



**Caledonian**

[www.caledonian-cables.co.uk](http://www.caledonian-cables.co.uk)

# Caledonian Airport Cables

>> Airfield Lighting Cables

>> 400Hz Cables



 **ADDISON**  
[www.addison-cables.com](http://www.addison-cables.com)

# COMPANY PROFILE

Caledonian, established in 1978, offers one of the most complete lines of fiber and copper cabling system solutions with over hundreds of different cabling system products. Our superior products provide leading edge within every cable series and for every application.

Among the national and international standards with which our cables could comply are: BS - British Standard; LPCB Fire Performance Standard, ISO Standard etc. Caledonian Cables offers a comprehensive stock of cables and cabling products through its nationwide network of resellers and distributors. Caledonian Cables has continually expanded its global presence in Europe and Asia.

Caledonian & Addison, produces a wide range of cables for communication, power and electronics in its primary plants in UK, Italy and Spain. To stay in front, we continually keep expanding our manufacturing capabilities in more low cost region such as Romania, Taiwan, Malaysia etc. This low-cost manufacturing facilities enable us provide a flexible, scalable global system that delivers superior operational performance and optimal results for our customers.

Our extensive global network of manufacturing facilities gives us significant scale and the flexibility to fulfill our customer requirements. This global presence provides design and consultancy solutions that are combined with core cable manufacturing, logistic services, and vertically integrated with our E commerce technologies, to optimize customer operations by lowering costs and reducing time to market.

Caledonian & Addison has been respected for its high standards of quality, excellent service level, competitive pricing and a unique and innovative spirit. With our latest technologies, we are both inspired and well-positioned to meet the changing needs of our customers. We have the resources to diversify and to enhance our product lines and services. We understand the need for change and with our accurate planning, we are ready for the future and the promise of new marketing opportunities. Our tradition of growth through excellence is assured.

Our Design Centers work closely with customers to constantly improve its standard range of products and technologies and to develop customized, country and industry-specific solutions. Caledonian & Addison has established an extensive network of design, manufacturing, and logistics facilities in the world's major markets to serve the growing outsourcing needs of both multinational and regional customers.





### » Airfield Lighting Cables

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# Caledonian Airport Cables

## Airfield Lighting Cables



### C 33-224 / C33-225

#### » Applications

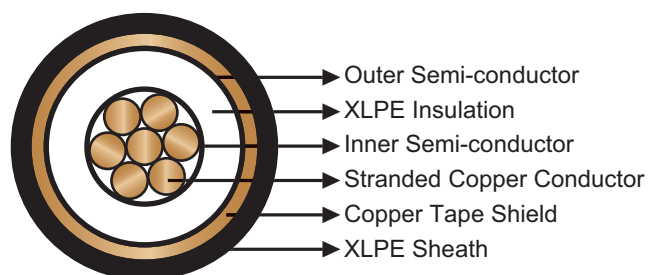
These cables are used as airfield lighting equipment primary cables for the series circuit connecting the Constant Current Regulators and the isolating transformers, and between the isolating transformers.

#### » Standards

C33-224

C33-225

#### » Construction



**Conductor:** Stranded bare or tinned copper conductor.

**Inner Semi-Conductor:** Extruded semi-conducting compound.

**Insulation:** XLPE. EPDM can be offered upon request.

**Outer Semi-Conductor:** Extruded semi-conducting compound.

**Shield:** Copper tape shield. Copper wire shield can be offered upon request.

**Sheath:** XLPE. PVC/HFFR/CR can be offered upon request.

#### » Technical Data

Rated Voltage $U_0/U$ (Um)	3.6/6 (7.2kV); 6/10 (12kV)
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-20°C~+70°C
Minimum Bending Radius	static: 10×OD; dynamic: 20×OD
Impacted Resistant	Yes
Weather Resistant	Yes



# Caledonian Airport Cables

## Airfield Lighting Cables

### » Dimensions and Weight

#### 3.6/6 (7.2kV)

Construction	No. of Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	-	mm	mm	mm	kg/km
1×6	7	2.7	1.4	12.5	198

#### 6/10 (12kV)

Construction	No. of Strand	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	-	mm	mm	mm	kg/km
1×6	7	3.6	1.6	14.7	250



# Caledonian Airport Cables

## Airfield Lighting Cables



### FLYCY

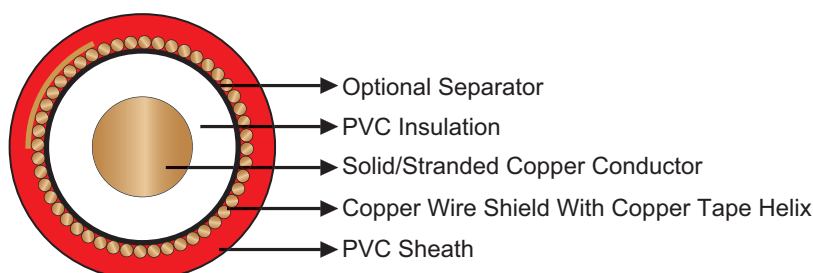
#### » Applications

These cables are used as airfield lighting equipment primary cables for the series circuit connecting the Constant Current Regulators and the isolating transformers, and between the isolating transformers.

#### » Standards

ENV 50213  
IEC 60502-2  
VDE 0271

#### » Construction



**Conductor:** Solid or stranded bare copper conductor.

**Insulation:** PVC.

**Optional Separator:** Separator tape.

**Shield:** Concentric layer of bare copper wires, counter helix of a copper tape.

**Sheath:** PVC.

#### » Technical Data

Rated Voltage $U_0/U$ (Um)	1/2kV, 1.5/3kV, 2.5/5kV, 3/6kV, 5/10kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	15×OD
Flame Retardant	Yes



Impacted Resistant	Yes
Weather Resistant	Yes

### » Dimensions and Weight

#### 1/2kV

Construction	Nominal Insulation Thickness	Nominal Shield Cross Section	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm <sup>2</sup>	mm	mm	kg/km
1×6	1.5	2.5	1.4	10.0	170

#### 1.5/3kV

Construction	Nominal Insulation Thickness	Nominal Screen Cross Section	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm <sup>2</sup>	mm	mm	kg/km
1×6	2.8	2.5	1.4	12.5	240

#### 2.5/5kV

Construction	Nominal Insulation Thickness	Nominal Shield Cross Section	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm <sup>2</sup>	mm	mm	kg/km
1×6	3.0	4	1.4	13.0	250

#### 3/6kV

Construction	Nominal Insulation Thickness	Nominal Shield Cross Section	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm <sup>2</sup>	mm	mm	kg/km
1×6	3.0	4	1.4	13.0	250
1×16	3.0	6	1.4	15.0	465

#### 5/10kV

Construction	Nominal Insulation Thickness	Nominal Screen Cross Section	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm <sup>2</sup>	mm	mm	kg/km
1×6	3.8	6	1.4	16.5	360
1×10	3.8	6	1.4	17.0	390



# Caledonian Airport Cables

## Airfield Lighting Cables



### FL2XCY

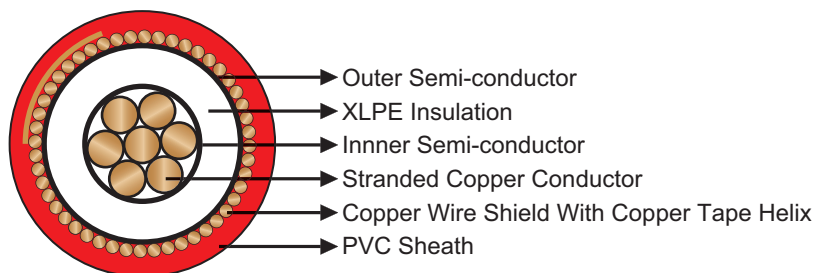
#### » Applications

These cables are used as airfield lighting equipment primary cables for the series circuit connecting the Constant Current Regulators and the isolating transformers, and between the isolating transformers.

#### » Standards

ENV 50213  
IEC 60502-2

#### » Construction



**Conductor:** Stranded bare copper conductor.

**Inner Semi-Conductor:** Extruded semi-conducting compound.

**Insulation:** XLPE.

**Outer Semi-Conductor:** Extruded semi-conducting compound.

**Shield:** Concentric layer of bare copper wires, counter helix of a copper tape.

**Sheath:** PVC.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	6/10kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	15×OD
Flame Retardant	Yes



# Caledonian Airport Cables

## Airfield Lighting Cables

Impacted Resistant	Yes
Weather Resistant	Yes
Oil Resistant	Yes

### » Dimensions and Weight

Construction	Nominal Insulation Thickness	Nominal Shield Cross Section	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm <sup>2</sup>	mm	mm	kg/km
1×6	3.5	6	1.4	15.6	420



# Caledonian Airport Cables

## Airfield Lighting Cables



### FL2XCYRY

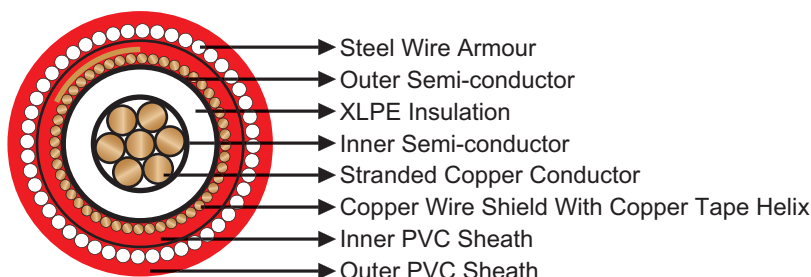
#### » Applications

These cables are used as airfield lighting equipment primary cables for the series circuit connecting the Constant Current Regulators and the isolating transformers, and between the isolating transformers.

