

### Filled, Direct Burial, Aerial, Duct, BJFA Also Available in C, G or AS Shields\* RUS Spec. PE-39

#### Advantages

Improved electrical stability; installation options: aerial, lashed, in conduit, directly buried; minimum maintenance costs

#### Specifications

**Conductors:** Solid, soft drawn, annealed bare copper

**Insulation:** Solid, virgin high density polyethylene, with telephone industry color-coding

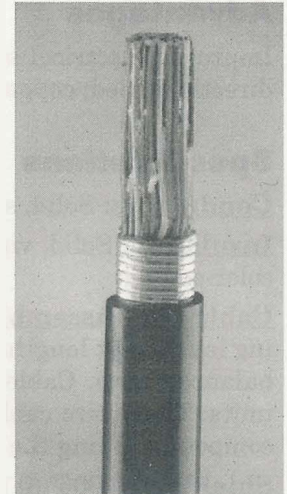
**Cable Core Assembly:** Insulated conductors are twisted into pairs with varying lays (twist lengths) to minimize crosstalk and meet strict capacitance unbalance limits. Cables with over 25 pairs are cabled and assembled in sub-units. The entire cable assembly is completely flooded with a water-blocking compound, filling the air space between the insulated conductors

**Shielding:** 0.008" (0.203mm) thick corrugated aluminum tape shield with a corrosion-resistant, blue tinted ethylene copolymer coating on both sides, applied longitudinally with overlap to provide 100% electrical shielding coverage

**Outer Jacket:** A black, low density, high molecular weight virgin polyethylene, compounded to withstand sunlight, temp. variations, and other environmental conditions, including abuse during installation

**Footage Marking:** Printed sequentially every two feet along outer jacket to provide readily accurate records of cable usage and reel contents

See Physical Characteristics page 9.



#### Installation Hardware:

Better Buried Closure (see page B-6 in the Hardware & Supplies section)

A-Line Terminal Blocks (see page C-3 in the Hardware & Supplies section)

#### Suggested Prep Tools:

(see page 21 for full descriptions)

Armored Cable Slitter ACS

Multi-wire Stripper/Cutter 821

Outer Jacket Cable Stripper MK01A

Cable Jacket Stripper MK04

#### RUS (REA) Designation BFCA

#### Shields:

C = 0.005" thick corrugated solid copper tape shield

G = gopher resistant 0.005" to 0.006" thick corrugated tape shield, either copper-clad stainless steel or Alloy 194

AS = 0.008" aluminum corrugated steel tape shield with additional 0.006" corrugated steel tape

**Note:** T-Screen® Type BJFA cables may be avail. with a core separated design for use with PCM-type carrier equipment.

Electrical Characteristics		26 AWG	24 AWG	22 AWG	19 AWG
<b>Conductor Resistance</b>					
Ohms/mile 68F	Nominal	220	137	85.5	42.5
	Maximum	230	145	92.0	46.0
Ohms/loop mile	Nominal	440	274	171	85
	Maximum	460	290	184	92
<b>Insulation Resistance</b>					
Megohm miles	Minimum	1000	1000	1000	1000
<b>Dielectric Strength</b>					
Insulation capable of withstanding for 3 seconds dc voltage					
Between conductors		2,800	4,000	5,000	7,000
Between conductors and shield		15,000	15,000	15,000	15,000
<b>Attenuation</b>					
At 1000 Hz-db/loop mile		2.85	2.28	1.79	1.25
<b>Average Mutual Capacitance</b>					
µf/mile at 1000 Hz	Pairs 6 thru 17			.083 ± 0.007	
	Pairs 18 and over			.083 ± 0.004	
<b>Capacitance Unbalance - pf/1000 ft:</b>					
Pair to Pair	R.M.S., 12 or more	25	25	25	25
	Maximum, less than 12	100	100	100	100
Pair to Shield	Maximum Avg, 12+	175	175	175	175
	Maximum, less than 12	800	800	800	800
<b>Crosstalk Loss</b>					
R.M.S. far end loss	6 pair or more - not less than 73 db per Kf.				
measured at 150 KHz					

## Filled, Direct Burial, Aerial, Duct, BJFC RUS Spec. PE-39

### Advantages

Improved electrical stability; installation options: aerial, lashed, in conduit, directly buried; copper tape shielding; minimum maintenance costs

