Customer Premises Products (Enterprise)

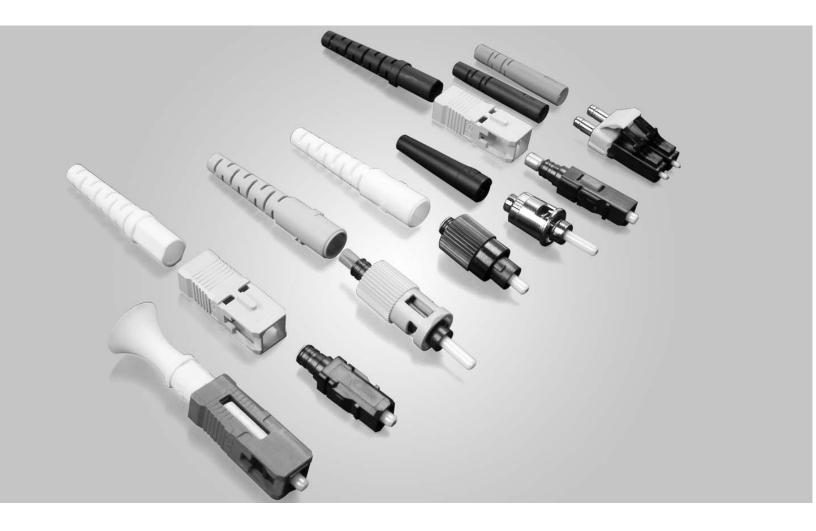
3M

Connectors, Tools/Supplies, Couplings and Splices

Fiber Connectors	15.2
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Many of the products in this catalog are certified as compliant with RoHS standards. For a complete and updated listing of specific RoHS-compliant products, refer to the 3M Communications Technology website at www.3M.com/ROHS.

3M™ Fiber Connectors



Drawing on 70 years of adhesive expertise and 40 years of experience in ceramic technology, 3M provides convenient, reliable, and easy-to-install connectors for both fiber and copper networks.

3M™ Hot Melt Fiber Optic Connectors have a proven record of high yield and reliable performance in both indoor and outdoor local area networks around the world. 3M™ Crimplok™ Fiber Optic Connectors are ideal where there is no electricity or in difficult locations. 3M™ Volition™ VF-45™ Connectors offer unprecedented simplicity. 3M™ No Polish Connectors help enable a fast, on-site installation that eliminates field polishing.

All 3M fiber connectors meet ANSI/TIA/EIA-568B.3.

3M™ FIBER CONNECTORS

Hot Melt LC Connector

The only LC connector with hot melt adhesive. The LC connector offers all the advantages of the 3M hot melt technology, including fast installation, ease of termination, reliability, low insertion loss and very high yield. These singlemode and multimode connectors meet and exceed TIA 568B.3 requirements for both indoor and outdoor LAN applications. As with the 3M SC and FC hot melt connectors, there is no need for a syringe, applicator or mixing of epoxy with the LC connector.



FEATURES

BENEFITS

Hot melt factory injected adhesive	No epoxy mixing, no pot life, ready to install
Fast termination time	Can help reduce labor in field
Precisely engineered polishing fixture	Provides exacting fiber finish for low loss and reflection performance
Meets and exceeds TIA-568B.3 performance	Helps provide user reliability
Typically <0.2 dB in field insertion loss	Network optical budget headroom
Consistent quality and application process	Reliable termination, minimal call backs
Compatible with industry standard LC form	Intermateable with installed base
Utilizes current hot melt kit with additional LC expansion kit	Minimal new tool purchase for existing hot melt users

		PKG.	MIN. ORDER	UPC 051115
6600-S	MM hot melt simplex 900 BTW white boot	1/bag, 60/carton	60 each	19027
6602-S	MM hot melt simplex 1.6-2.0 cable white boot	1/bag, 60/carton	60 each	18703
6603-S	MM hot melt simplex 2.4-3.0 cable white boot	1/bag, 60/carton	60 each	19028
6601-D	MM hot melt duplex 900 buffer white/beige boots	1/bag, 60/carton	60 each	19029
6602-D	MM hot melt duplex 1.6-2.0 cable white/beige boots	1/bag, 60/carton	60 each	18704
6603-D	MM hot melt duplex 2.4-3.0 cable white/beige boots	1/bag, 60/carton	60 each	19030
6604-D	MM hot melt duplex 900 buffer red/black boots	1/bag, 60/carton	60 each	19031
6605-D	MM hot melt duplex 1.6-2.0 cable red/black boots	1/bag, 60/carton	60 each	19032
6606-D	MM hot melt duplex 2.4-3.0 cable red/black boots	1/bag, 60/carton	60 each	19033
8600-S	SM hot melt simplex 900 BTW white boot	1/bag, 60/carton	60 each	19034
8602-S	SM hot melt simplex 1.6-2.0 cable white boot	1/bag, 60/carton	60 each	18705
8603-S	SM hot melt simplex 2.4-3.0 cable white boot	1/bag, 60/carton	60 each	19035
8601-D	SM hot melt duplex 900 buffer white/beige boots	1/bag, 60/carton	60 each	19036
8602-D	SM hot melt duplex 1.6-2.0 cable white/beige boots	1/bag, 60/carton	60 each	18706
8603-D	SM hot melt duplex 2.4-3.0 cable white/beige boots	1/bag, 60/carton	60 each	19037

3M™ FIBER CONNECTORS



SC (Epoxy, Hot Melt, Crimplok™ and No Polish) Connector

3M has simplified the SC connector to enhance performance and cable retention and provide a readily field mountable connector. The SC epoxy connector complies with the NTT, JIS, ISO/IEC and TIA/EIA component and ISO/IEC, CENELEC, ANSI, TIA/EIA-568B.3 and cabling level standards. It features a rectangular push-pull coupling mechanism for easy insertion and high repeatability. The epoxy SC connector is available in singlemode and multimode.

3M Hot Melt SC connectors, available in singlemode and multimode, are preloaded with hot melt adhesive, enabling a field termination in less than two minutes. The SC connector is also available as the 3M™ Crimplok™ Connector, combining 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 where there is no power.



