



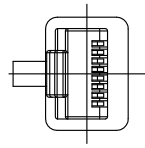
REVISION				
SYM	DESCRIPTION	DATE	WRIT	APPR
A	New Release	06MAR2019	C.GAO	M.LIU

# Connector Specification

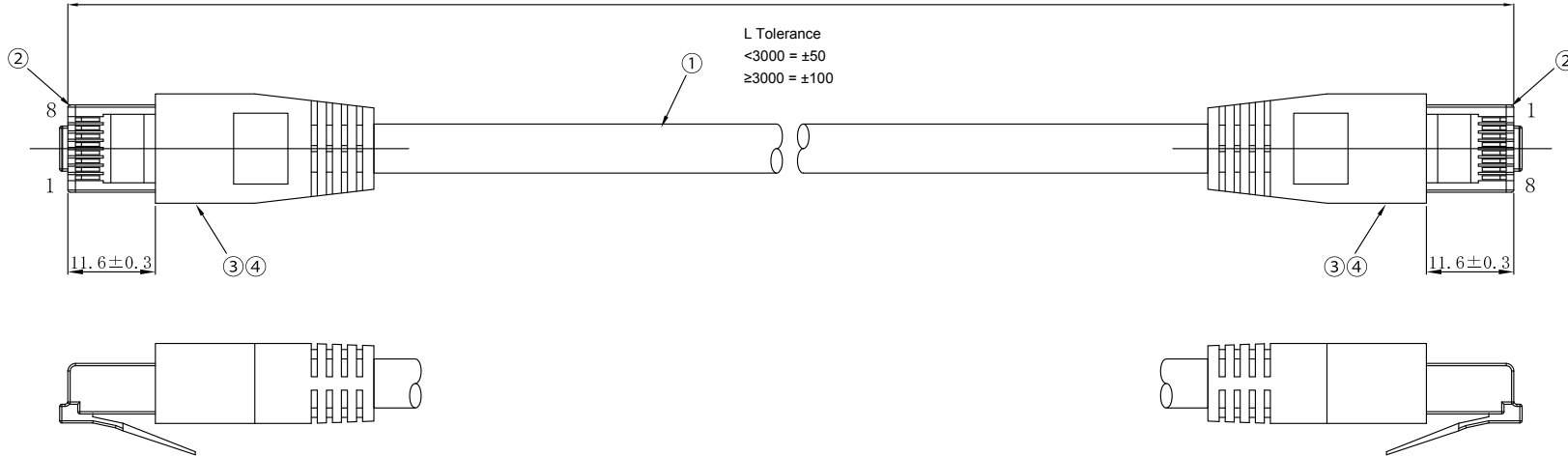
L: 5000/10,000

L Tolerance  
 <3000 = ±50  
 ≥3000 = ±100

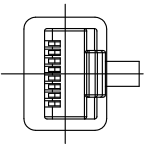
Mating Face View



## CN1



Mating Face View



## CN2

Wiring Diagram

CN1				CN2	
1	Orange / White			1	
2	Orange			2	
3	Green / White			3	
4	Green			4	
5	Blue			5	
6	Blue / White			6	
7	Brown / White			7	
8	Brown			8	
Shell	Group			Shell	

Notes:

1. The specification on the drawing must be completely followed for final finished products.

2. Test:

Conduction: no short-circuit, open circuit, false matching

Tithstand voltage: AC500V/2MA/1second

Insulation: DC: 500V/100MΩ/second

Instant Break: 3second

3. No Contamination, Damage, Scratch, Deformation.

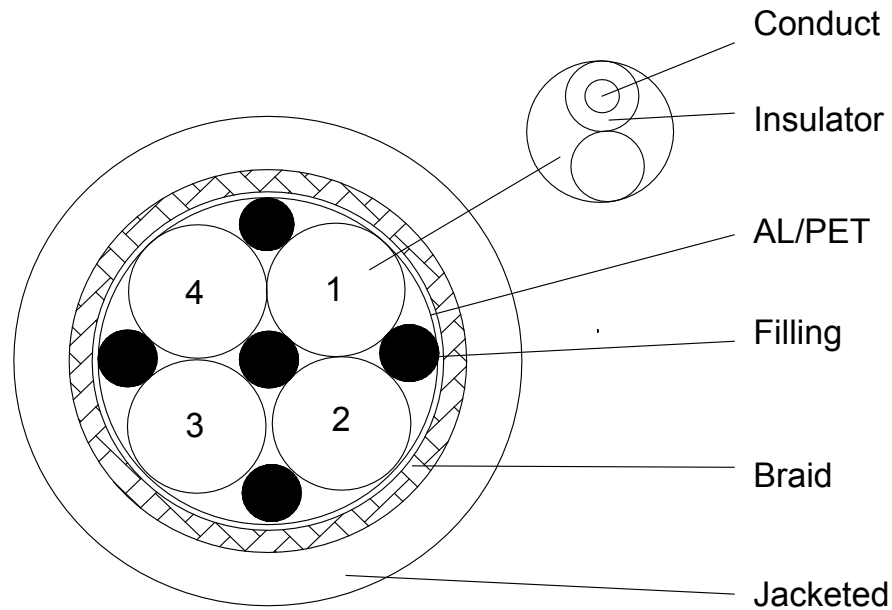
Item	Description	QTY	Specification
①	Wire	1	GIGE CABLE CAT5E BLACK LF 4PX26AWG
②	RJ45 Connector	2	8P8C
③	Inner Mold	2	PE, Nature
④	Outer Mold	2	PVC, BLACK, 50±5P

