

# FLEXIBLE MULTI CORE CABLES

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## FTM SERIES

# High Performance Flexible Twin Marine Cable 300/500V 75°C



**Marine** Suitable for wiring on pleasure craft and other marine applications requiring flexible tinned copper conductors.

**Lighting** Used for festoon and garden lighting where a flexible cable is required.

**Audio** Amplifiers and audio equipment where oxygen free copper wire is required.

#### **PRODUCT FEATURES:**

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

#### CONSTRUCTION:

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

**Insulation** Special SPVC V-75.

Sheath SPVC 4V-75.

#### CHARACTERISTICS:

Operating Temperature Range Fixed -20°C to 75°C /

Flexing -5°C to 75°C.

**Maximum Conductor Temperature** 75°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 Black.

Standard Core Colours Red, Black.

Relevant Standards AS/NZS 1125, AS/NZS 3808, IEC 60332-1,

RoHS Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application		1 Phase Volt Drop @50Hz / MAX. Conductor Temp:
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)	Spaced 8	Touching 8	75°C (Mv/Am)
FTM2/0.75	2 x 0.75	24/0.20	4.2h x 6.5w	38	14	12	63.200
FTM2/1.5	2 x 1.5	48/0.20	4.6h x 7.2w	60	23	21	32.300
FTM2/2.5	2 x 2.5	80/0.20	5.4h x 8.8w	90	30	29	19.400
FTM2/4.0	2 x 4.0	127/0.20	6.2h x 10.5w	130	40	38	12.000



# MTSV SERIES

Survey Compliant Flexible Twin Marine Cable 0.6/1kV 90°C

#### **APPLICATIONS:**

**Marine** Suitable for wiring on pleasure craft and commercial vessels that require survey compliant cables.

#### **PRODUCT FEATURES:**

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



#### **CONSTRUCTION:**

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

**Insulation** XLPE.

Sheath PVC ST2.

#### **CHARACTERISTICS:**

Temperature Range Fixed -20°C to 90°C.

Voltage Rating 0.6/1kV.

Minimum Bending Radius Fixed 10 x Cable Diameter.

Sheath Colour Black with Blue stripe, or White with Blue stripe.

Core Colour Red & Black.

**Maximum Conductor temperature** 90°C.

Relevant Standards AS/NZS 3004.1&2, IEC 60228,

IEC 60092-360, IEC 60092-350, IEC 60092-353, IEC 60332-3-22,

RoHS Compliant.

Code	Size (Core x mm)	Conductor Construction (mm)	Thickness of Insulation (mm)	Thickness of Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Max D.C. Resistance at 20°C (m Ω/mt)
MTSV2/0.75	2 x 0.75	24/0.2	0.8	1.0	4.8 x 7.6	38	26.7
MTSV2/1.0	2 x 1.0	32/0.2	0.8	1.0	5.0 x 8.0	53	20
MTSV2/1.5	2 x 1.5	48/0.2	0.8	1.1	5.4 x 8.6	60	13.7
MTSV2/2.5	2 x 2.5	80/0.2	0.8	1.1	5.8 x 9.4	90	8.21
MTSV2/4.0	2 x 4.0	127/0.2	1.0	1.2	7.0 x 11.6	130	5.09
MTSV2/6.0	2 x 6.0	190/0.2	1.0	1.2	7.9 x 13.4	143	3.39
MTSV2/10	2 x 10	318/0.2	1.0	1.3	9.2 x 15.8	310	1.95
MTSV2/16	2 x 16	504/0.2	1.0	1.4	10.4 x 18.0	403	1.24
MTSV2/25	2 x 25	770/0.2	1.2	1.6	12.7 x 22.2	615	0.795
MTSV2/35	2 x 35	703/0.25	1.2	1.7	14.7 x 26.0	765	0.565

# TW-T SERIES

# High Performance Flexible Twin Marine Cable 0.6/1kV 90°C



#### **APPLICATIONS:**

**Marine** Flexible tinned copper for battery power supplies and winches.

**Automotive** Suitable for use as battery/jumper cables (indoor/outdoor) and power leads for forklifts and field conveyers.

**Telecommunications** Where finely stranded large cross section cables are required for minimal volt drop.

**Audio** Power supply to amplifiers and audio equipment where oxygen free copper wire is required.

#### PRODUCT FEATURES:

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

#### **CONSTRUCTION:**

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

Insulation SPVC.

**Sheath** Transparent SPVC.

#### **CHARACTERISTICS:**

**Operating Temperature Range** Fixed -20°C to 90°C / Flexing -5°C 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 0.6/1kV.

Sheath Colour Clear sheath.

Core Colour Red and Black.

**Relevant Standards** DIN VDE 0250, DIN VDE 472, IEC 60332-1, AS/NZS 1125, *ROHS* Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Max D.C. Resistance at 20°C	Nominal Amps un-enclosed protected from sun @ 30°C fixed installation 1 Phase		1 Phase Volt Drop @50Hz / MAX. Conductor Temp:
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)	(m Ω/mt)	Spaced 8	Touching 8	75°C (Mv/Am)
TW02.5T	2 x 2.5	80/0.20	5.5 x 12.0	90.0	7.410	30	29	19.400
TW04T	2 x 4.0	128/0.20	6.0 x 13.0	130.0	4.950	40	38	12.000
TW06T	2 x 6.0	192/0.20	6.5 x 14.0	220.0	3.300	51	48	7.496
TW10T	2 x 10.0	322/0.20	8.0 x 17.0	340.0	1.910	72	67	4.458
TW16T	2 x 16.0	511/0.20	9.80 x 19.60	453.0	1.210	95	89	2.807
TW25T	2 x 25.0	784/0.20	11.30 x 22.60	659.0	0.780	125	119	1.778
TW35T	2 x 35.0	714/0.25	12.80 x 25.60	894.0	0.550	156	146	1.282

