

ARINC 801 Termini and 38999 Connectors



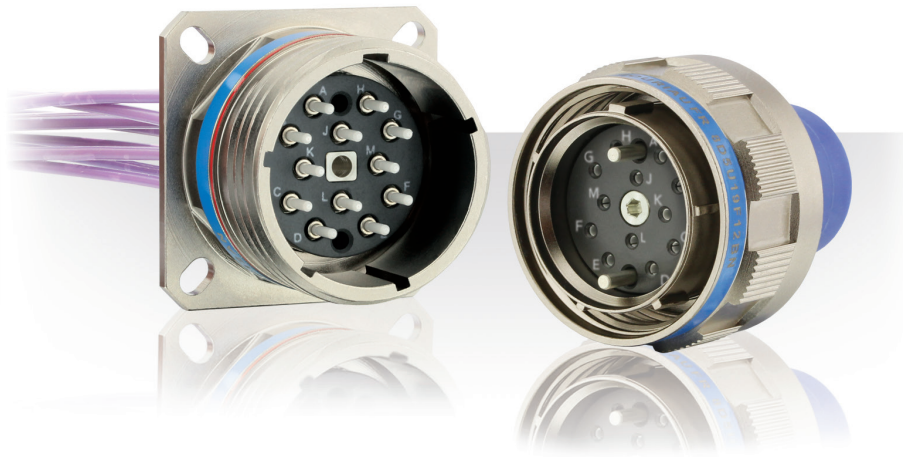
ARINC 801 Fiber Optic Connectors

The high density fiber optic connection made by SOURIAU using 1.25mm ferrules.

- A qualified technology** ■ Flight proven qualified ARINC 801 standard.
- Wide range of material** ■ From composite, aluminum, to stainless steel material connectors in stock.
- Quality and service** ■ 100% SOURIAU components: termini, patchcord and connectors.

Description

- Screw coupling
- Shell size from 11 to 25
- Large number of layouts from 2 to 32 termini
- Composite, aluminum, stainless steel material
- Protected by cadmium, nickel, green zinc cobalt or black zinc nickel plating
- Accessories and tools available (protective caps, backshells, etc...)



Technical features

Optical

- **Multimode insertion loss (IEC 61300-3-4 method B):**
Typical 0.3 dB

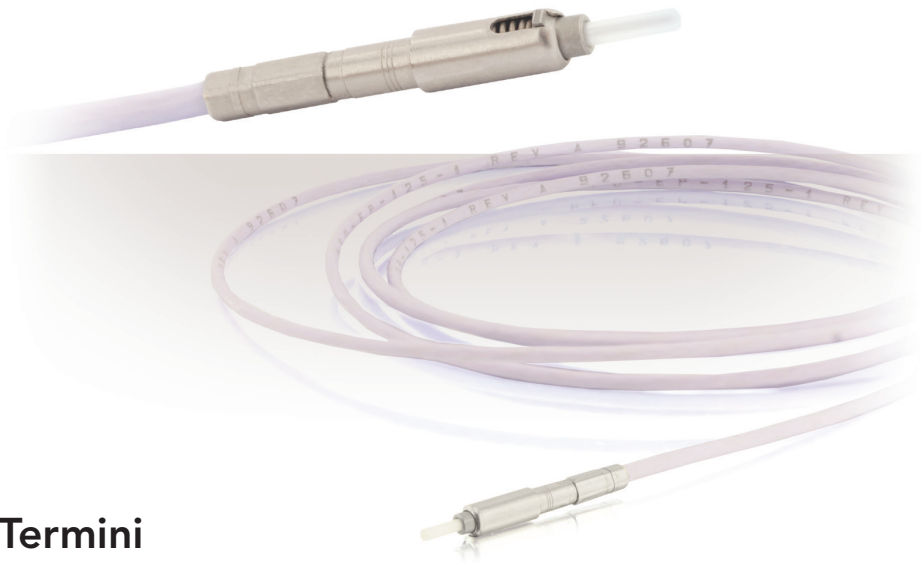
Mechanical

- **Endurance:**
Minimum 100 mating/unmating operations
- **Shock:**
300 g, 3ms as per TIA/EIA 455-14
- **Vibration:**
23.1 Grms as per TIA/EIA 455-11
- **Contact retention:**
68N, as per SAE AS 13441 method 2009.1 for 1.8mm cable

