

Wires & Cables for Aerospace Applications



Draka Fileca S.A.S. is part of the Prysmian Group, the world leader in the cable systems industry, listed on the Milan Stock Exchange. With a global presence and a long-term industrial experience, the Group is strongly positioned in high-tech markets and offers the widest possible range of products, services, technologies and know-how.

Guided by a spirit of conquest and innovation, Draka Fileca supports major aeronautic and space enterprises worldwide with their most ambitious projects. For over 50 years, the company is continuously developing and manufacturing wiring solutions through technological excellence.

Draka Fileca offers a wide portfolio of products and the core competencies of its highly skilled and experienced specialists focus on improving all aspects of the cable performance, such as high temperature resistance, reducing weight and enhancing the communication data rates.

To ensure the highest quality levels, the whole organization is certified under ISO 9001, EN 9100, ISO 14001 as well as OHSAS 18001.

Draka Fileca is proud member of the following organizations :



For more information please visit:
<http://aerospace.prysmiangroup.com>



DID YOU KNOW ?

Draka Fileca’s “Wires and Cables for Space Applications” catalog, dedicated to ESA-certified products, is now available as well.



Directly download the brochure at :

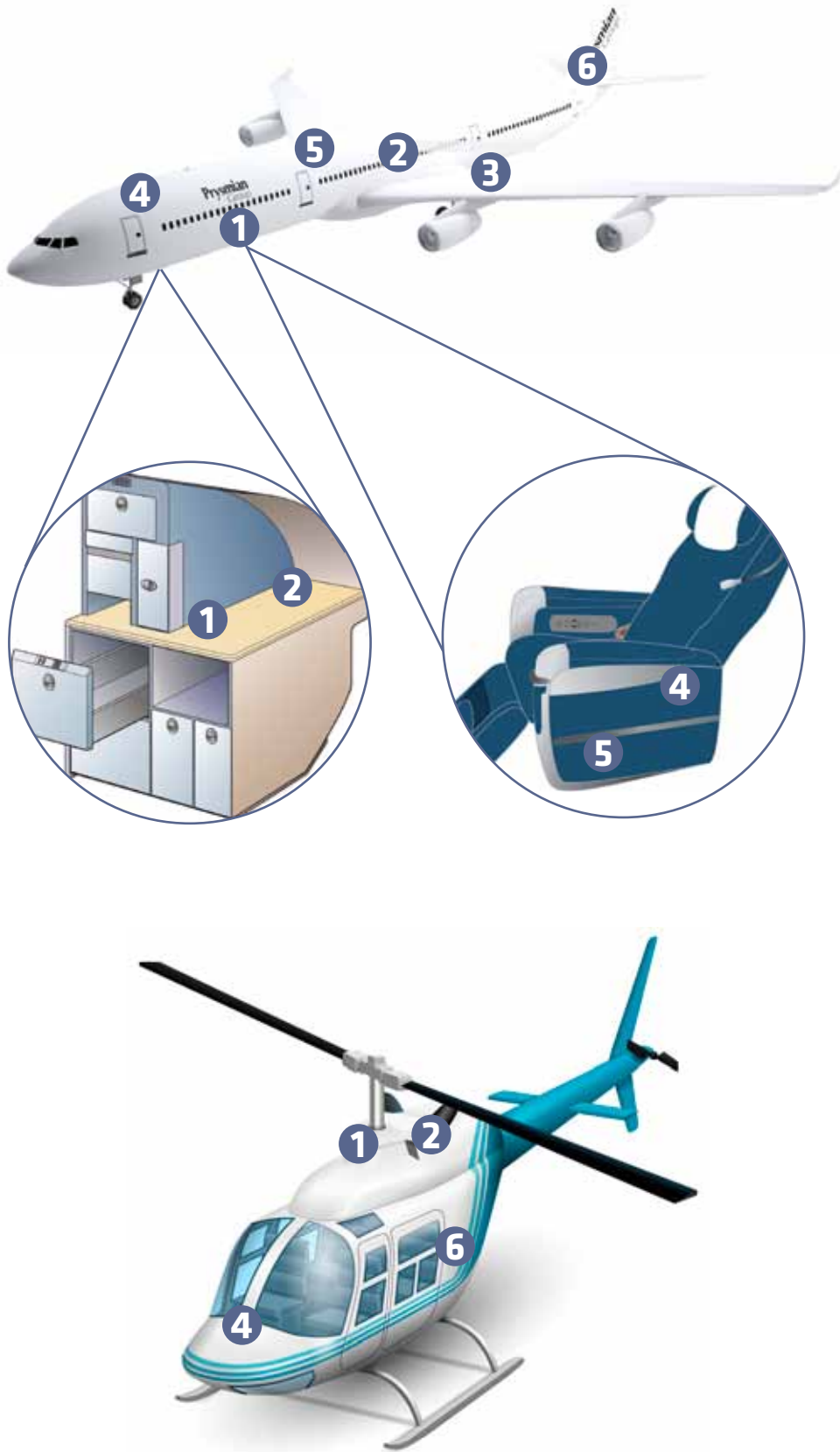


Icons in this Catalog:

- | | | |
|--------------------------------|--------------------|--------------|
| Copper Conductor | Aluminum Conductor | Light Weight |
| Copper-Clad Aluminum Conductor | High Temperature | High Voltage |

DRAKA FILECA PRODUCTS – EXCELLENCE IN A VARIETY OF APPLICATIONS

Civil Airplanes & Helicopters



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AIRFRAME HOOK-UP WIRES

Application examples :

- Lights
- Actuators
- Flight-Test

Cable families :

DR, CF, DM, AD, M22759, M27500, BG, VF...