Duty Cycle Current Rating (Amps) Welding, Automotive and Battery Charging (% of a 5 minute period @ $30^{\circ}$ C)								
Size	100%	60%	30%	25%				
2 x 4.0	42	54	77	82				
2 x 6.0	62	80	113	120				
2 x 10.0	100	107	126	134				
2 x 16.0	139	152	187	200				
2 x 25.0	183	209	265	285				
2 x 35.0	227	264	243	370				



## GLT SERIES

High Performance Flexible Twin Garden Lighting Cable ELV 90°C



**Lighting** Used for festoon and garden lighting where a flexible water resistant PVC cable is required.

#### **PRODUCT FEATURES:**

- ▶ Raised rib on one core for polarity identification +/-
- ► Tinned fine stranded copper conductor
- UV stabilised
- ▶ Water resistant
- ► Heat, oil and chemical resistant (See Technical Section)

#### **CONSTRUCTION:**

**Conductor** Annealed tinned copper stranded high flexibility **Insulation** Special SPVC V-90HT.





#### **CHARACTERISTICS:**

**Operating Temperature Range** Fixed -20°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).

 $\label{eq:Rated Voltage 50 VAC / 120 VDC ELV (Not for mains connection)} \\ \textbf{Minimum Bending Radius} \ \ \text{Fixed 10 x cable diameter / } \\ \\ \text{Flexing 15 x cable diameter.}$ 

**Insulation Colour** Black. (Raised rib on one core for polarity identification +/-)

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

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Max D.C Conductor Resistance @20°C Ω/km	1 Phase Volt Drop @50Hz / MAX. Conductor Temp:
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)		(Mv/Am) 75°C
GLT02/1.0	2 x 1.0	32/0.20	2.6h x 5.7w	38	20	47.5
GLT02/1.5	2 x 1.5	30/0.25	4.0h x 8.3w	64	13.7	32.3
GLT02/2.5	2 x 2.5	50/0.25	4.3h x 9.0w	90	8.21	19.4
GLT02/4.0	2 x 4.0	127/0.20	4.7h x 9.5w	124	5.09	12.0
GLT02/6.0	2 x 6.0	192/0.20	5.5h X 11.5w	160	3.39	7.25



## PF SERIES

# High Performance Flexible Cable 250/440V 90°C



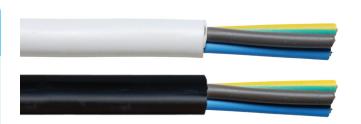
**Lighting** Used for interconnection for various forms of lighting including fluorescent fittings, high bays / low bays, floodlights and reading lamps.

**Appliance** Suitable for use as interconnection leads for appliances.

**Extension Leads** Suitable for domestic power leads (not recommended for industrial or harsh environments).

#### **PRODUCT FEATURES:**

- Metre marked
- ► Extremely 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 V-90. **Sheath** SPVC.

#### **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 250/440V.

Max AC Operating Voltage Uo 318V.

Minimum Bending Radius Fixed 7.5 x cable diameter /

Flexing 15 x cable diameter.

Sheath Colour Black, White (other colours available on request).

#### **Standard Core Colour**

2 Core - Blue, Brown. 3 Core - Blue, Brown, Green/Yellow.

4 Core - Brown, Black, Grey, Green/Yellow.

5 Core - Blue, Brown, Black, Grey, Green/Yellow.

**Relevant Standards** AS/NZS 3191, AS/NZS 3008, AS/NZS 3808, AS/NZS 1125, IEC 60332-1, *ROHS* Compliant.

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Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed in air	Single Phase Volt Drop Conductor Temp: 75°C			
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)		(Mv/Am)			
PF02/0.5	2 x 0.5	16/0.20	5.1	40	3	94.7			
PF02/0.75	2 x 0.75	24/0.20	6.5	60	7.5	63.2			
PF02/1.0	2 x 1.0	32/0.20	6.8	70	10	47.5			
PF02/1.5	2 x 1.5	28/0.26	7.8	100	15	32.3			
PF02/2.5	2 x 2.5	47/0.26	9.6	160	20	19.4			
PF02/4.0	2 x 4.0	60/0.29	10.6	180	25	12.0			
PF03/0.5	3 x 0.5	16/0.20	6.4	40	3	94.7			
PF03/0.75	3 x 0.75	24/0.20	6.8	70	7.5	63.2			
PF03/1.0	3 x 1.0	32/0.20	7.2	100	10	47.5			
PF03/1.5	3 x 1.5	28/0.26	8.5	120	15	32.3			
PF03/2.5	3 x 2.5	47/0.26	10.4	150	20	19.4			
PF03/4.0	3 x 4.0	60/0.29	11.5	230	25	12.0			
PF04/0.5	4 x 0.5	16/0.20	6.9	60	3	94.7			
PF04/0.75	4 x 0.75	24/0.20	7.5	70	7.5	63.2			
PF04/1.0	4 x 1.0	32/0.20	8.1	100	10	47.5			
PF04/1.5	4 x 1.5	28/0.26	9.4	140	15	32.3			
PF04/2.5	4 x 2.5	47/0.26	11.5	250	20	19.4			
PF04/4.0	4 x 4.0	60/0.29	12.7	300	25	12.0			
PF05/0.75	5 x 0.75	24/0.20	8.1	100	7.5	63.2			
PF05/1.0	5 x 1.0	32/0.20	8.8	125	10	47.5			
PF05/1.5	5 x 1.5	28/0.26	9.8	170	15	32.3			
PF05/2.5	5 x 2.5	47/0.26	11.7	250	20	19.4			
PF05/4.0	5 x 4.0	60/0.29	13.8	360	25	12.0			

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.



