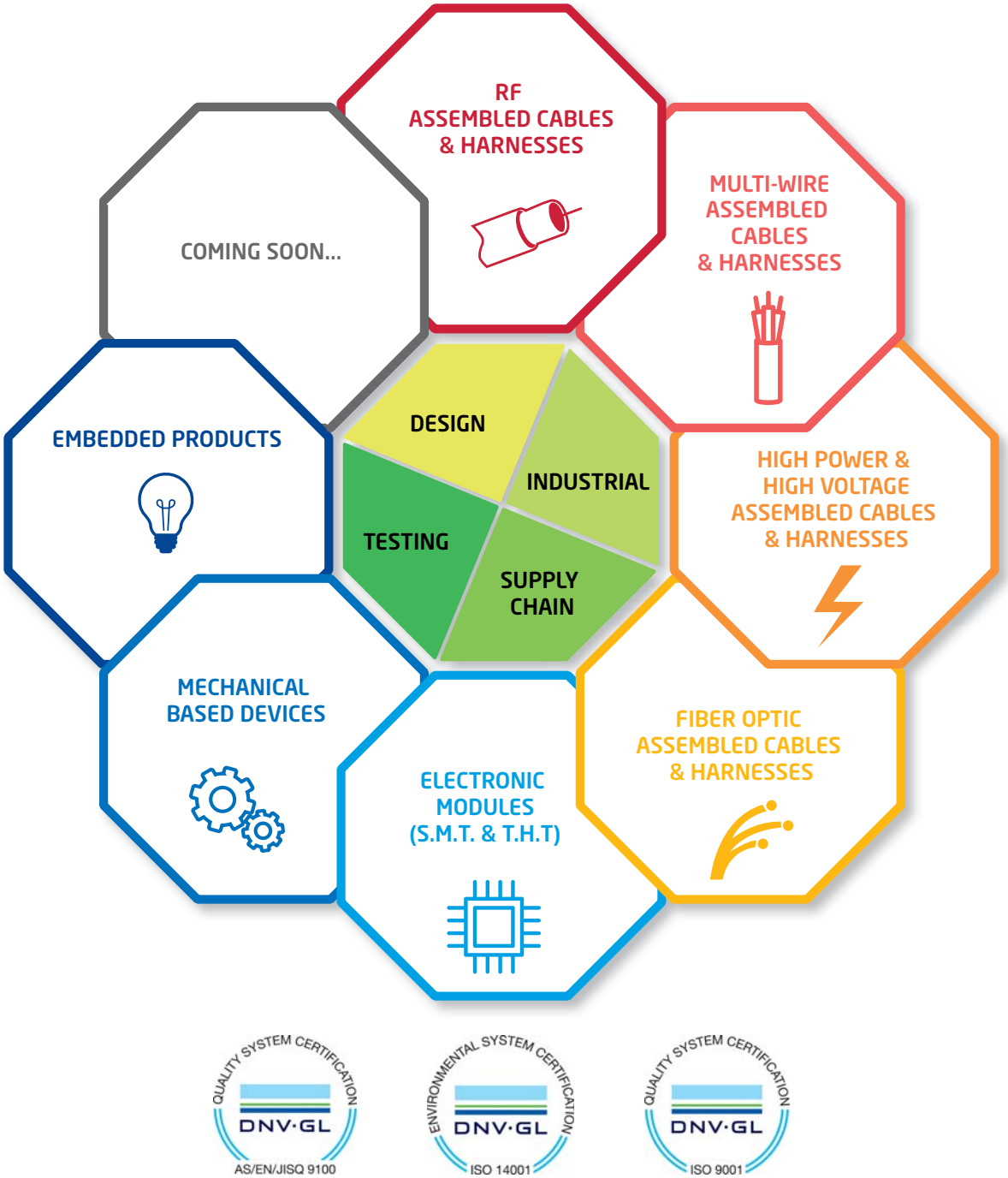
cpe italia GROUP

RF COAXIAL PRECISION CABLE ASSEMBLIES

Cables harnesses with cable COBHAM

Company History and new Targets

CPE is a family company founded in 1978 and established in Milan, Italy.
The business started as trading company of connectors and cables, addressing defense, and telecommunication.
After few years of activity It has been natural consequence moving from trading company to manufacturing company, pursuing high specialization in harnesses assembly and connector production.
As the spirit of CPE ITALIA has always been and still is to be customer «allied», the founder sustained the growth of the company by opening new production sites around the globe.
CPE ITALIA is now a Group of about 400 people with production facilities in Brazil, China, Italy, Mexico, Romania, branch offices in Nord America and India, headquarters in Milan.
Extensive knowledge in sectors such as Defense, Broadcasting, Communication Infrastructure, Medical, Transportation, Nuclear, Oceanographic Installations.
It is CPE main focus to support any customer need by designing and developing tailored solutions



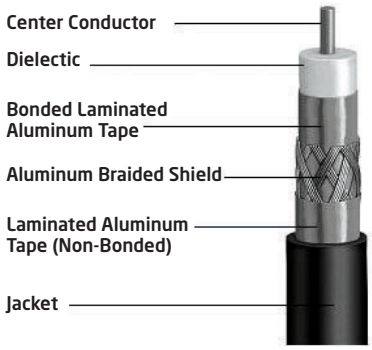
QUALITY SYSTEM CERTIFICATION DNV·GL AS/EN/JISQ 9100
ENVIRONMENTAL SYSTEM CERTIFICATION DNV·GL ISO 14001
QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001

COAXIAL CABLES & COAXIAL CABLES ASSEMBLIES

COAXIAL CABLES MAIN CHARACTERISTICS

Just to make easier CPE presentation on this matter, let us just recall the main characteristics of a coaxial cable and the possible factors that can affect the measured values.

