

**BIRTFLEX-EF 6511-C-PUR**PVC INSULATED, PUR SHEATED EXTRA FLEXIBLE SCREENED  
OIL RESISTANT CONTROL CABLES

**APPLICATION:** These screened oil resistance high-flexibility control cables are designed for applications where cable flexibility is needed. These cables are used for instrumentation, control and connecting of control units in mechanical tool construction, conveyor and assembly lines, production lines, any areas where continuous bending loads for free movement without tensile load forced movement in the cable trailing chain is required. The screen above the inner sheath protects against external interference pulses and ensures an interference-free transmission, and transfer impedance is max. 250 Ω/km at 30MHZ

**CABLE DESIGN**

Conductor	: Extra flexible copper wires, plain; IEC 60228 Class 6, TS/DIN EN 60228 Class 6
Insulation	: Special PVC compound
Core identification	: Acc. to TS/DIN EN 50334 black cores with white numerals with green/yellow from 3 cores
Lay-up	: Cores laid up in layers of shorten optimum pitch
Separator	: Textile bandaging
Inner Sheath	: PVC compound, TM2; RAL 7001, Grey
Screen	: Braid of tinned copper wires, 85% coverage
Outer sheath	: PUR compound, 11YM1
Sheath colour	: RAL 7001, Grey

**TECHNICAL DATA**

Standard	: TS HD 21.13 S1, DIN VDE 0281-13 DIN VDE 0282-10 (Designed according to)
Insulation resistance	: Min. 50 MΩ.km
Rated voltage Uo/U	: 300 / 500V
(AC 50 Hz)	: 2000 V
Test voltage	
Temperature range	: Fixed: - 40 °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 Ω/km at 30MHZ

**EMC\***

ELECTROMAGNETIC COMPATIBILITY

**Cross Sections**

Part - number	No. of cores x Cross section (mm <sup>2</sup> )	Approx. Outer Diameter (mm)	Copper Weight (Kg/km)	Approx. Cable Weight (Kg/km)
1020 05 003	3G0.50	8,4	42	100
1020 05 004	4G0.50	9,1	50	120
1020 05 005	5G0.50	10,2	55	140
1020 05 007	7G0.50	11,3	75	165
1020 05 012	12G0.50	13,8	125	285
1020 05 018	18G0.50	16,8	165	400
1020 05 025	25G0.50	19,7	196	505
1020 05 034	34G0.50	21,5	245	625
1020 06 003	3G0.75	8,7	50	110
1020 06 004	4G0.75	9,9	60	145
1020 06 005	5G0.75	10,6	75	170
1020 06 007	7G0.75	11,8	94	215
1020 06 012	12G0.75	14,8	155	305
1020 06 018	18G0.75	17,8	210	455
1020 06 025	25G0.75	21,0	280	610
1020 06 034	34G0.75	23,4	360	805

Part - number	No. of cores x Cross section (mm <sup>2</sup> )	Approx. Outer Diameter (mm)	Copper Weight (Kg/km)	Approx. Cable Weight (Kg/km)
1020 07 003	3G1.0	9,6	60	135
1020 07 004	4G1.0	10,8	75	165
1020 07 005	5G1.0	11,5	85	195
1020 07 007	7G1.0	12,4	115	230
1020 07 012	12G1.0	16,6	195	405
1020 07 018	18G1.0	19,4	265	590
1020 07 025	25G1.0	22,8	340	730
1020 07 034	34G1.0	25,8	445	945
1020 08 003	3G1.5	10,2	75	165
1020 08 004	4G1.5	10,9	95	200
1020 08 005	5G1.5	11,8	110	230
1020 08 007	7G1.5	13,5	140	310
1020 08 012	12G1.5	17,4	250	480
1020 08 018	18G1.5	20,5	315	680
1020 08 025	25G1.5	24,5	470	940
1020 08 034	34G1.5	27,0	630	1190