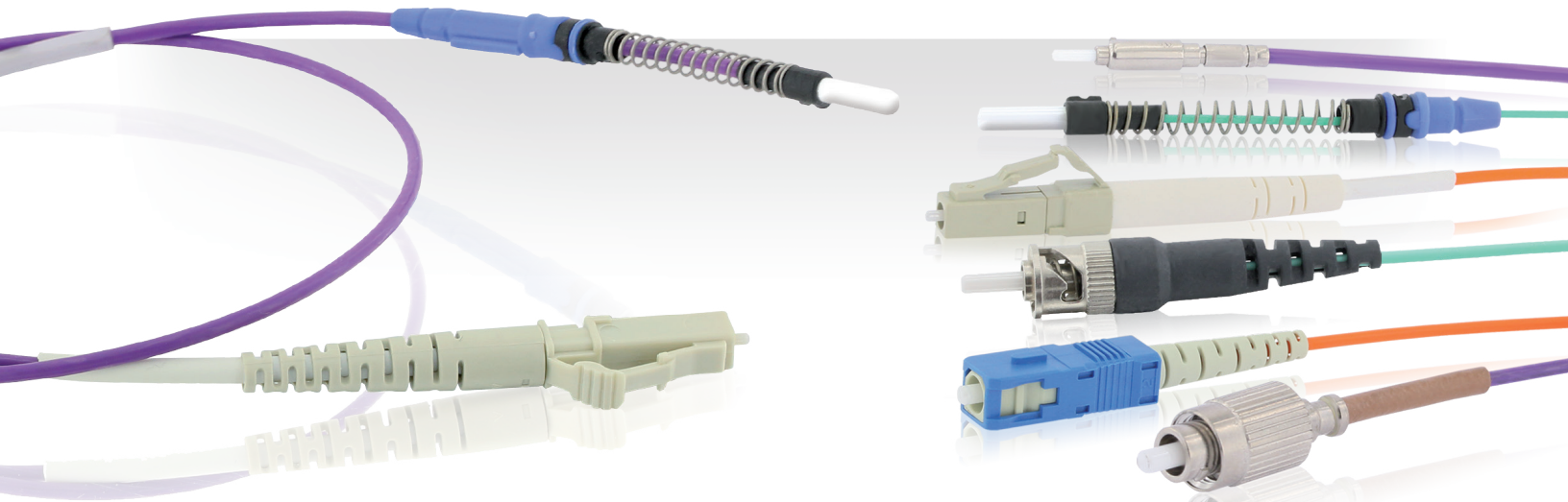


# Fiber Optic Patchcord



## Quick Design Meeting Your Specifications

Easily generate the part number of your patchcord by adjusting the length.

