

### **CONTROL CABLES**

CT Series	86
CTP Series	88
CTP-H Series	90
MLCON-G2 Series	91
JT Series	92
JC Series	94
VC Series	95
JFOB Series	96
JTCY Series	97
CTCY Series	98
JFCY Series	99
JFCY-H Series	100



### CHEMTUFF CONTROL CT SERIES

Ultra Performance Flexible Rubber Control Cable 300/500V 90°C

### **APPLICATIONS:**

**Chemtuff** Used in applications that require a greater resistance to chemicals, solvents, oils and fats.

**Control and Signals** For use on machines, portable tools, conveying equipment and other industrial applications. These cables are flexible for fixed installation as well as occasional flexing without tensile load.

**Harsh Environments** With its high flexibility, durable SER sheath and excellent resistance to oil, heat, abrasion, ozone, solvents and UV stabilisation, this cable is suited to harsh industrial environments.

**Lighting & Entertainment** With its extra durable SER sheath, this cable is suitable for indoor/outdoor lighting and control leads.

#### **PRODUCT FEATURES:**

- ► Extremely fine stranded copper conductor
- ▶ UV stabilised
- ▶ Resistant to environmental factors like ozone
- ► Flame retardant
- ▶ Extreme flexibility
- ▶ Highly flexible, tough and durable with resistance to abrasion
- Extensive heat, oil, solvent and chemical resistance (See Technical Section)

See over for full product table ▶



### **CONSTRUCTION:**

**Conductor** Annealed plain copper stranded extreme flexibility (Class 5 & 6).

Insulation SPVC V-90.

Sheath SER105.

### **CHARACTERISTICS:**

**Operating Temperature Range** Fixed -20°C to 90°C / Flexing -5°C to 80°C.

**Maximum Conductor Temperature** 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 5 x cable diameter /

Flexing 15 x cable diameter.

**Sheath Colour** Grey – as standard colour / Black – in some sizes subject to availability.

**Standard Core Colours** White (numbered) plus 1 Green/Yellow Earth. **Relevant Standards** IEC 60332-1, AS/NZS 1125, AS/NZS 3808, **ROHS** Compliant.



### CHEMTUFF CONTROL CT SERIES continued

	No. of Cores	Approx.	Approx.	Approx.
Code	x Size	Stranding	Overall Diameter	Weight
		No. of		
	(mm²)	wires x mm	(mm)	(Kg/Km)
CT02/0.5	2 x 0.5	16/0.20	4.8	35
CT03/0.5	3 x 0.5	16/0.20	5.1	42
CT04/0.5	4 x 0.5	16/0.20	5.7	54
CT05/0.5	5 x 0.5	16/0.20	6.6	67
CT07/0.5	7 x 0.5	16/0.20	7.0	84
CT12/0.5	12 x 0.5	16/0.20	9.4	131
CT18/0.5	18 x 0.5	16/0.20	11.1	192
CT25/0.5	25 x 0.5	16/0.20	12.4	261
CT30/0.5	30 x 0.5	16/0.20	13.3	304
CT41/0.5	41 x 0.5	16/0.20	16.6	450
CT03/0.75	3 x 0.75	24/0.20	6.0	63
CT04/0.75	4 x 0.75	24/0.20	6.2	64
CT05/0.75	5 x 0.75	24/0.20	7.1	88
CT07/0.75	7 x 0.75	24/0.20	7.6	110
CT12/0.75	12 x 0.75	24/0.20	10.5	200
CT18/0.75	18 x 0.75	24/0.20	12.2	268
CT25/0.75	25 x 0.75	24/0.20	15.0	365
CT02/1.0	2 x 1.0	32/0.20	6.0	64
CT03/1.0	3 x 1.0	32/0.20	6.1	66
CT04/1.0 CT05/1.0	4 x 1.0 5 x 1.0	32/0.20 32/0.20	6.5 7.6	79 105
CT05/1.0 CT07/1.0	7 x 1.0	32/0.20	8.0	131
CT12/1.0	12 x 1.0	32/0.20	11.1	220
CT12/1.0 CT18/1.0	18 x 1.0	32/0.20	13.4	315
CT25/1.0	25 x 1.0	32/0.20	15.4	449
CT36/1.0	36 x 1.0	32/0.20	18.2	620
CT41/1.0	41 x 1.0	32/0.20	18.8	660
CT03/1.5	3 x 1.5	48/0.20	6.7	84
CT04/1.5	4 x 1.5	48/0.20	8.3	121
CT05/1.5	5 x 1.5	48/0.20	8.7	144
CT07/1.5	7 x 1.5	48/0.20	10.3	237
CT12/1.5	12 x 1.5	48/0.20	13.8	393
CT19/1.5	19 x 1.5	48/0.20	16.4	542
CT25/1.5	25 x 1.5	48/0.20	19.0	655
CT30/1.5	30 x 1.5	48/0.20	20.5	750
CT37/1.5	37 x 1.5	48/0.20	24.5	980
CT50/1.5	50 x 1.5	48/0.20	26.5	1224
CT04/2.5	4 x 2.5	80/0.20	11.0	192
CT07/2.5	7 x 2.5	80/0.20	13.0	310
CT12/2.5	12 x 2.5	80/0.20	18.0	524
CT18/2.5	18 x 2.5	80/0.20	21.0	784
CT27/2.5	27 x 2.5	80/0.20	26.0	900