# CHEMTUFF ORDINARY DUTY OD SERIES

Ultra Performance Flexible Rubber Cable 250/440V 90°C

#### **APPLICATIONS:**

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

**Extension Leads** Used on construction sites due to its outstanding flexibility and excellent coiling characteristics in cold conditions.

**Power** For machine tools, construction and engineering equipment and conveyers.

#### **PRODUCT FEATURES:**

- UV stabilised
- ► Flame retardant
- Extremely flexible
- ▶ Water and moisture resistant
- ▶ Suitable for permanent submersion to 200 metres
- ► Heat, oil and chemical resistant (See Technical Section)



#### **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 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 250/440v.

Max AC Operating Voltage Uo 318v.

Minimum Bending Radius Fixed 5 x cable diameter /

Flexing 6 x cable diameter.

**Sheath Colour** Black, Orange (Blue, Yellow in 3 x 1.5mm only. Subject to availability).

**Standard Core Colour** 

2 Core - Blue, Brown.

3 Core - Blue, Brown, Green/Yellow.

4 Core - Grey, Brown, Black, Green/Yellow.

Relevant Standards AS/NZS 3191, IEC 60227, IEC 60332-1,

AS/NZS 3808, AS/NZS 3008, RoHS Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @50Hz / MAX. Conductor Temp:
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)	Touching	90°C (Mv/Am)
OD2/1.0	2 x 1.0	32/0.20	6.8	70	10	46.800
OD3/1.0	3 x 1.0	32/0.20	7.4	80	10	46.800
OD3/1.5	3 x 1.5	48/0.20	8.4	105	16	30.000
OD3/2.5	3 x 2.5	80/0.20	10.0	160	20	16.400
OD4/1.0	4 x 1.0	32/0.20	8.0	100	10	46.800
OD4/1.5	4 x 1.5	48/0.20	9.2	130	16	30.000
OD4/2.5	4 x 2.5	80/0.20	11.2	200	20	16.400

# CHEMTUFF ONESKIN ON SERIES

Ultra Performance Flexible Rubber Single Sheath Cable 0.6/1kV 90°C

#### **APPLICATIONS:**

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

**Extension Leads** Used on construction sites due to its 0.6/1kV heavy duty insulation, outstanding flexibility and cable memory. Suitable for tough climatic and mechanical conditions.

**Power** For machine tools, construction and engineering equipment and conveyers.

**Pumping** Suitable for permanent submersion to 200 metres. **Lighting & Entertainment** With its extra durable SER sheath, this cable is suitable for outdoor temporary power supply and lighting leads.

#### **PRODUCT FEATURES:**

- UV stabilised
- ► Flame retardant
- Extremely flexible
- ▶ Water and moisture resistant
- ▶ Suitable for permanent submersion to 200 metres
- ► Heat, oil and chemical resistant (See Technical Section)

See over for full product table ▶

### **CHEMTUFF ® ONESKIN**

#### **CHEMTUFF ® ONESKIN**



#### **CHEMTUFF ® ONESKIN**

#### **CONSTRUCTION:**

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

Insulation X-90.

Sheath SER105.

#### **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 0.6/1kV.

Max AC Operating Voltage Uo 0.7kV.

Minimum Bending Radius Fixed 5 x cable diameter /

Flexing 6 x cable diameter.

Sheath Colour Black, Orange (ON3/1.5 also available in blue, yellow)

#### **Standard Core Colour**

2 Core - Blue, Brown.

3 Core - Blue, Brown, Green/Yellow.

4 Core - Grey, Brown, Black, Green/Yellow.

5 Core - Blue, Red, White, Black, Green/Yellow.

Relevant Standards AS/NZS 3191, AS/NZS 5000.1, AS/NZS 3308,

IEC 60227, IEC 60332-1, **RoHS** Compliant.



### CHEMTUFF ONESKIN ON SERIES continued

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @50Hz / MAX. Conductor Temp:
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)	Touching	90°C (Mv/Am)
ON2/1.5	2 x 1.5	48/0.20	9.0	110	25	30.000
ON2/2.5	2 x 2.5	80/0.20	10.2	162	33	16.400
ON3/1.5	3 x 1.5	48/0.20	9.7	137	21	30.000
ON3/2.5	3 x 2.5	80/0.20	10.9	184	29	16.400
ON3/4.0	3 x 4.0	127/0.20	13.3	310	37	10.200
ON3/6.0	3 x 6.0	190/0.20	14.2	396	47	6.800
ON4/1.5	4 x 1.5	48/0.20	10.7	160	21	30.000
ON4/2.5	4 x 2.5	80/0.20	12.0	229	29	16.400
ON4/4.0	4 x 4.0	127/0.20	14.6	384	37	10.200
ON4/6.0	4 x 6.0	190/0.20	15.5	496	47	6.800
ON4/10	4 x 10.0	320/0.20	17.9	890	67	4.050
ON4/16	4 x 16.0	504/0.20	21.5	1230	89	2.550
ON5/1.5	5 x 1.5	48/0.20	11.7	198	21	30.000
ON5/2.5	5 x 2.5	80/0.20	13.2	279	29	16.400
ON5/4.0	5 x 4.0	127/0.20	16.3	472	37	10.200
ON5/6.0	5 x 6.0	190/0.20	16.8	607	47	6.800
ON5/10	5x 10.0	320/0.20	19.5	1140	67	4.050
ON5/16	5 x 16.0	504/0.20	23.6	1549	89	2.550

# CHEMTUFF TWINSKIN HD SERIES

Ultra Performance Flexible Rubber Double Sheath Cable 0.6/1kV 90°C

#### **APPLICATIONS:**

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

**Extension Leads** Used on construction sites due to its outstanding flexibility and cable memory. Suitable for tough climatic and mechanical conditions.