**Custom service** ■ Design your optical patchcord over more than 500 termini and cable mix.

**Availability** ■ Large stock of MIL & aviation cables.

**Quality products** ■ All patchcords are 100% tested and inspected.

## Typical applications



Aviation



Industrial



Oil & Gas



Aircraft Rotary Wings



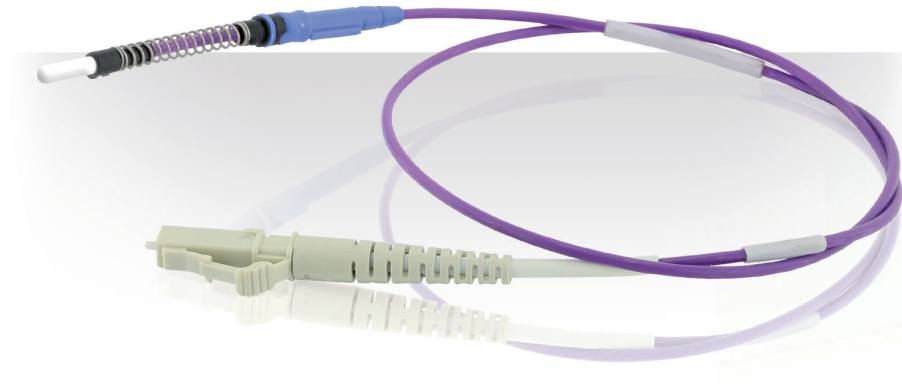
Railway



Nuclear

## Patchcords

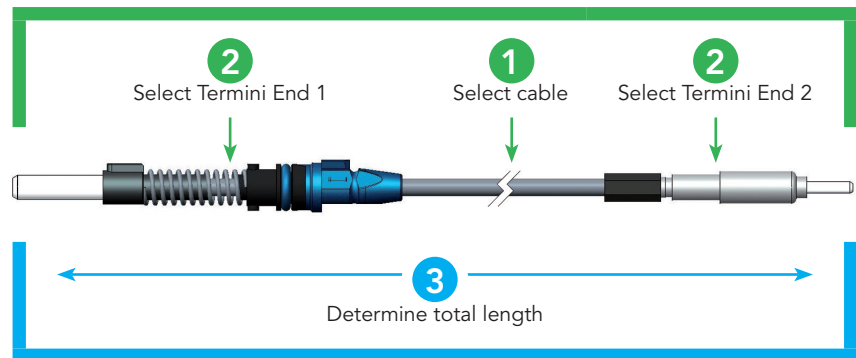
- SOURIAU offers a wide range of optical contacts that can be terminated.
- From full standard such as LC, ST or SC contacts up to milaero standard like ELIO® or ARINC 801.



- SOURIAU offers optical patchcords which are contacts terminated to a single wire.
- These sub assemblies can then be plugged into the corresponding connector to make complete connector assemblies.
- The patchcords facilitate the access to the fiber optic technology to customer regarding fiber optic termination.
- Patchcords can easily be ordered using the part number configurator below.

### Your optical patchcord in 3 steps!

#### Patchcord Cable/Terminus Combination Code



#### Patchcord Length

## Ordering information

	HA02	XXXX	XXX	M	A
<b>Patchcord cable/terminus combination code:</b>					
XXXX: See tables p.5 and 6					
<b>Patchcord length:</b>					
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)					
<b>Standard length tolerances</b>					
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			
<b>Length unit:</b>					
M: Meter					
CM: Centimeter					
<b>Patchcord version index</b>					

Note: To create your patchcord part number, select your patchcord combination code in tables p.5 and 6 (1st contact - 2nd contact - Fiber Optic cable) and the length of your assembly on 3 digits in meter (M) or centimetre (CM). You must use meter when possible (see examples above).

## Recommended cables

SOURIAU offers a wide range of cables, from cost efficient to high performance aeronautical cables. Fast delivery!

**HIGH PERFORMANCE CABLES**

**For flying use**

**COST EFFICIENT CABLES**

**For harsh environment**

Application	Standard	Cable code	Fiber type	Cable diameter	Temperature range	Tensile strength (N)	Number of ways	Bandwidth Limit (MHz.km)*	Attenuation (dB/km)*	Min. bend radius (mm)	Weight (kg/km)	Structure outer jacket
For flying use	ABS0963-003LF, EN4641-102	FCABLE11	62.5/125	1.8	-55°C to +125°C	250	1	400/1000	4.0/2.0	20	4	Tight
	ARINC802	FCABLE21	62.5/125	1.8	-55°C to +100°C	300	1	200/500	3.0/0.8	9	4.6	Semi-loose
	EN4641-101	FCABLE41	62.5/125	0.9	-55°C to +125°C	20	1	400/1000	4.0/2.0	10	1	NA
	-	FCABLE33	9/125	1.8	-55°C to +125°C	250	1	No limit	0.5/0.5	20	2.2	Tight
	EN4641-301, ABS2293 LG (50µm)	FCABLE22	50/125	1.8	-65°C to +135°C	200	1	400/1000	2.5/1.0	20	4	Tight
For harsh environment	-	FCABLE61	62.5/125	1.8	-40°C to +85°C	130	1	200/500	3.5/1.5	25	2.2	Loose
	-	FCABLE42	50/125	1.8	-40°C to +85°C	130	1	1500/500	3.0/1.0	25	2.2	Loose
	-	FCABLE43	9/125	1.8	-40°C to +85°C	130	1	No limit	0.5/0.5	25	2.2	Loose
	-	FCABLE13	9/125	0.9	-40°C to +85°C	10	1	No limit	0.6/0.6	15	0.4	NA
	-	FCABLE31	62.5/125	1.6	-20°C to +70°C	200	1	200/500	3.5/1.0	30	4	Loose
	-	FCABLE12	50/125	1.8	-10°C to +70°C	200	1	1500/500	2.8/0.8	20	4	Loose

\* 1st value @850nm for multimode cable, 2nd value @1300nm for multimode (respectively 1300nm and 1550nm for singlemode) ELIO® is compatible with loose and tight structured cables.