3M No Polish Connector (NPC) SCs utilize a one-piece, pre-assembled design that eliminates field polishing and loose parts. With a factory-polished ferrule assembly and a mechanical splice, the connector can be quickly installed – without electrical power – using a simple field tool. NPC is available in singlemode and multimode.

FEATURES

BENEFITS

3M™ SC CONNECTOR (EPOXY)	
Intermateable within NTT specifications	No retrofit, compatibility issues
Push-pull mating	High density, repeatable connections
Pull-proof (independent) ferrule	Maintains optical contact
3M PC finish	Excellent transmission performance
Zirconia ceramic ferrule	Reduces reflection problems; Field polish ≤-45 dB reflection (singlemode only)
Thermoplastic shell	Corrosion resistant
Fewer parts	Fast, simple termination
Meets Telcordia (SM) and EIA/TIA (MM)	Reliable long-term performance
3M™ HOT MELT SC CONNECTOR	
Pre-loaded hot melt adhesive	Extended shelf life, fewer consumables (can save money)
No waiting for epoxy to cure	Termination in two minutes (productivity)
Single-step polish for multimode	Only one abrasive to buy; faster polishing (reduces cost)
Meets EIA/TIA-568B.3	Rugged, reliable performance
3M™ CRIMPLOK™ SC CONNECTOR	
Non-adhesive design	Clean and simple terminations
No set-up required	Helps save time and money
No waiting for epoxy to cure	Termination in less than one minute with fully prepared fiber
No power required	Installation anywhere
Meets EIA/TIA-568B.3	Rugged, reliable performance

ORDERING INFORMATION

3M™ SC CONN	3M [™] SC CONNECTOR						
PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 054007-			
6300-W	Connector SC MM hot melt, white boot	60 each (1.10)	60 each	91725			
6300-W5-12	Connector SC MM hot melt, white boot, 5 pks of 12 each	60 each (1.00)	60 each	36680*			
6306-B	Connector SC MM epoxy, black boot	60 each (0.40)	60 each	70016*			
6306-BE	Connector SC MM epoxy, beige boot	60 each (0.85)	60 each	91724			
6900	Crimplok [™] connector SC MM 125 UM	60 each (0.85)	60 each	92815			
8300	Connector SC SM hot melt	60 each (1.00)	60 each	57747*			
8306	Connector SC SM epoxy, white boot	60 each (0.90)	60 each	91722			
8306-SC/APC	Connector SC APC 126 SM field mountable epoxy	60 each	60 each	87051*			
8307	Connector SC SM epoxy 127 UM	60 each (0.90)	60 each	91723			
8900	Crimplok™ connector SC SM 126 UM	60 each (1.00)	60 each	75386*			
*IIDC profix 051120							

*UPC prefix 051138-

NOTE: MM - Multimode; SM - Singlemode

SPECIFICATIONS

		MULTIMODE			SINGLE	MODE	
PRODUCT NUMBER	6300	6900	6306	8300	8306 I 8307	8900	8306-APC
CONNECTOR TYPE	HOT MELT CERAMIC	CRIMPLOK CERAMIC	EPOXY CERAMIC	HOT MELT CERAMIC	EPOXY	CRIMPLOK CERAMIC	EPOXY CERAMIC
Fiber size (μm)	125	125	125	126	126 127	126	126
Insertion loss (dB) field mount (one mated pair) at 1300 nm	<0.2 typical	<0.2 typical	<0.2 typical	<0.2 typical	<0.3 typical	<0.2 typical	<0.3 typical
Reflection (dB) Field mount	-25 typical	-25 typical	-25 typical	-40 typical	-45 typical	-40 typical	-65 typical
Connection durability (dB), after 500 matings	<0.2 change						
Operating temperature Connector only (cable dependent)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-10° to 60°C (14° to 140°F)	-40° to 85°C (-40° to 185°F)
Storage temperature	-40° to 85°C (-40° to 185°F)	-40° to 80°C (-40° to 176°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 80°C (-40° to 176°F)	-40° to 85°C (-40° to 185°F)
Cable tension (in service) Straight pull Side pull	<0.5 dB increase at 7.5 lbs. <0.5 dB increase at 3 lbs.	<0.5 dB increase at 20 lbs. <0.5 dB increase at 3 lbs.	<0.5 dB increase at 7.5 lbs. <0.5 dB increase at 3 lbs.	<0.5 dB increase at 7.5 lbs. <0.5 dB increase at 3 lbs.	<0.5 dB increase at 7.5 lbs. <0.5 dB increase at 3 lbs.	<0.5 dB increase at 20 lbs. <0.5 dB increase at 3 lbs.	<0.5 dB increase at 7.5 lbs. <0.5 dB increase at 3 lbs.
Testing specifications	TIA	TIA	TIA	TIA	Telcordia/TIA	TIA	Telcordia/TIA
Material Connector ferrule Connector body and housing Boot	Zirconia ceramic Engineered resin Thermoplastic elastomer						
Flame retardancy	UL-94 V-0						
Connector identification Body Outer shell Boot*	Black Beige White	Black Beige Black	Beige Beige Beige	Black Blue White	Beige Blue White	Black Blue Black	Beige Green Green
Field termination kit 120 V 230 V	6365 6361	6955 (no power needed)	-	6365 6361	_	6955 (no power needed)	8366 Conversion kit

Notes: TIA = TIA/EIA 568B.3. Telcordia GR-326-CORE.

^{*}Other boot colors are available.



3M™ FIBER CONNECTORS

ST (Epoxy, Hot Melt and Crimplok™) Connector

3M has simplified the ST connector to help enhance performance and cable retention and provide a readily field mountable connector. The ST epoxy connector complies with the NTT, JIS, ISO/IEC and TIA/EIA component and ISO/IEC, CENELEC, ANSI, TIA/EIA-568B.3 and cabling level standards. The epoxy ST connector is available in singlemode and multimode.

3M Hot Melt ST connectors, available in singlemode and multimode, are preloaded with hot melt adhesive, enabling a field termination in less than two minutes. The ST connector is also available as the 3M™ Crimplok™ Connector, combining 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 where there is no power.

