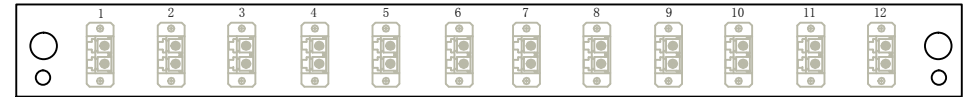
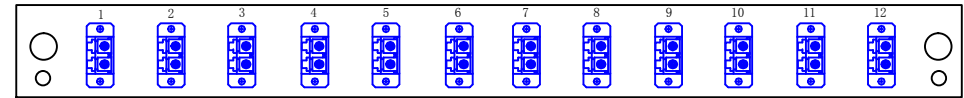


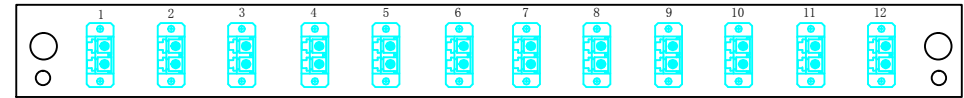
19" 1U Fiber Optic Patch panel Front panel for 12 × LC Duplex Adapter vertical ,Black



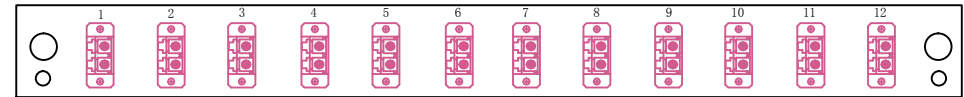
F103227 12 × LC OM2 Beige Duplex Adapter



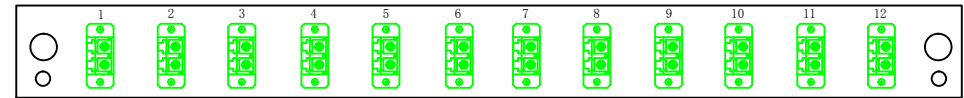
F103224 12 × LC OS2 Blue Duplex Adapter



103203 12 × LC OM3 Aqua Duplex Adapter



F103228 12 × LC OM4 Erika violett Duplex Adapter



F103223 12 × LC APC Green Duplex Adapter

MATERIAL LIST:

⑥	Screw	ST 2*10 Screw	24	
⑤	Push pin	ABS OD:15.8	2	
④	Spool	Fibre cable management Spool	2	
③	Splicing tray	24 Core Splicing tray	1	
②	Pigtail	Pigtail LC 12 different colours	2	
①	Adapter	LC Duplex Adapter	12	
NO.	PARTS NAME	SPECIFICATION DESCRIPTION	QT'Y	REMARK

NOTE:

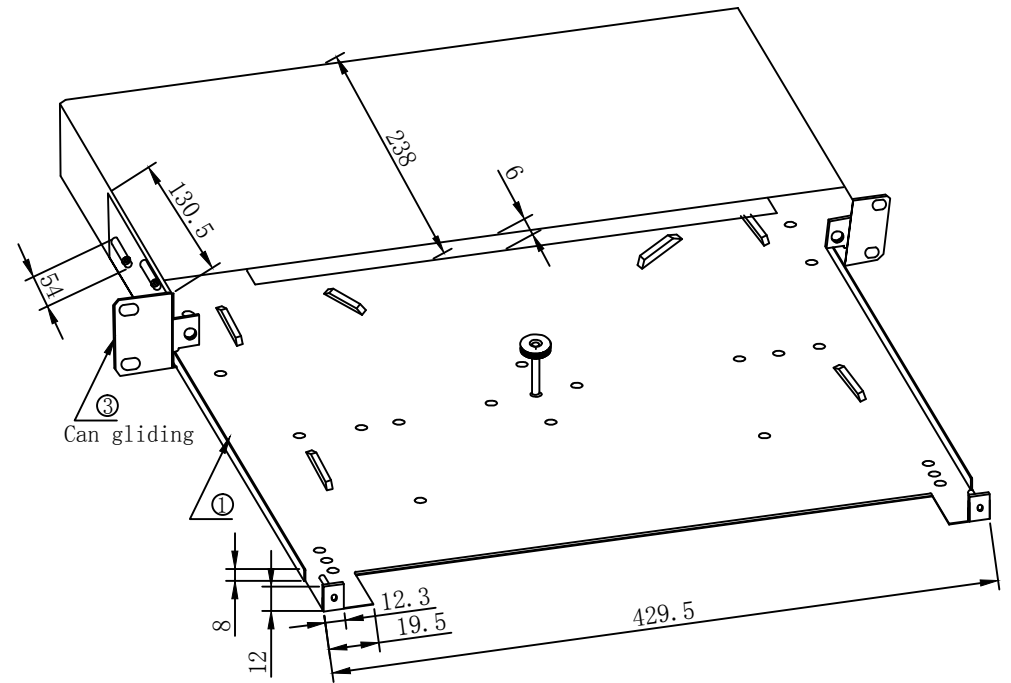
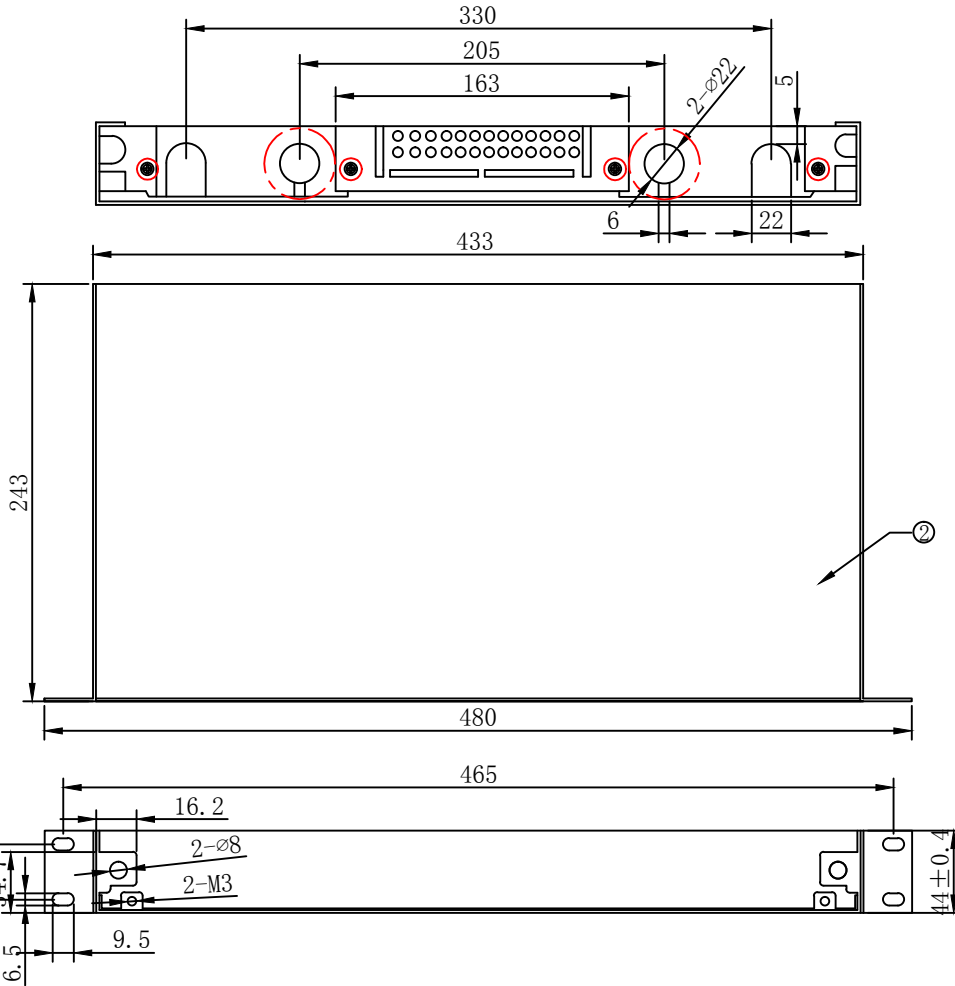
RoHS 2.0 COMPLIANT

1. Black (RAL 9005) matt black surface treatment
2. 1 2 3 412
3. packing:1PCS/PE BAG+inner box +label

LogiLink Professional F12LC2/3/4

NEW		2016. 08. 25	A
BY	CHK	REVISION RECORD MODIFICATIONS	DATE
			REV.

PRODUCT NAME	19" Fiber Optic Patch Panel, Fully loaded 1U" sliding type with 12 core LC DX Adapter and pigtail	ITEM NO.		UNIT	MM
DRAWNBY	CHECKBY	APPOBY	DATE		
			2016. 08. 25		



NOTE:

RoHS 2.0 COMPLIANT
 19" Fiber Optic Patch Panel, 1U" Sliding Type
 Changeable Front Panel
 Bottom panel 45° degree clippable
 Colour: Black (RAL 9005)

