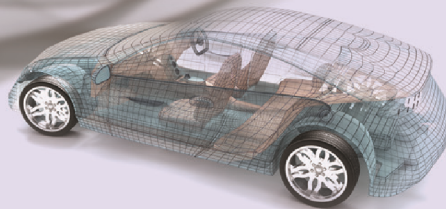


# YURA WIRE (Low Voltage)



AVSS	Thin wall vinyl electric wire for automobiles
CHFUS	Ultra thin wall compressed conductor halogen free electric wire for automobiles
CIVUS	Compressed conductor ISO type ultra thin wall vinyl low-voltage cables for automobiles
AV(E)SSXF	Flexible type of crosslinked thin wall vinyl(polyethylene) heat-resistant electric wire for automobiles
AVUHSF	Super flexible type of vinyl high heat-resistant electric wire for automobiles
ALEX	Aluminum conductor cross-linked polyethylene heat-resistant electric wire for automobiles
FLALRY	Aluminum conductor ISO type thin wall vinyl electric wire for automobiles
FLALUY	Aluminum conductor ISO type ultra-thin wall vinyl electric wire for automobiles
RG316A	PTFE insulation, silver coated annealed copper wire braid, FEP sheath, coaxial cable for automobiles
1.5DS-CV	Cross-linked PE Insulation, tin coated annealed copper wire braid, heat-resistant vinyl sheath, coaxial cable for automobiles



## Low voltage general wire AVSS

### APPLICATION

- ▶ Low voltage circuits for automobiles



### SPECIFICATIONS

Voltage	Up to 60V
Conductor	Strand annealed copper
Insulator	Polyvinyl chloride 95°C Grade
Standards / Specifications	ES91110-05, JASO D611

### STRUCTURE AND CABLE SELECTION

Nominal area mm <sup>2</sup>	Conductor			Insulator thickness mm	Completion diameter		Conductor resistance (20°C) Ω /km
	Structure No./mm	Calculated area mm <sup>2</sup>	Diameter (Appr.) mm		Standard mm	Maximum mm	
0.22	7/0.20	0.2265	0.6	0.3	1.2	1.3	85.4
0.3	7/0.26	0.3716	0.8	0.3	1.4	1.5	50.2
0.5	7/0.32	0.5629	1.0	0.3	1.6	1.7	32.7
0.85	19/0.24	0.8595	1.2	0.3	1.8	1.9	21.7
1.25	19/0.29	1.2549	1.5	0.3	2.1	2.2	14.9
2	37/0.26	1.9644	1.8	0.4	2.6	2.7	9.5

## Low voltage fine wire CHFUS

### APPLICATION

- ▶ Low voltage circuits for automobiles
- ▶ Used for reducing bulk, weight-loss



### SPECIFICATIONS

Voltage	Up to 60V
Conductor	Compressed strand annealed copper, Compressed strand Sn-Cu alloy
Insulator	Halogen free poly propylene 95°C Grade
Standards / Specifications	ES91110-05, JASO D611

### STRUCTURE AND CABLE SELECTION

Nominal area mm <sup>2</sup>	Conductor			Insulator thickness mm	Completion diameter		Conductor resistance (20°C) Ω /km
	Structure No./mm	Calculated area mm <sup>2</sup>	Diameter (Appr.) mm		Standard mm	Maximum mm	
0.13	7/ Compressed Sn-Cu alloy	0.1407	0.5	0.2	0.9	0.95	165
0.22	7/ Compressed	0.2425	0.6	0.2	1.0	1.05	84.8

## Low voltage ISO type ultra thin wall wire CIMUS

### ➡ APPLICATION

- ▶ Low voltage circuits for automobiles
- ▶ Reducing bulk, weight-loss effect better than AVSS



### ➡ SPECIFICATIONS

Voltage	Up to 60V
Conductor	Compressed strand annealed copper
Insulator	Polyvinyl chloride 85°C Grade
Standards / Specifications	ES91110-13, JASO D611

### ➡ STRUCTURE AND CABLE SELECTION

Nominal area mm <sup>2</sup>	Conductor			Insulator thickness mm	Completion diameter		Conductor resistance (20°C) Ω/km
	Structure No./mm	Calculated area mm <sup>2</sup>	Diameter (Appr.) mm		Standard mm	Maximum mm	
0.35	7/ Compressed	0.3436	0.7	0.2	1.1	±0.10	54.4
0.5	7/ Compressed	0.4948	0.85	0.2	1.25	±0.15	37.1