Consult us for other harsh environment cables.

## 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 from 15 m to 50 m	0 / + 30 cm
Patchcord from 50 m to 100 m	0 / + 50 cm

## Patchcord combination code

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

### With cable FCABLE11

Contact 2 \ Contact 1	ST	SC	ARINC801 1.25mm	LC Simplex	ELIO18WGSA	ELIO18WGLA	ELIO18NGSA	ELIO18NGNA	ELIO18NGLA	EOB18WGLA
EOB18WGLA	3069	3068	3066	3065	3064	3063	3062	3061	3060	3070
ELIO18NGLA	0350	0349	0533	0348	0183	0114	0347	0186	0346	
ELIO18NGNA	0206	0215	0534	0211	0195	0190	0221	0220		
ELIO18NGSA	0207	0216	0535	0212	0196	0191	0222			
ELIO18WGLA	0107	0110	0251	0109	0188	0111				
ELIO18WGSA	0192	0194	0254	0193	0116					
LC Simplex	0203	0209	0536	0208						
ARINC801 1.25mm	0538	0537	0263							
SC	0204	0213								
ST	0124									

### With cable FCABLE21

Contact 2 \ Contact 1	ST	SC	FC	ARINC801 1.25mm	LC Simplex	ELIO18WGSA	ELIO18WGLA	ELIO18NGSA	ELIO18NGNA	ELIO18NGLA
ELIO18NGLA	0696	0706	0715	0723	0730	0736	0741	0745	0748	0750
ELIO18NGNA	0697	0707	0716	0724	0731	0737	0742	0746	0749	
ELIO18NGSA	0698	0708	0717	0725	0732	0738	0743	0747		
ELIO18WGLA	0699	0709	0718	0726	0733	0739	0744			
ELIO18WGSA	0700	0710	0719	0727	0734	0740				
LC Simplex	0701	0711	0720	0728	0735					
ARINC801 1.25mm	0702	0712	0721	0729						
FC	0703	0713	0722							
SC	0704	0714								
ST	0705									

### With cable FCABLE33

Contact 2 \ Contact 1	ST	SC/UPC	SC/APC	ARINC801 1.25mm	LC Simplex/UPC	LC Simplex/APC	ELIO18WESA	ELIO18WELA	ELIO18NESA	ELIO18NENA	ELIO18NELA
ELIO18NELA	0763	0762	0761	0760	0759	0758	0755	0754	0753	0752	0751
ELIO18NENA	0775	0774	0773	0772	0771	0770	0767	0766	0765	0764	
ELIO18NESA	0786	0785	0784	0783	0782	0781	0778	0777	0776		
ELIO18WELA	0796	0795	0794	0793	0792	0791	0788	0787			
ELIO18WESA	0805	0804	0803	0802	0801	0800	0797				
LC Simplex/APC	X	X	0824	0823	X	0821					
LC Simplex/UPC	0831	0830	X	0828	0827						
ARINC801 1.25mm	0835	0834	0833	0832							
SC/APC	X	X	0836								
SC/UPC	0840	0839									
ST	0841										

### With cable FCABLE31

Contact 2 \ Contact 1	ST	SC	ARINC801 1.25mm	LC Simplex	FC	ELIO18NGSA	ELIO18NGNA	ELIO18NGLA
ELIO18NGLA	0345	0344	0641	0343	0342	0341	0153	0340
ELIO18NGNA	0166	0175	0640	0171	0178	0181	0180	
ELIO18NGSA	0167	0176	0639	0172	0179	0182		
FC	0165	0174	0636	0170	0177			
LC Simplex	0163	0169	0635	0168				
ARINC801 1.25mm	0686	0685	0634					
SC	0164	0173						
ST	0162							