**Power** With a separator acting as a second sheath this cable provides extra safety for machine tools, construction and engineering equipment and conveyers.

**Pumping** Suitable for permanent submersion to 200 metres. **Lighting & Entertainment** With its extra durable SER sheath, this cable is suitable for outdoor temporary power supply and lighting leads.

#### PRODUCT FEATURES:

- UV stabilised
- ► Flame retardant
- Extremely flexible
- ► Water and moisture resistant
- ▶ Suitable for permanent submersion to 200 metres
- ▶ Heat, oil and chemical resistant (See Technical Section)

See over for full product table



#### **CONSTRUCTION:**

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

Insulation X-90.

**Separator** An added separator or bedding of extruded V-90HT material for safety and durability. Silicate powder lubricant between cores and inner sheath to reduce friction.

Sheath SER105.

#### **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 0.6/1kV.

Max AC Operating Voltage Uo 0.7kV.

Minimum Bending Radius Fixed 5 x cable diameter /

Flexing 6 x cable diameter.

Sheath Colour Black, Orange (Available in Yellow - HDT Series).

**Standard Core Colour** 

2 Core – Blue, Brown.

3 Core - Blue, Brown, Green/Yellow.

4 Core - Grey, Brown, Black, Green/Yellow.

5 Core - Blue, Red, White, Black, Green/Yellow.

Relevant Standards AS/NZS 3191, AS/NZS 5000.1, AS/NZS 3308,

IEC 60227, IEC 60332-1, **RoHS** Compliant.



### CHEMTUFF TWINSKIN HD SERIES continued

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @50Hz / MAX. Conductor Temp:
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)	Touching	90°C (Mv/Am)
HD02/1.5	2 x 1.5	48/0.20	10.0	130	25	30.000
HD02/2.5	2 x 2.5	80/0.20	10.8	165	33	16.400
HD03/1.0	3 x 1.0	32/0.20	9.8	90	17	46.800
HD03/1.5	3 x 1.5	48/0.20	10.5	140	21	30.000
HD03/2.5	3 x 2.5	80/0.20	12.4	194	29	16.400
HD03/4.0	3 x 4.0	127/0.20	14.4	319	37	10.200
HD03/6.0	3 x 6.0	190/0.20	15.9	406	47	6.800
HD04/1.5	4 x 1.5	48/0.20	11.6	170	21	30.000
HD04/2.5	4 x 2.5	80/0.20	14.0	239	29	16.400
HD04/4.0	4 x 4.0	127/0.20	16.0	394	37	10.200
HD04/6.0	4 x 6.0	190/0.20	19.0	505	47	6.800
HD04/10	4 x 10.0	318/0.20	25.8	975	67	4.050
HD04/16	4 x 16.0	504/0.20	28.6	1285	89	2.550
HD05/1.5	5 x 1.5	48/0.20	13.0	210	21	30.000
HD05/2.5	5 x 2.5	80/0.20	15.4	289	29	16.400
HD05/4.0	5 x 4.0	127/0.20	17.4	482	37	10.200
HD05/6.0	5 x 6.0	190/0.20	21.0	619	47	6.800
HD05/10	5 x 10.0	318/0.20	28.1	1190	67	4.050
HD05/16	5 x 16.0	504/0.20	31.7	1590	89	2.550

# CHEMTUFF TWINSKIN HDT SERIES

Ultra Performance Flexible Rubber Double Sheath Cable 0.6/1kV 90°C



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

**Marine** Flexible tinned copper for installations on pleasure craft, ship to shore and other marine applications.

**Extension Leads** Used on construction sites due to its outstanding flexibility and cable memory. Suitable for tough climatic and mechanical conditions.

**Power** With a separator acting as a second sheath this cable provides extra safety for machine tools, construction and engineering equipment and conveyers.

**Pumping** Suitable for permanent submersion to 200 metres. **Lighting & Entertainment** With its extra durable SER sheath and high visibility, this cable is suitable for outdoor temporary power supply and lighting leads.

#### **PRODUCT FEATURES:**

- Yellow sheath for high visibility
- ► Tinned fine stranded copper conductor
- Non-marking sheath suits ship to shore use
- UV stabilised
- ► Flame retardant
- Extremely flexible
- ▶ Water and moisture resistant
- Suitable for permanent submersion to 200 metres
- ▶ Heat, oil and chemical resistant (See Technical Section)

See over for full product table >



#### **CONSTRUCTION:**

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

Insulation X-90.

**Separator** An added separator or bedding of extruded V-90HT material for safety and durability. Silicate powder lubricant between cores and inner sheath to reduce friction.

Sheath SER105.

#### **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 0.6/1kV.

Max AC Operating Voltage Uo 0.7kV.

Minimum Bending Radius Fixed 5 x cable diameter /

Flexing 6 x cable diameter.