### Specifications

**Conductors:** Solid, soft drawn, annealed bare copper

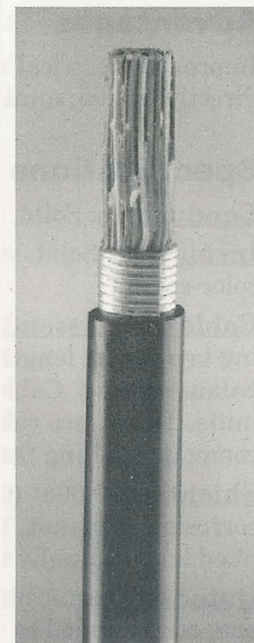
**Insulation:** Solid, virgin high density polyethylene, with telephone industry color-coding

**Cable Core Assembly:** Insulated conductors are twisted into pairs with varying lays (twist lengths) to minimize crosstalk and meet strict capacitance unbalance limits. Cables with over 25 pairs are cabled and assembled in sub-units. The entire cable assembly is completely flooded with a water-blocking compound, filling the air space between the insulated conductors.

**Shielding:** 0.005" (0.127mm) thick corrugated solid copper tape shield applied longitudinally with overlap to provide 100% electrical shielding coverage

**Outer Jacket:** A black, low density, high molecular weight virgin polyethylene, compounded to withstand sunlight, temperature variations, and other environmental conditions, including abuse during installation

**Footage Marking:** Printed sequentially every two feet along the outer jacket to provide readily accurate records of cable usage and reel contents



### Installation Hardware:

Better Buried Splice Closure  
(see page B-6 in the Hardware & Supplies section)

A-Line Terminal Blocks (see page C-3 in the Hardware & Supplies section)

Metal Pedestals (see page B-5 in the Hardware & Supplies section)

### Suggested Prep Tools:

(see page 21 for full descriptions)

Armored Cable Slitter ACS

Multi-wire Stripper/Cutter 821

Outer Jacket Cable Stripper MK01A

Cable Jacket Stripper MKO4

### RUS (REA) Designation BFCC

**Note:** T-Screen® Type BJFC cables may be avail. with a core separated design for use with PCM-type carrier equipment.

### Electrical Characteristics

		26 AWG	24 AWG	22 AWG	19 AWG
<b>Conductor Resistance</b>					
Ohms/mile 68F	Nominal	220	137	85.5	42.5
	Maximum	230	145	92.0	46.0
Ohms/loop mile	Nominal	440	274	171	85
	Maximum	460	290	184	92
<b>Insulation Resistance</b>					
Megohm miles	Minimum	1000	1000	1000	1000
<b>Dielectric Strength</b>					
Insulation capable of withstanding for 3 seconds dc voltage					
	Between conductors	2,800	4,000	5,000	7,000
	Between conductors and shield	15,000	15,000	15,000	15,000
<b>Attenuation</b>					
	At 1000 Hz-db/loop mile	2.85	2.28	1.79	1.25
<b>Average Mutual Capacitance</b>					
	µf/mile at 1000 Hz				
	Pairs 6 thru 17			.083 ± 0.007	
	Pairs 18 and over			.083 ± 0.004	
<b>Capacitance Unbalance - pf/1000 ft:</b>					
Pair to Pair	R.M.S., 12 or more	25	25	25	25
	Maximum, less than 12	100	100	100	100
Pair to Shield	Maximum Avg, 12+	175	175	175	175
	Maximum, less than 12	800	800	800	800
<b>Crosstalk Loss</b>					
R.M.S.	6 pair or more - not less than 73 db per Kf.				
far end loss					
measured at 150 KHz					



\*Standard stocking items. Other items may be available upon request.