FEATURES

BENEFITS

3M™ EPOXY BAYONET ST CONNECTOR	
Bayonet design	Quick interconnect
Keyed connector	Provides high repeatability
Pre-radiused PC ferrule	Provides contact of fibers; low reflection, consistent performance
Zirconia ceramic ferrule	Durability; stability through temperature change; quality performance
Meets TIA/EIA 568B.3	Rugged, reliable performance
3M" HOT MELT BAYONET ST CONNECTOR	
Pre-loaded hot melt adhesive	No epoxy to mix; no syringe needed; shorter set-up time; fewer consumables; no shelf life; no mess; no waste
Fast cure time	Short heat and cool cycle; can save time
Unlimited adhesive shelf life	Virtually eliminates outdated epoxy inventory and stock rotation requirements
No crimping required	Fewer tools; saves time
Pre-radiused PC ferrule	Provides contact of fibers; consistent performance
Zirconia ceramic ferrule	Durability; stability through temperature change; quality performance
Meets TIA/EIA 568B.3	Rugged, reliable performance
3M™ CRIMPLOK™ ST CONNECTOR	
Non-adhesive design	Clean and simple terminations
No set-up required	Helps save time and money
No electricity required	Installation anywhere
Meets TIA-568B.3 specifications	Rugged, reliable performance

ORDERING INFORMATION

PRODUCT Number	DESCRIPTION	PKG.	MIN. ORDER	UPC 054007-
6100-W	ST MM hot melt, white boot	1/bag, 60/cs.	60 each	91141
6100-B	ST MM hot melt, black boot	1/bag, 60/cs.	60 each	91142
6100-R	ST MM hot melt, red boot	1/bag, 60/cs.	60 each	91143
6105-B	ST MM, epoxy, black boot	1/bag, 60/cs.	60 each	91144
6105-R	ST MM, epoxy, red boot	1/bag, 60/cs.	60 each	48464
6901	ST MM crimplok	1/bag, 60/cs.	60 each	92813
8100-YS	ST SM hot melt, yellow boot	1/bag, 60/cs.	60 each	36650*
8106	ST SM, epoxy, yellow boot	1/bag, 60/cs.	60 each	17772
8107	ST SM, epoxy (127 µm), yellow boot	1/bag, 60/cs.	60 each	48716
8901	ST SM crimplok, blue boot	1/bag, 60/cs.	60 each	75388*
*UPC prefix 05113 NOTE: MM – Multi	38- imode; SM – Singlemode			

SPECIFICATIONS

	HOT MELT BAYONET CRIMPLOK™		EPOXY E	BAYONET		
	MULTIMODE	SINGLEMODE	MULTIMODE	SINGLEMODE	MULTIMODE	SINGLEMODE
PRODUCT NUMBER	6100	8100YS	6901	8901	6105	8106 8107
CONNECTOR TYPE	HOT MELT CERAMIC	HOT MELT CERAMIC	CRIMPLOK CERAMIC	CRIMPLOK CERAMIC	EPOXY CERAMIC	EPOXY CERAMIC
Fiber size µm	125	126	125	126	125	126 127
Insertion loss (dB) field mount (one-mated pair) at 1300 nm	<0.2 typical	<0.2 typical	<0.2 typical	<0.2 typical	<0.2 typical	<0.3 typical
Reflection (dB) field mount	-25 typical	-40 typical,	-25 typical	-40 typical	-25 typical	-45 typical
Connector durability (dB) 500 matings	<0.2 change	<0.2 change	<0.3 change	<0.3 change	<0.2 change/ 1000 matings	<0.2 change
Operating temperature	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-10° to 60°C (14° to 140°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)
Storage temperature	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)
Testing specifications	TIA*	TIA*	TIA*	TIA*	Telcordia	Telcordia
Material Connector ferrule Connector housing Boot	Zirconia ceramic Nickel plated zinc Thermoplastic	Zirconia ceramic Nickel plated zinc Thermoplastic	Zirconia ceramic Thermoplastic polymer Thermoplastic	Zirconia ceramic Thermoplastic polymer Thermoplastic	Zirconia ceramic Nickel plated zinc Thermoplastic	Zirconia ceramic Nickel plated zinc Thermoplastic
Flame retardancy	Elastomer UL-94 V-0	Elastomer UL-94 V-0	Elastomer UL-94 V-0	Elastomer UL-94 V-0	Elastomer UL-94 V-0	Elastomer UL-94 V-0
Identification	Blue dot on end of ferrule, white boot	Blue dot on end of ferrule, yellow boot	Black body Beige shell Grey boot	Black body Beige shell Blue boot	Black backbone	Silver backbone
Field termination kit 120V 230V	6365 6361	6365 6361	6955 (no power needed)	6955	-	-

*TIA/EIA 568B.3

Note: Other boot colors are available.





3M™ FIBER CONNECTORS

FC/PC (Epoxy/Hot Melt) Connector

The FC connector is a field mountable, pull-proof connector that is designed to be fully compatible with all FC connectors adhering to the NTT specification. The FC connector will help maximize termination yield through ease of mounting and a high performance polishing procedure.

The three-piece connector design (connector, crimp ring, and boot) is mounted using the same simple process used for other 3M connectors. The FC connector is available in singlemode and multimode utilizing epoxy adhesive. It is also available in singlemode and multimode preloaded with 3M's hot melt adhesive, enabling a field termination in less than two minutes for multiple terminations.

All 3M FC connectors meet the requirements of TIA/EIA-568B.3 (including composite ferrules). Singlemode epoxy connectors are compliant with Telcordia GR-326-CORE.