Sheath Colour Yellow

**Standard Core Colour** 

3 Core - Blue, Brown, Green/Yellow.

4 Core - Grey, Brown, Black, Green/Yellow.

5 Core - Blue, Red, White, Black, Green/Yellow.

**Relevant Standards** AS/NZS 3191, AS/NZS 5000.1, AS/NZS 3308, IEC 60227, IEC 60332-1, *ROHS* Compliant.



### **CHEMTUFF TWINSKIN HDT SERIES continued**

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @50Hz / MAX. Conductor Temp:
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)	Touching	90°C (Mv/Am)
HD03/1.5T	3 x 1.5	48/0.20	10.5	140	21	30.000
HD03/2.5T	3 x 2.5	80/0.20	12.4	194	29	16.400
HD03/4.0T	3 x 4.0	127/0.20	14.4	319	37	10.200
HD03/6.0T	3 x 6.0	190/0.20	15.9	406	47	6.800
HD04/1.5T	4 x 1.5	48/0.20	11.6	170	21	30.000
HD04/2.5T	4 x 2.5	80/0.20	14.0	239	29	16.400
HD04/4.0T	4 x 4.0	127/0.20	16.0	394	37	10.200
HD04/6.0T	4 x 6.0	190/0.20	19.0	505	47	6.800
HD05/1.5T	5 x 1.5	48/0.20	13.0	210	21	30.000
HD05/2.5T	5 x 2.5	80/0.20	15.4	289	29	16.400
HD05/4.0T	5 x 4.0	127/0.20	17.4	482	37	10.200
HD05/6.0T	5 x 6.0	190/0.20	21.0	619	47	6.800
HD05/10T	5 x 10.0	318/0.20	28.1	1190	67	4.050
HD05/16T	5 x 16.0	504/0.20	31.7	1590	89	2.550
HD05/35T	5 x 35.0	1120/0.20	36.6	3210	149	1.170

# ALLFLEX INDUSTRIALL MLG2 MULTI SERIES

Ultra Performance Flexible Rubber Industrial / Marine Cable 0.6/1kV 90°C AS/NZS 5000.1, IEC 60092, H07RN-F



**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)

See over for full product table >





#### **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 Numbered + Green/Yellow

ML-G2

2 Core - Blue, Brown

3 Core - Blue, Brown, Green/Yellow

4 Core - Brown, Black, Grey, Green/Yellow

5 Core - Blue, Brown, Black, Grey, Green/Yellow

Multi Core - Black Numbered + 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.

**H07RN-F** Harmonised type heavy duty rubber cable construction (1.5mm<sup>2</sup> and above).

Certification Approvals Lloyds Type Approval CEF/SA.



### ALLFLEX INDUSTRIALL MLG2 MULTI SERIES continued

Code	No. of	Approx.	Approx. Overall	Approx.	Nominal Amps un-enclosed	3 Phase Volt Drop			
Code	Cores x Size	Stranding	Diameter +/ - 10%	Weight	protected from sun @ 30°C fixed application	@50Hz / MAX. Conductor Temp:			
		No. of				90°C			
	(mm²)	wires x mm	(mm)	(Kg/Km)	Touching	(Mv/Am)			
COMPLIES ONLY TO IEC 60092-350. CORE COLOURS: BLACK NUMBERED + GRN/YEL									
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			
COMPLIES TO AS/NZ									
ML02/1.5BKG2	2 x 1.5	30/0.25	10.8	130	25	30.000			
ML02/2.5BKG2	2 x 2.5	50/0.25	11.8	190	33	16.400			
ML02/4.0BKG2	2 x 4.0	56/0.30	13.2	260	44	10.200			
ML02/6.0BKG2	2 x 6.0	84/0.30	15.0	350	56	6.800			
ML02/10.0BKG2	2 x 10.0	80/0.40	20.1	538	67	4.050			
ML02/16.0BKG2	2 x 16.0	128/0.40	22.9	749	89	2.550			
ML03/1.5BKG2	3 x 1.5	30/0.25	11.6	160	21	30.000			
ML03/2.5BKG2	3 x 2.5	50/0.25	12.7	230	29	16.400			
ML03/4.0BKG2	3 x 4.0	56/0.30	14.2	320	37	10.200			
ML03/6.0BKG2	3 x 6.0	84/0.30	16.1	425	47	6.800			
ML03/10.0BKG2	3 x 10.0	80/0.40	21.5	765	67	4.050			
ML03/16.0BKG2	3 x 16.0	128/0.40	24.0	1060	89	2.550			
ML04/1.5BKG2	4 x 1.5	30/0.25	12.8	200	21	30.000			
ML04/2.5BKG2	4 x 2.5	50/0.25	13.9	290	29	16.400			
ML04/4.0BKG2	4 x 4.0	56/0.30	15.6	400	37	10.200			
ML04/6.0BKG2	4 x 6.0	84/0.30	17.9	540	47	6.800			
ML04/10.0BKG2	4 x 10.0	80/0.40	23.0	930	67	4.050			
ML04/16.0BKG2	4 x 16.0	128/0.40	26.0	1300	89	2.550			
ML04/25.0BKG2	4 x 25.0	200/0.40	32.0	1950	119	1.610			
ML04/35.0BKG2	4 x 35.0	280/0.40	35.0	2330	149	1.170			
ML04/50.0BKG2	4 x 50.0	400/0.40	40.0	3200	187	0.868			
ML05/1.5BKG2	5 x 1.5	30/0.25	14.0	240	21	30.000			
ML05/2.5BKG2	5 x 2.5	50/0.25 56/0.30	15.3 17.3	350 500	29 37	16.400 10.200			
ML05/4.0BKG2	5 x 4.0				47				
ML05/6.0BKG2	5 x 6.0 5 x 10.0	84/0.30 80/0.40	19.8 25.8	670 1140	67	6.800 4.050			
ML05/10.0BKG2									
ML05/16.0BKG2 ML05/25.0BKG2	5 x 16.0 5 x 25.0	128/0.40 200/0.40	29.0 35.0	1610 2440	89 119	2.550 1.610			
ML05/35.0BKG2	5 x 25.0 5 x 35.0	280/0.40	38.0	3310	149	1.170			
ML07/1.5BKG2	7 x 1.5	30/0.25	15.3	330	15	30.000			
ML07/1.5BKG2	7 x 1.5	50/0.25	17.0	470	20	16.400			
ML12/1.5BKG2	7 x 2.5 12 x 1.5	30/0.25	20.8	480	15	30.000			
ML12/1.5BKG2	12 x 1.5	50/0.25	20.8	690	20	16.400			
ML19/1.5BKG2	12 x 2.5 19 x 1.5	30/0.25	24.7	710	15	30.000			
WIL 13/ 1.3DNUZ	C.I X CI	30/0.23	۷4./	710	13	30.000			

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.