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FEEDER CABLES

Application examples :

- Electrical power generation (High Power Systems)

Cable families :

A1715 (DASSAULT), NSA 935131 DG, EN 2854-003 DG, DH, AD

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HIGH-VOLTAGE CABLES

Application examples :

- Power Generation

Cable families :

AZ, DZ

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DATA-TRANSMISSION CABLES

Application examples :

- Inflight-Entertainment Systems
- Avionics

Cable families :

COAX, TWINAX, QUAD, ETHERNET, USB 2.0, HDMI

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OPTICAL FIBER

Application examples :

- Inflight-Entertainment
- Avionics
- Health-Monitoring

Cable families :

MMF (semi-loose/tight)

SMF (semi-loose/tight)

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VARIOUS DESIGNS

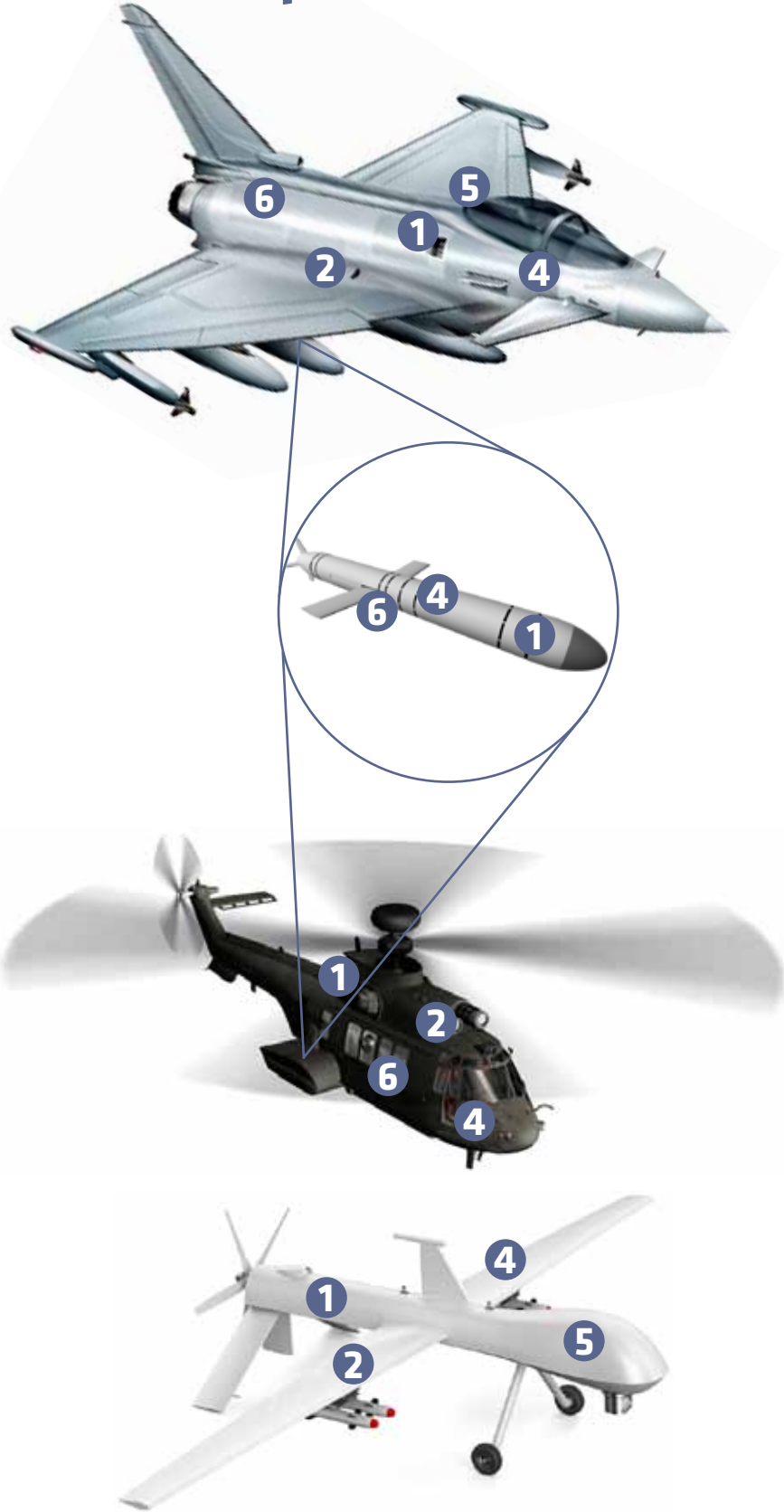
Application examples :

- Equipment Interconnect
- Temperature Sensoring

Cable families :

BF, BN, NEMA HP3, Thermocouples...

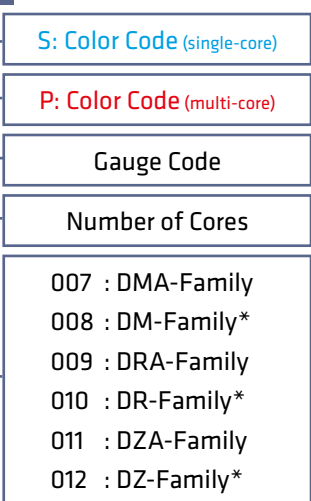
Defense Airplanes, Helicopters and UAVs



EN COLOR CODES, GAUGES, MARKING

UNSHIELDED

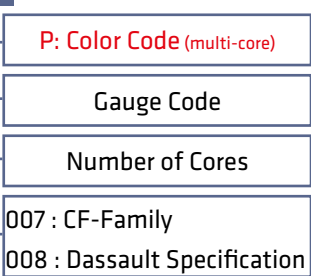
EN2267-XXX Y zzz Z



* Suitable for UV-Laser Marking

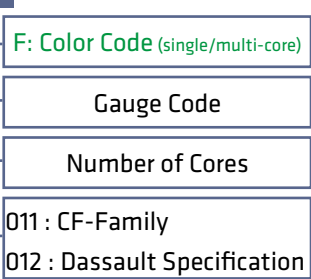
UNSHIELDED & JACKETED

EN2266-XXX Y zzz Z

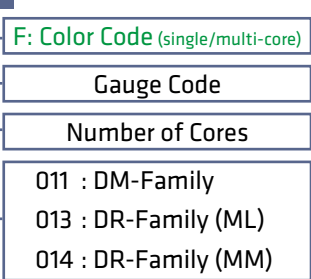


SHIELDED & JACKETED

EN2713-XXX Y zzz Z



EN2714-XXX Y zzz Z



COLOR CODE S

- single-core -

Gauge Code	Gauge (AWG)	Color
001	26	● (Light Yellow)
002	24	○ (White)
004	22	● (Light Green)
006 to 340	20 to 2	○ (White)