Useless to point out the variety of existing cables according to their technology, thus responding to different applications, needs and costs:



- Impedance (from 50 Ohm to over 120 Ohm)
- Dielectric (solid, foam, teflon, etc.)
- N°. of conductors (coaxial, twinaxial, triaxial... multicoaxial)

Back to Coaxial Cable Characteristics, the main ones are the following:

IMPEDANCE

Expressed in Ohm it represents the resistance to the electron flow throughout the conductor.
The conductor quality, the cable geometry and the dielectric uniformity might have an heavy effect on this parameter.
Junctions have an extreme importance as well.

CAPACITANCE

Measured in Farad/Length Unit.
This value shows the capacity of a dielectric material, inserted between two conductors, to keep the, dielectric charge when a difference of potential exists between the conductors. For the data transmission. Low capacitance allows a most reliable transmissions at longer distances.
Materials with low dielectric constant (i.e. polypropylene or cellular materials) will therefore be used.

ATTENUATION

Measured in dB/Length Unit.
The attenuation determines the transmission level of a line. The attenuation value is normally expressed as a ratio of the input voltage to the output voltage.
The two main factors that cause the attenuation are the resistive loss of the conductors (mainly due to the skin effect in high frequency) and the loss in the dielectric.
The sum of these two factors represents the total attenuation.

POWER RATING

This parameter highlights the transmittable power value and it is measured in Watt.
The heat loss in the cable grows as frequency, dielectric constant and dissipation factor, increase.
As a consequence, the power rating depends on cable dimension, temperature in the transmission encironment and voltage reflection.

FEW CONSIDERATIONS ABOUT RF CABLES

Dimensional or material irregularities along a coaxial line caused by manufacturing errors, assembled errors (including some possible too tight cable bending) and/or use of un-appropriate connectors, affect the characteristic Impedance. At each impedance deviation from the nominal value, a portion of signal is reflected, thus increasing the signal loss and reducing the power rating.
Reflections increase as the frequency goes up and irregular reflection peaks can be found when cable is tested.

The transmission quality is defined by taking into consideration

- >> the Reflections Coefficient
- >> the Voltage Standing Wave Ratio (VSWR)
- >> the structural return loss.

Just below, you will find a cross reference for these last three parameters.

Conversion table for return loss, reflection coefficient and SWR

SWR	Reflection coefficient	Return loss (dB)
1.3767	.1585	16
1.3290	.1413	17
1.2880	.1259	18
1.2528	.1122	19
1.2222	.1000	20
1.1957	.0891	21
1.1726	.0794	22
1.1524	.0708	23
1.1347	.0631	24
1.1192	.0562	25
1.1055	.0501	26
1.0935	.0447	27
1.0829	.0398	28
1.0736	.0355	29
1.0653	.0316	30
1.0580	.0282	31
1.0515	.0251	32
1.0458	.0224	33
1.0407	.0200	34
1.0362	.0178	35
1.0322	.0158	36
1.0287	.0141	37
1.0255	.0126	38
1.0227	.0112	39
1.0202	.0100	40
1.0180	.0089	41
1.0160	.0079	42
1.0143	.0071	43
1.0127	.0063	44
1.0113	.0056	45

FEW CONSIDERATIONS ABOUT RF CABLES

ASSEMBLED CABLES

From the highlights of the RF Cables characteristics it appears very clearly the importance of a cable quality to assure the correct transmission of any signal.

Another very critical factor is represented by the «junction». Actually, when speaking about junction and an RF cable, it is easy to turn immediately the mind to a connector whichever it might be.

Than, in fact, the subject becomes the «assembled cable» and it leads to think about applicable «connectors».

In order to achieve the lowest «insertion loss» and the greater power handling capability possible, just few rules are applicable.

However, it will never be emphasized enough the need to entrust this job to some very skilled people, with years of experience and with the capability to carry out the assembling operation by testing the obtained product according to the procedures established by quality engineers.

The rules to select the most appropriate connector are quite simple:

>> Frequency Range: Upper frequency cutoff determines maximum connector diameter

>> Weight: In respect to the cable strength, it must not be so heavy in order to avoid damages nor to fall off the cable itself

>> Replacement: Replaceable connectors are ideal for applications that require a long run of cable in areas difficult to access.

The table below is aiming to give some guidelines for the connector selection v/s upper frequency.