#### » Standards

ENV 50213  
IEC 60502-2

#### » Construction



**Conductor:** Stranded bare copper conductor.

**Inner Semi-Conductor:** Extruded semi-conducting compound.

**Insulation:** XLPE.

**Outer Semi-Conductor:** Extruded semi-conducting compound.

**Shield:** Concentric layer of bare copper wires, counter helix of a copper tape.

**Inner Sheath:** PVC.

**Armour:** Steel wire armour.

**Outer Sheath:** PVC.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (Um)	6/10kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C



# Caledonian Airport Cables

## Airfield Lighting Cables

Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	15×OD
Flame Retardant	Yes
Impacted Resistant	Yes
Weather Resistant	Yes
Oil Resistant	Yes

### » Dimensions and Weight

Construction	Nominal Insulation Thickness	Nominal Shield Cross Section	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm <sup>2</sup>	mm	mm	kg/km
1×6	3.5	6	1.4	20.5	710





# Caledonian Airport Cables

## Airfield Lighting Cables



### RG7H1R for Airport Lighting

#### » Applications

These cables are used as airfield lighting equipment primary cables for the series circuit connecting the Constant Current Regulators and the isolating transformers, and between the isolating transformers.

#### » Standards

ENV 50213

#### » Construction

**Conductor:** Compact stranded bare copper conductor.

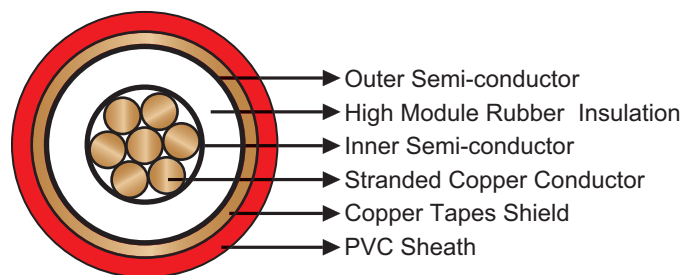
**Inner Semi-Conductor:** Extruded semi-conducting compound.

**Insulation:** High module rubber compound, G7 type.

**Outer Semi-Conductor:** Extruded semi-conducting compound.

**Shield:** Bare copper tapes.

**Sheath:** PVC.



#### » Technical Data

Rated Voltage $U_0/U$ (Um)	3.6/6kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	0°C~+90°C
Minimum Bending Radius	15×OD
Flame Retardant	Yes

#### » Dimensions and Weight

Construction	Nominal Insulation Thickness	Minimum Shield Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	mm	mm	kg/km
1×10	2.3	0.075	1.4	14.0	305



### RHV

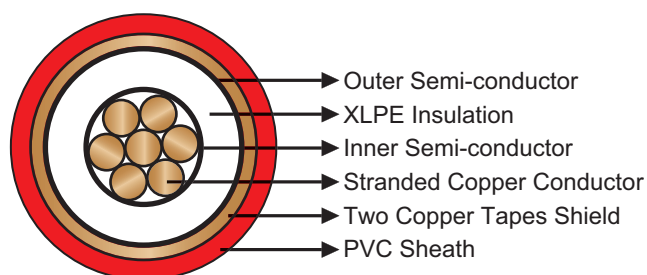
#### » Applications

These cables are used as airfield lighting equipment primary cables for the series circuit connecting the Constant Current Regulators and the isolating transformers, and between the isolating transformers.

#### » Standards

UNE 21-161-93 (Spain)

#### » Construction



**Conductor:** Stranded bare copper conductor.

**Inner Semi-Conductor:** Extruded semi-conducting compound.

**Insulation:** XLPE.

**Outer Semi-Conductor:** Extruded semi-conducting compound.

**Shield:** Two copper tapes.

**Outer Sheath:** PVC.

#### » Technical Data

Rated Voltage $U_0/U$ (Um)	6/10kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-20°C~+90°C
Minimum Bending Radius	static: 10×OD; dynamic: 20×OD
Impacted Resistant	Yes
Weather Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	mm	kg/km
1×6	3.5	2.8	18.0	410

# Caledonian Airport Cables

## Airfield Lighting Cables



### RHZ1

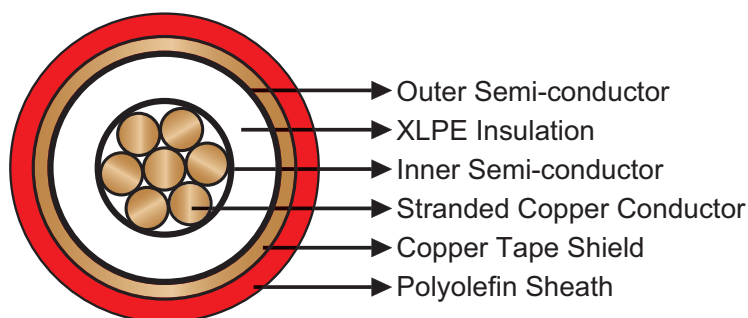
#### » Applications

These cables are used as airfield lighting equipment primary cables for the series circuit connecting the Constant Current Regulators and the isolating transformers, and between the isolating transformers.

#### » Standards

UNE 21161-93 (Spain)

#### » Construction



**Conductor:** Stranded copper conductor.

**Inner Semi-Conductor:** Extruded semi-conducting compound.

**Insulation:** XLPE.

**Outer Semi-Conductor:** Extruded semi-conducting compound.

**Shield:** Copper tape shield.

**Outer Sheath:** Polyolefin.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	6/10kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-20°C~+90°C
Minimum Bending Radius	18×OD
Halogen Free	Yes



# Caledonian Airport Cables

## Airfield Lighting Cables

No Corrosive & Toxic Gases	Yes
Low Smoke	Yes
Flame Retardant	Yes
Impacted Resistant	Yes
Weather Resistant	Yes
Oil Resistant	Yes

### » Dimensions and Weight

Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	mm	kg/km
1×6	3.5	2.0	18.0	400





# Caledonian Airport Cables

## Airfield Lighting Cables



### FAA L-824 Type B Unshielded 5kV

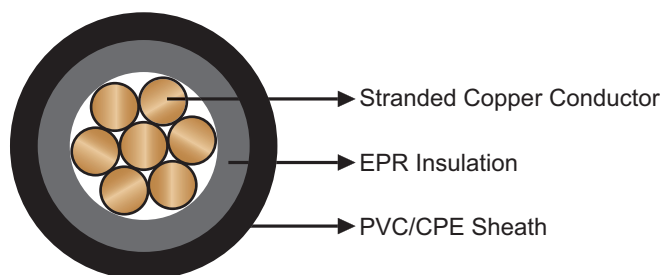
#### » Applications

These cables are used for interconnecting the transformers and the current regulator of airfield lighting systems in series circuits, suitable for fixed applications such as taxiways, runways, navigational aids, and obstruction lighting, can be installed in conduit and direct burial.

#### » Reference Standards

FAA L-824 Type B  
ICEA S-96-659/NEMA WC71

#### » Construction



**Conductor:** Stranded bare or tinned copper conductor.

**Insulation:** EPR.

**Sheath:** CPE/PVC.

#### » Technical Data

Rated Voltage $U_0/U$ ( $U_m$ )	5kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-40°C~+85°C
Minimum Bending Radius	5×OD
Halogen Free	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes



**Caledonian Airport Cables**

## ***Airfield Lighting Cables***

### » Dimensions and Weight

Construction	No. of Strand	Nominal Insulation Thickness		Nominal Insulation Thickness		Nominal Overall Diameter		Nominal Weight	
No. ×mm <sup>2</sup> / AWG	-	mm	inches	mm	inches	mm	inches	kg/km	lbs/kft
1×6 mm <sup>2</sup>	7/19	2.3	0.09	1.2	0.05	10.0	0.39	150	101
1×8	7/19	2.3	0.09	0.76	0.03	10.7	0.420	180	121
1×6	7/19	2.3	0.09	0.76	0.03	11.7	0.460	238	160
1×4	7/19	2.3	0.09	0.76	0.03	12.8	0.505	326	219



# Caledonian Airport Cables

## Airfield Lighting Cables



### FAA L-824 Type B Shielded 5kV

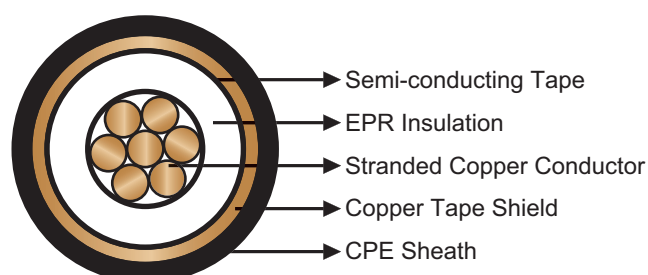
#### » Applications

These cables are used for interconnecting the transformers and the current regulator of airfield lighting systems in series circuits, suitable for fixed applications such as taxiways, runways, navigational aids, and obstruction lighting, can be installed in conduit and direct burial.