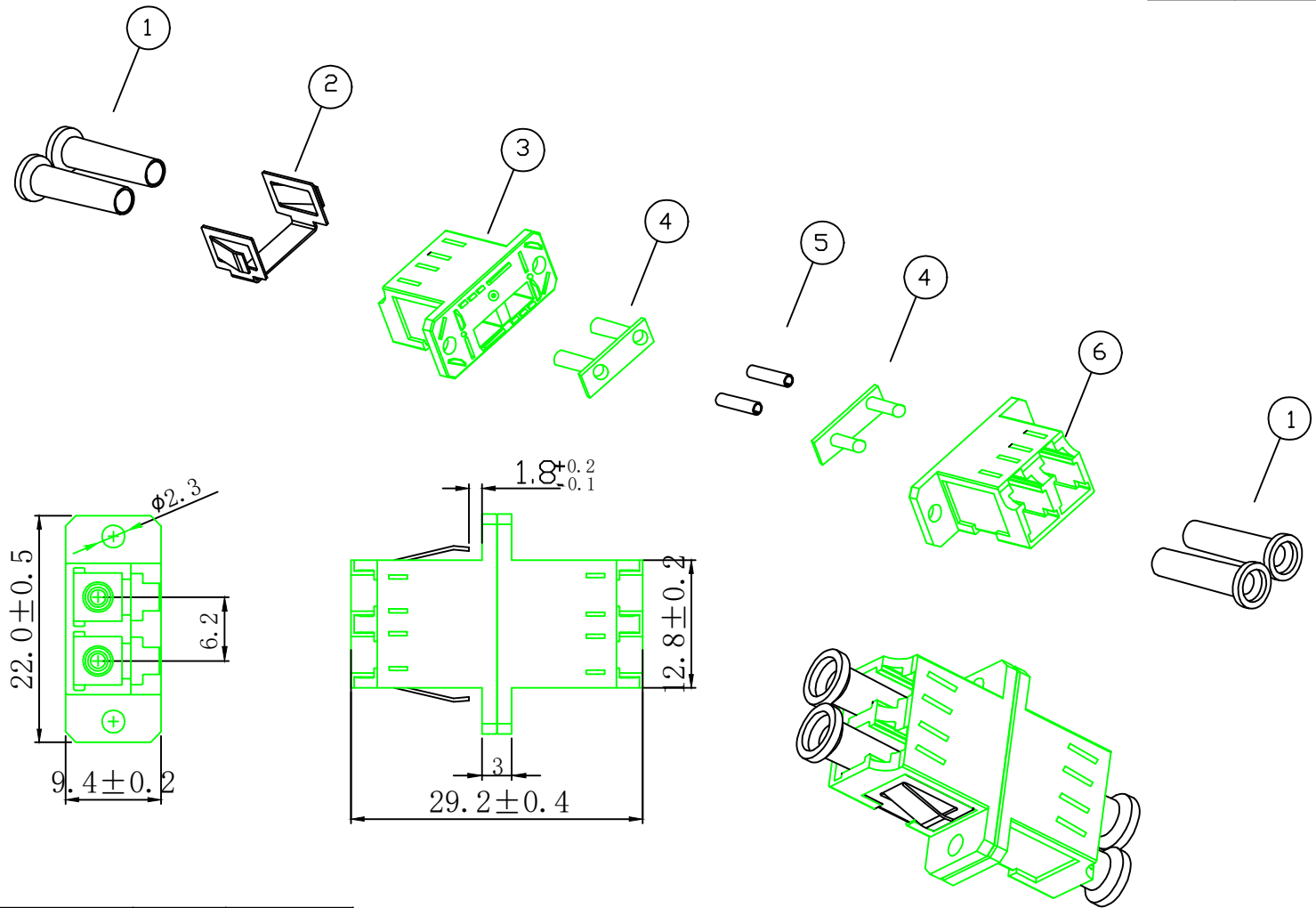
Accessory: Screw and Nut M6*18mm x 4set
 Cable Glands PG13.5 x 2 pcs
 Cable Tie 2.2*80mm x 6 pcs

MATERIAL LIST:

NO.	PARTS NAME	SPECIFICATION DESCRIPTION	QT' Y	REMARK
⑤	Push pin	ABS OD:15.8	2	
④	Front panel	1.0mm thickness Metallic Panel with plastic powder cladding	1	
③	Mounting	1.5mm thickness Metallic Panel with plastic powder cladding	2	
②	Upper Panel Cover	1.0mm thickness Metallic Panel with plastic powder cladding	1	
①	Bottom Panel	1.0mm thickness Metallic Panel with plastic powder cladding	1	

BY	CHK	REVISION RECORD MODIFICATIONS	DATE	REV.
		NEW	2016. 08. 25	A
BY	CHK	REVISION RECORD MODIFICATIONS	DATE	REV.
			2016. 08. 25	

PRODUCT NAME		2Direct GmbH		ITEM NO.	
19" Fiber Optic Patch Panel, 1U" sliding type				ITEM NO.	
DRAWNBY		CHECKBY		APPOBY	
				DATE	
				2016. 08. 25	



NOTE:
RoHS 2.0 & Reach COMPLIANT

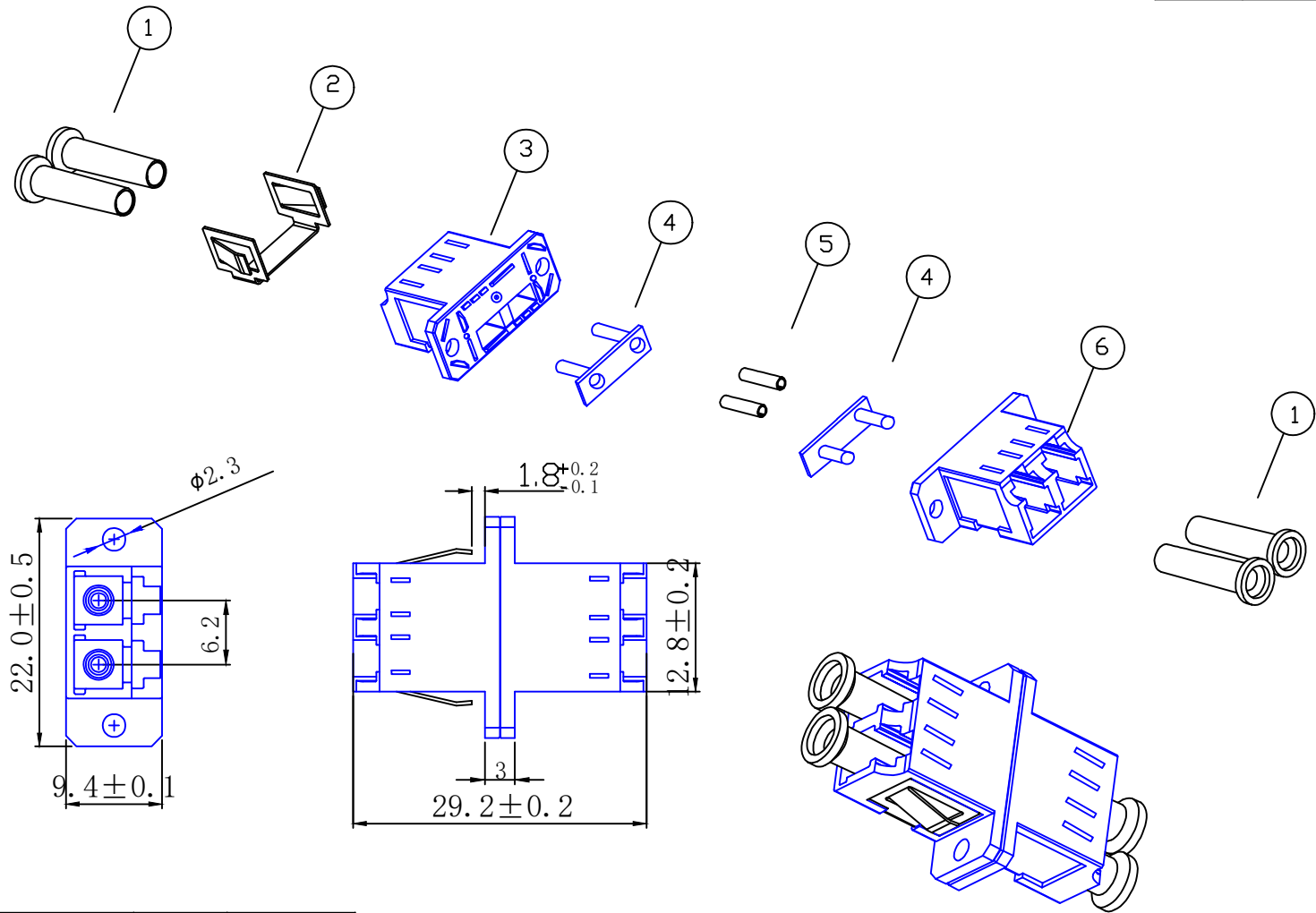
Insertion Loss (typical) (dB)	≤0.12
Insertion Loss (dB)	≤0.20
Operating Temperature (° C)	-40 ~ +80
Storage Temperature (° C)	-40 ~ +85

MATERIAL LIST:

⑥	LC Green Body (SC simplex footprint)	1pcs	
⑤	LC Sleeve ceramic (APC)	1pcs	
④	Green bush	2pcs	
③	LC Green Body (SC simplex footprint)	1pcs	
②	LC Metal Mount	1pcs	
①	LC White Dust Cap	4pcs	
NO.	SPECIFICATION STANDARD	QT'Y	REMARK

LogiLink Professional F12LC2/3/4

		2Direct GmbH		ITEM NO.			
PRODUCT NAME		LC/APC Green (ceramic) Duplex Plastic Adapter (SC SX Footprint)		ITEM NO.		UNIT MM	
BY	CHK	NEW	2016.08.25	A	DRAWNBY	CHECKBY	APPOBY
REVISION RECORD MODIFICATIONS		DATE	2016.08.25	REV.	2016.08.25		