### Physical Characteristics

	No. Pairs	Clifford Part Number	Jacket Thickness		Outside Diameter		Approx. Shipping Weight		Standard Reel Length		
			inch	mm	inch	mm	lbs/K-ft.	kg/km	Feet	Meters	
<b>24 AWG - Filled BJFA, BJFC, PE-39</b> Conductor Size: 0.0201" (0.51 mm) Insulation Thickness: 0.012" (0.30 mm)	*6	6P24-B1-BJFA	0.060	1.52	0.41	10.4	97	144	5000	1524	
	*12	12P24-B1-BJFA	0.060	1.52	0.49	12.5	142	211	5000	1524	
	18	18P24-B1-BJFA	0.060	1.52	0.53	13.5	185	275	5000	1524	
	*25	25P24-B1-BJFA	0.060	1.52	0.61	15.5	227	338	5000	1524	
	*50	50P24-B1-BJFA	0.060	1.52	0.77	19.6	370	551	5000	1524	
	*75	75P24-B1-BJFA	0.060	1.52	0.91	23.1	542	806	5000	1524	
	*100	100P24-B1-BJFA	0.070	1.78	1.02	25.9	695	1034	2500	762	
	*150	150P24-B1-BJFA	0.070	1.78	1.20	30.5	988	1470	2500	762	
	*200	200P24-B1-BJFA	0.070	1.78	1.40	35.7	1308	1946	2500	762	
	*300	300P24-B1-BJFA	0.075	1.91	1.66	42.2	1910	2842	2000	610	
	*400	400P24-B1-BJFA	0.080	2.03	1.89	48.0	2602	3872	1000	305	
	*600	600P24-B1-BJFA	0.090	2.29	2.32	58.9	3811	5671	1000	305	
	900	900P24-B1-BJFA	0.100	2.54	2.78	70.6	5868	8732	1000	305	
	1200	1200P24-B1-BJFA	0.100	2.54	3.14	79.8	5600	8335	750	229	
	1500	1500P24-B1-BJFA	0.100	2.54	3.44	87.4	4630	6891	500	152	
	1800	1800P24-B1-BJFA	0.100	2.54	3.83	97.3	5900	8782	500	152	
<b>22 AWG - Filled BJFA, BJFC, PE-39</b> Conductor Size: 0.0254" (0.64 mm) Insulation Thickness: 0.015" (0.39 mm)	*6	6P22-B1-BJFA	0.060	1.52	0.47	11.9	134	199	5000	1524	
	*12	12P22-B1-BJFA	0.060	1.52	0.56	14.2	193	287	5000	1524	
	18	18P22-B1-BJFA	0.060	1.52	0.69	17.5	251	373	5000	1524	
	*25	25P22-B1-BJFA	0.060	1.52	0.74	18.8	331	493	5000	1524	
	*50	50P22-B1-BJFA	0.070	1.78	0.98	24.9	572	851	5000	1524	
	75	75P22-B1-BJFA	0.070	1.78	1.15	29.2	819	1219	2500	762	
	*100	100P22-B1-BJFA	0.070	1.78	1.29	32.8	1047	1558	2500	762	
	150	150P22-B1-BJFA	0.075	1.91	1.54	39.1	1518	2259	2500	762	
	200	200P22-B1-BJFA	0.080	2.03	1.76	44.7	2073	3085	2000	610	
	300	300P22-B1-BJFA	0.090	2.29	2.12	53.9	3158	4699	1000	305	
	400	400P22-B1-BJFA	0.090	2.29	2.40	61.0	3875	5766	1000	305	
	600	600P22-B1-BJFA	0.100	2.54	2.90	73.7	6091	9063	1000	305	
	900	900P22-B1-BJFA	0.100	2.54	3.49	88.7	4570	6800	500	152	
	1200	1200P22-B1-BJFA	0.100	2.54	3.98	101.1	6220	9258	500	152	
	<b>19 AWG - Filled BJFA, BJFC, PE-39</b> Conductor Size: 0.0359" (0.91 mm) Insulation Thickness: 0.021" (0.52 mm)	*6	6P19-B1-BJFA	0.060	1.52	0.64	16.3	203	302	5000	1524
		*12	12P19-B1-BJFA	0.060	1.52	0.75	19.1	339	504	5000	1524
*18		18P19-B1-BJFA	0.060	1.52	0.88	22.4	467	695	5000	1524	
*25		25P19-B1-BJFA	0.070	1.78	1.02	25.9	601	894	5000	1524	
*50		50P19-B1-BJFA	0.075	1.91	1.35	34.3	1082	1610	2500	762	
75		75P19-B1-BJFA	0.075	1.91	1.61	40.9	1644	2446	2500	762	
100		100P19-B1-BJFA	0.080	2.03	1.74	44.2	2126	3163	2000	610	
150		150P19-B1-BJFA	0.090	2.29	2.10	53.3	3194	4753	1000	305	
200		200P19-B1-BJFA	0.090	2.29	2.38	60.5	4121	6132	1000	305	
300		300P19-B1-BJFA	0.100	2.54	2.88	73.2	6266	9324	1000	305	
400	400P19-B1-BJFA	0.100	2.54	3.50	88.9	4190	6236	500	152		



26 AWG Filled BJFA, BJFC, PE-39 always available upon request.  
Conductor size: 0.0159" (0.40 mm) - Insulation thickness: 0.010" (0.24 mm)