#### » Reference Standards

FAA L-824 Type B  
ICEA S-93-639 / NEMA WC74

#### » Construction



**Conductor:** Stranded tinned copper conductor.

**Insulation:** EPR.

**Semi-Conductor:** Helically applied semi-conducting tape.

**Shield:** Tinned copper tape.

**Separator:** Separation tape.

**Sheath:** CPE.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	5kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-40°C~+85°C
Minimum Bending Radius	12×OD





# Caledonian Airport Cables

## Airfield Lighting Cables

Halogen Free	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

### » Dimensions and Weight

Construction	No. of Strand	Nominal Insulation Thickness		Nominal Sheath Thickness		Nominal Overall Diameter		Nominal Weight	
No. xmm <sup>2</sup> /AWG	-	mm	inches	mm	inches	mm	inches	kg/km	lbs/kft
1x6mm <sup>2</sup>	7	2.3	0.09	1.2	0.05	11.1	0.44	194	130
1x8	7	2.3	0.09	1.2	0.05	11.7	0.46	225	151





# Caledonian Airport Cables

## Airfield Lighting Cables



### FAA L-824 Type C 600V

#### » Applications

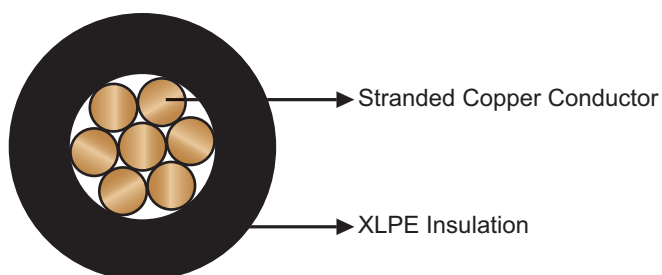
These cables are designed for use in airport lighting and control circuits, suitable for installation in ducts, conduit and direct burial.

#### » Reference Standards

FAA L-824 Type C

ICEA S-95-658/NEWA WC71

#### » Construction



**Conductor:** Stranded bare copper to ASTM B.

**Insulation:** XLPE.

**Sheath (for multiconductor cables only):** PVC.

#### » Technical Data

Rated Voltage $U_0/U$ (Um)	600V
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	5×OD



### » Dimensions and Weight

Construction	No. of Strand	Nominal Insulation Thickness		Nominal Sheath Thickness		Nominal Overall Diameter		Nominal Weight	
No. xAWG	-	mm	mm	mm	inches	mm	inches	kg/km	lbs/kft
1×12	7	mm	inches	-	-	4.62	0.182	46	30
1×10	7	1.14	0.045	-	-	5.21	0.205	61	43
1×8	7	1.14	0.045	-	-	6.76	0.266	101	69
1×6	7	1.52	0.06	-	-	7.72	0.304	152	102
1×4	7	1.52	0.06	-	-	8.94	0.352	231	158
2×12	7	0.76	0.03	1.14	0.045	10.41	0.41	146	98
2×10	7	0.76	0.03	1.14	0.045	11.56	0.455	199	134
2×8	7	1.14	0.045	1.52	0.06	15.37	0.605	323	217
2×6	7	1.14	0.045	1.52	0.06	17.40	0.685	446	300
2×4	7	1.14	0.045	1.52	0.06	19.81	0.780	632	425
3×12	7	0.76	0.03	1.14	0.045	11.05	0.435	187	126
3×10	7	0.76	0.03	1.14	0.045	12.19	0.480	259	174
3×8	7	1.14	0.045	1.52	0.06	16.38	0.645	437	294
3×6	7	1.14	0.045	1.52	0.06	18.42	0.725	610	410
3×4	7	1.14	0.045	2.03	0.08	21.97	0.865	908	610
4×12	7	0.76	0.03	1.14	0.045	12.07	0.475	222	149
4×10	7	0.76	0.03	1.52	0.06	14.22	0.560	350	235
4×8	7	1.14	0.045	1.52	0.06	17.91	0.705	548	368
4×6	7	1.14	0.045	1.52	0.06	20.19	0.795	772	519
4×4	7	1.14	0.045	2.03	0.08	24.13	0.950	1165	783
5×12	7	0.76	0.03	1.14	0.045	13.08	0.515	292	196
5×10	7	0.76	0.03	1.52	0.06	15.49	0.610	405	272
6×12	7	0.76	0.03	1.52	0.06	15.24	0.600	357	240
6×10	7	0.76	0.03	1.52	0.06	16.89	0.665	495	333
7×12	7	0.76	0.03	1.52	0.06	15.24	0.600	379	255
7×10	7	0.76	0.03	1.52	0.06	16.89	0.665	534	359
8×12	7	0.76	0.03	1.52	0.06	16.38	0.645	430	289
8×10	7	0.76	0.03	1.52	0.06	18.29	0.720	604	406
9×12	7	0.76	0.03	1.52	0.06	17.65	0.695	479	322
9×10	7	0.76	0.03	1.52	0.06	19.69	0.775	707	475
10×12	7	0.76	0.03	1.52	0.06	18.42	0.725	539	362
10×10	7	0.76	0.03	1.52	0.06	20.57	0.810	762	512
11×12	7	0.76	0.03	1.52	0.06	18.92	0.745	594	399
11×10	7	0.76	0.03	2.03	0.08	22.10	0.870	878	590
12×12	7	0.76	0.03	1.52	0.06	19.43	0.765	631	424
12×10	7	0.76	0.03	2.03	0.08	22.61	0.890	933	627
13×12	7	0.76	0.03	1.52	0.06	20.07	0.790	662	445

# Caledonian Airport Cables

## Airfield Lighting Cables



Construction	No. of Strand	Nominal Insulation Thickness		Nominal Sheath Thickness		Nominal Overall Diameter		Nominal Weight	
No. xAWG	-	mm	mm	mm	inches	mm	inches	kg/km	lbs/kft
13x10	7	0.76	0.03	2.03	0.08	23.50	0.925	985	662
14x12	7	0.76	0.03	1.52	0.06	20.83	0.820	708	476
14x10	7	0.76	0.03	2.03	0.08	24.26	0.955	1053	708
15x12	7	0.76	0.03	2.03	0.08	22.35	0.880	793	533
15x10	7	0.76	0.03	2.03	0.08	24.89	0.980	1119	752
16x12	7	0.76	0.03	2.03	0.08	22.99	0.905	839	564
16x10	7	0.76	0.03	2.03	0.08	25.65	1.010	1186	797
17x12	7	0.76	0.03	2.03	0.08	23.62	0.930	902	606
17x10	7	0.76	0.03	2.03	0.08	26.29	1.035	1275	857
18x12	7	0.76	0.03	2.03	0.08	24.26	0.955	946	636
18x10	7	0.76	0.03	2.03	0.08	26.92	1.060	1342	902
19x12	7	0.76	0.03	2.03	0.08	24.26	0.955	970	652
19x10	7	0.76	0.03	2.03	0.08	26.92	1.060	1381	928





# Caledonian Airport Cables

## Airfield Lighting Cables

### FAA L-824 Type C Unshielded 5kV

#### » Applications

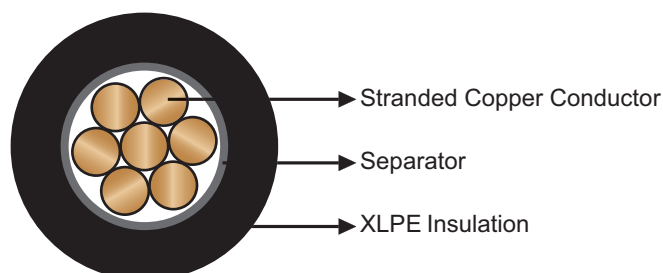
These cables are used for interconnecting the transformers and the current regulator of airfield lighting systems in series circuits, suitable for fixed applications such as taxiways, runways, navigational aids, and obstruction lighting, can be installed in conduit and direct burial.

