

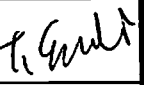


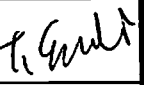


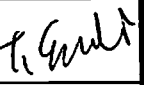


Optical Connector Performance

Connector Type		MU-Type Plug MU-Type Adaptor		
Item number		[Plug] LGC-PH60()+R LGC-F2PH60()+R [Adaptor] LGC-A6()+R LGC-F2A6()+R		
Quotation standard		JIS C5983 F14 Type Connectors for Optical Fiber Cables		
Classification	Test item		Requirement condition	Test method (JIS C 5961-2005)
	No.			
Structure	1	Appearance, Construction and Dimensions	Accordance to production drawing and quotation standard.	5.
	2	Fitting	Engagement without mechanical abnormality.	5.
Optical performance	3	Insertion Loss	Single mode optical fiber Ins. : $\leq 0.5\text{dB}$ (Plug) Ins. : $\leq 0.3\text{dB}$ (Adaptor)	7.1 -Kind of light source : Single-mode optical fiber : Wavelength : $1.3\mu\text{m}$ LD -Measuring method : 4 (Plug) -Measuring method : 5 (Adaptor)
	4	Reflection Attenuation	Reflection : $\geq 25\text{dB}$ (PC Polishing Plug) Reflection : $\geq 40\text{dB}$ (AdPC Polishing Plug)	7.2 -Wavelength : $1.3\mu\text{m}$ LD
Mechanical performance	5	Vibration	Ins. loss after test : $\leq 0.5\text{dB}$ Reflection after test : $\geq 40\text{dB}$ There shall be no physical or mechanical damage to the connector.	8.1 -Vibration frequency range : $10\sim 55\text{Hz}$ -Amplitude (one side) : 0.75m -Axis : X,Y,Z 3 axes
	6	Shock		8.2 -Peak acceleration : 981m/s^2 -Test condition : 10 times in each X,Y,Z 3 axes
	7	Repetitive Operation (Plug engagement and disengagement)		8.3 -Operation times : 500 times
	8	Gauge Retension Force	Retension force : $1.0\sim 2.5\text{N}$	8.4 -Detail of gauge : $\phi 1.249\pm 0.0005\text{mm}$
	9	Ferrule Thrust	Thrust : $5.5\sim 6.5\text{N}$	8.5
	10	Engagement and Separation Force (When simplex plug)	Engagement and Separation force : Single-ports : $\leq 20\text{N}$ 2-ports : $\leq 30\text{N}$	8.13
	11	Robustness of Connection at Joint	Robustness of connection at joint : $\geq 68.6\text{N}$	8.6 (When simplex plug and duplex adaptor)
	12	Fibre cable retention	Ins. loss after test : $\leq 0.5\text{dB}$ Reflection after test : $\geq 40\text{dB}$ There shall be no physical or mechanical damage to the connector.	8.11 -Tensile force : 70N (When simplex plug and duplex adaptor)
	13	Robustness of Optical Fiber Cord (Bending)		8.12 -Tensile force : 5N , $\pm 90^\circ$ -Operation times : 100 times (When simplex plug and duplex adaptor)

Classification	Test item		Requirement condition	Test method (JIS C 5961-2005)																
	No.																			
Environmental performance	14	Salt mist	· There shall be no corrosion to the connector.	9.1 · Test duration : 48h · Concentration : 5±1%																
	15	Change of Temperature	· Ins. loss after test : ≤0.5dB · Reflection after test : ≥40dB · There shall be no physical or mechanical damage to the connector.	9.2 · Temperature : -25~70°C · Class of Test : Nb · Test duration : 1.5h/cyc. ,100cyc.																
	16	Humidity (cyclic)		9.4 · Temperature : -10~25~65°C · Humidity : 93±3% · Test duration : 24h/cyc. ,20cyc.																
	17	Dry Heat		9.5 · Temperature : 85°C · Test duration : 240h																
	18	Cold		9.6 · Temperature : -25°C · Test duration : 240h																
Note	· Insertion loss measurement was measured by master code. · The adapter was evaluated together with the plug. · When a outside diameter of fiber was φ0.9mm, No.12 and No.13 of an test item did not measure.			<table border="1"> <thead> <tr> <th></th> <th>Prepared</th> <th>Checked</th> <th>Approved</th> </tr> </thead> <tbody> <tr> <td>By</td> <td>T.Koiso</td> <td>T.Yoshizaki</td> <td>T.Eguchi</td> </tr> <tr> <td>Signature</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Honda Tsushin Kogyo Co.,Ltd. Tokyo Japan</td> <td colspan="2">Date : April 28,2006</td> </tr> </tbody> </table>		Prepared	Checked	Approved	By	T.Koiso	T.Yoshizaki	T.Eguchi	Signature				Honda Tsushin Kogyo Co.,Ltd. Tokyo Japan		Date : April 28,2006	
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