Environmental

- **Salt spray:**
 - . Aluminum shell:
 - Olive Drab Cadmium (W): 500 Hrs
 - Nickel (F): 48 Hrs
 - Black Zinc Nickel (Z): 500 Hrs
 - . Composite shell:
 - Olive Drab Cadmium (J): 2000 Hrs
 - Nickel (M): 2000 Hrs
 - Without plating (X): 2000 Hrs
 - . Stainless steel shell:
 - Passivated (K): 500 Hrs
 - Nickel (S): 500 Hrs
- **Temperature range:**
 - . Thermal cycling 50 cycles between -55°C to +125°C as per TIA/EIA 455-3
 - . Temperature life 1000 hours at 125°C as per TIA/EIA-455-4C

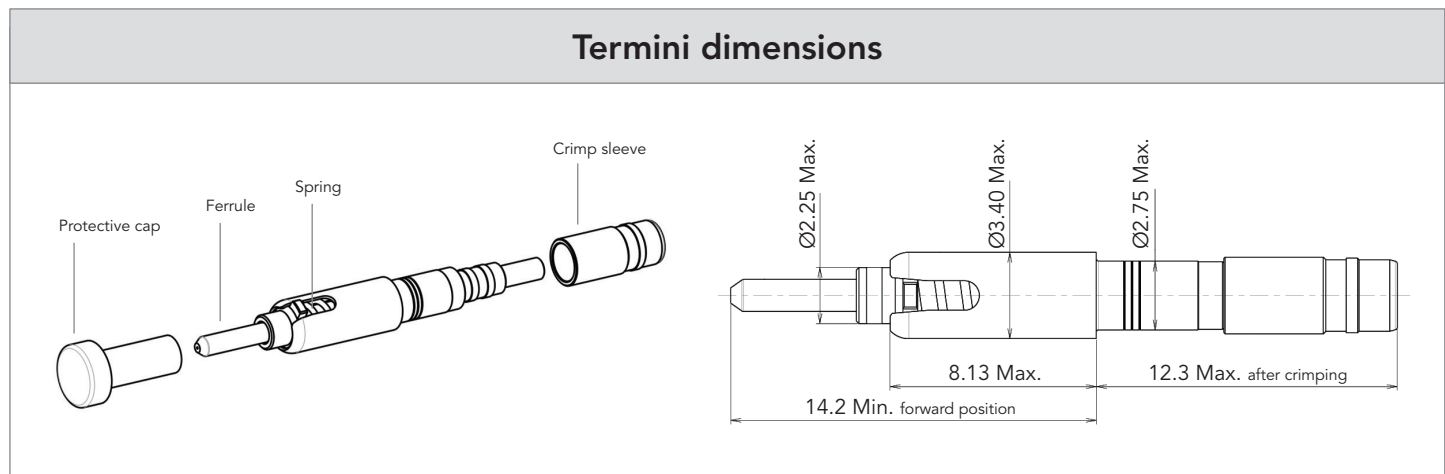
- **Humidity:**
10 cycles/24h, -25 to +65°C, 90% RH as per TIA/EIA 455-5
- **Altitude immersion**
Pressure equivalent to 50,000 ft (15,200 m)



Termini

Ordering information

SOURIAU ARINC 801 Termini	ARC1	G	18T	A
Fiber type:				
G: Multimode fiber 50/125µm or 62.5/125µm				
E: Singlemode fiber 9/125µm - consult us for availability				
Cable type and diameter:				
09T: Ø 900µm fiber cable - non waterproof				
18T: Ø 1.6mm to Ø 2.2mm fiber cable, tight structure				
18L: Ø 1.6mm to Ø 2.2mm fiber cable, loose structure				
Contact version index				



Note: All dimensions are in millimeters (mm)