#### » Reference Standards

FAA L-824 Type C

ICEA S-96-659/NEWA WC71

#### » Construction



**Conductor:** Stranded bare copper to ASTM B3 and ASTM B8.

**Separator:** Semi-conductive extruded layer or semi-conductive tape.

**Insulation:** XLPE.

#### » Technical Data

Rated Voltage $U_0/U$ (Um)	5kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	5×OD
Lead Free	Yes



# Caledonian Airport Cables

## *Airfield Lighting Cables*



### » Dimensions and Weight

Construction	No. of Strand	Nominal Insulation Thickness		Nominal Overall Diameter		Nominal Weight	
No. ×AWG	-	mm	inches	mm	inches	kg/km	lbs/kft
1×8	7/19	2.79	0.11	9.65	0.380	132	89
1×6	7/19	2.79	0.11	10.67	0.420	186	125
1×4	7/19	2.79	0.11	11.68	0.46	268	180





# Caledonian Airport Cables

## Airfield Lighting Cables

### FAA L-824 Type C Shielded 5kV

#### » Applications

These cables are used for interconnecting the transformers and the current regulator of airfield lighting systems in series circuits, suitable for fixed applications such as taxiways, runways, touchdown zones, land and hold short lighting systems, can be installed in conduit, duct, aerial and direct burial.

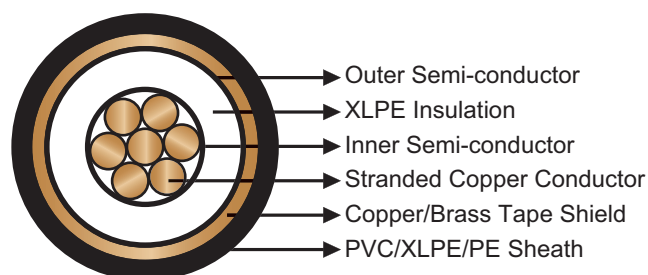
#### » Reference Standards

FAAAC 150 / 5345-7E

FAA L-824 Type C

ICEA S-93-639 / NEMA WC74

#### » Construction



**Conductor:** Stranded bare or tinned copper.

**Inner Semi-Conductor:** Extruded semi-conducting compound.

**Insulation:** XLPE.

**Outer Semi-Conductor:** Semi conducting tape or extruded.

**Shield:** Copper or brass tape(s). Tinned copper wire braid can be offered upon request.

**Sheath:** PVC. PE/XLPE can be offered upon request.

#### » Technical Data

Rated Voltage $U_0/U$ (Um)	5kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-40°C~+90°C

# Caledonian Airport Cables

## Airfield Lighting Cables



Minimum Bending Radius	static: 10×OD; dynamic: 20×OD
Impacted Resistant	Yes
Weather Resistant	Yes

### » Dimensions and Weight

Construction No. ×mm <sup>2</sup> / AWG	No. of Strand -	Nominal Insulation Thickness		Nominal Overall Diameter		Nominal Weight	
		mm	inches	mm	inches	kg/km	lbs/kft
1×6mm <sup>2</sup>	7/19	2.3	0.09	11.0	0.43	180	121
1×8	7/19	2.3	0.09	14.3	0.565	298	200
1×6	7/19	2.3	0.09	15.4	0.605	366	246
1×4	7/19	2.3	0.09	17.0	0.668	513	345





### FAA L-824 Type C Sheathed 5kV

#### » Applications

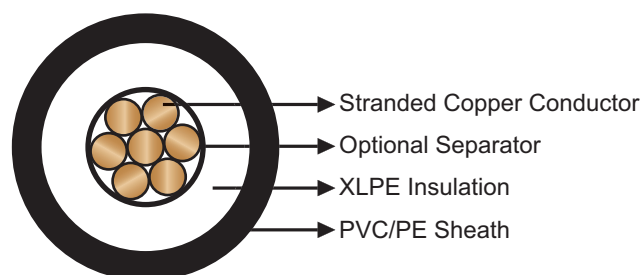
These cables are used for interconnecting the transformers and the current regulator of airfield lighting systems in series circuits, suitable for fixed applications such as taxiways, runways, navigational aids, and obstruction lighting, can be installed in conduit and direct burial.

#### » Reference Standards

FAA L-824 Type C

ICEA S-96-659/NEWA WC71

#### » Construction



**Conductor:** Stranded bare copper to ASTM B3 and ASTM B8.

**Optional Separator:** Optional separator or conductor shield be applied.

**Insulation:** XLPE.

**Sheath:** PE/PVC.

#### » Technical Data

Rated Voltage $U_0/U$ ( $U_m$ )	5kV
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 10×OD; dynamic: 20×OD
Impacted Resistant	Yes
Weather Resistant	Yes



# Caledonian Airport Cables

## *Airfield Lighting Cables*



### » Dimensions and Weight

Construction No. ×mm <sup>2</sup> / AWG	No. of Strand -	Nominal Insulation Thickness		Nominal Insulation Thickness		Nominal Overall Diameter		Nominal Weight	
		mm	mm	mm	inches	mm	inches	kg/km	lbs/kft
1×6mm <sup>2</sup>	7	2.3	0.09	0.8	0.03	9.9	0.39	180	121
1×8	7	2.3	0.09	0.76	0.03	10.1	0.396	95	64
1×6	7	2.3	0.09	0.76	0.03	11.0	0.433	127	85
1×4	7	2.3	0.09	1.14	0.045	13.0	0.509	164	110







### H07RN-F

#### » Applications

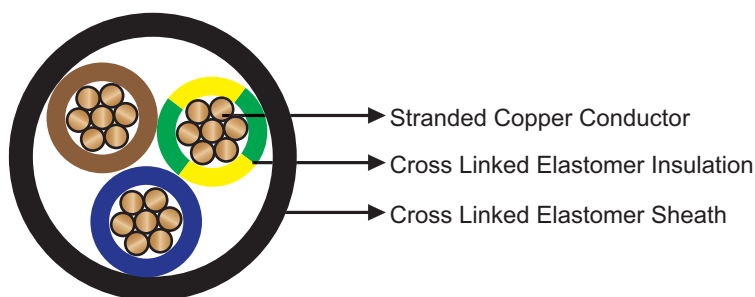
These cables are used for connection between transformers and Airfield Lighting Equipment.

#### » Standards

NF C 32-102-4

HD 22-4

#### » Construction



**Conductor:** Stranded bare copper.

**Insulation:** Special cross linked elastomer.

**Sheath:** Cross linked oil resistant elastomer.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	450/750V
Maximum Conductor Temperature	85°C
Short Circuit Temperature	200°C
Operating Temperatures	-20°C~+85°C
Minimum Bending Radius	static: 4×OD; dynamic: 8×OD
Impacted Resistant	Yes
Weather Resistant	Yes
Oil Resistant	Yes

# Caledonian Airport Cables

## *Airfield Lighting Cables*



### » Dimensions and Weight

Construction	Nominal Insulation Thickness	Nominal Sheath Thickness	Minimum Overall Diameter	Maximum Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	mm	mm	kg/km
1×2.5	0.9	1.4	6.3	7.9	66
1×4	1.0	1.5	7.2	9.0	94
1×6	1.0	1.6	7.9	9.8	109
2×2.5	0.9	1.7	10.2	13.1	161
2×4	1.0	1.8	11.8	15.0	238
2×6	1.0	2.0	13.1	17.0	279
3×2.5	0.9	1.8	10.9	14.0	195
3×4	1.0	1.5	12.7	16.2	290
3×6	1.0	2.0	14.1	18.0	346





### Secondary Circuit Cable 450/750V to ADP Specification

#### » Applications

These cables are used for connection between transformers and Airfield Lighting Equipment.

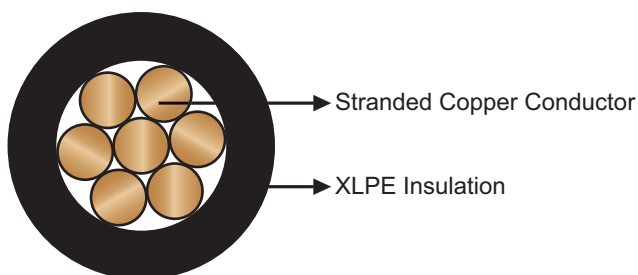
#### » Standards

ADP (Aéroport de Paris) specification

#### » Construction

**Conductor:** Stranded bare copper.

**Insulation:** XLPE.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	450/750V
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-20°C~+70°C
Minimum Bending Radius	5×OD
Impacted Resistant	Yes
Weather Resistant	Yes

#### » Dimensions and Weight

Construction	Nominal Insulation Thickness	Minimum Overall Diameter	Maximum Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	mm	kg/km
1×4	0.7	3.5	4.5	42

# Caledonian Airport Cables

## Airfield Lighting Cables



### FLGG

#### » Applications

These cables are used as airfield lighting cable for secondary electrical circuits.

