

# LANmark-OF Plug&Play Patch Panel Sliding Black

**PRODUCT INSTALLATION GUIDE** 

December 2024 v4.00





## LANmark-OF Plug&Play Patch Panel Sliding Black PRODUCT INSTALLATION GUIDE

#### **Product References**

Part Number	Description
N439.3MPP	LANmark-OF Plug&Play Patch Panel Sliding Black

#### **Document information**

Release Rublished by	November 2024
Contact address	Alcomboracostoonwog 2 b3
Contact address	1501 Buizingon
	Belgium
Phone	+32 2 363 38 00
Website	<u>www.aginode.net/en/</u>
E-mail	info@aginode.net

#### **Important Notice**

The information contained in this document has been carefully checked and is assumed to be entirely correct and reliable at the time of publishing. However, Aginode Belgium reserves the right to make such changes to its products or its documentation as it deems necessary, in order to make improvements. Aginode Belgium rejects all responsibility for the use made of its products or of its documentation. In this document, no mention is made of rights with respect to trademarks or tradenames which may attach to certain words or signs. The absence of such mention, however, in no way implies that there is no protection.

© 2024 Aginode Belgium



Installation is to be performed by qualified service personnel.

The installation of the LANmark-OF Plug&Play Patch Panel must be carried out with care and precision.



Prior to panel installation in a cabinet, preparation work should be carried out on a clean and level work-surface.

Each patch panel is supplied with:

- Integrated front guide for patch cord
- 1 labelling strip
- 4 cage-nuts with screws
- 1 screw and star washer for earthing
- 1 screw and washer kit for optional splice tray fixing





All other ancillaries (e.g. splice trays) must be purchased separately. The product part numbers are mentioned where applicable in the following.



#### 1. Installation with pre-terminated cable:

This is selected for ease of installation, particularly where the following elements are determining factors:

- the installation time window is short, and /or
- where there are a large number of connectors to be installed, and/or
- where minimum link loss performance is required

#### 2. Installation with direct connectorisation:

This is suited primarily to multimode fibres. Direct termination on singlemode fibres is restricted to specific connector types (see table below).

#### 3. Installation with splicing system:

This is suitable for both tight buffered and loose tube (including Micro-Bundle) constructions, with appropriate use of splice protectors and splice management.







LC / SC	Loose Tube / Microbundle 250µm fibres	Tight Buffer 900µm fibres
Fusion splicing MM	Yes	<b>Yes</b> Using heat shrink splice protectors
Connectorisation MM	Yes with microtube	Yes
Fusion splicing SM	<b>Yes (preferred)</b> Using heat shrink or aluminium splice protectors	<b>Yes (preferred)</b> Using heat shrink splice protectors
Connectorisation SM	<b>Yes with microtube</b> (available but not preferred)	<b>Yes</b> (available but not preferred)



## 4. With MTP-LC modules and MTP pre-terminated cable:

This is selected for ease of installation, particularly where the following elements are determining factors:

- easy migration to other applications and required migration path to 40G
- short installation time
- minimum link loss performance is required



#### **MTP-LC modules**

When needed up to 4 modules can be installed into the panel

Part Number	Description
N441.5L12LC4FS	LANmark-OF Plug&Play Ultra Low Loss Module Female Straight 12 LC OM4 Aqua
N441.5L24LC4FS	LANmark-OF Plug&Play Ultra Low Loss Module Female Straight 24 LC OM4 Aqua
N441.5L12LC4FC	LANmark-OF Plug&Play Ultra Low Loss Module Female Crossed 12 LC OM4 Aqua
N441.5L24LC4FC	LANmark-OF Plug&Play Ultra Low Loss Module Female Crossed 24 LC OM4 Aqua
N441.5L12LC0FS	LANmark-OF Plug&Play Low Loss Module Female Straight 12 LC SM Blue
N441.5L24LC0FS	LANmark-OF Plug&Play Low Loss Module Female Straight 24 LC SM Blue
N441.5L12LC0FC	LANmark-OF Plug&Play Low Loss Module Female Crossed 12 LC SM Blue
N441.5L24LC0FC	LANmark-OF Plug&Play Low Loss Module Female Crossed 24 LC SM Blue



Unused positions can be populated with a blank filler.

