

### SMPTE311M Hybrid Fiber-optic Camera Cables

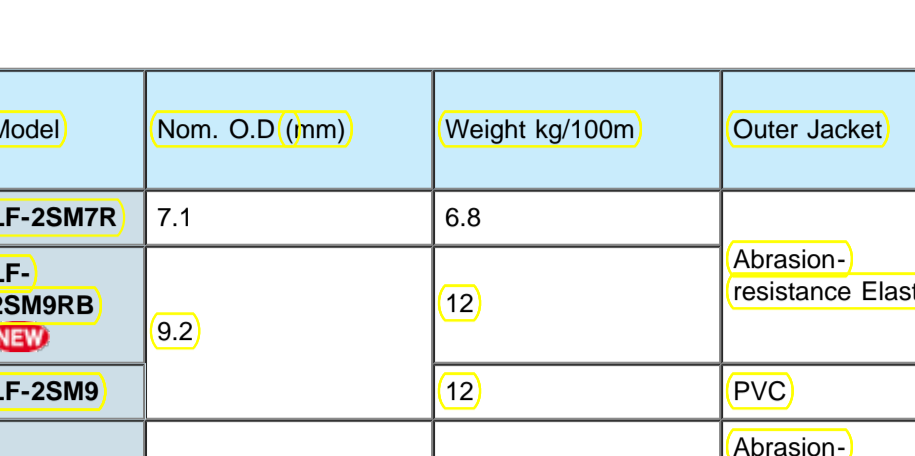
Canare expands the range of hybrid fiber-optic camera cable to provide the best solutions for HDTV broadcasting. In addition to the industrial standard OD 9mm cable, we launched OD 7mm of slim profile cable.

#### Key Features and Benefits

- SMPTE 311M
- Meets HDTV Camera systems
- Rugged and flexible construction
- Slim and Light (LF-2SM7R)



**LF-2SM7R**  
Jacket color : black



**LF-2SM9RB**  
Jacket color : black

Model	Nom. O.D (mm)	Weight kg/100m	Outer Jacket	Overall Shield	Tension Tolerance (N)	Bend Radius	Temp. Range
LF-2SM7R	7.1	6.8		8/24/0.10TA 91%	300		
LF-2SM9RB <b>NEW</b>	9.2	12	Abrasion-resistance Elastomer				
LF-2SM9		12	PVC				
LF-2SM12 <b>NEW</b>	12.0	18.0	Abrasion-resistance Elastomer (trinner Jacket: PVC)	9/24/0.10TA 91%	700	x6 over of Nom. O.D.	-40°C to +75°C
LF-2SM16 <b>NEW</b>	16.0	29.0	PVC (Double)				

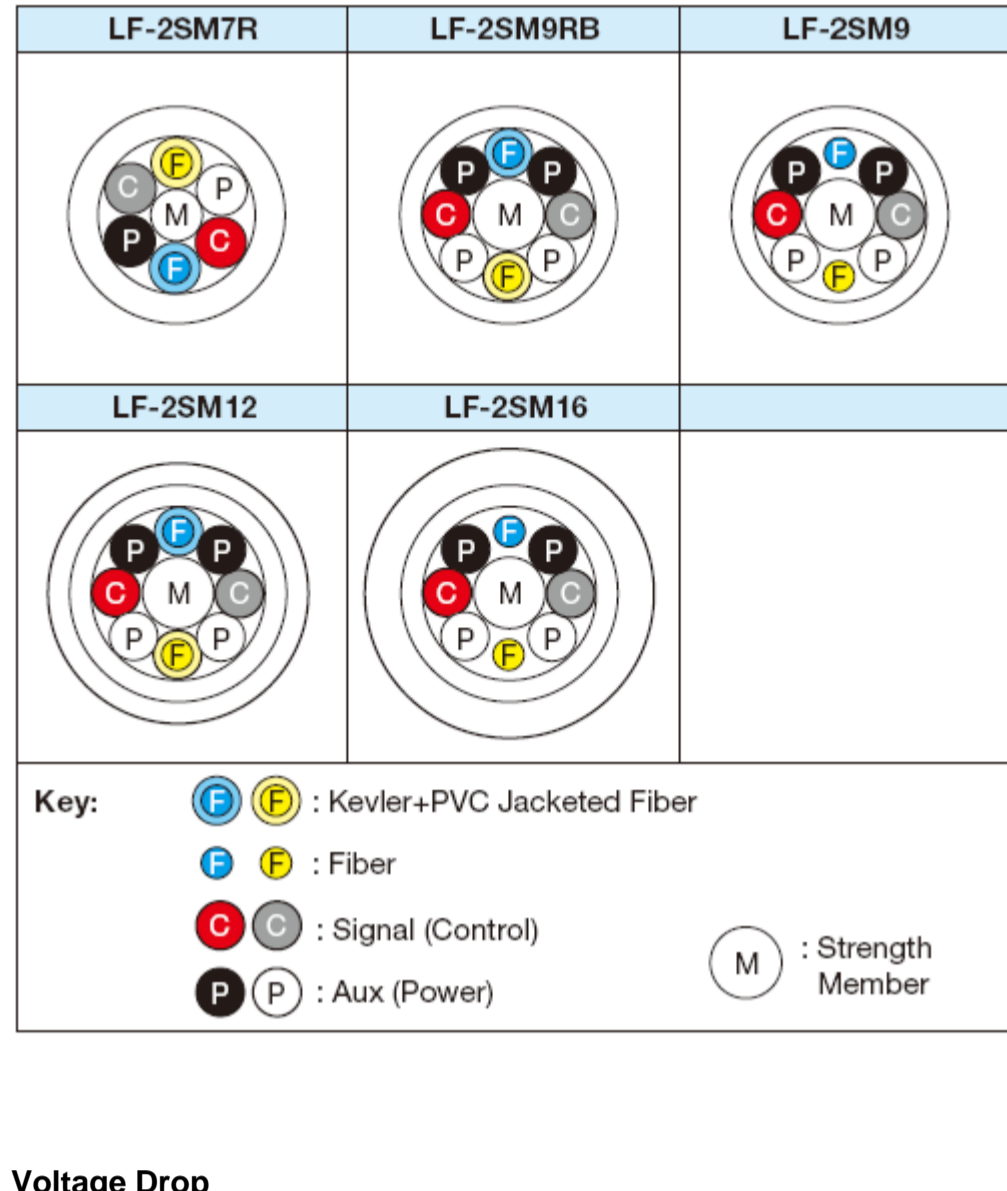
Model	Channel Unit	Signal (Control)	Aux. (Power)	Strength Member
LF-2SM7R	2x SM9 2/125µm Kevlar+PVC Jacket (1x BLU, 1x YEL) Unit OD: 1.7mm	2x 25AWG, 7/0.18TA (1xCLR, 1xRED) Unit OD: 1.2mm	2x 23AWG, 25/0.12TA (1x BLK, 1x WHT) Unit OD: 1.35mm	1x 18AWG, 19/0.24 (1xCLR) Unit OD: 1.4mm
LF-2SM9RB <b>NEW</b>	2x SM9 2/125µm Kevlar+PVC Jacket (1x BLU, 1x YEL) Unit OD: 1.7mm			
LF-2SM9	2x SM9 5/125µm (1x BLU, 1x YEL) Unit OD: 0.9mm	2x 25AWG, 7/0.18TA (1xGRY, 1xRED) Unit OD: 1.2mm	4x 20AWG, 21/0.18TA (2xBLK, 2xWHT) Unit OD: 1.7mm	1x 15AWG, 19/0.24 (1xCLR) Unit OD: 2.6mm
LF-2SM12 <b>NEW</b>	2x SM9 5/125µm Kevlar+PVC Jacket (1x BLU, 1x YEL) Unit OD: 1.7mm			
LF-2SM16 <b>NEW</b>	2x SM9 5/125µm (1x BLU, 1x YEL) Unit OD: 0.9mm			

\*Non-stock item. Contact Canare sales for details. Sales units (m) : Please contact Canare sales.

