

## 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 :



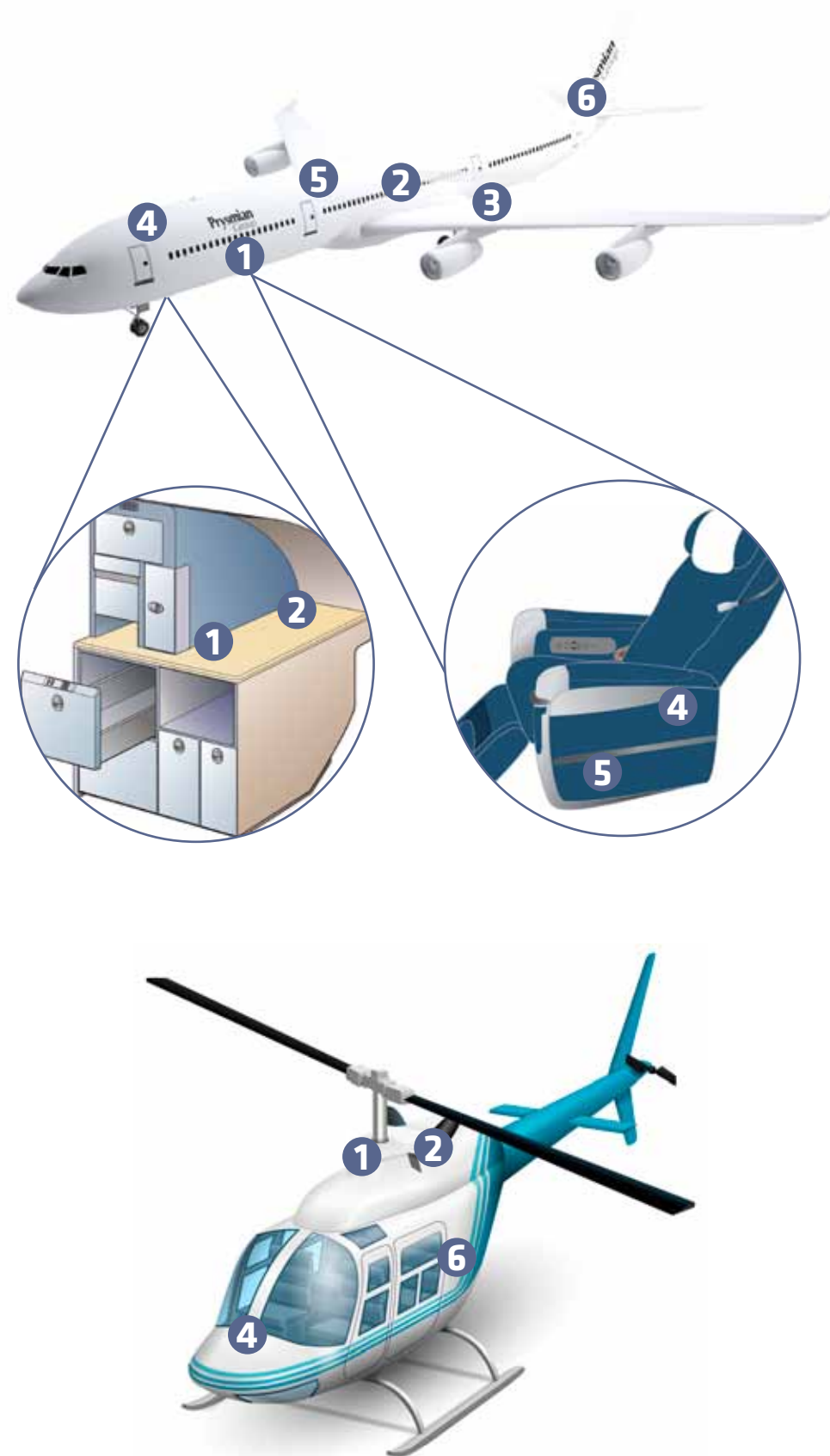
#### Icons in this Catalog:

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



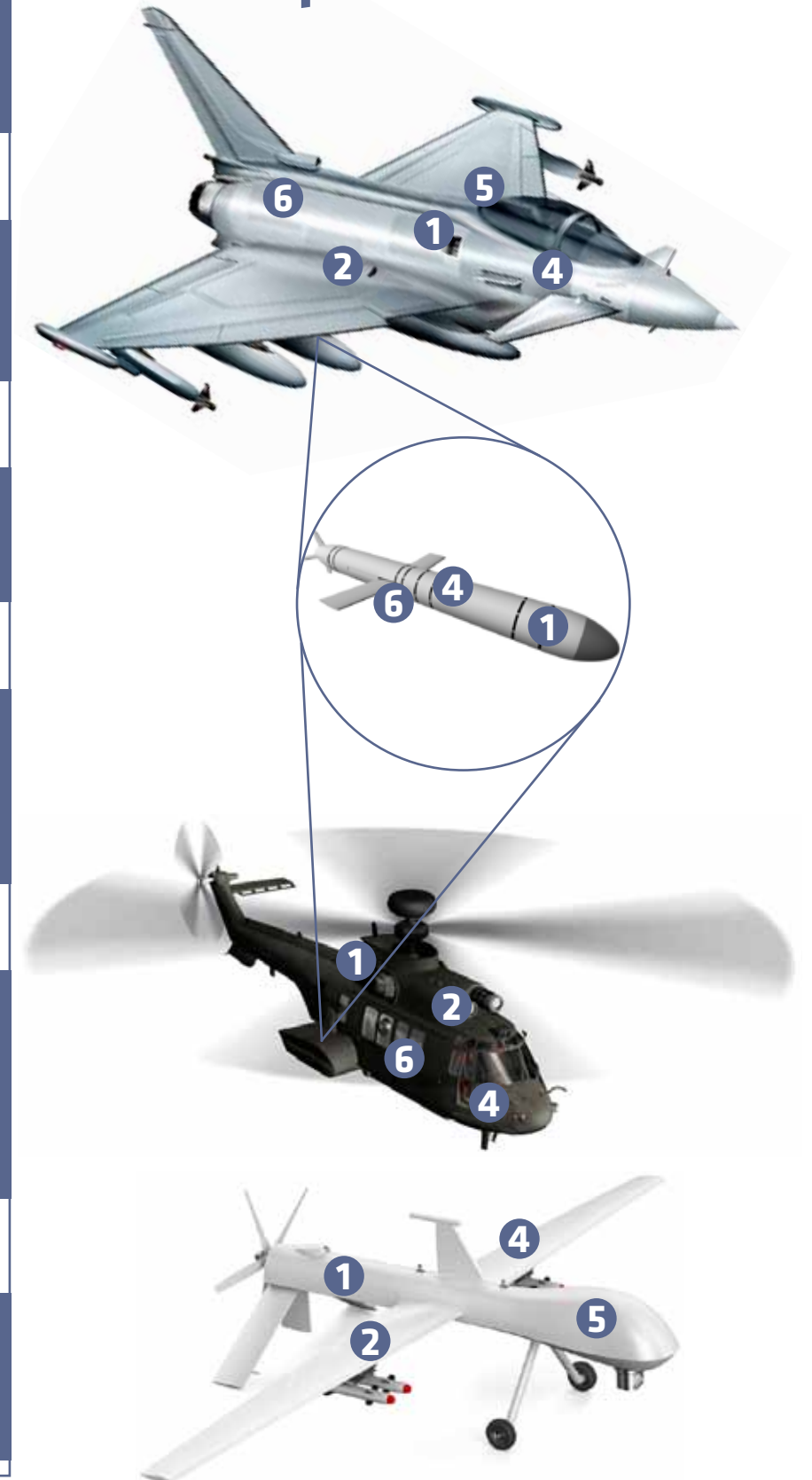
# DRAKA FILECA PRODUCTS - EXCELLENCE IN A VARIETY OF APPLICATIONS

## Civil Airplanes & Helicopters



	<p><b>1 AIRFRAME HOOK-UP WIRES</b></p> <p><b>Application examples :</b></p> <ul style="list-style-type: none"> <li>- Lights</li> <li>- Actuators</li> <li>- Flight-Test</li> </ul> <p><b>Cable families :</b></p> <p>DR, CF, DM, AD, M22759, M27500, BG, VF...</p>
	<p><b>2 FEEDER CABLES</b></p> <p><b>Application examples :</b></p> <ul style="list-style-type: none"> <li>- Electrical power generation (High Power Systems)</li> </ul> <p><b>Cable families :</b></p> <p>A1715 (DASSAULT), NSA 935131 DG, EN 2854-003 DG, DH, AD</p>
	<p><b>3 HIGH-VOLTAGE CABLES</b></p> <p><b>Application examples :</b></p> <ul style="list-style-type: none"> <li>- Power Generation</li> </ul> <p><b>Cable families :</b></p> <p>AZ, DZ</p>
	<p><b>4 DATA-TRANSMISSION CABLES</b></p> <p><b>Application examples :</b></p> <ul style="list-style-type: none"> <li>- Inflight-Entertainment Systems</li> <li>- Avionics</li> </ul> <p><b>Cable families :</b></p> <p>COAX, TWINAX, QUAD, ETHERNET, USB 2.0, HDMI</p>
	<p><b>5 OPTICAL FIBER</b></p> <p><b>Application examples :</b></p> <ul style="list-style-type: none"> <li>- Inflight-Entertainment</li> <li>- Avionics</li> <li>- Health-Monitoring</li> </ul> <p><b>Cable families :</b></p> <p>MMF (semi-loose/tight)</p> <p>SMF (semi-loose/tight)</p>
	<p><b>6 VARIOUS DESIGNS</b></p> <p><b>Application examples :</b></p> <ul style="list-style-type: none"> <li>- Equipment Interconnect</li> <li>- Temperature Sensoring</li> </ul> <p><b>Cable families :</b></p> <p>BF, BN, NEMA HP3, Thermocouples...</p>

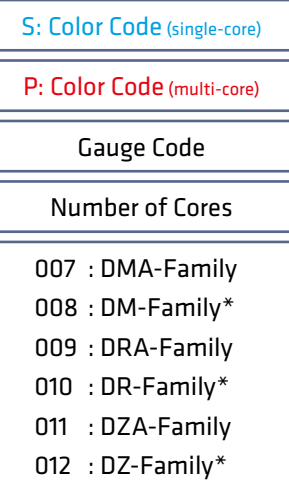
## Defense Airplanes, Helicopters and UAVs



# EN COLOR CODES, GAUGES, MARKING

## UNSHIELDED

### EN2267-XXX Y zzz Z



\* Suitable for UV-Laser Marking

## 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

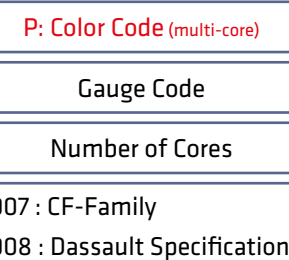
- multi-core -      - single/multi-core -

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 (J, from left to right): Red-Blue-Yellow-Green-White-Black-Brown-Orange-Purple-Grey

