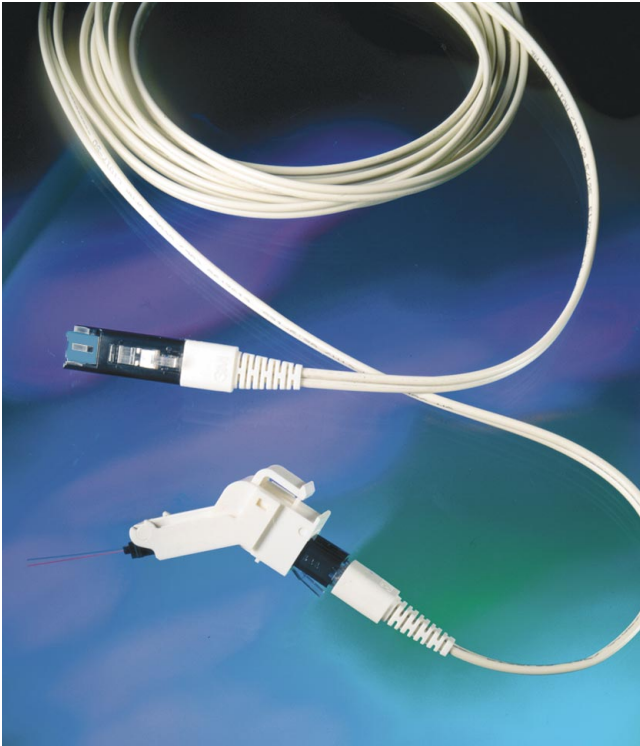




Volition™ VF-45™

Singlemode Socket and Patch Cords



It's as easy as plugging in an RJ45

The Volition™ VF-45™ Singlemode Socket and Patch Cords from 3M are the latest duplex, fibre optic interconnect products for affordable, high bandwidth, fibre-to-the-desk networks. The VF-45 plug and socket work like an 8-pin modular jack, bringing the simplicity of the RJ45 jack to optical fibre applications.

VF-45 singlemode sockets can be field terminated in closet patch panels and in work area outlets for premises backbone and horizontal cabling applications. Field termination on duplex singlemode fibre using the Volition VF-45 Termination Kit takes less than two minutes, two fibres at a time!

The mating VF-45 plugs, factory-terminated onto singlemode patch cords, enable interconnection from socket-to-socket or from socket-to-transceiver devices. VF-45 singlemode patch cords are provided in a variety of lengths and are also available in hybrid ST or SC configurations. All VF-45 patch cords are constructed with the innovative 3M "GGP" high-strength coated optical fibre, providing durability and tight bend radius in desktop applications.

The VF-45 singlemode fibre optic interconnect conforms to 3M specifications chosen to meet even the toughest customer expectations. The VF-45 interconnect is the heart of a full system of affordable optical fibre Volition Network Solutions.

Features

- Plug to socket design (no adapter needed)
- Small size duplex interconnect
- V-groove alignment with injection-moulded parts
- RJ45 style latch
- Socket - 3-piece snap together assembly
- Patch cords made with 3M's innovative coated fibre, GGP (requiring a minimum bend radius of only 24mm)
- Full line of Volition™ Network Solutions products and services
- Self closing dust caps on both plug and socket

Benefits

- Low cost
- High density
- Eliminates expensive ferrules, sleeves, or precision components
- Familiarity, easy to use
- Easy to install, lower labour costs
- Dependable in under-desk applications
- Warrantied system offering
- Fully shuttered patch panels and wall outlets give protection against dust ingress

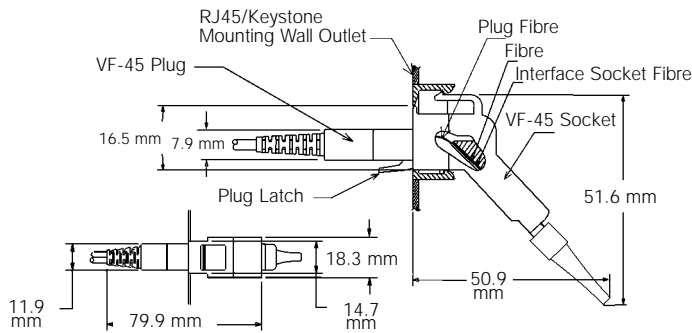
Specifications

Volition Singlemode VF-45™ Socket

Ref.-No.	Description
VOL-0002	VF-45™ Socket, singlemode PU: 96 ea/ca., MOQ: 96 ea
VOL-0011	Fibreholder for VF-45™ Socket, multimode and singlemode PU: 96 ea/ca., MOQ: 96 ea

The VF-45 Socket (VOL-0002) includes socket base, housing, socket fibre holder and boot; complete for termination to 250 µm coated singlemode fibre. Termination requires the VF-45 Socket Termination Kit (VOL-0562). The VF-45 Socket Fibre Holders (VOL-0011) may be purchased separately as replacement parts, if necessary.

VF-45™ Singlemode Socket and Plug



The dust shutters on the plug and socket are blue.

Typical Performance Data

Volition Singlemode VF-45 Patch Cords, interconnected with Volition VF-45 Sockets, have the following typical performance.

