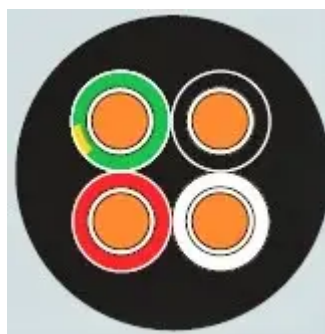




## *INNOVCABLE Power, Control and Lighting 0.6/1(1.2)kV BU – P17 – SHF2 Resistance – IEC 60331*



- 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) Insulated conductors cabled together, non-hygroscopic and flame retardant filaments can be used in the construction of the conductor and tapes can be applied to the conductors.
- 4) Final cover in halogen-free polyolefin compound LSOH (SHF2), black. (U Code)

### *Identification*

*A-) Number of Conductors (Without Earth G conductor)*



*1C: Single conductor - Black or White*

*2C: Two conductors - White, Black*

*3C: Three conductor - White, Black, Red*

*4C: Four conductors - White, Black, Red, Blue*

*5C or more: Five conductors or more - Black or White conductors numbered sequentially.*

*B-) Number of conductors (with G earth conductor)*

*2C +E: Three conductors - White, Black, Green*

*3C +E: Four conductors - White, Black, Red, Green*

*4C +E: Five conductors - White, Black, Red, Blue, Green*

*6C or more: Six or more conductors - Black or white sequentially numbered conductors + green lane*

*Engraving on outer cover (example): "year" Innovcable 01 BU 0.6/1kV P17 1 x 70 mm<sup>2</sup> IEC 60331-21 IEC 60332-3-22*

*Applicable Specifications*

*Design: NEK TS 606 and IEC 60092-353*



*Conductor: IEC 60228 class 2 or 5*

*Insulation: IEC 60092-360*

*Coverage: IEC 60092-360*

*Fire Resistance: IEC 60331-1, -2, -21*

*Flame Retardant: IEC 60332-1 and IEC 60332-3 Category A*

*Halogen content: IEC 60754-1, 0.5%.*

*Cold / impact bending : CSA 22.2 No.03 (-40°C/-35°C)*

*NEK-606*

*Luminosity transmission in smoke: IEC 61034, 60% >.*

### *Applications*

*Naval cables for fixed installations for power, control and lighting in EX environments (Zone 0, 1 and 2) and safe areas (SHF2). Meets resistance requirements as per NEK TS 606 (SHF2).*

*Cables have double layers, single cables are used as battery cables. Cable with IEC 60331 Fire Resistance.*

### *Maximum Conductor Temperature*

*90°C*



## Notes

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

2) Operating voltage : 0.6/1(1.2)kV

*\*\*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

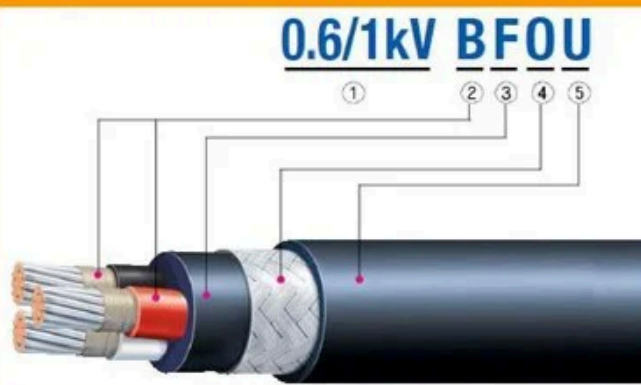
Nomenclatura	Código H-F	Código H-F-M-R
0.6/1kV RFOU	P1	P1/P8
0.6/1kV BFOU	P5	P5/P12
0.6/1kV RU	P18	-
0.6/1kV BU	P17	-
0.6/1kV UX	P15	P2/P9
250V RFOU(i)	S1	S1/S5
250V RFOU(c)	S2	S2/S6
250V BFOU(i)	S3	S3/S7
250V BFOU(c)	S4	S4/S8