ORDERING INFORMATION

FC/PC (EPOXY/HOT MELT) CONNECTORS							
PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 054007-			
6200	Connector FC/PC 3 MM hot melt, white boot	60 each (0.95)	60 each	91717			
6202	Connector FC/PC MM epoxy, beige boot	60 each (0.90)	60 each	91716			
8200-W	Connector FC SM hot melt 126 µm, white boot	60 each (1.00)	60 each	89062*			
8203	Connector FC/PC SM epoxy, white boot	60 each (0.40)	60 each	91719			
8204	Connector FC/PC SM epoxy 127 µm, white boot	60 each (0.90)	60 each	91720			
8206-FC/APC	FC/APC 126 SM epoxy FM connector, green boot	60 each	60 each	87052*			
*UPC prefix 051138- NOTE: MM – Multimode:	SM – Singlemode: FM – Field Mountable						

FEATURES BENEFITS

FC CONNECTOR	
Pull-proof (independent) ferrule	Maintains optical contact
Compatible with FC NTT specifications	Versatility; convenient global source
Pre-radiused PC ferrule	Fiber centered in radius, improved performance
Zirconia ceramic ferrule	Helps reduce reflection problems; Field polish ≤-45 dB reflection (singlemode epoxy only*)
High strength thermoplastic housing	Virtually eliminates flaking of metal plating
Keyed threaded connector	High repeatability, can improve stability of system
HOT MELT VERSION ONLY (IN ADDITION TO ABOVE)	
Pre-loaded hot melt adhesive	Extended shelf life, fewer consumables (can save money)
No waiting for epoxy cure	Termination in two minutes
Single-step polish for multimode	Only one abrasive to buy; faster polishing (can reduce cost)
*When mated with another connector with the same polish	

electronic components distributor

SPECIFICATIONS

	MULT	TIMODE	SINGLEMODE				
PRODUCT NUMBER	6200	6202	8203	8204	8200	8206-FC/APC	
CONNECTOR TYPE	HOT MELT CERAMIC	EPOXY CERAMIC	EPOXY CERAMIC (126)	EPOXY CERAMIC (127)	HOT MELT CERAMIC	EPOXY CERAMIC	
Fiber size (μm)	125	125	126	127	126	126	
Insertion loss (dB) field mount (one mated pair) at 1300 nm	<0.2 typical	<0.2 typical	<0.3 typical	<0.3 typical	<0.2 typical	<0.2 typical	
Reflection (dB) field mount	-25 typical	-25 typical	-45 typical	-45 typical	-40 typical	-65 typical	
Connector durability (dB) after 200 matings	<0.2 change						
Operating temperature connector only (cable dependent)	-40° to 85°C (-40° to 185°F)						
Storage temperature	-40° to 85°C (-40° to 185°F)						
Cable tension (in service) Straight pull Side pull	<0.5 dB increase at 90N (20.5 lbf) <0.5 dB increase at 13N (3 lbf)	<0.5 dB increase at 90N (20.5 lbf) <0.5 dB increase at 13N (3 lbf)	<0.5 dB increase at 90N (20.5 lbf) <0.5 dB increase at 13N (3 lbf)	<0.5 dB increase at 90N (20.5 lbf) <0.5 dB increase at 13N (3 lbf)	<0.5 dB increase at 90N (20.5 lbf) <0.5 dB increase at 13N (3 lbf)	<0.5 dB increase at 90N (20.5 lbf) <0.5 dB increase at 13N (3 lbf)	
Testing specifications	TIA*	TIA*	TIA Telcordia**	TIA* Telcordia**	TIA*	TIA* Telcordia**	
Material Connector ferrule Connector housing and body Boot	Zirconia ceramic Engineered resin Thermoplastic Elastomer						
Flame retardancy	UL-94 V-0						
Identification Backbone Coupling nut Boot	Beige Black White	Black Black Beige	Black Gray White	Black Gray White	Black Gray White	Beige Green Green	
Field termination kit 120V 230V	6355 6351	8365 8361	8365 8361	8365 8361	6355 6351	8367 Conversion kit	

^{**}Telcordia GR-326-CORE

PRODUCT REFERRAL GENERATOR

SC/FC/PC Field Termination Kits Epoxy

Fiber Distribution Units Hot Melt....



3M™ VOLITION™ VF-45™ SOCKETS

VF-45 sockets include socket base, housing, fiber holder (VOL-0011) and strain relief boot. Mounting of the VF-45 socket onto backbone or horizontal cable requires the VOL-0563 quick install kit. The keyed bezel (for mounting into Volition accessories) is required and sold separately in 11 colored keyed configurations.

VOLITION VF	-45 SOCKETS			
PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051115-
VOL-0001	VF-45 socket MM	96 each (2.08 lbs.)	96 each	58290*
VOL-0002	VF-45 socket SM	96 each (2.08 lbs.)	96 each	75927*
VOL-0003	Keyed VF-45 socket MM, no bezel	96 each (2.08 lbs.)	96 each	15693
VOLITION VF	-45 SOCKET BEZELS			
PRODUCT NUMBER	DESCRIPTION	PKG.	MIN. ORDER	UPC 051115-
VOL-0720-BL	Bezel for keyed VF-45 socket, blue	12 each	12 each	18261
V0L-0720-0R	Bezel for keyed VF-45 socket, orange	12 each	12 each	18262
VOL-0720-GR	Bezel for keyed VF-45 socket, green	12 each	12 each	18263
V0L-0720-BR	Bezel for keyed VF-45 socket, brown	12 each	12 each	18264
V0L-0720-SL	Bezel for keyed VF-45 socket, slate	12 each	12 each	18265
VOL-0720-RD	Bezel for keyed VF-45 socket, red	12 each	12 each	18266
VOL-0720-BK	Bezel for keyed VF-45 socket, black	12 each	12 each	18267
V0L-0720-YL	Bezel for keyed VF-45 socket, yellow	12 each	12 each	18268
VOL-0720-VI	Bezel for keyed VF-45 socket, violet	12 each	12 each	18269
V0L-0720-RS	Bezel for keyed VF-45 socket, rose	12 each	12 each	18270
VOL-0720-AQ	Bezel for keyed VF-45 socket, aqua	12 each	12 each	18271
VOLITION VF	-45 QUICK INSTALL KIT AND REPLACE	MENT HOLDERS		
PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051115-
VOL-0011	VF-45 socket fiber holders, 250 µm coated fiber	96 each (2.21 lbs.)	96 each	58627*
VOL-0012	VF-45 socket fiber holders, 900 μm buffered fiber	96 each (2.21 lbs.)	96 each	88652*
VOL-0563	VF-45 quick install kit	1 each (4.08 lbs.)	1 each	16206
*UPC prefix 051138-	· ·	1 00011 (1.00 105.)	1 00011	13200