## HO PLUS SERIES

# Ultra Performance Flexible Rubber Cable 0.6/1kV 90°C



#### **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 cable for installation in pleasure craft and other marine applications.

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

**Pumping** Suitable for permanent submersion to 200 metres. **Materials and Handling Systems** Suitable for cable spring reelers and large energy chains.

#### **PRODUCT FEATURES:**

- ► Tinned fine stranded copper conductor
- UV stabilised
- ► Flame retardant
- ▶ Water and moisture resistant
- ► Good elongation at break
- Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ Suitable for permanent submersion to 200 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 (Current ratings are based on 30°C air temp. See technical section for de-rating factors).

Rated Voltage Uo/U 0.6/1kV.

Max AC Operating Voltage Uo 0.7kV.

**Minimum Bending Radius** Fixed 4 x cable diameter / flexing 6 x cable diameter / Drag chains and spring reelers 10 x cable diameter.

Sheath Colour Black.

**Standard Core Colours** 

2 Core – Blue, Brown.

3 Core – Blue, Brown, Green/Yellow.

4 Core – Brown, Black, Grey, Green/Yellow.

5 Core – Blue, Brown, Black, Grey, Green/Yellow.

Multi Core - Black Numbered + Green/Yellow.

**Relevant Standards** H07RN-F Type, DIN VDE 0295, DIN VDE 0165, IEC 60332-1, EN 50363, EN 50525-2-21, *RoHS* Compliant.

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)
HO5RN-F 300/500V						
HO2/0.75B	2 x 0.75	24/0.20	6.4	62	12	54.800
HO2/1.0B	2 x 1.0	32/0.20	7.0	72	20	46.800
H03G0.75B	3 x 0.75	24/0.20	7.0	77	12	54.800
H03G1.0B	3 x 1.0	32/0.20	7.1	125	20	46.800
H04G0.75B	4 x 0.75	24/0.20	8.8	78	11	54.800
H04G1.0B	4 x 1.0	32/0.20	10.0	155	17	46.800
HO7RN-F 0.6/1kV						
H07G4.0B	7 x 4.0	56/0.30	21.5	660	27	10.200
H07G6.0B	7 x 6.0	84/0.30	24.8	956	35	6.800





# HR SERIES

# High Performance Flexible Rubber Cable 450/750V 60°C

#### **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

**Power** Used on construction sites due to its outstanding flexibility, durability and cable memory.

**Pumping** Suitable for permanent submersion to 200 metres. **Materials and Handling Systems** Suitable for cable spring reelers and large energy chains.

#### **PRODUCT FEATURES:**

- UV stabilised
- ► Flame retardant
- ▶ Water and moisture resistant
- Good elongation at break
- Resistant to environmental factors such as oxidation, ozone and sunlight
- ▶ Suitable for permanent submersion to 200 metres
- $\,\blacktriangleright\,$  Good tensile strength, tearing strength and abrasion resistance
- ▶ Heat, oil and chemical resistant (See Technical Section)



#### **CONSTRUCTION:**

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

Sheath SER.

#### **CHARACTERISTICS:**

**Operating Temperature Range** Fixed -40°C to 60°C / Flexing -30°C to 60°C.

**Maximum Conductor Temperature** 60°C.

Rated Voltage Uo/U 450/750V (Fixed laying permitted up to 1000V).

Minimum Bending Radius Fixed 5 x cable diameter.

Sheath Colour Black.

#### **Standard Core Colours**

2 Core - Blue, Brown.

3 Core - Blue, Brown, Green/Yellow.

4 Core - Brown, Black, Grey, Green/Yellow.

5 Core - Blue, Brown, Black, Grey, Green/Yellow.

Multi Core - Black Numbered + Green/Yellow.

**Relevant Standards** H07RN-F, HD361 S2/S3, VDE 0295, VDE 0282, IEC 60811-2-1, VDE 0293-308, EN 60811-2-1, IEC 60332-1,

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

See over for full product table ▶



### HR SERIES continued

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @ 50Hz / MAX . Conductor Temp:
	(mm²)	No. of wires x mm	+/- <b>10</b> % (mm)	(Kg/Km)	Touching	90°C (Mv/Am)
HR3G1.5	3 x 1.5	30/0.25	10.5	130	15	30.000
HR3G2.5	3 x 2.5	50/0.25	12.5	191	21	16.400
HR3G4.0	3 x 4.0	56/0.31	14.5	298	30	10.200
HR3G6.0	3 x 6.0	84/0.30	16.1	407	37	6.800
HR3G25	3 x 25.0	200/0.41	27.5	1157	92	1.610
HR4G1.5	4 x 1.5	30/0.25	11.5	162	16	30.000
HR4G2.5	4 x 2.5	50/0.25	13.8	238	22	16.400
HR4G4.0	4 x 4.0	56/0.31	15.5	331	30	10.200
HR4G6.0	4 x 6.0	84/0.30	17.5	472	37	6.800
HR4G10	4 x 10.0	30/0.40	23.7	718	52	4.050
HR4G16	4 x 16.0	1280/0.40	26.9	1068	69	2.550
HR4G25	4 x 25.0	200/0.41	33.4	1400	92	1.610
HR4G35	4 x 35.0	280/0.41	36.8	1870	114	1.170
HR4G50	4 x 50.0	400/0.40	42.6	3200	143	0.868
HR4G70	4 x 70.0	356/0.50	48.3	4200	178	0.609
HR4G95	4 x 95.0	485/0.50	54.7	5490	210	0.450
HR4G120	4 x 120.0	614/0.50	59.5	7098	246	0.366
HR5G1.5	5 x 1.5	30/0.25	12.5	195	16	30.000
HR5G2.5	5 x 2.5	50/0.25	15.0	291	22	16.400
HR5G4.0	5 x 4.0	56/0.31	17.7	411	30	10.200
HR5G6.0	5 x 6.0	84/0.31	19.8	581	38	6.800
HR5G10	5 x 10.0	80/0.41	26.0	896	54	4.050
HR5G16	5 x 16.0	128/0.41	30.0	1810	71	2.550
HR5G25	5 x 25.0	200/0.40	36	2440	94	1.610
HR5G35	5 x 35.0	280/0.40	41	3310	114	1.170
HR5G50	5 x 50.0	400/0.40	45.0	4000	143	0.868
HR5G70	5 x 70.0	356/0.50	52.5	5256	178	0.609
HR5G95	5 x 95.0	485/0.50	56.6	6780	210	0.450
HR7G1.5	7 x 1.5	30/0.25	16.0	330	12	30.000
HR7G2.5	7 x 2.5	50/0.25	18.5	470	16	16.400
HR12G1.5	12 x 1.5	30/0.25	19.0	480	10	30.000
HR12G2.5	12 x 2.5	50/0.25	22.5	690	14	16.400
HR19G1.5	19 x 1.5	30/0.25	23.5	788	7	30.000
HR19G2.5	19 x 2.5	50/0.25	27.7	1068	10	16.400
HR24G1.5	24 x 1.5	30/0.25	27.5	968	7	30.000
HR24G2.5	24 x 2.5	50/0.25	32.6	1400	7.5	16.400



