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Evolucable Industria de Cabos Especiais
Av. Minasa, 25 - Galpão B1 - Condomínio Industrial
Business Park -Sumaré/SP - Cep 13.180-400
Sumaré/SP (Fábrica): +55 19 3090-3350
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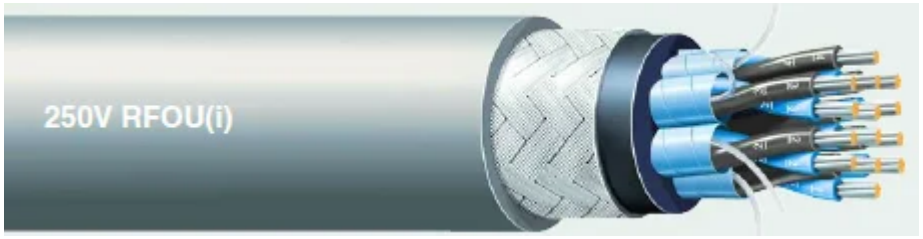
INNOVCABLE Instrumentation and Communication 150/250(300)V RFOU(i), RFBU(i), RFCU(i), TFOU(i), TFBU(i), TFCU(i) – S1 and S1/S5 – SHF2 Resistance



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))

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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

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Identification on outer jacket (example): "Year" Innovcable 01 RFOU(i) 250V S2/S6 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. Meets the resistance requirement in NEK TS 606:2009. Meets the 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.

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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), 250V RFBU(i), 250V RFCU(i)

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	MΩ/km
1P				0.6	7.1	11.6	0.8	230		
2P				0.6	10.8	15.5	0.9	360		
3P				0.6	11.5	16.2	0.9	410		
4P				0.6	12.3	17.2	1.0	480		
7P				0.6	14.9	20.0	1.1	660		
8P	0.75	7/0.37	1.11	0.6	15.9	21.0	1.1	720	24.8	1,170
10P				0.6	17.9	23.2	1.2	850		
12P				0.6	18.7	24.0	1.3	940		
14P				0.6	19.4	24.9	1.3	1,040		
16P				0.6	21.0	26.5	1.4	1,150		
19P				0.6	22.0	27.7	1.4	1,300		
24P				0.6	25.1	31.0	1.5	1,570		
32P				0.6	29.0	35.1	1.7	2,010		
1P				0.6	7.5	12.0	0.8	250		
2P				0.6	11.5	16.2	0.9	390		
3P				0.6	12.3	17.2	1.0	470		
4P				0.6	13.1	18.0	1.0	530		
7P				0.6	15.9	21.0	1.1	740		
8P				0.6	17.0	22.3	1.2	820		
10P	1.0	7/0.43	1.29	0.6	19.2	24.5	1.3	970	18.2	1,050
12P				0.6	20.0	25.5	1.3	1,090		
14P				0.6	20.8	26.3	1.4	1,200		
16P				0.6	22.5	28.2	1.4	1,340		
19P				0.6	23.6	29.3	1.5	1,510		
24P				0.6	26.9	33.0	1.6	1,850		
32P				0.6	31.1	37.9	1.8	2,460		
1P				0.7	8.5	13.0	0.8	290		
2P				0.7	13.2	18.1	1.0	480		
3P				0.7	14.1	19.0	1.1	560		
4P				0.7	15.1	20.2	1.1	650		
7P				0.7	18.4	23.7	1.2	920		
8P	1.5	7/0.53	1.59	0.7	19.7	25.2	1.3	1,030	12.2	1,010
10P				0.7	22.3	28.0	1.4	1,230		
12P				0.7	23.2	28.9	1.5	1,370		
14P				0.7	24.2	29.9	1.5	1,520		
16P				0.7	26.2	32.1	1.6	1,710		
19P				0.7	27.9	34.0	1.7	1,980		
24P				0.7	31.8	38.8	1.9	2,520		
32P				0.7	36.3	43.5	2.0	3,160		
1P				0.7	9.3	13.8	0.9	330		
2P				0.7	14.5	19.6	1.1	560		
3P				0.7	15.6	20.7	1.1	670		
4P				0.7	16.7	21.8	1.2	780		
7P				0.7	20.4	25.9	1.3	1,150		
8P	2.5	7/0.67	2.01	0.7	21.8	27.3	1.4	1,270	7.56	840
10P				0.7	24.7	30.6	1.5	1,540		
12P				0.7	25.8	31.7	1.6	1,730		
14P				0.7	27.3	33.4	1.6	1,990		
16P				0.7	29.5	35.8	1.7	2,230		
19P				0.7	31.0	37.8	1.8	2,620		
24P				0.7	35.4	42.6	2.0	3,210		
32P				0.7	40.9	48.5	2.2	4,150		