Recommended Upper Frequencies for Common connectors Types Offered*

GHz	Type
4	C
4	SMC
7,5	7-16 IEC
12	SC
16	TNC
18,2	ETNC
18,5	7mm Precision
18,5-22	N
22	OSP
26,5	SMA (OSM)
28	OSSP
34	SSMA (OSM)
34	3,5mm Precision
40	OS-50-P
40	2,92mm (K)
40	GPO (SMP)
50	2,4mm (OS-50)™
60	1,65mm (V)

KEY DESCRIPTION - COAXIAL CABLES ASSEMBLIES

CODE DESCRIPTION

1	2	3	4	5	6	7	8	9

TYPE OF CONNECTORS SIDE A (1)	
DESCRIPTION	**Name key**
Connector type C recommended with frequencies lower than 4 Ghz	C
Connector type SMC recommended with frequencies lower than 4 Ghz	SMC
Connector type 7/16 IEC recommended with frequencies lower than 7.5 Ghz	7-16
Connector type SC recommended with frequencies lower than 12 Ghz	SC
Connector type TNC recommended with frequencies lower than 16 Ghz	TNC
Connector type ETNC recommended with frequencies lower than 18.2 Ghz	ETNC
Connector type "7MM Precision" recommended with frequencies lower than 18.5 Ghz	7
Connector type N recommended with frequencies lower than 18.5 Ghz	N
Connector type OSP recommended with frequencies lower than 22 Ghz	OSP
Connector type SMA recommended with frequencies lower than 26.5 Ghz	SMA
Connector type OSSP recommended with frequencies lower than 28 Ghz	OSSP
Connector type SSMA recommended with frequencies lower than 34 Ghz	SSMA
Connector type "3.5MM Precision" recommended with frequencies lower than 34 Ghz	3.5MM
Connector type OS-50-P recommended with frequencies lower than 40 Ghz	OS50P
Connector type 2.92MM recommended with frequencies lower than 40 Ghz	2.92
Connector type SMP recommended with frequencies lower than 40 Ghz	SMP
Connector type 2.4MM recommended with frequencies lower than 50 Ghz	2.4
Connector type 1.65MM recommended with frequencies lower than 60 Ghz	1.65

GENDER SIDE A (2)	
DESCRIPTION	**Name key**
Plug / Male connectors	P-
Jack / Female connectors	J-

CONFIGURATION OF CONNECTORS SIDE A (3)	
DESCRIPTION	**Name key**
Flange connectors with 2 hole	2H
Flange connectors with 4 hole	4H
Right angle connector	RA
Curved connector	C
Straight connector	S

TYPE OF CABLE (4)
DESCRIPTION
CHOOSING THE TYPE OF CABLE BY COBHAM'S CATALOGUE AND USE COBHAM'S P/N CODE.. (9 digit max)
YYYYYYYYY

TYPE OF ASSEMBLIES (5)	
DESCRIPTION	**Name key**
Phase matched cables	P
Armored cable	A
Aromored & Phase matched cables	AP
NONE	-

CONFIGURATION OF CONNECTORS SIDE B (9)	
DESCRIPTION	**Name key**
Flange connectors with 2 hole	2H
Flange connectors with 4 hole	4H
Right angle connector	RA
Curved connector	C
Straight connector	S

GENDER SIDE B (8)	
DESCRIPTION	**Name key**
Plug / Male connectors	P-
Jack / Female connectors	J-