Unless otherwise specific dimensions are in milli-meters. Tolerances on the right.			Dim Tolerances x, ±5 x±0.3	Angle Tolerances x°, ±1° x'±
Drawn C.GAO	Date 06MAR2019	Material See Table	Unit MM	Title GigE Cat5E with RJ-45 Straight High Flex Cable
Checked M.LIU	Date 06MAR2019	Finish See Table	Scale /	Model NO. OLA-GIGE-1-1-1-XM
Approved M.LIU	Date 06MAR2019	It must not be copied or otherwise disclosed without prior written consent. This document is the property of OKLAB.		



# Cable Specification

## Drawing



NO.	Insulator Colour 1	Insulator Colour 2
1	Blue	Blue / White
2	Orange	Orange / White
3	Green	Green / White
4	Brown	Brown / White

Blue / White: White line is injected on the blue insulator and occupies 20-25% of the dimension.  
The same for others.

Model NO.	OLA-GIGE-1-1-1-XM CABLE	Established Date	15NOV2018
Style	GIGE Ethernet/T/20276-SB BLACK LF 4PX26AWG		
Size	4PX26AWG		
Approbation	UL20276 AWM 80°C 30V	Flame Retardant Grade: VW-1	
Conductor	Size	26AWG/4P	
	Cond. Material	Bare Copper BC	
	Construction	30/0.08 BC	
	Diameter	0.51mm	
	Tolern	±0.003mm	
Insulation	Material	HDPE	
	Avg.Thick.	0.207mm	
	Min.Thick.	0.184mm	
	Diameter	0.97±0.05mm	
	Colour	(Bule*Bule/White) (Orange*Orange/White) (Green*Green/White) (Brown*Brown/White)	
Pair Twist	Pair Twist	1P*26AWG	
	Diameter	1.94mm	
Assembly Standed	26AWG/4P		
Shielded	Al/Pet	0.05*20mm	
	Braid	24/8/0.1TC	
	Covered	99% Min	
Jacketed	Material	PVC	
	Avg.Thick.	0.765mm	
	Min.Thick.	0.723mm	
	Diameter	ø6.5±0.2mm	
Electrical Properties	Colour	Black (Similar to RAL 9005)	
	Conductor Resistance	≤124 Ω/km 20°C	
	Test Voltage	500V/1min	
	Insulating Resistance	> 10 MΩ/km 20°C	
Wokring Temperature	Characteristic Impedance	100±15Ω	
	Fixed Installation	-20°C ~ 80°C	
Minimal Bending Radius	Moved Installation	-5°C ~ 50°C	
	Fixed Installation	5 X Cable-ø	
Printing	Moved Installation	8.5 X Cable-ø	
	Ethernet, 4PX26AWG, 80°C, 30V, VW-1, LF		



# Cable Vertical Fire Resistance Test Report

Item NO.: GIGE Ethernet/T/20276-SB BLACK LF 4PX26AWG

Temperature/Humidity: 25°C / 30%

Test Date: 12FEB2018

Item	Test Conditions	Standard of Criterion	Test Records(Second)								Test Results	Notes
			Cables NO.	Residual Flame 1	Residual Flame 2	Residual Flame 3	Residual Flame 4	Residual Flame 5	Burning Area of Flag %	Igniting of Cotton Layer		
VW-1	<ul style="list-style-type: none"> <li>Flame: Inner flame 40mm, outer flame 125mm, the flame tube forms an angle of 20 degree to the horizontal plane.</li> <li>Flag: The 13mm flag is 250mm above the intersection of the inner and outer flame.</li> <li>Combustion: Single combustion for 15 second and interval 15s as a cycle, 5 cycles are repeated.</li> </ul>	<ul style="list-style-type: none"> <li>A single residual flame does not exceed 60 seconds.</li> <li>No falling ignites absorbent cotton.</li> <li>The burning area of flag does not exceed 25%.</li> </ul>	(1)	8	7	6	6	7	0%	Not Ignited	Not Ignited	
			(2)	4	9	10	6	5	0%	Not Ignited		
			(3)	10	11	9	10	13	0%	Not Ignited		

Test Results: Not Ignited, passed.