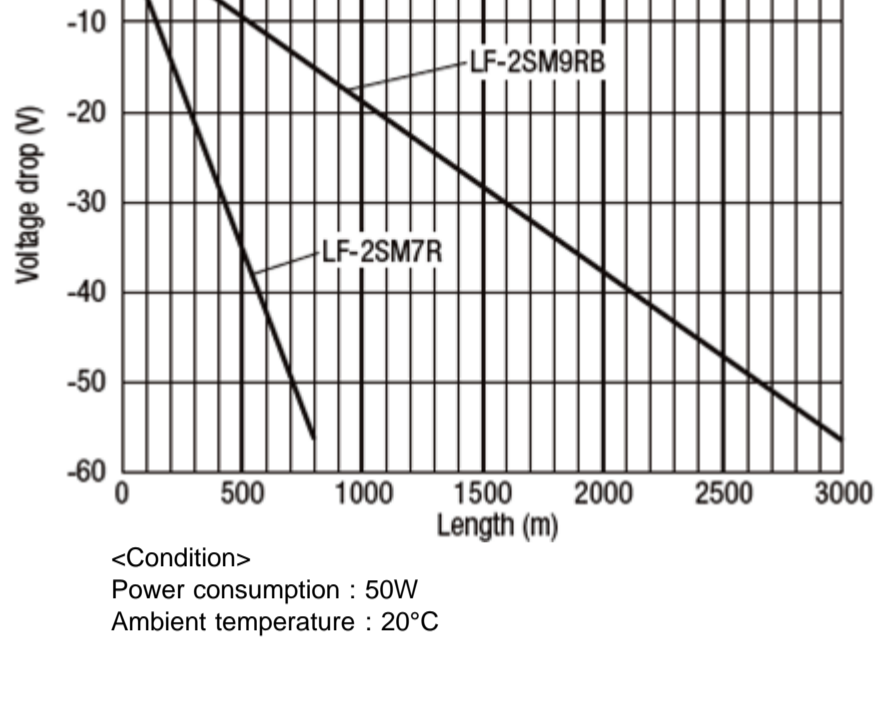
- LF-2SM7R:** OD 7mm of slim profile and 43% lighter than LF-2SM9R, best fit for mobile applications.
- LF-2SM9RB:** Durable OD 9mm hybrid cable features abrasion-resistance PVC jacket and Kevlar+PVC jacketed fiber units. Best fit for all studio and outside broadcast applications... most common.
- LF-2SM9:** Ideal for fixed HDTV system installations
- LF-2SM12, LF-2SM16:** Rugged construction, double jacket

**Note :**  
The power supply distance depends on HFO camera cable voltage drop and the system used. Calculate the distance using the graph below provided as a guideline.

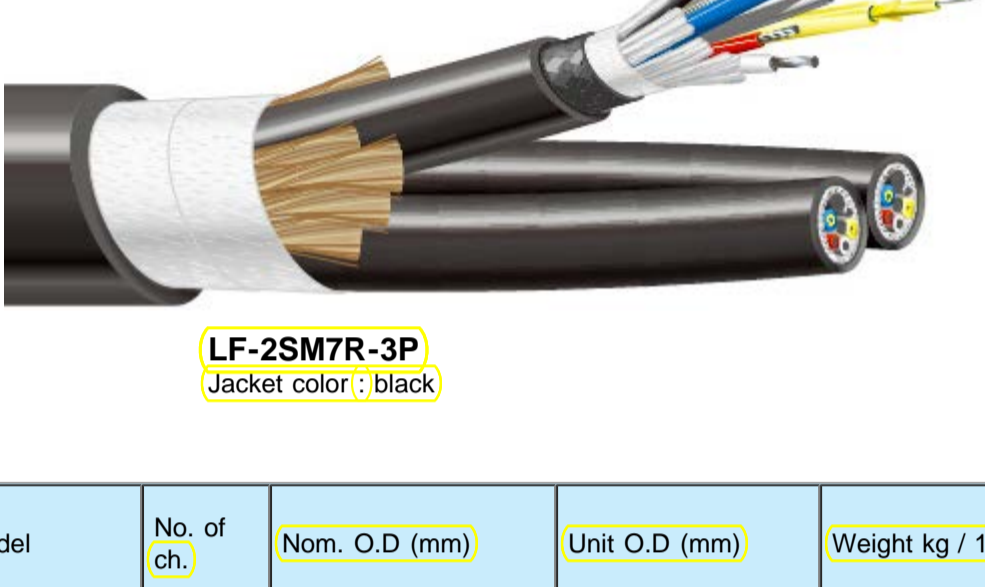
#### Cross Section



#### Voltage Drop



### HFO Camera Cable (Multi Channel)



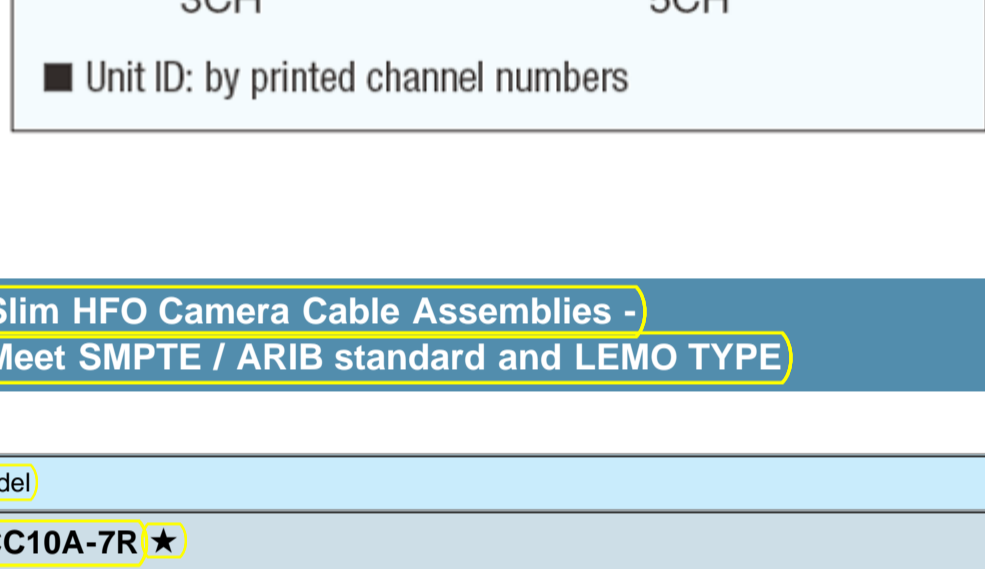
**LF-2SM7R-3P**  
Jacket color : black

Model	No. of ch.	Nom. O.D (mm)	Unit O.D (mm)	Weight kg / 100m	Outer Jacket	Tension Tolerance (N)	Bend Radius	Temp. Range
LF-2SM7R-3P <b>NEW</b>	3	19.4		36				
LF-2SM7R-5P <b>NEW</b>	5	23.7	7.1	56	PVC	900	6 x over of Nom. O.D.	-30°C to +75°C

\* Production by order. Contact Canare sales for details. Sales units (m) : Please contact Canare sales. Unit composition : Refer to LF-2SM7R.

#### LF-2SM7R-P SERIES:

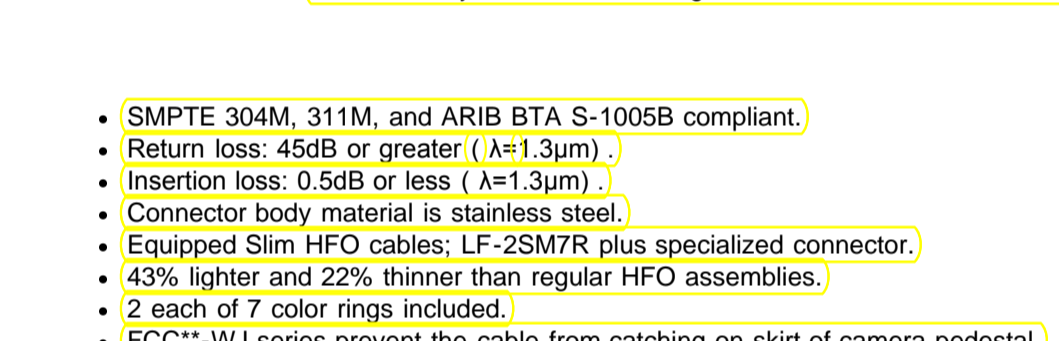
- Canare multi channel hybrid fiber cables are now available in 3 or 5-channel format. LF-2SM7R-P is designed with thin OD and light weight for ease of mobile HD applications.



### Slim HFO Camera Cable Assemblies - Meet SMPTE / ARIB standard and LEMO TYPE

Model	Length (m)
FCC10A-7R <b>NEW</b>	10
FCC20A-7R <b>NEW</b>	20
FCC30A-7R <b>NEW</b>	30
FCC50A-7R <b>NEW</b>	50
FCC100A-7R <b>NEW</b>	100

Jacket color: black



\* Production by order. Custom lengths order available \* TAJIMI compatible type (OC series) is also available. Please contact Canare for more information.