### With cable FCABLE22

Contact 2 \ Contact 1	ST	SC	FC	ARINC801 1.25mm	LC Simplex	ELIO18WGSA	ELIO18WGLA	ELIO18NGSA	ELIO18NGNA	ELIO18NGLA	EOB18WGLA
EOB18WGLA	X	3079	3078	3077	3076	3075	3074	3073	3072	3071	3081
ELIO18NGLA	0582	0591	0599	0606	0612	0617	0621	0624	0626	0627	
ELIO18NGNA	0581	0590	0598	0605	0611	0616	0620	0623	0625		
ELIO18NGSA	0580	0589	0597	0604	0610	0615	0619	0622			
ELIO18WGLA	0579	0588	0596	0603	0609	0614	0618				
ELIO18WGSA	0578	0587	0595	0602	0608	0613					
LC Simplex	0577	0586	0594	0601	0607						
ARINC801 1.25mm	0576	0585	0593	0600							
FC	0575	0584	0592								
SC	0574	0583									
ST	0570										

### With cable FCABLE13

Contact 2 \ Contact 1	ST	SC	ARINC801 1.25mm	LC Simplex	FC	ELIO09NESA	ELIO09NENA	ELIO09NELA
ELIO09NELA	0561	0560	0633	0559	0558	0675	0674	0551
ELIO09NENA	0564	0563	0632	0550	0562	0676	0552	
ELIO09NESA	0568	0567	0631	0566	0565	0553		
FC	0679	0678	0630	0677	0554			
LC Simplex	0681	0680	0629	0555				
ARINC801 1.25mm	0683	0682	0628					
SC	0684	0556						
ST	0557							

Note: For other combination cable/contacts please send a request to [contactmilaero@souriau.com](mailto:contactmilaero@souriau.com)

## With cable FCABLE43

Contact 1 \ Contact 2													
	ST	SC/UPC	SC/APC	ARINC801 1.25mm	LC Simplex/UPC	LC Simplex/APC	FC/UPC	FC/APC	ELIO18WESA	ELIO18WELA	ELIO18NESA	ELIO18NENA	ELIO18NELA
ELIO18NELA	0464	0457	0449	0673	0443	0437	0433	0429	0425	0422	0420	0419	0409
ELIO18NENA	0465	0458	0450	0672	0444	0438	0434	0430	0426	0423	0421	0410	
ELIO18NESA	0466	0459	0451	0671	0445	0439	0435	0431	0427	0424	0411		
ELIO18WELA	0467	0460	0452	0670	0353	0440	0408	0432	0428	0356			
ELIO18WESA	0468	0461	0453	0669	0446	0441	0436	0367	0366				
FC/APC	X	X	0454	0668	X	0442	X	0412					
FC/UPC	0470	0462	X	0667	0447	X	0413						
LC Simplex/APC	X	X	0455	0666	X	0414							
LC Simplex/UPC	0472	0463	X	0665	0415								
ARINC801 1.25mm	0695	0694	0456	0664									
SC/APC	X	X	0416										
SC/UPC	0474	0417											
ST	0418												

## With cable FCABLE61

Contact 1 \ Contact 2											
	ST	SC	ARINC801 1.25mm	LC Simplex	FC	ELIO18WGSA	ELIO18WGLA	ELIO18NGSA	ELIO18NGNA	ELIO18NGLA	EOB118WGLA
EOB118WGLA	3111	3110	3109	3108	3107	3106	3105	3104	3103	3102	3112
ELIO18NGLA	0384	0383	0655	0382	0381	0404	0401	0398	0397	0372	
ELIO18NGNA	0522	0521	0654	0520	0519	0405	0402	0399	0373		
ELIO18NGSA	0388	0387	0653	0386	0385	0406	0403	0374			
ELIO18WGLA	0392	0391	0652	0390	0389	0407	0375				
ELIO18WGSA	0396	0395	0651	0394	0393	0376					
FC	0525	0524	0650	0523	0377						
LC Simplex	0527	0526	0649	0378							
ARINC801 1.25mm	0691	0690	0648								
SC	0528	0379									
ST	0380										