NOTE:
RoHS 2.0 & Reach COMPLIANT

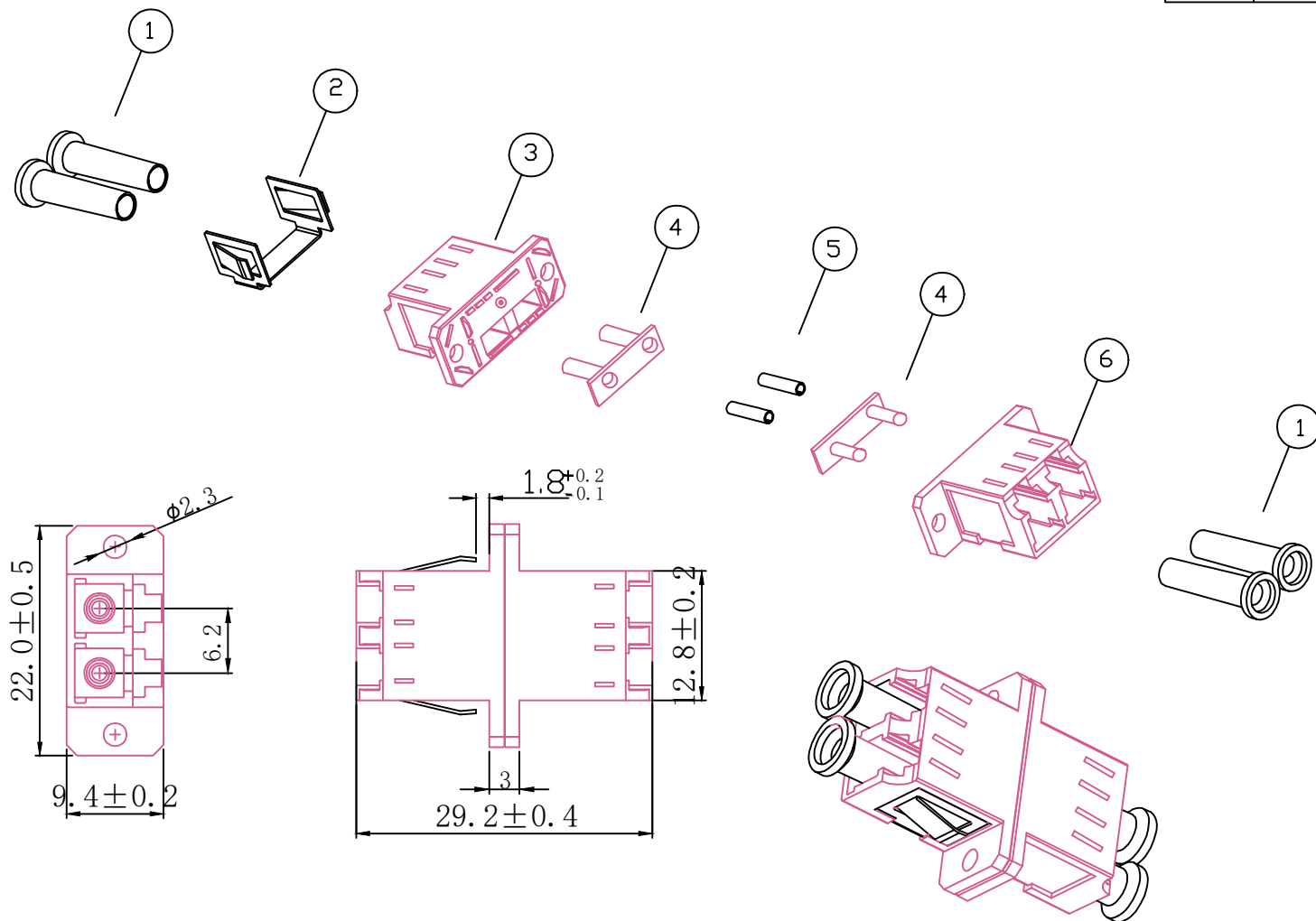
Insertion Loss (typical) (dB)	≤0.12
Insertion Loss(dB)	≤0.20
Operating Temperature(° C)	-40 ~+80
Storage Temperature(° C)	-40 ~+85

MATERIAL LIST:

⑥	LC Blue Body (SC simplex footprint)	1pcs	
⑤	LC Sleeve ceramic(Single-Mode)	1pcs	
④	Blue bush	2pcs	
③	LC Blue Body (SC simplex footprint)	1pcs	
②	LC Metal Mount	1pcs	
①	LC White Dust Cap	4pcs	
NO.	SPECIFICATION STANDARD	QT'Y	REMARK

LogiLink Professional F12LC2/3/4

		2Direct Gmbh		ITEM NO.			
PRODUCT NAME		LC SM(ceramic)Duplex Plastic Adapter(SC SX Footprint)		ITEM NO.		UNIT MM	
BY	CHK	NEW	2016.08.25	A	DRAWNBY	CHECKBY	APPOBY
REVISION RECORD MODIFICATIONS		DATE	2016.08.25	REV.			DATE
						2016.08.25	



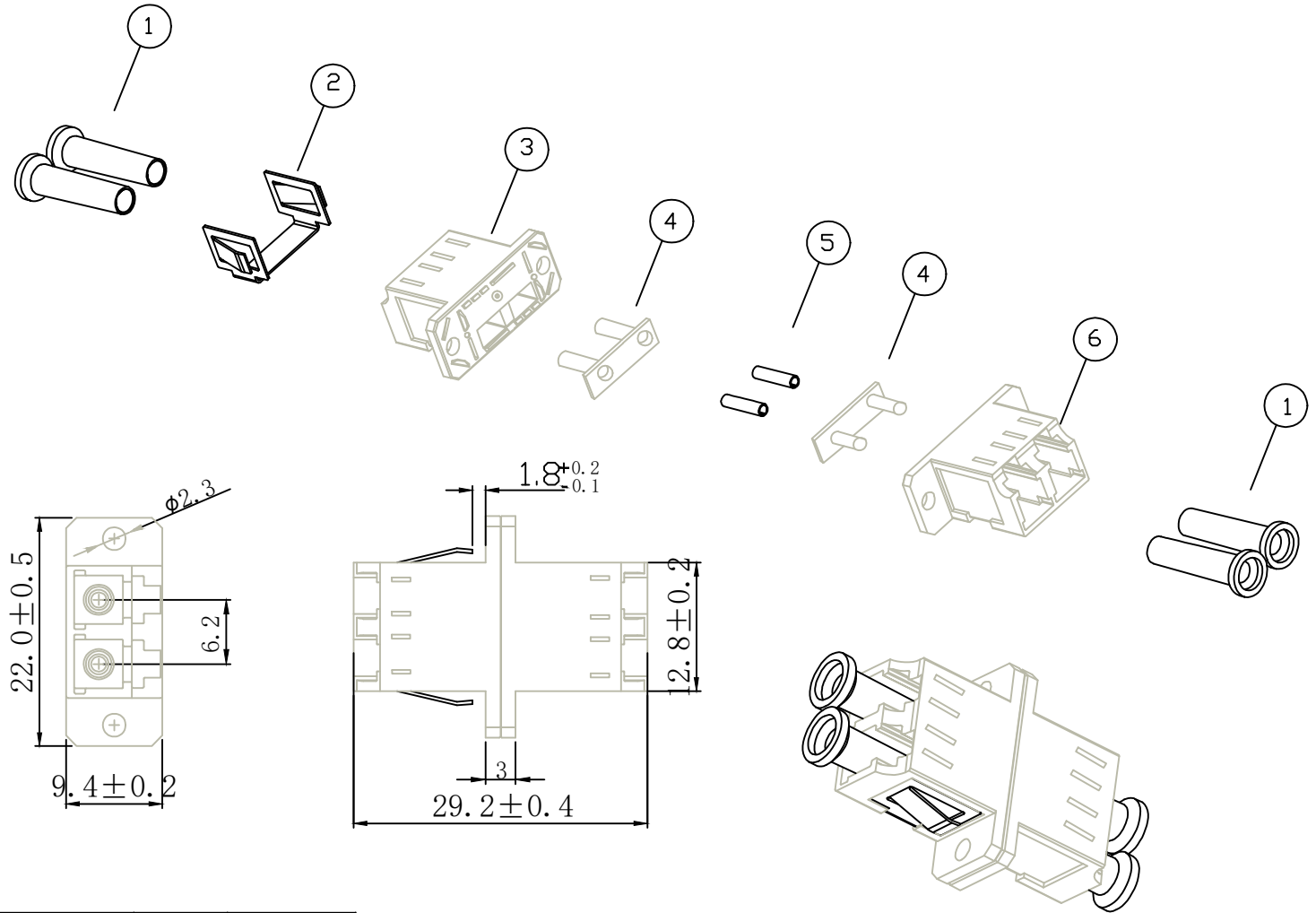
NOTE:
RoHS 2.0 & Reach COMPLIANT

Insertion Loss (typical) (dB)	≤0.12
Insertion Loss (dB)	≤0.20
Operating Temperature (° C)	-40 ~ +80
Storage Temperature (° C)	-40 ~ +85

MATERIAL LIST:

⑥	LC Erika violett Body RAL4003 (SC simplex footprint)	1pcs	
⑤	LC Sleeve ceramic (Multi-Mode)	1pcs	
④	Erika violett bush RAL4003	2pcs	
③	LC Erika violett Body RAL4003 (SC simplex footprint)	1pcs	
②	LC Metal Mount	1pcs	
①	LC White Dust Cap	4pcs	
NO.	SPECIFICATION STANDARD	QT' Y	REMARK

		2Direct Gmbh		ITEM NO.			
PRODUCT NAME		LC MM Erika violett (ceramic) Duplex Plastic Adapter (SC SX Footprint)		ITEM NO.		UNIT MM	
BY	CHK	NEW	2016.08.25	A	DRAWNBY	CHECKBY	APPOBY
REVISION RECORD MODIFICATIONS				DATE	REV.	2016.08.25	