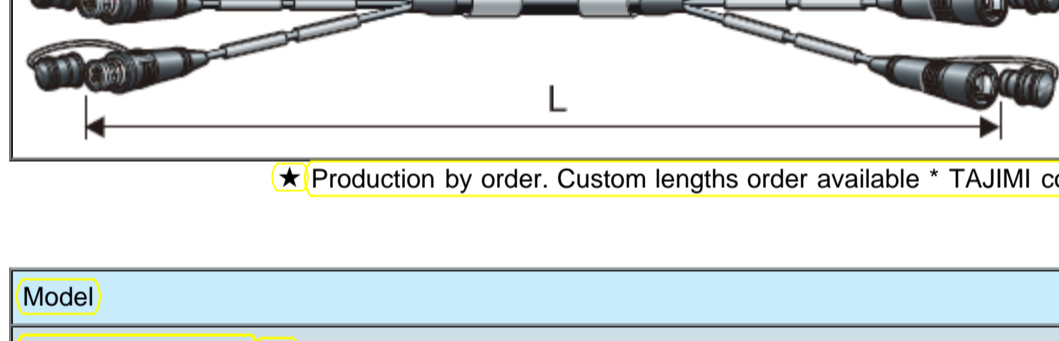
- SMPTE 304M, 311M, and ARIB BTA S-1005B compliant.
- Return loss: 45dB or greater (A=1.3µm).
- Insertion loss: 0.5dB or less (A=1.3µm).
- Connector body material is stainless steel.
- Equipped Slim HFO cables: LF-2SM7R plus specialized connector.
- 43% lighter and 22% thinner than regular HFO assemblies.
- 2 each of 7 color rings included.
- FCC\*\*WJ series prevent the cable from catching on skirt of camera pedestal.
- FCC\*\*7R series are slim and lightweight for mobile applications.

**Note :**  
Power supply distance for FCC\*\*A-7R shortens to approximately 1/4 of that of the FCC\*\*B and FCC\*\*A-WJ series.

### Slim HFO Camera Cable Assemblies (Multi Channel Fantails) - Meet SMPTE / ARIB standard and LEMO TYPE

Model	Length (m)
F3-FCC10A-7R <b>NEW</b>	10
F3-FCC20A-7R <b>NEW</b>	20
F3-FCC30A-7R <b>NEW</b>	30
F3-FCC50A-7R <b>NEW</b>	50
F3-FCC100A-7R <b>NEW</b>	100

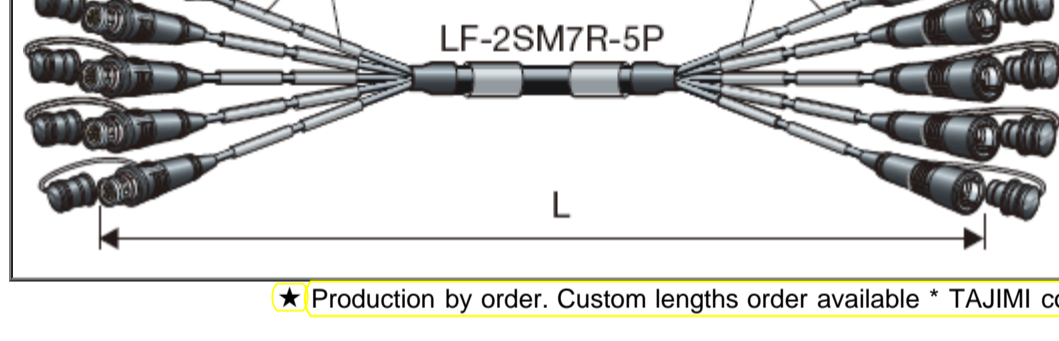
Jacket color: black



\* Production by order. Custom lengths order available \* TAJIMI compatible type (OC series) is also available. Please contact Canare for more information.

Model	Length (m)
F5-FCC10A-7R <b>NEW</b>	10
F5-FCC20A-7R <b>NEW</b>	20
F5-FCC30A-7R <b>NEW</b>	30
F5-FCC50A-7R <b>NEW</b>	50
F5-FCC100A-7R <b>NEW</b>	100

Jacket color: black



\* Production by order. Custom lengths order available \* TAJIMI compatible type (OC series) is also available. Please contact Canare for more information.

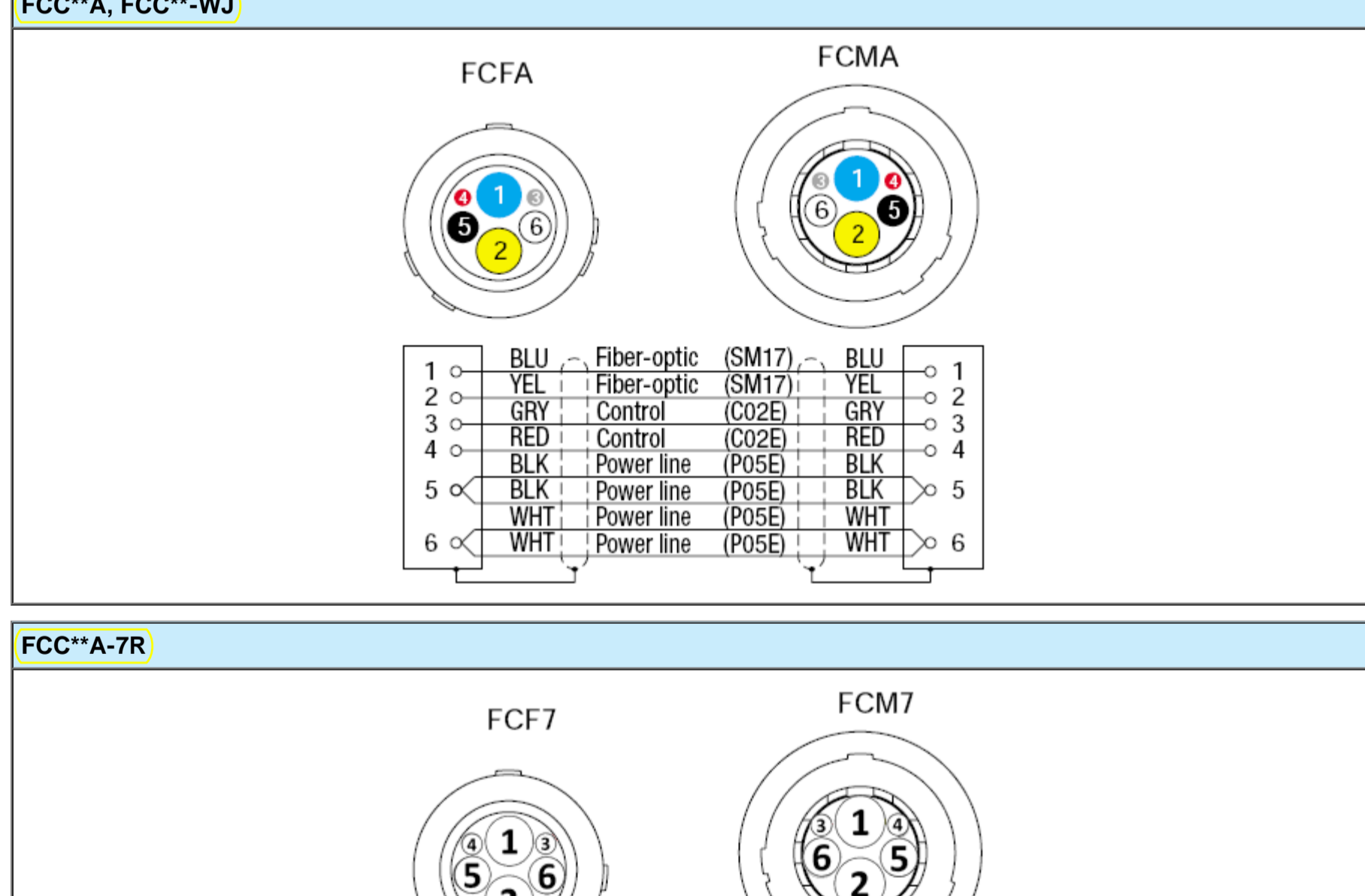
- Equipped Slim HFO cables: LF-2SM7R-P plus specialized connector.
- color rings included.

**Note :**  
Power supply distance for F-FCC\*\*A-7R shortens to approximately 1/4 of that of the FCC\*\*B and FCC\*\*A-WJ series.

