

3M Telecommunications

Solutions for Networks

Solutions for Enterprise Networks





Fibre Interconnect Solutions


As well as Volition™ Network Solutions, 3M™ offers a complete line of single-mode & multimode ferruled fibre optic connectors including Hot Melt and Crimplok™ connectors in ST, SC, FC and LC style. To complement this, connectors are also available terminated as pigtails or patch cords in a variety of lengths.

There is also an extensive range of mounting hardware & accessories including 19" patch panels and distribution boxes. The Fibrlok™ mechanical splice, available in single- and multi-fibre versions for single- and multimode fibre completes the offering of Fibre Interconnect Solutions.

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2.1 Couplings, Connectors, Pigtails

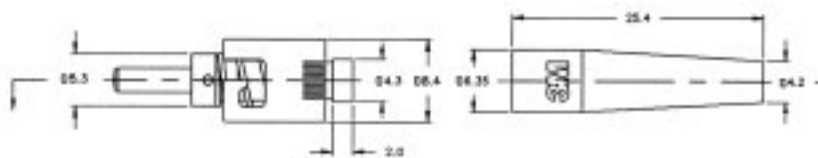
2.1.1 3M™ ST-Connectivity

Type/Order text

Ref.-No.

3M™ ST Connectors

	ST connector - Hot Melt - multimode White boot	PU: 60 pcs PU: 1000 pcs	6100-W 6100-W1K
	Black boot	PU: 60 pcs PU: 1000 pcs	6100-B 6100-B1K
	Red boot	PU: 60 pcs PU: 1000 pcs	6100-R 6100-R1K
	ST connector - Hot Melt - single-mode Yellow boot	PU: 60 pcs	8100-YS
	ST connector - Epoxy - multimode Black boot	PU: 60 pcs PU: 1000 pcs	6105-B 6105-B1K
	Red boot	PU: 60 pcs	6105-R
	ST connector Epoxy - single-mode Yellow boot	PU: 60 pcs	8106
	Blue boot	PU: 60 pcs	AAMUL3
	ST connector - Crimplok - multimode Grey boot	PU: 60 pcs	6901
	ST connector - Crimplok - single-mode Blue Boot	PU: 60 pcs	8901



Connector type	6100	6105	6901	8100	8106	8901
Adhesive type	Hot Melt	Epoxy	None, crimp	Hot Melt	Epoxy	None, crimp
Fibre Type	50/125, 62,5/125	50/125, 62,5/125	50/125, 62,5/125	9/125	9/125	9/125
Insertion loss	< 0,20 dB typ.	< 0,20 dB typ.	< 0,20 dB typ.	< 0,20 dB typ.	< 0,30 dB typ.	< 0,20 dB typ.
Return loss	≥ 25 dB typ.	≥ 25 dB typ.	≥ 40 dB typ.	≥ 40 dB typ.	≥ 45 dB typ.	> 40 dB typ.
Ferrule	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic
Housing / Body	Metal	Metal	Plastic	Metal	Metal	Plastic
Boot colour	white/black/red	black/red	grey/blue	yellow	yellow	blue
Operating temperature	-40°C to 85°C	-40°C to 85°C	-10°C to 60°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Storage temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C

2.1 Couplings, Connectors, Pigtails

2.1.1 3M™ ST-Connectivity



Type/Order text

Ref.-No.

3M™ ST Couplings / ST Pigtails



ST Coupling, multimode

for D hole mounting, spacer and union nut included

PU: 60 pcs

PU: 1000 pcs

6112

6112-1K

ST Coupling, single-mode

for D hole mounting, spacer and union nut included

PU: 60 pcs

8119



ST Pigtail 50/125, multimode Fibre, green, easy strip

Length: 2 m, PU: 12 pcs

BAN00-ZK0002

ST Pigtail 62.5/125, multimode Fibre, blue, easy strip

Length: 2 m, PU: 12 pcs

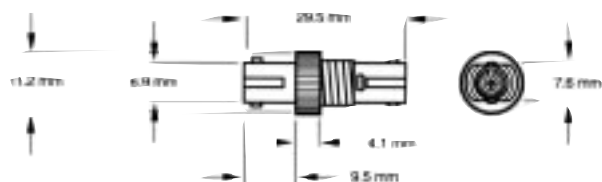
BNA00-AP0002

ST Pigtail 9/125, single-mode Fibre, yellow, easy strip

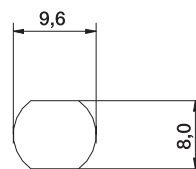
Length: 2 m, PU: 12 pcs

AAM00-AU0002

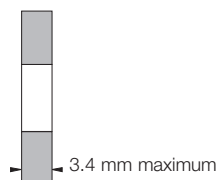
ST Coupling



Hole pattern



Sheet thickness



Coupling type	6112	8119
Type	Multimode	Single-mode
Sleeve	Phosphor bronze	Zirconia ceramic
Housing	Metal	Metal
Operating temperature	-40°C to 85°C	-40°C to 85°C

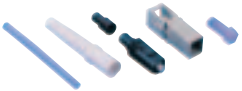



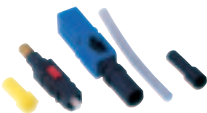

2.1 Couplings, Connectors, Pigtails

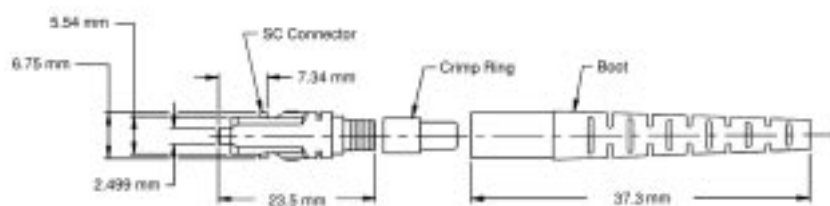
2.1.2 3M™ SC-Connectivity

Type/Order text

Ref.-No.

3M™ SC Connectors

	SC-Connector Hot Melt, multimode, white boot PU: 60 pcs PU: 1000 pcs	6300-W 6300-W1K-S
	SC-Connector Ultra High Temperature Hot Melt, single-mode blue boot PU: 60 pcs PU: 1000 pcs	8308-U 8308-U1K
	SC-Connector Epoxy, single-mode, white boot PU: 60 pcs	8306
	SC/APC-Connector, single-mode, green boot PU: 60 pcs PU: 1000 pcs	8306-SC/APC AEPGL-3
	SC-Connector Crimplok, single-mode, black boot PU: 60 pcs	6900
	SC-Connector Crimplok, multimode, black boot PU: 60 pcs	8900



SC Connector	6300 W	8308	8306	8306-SC/APC AEPGL-3	6900	8900
Adhesive type	Hot Melt	Hot Melt	Epoxy	Epoxy	None, crimp	None, crimp
Fibre Type	50/125 62.5/125	9/125	9/125	9/125	50/125 62.5/125	9/125
Insertion loss in dB typ.	< 0,20	< 0,20	< 0,30	< 0,30	< 0,20	< 0,20
Return loss in dB typ.	≥ 25	≥ 55	≥ 45	≥ 65	> 27	≥ 40
Ferrule	Zirc. ceramic	Zirc. ceramic	Zirc. ceramic	Zirc. ceramic	Zirc. ceramic	Zirc. ceramic
Housing / Body	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
Boot colour	White	Blue	White	Green	Black	Black
Operating temp. in °C	-40 to 85	-40 to 100	-40 to 85	-40 to 85	-10 to 60	-10 to 60
Storage temp. in °C	-40 to 85	-40 to 100	-40 to 85	-40 to 85	-40 to 80	-40 to 80

2.1 Couplings, Connectors, Pigtails

2.1.2 3M™ SC-Connectivity



Type/Order text

Ref.-No.

3M™ SC Couplings / Pigtails



SC Duplex Coupling, multimode

Plastic housing, grey, mounting bracket included
PU: 60 pcs

6313



SC Duplex Coupling, single-mode

Plastic housing, blue, mounting bracket included
PU: 60 pcs

8313



SC Coupling, multimode

Simplex, grey, mounting springs included

6310

PU: 60 pcs



SC Coupling, single-mode

Simplex, blue, mounting springs included

8310

PU: 60 pcs



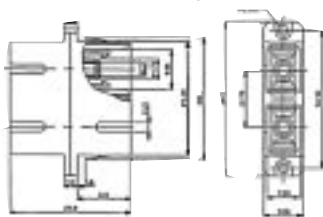
SC/APC Coupling, single-mode

Simplex, green, mounting springs included

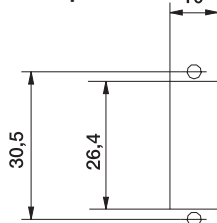
8310-G

PU: 60 pcs

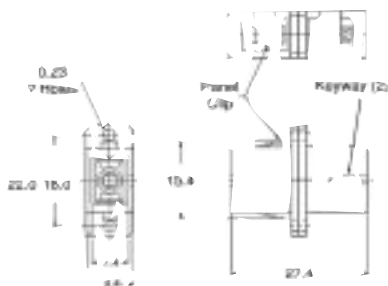
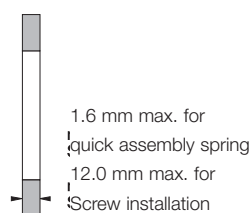
SC duplex coupling



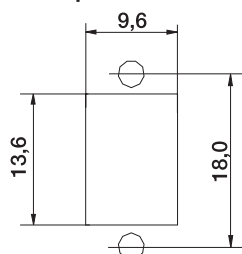
Hole pattern



Sheet thickness









Hole pattern



Coupling/Connector type	6313	8313	6310	8310	8310 G
Type	Multimode	Single-mode	Multimode	Single-mode	Single-mode
Simplex/Duplex	for duplex	for duplex	simplex	simplex	simplex
Sleeve	Phosphor bronze	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Housing	Plastic, gray	Plastic, blue	Plastic, grey	Plastic, blue	Plastic, green
Operating temp.	-40°C to 75°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C

2.1 Pigtails

2.1.2 3M™ SC-Connectivity

Type/Order text	Ref.-No.
3M™ SC Pigtails	
 SC Pigtail 50/125, multimode Fibre Length: 2 m, PU: 12 pcs	BDB00-ZK0002
 SC Pigtail 50/125, multimode OM3 Length: 2m, PU: 12 pcs	BDB00-ZO0002
 SC Pigtail 62.5/125, single-mode Fibre Length: 2 m, PU: 12 pcs	BDB00-AP0002
 SC Pigtail 9/125, single-mode Fibre Length: 2 m, PU: 12 pcs	ADA00-AU0002
 SC APC 8° Pigtail 9/125, single-mode Fibre Length: 2 m, PU: 12 pcs	ADE00-AU0002
 SC APC 9° Pigtail 9/125, single-mode Fibre Length: 2 m, PU: 12 pcs	ABP00-AU0002

2.1 Couplings, Connectors, Pigtails

2.1.3 3M™ LC-Connectivity



Type/Order text

Ref.-No.