COLOR CODE P & COLOR CODE F

- multi-core - - single/multi-core -

Code Y	No. of Cores in Cables	Colors	Color Code P (Unshielded)	Color Code F (Shielded)
A	1	○*		X
B	2	● ●	X	X
C	3	● ● ●	X	X
D	4	● ● ● ●	X	X
E	5	● ● ● ● ○	X	X
F	6	● ● ● ● ○ ●	X	X
G	7	● ● ● ● ○ ● ●	X	X
H	8	● ● ● ● ○ ● ● ●	X	X
I	9	● ● ● ● ○ ● ● ● ●	X	X
J	10	● ● ● ● ○ ● ● ● ● ●	X	X

* Light Green for Gauge Code 004 (AWG 22) and Light Yellow for Gauge Code 001 (AWG 26)
Jacket Color (if present): Gauge Codes 002/006/012 (AWG 24/20/16): Light Blue. All other Gauges: White.
Colors (I, from left to right): Red-Blue-Yellow-Green-White-Black-Brown-Orange-Purple-Grey

GAUGE SIZES

Gauge Code	AWG	Nominal Cross Section (mm²)	Gauge Code	AWG	Nominal Cross Section (mm²)
001	26	0,15	090	8	9
002	24	0,25	140	6	14
004	22	0,4	220	4	22
006	20	0,6	340	2	34
010	18	1	420	1	42
012	16	1,2	530	0	53
020	14	2	680	00	67
030	12	3	850	000	85
051	10	5	1070	0000	107

INTERNATIONAL COLOR CODES & EN NORMS

■ Natural	■ Red: 2 or A	■ Green: 5 or D	■ Grey: 8 or K
■ Black: 0 or F	■ Orange: 3 or H	■ Blue: 6 or B	■ White: 9 or E
■ Brown: 1 or G	■ Yellow: 4 or C	■ Purple: 7 or J	

EN-STANDARD CABLES : DR-SERIES

DR-SERIES

Characteristics: Arc-Tracking Resistant
Temperature Range: -65°C to +260°C
Network: 115 V AC
Conductor: Nickel Plated Copper (AWG 22 to 02)
High-Strength Nickel Plated Copper Alloy (AWG 26 & 24)
Insulation: Polyimide and PTFE Tapes
Jacket: Polyimide and PTFE Tapes
Shield: Nickel Plated Copper



Cable Family	Standard	AWG		Number of Cores	Shielded		Jacketed	UV-Laser Marking
		Min.	Max.		Spiral	Braid		
SINGLE CORE								
DR	EN2267-010A	26	02	1				●
DRA	EN2267-009A	26	02	1				
MULTI CORE								
DRB	EN2267-009B	26	02	2 x DRA				
DRC	EN2267-009C	26	02	3 x DRA				
DRD	EN2267-009D	26	08	4 x DRA				
SHIELDED & JACKETED								
MLA	EN2714-013A	26	10	1 x DRA	●		●	●
MLB	EN2714-013B	26	10	2 x DRA	●		●	●
MLC	EN2714-013C	26	10	3 x DRA	●		●	●
MLD	EN2714-013D	26	10	4 x DRA	●		●	●
MME	EN2714-014E	26	10	5 x DRA		●	●	●
MMX	EN2714-014X	26	10	6-10 x DRA*		●	●	●

* Available upon Request.

DR-SERIES: DASSAULT SPECIFICATIONS

Characteristics: According to Dassault Specifications
Temperature Range: -55°C to +200°C
Network: 115 V AC
Conductor: Nickel Plated Copper (AWG 22 to 02)
High-Strength Nickel Plated Copper Alloy (AWG 26 & 24)
Insulation: Polyimide and PTFE Tapes
Jacket: Polyimide and Fluoropolymer Topcoat
Shield: Silver Plated Copper



Cable Family	Standard	AWG		Number of Cores	Shielded		Jacketed	UV-Laser Marking
		Min.	Max.		Spiral	Braid		
MULTI CORE								
DRP	EN2266-008B	26	14	2 x DRA			●	●
DRT	EN2266-008C	26	12	3 x DRA			●	●
DRQ	EN2266-008D	26	14	4 x DRA			●	●
SHIELDED AND JACKETED								
MNA	EN2713-012A	26	10	1 x DRA	●		●	●
MNB	EN2713-012B	26	14	2 x DRA	●		●	●
MNC	EN2713-012C	26	14	3 x DRA	●		●	●
MND	EN2713-012D	26	16	4 x DRA	●		●	●

For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

EN-STANDARD CABLES: RETRO-FIT

CF-SERIES

Characteristics: Low Temperature Airframe Wires, **RETRO-FIT**
Temperature Range: -55°C to +200°C
Network: 115 V AC
Conductor: Nickel Plated Copper (AWG 22 to 10)
High-Strength Nickel Plated Copper (AWG 26 & 24)
Insulation: Polyimide Tapes and FEP Topcoat
Jacket: Polyimide Tapes and FEP Topcoat
Shield: Nickel Plated Copper