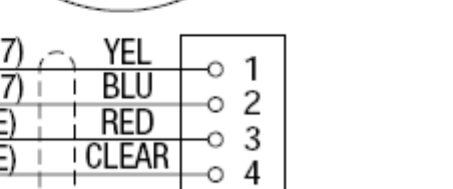


**F5-FCC10A-7R**

#### Wiring Diagram



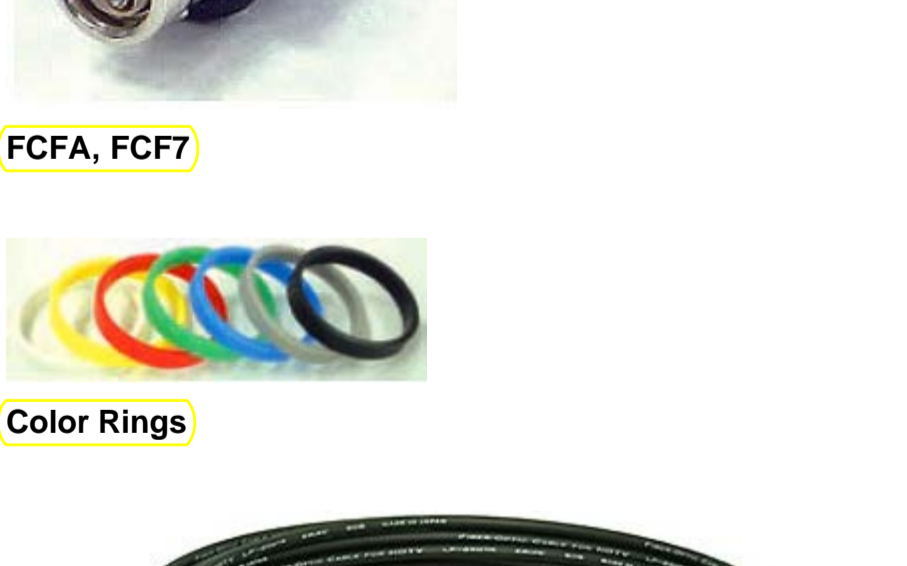
**FCFA, FCF7**



**FCMA, FCM7**



**Color Rings**

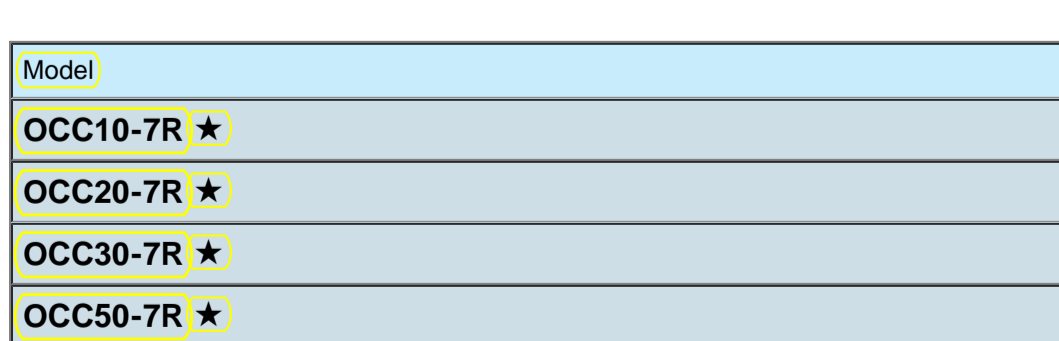


**FCC\*\*A-7R**

### Slim HFO Camera Cable Assemblies - TAJIMI TYPE

Model	Length (m)
OCC10-7R <b>NEW</b>	10
OCC20-7R <b>NEW</b>	20
OCC30-7R <b>NEW</b>	30
OCC50-7R <b>NEW</b>	50
OCC100-7R <b>NEW</b>	100

Jacket color: black

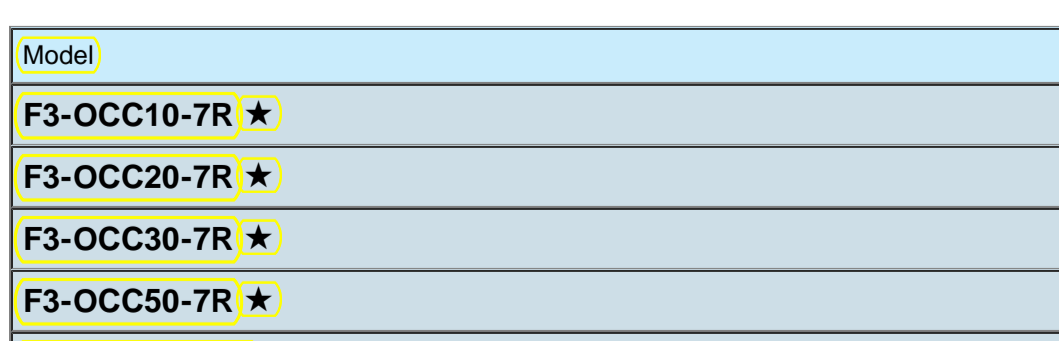


\* Production by order.

### Slim HFO Camera Cable Assemblies (Multi Channel Fantails) - TAJIMI TYPE

Model	Length (m)
F3-OCC10-7R <b>NEW</b>	10
F3-OCC20-7R <b>NEW</b>	20
F3-OCC30-7R <b>NEW</b>	30
F3-OCC50-7R <b>NEW</b>	50
F3-OCC100-7R <b>NEW</b>	100

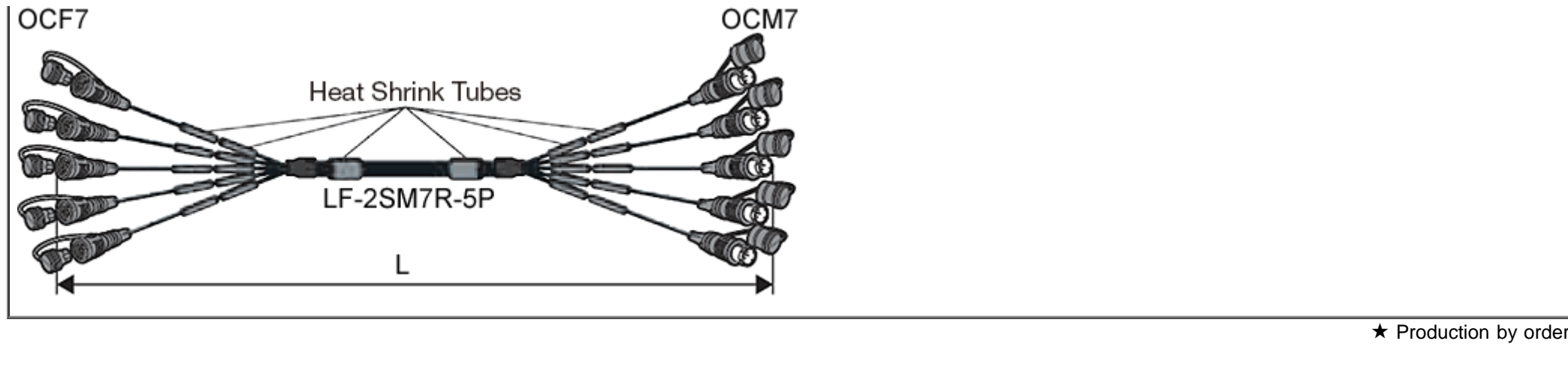
Jacket color: black



\* Production by order.

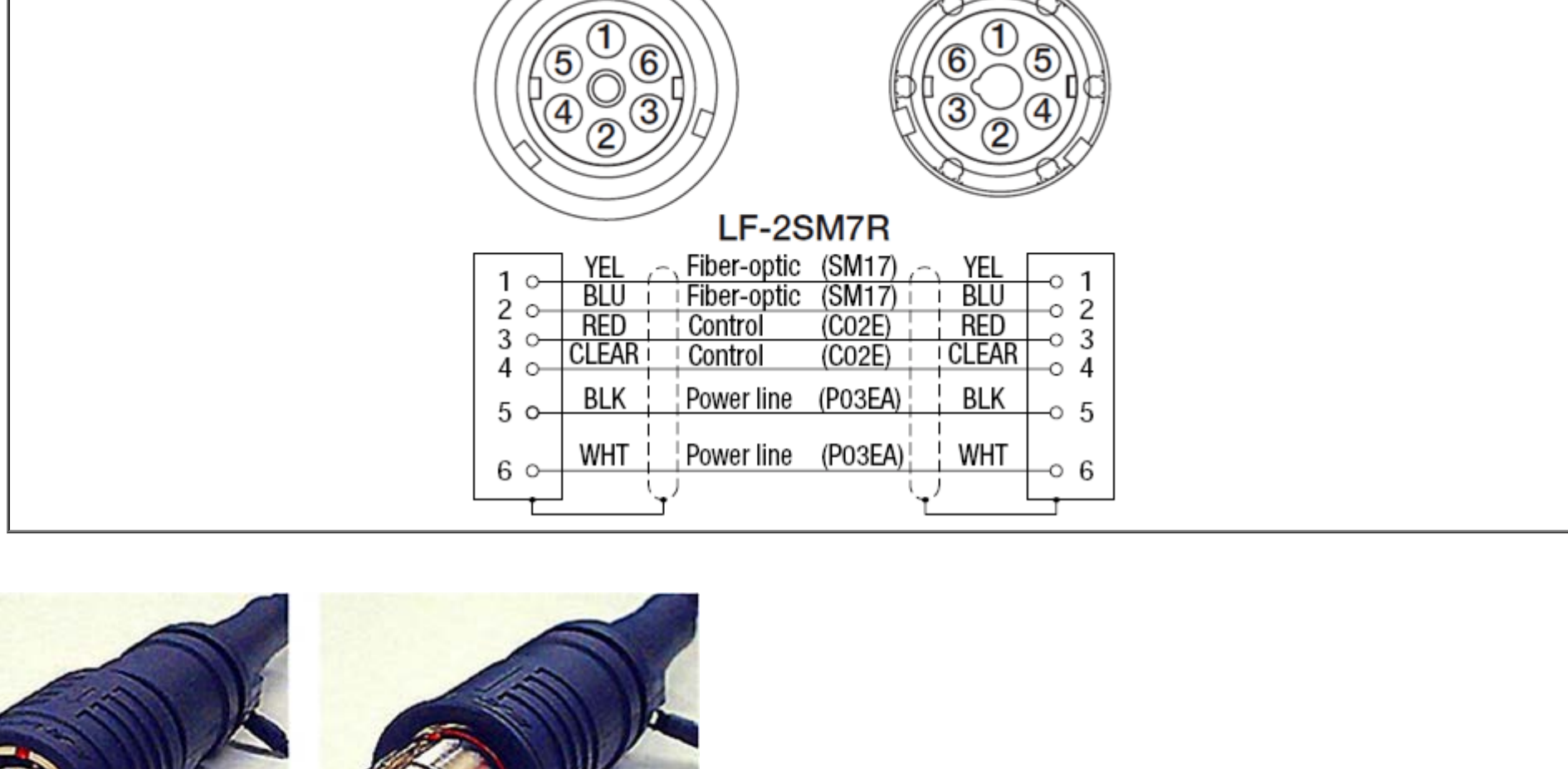
Model	Length (m)
F5-OCC10-7R <b>NEW</b>	10
F5-OCC20-7R <b>NEW</b>	20
F5-OCC30-7R <b>NEW</b>	30
F5-OCC50-7R <b>NEW</b>	50
F5-OCC100-7R <b>NEW</b>	100