#### 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")



**CABLE TYPE : 0.6/1kV BU**

No. of Cores	Conductor			Thickness of Insulation	Cable Weight	Conductor Resistance (at 25°C) (Max.)	Insulation Resistance (at 25°C) (Min.)	Current Carrying Capacity (Max.) (at 45°C)
	Nominal Area	Strand	Dia.					
No.	mm²	No. / mm	mm	mm	kg/km	Ω/km	M.Ω/km	A
1	1.5	7/0.53	1.59	1.0	70	12.2	1,300	21
	2.5	7/0.67	2.01	1.0	80	7.56	1,100	30
	4	7/0.85	2.55	1.0	100	4.70	920	40
	6	7/1.04	3.12	1.0	120	3.110	790	51
	10	7/1.35	4.05	1.0	180	1.840	640	71
	16	7/1.70	5.10	1.0	250	1.140	530	95
	25	7/2.14	6.42	1.2	370	0.734	510	125
	35	7/2.52	7.56	1.2	480	0.529	440	155
	50	19/1.78	8.90	1.4	630	0.391	440	190
	70	19/2.14	10.70	1.4	860	0.270	370	240
	95	19/2.52	12.60	1.6	1,140	0.195	360	290
	120	37/2.03	14.21	1.6	1,420	0.154	320	340
	150	37/2.25	15.75	1.8	1,730	0.126	330	385
	185	37/2.52	17.64	2.0	2,150	0.100	330	440
	240	61/2.25	20.25	2.2	2,780	0.0762	310	520
	300	61/2.52	22.68	2.4	3,440	0.0607	310	590
2	1.5	7/0.53	1.59	1.0	190	12.2	1,300	18
	2.5	7/0.67	2.01	1.0	230	7.56	1,100	25
	4	7/0.85	2.55	1.0	290	4.70	920	34
	6	7/1.04	3.12	1.0	360	3.110	790	43
	10	7/1.35	4.05	1.0	510	1.840	640	60
	16	7/1.70	5.10	1.0	680	1.140	530	81
	25	7/2.14	6.42	1.2	1,020	0.734	510	105
	35	7/2.52	7.56	1.2	1,320	0.529	440	135
	50	19/1.78	8.90	1.4	1,730	0.391	440	165
	70	19/2.14	10.70	1.4	2,330	0.270	370	200
	95	19/2.52	12.60	1.6	3,140	0.195	360	249
	120	37/2.03	14.21	1.6	3,850	0.154	320	288
	150	37/2.25	15.75	1.8	4,690	0.126	330	331
	185	37/2.52	17.64	2.0	5,800	0.100	330	377
	240	61/2.25	20.25	2.2	7,500	0.0762	310	444
	300	61/2.52	22.68	2.4	9,310	0.0607	310	511
2C+E	1.5	7/0.53	1.59	1.0	220	12.2	1,300	18
2C+E	2.5	7/0.67	2.01	1.0	270	7.56	1,110	25
2C+E	4	7/0.85	2.55	1.0	350	4.70	930	34
2C+E	6	7/1.04	3.12	1.0	440	3.110	790	43
2C+E	10	7/1.35	4.05	1.0	630	1.840	640	60
2C+E	16	7/1.70	5.10	1.0	870	1.140	530	81
2C	25	7/2.14	6.42	1.2	1,190	0.734	510	105
Earth	16	7/1.70	5.10	1.0		1.140	530	
2C	35	7/2.52	7.56	1.2	1,570	0.529	440	135
Earth	25	7/2.14	6.42	1.2		0.734	510	
2C	50	19/1.78	8.90	1.4	2,020	0.391	440	165
Earth	25	7/2.14	6.42	1.2		0.734	510	
2C	70	19/2.14	10.70	1.4	2,720	0.270	380	200
Earth	35	7/2.52	7.56	1.2		0.529	440	
2C	95	19/2.52	12.60	1.6	3,470	0.195	370	249
Earth	50	19/1.78	8.90	1.4		0.391	440	
2C	120	37/2.03	14.21	1.6	4,530	0.154	330	288
Earth	70	19/2.14	10.70	1.4		0.270	380	
2C	150	37/2.25	15.75	1.8	5,630	0.126	330	331
Earth	95	19/2.52	12.60	1.6		0.195	370	
2C	185	37/2.52	17.64	2.0	6,790	0.100	330	377
Earth	95	19/2.52	12.60	1.6		0.195	370	
2C	240	61/2.25	20.25	2.2	8,750	0.076	320	444
Earth	120	37/2.03	14.21	1.6		0.154	330	



