Riedel PURE

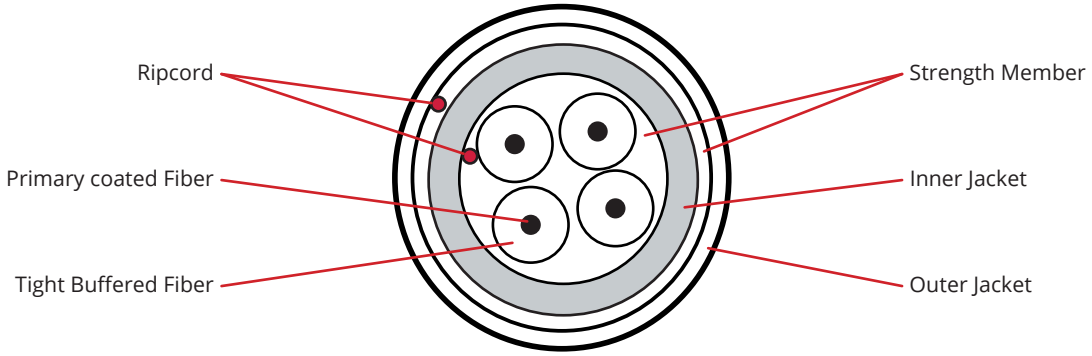
Based on Riedel's extensive experience in demanding rental projects such as Olympic Games, Formula 1 or the Eurovision Song Contest, Riedel designed a fiber optic cable that meets the highest demands in event and mobile productions. With Pure, clients directly benefit from Riedel's expertise.

- Single-mode 9/125, PC
- Extremely strong, rugged, survivable tight-buffered cables for severe environments
- These cables are flame retardant and watertight and therefore suitable for indoor and outdoor use
- Helically stranded cable core for flexibility and outstanding mechanical protection for the fibers
- Core-bonded Polyurethane jacket providing simple installation.
- Predicted lifetime > 30 years
- Available with Neutrik opticalCON DUO and Neutrik opticalCON QUAD including metal protection caps
- Available on cable drum

Cable Specifications (construction in accordance with IEC 60794)

- Primary coated optical fibres: Ø 280 ±15 µm
- Tight buffered fibres: Ø 0.9 ±0.1 mm
- Colour coding of the buffered fibres
  - white – red – blue – yellow – green – violet – brown – black – orange– turquoise – pink – grey
- Swellable aramid yarns as common strength members and for the longitudinal watertightness
- Black Polyurethane inner jacket with (polyester) rip cord
- Swellable glassyarns as additional strength members (only Riedel PURE XT)
- Black Polyurethane outer jacket with (polyester) rip cord (only Riedel PURE XT)

Construction



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Characteristics

Temperature range	according to IEC 60794-1-2-F1	
	-70 ... + 85 ˚C	Transport / Storage
	-5 ... + 50 ˚C	Installation
	-55 ... + 85 ˚C	Operation
Bending Radius for Fibres	>25 mm	Installation / Operation
	Max. increase 0.02 dB/turn @1550nm with 32 mm	
	Max. increase 0.20 dB/turn @1550nm with 20 mm	
Strippability	≤ 10 cm	Secondary coating only
	≤ 10 mm	Secondary + primary coating
Watertightness	according to IEC 60794-1-2-F5	
Crush resistance	according to IEC 60794-1-2-E3	
	≤ 4.000 N/m	Tight buffer
	≤ 4.000 N/m (Riedel PURE CS) / ≤ 50.000 N/m (Riedel PURE XT)	Cable
Bending Radius for Cables	8 × ø	Static according to IEC 60794-1-2-E11
	4 × ø	Dynamic according to IEC 60794-1-2-E6
Flame retardancy	according IEC 60332-2 (EN 50265-2-2)	
Repeated bending	> 700.000 times	according to IEC 60794-1-2-E6
Fibre-Type	9/125 µm / G.657A	
Mode-Field	8.9 ±0.4 µm (125 ±0.3 µm)	(Cladding Diameter)
Wavelength	1310 nm (0.35 / 0.5 dB/km)	(Attenuation average / max.)
	1550 nm (0.21 / 0.3 dB/km)	
	1625 nm (0.24 / 0.4 dB/km)	
Dispersion	≤ 3.5 ps / ≤ 18 nm/km	
PMD	≤ 0.2 ps/km	
Cable Cut-off Wavelength	≤ 1260 nm	

Mechanical Data

	Riedel PURE CS D	**Riedel PURE CS Q**	**Riedel PURE XT D / PURE XT Q**	
Ø Inner jacket nom.	--	--	5.8	
Ø Outer jacket nom.	5.4 mm	5.8 mm	9.2	
Max. pulling tension	according to IEC 60794-1-2-E1			
	700 N	800 N	1600 N	Long term
	1500 N	1600 N	2400 N	Short term
Energy of flame	470 kJ/m	580 kJ/m	1180 kJ/m	
Weight	27 kg/km	31 kg/km	61 kg/km	