



SBEE

Datatronic & Instrum Cable



SBEE DATATRONIC LIYY

SBEE DATATRONIC LIYY



TECHNICAL DATA

Generally confirms to test VDE 0812 standard	Core Colours: As per DIN47100 colour coding	Peak working voltage: 250 V (Not recommended for power application)
Specific Insulation Resistance: >20G Ω x cm	Mutual Capacitance: Approx 120nF/km	Minimum Bending Radius: Occasional Flexing 15 x Cable Dia
Test Voltage: 1.2kV for cross section up to including 0.14mm ² 1.5 kV for cross section > 0.14mm ²	Inductance: Approx 0.65mH/km	Conductor Bunching: Short lay, Class 5 as per VDE 0295 or IS 8130
	Temperature Range: Fixed Installation -30°C to +80°C PVC Occasional flexing -5° C +70°C	

APPLICATIONS

- O.E.M, Machine Builders
- Space saving Flexible Applications Mechanical Protection.
- Dry or Damp interiors
- Test Voltage at 4kV
- Power Stations. D.G.Set Control Circuit
- Air conditioning installations

PRODUCT MAKEUP

- Strands of Electrolytic Grade, Oxygen free Bare Copper wire class V, (Class 2 or Class 6 on request)
- Different classes of PVC Insulation, Inner & Outer Sheath, HFFR optional
- Cores are layed up in sequence and in layers
- Screen is with Fine oxidation resistant Special steel wire braid
- Special PVC outer Sheath, Transparent

PRODUCT FEATURES

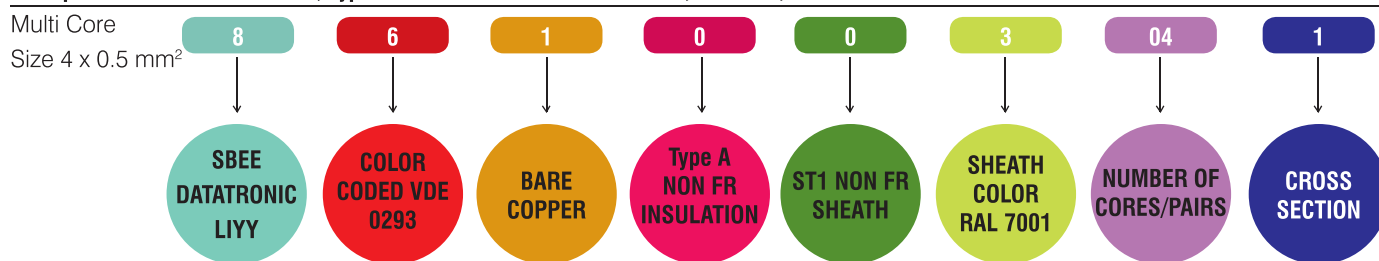
- Flame retardent as per IEC 60332-1-2
- Flamability test as per IS 10810-53
- Resistant to certain Industrial Oils used in Machine tool Industries
- Organic & Inorganic Chemical Resistance of Certain type
- High Percentage Coverage of fine Steel wires imprat robhust mechanical protection and to some extent EMC protection too

* Energy efficient product optional and available on request. * Anti-rodent & anti-termite properties optional on request. * In-built UV protection.

Article No.	Conductor Cross-Section in mm ²	Outer Diameter in mm approx	Copper index kg/km	Weight kg/ approx
8610030223	2X0.14	3.20	2.70	13.20
8610030323	3X0.14	3.40	4.00	16.00
8610030423	4X0.14	3.60	5.40	18.90
8610030523	5X0.14	3.90	6.70	22.20
8610030723	7X0.14	4.20	9.40	28.40
8610030823	8X0.14	4.90	10.20	35.20
8610031023	10X0.14	5.20	13.50	41.20
861003020	2X0.25	3.80	4.80	18.00
861003030	3X0.25	4.00	7.20	22.00
861003040	4X0.25	4.30	9.60	26.20
861003050	5X0.25	4.70	12.00	31.00
861003070	7X0.25	5.10	16.80	42.00
861003080	8X0.25	6.20	19.20	49.20
861003100	10X0.25	6.80	24.00	58.00
8610030224	2X0.34	4.20	6.60	22.20
8610030324	3X0.34	4.40	9.90	31.00
8610030424	4X0.34	4.80	13.10	43.20
8610030524	5X0.34	5.50	16.50	53.80
8610030724	7X0.34	5.90	22.80	62.00
8610030824	8X0.34	7.10	26.10	73.10

Article No.	Conductor Cross-Section in mm ²	Outer Diameter in mm approx	Copper index kg/km	Weight kg/ approx
8610031024	10X0.34	7.60	32.60	82.00
861003021	2X0.50	4.70	9.60	40.00
861003031	3X0.50	5.00	14.40	47.00
861003041	4X0.50	5.60	19.20	56.00
861003051	5X0.50	6.10	24.00	65.00
861003071	7X0.50	6.90	33.60	82.00
861003081	8X0.50	8.00	38.40	90.00
861003101	10X0.50	8.60	48.00	117.00
861003022	2X0.75	5.10	14.40	48.00
861003032	3X0.75	5.60	21.60	57.00
861003042	4X0.75	6.10	28.80	69.00
861003052	5X0.75	6.90	36.00	78.00
861003072	7X0.75	7.50	50.00	112.00
861003082	8X0.75	8.70	58.00	126.00
861003102	10X0.75	9.40	72.00	149.00
861003023	2X1.00	5.60	19.20	55.00
861003033	3X1.00	5.90	29.00	70.00
861003053	5X1.00	7.30	48.00	98.00
861003024	2X1.50	6.80	29.00	74.00
861003034	3X1.50	7.20	43.00	89.00
861003044	4X1.50	7.80	58.00	105.00

Example to find out Part Number, Type A & ST1 PVC 4 Core of 0.5mm², CLASS 5, BARE CU



- Note:
1. Tinned copper Class 2, Class 5 or Class 6 on request.
 2. Packing 500mtrs in wooden Spools, or 100mtr Rings

SBEE DATATRONIC LIYY-TP

SBEE DATATRONIC LIYY-TP



TECHNICAL DATA

Generally conforms to test VDE 0812 standard	Core Colours: As per DIN47100 colour coding	Peak working voltage: 250 V (Not recommended for power application)
Specific Insulation Resistance: >20G Ω x cm	Mutual Capacitance: Approx 120nF/km	Minimum Bending Radius: Occasional Flexing 10 x Cable Dia
Test Voltage: 1.2kV for cross section up to including 0.14mm ² 1.5 kV for cross section > 0.14mm ²	Mutual Capacitance: Approx 120nF/km	Conductor Bunching: Short lay, Class 5 as per VDE 0295 or IS 8130
Temperature Range: Fixed Installation -30°C to +80°C PVC Occasional flexing -5° C +70°C	Coupling: 300pF/100m @ 1kHz	
	Loop Resistance: 2 x Conductor resistance	

APPLICATIONS

- O.E.M, Machine Builders for data communication
- Space saving Flexible Applications
- Dry or Damp interiors
- Electronic control systems
- Air conditioning installations for remote sensing
- Inductive Proximity sensors circuits & Tacho Generators & Control Equipemnts

PRODUCT MAKEUP

- Strands of Electrolytic Grade, Oxygen free Bare Copper wire class V (Class 2 or Class 6 on request)
- Different classes of PVC Insulation, Inner & Outer Sheath, HFFR optional.
- Cores are paired & layed up in sequence and in layers at achieve attinuation levels
- Special PVC outer Sheath, Pebble Grey RAL-7032