NOTE:
RoHS 2.0 & Reach COMPLIANT

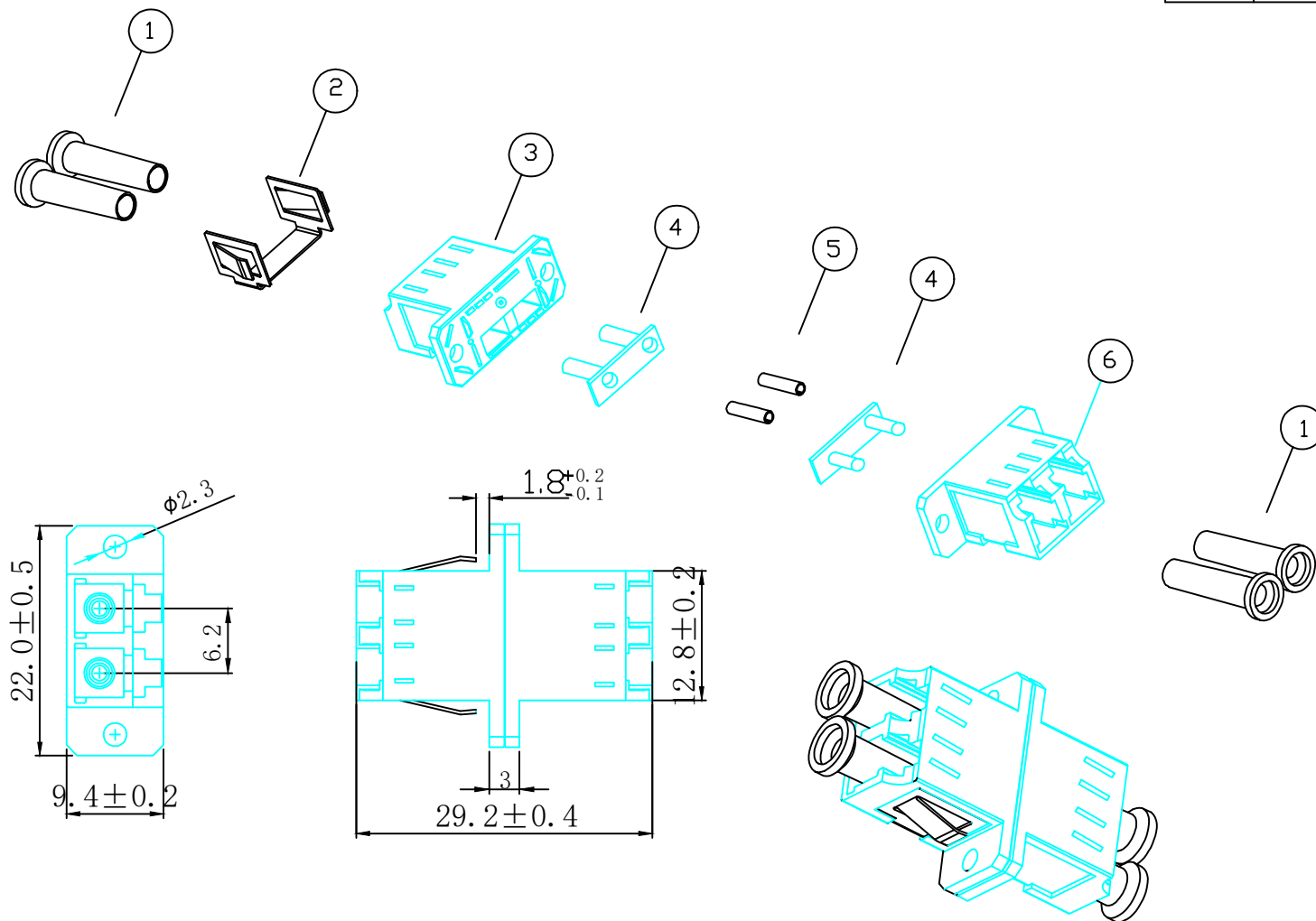
Insertion Loss (typical) (dB)	≤0.12
Insertion Loss (dB)	≤0.20
Operating Temperature(° C)	-40 ~+80
Storage Temperature(° C)	-40 ~+85

MATERIAL LIST:

⑥	LC beige Body (SC simplex footprint)	1pcs	
⑤	LC Sleeve ceramic(Multi-Mode)	1pcs	
④	Beige bush	2pcs	
③	LC beige Body (SC simplex footprint)	1pcs	
②	LC Metal Mount	1pcs	
①	LC White Dust Cap	4pcs	
NO.	SPECIFICATION STANDARD	QT' Y	REMARK

2Direct Gmbh		ITEM NO.	
PRODUCT NAME	LC MM beige(ceramic)Duplex Plastic Adapter(SC SX Footprint)	ITEM NO.	UNIT MM
DRAWNBY	CHECKBY	APPOBY	DATE
			2016.08.25

		NEW	2016.08.25	A
BY	CHK	REVISION RECORD MODIFICATIONS	DATE	REV.



NOTE:
RoHS 2.0 & Reach COMPLIANT

Insertion Loss (typical) (dB)	≤0.12
Insertion Loss (dB)	≤0.20
Operating Temperature (° C)	-40 ~ +80
Storage Temperature (° C)	-40 ~ +85

MATERIAL LIST:

⑥	LC Aqua Body (SC simplex footprint)	1pcs	
⑤	LC Sleeve ceramic (Multi-Mode)	1pcs	
④	Aqua bush	2pcs	
③	LC Aqua Body (SC simplex footprint)	1pcs	
②	LC Metal Mount	1pcs	
①	LC White Dust Cap	4pcs	
NO.	SPECIFICATION STANDARD	QT'Y	REMARK

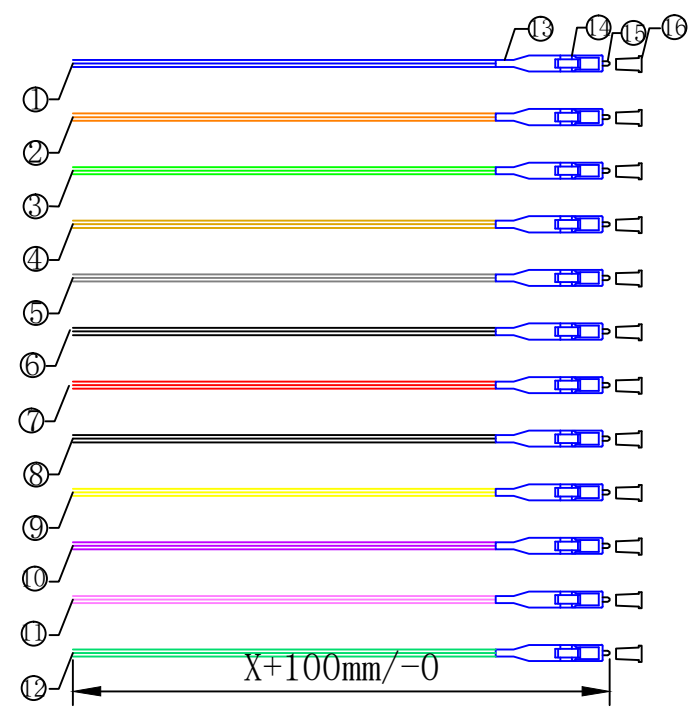
		2Direct Gmbh		ITEM NO.			
		LC MM Aqua (ceramic) Duplex Plastic Adapter (SC SX Footprint)		ITEM NO.		UNIT MM	
BY	CHK	NEW	2016.08.25	A	DRAWNBY	CHECKBY	APPOBY
		REVISION RECORD MODIFICATIONS	DATE	REV.			2016.08.25

NOTE:
The primary coating and secondary coating
have the same color

ROHS 2.0 Compliant

MATERIAL LIST:

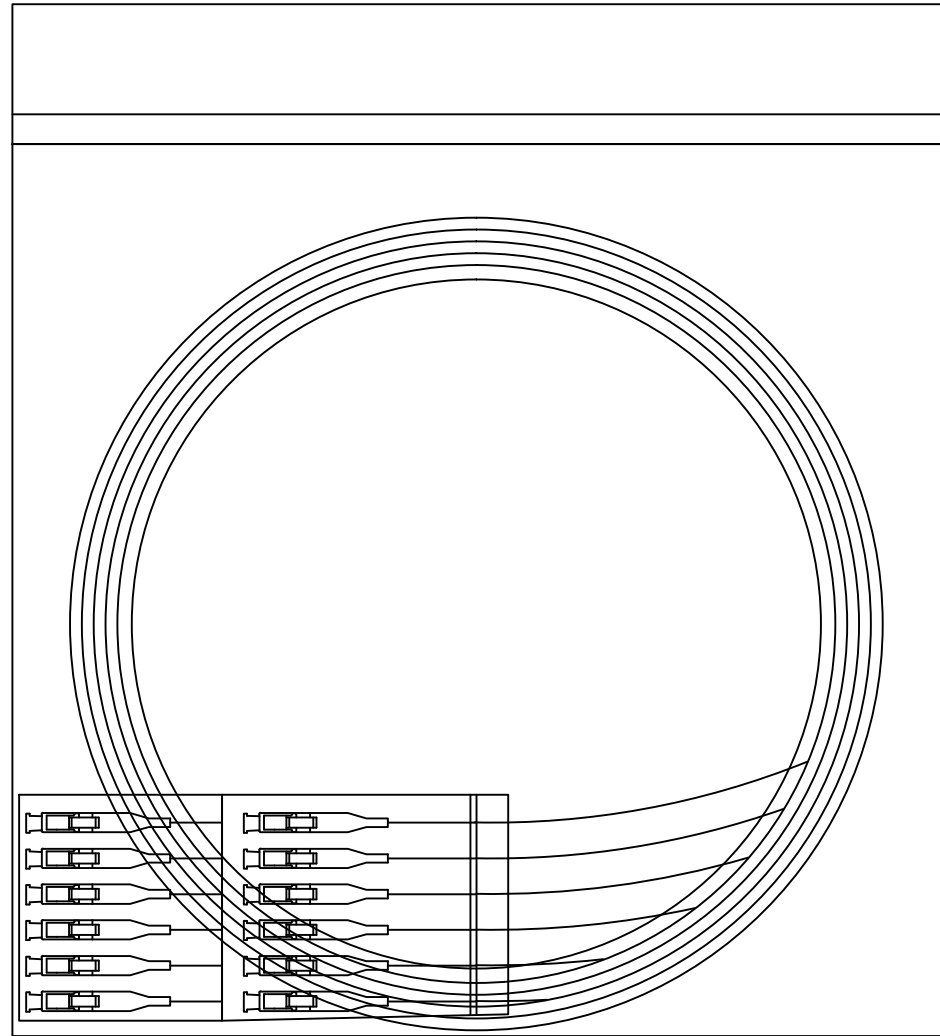
⑬	LC White Dust Cap	12	
⑮	LC/ UPC SM Ferrule 125-126um	12	
⑭	LC SM Blue 0.9 Connector	12	
⑬	LC 0.9 Blue Boot	12	
⑫	Fiber Cable LOOSE TUBE SM 9/125 0.9mm TURQUOISE LSZH	Xm	
⑪	Fiber Cable LOOSE TUBE SM 9/125 0.9mm PINK LSZH	Xm	
⑩	Fiber Cable LOOSE TUBE SM 9/125 0.9mm VIOLET LSZH	Xm	
⑨	Fiber Cable LOOSE TUBE SM 9/125 0.9mm YELLOW LSZH	Xm	
⑧	Fiber Cable LOOSE TUBE SM 9/125 0.9mm BLACK LSZH	Xm	
⑦	Fiber Cable LOOSE TUBE SM 9/125 0.9mm RED LSZH	Xm	
⑥	Fiber Cable LOOSE TUBE SM 9/125 0.9mm WHITE LSZH	Xm	
⑤	Fiber Cable LOOSE TUBE SM 9/125 0.9mm GREY LSZH	Xm	
④	Fiber Cable LOOSE TUBE SM 9/125 0.9mm BROWN LSZH	Xm	
③	Fiber Cable LOOSE TUBE SM 9/125 0.9mm GREEN LSZH	Xm	
②	Fiber Cable LOOSE TUBE SM 9/125 0.9mm ORANGE LSZH	Xm	
①	Fiber Cable LOOSE TUBE SM 9/125 0.9mm BLUE LSZH	Xm	