Part NumberDescriptionN441.2MBPLANmark-OF Plug&Play Blank Filler





When needed, up to 4 adaptor plates can be installed into the panel.

#### Part Number

#### Description

N205.ALC12MMA N205.ALC24MMA N205.ALC12MMV N205.ALC24MMV N205.ALC12SMB N205.ALC24SMB N205.ALC12SAG N205.ALC24SAG LANmark-OF Adaptor Plate 12 LC Multimode Aqua LANmark-OF Adaptor Plate 24 LC Multimode Aqua LANmark-OF Adaptor Plate 12 LC Multimode Violet LANmark-OF Adaptor Plate 24 LC Multimode Violet LANmark-OF Adaptor Plate 12 LC Singlemode Blue LANmark-OF Adaptor Plate 24 LC Singlemode Blue LANmark-OF Adaptor Plate 12 LC APC Singlemode Green LANmark-OF Adaptor Plate 24 LC APC Singlemode Green



Unused positions can be populated with a blank filler.

#### Part Number

N441.2MBP

**Description** LANmark-OF Plug&Play Blank Filler





#### 1.1 Installing the cable

Ensure a length of spare cable (slack) is provided within the cabinet (6m recommended). As well as being required to facilitate the termination of the cable in the OF patch panel, spare cable will allow the ability to relocate the panel if required in the future.

NB1. Spare cable may require special stowage requirements in the installation.

NB2. When using fusion splicing, always cut off the first meter of cable as this part can be damaged after pulling the cable, bending etc.... The removal of this 1m section should be taken into consideration in respect to the final amount of cable slack provided.

#### 1.2 Elements of the patch panel







## Phase 1 - Preparation of the patch panel

#### 1.3 Installing the patch panel into the cabinet

1. The L shaped chassis support brackets can be fitted in either a forward or recessed position.

> By default, they are installed in the forward position to provide maximum space in front of the panel.

They can be moved to the recessed position if needed - the "right" position being dependant on the available space between the 19" frame and the cabinet door.





- 2. Remove the sliding drawer from the chassis (fixed part).
  - a. Lift the drawer up to release it from the chassis.







 Keep the drawer in an upwards position and pull it forwards.



c. When reaching the end of the chassis, lift the drawer further to unhook it. Now both parts can be separated.



3. Position the chassis into the rack.

Remember to complete earthing requirements for metallic items using a suitable earthing cable and the screw / washer provided on the chassis.

NB. The holes for the screw are located at the rear of the panel on the left and right-hand side of the chassis, but the screw is located at the left hand (see phase 3).

Thread the Pre-Term or cable through the chassis of the patch panel. Make sure to respect the cable's

minimum bending radius while handling the cable.





### Phase 2A - Installation with pre-terminated assemblies

For pre-terminated OF cable general pulling rules and pulling part removal procedure, please refer to the Aginode FO installation guide and pre-terminated cable supplement. These documents can be viewed on the Aginode website.

## **1. Sliding drawer preparation for pre-term installation**

Install the 4 support bases using the 4 small screws, washers (both locking (1) and flat (2)) from the screw kit provided and insert 4 loop rings on every support base, with the loop ring opening facing inwards. They will be used later.

The fibre organisers are available separately (bag of 10 pieces).

Part Number Description

N890.070 LANmark-OF fibre organiser 10x

The screw kit is provided with the organisers.

Arrows indicate loop rings fixing points.









#### 2. Installation process in the patch panel

1. Install up to 4 adaptor plates onto the drawer.

2. With the black net sleeve, or only the bubble wrap sleeve at the other end of the pre-term still in place, insert the cable end from the rear of the chassis.

 Carefully remove the black net sleeve and/or bubble wrap sleeve to access the cable gland. Do not yet remove the plastic bags around each bundle of 12 connectors, this to avoid mixing them up.