Cable Family	Standards	AWG		Number of Cores	Shielded		Jacketed	UV-Laser Marking
		Min.	Max.		Spiral	Braid		
SINGLE CORE								
CF-U	ASNE0261 EN2266-005A	26	10	1				●
MULTI CORE								
PF	ASNE0264 EN2266-003B	26	10	2 x ASNE0261 or EN2266				
QF	ASNE0266 EN2266-003C	26	10	3 x ASNE0261 or EN2266				
RF	ASNE0268 EN2266-003D	26	10	4 x ASNE0261 or EN2266				
SHIELDED & JACKETED								
SJ-U	ASNE0270	26	14	1 x	●		●	●
	EN2713-007A	26	10	ASNE0261 or EN2266				
TK-U	ASNE0272	26	12	2 x	●		●	●
	EN2713-007B	26	10	ASNE0261 or EN2266				
UD-U	ASNE0274	26	14	3 x	●		●	●
	EN2713-007C	26	12	ASNE0261 or EN2266				
VL	-	-	-	4 x	●		●	●
	EN2713-007D	26	14	ASNE0261 or EN2266				

DM-SERIES

Characteristics: High Temperature, Arc-Tracking Resistant, **RETRO-FIT**
Temperature Range: -65°C to +260°C
Network: 115 V AC
Conductor: Nickel Plated Copper (AWG 22 to 06)
High-Strength Nickel Plated Copper Alloy (AWG 26 & 24)
Insulation: Polyimide and PTFE Tapes
Jacket: Polyimide and PTFE Tapes
Shield: Nickel Plated Copper



Cable Family	Standards	AWG		Number of Cores	Shielded		Jacketed	UV-Laser Marking
		Min.	Max.		Spiral	Braid		
SINGLE CORE								
DM	EN2267-008A	26	06	1				●
DMA	EN2267-007A	26	06	1				
MULTI CORE								
PN	EN2267-007B	26	06	2 x DMA				
QL	EN2267-007C	26	06	3 x DMA				
RK	EN2267-007D	26	06	4 x DMA				
SHIELDED & JACKETED								
GJ	EN2714-011A	26	10	1 x DMA	●		●	●
MH	EN2714-011B	26	10	2 x DMA	●		●	●
UU	EN2714-011C	26	10	3 x DMA	●		●	●
VV	EN2714-011D	26	14	4 x DMA	●		●	●
MJ	EN2714-012E	18	12	5 x DMA		●	●	●

For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

ULTRA-LIGHT AIRFRAME HOOK-UP WIRE

AD-SERIES

Characteristics: Arc-Tracking Resistant, Light Weight
Temperature Range: -55°C to +180°C
Network: 115 V AC
Conductor: Nickel Plated Copper-Clad Aluminum
Insulation: Polyimide and PTFE Tapes
Jacket: Polyimide and PTFE Tapes
Shield: Nickel Plated Copper

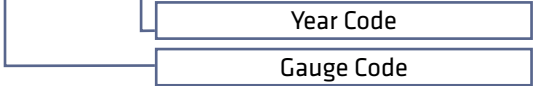


Cable Family	Standard compliant with	AWG		Number of Cores	Shielded		Jacketed	UV-Laser Marking
		Min.	Max.		Spiral	Braid		
SINGLE CORE								
AD	ABS0949	24	04	1				●
ADA	ABS1354	24	04	1				
MULTI CORE								
ADB	ABS1354	24	04	2 x ADA				
ADC	ABS1354	24	04	3 x ADA				
ADD	ABS1354	24	04	4 x ADA				
SHIELDED & JACKETED								
VNA	ABS1356	24	10	1 x ADA	●		●	●
VNB	ABS1356	24	10	2 x ADA	●		●	●
VNC	ABS1356	24	10	3 x ADA	●		●	●
VND	ABS1356	24	14	4 x ADA	●		●	●

COLOR CODES, GAUGES, MARKING

UNSHIELDED SINGLE CORE

AD zz FR A yy



COLOR CODE

Color of insulation (No. of cores = 1)	Color of Marking	
● (Grey)	All Gauges except AWG 22	Blue
	AWG 22	Green

UNSHIELDED SINGLE CORE

ADA zz FR A yy



SHIELDED & JACKETED SINGLE CORE

VNA zz FR A yy

MULTI-CORE











ADB zz FR A yy
ADC zz FR A yy
ADD zz FR A yy



MULTI-CORE

VNB zz FR A yy
VNC zz FR A yy
VND zz FR A yy

COLOR CODE CORES

Color of insulation				Color of Marking
No. of Cores in Cables				
1	2	3	4	
	 	  	   	Black

Colors (from left to right) : 1 Grey, 2 Red-Blue, 3 Red-Blue-Yellow, 4 Red-Blue-Yellow-Green

COLOR CODE JACKET

Color of jacket	Gauge (AWG)	Color of Marking
Grey	24-20-16-12	Blue
	22-18-14-10	Green

For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

M22759 SERIES

AS 22759 WIRES

Characteristics:

High-Performance Hook-Up Wires
M22759/180-/192: **SMOOTH OUTER SURFACE**

Voltage Rating:

600 V (rms)*

Core:

T : Tin Coated Copper

S : Silver Coated Copper

S+ : Silver Coated High-Strength (20-24 AWG) or Ultra-High-Strength (26 AWG) Copper Alloy

N : Nickel Coated Copper

N+ : Nickel Coated High-Strength (20-24 AWG) or Ultra-High-Strength (26 AWG) Copper Alloy

Insulation:

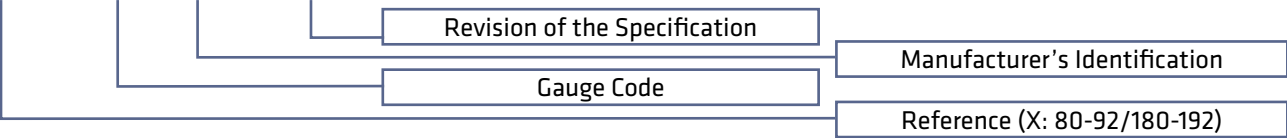
Special Polyimide and PTFE Tapes

Braid:

Meta-Aramid Fiber



M22759/X-Y F 1868 REV Z



Standard	AWG		Temperature (°C)		Core					Braid	Weight	
	Min.	Max.	Min.	Max.	T	S	S+	N	N+		Light	Normal
M22759/80 - /92												
AS22759/80	26	10	-65	150	●						●	
AS22759/81	26	20	-65	200			●				●	
AS22759/82	26	20	-65	260					●		●	
AS22759/83	8	0000	-65	200		●				●		●
AS22759/84	8	0000	-65	260				●		●		●
AS22759/85	8	0000	-65	150	●					●		●
AS22759/86	26	0000	-65	200		●						●
AS22759/87	26	0000	-65	260				●				●
AS22759/88	26	0000	-65	150	●							●
AS22759/89	26	20	-65	200			●					●
AS22759/90	26	20	-65	260					●			●
AS22759/91	26	10	-65	200		●					●	
AS22759/92	26	10	-65	260				●			●	
M22759/180 - /192												
AS22759/180	26	10	-65	150	●						●	
AS22759/181	26	20	-65	200			●				●	
AS22759/182	26	20	-65	260					●		●	
AS22759/183	8	0000	-65	200		●				●		●
AS22759/184	8	0000	-65	260				●		●		●
AS22759/185	8	0000	-65	150	●					●		●
AS22759/186	26	0000	-65	200		●						●
AS22759/187	26	0000	-65	260				●				●
AS22759/188	26	0000	-65	150	●							●
AS22759/189	26	20	-65	200			●					●
AS22759/190	26	20	-65	260					●			●
AS22759/191	26	10	-65	200		●					●	
AS22759/192	26	10	-65	260				●			●	

* This insulation system has been used in aerospace applications that employ 115 V (phase to neutral), 400 Hz AC and 28 V DC. Verification of the suitability of this product for use in other electrical system configurations is the responsibility of the user.

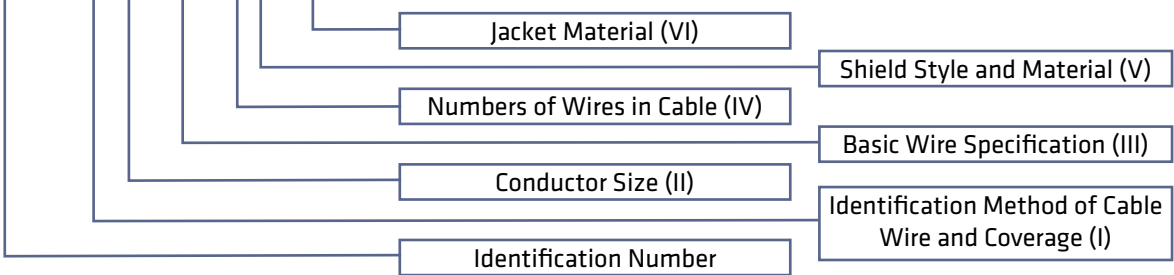
For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

M27500 SERIES

NEMA WC 27500 CABLES

Special purpose and power electrical cables designed for aerospace, commercial, and military applications and high-performance vehicles.

M27500 - 22 WK 2 N 24



Characteristics						
Operating Temperature: -65°C to +150°C/+200°C/+260°C* (ambient temperature + current heating)						
Standards and Specifications						
Cable Specification:		NEMA WC 27500				
Wires Specification:		AS22759/80 to /92 and AS22759/180 to /192				
Combination Possibilities**						
ID Number	I	II	III	IV	V	VI
M27500	-	26	DB	1	NF (prev.: *)	00
	A	24	DC	2	ND (prev.: #)	06
	B	22	DE	3	HS (prev.: \$)	11
	C	20	DF	4	HD (prev.: +)	12
	D	18	DG	5	A	24
	E	16	DH	6	B	25
	F	14	DJ	7	C	56
	G	12	DK	8	D	61
	H	10	DL	9	E	62
	J	8	DM	10	F	74
	K	6	DN	11	G	75
	L	4	DP	12	H	
	M	2	DR	13	I	
	N	1	WB	14	J	
	P	01	WC	15	K	
	R	02	WE		L	
	S	03	WF		M	
	T	04	WG		N	
	U		WH		P	
	V		WJ		Q	
			WK		R	
			WL		S	
			WM		T	
			WN		U	
			WP		V	
			WR		W	
					X	
					Y	
					Z	

*Depending on the type of basic wires, shield or jacket requested.

** For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

FLIGHT-TEST CABLES

BG/SU/TV/VF/HK-CABLES

Characteristics:	Flight-Test Cables THERMOCOUPLE CABLE (HK): Temperature sensing, applicable in harsh environments
Temperature Range:	-55°C to +260°C
Operating Voltage:	250 V
Conductor:	Nickel Plated Copper, Solderable (BG, SU, TV, VF) Nickel-Chromium/Nickel-Aluminum (HK)
Insulation:	PTFE Tape
Shield:	Nickel Plated Copper
Jacket:	Polyimide Tape and PTFE Tape
Jacket Color:	Orange



Cable Family	Standard	AWG	Number of Cores	Additional PTFE Tape around Cores	Shielded		Jacketed	UV-Laser Marking
					Spiral	Braid		
BG	ASNE0409	24	1					●
SU	ASNE0410	24	1 x BG		●		●	●
TV	ASNE0411	24	2 x BG	●	●		●	●
VF	ASNE0412	24	4 x BG	●	●		●	●
THERMOCOUPLE CABLE								
HK	ASNE0413	24	1			●	●	