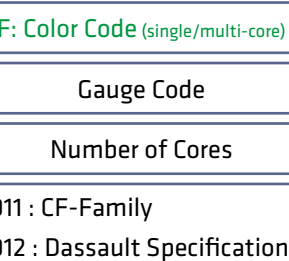
## UNSHIELDED & JACKETED

### EN2266-XXX Y zzz Z

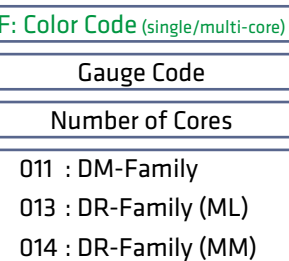


## SHIELDED & JACKETED

### EN2713-XXX Y zzz Z



### EN2714-XXX Y zzz Z



## 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								
<b>DR</b>	EN2267-010A	26	02	1				●
<b>DRA</b>	EN2267-009A	26	02	1				
MULTI CORE								
<b>DRB</b>	EN2267-009B	26	02	2 x DRA				
<b>DRC</b>	EN2267-009C	26	02	3 x DRA				
<b>DRD</b>	EN2267-009D	26	08	4 x DRA				
SHIELDED & JACKETED								
<b>MLA</b>	EN2714-013A	26	10	1 x DRA	●		●	●
<b>MLB</b>	EN2714-013B	26	10	2 x DRA	●		●	●
<b>MLC</b>	EN2714-013C	26	10	3 x DRA	●		●	●
<b>MLD</b>	EN2714-013D	26	10	4 x DRA	●		●	●
<b>MME</b>	EN2714-014E	26	10	5 x DRA		●	●	●
<b>MMX</b>	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								
<b>DRP</b>	EN2266-008B	26	14	2 x DRA			●	●
<b>DRT</b>	EN2266-008C	26	12	3 x DRA			●	●
<b>DRQ</b>	EN2266-008D	26	14	4 x DRA			●	●
SHIELDED AND JACKETED								
<b>MNA</b>	EN2713-012A	26	10	1 x DRA	●		●	●
<b>MNB</b>	EN2713-012B	26	14	2 x DRA	●		●	●
<b>MNC</b>	EN2713-012C	26	14	3 x DRA	●		●	●
<b>MND</b>	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		
<b>SINGLE CORE</b>								
<b>CF-U</b>	ASNE0261 EN2266-005A	26	10	1				●
<b>MULTI CORE</b>								
<b>PF</b>	ASNE0264 EN2266-003B	26	10	2 x ASNE0261 or EN2266				
<b>QF</b>	ASNE0266 EN2266-003C	26	10	3 x ASNE0261 or EN2266				
<b>RF</b>	ASNE0268 EN2266-003D	26	10	4 x ASNE0261 or EN2266				
<b>SHIELDED &amp; JACKETED</b>								
<b>SJ-U</b>	ASNE0270	26	14	1 x	●		●	●
	EN2713-007A	26	10	ASNE0261 or EN2266				
<b>TK-U</b>	ASNE0272	26	12	2 x	●		●	●
	EN2713-007B	26	10	ASNE0261 or EN2266				
<b>UD-U</b>	ASNE0274	26	14	3 x	●		●	●
	EN2713-007C	26	12	ASNE0261 or EN2266				
<b>VL</b>	-	-	-	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		
<b>SINGLE CORE</b>								
<b>DM</b>	EN2267-008A	26	06	1				●
<b>DMA</b>	EN2267-007A	26	06	1				
<b>MULTI CORE</b>								
<b>PN</b>	EN2267-007B	26	06	2 x DMA				
<b>QL</b>	EN2267-007C	26	06	3 x DMA				
<b>RK</b>	EN2267-007D	26	06	4 x DMA				
<b>SHIELDED &amp; JACKETED</b>								
<b>GJ</b>	EN2714-011A	26	10	1 x DMA	●		●	●
<b>MH</b>	EN2714-011B	26	10	2 x DMA	●		●	●
<b>UU</b>	EN2714-011C	26	10	3 x DMA	●		●	●
<b>VV</b>	EN2714-011D	26	14	4 x DMA	●		●	●
<b>MJ</b>	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

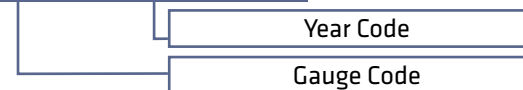


Cable Family	Standard compliant with	AWG		Number of Cores	Shielded		Jacketed	UV-Laser Marking
		Min.	Max.		Spiral	Braid		
<b>SINGLE CORE</b>								
<b>AD</b>	ABS0949	24	04	1				●
<b>ADA</b>	ABS1354	24	04	1				
<b>MULTI CORE</b>								
<b>ADB</b>	ABS1354	24	04	2 x ADA				
<b>ADC</b>	ABS1354	24	04	3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

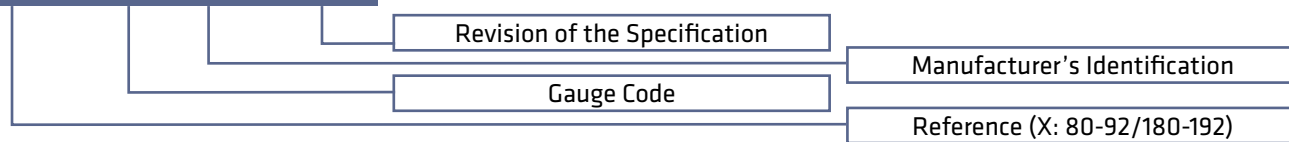
**Voltage Rating:** 600 V (rms)\*

**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
<b>M22759/80 - /92</b>												
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				●			●	
<b>M22759/180 - /192</b>												
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.

