

**QUALITATIVE REQUIREMENTSs AND TRIAL DIRECTIVES OF OFC 06 CORE
(ARMOURED)**

S/N o	SPECIFICATION	TRIAL DIRECTIVE
(A) Optical Fiber Sensor Cable:		
1	Loose Tube jelly filled uni-tube designed.	Specification to be verified by the BOO through Specs Sheet.
2	Single Mode : (ITU-T Rec. G652D) Fiber	Specification to be verified by the BOO through Specs Sheet.
3	Attenuation : At 1310nm \leq 0.38 dB/Km	Specification to be verified by the BOO through Specs Sheet.
4	Attenuation : At 1550 nm \leq 0.25 dB/Km	Specification to be verified by the BOO through Specs Sheet.
5	Core Diameter : 9/125/250 μ m	Specification to be verified by the BOO through Specs Sheet.
6	Clad Diameter : 125 \pm 1.0 μ m	Specification to be verified by the BOO through Specs Sheet.
7	Clad non circularity : < 1.0%	Specification to be verified by the BOO through Specs Sheet.
8	Coating Diameter : 245 \pm 10 μ m	Specification to be verified by the BOO through Specs Sheet.
9	Chromatic Dispersion : At 1550 nm < 18.0 ps/nm.km	Specification to be verified by the BOO through Specs Sheet.
10	Zero Dispersion wave length : 1300 ~1324 nm	Specification to be verified by the BOO through Specs Sheet.
11	Zero Dispersion slop : < 0.092 ps/nm ² .km	Specification to be verified by the BOO through Specs Sheet.
12	i) Fiber cut off wavelength: \leq 1320nm. ii) Cable cut off wavelength: \leq 1260nm.	Specification to be verified by the BOO through Specs Sheet.
13	Polarization Mode Diameter : < 0.2 ps/root km	Specification to be verified by the BOO through Specs Sheet.
14	Mode Field Diameter : At 1310 nm 9.2 \pm 0.4 μ m	Specification to be verified by the BOO through Specs Sheet.

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15	Fiber Identification: Blue, Orange, Green, Brown, Slate, White.	To be physically checked by the BOO.
16	No. of fibers : 06F	To be physically checked by the BOO.
17	Moisture Barrier: Single layer of water swellable tape / Polyester Tape applied longitudinally.	Specification to be verified by the BOO through Specs Sheet.
(B) Strength:		
1	Type (Outer Jacket) : 2# Steel wire /FRP RODs	Specification to be verified by the BOO through Specs Sheet.
2	Type (Peripheral) : Aramid Yarn/Glass yarn	Specification to be verified by the BOO through Specs Sheet.
(C) Mechanical and Environmental:		
1	Max Tensile Strength : 3500 Newton	Specification to be verified by the BOO through Specs Sheet.
2	Crush Resistance :Newton 4000/ 10 cm	Specification to be verified by the BOO through Specs Sheet.
3	Minimum Bending radius : 20 x Diameter	Specification to be verified by the BOO through Specs Sheet.
4	Operating Temperature : -30°C to +70°C	Specification to be verified by the BOO through Specs Sheet.

The Sub-group has decided to upload the QRs on MHA and BSF website for 15 days to invite the views/ comments/ suggestions of prospective bidders to make the QRs more broad based.

Note - All firms are requested to provide the following.

1. Original Brochure of product by OEM.
2. Detail literature about the product.
3. Comprehensive comments for incorporation in the specifications.


(Vikas Singh)
Dy. Commandant/(Mod)