

### Description

Scientific-Atlanta offers a complete line of fiber optic jumpers to service all CATV network applications. The Prisma® Fiber Optic Jumpers include high quality components and are manufactured to comply with industry standards for optical, mechanical, and environmental performance. The wide selection of connectors, cable types, and lengths ensures that jumpers can be optimized for each unique installation.

As transmission platforms become denser, there is a need to route more fiber through smaller spaces. To accommodate this ever-increasing challenge, the standard fiber cable diameter for simplex jumpers is 2mm. Using 2mm diameter cable can more than double the fiber capacity of overhead fiber routing troughs while making fiber management easier in tightly packed cabinets. There is a 3mm option to match jumpers in legacy networks.

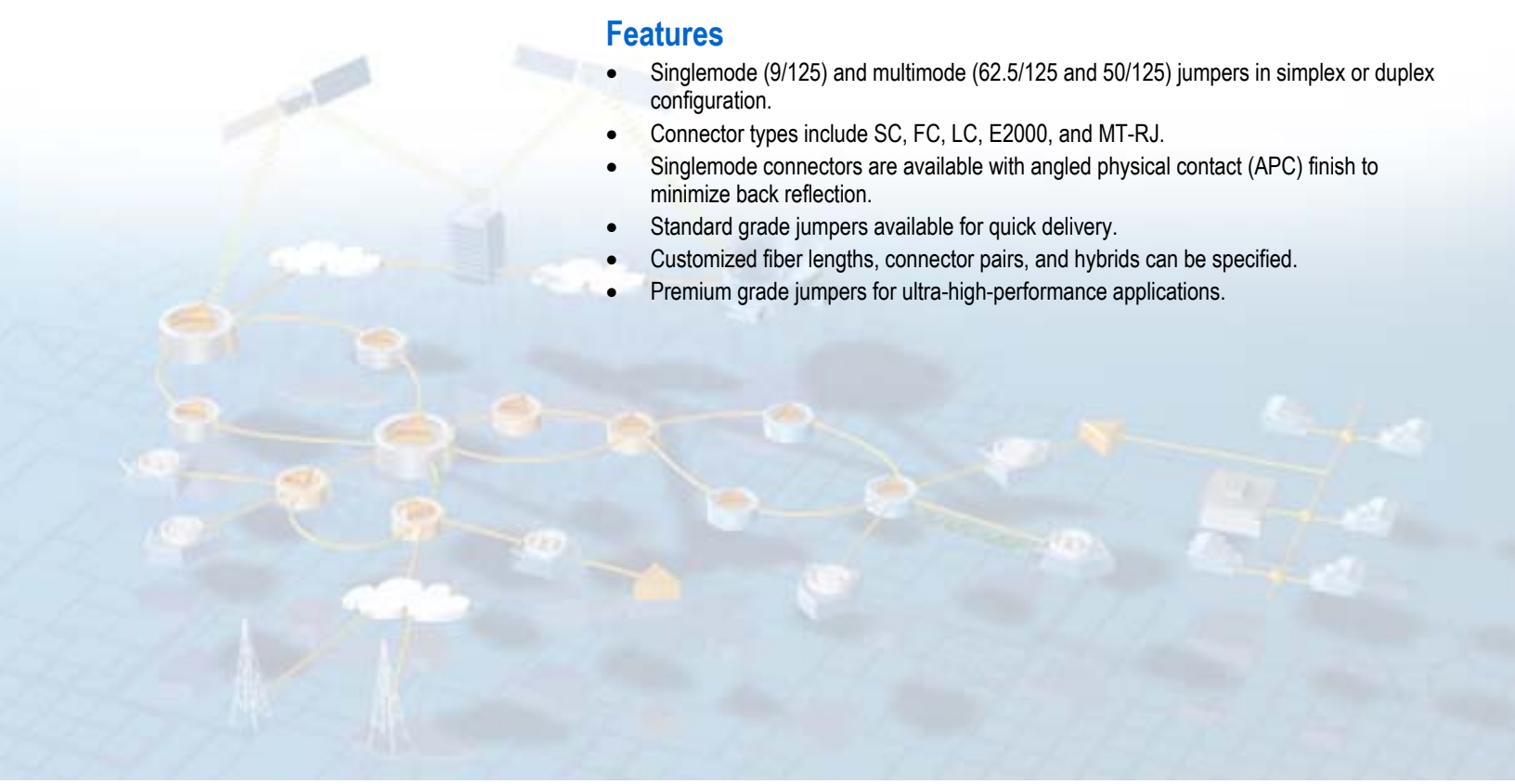
Singlemode jumpers use the industry-recognized SMF-28 fiber and the connectors may be ordered with an angled physical contact (APC) end face finish, to reduce back reflections to less than -60 dB. Multimode jumpers are available with either 62.5- or 50-micron core sizes to match system requirements. Multimode connectors are polished to a physical contact standard for back reflections lower than -40 dB.