#### » Standards

IEC 60502-1

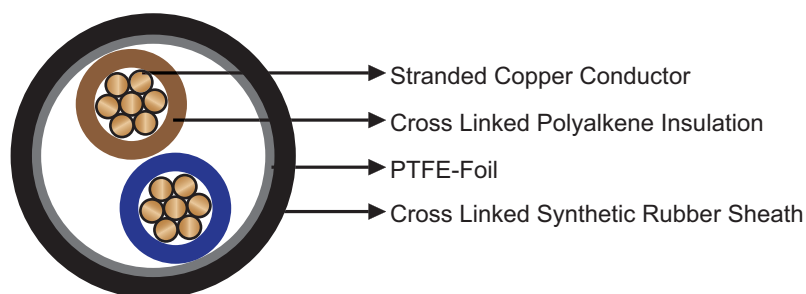
#### » Construction

**Conductor:** Stranded tinned copper conductor.

**Insulation:** Cross linked polyalkene.

**Separator:** PTFE-Foil.

**Outer Sheath:** Cross linked synthetic rubber compound.



#### » Technical Data

Rated Voltage $U_0/U$ (Um)	500V
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-20°C~+90°C
Minimum Bending Radius	5×OD
Halogen Free	Yes
No Toxicity & Corrosivity	Yes
Low Smoke	Yes
Flame Retardant	Yes

#### » Dimensions and Weight

Construction	Nominal Sheath Thickness	Nominal Sheath Thickness	Maximum Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	mm	kg/km
2×4	0.5	1.1	9.8	167





**Caledonian Airport Cables**

## *Airfield Lighting Cables*

### LYST

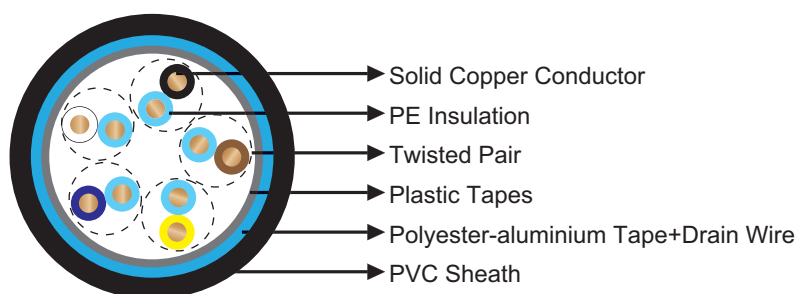
#### » Applications

These cables are used for connection between Control Tower and Constant Current Regulators (CCRs), suitable for transmission of voice data up to 2,000 kHz.

#### » Standards

NF C 32 070 C2

#### » Construction



**Conductor:** Solid bare copper.

**Insulation:** PE.

**Cable Element:** Pairs.

**Separator:** One or more plastic tapes.

**Shield:** Polyester-aluminium tape with drain wire.

**Sheath:** PVC.

#### » Technical Data

Rated Voltage $U_0/U$ ( $U_m$ )	200V
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-15°C~+70°C
Minimum Bending Radius	static: 6×OD; dynamic: 12×OD
Lead Free	Yes

# Caledonian Airport Cables

## *Airfield Lighting Cables*



### » Dimensions and Weight

Construction	AWG	Nominal Overall Diameter	Nominal Weight
No. xmm <sup>2</sup>	-	mm	kg/km
1x2x0.20	24	3.6	18
2x2x0.20	24	4.5	27
3x2x0.20	24	5.0	33
5x2x0.20	24	6.0	47
10x2x0.20	24	7.2	77
15x2x0.20	24	8.2	104
30x2x0.20	24	11.0	193
56x2x0.20	24	14.7	334
112x2x0.20	24	19.5	626
1x2x0.50	20	4.8	31
2x2x0.50	20	7.0	57
3x2x0.50	20	7.2	70
5x2x0.50	20	8.6	97
10x2x0.50	20	11.3	174
15x2x0.50	20	12.9	236
30x2x0.50	20	16.8	441
56x2x0.50	20	23.4	799





# Caledonian Airport Cables

## Airfield Lighting Cables

### LYAR

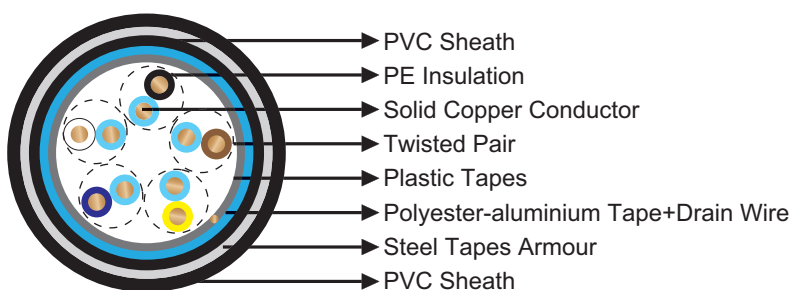
#### » Applications

These cables are used for connection between Control Tower and Constant Current Regulators (CCRs), suitable for transmission of voice data up to 2,000 kHz.

#### » Standards

NF C 32 070 C2

#### » Construction



**Conductor:** Solid bare copper.

**Insulation:** PE.

**Cable Element:** Pairs.

**Separator:** One or more plastic tapes.

**Shield:** Polyester-aluminium tape with drain wire.

**Inner Sheath:** PVC.

**Armour:** Steel tapes.

**Outer Sheath:** PVC.

#### » Technical Data

Rated Voltage $U_0/U$ (Um)	200V
Maximum Conductor Temperature	90°C
Short Circuit Temperature	250°C
Operating Temperatures	-15°C~+70°C
Minimum Bending Radius	static: 10×OD; dynamic: 20×OD
Lead Free	Yes

# Caledonian Airport Cables

## Airfield Lighting Cables



### » Dimensions and Weight

Construction	AWG	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	-	mm	kg/km
5×2×0.20	24	9.9	147
10×2×0.20	24	10.7	178
15×2×0.20	24	11.7	222
30×2×0.20	24	14.4	342
56×2×0.20	24	18.1	537
2×2×0.50	20	10.4	57
3×2×0.50	20	10.6	70
5×2×0.50	20	12.0	97
10×2×0.50	20	14.6	174
15×2×0.50	20	16.0	236
30×2×0.50	20	24.4	441
56×2×0.50	20	23.4	799







# Caledonian Airport Cables

## Airfield Lighting Cables

### Airport Pavement Cable 600V

#### » Applications

These cables are used as airport pavement cable for secondary electrical circuits.

#### » Standards

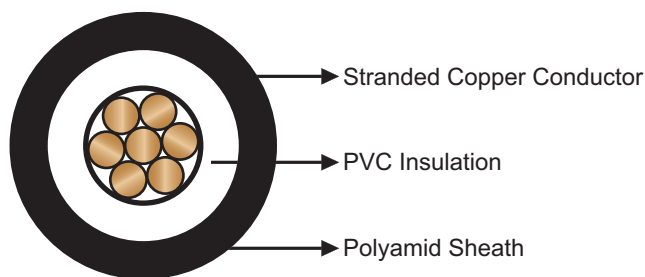
FAA 150/5345-30

#### » Construction

**Conductor:** Stranded copper conductor.

**Insulation:** PVC.

**Sheath:** Polyamid (nylon).



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600V
Operating Temperatures	-45°C~+85°C
Minimum Bending Radius	5×OD
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction No. ×mm <sup>2</sup> /AWG	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×4 mm <sup>2</sup>	0.6	0.15	4.1	48
1×12	0.6	0.15	3.8	41
1×10	0.8	0.15	4.9	66



## 400Hz Cables

### 400Hz Airport Cables Single Core

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

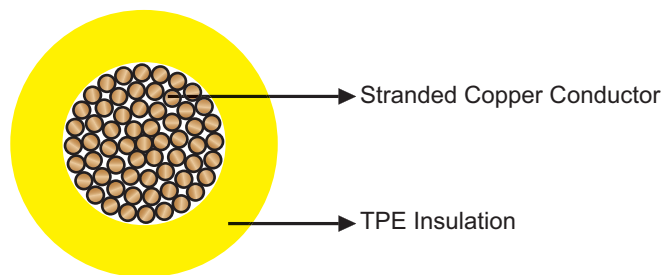
#### » Standards

VDE 0295

#### » Construction

**Conductor:** Stranded copper conductor, Class 5 to VDE 0295/IEC 60228.

**Insulation:** TPE.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 6×OD; dynamic: 7×OD
Halogen Free	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction No. ×mm <sup>2</sup>	Nominal Overall Diameter mm	Nominal Weight kg/km
1×35	11.5	430
1×50	12.6	665
1×70	14.0	910
1×120	23.0	1545