# CABLE TYPE : 0.6/1kV BU

No. of Cores	Conductor			Thickness of Insulation	Cable Weight	Conductor Resistance (at 20°C) (Max.)	Insulation Resistance (at 20°C) (Min.)	Current Carrying Capacity (Max.) (at 60°C)
	Nominal Area	Strand	Dia.					
No.	mm²	No./mm	mm	mm	kg/km	Ω/km	MΩ/km	A
3	1.5	7/0.53	1.59	1.0	220	12.2	1,300	15
	2.5	7/0.67	2.01	1.0	270	7.56	1,100	21
	4	7/0.85	2.55	1.0	350	4.70	920	29
	6	7/1.04	3.12	1.0	440	3.110	790	34
	10	7/1.35	4.05	1.0	630	1.840	640	50
	16	7/1.70	5.10	1.0	870	1.160	530	67
	25	7/2.14	6.42	1.2	1,280	0.734	510	89
	35	7/2.52	7.56	1.2	1,680	0.529	440	105
	50	19/1.78	8.90	1.4	2,220	0.391	440	135
	70	19/2.14	10.70	1.4	3,010	0.270	370	170
	95	19/2.52	12.60	1.6	4,090	0.195	360	205
	120	37/2.03	14.21	1.6	5,020	0.154	320	240
	150	37/2.25	15.75	1.8	6,120	0.126	330	270
	185	37/2.52	17.64	2.0	7,590	0.100	330	305
	240	61/2.25	20.25	2.2	9,840	0.0762	310	365
300	61/2.52	22.68	2.4	12,200	0.0607	310	415	
3C+E	1.5	7/0.53	1.59	1.0	270	12.2	1,300	15
3C+E	2.5	7/0.67	2.01	1.0	330	7.56	1,110	21
3C+E	4	7/0.85	2.55	1.0	430	4.70	930	29
3C+E	6	7/1.04	3.12	1.0	550	3.110	790	34
3C+E	10	7/1.35	4.05	1.0	790	1.840	640	50
3C+E	16	7/1.70	5.10	1.0	1,100	1.160	530	67
3C	25	7/2.14	6.42	1.2	1,520	0.734	510	89
Earth	16	7/1.70	5.10	1.0		1.160	530	
3C	35	7/2.52	7.56	1.2	2,030	0.529	440	105
Earth	25	7/2.14	6.42	1.2		0.734	510	
3C	50	19/1.78	8.90	1.4	2,550	0.391	440	135
Earth	25	7/2.14	6.42	1.2		0.734	510	
3C	70	19/2.14	10.70	1.4	3,460	0.270	380	170
Earth	35	7/2.52	7.56	1.2		0.529	440	
3C	95	19/2.52	12.60	1.6	4,680	0.195	370	205
Earth	50	19/1.78	8.90	1.4		0.391	440	
3C	120	37/2.03	14.21	1.6	5,840	0.154	330	240
Earth	70	19/2.14	10.70	1.4		0.270	380	
3C	150	37/2.25	15.75	1.8	7,270	0.126	330	270
Earth	95	19/2.52	12.60	1.6		0.195	370	
3C	185	37/2.52	17.64	2.0	9,670	0.100	330	305
Earth	95	19/2.52	12.60	1.6		0.195	370	
3C	240	61/2.25	20.25	2.2	11,180	0.076	320	365
Earth	120	37/2.03	14.21	1.6		0.154	330	
4	1.5	7/0.53	1.59	1.0	270	12.2	1,300	15
	2.5	7/0.67	2.01	1.0	330	7.56	1,100	21
	4	7/0.85	2.55	1.0	430	4.70	920	29
	6	7/1.04	3.12	1.0	550	3.110	790	34
	10	7/1.35	4.05	1.0	790	1.840	640	50
	16	7/1.70	5.10	1.0	1,100	1.160	530	67
	25	7/2.14	6.42	1.2	1,630	0.734	510	89
	35	7/2.52	7.56	1.2	2,140	0.529	440	105
	50	19/1.78	8.90	1.4	2,830	0.391	440	135
	70	19/2.14	10.70	1.4	3,880	0.270	370	170
	95	19/2.52	12.60	1.6	5,260	0.195	360	205
	120	37/2.03	14.21	1.6	6,460	0.154	320	240
	150	37/2.25	15.75	1.8	7,910	0.126	330	270
	185	37/2.52	17.64	2.0	9,800	0.100	330	305
	240	61/2.25	20.25	2.2	12,720	0.0762	310	365
300	61/2.52	22.68	2.4	15,770	0.0607	310	415	





## CABLE TYPE : 0.6/1kV BU

No. of Cores	Conductor			Thickness of Insulation	Cable Weight	Conductor Resistance (at 20°C) (Max.)	Insulation Resistance (at 20°C) (Min.)	Current Carrying Capacity (Max.) (at 45°C)
	Nominal Area	Strand	Dia.					
No.	mm²	No./mm	mm	mm	kg/km	Ω/km	M Ω/km	A
5	1.0	7/0.43	1.29	1.0	260	18.2	1,490	10
7				1.0	320			9
9				1.0	440			8
12				1.0	570			7
14				1.0	640			7
16				1.0	720			7
19				1.0	800			6
24				1.0	1,110			6
27				1.0	1,170			6
30				1.0	1,270			5
37	1.5	7/0.53	1.59	1.0	1,500	12.2	1,300	5
44				1.0	1,920			5
5				1.0	320			12
7				1.0	380			11
9				1.0	520			10
12				1.0	680			9
14				1.0	770			9
16				1.0	860			8
19				1.0	980			8
24				1.0	1,330			7
27	2.5	7/0.67	2.01	1.0	1,430	7.56	1,100	7
30				1.0	1,540			7
37				1.0	1,830			6
44				1.0	2,320			6
5				1.0	390			18
7				1.0	490			16
9				1.0	660			14
12				1.0	860			13
14				1.0	960			12
16				1.0	1,090			12
19				1.0	1,230			11
24				1.0	1,690			10
27				1.0	1,810			10
30				1.0	1,960			10
37				1.0	2,340			9
44				1.0	2,960			8