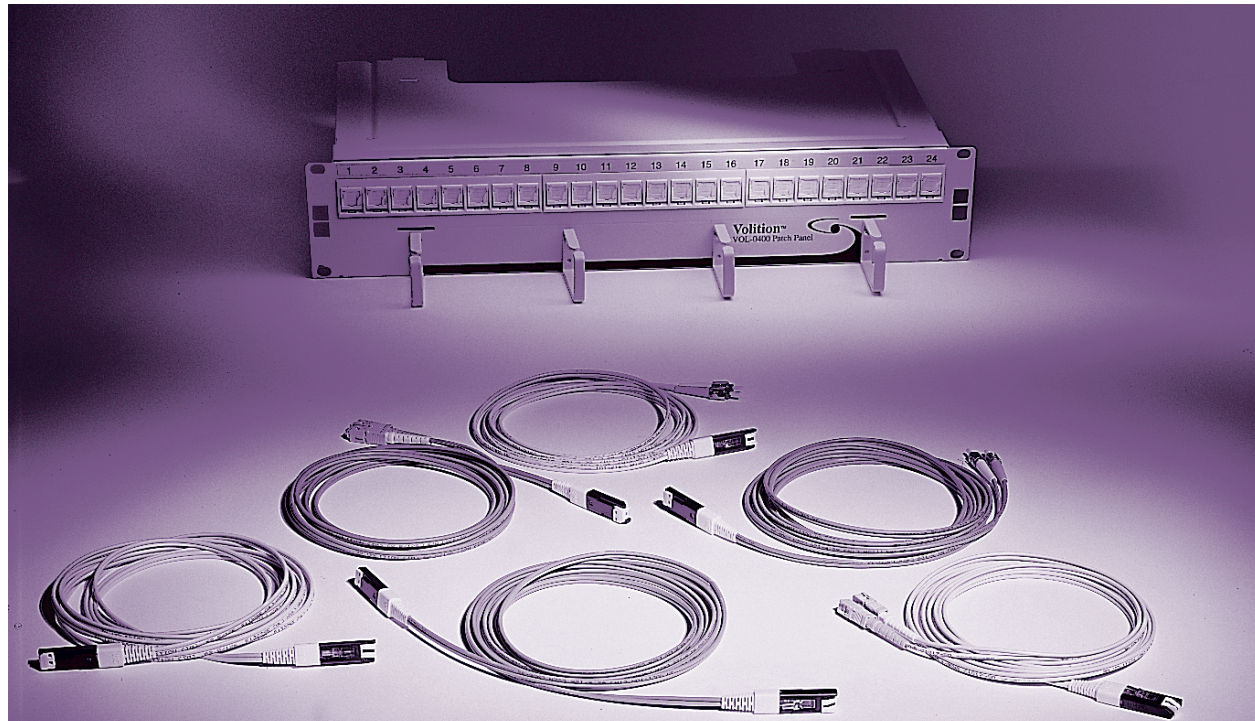
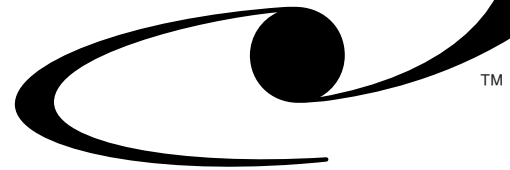


Volition™ Multimode VF-45™ Socket and Patch Cords



IT'S AS EASY AS PLUGGING IN A RJ-45.

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

VF-45 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 multimode fiber using the Volition VF-45 Termination Kit takes less than two minutes, two fibers at a time!

The mating VF-45 plugs, factory-terminated onto patch cords, enables interconnection from socket-to-socket or from socket-to-transceiver devices. VF-45 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 fiber, providing for durability and tight bend radius in desktop applications.

3M Innovation

The VF-45™ fiber optic interconnect conforms to a combination of TIA, ISO, IEC and 3M specifications chosen to meet even the toughest customer expectations. The VF-45 interconnect is the heart of a full system of Volition™ products that provides affordable optical fiber premises cabling solutions.