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### CTP SERIES

# Standard Performance Flexible Control Cable 300/500V 80°C



### **APPLICATIONS:**

**Control and Signals** For use on machines, portable tools, conveying equipment and other industrial applications.

These cables are flexible for fixed installation as well as occasional flexing without tensile load.

**Lighting & Entertainment** With its special flexible PVC sheath, this cable is suitable for indoor lighting and control leads.

### **PRODUCT FEATURES:**

- ► Fine stranded copper conductor
- ▶ High flexibility
- UV stabilised
- ► Flame retardant
- ▶ High flexibility with stranding to VDE 0295 Class 5 & 6
- ▶ Heat, oil and chemical resistant (See Technical Section)

See over for full product table ▶

### **CONSTRUCTION:**

**Conductor** Annealed plain copper stranded high flexibility (Class 5). **Insulation** SPVC V-75.

Sheath SPVC.

### **CHARACTERISTICS:**

Operating Temperature Range Fixed -20°C to 80°C /

Flexing -5°C to 80°C

**Maximum Conductor Temperature** 80°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v.

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Grey – as standard colour.

**Standard Core Colours** Black (numbered) plus 1 Green/Yellow Earth **Relevant Standards** DIN VDE 0295, IEC 60332-1, AS/NZS 3808,

RoHS Compliant.



### CTP SERIES continued

Code	No. of Cores	Approx.	Approx.	Approx.
	x Size	Stranding	Overall Diameter	Weight
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)
CTP02/0.5	2 x 0.5	16/0.20	4.9	40
CTP03/0.5	3 x 0.5	16/0.20	5.1	42
CTP04/0.5	4 x 0.5	16/0.20	5.7	54
CTP05/0.5	5 x 0.5	16/0.20	6.2	63
CTP07/0.5	7 x 0.5	16/0.20	6.7	81
CTP12/0.5	12 x 0.5	16/0.20	8.9	131
CTP18/0.5	18 x 0.5	16/0.20	10.5	188
CTP25/0.5	25 x 0.5	16/0.20	12.5	261
CTP02/0.75	2 x 0.75	24/0.20	5.3	46
CTP03/0.75	3 x 0.75	24/0.20	5.7	55
CTP04/0.75	4 x 0.75	24/0.20	6.2	66
CTP05/0.75	5 x 0.75	24/0.20	6.7	79
CTP07/0.75	7 x 0.75	24/0.20	7.3	101
CTP12/0.75	12 x 0.75	24/0.20	10.0	171
CTP18/0.75	18 x 0.75	24/0.20	11.8	244
CTP25/0.75	25 x 0.75	24/0.20	13.8	337
CTP02/1.0	2 x 1.0	32/0.20	5.8	60
CTP03/1.0	3 x 1.0	32/0.20	6.0	65
CTP04/1.0	4 x 1.0	32/0.20	6.5	79
CTP05/1.0	5 x 1.0	32/0.20	7.1	94
CTP07/1.0	7 x 1.0	32/0.20	8.0	126
CTP12/1.0	12 x 1.0	32/0.20	10.5	205
CTP18/1.0	18 x 1.0	32/0.20	12.7	300
CTP25/1.0	25 x 1.0	32/0.20	14.7	408
CTP02/1.5	2 x 1.5	48/0.20	6.4	70
CTP03/1.5	3 x 1.5	48/0.20	6.7	84
CTP04/1.5	4 x 1.5	48/0.20	7.2	104
CTP05/1.5	5 x 1.5	48/0.20	8.1	128
CTP07/1.5	7 x 1.5	48/0.20	9.0	166
CTP12/1.5	12 x 1.5	48/0.20	12.0	279
CTP18/1.5	18 x 1.5	48/0.20	14.4	407
CTP25/1.5	25 x 1.5	48/0.20	17.0	560
CTP04/2.5	4 x 2.5	80/0.20	9.2	178
CTP07/2.5	7 x 2.5	80/0.20	11.2	306
CTP12/2.5	12 x 2.5	80/0.20	14.8	498
CTP18/2.5	18 x 2.5	80/0.20	18.0	764

