

# FREP®

## FR-EPR/CPE, Instrumentation, Shielded 600 V, UL Type TC, Individual and Overall Shielded Pairs

### Product Construction:

#### Conductor:

- 18 AWG and 16 AWG tinned, annealed 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: Pairs - black and white. One conductor in each pair is printed alpha-numerically for easy identification

#### Shield:

##### Individual and overall shielded pairs

- Individual pairs are 100% individually shielded with Flexfoil® aluminum/polyester in contact with stranded tinned copper drain wire
- 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, raceways or direct burial
- In wet or dry locations
- Permitted for use in 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
- Excellent moisture resistance
- Excellent resistance to compression cuts and heat deformation
- Excellent flame resistance—burns to an ash; does not exhibit thermoplastic drip
- Low coefficient of friction for easy pulling
- Sunlight- and weather-resistant
- Excellent low temperature cold bend characteristics
- Meets cold bend test at -40°C

### Compliances:

#### Industry Compliances:

- UL 1277 Type TC, UL File # E57179
- UL 1581
- ICEA S-73-532/NEMA WC57
- RoHS Compliant

#### 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

### Packaging:

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



CATALOG NUMBER	NO. OF PAIRS	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

### INDIVIDUAL AND OVERALL SHIELDED PAIRS 18 AWG CONDUCTORS

279700	2	18	7W	0.025	0.64	0.045	1.14	0.473	12.01	27	41	83	124
279710	4	18	7W	0.025	0.64	0.060	1.52	0.586	14.88	53	78	152	226
279720*	8	18	7W	0.025	0.64	0.060	1.52	0.751	19.08	103	153	259	385
279730*	12	18	7W	0.025	0.64	0.080	2.03	0.948	24.08	153	228	398	592
279740*	16	18	7W	0.025	0.64	0.080	2.03	1.050	26.67	206	307	502	747
319270*	20	18	7W	0.025	0.64	0.080	2.03	1.185	30.10	254	378	623	927
279750*	24	18	7W	0.025	0.64	0.080	2.03	1.220	30.99	311	463	709	1055
337240*	36	18	7W	0.025	0.64	0.080	2.03	1.474	37.44	461	687	1008	1500
337250*	50	18	7W	0.025	0.64	0.110	2.79	1.780	45.21	640	952	1454	2164

### INDIVIDUAL AND OVERALL SHIELDED PAIRS 16 AWG CONDUCTORS

280500	2	16	7W	0.025	0.64	0.045	1.14	0.500	12.70	40	59	103	153
280520	4	16	7W	0.025	0.64	0.060	1.52	0.650	16.51	77	114	189	281
280530	6	16	7W	0.025	0.64	0.060	1.52	0.755	19.18	115	171	268	399
280540	8	16	7W	0.025	0.64	0.060	1.52	0.840	21.34	151	225	330	491
279760	12	16	7W	0.025	0.64	0.080	2.03	1.065	27.05	226	337	506	753
280990*	16	16	7W	0.025	0.64	0.080	2.03	1.185	30.10	305	453	643	957
337260*	20	16	7W	0.025	0.64	0.080	2.03	1.320	33.53	380	566	777	1156
279770*	24	16	7W	0.025	0.64	0.080	2.03	1.485	37.72	455	677	932	1387
288260*	36	16	7W	0.025	0.64	0.080	2.03	1.760	44.70	683	1016	1410	2098
288250*	50	16	7W	0.025	0.64	0.110	2.79	2.035	51.69	946	1408	1883	2802

Dimensions and weights are nominal; subject to industry tolerances.

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