3M™ VOLITION™ VF-45™ FIELD MOUNT PLUG

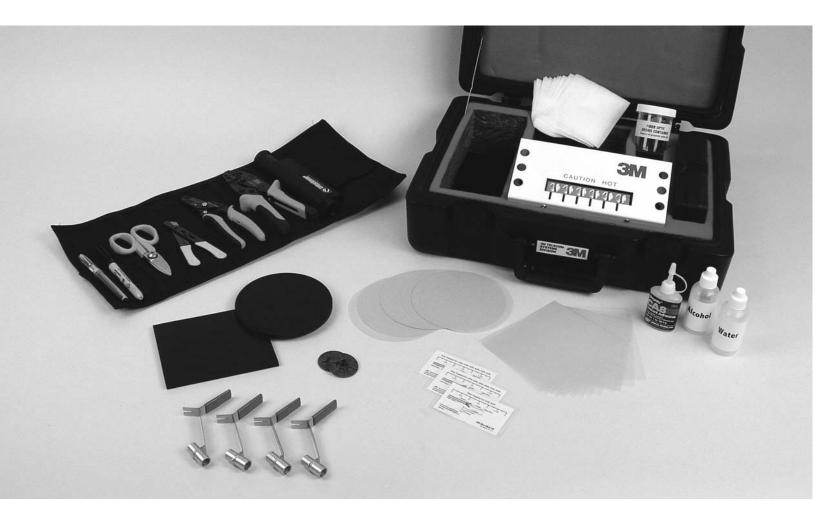
Facilitates the use of consolidation point designs, helps enable emergency link creation through field-made cable assemblies, and allows custom length cable assemblies to be made on site. It is terminated onto Volition two-fiber cable with the quick install kit, the same kit used for the VF-45 socket. An additional plug actuation tool is required and ordered separately.

SPECIFICATIONS

VF-45 field mount plug interconnected with VF-45 sockets conform to the following combination of TIA and 3M performance specifications:				
TEST	TEST CONDITION/REQUIREMENTS	TYPICAL RESULTS 50	TYPICAL RESULTS 62.5	
Attenuation	< 0.75 dB max	850 nm Avg. = -0.35, Std. Dev. = 0.11, 1310 nm Avg. = -0.31, Std. Dev. = 0.10 dB	850 nm Avg. = 0.34, Std. Dev. = 0.10, 1310 nm Avg. = 0.26, Std. Dev. = 0.09 dB	
Reflection	> 20 dB max	850 nm Avg. = -34.31, Std. Dev. = 1.21, 1310 nm Avg. = -35.91, Std. Dev. = 1.46 dB	850 nm Avg. = 27.8, Std. Dev. = 1.27 dB, 1310 nm Avg. = 29.3, Std. Dev. = 1.55 dB	
Mating durability	500 cycles, < 0.75 dB max	Pass	Pass	
Strength of coupling	> 33 N, < 0.75 dB max	Pass	Pass	
Plug flex	100 cycles, \pm 90 degrees, 0.5 kg, $<$ 0.75 dB max	Pass	Pass	
Plug twist	10 cycles, \pm 2.5 revolutions, 15 N, $<$ 0.75 dB max	Pass	Pass	
Cold	-0°C for 96 hours, < 0.3 dB increase	Pass	Pass	
Heat	+60°C for 4 days, < 0.3 dB increase	Pass	Pass	
Cycling	-10°C to 60°C, 5 cycles, < 0.3 dB increase	Pass	Pass	
Humidity	95% RH, +40°C for 4 days, < 0.3 dB increase	Pass	Pass	
Tensile load	> 50 N, side pull > 19.4 N	Pass	Pass	
Plug cable retention	< 0.75 dB max	Pass	Pass	

PRODUCT NUMBER	DESCRIPTION	PKG.	MIN. ORDER	UPC 051115-
The field mount plug is a	available in 50 µm and 62.5 µm multimode versions, in packages of	12.		
VOL-FMP612	VF-45 field mount plug 62.5/125 MM non-keyed	1 each	12/package	15569
VOL-FMP512	VF-45 field mount plug 50/125 MM non-keyed	1 each	12/package	15570
	designed for termination to Volition type two-fiber horizontal cable a led with each package. For source information call Customer Servic		ck install kit and actuation too	ıl.
VOL-0563	VF-45 quick install kit	1 each	1 package	16206
VOL-0563A	Actuation tool, VF-45 field mount plug	1 each	1 package	15115
*UPC prefix 051138- NOTE: MM – Multimode; To order, call 800/426 86	SM – Singlemode 588. For more information, please contact your local 3M representative			

3M™ Fiber Optic Termination Kits and Accessories



3M fiber optic termination kits and accessories provide tools and materials necessary to terminate the major fiber optic connectors found in the industry today.

Conversion kits make it easy to incorporate both an epoxy process and a hot melt process into one kit. Most kit parts are available separately to supplement existing kits and replenish consumables.

Videos, training classes and detailed manuals are available to assure the best results.

Hot Melt Kits

Hot Melt Kit (120V) PRODUCT NUMBER: 6365 PKG: 1 KIT MIN. ORDER: 1 KIT UPC: 051115-16146



Hot Melt Kit (230V) PRODUCT NUMBER: 6361 PKG: 1 KIT MIN. ORDER: 1 KIT UPC: 051115-16145

The 6365 and 6361 hot melt termination kits contain all materials necessary to terminate hot melt SC, ST and FC Connectors.

PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051138-
6312	Hot melt oven (120V) in 6355 kit	1 each	1 each	87204
6323	Hot melt oven (230V) in 6351 kit	1 each	1 each	87205
6365-HH	Universal hot melt holder ST, SC, FC 4-pack	4 each	4 each	19074-2
6191	Cooling stand	1 each (0.10)	1 each	68729**
6192-A-254X-2D5	Lapping film, one step, hot melt	500 sheets (1.40)	500 sheets	85932***
6192-AA-263X-0.05D5	Lapping film, singlemode final polish, hot melt	500 sheets (2.50)	500 sheets	86345***
05-00017	Lint free cloth	100/pack (0.05)	1 pack	48999**
6365-FS	Carbide fiber scribe	1 each	1 each	16198*
6365-PP	Polishing pad one-step	1 each	1 each	16196*
6365-VS	200X view scope	1 each	1 each	16199*
6365-ST	Stripping tool	1 each	1 each	16200*
8365-PP	Soft polishing pad	1 each	1 each	16197*
661X-1.5S	Polishing film	250 sheets (1.00)	25 sheets	86359***
6365-JS	Jacket stripper	1 each	1 each	16201*
8892	Universal polishing jig	1 each	1 each	70888
6365-KS	Kevlar snips	1 each	1 each	16202*
6365-CC	Classic hot melt consumable kit	1 each	1 each	16192*
*UPC prefix 051115- **UPC prefix 054007- ***UPC prefix 051144-				

^{***}UPC prefix 051144-



Hot Melt Auto Polisher 6850A

The 6850A hot melt polishing machine features a single-paper technology for polishing the ferrule of a single hot melt ST connector. It has a 12-volt DC unit that provides hands-free operation and is designed to deliver consistent performance. Adapters for polishing ferrules of FC and SC connectors are available.

Auto Polisher 120v

PRODUCT NUMBER: 6850A PKG (LBS.): 1 KIT (8.90) MIN. ORDER: 1 KIT UPC: 051138-11516 Auto polisher comes complete with power cord, ST holder and 6192B polishing film.

ST Holder for 6850A

PRODUCT NUMBER: 6892 PKG (LBS.): 1 EACH (0.10) MIN. ORDER: 1 EACH UPC: 054007-92700

SC Holder for 6850A

PRODUCT NUMBER: 6392 PKG (LBS.): 1 EACH (0.10) MIN. ORDER: 1 EACH UPC: 054007-92699

FC Holder for 6850A

PRODUCT NUMBER: 6292 PKG (LBS.): 1 EACH (0.10) MIN. ORDER: 1 EACH UPC: 054007-92701

LC Holder for 6850A

PRODUCT NUMBER: 6692 PKG (LBS.): 1 EACH (0.10) MIN. ORDER: 1 EACH UPC: 051115-21817-0

Auto Polishing Film with Hole for 6850A

PRODUCT NUMBER: 6192B-254X-2D4H PKG (LBS.): 1000 DISCS (1.30) MIN. ORDER: 1000 DISCS UPC: 051144-85930



Volition™ VF-45™ Termination Kits

The kit contains all the materials necessary to install VF-45 sockets onto duplex fiber optic cable. You can complete fiber installations fast and easy; duplex fiber terminations can be completed in less than two minutes.

VF-45 Quick Install Kit

PRODUCT NUMBER: VOL-0563 PKG (LBS.): 1 KIT (4.08) MIN. ORDER: 1 KIT UPC: 051115-16206

VF-45 Maintenance Cleaning Kit

For both keyed and non-keyed VF-45 sockets

PRODUCT NUMBER: VOL-0573 PKG (LBS.): 1 KIT (2.04) MIN. ORDER: 1 KIT UPC: 051115-14607



HFE-Based Cleaning Fluid, 16 oz. Bottle

PRODUCT NUMBER: VOL-0570A PKG (LBS.): 12 EACH (20.76) MIN. ORDER: 12 EACH UPC: 051138-58561

PRODUCT Number	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051115-
6365-JS	Jacket stripper	1 each	1 each	16201
VOL-0560B	Snips	1 each (0.22)	1 each	58564*
VOL-0560C	Micromodule stripper	1 each (0.10)	1 each	58565*
VOL-0560D	Fiber stripper, 250 µm coating	1 each (0.12)	1 each	58566*
VOL-0560F	Polishing puck assembly (includes puck polishing face)	1 each (0.14)	1 each	58568*
VOL-0560G	Puck polishing face	12 each (0.10)	12 each	58569*
VOL-0562H	Polishing station assembly	1 each (0.92)	1 each	88324*
VOL-0562J	Quick polish cleave button	1 each (0.40)	1 each	88239*
VOL-0562K-666XW	Lapping film, 2 x 5	50 sheets	50 sheets	70035***
VOL-0563M	Microscope dual light	1 each	1 each	16207
05-00017	Lint free cloth	100/pack (0.05)	1 pack	48999**
VOL-0560R	Bottle, alcohol, empty	12 each (0.74)	12 each	58597*
05-00251	Cleaning wires	1 each	1 each	49017**
VOL-0563C	Quick install tool case	1 each (1.22)	1 each	18678
VOL-0563P	Tool pouch	1 each (0.62)	1 each	18677

^{***}UPC prefix 051111-



Volition™ VF-45™ Reference Test Cable Set

Reference cable kits enable connections to test equipment with the ST, SC or FC connector interface. Essential for creating a reference reading prior to link testing, they can be used with other manufacturers' test equipment.

The transmit cable consists of a VF-45 plug on one end and a choice of either 2 ST, SC or FC connectors on the other end. The receive cable has a VF-45 socket housed in a protective casing on one end and at the other end there are either 2 ST, SC or FC connectors.

Reference Cable Kit with ST 62.5/125 µm PRODUCT NUMBER: VOL-UREF-062-ST PKG (LBS.): 1 KIT (0.70) MIN. ORDER: 1 KIT UPC: 051115-13773

Reference Cable Kit with SC 62.5/125 μ m PRODUCT NUMBER: VOL-UREF-062-SC PKG (LBS.): 1 KIT (0.70) MIN. ORDER: 1 KIT UPC: 051115-14577

Reference Cable Kit with ST 50/125 µm PRODUCT NUMBER: VOL-UREF-050-ST PKG (LBS.): 1 KIT (0.20) MIN. ORDER: 1 KIT UPC: 051115-13767

Reference Cable Kit with SC 50/125 μm PRODUCT NUMBER: VOL-UREF-050-SC PKG (LBS.): 1 KIT (0.65) MIN. ORDER: 1 KIT UPC: 051115-13770

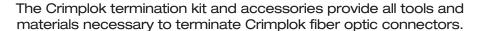
Reference Cable Kit with SC 9/125 µm PRODUCT NUMBER: VOL-UREF-SM-SC PKG (LBS.): 1 KIT (0.64) MIN. ORDER: 1 KIT UPC: 051115-14579

