

# FREP®

FR-EPR/CPE, Control, Shielded  
600 V, UL Type TC-ER<sup>1</sup>, Overall Shielded—E-2 Color Code



### Product Construction:

#### Conductor:

- 16 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)

#### Shield:

##### Overall shielded multi-conductor cable

- Overall shield is Flexfoil® aluminum/polymer in contact with stranded tinned copper drain wire

#### Jacket:

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

### Applications:

- In free air, raceway and 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, Division 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 conductors or more

### 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/NEMA WC57

#### Flame Test Compliances:

- UL 1581/UL 2556 VW-1
- UL 1685 Vertical Flame Test
- 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
- RoHS Compliant

### 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

### OVERALL SHIELD 16 AWG CONDUCTORS

280470	2	16	7W	0.025	0.64	0.045	1.14	0.320	8.13	19	28	52	77
280490	3	16	7W	0.025	0.64	0.045	1.14	0.335	8.51	27	40	66	98

### OVERALL SHIELD 14 AWG CONDUCTORS

280980*	2	14	7W	0.030	0.76	0.045	1.14	0.375	9.53	29	43	74	110
354800*	3	14	7W	0.030	0.76	0.045	1.14	0.395	10.03	42	63	95	141
305330*	4	14	7W	0.030	0.76	0.045	1.14	0.430	10.92	55	82	118	176
354810*	5	14	7W	0.030	0.76	0.045	1.14	0.470	11.94	68	101	142	211
354820*	7	14	7W	0.030	0.76	0.045	1.14	0.510	12.95	94	140	176	262
367120*	9	14	7W	0.030	0.76	0.060	1.52	0.625	15.88	121	180	243	362
354830*	12	14	7W	0.030	0.76	0.060	1.52	0.705	17.91	160	238	304	452
305360*	19	14	7W	0.030	0.76	0.060	1.52	0.820	20.83	252	375	471	701
367130*	25	14	7W	0.030	0.76	0.080	2.03	0.940	25.53	325	484	627	933
367140*	30	14	7W	0.030	0.76	0.080	2.03	1.035	26.29	389	579	750	1116
367150*	37	14	7W	0.030	0.76	0.080	2.03	1.115	28.32	468	696	878	1307

### OVERALL SHIELD 12 AWG CONDUCTORS

367160*	2	12	7W	0.030	0.76	0.045	1.14	0.415	10.45	43	64	97	144
367170*	3	12	7W	0.030	0.76	0.045	1.14	0.440	11.18	66	98	127	189
326650*	4	12	7W	0.030	0.76	0.045	1.14	0.480	12.19	87	129	160	238
367180*	5	12	7W	0.030	0.76	0.045	1.14	0.525	13.34	108	162	194	289
326660*	7	12	7W	0.030	0.76	0.060	1.52	0.600	15.24	151	225	271	403
367190*	9	12	7W	0.030	0.76	0.060	1.52	0.700	17.78	193	287	340	506
326640*	12	12	7W	0.030	0.76	0.060	1.52	0.770	19.56	249	371	431	641
326670*	19	12	7W	0.030	0.76	0.080	2.03	0.945	24.00	393	585	691	1028
367200*	25	12	7W	0.030	0.76	0.080	2.03	1.100	27.94	517	769	857	1275
367210*	30	12	7W	0.030	0.76	0.080	2.03	1.155	29.80	620	923	1005	1496
367220*	37	12	7W	0.030	0.76	0.080	2.03	1.245	31.62	764	1137	1243	1850

### OVERALL SHIELD 10 AWG CONDUCTORS

311900*	2	10	7W	0.030	0.76	0.045	1.14	0.460	11.68	68	101	131	195
367230*	3	10	7W	0.030	0.76	0.045	1.14	0.490	12.45	103	155	175	260
311910*	4	10	7W	0.030	0.76	0.060	1.52	0.565	14.35	136	202	237	353
367240*	5	10	7W	0.030	0.76	0.060	1.52	0.620	15.75	170	253	287	427
367250*	7	10	7W	0.030	0.76	0.060	1.52	0.675	17.15	237	353	384	571
367260*	9	10	7W	0.030	0.76	0.060	1.52	0.765	19.43	298	443	467	695
367270*	12	10	7W	0.030	0.76	0.080	2.03	0.910	23.11	404	601	654	973

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.