Jacket color: black



★ Production by order.

- HFO camera cable with the flange for panel mounting.
- SMPTE 304M, 311M compliant.
- Equipped Slim HFO cables: LF-2SM7R plus specialized connector.
- 43% lighter and 22% thinner than regular HFO assemblies.
- 7 color rings are included to differentiate signals.



OCF7

OCM7



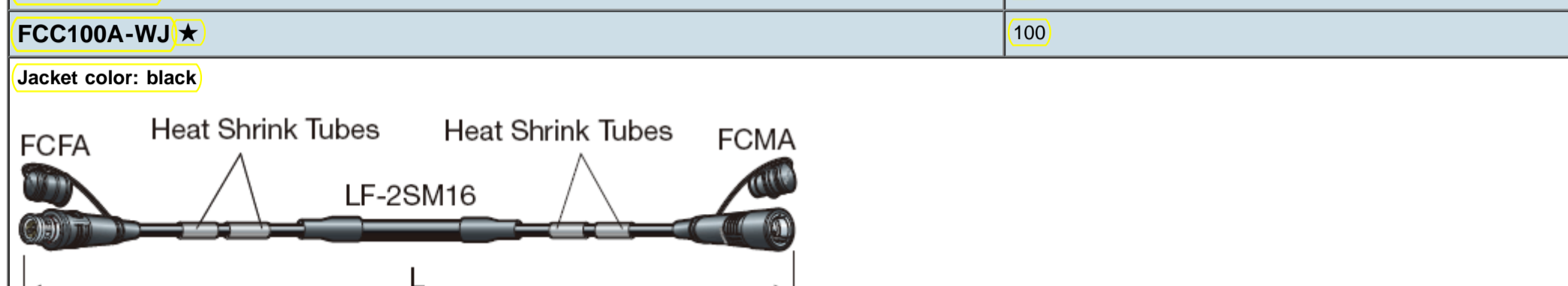
O.B. Van機架

薄型攝影機複合光纖線組

O.B. Van

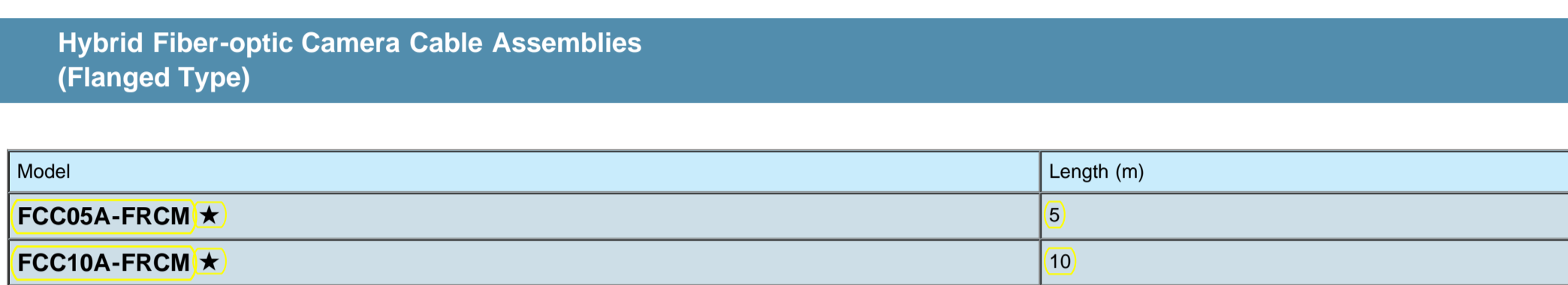
Hybrid Fiber-optic Camera Cable Assemblies

Model	Length (m)
<b>FCC10B</b> ★	10
<b>FCC20B</b> ★	20
<b>FCC50B</b>	50
<b>FCC100B</b>	100



★ Production by order. Custom lengths order available  
 \* TAJIMI compatible type (OC series) is also available.  
 Please contact Canare for more information.

Model	Length (m)
<b>FCC50A-WJ</b> ★	50
<b>FCC100A-WJ</b> ★	100



★ Production by order. Custom lengths order available  
 \* TAJIMI compatible type (OC series) is also available.  
 Please contact Canare for more information.

- SMPTE 304M, 311M, and ARIB BTA S-1005B compliant.
- Return loss: 45dB or greater ( $\lambda=1.3\mu\text{m}$ )
- Insertion loss: 0.5dB or less ( $\lambda=1.3\mu\text{m}$ )
- Connector body material is stainless steel.
- 2 each of 7 color rings included.
- FCC\*\*A-WJ series prevent the cable from catching on skirt of camera pedestal.

Hybrid Fiber-optic Camera Cable Assemblies (Flanged Type)

Model	Length (m)
<b>FCC05A-FRCM</b> ★	5
<b>FCC10A-FRCM</b> ★	10



IU-FC-SET included

★ Production by order.

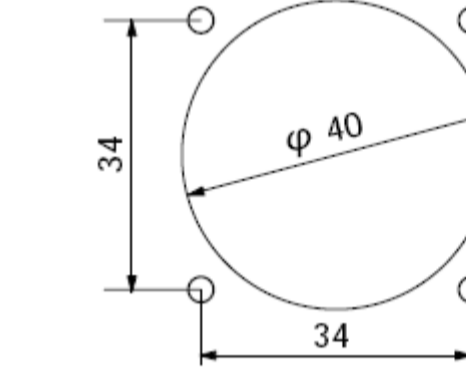
Model	Length (m)
<b>FCC05A-FMRC</b> ★	5
<b>FCC10A-FMRC</b> ★	10



IU-FCM-SET included

★ Production by order.

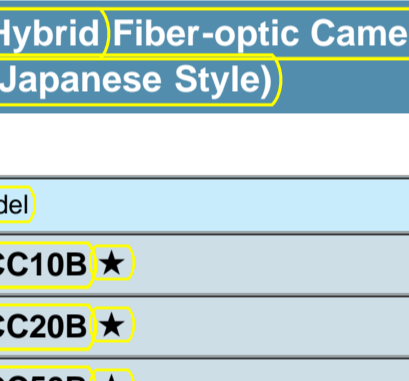
- HFO camera cable with the flange for panel mounting.
- SMPTE 304M, 311M, and ARIB BTA S-1005B compliant.
- Return loss: 45dB or greater ( $\lambda=1.3\mu\text{m}$ )
- Insertion loss: 0.5dB or less ( $\lambda=1.3\mu\text{m}$ )
- Connector body material is stainless steel.
- 2 each of 7 color rings and insulation plates included.