Photo: Vincent Kauffmann

POWER FEEDER CABLES

A1715-, DG - CABLES

Characteristics:	Auto-Extinguishing Properties, Non-Flammable
Network:	115 V AC
Temperature Range:	-90°C to +260°C (A1715) -55°C to +260°C (EN 2854-003 DG)
Conductor:	Nickel Plated Copper
Insulation:	Composite Polyimide, Fiber Glass, PTFE
Shield:	Nickel Plated Copper



Cable Family	Standard	AWG		Number of Cores	UV-Laser Marking
		Min.	Max.		
A1715	Dassault Spec.	24	0000	1	●
NSA 935131 DG	NSA 935131 DG	10	0000	1	
EN 2854-003 DG	EN 2854-003	08	0000	1	

DH - SERIES

Characteristics:	LOW-BENDING RADIUS
Network:	115 V AC
Temperature Range:	-65°C to +260°C
Conductor:	Nickel Plated Copper
Insulation:	Composite PTFE
Color:	Light Yellow
Shield:	Nickel Plated Copper



Cable Family	Standard	AWG	Number of Cores	UV-Laser Marking
DH	ECS0844	02 – 0 – 00	1	

AD - SERIES

Characteristics:	Arc-Tracking Resistant, LIGHT-WEIGHT
Network:	115 V AC
Temperature Range:	-55°C to +180°C
Conductor:	Nickel Plated Aluminum (NPA), Unplated Aluminum*
Insulation:	Composite Polyimide, PTFE
Color of PTFE:	Grey
Shield:	Nickel Plated Copper



Cable Family	Standard	AWG		Number of Cores	UV-Laser Marking
		Min.	Max.		
AD	ABS0949	03	000	1	●
ADB	ABS1354	03	000	2 x ADA	
ADC	ABS1354	03	000	3 x ADA	
ADD	ABS1354	03	01	4 x ADA	

* Modification pending

OUR COMMITMENT

Refer to the following Link for the Prysmian Group Sustainability Report:



SUSTAINABILITY

We develop important initiatives in collaboration with stakeholders, in order to improve our **economic, environmental** and **social performance**.

QUALITY

The quality of our optical fibers and innovative cabling solutions enables us to tackle your **most difficult** and **ambitious challenges**.

INNOVATION

We seek to generate innovation, quality and know-how, with a view on developing innovative products with a **lower environmental impact** and **higher value-added** for our customers.

SUPPLY CHAIN MANAGEMENT

In order to assess the environmental and social impact of our activities, Prysmian has taken steps towards the **sustainable management** of the **entire supply chain**.

HIGH-VOLTAGE CABLES (230V)

AZ-SERIES

Characteristics:
Temperature Range:
Network:
Conductor:
Insulation:

Suitable for **HIGH-VOLTAGE NETWORKS** (230V)
LIGHT WEIGHT
-65°C to +180°C
230 V AC
Nickel Plated Aluminum, Unplated Aluminium*
Polyimide and PTFE Tapes

Cable Family	Standard	AWG	Number of Cores	Shielded		Jacketed	UV-Laser Marking
				Spiral	Braid		
SINGLE CORE							
AZ	EN4681-005	00, 1, 3	1				●
AZA	EN4681-006	00, 1, 3	1				
MULTI-CORE							
AZB	EN4681-006	00, 1, 3	2 x AZA				
AZC	EN4681-006	00, 1, 3	3 x AZA				

* Modification pending

DZ-SERIES

Characteristics:
Temperature Range:
Network:
Conductor:
Insulation:

Suitable for **HIGH-VOLTAGE NETWORKS** (230V)
-65°C to + 260°C
230 V AC
Nickel Plated Copper
Polyimide and PTFE Tapes

Cable Family	Standard	AWG	Number of Cores	Shielded		Jacketed	UV-Laser Marking
				Spiral	Braid		
SINGLE CORE							
DZ	EN2267-012	10, 12, 16	1				●
MULTI-CORE							
DZB	EN2267-011	10, 12, 16	2 x DZ				
DZC	EN2267-011	10, 12, 16	3 x DZ				



For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

DATA TRANSMISSION CABLES

COAXIAL CABLES

Characteristics: Non-flammable
Temperature Range: -100°C to +200°C
Conductor: SC: Silver Plated Copper
SCCS: Silver Copper-Clad Steel
Insulation: Polyimide and PTFE Tapes
Shield: Silver Plated Copper Braid



Cable Family/ Reference	Standard	Ø max. (mm)	Z (Ω)	Temperature Range (°C)		Conductor Material		Shield (No. of Braids)	Jacket
				Min.	Max.	SC	SCCS		
XF	ASNE0293 M17/128 00001 RG400U	5.10	50	-55	200	●		2	FEP
SW	ASNE0291	1.95	n/a	-90	200	●		1	Polyimide/ FEP
F1703-93	Dassault Spec.	4.30	50	-55	200	●		2 + Tape	FEP
F1703-94	Dassault Spec.	8.25	50	-55	200	●		2	FEP
F1709-72U-AG	Dassault Spec.	3.30	50	-65	150	●		2 + Tape	FEP
XK	NSA935348 M17/110 RG302AB	5.20	75	-55	200		●	1	FEP

TWINAX-BUS CABLES

Characteristics: Suitable for harsh environments
Temperature Range: -65°C to +200°C
Conductor: Silver-plated Copper Alloy
Insulation: PTFE
Shield: SC: Silver-plated Copper Braid
NC: Nickel-plated Copper Braid