## Low voltage heat resistance wire AV(E)SSXF

### ➡ APPLICATION

- ▶ Low voltage circuit for heat resistance
- ▶ Engine room and engine wiring



### ➡ SPECIFICATIONS

Voltage	Up to 60V
Conductor	Strand annealed copper
Insulator	Crosslinked polyvinyl chloride 115°C Grade, Crosslinked polyethylene 135°C Grade
Standards / Specifications	ES91110-05, JASO D611

### ➡ STRUCTURE AND CABLE SELECTION

Nominal area mm <sup>2</sup>	Conductor			Insulator thickness mm	Completion diameter		Conductor resistance (20°C) Ω/km
	Structure No./mm	Calculated area mm <sup>2</sup>	Diameter (Appr.) mm		Standard mm	Maximum mm	
0.22	7/0.20	0.2199	0.6	0.3	1.2	1.3	84.8
0.3	19/0.16	0.3820	0.8	0.3	1.4	1.5	48.8
0.5	19/0.19	0.5387	1.0	0.3	1.6	1.7	34.6
0.75	19/0.23	0.7894	1.2	0.3	1.8	1.9	23.6
0.85	37/0.172	0.8597	1.2	0.3	1.8	1.9	21.7
1.25	37/0.21	1.2815	1.5	0.3	2.1	2.2	14.6
1.5	19/0.32	1.5281	1.6	0.3	2.2	2.3	12.7
2	37/0.26	1.9644	1.8	0.4	2.6	2.7	9.5
2.5	50/0.26	2.6550	2.1	0.4	2.9	3.1	7.6

## Low voltage flexible battery cable AVUHSF

### ➡ APPLICATION

- ▶ Low voltage circuit for high current
- ▶ Battery wiring



### ➡ SPECIFICATIONS

Voltage	Up to 60V
Conductor	Roped-strand annealed copper
Insulator	Flexible polyvinyl chloride 135°C Grade
Standards / Specifications	ES91110-05

### ➡ STRUCTURE AND CABLE SELECTION

Nominal area mm <sup>2</sup>	Conductor			Insulator thickness mm	Completion diameter		Conductor resistance (20°C) Ω/km
	Structure No./mm	Calculated area mm <sup>2</sup>	Diameter (Appr.) mm		Standard mm	Maximum mm	
5	207/0.18	5.268	3.0	0.8	4.6	4.8	3.94
8	315/0.18	8.016	3.7	0.8	5.3	5.5	2.32
10	399/0.18	10.153	4.15	0.9	6.0	6.2	1.76
15	588/0.18	14.96	5.0	1.1	7.2	7.5	1.25
20	779/0.18	19.82	6.3	1.2	8.7	9.0	0.99
25	1007/0.18	25.63	7.1	1.3	9.7	10.0	0.75
30	1159/0.18	29.49	8.0	1.3	10.6	10.9	0.61
40	1558/0.18	39.65	9.2	1.4	12.0	12.4	0.46
50	1919/0.18	48.8	10.0	1.5	13.0	13.4	0.39
60	1121/0.26	59.5	11.0	1.5	14.0	14.4	0.29
85	1596/0.26	84.7	13.0	1.6	16.2	16.6	0.21
100	1881/0.26	99.9	15.0	1.6	18.2	18.6	0.17

## Low voltage AL flexible battery cable ALVUHF

### ➡ APPLICATION

- ▶ Low voltage circuit for high current / flexible
- ▶ Battery wiring



### ➡ SPECIFICATIONS

Voltage	Up to 60V
Conductor	Aluminum 99.7%
Insulator	Flexible polyvinyl chloride 135°C Grade
Standards / Specifications	ES91110-09

### ➡ STRUCTURE AND CABLE SELECTION

Nominal area mm <sup>2</sup>	Conductor			Insulator thickness mm	Completion diameter		Conductor resistance (20°C) Ω/km
	Structure No./mm	Calculated area mm <sup>2</sup>	Diameter (Appr.) mm		Standard mm	Maximum mm	
70	192/0.65	63.711	12.2	1.5	15.2	15.6	0.46
	333/0.50	65.384	12.1	1.5	15.1	15.5	
85	408/0.50	80.111	13.0	1.5	16.0	16.4	0.39

## Low voltage AL battery cable ALEX

### ➡ APPLICATION

- ▶ Low voltage circuit for high current
- ▶ Battery wiring for weight loss



### ➡ SPECIFICATIONS

Voltage	Up to 60V
Conductor	Aluminum 99.7%
Insulator	Cross linked polyethylene 135°C
Standards / Specifications	ES91110-09