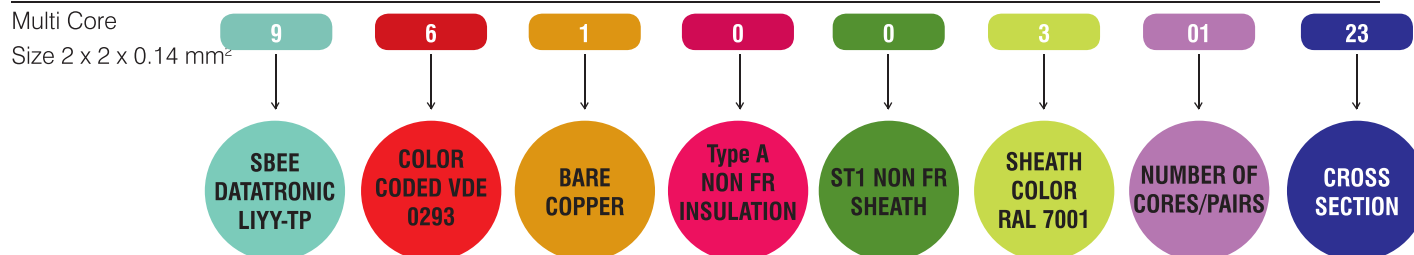
PRODUCT FEATURES

- Non flame retardent properties is option
- Optional Flame retardent as per IEC 60332-1-2
- Optional Flamability test as per IS 10810-53
- Resistant to certain Industrial Oils used in Machine tool Industries
- Organic & Inorganic Chemical Resistance of Certain type

* Energy efficient product optional and available on request. * Anti-rodent & anti-termite properties optional on request. * In-built UV protection.

Article No.	Conductor Cross-Section in mm ²	Outer Diameter in mm approx	Copper index kg/km	Weight kg/ approx
9610030123	2X2X0.14	4.80	5.40	25.50
9610030223	3X2X0.14	4.90	8.00	32.00
9610030323	4X2X0.14	5.50	10.70	38.50
9610030423	5X2X0.14	5.70	13.40	45.50
9610030523	6X2X0.14	6.20	16.10	51.00
9610030923	10X2X0.14	8.00	26.90	77.50
9610031123	12X2X0.14	8.20	32.30	94.50
9610031523	16X2X0.14	9.10	43.00	110.50
961003010	2X2X0.25	6.10	9.60	38.00
961003020	3X2X0.25	6.20	14.40	48.00
961003030	4X2X0.25	6.90	19.20	59.00
961003050	6X2X0.25	7.80	28.80	80.00
961003070	8X2X0.25	9.20	38.40	98.00
961003090	10X2X0.25	10.30	48.00	115.00
961003011	2X2X0.50	7.90	19.20	72.00
961003021	3X2X0.50	8.00	28.80	83.00
961003031	4X2X0.50	8.70	38.40	115.00
961003071	8X2X0.50	12.20	76.80	206.00
961003091	10X2X0.50	13.20	96.00	247.00

Example to find out Part Number, Type A & ST1 PVC 2 Pair of 0.14mm², CLASS 5, BARE CU



Note:
1. Tinned copper Class 2, Class 5 or Class 6 on request.
2. Packing 500mtrs in wooden Spools, or 100mtr Rings



TECHNICAL DATA

Generally conforms to test VDE 0812 standard	Core Colours: As per DIN47100 colour codig	Peak working Voltage: 250 V (Not recomended for power application)
Specific Insulation Resistance:>20G Ω x cm	Mutual Capacitance: Approx 140nF/km, Core to core Approx 150nF/km Core to Screen	Minimum Bending Radius: Occasional Flexing 15 x Cable Dia
Test Voltage: 1.2kV for cross section up to including 0.14mm ² 1.5 kV for cross section > 0.14mm ²	Temperature Range: Fixed Installation -30°C to +80°C PVC Occasional flexing -5° C +70°C	Conductor Bunching: Short lay, Class 5 as per VDE 0295 or IS 8130
Inductance: Approx 0.65mH/km		

APPLICATIONS

- O.E.M, Machine Builders for data communication
- Space saving Flexible Applications
- Dry or Damp interiors
- Electronic control systems where screening is essential
- Electronic Measurement Industries, Data Network, Automation
- Air conditioning installations for remote sensing
- Inductive Proximity sensors circuits & Tacho Generators & Control Equipemnts

PRODUCT MAKEUP

- Strands of Electrolytic Grade, Oxygen free Bare Copper wire class V (Class 2 or Class 6 on request)
- Different classes of PVC Insulation, Inner & Outer Sheath, HFFR optional
- Cores are paired & layed up in sequence and in layers to achieve attinuation levels
- Screen is with Fine Electroplated Tinned Copper wire braid
- Special PVC outer Sheath, Pebble Grey to RAL7032

PRODUCT FEATURES

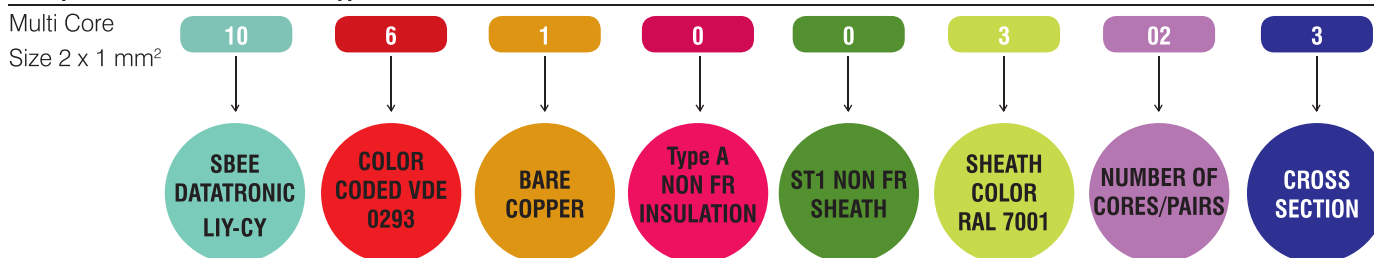
- Non flame retardent properties is option
- Optional Flame retardent as per IEC 60332-1-2
- Optional Flamability test as per IS 10810-53
- Resistant to certain Industrial Oils used in Machine tool Industries
- Organic & Inorganic Chemical Resistance of Certain type
- High Percentage Coverage of Electroplated Tinned Copper fine wires for very good EMC protection. Low Transfer Impedence of 250Ω/km at 30MHz

* Energy efficient product optional and available on request. * Anti-rodent & anti-termite properties optional on request. * In-built UV protection.

Article No.	Conductor Cross-Section in mm ²	Outer Diameter in mm approx	Copper index kg/km	Weight kg/ approx
1010030223	2X0.14	3.90	12.00	20.00
10610030323	3X0.14	4.10	13.00	28.00
10610030423	4X0.14	4.30	14.30	33.00
10610030523	5X0.14	4.60	15.50	38.00
10610030623	6X0.14	4.90	18.20	38.00
10610030723	7X0.14	4.90	19.00	49.00
10610030823	8X0.14	5.80	21.20	56.00
10610031023	10X0.14	6.10	28.50	66.00
1061003020	2X0.25	4.50	16.00	32.00
1061003030	3X0.25	4.70	21.00	37.00
1061003040	4X0.25	5.00	24.00	41.30
1061003050	5X0.25	5.60	29.00	51.20
1061003060	6X0.25	6.00	30.00	58.00
1061003070	7X0.25	6.00	37.00	65.00
1061003080	8X0.25	7.10	42.00	73.00
1061003100	10X0.25	7.50	46.00	82.00
10610030224	2X0.34	4.90	21.00	37.00
10610030324	3X0.34	5.10	27.00	49.00
10610030424	4X0.34	5.70	28.00	59.00
10610030524	5X0.34	6.20	3.00	66.00
10610030624	6X0.34	6.80	45.00	79.00
10610030724	7X0.34	6.80	48.00	83.00
10610030824	8X0.34	7.80	52.00	94.00
10610031024	10X0.34	8.30	74.00	129.20

