Rosenberger

CS® Patchcords



CS® Patchcords solution is available in two end face quality features: BASIC and PURE

Define the end-face quality according to your application requirements:



Quality feature BASIC is our well-proven, high-grade, standards compliant product in terms of end-face geometry, defect, and cleanness, providing excellent IL and RL performance:

- The PreCONNECT® factory-assembled plug & play system enables quick and reliable, cost efficient, installation and performance
- Harmonized modular components of the quality feature BASIC solution ensure end to end performance of the entire channel



Quality feature PURE is the enhanced version of our quality feature BASIC, but with more stringent defect and cleanliness screening and factory sealed, tamper evident adapter-interfaces.

- Guaranteed protection of the polished connector end-face against contamination and damage through sealed adapter-interfaces,
 enabling time savings during initial installation and commissioning due to the elimination of the need for cleaning and testing*/**.
- Quality feature PURE provides an industry leading low <u>random mate</u> insertion and return loss (mean) which enables up to six (6) mated pairs in a 10G/OM4 application up to 300m.

Part numbers:

Quality feature BASIC: The part numbers XXXAXXXX listed in this document are valid for the BASIC quality feature.

Quality feature PURE: Add a "P" to the end of the quality feature BASIC part number (Example: XXXAXXXXP)

(Note: PURE trunk cables have factory attached sealed coupling adapters incorporated and thus utilize empty patch panels and enclosures)

^{*} While Rosenberger does not require permanent link or channel testing for warranty registration of PURE installations due to guaranteed performance, certain customers will require testing documentation for their records.

^{**} Only applicable when all components are of quality feature PURE and installed by trained PURE installers.

Applications:

For stationary and weather protected application acc. to IEC 60721-3-3, like within data centers and buildings.

Properties:

- 2 fiber round cables, single and double jacket, different diameters
- Bending behavior of the round cables equal in all directions
- Bend-insensitive fibers
- With FRNC-LSZH and OFNP (Plenum) cable jackets, OFNR (Riser) on request
- Polarity
 - Full-duplex cables with duplex connectors on both sides "crossed" A to B in accordance with ISO/IEC 11801 and EN 50173
 - Polarity changeable if needed
- Operating temperature range climate class C "indoor, controlled environment" acc. to IEC 60753-1, -10°C to +60°C
- Connector, fiber and cable data on request via the product profiles of the patchcords

Length tolerances:

- Up to 1 m = 50 mm
- 2 m to 3 m = 100 mm
- 4 m to 25 m = 200 mm
- Longer than 25 m = 1 %

Delivery form:

- Attenuation (IL) measured in accordance with IEC 61300-3-4 "C" or "Substitution" method, MM 850nm/SM 1310nm, measurement values on request, or can be downloaded from our website by using the serial numbers of the patchcords https://www.rosenberger.com/products/download-measurement-data/
- Serial number labels with length information at both patchcord ends
- Individually packaged in foil bags with product ID label

Your benefits at a glance:

- The perfect fitting cable diamter for each application available
- Installed patchcords can be clearly identified by their serial number labels with length information at both patchcord ends
- Patchcords can be loaded with their serial number into your network documentation



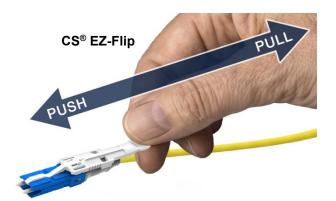
CS® connector:

The CS® (Connector Senko) is a genuine Push-Pull-Boot duplex plug connector manufactured using 1.25-mm full-ceramic ferrule technology. It belongs to the category of Very Small Form Factor (VSFF) plug connectors.

The connector has been developed by Senko as an optical interface plug connector for OSFP and QSFP-DD transceivers and various other applications and is available as singlemode and multimode version, PC 0° and APC 8° polished. The CS® is not IEC standardized.

Our CS® Patchcords are assembled with the second CS® model, the CS® EZ-Flip. Its A/B polarity is easy and secure, toolless changeable. The A/B polarity of the first CS® model is not changeable.

The CS® connector allows users to increase the port density per 19" height unit (HU) in datacenter optical fiber cabling infrastructures beyond the with LC Duplex maximum possible number while still permitting patching with no equipment other than the user's fingers.



A/B polarity easy and secure, toolless changeable, source www.senko.com







CS[®] single jacket patchcords FRNC-LSZH:





Part numbers with single jacket cable I-V(ZN)H FRNC-LSZH Add your desired lenght in millimeter to the part number, e.g. 2.0 meter: 094A0001G657A1-2000

Deliverable lengths: From 30cm up to 999 meter, in 10cm increments

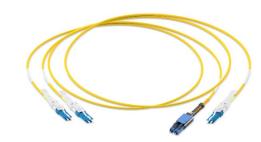
Connectors	OM4	OS2	
CS PC 0° » CS PC 0°	on request	094A0001G657A1	
CS PC 0° » LCC-PPB PC 0°	on request	094A0002G657A1	
CS PC 0° » CS PC 0°	on request	on request	
CS PC 0° » LCC-PPB PC 0°	on request	on request	
	CS PC 0° » CS PC 0° CS PC 0° » LCC-PPB PC 0° CS PC 0° » CS PC 0°	CS PC 0° » CS PC 0° on request CS PC 0° » LCC-PPB PC 0° on request CS PC 0° » CS PC 0° on request	

Technical data of connectors, fibers and cables on request via the product profile of your selected patchcords.