The full removal process is described in the Pre-terminated cable supplement of the OF general installation guide which is available on the Aginode website.







Phase 2A - Installation with pre-terminated assemblies LANmark-OF Plug&Play Patch Panel Sliding Black • Installation Guide • Page 11



- The gland fixing locations on the LANmark-OF patch panels are open at the top and are therefore suitable for use with preterminated assemblies.
   Slide in and fasten the gland in an appropriate slot.
- 5. Select the leg to be terminated. A label (B) is located on every leg at the rear of the fanout.
- 6. Remove the plastic bag from the first group of connectors.
  Coil the first leg into the loop rings, then coil the 900µ fibres into the same loop rings.
  Remove the dust protection caps on the inside of the couplers where connectors will be inserted.
- A check for the cleanliness of the couplers and connectors is required prior to the insertion of the connectors - see Important Note below.

Insert connectors according to the colour coding/position sequence of the couplers (see Annex B and C).











8. Repeat steps 5, 6 and 7 for every leg of the pre-term.



9. See page 25 for the finalisation of the installation.



#### Important note

The cleaning of all the optical fibre connectors prior to the installation (pigtail, patch cords etc) is a critical factor that needs to be applied at all times.

Latest applications have stringent link loss requirements and in order to ensure that the required performances levels are achieved during commissioning and operation, the cleanliness of all fibre interfaces needs to be maintained.

See Annex A



## Phase 2B - Installation with direct connectorisation

Remove approximately 2 metres of the outer sheath and the aramid/glass yarns from the cable.

In addition, for 250µ fibres, the tube must also be removed. At least two loops of fibre will be required to be provided in the loop rings.

Consult the guideline documents for specific jacket removal requirements regarding the cable type being installed.

These documents can be viewed on the Aginode website.

Special consideration may be required for grounding corrugated metal jacket constructions. Refer to customer / site installation specifications.

Avoid damaging the fibres while cutting the outer jacket and yarns. Collect all waste and dispose of correctly.

Use the correct tools in order not to damage the fibres while cutting the tube (Loose tube or Micro-Bundle structures).

Make sure to clean the fibres (with

appropriate and approved cleaning solvents) to remove the gel.

Secure the outer jacket of the cable onto the base at the back of the patch panel by means of a cable gland or by tie-wraps.

Cable glands are preferred, cable gland (20mm / PG11-13,5 or 25mm / PG16- 21) has to be used to affix the cable to the patch panel.

If no cable gland is used, then tie wraps can be used. Ties shall not significantly deform the cable sheath - ties should be hand tight.







Phase 2B - Installation with direct connectorisation

#### 20mm hole

Part NumberDescriptionN890.148LANmark-OF Cable gland<br/>rubber boot 20 mm 10x

Suitable for cable diameters 4.0 - 7.8 mm



#### 25mm hole: PG16-21

Part Number Description N890.146 LANmark-OF Cable gland 25 mm

Suitable for cable diameters 12.3-18 mm





#### Phase 2B - Installation with direct connectorisation

Apply a permanent label on the cable just behind the gland for identification purposes. Provide at least 2 spare loops of fibre in the patch panel and arrange them in the loop rings.

Install up to 4 adaptor plates onto the drawer.

Measure the length of each fibre to the coupler respecting both bending radius and the colour sequence, then cut off the surplus and dispose of it correctly.

Refer to "Recommendations to maintain OF duplex channel polarity"- a technical paper, which is available from the Aginode website under "Resources". Knowledge of this document content will assist in efficient preparation and storage of the fibres within the rings (see annex B).



Take the fibre out of the loop rings and mount the connectors on the fibre.

It is advisable to label the fibres for easy identification. Labels must not compromise bend radius of the fibre cores. Remove the dust protection caps on the inside of the couplers where connectors will be inserted.

Loop the fibres back in the loop rings and insert connectors according to the colour coding / position sequence of the couplers.

A check for the cleanliness of the couplers and connectors is required prior to the insertion of the connectors.