Cable Family/ Reference	Standard	Ø max. (mm)	AWG	Z (Ω)	Temperature Range (°C)		Max. Weight (kg/km)	Shield Material (No. of Braids)		Jacket Material	Jacket Color	High Immunity
					Min.	Max.		SC	NC			
F2703-48U A	Dassault Spec.	3.90	24	77	-65	200	37	2		FEP	Red	
F2703-48U B	Dassault Spec.	3.90	24	77	-65	200	37	2		FEP	Blue	
WJC	EN3375-004C	3.90	24	77	-65	200	37	2		Fluoropolymer	Green	
WW F2703-72	EN3375-007	3.00	26	77	-65	200	21	2		Fluoropolymer	White	
F2709-12		5.35	20	75	-55	200	78	2 + Tapes		Polyimide/ PTFE	White	●
F2709-9		4.80	22	75	-55	200	53	2 + Tapes		Polyimide/ PTFE	White	●
F2709-13		4.10	24	75	-65	200	43	2 + Tapes		Polyimide/ PTFE	White	●
F2709-35		2.60	30	75	-65	200	16.5	2 + Tapes		Fluoropolymer	Red	●
WF F2703-37	ABS0386	3.50	24	100	-55	200	23.4		1	Polyimide	Natural (Amber)	
XM F2703-30	ASNE0290XM	3.10	24	78	-55	200	15		1	Polyimide	Natural (Amber)	

For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

DATA TRANSMISSION CABLES

QUAD CABLES

Characteristics: INFLIGHT-APPLICATIONS
Operating Temperature: -55°C to +125°C, except AS6070/1: -55°C to 200°C
Conductor: SCA: Silver Plated Copper Alloy
SPC: Silver Plated Copper
Insulation: Fluoropolymer or PTFE Foam Skin or Foam-extruded Fluoropolymer
Shield: Silver Plated Copper Braid



Cable Family/ Reference	Standard	Ø max. (mm)	AWG	Z (Ω)	Conductor		Shield Material (No. of Braids)	Jacket	High Immunity	UV Laser Marking
					SCA	SPC				
KB F 4704-4	ABS0972 ARINC 664	5	24	100		●	1	FEP		●
KD F 4704-5	ABS1503 ARINC 664	5	24	100		●	1	FEP		●
F 4704-6		4.05	26	100		●	1	FEP		●
F 4704-8		6.30	24	150		●	1	FEP		●
F 4704-9		5	26	150	●		1	FEP		●
F 4709-6		5.55	24	100		●	1 + High Perme- ability Screen	Fluoropolymer	●	●
KL F 4704-19 <small>[Replaces KL F4704-13]</small>	EN3375-011	4.50	24	100		●	Inner: AL/Mylar Outer: Round	FEP		●
F 4704-16	AS6070/1	4.32	24	100	●		Inner: Flat Outer: Round	FEP		●*

* Available in UV-Laser markable [4th digit jacket detail: U] and non-UV-Laser markable [no 4th digit on jacket] versions.

ETHERNET - USB - HDMI

Characteristics: VERY HIGH DATA-RATE CABLES
Operating Temperature: Max. 125°C
Conductor: SPC: Silver Plated Copper
NPC: Nickel Plated Copper
Insulation: Fluoropolymer
Shield: 1 Silver Plated Copper Braid and Tape
Jacket: Fluoropolymer



Cable Family/ Reference	Category	Ø max. (mm)	AWG	Z (Ω)	Max. Weight (kg/km)	Conductor		Wire Construction	Transmission Pairs	
						SPC	NPC		Shielded	Unshielded
ETHERNET										
F 4709-8	5e	5.50	26	100	51	●		Data Patch		●
F 4709-11	5e	7.20	24	100	80	●		Data Patch		●
F 4709-5	7	8.70	24	100	100	●		Data Patch	●	
F 4709-13	7	7.80	26	100	90	●		Data Patch	●	
USB 2.0										
F 4709-17	USB2 compatible	4.10	24	90	33	●	●	with DR Wires		●
HDMI										
F 6774-3	HDMI	12.00	24	100	175	●		Data Patch	●	

For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

OPTICAL FIBER CABLES

High-speed fiber networks are increasingly required in numerous aerospace applications, such as Avionics and Inflight-Entertainment, to transmit high volumes of data while gaining weight-savings.

Responding to that demand, the Prysmian Group is producing its own optical fibers to ensure the best performance levels in these harsh and demanding environments:

- Interference-free solutions.
- Space-savings due to smaller size and bending radius.
- Easy plugging and installation.

THE PORTFOLIO OF FIBERS WITHIN THE PRYSMIAN GROUP CURRENTLY COMPRISES:

MULTI-MODE FIBERS

- ➔ OM-1
- ➔ OM-2
- ➔ OM-3
- ➔ OM-4 (WideCap and MaxCap-BB)

SINGLE-MODE FIBERS

- ➔ G.652 Series
- ➔ G.654 Series
- ➔ G.655-G.656 Series
- ➔ G.657 Series

SPECIALTY FIBERS DrakaElite

- ➔ BendBright
- ➔ High-Temperature Resistant (Acrylate, Silicone)
- ➔ RadHard (MIL-PRF-49291)

For further information visit:



SINGLE & MULTI-MODE FIBER CABLES

Characteristics: Suitable for use in harsh environments, up to 10Gbits/s, Tight and semi-loose cables, **EASY TERMINATION**

Temperature Range: -65°C to +150°C

Jacket: Fluoropolymer

Color: Light Purple



Cable Family/ Reference	Short Designation	Ø nom. (mm)	Max. Weight (kg/km)	Temperature Range (°C)		Utilized Fiber*	Tight/ Semi loose	Flexibility (D= Outer Diameter)	Max. Attenuation (dB/km 20°C)		Data rate** (GBps)
				Min.	Max.				850nm	1300nm	
MULTI-MODE											
F1913-1		2.50	10	-65	+125	200µm	T		3		
F1913-12	LG	1.80	4	-65	+135	OM3 Bend Insensitive	T	5 x D	4	2	10
F1913-14	LF	1.80	4	-55	+135	OM1	T	5 x D	4	2	1
F1913-16		1.85	4.95	-55	+150	OM4 Bend Insensitive	S	10 x D	3.5	1	10
F1913-17		1.85	4.95	-55	+150	OM1	S	10 x D	3.5	1	1
F1919-2		2.78	12.2	-55	+150	OM1	S	10 x D	6	3	1
F1919-3		2.78	12.2	-55	+150	OM4 Bend Insensitive	S	10 x D	6	3	10
SINGLE-MODE											
F1913-15		1.80	4	-65	+135	Bend Insensitive	T	5 x D	1310nm 0.5	1550 nm 0.4	10

* Adaptation to other cores upon request. ** Depending on the length of the link the data rate can also be higher.

