



# HALLEY CABLES

# BIRTFLEX 659-C PUR

## Control cables

PP (polypropylene) insulated, PUR sheathed, extra flexible, screened, oil resistant cable



### Construction:

- Conductor : extra flexible copper wires, plain; IEC 60228 Class 6, DIN EN 60228 Class 6.
- Insulation : PP (polypropylene) compound, 9Y.
- Core identification : numbered cores or colour coded cores.
- Lay-up : cores laid up in layers of optimum pitch.
- Separator : textile material.
- Inner Sheath : special compound, RAL 7001, Grey.
- Screen : braid of tinned copper wires, 85% coverage.
- Outer sheath : PUR (polyurethane) compound, 11YM1.
- Sheath colour : RAL 7001, Grey (to be agreed upon the shade of grey).

### Technical data and tests:

- Standard : HD 21.13 S1;  
DIN VDE 0281-13;  
DIN VDE 0282-10.
- Insulation resistance : min. 50 M $\Omega$ /km.
- Rated voltage U<sub>0</sub>/U : 300 / 500 V.
- Test voltage (50 Hz) : 2000 V.
- Temperature range : fixed : - 30° C ~ + 70° C;  
mobile: - 5° C ~ + 70° C.
- Min. bending radius : fixed : 4 x D;  
mobile: 7.5 x D.
- Flame retardance test : IEC 60332-1 & EN 50265-2-1.
- Oil test : IEC 60811-2-1.
- Transfer impedance : max. 250  $\Omega$ /km at 30 MHz.
- EMC : electromagnetic compatibility.

\* Upon request this cable can be produced having a rated voltage of 0.6/1 kV.

\* Upon request this cable can be made with 65% braid of tinned copper wires.

### Applications:

This control cable is resistant to oil, cold and extreme mechanical load and designed for applications where high cable flexibility is required. This type is more economical than 6512-C PUR; it has a high service period, can be used for instrumentation, control and connection of control units in mechanical tool construction, conveyor and assembly lines, production lines. It can be used in any areas where continuous bending loads require free movement without pulling force and areas where low tensile load forced movement is required. It can be installed in dry, humid, wet and cold places. The screen above the inner sheath protects against external interference pulses and ensures an interference-free transmission, transfer impedance being maximum 250  $\Omega$ /km at 30 MHz.



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## DIMENSIONS

No. of Cores x Cross Section mm <sup>2</sup>	Approx. Outer Diameter mm	Copper Weight Kg/km	Approx. Cable Weight Kg/km
3G0.50	8,4	42	100
4G0.50	9,1	50	120
5G0.50	10,2	55	140
7G0.50	11,3	75	165
12G0.50	13,8	125	285
18G0.50	16,8	165	400
25G0.50	19,7	196	505
34G0.50	21,5	245	625
3G0.75	8,7	50	110
4G0.75	9,9	60	145
5G0.75	10,6	75	170
7G0.75	11,8	94	215
12G0.75	14,8	155	305
18G0.75	17,8	210	455
25G0.75	21,0	280	610
34G0.75	23,4	360	805
3G1.0	9,6	60	135
4G1.0	10,8	75	165
5G1.0	11,5	85	195
7G1.0	12,4	115	230
12G1.0	16,6	195	405
18G1.0	19,4	265	590
25G1.0	22,8	340	730
34G1,0	25,8	445	945
3G1.5	10,2	75	165
4G1.5	10,9	95	200
5G1.5	11,8	110	230
7G1.5	13,5	140	310
12G1.5	17,4	250	480
18G1.5	20,5	315	680
25G1.5	24,5	470	940
34G1.5	27,0	630	1190

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