FEATURES

- Plug-to-socket design (no adapter needed)
- High-density duplex interconnect
- V-groove alignment with injection-molded parts
- RJ-45 style latch
- Socket, snap together assembly
- Tested to TIA and IEC performance requirements
- Patch cords made with 3M high strength fiber (requiring a minimum bend diameter of only one inch)
- Full line of Volition Cabling System products and services

BENEFITS

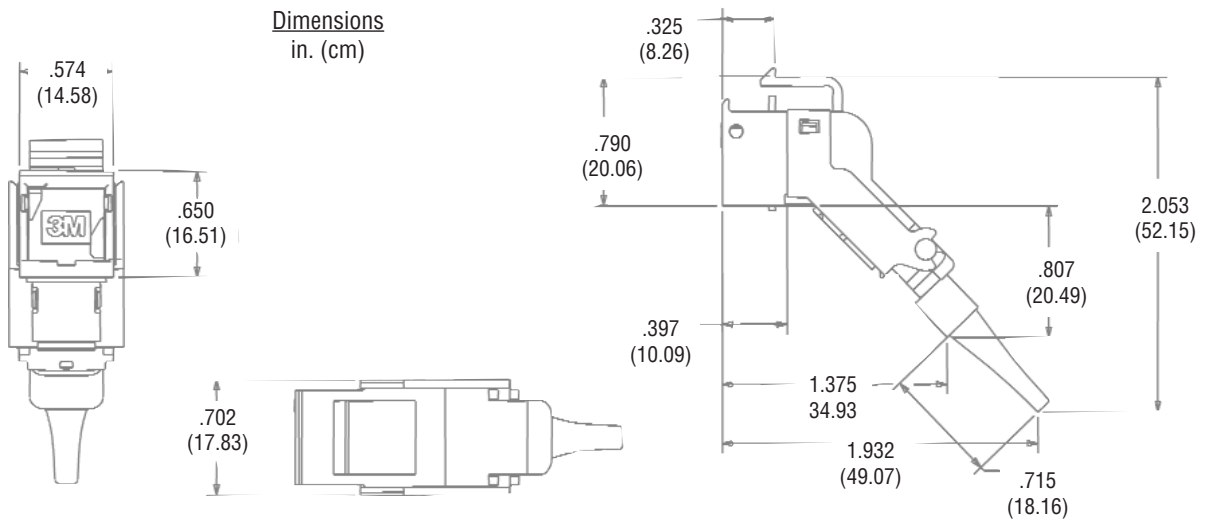
- Low cost
- Small size
- Eliminates expensive ferrules, sleeves or precision components
- Familiar, easy to use
- Easy to install, lower labor costs
- Reliable
- Dependable in under-desk applications
- Warranted system offering

Ordering Information — Volition™ VF-45™ Socket from 3M

Model #	Description
VOL-0001*	VF-45 Socket, Multimode
VOL-0011	VF-45 Socket Fiber Holder

*The VF-45 Socket (VOL-0001) includes socket base, housing, Socket Fiber Holder VOL-0011 and boot; complete for termination to 250 μm coated multimode fiber. Termination requires the VF-45 Socket Termination Kit (VOL-0560). The VF-45 Socket Fiber Holders (VOL-0011) may be purchased separately as replacement parts, if necessary.

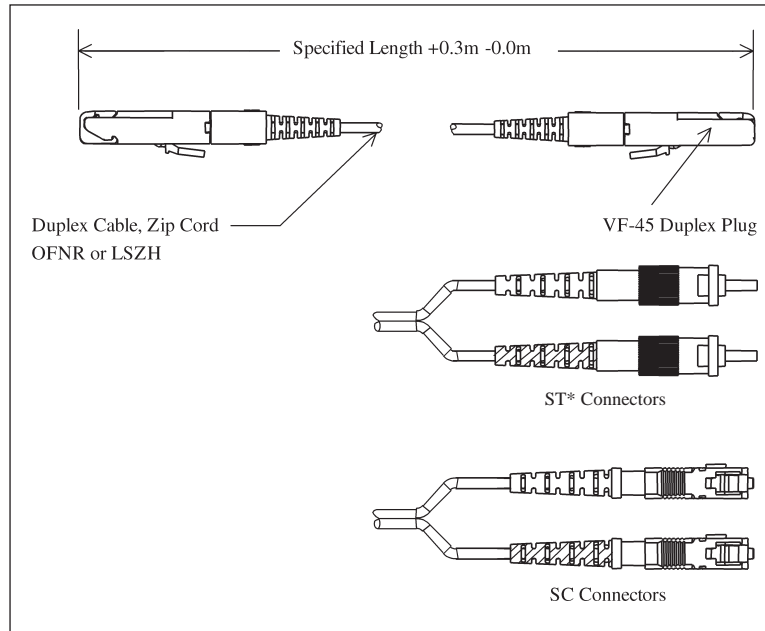
VOLITION VF-45 SOCKET



VOLITION™ VF-45™ PATCH CORDS

VF-45 Patch Cords are available in the following combinations:

- VF-45 to VF-45
- VF-45 to ST*
- VF-45 to SC



Volition VF-45 Patch Cord Material Specifications

Material	Specification
Connector:	Engineering Thermoplastic UL-94 V0
Boot:	Thermoplastic Elastomer
Fiber:	62.5 μm or 50 μm multimode