Article No.	Conductor Cross-Section in mm ²	Outer Diameter in mm approx	Copper index kg/km	Weight kg/ approx
1061003021	2X0.50	5.60	29.00	54.00
1061003031	3X0.50	5.90	38.00	67.00
1061003041	4X0.50	6.30	43.00	77.00
1061003051	5X0.50	7.00	51.00	90.00
1061003061	6X0.50	7.60	59.00	104.00
1061003071	7X0.50	7.60	65.00	112.00
1061003081	8X0.50	8.70	70.00	135.00
1061003101	10X0.50	9.30	88.00	160.00
1061003022	2X0.75	6.00	38.00	64.00
1061003032	3X0.75	6.30	49.00	76.00
1061003042	4X0.75	7.00	58.00	92.00
1061003052	5X0.75	7.60	67.00	109.00
1061003072	7X0.75	8.20	100.00	156.00
1061003102	10X0.75	10.50	130.00	187.00
1061003023	2X1.00	6.30	43.00	72.00
1061003033	3X1.00	6.80	56.00	90.00
1061003043	4X1.00	7.30	68.00	109.00
1061003053	5X1.00	8.00	79.00	126.00
1061003073	7X1.00	8.60	118.00	171.00
1061003103	10X1.00	11.10	140.00	228.00
1061003024	2X1.50	7.50	58.00	90.00
1061003034	3X1.50	7.90	74.00	115.00
1061003044	4X1.50	8.50	108.00	153.00
1061003054	5X1.50	9.30	129.00	176.00
1061003074	7X1.50	10.50	164.00	176.00

Example to find out Part Number, Type A & ST1 PVC 2 Core of 1mm², CLASS 5, BARE CU



Note:
1. Tinned copper Class 2, Class 5 or Class 6 on request.
2. Packing 500mtrs in wooden Spools, or 100mtr Rings

SBEE DATATRONIC LIYC-TP

SBEE DATATRONIC LIYC TP



TECHNICAL DATA

Generally conforms to test VDE 0812 standard	Core Colours: As per DIN47100 colour coding	Peak working Voltage: 250 V (Not recommended for power application)
Specific Insulation Resistance: >20G Ω x cm	Mutual Capacitance: Approx 230nF/km, Core to core Approx 150nF/km Core to Screen	Minimum Bending Radius: Occasional Flexing 15 x Cable Dia
Test Voltage: 1.2kV for cross section up to including 0.14mm ² 1.5 kV for cross section > 0.14mm ²	Inductance: Approx 0.65mH/km	Conductor Bunching: Short lay, Class 5 as per VDE 0295 or IS 8130
Temperature Range: Fixed Installation -30°C to +80°C PVC Occasional flexing -5° C +70°C	Coupling: 300pF/100Mtr @ 1kHz	
	Loop Resistance: 2 x conductor resistance d.c.	

APPLICATIONS

- O.E.M, Machine Builders for data communication
- Space saving Flexible Applications
- Dry or Damp interiors
- Electronic control systems where screening is essential
- Electronic Measurement Industries, Data Network, Automation
- Air conditioning installations for remote sensing
- Inductive Proximity sensors circuits & Tacho Generators & Control Equipemnts
- For trouble free data transfer at where strong interference of Electromagnetic field

PRODUCT MAKEUP

- Strands of Electrolytic Grade, Oxygen free Bare Copper wire class V (Class 2 or Class 6 on request)
- Different varieties of PVC Insulation & Outer Sheath, HFFR optional.
- Cores layed up in sequence and in layers at achieve attinuation
- Overall Screen is with Fine Electroplated Tinned Copper wire braid
- Special PVC outer Sheath, Pebble Grey to RAL7032

PRODUCT FEATURES

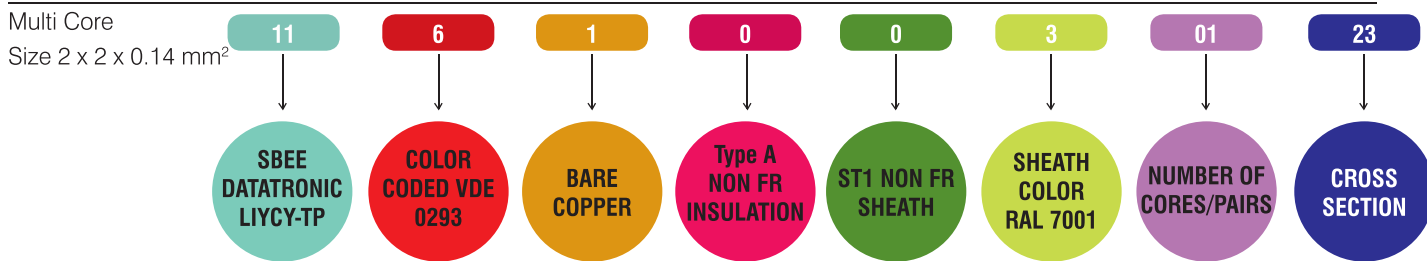
- Non flame retardent properties is option
- Optional Flame retardent as per IEC 60332-1-2
- Optional Flamability test as per IS 10810-53
- Resistant to certain Industrial Oils used in Machine tool Industries
- Organic & Inorganic Chemical Resistance of Certain type
- High Percentage Coverage of Electroplated Tinned Copper fine wires for very good EMC protection. Low Transfer Impedence of 250Ω/km at 30MHz

* Energy efficient product optional and available on request. * Anti-rodent & anti-termite properties optional on request. * In-built UV protection.

Article No.	Conductor Cross-Section in mm ²	Outer Diameter in mm approx	Copper index kg/km	Weight kg/ approx
11610030123	2X2X0.14	5.70	18.50	39.00
11610030223	3X2X0.14	5.80	23.00	48.00
11610030323	4X2X0.14	6.20	26.60	54.00
1161003010	2X2X0.25	7.00	28.00	54.00
1161003020	3X2X0.25	7.10	39.60	66.00
1161003030	4X2X0.25	7.60	44.90	81.00
1161003011	2X2X0.50	8.60	48.10	93.00
1161003021	3X2X0.50	8.70	73.70	129.00

Article No.	Conductor Cross-Section in mm ²	Outer Diameter in mm approx	Copper index kg/km	Weight kg/ approx
1161003031	4X2X0.50	9.40	82.00	146.00
1161003012	2X2X0.75	8.50	58.00	126.00
1161003022	3X2X0.75	9.40	84.00	140.00
1161003032	4X2X0.75	10.70	108.00	179.00
1161003013	2X2X1	10.30	84.00	142.00
1161003023	3X2X1	10.40	96.00	173.00
1161003033	4X2X1	11.30	121.00	212.00
1161003043	5X2X1	11.80	161.00	266.00

Example to find out Part Number, Type A & ST1 PVC 2 Pair of 0.14mm², CLASS 5, BARE CU



Note:
1. Tinned copper Class 2, Class 5 or Class 6 on request.
2. Packing 500mtrs in wooden Spools, or 100mtr Rings

SBEE DATATRONIC LIYCY-CY



TECHNICAL DATA

Generally confirms to test VDE 0812 standard	Core Colours: As per DIN47100 colour coding	Peak working Voltage: 250 V (Not recommended for power application)
Specific Insulation Resistance: >20G Ω x cm	Mutual Capacitance: Approx 230nF/km, Core to core Approx 150nF/km Core to Screen	Minimum Bending Radius: Occasional Flexing 15 x Cable Dia
Test Voltage: 1.2kV for cross section up to including 0.14mm ² 1.5 kV for cross section > 0.14mm ²	Temperature Range: Fixed Installation -30°C to +80°C PVC Occasional flexing -5° C +70°C	Conductor Bunching: Short lay, Class 5 as per VDE 0295 or IS 8130
Inductance: Approx 2mH/km		

APPLICATIONS

- O.E.M, Machine Builders for data communication
- Space saving Flexible Applications
- Dry or Damp interiors
- Electronic control systems where screening is essential
- Electronic Measurement Industries, Data Network, Automation
- Air conditioning installations for remote sensing
- Inductive Proximity sensors circuits & Tacho Generators & Control Equipemnts
- For trouble free data transfer at where strong interference of Electromagnetic field