Refer to the 'OF connector Inspection cleaning and testing general guidelines' Aginode technical paper for detailed information.

NB. Always maintain installation cleanliness practice! Close the drawer whenever you finish working on the panel and keep dust caps fitted.

See page 25 for finalisation of the installation.



Strip at least 1.6 meters of cable sheath to allow enough spare fibre for later maintenance purposes. Consult the guideline documents for specific jacket removal requirements regarding the cable type being installed.

These documents can be viewed on the Aginode website.

Special consideration may be required for grounding corrugated metal jacket constructions. Refer to customer / site installation specifications.

Avoid damaging the fibres while cutting the outer jacket and yarns. Collect all waste and dispose of correctly.

Use the correct tools in order not to damage the fibres while cutting the tube (Loose tube or Micro-Bundle structures).



Cable glands are preferred, cable gland (see page 14) has to be used to affix the cable to the patch panel.

If no cable gland is used, then tie wraps can be used. Ties shall not significantly deform the cable sheath - ties should be hand tight.

Install the first splice cassette on the drawer using the 2 longer screws and associated locking washers from the screw kit. The additional cassettes will be installed at a later stage. To connect the additional splice cassettes the hinges at the back of the splice cassettes will be used.

Up to 4 splice cassettes can be installed according to the number of fibres to be terminated.

Splice cassettes must be ordered separately. 2 type of splice cassette are available:







## Phase 2C - Installation with fusion splicing

The splice cassette for aluminium protection (N890.091) can accommodate 24 splices allowing a maximum of 96 splices per patch panel. Aluminium splice protectors - N890.003 (pack

of 150 pieces) NB. Tool N890.004 must be used with

aluminium splice protectors.

Important Note: N890.091 can only be used with maxistrip pigtails and cables with 250 um coated fibres. The aluminium protection is not suitable for use with 900µm coated fibres.

Arrows indicate cassette fixing points.







<u>The splice cassette for heat shrink protection</u> (N890.090) can accommodate 12 splices allowing a maximum of 48 splices per patch panel when using Tight Buffer pigtails of 900 µm or 24 splices allowing a maximum of 96 splices per patch panel when using Maxistrip pigtails of 250µm (see picture below).

Heat shrink splice protectors - N890.021 (pack of 100 pieces)







As highlighted on the picture, two heat shrink protected splices shall be installed on top of each other in each of the 2x 6 splice holders of the cassette to accommodate 24 splices on a single cassette.



## Phase 2C - Installation with fusion splicing

For both type of splice cassette only one cover (N890.093) is required to close the last splice cassettes at the top.

Additional splice cassettes are fixed with hinges to the cassette below it. With such an arrangement the additional splice cassettes can be lifted and tilted for improved access to the splices beneath them.

Install up to 4 adaptor plates onto the drawer.



Apply a permanent label on the cable just behind the gland for identification purposes.

Up to 4 splice trays may be installed to accommodate 48 heat-shrink fibre splices when using Tight Buffer pigtails or 96 heatshrink or metallic fibre splices, when using Maxistrip pigtails of 250µm.

Splice trays for fibre splice protections are available in metallic or heat-shrink versions. 900µm coated fibres shall be fixed in the entry combs of the splice trays (B).

For Loose Tube and Micro-Bundle cable structures remove surplus tube from the fibre to allow the remaining tube to be fixed on the splice tray (A) by means of tie wraps. The tie wraps are not intended to provide strain relief but are to keep the tube in the right position. Do not over-tighten the tie wraps on the tube especially when working with Micro-Bundle cables.

Clean the fibres with an approved and suitable solvent to remove the gel. Make sure that there are at least 2 loops of fibres in the splice tray.



#### Metallic splice protectors









## Phase 2C - Installation with fusion splicing

A check for the cleanliness of the couplers and connectors is required prior to the insertion of the connectors. Refer to the 'OF connector Inspection cleaning and testing general guidelines' Aginode technical paper for detailed information.

