



## INOVABLE CONTROL CABLE BF BTC



- 1) Stranded conductor formed by electrolytic bare copper wires, soft temper, class 5 NBR NM 280 stranding.
- 2) Insulation in thermoplastic compound based on polyvinyl chloride (PVC/A).
- 3) Separator in polyester tape and collective shield in aluminized polyester tape with tinned copper drain wire.
- 4) Intermediate cover in thermoplastic compound based on polyvinyl chloride (PVC /ST1).
- 5) Shielding in copper braid.
- 6) Non-hygroscopic ribbon
- 7) Cover in thermoplastic compound based on polyvinyl chloride (PVC/ST1).

- Insulation voltage:

Up to 1,0mm<sup>2</sup> - 500V

From 1,50mm<sup>2</sup> to 10,00mm<sup>2</sup> - 1000V

- Routine tests:

Electrical resistance of the conductor at 20°C

Electric tension in Alternate Current

Insulation resistance.

### Identification

Sequentially numbered white veins, can be manufactured on customer request with a green track (protective conductor). It can also be built with coloured veins.

### Applicable Specifications



ABNT/MERCOSUR: NM-280 and NM-IEC

NBR NM IEC 60332-3-23 (Category B)

ABNT: NBR 7290 (when manufactured with insulation/end cap in XLPE or HEPR/PVC-change codes)

ABNT: NBR 13248 (when manufactured with insulation/end cap in HEPR/LSZH-change codes).

ABNT: NBR 7289 (when manufactured with PVC/PVC insulation/end cap - codes indicated in the table below)

ABNT: NBR 6251

## Applications

They are used in fixed installations in control, command and signalling circuits of electrical equipment, structured cabling, machine connections, push buttons, power supply, microprocessor systems, in the automation of substations, power plants, industrial and chemical areas, among others.

They are applied in fixed systems of conduits (embedded or exposed), ducts, duct banks, electro-roof gutters, electrical panels, among other applications. It has collective protection in aluminized polyester tape and copper braid against electromagnetic interference. This cable has good flexibility, resistance to UV, bad weather, humidity and certain chemicals.

## Maximum Conductor Temperature

PVC/A -70°C  
- Flame retardant

flame-retardant / self-extinguishing - meets the flame-retardance requirement in accordance with NBR NM IEC 60332-3-23 (Category B)



## Notes

The BF BTC control cable can be manufactured in other sections, dimensions or materials at the customer's request. Innovcable reserves the right to modify this catalogue without prior notice.

### CONSTRUCTION OPTIONS

We can manufacture other configurations on request.

1- Tinned Copper Conductor.

Class 2 stranding.

2- Different sections, colours and number of veins, maximum up to

- 71 x 0,50mm<sup>2</sup> / 71 x 2,50mm<sup>2</sup>

- 52 x 4,00mm<sup>2</sup> / 52 x 4,00mm<sup>2</sup>.

- 42 x 6,00mm<sup>2</sup>

- 20 x 10,0mm<sup>2</sup>

3- Vein insulation material / other temperatures:

PVC/E -105°C

XLPE - 125 °C

HEPR - 90 °C

PE - 80 °C

4- Material of the intermediate layer and the cover:

PE

PVC/E

PVC/ST2

Special PVC resistant to oils, grease and other chemicals.

LSZH (non-halogenated polyolefin compound)

Perfectly cylindrical cover for cable gland applications in hazardous (Ex) areas



CABO DE CONTROLE BF BTC PVC/PVC				
DADOS DIMENSIONAIS				
SEÇÃO NOMINAL - 0,50 mm²				
Código do Produto	Número de Condutores		Diâmetro Externo mm	Peso Nominal (kg/km)
803792	2		8,51	113,06
803793	3		8,78	128,33
803794	4		9,59	164,36
803795	5		9,74	180,23
803796	6		10,27	195,12
803797	7		10,27	204,05
803798	8		10,82	221,11
803799	9		12,31	261,09
803800	10		12,72	281,42
803801	11		12,72	289,04
803802	12		12,93	304,65
803803	13		13,39	324,84
803804	14		13,39	332,14
803805	15		13,90	356,91
803806	16		13,90	363,93
803807	17		14,43	384,28
803808	18		14,43	390,86
803809	19		14,43	397,57
803810	20		15,18	427,28
803811	21		15,71	443,04
803812	22		15,71	453,82
803813	23		15,71	469,00
803814	24		15,71	475,23
803815	25		15,71	490,26