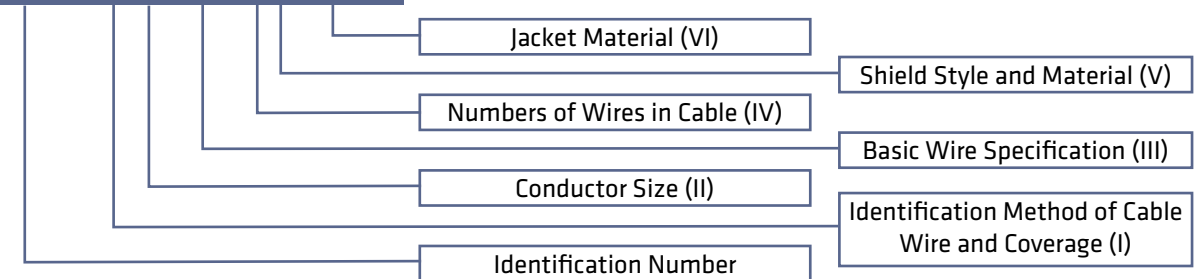
# M27500 SERIES

## 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		
<b>BG</b>	ASNE0409	24	1					●
<b>SU</b>	ASNE0410	24	1 x BG		●		●	●
<b>TV</b>	ASNE0411	24	2 x BG	●	●		●	●
<b>VF</b>	ASNE0412	24	4 x BG	●	●		●	●
<b>THERMOCOUPLE CABLE</b>								
<b>HK</b>	ASNE0413	24	1			●	●	