Insert the pigtails connectors in the couplers. Measure the length of the 900µ buffer needed to fix the pigtail in the comb (B) of the splice tray keeping in mind the bending radius. Make sure to use the entry comb on the side of the connectors you have just installed as shown in the picture.

The fibres from the pigtails should make 2 loops in the opposite direction. Aginode Maxistrip pigtails allow the removal of the  $900\mu$  buffer in one operation after being cut to the right length.

A minimum of 2 loops of fibre core from the pigtail is advised in the splice tray.









Cut the fibres to the right length, slide the heat shrink protections tubes onto the fibres and joint them by fusion splicing with pigtails following the correct colour sequence. The "Recommendations to maintain duplex OF channel polarity" technical paper, which is available from our Aginode website (under 'Resources'), should be considered when choosing the colour order. (See Annex B)

Note: Only one cover is needed on top of the last cassette whatever the number of cassettes installed in the panel.

See page 25 for finalisation of the installation.



#### Important Note

The cleaning of all the optical fibre connectors prior to the installation (pigtail, patch cords etc) is a critical factor that needs to be applied at all times.

Latest applications have stringent link loss requirements and in order to ensure that the required performances levels are achieved during commissioning and operation, the cleanliness of all fibre interfaces needs to be maintained.

See Annex A



#### Phase 2D - Installation with MTP-LC modules and MTP pre-terminated cable

For pre-terminated OF cable general pulling rules and pulling part removal procedure, please refer to the Aginode FO installation guide and pre-terminated cable supplement. These documents can be viewed on the Aginode website.

#### Installation process in the patch panel

- 1. Install up to 4 MTP cassettes onto the drawer.
- 2. With the black net sleeve, or only the bubble wrap sleeve at the other end of the pre-term still in place, insert the cable end from the rear of the chassis.



 Carefully remove the black net sleeve and/or bubble wrap sleeve to access the cable gland. Do not yet remove the plastic bags around each bundle of 12 connectors, this to avoid mixing them up.

The full removal process is described in the Pre-terminated cable supplement of the OF general installation guide which is available on the Nexans website.





## Phase 2D - Installation with MTP-LC modules and MTP pre-terminated cable

- The gland fixing locations of the LANmark-OF patch panels are open at the top and are therefore suitable for use with pre-terminated assemblies. Slide in and fasten the gland in an appropriate slot.
- 5. Remove the MTP connector dust caps at the back of the cassettes; clean the connector through the MTP adaptor see Important Note below.

6. Coil the fan-out, clean the MTP connectors and insert them according to the correct sequence (each MTP fan-out is labeled).







OF system polarity: see Annex B.

See page 25 for finalisation of the installation.

#### Important Note

The cleaning of all the optical fibre connectors prior to the installation (pigtail, patch cords etc) is a critical factor that needs to be applied at all times.

Latest applications have stringent link loss requirements and in order to ensure that the required performances levels are achieved during commissioning and operation, the cleanliness of all fibre interfaces needs to be maintained.

#### See Annex A



## Phase 3 - Finalisation of the installation

The drawer assembly can now be refitted to the chassis. Lift-up the drawer to engage it into the chassis.

First engage left and right locks into the chassis.

Then lower the drawer and slide it inside the chassis.

The locking mechanism of the chassis is highlighted in the picture.

For installation of the self-adhesive label, open the cover of the patch guide manager. Stick the label on the inside of the cover. Label according to today's network administration standards. Label the ports conform with the site labelling scheme.

The rear side of the L shaped support bracket is unpainted (1) to ensure automatic earth connection with Aginode cabinets' frames or other unpainted 19" frames.

If the frames are painted, an earth connection has to be made to the chassis using an earth lead (2).

Spare / slack cable should then be appropriately secured depending on the installation requirements of the site.











## Phase 3 Finalisation of the installation

The patch panel installation is now complete. Testing must be carried out in accordance with client requirements and Aginode requirements for warranty submission.

Patch cords can now be installed.



On completion the installation must be handed over to the customer with all dust caps fitted to unpatched adaptors.