Type	Single-Mode
Insertion Loss	<=0.3dB
Return Loss	>50dB
Test Wavelength	1310nm

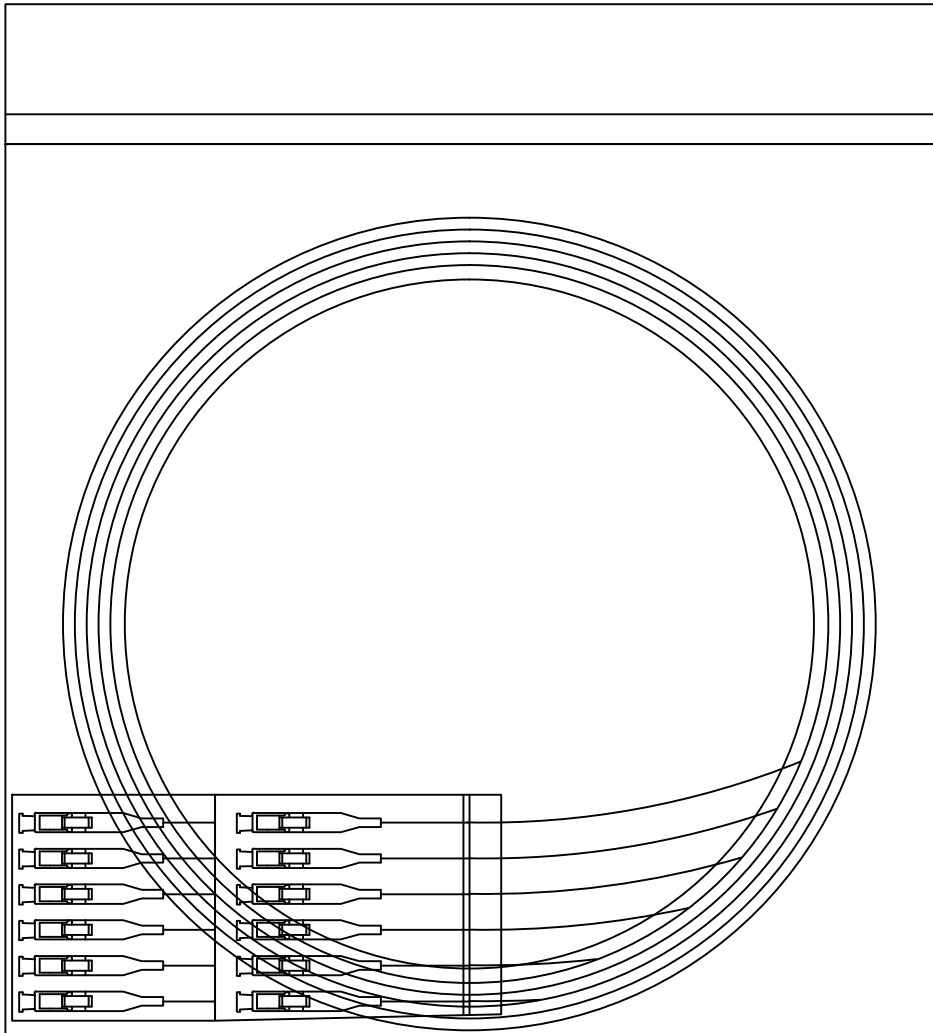
NO.	SPECIFICATION STANDARD		QT' Y	REMARK	2Direct Gmbh		ITEM NO.		
					PRODUCT NAME	Pigtail LC/UPC SM 9/125 μm 12 different colours	ITEM NO.	UNIT	MM
		NEW	2016.08.25	A	DRAWNBY	CHECKBY	APPOBY	DATE	
BY	CHK	REVISION RECORD MODIFICATIONS	DATE	REV.				2016.08.25	

TEST REPORT				
Batch No.		PO NO.		
ITEM No.		Test Wavelength:		
Description	Pigtail set LC single mode 9/125, 12 different colour xm OD 0.9mm LSZH loose tube			
Allow Loss	Insertion Loss 0.3dB	Return Loss	(SM)	50dB
TEST VALUES				
Fiber	Insertion Loss (dB)	Return Loss (dB)		
BLUE				
ORANGE				
GREEN				
BROWN				
GREY				
WHITE				
RED				
BLACK				
YELLOW				
VIOLET				
PINK				
TURQUOISE				
RESULT	OK			



		2Direct GmbH		ITEM NO.		
PRODUCT NAME	Pigtail LC/UPC SM 9/125 μm 12 different colours		ITEM NO.	UNIT	MM	
BY	CHK	NEW	DATE	REV.	DRAWNBY	CHECKBY
		REVISION RECORD MODIFICATIONS	2016. 08. 25	A		
					APPOBY	DATE
						2016. 08. 25

TEST REPORT				
Batch No.		PO NO.		
ITEM No.		Test Wavelength:		
Description	Pigtail set LC OM4 Multi-Mode 50/125, 12 different colour xm OD 0.9mm LSZH loose tube			
Allow Loss	Insertion Loss 0.3dB	Return Loss	(MM)	N/A
TEST VALUES				
Fiber	Insertion Loss (dB)	Return Loss (dB)		
BLUE				
ORANGE				
GREEN				
BROWN				
GREY				
WHITE				
RED				
BLACK				
YELLOW				
VIOLET				
PINK				
TURQUOISE				
RESULT	OK			

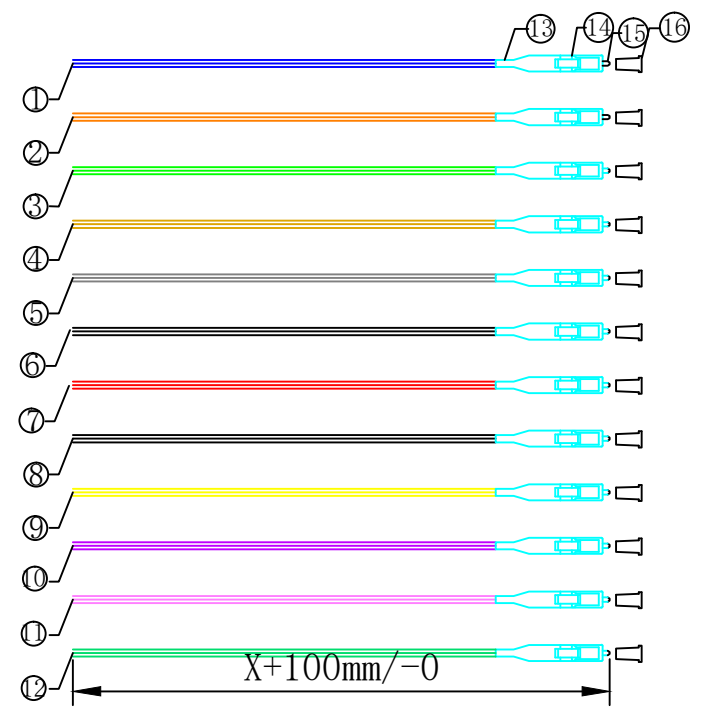


		2Direct GmbH		ITEM NO.			
PRODUCT NAME	Pigtail LC/UPC 50/125 μm OM4 12 different colours			ITEM NO.	UNIT	MM	
BY	CHK	NEW	2016.08.25	A	DRAWNBY	CHECKBY	APPOBY
		REVISION RECORD MODIFICATIONS	DATE	REV.			2016.08.25

NOTE:
 The primary coating and secondary coating
 have the same color
 ROHS 2.0 Compliant

MATERIAL LIST:

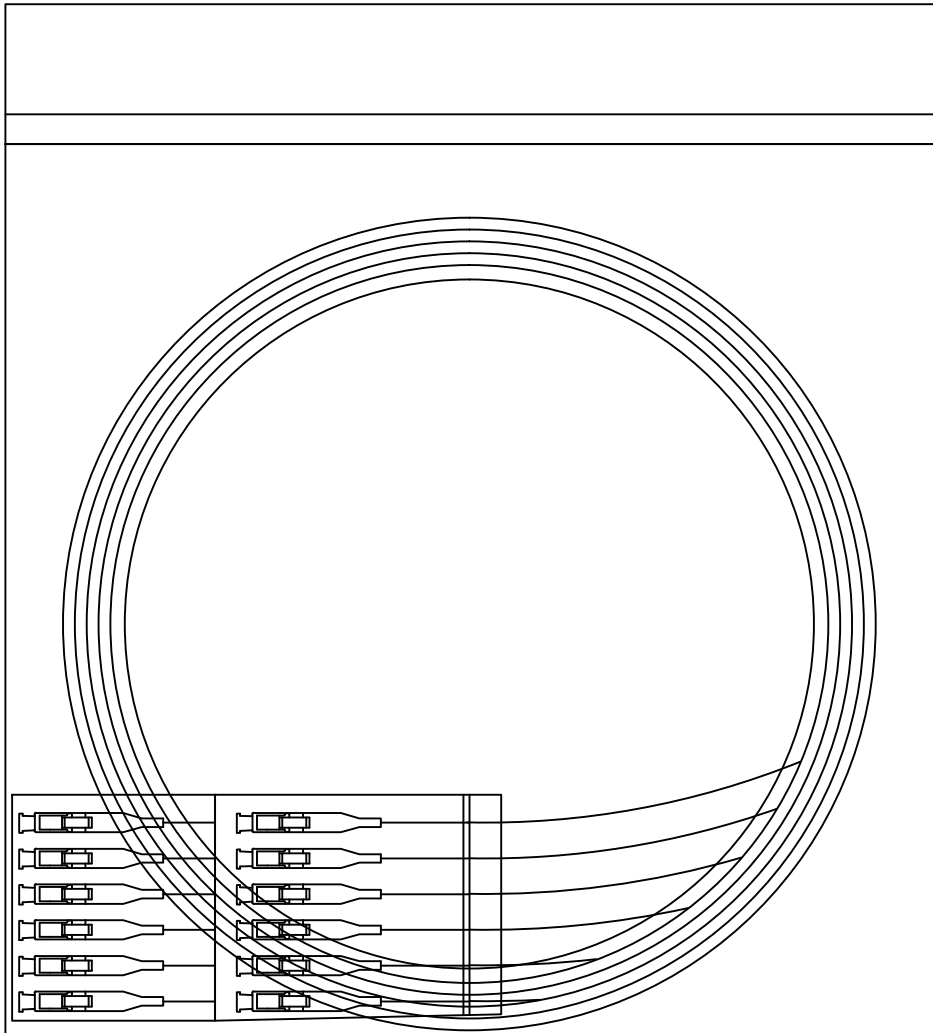
⑬	LC White Dust Cap	12	
⑮	LC/ UPC MM Ferrule 126-128um	12	
⑭	LC MM Aqua 0.9 Connector	12	
⑬	LC 0.9 Aqua Boot	12	
⑫	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm TURQUOISE LSZH	Xm	
⑪	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm PINK LSZH	Xm	
⑩	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm VIOLET LSZH	Xm	
⑨	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm YELLOW LSZH	Xm	
⑧	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm BLACK LSZH	Xm	
⑦	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm RED LSZH	Xm	
⑥	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm WHITE LSZH	Xm	
⑤	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm GREY LSZH	Xm	
④	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm BROWN LSZH	Xm	
③	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm GREEN LSZH	Xm	
②	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm ORANGE LSZH	Xm	
①	Fiber Cable LOOSE TUBE OM3 50/125 0.9mm BLUE LSZH	Xm	



Type	Multi-Mode
Insertion Loss	<=0.3dB
Return Loss	NA
Test Wavelength	850nm

NO.	SPECIFICATION STANDARD		QT' Y	REMARK			2Direct GmbH		ITEM NO.		
					PRODUCT NAME	Pigtail LC/UPC MM 50/125 μm OM3 12 different colours	ITEM NO.		UNIT	MM	
		NEW	2016.08.25	A	DRAWNBY	CHECKBY	APPOBY	DATE	2016.08.25		
BY	CHK	REVISION RECORD MODIFICATIONS			DATE	REV.				2016.08.25	

TEST REPORT				
Batch No.		PO NO.		
ITEM No.		Test Wavelength:		
Description	Pigtail set LC OM3 Multi-Mode 50/125, 12 different colour xm OD 0.9mm LSZH loose tube			
Allow Loss	Insertion Loss 0.3dB	Return Loss	(MM)	N/A
TEST VALUES				
Fiber	Insertion Loss (dB)	Return Loss (dB)		
BLUE				
ORANGE				
GREEN				
BROWN				
GREY				
WHITE				
RED				
BLACK				
YELLOW				
VIOLET				
PINK				
TURQUOISE				
RESULT	OK			

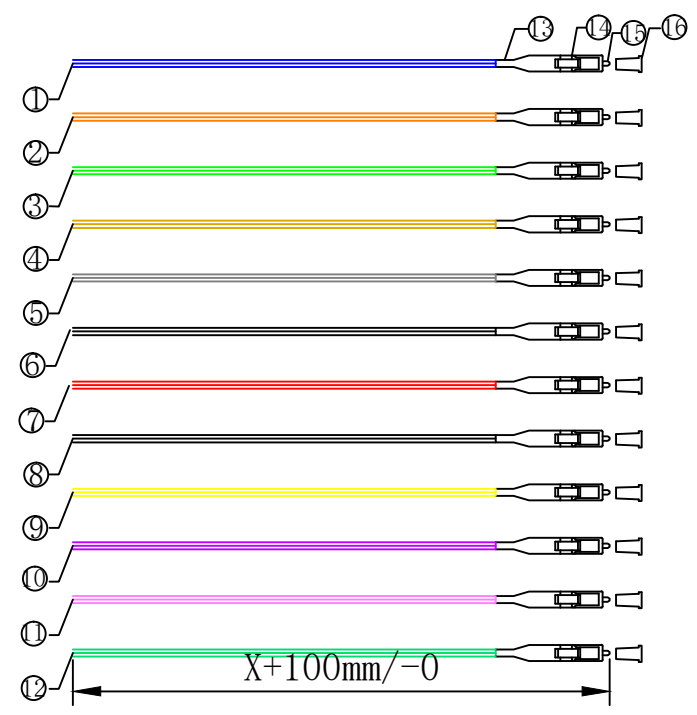


		2Direct GmbH		ITEM NO.			
PRODUCT NAME	Pigtail LC/UPC 50/125 μm OM3 12 different colours			ITEM NO.	UNIT	MM	
BY	CHK	NEW	2016. 08. 25	A	DRAWNBY	CHECKBY	APPOBY
		REVISION RECORD MODIFICATIONS	DATE	REV.			2016. 08. 25

NOTE:
 The primary coating and secondary coating
 have the same coulor
 ROHS 2.0 Compliant

MATERIAL LIST:

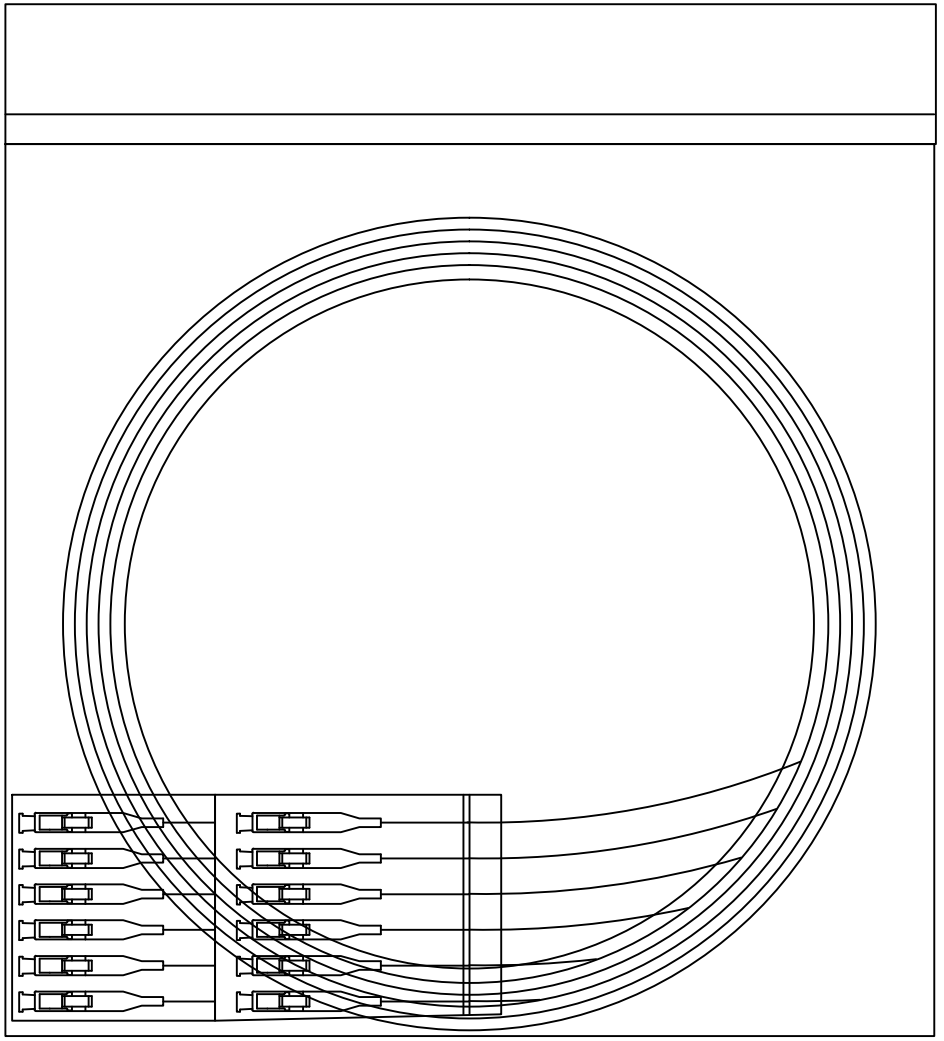
⑬	LC White Dust Cap	12	
⑮	LC/ UPC MM Ferrule 126-128um	12	
⑭	LC MM Beige 0.9 Connector	12	
⑬	LC 0.9 White Boot	12	
⑫	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm TURQUOISE LSZH	Xm	
⑪	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm PINK LSZH	Xm	
⑩	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm VIOLET LSZH	Xm	
⑨	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm YELLOW LSZH	Xm	
⑧	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm BLACK LSZH	Xm	
⑦	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm RED LSZH	Xm	
⑥	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm WHITE LSZH	Xm	
⑤	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm GREY LSZH	Xm	
④	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm BROWN LSZH	Xm	
③	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm GREEN LSZH	Xm	
②	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm ORANGE LSZH	Xm	
①	Fiber Cable LOOSE TUBE OM2 50/125 0.9mm BLUE LSZH	Xm	
NO.	SPECIFICATION STANDARD	QT' Y	REMARK