Prisma Jumpers are also available in a premium grade that is 100% tested to meet rigorous optical, geometric, and surface defect specifications. Premium grade jumpers have demonstrated significant improvements in network performance and reliability for high power, high bit rate systems.

Scientific-Atlanta offers standard jumper lengths of 1, 3, 5, 10 and 15 meters. Customized lengths can be ordered in 1-meter increments up to 30 meters, and 5-meter increments to 50 meters, for those applications where standard lengths will not suffice.

### Features

- Singlemode (9/125) and multimode (62.5/125 and 50/125) jumpers in simplex or duplex configuration.
- Connector types include SC, FC, LC, E2000, and MT-RJ.
- Singlemode connectors are available with angled physical contact (APC) finish to minimize back reflection.
- Standard grade jumpers available for quick delivery.
- Customized fiber lengths, connector pairs, and hybrids can be specified.
- Premium grade jumpers for ultra-high-performance applications.



## Specifications

Specification	Units	Standard Grade	Premium Grade
Insertion Loss (@1310 nm, 1550 nm)	Singlemode	0.30	0.20
	Multimode	0.50	0.40
Return Loss (@1310 nm, 1550 nm)	APC ferrule end face finish (singlemode)	>60	>60
	UPC ferrule end face finish (singlemode)	>55	>55
	PC (multimode)	>40	>40
End Face Geometry		Meets tolerances of Telcordia GR-326 Issue 3	Tighter tolerances than Telcordia GR-326 Issue 3
Length Tolerance	1 to 10 meter lengths	±0.1	±0.1
	>10 meter lengths	±0.3	±0.3
Operating Temperature	°C	-40 to +65	-40 to +65
Testing for Insertion Loss & Return Loss		100%	100%

**Notes:**

- Connectors meet the dimensional requirements of the TIA/EIA-604 FOCIS specification.
- FC/APC connectors meet the TIA/EIA-604-4A, Narrow Key, k=3 specification.
- Each jumper is shipped in a separate, re-sealable bag, labeled with the appropriate S-A jumper configuration code, S-A part number (if applicable), and date of manufacture.