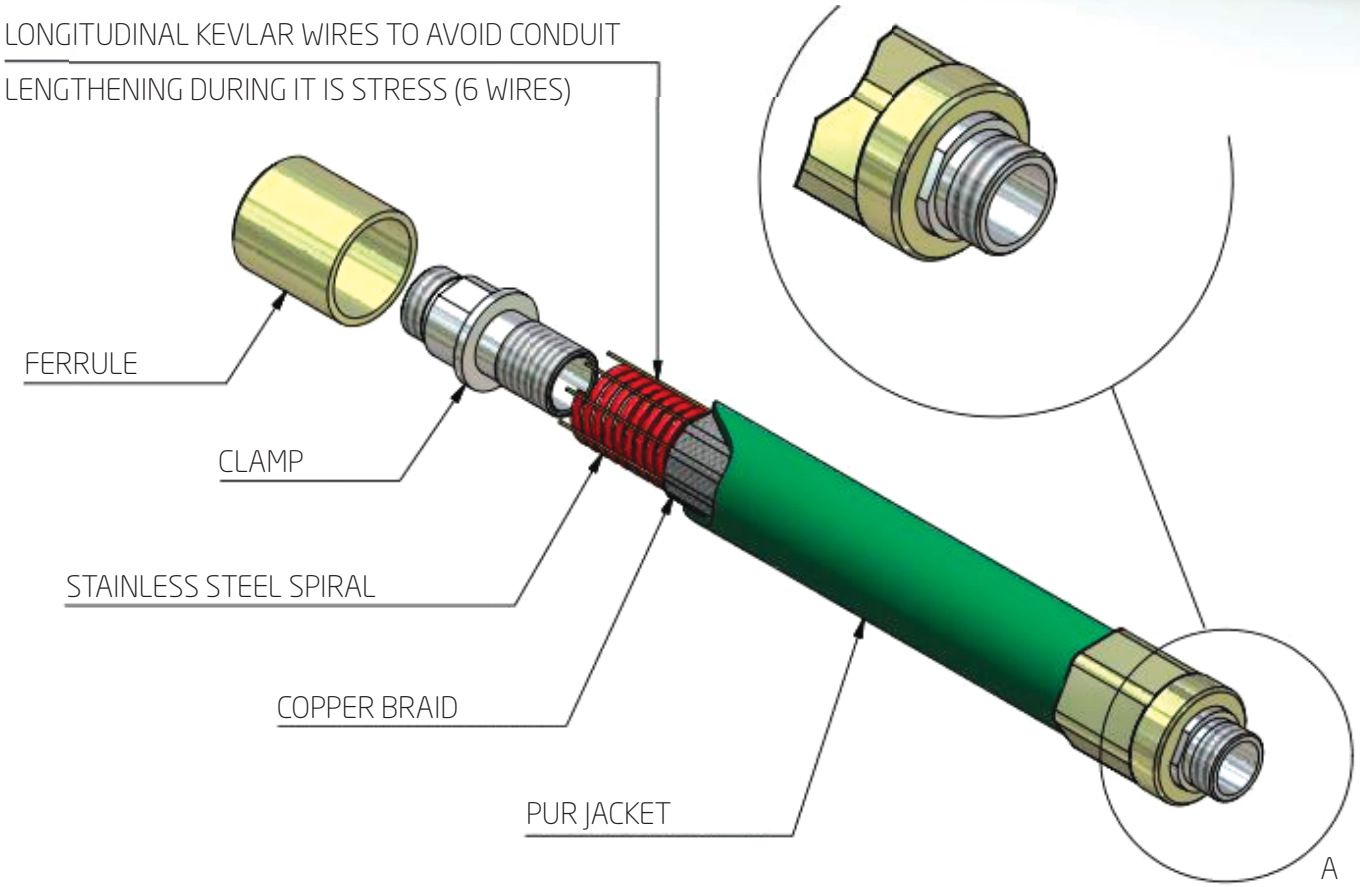
TYPE OF CONNECTORS SIDE B (7)	
DESCRIPTION	**Name key**
Connector type C recommended with frequencies lower than 4 Ghz	C
Connector type SMC recommended with frequencies lower than 4 Ghz	SMC
Connector type 7/16 IEC recommended with frequencies lower than 7.5 Ghz	7-16
Connector type SC recommended with frequencies lower than 12 Ghz	SC
Connector type TNC recommended with frequencies lower than 16 Ghz	TNC
Connector type ETNC recommended with frequencies lower than 18.2 Ghz	ETNC
Connector type "7MM Precision" recommended with frequencies lower than 18.5 Ghz	7
Connector type N recommended with frequencies lower than 18.5 Ghz	N
Connector type OSP recommended with frequencies lower than 22 Ghz	OSP
Connector type SMA recommended with frequencies lower than 26.5 Ghz	SMA
Connector type OSSP recommended with frequencies lower than 28 Ghz	OSSP
Connector type SSMA recommended with frequencies lower than 34 Ghz	SSMA
Connector type "3.5MM Precision" recommended with frequencies lower than 34 Ghz	3.5MM
Connector type OS-50-P recommended with frequencies lower than 40 Ghz	OS50P
Connector type 2.92MM recommended with frequencies lower than 40 Ghz	2.92
Connector type SMP recommended with frequencies lower than 40 Ghz	SMP
Connector type 2.4MM recommended with frequencies lower than 50 Ghz	2.4
Connector type 1.65MM recommended with frequencies lower than 60 Ghz	1.65

LENGHT OF CABLE (6)	
DESCRIPTION	**Name key**
Lenght in millimeters including connectors	XXXMM
Lenght in meters with decimal of meter including connectors	XX.XM
Lenght in meters including connectors	XXXXM

ARMOURED COAXIAL CABLES

Where coaxial cables can be exposed to mechanical damage CPE Italia S.p.a. can provide additional protection.

Armoured Coaxial Cables are recommended when the use is not static or if there is a risk that the cables may be crushed.



FEATURES: Flexible, UV Resistance.
Crush Resistance 80N/mm.
Clamp Retention force 25 Kg for minimum 30 seconds.

CURVED COAXIAL CABLES

When coaxial cables are installed on equipment, with limited space, the right-angle connectors are widely used, but this does not guarantee the best performance.

CPE Italia S.p.a. overcomes this problem with «Curved Cable Harnesses» where curves are specifically made according to the selected raw cables parameters.

The standard Curved Cable Harnesses has an angle of 90° but can be assembled with custom angles, as well (range from 30° to 180°).