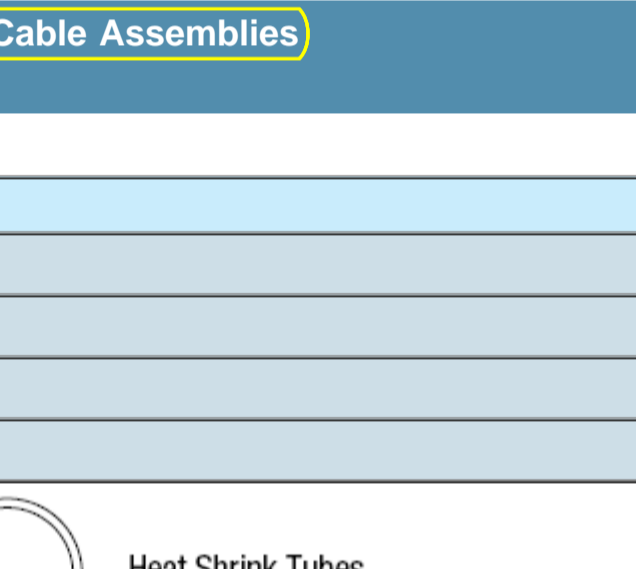
FCFRCA



FCMRCA

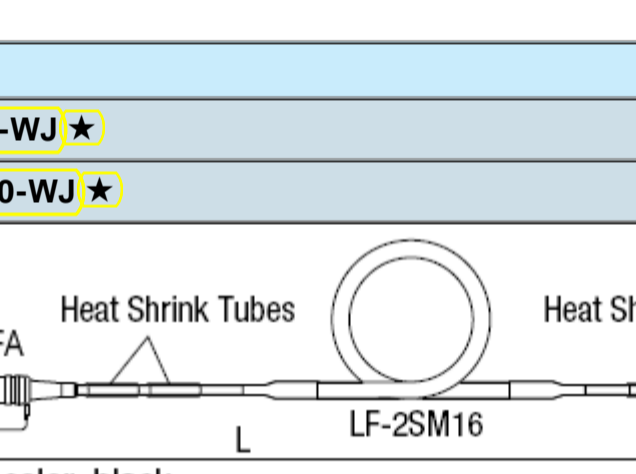


Color Rings



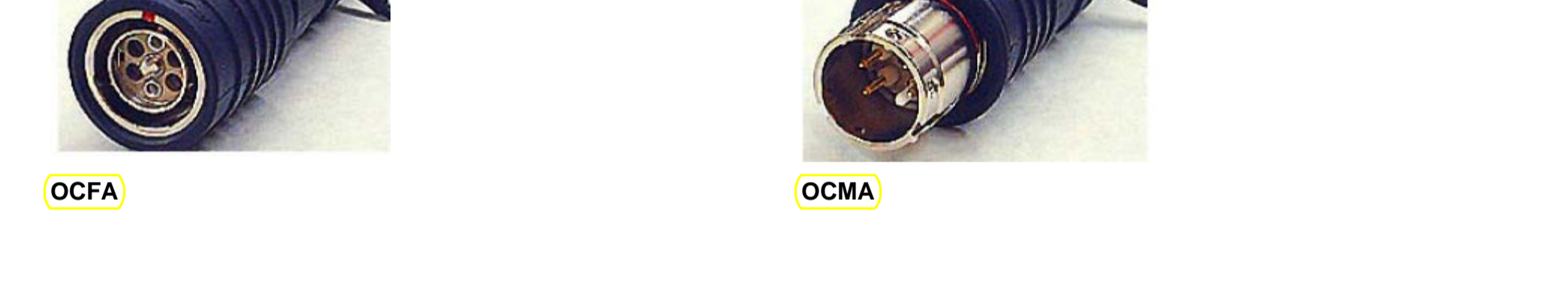
IU-FC-SET

Hole Dimensions



Hybrid Fiber-optic Camera Cable Assemblies (Japanese Style)

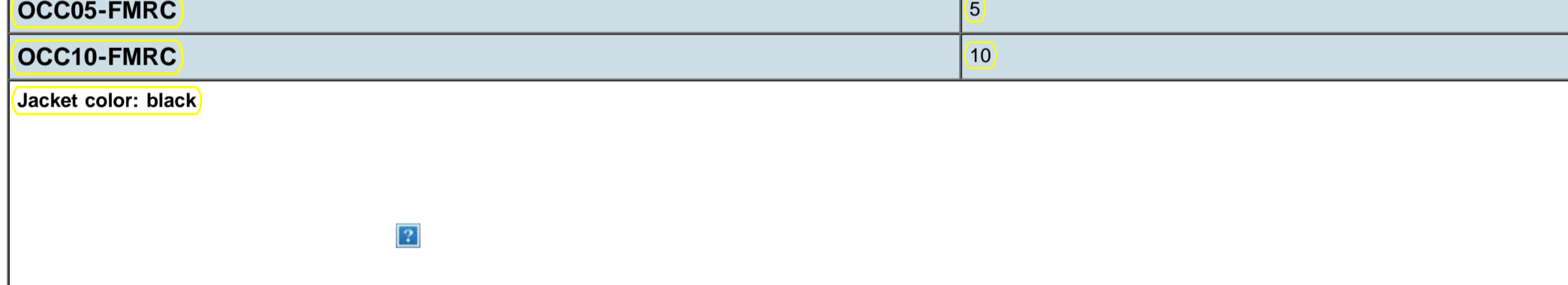
Model	Length (m)
<b>OCC10B</b> ★	10
<b>OCC20B</b> ★	20
<b>OCC50B</b> ★	50
<b>OCC100B</b> ★	100



Jacket color: black

★ Production by order.

Model	Length (m)
<b>OCC50-WJ</b> ★	50
<b>OCC100-WJ</b> ★	100



Jacket color: black

★ Production by order.

- Return loss: 45dB or greater ( $\lambda=1.3\mu\text{m}$ )
- Insertion loss: 0.5dB or less ( $\lambda=1.3\mu\text{m}$ )
- Connector body material is stainless steel.
- 2 each of 7 color rings included.
- OCC\*\*-WJ series prevent the cable from catching on skirt of camera pedestal.

Note :  
 The above connectors (Canare OC series) are non-compatible with SMPTE connectors (Canare FC series).

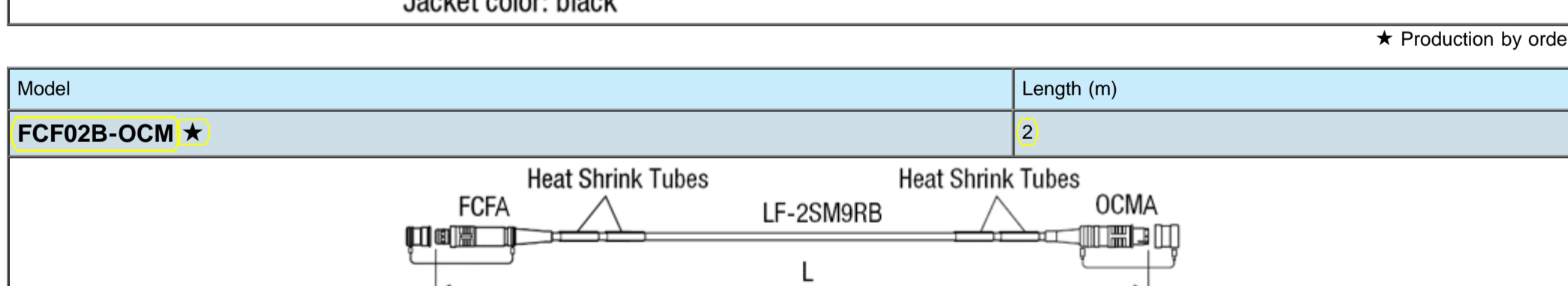


OCFA



OCMA

Model	Length (m)
<b>OCC05-FRCM</b>	5
<b>OCC10-FRCM</b>	10



IU-FCM-SET included

Production by order.

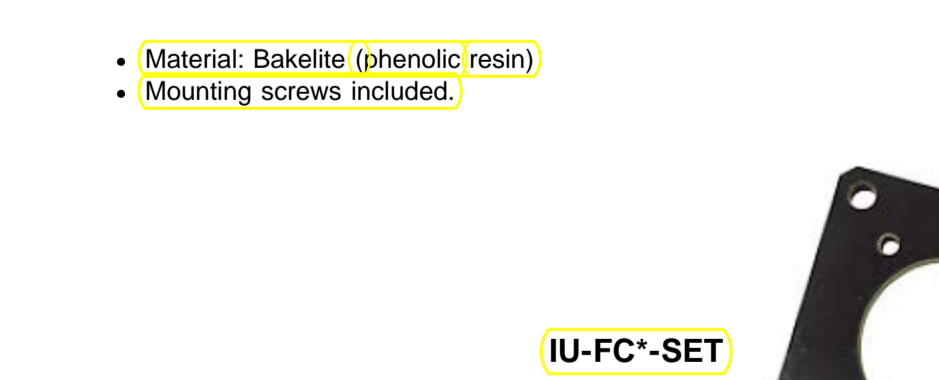
Model	Length (m)
<b>OCC05-FMRC</b>	5
<b>OCC10-FMRC</b>	10



Jacket color: black

Production by order.

- 2 each of 7 color rings included.



