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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
São Paulo/SP: +55 11 3090-6855
Rio de Janeiro/RJ: +55 21 2042-0087

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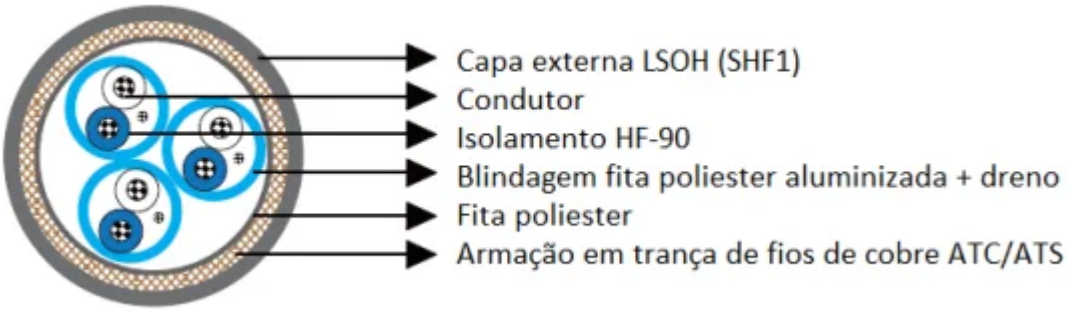
INNOVCABLE INNOVSHORE INSTRUMENTATION ARMOURED/SHIELDED ATC/ATS BFI 0,15/0,25KV (300V)



1) Conductor formed by electrolytic bare copper wires or tinned, soft temper, class 5 stranding. IEC 60228. *1,7
2) Insulation in special halogen-free compound LSOH (HF-90). *4
3) Communication conductor with section 0,5mm², in LSOH (HF-90) compound, Identification through insulation in blue colour (only for cables with 2 or more pairs, suits or blocks) - (Optional). *4
4) Individual shield in aluminum-polyester tape, with flexible drain conductor, formed by electrolitic tinned copper wires, soft temper.
5) Polyester tape.
6) Frame: braided bare copper (ATC) or tinned copper (ATS) wires, coverage >90%.* 8
7) Cover in polyolefin compound halogen-free LSOH (SHF1), in grey colour. *2,5

Identification

- External recording:
INNOVCABLE INNOVSHORE INSTRUMENTATION ATC/ATS BFI __mm² 0.15/0.25KV (300V) 90°C OF: XXXX/YE.

Of the conductors - through the colours of the insulation, being:
black and white (cables in pairs)

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black, white and red (cables in pairs).
black, white, red and green (cables in blocks).*3

Identification through sequential numbering.

Applicable Specifications

Strings: IEC 60228

Primary Isolation: 150/250 V (300 V) - IEC 60092-376.

Selection and installation of electrical cables: IEC 60092-352.

Meets the requirements for firing test - IEC 60332-1 and IEC 60332-3-22 , category "A".

Certifications can be Batch Approval or Type Approval (depending on certification and certifier) - Please contact us for further details.

Shipborne energy cables - General construction and testing requirements: IEC 60092-350

Insulation materials and outer jacket for use on board offshore units, power, control, instrumentation and telecommunication cables: IEC 60092-360

Common test methods for insulation and outer jacket of materials of electric cables: IEC 60811

Halogen Free: IEC-60754-1/2

Application: IEC 60092 series.

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Applications

Built and designed for the demanding environment of offshore drilling and the marine industry. They are used in fixed installations, for conducting analog (4 - 20mA) and digital signals, point-to-point instrumentation, Hart ® protocol, connections of various sensors and meters, power supply to conventional and electronic relays, in industrial environments in general. INNOVSHORE INSTRUMENTATION ARMED/BLINDED ATC/ATS BFI 0.15/0.25KV (300V) Instrumentation Cables are recommended in cases where excellent levels of protection against external electromagnetic interference are required, and maximum immunity against the emergence of "crosstalk" (crosstalk) between the various pairs/pairs, providing electrical discharge of the same. Excellent flexibility, resistance to chemical products, humidity and UV rays. Cable armed with galvanized steel wires. Non-halogen and anti-flame, not producing toxic and corrosive gases.

Maximum Conductor Temperature

CONTINUOUS DUTY: 90°C - IEC 60092-360
SHORT CIRCUIT: 250°C

Notes

* We manufacture with other configurations:
1) Tinned copper conductor can be manufactured in class 2.
2) External layer colours: Nomenclature to be added at the end of the code: VM - Red // VD - Green // BR - White // PT - Black // AZ - Blue // CZ - Gray.
We can manufacture other colours on request.
3) Different sections and amount of veins, maximum up to:
- 71 x 2 x 0,50mm² / 71 x 2 x 2,50mm²
- 71 x 3 x 0,50mm² / 71 x 3 x 2,50mm².
- 36 x 4 x 0,50mm² / 36 x 4 x 2,50mm².
4) Vein insulation material:
EPR - 90 ºC
HEPR - 90 ºC
XLPE - 90 ºC
5) Material of the intermediate layer and the cover:
ST2
SE
SHF2
6) At Innovcable's discretion, separators and/or fillers of compatible material may be used.