# CTP-H SERIES

### **High Performance Flexible LSHF** Control Cable 300/500V 90°C



### **APPLICATIONS:**

Marine Flexible LSHF tinned copper control cable for installation in superyachts, pleasure craft and other marine applications.

Control and Signals Suitable for use on machines, portable tools, conveying equipment and other industrial applications. These cables are flexible for fixed installation as well as occasional flexing without tensile load.

Lighting & Entertainment With its special flexible low smoke halogen free sheath, this cable is suitable for indoor/outdoor lighting and control leads.

Rail or Rolling Stock Suitable for wiring in locomotives, rail cars, buses and coaches.

Pumping Suitable for use as submersible (200 metres) pump controls.

#### **PRODUCT FEATURES:**

- ▶ Tinned fine stranded copper conductor
- ► High flexibility
- ► Low smoke halogen free
- PVC free
- ▶ Submersible to 200 metres
- UV stabilised
- ▶ Flame retardant
- Extreme flexibility
- ▶ Heat, oil and chemical resistant (See Technical Section)

### **CONSTRUCTION:**

Conductor Annealed tinned copper stranded high flexibility (Class 5).

Insulation LSHF X-90.

Sheath LSHF.

### CHARACTERISTICS:

**Operating Temperature Range** Fixed -40 to 90°C / Flexing -5 to 90°C.

Maximum Conductor Temperature 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Grey - as standard colour.

Standard Core Colours Black (numbered) plus 1 Green/Yellow earth.

Relevant Standards DIN VDE 0295, IEC 61034, IEC 60332-1,

IEC 60754-1, IEC 60754-2, **RoHS** Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)
CTP02/0.75H	2 x 0.75	24/0.20	5.1	46
CTP03/0.75H	3 x 0.75	24/0.20	5.6	55
CTP04/0.75H	4 x 0.75	24/0.20	6.2	66
CTP05/0.75H	5 x 0.75	24/0.20	7.1	79
CTP07/0.75H	7 x 0.75	24/0.20	7.5	101
CTP12/0.75H	12 x 0.75	24/0.20	10.5	171
CTP18/0.75H	18 x 0.75	24/0.20	12.2	244
CTP02/1.5H	2 x 1.5	48/0.20	6.4	78
CTP03/1.5H	3 x 1.5	48/0.20	7.1	84
CTP04/1.5H	4 x 1.5	48/0.20	8.3	104
CTP05/1.5H	5 x 1.5	48/0.20	8.7	128
CTP07/1.5H	7 x 1.5	48/0.20	10.0	166
CTP12/1.5H	12 x 1.5	48/0.20	13.0	279
CTP18/1.5H	18 x 1.5	48/0.20	15.5	407





# ALLFLEX INDUSTRIALL MLCON-G2 SERIES

Ultra Performance Flexible Rubber Industrial / Marine Cable 0.6/1kV 90°C, IEC 60092



#### **APPLICATIONS:**

**Hazardous Areas** With correct explosion proof glands this cable can be installed in locations subject to explosion hazards rated 0.6/1kV (DIN VDE 0165).