### ➡ STRUCTURE AND CABLE SELECTION

Nominal area mm <sup>2</sup>	Conductor			Insulator thickness mm	Completion diameter		Conductor resistance (20°C) Ω/km
	Structure No./mm	Calculated area mm <sup>2</sup>	Diameter (Appr.) mm		Standard mm	Maximum mm	
35	37/1.1	35.162	7.7	1.3	10.3	10.8	0.845

## Low voltage ISO type AL wire FLALRY

### ➡ APPLICATION

- ▶ Low voltage circuit for automobiles
- ▶ Door, roof wiring for weight loss



### ➡ SPECIFICATIONS

Voltage	Up to 60V
Conductor	Aluminum alloy
Insulator	Polyvinyl chloride 100°C Grade
Standards / Specifications	ISO 6722-2 / ES91110-12

### ➡ STRUCTURE AND CABLE SELECTION

Nominal area mm <sup>2</sup>	Conductor			Insulator thickness mm	Completion diameter		Conductor resistance (20°C) Ω/km
	Structure No./mm	Calculated area mm <sup>2</sup>	Diameter (Appr.) mm		Standard mm	Maximum mm	
0.75	7/0.37	0.7526	1.1	0.3	1.70	1.9	43.6
1.0	7/0.42	0.9698	1.25	0.3	1.85	2.1	32.7
1.25	19/0.29	1.255	1.45	0.3	2.05	2.3	26.3
1.5	19/0.31	1.434	1.55	0.3	2.15	2.4	22.4
2.0	19/0.36	1.934	1.8	0.35	2.5	2.8	16.6
2.5	19/0.42	2.632	2.1	0.35	2.80	3.0	13.4

## Low voltage ISO type ultra thin wall wire FLALUY

### ➡ APPLICATION

- ▶ Low voltage circuit for automobiles
- ▶ Door, roof wiring for weight loss



### ➡ SPECIFICATIONS

Voltage	Up to 60V
Conductor	Aluminum alloy
Insulator	Polyvinyl chloride 100°C Grade
Standards / Specifications	ISO 6722-2 / ES91110-12

### ➡ STRUCTURE AND CABLE SELECTION

Nominal area mm <sup>2</sup>	Conductor			Insulator thickness mm	Completion diameter		Conductor resistance (20°C) Ω/km
	Structure No./mm	Calculated area mm <sup>2</sup>	Diameter (Appr.) mm		Standard mm	Maximum mm	
0.75	11/ Compressed	0.7266	1.0	0.2	1.4	1.6	43.6
1.0	16/ Compressed	0.9852	1.2	0.2	1.6	1.75	32.7
1.25	16/ Compressed	1.247	1.4	0.2	1.8	2.0	26.3
1.5	16/ Compressed	1.539	1.45	0.2	1.85	2.1	22.4

# Coaxial cable for AVM system 1.5DS-CV, RG316A

## ➡ APPLICATION

- ▶ Around view monitoring system



1.5DS-CV

## ➡ SPECIFICATIONS

### • 1.5DS-CV

Conductor	Strand tinned annealed copper
Insulator	Cross-linked Polyethylene 105°C Grade
Shield	Tin Coated Annealed Copper
Tape	Double-Sided AL-Mylar
Sheath	Polyvinyl chloride 105°C Grade
Standards / Specifications	ES91110-11

### • RG316A

Conductor	Silver coated copper clad steel
Insulator	Polytetrafluoroethylene
Shield	Silver Coated Annealed Copper
Tape	-
Sheath	Fluorinated ethylene propylene
Standards / Specifications	ES91110-11



RG316A

## ➡ STRUCTURE AND CABLE SELECTION

Sort	Conductor			Insulator Diameter mm	Shield No./No./mm	Sheath Diameter mm	Conductor resistance (20°C) Ω/km
	Structure No./mm	Calculated Area mm <sup>2</sup>	Diameter (Appr.) mm				
1.5DS-CV	7/0.18	0.1781	0.54	1.6	16/5/0.10	3.0	120
RG316A	7/0.17	0.1589	0.51	1.53	16/5/0.102	2.5	275.9

## ➡ ATTENUATION

Sort		Unit	1.5DS-CV	RG316A	Test Method
Standard Attenuation	900 MHz	dB/m	0.82 ↓	0.76 ↓	ES91110-11 6.7
	1500 MHz	dB/m	1.04 ↓	1.08 ↓	
	1600 MHz	dB/m	1.08 ↓	1.11 ↓	
	1900 MHz	dB/m	1.20 ↓	1.23 ↓	
	2000 MHz	dB/m	1.23 ↓	1.26 ↓	
	2500 MHz	dB/m	1.40 ↓	1.49 ↓	
	3000 MHz	dB/m	1.59 ↓	1.72 ↓	

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