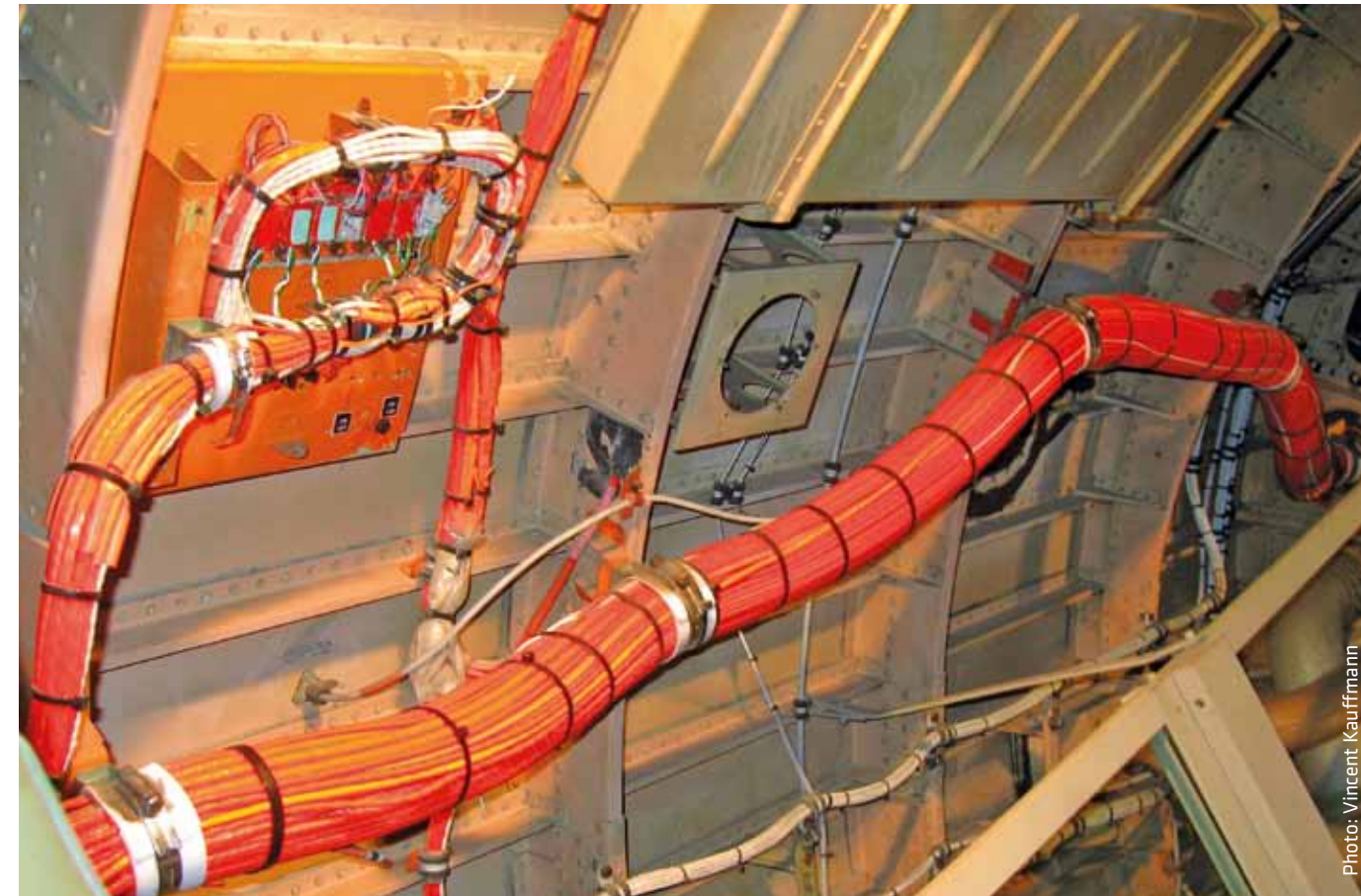


Photo: Vincent Kauffmann

# 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.		
<b>A1715</b>	Dassault Spec.	24	0000	1	●
<b>NSA 935131 DG</b>	NSA 935131 DG	10	0000	1	
<b>EN 2854-003 DG</b>	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
<b>DH</b>	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.		
<b>AD</b>	ABS0949	03	000	1	●
<b>ADB</b>	ABS1354	03	000	2 x ADA	
<b>ADC</b>	ABS1354	03	000	3 x ADA	
<b>ADD</b>	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:** Suitable for **HIGH-VOLTAGE NETWORKS (230V)**  
**Temperature Range:** -65°C to +180°C  
**Network:** **230 V AC**  
**Conductor:** Nickel Plated Aluminum, Unplated Aluminium\*  
**Insulation:** Polyimide and PTFE Tapes



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

\* Modification pending

## DZ-SERIES

**Characteristics:** Suitable for **HIGH-VOLTAGE NETWORKS (230V)**  
**Temperature Range:** -65°C to + 260°C  
**Network:** **230 V AC**  
**Conductor:** Nickel Plated Copper  
**Insulation:** Polyimide and PTFE Tapes



Cable Family	Standard	AWG	Number of Cores	Shielded		Jacketed	UV-Laser Marking
				Spiral	Braid		
SINGLE CORE							
<b>DZ</b>	EN2267-012	10, 12, 16	1				●
MULTI-CORE							
<b>DZB</b>	EN2267-011	10, 12, 16	2 x DZ				
<b>DZC</b>	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		
<b>XF</b>	ASNE0293 M17/128 00001 RG400U	5.10	50	-55	200	●		2	FEP
<b>SW</b>	ASNE0291	1.95	n/a	-90	200	●		1	Polyimide/ FEP
<b>F1703-93</b>	Dassault Spec.	4.30	50	-55	200	●		2 + Tape	FEP
<b>F1703-94</b>	Dassault Spec.	8.25	50	-55	200	●		2	FEP
<b>F1709-72U-AG</b>	Dassault Spec.	3.30	50	-65	150	●		2 + Tape	FEP
<b>XK</b>	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			
<b>F2703-48U A</b>	Dassault Spec.	3.90	24	77	-65	200	37	2		FEP	Red	