## With cable FCABLE41

Contact 1 \ Contact 2											
	ST	SC	ARINC801 1.25mm	LC Simplex	FC	ELIO09NGSA	ELIO09NGNA	ELIO09NGLA	EOB109NGLA		
EOB109NGLA	3089	3088	3087	3086	3085	3084	3083	3082	3090		
ELIO09NGLA	0226	0227	0647	0103	0228	0229	0230	0126			
ELIO09NGNA	0529	0239	0646	0235	0242	0244	0245				
ELIO09NGSA	0530	0238	0645	0234	0241	0243					
FC	0240	0237	0644	0233	0687						
LC Simplex	0531	0232	0643	0231							
ARINC801 1.25mm	0689	0688	0642								
SC	0532	0236									
ST	0253										

## With cable FCABLE42

Contact 1 \ Contact 2											
	ST	SC	ARINC801 1.25mm	LC Simplex	FC	ELIO18WGSA	ELIO18WGLA	ELIO18NGSA	ELIO18NGNA	ELIO18NGLA	EOB118WGLA
EOB118WGLA	3100	3099	3098	3097	3096	3095	3094	3093	3092	3091	3101
ELIO18NGLA	0491	0490	0663	0489	0488	0487	0486	0485	0484	0475	
ELIO18NGNA	0498	0497	0662	0496	0495	0494	0493	0492	0476		
ELIO18NGSA	0504	0503	0661	0502	0501	0500	0499	0477			
ELIO18WGLA	0508	0507	0660	0113	0506	0505	0478				
ELIO18WGSA	0512	0511	0659	0510	0509	0479					
FC	0515	0514	0658	0513	0480						
LC Simplex	0517	0516	0657	0481							
ARINC801 1.25mm	0693	0692	0656								
SC	0518	0482									
ST	0483										

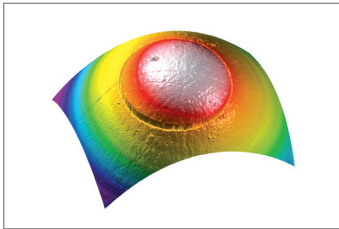
## With cable FCABLE12

Contact 1 \ Contact 2							
	ST	SC	LC Simplex	FC	ELIO18WGSA	ELIO18WGLA	ELIO18NGNA
ELIO18NGNA			0310				
ELIO18WGLA	0267		0284	0285		0260	
ELIO18WGSA	0270	0269	0300	0301			
FC							
LC Simplex							
SC							
ST	0286						

Note: For other combination cable/contacts please send a request to [contactmilaero@souriau.com](mailto:contactmilaero@souriau.com)

## 100% tested and inspected

### Interferometry



Measurement system gives in 3 dimensions the observed surface with curves similar to levels of a geographic map.

As a result it is possible to get the geometric parameters of the optical contact with extreme accuracy.

A good shape is a long-life warranty.

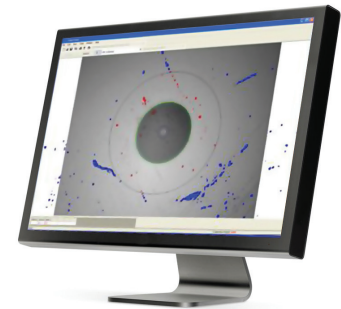
### Insertion loss



Insertion loss refers to the light attenuation that occurs when the light travels in a fiber optic cable and connection.

This measurement is a functional test assuring that the patchcord meets the specifications.

### Termini end face inspection



Termini optical end-faces are all controlled under microscope magnification (X400).

Polishing defects and contamination can drastically affect the optical performance of the link. That's why we make sure that the end-face has pristine cleanliness before applying the ultra-clean protective cap.

For further information contact us at [technical.emear@souriau.com](mailto:technical.emear@souriau.com) (Europe - Asia - Africa)  
[technical.americas@souriau.com](mailto:technical.americas@souriau.com) (North America)  
or visit our web site [www.souriau.com](http://www.souriau.com)