### 400Hz Airport Cables Single Core With Control Wires

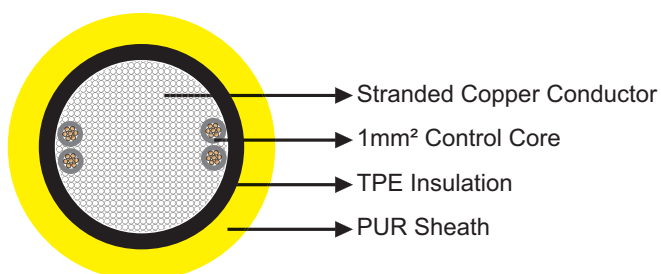
#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction



**Conductor:** Stranded copper conductor, Class 6 to VDE 0295/IEC 60228.

**Insulation:** TPE. XLEPR/PUR can be offered upon request.

**Control Core:** 1mm² stranded copper conductor with TPE insulation. XLPE/Polyolefin can be offered upon request

**Sheath:** PUR.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 6×OD; dynamic: 7×OD
Halogen Free	Yes
No Corrosive & Toxic Gases	Yes
Flame Retardant	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes



### » Dimensions and Weight

Construction	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	kg/km
1×35+4×1	14.0	490
1×50+4×1	17.0	600
1×70+4×1	18.7	800
1×120+4×1	25.0	1400







### Split Concentric Halogen Free 400Hz Airport Cable

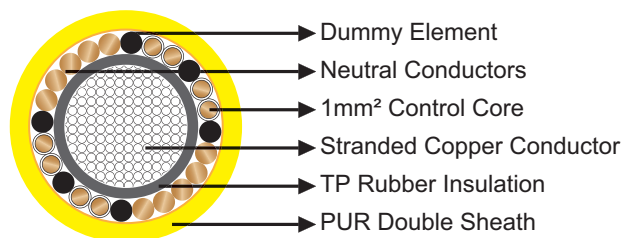
#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction



**Conductor:** Stranded copper conductor, Class 6 /Class 5 to VDE 0295/IEC 60228.

**Insulation:** TP rubber.

**Control Core:** 1mm² stranded copper conductor with XLPE insulation.

**Cable Assembling:** Helical concentric stranding of bare neutral conductors and control wire separated by dummies.

**Sheath:** 2 layer PUR.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (Um)	600/1000V
Operating Temperatures	-40°C~+85°C
Minimum Bending Radius	static: 6×OD; dynamic: 8×OD
Flame Retardant	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter Over Insulation	Nominal Diameter of Control Core	Nominal Diameter Under Sheath	Nominal Overall Diameter	Nominal Weight
No. ×mm²	mm	mm	mm	mm	kg/km
1×70+10×2.5+8×1	13.8	2.1	17.8	22.2	1300



### 400Hz Airport Cables 3-core With Control Wires

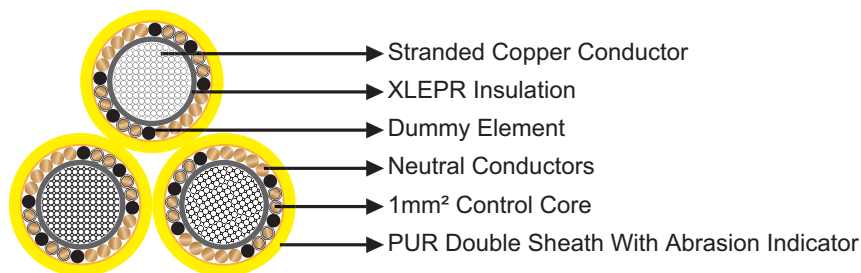
#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction



**Conductor:** Stranded copper conductor, Class 6 to VDE 0295/IEC 60228.

**Insulation:** XLEPR.

**Control Core:** 1mm<sup>2</sup> stranded copper conductor with XLPE insulation.

**Cable Assembling:** Control cores and neutral conductor concentric stranding around the phase conductors.

**Sheath:** Bonded inner and outer sheath of polyurethane with abrasion indicators.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 3×OD; dynamic: 4×OD
Halogen Free	Yes
No Corrosive & Toxic Gases	Yes
Flame Retardant	Yes
Abrasion Resistant	Yes
UV Resistant	Yes



# Caledonian Airport Cables

## 400Hz Cables

Oil Resistant

Yes

### » Dimensions and Weight

Construction	Nominal Diameter of Single Core	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	kg/km
3×(1×35/20+8×1)	20.5	44.1	2790
3×(1×70/25+8×1)	22.2	47.8	3560





## 400Hz Cables

### 400Hz Airport Cables 4-core With Control Wires In The Center Cable

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

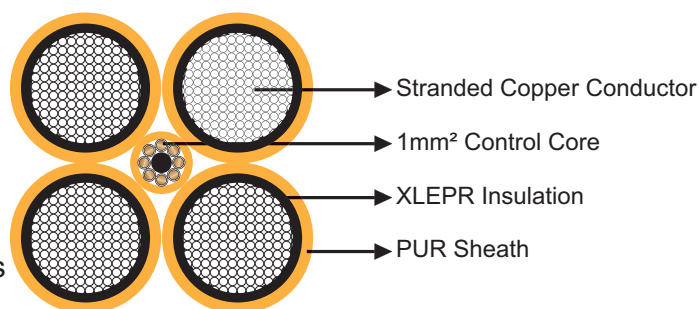
#### » Construction

**Conductor:** Stranded copper conductor, Class 5/Class 6 to VDE 0295/IEC 60228.

**Insulation:** XLEPR.

**Control Core:** 1mm<sup>2</sup> stranded copper conductor with polyolefin insulation.

**Sheath:** PUR.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (Um)	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 3×OD; dynamic: 4×OD
Halogen Free	Yes
No Corrosive & Toxic Gases	Yes
Flame Retardant	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter of Single Core	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	kg/km
4×1×50+8×1	17.2	42.0	2643
4×1×70+8×1	18.2	44.0	3360





# Caledonian Airport Cables

## 400Hz Cables

### 400Hz Airport Cables 4-core With Control Wires

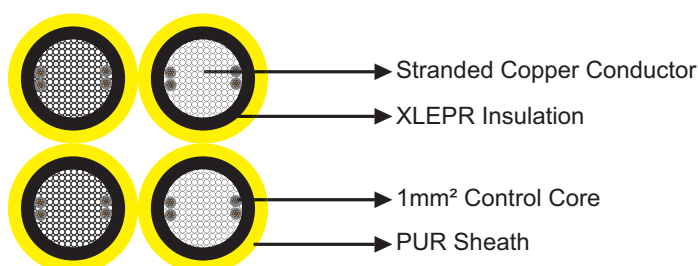
#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction



**Conductor:** Stranded copper conductor, Class 5/Class 6 to VDE 0295/IEC 60228.

**Insulation:** XLEPR.

**Control Core:** 1mm<sup>2</sup> stranded copper conductor with polyolefin insulation.

**Sheath:** PUR.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 4×OD; dynamic: 5×OD
Halogen Free	Yes
No Corrosive & Toxic Gases	Yes
Flame Retardant	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes



## 400Hz Cables

### » Dimensions and Weight

Construction	Nominal Diameter of Single Core	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	kg/km
4×(1×35+4×1)	13.7	33.0	2600
4×(1×50+4×1)	18.2	44.0	3900
4×(1×70+4×1)	21.2	51.3	4300
4×(1×120+4×1)	23.2	56.0	7400





### 400Hz Airport Cables 7-core

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

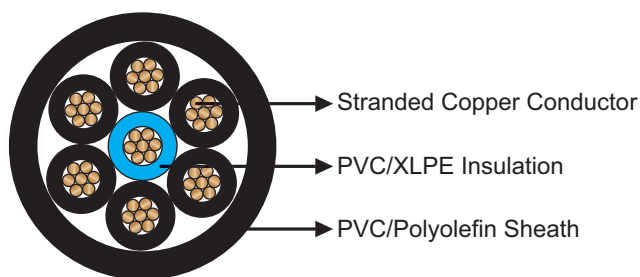
VDE 0271

#### » Construction

**Conductor:** Stranded bare copper conductor, Class 2 or 5 to VDE 0295/IEC 60228.

**Insulation:** PVC/XLPE.

**Outer Sheath:** PVC. Polyolefin can be offered upon request.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (Um)	600/1000V
Operating Temperatures	-20°C~+70°C
Minimum Bending Radius	static: 6×OD; dynamic: 12×OD
Impacted Resistant	Yes
Weather Resistant	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter of Single Core	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	kg/km
7×25	9.6	35.0	2800
7×35	10.6	39.0	3500
7×50	11.8	42.9	4000
7×70	13.6	49.2	5440