Any dust caps that have been removed must be stored appropriately for potential re-use. Optical Power / Safety levels warning labelling, and security procedures must have been implemented on completion of the installation. An example is where the optical hazard requires identification labels to be fitted and security procedures for racks and doors to be fitted and closed/ locked.



#### **IMPORTANT NOTE - INSPECTION, CLEANING & TESTING**

The cleaning of all optical fibre connectors prior to the installation (pigtail, patch cords etc) is a critical factor that needs to be applied at all times.

Latest applications have stringent link loss requirements and in order to ensure that the required performances levels are achieved during commissioning and operation, the cleanliness of all fibre interfaces needs to be maintained.

The Aginode **OF connector Inspection, Cleaning & Testing general guidelines** can be downloaded from the Aginode website.

In addition, there is also a General Installation guide (for both copper and fibre) which includes further information.

**Please note:** The Aginode warranty may be invalidated if the cables have not been properly stored or handled according to Aginode requirements.

On the Aginode website, all these documents and also others relating to design and installation, testing, etc. can be found <u>here.</u>



#### **OF** system polarity

The only way to automatically maintain the duplex polarity without having to think about it, is to include a crossover into all the OF link segments.

In other words, fibres pairs have to be swapped over (interchanged) into the patch panel on one side of every link segment.

	Side A		Side B				
Port Number	Fibre Number	Colour of the fibre	Colour of the fibre	Fibre Number	Port Number		
1	1	Blue	Orange	2	1		
2	2	Orange	Blue	1	2		
3	3	Green	Brown	4	3		
4	4	Brown	Green	3	4		
5	5	Grey	White	6	5		
6	6	White	Grey	5	6		
7	7	Red	Black	8	7		
8	8	Black	Red	7	8		
9	9	Yellow	Violet	10	9		
10	10	Violet	Yellow	9	10		
11	11	Pink	Aqua	12	11		
12	12	Aqua	Pink	11	12		

To be repeated 4 or 8 times for a fully loaded patch panel (48 or 96 fibres)

#### LC pre-terminated assemblies

The connectors of the 900  $\mu m$  pre-terminated assemblies are loaded with coloured boots as shown on the pictures (i.e. page 11).

The insertion has to be realised according to the colour coding sequence of the boots and NOT according to the colour of the fibres.

Indeed, the colours of the boots are swapped over at one end of the pre-terminated assembly to facilitate error free implementation of the required fibre pair-flip.

	S	ide A		Side B				
Port Number	Fibre Number	Colour of the boot	Colour of the fibre	Colour of the fibre	Colour of the boot	Fibre Number	Port Number	
1	1	Blue	Blue	Orange	Blue	2	1	
2	2	Orange	Orange	Blue	Orange	1	2	
3	3	Green	Green	Brown	Green	4	3	
4	4	Brown	Brown	Green	Brown	3	4	
5	5	Grey	Grey	White	Grey	6	5	
6	6	White	White	Grey	White	5	6	
7	7	Red	Red	Black	Red	8	7	
8	8	Black	Black	Red	Black	7	8	
9	9	Yellow	Yellow	Violet	Yellow	10	9	
10	10	Violet	Violet	Yellow	Violet	9	10	
11	11	Pink	Pink	Aqua	Pink	12	11	
12	12	Aqua	Aqua	Pink	Aqua	11	12	

LANmark-OF Plug&Play Patch Panel Sliding Black • Installation Guide • Page 27



#### **MTP/MPO OF polarity**

The polarity is automatically maintained (method B or C) for Aginode MTP system.

## **Types of Pre-Terms**



NB. Always maintain installation cleanliness practice! Close the drawer whenever you finish working on the panel and keep dust caps fitted.



#### **Testing recommendations**

Each pre-terminated assembly is 100% factory tested and a test report is always included in the packaging.



However, all fibres should be tested to ensure that the fibres and the connectors have not been affected by the installation process.

