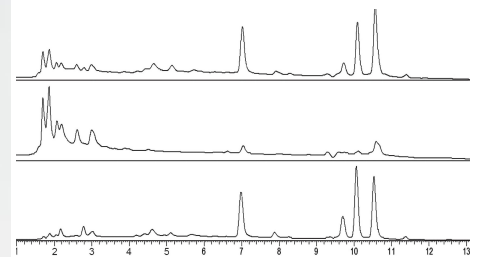




**Hard Rigid**  
**Resistant**  
**High Pressure**



## Enormous Material Hardness – Highest Pressures

Highest Rigidity with excellent lubricity and boasts a continuous working temperature. Highest tensile and flexural strength, extreme impact resistance, high dynamic resilience, stress crack resistance, highest thermooxidative stability, rigid and resistant to abrasion ...PEEK is the hardest of all Plastics and reaches mechanical strength properties of metal.

Optiflon PEEK-Capillary is not swellable and aging resistant. Aside of its mechanical strength properties it also provides an excellent chemical resistance.

### Applications

Due to its high pressure resistance (up to 600 bar / 8700 psi) Optiflon PEEK is used as alternative to metal in chromatography (HPLC).

### Features and Benefits

- High Chemical Resistance
- Enormous Mechanical Strength
- Highest Pressures
- Wide Temperature Range
- Inert and Biocompatible
- Color coded
- Flame resistant UL 94 V-0

### Typical Applications

- High-Performance Liquid Chromatography (HPLC)
- Medical
- Automotive

### Optiflon PEEK Standard Sizes

Part Number	ID	OD	Wall	Color	Max. Working Pressure* 22°C (73°F)
PK0,064NA1,59	0,064 mm (0,005")	1,59 mm (1/16")	0,813 mm	natural	435 bar / 6300 psi
PK0,102NA1,59	0,102 mm (0,004")	1,59 mm (1/16")	0,744 mm	black	-
PK0,127NA0,79	0,127 mm (0,005")	0,79 mm (1/32")	0,332 mm	natural	380 bar / 5500 psi
PK0,127RT1,59	0,127 mm (0,005")	1,59 mm (1/16")	0,732 mm	red stripe	420 bar / 6100 psi
PK0,178NA0,79	0,178 mm (0,007")	0,79 mm (1/32")	0,306 mm	natural	350 bar / 5100 psi
PK0,178GL1,59	0,178 mm (0,007")	1,59 mm (1/16")	0,706 mm	yellow stripe	400 bar / 5800 psi
PK0,254NA0,79	0,254 mm (0,01")	0,79 mm (1/32")	0,268 mm	natural	310 bar / 4500 psi
PK0,254BL1,59	0,254 mm (0,01")	1,59 mm (1/16")	0,668 mm	blue stripe	385 bar / 5600 psi
PK0,381NA0,79	0,381 mm (0,015")	0,79 mm (1/32")	0,205 mm	natural	-
PK0,508OR1,59	0,508 mm (0,02")	1,59 mm (1/16")	0,541 mm	orange stripe	350 bar / 4500 psi
PK0,762GN1,59	0,762 mm (0,03")	1,59 mm (1/16")	0,414 mm	green stripe	240 bar / 3500 psi
PK0,762NA3,18	0,762 mm (0,03")	3,18 mm (1/8")	1,209 mm	natural	345 bar / 5000 psi
PK1,016GR1,59	1,016 mm (0,04")	1,59 mm (1/16")	0,287mm	grey stripe	165 bar / 2400 psi
PK1,45W1,59	1,4 mm	1,59 mm (1/16")	0,095 mm	black stripe	50 bar / 750 psi
PK1,59NA3,18	1,59 mm (1/16")	3,18 mm (1/8")	0,79 mm (1/32")	natural	220 bar / 3200 psi
PK2,0NA3,18	2,032 mm (0,08")	3,18 mm (1/8")	0,574 mm	natural	165 bar / 2400 psi
PK3,18NA6,35	3,18 mm (1/8")	6,35 mm (1/4")	1,59 mm (1/16")	natural	225 bar / 3300 psi

### Typical Physical Properties of Optiflon PEEK Capillary

Property	ASTM Method	Value
Hardness	D2240	84,5° Shore D
Density	D792	1,3
Tensile Strength	ISO 527	98-100 MPa
Elongation at Break	ISO 527	40-45%
Modulus of Elasticity	D527	3700-4000 MPa
Flexural Modulus	ISO 178	3800-4200 MPa
Flexural Modulus	D1894	0,58
Maximum Service Temperature Air	-	260°C
Volume Resistivity	D257	1.0 x 10 <sup>16</sup> Ω - cm
Dielectric Strength	-	584,2 V/mil
Water Absorption	ISO 62-1	0,07 – 0,45 %

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