

Optical Connector Performance

Connector Type		SC-Type Adaptor		
Item number		LGC-A30(), LGC-A31(), LGC-A33(), LGC-F2A30(), LGC-H2A30()		
Quotation standard		JIS C5973 F04 Type Connectors for Optical Fiber Cables		
Classification	Test item		Requirement condition	Test method (JIS C 5961-1997)
	No.			
Structure	1	Appearance, Construction and Dimensions	Accordance to production drawing and quotation standard.	4. and 5.
	2	Fitting	Engagement without mechanical abnormality.	4.
Optical performance	3	Insertion Loss	$\leq 0.3\text{dB}$	6.1 · Kind of light source : Wavelength : $1.3\ \mu\text{m}$ LD · Measuring method : 5 (Adaptor)
Mechanical performance	4	Vibration	· Ins. loss after test : $\leq 0.3\text{dB}$ · There shall be no physical or mechanical damage to the connector.	7.1 · Vibration frequency range : 10~55Hz · Amplitude (one side) : 0.75mm · Axis : X, Y, Z 3 axes
	5	Shock		7.2 · Peak acceleration : 981m/s^2 · Test condition : 10 times in each X, Y, Z 3 axes
	6	Repetitive Operation (Plug engagement and disengagement)		7.3 · Operation times : 500 times
	7	Gauge Retension Force		7.4 · Detail of gauge : $\phi 2.499 \pm 0.0005\text{mm}$
	8	Engagement and Separation Force		7.13 Engagement and Separation force : Single-port : $\leq 19.6\text{N}$ 2-port : $\leq 29.4\text{N}$
9	Robustness of Connection at Joint	Robustness of connection at joint: $\geq 68.6\text{N}$	7.6	

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Environmental performance	10	Salt mist	·There shall be no corrosion to the connector. ·Ins. loss after test : $\leq 0.3\text{dB}$ ·There shall be no physical or mechanical damage to the connector.	8.1 ·Test duration : 48h ·Concentration : $5\pm 1\%$			
	11	Change of Temperature		8.2 ·Temperature : $-25\sim 70^{\circ}\text{C}$ ·Test duration : 2h/cyc. ,100cyc.			
	12	Humidity (cyclic)		8.4 ·Temperature : $-10\sim 25\sim 65^{\circ}\text{C}$ ·Humidity : $93\pm 3\%$ ·Test duration : 24h/cyc. ,20cyc.			
	13	Dry Heat		8.5 ·Temperature : 85°C ·Test duration : 240h			
	14	Cold		8.6 ·Temperature : -25°C ·Test duration : 240h			
Note	·Insertion loss measurement was measured by master code. ·The adapter was evaluated together with the plug.			By	Prepared	Checked	Approved
				N.goto	N.goto	Y.Ohkubo	T.Eguchi
				Signature	<i>n.goto</i>	<i>Y.Ohkubo</i>	<i>T.Eguchi</i>
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