Tested	L.S.Yang
Checked	L.S.Yang
Approved	C.Gan



# Cable Drag Chain Test Report

Item NO.: GIGE Ethernet/T/20276-SB BLACK LF 4PX26AWG

Outer Diameter: 6.5±0.3mm

Temperature/Humidity: 10°C-30°C / 40%H

Test Date: 13Nov2017-12DEC2018

Test Conditions		Test Instrument	CO2
Cable bending coefficient	9xd	Target number of test round trips	20 Million Times
Cable bending radius	60mm		
Stroke	1,000mm		
Speed	60 Sound trips/min		
Acceleration and deceleration	Around 4m/s		

Item NO.	Cables NO.	(1)	(2)	(3)	(4)	(5)	(6)	Avg
Ethernet/T/20276-SB BLACK LF 4PX26AWG		20,004,325	20,004,325	20,004,325	20,004,325	20,004,325		20,004,325

Test Results: No disconnection, passed.  
 Reach the target test times, stop the test.

Tested	Z.M.L
Checked	H.W.Z
Approved	H.Y.W



# Cable Torsion Test Report

Item NO.: GIGE Ethernet/T/20276-SB BLACK LF 4PX26AWG

Outer Diameter: 6.5±0.3mm

Temperature/Humidity: 10°C-30°C / 40%H

Test Date: 04Jan2019-06Jan2019

Test Conditions		Test Instrument	YOUER, OUT
Torsion Angle	±180°	Target Number of Test Round Trips	50K Times
Test Length	500mm		
Speed	40 Round trips/min		

Item NO.	Cables NO.	(1)	(2)	(3)	(4)	(5)	(6)	Avg
Ethernet/T/20276-SB BLACK LF 4PX26AWG		50,000	50,000	50,000	50,000	50,000		50,000

Test Results: No disconnection, passed.  
 Reach the target test times, stop the test.

Tested	Z.M.L
Checked	H.W.Z
Approved	H.Y.W



# Cable Flexing Test Report

Item NO.: GIGE Ethernet/T/20276-SB BLACK LF 4PX26AWG

Outer Diameter: 6.5±0.3mm

Temperature/Humidity: 10°C-30°C / 40%H

Test Date: 06JUL2018-13OCT2018

Test Conditions		Test Instrument	Y01
Bending Speed	60 Times/min	Target Number of Test Round Trips	100K Times
Bending Angle	±90°		
Bending Radius	60mm		
Load	500g		

Item NO.	Cables NO.	(1)	(2)	(3)	(4)	(5)	(6)	Avg
Ethernet/T/20276-SB BLACK LF 4PX26AWG		101,326	101,326	101,326	101,326	101,326		101,326

Test Results: No disconnection, passed.  
 Reach the target test times, stop the test.