Semi-Rigid Cables

Special Harnesses

Cobham Antenna Systems

Coaxial Cable

The most important thing we build is trust

AIRBORNE

SPACE

SHIPBOARD

LABORATORY




CABLE HERITAGE

	FA19 HFX	FA19 RX	FA29 RX	FN34 RX	FN25	FN35	FN40	FN55	FN61	FN35 RL	FN40 RL	FE56	FN50	FC-Z	FN24 RL	FN27 RL	FN31 RL	Custom Semi-Rigid
A-4							●											
A-6							●											
A-7							●						●					
A-10						●												
AC-130U					●		●			●	●							
AH-1-SJ																		
AH-64										●								
AV-8B						●												
AWACS						●												
B-1B					●	●		●										
B-52						●							●					
CH-47						●												
E-2C																		●
EA-6B										●					●	●	●	
EF-111						●												
EP-3				●	●			●										
Eurofighter	●																	
F-4							●						●					
F-5						●												
F-8							●											
F-14A							●						●					
F-14D													●					
F-15							●											
F-15J				●														
F-16						●							●					
F-18				●		●				●								
FSX															●	●	●	
KC-10													●	●				
KC-135													●					
Mirage						●												
MPA		●	●						●									
P-3A					●	●							●					
-3B					●	●												
-3C					●	●												
Tornade						●							●					
T-45						●												
T-46A						●												
UH-1						●												
U2		●	●											●				
727														●				
737														●				
747														●				
757														●				
767														●				
777														●				
DC-9														●				
DC-10														●				
MD-11														●				
MD-80														●				
Trident II						●												
Delta III			●															
Delta IV				●														
Atlas V			●															
Sea Launch			●															

Cable Assemblies

DC to 50 GHz

Electronic Warfare
- Airborne
- Ground & Shipboard
- Missiles

Space

Laboratory
- General Purpose
- Test

Commercial Aviation
- Bulk OEM
- Lightweight Assemblies

Special Applications

500 different cable designs
5000 different connector designs

◀ Customers around the world select Cobham cables for their exacting defense or commercial applications. To the left is a partial list of platforms and programs:

COBHAM CABLES LIST

Cable	Nominal OD - inches	FCO (GHz)	Assemblies offered to ___ GHz	Center Conductor	Vp (%)	Weight (lb/ft)	Max Assembly Length	Upper Temp (°C)
FA05LX	0,047	130	18	Solid	80	0,0040	5	200
FA07LX	0,070	100	18	Solid	80	0,0065	50	200
FC07SZ	0,070	50	10	Stranded	75	0,0050	100	200
FT08	0,080	50	3	Stranded	75	0,0064	0	200
FC09Z	0,090	50	10	Stranded	75	0,0081	100	200
FA09LX	0,090	65	20	Solid	80	0,0100	50	200
FA09RX	0,090	65	18	Solid	80	0,0106	30	200
FA09HFX	0,090	65	18	Stranded	82	0,0105	30	200
FA09X	0,090	65	40	Stranded	80	0,0104	30	200
FZ09RX	0,090	65	18	Solid	80	0,0106	30	150
FE10ST	0,100	74	18	Stranded	75	0,0085	50	125
FC11BC2	0,110	50	10	Stranded	75	0,0123	200	200
FN11WX	0,110	18	18	Solid	82	0,0110	50	200
FC11Z	0,110	50	10	Stranded	75	0,0123	200	200
FA12RX	0,120	50	50	Solid	82	0,0138	175	200
FZ12RX	0,120	50	26,5	Solid	82	0,0138	175	150
FA12X	0,120	50	26,5	Stranded	82	0,0135	175	200
FE12RL	0,120	50	50	Solid	76	0,0140	50	125
FE12ST	0,120	50	50	Stranded	76	0,0140	50	125
FN12TF	0,120	50	50	Stranded	76	0,0140	1000	200
FN11Z	0,140	50	10	Stranded	75	0,0180	200	200
FC14Z	0,140	40	10	Stranded	76	0,0198	200	200
FC14BC2	0,140	40	10	Stranded	76	0,0198	200	200
FA15RX	0,150	40	40	Solid	82	0,0200	125	200
FA15X	0,150	40	40	Stranded	82	0,0197	125	200
FC15EX	0,150	35	18	Solid	69	0,0284	200	200
FE15ST	0,150	40	40	Stranded	76	0,0220	50	125
FN15RX	0,150	50	50	Solid	82	0,0195	125	200
FN15RXM	0,150	40	18	Solid	82	0,0195	125	150
FN14Z	0,170	40	10	Stranded	76	0,0280	200	200
FC17EX	0,170	30	18	Solid	69	0,0370	200	200
FG18	0,180	26,5	18	Stranded	76	0,0320	1000	200
FN18RL	0,180	40	18	Solid	76	0,0261	1000	200
FN18RX	0,180	40	40	Solid	82	0,0287	125	200
FA19MX	0,190	30	18	Multi-Strand	82	0,0290	125	200
FA19RX	0,190	30	26,5	Solid	82	0,0330	150	200
FZ19RX	0,190	30	26,5	Solid	82	0,0330	150	200
FZ19TX	0,190	30	28	Solid	82	0,0330	150	200
FA19RXLF	0,190	30	3	Solid	82	0,0330	150	200
FA19RXLW	0,190	30	26,5	Solid	82	0,0232	150	200
FA19TX	0,190	30	26,5	Solid	82	0,0330	150	200
FA19X	0,190	30	26,5	Stranded	82	0,0320	150	200
FA19XLF	0,190	30	3	Stranded	82	0,0320	150	200
FE19	0,190	26,5	26,5	Stranded	76	0,0320	100	125
FE19RL	0,190	26,5	26,5	Solid	76	0,0330	50	125
FE19ST	0,190	26,5	26,5	Stranded	76	0,0320	100	125
FC20	0,190	28	18	Stranded	76	0,0400	500	200
FC20RZ	0,190	28	10	Solid	76	0,0430	500	200
FC20Z	0,190	28	10	Stranded	76	0,0390	500	200
FC20BC2	0,190	28	10	Stranded	76	0,0390	500	200
FN19EX	0,190	30	18	Solid	69	0,0394	500	200
FN19TF	0,190	26,5	26,5	Stranded	76	0,0320	1000	200
FC21RL	0,210	26,5	18	Solid	76	0,0526	1000	200
FA20RX	0,200	28	26,5	Solid	82	0,0389	150	200
FN20Z	0,210	28	10	Stranded	76	0,0450	500	200
FA22RX	0,220	24	18	Solid	82	0,0470	125	200
FN22	0,220	28	18	Stranded	76	0,0400	1000	200
FN22RX	0,220	30	26,5	Solid	82	0,0420	150	200
FN22RXM	0,220	30	26,5	Solid	82	0,0420	150	150
FN25RXWW	0,250	26,5	26,5	Solid	82	0,0616	150	200
FN22TX	0,220	30	18	Solid	82	0,0420	150	200
FN22X	0,220	30	26,5	Stranded	82	0,0430	150	200
FN22XM	0,220	30	26,5	Stranded	82	0,0430	150	150
FS23MX	0,230	30	18	Multi-Strand	82	0,0430	30	175
FN24	0,240	26,5	26,5	Stranded	76	0,0510	1000	200
FN24RL	0,240	26,5	26,5	Solid	76	0,0525	1000	200
FA25RX	0,250	20	18	Solid	82	0,0580	100	200
FN25	0,250	23,5	18	Stranded	76	0,0550	1000	200
FN25R	0,250	23	18	Solid	76	0,0000	0	200
FC28Z	0,250	21	10	Stranded	76	0,0706	1000	200
FC28BC2	0,250	21	10	Stranded	76	0,0706	1000	200
FE26RX	0,260	24	18	Solid	82	0,0600	125	125