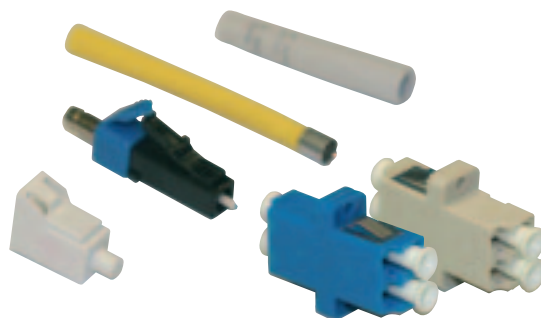
3M™ LC Connectors / Couplings / Pigtails

The LC small form factor connector has become the most popular interface for optical line equipment over the last two years and is well established in fibre backbones.

3M has expanded their attractive productline of Hot Melt fibre optic connectors and now offers also LC Hot Melt connectivity for single- and multimode applications.

The 3M Hot Melt system combines the ease of installation together with the advantage of spliceless direct termination in patch panels and TO's.

Due to it's small size, the LC-Connector allows to double the port density in 19" cabinets. By design the LC has a very low crosstalk and makes the connector the perfect choice for 1 GBit/s as well as 10 GBit/s applications.



3M™ LC Connectors Hot Melt

3M™ LC Couplings

(LC Hot Melt connectors are available in Q2/3 2005)

Type/Order text

Ref.-No.

	LC-Connector Hot Melt, multimode Simplex, beige, PU: 60 pcs	6602-S
	LC-Connector Hot Melt, multimode Duplex Clip, beige, PU: 60 pcs	6602-D
	LC-Connector Hot Melt, single-mode Simplex, blue, PU: 60 pcs	8602-S
	LC-Connector Hot Melt, single-mode Duplex Clip, blue, PU: 60 pcs	8602-D
	LC-Coupling, multimode Duplex, beige plastic housing in SC-Simplex format PU: 60 pcs	6661-DC
	LC-Coupling, single-mode Duplex, blue plastic housing in SC-Simplex format PU: 60 pcs	8661-DC
	LC-Coupling, single-mode Simplex, blue plastic housing PU: 60 pcs	8662-SC
	LC-Pigtail 50/125, multimode Green, length: 2 m, PU: 12 pcs	BDU00-ZK0002
	LC-Pigtail 50/125, multimode OM3 Green, length: 2 m, PU: 12 pcs	BDU00-ZO0002
	LC-Duplex Pigtail 50/125, multimode Green, length: 2 m, PU: 6 pcs	BDU00-CT0002
	LC-Duplex Pigtail 50/125, multimode OM3 Green, length: 2 m, PU: 6 pcs	BDU00-CB0002
	LC-Pigtail 62,5/125, multimode Blue, length: 2 m, PU: 12 pcs	BDB00-AP0002
	LC Pigtail 9/125, single-mode Yellow, length: 2 m, PU: 12 pcs	ADVOO-AU0002
	LC/APC Pigtail 9/125, single-mode Yellow, length: 2 m, PU: 12 pcs	ADWOO-AU0002

2.1 Couplings, Connectors, Pigtails

2.1.4 3M™ FC-Connectivity

Type/Order text

Ref.-No.

3M™ FC/PC Connector



FC-Connector, Hot Melt, multimode, white boot
PU: 60 pcs

6200



FC-Connector, Epoxy, single-mode, white boot
PU: 60 pcs
PU: 1000 pcs

8203
AENWL-3



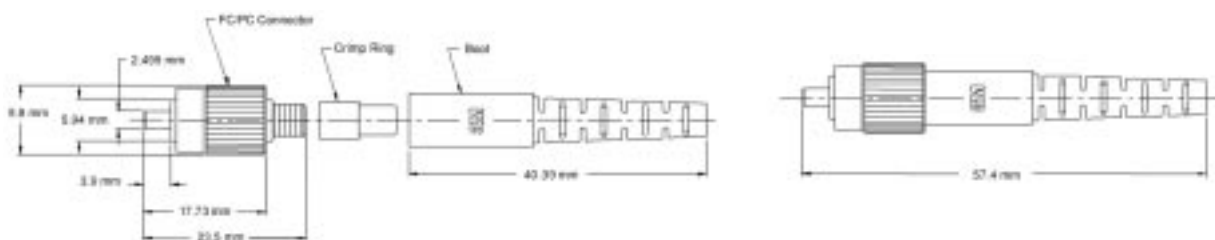
FC-Connector, Ultra High Temperature Hot Melt, single-mode
blue boot
PU: 60 pcs
PU: 1000 pcs

8208
8208-U1K



FC/APC Connector, Epoxy, single-mode
green boot
PU: 60 pcs
PU: 1000 pcs

8206-FC/APC
AEXGL-3



FC Connector	8203 AENWL-3	8208 8208-U1K	8206-FC/APC	AEXGL-3	6200
Adhesive Type	Epoxy	Epoxy	Epoxy	Epoxy	Hot Melt
Fibre Type	E9/125	E9/125	E9/125	E9/125	G50/125, G62,5/125
Insertion loss in dB typ.	< 0,2	< 0,2	< 0,2	< 0,2	< 0,2
Return loss in dB typ.	≥ 55	≥ 55	≥ 80	≥ 80	≥ 25
Ferrule	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
Housing/body	Plastic	Plastic	Plastic	Plastic	Plastic
Boot colour	White	Blue	Green	Green	White
Operating temp. in °C	-40 to 85	-40 to 100	-40 to 85	-40 to 85	-40 to 85
Storage temp. in °C	-40 to 85	-40 to 100	-40 to 85	-40 to 85	-40 to 85

2.1 Couplings, Connectors, Pigtails

2.1.4 3M™ FC-Connectivity



Type/Order text

Ref.-No.

3M™ FC Couplings/Pigtails



FC-Coupling, single-mode

for D hole mounting spacers and nut included
PU: 60 pcs

8211

FC-APC-Coupling, single-mode

for D hole mounting spacers and nut included
PU: 60 pcs

8211-APC



FC-Pigtail 9/125, single-mode Fibre

Length: 2 m
PU: 12 pcs

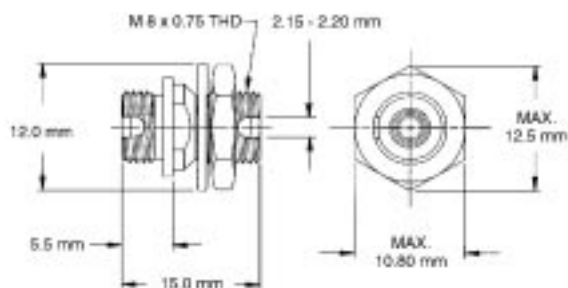
AEN00-AU0002



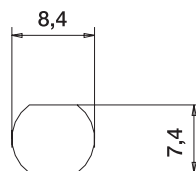
FC-APC 8° Pigtail 9/125, single-mode Fibre

Length: 2 m,
PU: 12 pcs

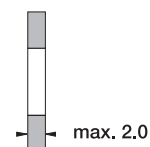
AEX00-AU0002



Hole pattern



Wall thickness



Connector	8211	8211-APC
Type	Singlemode	Singlemode
Sleeve	Zirconia ceramic	Zirconia ceramic
Housing	Metal	Metal
Operating temperature	-40°C to 85°C	-40°C to 85°C

2.1 Couplings, Connectors, Pigtails

2.1.4 E2000 Connectivity

Type/Order text

Ref.-No.

E2000 Couplings/Pigtails

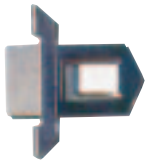


E2000/APC coupling, single-mode

Simplex, green, 2 mounting screws included

PU: 1 pc

05-751-13400



E2000 Simplex, metal mounting clamp

for screw-less mounting of E2000 connectors

metal, PU: 10 pcs

05-750-14100

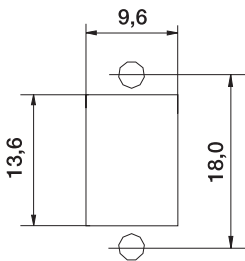


E2000/APC 8° Pigtail 9/125, single-mode Fibre

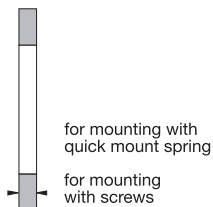
Length: 2 m, PU: 1 pc

05-706-03900

Hole pattern



Sheet thickness



Connector type	E2000/APC
Type	Single-mode
Sleeve	Zirconia ceramic
Housing	Plastic, green
Operating temperature	-40°C to 85°C

Connector type	E2000/APC
Adhesive type	Epoxy
Fibre Type	9/125
Insertion loss	< 0.2 dB typ.
Return loss	> 75 dB typ.
Ferrule	Zirconia ceramic
Housing / Body	Plastic
Boot	green
Operating temperature	-40°C to 85°C
Storage temperature	-40°C to 85°C

E2000 is a trademark of the Diamond Company.



2.2 Assembly Systems

2.2.1 3M™ Hot Melt System

Description

3M™ Hot Melt optical fibre connector assembly system

The 3M Hot Melt system offers most convenient field connectivity for fibre optic connectors. From direct termination of breakout cables in patch panels over pigtails up to patchcords, Hot Melt connectors fit every application. The connectors are pre-filled with Hot Melt adhesive which just needs to be heated for easy termination.

All connectors have ceramic ferrules and different coloured boots enable clear port identification.. A universal termination kit plus different upgrade kits enable to install all type of 3M Hot Melt connectors.

Highlights:

- Quick, simple and safe assembly in the field or factory
- Connector, adhesive and polishing film from one manufacturer guarantees a high quality connector
- Simple polishing process, either manually or with a polishing machine
- All connectors contain a zirconia ferrule and Hot Melt adhesive
- Boots are available in various colours for definite channel separation
- Suitable for all LAN and CATV applications
- Suitable for internal or external applications



Type/Order text

Ref.-No.



Universal Hotmelt Termination Kit

The Hot Melt Termination Kit for ST, SC, FC and LC-Connectors contains all tools and consumeables, which are necessary to terminate 3M HotMelt Connectors in the field.

(LC Hot Melt available form Q2/3 2005)

PU: 1 pc

Kit content:

- Hotmelt oven with 230V power cord for europe and UK
- Connector holders for ST (6 ea.), SC and FC (4 ea.)
- Universal connector holder for ST, SC, FC connectors (during 2005)
- Polishing pad, classic, round ("one step")
- Polishing pad, UHT, soft
- Polishing film 2µm, round, light green, 200 ea
- Polishing film 0,5µm, diamond, light gray, 15 ea
- Polishing film 0,5µm, final polish, frosted, 50 ea
- Polishing film 0,05µm, light yellow, 50 ea
- Jacket stripper
- Buffer/coating stripper
- Kevlar sissors
- Universal crimp tool
- Carbide scribe blade
- Angled viewscope (200x)
- Express glue for UHT connectors
- Lint free tissues, 100 ea
- Bottles for water and isoprophyl alcohol
- Safety container for fibre stubs
- Marker
- Trainings CD and instruction manual

6361

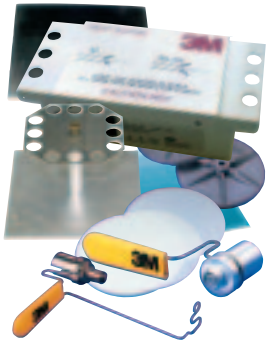
2.2 Assembly Systems

2.2.1 3M™ Hot Melt System

Type/Order text

Ref.-No.