Technical data single jacket cable I-V(ZN)H FRNC-LSZH					
Cable diameter		Max. tensile force short term [N]	Max. crush resistance short term [N/dm]	Weight [kg/km]	Fire load [MJ/m]
	loop diameter				
2.0 mm	8.4 mm	300	150	4	0.11
2.8 mm	18.6 mm	300	150	7	0.20
More technical data of the cables on request.					

CS® single jacket patchcords OFNP (Plenum):





Part numbers with single jacket cable OFNP (Plenum) Add your desired lenght in millimeter to the part number, e.g. 2.0 meter: 094A0001G657A1-2000 Deliverable lengths: From 30cm up to 999 meter, in 10cm increments				
Cable diameter	Connectors	OM4 violet	OM4 aqua	OS2
0.4	CS PC 0° » CS PC 0°	on request	on request	on request
2.1 mm	CS PC 0° » LCC-PPB PC 0°	on request	on request	on request
2.0	CS PC 0° » CS PC 0°	on request	on request	on request
2.9 mm	CS PC 0° » LCC-PPB PC 0°	on request	on request	on request
Technical data of connectors,	fibers and cables on request via the product profile	of your selected patchcords	S.	-

Technical data single jacket cable OFNP (Plenum)				
Cable diameter	Kink resistance loop diameter	Max. tensile force short term [N]	[N] Max. crush resistance short term [N/dm] Weight [lb	
2.1 mm	8.6 mm	220	3.5	3.096
2.9 mm	18.8 mm	220	3.5	4.795
More technical data of the cables on request.				

CS® double jacket patchcords FRNC-LSZH:

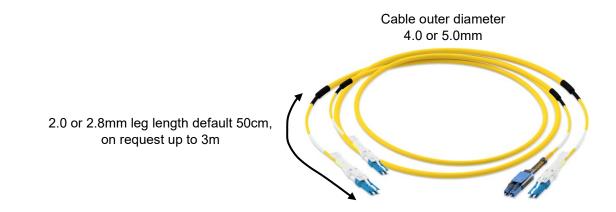
Perfect for "top-of-the-rack" and raised-floor cabling within data centers!

Mechanical requirements of "top-of-the-rack" and raised-floor cabling on patchcords are much higher than within racks. Therefor we offer rugged CS patchcords with 2 fiber round cables with double jacket, with increased kink, crush and tensile resistance.

Advantages of double jacket cables:

- Increased kink, crush and tensile resistance of the 4.0mm double jackets in the "top-of-the-rack" and raised-floor environment
- Low cable volume and good bending behaviour of the 2.0mm thin CS legs within the patchfield area





CS[®] double jacket patchcords FRNC-LSZH:





Part numbers with double jacket cable I-V(ZN)H(ZN)H FRNC-LSZH

Add your desired lenght in millimeter to the part number, e.g. 2.0 meter: 094A0001G657A1-2000

Deliverable lengths: From 2 up to 999 meter, in 10cm increments

Cable diameter

Connectors

OM4

OS2

2.0 / 4.0 mm

CS PC 0° » CS PC 0°

On request

On request

On request

On request

On request

On request



Technical data double jacket cable I-V(ZN)H(ZN)H FRNC-LSZH					
Cable diameter	Kink resistance loop diameter	Max. tensile force short term [N]	Max. crush resistance short term [N/dm]	Weight [kg/km]	Fire load [MJ/m]
2.0 / 4.0 mm	< 24.5mm tbt	600	300	2.9	0.07
2.8 / 5.0 mm	24.5 mm	600	300	4	0.11
More technical data of the cables on request.					

About Rosenberger OSI:

Since 1991, Rosenberger Optical Solutions & Infrastructure (Rosenberger OSI) has been a recognized expert for fiber-based connectivity, cabling solutions and infrastructure services in the areas of data centers, local area networks, mobile networks and industrial applications. As an integrated solution provider, we have high expertise in the development and operational excellence in the production of system solutions for communication networks. Our comprehensive services enable the secure and efficient operation of digital infrastructures. This combination, combined with our strong customer focus, makes us unique and a strong partner in the global market.

Rosenberger OSI has been part of the globally operating Rosenberger Group since 1998. The Rosenberger Group is a leading global provider of high-frequency, high-voltage and fiber optic connectivity solutions with headquarters in Germany. For further information, please visit: www.rosenberger.com/osi

Rosenberger

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