## Ordering Information for Standard Jumpers

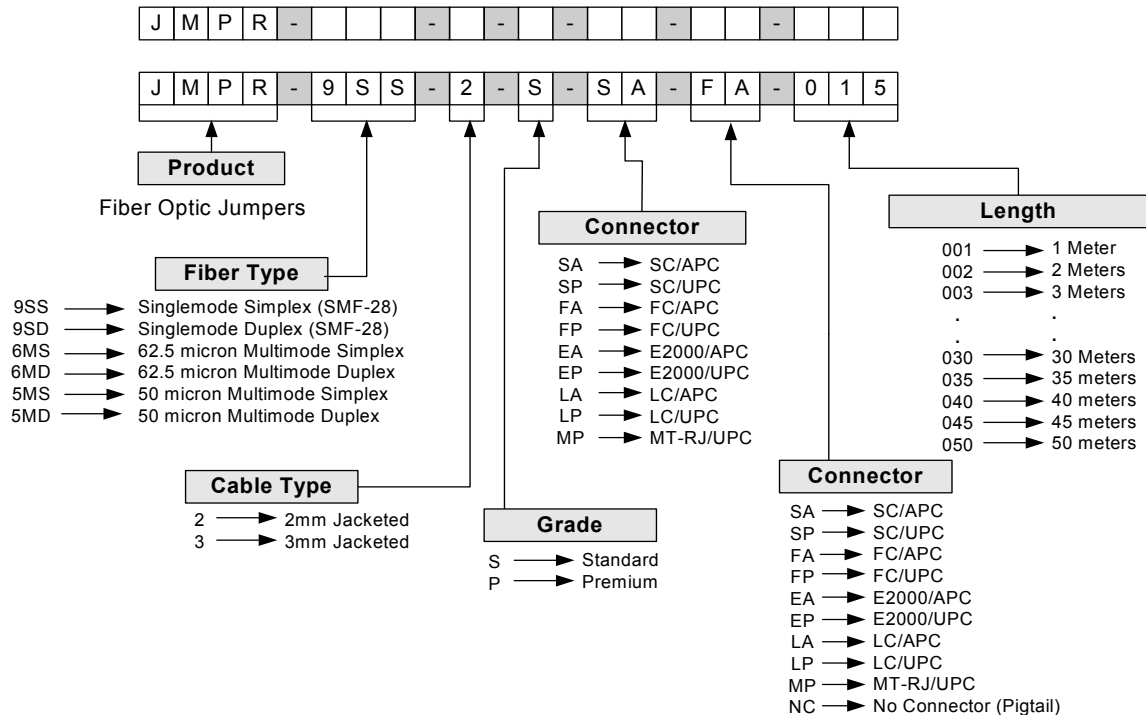
### Standard Fiber Jumper Lengths

Description	Part Numbers (by length)				
	1m	3m	5m	10m	15m
<b>Singlemode Simplex</b>					
SC/APC to SC/APC	4000665	4000666	4000667	4000668	4000669
SC/UPC to SC/UPC	4000670	4000671	4000672	4000673	4000674
FC/APC to FC/APC	4000675	4000676	4000677	4000678	4000679
FC/UPC to FC/UPC	4000681	4000682	4000683	4000684	4000685
LC/UPC to LC/UPC	4000686	4000687	4000688	4000689	4000690
E2000/APC to E2000/APC	4000691	4000692	4000693	4000694	4000695
<b>Hybrid Singlemode Simplex</b>					
SC/APC to FC/APC	4000647	4000648	4000649	4000650	4000651
SC/APC to SC/UPC	4000652	4000653	4000654	4000655	4000656
SC/APC to FC/UPC	4000657	4000658	4000659	4000660	4000661
SC/UPC to FC/UPC			751751		
<b>Hybrid Singlemode Duplex</b>					
SC/PC to LC/PC	4000662	—	4000663	4001002	4000664
<b>Multimode Simplex</b>					
SC/PC to SC/PC (62.5/125)	—	—	4000602	—	—
SC/PC to SC/PC (50/125)	—	—	4000603	—	—
<b>Multimode Duplex</b>					
SC/PC to SC/PC (62.5/125)	—	—	4000604	—	—
SC/PC to SC/PC (50/125)	—	—	4000605	—	—
MT-RJ to MT-RJ (62.5/125)	4000607	4000608	4000609	4000610	4000611
MT-RJ to MT-RJ (50/125)	—	—	4000612	—	—
<b>Hybrid Multimode Duplex</b>					
SC/PC to MT-RJ (62.5/125)	4000613	4000614	4000615	4000616	4000642
SC/PC to MT-RJ (50/125)	—	—	4000643	—	—
SC/PC to LC/PC (62.5/125)	4000644	—	4000645	—	4000646
SC/PC to MT-RJ (62.5/125)	4000801	4000802			4000803

## Ordering Information for Custom Jumpers

### Fiber Jumper Configurator

The following matrix can be used to configure Prisma Fiber Optic Jumpers. The example shows the configuration code JMPR-9SS-2-S-SA-FA-015, which is a hybrid singlemode, simplex fiber jumper, using 2mm diameter cable, with an SC/APC connector on one end, and an FC/APC connector on the other, in a 15-meter length.



#### Notes:

- Only PC end face finish is available on multimode connectors.
- Only 3mm diameter jackets are available on duplex cables.
- Connectors are available only as matched pairs per end on duplex jumpers.
- MT-RJ connectors are only available with 3mm diameter, dual-fiber, round cable.
- Jumpers with E2000 connectors are only available in premium grade



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