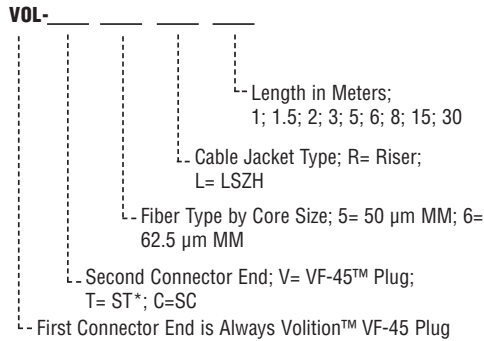
The cable used to make Volition Patch Cords is a graded index multimode optical fiber with 100 μm glass cladding diameter and 125 μm polymer coating diameter. The polymer is a tough, permanent primary coating, which provides improved strength and bend resistance. The static fatigue parameter is a 50% improvement over standard glass. This high-strength fiber is fully compatible and intermateable with standard glass fiber.

Ordering Information

Volition VF-45 Patch Cords may be ordered in the following lengths. m (ft.)

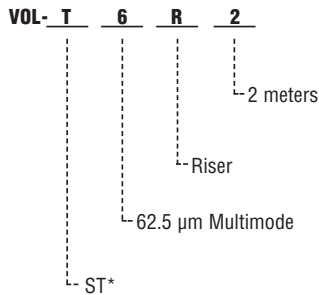
1 (3.2)	3 (9.8)	8 (26.2)
1.5 (4.9)	5 (16.4)	15 (49.2)
2 (6.5)	6 (19.7)	30 (98.4)

MODEL NUMBERS

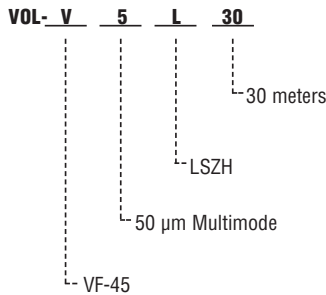


OFNR= Optical Fiber Non-Conductive Riser
LSZH= Low Smoke, Zero Halogen

EXAMPLES



Description: VF-45 to ST*, 62.5 μ m
Multimode OFNR Cable, 2 meters.



Description: VF-45 to VF-45, 50 μ m
Multimode LSZH Cable, 30 meters.

SPECIFICATIONS

Loss and Reflective Typical Performance

Volition VF-45 Patch Cords interconnected with Volition VF-45 Sockets perform to the following loss and reflection data:

62.5 μ m Loss & Reflection Typical Performance					50 μ m Loss & Reflection Typical Performance						
		Loss (dB)		Reflection (dB)				Loss (dB)		Reflection (dB)	
		1310	850	1310	850			1310	850	1310	850
Mean		-0.21	-0.28	-29.2	-27.2	Mean		0.28	0.37	-33.3	-32.7
Sigma		0.13	0.14	1.41	1.77	Sigma		0.17	0.17	1.83	1.57

SPECIFICATIONS (CONT.)

Volition™ VF-45™ Patch Cords interconnected with Volition VF-45 sockets conform to the following combination of TIA, IEC and 3M performance specifications:

Test	Test Condition/Requirements
Attenuation:	< 0.75 dB max
Reflection:	> 20 dB max
Mating durability:	500 cycles, <0.75 dB max
Strength of coupling:	> 33 N, < 0.75 dB max
Plug cable retention:	Tensile load > 66 N, Side Pull > 6.6 N, < 0.75 dB max
Plug flex:	100 Cycles, ± 90 degrees, 0.5 kg, < 0.75 dB max
Plug twist:	10 Cycles, ± 2.5 revolutions, 15 N, < 0.75 dB max
Cold:	-10°C for 96 hours, < 0.3 dB increase
Heat:	+60°C for 14 days, < 0.3 dB increase
Thermal cycling:	-10°C to 60°C, 5 Cycles, < 0.3 dB increase
Vibration:	10 to 55 Hz, 30 min. each axis, < 0.3 dB increase

Important Notice

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one year from the date of purchase. 3M MAKES NO OTHER WARRANTIES


INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.



Telecom Systems Division

6801 River Place Blvd.
Austin, TX 78726-9000
800 695-0447
FAX 512 990-7962
<http://www.3M.com/volition>

Volition, VF-45 and the "dot wave" symbol are trademarks of 3M.
ST* is a registered trademark of Lucent Tehnologies.

 40% Pre-consumer waste paper
10% Post-consumer waste paper

Litho in USA. © 3M IPC 2000 80-6111-5982-5