Accessories/Consumables



Conversion Kit: Epoxy to Hot Melt Classic

(8361 to 6361)

PU: 1 pc

Content:

- Polishing pad, classic, round, ("one step")
- Connector holders, ST (6 ea)
- Connector holders, FC (4 ea)
- Connector holders, SC (4 ea)
- Hot Melt oven, 230V with power cord, Europe and UK
- Universal polishing jig (2 ea)
- Polishing film 2µm, round, "one step"
- Polishing film, 0,05µm, final polish single-mode (50 ea)
- Instruction manual HotMelt connectors ST, SC, FC
- Operation manual HotMelt Oven

6157

Extension Kit Hot Melt to UHT connectors

PU: 1 pc

Content:

- Polishing pad, soft for UHT connectors (1 ea)
- Polishing film 0,5µm, diamond, for UHT connectors (15 ea)
- Polishing film 0,02µm, silicon dioxide for UHT connectors (50 ea)
- Express glue, bottle, for UHT connectors (1 ea)
- Instruction manual UHT connectors

6355-U



Extension kit LC Hot Melt

(from Q2/3 2005)

PU: 1 ea

- Polishing pad 11,5 x 14 mm (1 ea)
- LC connector holder (4 ea)
- LC polishing jig (2 ea)
- Polishing film, 9µm (50 ea)
- LC crimp dies (1 set)
- LC adapter for microscope 200x (1 ea)
- Heat shrink adapter (1 ea)
- Cleaning wires for connector holder (1 set)
- Instruction manual LC Hot Melt

6650-LC



Classic Hot Melt consumables kit

PU: 1pc

Content:

- Polishing film 2µm (200 ea)
- Polishing film 0,05µm (50 ea)
- Lint free tissues (200 ea)
- Universal polishing jig (1 ea)

6365-CC



UHT Consumable kit

PU: 1pc

- Polishing film 0,5µm (10 ea)
- Polishing film 0,02µm (50 ea)
- Lint free tissues (200 ea)
- Universal polishing jig (1 ea)

6365-CU

2.2 Assembly Systems

2.2.1 3M™ Hot Melt System

Type/Order text

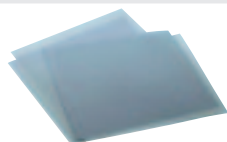
Ref.-No.

Accessories/Consumables



Polishing film 2µm, "one step" (254 X Classic),
round for handpolish
PU: 50 pcs

6192 A



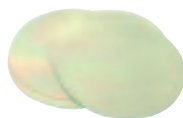
Polishing film 0,5µm, diamond (light gray)
PU: 5 pcs

661X-0,5S



Polishing film 0,5µm, final polish (frosted)
PU: 50 pcs

863X-0,02S



Polishing film 0,02µm, single-mode (light yellow)
PU: 50 pcs

263X



Polishing film 9µm, pre-polish LC-Hotmelt
PU: 50 pcs

461X



Polishing pad, round, handpolish, Classic HotMelt
PU: 1 pc

6365-PP



Polishing pad 11,5 x 14 cm, soft, for UHT connectors
PU: 1 pc

8365-PP



Polishing pad 11,5 x 14 cm, for LC HotMelt connectors
PU: 1 pc

Upon request



Polishing jig HotMelt, handpolish, ST, SC, FC
PU: 1 pc

8892



Polishing jig, handpolish, HotMelt LC
PU: 1 pc

6650-LJ

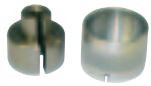
2.2 Assembly Systems

2.2.1 3M™ Hot Melt System

Type/Order text

Ref.-No.

Accessories/Consumeables



Weight for polishing jig, handpolish, HotMelt LC
PU: 1 pc

6650-JW



Hot Melt oven, 230V
with UK and EU power cord, PU: 1 pc

6323



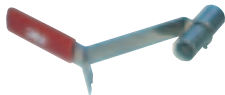
Lintfree tissues
PU: 200 pcs

05-00017



Bottle for isopropyl alcohol
PU: 1pc

VOL-0560R



Universal connector holder
for ST, SC, and FC HotMelt connectors (from Q3/2005)
PU: 6 pcs

6365-UH



Connector holder for ST Hot Melt connectors
PU: 6 pcs

6190



Connector holder for SC Hot Melt connectors
PU: 4 pcs

SP-00504



Connector holder for FC Hot Melt connectors
PU: 4 pcs

SP-00505



Connector holder for LC Hot Melt connectors
PU: 4 pcs

6650-LH

2.2 Assembly Systems

2.2.1 3M™ Hot Melt System

Description

3M Hot Melt Autopolisher / 3M Tubing Kit

The 6851-E duplex Auto Polisher is a robust polishing machine designed for field polishing of 3M HotMelt connectors with the performance of a factory polish.

The receptacle of the machine has a clamp mechanism, that allows to polish two HotMelt (ST, SC or FC) connectors of the same type at a time.

This polishing machine is designed for high volume installations of HotMelt connectors and ensures an extremely high consistency of the polishing quality.

Technical Data:

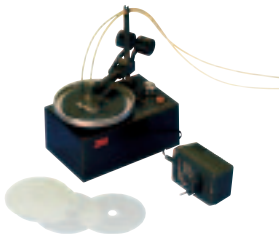
Voltage (primary)	230V/50Hz, wallsocket PS
Voltage (secondary)	15V DC / 1A, plus on centre
Dimensions:	170 x 185 x 120 cm
Weight:	1,7 kg
Timer intervals:	30, 60, 90, 120 sec.



3M HotMelt Autopolisher

Type/Order text

Ref.-No.



HotMelt Autopolisher, 230V

incl. 230V wall socket power supply and polishing film 2µm with hole (50 ea)
PU: 1 pc

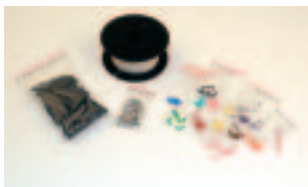
6851-E



Polishing film, 2µm

with hole for 6851-E Autopolisher
PU: 50 pcs

6192-B



Tubing Kit

This Tubing or Breakout Kit is for direct termination of HotMelt connectors on loose tube cables with 250µm primary coated fibres. The 900µm buffer tube slides over the primary coated fibre and offers more mechanical protection as well as better strain relief on the connector.

DE-0100-0900-4

Kit Content:

- Transparent PP-tube (60 m)
- Heatshrink tube 6,4, x 50 mm with glue (25 ea)
- Metal protection tube for the separation zone loose tube/buffer tubes (25 ea)
- Colour rings for coding (12 different colours, 10 ea colour)
- Instruction manual

2.2 Assembly Systems

2.2.2 3M™ Crimplok™ Connectors

Description

Crimplik™

The Crimplok™ connector combines the speed of non-adhesive connectors with the performance characteristics of epoxy and Hot Melt connectors. Crimplok™ Connectors are the ideal solution for emergency restoration work or for quickly making fibre connections at the desk.

Crimplik connectors were designed to:

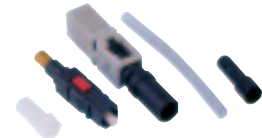
- Save time in installation
- Provide rugged, reliable performance, meeting or exceeding current EIA/TIA 568, ISO 11801 and EN 50173 specifications.
- Install cleanly and simply with fewer parts and tools.

Available in both SC and ST, single mode and multimode connector versions, Crimplok connectors are faster to install than epoxy connectors since there is no set-up or curing time. Crimplok connectors do not require special heating tools or ovens, so time spent searching for electrical outlets is eliminated. Polishing the connector is also a simple process that can be performed in seconds.

The Crimplok connector incorporates proven 3M malleable metal element fibre gripping technology. There is no fibre splice or second joint inside the connector, so there is no added attenuation at the connection. When the conformable metal element closes, it grips a length of the fibre, eliminating fibre movement associated with other crimp-style connectors. The strength of the metallic element ensures that Crimplok connectors meet industry standards for temperature and humidity.



ST Connector



SC Connector

Highlights:

- quick, simple and safe assembly in the field
- no adhesive required
- simple manual polishing process
- all connectors contain a pre-radiused Zirconia ferrule
- anti-bend design boot
- suitable for all LAN and CATV applications
- minimal tools required
- no electricity required
- meets EIA/TIA-568 specifications

Type/Order text

Ref.-No.



The Crimplok assembly kit for ST and SC connectors, contains all the tools and consumables needed for assembly. Supplied in a convenient carrying case.

Crimplik assembly case

6955

Contents of case:

1. Crimping pliers, universal
2. 6955-T Activation Tool
3. Polishing film 2µ, 200 discs
4. Polishing film 0,05µ, 50 discs
5. Polishing pad
6. Plastic bottle, empty
7. Special scissors
8. Stripping tool for cable sheath
9. Stripping tool for coating
10. Microscope, illuminated, 100X
11. Cleaning cloth, 100-pieces
12. Polishing puck
13. Assembly instructions
14. Carrying case



Activation Tool, ST/SC

PU: 1 pc

6955-T



Polishing film 2µm, oval with adhesive back

PU: 200 pcs

SP-00503

2.2 Assembly Systems

2.2.3 3M™ Fibrlok™

Description

Fibrlok™ Universal

Fibrlok is a universal mechanical splice, which can be used wherever quick and secure splice connections are required.

Fibrlok Universal splice consists of a highly resistant plastic base, body, and lid, in which a metallic element provides the connection. The metal element surrounds the optical fibres to be connected aligning the fibres precisely and permanently in place.

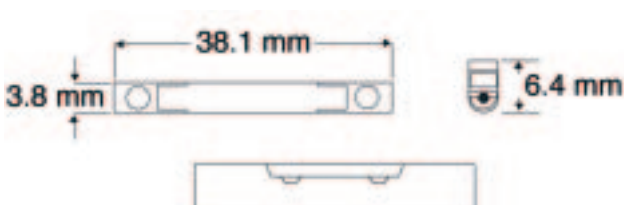
The universal splice utilizes a single cleave length for both 250 and 900µm coated fibres and has the ability to compensate for variations in fibre outer diameters for improved splicing yield.

The Fibrlok Universal splice can be used with multimode and single-mode fibres with 125 µm diameter and coatings of 250 to 900 µm.