<b>F2703-48U B</b>	Dassault Spec.	3.90	24	77	-65	200	37	2		FEP	Blue	
<b>WJC</b>	EN3375-004C	3.90	24	77	-65	200	37	2		Fluoropolymer	Green	
<b>WW F2703-72</b>	EN3375-007	3.00	26	77	-65	200	21	2		Fluoropolymer	White	
<b>F2709-12</b>		5.35	20	75	-55	200	78	2 + Tapes		Polyimide/ PTFE	White	●
<b>F2709-9</b>		4.80	22	75	-55	200	53	2 + Tapes		Polyimide/ PTFE	White	●
<b>F2709-13</b>		4.10	24	75	-65	200	43	2 + Tapes		Polyimide/ PTFE	White	●
<b>F2709-35</b>		2.60	30	75	-65	200	16.5	2 + Tapes		Fluoropolymer	Red	●
<b>WF F2703-37</b>	ABS0386	3.50	24	100	-55	200	23.4		1	Polyimide	Natural (Amber)	
<b>XM F2703-30</b>	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				
<b>KB F 4704-4</b>	ABS0972 ARINC 664	5	24	100		●	1	FEP		●
<b>KD F 4704-5</b>	ABS1503 ARINC 664	5	24	100		●	1	FEP		●
<b>F 4704-6</b>		4.05	26	100		●	1	FEP		●
<b>F 4704-8</b>		6.30	24	150		●	1	FEP		●
<b>F 4704-9</b>		5	26	150	●		1	FEP		●
<b>F 4709-6</b>		5.55	24	100		●	1 + High Perme- ability Screen	Fluoropolymer	●	●
<b>KL F 4704-19</b> <small>[Replaces KL F4704-13]</small>	EN3375-011	4.50	24	100		●	Inner: AL/Mylar Outer: Round	FEP		●
<b>F 4704-16</b>	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
<b>ETHERNET</b>										
<b>F 4709-8</b>	5e	5.50	26	100	51	●		Data Patch		●
<b>F 4709-11</b>	5e	7.20	24	100	80	●		Data Patch		●
<b>F 4709-5</b>	7	8.70	24	100	100	●		Data Patch	●	
<b>F 4709-13</b>	7	7.80	26	100	90	●		Data Patch	●	
<b>USB 2.0</b>										
<b>F 4709-17</b>	USB2 compatible	4.10	24	90	33	●	●	with DR Wires		●
<b>HDMI</b>										
<b>F 6774-3</b>	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	
<b>MULTI-MODE</b>											
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
<b>SINGLE-MODE</b>											
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