Reference Cable Kit with FC 9/125 µm
PRODUCT NUMBER: VOL-UREF-SM-FC PKG (LBS.): 1 KIT (0.64) MIN. ORDER: 1 KIT UPC: 051115-14580

Reference Cable Kit with ST 9/125 µm PRODUCT NUMBER: VOL-UREF-SM-ST PKG (LBS.): 1 KIT (0.50) MIN. ORDER: 1 KIT UPC: 051115-14578

3M[™] Crimplok[™] Termination Kit

PRODUCT NUMBER: 6955 PKG (LBS.): 1 KIT (0.40) MIN. ORDER: 1 KIT UPC: 051138-58238







PRODUCT NUMBER	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051115-
6365-CT	Universal crimp tool (HM and Crimplok)	1 each	1 each	16194
6955-P	Polishing tool	1 each (0.10)	1 each	58301*
SP-00503	Lapping film, one step	1 pack (0.10)	1 pack	92819**
8892	Universal polishing jig	1 each	1 each	70888*
6955-T	Activation tool	1 each (0.44)	1 each	58236*
6365-VS	200x view scope	1 each	1 each	16199
6365-ST	Stripping tool	1 each	1 each	16200
05-0C251	Cleaning wires, 0.004 diameter	12 each	12 each	49017**
VOL-0563C	Quick install tool case	1 each	1 each	18678
VOL-0563P	Quick install tool pouch	1 each	1 each	18677
6365-JS	Jacket stripper	1 each	1 each	16201
6365-KS	Kevlar snips	1 each	1 each	16202
05-00017	Lint free cloth	1 pack (0.05)	1 pack	48999**
VOL-0560R	Bottle, alcohol, empty	12 each (0.74)	12 each	58597*

Epoxy Termination Accessories

The following accessory items may be added to enhance typical epoxy termination kits available from a number of fiber optic distributors in the industry. These 3M items are designed to optimize the termination of 3M epoxy connectors to meet Telcordia TR-326-CORE specifications.

The soft polishing pad, polishing jig and 3M lapping films optimize the fiber end face finish for low light loss and low reflection in high speed laser systems.

The 8692 epoxy has been tested to Telcordia specifications to assure 3M connectors meet the most stringent environmental requirements.

The syringe with the proper FP-25DT epoxy dispensing tip is important to deliver epoxy into the connector ceramic ferrule without epoxy bleed back that might foul the coupling mechanism.

The 8366 and 8367 conversion kits include an angle polishing jig and additional 3M lapping film to complete the 3M SC and FC / APC angle connectors to meet -65 dB reflection with a field hand polish.

3M" EPOXY TERMINATION ACCESSORIES				
PRODUCT Number	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 054007-
6365-CT	Universal crimp tool	1 each	1 each	16194**
SP-00508	Load adapter, SC 4 pack	4/pack (0.50)	1 pkg.	92846
SP-00507	Load adapter, FC 4 pack	4/pack (0.50)	1 pkg.	92845
8365-PP	Soft polishing pad	1 each	1 each	16197**
8692	Epoxy for fiber optic	25 each (0.04)	25 each	91706
261X-5S	Lapping film, 5 µm AlOx	500 sheets (3.36)	500 sheets	85928***
661X-1.5S	Lapping film, 1.5 µm diamond	250 sheets (1.00)	25 sheets	86359***
262X-1S	Lapping film, 1 µm AlOx	500 sheets (4.00)	500 sheets	85926***
263X-0.05S	Lapping film, final, 0.05 µm AlOx	500 sheets (1.00)	500 sheets	85931***
8892	Universal polishing jig	1 each	1 each	70888*
05-00255	Syringe, 3CC	25 each	25 each	49019
FO-25DT	Epoxy dispensing syringe tips, green	25/pack	1 pkg.	92024
8366	SC/APC conversion kit	1 each	1 each	87073*
8367	FC/APC conversion kit	1 each	1 each	87074*
*UPC prefix 051138- **UPC prefix 051115-				