PRODUCT MAKEUP

- Strands of Electrolytic Grade, Oxygen free Bare Copper wire class V (Class 2 or Class 6 on request)
- Different classes of PVC Insulation, Inner & Outer Sheath, HFFR optional
- Each core is braided with fine Electroplated Tinned copper wire and sheathed
- Cores layed up in sequence and in layers to achieve attenuation
- Overall Screen is with Fine Electroplated Tinned Copper wire braid
- Special PVC outer Sheath, Pebble Grey to RAL7032

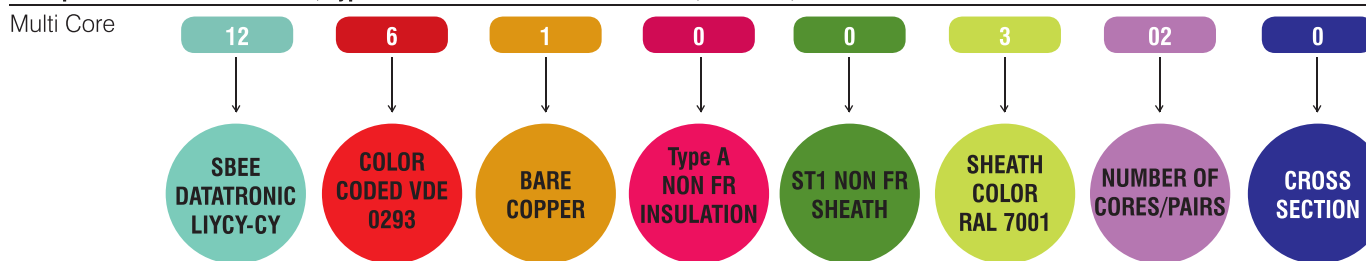
PRODUCT FEATURES

- Non flame retardent properties is option
- Optional Flame retardent as per IEC 60332-1-2
- Optional Flamability test as per IS 10810-53
- Resistant to certain Industrial Oils used in Machine tool Industries
- Organic & Inorganic Chemical Resistance of Certain type
- High Percentage Coverage of Electroplated Tinned Copper fine wires for very good EMC protection. Low Transfer Impedence of 250Ω/km at 30MHz

* Energy efficient product optional and available on request. * Anti-rodent & anti-termite properties optional on request. * In-built UV protection.

Article No.	Conductor Cross-Section in mm ²	Outer Diameter in mm approx	Copper index kg/km	Weight kg/ approx
1261003020	2X0.25	6.90	41.50	69.00
1261003030	3X0.25	7.20	53.00	106.00
1261003040	4X0.25	7.80	65.00	130.00
1261003050	5X0.25	8.50	78.00	161.00
1261003070	7X0.25	9.20	94.00	196.00

Example to find out Part Number, Type A & ST1 PVC 2 Core of 0.25mm², CLASS 5, BARE CU



Note:
 1. Tinned copper Class 2, Class 5 or Class 6 on request.
 2. Packing 500mtrs in wooden Spools, or 100mtr Rings

SBEE INSTRUM MULTICORE SIGNAL & INSTRUMENTATION CABLES



TECHNICAL DATA

- Generally conforms to test BS5308 P1 or P2
- Insulation Resistance: >5000M Ω x cm
- Test Voltage: 2kV r.m.s
- Inductance: Approx 2mH/km
- Loop Resistance: 2 x conductor resistance d.c.

- Core Colours: All Cores Black & Blue, skin extruded with semi compression process. Each pair is formed using One Black core & one Blue core, first pair cores are identified with Nr.1 & 1 printed on cores, second pair cores are printed Nr.2 & 2 - - - etc. Alternatively cores in a pair are coded as per Appendix A of BS5308 P1 & P2.
- Temperature Range: Fixed Installation -30°C to +80°C PVC
Occasional flexing -5°C to +105°C

- Peak working Voltage: 250 V (Not recommended for power application)
- Minimum Bending Radius: Occasional Flexing 15 x Cable Dia
- Conductor Bunching: Short lay, Class 5 for 0.5mm² & 0.75mm², Class 2 for 1.5mm² as per VDE 0295 or IS 8130

APPLICATIONS

- O.E.M, Machine Builders for data communication
- Transmission of Analog control Signals in Petro Chemical industries
- Dry or Damp interiors
- Electronic control systems where screening is essential
- Electronic Measurement Industries, Data Network, Automation
- Scada Application in Wind mill power generation
- Use in Interinsically safe systems where potential hazards of likelihood of explosions

PRODUCT MAKEUP

- Strands of Electrolytic Grade, Oxygen free Bare Copper wire class 2 BS6360
- Different varieties of PE Type 3 BS 6324/PVC-Insulation, PVC Type TM1 Inner & Outer Sheath BS7655 or Equivalent
- Cores are paired with unique lay for effective attenuation, screening of pairs with Aluminium mylar tape & Tinned Copper Drain wires is optional for effective electrostatic protection
- Pairs are layed up in sequence and in layers at achieve attinuation, overall screened with Aluminium Mylar tape tape & Tinned copper wire
- Steel wire/strip armoured optional. BS6476 or IS 3975-1979 Copper wire braid
- Special PVC outer Sheath, Blue to RAL 5015

PRODUCT FEATURES

- Non flame retardent properties is option
- Optional Flame retardent as per IEC 60332-1-2
- Optional Flamability test as per IS 10810-53
- Resistant to certain Industrial Oils used in Machine tool Industries
- Organic & Inorganic Chemical Resistance of Certain type
- High Percentage Coverage of Aluminium Mylar tape screen results in good EMC protection

* Energy efficient product optional and available on request. * Anti-rodent & anti-termite properties optional on request. * In-built UV protection.

Typical L/R & Capacitance Charecterstics: BS5308 P1

Cross section mm ²	L/R μH/Ω	Core to Core Capacitance pF/m @ 1kHz	Core to overall Screen Capacitance pF/m @ 1kHz	Pair Screened & Overall Screen Capacitance pF/m @ 1kHz	Capacitance Unbalance Pair to Pair 250m @ 1kHz
0.5	25	75	75	115	250pF/250m
0.75	25	75	75	115	250pF/250m
1.5	40	85	85	115	250pF/250m

Typical L/R & Capacitance Charecterstics: BS5308 P2

Cross section mm ²	L/R μH/Ω	Core to Core Capacitance pF/m @ 1kHz	Core to Screen Capacitance pF/m @ 1kHz
0.5	25	250	400
0.75	25	250	400
1.5	40	250	400

Article Number	Conductor Cross-Section in mm ²	Overall Screened Outer Diameter in mm approx.	Pair Sheilded & Over all Screened Outer diameter in mm approx.	Article Number	Conductor Cross-Section in mm ²	Overall Screened Outer Diameter in mm approx.	Pair Sheilded & Over all Screened Outer diameter in mm approx.
1361003001	1X2X0.5	6.00	11.00	1361003142	15X2X0.75	20.40	25.40
1361003041	5X2X0.5	12.10	14.20	1361003162	20X2X0.75	23.50	28.80
1361003091	10X2X0.5	16.20	20.10	1361003172	30X2X0.75	28.50	34.50
1361003141	15X2X0.5	18.80	23.50	1361003502	50X2X0.75	36.40	44.00
1361003161	20X2X0.5	21.30	26.30	1361003003	1X2X1.5	7.30	13.70
1361003171	30X2X0.5	25.90	31.30	1361003043	5X2X1.5	15.40	17.80
1361003501	50X2X0.5	32.90	40.70	1361003093	10X2X1.5	20.60	25.50
1361003002	1X2X0.75	6.30	11.80	1361003143	15X2X1.5	24.20	29.80
1361003042	5X2X0.75	13.30	15.30	1361003163	20X2X1.5	27.50	33.40
1361003092	10X2X0.75	17.70	21.70	1361003173	30X2X1.5	33.30	40.00
				1361003503	50X2X1.5	42.60	51.20

Note:

1. Tinned copper Class 5 or Class 6, Class 2 on request
2. Packing 500mtrs in wooden Spools, or 100mtr Rings
3. Odd lengths packing based on cable size