CABO DE CONTROLE BF BTC PVC/PVC				
DADOS DIMENSIONAIS				
SEÇÃO NOMINAL - 0,75 mm²				
Código do Produto	Número de Condutores		Diâmetro Externo mm	Peso Nominal (kg/km)
803840	2		8,93	125,30
803841	3		9,23	144,31
803842	4		10,14	186,60
803843	5		10,31	205,76
803844	6		10,90	224,34
803845	7		10,90	236,79
803846	8		11,51	257,80
803847	9		13,14	303,30
803848	10		13,59	327,45
803849	11		13,59	338,43
803850	12		13,80	358,01
803851	13		14,31	382,00
803852	14		14,31	392,63
803853	15		14,89	421,21
803854	16		14,89	431,52
803855	17		15,48	455,70
803856	18		15,48	465,51
803857	19		15,48	475,47
803858	20		16,30	509,76
803859	21		16,89	529,31
803860	22		16,89	543,30
803861	23		16,89	561,69
803862	24		16,89	571,11
803863	25		16,89	589,33



CABO DE CONTROLE BF BTC PVC/PVC				
DADOS DIMENSIONAIS				
SEÇÃO NOMINAL - 1,00 mm <sup>2</sup>				
Código do Produto	Número de Condutores		Diâmetro Externo mm	Peso Nominal (kg/km)
803889	2		9,29	136,43
803890	3		9,62	159,01
803891	4		10,61	206,98
803892	5		10,79	229,31
803893	6		11,44	251,41
803894	7		11,44	267,22
803895	8		12,10	291,97
803896	9		13,84	342,53
803897	10		14,33	370,30
803898	11		14,33	384,51
803899	12		14,54	407,83
803900	13		15,10	435,43
803901	14		15,10	449,26
803902	15		15,72	481,46
803903	16		15,72	494,94
803904	17		16,37	522,74
803905	18		16,37	535,67
803906	19		16,37	548,77
803907	20		17,24	587,32
803908	21		17,89	610,48
803909	22		17,89	627,57
803910	23		17,89	649,06
803911	24		17,89	661,57
803912	25		17,89	682,87

CABO DE CONTROLE BF BTC PVC/PVC				
DADOS DIMENSIONAIS				
SEÇÃO NOMINAL - 1,50 mm <sup>2</sup>				
Código do Produto	Número de Condutores		Diâmetro Externo mm	Peso Nominal (kg/km)
803938	2		9,85	155,34
803939	3		10,22	184,22
803940	4		11,34	241,83
803941	5		11,55	269,83
803942	6		12,28	298,16
803943	7		12,28	319,97
803944	8		13,03	351,30
803945	9		14,93	410,50
803946	10		15,49	444,67
803947	11		15,49	464,66
803948	12		15,70	494,57
803949	13		16,33	528,54
803950	14		16,33	548,09
803951	15		17,04	586,70
803952	16		17,04	605,86
803953	17		17,77	640,05
803954	18		17,77	658,59
803955	19		17,77	677,32
803956	20		18,73	723,28
803957	21		19,46	752,81
803958	22		19,46	775,47
803959	23		19,46	802,54
803960	24		19,46	820,59
803961	25		19,46	847,45



CABO DE CONTROLE BF BTC PVC/PVC				
DADOS DIMENSIONAIS				
SEÇÃO NOMINAL - 1,50 mm <sup>2</sup>				
Código do Produto	Número de Condutores		Diâmetro Externo mm	Peso Nominal (kg/km)
803938	2		9,85	155,34
803939	3		10,22	184,22
803940	4		11,34	241,83
803941	5		11,55	269,83
803942	6		12,28	298,16
803943	7		12,28	319,97
803944	8		13,03	351,30
803945	9		14,93	410,50
803946	10		15,49	444,67
803947	11		15,49	464,66
803948	12		15,70	494,57
803949	13		16,33	528,54
803950	14		16,33	548,09
803951	15		17,04	586,70
803952	16		17,04	605,86
803953	17		17,77	640,05
803954	18		17,77	658,59
803955	19		17,77	677,32
803956	20		18,73	723,28
803957	21		19,46	752,81
803958	22		19,46	775,47
803959	23		19,46	802,54
803960	24		19,46	820,59
803961	25		19,46	847,45