## 400Hz Cables

### 400Hz Airport Cables 7-core With Copper Wire Braid Shield

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0271

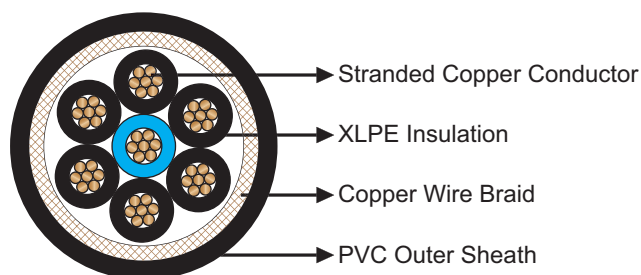
#### » Construction

**Conductor:** Stranded bare copper conductor, Class 2/Class 5 to VDE 0295/IEC 60228.

**Insulation:** XLPE.

**Shield:** Bare copper braid.

**Outer Sheath:** PVC.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-20°C~+70°C
Minimum Bending Radius	static: 6×OD; dynamic: 12×OD
Impacted Resistant	Yes
Weather Resistant	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter of Single Core	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	kg/km
7×70	11.9	46.5	6430





### 400Hz Airport Cables 7-core With Concentric Copper Wire Shield

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction

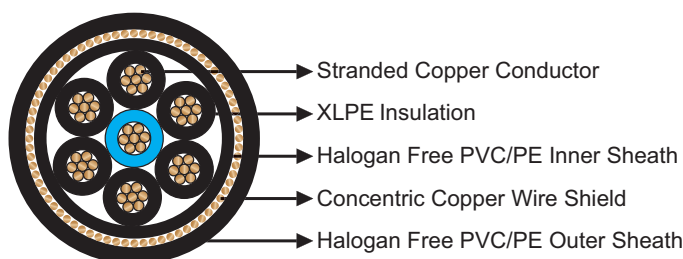
**Conductor:** Stranded bare copper conductor, Class 2/Class 5 to VDE 0295/IEC 60228.

**Insulation:** XLPE.

**Inner Sheath:** Halogen free PVC/PE.

**Shield:** Concentric copper conductor (25/35mm<sup>2</sup>).

**Outer Sheath:** Halogen free PVC/PE.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (Um)	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 9×OD; dynamic: 12×OD
Halogen Free	Yes
No Corrosive & Toxic Gases	Yes

#### » Dimensions and Weight

Construction No. ×mm <sup>2</sup>	Nominal Diameter of Single Core mm	Nominal Shield Cross Section mm <sup>2</sup>	Nominal Overall Diameter mm	Nominal Weight kg/km
7×25 (class 2)	8.7	25	32.9	2300
7×35 (class 2)	9.7	35	37.2	3100
7×35 (class 5)	10.6	35	41.9	3300



## 400Hz Cables

### 400Hz Airport Cables 7-core With Copper Tape Shield

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction

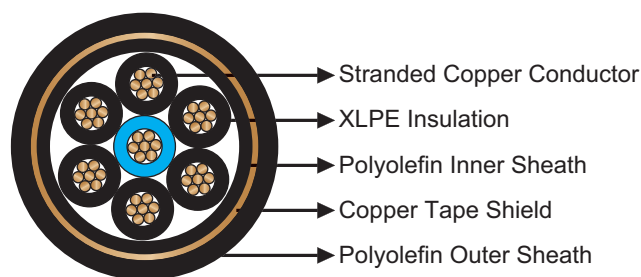
**Conductor:** Stranded bare copper conductor, Class 5 to VDE 0295/IEC 60228.

**Insulation:** XLPE.

**Inner Sheath:** Polyolefin.

**Shield:** Copper tape shield.

**Outer Sheath:** Polyolefin.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 9×OD; dynamic: 12×OD
Halogen Free	Yes
No Corrosive & Toxic Gases	Yes
Low Smoke	Yes
Flame Retardant	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter of Single Core	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	kg/km
7×35	9.7	41.8	3450
7×50	11.8	47.8	4660
7×70	11.9	54.1	5930



### 400Hz Airport Cables 7-core With Aluminium Wire Armour

#### » Applications

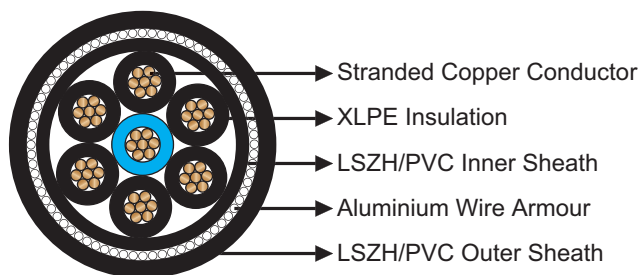
These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

BS 6724

BS 5467

#### » Construction



**Conductor:** Stranded bare copper conductor, Class 2.

**Insulation:** XLPE.

**Inner Sheath:** LSZH. PVC can be offered upon request.

**Armour:** Aluminium wire armour.

**Outer Sheath:** LSZH. PVC can be offered upon request.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 9×OD; dynamic: 12×OD
Halogen Free	Yes
No Corrosive & Toxic Gases	Yes
Low Smoke	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter of Single Core	Nominal Diameter Under Armour	Nominal Diameter Over Armour	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	mm	mm	kg/km
7×35	8.6	30.0	32.4	36.6	3355



## 400Hz Cables

### 400Hz Airport Cables 7-core With Control Wires & Reinforcement

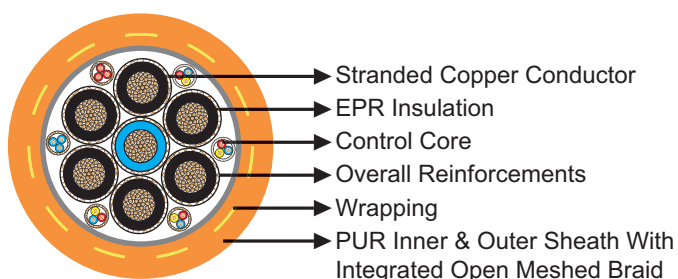
#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction



**Conductor:** Stranded bare copper conductor, Class 5/Class 6 to VDE 0295/IEC 60228.

**Insulation:** EPR. HEPR/TPE /XLEPR can be offered upon request.

**Control Core:** 1mm<sup>2</sup> stranded copper conductor with ethylene tetrafluorethylene insulation. Thermoplastic/TPE/polyolefin can be offered upon request.

**Cable Assembling:** 6 power cores laid-up over a centre core, control cores laid-up in triads/quads located in outer interstices. Each core has an overall reinforcement.

**Wrapping:** Common core covering of wrapping and/or extruded filling compound.

**Outer Sheath:** Bonded inner and outer sheath of polyurethane with integrated open meshed braid.

#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-20°C~+70°C
Minimum Bending Radius	static: 4×OD; dynamic: 6×OD
Flame Retardant	Yes
Abrasion Resistant	Yes





# Caledonian Airport Cables

## 400Hz Cables

Weather Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

### » Dimensions and Weight

Construction No. ×mm <sup>2</sup>	Nominal Diameter of Power Core mm	Nominal Diameter of Control Core mm	Nominal Overall Diameter mm	Nominal Weight kg/km
7×25+6×(3×1)	9.6	1.8	38.3	2600
7×35+6×(3×1)	10.5	2.1	42.0	3100
7×25+6×(4×1)	9.6	1.8	42.0	2850
7×35+6×(4×1)	10.9	1.9	44.0	3050
7×50+6×(4×1)	11.8	2.1	51.0	4030





## 400Hz Cables

### 400Hz Airport Cables 7-core With Reinforcement

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction

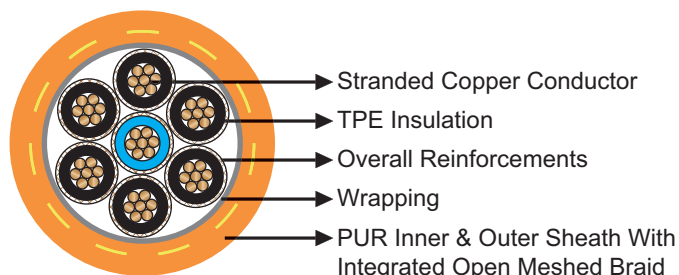
**Conductor:** Stranded bare copper conductor, Class 5 to VDE 0295/IEC 60228.