SBEE THERMOPLUS THERMOCOUPLE CABLES: K TYPE



TECHNICAL DATA

IS Certified As per IS 8784	Temperature Range: Fixed Installation -65° C to +90° C PVC HR
Test Voltage: Upto and Including 1.0mm Insulation Thickness - 6 kV rms	Rated Voltage: 300/500 volts grade.
Core Colours: Chromel (+) in Yellow Colour & Alumel (-) in Red colour	Minimum Bending Radius: Fixed Application 12 x Cable Dia
Specific Insulation Resistance: As per IS 5831	

APPLICATIONS

- It is used in various of temperature measurement device
- it will be used in oil, chemical industry, metallurgy, electric, etc

PRODUCT MAKEUP

- Strands of Chromel and Alumel wire class 2
- Different classes of P.V.C Insulation Sheath
- Outer sheath colour P.V.C. YELLOW to RAL 1021
- G.I. Wire for additional Mechanical Protection- Optional

PRODUCT FEATURES

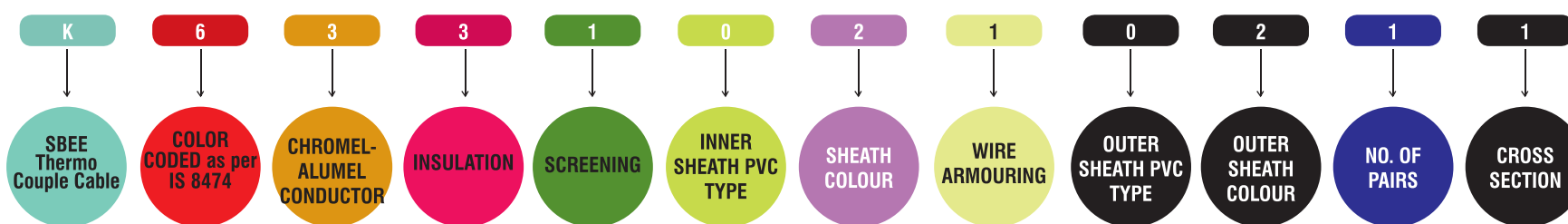
- Flame retardent as per IEC 60332-1-2
- Flamability test as per IS 10810-53

* Anti-rodent & anti-termite properties optional on request.

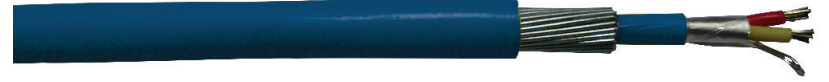
NEW PART NO	Size in AWG	Crossection mm ²	No. of Strands/Dia of Each Strand of single core	Outer diameter in mm approx	Conductor Index kg/km
K63310210201	1P X 16AWG	1P X 1.32mm ²	7/0.49	11	23
K63310210211	2P X 16AWG	2P X 1.32mm ²	7/0.49	14	45
K63310210221	3P X 16AWG	3P X 1.32mm ²	7/0.49	15	68
K63310210231	4P X 16AWG	4P X 1.32mm ²	7/0.49	16	91
K63310210241	5P X 16AWG	5P X 1.32mm ²	7/0.49	17	114
K63310210251	6P X 16AWG	6P X 1.32mm ²	7/0.49	17	136
K63310210261	7P X 16AWG	7P X 1.32mm ²	7/0.49	18	159
K63310210271	8P X 16AWG	8P X 1.32mm ²	7/0.49	18	182
K63310210281	9P X 16AWG	9P X 1.32mm ²	7/0.49	20	204
K63310210291	10P X 16AWG	10P X 1.32mm ²	7/0.49	20	227
K63310210203	1P X 20AWG	1P X 0.5mm ²	7/0.3	10	9
K63310210213	2P X 20AWG	2P X 0.5mm ²	7/0.3	12	17
K63310210223	3P X 20AWG	3P X 0.5mm ²	7/0.3	12	26
K63310210233	4P X 20AWG	4P X 0.5mm ²	7/0.3	14	34
K63310210243	5P X 20AWG	5P X 0.5mm ²	7/0.3	15	43
K63310210253	6P X 20AWG	6P X 0.5mm ²	7/0.3	15	52
K63310210263	7P X 20AWG	7P X 0.5mm ²	7/0.3	16	60
K63310210273	8P X 20AWG	8P X 0.5mm ²	7/0.3	17	69
K63310210283	9P X 20AWG	9P X 0.5mm ²	7/0.3	19	77
K63310210293	10P X 20AWG	10P X 0.5mm ²	7/0.3	18	86

Example to Find Part Number Type C & ST2 PVC 2 Pair of 16SWG, CLASS 2, Chromel & Alumel Conductor








Wire Armoured



SBEE THERMOPLUS THERMOCOUPLE CABLES: T TYPE



TECHNICAL DATA

-  IS Certified As per IS 8784
-  Test Voltage: Upto and Including 1.0mm Insulation Thickness - 6 kV rms
-  Core Colours: Copper (+) in Blue Colour & Constantan (-) in Red colour
-  Specific Insulation Resistance: As per IS 5831
-  Temperature Range: Fixed Installation -65° C to +90° C PVC HR
-  Rated Voltage: 300/500 volts grade.
-  Minimum Bending Radius: Fixed Application 12 x Cable Dia

APPLICATIONS

- May be used in vacuum, oxidizing, reducing, and inert atmospheres
- High stability at sub-zero temperatures and its limits of error are guaranteed at cryogenic temperatures

PRODUCT MAKEUP

- Strands of Chromel and Alumel wire class 2
- Different classes of P.V.C Insulation Sheath
- Outer sheath colour P.V.C. YELLOW to RAL 1021
- G.I. Wire for additional Mechanical Protection-Optional

PRODUCT FEATURES

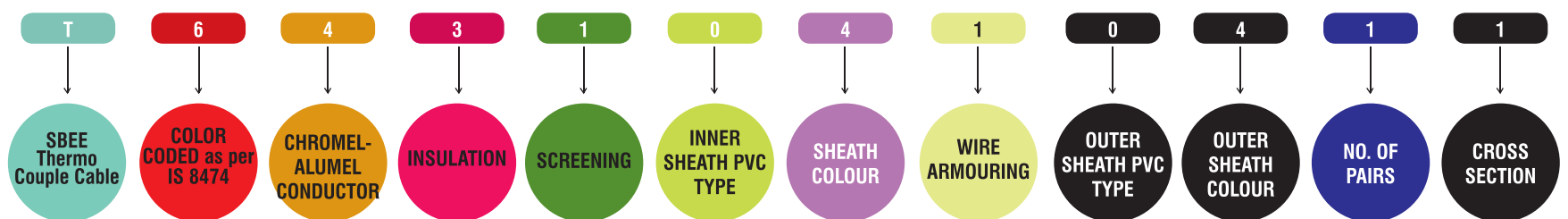
- Flame retardent as per IEC 60332-1-2
- Flamability test as per IS 10810-53

* Anti-rodent & anti-termite properties optional on request.