Cable	Nominal OD - inches	FCO (GHz)	Assemblies offered to ___ GHz	Center Conductor	Vp (%)	Weight (lb/ft)	Max Assembly Length	Upper Temp (°C)
FE26X	0,260	24	18	Stranded	82	0,0512	125	125
FN26RX	0,260	24	18	Solid	82	0,0583	125	200
FN27R	0,270	21	18,2	Solid	76	0,0830	1000	200
FN28Z	0,280	21	10	Stranded	76	0,0760	1000	200
HTS28	0,280	26	18	Solid	76	0,0800	100	200
FA29RX	0,300	18	18	Solid	82	0,0930	85	200
FA29RXLG	0,300	18	18	Solid	82	0,0930	85	200
FA31TX	0,300	18	18	Solid	82	0,0830	85	200
FA29X	0,300	18	18	Stranded	82	0,0810	85	200
FZ31RX	0,300	18	18	Solid	82	0,0830	25	150
FZ31RXW	0,300	18	18	Solid	82	0,0830	25	150
FZ31TXW	0,300	18	18	Solid	82	0,0830	25	150
FN30	0,300	20	18	Stranded	76	0,0801	1000	200
FN31RX	0,310	18,5	18	Solid	82	0,0846	75	200
FN31X	0,310	18,5	18	Stranded	82	0,0846	75	200
FC32	0,310	18	18	Stranded	76	0,1000	500	200
FC38RZ	0,320	16	10	Solid	76	0,1130	1000	200
FN32RX	0,320	18,5	18,2	Solid	82	0,0910	75	200
FC38Z	0,320	16	10	Stranded	76	0,1127	1000	200
FC38BC2	0,320	16	10	Stranded	76	0,1127	1000	200
FN32RL	0,320	18,2	18,2	Solid	76	0,0923	1000	200
FE34RX	0,340	18	18	Solid	82	0,1010	120	125
FE34RXLG	0,340	18	18	Solid	82	0,1010	120	125
FN34RX	0,340	18	18	Solid	82	0,1010	120	200
FN34RXLG	0,340	18	18	Solid	82	0,1010	120	200
FN34RXLW	0,340	18	18	Solid (Al Core)	82	0,0714	120	200
FN34RXM	0,340	18	18	Solid	82	0,1010	120	150
FN34RXMLG	0,340	18	18	Solid	82	0,1010	120	150
FN34TX	0,340	18	18	Solid	82	0,1010	120	200
FN34X	0,340	18	18	Stranded	82	0,1020	120	200
FN38Z	0,350	16	10	Stranded	76	0,1170	1000	200
FE35RL	0,350	18	18	Solid	76	0,1084	1000	125
FE35RLM	0,350	18	18	Solid	76	0,1084	1000	125
FE35	0,350	18	18	Stranded	76	0,1084	1000	125
FN35	0,350	18	18	Stranded	76	0,0990	1000	200
FN37	0,370	18	18	Stranded	76	0,1110	0	200
FN35RL	0,350	18	18	Solid	76	0,1122	1000	200
FN40RL	0,370	16,5	16,5	Solid	76	0,1200	1000	200
HTS38	0,380	18,2	18,2	Solid	76	0,1688	100	200
FN35WW	0,400	18	18	Stranded	76	0,1540	1000	200
FN41RL	0,400	16	16	Solid	76	0,1410	1000	200
FA46RX	0,460	11	9	Solid	82	0,2010	75	200
FE47	0,470	13	13	Stranded	76	0,1744	1000	125
FZ47RX	0,470	11	9	Solid	82	0,1880	75	150
FZ47RXW	0,470	11	9	Solid	82	0,1880	75	150
FZ47TX	0,470	10	9	Solid	82	0,1880	75	150
FZ47TXW	0,470	10	9	solid	82	0,1880	75	150
FN50V	0,480	12	6	Stranded	79	0,2003	50	200
FC48Z	0,490	10	10	Stranded	76	0,2300	1000	200
FN49RX	0,490	11	9	Solid	82	0,2180	75	200
FN50	0,500	12	12	Stranded	76	0,2000	1000	200
FN52RL	0,520	10,5	10,5	Solid	76	0,2390	1000	200
FE54RX	0,540	8	8	Solid	82	0,2270	75	125
FN55	0,550	10	10	Stranded	76	0,2500	1000	200
FE56	0,560	10	10	Stranded	76	0,2400	1000	125
FN61	0,610	8	8	Stranded	76	0,3100	1000	200
FE81	0,810	6	6	Composite	76	0,5000	1000	125
FN87K	0,870	5	5	Stranded	76	0,6310	1000	200
FE92	0,920	5	5	Composite	76	0,6500	1000	125
FN92TF	0,920	5	5	Composite	76	0,6500	1000	200
FN98V	0,980	5	5	Composite	76	0,7055	50	200
FN100KA	1,000	4	4	Solid	76	0,7190	200	200
FN19RX	0,190	26,5	26,5	Solid	0	0,0000	0	0
FN21RX	0,210	26,5	26,5		0	0,0000	0	0
FN24RX	0,240	26,5	26,5	Solid	0	0,0000	0	0
FN25RX	0,250	23	18	Solid	0	0,0000	0	0
FN27RX	0,270	23	18	Solid	0	0,0000	0	0
FN38RX	0,380	16	16	Solid	82	0,0000	50	0
FN48Z	0,520	10	10	Stranded	76	0,2487	1000	200
FN87KR	0,870	5	5	Solid	76	0,6670	250	200
FN100KR	0,990	4	4	Solid	76	0,8830	200	200
FN15TF	0,160	40	40	Stranded	76	0,0250	1000	200