Apply in

- Overhead cable joints
- In-ground joints
- Assembly shafts
- Cable branching boxes
- Building wiring

Connector type	Fibrlok™
Fibre diameter	125µm
Coating	250 to 900 µm
Life cycle	> 30 years (Arrhenius DIN/IEC 88 T1)
Assembly time	<30 s after preparation of fibre ends
Insertion loss	mean = 0,1 dB
Return loss	>35 dB from -40°C to +80°C >60 dB at room temperature
Fibre pull strength	>4,5 N, typically 13 N
Material	highly temperature-resistant plastic with aluminium alloy metal element UL 94, V-0 value
Operating temperature	-40°C to +80°C
Temperature cycle	Change of insertion loss: <0.5 dB. from -40°C to +80°C
Fungus resistance	ASTM G-21-70; value 0
Vibration	EIA standard FOTP-11, test procedure 1
Water resistance	7 days at +43° C, change in attenuation <=0.05 dB



3M™ Fibrlok™

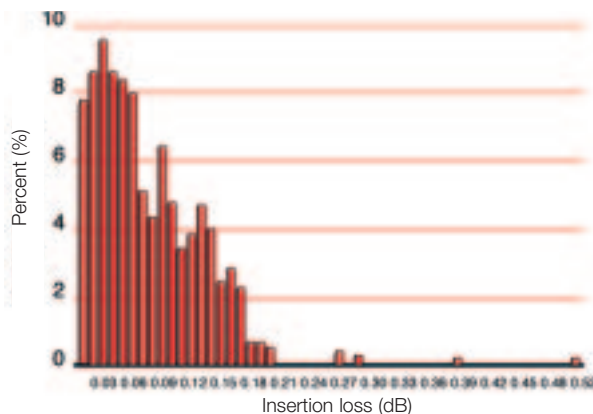
Highlights:

- Fibrlok™ is a universal splice for both 250 to 900 µm coated fibres
- The same splice is used for either singlemode or multimode fibres
- Identical stripping lengths are used for 250/900 µm fibres
- Repositioning of fibres is possible

Fibrlok™ 2529 universal connector for optical fibres

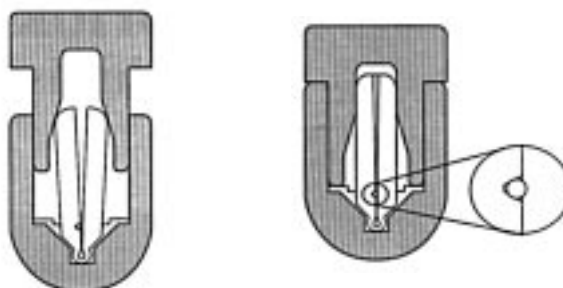
The following diagram illustrates the distribution of results from measuring the insertion loss on 550 Fibrlok™ universal connectors (equal optical fibres, coating: 250 µm).

Mean insertion loss: 0.07 dB.



Cross-section of an open and closed Fibrlok™ Universal

To make the connection, the prepared fibre ends are inserted into the connector. Using the assembly tool, the connector lid is closed, and the metal element positions the fibres accurately together.



2.2 Assembly Systems

2.2.3 3M™ Fibrlok™

Type/Order text

Ref.-No.

Fibrlok™ Universal



Kit Content:

- 2501 assembly tool
- T&B Cleaver (for 2530 only)
- Microstrip fibre stripper
- Miller cable stripper
- Ideal cable stripper
- Scissors
- Empty plastic bottle
- Lint free cloths (100 ea)
- Carrying case

Fibrlok™ Universal Tool Kit

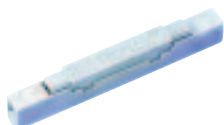
For production of mechanical splicing connections with Fibrlok Universal, splice. All required tools in a convenient case.
PU: 1 set in carrying case

Complete

2530

Without Cleaver

2531



Fibrlok™ Universal, single fibre mechanical splice

2529

The Fibrlok Universal splice for optical glass fibres can be used with single-mode or multimode fibres with 125 µm diameter and coatings of 250 to 900 µm.
PU: 60 pcs



Fibrlok™ Universal Splice Holder

2529-H

To accommodate 6 Fibrlok Universal splice connectors, single, in Quante DIN splicing cassette
PU: 20 pcs



T&B Cleaver

80-6105-7226-7

Fibre cleaving tool for Universal Fibrlok™

PU: 1 pc

Contents of case:

- Cleaver
- Clamp for table mounting

2.3 Cable Assemblies

2.3.1 3M™ Multimode Patch Cords

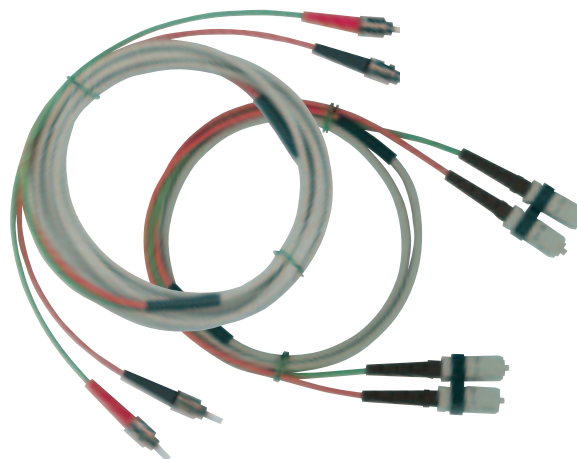
Description

Patch Cords ST-ST / SC-SC

Only standard length patch cords are available from stock. Please contact your local 3M customer service first for stock status.

Technical data:

Adhesive type:	Epoxy
Fibre type:	50/125, OM2 50/125, OM3
Insertion Loss:	< 0,3 dB typ.
Return Loss:	≥ 20 dB typ.
Ferrule:	Zirconia Ceramic
Housing:	Metal (ST) Plastic, grey (SC)
Boot colour:	Black/red (ST-duplex) Black/beige (SC-duplex)
Operating Temperature:	-40°C to 60°C
Storage Temperature:	-40°C to 80°C
Cable Type:	I-VH 2G50/125, LSZH
Jacket colour:	grey or orange

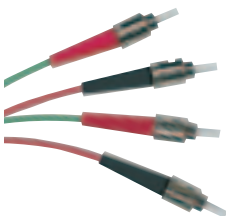


ST-ST Patch Cords

ST-SC Patch Cords

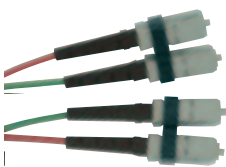
Type/Order text

Ref.-No.



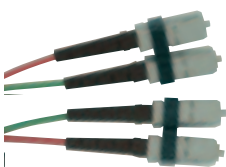
ST-ST Patch cords, multimode, duplex	
50/125µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

BANAN-AX0001
BANAN-AX0002
BANAN-AX0003
BANAN-AX0005



SC-SC Patch cords, multimode, duplex	
50/125µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

BDBDB-AX0001
BDBDB-AX0002
BDBDB-AX0003
BDBDB-AX0005



SC-SC Patch cords, multimode, duplex, OM3	
50/125µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

BDBDB-CB0001
BDBDB-CB0002
BDBDB-CB0003
BDBDB-CB0005



2.3 Cable Assemblies

2.3.1 3M™ Multimode Patch Cords

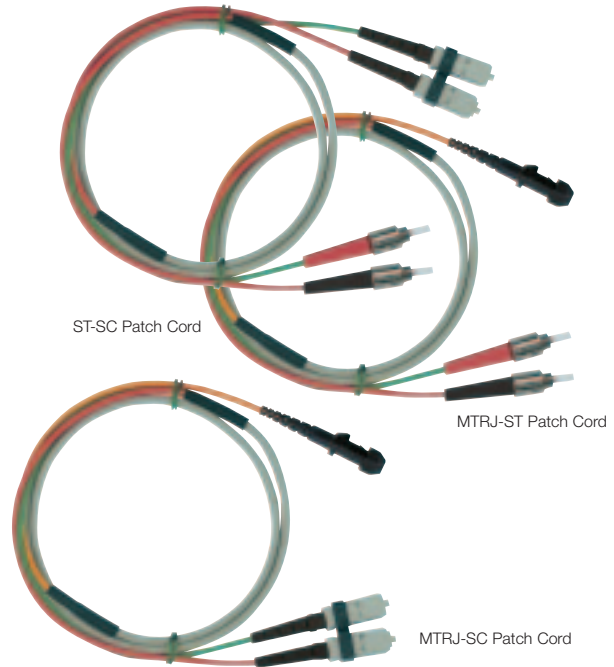
Description

Patch Cords ST-SC / MTRJ-ST / MTRJ-SC

Only standard length patch cords are available from stock. Please contact your local 3M customer service first for stock status.

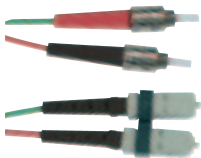
Technical Data:

Adhesive type:	Epoxy
Fibre type:	50/125, OM2 50/125, OM3
Insertion Loss:	< 0,3 dB typ.
Return Loss:	≥ 20 dB typ.
Ferrule:	Zirconia Ceramic
Housing:	Metal (ST) Plastic, grey (SC) Plastic, black (MTRJ)
Boot colour:	Black/red (ST) Black/beige (SC)
Operating Temperature:	-40°C to 60°C
Storage Temperature:	-40°C to 80°C
Cable Type:	I-VH 250/125, LSZH
Jacket colour:	grey or orange



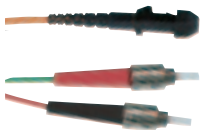
Type/Order text

Ref.-No.



ST-SC Patch cords, multimode, duplex	
50/125µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

BANDB-AX0001
BANDB-AX0002
BANDB-AX0003
BANDB-AX0005



MTRJ-ST Patch cords, multimode, duplex	
50/125µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

BANMT-CT0001
BANMT-CT0002
BANMT-CT0003
BANMT-CT0005



MTRJ-SC Patch cords, multimode, duplex, OM3	
50/125µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

BDBMT-CT0001
BDBMT-CT0002
BDBMT-CT0003
BDBMT-CT0005



2.3 Cable Assemblies

2.3.1 3M™ Multimode Patch Cords

Description

Patch Cords SC-LC / LC-LC

Only standard length patch cords are available from stock. Please contact your local 3M customer service first for stock status.

Technical Data:

Adhesive type:	Epoxy
Fibre type:	50/125, OM2 50/125, OM3
Insertion Loss:	< 0,3 dB typ.
Return Loss:	≥ 20 dB typ.
Ferrule:	Zirconia Ceramic
Housing:	Plastic, grey
Boot colour:	White (LC) Black/beige (SC)
Operating Temperature:	-40°C to 60°C
Storage Temperature:	-40°C to 80°C
Cable Type:	I-VH 250/125, LSZH
Jacket colour:	grey or orange



SC-LC Patch Cord

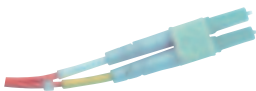
Type/Order text

Ref.-No.