**Insulation:** TPE.

**Cable Assembling:** 6 power cores laid-up over a centre core.

**Wrapping:** Common core covering of wrapping and/or extruded filling compound.

**Outer Sheath:** Bonded inner and outer sheath of polyurethane with integrated open meshed braid.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-35°C~+80°C
Minimum Bending Radius	static: 4×OD; dynamic: 6×OD
Flame Retardant	Yes
Abrasion Resistant	Yes
Weather Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter of Single Core	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	kg/km
7×35	10.9	38.0	3800



### 400Hz Airport Cables 7-core With Control Wires

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

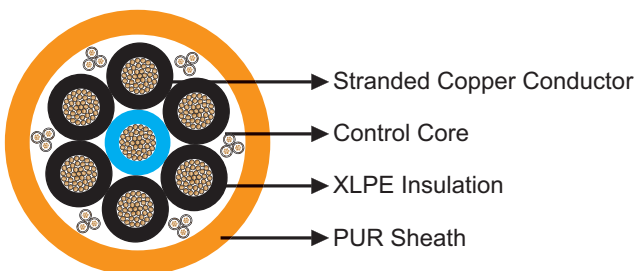
#### » Construction

**Conductor:** Stranded copper conductor, Class 6 to VDE 0295/IEC 60228.

**Insulation:** XLPE.

**Control Core:** 1mm<sup>2</sup> stranded copper conductor with PVC insulation.

**Outer Sheath:** PUR.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 4×OD; dynamic: 6×OD
Flame Retardant	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction No. ×mm <sup>2</sup>	Nominal Diameter of Power Core mm	Nominal Diameter of Control Core mm	Nominal Overall Diameter mm	Nominal Weight kg/km
7×16+6×(2×1)	7.2	2.1	30.8	1400
7×35+6×(3×1)	10.5	2.1	36.0	3000
7×50+6×(4×1)	11.8	2.1	43.0	4300



## 400Hz Cables

### » Colour Code

**Insulation Colour:**

**Light blue in the center as**

**neutral , 2\*brown , 2\*black , 2\*white**

Control core color: White with black numbers 1-24.

Other colours can be offered upon request

**Sheath Colour:** black , other colours can be offered upon request.

### » Physical And Thermal Properties

**Maximum conductor operating temperature :** 90°C

**Temperature rating :** -45 to +90°C

**Minimum bending radius :** 258mm for fixed installation

### » Flame Retardant Property

IEC 60332-1

### » Electrical Properties

Conductor Resistance @20°C :  $\leq 0.183 \text{ Ohm/Km}$  (2 cores);

$\leq 0.38 \text{ Ohm/Km}$  (1 cores);

Insulation Resistance @20°C :  $\geq 1000 \text{ M Ohm} \times \text{Km}$  (XLPE insulation);

Rated Voltage : 600/1000V;

Testing Voltage : 2000V (routine test); 4000V (tape spark test);

Mutual Capacitance :  $120 \text{ nF/Km}$ ;

Inductance :  $0.11 \text{ mH/Km}$ ;

Max. Short Circuit Current (5 seconds) : 6.0kA;

Max. Current Carrying Capacity per phase : 329 Amps at 90°C

conductor temperature 30°C ambient temperature;

Voltage Drop :  $0.364 \text{ mV/Am phase/N}$





### 400Hz Airport Cables 7-core With Double Sheath & Control Wires

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction

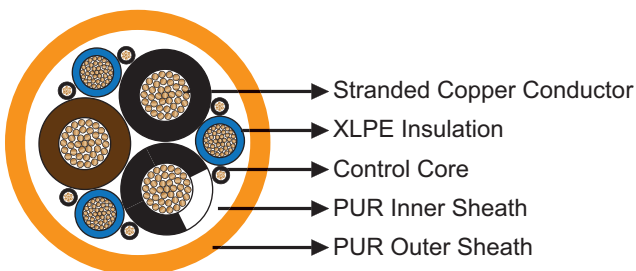
**Conductor:** Stranded copper conductor, Class 6 to VDE 0295/IEC 60228.

**Insulation:** XLPE.

**Control Core:** 1mm<sup>2</sup> stranded copper conductor with PVC insulation.

**Inner Sheath:** PUR

**Outer Sheath:** PUR.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (Um)	600/1000V
Operating Temperatures	-55°C~+80°C
Minimum Bending Radius	static: 4×OD; dynamic: 6×OD
Flame Retardant	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter of 50mm <sup>2</sup> Core	Nominal Diameter of 16mm <sup>2</sup> Core	Nominal Diameter of Control Core	Nominal Diameter Under Outer Sheath	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm		mm	mm	mm	kg/km
3×50+3×16+6×1	12.2	7.2	2.5	30.4	34.0	2200



## 400Hz Cables

### 400Hz Airport Cables 7-core With Shielded Control Wires

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

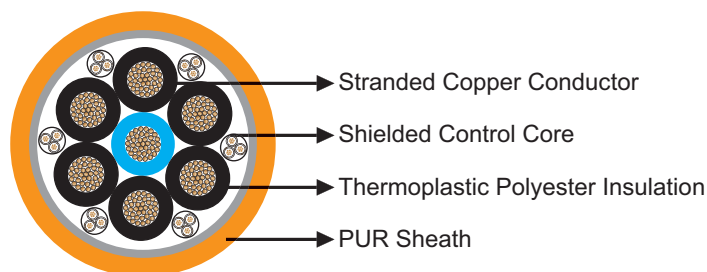
#### » Construction

**Conductor:** Stranded copper conductor, Class 6 to VDE 0295/IEC 60228.

**Insulation:** Thermoplastic polyester.

**Control Core:** 1mm<sup>2</sup> stranded copper conductor with polyolefin insulation & tinned copper braid.

**Outer Sheath:** PUR. TPE can be offered upon request.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 4×OD; dynamic: 6×OD
Halogen Free	Yes
No Corrosive & Toxic Gases	Yes
Flame Retardant	Yes
Abrasion Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter of Power Core	Nominal Diameter of Control Core	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	mm	kg/km
7×25+6×(3×1)C	9.6	2.1	37.5	2800
7×35+6×(3×1)C	11.1	2.1	40.3	3500
7×35+6×(4×1)C	11.1	2.1	44.5	4200



# Caledonian Airport Cables

## 400Hz Cables

### 400Hz Airport Cables 7-core With Concentric Copper Wire Shield & Control Wire

#### » Applications

These cables are designed for 400 Hz systems for power supply of aircraft, computer systems and radar stations, suitable for laying in earth, in water, outdoors, indoors and in cable ducts.

#### » Standards

VDE 0295

#### » Construction

**Conductor:** Stranded bare copper conductor, Class 6 to VDE 0295/IEC 60228.

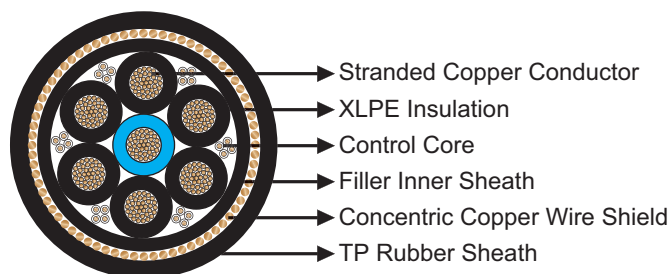
**Insulation:** XLPE.

**Control Core:** 1mm<sup>2</sup> stranded copper conductor with PVC insulation.

**Inner Sheath:** Filler.

**Shield:** Concentric copper conductor (25mm<sup>2</sup>).

**Outer Sheath:** TP rubber.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-55°C~+85°C
Minimum Bending Radius	static: 8×OD; dynamic: 12×OD
Flame Retardant	Yes

#### » Dimensions and Weight

Construction	Nominal Diameter of Power Core	Nominal Diameter of Control Core	Nominal Diameter Under Shield	Nominal Overall Diameter	Nominal Weight
No. ×mm <sup>2</sup>	mm	mm	mm	mm	kg/km
7×35+6×(4×1)	10.5	2.1	40.8	42.8	3000



## 400Hz Cables

### 400Hz Single Core Grounding Cable

#### » Applications

These cables are designed to be used for grounding the aircraft in hangars or on passenger bridges, connecting aircraft and mobile refueling systems and provide an equipotential bonding.

#### » Standards

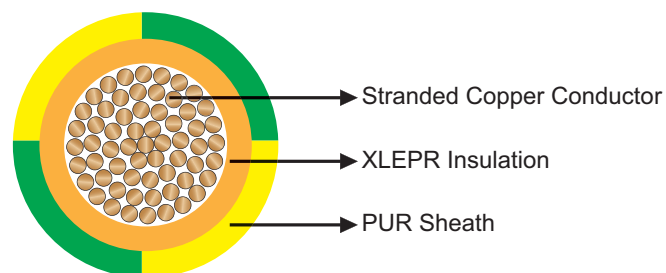
VDE 0295

#### » Construction

**Conductor:** Stranded copper conductor, Class 5 to VDE 0295/IEC 60228.

**Insulation:** XLEPR.

**Outer Sheath:** PUR.



#### » Technical Data

Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	600/1000V
Operating Temperatures	-40°C~+90°C
Minimum Bending Radius	static: 6×OD; dynamic: 9×OD
Halogen Free	Yes
No Corrosive & Toxic Gases	Yes
Abrasion Resistant	Yes
Weather Resistant	Yes
Oil Resistant	Yes

#### » Dimensions and Weight

Construction No. ×mm <sup>2</sup>	Nominal Overall Diameter mm	Nominal Weight kg/km
1×16	10.7	216



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