Cable	Nominal OD - inches	FCO (GHz)	Assemblies offered to ___ GHz	Center Conductor	Vp (%)	Weight (lb/ft)	Max Assembly Length	Upper Temp (°C)
FE27RXBR	0,270	24	18	Solid	82	0,0645	125	125
FE35RXBR	0,350	18	18	Solid	82	0,1071	120	125
FE55RXBR	0,550	8	8	Solid	82	0,2354	75	125
FE140	1,400	3	3	Multi-Stranded	76	1,4000	100	125
FA31RXLW	0,310	18	18	Solid	82	0,0645	85	200
FA31XLW	0,310	18	18	Stranded	82	0,0000	85	200
FC36RXWW	0,360	18	18	Solid	82	0,1285	85	200
FZ09LX	0,090	65	18	Solid	80	0,0106	30	150
FN34RXLWM	0,340	18	18	Solid	82	0,0714	120	150
FG09	0,090	74	18	Stranded	75	0,0076	300	200
FT09HF	0,090	50	18	Stranded	75	0,0000	0	200
FN52RLLW	0,520	10,5	10,5	Solid	76	0,1780	1000	200
FE19LSX	0,190	30	26,5	Stranded	82	0,0320	150	125
FE32LSX	0,320	18	18	Stranded	82	0,0810	85	125
FZ09LXW	0,090	65	18	Solid	80	0,0106	30	150
FN40	0,390	16,5	16,5	Stranded	76	0,1200	1000	200
FN15X	0,150	50	26,5	Stranded	82	0,0193	175	200
FN17EX	0,170	35	18	Solid	69	0,0275	1000	200
FA19	0,180	26,5	26,5	Stranded	76	0,0320	1000	200
FA19HFX	0,190	30	18	Multi-Stranded	82	0,0290	125	200
FA20X	0,200	28	26,5	Stranded	82	0,0380	150	200
FC36XLWWW	0,360	18	18	Stranded	82	0,0957	85	200
FC49	0,500	10	10	Stranded	76	0,2340	1000	200
HTS53	0,530	12	12	Stranded	76	0,2213	1000	200
FC23RXWW	0,230	30	30	Solid	82	0,0528	150	200
FN37RXWW	0,370	18	18	Solid	82	0,1326	120	200
FA20RXLW	0,200	28	26,5	Solid	82	0,0267	150	200
FC36RXLWWW	0,360	18	18	Solid	82	0,0965	85	200
FA46RXLW	0,460	11	9	Solid	82	0,1490	75	200
FN49RXLW	0,490	11	9	Solid	82	0,1640	75	200
FE34X	0,340	18	18	Stranded	82	0,0990	120	125
FC22	0,220	23,5	18	Stranded	76	0,0484	1000	200
FE25	0,250	23,5	18	Stranded	76	0,0500	1000	125
TRX21	0,210	60	18	Solid	69	0,0352	100	200
FN34RXB	0,340	18	18	Solid	82	0,1010	120	125
FN22RXB	0,220	30	26,5	Solid	82	0,0420	150	125
FE31RXBRWW	0,310	24	18	Solid	82	0,0810	125	125
FE39RXBRWW	0,390	18	18	Solid	82	0,1400	120	125
FE39WW	0,400	18	18	Stranded	76	0,1480	200	125
FC21RXTW	0,210	28	26,5	Solid	82	0,0419	150	200
KW	0,310	18	6	Solid	82	0,0537	100	180
KX	0,200	0	0	Solid	82	0,0000	0	180
FN32RXUL	0,320	18,5	18,5	Solid	88	0,0490	50	125