It will also ensure that

- the system polarity has been correctly managed
- all the connectors are clean

Note: if the Aginode 25-year system warranty is required, testing and submission of results for certification is a mandatory requirement.

Testing has to be performed according to the Aginode OF field testing procedure which is available from our website.



## **Connection scheme of the pre-terminated assemblies**

#### LC/LC pre-terminated assemblies with 900µm fan-outs on both ends



A label (A) is located on every leg at the rear of the fanout. Corresponding numbers are printed on the labels at both ends.

The LC connectors are loaded with coloured boots (B). The colours of the boot have been swapped over at one end of the assembly during manufacture.



	S	ide A		Side B				
Leg Number	Fibre Number	Colour of the boot	Colour of the fibre	Colour of the fibre	Colour of the boot	Fibre Number	Leg Number	
	1	Blue	Blue	Orange	Blue	2		
F	2	Orange	Orange	Blue	Orange	1	F	
r	3	Green	Green	Brown	Green	4	r	
o	4	Brown	Brown	Green	Brown	3	0	
m	5	Grey	Grey	White	Grey	6	m	
	6	White	White	Grey	White	5		
3	7	Red	Red	Black	Red	8		
t	8	Black	Black	Red	Black	7	t	
0	9	Yellow	Yellow	Violet	Yellow	10	0	
	10	Violet	Violet	Yellow	Violet	9	- 	
8	11	Pink	Pink	Aqua	Pink	12	8	
	12	Aqua	Aqua	Pink	Aqua	11		



#### LC/LC pre-terminated patching assemblies (with 1x 900µm fan-out and 1x 2mm fan-out)

At the 900µm fan-out end the identification of the fibre is done using labels on the legs and coloured boots on the connector as it is for the previous type of pre-term (900µm fan-out on both ends) - see previous page.



At the 2mm fan-out end the fibres are grouped by pairs in legs terminated with a uniboot duplex LC connector.

A label (B) is located on every leg at the rear of the fan-out.

Each fibre is identified with a red or a black ring located on every duplex connector (A).





Ŧ	900	µm end				2mm end	
Leg number	Fibre number	Colour of the fibre	Colour of the boot		Colour of the fibre	Fibre number	Connector number
	1	Blue	Blue		Orange	A	1
	2	Orange	Orange		Blue	В	12
	3	Green	Green		Brown	8	2
	4	Brown	Brown		Green	В	1
	5	Grey	Grey		White	8	3
1	6	White	White		Grey	B	i internet E
1.20	7	Red	Red		Black	A	4
	8	Black	Black	-	Red	в	
	9	Yellow	Yellow		Violet	<u>Å</u>	5
	10	Violet	Violet		Yellow	в	1
	11	Pink	Pink	8 3	Aqua	<u>Å</u>	6
	12	Aqua	Aqua	-	РШК	B	
	1	Blue	Blue		Orange	i i i	7
	2	Urange	Grange		Diue	D	-
	3	Green	Green		Brown	8	8
	- 4 E	Grown	Crew	-	White	D .	1
-	6	White	White	81 3	Grev	B	9
2	7	Ded	Died		Plaak		10 20005
100	8	Black	Black		Diack	B	10
	0	Vallow	Vallow	1	Upplet	4	1 Million
	10	Violet	Violet		Yellow	B	11
	11	Pink	Pink		Aqua	4	12
	12	Agua	Aqua		Pink	в	
	1	Blue	Blue		Orange	A	
	2	Orange	Orange	4	Blue	В	13
	3	Green	Green		Brown	A	1 2020
	4	Brown	Brown	5	Green	В	14
	5	Grey	Grev		White	A	45
2	6	White	White		Grey	В	ID
3	7	Red	Red		Black	A	46
	8	Black	Black	-	Red	В	10
	9	Yellow	Yellow	1	Violet	A	47
	10	Violet	Violet		Yellow	В	n.
	11	Pink	Pink		Aqua	8	10
	12	Aqua	Aqua		Pink	В	10
	1	Blue	Blue		Orange	8	10
	2	Orange	Orange	3	Blue	В	15
	3	Green	Green		Brown	8	20
4	4	Brown	Brown		Green	В	
	5	Grey	Grey		White	8	21
	6	White	White		Grey	В	0.7533
	7	Red	Red		Black	8	22
	8	Black	Black	-	Red	В	2 0 <del>1000</del>
	9	Yellow	Yellow		Violet	A	23
	10	Violet	Violet		Yellow	В	1.000
	11	Pink	Pink		Aqua	A	24
	12	Aqua	Aqua		Pink	в	