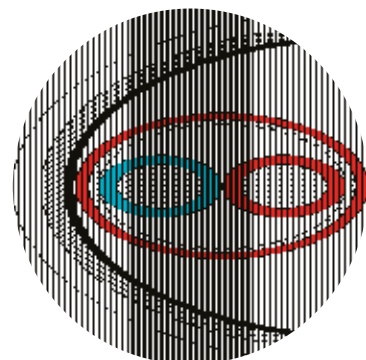
**Characteristics:** Combining Multiple Elements  
**Temperature Range:** -65°C to +200°C  
**Network:** Dedicated Networks  
**Conductor:** Silver Plated Copper (Gigabit Ethernet), Nickel Plated Copper (DR)  
**Insulation:** Fluoropolymer/PTFE  
**Jacket:** Fluoropolymer  
**Shield:** Silver Plated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



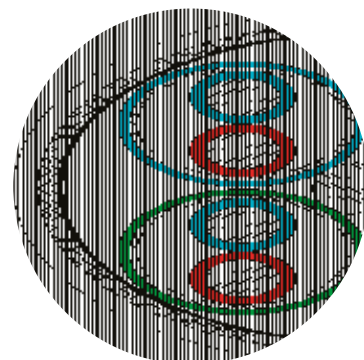
Cable Family	Standard	Ø max. (mm)	AWG	Temperature Range (°C)		Max. Mass (kg/km)	Conductor	Shield
				Min.	Max.			
<b>F8704-16</b>		8.70	24	-55	+125	127	Gigabit Ethernet S-STP Cat. 7+ DR	SPC + Tape
<b>MQB F 2744-7</b>	ECS0828	5.90	24	-65	+200	46	2 x MLB	NPC
<b>MQD F 4744-8</b>	ECS0829	6.80	24	-65	+200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



F8704-16



MQB F 2744-7



MQD F 4744-8

## THERMOCOUPLES

**Characteristics:** Temperature Sensing 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.					
<b>F2793-33</b>	ASNE (Elements recognition)	4.24	22	-55	+260	26.30	NiCr/NiAl	4.10	●	NPC
<b>F2793-22</b>	NSA (Elements recognition)	4.25	22	-55	+260	26.30	NiCr/NiAl	4.10	●	NPC
<b>F2794-14</b>		3.60	24	-95	+200	26.00	NiCr/NiAl	4.10	●	SnCu or NPC
<b>F2794-32</b>		4.00	22	-95	+260	26.50	NiCr/NPC	6.32	●	NPC
<b>F2790-12</b>		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.