^{***}UPC prefix 051144-

3M™ FIBER COUPLINGS

LC

COUPLING LC MM DUPLEX

PRODUCT NUMBER: 6613 PKG.: 1 BAG, 60/CS. MIN ORDER: 60 EACH, UPC: 05115-19044

COUPLING LC SM DUPLEX

PRODUCT NUMBER: 8613 PKG.: 1 BAG, 60/CS. MIN ORDER: 60 EACH, UPC: 05115-19045

ST

COUPLING ST MM SIMPLEX

PRODUCT NUMBER: 6112 PKG.(LBS.): 1 BAG, 60/CS. (1.45) MIN ORDER: 60 EACH, UPC: 054007-91153

COUPLING ST MM DUPLEX

PRODUCT NUMBER: 6113 PKG.(LBS.): 1 BAG, 60/CS. (2.50) MIN ORDER: 60 EACH, UPC: 054007-91025

COUPLING ST SM DUPLEX

PRODUCT NUMBER: 8113 PKG.(LBS.): 1 BAG, 60/CS. (2.50) MIN ORDER: 60 EACH, UPC: 054007-91026

COUPLING ST SM SIMPLEX

PRODUCT NUMBER: 8119 PKG.(LBS.): 1 BAG, 60/CS. (1.50) MIN ORDER: 60 EACH, UPC: 054007-68747

SC

COUPLING SC MM SIMPLEX

PRODUCT NUMBER: 6310 PKG.: 1 BAG, 60/CS. MIN ORDER: 60 EACH, UPC: 051138-58072

COUPLING SC MM DUPLEX

PRODUCT NUMBER: 6313 PKG.: 1 BAG, 60/CS. MIN ORDER: 60 EACH, UPC: 051138-58073

COUPLING SC SM SIMPLEX

PRODUCT NUMBER: 8310 PKG.(LBS.): 1 BAG, 60/CS. (0.85) MIN ORDER: 60 EACH, UPC: 054007-48713

COUPLING SC/APC GREEN

PRODUCT NUMBER: 8310-G PKG.(LBS.): 1 BAG, 60/CS. (0.10) MIN ORDER: 60 EACH, UPC: 054007-92948

COUPLING SC SM DUPLEX

PRODUCT NUMBER: 8313 PKG.: 1 BAG, 60/CS. MIN ORDER: 60 EACH, UPC: 054007-92464

FC/PC

COUPLING FC/PC MM

PRODUCT NUMBER: 6210 PKG.: 1 BAG, 60/CS. MIN ORDER: 60 EACH, UPC: 054007-70782

COUPLING FC/PC SM

PRODUCT NUMBER: 8210 PKG.: 1 BAG, 60/CS. MIN ORDER: 60 EACH, UPC: 054007-48805

COUPLING FC/PC SM D-MOUNT

PRODUCT NUMBER: 8211 PKG.: 1 BAG, 60/CS. MIN ORDER: 60 EACH, UPC: 051138-11913

COUPLING FC/APC SM

PRODUCT NUMBER: 8211-APC PKG.: 1 BAG, 60/CS. MIN ORDER: 60 EACH, UPC: 051138-57576







3M™ COPPER CONNECTORS, RJ45 JACKS



3M™ Volition™ Cat. 5e and Cat. 6 RJ45 Keystone Jacks

Cat. 5e and Cat. 6 RJ45 keystone jack design provides consistent and repeatable results. The jack offers tool-less installation, optimized for maximum system performance and reliability; they can be reused many times. The integral shutter protects the contacts from dirt and dust and provides reliability.

FEATURES

BENEFITS

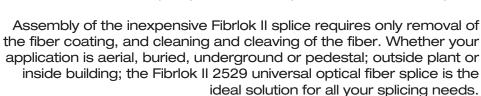
Tool-less installation	No punch down tool, saves time
Keystone dimensions	Compatible with common face plates
Integral dust protection	Protects contacts

3M" COPPER CONNECTORS					
PRODUCT Number	DESCRIPTION	PKG. (LBS.)	MIN. ORDER	UPC 051115-	
VOL-OCK5E-U-W	RJ45 Cat. 5e K5E jack UTP tool-less, white	96 each (4.00)	96 each	22613	
VOL-OCK5E-F	RJ45 Cat. 5e K5E jack FTP tool-less, white, foiled cable	96 each (4.00)	96 each	22614	
VOL-OCK5E-S	RJ45 Cat. 5e K5E jack STP tool-less, white, metallic shield	96 each (4.00)	96 each	22615	
VOL-OCK5E-U-AL	RJ45 cat. 5e K5E jack UTP tool-less, almond	96 each (4.00)	96 each	22623	
VOL-OCK5E-U-BL	RJ45 Cat. 5e K5E jack UTP tool-less, blue	96 each (4.00)	96 each	22617	
VOL-OCK5E-U-G	RJ45 Cat. 5e K5E jack UTP tool-less, green	96 each (4.00)	96 each	22618	
VOL-OCK5E-U-R	RJ45 Cat. 5e K5E jack UTP tool-less, red	96 each (4.00)	96 each	22619	
VOL-OCK5E-U-Y	RJ45 Cat. 5e K5E jack UTP tool-less, yellow	96 each (4.00)	96 each	22620	
VOL-OCK5E-U-BK	RJ45 Cat. 5e K5E jack UTP tool-less, black	96 each (4.00)	96 each	22621	
VOL-OCK5E-U-O	RJ45 Cat. 5e K5E jack UTP tool-less, orange	96 each (4.00)	96 each	22622	
VOL-OCK6-U-W	RJ45 Cat. 6 K6 jack UTP tool-less, white	96 each (4.00)	96 each	22616	
VOL-OCK6-F	RJ45 Cat. 6 K6 jack FTP tool-less, white	96 each (4.00)	96 each	22607	
VOL-OCK6-S	RJ45 Cat. 6 K6 jack STP tool-less, white, metallic shield	96 each (4.00)	96 each	22618	
VOL-OCK6-U-AL	RJ45 Cat. 6 K6 jack UTP tool-less, almond	96 each (4.00)	96 each	22630	
VOL-OCK6-U-BL	RJ45 Cat. 6 K6 jack UTP tool-less, blue	96 each (4.00)	96 each	22624	
VOL-OCK6-U-G	RJ45 Cat. 6 K6 jack UTP tool-less, green	96 each (4.00)	96 each	19417	
VOL-OCK6-U-R	RJ45 Cat. 6 K6 jack UTP tool-less, red	96 each (4.00)	96 each	22627	
VOL-OCK6-U-Y	RJ45 Cat. 6 K6 jack UTP tool-less, yellow	96 each (4.00)	96 each	22628	
VOL-OCK6-U-BK	RJ45 Cat. 6 K6 jack UTP tool-less, black	96 each (4.00)	96 each	22629	

3M™ FIBRLOK™ SPLICES

Fibrlok II Universal Optical Fiber Splice 2529

The Fibrlok II 2529 optical fiber splice provides a precise, simple and low cost method of splicing optical fiber. The splice design utilizes an articulated metallic splicing element held inside a molded plastic body and cap to provide a fast, permanent, low-loss splice.





Fibrlok Multi-Fiber Optical Splicing System 2600 Series

The Fibrlok multi-fiber splicing system uses field proven splice technology to provide fast, efficient and permanent splicing of multiple fibers, designed to minimize training, specialized skills or experience.

The system consists of a consumable splice "module" and associated tools. Splices are available in 4-, 8- and 12-fiber versions.

The Fibrlok multi-fiber splice uses the same easy strip, clean, cleave and splice procedure as the Fibrlok II optical fiber splice. A complete splice can be assembled in less than five minutes, ideal for new construction and cable restoration.

The Fibrlok 2600 series multi-fiber optical splice accommodates singlemode or multimode fibers with a nominal cladding diameter of 125 microns. Splices accommodate both ribbon cable construction and individual 250 micron plastic-coated fibers. Color-coded versions are available.

Please refer to the Fiber Outside Plant Products section of the catalog for additional information. See pg. 217.



3M Solutions Tool

The solutions tool is designed to show you the breadth of the 3M product line and allow you to drill into specific categories to identify solutions.

To use this free Inernet support tool, visit: http://www.3M.com/Telecom

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