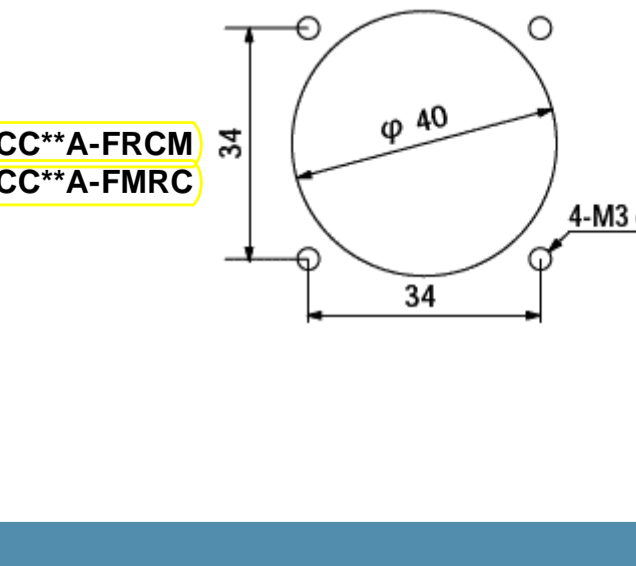
FCF02B-OCM

Insulation Plate

(Ideal for perfect insulation between individual connector and panel.)

Model	Applicable connector
<b>IU-FCM-SET</b>	FCMRA, FCMRCA, OCFRA, OCFRCA, OCMRA, OCMRCA
<b>IU-FCF-SET</b>	FCFRA, FCFRCA

- Material: Bakelite (phenolic resin)
- Mounting screws included.



IU-FC-SET

Hole Dimensions



Extraction Tool

Extraction tool helps easy to clean Canare HFO connectors.

Model	Applicable connector
<b>ASPT-1</b>	FCFA, FCF7, FCFRA, FCFRCA

- (Tool to be used to release the alignment sleeve unit when cleaning HFO connectors.)
- (Use the CLETOP 2.5/2.0 (100) cleaning stick to clean fiber-optic camera connectors.)

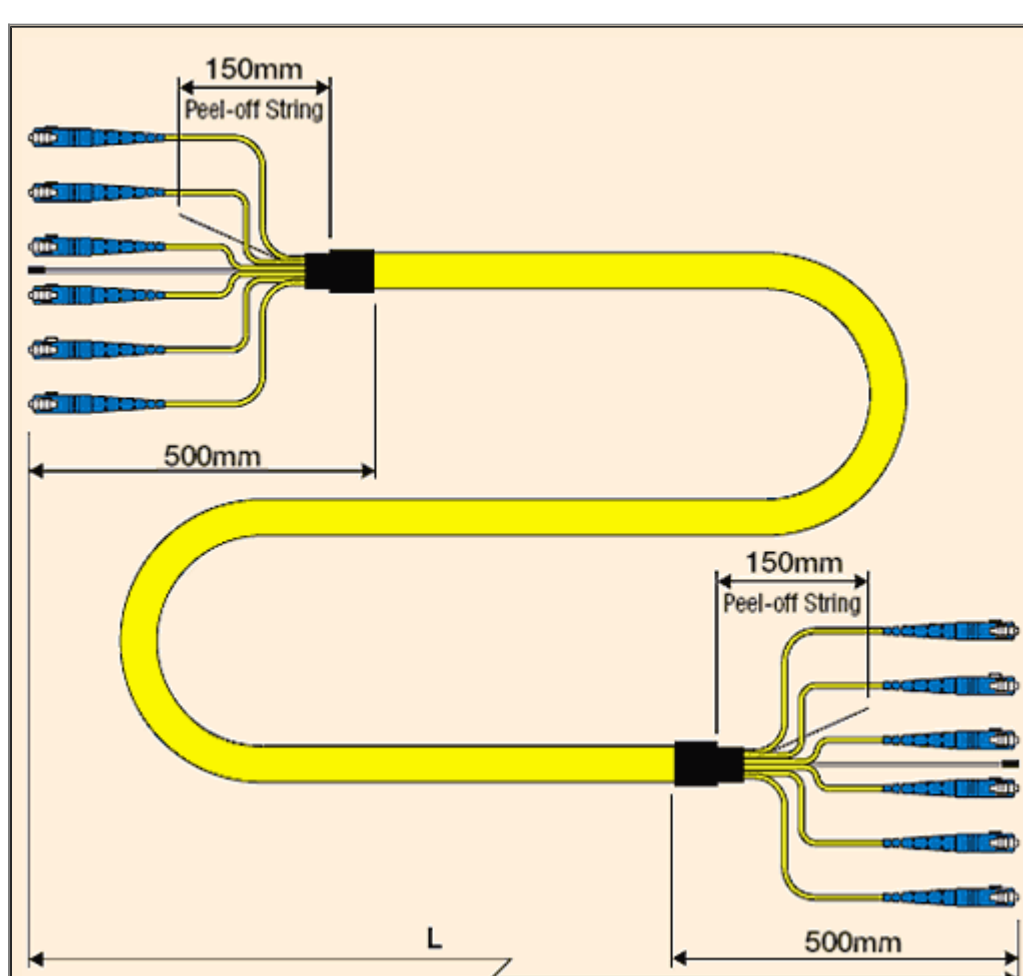


ASPT-1



Quick-release

Fiber-optic Assemblies (Multi Channel Fantails)



**YEL**

Channel	Model	Length (m)	Fiber Optic Cable Brief Spec.		
			Part Number	Unit O.D. (mm)	Nom. O.D. (mm)
2	2FS10-S ★	10	LF-SM2-2C	2	7.4
	2FS20-S ★	20			
	2FS50-S ★	50			
4	4FS10-S ★	10	LF-SM2-4C	2	9.0
	4FS20-S ★	20			
	4FS50-S ★	50			
6	6FS10-S ★	10	LF-SM2-6C	2	10.0
	6FS20-S ★	20			
	6FS50-S ★	50			
8	8FS10-S ★	10	LF-SM2-8C	2	12.8
	8FS20-S ★	20			
	8FS50-S ★	50			
12	12FS10-S ★	10	LF-SM2-12C	2	14.7
	12FS20-S ★	20			
	12FS50-S ★	50			
16	16FS10-S ★	10	LF-SM2-16C	2	15.3
	16FS20-S ★	20			
	16FS50-S ★	50			
24	24FS10-S ★	10	LF-SM2-24C	2	
	24FS20-S ★	20			
	24FS50-S ★	50			

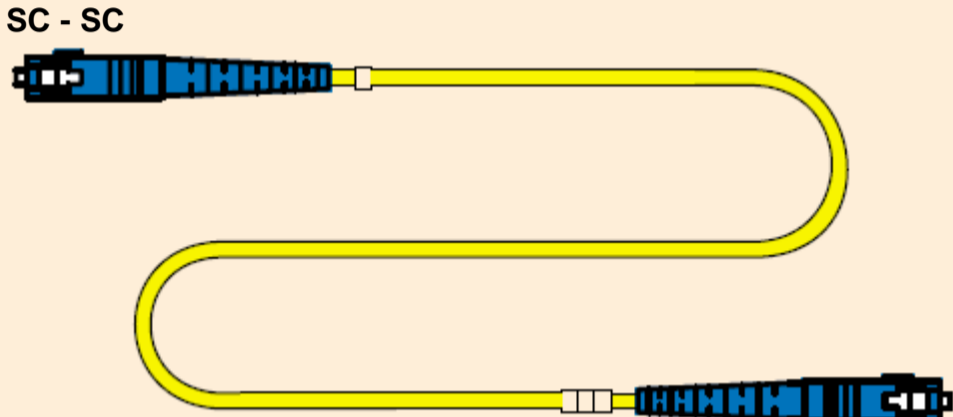
★ Production by order

- Super flexible cable with reliable bellcore boots
- Adjustable fantail length with peel-off string
- UPC polishing; Return loss  $\geq 50$ dB for single mode
- Transmission loss 0.5dB at  $\lambda=1.31\mu\text{m}$  and 0.4dB at  $\lambda=1.55\mu\text{m}$

### Fiber-optic Assemblies (Single/Dual Channel)

#### Single mode

SC - SC

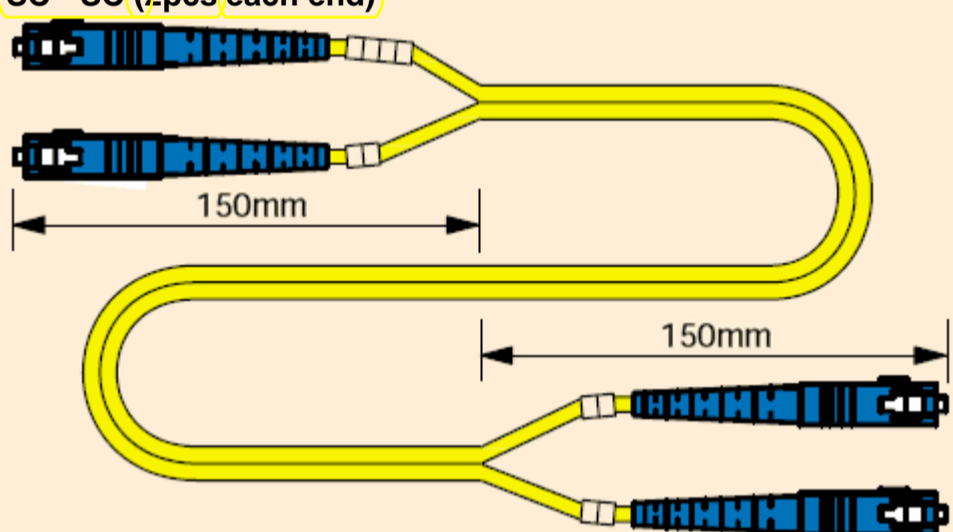


**YEL**

Model	Length (m)
FS3C002-S	0.2
FS3C003-S	0.3
FS3C005-S	0.5
FS3C01-S	1.0
FS3C015-S	1.5
FS3C02-S	2.0
FS3C03-S	3.0
FS3C05-S	5.0
FS3C10-S ★	10.0
FS3C15-S ★	15.0
FS3C20-S ★	20.0
FS3C30-S ★	30.0

