19P				0.6	23.8	29.5	1.5	1,540		
24P				0.6	27.5	33.6	1.6	1,920		
32P				0.6	31.3	38.1	1.8	2,500		
2P	1.5	7 / 0.53	1.59	0.7	13.4	18.3	1.0	500	12.2	1,010
3P				0.7	14.3	19.2	1.1	580		
4P				0.7	15.3	20.4	1.1	670		
5P				0.7	17.3	22.6	1.2	800		
6P				0.7	18.6	23.9	1.3	890		
7P				0.7	18.6	23.9	1.3	950		
8P				0.7	19.9	25.4	1.3	1,060		
10P				0.7	22.5	28.2	1.4	1,260		
12P				0.7	23.4	29.1	1.5	1,400		
14P				0.7	24.4	30.3	1.5	1,560		
16P				0.7	26.4	32.3	1.6	1,740		
19 P				0.7	28.1	34.2	1.7	2,010		
24P				0.7	32.0	39.0	1.9	2,560		
32 P				0.7	36.5	43.9	2.1	3,230		
2p	2.5	7 / 0.67	2.01	0.7	14.7	19.8	1.1	590	7.56	840
3p				0.7	15.8	20.9	1.1	700		
4p				0.7	16.9	22.2	1.2	820		
7p				0.7	20.6	26.1	1.3	1,180		
8p				0.7	22.0	27.7	1.4	1,310		
10p				0.7	24.9	30.8	1.5	1,570		
12p				0.7	26.0	31.9	1.6	1,770		
14p				0.7	27.5	33.6	1.6	2,020		
16p				0.7	29.7	36.0	1.7	2,270		
19p				0.7	31.2	38.0	1.8	2,660		
24p				0.7	35.6	42.8	2.0	3,260		
32p				0.7	41.1	48.7	2.2	4,200		

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CABLE TYPE : 250V RFOU(i&c), 250V RFCU(i&c), 250V RFBU(i&c)

No. of Triads	Conductor			Thickness of Insulation	Nominal dia. inner covering	Overall diameter		Cable Weight Approx.	Conductor Resistance (at 20°C) (Max.)	Insulation Resistance (at 20°C) (Min.)
	Nominal Area	Strand	Dia. (ca.)			Nominal	Tolerance			
No.	SQMM	No. / mm	mm	mm	mm	mm	±mm	kg / km	Ω/km	MΩ/km
2P	0.75	7 / 0.37	1.11	0.6	12.0	16.9	1.0	440	24.8	1,170
3P				0.6	12.8	17.7	1.0	510		
4P				0.6	14.0	18.9	1.1	580		
5P				0.6	15.6	20.7	1.1	680		
6P				0.6	17.6	22.9	1.2	800		
7P				0.6	17.6	22.9	1.2	840		
8P				0.6	18.9	24.2	1.3	930		
10P				0.6	21.4	26.9	1.4	1,100		
12P				0.6	22.7	28.4	1.4	1,250		
14P				0.6	23.9	29.4	1.5	1,370		
16P				0.6	25.3	31.2	1.5	1,530		
19P				0.6	27.7	33.8	1.7	1,790		
24P				0.6	30.8	37.6	1.8	2,230		
32P				0.6	35.4	42.6	2.0	2,810		
2T	1.0	7 / 0.43	1.29	0.6	12.7	17.6	1.0	480	18.2	1,050
3T				0.6	13.5	18.4	1.0	560		
4T				0.6	14.9	20.0	1.1	670		
7T				0.6	18.7	24.0	1.3	960		
8T				0.6	20.1	25.6	1.3	1,070		
10T				0.6	22.8	28.5	1.4	1,270		
12T				0.6	24.2	29.9	1.5	1,430		
14T				0.6	25.3	31.2	1.5	1,600		
16T				0.6	26.9	33.0	1.6	1,780		
19T				0.6	29.6	35.9	1.7	2,090		
24T				0.6	32.8	39.8	1.9	2,600		
32T				0.6	38.1	45.5	2.1	3,350		
2T	1.5	7 / 0.53	1.59	0.7	14.6	19.7	1.1	580	12.2	1,010
3T				0.7	15.6	20.7	1.1	690		
4T				0.7	17.2	22.5	1.2	830		
7T				0.7	21.8	27.3	1.4	1,210		
8T				0.7	23.4	29.1	1.5	1,350		
10T				0.7	26.7	32.6	1.6	1,620		
12T				0.7	28.7	34.8	1.7	1,890		
14T				0.7	30.0	36.8	1.8	2,210		
16T				0.7	31.9	38.9	1.9	2,450		
19T				0.7	34.6	41.8	2.0	2,810		
24T				0.7	38.8	46.2	2.1	3,430		
32T				0.7	44.7	52.7	2.4	4,380		
2T	2.5	7 / 0.67	2.01	0.7	16.2	21.3	1.2	690	7.56	840
3T				0.7	17.3	22.6	1.2	850		
4T				0.7	19.2	24.5	1.3	1,020		
7T				0.7	24.3	30.0	1.5	1,530		
8T				0.7	26.1	32.0	1.6	1,710		
10T				0.7	30.2	37.0	1.8	2,220		
12T				0.7	32.0	39.0	1.9	2,530		
14T				0.7	33.5	40.5	1.9	2,810		
16T				0.7	35.7	42.9	2.0	3,130		
19T				0.7	39.1	46.7	2.2	3,690		
24T				0.7	43.4	51.2	2.3	4,450		
32T				0.7	50.4	58.8	2.7	5,770		

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