CABO DE CONTROLE BF BTC PVC/PVC				
DADOS DIMENSIONAIS				
SEÇÃO NOMINAL - 2,50 mm <sup>2</sup>				
Código do Produto	Número de Condutores		Diâmetro Externo mm	Peso Nominal (kg/km)
803987	2		11,64	210,94
803988	3		12,16	257,56
803989	4		13,69	343,49
803990	5		13,97	387,30
803991	6		14,97	433,18
803992	7		14,97	471,76
803993	8		16,00	521,74
803994	9		18,45	606,19
803995	10		19,22	658,44
803996	11		19,22	694,52
803997	12		19,43	743,10
803998	13		20,29	795,08
803999	14		20,29	830,57
804000	15		21,26	887,26
804001	16		21,26	922,21
804002	17		22,25	974,50
804003	18		22,25	1008,60
804004	19		22,25	1042,97
804005	20		23,50	1110,22
804006	21		24,49	1157,74
804007	22		24,49	1195,87
804008	23		24,49	1238,40
804009	24		24,49	1271,83
804010	25		24,49	1314,07





CABO DE CONTROLE BF BTC PVC/PVC					CABO DE CONTROLE BF BTC PVC/PVC				
DADOS DIMENSIONAIS					DADOS DIMENSIONAIS				
SEÇÃO NOMINAL - 4,00 mm <sup>2</sup>					SEÇÃO NOMINAL - 6,00 mm <sup>2</sup>				
Código do Produto	Número de Condutores		Diâmetro Externo mm	Peso Nominal (kg/km)	Código do Produto	Número de Condutores		Diâmetro Externo mm	Peso Nominal (kg/km)
804036	2		12,87	261,77	804085	2		13,74	310,32
804037	3		13,45	322,99	804086	3		14,42	394,78
804038	4		15,17	431,46	804087	4		16,43	531,10
804039	5		15,49	488,40	804088	5		16,80	610,44
804040	6		16,61	548,72	804089	6		18,12	693,91
804041	7		16,61	601,17	804090	7		18,12	769,19
804042	8		17,77	666,42	804091	8		19,47	858,07
804043	9		20,47	770,20	804092	9		22,57	989,19
804044	10		21,33	837,21	804093	10		23,57	1079,67
804045	11		21,33	886,61	804094	11		23,57	1151,65
804046	12		21,54	949,93	804095	12		23,78	1239,16
804047	13		22,51	1016,57	804096	13		24,92	1329,26
804048	14		22,51	1065,26	804097	14		24,92	1400,47
804049	15		23,60	1136,68	804098	15		26,19	1495,39
804050	16		23,60	1184,71	804099	16		26,19	1565,87
804051	17		24,72	1251,72	804100	17		27,50	1656,38
804052	18		24,72	1298,74	804101	18		27,50	1725,75
804053	19		24,72	1346,08	804102	19		27,50	1795,47
804054	20		26,09	1429,73	804105	22		30,38	2063,63
804055	21		27,21	1491,87	804106	23		30,38	2141,30
804056	22		27,21	1542,83	804107	24		30,38	2209,79
804057	23		27,21	1598,19	804108	25		30,38	2287,08
804058	24		27,21	1644,40					
804059	25		27,21	1699,42					



CABO DE CONTROLE BF BTC PVC/PVC				
DADOS DIMENSIONAIS				
SEÇÃO NOMINAL - 10,00 mm <sup>2</sup>				
Código do Produto	Número de Condutores		Diâmetro Externo mm	Peso Nominal (kg/km)
804134	2		15,78	429,78
804135	3		16,61	562,48
804136	4		19,09	759,21
804137	5		19,55	884,55
804138	6		21,17	1016,01
804139	7		21,17	1138,43
804140	8		22,84	1276,58
804141	9		26,56	1464,50
804142	10		27,80	1603,59
804143	11		27,80	1721,92
804144	12		28,01	1858,74
804145	13		29,41	1997,36
804146	14		29,41	2114,74
804147	15		30,97	2258,27
804148	16		30,97	2374,76
804149	17		32,59	2513,89
804150	18		32,59	2628,99
804151	19		32,59	2744,54
804152	20		34,48	2906,08
804153	21		36,10	3040,20
804154	22		36,10	3159,10
804155	23		36,10	3282,40
804156	24		36,10	3396,42
804157	25		36,10	3519,25