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

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	M Ω/km
1T	0.75	7 / 0.37	1.11	0.6	7.5	12.0	0.8	250	24.8	1,170
2T				0.6	11.8	16.5	1.0	410		
3T				0.6	12.6	17.5	1.0	490		
4T				0.6	13.8	18.7	1.0	560		
5T				0.6	15.4	20.5	1.1	660		
6T				0.6	17.4	22.7	1.2	770		
7T				0.6	17.4	22.7	1.2	820		
8T				0.6	18.7	24.0	1.3	900		
10T				0.6	21.2	26.7	1.4	1,080		
12T				0.6	22.5	28.2	1.4	1,220		
14T				0.6	23.5	29.2	1.5	1,340		
16T				0.6	25.1	31.0	1.5	1,500		
19T				0.6	27.5	33.6	1.6	1,760		
24T				0.6	30.6	37.4	1.8	2,200		
32T				0.6	35.2	42.4	2.0	2,770		
1T	1.0	7 / 0.43	1.29	0.6	7.9	12.4	0.8	270	18.2	1,050
2T				0.6	12.5	17.4	1.0	460		
3T				0.6	13.3	18.2	1.0	540		
4T				0.6	14.7	19.8	1.1	640		
7T				0.6	18.5	23.8	1.3	930		
8T				0.6	19.9	25.4	1.3	1,040		
10T				0.6	22.6	28.3	1.4	1,240		
12T				0.6	24.0	29.7	1.5	1,400		
14T				0.6	25.1	31.0	1.5	1,570		
16T				0.6	26.7	32.6	1.6	1,730		
19T				0.6	29.4	35.7	1.7	2,050		
24T				0.6	32.6	39.6	1.9	2,560		
32T				0.6	37.9	45.3	2.1	3,300		
1T	1.5	7 / 0.53	1.59	0.7	9.0	13.5	0.8	320	12.2	1,010
2T				0.7	14.4	19.5	1.1	560		
3T				0.7	15.4	20.5	1.1	670		
4T				0.7	17.0	22.3	1.2	800		
7T				0.7	21.6	27.1	1.4	1,180		
8T				0.7	23.2	28.9	1.5	1,320		
10T				0.7	26.5	32.4	1.6	1,590		
12T				0.7	28.5	34.6	1.7	1,860		
14T				0.7	29.8	36.1	1.7	2,080		
16T				0.7	31.7	38.7	1.8	2,410		
19T				0.7	34.4	41.6	2.0	2,770		
24T				0.7	38.6	46.0	2.1	3,390		
32T				0.7	44.5	52.5	2.4	4,330		
1T	2.5	7 / 0.67	2.01	0.7	9.9	14.6	0.9	380	7.56	840
2T				0.7	16.0	21.1	1.1	670		
3T				0.7	17.1	22.4	1.2	820		
4T				0.7	19.0	24.3	1.3	990		
7T				0.7	24.1	29.8	1.5	1,490		
8T				0.7	25.9	31.8	1.6	1,670		
10T				0.7	30.0	36.8	1.8	2,180		
12T				0.7	31.8	38.8	1.9	2,480		
14T				0.7	33.3	40.3	1.9	2,760		
16T				0.7	35.5	42.7	2.0	3,090		
19T				0.7	38.9	46.5	2.2	3,640		
24T				0.7	43.2	51.0	2.3	4,390		
32T				0.7	50.2	58.6	2.6	5,720		