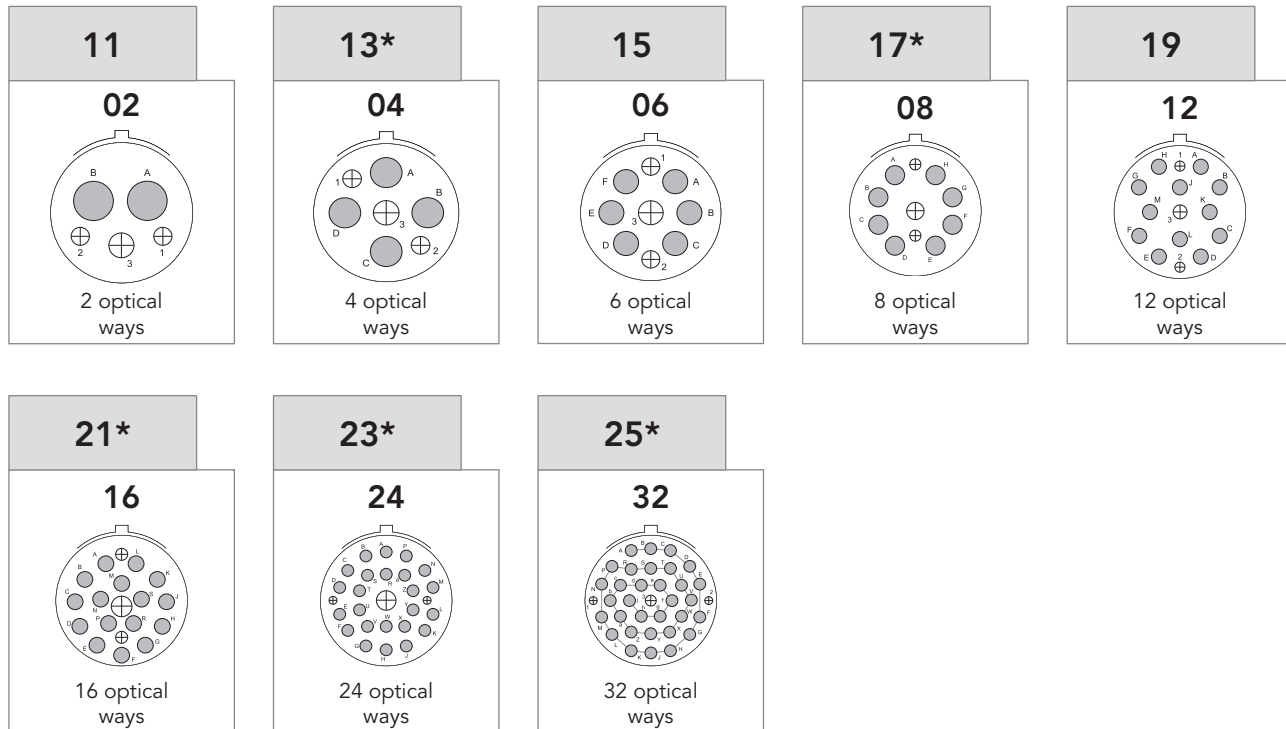
Connector

Ordering information

8D Connector	8D	5	U	25	F	32	B	N
Shell type:								
0: Square flange receptacle (male insert only)								
5: Plug (female insert only)								
7: Jam nut receptacle (male insert only)								
U: ARINC 801 optical connector								
Shell size: 11, 13, 15, 17, 19, 21, 23, 25								
Material and plating:								
Aluminum:			Stainless steel:			Composite:		
W: Olive green cadmium			K: Passivated			J: Olive green cadmium		
F: Nickel			S: Nickel			M: Nickel		
Z: Zinc Nickel						X: Without plating		
Layout: See below								
Insert gender:								
A: Male								
B: Female								
Orientation: N, A, B, C, D, E								