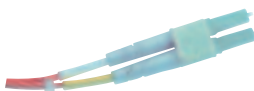
SC-LC Patch cords, multimode, duplex	
50/125/2000µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

BDBDU-AX0001
BDBDU-AX0002
BDBDU-AX0003
BDBDU-AX0005



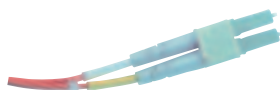
SC-LC Patch cords, multimode, duplex, OM3	
50/125/2000µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

BDBDU-CB0001
BDBDU-CB0002
BDBDU-CB0003
BDBDU-CB0005



LC-LC Patch cords, multimode, duplex	
50/125/2000µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 4 m	PU: 12 pcs

BDUDU-AX0001
BDUDU-AX0002
BDUDU-AX0003
BDUDU-AX0004



LC-LC Patch cords, multimode, duplex, OM3	
50/125/2000µm, grey or orange jacket colour, zip cord	
Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

BDUDU-CB0001
BDUDU-CB0002
BDUDU-CB0003
BDUDU-CB0005

2.3 Cable Assemblies

2.3.2 3M™ Single-mode Patch Cords

Description

Patch Cords ST-ST / ST-SC / SC-SC

Only standard length patch cords are available from stock. Please contact your local 3M customer service first for stock status.

Technical Data:

Adhesive type:	Epoxy
Fibre type:	9/125
Insertion Loss:	< 0,2 dB typ.
Return Loss:	≥ 55 dB typ.
Ferrule:	Zirconia Ceramic
Housing:	Plastic, blue (SC) Metal (ST)
Boot colour:	Yellow (ST) White (SC)
Operating Temperature:	-40°C to 85°C
Storage Temperature:	-40°C to 80°C
Cable Type:	I-VH 19/125, LSZH
Jacket colour:	yellow



Type/Order text

Ref.-No.

	ST-ST Patch cords, single-mode, simplex		AAMAM-AT0001 AAMAM-AT0002 AAMAM-AT0003 AAMAM-AT0005
	9/125µm, yellow jacket colour		
	Length: 1 m	PU: 12 pcs	
	Length: 2 m	PU: 12 pcs	
	Length: 3 m	PU: 12 pcs	
Length: 5 m	PU: 12 pcs		
	ST-SC Patch cords, single-mode, simplex		AAMDA-AT0001 AAMDA-AT0002 AAMDA-AT0003 AAMDA-AT0005
	9/125µm, yellow jacket colour		
	Length: 1 m	PU: 12 pcs	
	Length: 2 m	PU: 12 pcs	
	Length: 3 m	PU: 12 pcs	
Length: 5 m	PU: 12 pcs		
	SC-SC Patch cords, single-mode, simplex		ADADA-AT0001 ADADA-AT0002 ADADA-AT0003 ADADA-AT0005
	9/125µm, yellow jacket colour		
	Length: 1 m	PU: 12 pcs	
	Length: 2 m	PU: 12 pcs	
	Length: 3 m	PU: 12 pcs	
Length: 5 m	PU: 12 pcs		

2.3 Cable Assemblies

2.3.2 3M™ Single-mode Patch Cords

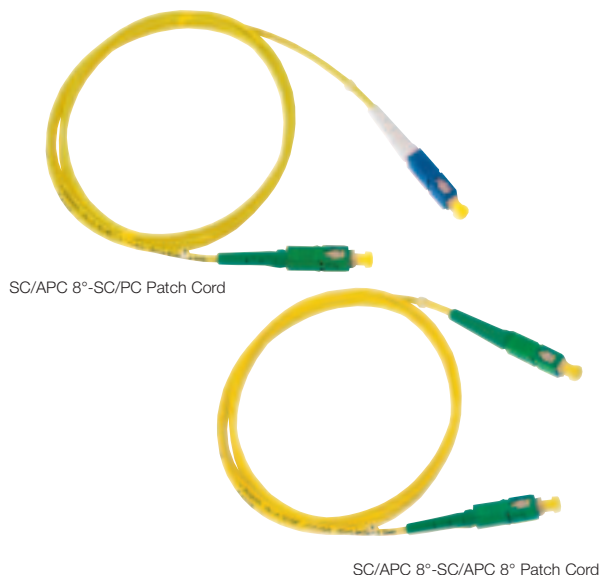
Description

Patch Cords SC/APC 8°-SC/PC SC/APC 8°-SC/APC 8°

Only standard length patch cords are available from stock. Please contact your local 3M customer service first for stock status.

Technical Data:

Adhesive type:	Epoxy
Fibre type:	9/125
Insertion Loss:	< 0,2 dB typ.
Return Loss:	≥ 70 dB typ.
Ferrule:	Zirconia Ceramic
Housing:	Plastic, blue (SC/PC) Plastic, green (SC/APC)
Boot colour:	Green (APC) White (SC)
Operating Temperature:	-40°C to 85°C
Storage Temperature:	-40°C to 80°C
Cable Type:	I-VH 19/125, LSZH
Jacket colour:	yellow



Type/Order text

Ref.-No.



SC/APC 8°-SC/PC Patch cords, single-mode, simplex 9/125µm, yellow jacket colour

Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

AEPDA-AT0001
AEPDA-AT0002
AEPDA-AT0003
AEPDA-AT0005



SC/APC 8°-SC/PC 8° Patch cords, single-mode, simplex 9/125µm, yellow jacket colour

Length: 1 m	PU: 12 pcs
Length: 2 m	PU: 12 pcs
Length: 3 m	PU: 12 pcs
Length: 5 m	PU: 12 pcs

AEPEP-AT0001
AEPEP-AT0002
AEPEP-AT0003
AEPEP-AT0005



2.3 Accessories

2.3.3 3M™ DIN Splicing Cassettes

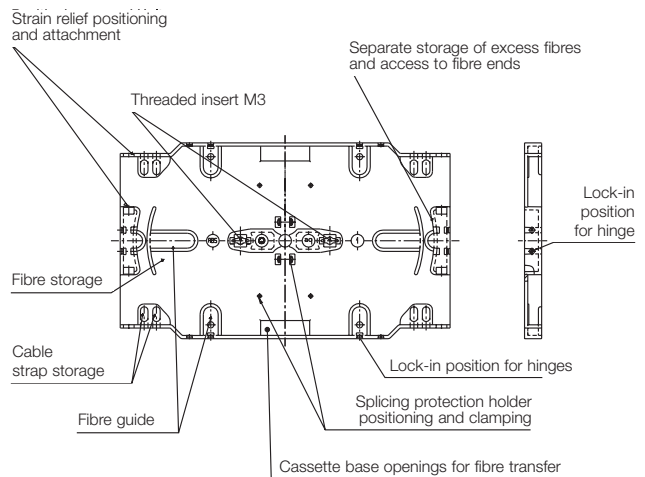
Description

3M™ FO splicing cassettes manufactured to DIN standards

FO splicing cassette conforming to DIN 47662 and Telecom standards for up to 12 splice connections. Numerous retaining options for FO bunched fibres and single fibres.



3M™ FO-Splicing cassette



Type/Order text

Ref.-No.



FO-Splicing cassette

Incl. strain relief and cable management
Dimensions: 155 x 92 x 8 mm (HxWxD)
Colour: RAL 9001 (cream white), PU: 10 pcs

29026-500 31



FO-Splicing cassette

Incl. splice protective holder for 12 crimp splice protectors and cable management
Dimensions: 155 x 92 x 8 mm (HxWxD)
Colour: RAL 9001 (cream white), PU: 30 pcs

29026-500 30



FO Lid

For splicing cassette, colour: RAL 9001 (cream white)
Dimensions: 155 x 92 x 2 mm (HxWxD), colour: RAL 9001 (cream white)
PU: 10 pcs
PU: 50 pcs

29025-503 31
29025-503 30



Hinge

To connect splicing cassette and lid, PU: 100 pcs

03-756-00500



FO-Strain relief

For 12 fibres with Ø 0.9 and 1.1mm coating
PU: 50 pcs

29031-000 30



FO-Splicing protection holder, crimp

PU: 10 pcs, for 12x crimp splice protectors

05-760-08000



FO-Crimp splice protector

PU: 150 pcs

05-760-08100



FO-Splicing protection holder, shrink

PU: 10 pcs, for 6x shrink splice protectors

05-760-11900



FO-Heatshrink splice protector 60 mm FSS 1

PU: 1000 pcs

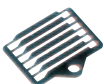
05-760-12000



FO-Heatshrink splice protector 45 mm FSS 1/2,4

PU: 1000 pcs

05-760-12100



FO-Splicing holder Fibrlok™ Universal

PU: 20 pcs, for 6x Fibrlok

2529-H

2.4 Subracks

2.4.1 3M™ FO-19" Patch Panels

Description

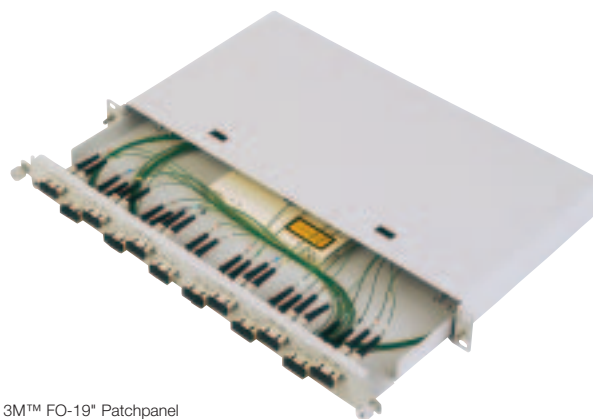
3M™ 19" Patch Panels SPP3-E, sliding, 1 HU

Housing: robust power coated steel, sliding drawer with fixed stop for safer and easier termination

Colour: RAL 7035 (light grey)

Features: cable entry with integrated tie fixing points for 2-4 fibre horizontal cable. 2 holes for backbone cable entry through PG glands. Point welded thread to fix and stack DIN splice cassettes

Front panel: fixed (non interchangeable) with screen printed port numbers for ST, SC and SC duplex couplings. Individual port labelling in preparation



3M™ FO-19" Patchpanel

Type/Order text

Ref.-No.



FO-19"-patch panel (1 HU), sliding

Empty patch panel with integrated front plate

Dimensions: 44 x 483 x 250 mm (HxWxD)

Colour : RAL 7035 (light grey), PU: 1 pc

Delivery: -FO-19" patch panel (1 HU), empty
-Screws and cage nuts for 19" frames

FO-patch panel 12 ST

SPP3-E-1T

FO-patch panel 24 ST

SPP3-E-2T

FO-patch panel 12 SC Simplex or 12 LC Duplex

SPP3-E-1CS

FO-patch panel 24 SC Simplex or 24 LC Duplex

SPP3-E-2CS

FO-patch panel 6 SC Duplex

SPP3-E-6CD

FO-patch panel 12 SC Duplex

SPP3-E-1CD

FO-patch panel 24 SC Duplex

SPP3-E-2CD

FO-19"-patch panel (1 HU), sliding, equipped with pre-mounted couplings

Dimensions: 44 x 483 x 250 mm (HxWxD)

Colour: RAL 7035 (light grey), PU: 1 pc

Delivery: -FO-19" patch panel (1 HU), including couplings
-Screws and cage nuts for 19" frames

Multimode

FO-patch panel 12 ST MM-Couplings

SPP3-E-1T-M

FO-patch panel 24 ST MM-Couplings

SPP3-E-2T-M

FO-patch panel 6 SC Duplex MM-Couplings

SPP3-E-6C-DM

FO-patch panel 12 SC Duplex MM-Couplings

SPP3-E-1C-DM

FO-patch panel 24 SC Duplex MM-Couplings

SPP3-E-2C-DM

Single-mode

FO-patch panel 12 SC Duplex SM-Couplings

SPP3-E-1C-SS

FO-patch panel 24 SC Duplex SM-Couplings

SPP3-E-2C-SS



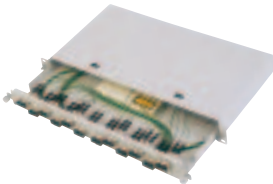
2.4 Subracks

2.4.1 3M™ FO-19" Patch Panels

Type/Order text

Ref.-No.