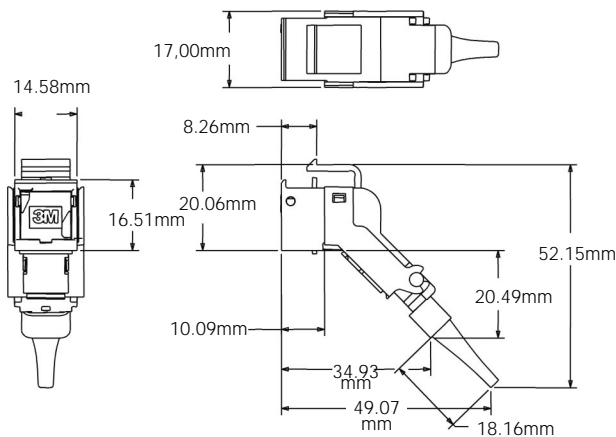
Singlemode Loss & Reflectance		
Typical Performance		
	Loss (dB)	Return Loss (dB)
Wavelength	1310	1310
Mean	0.20	56.4
Sigma	0.18	3.4

TIA 568 and ISO 11801 specify:

Loss ≤ 0.75dB

Return Loss > 26.0dB

Volition Singlemode VF-45™ Socket



Typical Performance Data continued

Test	Performance
Attenuation	≤0.75dB (typical 0.2 dB)
Return loss	>26dB (typical 56 dB)
Mating durability	500 cycles, ≤0.75 dB
Strength of coupling	33 N, ≤0.75 dB
Impact	8 drops @ 1.8 m, ≤0.75 dB
Plug cable retention	Tensile load 66 N, Side Pull 19.4 N, ≤0.75 dB
Plug flex	100 cycles, ± 90 degrees, 0.5 kg, ≤0.75 dB
Plug twist	10 cycles, ± 2.5 revolutions, 15 N, ≤0.75 dB
Cold	-10°C for 96 hours, ≤0.3 dB increase
Heat	+60 °C for 14 days, ≤0.3 dB increase
Humidity	+40 °C, 95% RH for 96 hours, ≤0.4 dB

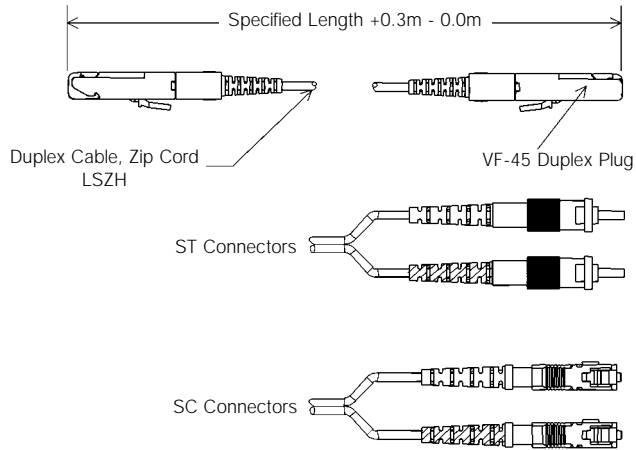
Specifications

VF-45™ Patch Cords

Material	Specification
Connector:	Engineering Thermoplastic UL-94 V0
Boot:	Thermoplastic Elastomer
Fibre:	9 µm singlemode

The cable used to make Volition Patchcords contains a singlemode optical fibre with 100µm glass cladding diameter and 125µm polymer coating diameter. The polymer is a tough, permanent, primary coating, which provides improved strength and bend resistance. The static fatigue parameter is a 50% improvement over standard glass. This high-strength fibre is fully compatible and intermatable with standard glass fibre.

VF-45 Patch Cords are available in the following combinations:
VF-45 to VF-45, VF-45 to ST, VF-45 to SC, VF-45 to MT-RJ



Ordering Information

Ref.-No.

VF-45 to VF-45 Patch Cords



1 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-V9L1
1.5 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-V9L1.5
2 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-V9L2
3 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-V9L3
5 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-V9L5
6 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-V9L6
8 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-V9L8
15 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-V9L15
30 m	PU: 1 ea/ca.	MOQ: 1 ea	VOL-V9L30

VF-45 to ST Patch Cords



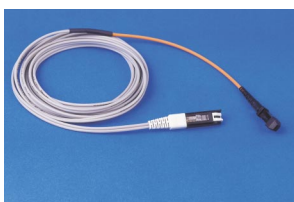
1 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-T9L1
1.5 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-T9L1.5
2 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-T9L2
3 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-T9L3
5 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-T9L5
6 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-T9L6
8 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-T9L8
15 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-T9L15
30 m	PU: 1 ea/ca.	MOQ: 1 ea	VOL-T9L30

VF-45 to SC Patch Cords



1 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-C9L1
1.5 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-C9L1.5
2 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-C9L2
3 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-C9L3
5 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-C9L5
6 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-C9L6
8 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-C9L8
15 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-C9L15
30 m	PU: 1 ea/ca.	MOQ: 1 ea	VOL-C9L30

VF-45 to MT-RJ Patch Cords



1 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-M9L1
2 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-M9L2
3 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-M9L3
5 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-M9L5
6 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-M9L6
8 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-M9L8
10 m	PU: 12 ea/ca.	MOQ: 12 ea	VOL-M9L10

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