NEW PART NO	Size in AWG	Crosssection mm ²	No. of Strands/Dia of Each Strand of single core	Outer diameter in mm approx	Conductor Index kg/km
T64310410401	1P X 16AWG	1P X 1.32mm ²	7/0.49	10.80	23
T64310410411	2P X 16AWG	2P X 1.32mm ²	7/0.49	14.00	47
T64310410421	3P X 16AWG	3P X 1.32mm ²	7/0.49	14.60	70
T64310410431	4P X 16AWG	4P X 1.32mm ²	7/0.49	15.60	94
T64310410441	5P X 16AWG	5P X 1.32mm ²	7/0.49	16.60	117
T64310410451	6P X 16AWG	6P X 1.32mm ²	7/0.49	17.40	141
T64310410461	7P X 16AWG	7P X 1.32mm ²	7/0.49	18.00	164
T64310410471	8P X 16AWG	8P X 1.32mm ²	7/0.49	18.40	188
T64310410481	9P X 16AWG	9P X 1.32mm ²	7/0.49	19.60	211
T64310410491	10P X 16AWG	10P X 1.32mm ²	7/0.49	20.40	235
T64310410403	1P X 20AWG	1P X 0.5mm ²	7/0.3	9.80	9
T64310410413	2P X 20AWG	2P X 0.5mm ²	7/0.3	11.60	18
T64310410423	3P X 20AWG	3P X 0.5mm ²	7/0.3	12.10	27
T64310410433	4P X 20AWG	4P X 0.5mm ²	7/0.3	13.90	36
T64310410443	5P X 20AWG	5P X 0.5mm ²	7/0.3	14.80	44
T64310410453	6P X 20AWG	6P X 0.5mm ²	7/0.3	15.40	53
T64310410463	7P X 20AWG	7P X 0.5mm ²	7/0.3	15.70	62
T64310410473	8P X 20AWG	8P X 0.5mm ²	7/0.3	17.10	71
T64310410483	9P X 20AWG	9P X 0.5mm ²	7/0.3	18.50	80
T64310410493	10P X 20AWG	10P X 0.5mm ²	7/0.3	17.80	89

Example to Find Part Number Type C & ST2 PVC 2 Pair of 16SWG, CLASS 2, Copper & Constantan Conductor








Wire Armoured



SBEE THERMOPLUS THERMOCOUPLE CABLES: J TYPE



TECHNICAL DATA

-  IS Certified As per IS 8784
-  Test Voltage: Upto and Including 1.0mm Insulation Thickness - 6 kV rms
-  Core Colours: Copper (+) in Blue Colour & Constantan (-) in Red colour
-  Specific Insulation Resistance: As per IS 5831
-  Temperature Range: Fixed Installation -65° C to +90° C PVC HR
-  Rated Voltage: 300/500 volts grade.
-  Minimum Bending Radius: Fixed Application 12 x Cable Dia

APPLICATIONS

- Monitoring in a vacuum and for inert metals
- Hot processes including plastics and resin manufacture

PRODUCT MAKEUP

- Strands of Chromel and Alumel wire class 2
- Different classes of P.V.C Insulation Sheath
- Outer sheath colour BLACK to RAL 9005
- G.I. Wire for additional Mechanical Protection- Optional

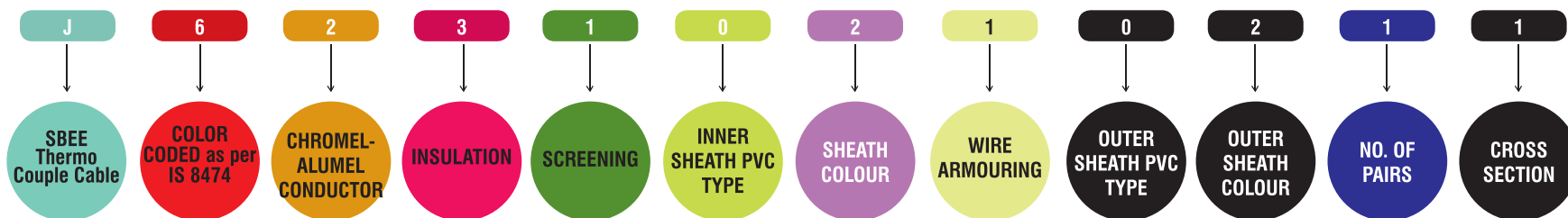
PRODUCT FEATURES

- Flame retardent as per IEC 60332-1-2
- Flamability test as per IS 10810-53

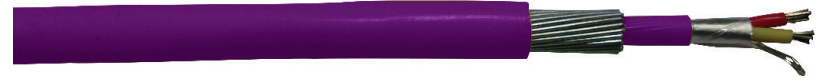
NEW PART NO	Size in AWG	Crosssection mm ²	No. of Strands/Dia of Each Strand of single core	Outer diameter in mm approx	Conductor Index kg/km
J62310210201	1P X 16AWG	1P X 1.32mm ²	7/0.49	10.80	22
J62310210211	2P X 16AWG	2P X 1.32mm ²	7/0.49	14.00	44
J62310210221	3P X 16AWG	3P X 1.32mm ²	7/0.49	14.60	66
J62310210231	4P X 16AWG	4P X 1.32mm ²	7/0.49	15.60	88
J62310210241	5P X 16AWG	5P X 1.32mm ²	7/0.49	16.60	111
J62310210251	6P X 16AWG	6P X 1.32mm ²	7/0.49	17.40	133
J62310210261	7P X 16AWG	7P X 1.32mm ²	7/0.49	18.00	155
J62310210271	8P X 16AWG	8P X 1.32mm ²	7/0.49	18.40	177
J62310210281	9P X 16AWG	9P X 1.32mm ²	7/0.49	19.60	199
J62310210291	10P X 16AWG	10P X 1.32mm ²	7/0.49	20.40	221
J62310210203	1P X 20AWG	1P X 0.5mm ²	7/0.3	9.80	8
J62310210213	2P X 20AWG	2P X 0.5mm ²	7/0.3	11.60	17
J62310210223	3P X 20AWG	3P X 0.5mm ²	7/0.3	12.10	25
J62310210233	4P X 20AWG	4P X 0.5mm ²	7/0.3	13.90	34
J62310210243	5P X 20AWG	5P X 0.5mm ²	7/0.3	14.80	42
J62310210253	6P X 20AWG	6P X 0.5mm ²	7/0.3	15.40	50
J62310210263	7P X 20AWG	7P X 0.5mm ²	7/0.3	15.70	59
J62310210273	8P X 20AWG	8P X 0.5mm ²	7/0.3	17.10	67
J62310210283	9P X 20AWG	9P X 0.5mm ²	7/0.3	18.50	75
J62310210293	10P X 20AWG	10P X 0.5mm ²	7/0.3	17.80	84

Example to Find Part Number Type C & ST2 PVC 2 Pair of 16SWG, CLASS 2, Iron & Constantan Conductor

Wire Armoured



SBEE THERMOPLUS THERMOCOUPLE CABLES: E TYPE



TECHNICAL DATA

- IS Certified As per IS 8784
- Test Voltage: Upto and Including 1.0mm Insulation Thickness - 6 kV rms
- Core Colours: Copper (+) in Blue Colour & Constantan (-) in Red colour
- Specific Insulation Resistance: As per IS 5831
- Temperature Range: Fixed Installation -65° C to +90° C PVC HR
- Rated Voltage: 300/500 volts grade.
- Minimum Bending Radius: Fixed Application 12 x Cable Dia

APPLICATIONS

- May be used in oxidizing or inert atmospheres, but not recommended for alternating oxidizing or inert atmospheres.
- Has the highest EMF produced per degree than any other standard thermocouple and must be protected from sulfurous atmospheres.

PRODUCT MAKEUP

- Strands of Chromel and Alumel wire class 2
- Different classes of P.V.C Insulation Sheath
- Outer sheath colour VIOLET to RAL 1008
- G.I. Wire for additional Mechanical Protection-Optional

PRODUCT FEATURES

- Flame retardent as per IEC 60332-1-2
- Flamability test as per IS 10810-53

* Anti-rodent & anti-termite properties optional on request.