Waste Water Treatment Plants Suitable for submersion in polluted liquids and aggressive environments up to 10 metres. Lighting & Entertainment With its extra durable CPE sheath this cable is suitable for outdoor temporary power supplies and lighting leads.

**Marine** Flexible tinned copper & Lloyds approved cable for installation in pleasure craft, super yachts and other marine applications.

**Power** Used on construction sites due to its outstanding flexibility, durability and industrial performance.

**Pumping** Suitable for permanent submersion to 500 metres.

#### **PRODUCT FEATURES:**

- ► Tinned fine stranded copper conductor
- UV stabilised
- ► Flame retardant
- ► Water and moisture resistant
- ► Good elongation at break
- ▶ Good Dielectric properties
- Resistant to environmental factors such as oxidation, ozone and sunlight
- Very good behaviour to variations of outdoor temperature
- Suitable for permanent submersion to 500 metres
- ▶ Good tensile strength, tearing strength and abrasion resistance
- ► Heat, oil and chemical resistant (See Technical Section)

### **CONSTRUCTION:**

**Conductor** Annealed tinned copper stranded high flexibility (Class 5).

Insulation EPR R90.

Sheath CPE Elastomer Rubber.

### **CHARACTERISTICS:**

**Operating Temperature Range** Fixed -40°C to 90°C / Flexing -25°C to 90°C.

**Maximum Conductor Temperature** 90°C.

Rated Voltage Uo/U 0.6/1kV.

**Minimum Bending Radius** Fixed 4 x cable diameter / flexing 6 x cable diameter.

Sheath Colour Black.

**Standard Core Colours** 

MLCON-G2

3 to 19 Core - Black Numbers + Green/Yellow

**Relevant Standards** DIN VDE 0295, DIN VDE 0165, IEC 60092-360 IEC 60092-353, IEC 60092-359, IEC 60092-351, AS/NZS 1125, AS/NZS 3808, *RoHS* Compliant.

**AS/NZS 5000.1** Electric cables for working voltage 0.6/1kV. **IEC 60092-360** Electrical installations in ships - Part 360: Insulating and sheathing materials for shipboard and offshore units, power, control, instrumentation and telecommunication cables.

**IEC 60092-350** Electrical installations in ships - Part 350: General construction and test methods.

**IEC 60332-3-22** Test for vertical flame spread of vertically-mounted bunched wires or cables.

Certification Approvals Lloyds Type Approval CEF/SA.

Code	No. of Cores x Size (mm²)	Approx. Stranding  No. of wires x mm	Approx. Overall Diameter +/ - 10% (mm)	Approx. Weight (Kg/Km)	Nominal Amps un-enclosed protected from sun @ 30°C fixed application Touching	3 Phase Volt Drop @50Hz / MAX. Conductor Temp: 90°C (Mv/Am)
MLCON03/1.0BKG2	3 x 1.0	32 x 0.20	10.1	128	18	46.800
MLCON04/1.0BKG2	4 x 1.0	32 x 0.20	11.0	160	16	46.800
MLCON05/1.0BKG2	5 x 1.0	32 x 0.20	12.1	172	14	46.800
MLCON07/1.0BKG2	7 x 1.0	32 x 0.20	12.8	191	12	46.800
MLCON12/1.0BKG2	12 x 1.0	32 x 0.20	16.9	287	12	46.800
MLCON19/1.0BKG2	19 x 1.0	32 x 0.20	20.2	432	12	46.800

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### JT SERIES

Standard Performance Flexible Control Cable Coloured Cores 300/500V 80°C



**Control and Signals** For use on machines, portable tools, conveying equipment and other industrial applications.

These cables are flexible for fixed installation as well as occasional flexing without tensile load.

**Coloured Cores** For applications where coloured cores are required.

### **PRODUCT FEATURES:**

- ► Fine stranded copper conductor
- UV stabilised
- ► Flame retardant
- ► Heat, oil and chemical resistant (See Technical Section)



### **CONSTRUCTION:**

**Conductor** Annealed plain copper stranded high flexibility (Class 5). **Insulation** SPVC 75.

Sheath SPVC 75.