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7) Nomenclature to be added at the end of the code according to the conductor type:
Bare copper conductor - CN
Tinned copper conductor - SN
8) Types of armatures:
ATS - Tinned copper wire braided frame
ATC - Bare copper braid frame

**Innovcable reserves the right to change this catalogue without prior notice.

Construção N. elementos x n. de condutores x seção (mm²)	Isolação Espessura Nominal mm	Capa Ext. Espessura Nominal mm	Diametro Ext. Nominal Aproximado mm	Peso Nominal mm
1x2x0.75	0.5	1.2	8.3	110
2x2x0.75	0.5	1.4	12.2	200
3x2x0.75	0.5	1.4	13.0	240
4x2x0.75	0.5	1.7	14.4	310
5x2x0.75	0.5	1.7	15.9	370
6x2x0.75	0.5	1.9	17.1	430
7x2x0.75	0.5	1.9	17.1	450
8x2x0.75	0.5	1.9	18.0	500
10x2x0.75	0.5	2.0	20.2	610
12x2x0.75	0.5	2.0	20.9	680
14x2x0.75	0.5	2.0	21.7	750
16x2x0.75	0.5	2.1	23.3	850
19x2x0.75	0.5	2.2	25.0	980
20x2x0.75	0.5	2.2	25.0	1010
24x2x0.75	0.5	2.3	28.4	1220
30x2x0.75	0.5	2.4	30.8	1460
37x2x0.75	0.5	2.5	33.0	1720
1x2x1.0	0.5	1.3	8.9	120
2x2x1.0	0.5	1.4	12.9	230
3x2x1.0	0.5	1.8	14.4	310
4x2x1.0	0.5	1.8	15.2	360
5x2x1.0	0.5	1.8	17.0	440
6x2x1.0	0.5	1.8	18.1	500
7x2x1.0	0.5	1.8	18.1	530
8x2x1.0	0.5	1.8	19.1	590
10x2x1.0	0.5	2.0	21.4	720
12x2x1.0	0.5	2.1	22.4	820
14x2x1.0	0.5	2.1	23.2	900
16x2x1.0	0.5	2.2	25.0	1030
19x2x1.0	0.5	2.2	26.6	1180

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20×2×1.0	0.5	2.2	26.6	1210
24×2×1.0	0.5	2.4	30.4	1480
30×2×1.0	0.5	2.5	33.0	1780
37×2×1.0	0.5	2.5	35.2	2090
1×2×1.5	0.6	1.3	9.9	150
2×2×1.5	0.6	1.8	15.3	320
3×2×1.5	0.6	1.8	16.3	390
4×2×1.5	0.6	1.8	17.4	460
5×2×1.5	0.6	1.8	19.5	560
6×2×1.5	0.6	2.0	20.8	640
7×2×1.5	0.6	2.0	20.8	690
8×2×1.5	0.6	2.1	22.2	770
10×2×1.5	0.6	2.2	24.9	950
12×2×1.5	0.6	2.2	25.9	1070
14×2×1.5	0.6	2.2	26.8	1180
16×2×1.5	0.6	2.3	28.9	1350
19×2×1.5	0.6	2.4	31.0	1560
20×2×1.5	0.6	2.4	31.0	1600
24×2×1.5	0.6	2.5	35.3	1950
30×2×1.5	0.6	2.9	39.0	2450
37×2×1.5	0.6	3.0	41.8	2900
1×3×0.75	0.5	1.3	8.9	120
2×3×0.75	0.5	1.4	13.2	230
3×3×0.75	0.5	1.8	14.6	320
4×3×0.75	0.5	1.8	15.8	380
5×3×0.75	0.5	1.8	17.5	460
6×3×0.75	0.5	2.0	19.6	550
7×3×0.75	0.5	2.0	19.6	580
8×3×0.75	0.5	2.0	20.9	650
10×3×0.75	0.5	2.1	23.5	800
12×3×0.75	0.5	2.2	24.9	910
14×3×0.75	0.5	2.2	25.9	1010
16×3×0.75	0.5	2.3	27.6	1140
19×3×0.75	0.5	2.3	29.5	1300
20×3×0.75	0.5	2.3	30.0	1350
24×3×0.75	0.5	2.4	32.6	1590
30×3×0.75	0.5	2.8	36.7	2030
32×3×0.75	0.5	2.8	37.9	2150
1×3×1.0	0.5	1.3	9.3	140

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2x3x1.0	0.5	1.8	14.6	310
3x3x1.0	0.5	1.8	15.4	370
4x3x1.0	0.5	1.8	16.9	450
5x3x1.0	0.5	1.8	18.5	530
6x3x1.0	0.5	2.0	20.8	640
7x3x1.0	0.5	2.0	20.8	680
8x3x1.0	0.5	2.1	22.4	780
10x3x1.0	0.5	2.2	25.2	960
12x3x1.0	0.5	2.2	26.5	1080
14x3x1.0	0.5	2.3	27.8	1220
16x3x1.0	0.5	2.3	29.4	1360
19x3x1.0	0.5	2.4	31.7	1580
20x3x1.0	0.5	2.4	32.2	1640
24x3x1.0	0.5	2.5	35.0	1930
30x3x1.0	0.5	2.9	39.4	2470
32x3x1.0	0.5	2.9	40.7	2620
1x3x1.5	0.6	1.3	10.4	170
2x3x1.5	0.6	1.8	16.5	380
3x3x1.5	0.6	1.9	17.7	480
4x3x1.5	0.6	1.9	19.2	570
5x3x1.5	0.6	1.9	21.3	690
6x3x1.5	0.6	2.1	24.0	840
7x3x1.5	0.6	2.1	24.0	900
8x3x1.5	0.6	2.2	25.8	1020
10x3x1.5	0.6	2.3	29.1	1260
12x3x1.5	0.6	2.4	30.9	1450
14x3x1.5	0.6	2.4	32.2	1620
16x3x1.5	0.6	2.5	34.3	1830
19x3x1.5	0.6	2.8	37.5	2210
20x3x1.5	0.6	2.8	38.1	2300
24x3x1.5	0.6	3.0	41.6	2720
30x3x1.5	0.6	3.1	45.9	3310
32x3x1.5	0.6	3.2	47.7	3530