

# FREP®

## FR-EPR/CPE, Control, Unshielded 600 V, UL Type TC-ER<sup>1</sup> – E-2 Color Code

### Product Construction:

#### Conductor:

- 14 AWG thru 10 AWG fully annealed stranded tinned copper per ASTM B33
- Class B stranding per ASTM B8

#### Insulation:

- Flame-Retardant Ethylene Propylene Rubber (FR-EPR) Type II
- Color-coded per ICEA Method 1, Table E-2 (does not include white or green)

#### Jacket:

- Lead-free, flame-retardant thermoplastic Chlorinated Polyethylene (CPE)

#### Print

- GENERAL CABLE® (PLANT OF MFG) FREP® XX/C XXAWG EPR/CPE (UL) TYPE TC-ER<sup>1</sup> XHHW-2 CDRS 90°C WET OR DRY 600 V DIR BUR SUN RES DAY/MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

#### Options:

- 2 kV version
- Bare copper conductor
- Class C stranding
- E-1 Color Code—see Spec 4310
- Overall shielded multi conductor
- Flame-Retardant Cross-Linked Polyethylene (FR-XLPE) insulation
- Thermoplastic Low-Smoke, Zero-Halogen (LSZH) jacket
- Other constructions available upon request

### Applications:

- In free air, raceways or direct burial
- In wet or dry locations
- Permitted for Exposed Run (ER) use in accordance with NEC for 3 or more conductors
- Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC

### Features:

- Rated at 90°C wet or dry
- Ripcord applied to all cables with jacket thickness of 60 mils or less
- Excellent physical, thermal and electrical properties
- Sunlight- and weather-resistant
- Excellent moisture resistance
- Excellent resistance to compression cuts and heat deformation
- Low coefficient of friction for easy pulling
- Excellent flame resistance—burns to ash; does not exhibit thermoplastic drip
- Excellent low temperature cold bend characteristics
- Meets cold bend test at -40°C
- Meets the crush and impact requirements of Type MC cable for 3 or more conductors

### Compliances:

#### Industry Compliances:

- UL 44 Type XHHW-2
- UL 1277 Type TC-ER for 3 or more conductors, UL File # E57179
- UL 1581
- ICEA S-73-532

#### Flame Test Compliances:

- UL 1581 VW-1
- UL 1277
- IEEE 383
- IEEE 1202
- CSA FT4
- ICEA T-29-520

#### Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable

### Packaging:

- Material cut to length and shipped on non-returnable wood reels



CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG)	COND. STRAND	MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
				INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km

### 14 AWG MULTI CONDUCTORS

279560	2 Flat	14	7/.0242	0.030	0.76	0.045	1.14	.365 x .230	9.30 x 5.80	26	38	61	91
305320*	2	14	7/.0242	0.030	0.76	0.045	1.14	0.370	9.40	26	39	71	106
280180	3	14	7/.0242	0.030	0.76	0.045	1.14	0.390	9.91	39	59	92	137
280190	4	14	7/.0242	0.030	0.76	0.045	1.14	0.425	10.80	53	78	115	171
279870	5	14	7/.0242	0.030	0.76	0.045	1.14	0.465	11.81	66	98	139	207
280200	7	14	7/.0242	0.030	0.76	0.045	1.14	0.505	12.83	92	137	173	257
280210	9	14	7/.0242	0.030	0.76	0.060	1.52	0.620	15.75	118	176	240	357
279880	12	14	7/.0242	0.030	0.76	0.060	1.52	0.700	17.78	158	235	301	448
279580	19	14	7/.0242	0.030	0.76	0.060	1.52	0.815	20.70	250	372	468	696
279590	25	14	7/.0242	0.030	0.76	0.080	2.03	0.935	23.75	323	481	624	929
347080*	30	14	7/.0242	0.030	0.76	0.080	2.03	1.030	26.16	387	576	747	1112
279600*	37	14	7/.0242	0.030	0.76	0.080	2.03	1.110	28.19	466	694	875	1302

### 12 AWG MULTI CONDUCTORS

279840	2 Flat	12	7/.0305	0.030	0.76	0.045	1.14	.400 x .245	10.20 x 6.20	40	60	82	122
307690*	2	12	7/.0305	0.030	0.76	0.045	1.14	0.410	10.41	41	61	94	140
280170	3+ Grnd	12	7/.0305	0.030	0.76	0.045	1.14	0.435	11.05	85	127	148	220
280300	3	12	7/.0305	0.030	0.76	0.045	1.14	0.435	11.05	64	95	124	185
280310	4	12	7/.0305	0.030	0.76	0.045	1.14	0.475	12.07	85	127	157	234
280320	5	12	7/.0305	0.030	0.76	0.045	1.14	0.520	13.21	106	158	191	284
279890	7	12	7/.0305	0.030	0.76	0.060	1.52	0.595	15.11	149	221	268	399
280330	9	12	7/.0305	0.030	0.76	0.060	1.52	0.695	17.65	191	285	337	502
280340	12	12	7/.0305	0.030	0.76	0.060	1.52	0.765	19.43	247	368	428	637
279610	19	12	7/.0305	0.030	0.76	0.080	2.03	0.940	23.88	391	582	688	1024
295400*	25	12	7/.0305	0.030	0.76	0.080	2.03	1.095	27.81	515	767	854	1271
347100*	30	12	7/.0305	0.030	0.76	0.080	2.03	1.150	29.21	618	920	1002	1491
301870	37	12	7/.0305	0.030	0.76	0.080	2.03	1.240	31.50	762	1134	1240	1845

### 10 AWG MULTI CONDUCTORS

279570	2 Flat	10	7/.0385	0.030	0.76	0.045	1.14	.445 x .270	11.30 x 6.90	64	95	113	168
305340*	2	10	7/.0385	0.030	0.76	0.045	1.14	0.455	11.56	65	97	128	190
279680	3+ Grnd	10	7/.0385	0.030	0.76	0.045	1.14	0.485	12.32	134	199	225	335
280410	3	10	7/.0385	0.030	0.76	0.045	1.14	0.485	12.32	100	150	172	256
279900	4	10	7/.0385	0.030	0.76	0.060	1.52	0.560	14.22	134	199	234	348
279620	5	10	7/.0385	0.030	0.76	0.060	1.52	0.615	15.62	167	249	284	423
279630	7	10	7/.0385	0.030	0.76	0.060	1.52	0.670	17.02	234	349	381	567
279640	9	10	7/.0385	0.030	0.76	0.060	1.52	0.760	19.30	295	440	464	691
279650	12	10	7/.0385	0.030	0.76	0.080	2.03	0.905	22.99	402	598	651	696

Dimensions and weights are nominal; subject to industry tolerances.

\* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

<sup>1</sup> Approved as TYPE TC-ER for Exposed Run applications of 3 or more conductors as defined by NEC.