### **CHARACTERISTICS:**

Operating Temperature Range Fixed -20°C to 80°C /

Flexing -5°C to 80°C.

Maximum Conductor Temperature 80°C (Current ratings are

based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v.

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Grey.

Standard Core Colours To DIN 47100 without repetition.

Cores 1 to 12 are: White, Brown, Green, Yellow, Grey, Pink, Blue,

Red, Black, Violet, Grey-Pink, Red-Blue.

Inductance Approx 0.65 mH/Km.

**Insulation Resistance** Min.  $20\Omega \times km$ .

Capacitance 120 nF/km.

Impedance Approx 78 OHM.

Relevant Standards VDE 0245, VDE 0250, DIN 47100,

IEC 60332-1, IEC 60228, *RoHS* Compliant.

Code	No. of Cores x Size (mm²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)
JT02/0.25	2 x 0.25	14/0.15	3.8	18
JT03/0.25	3 x 0.25	14/0.15	3.9	22
JT04/0.25	4 x 0.25	14/0.15	4.3	26
JT07/0.25	7 x 0.25	14/0.15	5.2	42
JT12/0.25	12 x 0.25	14/0.15	6.7	66





# ON ALL FIRSTFLEX STOCKED CABLES

YES - THAT MEANS FROM 0.22mm<sup>2</sup> TO 500mm<sup>2</sup>



### JC SERIES

Standard Performance Flexible Control Cable Coloured Cores 300/500V 80°C



**Control and Signals** For use on machines, portable tools, conveying equipment and other industrial applications.

These cables are flexible for fixed installation as well as occasional flexing without tensile load.

**Coloured Cores** For applications where coloured cores are required.

### **PRODUCT FEATURES:**

- ▶ High flexibility
- UV stabilised
- ► Flame retardant
- ▶ Heat, oil and chemical resistant (See Technical Section)



### **CONSTRUCTION:**

**Conductor** Annealed plain copper stranded high flexibility (Class 5). **Insulation** SPVC 75.

Sheath SPVC 75.

### **CHARACTERISTICS:**

Operating Temperature Range Fixed -20°C to  $80^{\circ}\text{C}$  /

Flexing -5°C to 80°C.

**Maximum Conductor Temperature** 80°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v.

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Grey.

**Standard Core Colours** 

Cores 1 to 7: Green/Yellow, White, Brown, Grey, Blue, Red, Black.

Cores 8 to 12: Violet, Pink, Orange, Clear, Beige.

Relevant Standards IEC 60228, DIN VDE 0295, DIN VDE 0281-1,

DIN VDE 0293, DIN VDE 0245, IEC 60332-1,

**C** € Directive 2006/95/EC, **RoHS** Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)
JC07/0.75	7 x 0.75	24/0.20	8.1	110
JC12/0.75	12 x 0.75	24/0.20	9.9	179



### **VC** SERIES

Standard Performance Flexible Valve Control Cable 300/500V 90°C

### **APPLICATIONS:**

**Dairy** Used for valve cables in dairy factory applications.

### **PRODUCT FEATURES:**

- ► Fine stranded tinned copper conductor
- UV stabilised
- ► Flame retardant
- ► Heat, oil and chemical resistant (See Technical Section)

### 0.5mm² 300/500V 90°C (€ RoHS

### **CONSTRUCTION:**

**Conductor** Annealed tinned copper stranded high flexibility (Class 5).

Insulation V-90.

Sheath SPVC 5V-90.

### **CHARACTERISTICS:**

Operating Temperature Range Fixed -20 to 90°C /

Flexing -5 to 75°C.

**Maximum Conductor Temperature** 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v.

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Black.

**Standard Core Colour** 

 $6\ core-Brown,\,Black,\,Red,\,White,\,Grey,\,Blue.$ 

8 core - Brown, Black, Red, White, Grey, Blue, Purple, Green/Yellow.

9 Core – Brown, Black, Red, White, Grey, Blue, Purple, Pink, Orange.

Relevant Standards AS/NZS 3808, AS/NZS 3008, IEC 60332-1,

RoHS Compliant.