For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

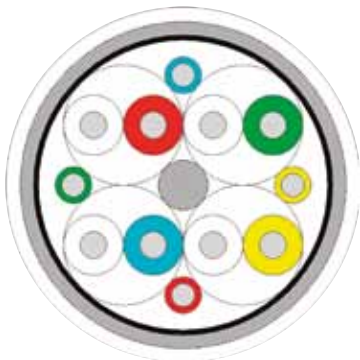
VARIOUS DESIGNS

COMPLEX DESIGNS

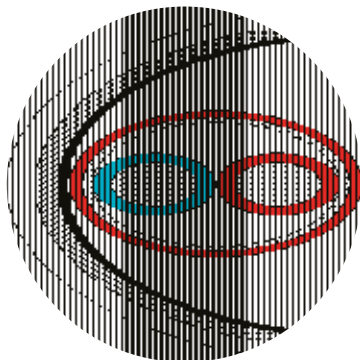
Characteristics:	Combining Multiple Elements
Temperature Range:	-65°C to +200°C
Network:	Dedicated Networks
Conductor:	Silver Plated Copper (Gigabit Ethernet), Nickel Plated Copper (DR)
Insulation:	Fluoropolymer/PTFE
Jacket:	Fluoropolymer
Shield:	Silver Plated Copper Braid (SPC), Nickel Plated Copper Braid (NPC)



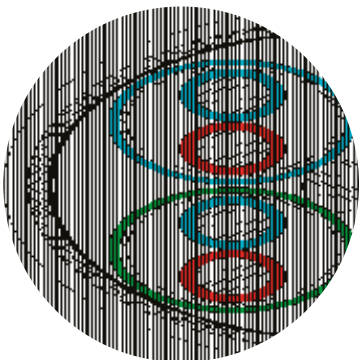
Cable Family	Standard	Ø max. (mm)	AWG	Temperature Range (°C)		Max. Mass (kg/km)	Conductor	Shield
				Min.	Max.			
F8704-16		8.70	24	-55	+125	127	Gigabit Ethernet S-STP Cat. 7+ DR	SPC + Tape
MQB F 2744-7	ECS0828	5.90	24	-65	+200	46	2 x MLB	NPC
MQD F 4744-8	ECS0829	6.80	24	-65	+200	77	4 x MLB	NPC



F8704-16



MQB F 2744-7



MQD F 4744-8

THERMOCOUPLES

Characteristics:	Temperature Sensoring and Measurements
Temperature Range:	-95°C to +260°C
Conductor:	Nickel-Chrome (NiCr), Nickel-Aluminum (NiAl), Nickel Plated Copper (NPC), Copper (Cu), Constantan (Ctt; Copper-Nickel Alloy)
Insulation:	Polyimide and PTFE Tapes
Shield:	Nickel Plated Copper (NPC), Copper-Tin Alloy (SnCu)



Cable Family	Standard	Ø max. (mm)	AWG	Temperature Range (°C)		Nom. Mass (kg/km)	Cores	EMF* (mV at 100°C)	Jacket	Shield
				Min.	Max.					
F2793-33	ASNE (Elements recognition)	4.24	22	-55	+260	26.30	NiCr/NiAl	4.10	●	NPC
F2793-22	NSA (Elements recognition)	4.25	22	-55	+260	26.30	NiCr/NiAl	4.10	●	NPC
F2794-14		3.60	24	-95	+200	26.00	NiCr/NiAl	4.10	●	SnCu or NPC
F2794-32		4.00	22	-95	+260	26.50	NiCr/NPC	6.32	●	NPC
F2790-12		0.82	30	-55	+260	04.00	Cu/Ctt	4.27		

* EMF: Electromotive Force

For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

VARIOUS DESIGNS

OTHER DESIGNS

Characteristics:	Diverse Applications
Temperature Range:	-90°C to +200°C
Network:	Refer to Table
Insulation:	PTFE (BF & NEMA HP3 Wires), ETFE (BN)
Shield:	Silver Plated Copper Braid



Cable Family	Standard	AWG		Conductor	Temperature Range (°C)		Operating Voltage	Shield	UV-Laser Marking
		Min.	Max.		Min.	Max.			
High-Flexibility Airframe Wires									
BF	ASNE0260	24	18	Nickel + Silver Plated Copper	-55	200	600		
Equipment Interconnect Cables – 600 V									
BN	ASNE0719	24	16	Silver Plated Copper Alloy (AWG 24), Tin Plated Copper (AWG 16 to 22)	-90	150	600		●
NEMA HP3 Wires (former MIL W 16878)									
ET		32	20	Silver Plated Copper Optional: Nickel Plated Copper (up to 260°C)	-90	200	250		
E		32	12	Silver Plated Copper Optional: Nickel Plated Copper (up to 260°C)	-90	200	600		
EE		32	12	Silver Plated Copper Optional: Nickel Plated Copper (up to 260°C)	-90	200	1000		
ET		30	20	ET, E, or EE Series exists with 1, 2, or 3 conductors	-90	200	250	●	
E		30	20	ET, E, or EE Series exists with 1, 2, or 3 conductors	-90	200	600	●	
EE		30	20	ET, E, or EE Series exists with 1, 2, or 3 conductors	-90	200	1000	●	



Our expertise with and passion for cables does not end here. Contact us for our complete portfolio or discuss customization possibilities with our experienced team.

For detailed technical information refer to the product data sheet. Also accessible online with the QR-Code.

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