## 48 fibre pre-terminated assembly / 96 fibre assembly (legs 1 to 4)







## 96 fibre pre-terminated assembly (legs 5 to 8)

		900	uni ena		Zinin enu			
	Leg number	Fibre number	Colour of the fibre	Colour of the boot		Colour of the fibre	Fibre number	Connector number
		1	Blue	Blue	1 11	Orange	A	25
		2	Orange	Orange		Blue	В	- Alth
		3	Green	Green	1.3	Brown	A	26
		4	Brown	Brown		Green	В	233
	-	5	Grey	Grey		White	A.	27
	5	6	White	White		Grey	в	
	Y	/	Red	Red		Black	A	28
	1	8	BIACK	Black	-	Red	в	2,0043
	1	9	Yellow	Yellow		Violet	-	29
	1	10	Diple	Dink		Agua	B	
		12	Адиа	Agua		Aqua	B	30
		1	Blue	Ritte		Orange		
		2	Orange	Orange		Blue	B	31
		3	Green	Green		Brown	4	
		4	Brown	Brown	1.1	Green	В	32
		5	Grev	Grev		White	A	
3	~	6	White	White		Grev	В	33
	6	7	Red	Red		Black	A	24
	10455	8	Black	Black		Red	В	34
		9	Yellow	Yellow		Violet	A.	25
		10	Violet	Violet		Yellow	В	30
		11	Pink	Pink		Aqua	A	36
		12	Aqua	Aqua		Pink	В	
		1	Blue	Blue	1	Orange	A.	37 38
		2	Orange	Orange		Blue	В	
		3	Green	Green		Brown	A	
		4	Brown	Brown		Green	В	
		5	Grey	Grey		White	A.	39
	7	6	White	White		Grey	В	100
Ļ		7	Red	Red		Black	A.	40
		8	Black	Black	-	Red	В	1728
		9	Yellow	Yellow	1.0	Violet	A.	41
	1	10	Violet	Violet		Yellow	В	5786
		11	Pink	Pink		Aqua	A.	42
		12	Aqua	Aqua		Pink	в	0,000
	1	1	Blue	Blue	- 4	Orange	A	43
	1	2	Orange	Urange		Blue	в	within
	1	3	Green	Green		Brown		44
		4	Brown	Brown		Green	D	- Marcos
	-	6	White	White		Grev	B	45
	8	7	Ded	Dest		Black		- Courte
	1944	8	Black	Black		Red	В	46
		q	Yellow	Yellow		Violet		
		10	Violet	Violet		Yellow	в	47
		11	Pink	Pink		Aqua	A.	10
	-	12	Aqua	Aqua		Pink	в	48





## End of life management

4. INSTRUCTIONS DE FIN DE VIE END LIFE INSTRUCTIONS





#### Disclaimer

This document is a guideline only. International and local procedures and safety standards must be observed and followed at all times.

Aginode Belgium will not be held liable for any damage or injury to personnel, equipment or business directly or indirectly as a result of using this document in part or in whole.

The practices contained herein are designed as a guide for use by persons having the required technical skill at their own discretion and risk. The recommended practices are based on average conditions. Aginode does not guarantee any favourable results or assume any liability in connection with this document.

Aginode does not assume any responsibility for the accuracy or completeness of this document.

The user should review the information to ensure conformity to the current applicable codes and regulations and to the project requirements.

Aginode reserves the right to change the technical specifications at any time without notice.

#### Edition 10.12.2024

Copyright © Aginode 2024 All data subject to change without prior notice.