Cable	Nominal OD - inches	FCO (GHz)	Assemblies offered to ___ GHz	Center Conductor	Vp (%)	Weight (lb/ft)	Max Assembly Length	Upper Temp (°C)
FE65	0,650	8	8	Stranded	76	0,3350	1000	125
FA20RXBK	0,200	28	27	Solid	82	0,0389	150	200
FA31RXBK	0,310	18	18	Solid	82	0,0930	85	200
FC25XWW	0,250	28	26,5	Stranded	82	0,0635	150	200
FA20XA	0,330	28	26,5	Stranded	82	0,0000	30	200
FA12MX	0,120	50	18	MultiStrand	82	0,0142	150	200
FA12RXLF	0,120	50	6	Solid	82	0,0138	175	200
FN99KR	0,990	4	4	Solid	76	0,8830	200	200
FE108RL	1,080	4	4	Solid	76	0,9600	100	125
FC14ZLW	0,140	40	10	Stranded	76	0,0140	200	200
FC20ZLW	0,190	28	10	Stranded	76	0,0299	500	200
FC28ZLW	0,250	21	10	Stranded	76	0,0522	1000	200
FC38ZLW	0,320	16	10	Stranded	76	0,0851	1000	200
FC48ZLW	0,490	10	10	Stranded	76	0,1714	1000	200
FN32RXLW	0,320	18,5	18,5	Solid	82	0,0000	75	200
FA20XBK	0,200	28	27	Stranded	82	0,0380	150	200
WN	0,310	18	5	Solid	82	0,0931	100	200
FE62WW	0,620	10	10	Stranded	76	0,0000	100	125
FA19RXBK	0,190	30	26,5	Solid	82	0,0330	150	200
FA15RXBK	0,150	40	40	Solid	82	0,0200	125	200
FA25XBK	0,250	20	18	Stranded	82	0,0000	100	200
FA31RXBL	0,310	18	18	Solid	82	0,0930	85	200
FE15LSRX	0,150	40	18	Solid	82	0,0200	125	125
FA39RX	0,390	13	12	Solid	82	0,1440	75	200
FA31MX	0,310	18	18	Multi-Stranded	82	0,0000	0	200
FC33MXTW	0,330	18	18	Multi-Stranded	82	0,0000	0	200
FC09ZLW	0,090	50	10	Stranded	75	0,0057	100	200
RC60	0,600	6	6	Stranded	86	0,1650	0	125
FC38RL	0,380	16	16	Solid	76	0,0000	1000	200
FN25B	0,250	23,5	18	Stranded	76	0,0550	1000	125
FC38	0,330	16	16	Stranded	76	0,0000	1000	200
FN34RXEL	0,340	18,5	18,5	Solid	88	0,0660	80	125
FE55Z	0,550	10	10	Stranded	76	0,2390	1000	125
FC29RX	0,300	18	18	Solid	82	0,0930	85	200
FA25RXBK	0,250	20	18	Solid	82	0,0580	100	200
FC21RLBL	0,210	27	26,5	Solid	76	0,0493	1000	200
FZ11Z	0,110	50	10	Stranded	75	0,0123	200	150
FN35B	0,350	18	18	Stranded	76	0,0990	1000	200
FA32BL	0,310	18,8	18	Stranded	76	0,1000	500	200
FA22BL	0,220	23,5	18	Stranded	76	0,0484	1000	200
FA11ZBL	0,110	50	10	Stranded	75	0,0123	200	200
FA30RXBL	0,310	18	18	Solid	82	0,0930	85	200

FOR YOUR NOTE

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CERTIFICAZIONE DI SISTEMA QUALITÀ DNV·GL ISO 9001
CERTIFICAZIONE DI SISTEMA QUALITÀ DNV·GL AS/EN/JISQ 9100
CERTIFICAZIONE DI SISTEMA AMBIENTALE DNV·GL ISO 14001

Ed.09/2018 v.0

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