3M™ 19"-Patch Panel (1 HU), sliding



FO-19"-patch panel (1 HU), sliding, equipped with couplings and pigtails

Dimensions: 44 x 483 x 250 mm (HxWxD)

Colour: RAL 7035 (light grey), PU: 1 pc

Delivery: -FO-19" patch panel (1 HU) including couplings and pigtails, mounted and colour coded
-1 to 4 FO-Splicing cassettes including lid
-Holder for splice protectors and strain relief
-Screws and cage nuts for 19" frames

Multimode, 50/125µm

FO-patch panel 12 ST

SPP3-E-1T-MP5

FO-patch panel 24 ST

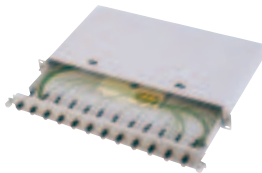
SPP3-E-2T-MP5

FO-patch panel 6 SC Duplex

SPP3-E-6C-DMP5

FO-patch panel 12 SC Duplex

SPP3-E-1C-DMP5



Multimode, 62,5/125µm

FO-patch panel 12 ST

SPP3-E-1T-UP6

FO-patch panel 24 ST

SPP3-E-2T-UP6

FO-patch panel 6 SC Duplex

SPP3-E-6C-DMP6

FO-patch panel 12 SC Duplex

SPP3-E-1C-DMP6

Single-mode 9/125µm

FO-patch panel 12 ST

SPP3-E-1C-SP9

2.4 Subracks

2.4.2 3M™ BCCO II 19"

Description

3M™ BCCO II - Slide mounted optical patch panel

3M BCCO Range



BCCO, the reference in slide-mounted 19" optical patch panel. Generation II is designed to offer further functionality with the same high quality approach

- New slides for perfect panel/rack body assembly
- TOP Cassette with fibre management zone to separate unjacketted fibres from the pigtails
- Compact: 24 connections on only 1U
- Shallow depth allowing back-to-back mounting in standard 600 x 600 frames
- Specific 19" and ETSI models
- Anti-rodent device on both cable entries as standard

Concept

Body

Single piece for 19" or ETSI frame
Left or right cable entry
Attachment system for four 8mm dia. cables or one 18 mm dia. cable on each side
Anti-rodent device on each cable entry.

Slides

Anodized aluminum profiles, greased for perfect panel/rack body adjustment

Panel

Single piece assembly with integrated connection strip.

Fittings:

2 TOP cassettes with double, articulated fibre management (4 for the 36- and 48-fibre versions)

Cassette equipped to take 12 fusion-type splices with heat-shrink sleeve protection.

Connection strip with label and two handles for opening.

Other Supplies and Accessories

Click-in cover

Two corrugated conduits to guide the fibres from the cables to the cassettes

Mounting kit (screws, washers, captive nuts)

Instruction sheet

The panel is delivered fully assembled, with the cassettes in place

Materials / Protection

Body, panel, cover: Steel

Paint: Epoxy powder

Color: Anthracite (RAL 7016)

Cassette & grommets: Thermoplastic

Pre-loaded

Our BCCO II Patch Panels can be factory preloaded with pigtails.

Capacity / Dimensions (mm)

Model	Capacity	Height	Width	Depth	Slide Distance
1U 19"	0 to 24 fibres	1U	19"	240	40
2U 19"	0 to 48 fibres	2U	19"	240	40



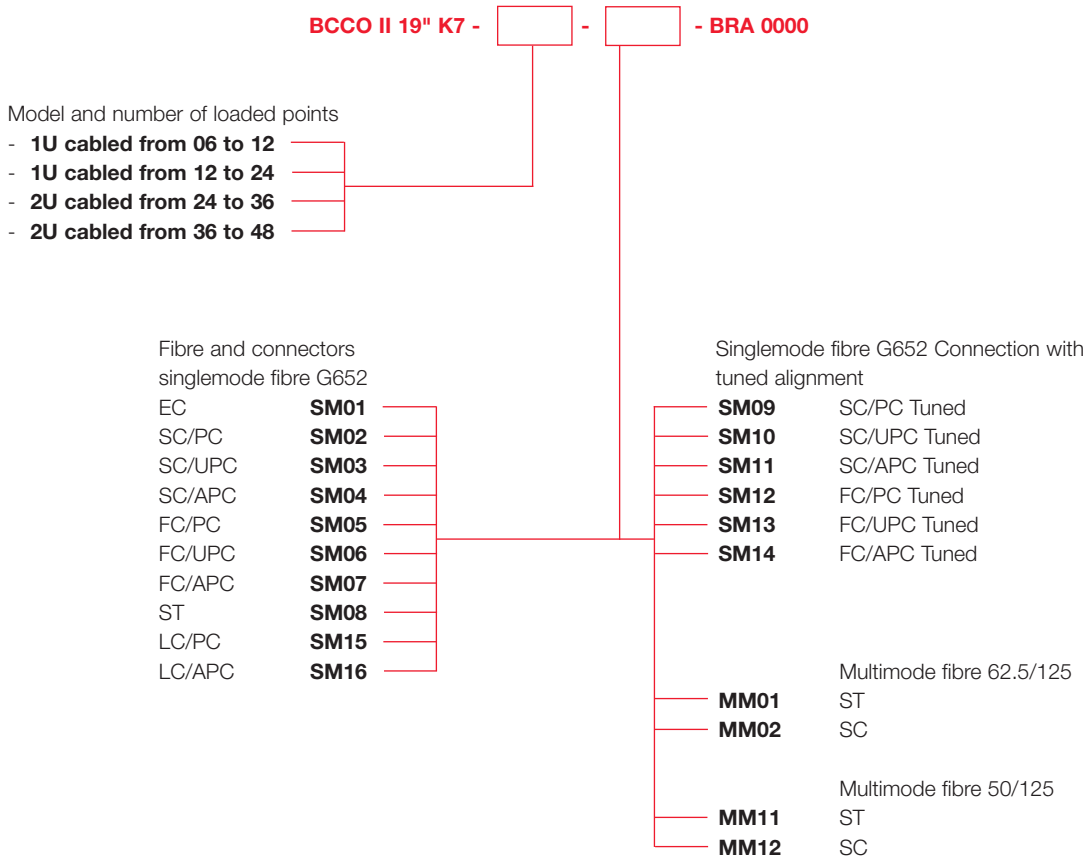
2.4 Subracks

2.4.2 3M™ BCCO II 19"

Description

3M™ BCCO II 19" Range

BCCO II 19" Panels with loaded cassettes



On request: singlemode fibre G655, multi-mode fibre 50/125, other connectors and special layouts.

Ordering Example:

BCCO II 19" K7 - 1U 06 - SM04 BRA 0000

Range:

BCCO II panel for 19" mounting with splicing cassettes.

Loaded: 1U panel designed for 12 fibres and half loaded (6 connections)

Connection and fibre: sleeveless SC/APC connector mounted on standard singlemode fibre (G652)

Packing:

1U Panel for 19":

Cardboard carton 550 x 250 x 60 mm. Weight 4 kg

2U Panel for 19":

Cardboard carton 550 x 250 x 100 mm. Weight 5 kg

2.4 Subracks

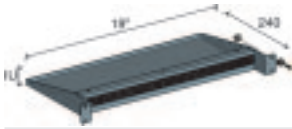
2.4.2 3M™ BCCO II 19"

Type/Order text

Ref.-No.

3M™ BCCO II 19" Accessories / Panels without Pre-wiring

Storage racks and shelf, Splicing racks, Cable panels without pre-cabling Racks for storing surplus jumper lengths



BCCO II 19", 1U Storage shelf

N461617A

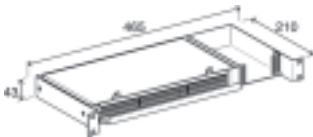
Storing surplus jumper length
Front panel with guide. Dim. 19" x 1U x 240 mm.
Anthracite grey (RAL 7016)



BCCO II 19", 1U Standard storage rack

N461572A

To be fixed under the cable panel
Sliding shelf for better accessibility
Front panel with rubber guide to support the jumpers. Dim. 19" x 1U x 240 mm.
Anthracite grey (RAL 7016)



BCCO II 19", 1U Rack for managing surplus length

N461571A

To be fixed under the cable panel
Sliding shelf for better accessibility
Side channel for surplus length enabling the panel to be opened for further work without having to disconnect the jumpers from the front panel. Front panel with rubber guide to support the jumpers. Dim. 19" x 1U x 240 mm.
Anthracite grey (RAL 7016)

Splicing Racks

BCCO II 19", 1U Rack for managing 24 splices

N461596A

The splicing rack is a cable panel with a solid front panel.

It is equipped with the same fittings as the panel.

In the 1U version, it takes 2 TOP cassettes
Dim. 19" x 1U x 240 mm.
Anthracite grey (RAL 7016)



BCCO II 19", 2U Rack for managing 48 splices

BCCO II

N461560A

2U Version: 4 TOP cassettes
Dim. 19" x 2U x 240 mm.
Anthracite grey (RAL 7016)

BCCO II 19" Cable panels with Cassettes and Slides without pre-loading

1U for 12 ST or FC

N461580A

1U for 12 SC, E2000 or EC

N461592A

1U for 24 ST or FC

N461529A

1U for 24 SC, E2000 or EC

N461554A

2U for 36 ST or FC

N461559A

2U for 36 SC, E2000 or EC

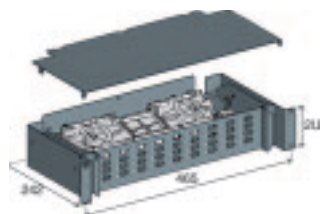
N461593A

2U for 48 ST or FC

N461582A

2U for 48 SC, E2000 or EC

N461555A



Packing:

1U panel for 19":

Cardboard carton 550 x 250 x 60 mm. Weight 4 kg

2U panel for 19":

Cardboard carton 550 x 250 x 100 mm. Weight 5 kg

Accessories:

Pack of 2 adapter supports for ETSI Racks

1U

N711498B

2U

N711499B



2.5 Distribution Boxes

2.5.1 3M™ VKA 2/GF

Description

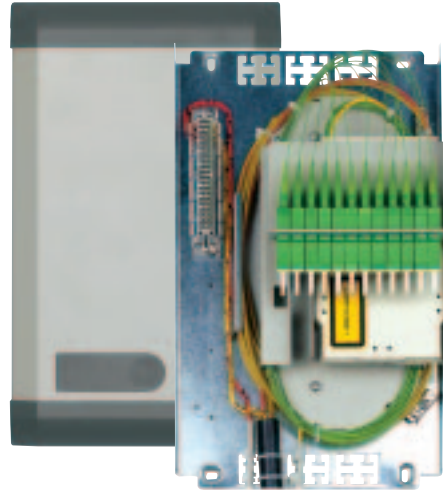
3M™ VKA 2/GF

The VKA 2/GF optical fibre distribution box is specifically designed as an interior transfer or termination point for optical fibre runs. It is well-suited to environments where space is limited and a cost effective solution is required.