NEW PART NO	Size in AWG	Crosssection mm ² Strand of single core	No. of Strands/Dia of Each	Outer diameter in mm approx	Conductor Index kg/km
E61310510501	1P X 16AWG	1P X 1.32mm ²	7/0.49	11	23
E61310510511	2P X 16AWG	2P X 1.32mm ²	7/0.49	14	47
E61310510521	3P X 16AWG	3P X 1.32mm ²	7/0.49	15	70
E61310510531	4P X 16AWG	4P X 1.32mm ²	7/0.49	16	94
E61310510541	5P X 16AWG	5P X 1.32mm ²	7/0.49	17	117
E61310510551	6P X 16AWG	6P X 1.32mm ²	7/0.49	17	141
E61310510561	7P X 16AWG	7P X 1.32mm ²	7/0.49	18	164
E61310510571	8P X 16AWG	8P X 1.32mm ²	7/0.49	18	188
E61310510581	9P X 16AWG	9P X 1.32mm ²	7/0.49	20	211
E61310510591	10P X 16AWG	10P X 1.32mm ²	7/0.49	20	235
E61310510503	1P X 20AWG	1P X 0.5mm ²	7/0.3	10	9
E61310510513	2P X 20AWG	2P X 0.5mm ²	7/0.3	12	18
E61310510523	3P X 20AWG	3P X 0.5mm ²	7/0.3	12	26
E61310510533	4P X 20AWG	4P X 0.5mm ²	7/0.3	14	35
E61310510543	5P X 20AWG	5P X 0.5mm ²	7/0.3	15	44
E61310510553	6P X 20AWG	6P X 0.5mm ²	7/0.3	15	53
E61310510563	7P X 20AWG	7P X 0.5mm ²	7/0.3	16	62
E61310510573	8P X 20AWG	8P X 0.5mm ²	7/0.3	17	70
E61310510583	9P X 20AWG	9P X 0.5mm ²	7/0.3	19	79
E61310510593	10P X 20AWG	10P X 0.5mm ²	7/0.3	18	88

Example to Find Part Number Type C & ST2 PVC 2 Pair of 16SWG, CLASS 2, Chromel & Constantan Conductor

Wire Armoured

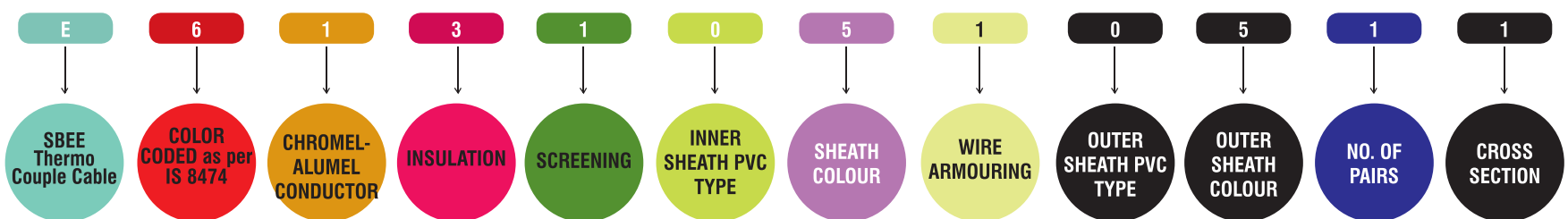


Table 1-I: Power rating of wires & cables having nominal voltage up to 1000 V and heat resistant wire & cables, ambient temperature 30 °C

CABLE OR LEAD CATEGORY				
Installation Method	A PVC insulated Single Core	B PVC insulated Multicore cables & cords for domestic & portable apparatus		C PVC insulated Heat resistant Multicore cables + cords, excl. domestic
Number of current carrying conductors				
Nominal cross Section In mm ²	Current rating in Amps	Current rating in Amps		Current rating in Amps
	1 ³⁾	2	3	2 or 3
0.081)	1.5	-	-	1
0.141)	3	-	-	2
0.251)	5	-	-	4
0.341)	8	-	-	6
0.5	122)	3	3	92)
0.75	15	6	6	12
1	19	10	10	15
1.5	24	16	16	18
2.5	32	25	20	26
4	42	32	25	34
6	54	40	-	44
10	73	63	-	61
16	98	-	-	82
25	129	-	-	108
35	158	-	-	135
50	198	-	-	168
70	245	-	-	207
95	292	-	-	250
120	344	-	-	292
150	391	-	-	335
185	448	-	-	382
240	528	-	-	453
300	608	-	-	523
400	726	-	-	-
500	830	-	-	-
Sources of current ratings of table 1-I	DIN VDE 02984, 2003-08 Table 2 column 2	DIN VDE 02984, 2003-08 Table 2 column 3+4		DIN VDE 02984, 2003-08 Table 2 column 4+2

Table 1-I values have to be taken into consideration of further applicable De-rating factors:

- For different ambient temperatures: Table 1-II
- more than 3 current carrying cores of multiconductor cables up to 10mm²: Table 1-III
- Ambient temperatures > 50 °C of heat resistant wire & cables: Table 1-IV
- For winded, spooled cables: Table 1-V
- Grouping of single core & multi core cables in conduits, raceways, wireways, floor & ceiling: Table 1-VI
- Grouping of multi core cables in cable trays: Table 1-VII
- Grouping of single core cables in cable trays : Table 1-VIII

Table 1-I Column A - D, Cable Categories:

A: Single cores: Standard & Universal, LIY, LIYCY-, Multi-standard wiring cable SBEEFLEX.

Current (power) ampacity of other cables: Copper earthing cable ESUY see VDE 0105 part 1

1) VDE 0891-1 -borrowed current ratings for conductor sizes < 0.5mm² (0.08-0.34 mrrr) 21

2) In terms of VDE 0298-4, 2003-08, Table 2 column 2 extended range for size 0.5 mm²

3) Clustering of single core cables in touch to each other or bundled cables:

- on surfaces: Current rating values of Table 1-I column A.
 - for 1 -A.C. or - or D.C.-circuits a derating factor of 0.76
 - for 3-A.C. circuits a derating factor of 0.67 have to be applied before applying conversion factor of Table 1-VI
- free in air or on cable trays: Current rating values of table 1-I column A.
 - for 1 -A.C. - or D.C. circuits a derating factor of 0.8
 - for 3-A.C. circuits a derating factor of 0.7 have to be applied before applying conversion factor of table 1-VIII.
- Attention: Single cores (wires) installed in conduits or pipes in or attached to walls (Installation Methode A1 or B1) in buildings see VDE 0298.

Table 1-II: Correction Factors For different ambient temperatures from 60 to 90°C.

Ambient temperature	Rated temperature of the conductor of wire or cable				
	60°C	70°C	80°C	85°C	90°C
10	1.29	1.22	1.18	1.17	1.15
15	1.22	1.17	1.14	1.13	1.12
20	1.15	1.12	1.1	1.09	1.08
25	1.08	1.06	1.05	1.04	1.04
30	1.00	1.00	1.00	1.00	1.00
35	0.91	0.94	0.95	0.95	0.96
40	0.82	0.87	0.89	0.90	0.91
45	0.71	0.79	0.84	0.85	0.87
50	0.58	0.71	0.77	-	0.82
55	0.41	0.61	0.71	-	0.76
60	-	0.5	0.63	-	0.71
65	-	0.35	0.55	-	0.65
70	-	-	0.45	-	0.58
75	-	-	0.32	-	0.50
80	-	-	-	-	0.41
85	-	-	-	-	0.29

Table 1-III: Correction Factors For Multiconductor cables, size up to 10 mm²

Number of current carrying conductors	Correction factors for cables in free air	Correction factors for cables in earth
5	0.75	0.70
7	0.65	0.60
10	0.55	0.50
14	0.50	0.45
19	0.45	0.40
24	0.40	0.35
40	0.35	0.30
61	0.30	0.25

Table 1 - IV : Correction factors Heat resistant cables and wires Cables and wires classified according to its rated temperature of the conductor

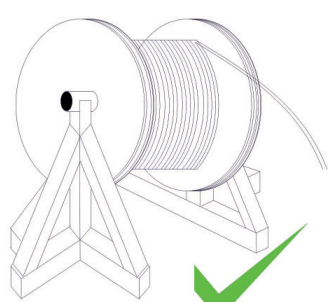
Ambient temperature	SBEEFLEX HEAT 105°C	Halogen Free single core
	Correction factor, applying to current value of Table 1-I, Column A & C	
up to 50	1.00	1
55	0.94	1
60	0.87	1
65	0.79	1
70	0.71	1
75	0.61	1
80	0.50	1
85	0.35	0.91
90	-	0.82
95	-	0.71
100	-	0.58
105	-	0.41
110	-	-
115	-	-
120	-	-
125	-	-
130	-	-
135	-	-
140	-	-
150	-	-
155	-	-
160	-	-
165	-	-
170	-	-
175	-	-