# HRP SERIES

High Performance Flexible Rubber Cable C/W 2 X PILOT 0.6/1kV 90°C



#### **APPLICATIONS:**

**Pumping** Complete with two 1.5mm pilots, this cable is suitable for permanent submersion to 100 metres.

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

**Marine** Flexible tinned copper cable for installation in pleasure craft and other marine applications.

#### **PRODUCT FEATURES:**

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

#### **CONSTRUCTION:**

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

Insulation R-90.

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 (Current ratings are based on 30°C air temp. See Technical section for de-rating factors).

Rated Voltage Uo/U 0.6/1kV.

Max AC Operating Voltage Uo 0.7kV.

Minimum Bending Radius Fixed 4 x cable diameter /

Flexing 6 x cable diameter.

Sheath Colour Black.

**Standard Core Colours** 

4 Core – Brown, Black, Grey, Green/Yellow + 2 x white numbered pilots.

**Relevant Standards** DIN VDE 0295, DIN VDE 0165, IEC 60332-1, EN 50363, EN 50525-2-21, *ROHS* Compliant.

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @ 50Hz / MAX. Conductor Temp:
	(mm²)	No. of wires x mm	+/- 10% (mm)	(Kg/Km)	Touching	90°C (Mv/Am)
HRP4G1.5	4 x 1.5 + (2 x 1.5)	30/0.25 (30/0.25)	15.0	310	21	30.000
HRP4G2.5	4 x 2.5 + (2 x 1.5)	50/0.25 (30/0.25)	17.3	420	29	16.400
HRP4G4.0	4 x 4.0 + (2 x 1.5)	56/0.30 (30/0.25)	20.3	570	37	10.200
HRP4G6.0	4 x 6.0 + (2 x 1.5)	84/0.30 (30/0.25)	24.0	720	47	6.800
HRP4G10	4 x 10 + (2 x 1.5)	80/0.40 (30/0.25)	27.5	1170	67	4.050
HRP4G16	4 x 16 + (2 x 1.5)	128/0.40 (30/0.25)	29.5	1310	89	2.550
HRP4G25	4 x 25 + (2 x 1.5)	200/0.40(30/0.25)	33.5	1910	119	1.610
HRP4G35	4 x 35 + (2 x 1.5)	280/0.40(30/0.25)	37.5	2460	149	1.170



## AR SERIES

# Ultra Performance Flexible Power & Control Cable 0.6/1kV 90°C



#### **APPLICATIONS:**

**Cable Festoon Systems** Suitable for Backing Gate, machine and plant applications.

**Energy/Drag Chains** Power & Control cables for highest requirements in drag chain applications.

**Food & Beverage** Resistant to microbe & hydrolysis making it suitable for the food & beverage industry.

**Harsh Environments** With its high flexibility, robust TPE sheath and tensile strengthen centre support, this cable is suited to most harsh industrial environments including compost, sewage, car wash, laundry/humid rooms and outdoors.

#### **PRODUCT FEATURES:**

- ▶ Resistant to oil acc. to DIN EN 60811-404 4 h at +100 °C
- Silicone-free
- ▶ UV,- ozone- and weather resistant acc. EN 50396 und HD 605 S2
- Resistant to coolant fluids, microbes, hydrofluoric acid, salt acid and weakened sulfuric (See Technical section)
- ▶ NEW: with Ripcord, for faster and core protected dismantling

#### **CONSTRUCTION:**

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

**Insulation PELON®2** 

Sheath TPE

#### CHARACTERISTICS:

**Operating Temperature Range** Fixed -40°C to 90°C Flexing -30°C to 90°C

**Maximum Conductor Temperature** 90°C

Rated Voltage Uo/U 0.6/1kV

Max AC Operating Voltage Uo 0.7kV

Minimum Bending Radius Fixed 3 x cable diameter/ Flexing 5 x cable diameter.