Code	No. of Cores x Size (mm²)	Approx. Stranding No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)
VC06/0.25	6 x 0.25	14/0.15	5.1	46
VC06/0.5	6 x 0.50	16/0.20	6.9	65
VC08/0.5	8 x 0.50	16/0.20	8.1	84
VC09/0.5	9 x 0.50	16/0.20	8.6	93



### JFOB SERIES

Standard Performance Flexible Control Cable Coloured Cores (no Earth) 300/500V 80°C



### **APPLICATIONS:**

**Control and Signals** For use on machines, portable tools, conveying equipment and other industrial applications.

These cables are flexible for fixed installation as well as occasional flexing without tensile load.

**Coloured Cores** For applications where coloured cores are required.

### **PRODUCT FEATURES:**

- ► High flexibility
- UV stabilised
- ► Flame retardant
- ▶ Heat, oil and chemical resistant (See Technical Section)

### **CONSTRUCTION:**

**Conductor** Annealed plain copper stranded high flexibility (Class 5). **Insulation** PVC V-75.

Sheath SPVC 75.

### **CHARACTERISTICS:**

Operating Temperature Range Fixed -20°C to 80°C /

Flexing -5°C to 80°C.

**Maximum Conductor Temperature** 80°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v.

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Grey.

Standard Core Colours Black, Brown, Grey (no earth).

 $\textbf{Relevant Standards} \ \mathsf{IEC} \ \mathsf{60228}, \ \mathsf{DIN} \ \mathsf{VDE} \ \mathsf{0295}, \ \mathsf{DIN} \ \mathsf{VDE} \ \mathsf{0281-1},$ 

 ${\rm DIN\ VDE\ 0293,\ DIN\ VDE\ 0245,\ IEC\ 60332-1,}$ 

**C** € Directive 2006/95/EC, **RoHS** Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)
JFOB03/0.5	3 x 0.5	16/0.20	5.1	46
JFOB03/1.5	3 x 1.5	48/0.20	6.7	90



# JTCY SERIES

Standard Performance Flexible CBS Control Cable Coloured Cores 300/500V 80°C

### **APPLICATIONS:**

**Control and Signals** For use on machines, portable tools, conveying equipment and other industrial applications requiring screened cables for EMC. These cables are flexible for fixed installation as well as occasional flexing without tensile load. **Coloured Cores** For applications where coloured cores are required.

### **PRODUCT FEATURES:**

- ▶ High flexibility
- Prevents external interference
- UV stabilised
- ► Flame retardant
- ▶ To be earthed using EMC compatible glands
- ▶ Heat, oil and chemical resistant (See Technical Section)



### **CONSTRUCTION:**

**Conductor** Annealed plain copper stranded high flexibility (Class 5). **Insulation** SPVC V-75.

**Screening** Tinned copper braid 85% coverage.

Sheath SPVC 75.

### **CHARACTERISTICS:**

**Operating Temperature Range** Fixed -20°C to 80°C / Flexing -5°C to 80°C.

**Maximum Conductor Temperature** 80°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v.

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Grey.

Standard Core Colours To DIN 47100 without repetition.

Cores 1 to 12 – White, Brown, Green, Yellow, Grey, Pink, Blue, Red, Black, Violet, Grey/Pink, Red/Blue.

Inductance Approx 0.65 mH/Km.

Insulation Resistance Min. 200 MOHM x km.

**Capacitance** @ 800 Hz (pF/m) core/core 150 approx. core/screen 270 approx.

Impedance Approx 78 OHM.

**Relevant Standards** DIN VDE 0295, IEC 60228, DIN VDE 0281-1, DIN VDE 0293, IEC 60332-1, DIN VDE 0472-804, *RoHS* Compliant.

Code	No. of Cores x Size (mm²)	Approx. Stranding  No. of wires x mm	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)
JTCY02/0.25	2 x 0.25	14/0.15	4.3	31
JTCY03/0.25	3 x 0.25	14/0.15	4.5	36
JTCY04/0.25	4 x 0.25	14/0.15	4.9	40
JTCY07/0.25	7 x 0.25	14/0.15	5.9	64
JTCY12/0.25	12 x 0.25	14/0.15	7.3	90



# CTCY SERIES

# Ultra Performance Flexible Rubber CBS Control Cable 300/500V 80°C



### **APPLICATIONS:**

**Control and Signals** For use on machines, portable tools, conveying equipment and other industrial applications requiring screened cables for EMC. These cables are flexible for fixed installation as well as occasional flexing without tensile load.

