

# UL2464-SX (FA), UL2464 (FA)

Conformity standard **UL 758**



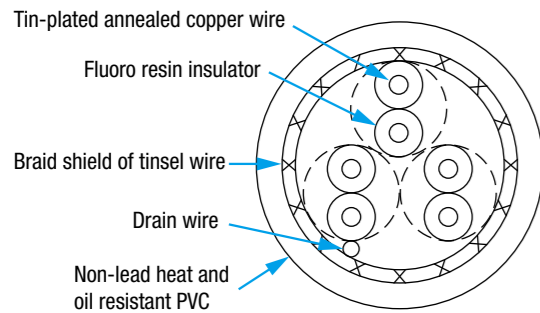
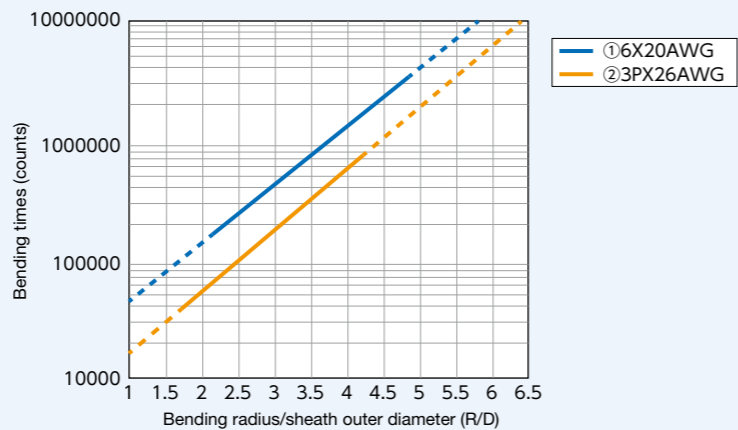
### Feature

Realizes superior flexibility and high bending characteristics by adopting a fluororesin insulator and our original braid shield of tinsel wire.

### Use

Power supply and signal transmission for semiconductor devices, small machining tools, and other equipment

Bending resistance of about 10 million times (bending radius R = 6D)



Example of cable structure

Wire disconnection life in right-left 90° bending

### Characteristics

- Rating temperature: 80°C
- Withstand voltage: 2,000 VAC/5 min
- Rating voltage: 300 V
- Min. insulating resistance (at 20°C): 1,000 MΩ·km



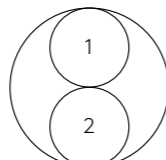
### Wire core identification

#### Multiple pair type

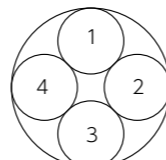
Pair No.	Insulator color		Pair No.	Insulator color	
	Wire core No. 1	Wire core No. 2		Wire core No. 1	Wire core No. 2
1	Black	Brown	11	Brown	Orange
2	Black	Red	12	Brown	Yellow
3	Black	Orange	13	Brown	Green
4	Black	Yellow	14	Brown	Blue
5	Black	Green	15	Brown	Purple
6	Black	Blue	16	Brown	Gray
7	Black	Purple	17	Brown	White
8	Black	Gray	18	Red	Orange
9	Black	White	19	Red	Yellow
10	Brown	Red	20	Red	Green

#### Multiple core type

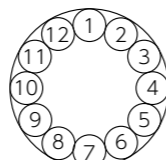
Wire core No.	Insulator color	Wire core No.	Insulator color
1	Black	11	Black
2	White	12	White
3	Red	13	Red
4	Green	14	Green
5	Yellow	15	Yellow
6	Brown	16	Brown
7	Blue	17	Blue
8	Orange	18	Orange
9	Gray	19	Gray
10	Purple	20	Purple



