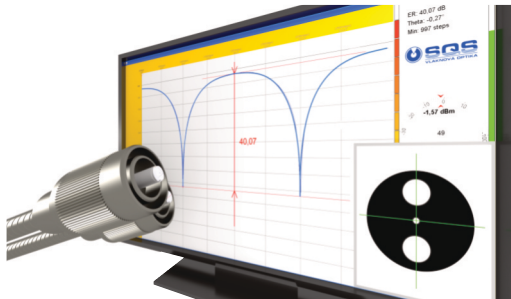




# High ER Polarization Maintaining Patchcords

In Wavelength range from 405 to 1620 nm



## Features:

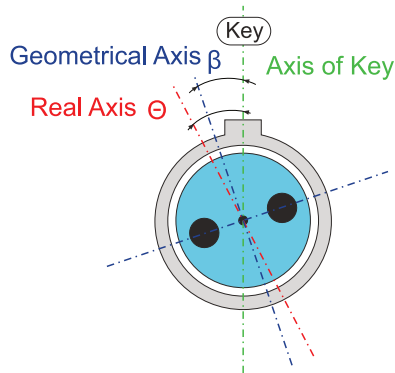
- High value of PER (up to 35dB @ 1550nm)
- Active fiber alignment to connector's key
- Precise optical lengths of patchcords
- Expanding core diameter at the end of fiber
- PM patchcords with MPO or Fiber Array on request

SQS Vlakovna optika a.s. is a producer of high quality polarization maintaining patchcords with high polarization extinction ratio (PER) within wavelength range from 405 up to 1620 nm. Higher values of RL are achieved because of a sophisticated process of an active PM fiber alignment inside the connector and unique method of bonding PM fiber to the ferrule with minimal additional stress induced by the adhesive. The active alignment method allows us to guarantee a minimal angle misalignment between the axis of the connector key and the real axis of the PM fiber. SQS fiber optic components meet IEC standards.

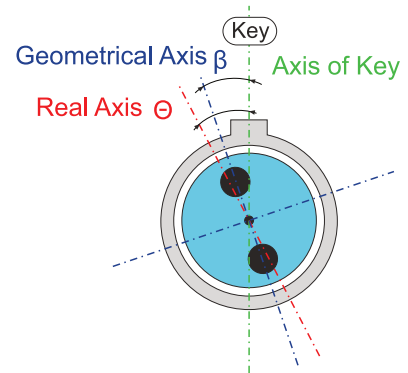
## PM Connectors

Design type:	405	460	630	780	980	1310	1550
Wavelength range [nm]:	400 - 680	460 - 630	630 - 780	780 - 980	980 - 1300	1280 - 1340	1490 - 1620
Insertion loss IL (max) [dB]	1.8	1.5	1.2	0.8	0.6	0.5	0.4
Insertion loss IL typ [dB]	1.5	1.2	0.9	0.5	0.4	0.3	0.2
Extinction ratio (min) [dB]	20	20, 25	20, 25	20, 25	20, 25	20, 25, 30	20, 25, 30
Core/Cladding size:	3/125	3/125	4/125	5/125	6/125	9/125	10/125
Return loss RL (UPC ver.) [dB]	> 50 ( typical 55 )						
Return loss RL (APC ver.) [dB]	> 60 ( typical 68 )						
Angle misalignment $\beta$ (GEO axis) [°]:	$\pm 0.5$						
Angle misalignment $\theta$ (Real axis) [°]:	$\pm 2.5$ or $\pm 1.5$						
Repeatability (500 matings):	$\pm 0.2$						
Connector type:	FC, SC, MU, LC						
Operating temperature [°C]:	-20 to +70						
Storage temperature [°C]:	-40 to +80						

## Aligned to Fast Axis

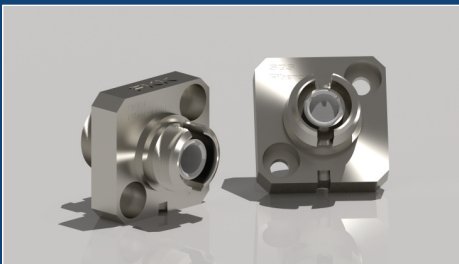


## Aligned to Slow Axis

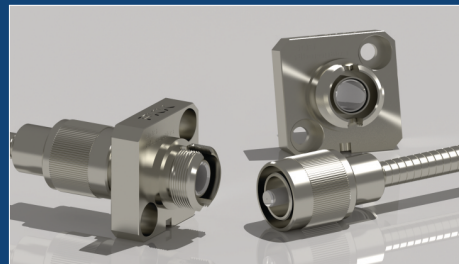


The angular misalignment tells us how precisely the connector is assembled on the PM fiber. It means what is the maximum angle between the real axis of the glued fiber and the axis of the connector key. The angular misalignment affects the total PER during mating of two PM connectors.

SQS FKK PM Adapter



FKK Adapter with Armored PM FC Patchcord



FC with Buffered Fiber or Loose Tube