**Harsh Environments** With its UV stabilised, high flexibility, durable NBR sheath and excellent resistance to oil, heat, abrasion, ozone and solvents, this cable is suited to harsh industrial environments.

### **PRODUCT FEATURES:**

- ► Extremely fine stranded copper conductor
- ▶ Prevents external interference
- UV stabilised
- ► Flame retardant
- Resistant to environmental factors like ozone
- Abrasion resistance
- ▶ Extreme flexibility with stranding to VDE 0295 Class 5 & 6
- ▶ To be earthed using EMC compatible glands
- Extensive heat, oil, solvent and chemical resistance (See Technical Section)

### **CONSTRUCTION:**

**Conductor** Annealed plain copper stranded extreme flexibility (Class 5 & 6).

Insulation SPVC V-75.

**Screening** Tinned copper braid 85% minimum coverage.

Inner Sheath SER 90.

Sheath SER 90.

### **CHARACTERISTICS:**

Operating Temperature Range Fixed -20 to 80°C /

Flexing -5 to 80°C.

**Maximum Conductor Temperature** 80°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v.v

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Black.

**Standard Core Colours** White (numbered) plus 1 Green/Yellow Earth.

**Relevant Standards** IEC 60332-1, AS/NZS 1125, AS/NZS 3808, *ROHS* Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)
CTCY03/0.75	3 x 0.75	24/0.20	9.1	131
CTCY07/0.75	7 x 0.75	24/0.20	11.5	201
CTCY12/0.75	12 x 0.75	24/0.20	14.8	335
CTCY18/0.75	18 x 0.75	24/0.20	15.6	420
CTCY02/1.5	2 x 1.5	48/0.20	10.2	168
CTCY07/1.5	7 x 1.5	48/0.20	13.9	323
CTCY12/1.5	12 x 1.5	48/0.20	16.8	521
CTCY19/1.5	19 x 1.5	48/0.20	20.7	705
CTCY07/2.5	7 x 2.5	80/0.20	16.5	374



# JFCY SERIES

# Standard Performance Flexible CBS Control Cable 300/500V 80°C

### **APPLICATIONS:**

**Control and Signals** For use on machines, portable tools, conveying equipment and other industrial applications requiring screened cables for EMC. These cables are flexible for fixed installation as well as occasional flexing without tensile load.

#### PRODUCT FEATURES:

- High flexibility
- ▶ Prevents external interference
- UV stabilised
- ► Flame retardant
- Resistant to environmental factors like ozone
- ► Abrasion resistance
- ▶ To be earthed using EMC compatible glands
- ► Extensive heat, oil, solvent and chemical resistance (See *Technical Section*)



### **CONSTRUCTION:**

**Conductor** Annealed plain copper stranded high flexibility (Class 5). **Insulation** SPVC V-75.

**Screening** Tinned copper braid 85% coverage.

Sheath SPVC.

### **CHARACTERISTICS:**

**Operating Temperature Range** Fixed  $-20^{\circ}$ C to  $80^{\circ}$ C / Flexing  $-5^{\circ}$ C to  $80^{\circ}$ C.

**Maximum Conductor Temperature** 80°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v.

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 10 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Grey.

**Standard Core Colours** Black (numbered) + 1 Green/Yellow Earth (2 Core is without Earth).

**Relevant Standards** DIN VDE 0295, IEC 60228, DIN VDE 0281-1, DIN VDE 0293, DIN VDE 0245, IEC 60332-1, *RoHS* Compliant.