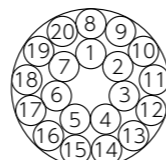
2 pairs or 2 cores



4 pairs or 4 cores



12 pairs or 12 cores



20 pairs or 20 cores

### Cable structure and performance

#### Multiple pair type of UL2464-SX (FA)

AWG size	Configuration (No./No./mm)	Outer diameter (mm)	Insulator		Max. conductor resistance (at 20 °C) (Ω/km)	No. of pairs	Finished outer diameter (mm)	Approx. mass (kg/km)	Allowable current (A)	Bending radius (mm)
			Standard thickness (mm)	Outer diameter (mm)						
28 (0.09mm <sup>2</sup> )	19/0.08	0.4	0.2	0.8	220	2	5.7	40	3.5	35
						3	5.9	45	3.0	36
						4	6.3	50	2.6	38
						5	6.7	58	2.4	41
						6	7.1	64	2.3	43
						7	7.5	70	2.2	45
						8	8.0	77	2.1	48
						10	8.8	90	1.9	53
						12	9.9	110	1.8	60
						15	9.7	115	1.6	59
						20	10.6	140	1.5	64
						26 (0.15mm <sup>2</sup> )	30/0.08	0.51	0.2	0.91
3	6.4	45	3.8	39						
4	6.8	51	3.4	41						
5	7.3	59	3.2	44						
6	7.7	67	3.0	47						
7	8.1	75	2.8	49						
8	8.7	85	2.7	53						
10	9.7	105	2.5	59						
12	10.7	125	2.4	65						
15	10.6	130	2.1	64						
20	11.7	160	1.9	71						
25 (0.2mm <sup>2</sup> )	40/0.08	0.58	0.2	0.98	105					
						3	6.6	50	4.5	40
						4	7.1	60	4.0	43
						5	7.6	70	3.7	46
						6	8.0	75	3.5	48
						7	8.6	85	3.3	52
						8	9.1	100	3.2	55
						10	10.2	120	3.0	62
						12	11.3	140	2.8	68
						15	11.2	155	2.5	68
						20	12.4	190	2.3	75
						23 (0.3mm <sup>2</sup> )	60/0.08	0.72	0.2	1.12
3	7.2	60	5.8	44						
4	7.7	71	5.2	47						
5	8.3	85	4.7	50						
6	8.8	95	4.5	53						
7	9.4	110	4.2	57						
8	10.1	125	4.1	61						
10	11.3	150	3.8	68						
12	13.0	190	3.7	78						
15	12.8	205	3.2	77						
20	14.1	255	2.9	85						

#### Multiple core type of UL2464-SX (FA)

AWG size	Configuration (No./No./mm)	Outer diameter (mm)	Insulator		Max. conductor resistance (at 20 °C) (Ω/km)	No. of wire cores	Finished outer diameter (mm)	Approx. mass (kg/km)	Allowable current (A)	Bending radius (mm)
			Standard thickness (mm)	Outer diameter (mm)						
25 (0.2mm <sup>2</sup> )	40/0.08	0.58	0.2	0.98	105	2	4.7	26	5.4	29
						3	4.9	30	4.5	30
						4	5.1	35	4.0	31
						6	5.7	45	3.5	35
						8	6.3	55	3.2	38
						10	6.9	65	3.0	42
23 (0.3mm <sup>2</sup> )	60/0.08	0.72	0.2	1.12	69.5	2	5.0	30	6.9	30
						3	5.2	35	5.8	32
						4	5.5	40	5.2	33
						6	6.1	53	4.5	37
						8	6.8	66	4.1	41
						10	7.5	80	3.8	45
						12	8.2	95	3.7	50

\*The finished outer diameter without a shield is 0.6 mm smaller than the above-mentioned value. For approximate mass, contact our salesperson in charge.  
 \*The above-mentioned structure is a representative example. For other sizes and combinations, contact our salesperson in charge.  
 \*The allowable current in the table above is of a value at ambient temperature of 40°C for single line wiring in air.

### Example of product designation

**UL2464-SX (FA) 4P X 23AWG (60/0.08)**



# UL2570-SX (FA), UL2570 (FA)

Conformity standard **UL 758**



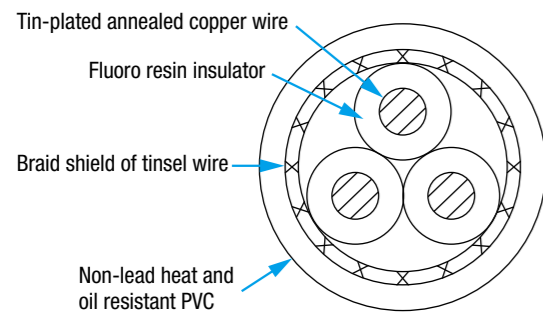
\*Photo of UL2464-SX (FA)

### Feature

Realizes superior flexibility and high bending characteristics by adopting a fluoro resin insulator and our original braid shield of tinsel wire.