Table 1-V: Correction factors of spooled / winded cables

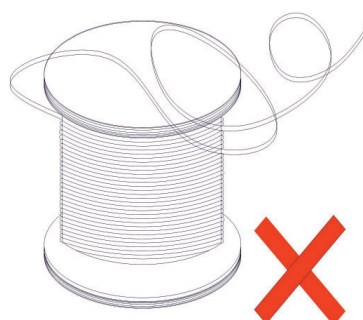
Number of layers on spool, reel or drum	1	2	3	4	5
Correction factor	0.8	0.61	0.49	0.42	0.38

For helix - type coiled/winded cables (spiral in one layer) the correction factor is 0.80

METHOD OF UNWINDING CABLE FROM DRUM



RIGHT: Method of unwinding cable from Spool



WRONG: Method of unwinding cable from Spool

**Table 1-VI: Correction factors
Grouping on the wall, floor, ceiling in conduits
Number of current-carrying multicore cables of 2 or 3 phase A.C**

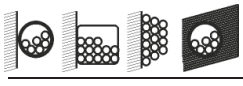
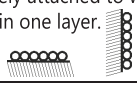
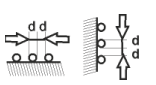
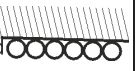
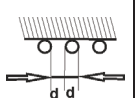
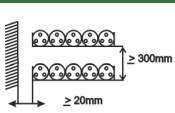
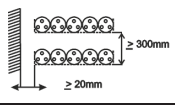
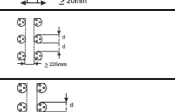
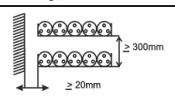
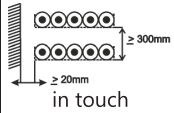

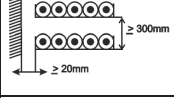
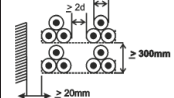
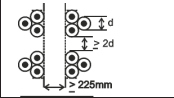
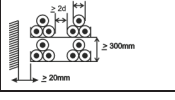
Type of installation (method)	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
On floors or walls with contact between each other bunched directly as well as in conduits or in wireways	Correction factor applicable to the current value of Table 1 - 1														
	1.00	0.80	0.70	0.65	0.60	0.57	0.54	0.52	0.50	0.48	0.45	0.43	0.41	0.39	0.38
In touch between each other, directly attached to walls or floors in one layer.	1.00	0.85	0.79	0.75	0.73	0.72	0.71	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
															
With spaces of "d" between each other, directly attached to walls or floors in one layer.	1.00	0.94	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
															
Touch between each other, directly attached to ceilings.	0.95	0.81	0.72	0.68	0.66	0.64	0.63	0.62	0.61	0.61	0.61	0.61	0.61	0.61	0.61
															
With spaces of "d" between each other, directly attached to ceilings in one layer.	0.95	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
															







Table 1-VII: Correction factors for grouping of multi conductor cables trays

Cable Arrangement	Number of cable trays	Number of Multi conductor cables						
		1	2	3	4	6	9	
Cable tray non-punched 	1	0.97	0.84	0.78	0.75	0.71	0.68	0.68
	2	0.97	0.83	0.76	0.72	0.68	0.63	0.63
	3	0.97	0.82	0.75	0.71	0.66	0.61	0.61
	6	0.97	0.81	0.73	0.69	0.63	0.58	0.58
Cable tray punched (ventilated) 	1	1.00	0.88	0.82	0.79	0.76	0.73	0.73
	2	1.00	0.87	0.80	0.77	0.73	0.68	0.68
	3	1.00	0.86	0.79	0.76	0.71	0.66	0.66
	6	1.00	0.84	0.77	0.73	0.68	0.64	0.64
	1	1.00	1.00	0.98	0.95	0.91	-	-
	2	1.00	0.99	0.96	0.92	0.87	-	-
	3	1.00	0.98	0.95	0.91	0.85	-	-
Cable tray ladder type 	1	1.00	0.88	0.82	0.78	0.73	0.72	
	2	1.00	0.88	0.81	0.76	0.71	0.70	
	1	1.00	0.91	0.89	0.88	0.87	-	
	2	1.00	0.91	0.88	0.87	0.85	-	
Cable tray ladder type 	1	1.00	0.87	0.82	0.80	0.79	0.78	
	2	1.00	0.86	0.81	0.78	0.76	0.73	
	3	1.00	0.85	0.79	0.76	0.73	0.70	
	6	1.00	0.83	0.76	0.73	0.69	0.66	
	1	1.00	1.00	1.00	1.00	1.00	-	
	2	1.00	0.99	0.98	0.97	0.96	-	
	3	1.00	0.98	0.97	0.96	0.93	-	

**Table 1-VIII Correction factor For grouping /clustering of single core in cable trays.
Applicable to current values of table 1-I**

Cable Arrangement	Number of cable trays	Correction Factor			Applicable as a multiplier of the rated values of:
		1	2	3	
	1.00	0.98	0.91	0.87	Three cables, horizontal array, one-layer configuration
	2.00	0.96	0.86	0.81	
	3.00	0.95	0.85	0.78	
Cable tray punched (ventilated) 	1.00	0.96	0.86	-	Three cables, vertical array, one-layer configuration
	2.00	0.95	0.84	-	
	1.00	1.00	0.97	0.96	Three cables, horizontal array, one-layer configuration
	2.00	0.98	0.93	0.89	
	3.00	0.97	0.90	0.86	
Cable tray ladder type 	1.00	1.00	0.98	0.96	Three cables, horizontal array delta - configuration
	2.00	0.97	0.93	0.89	
	3.00	0.96	0.92	0.86	
Cable tray punched (ventilated) 	1.00	1.00	0.91	0.89	Three cables, vertical array, delta configuration
	2.00	1.00	0.90	0.86	
Cable tray ladder type 	1.00	1.00	1.00	1.00	Three cables, horizontal array delta - configuration
	2.00	0.97	0.95	0.93	
	3.00	0.96	0.94	0.90	

THERMOCOUPLE CABLE COLOUR CODES

Thermocouple Extension Type							
		ANSI	BS	DIN	NFC	JIS	IEC
JX	Iron +						
	Constantan® -						
KX	Chromel® +						
	Alumel® -						
TX	Copper +						
	Constantan® -						
EX	Chromel® +						
	Constantan® -						
NX	Nicrosil® +						
	Nisil® -						
SX	Copper +						
	Alloy II -						

PAIR COLOUR CODING FOR INSTRUMENTATION CABLE

Pair No.	a-wire		b-wire	Pair No.	a-wire		b-wire
1	White		Blue	26	Red	Blue	Blue
2	White		Orange	27	Red	Blue	Orange
3	White		Green	28	Red	Blue	Green
4	White		Brown	29	Red	Blue	Brown
5	White		Grey	30	Red	Blue	Grey
6	Red		Blue	31	Blue	Black	Blue
7	Red		Orange	32	Blue	Black	Orange
8	Red		Green	33	Blue	Black	Green
9	Red		Brown	34	Blue	Black	Brown
10	Red		Grey	35	Blue	Black	Grey
11	Black		Blue	36	Yellow	Blue	Blue
12	Black		Orange	37	Yellow	Blue	Orange
13	Black		Green	38	Yellow	Blue	Green
14	Black		Brown	39	Yellow	Blue	Brown
15	Black		Grey	40	Yellow	Blue	Grey
16	Yellow		Blue	41	White	Orange	Blue
17	Yellow		Orange	42	White	Orange	Orange
18	Yellow		Green	43	White	Orange	Green
19	Yellow		Brown	44	White	Orange	Brown
20	Yellow		Grey	45	White	Orange	Grey
21	White	Blue	Blue	46	Orange	Red	Blue
22	White	Blue	Orange	47	Orange	Red	Orange
23	White	Blue	Green	48	Orange	Red	Green
24	White	Blue	Brown	49	Orange	Red	Brown
25	White	Blue	Grey	50	Orange	Red	Grey