Code	No. of Cores	Approx.	Approx.	Approx.
	x Size	Stranding	Overall Diameter	Weight
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)
JFCY02/0.75	2 x 0.75	24/0.20	5.7	59
JFCY03/0.75	3 x 0.75	24/0.20	6.4	66
JFCY04/0.75	4 x 0.75	24/0.20	6.7	77
JFCY05/0.75	5 x 0.75	24/0.20	7.2	93
JFCY07/0.75	7 x 0.75	24/0.20	8.6	130
JFCY12/0.75	12 x 0.75	24/0.20	10.8	138
JCFY18/0.75	18 x 0.75	24/0.20	12.5	211
JFCY25/0.75	25 x 0.75	24/0.20	15.1	280
JFCY02/1.0	2 x 1.0	32/0.20	6.4	65
JFCY03/1.0	3 x 1.0	32/0.20	6.7	80
JFCY04/1.0	4 x 1.0	32/0.20	7.3	98
JFCY05/1.0	5 x 1.0	32/0.20	7.8	127
JFCY07/1.0	7 x 1.0	32/0.20	9.1	158
JFCY12/1.0	12 x 1.0	32/0.20	11.2	260
JFCY02/1.5	2 x 1.5	30/0.25	7.0	88
JFCY03/1.5	3 x 1.5	30/0.25	7.6	100
JFCY04/1.5	4 x 1.5	30/0.25	8.2	153
JFCY05/1.5	5 x 1.5	30/0.25	9.1	160
JFCY07/1.5	7 x 1.5	30/0.25	9.6	154
JFCY12/1.5	12 x 1.5	30/0.25	12.9	268
JFCY18/1.5	18 x 1.5	30/0.25	15.3	373
JFCY25/1.5	25 x 1.5	30/0.25	18.9	705

Firstflex has taken every precaution to ensure accurate information in this catalogue, but accept no liability for any errors or omissions. Firstflex reserves the right to modify specifications at any time.



# JFCY-H SERIES

# High Performance Flexible LSHF CBS Control Cable 300/500V 80°C



### **APPLICATIONS:**

Marine Flexible LSHF tinned copper control cable for installation in superyachts, pleasure craft and other marine applications.

Control and Signals For use on machines, portable tools, conveying equipment and other industrial applications requiring screened cables for EMC. These cables are flexible for fixed

installation as well as occasional flexing without tensile load. **Pumping** Suitable for use as submersible (200 metres) pump controls.

### **PRODUCT FEATURES:**

- Very high flexibility
- ► Low smoke halogen free
- ▶ PVC free
- ▶ Submersible to 200 metres
- UV stabilised
- ► Flame retardant
- Resistant to environmental factors like ozone
- Abrasion resistance
- ▶ To be earthed using EMC compatible glands
- Extensive heat, oil, solvent and chemical resistance (See Technical Section)

### **CONSTRUCTION:**

**Conductor** Annealed tinned copper stranded high flexibility (Class 5).

Insulation LSHF X-90.

**Screening** Tinned copper braid 85% coverage.

Sheath LSHF.

#### **CHARACTERISTICS:**

**Operating Temperature Range** Fixed -20°C to 90°C / Flexing -5°C to 90°C.

**Maximum Conductor Temperature** 90°C (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 300/500v

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 10 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Grey.

**Standard Core Colours** Black (numbered) + 1 Green/Yellow Earth (2 Core is without Earth).

**Relevant Standards** IEC 60228, IEC 60754-1, IEC 60754-2, IEC 60332-1, IEC 61034, *ROHS* Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)
JFCY02/0.75H	2 x 0.75	24/0.20	6.2	59
JFCY03/0.75H	3 x 0.75	24/0.20	6.4	100
JFCY04/0.75H	4 x 0.75	24/0.20	7.1	77
JFCY05/0.75H	5 x 0.75	24/0.20	7.6	93
JFCY07/0.75H	7 x 0.75	24/0.20	8.5	161
JFCY12/0.75H	12 x 0.75	24/0.20	10.7	202
JFCY02/1.5H	2 x 1.5	30/0.25	7.0	88
JFCY03/1.5H	3 x 1.5	30/0.25	7.6	100
JFCY04/1.5H	4 x 1.5	30/0.25	8.2	100
JFCY05/1.5H	5 x 1.5	30/0.25	9.1	160
JFCY07/1.5H	7 x 1.5	30/0.25	9.7	280
JFCY12/1.5H	12 x 1.5	30/0.25	12.6	338
JFCY19/1.5H	19 x 1.5	30/0.25	15.0	508
JFCY25/1.5H	25 x 1.5	30/0.25	18.9	705