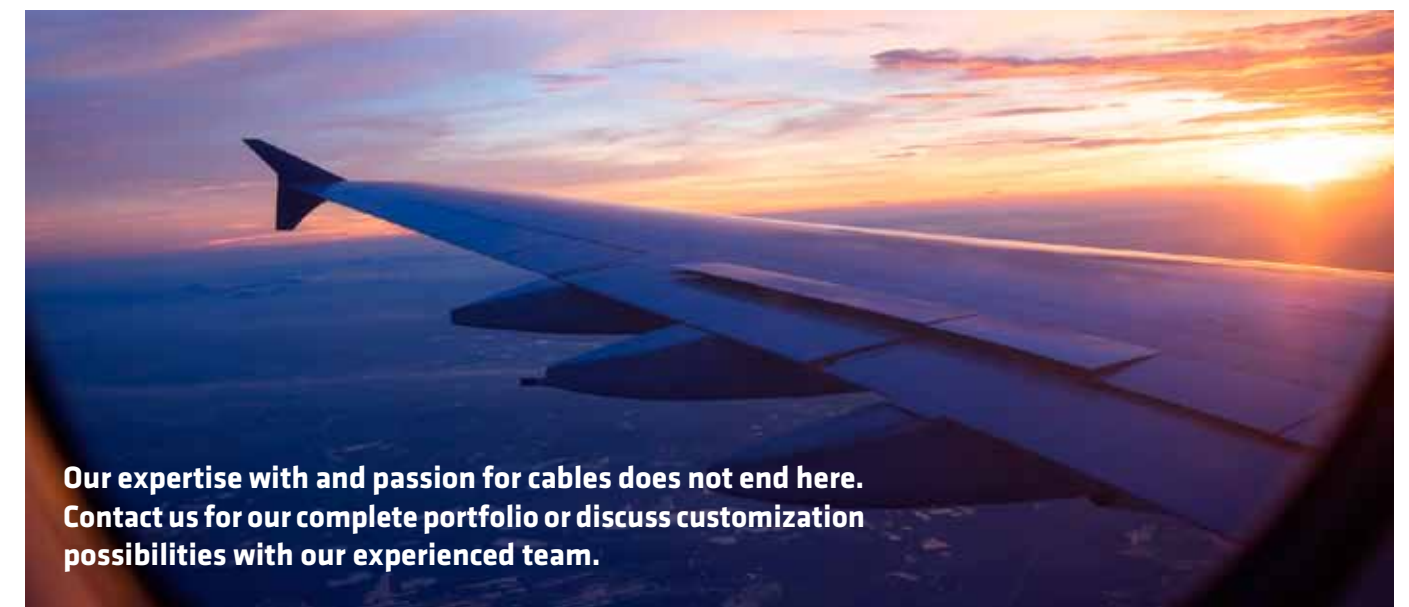
# VARIOUS DESIGNS

## 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.			
<b>High-Flexibility Airframe Wires</b>									
<b>BF</b>	ASNE0260	24	18	Nickel + Silver Plated Copper	-55	200	600		
<b>Equipment Interconnect Cables - 600 V</b>									
<b>BN</b>	ASNE0719	24	16	Silver Plated Copper Alloy (AWG 24), Tin Plated Copper (AWG 16 to 22)	-90	150	600		●
<b>NEMA HP3 Wires (former MIL W 16878)</b>									
<b>ET</b>		32	20	Silver Plated Copper Optional: Nickel Plated Copper (up to 260°C)	-90	200	250		
<b>E</b>		32	12	Silver Plated Copper Optional: Nickel Plated Copper (up to 260°C)	-90	200	600		
<b>EE</b>		32	12	Silver Plated Copper Optional: Nickel Plated Copper (up to 260°C)	-90	200	1000		
<b>ET</b>		30	20	ET, E, or EE Series exists with 1, 2, or 3 conductors	-90	200	250	●	
<b>E</b>		30	20	ET, E, or EE Series exists with 1, 2, or 3 conductors	-90	200	600	●	
<b>EE</b>		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.



# THE FUTURE STARTS NOW - DRAKA FILECA AS PART OF CLEAN TECHNOLOGIES

Draka Fileca is proud to be Specialized Partner of Clean-Tech Projects such as :



## ENERGY OBSERVER

With our innovative and light-weight cabling we pave the way for future technologies whether high up in the air or throughout the oceans of the world.

If you want to learn more about our involvement in one these projects, scan the following QR-Code:





# Linking the Future

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**Prysmian**  
Group



<http://aerospace.prysmiangroup.com>