Type	Multi-Mode
Insertion Loss	<=0.3dB
Return Loss	NA
Test Wavelength	850nm

		2Direct GmbH		ITEM NO.		UNIT	MM
PRODUCT NAME	Pigtail LC/UPC 50/125 μm OM2 12 different colours	DRAWNBY	CHECKBY	APPOBY	DATE	2016.08.25	
BY	CHK	REVISION RECORD MODIFICATIONS	DATE	REV.	2016.08.25		

TEST REPORT				
Batch No.		PO NO.		
ITEM No.		Test Wavelength:		
Description	Pigtail set LC OM2 Multi-Mode 50/125, 12 different colour xm OD 0.9mm LSZH loose tube			
Allow Loss	Insertion Loss 0.3dB	Return Loss	(MM)	N/A
TEST VALUES				
Fiber	Insertion Loss (dB)	Return Loss (dB)		
BLUE				
ORANGE				
GREEN				
BROWN				
GREY				
WHITE				
RED				
BLACK				
YELLOW				
VIOLET				
PINK				
TURQUOISE				
RESULT	OK			

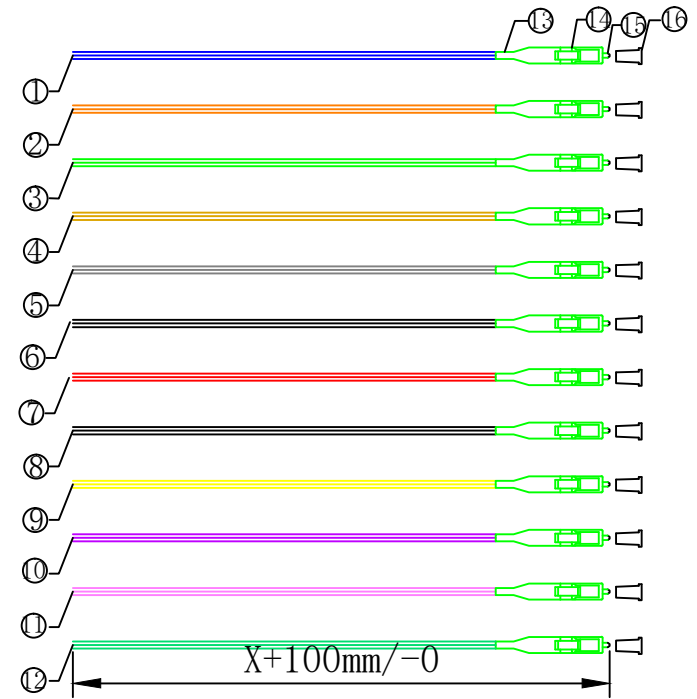


		2Direct GmbH		ITEM NO.	
PRODUCT NAME	Pigtail LC/UPC 50/125 μm OM2 12 different colours	ITEM NO.		UNIT	MM
BY	CHK	NEW	2016.08.25	A	
REVISION RECORD MODIFICATIONS		DATE	REV.	DRAWNBY	CHECKBY
				APPOBY	DATE
					2016.08.25

NOTE:
The primary coating and secondary coating
have the same color

MATERIAL LIST:

⑬	LC White Dust Cap	12	
⑮	LC/APC 8° Ferrule 125-126um	12	
⑭	LC/APC 0.9 Green Connector	12	
⑬	LC 0.9 Green Boot	12	
⑫	Fiber Cable LOOSE TUBE SM 9/125 0.9mm TURQUOISE LSZH	Xm	
⑪	Fiber Cable LOOSE TUBE SM 9/125 0.9mm PINK LSZH	Xm	
⑩	Fiber Cable LOOSE TUBE SM 9/125 0.9mm VIOLET LSZH	Xm	
⑨	Fiber Cable LOOSE TUBE SM 9/125 0.9mm YELLOW LSZH	Xm	
⑧	Fiber Cable LOOSE TUBE SM 9/125 0.9mm BLACK LSZH	Xm	
⑦	Fiber Cable LOOSE TUBE SM 9/125 0.9mm RED LSZH	Xm	
⑥	Fiber Cable LOOSE TUBE SM 9/125 0.9mm WHITE LSZH	Xm	
⑤	Fiber Cable LOOSE TUBE SM 9/125 0.9mm GREY LSZH	Xm	
④	Fiber Cable LOOSE TUBE SM 9/125 0.9mm BROWN LSZH	Xm	
③	Fiber Cable LOOSE TUBE SM 9/125 0.9mm GREEN LSZH	Xm	
②	Fiber Cable LOOSE TUBE SM 9/125 0.9mm ORANGE LSZH	Xm	
①	Fiber Cable LOOSE TUBE SM 9/125 0.9mm BLUE LSZH	Xm	
NO.	SPECIFICATION STANDARD	QT' Y	REMARK