Layouts

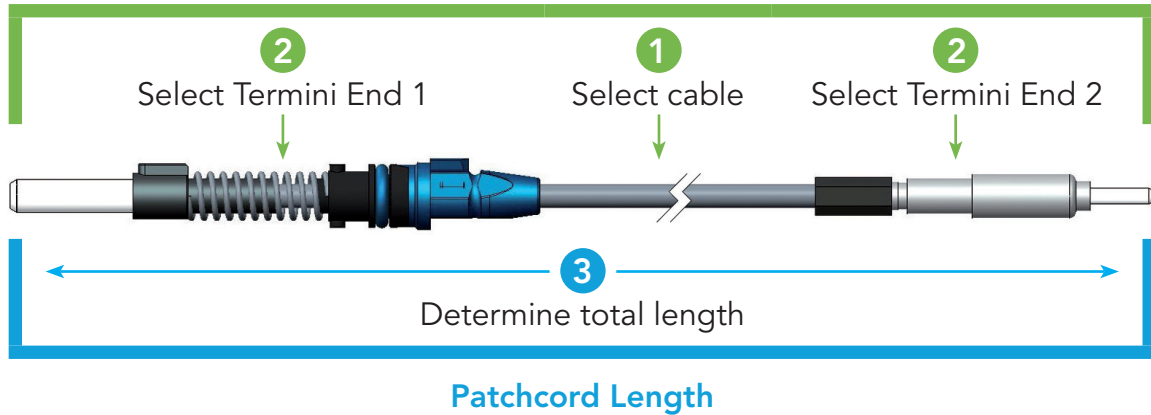
Sleeve holder front view



* Please consult us for availability.

Patchcord - Your optical patchcord in 3 steps!

Patchcord Cable/Terminus Combination Code



Ordering information

	HA02	XXXX	XXX	M	A
Patchcord cable/terminus combination code: XXXX: See tables below and p.6					
Patchcord length: In meter when possible. Examples: - for a 3 meter assembly, use 003(M) and not 300(CM) - for a 3.5 meter assembly, use 350(CM)					
Standard length tolerances					
Patchcord from 30 cm to 1 m		0 / + 5 cm			
Patchcord from 1 m to 4 m		0 / + 10 cm			
Patchcord from 4 m to 15 m		0 / + 20 cm			
Patchcord > 15 m		0 / + 30 cm			
Length unit: M: Meter CM: Centimeter					
Patchcord version index					

1 Select Cable

SOURIAU offers a wide range of cables, from cost efficient to high performance aeronautical cables. Select your optical fiber's properties. Temperature range can be critical for your applications. If you need any help on a criteria selection, please contact us.

Application	Fiber type	Cable diameter	Temperature range	Tensile strength (N)	OM class	Attenuation (dB.km)*	Min. bend radius (mm)	Weight (kg.km)	Structure outer jacket	Standard	Cable type
FOR FLYING USE High performance cables	62.5/125	1.8	-55°C to +125°C	250	OM2	4.0/2.0	20	4	Tight	ABS0963	FCABLE11
	62.5/125	0.9	-55°C to +125°C	20	OM2	4.0/2.0	10	1	NA	EN4641-101	FCABLE41
	62.5/125	1.8	-55°C to +100°C	300	OM1	3.0/0.8	9	4.6	Semi-loose	ARINC802	FCABLE21
	50/125	1.8	-65°C to +135°C	200	OM2	2.5/1.0	20	4	Tight	ABS2293 LG	FCABLE22

* 1st value @850nm for multimode cable, 2nd value @1300nm for multimode (respectively 1300nm and 1550nm for singlemode)
Consult us for other harsh environment cables.

2 Select Termini End 1 & 2 according to your selected cable, and get your final Patchcord Cable/Terminus Combination Code

Most common cables with most common contacts - For other combinations please consult us. All contacts are UPC polished otherwise specified.

Termini End 1 \ Termini End 2	ARINC801 1.25mm			
	Cable types			
	FCABLE11	FCABLE21	FCABLE22	FCABLE41
ARINC801 1.25mm	0263	0729	0600	0642
ELIO18WGLA	0251	0726	0603	-
ELIO18WGSA	0254	0727	0602	-
LC Simplex	0536	0728	0601	0643
SC	0537	0712	0585	0688
ST	0538	0702	0576	0689
FC	-	0721	0593	0644
ELIO09NGSA	-	-	-	0645

Tooling and accessories

Plastic insertion and extraction tool

Part Number: **M81969/14-03**
 Blue side: insertion
 White side: extraction



Dummy contact

Part Number: **ARC1-FILL**
 for male and female insert



ARINC 801 adaptor for LC polishing and measuring

Part Number: **ALC1** (contact us for availability)

LC Adaptor + ARINC 801 termini

= LC compatible interface



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 or visit our web site www.souriau.com