The VKA 2/GF houses two FO splicing cassettes which can hold up to 24 splice connections. With the addition of a connector mounting plate (optional) the boxes can also be used as a patch distribution frame.

Highlights:

- Splice or patch distribution frame for 24 splice connections (2 FO splicing cassettes)
- FO connector mounting plates for 12 connectors E2000/SC, ST/FC or 6 connectors SC duplex
- accommodates hybrid cables using copper connector blocks, either 2x10 pair or 1x20 pair (SID-CD). Overvoltage protection can be used
- Lockable
- Remote monitoring via lid contact



3M™ VKA 2/GF

If hybrid cables are used, the modular design of the VKA 2/GF makes it possible for either two 10 pair or one 20 pair copper connector blocks (Quante™ SID™-CD) to be accommodated.

Protection rating: IP 40 (DIN 40050)

Typ/Bestelltext

Ref.-No.



VKA 2/GF for 24 splice connections

Dimensions (HxWxD): 330 x 200 x 100 mm

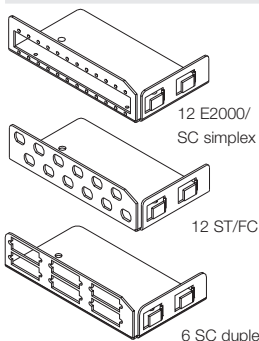
Weight: approx. 2.1 kg;

PU: 1 unit

Contents:

- Base plate with earth terminal and attachment for copper connector block
- Cassette tray for FO splicing cassettes
- 2 FO splicing cassettes with splice protection holder
- Housing lid with snap closure
- Cable management, assembly instructions

52-303-00030



FO connector mounting plates 12 E2000/SC simplex

52138-019 30

FO connector mounting plates 12 ST/FC

52138-018 30

FO connector mounting plates 6 SC duplex

52138-016 30



VKA-Monitoring switch

Lid contact only useable in combination with lock kit

52096-519 00



2.5 Distribution Boxes

2.5.1 3M™ VKA 2/GF-EFM

Description

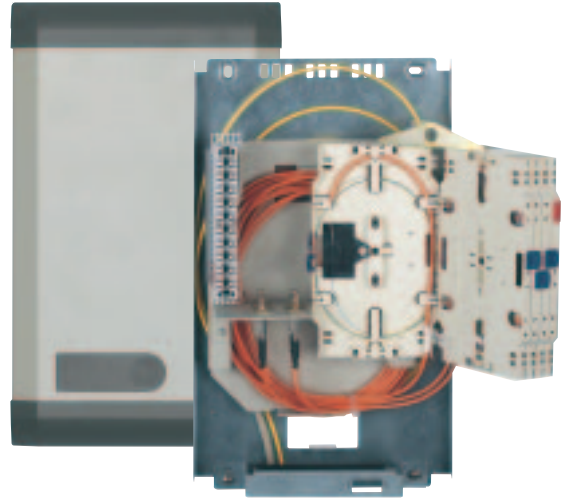
3M™ VKA 2/GF-EFM with single fibre management

The VKA 2/GF-EFM serves as a final distribution or splice distribution frame in optical fibre networks and is capable of accommodating up to 12 splice connections in six FO splicing cassettes.

A feature of the VKA 2/GF-EFM is that it provides the opportunity for both single and multiple fibre management. This type of fibre management enables the storage of the splice for a connection to be separate from all other fibres. Ideally, two fibres will be stored in one splicing cassette. Using this method to manage the fibres, existing fibre connections will not be affected, even at later extensions or service work.

Highlights:

- Single-fibre management for up to 12 splicing connections (24 fibres)
- FO cassette stack, completely removable
- Separate cable guide levels for incoming and outgoing sides
- Connector holders for SC, ST or FC connections
- Copper connector block for hybrid cables
- Lockable
- Remote monitoring via lid contact
- Utilises the same design as the VKA distribution frame

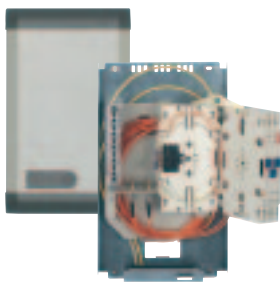


3M™ VKA 2/GF-EFM

By using different connector mounting plates, the VKA 2/GF-EFM can be used as a patch distribution frame. It is possible to install a 10 pair copper connector block (Quante™ SID™-CT) for use with hybrid cables.

Type/Order text

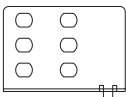
Ref.-No.



VKA 2/GF-EFM for 12 splice connections

- Protection rating: IP 40 (DIN 40050)
 Dimensions (H x W x D): 330 x 200 x 100 mm
 Weight: approx. 2.1 kg;
 PU: 1 unit
 Contents:
- Base plate with earth terminal and attachment for copper connector block
 - Cassette stack with 6 FO splicing cassettes, hinges and cassette lids included
 - Unlocking tools
 - Cable management
 - Assembly instructions

52-303-0000



FO connector mounting plates holders 6 ST/FC

52138-009 30

Lock kits

- VKA lock kit Q2
- VKA lock kit Q3
- VKA lock kit Q15

52096-523 00
 52096-521 00
 52096-526 00



VKA-Monitoring switch

Lid contact only useable in combination with lock kit

52096-519 00

2.5 Distribution Boxes

2.5.1 3M™ VKA 4/GF, 3M™ VKA 8/GF

Description

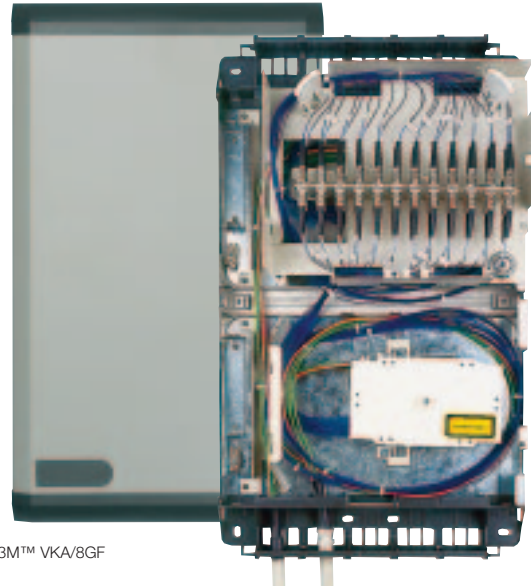
3M™ VKA 4/GF, 3M™ VKA 8/GF

VKA 4/GF and VKA 8/GF are optical fibre distribution frames capable of housing upto 48 and 96 splice connections in either four or eight FO splicing cassettes, respectively. These capacities can be further expanded to 72 or 144 splice connections by the addition of a further 2 or 4 splicing cassettes. In these cases it will not be possible to install a FO connector mounting plate.

Using optional connector mounting plates, the two splice distribution frames can be converted to patch distribution frames.

Highlights:

- Capacity as:
Patch distribution frame, 48 (VKA 4/GF) or 96 (VKA 8/GF) splice connections
Splice distribution frame, 72 (VKA 4/GF) or 144 (VKA 8/GF) splice connections
- Connector mounting plates for SC, E2000, FC or SC connections
- Copper termination for hybrid cables possible with overvoltage protection
- Remote monitoring via lid contact

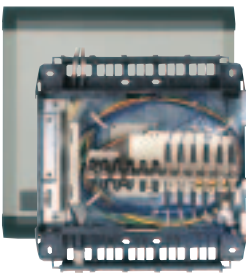


3M™ VKA/8GF

The VKA 4/GF can be equipped with one, the VKA 8/GF with two connector mounting plates. For the use of hybrid cables (with copper leads), there is a provision for the installation of 10 pair copper connector blocks (SID-CT).

Type/Order text

Ref.-No.



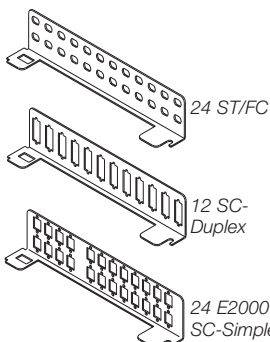
3M™ VKA/4GF

VKA 4/GF for 48 splice connections VKA 8/GF for 96 splice connections

Protecting rating: IP 40 (DIN 40050)
Dimensions (HxWxD) :330x330x125 mm, 550x330x125 mm
Weight: approx. 2.8 / 4.9 kg;
PU: 1 unit

- Contents:
- Base plate with earth terminal and attachment materials for copper connector blocks
 - Cassette tray for FO splicing cassettes
 - 4 or 8 splicing cassettes with splice protection holder
 - 1 or 2 splicing cassette lids
 - Plastic cable inlets and clamping
 - Housing lid with snap closure
 - Cable management
 - Assembly instructions

52-303-00100
52-303-00200



FO connector holders 24 ST/FC

52138-010 30

FO connector holders 12 SC-Duplex

52138-012 30

FO connector holders 24 E2000 / SC-Simplex

52138-013 30

Installation above the FO splicing cassettes



VKA-Monitoring switch

Lid contact only useable in combination with lock kit

52096-519 00

2.5 Distribution Boxes

2.5.2 3M™ Box 2552SA



Description

3M™ 2552 SA Wallmount distribution box

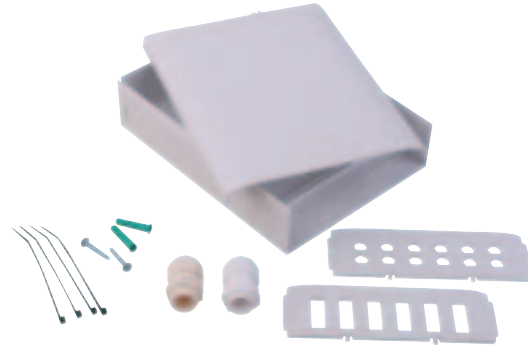
The 3M 2552SA offers excellent fibre management in an affordable box with an attractive, low profile design able to be wall mounted anywhere in your LAN network. The box is also suitable for housing consolidation points.

The 2552SA series brings efficient use of space as well as functionality and rugged durability. The boxes have a unique sliding lid to provide easy access to couplings and fibre management.

Interchangeable connector panels are available to accommodate: ST simplex & duplex couplings, SC duplex couplings, FC flanged couplings, FC "D" mount couplings, and the Volition™ VF-45™ Socket.