**Speed** Self-supporting: max 10 m/s, Gliding: max 5 m/s

Traverse Length Self-supporting/Gliding max 400 m

Acceleration max 100m/s

Sheath Colour Black

Standard Core Colours Black (numbered) + Green/Yellow Earth Relevant Standards IEC 60228, IEC 60332-1, VDE 0295, DIN 47100, EN 60811, EN 50396, HD 605S2, *RoHS* Compliant, C € Directive 2014/35/EU, UL/CSA Approvals

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application
	(mm²)	No. of wires x mm	+/- <b>10</b> % (mm)	(Kg/Km)	Touching
AR07/1.5	7 X 1.5	84/0.15	10	164	13
AR12/1.5	12 X 1.5	84/0.15	14.8	301	8



## **EP** SERIES

# Extreme Performance Flexible Cable 0.6/1kV 90°C



#### **APPLICATIONS:**

**Food, Beverage & Laboratory** With its microbe and hydrolysis resistant and super durable PUR sheath this cable suits the food and beverage industry and laboratory environments.

**Mobile Tools** Suitable for floor sanding and drills where extreme wear resistance and reverse bending is required.

**Power** With its extra durable PUR sheath this cable is suitable for outdoor temporary power supplies, extension leads and agricultural equipment.

**Materials and Handling Systems** Suitable for cable spring reelers and large energy chains.

**Low Temperature** Extreme flexibility in low temperatures such as freezers and ski fields.

#### PRODUCT FEATURES:

- Extreme resistance to abrasion, tearing & notching
- Good reverse bending strength (min 30,000 reverse bends VDE0472)
- ► Non-marking sheath
- Microbe and hydrolysis resistant
- ► Halogen free
- UV stabilised
- ► Flame retardant
- Resistant to environmental factors such as oxidation, ozone & sunlight
- Very good behaviour to variations of outdoor temperatures
- ▶ Good tensile strength, tearing strength and abrasion resistance
- Good elongation at break
- Good dielectric properties
- Avian and rodent resistance
- Water and moisture resistance
- Resistance to seawater and wastewater
- ▶ 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** EPR R90 Type E14 (to HD22) PETP.

Inner Sheath TPE 6mm<sup>2</sup> and above.

**Sheath** PUR halogen free polyurethane compound type TMPU acc. To HD22.10 S1.

#### CHARACTERISTICS:

**Operating Temperature Range** Fixed -45°C to 90°C / Flexing -40°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 HO5BQ-F. Uo/U 0.6/1kV HO7BQ-F.

**Minimum Bending Radius** Fixed 4 x cable diameter / Freely flexing  $5 \times 10^{12} \times 10^$ 

Sheath Colour Orange.

#### **Standard Core Colours**

2 Core - Blue, Brown.

3 Core – Blue, Brown, Green/Yellow.

4 Core - Brown, Black, Grey, Green/Yellow.

5 Core - Blue, Brown, Black, Grey, Green/Yellow.

**Relevant Standards** DIN VDE 0295, DIN VDE 0293-308, (HAR) HD22.10.S1, IEC 60228,  $\mathbf{C}$   $\mathbf{E}$  Directive 2006/95/EC and **ROHS** Compliant.



## **EP SERIES** continued

Code	No. of Cores x Size	Approx. Stranding	Approx. Overall Diameter +/-10%	Approx. Weight	Nominal Amps un-enclosed protected from sun @ 30°C fixed application	3 Phase Volt Drop @ 50Hz / MAX. Conductor Temp:
	(mm²)	No. of wires x mm	(mm)	(Kg/Km)	Touching	90°C (Mv/Am)
HO5BQ-F 300/500V						
EP2/0.75OR	2 x 0.75	24/0.20	7.0	65	12	54.800
EP2/1.00R	2 x 1.0	32/0.20	7.5	78	20	46.800
EP3G0.75OR	3 x 0.75	24/0.20	7.5	78	12	54.800
EP3G1.00R	3 x 1.0	32/0.20	8.0	91	20	46.800
EP4G0.75OR	4 x 0.75	24/0.20	8.0	91	11	54.800
EP4G1.00R	4 x 1.0	32/0.20	8.5	108	17	46.800
EP5G0.75OR	5 x 0.75	24/0.20	9.0	113	11	54.800
EP5G1.00R	5 x 1.0	32/0.20	9.5	137	17	46.800
HO7BQ-F 0.6/1kV						
EP2/1.50R	2 x 1.5	30/0.25	9.0	111	25	30.000
EP3G1.5OR	3 x 1.5	30/0.25	9.5	130	25	30.000
EP3G2.5OR	3 x 2.5	50/0.25	11.0	191	33	16.400
EP3G4.0OR	3 x 4.0	56/0.30	13.0	266	44	10.200
EP4G1.5OR	4 x 1.5	30/0.25	10.5	162	21	30.000
EP4G2.5OR	4 x 2.5	50/0.25	12.5	238	29	16.400
EP4G4.0OR	4 x 4.0	56/0.30	14.0	331	37	10.200
EP4G6.00R	4 x 6.0	84/0.30	16.5	472	47	6.800
EP4G10.0R	4 x 10.0	80/0.40	21.1	718	67	4.050
EP4G16.0R	4 x 16.0	128/0.40	23	1068	89	2.550
EP4G25.0R	4 x 25.0	200/0.40	29.7	1400	119	1.610
EP4G35.0R	4 x 35.0	280/0.40	33	1870	149	1.170
EP5G1.5OR	5 x 1.5	30/0.25	11.5	195	21	30.000
EP5G2.5OR	5 x 2.5	50/0.25	13.5	291	29	16.400
EP5G4.0OR	5 x 4.0	56/0.30	16.0	411	37	10.200
EP5G6.00R	5 x 6.0	84/0.30	20	581	47	6.800
EP5G10.0R	5 x 10.0	80/0.40	23	896	67	4.050
EP5G16.0R	5 x 16.0	128/0.40	27	1210	119	2.550
EP7G1.5OR	7 x 1.5	30/0.25	14.0	291	15	30.000
EP7G2.5OR	7 x 2.5	50/0.25	16.5	431	20	16.400