### Use

Power supply and signal transmission for semiconductor devices, small machining tools, and other equipment



Example of cable structure

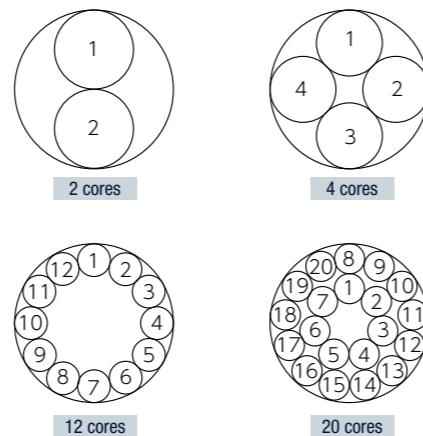
### Characteristics

- Rating temperature: 80°C
- Withstand voltage: 2,000 VAC/5 min
- Rating voltage: 600 V
- Min. insulating resistance (at 20°C): 1,000 MΩ·km



### Wire core identification

Wire core No.	Insulator color	Wire core No.	Insulator color
1	Black	11	Black
2	White	12	White
3	Red	13	Red
4	Green	14	Green
5	Yellow	15	Yellow
6	Brown	16	Brown
7	Blue	17	Blue
8	Orange	18	Orange
9	Gray	19	Gray
10	Purple	20	Purple



### Cable structure and performance

Multiple core type of UL2570-SX (FA)

AWG size	Conductor		Insulator		Max. conductor resistance (at 20 °C) (Ω/km)	No. of wire cores	Finished outer diameter (mm)	Approx. mass (kg/km)	Allowable current (A)	Bending radius (mm)
	Configuration (No./No./mm)	Outer diameter (mm)	Standard thickness (mm)	Outer diameter (mm)						
20 (0.5mm <sup>2</sup> )	104/0.08	0.94	0.25	1.44	40.1	2	5.6	51	9.6	34
						3	5.9	59	8.1	36
						4	6.2	67	7.3	38
						5	6.6	76	6.7	40
						6	7.1	87	6.4	43
18 (0.75mm <sup>2</sup> )	7/24/0.08	1.25	0.28	1.81	25.0	2	6.4	53	13.0	39
						3	6.7	65	11.0	41
						4	7.1	80	9.9	43
						5	7.6	95	9.1	46
						6	8.2	110	8.6	50
16 (1.25mm <sup>2</sup> )	7/38/0.08	1.71	0.28	2.27	16.1	2	7.3	75	17.4	44
						3	7.6	90	14.7	46
						4	8.2	110	13.2	50
						5	8.9	130	12.3	54
						6	9.6	155	11.3	58
14 (2mm <sup>2</sup> )	7/60/0.08	2.15	0.36	2.87	10.2	2	8.5	115	23.4	51
						3	8.9	140	19.8	54
						4	9.7	175	17.9	59
						5	10.5	210	16.6	63
						6	11.4	240	15.8	69

\*The finished outer diameter without a shield is 0.6 mm smaller than the above-mentioned value. For approximate mass, contact our salesperson in charge.  
 \*The above-mentioned structure is a representative example. For other sizes and combinations, contact our salesperson in charge.  
 \*The allowable current in the table above is of a value at ambient temperature of 40°C for single line wiring in air.

### Example of product designation

**UL2570-SX (FA) 4 X 16AWG (7/38/0.08)**



### What is a braid shield of tinsel wire?

Tinsel wire is a material made of polyester yarn wound with copper foil. A braid shield using tinsel wire offers superior flexibility and bending characteristics, and the rate of change in its resistance due to repetitive bending is more stable than that of a braid shield using annealed copper wire.

