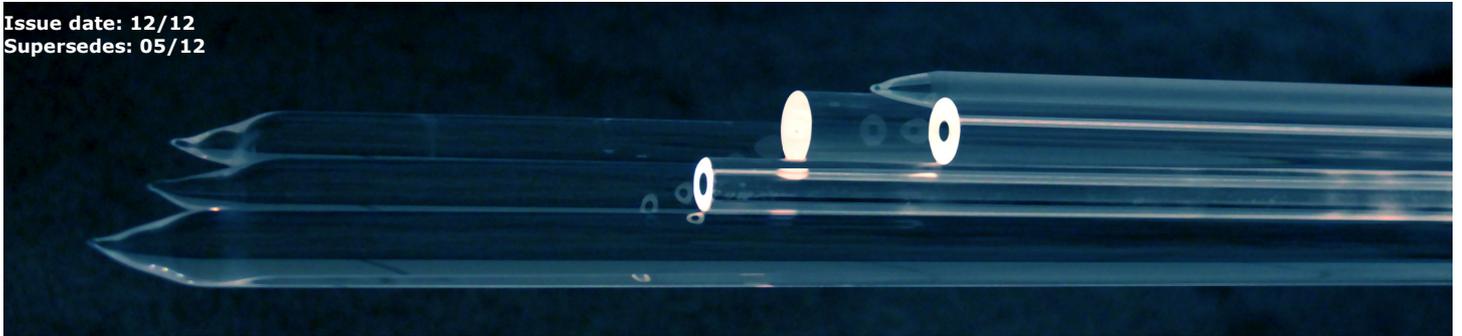


Boron doped stress rods

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This specialty rod is produced with the Plasma-activated Chemical Vapor Deposition (PCVD) manufacturing process. The use of this process allows for very precise index profiles and pure material compositions. The applied machinery and processes are used also for manufacturing the core rods for the various large volume fibre products supplied to the market. This guarantees perfect process control and repeatability.

Boron stress rods consist mainly of a B_2O_3 doped core area surrounded by a thin un-doped pure silica layer which prevents contact between the doped core and the open air. The thin pure silica layer is achieved by grinding away the major part of the original substrate tube applied for making the boron doped deposited core area. The stress rods are made in a variety of lengths, diameters and concentrations as listed in the table below.

Rod specifications usually are listed in a more detailed quote as part of the ordering process. For each supplied rod the refractive index profile as measured in the mid-section of the rod before grinding will be supplied as customer information¹. Rod data is stored in the factory data base allowing full traceability of all raw materials for later use.

Characteristics	Specified Values ²⁾	Remarks
Outer diameter (OD)	6 – 15 mm	<i>smaller values on request</i>
OD/core ratio	≈ 1.15	
B_2O_3 dope content	12 – 24 mol%	
Length	150 - 500 mm	

1) Note that due to the intrinsic stresses the refractive index of the rod is no suited measure for the boron dope content.

2) Other values on request.