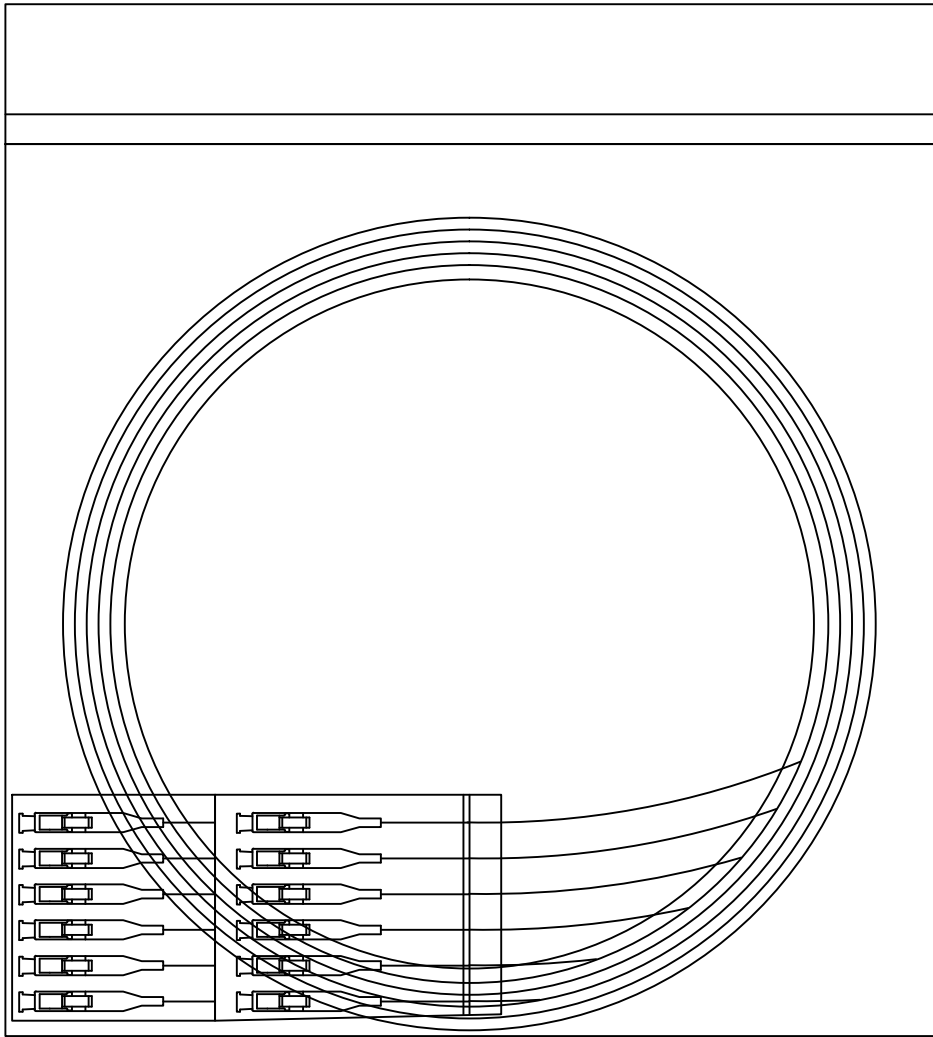


Note:
ROHS Compliant

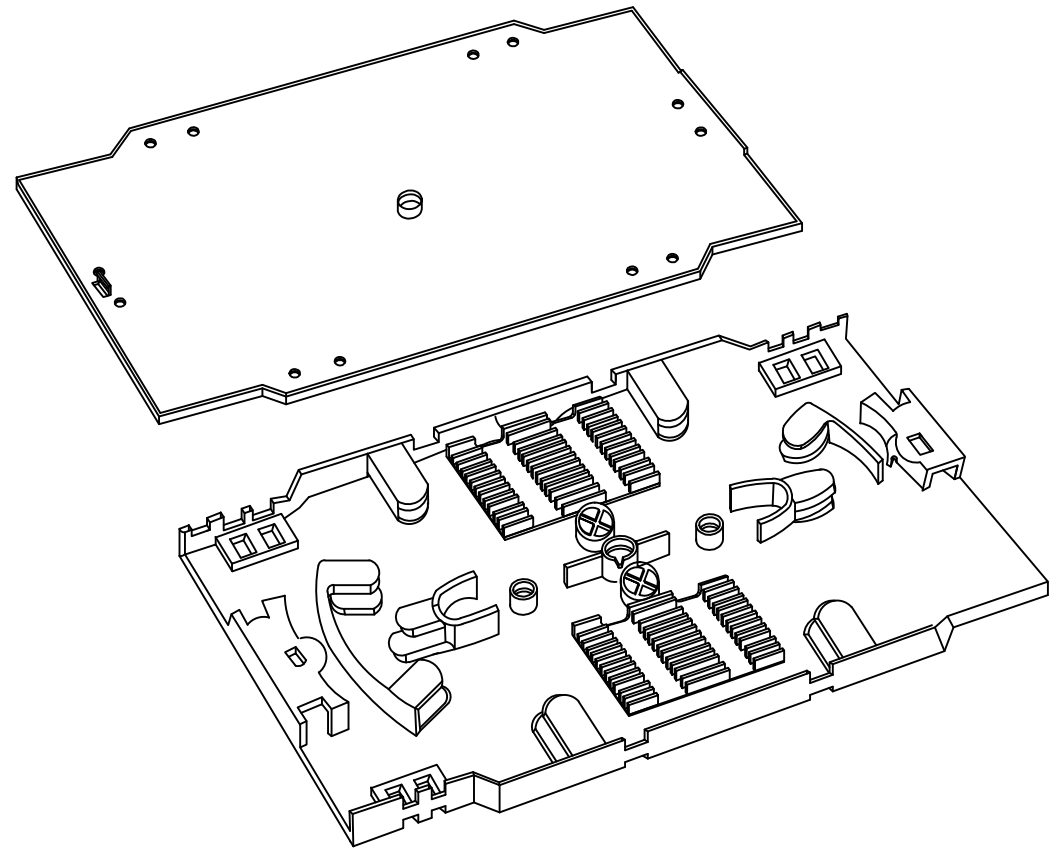
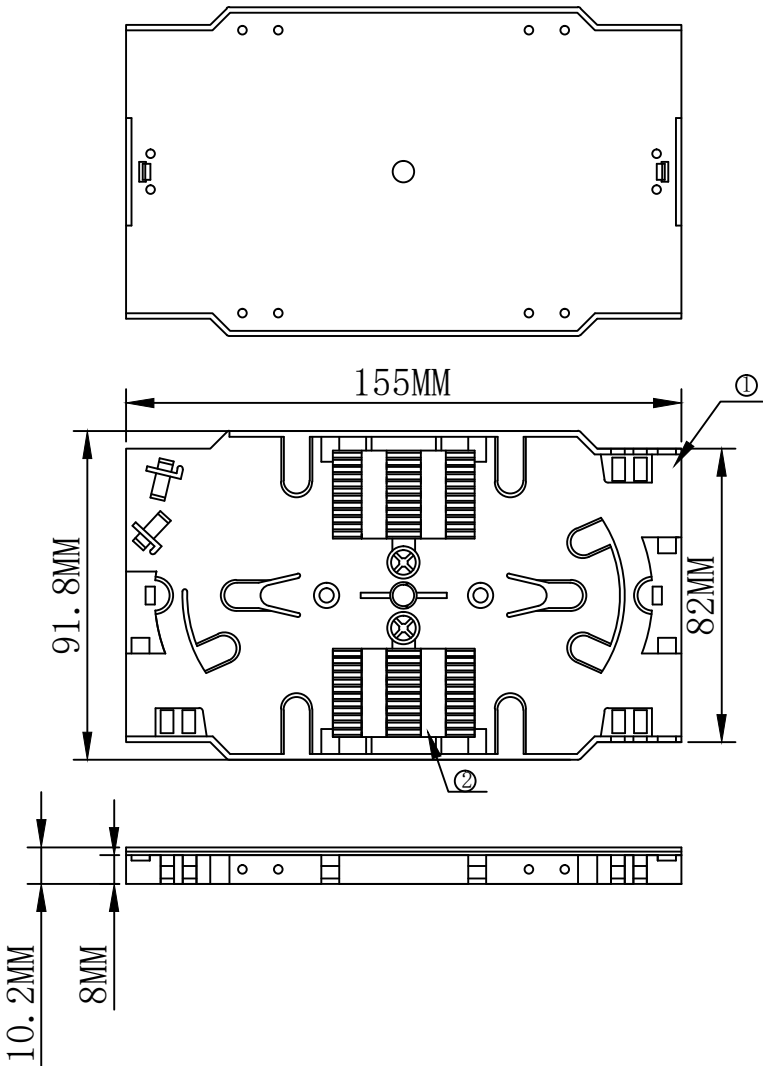
Type	Single-Mode
Insertion Loss	≤0.3dB
Return Loss	>60dB
Test Wavelength	1310nm

		2Direct GmbH		ITEM NO.			
PRODUCT NAME	Pigtail LC/APC 8° 12 different colours	ITEM NO.		UNIT	MM		
BY	CHK	DATE	REV.	DRAWNBY	CHECKBY	APPOBY	DATE
NEW		2016.08.25	A			2016.08.25	
REVISION RECORD MODIFICATIONS							

TEST REPORT				
Batch No.		PO NO.		
ITEM No.		Test Wavelength:		
Description	Pigtail set LC APC 8°, 12 different colour xm OD .9mm LSZH loose tube			
Allow Loss	Insertion Loss 0.3dB	Return Loss	(APC)	60dB
TEST VALUES				
Fiber	Insertion Loss (dB)	Return Loss (dB)		
BLUE				
ORANGE				
GREEN				
BROWN				
GREY				
WHITE				
RED				
BLACK				
YELLOW				
VIOLET				
PINK				
TURQUOISE				
RESULT	OK			



		2Direct Gmbh		ITEM NO.	
PRODUCT NAME	Pigtail LC/APC 8° 12 different colours	ITEM NO.		UNIT	MM
BY	CHK	DATE	REV.	APPOBY	DATE
	NEW	2016. 08. 25	A		2016. 08. 25
REVISION RECORD MODIFICATIONS					

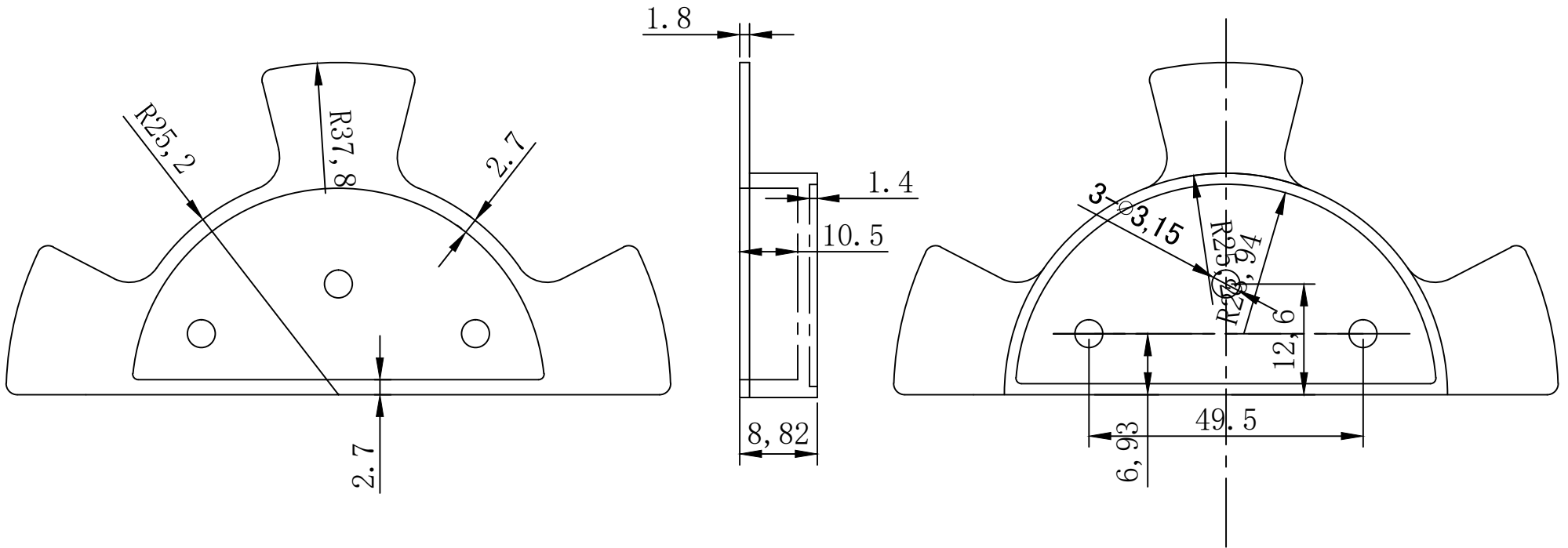


- with 2* 12 core splicing Holder ,black
- Material:Plastic (Non fire retardant)
- Color: beige
- RoHS 2.0 and Reach Compliant

Packing:1pcs/PE bag+label 1,100pcs/innet carton+outer carton+label 3

MATERIAL LIST:

②	Splic Holder	ABS/Black	2							
①	Splicing tray	24 cores splicing tray,ABS/Beige	1							
NO.	PARTS NAME	SPECIFICATION DESCRIPTION	QT'Y	REMARK	2Direct Gmbh		ITEM NO.	FB3001		
					PRODUCT NAME	Splicing tray with 2pcs of 12core holders	ITEM NO.		UNIT	MM
		NEW	2016.08.25	A	DRAWNBY	CHECKBY	APPOBY	DATE		
BY	CHK	REVISION RECORD MODIFICATIONS	DATE	REV.				2016.08.25		



Note:

- 1. COLOUR: ABS/GRAY
- 2. ROHS2.0 COMPLIANT
- 3. Accessory: Screw M3*8, Hex Nut M3*2.4

LogiLink Professional F12LC2/3/4			
2Direct Gmbh		ITEM NO.	

					PRODUCT NAME	Fibre cable management Spool - Grey	ITEM NO.		UNIT	MM
		NEW	2016. 08. 25	A	DRAWNBY	CHECKBY	APPOBY	DATE		
BY	CHK	REVISION RECORD MODIFICATIONS	DATE	REV.				2016. 08. 25		