★ Production by order

SC - SC (2pcs each end)



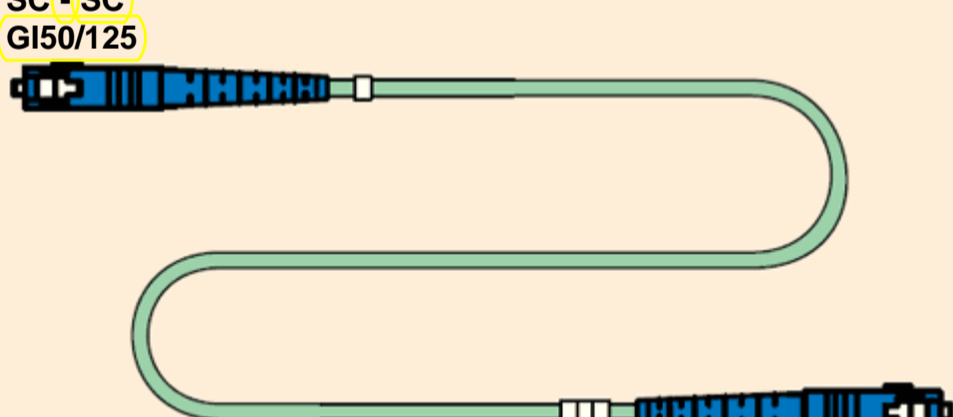
**YEL**

Model	Length (m)
2FSZ3S02-S ★	2.0
2FSZ3S03-S ★	3.0
2FSZ3S05-S ★	5.0

★ Production by order

#### Multi mode

SC - SC

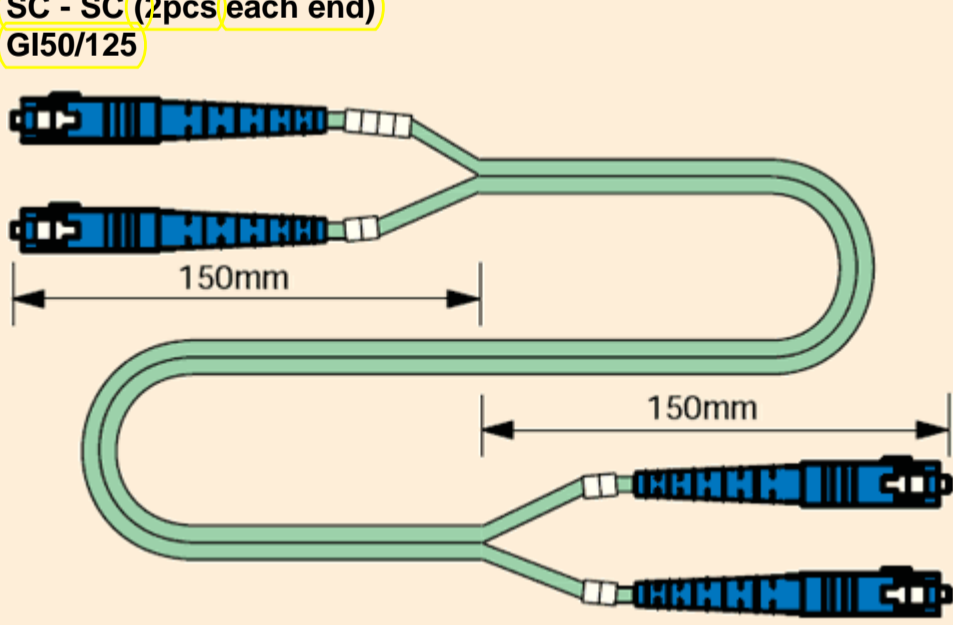


**GRN**

Model	Length (m)
FG53C02-S ★	2.0
FG53C03-S ★	3.0
FG53C05-S ★	5.0

★ Production by order

SC - SC (2pcs each end)

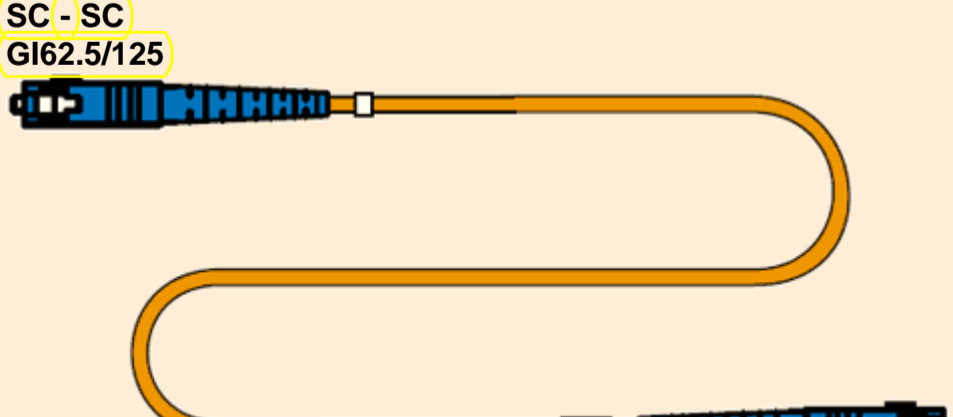


**GRN**

Model	Length (m)
2FG5Z3S02-S ★	2.0
2FG5Z3S03-S ★	3.0
2FG5Z3S05-S ★	5.0

★ Production by order

SC - SC

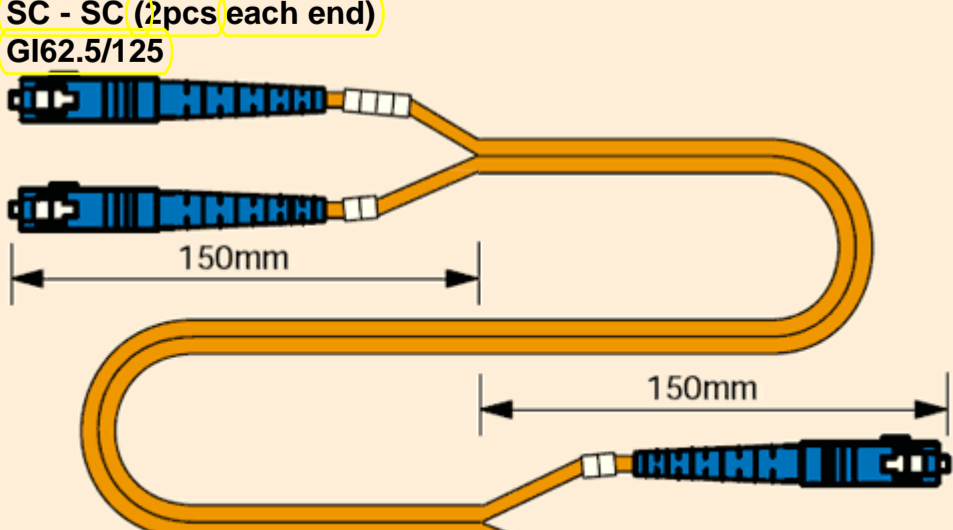


**ORN**

Model	Length (m)
FG63C02-S ★	2.0
FG63C03-S ★	3.0
FG63C05-S ★	5.0

★ Production by order

SC - SC (2pcs each end)



**ORN**

Model	Length (m)
2FG6Z3S02-S ★	2.0
2FG6Z3S03-S ★	3.0
2FG6Z3S05-S ★	5.0

★ Production by order

- Super flexible cable with reliable bellcore boots
- UPC polishing; Return loss  $\geq 50$ dB for single mode and  $\geq 25$ dB for multi mode
- Transmission loss 0.5dB at  $\lambda=1.31\mu\text{m}$  and 0.4dB at  $\lambda=1.55\mu\text{m}$  for single mode
- Transmission loss 3.0dB at  $\lambda=0.85\mu\text{m}$  and 1.0dB at  $\lambda=1.30\mu\text{m}$  for multi mode