Fibres can either be directly terminated or spliced to pigtails using either Fibrok™ or fusion splicing. The 2552SA is constructed from flame retardant material.

The 2552SA is part of 3M's large family of fibreoptic products including connectors, couplings cable assemblies splices and more.



Highlights:

- Assortment of coupling plates will handle all major connector styles

Type/Order text

Ref.-No.



2552SA

Dimensions (HxWxD) :210 x 160 x 65 mm
 Weight: approx. 0,5 kg/ea.
 MOQ: 10 units

Content:
 Exchangeable face plates for:
 ST simplex /
 FC-"D" Mount /
 SC duplex plate up to 12x fibres

2552SA

2.6 Terminal Outlet

2.6.1 3M™ FO-Wall Outlet, UP

Description

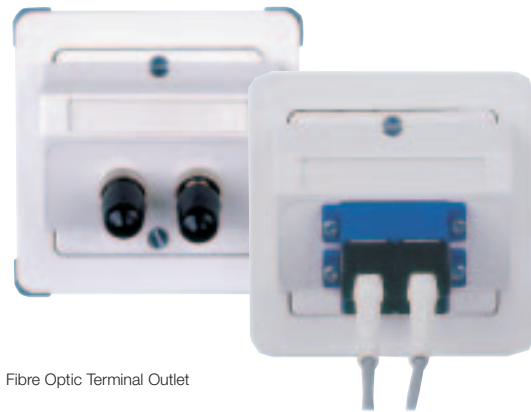
3M™ FO-Wall Outlet

Fibre optic Terminal Outlet for channel mounting.

TO with 30° coupling orientation, without couplings.

Content:

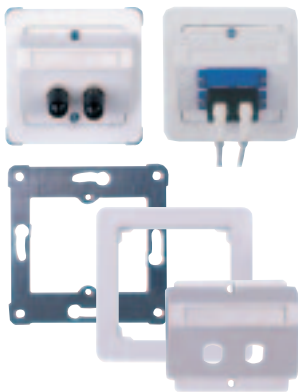
- Face plate (50 x 50 mm) for 2 x ST simplex couplings
or
- 2 x SC duplex couplings
- Port numbering window 7 x 44 mm
- Subframe 70 x 70 mm
- Metal mounting frame
- Fixing material



Fibre Optic Terminal Outlet

Type/Order text

Ref.-No.



FO-Wall Outlet

Outlet for channel mounting onto standard mounting plate (EN 60670/DIN 49073-TA-M2H1)

Dimensions (HxWxD): 16,5 x 70 x 70 mm

Colour: RAL 9010 (office white), PU: 1 pc

For 2 ST-simplex

FIPTOST-70

For 2 SC-Duplex

FIPTOSC-70

2.7 Racks

2.7.1 3M™ MODF Series 2K

Description

3M™ MODF 2K/19" – Modular technology for 19" subracks

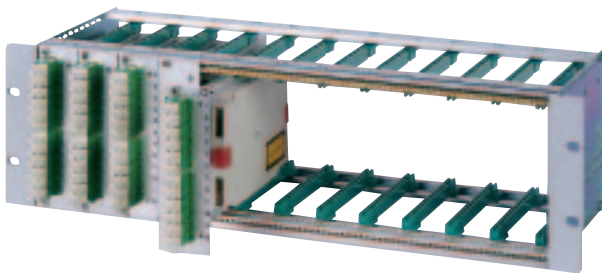
With its modular optical fibre technology, 3M offers the user a complete system for central optical fibre distribution frames with high fibre counts.

Possible applications are centrally located FO main distribution frames for network providers or Fibre To The Desk cabling (FTTD) with single-level hierarchy.

Taking into account the specific characteristics of fibre optics, both applications require a compact and accessible solution for the termination of optical fibres. Furthermore, the system must guarantee trouble-free extension and no downtime maintenance.

3M's modular technology provides the user with an extremely compact FO patching or splicing system which, as a patch distribution frame, offers a capacity of up to 144 fibres on three height units. If used as a splice distribution frame, the capacity increases to 288 fibres per 19" subrack.

The patch system's core is the 2K connector module, also available for various FO connector types. All connector modules are installed in 19" subracks and are easily accessible from the front. The 2K modular system is completed by an excess fibre tray to accommodate incoming bunched fibre reserves, a patch panel for lateral exit of patch cords and a cable management system for 19" cabinets.



Fibre Optic 19" sub-rack

Sub-rack (84 WU, 3 U) for max. 12 ea of 2K connector- or splice modules.



Highlights:

- Complete system for optical fibre distribution frames
- extremely high capacity, per subrack:
 - 144 fibres when used as patch distribution frame, or
 - 288 fibres when used as splice distribution frame per subrack
- extremely easy to install and maintain
- expandable any time
- co-ordinated patch cord routing, observance of minimum bending radius
- orderly storage of excess bunched fibre
- 2K Connector modules for E2000, SC, FC and ST technology



2.7 Racks

2.7.1 3M™ MODF Series 2K

Description

3M™ 2K-Optical Modules for 19" subracks

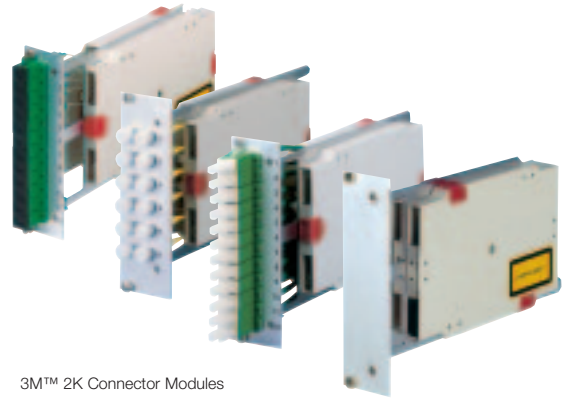
2K-Connector Module

2K connector modules (7 depth units) for 10 or 12 connectors each and FO pigtails, type E2000, SC, FC and ST with printed port identification. The primary coat of the pigtails is exposed, all pigtail ends are colour-coded.

Each 19" subrack can house up to 12 2K connector modules, splicing reserves and excess lengths of pigtails are stored in 2 separate cassettes to simplify installation.

2K-Splice Module

FO splicing module (7 DU) for the creation of high-capacity splice distribution frames. A 2K splicing module permits the inclusion of up to 24 splice connections in 2 FO splicing cassettes.



3M™ 2K Connector Modules

3M™ 2K Splice modules

Technical Datas:

FO Connector type in μm	Single-mode 9/125		Multimode 50/125 62,5/125	
E2000 (APC 8°) simplex/10 fibres	•			
E2000 (APC 8°) simplex/12 fibres	•			
SC (APC 8°) simplex/12 fibres	•			
SC (PC) simplex/12 fibres	•	•	•	
ST (PC) 10 fibres	•			
ST (PC) 12 fibres	•	•	•	
FC (PC) 12 fibres	•			
SC (PC) duplex/12 fibres			•	•
SC (PC)-ST duplex/12 fibres				

Included:

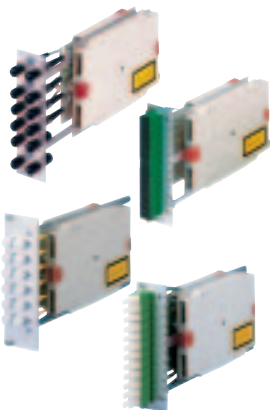
- Aluminium front panel (7DU), installed with 10 or 12 connectors
- Port ID 1 through 12
- 1 FO splicing cassette and 1 FO excess fibre tray, mounted on cassette tray
- Secondary pigtail coat stripped and stored in splicing or excess fibre tray
- All pigtail ends are colour-coded
- Various cable ties
- Fastening materials for 19" subrack

Dimensions: 128 x 35 x 215 mm (H x W x D)

Weight: approx. 0.3 Kg, PU: 1 pc

Type/Order text

Ref.-No.



Single-mode 9/125 μm with E2000-APC 8°, 12 Fibres

40395-511 30

SC-APC 8°, 12 Fibres

40395-514 45

SC-PC, 12 Fibres

40395-546 45

Multimode 50/125 μm with SC, 12 Fibres

40395-514 55

ST, 12 Fibres

40395-507 57

SC-Duplex, 12 Fibres, horizontal

40395-523 57

Multimode 62,5/125 μm with SC, 12 Fibres

40395-514 65

ST, 12 Fibres

40395-507 67

SC-Duplex, 12 Fibres

40395-523 67



2K-Splicing Module, 7 Depth Units for up to 24 splicing connections

40395-517 30

Dimensions: (HxWxD) 128 x 35 x 215 mm

Weight: approx. 0.3 Kg, PU: 1 pc

Delivery:

- 7 DU Aluminium front panel, with cassette tray
- 2 FO splicing cassettes with lid
- 2 splice protector holders for crimp splice protection
- Various cable ties
- Fastening materials for 19" subrack

2.7 Racks

2.7.1 3M™ MODF Series 2K



Type/Order text

Ref.-No.

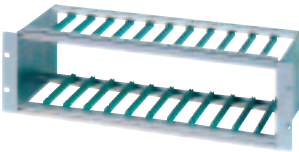
3M™ 2K-Optical Modules for 19" subracks



2K Dummy front plate, 7DU

40018-018 30

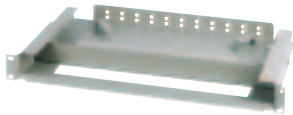
To cover unused sockets in the 19" subrack
Dimensions: 128 x 35 x 1.5 mm (HxWxD), PU: 1 pc
Included: - Aluminium front panel (7DU), no imprint
- Fastening materials for 19" subrack



GF-19" Subrack, 3 HU, 84 DU

40026-515 30

To accommodate up to 12 2K Connector modules/2K Splice modules
Dimensions: 135 x 483 x 190 mm (HxWxD)
Weight: approx. 1.2 Kg, PU: 1 pc
Included: - 19" subrack, aluminium
- 24 guide rails, installed
- Attachment materials for 19" racks/frames



FO 19" Loose tube storage tray, 1 HU

40040-502 30

For storage of excess bunched fibre, pull-out design
Pull-out length: 200 mm
Colour: RAL 7032 (pebble grey)
Dimensions: 44 x 483 x 280 mm (HxWxD)
Weight: approx. 3.3 Kg, PU: 1 pc
Included: - 1 Excess fibre tray
- 2 Cable guide rings to guide FO bunched fibre
- Various cable ties
- Attachment materials for 19" racks



FO 19" Patch cord guiding panel, 1 HU

40036-521 30

For attachment and radius limiting for FO patch cables.
Rotary radius limiters, providing a choice of left or right side
FO patch cable exit.
Colour: RAL 7032 (pebble grey)
Weight: approx. 1.0 Kg, PU: 1 pc
Dimensions: 73 x 485 x 100 mm (HxWxD),
Included: - Patch panel, installed
- With 6 rotary radius limiters
- Attachment materials for 19" racks

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