Tested	Z.M.L
Checked	H.W.Z
Approved	H.Y.W



**Cable ID: 192**

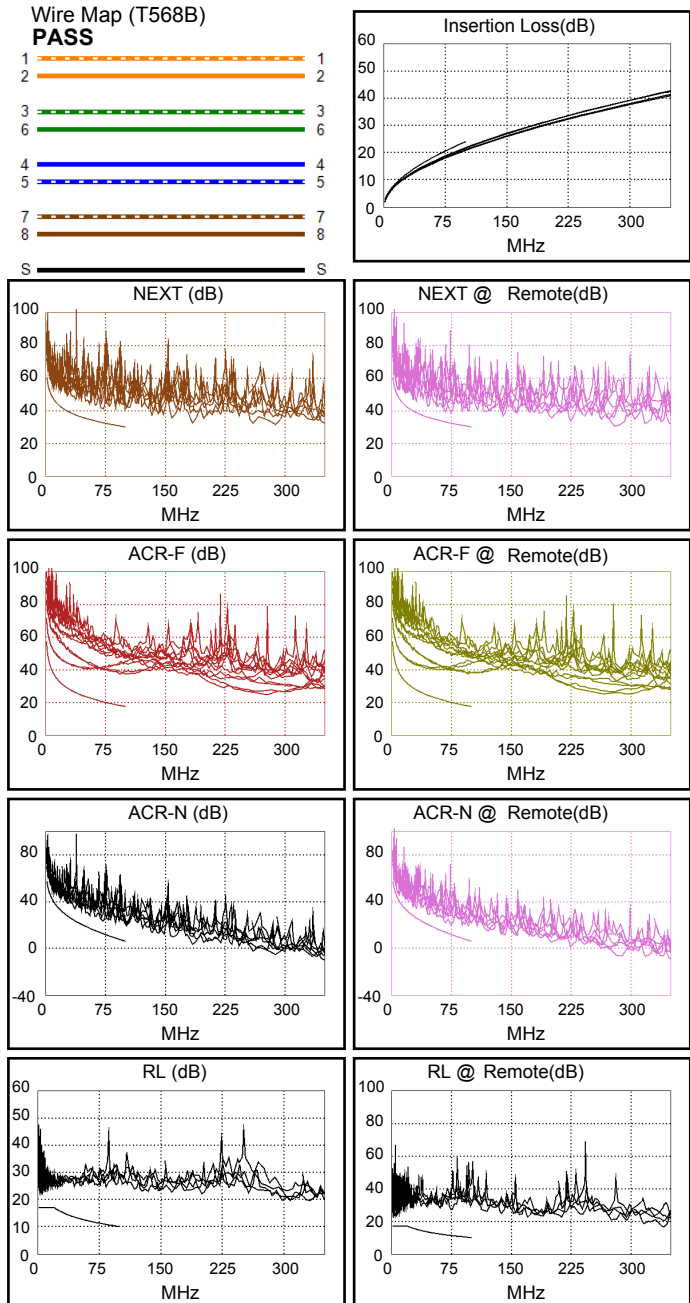
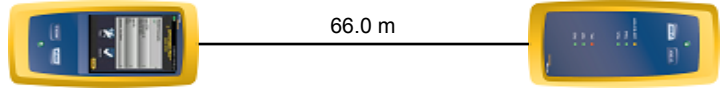
Data / Time: 06/13/2019 04:50:56 PM  
**Headroom 4.1 dB (NEXT 45-78)**  
**Test Limit: TIA Cat 5e Channel**  
 Cable Type: Cat 5e F/UTP  
 NVP: 69.0%

Software Version: V6.0 Build 6  
 Limits Version: V7.0  
 Calibration Date:  
 Main (Tester): 04/11/2019  
 Remote (Tester): 04/11/2019

**Test Summary: PASS**

Model: DSX-5000  
 Main S/N: 18310305  
 Remote S/N: 18310304  
 Main Adapter: DSX-CHA004  
 Remote Adapter: DSX-CHA004

Length (m), Limit 100.0	[Pair 45]	66.0
Prop. Delay (ns), Limit 555	[Pair 78]	330
Delay Skew (ns), Limit 50	[Pair 78]	11
Resistance (ohms)	[Pair 12]	14.96
Insertion Loss Margin (dB)	[Pair 12]	2.2
Frequency (MHz)	[Pair 12]	100.0
Limit (dB)	[Pair 12]	24.0



Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	45-78	45-78	45-78
<b>NEST (dB)</b>	6.5	4.1	9.8	6.3
Freq. (MHz)	10.1	7.8	100.0	74.3
Limit (dB)	46.9	48.8	30.1	32.3
Worst Pair	45	45	45	45
<b>PS NEST (dB)</b>	6.9	6.5	9.5	7.3
Freq. (MHz)	10.1	7.9	100.0	66.8
Limit (dB)	43.9	45.7	27.1	30.1

PASS	MAIN	SR	MAIN	SR
Worst Pair	45-12	45-12	45-78	45-78
<b>ACR-F (dB)</b>	13.2	13.2	19.8	19.7
Freq. (MHz)	6.3	6.1	100.0	96.5
Limit (dB)	41.5	41.7	17.4	17.7
Worst Pair	45	45	78	45
<b>PS ACR-F (dB)</b>	16.1	16.0	22.4	22.4
Freq. (MHz)	6.1	6.3	100.0	100.0
Limit (dB)	38.7	38.5	14.4	14.4

N/A	MAIN	SR	MAIN	SR
Worst Pair	36-45	45-78	45-78	12-45
<b>ACR-N (dB)</b>	7.2	4.6	12.2	12.4
Freq. (MHz)	10.1	7.6	100.0	96.8
Limit (dB)	39.8	42.8	6.1	6.7
Worst Pair	45	45	45	45
<b>PS ACR-N (dB)</b>	7.6	7.2	12.7	13.3
Freq. (MHz)	10.1	7.8	100.0	96.8
Limit (dB)	36.8	39.6	3.1	3.7

PASS	MAIN	SR	MAIN	SR
Worst Pair	45	36	45	36
<b>RL (dB)</b>	6.5	7.7	6.5	7.7
Freq. (MHz)	3.8	3.8	3.8	3.8
Limit (dB)	17.0	17.0	17.0	17.0

Compliant Network Standards:  
 10BASE-T      100BASE-TX      100BASE-T4  
 1000BASE-T    2.5GBASE-T      ATM-25  
 ATM-51        ATM-155          100VG-AnyLan  
 TR-4           TR-16 Active      TR-16 Passive