



05CA12364

March 30, 2005

**TYCO ELECTRONICS CORP**  
Menlo Park, CA 94025

**Attention:** Mr. Ron Watson

**Subject:**

- 1) Change of Cat. No. Designation V2-ZH to ZH2 in E35586, Vol. 1, Sec. 7
- 2) Qualification of 0.35 mm recovered ID from 0.4 mm for Cat. Nos. Versafit V2, G2 and ZH2 - E35586, Vol. 1 - YDPU2
- 3) Change of Cat. No. Designation V4-ZH to ZH4 in E85381, Vol. 2, Sec. 12
- 4) Qualification of 0.25 mm recovered ID from 0.4 and 0.3 mm for Cat. Nos. Versafit V4, G4 and ZH4 - E85381, Vol. 2 - YDTU2

Dear Mr. Watson:

**NOTICE OF AUTHORIZATION TO APPLY THE UL RECOGNITION MARK**

UL's investigation of your product has been completed under project number 05CA12364 and the product was determined to comply with the applicable requirements.

This fax temporarily supplements the UL Follow-Up Services Inspection Procedure and serves as authorization to apply the UL Recognized Marking only at the factories under UL's Follow-Up Service Program to the products which are constructed as described below:

Cat. Nos. ZH2 and ZH4, as described above and on the attached Description pages, which were submitted for this investigation. The UL Records covering the initial testing of this product can be found in the UL Follow-Up Services Inspection Procedure, E35586, Vol. 1, Sec. 7 and E85381, Vol. 2, Sec. 12.

This authorization is effective from the date of this Notice and only for products at the indicated manufacturing locations. Records in the Follow-Up Services Procedure covering the product are now being prepared and will be sent to the indicated manufacturing locations in the near future. Please note that Follow-Up Services Procedures are sent to the manufacturers only unless the Applicant specifically requests this document.

Products that bear the UL Recognition Mark shall be identical to those that were evaluated by UL and found to comply with UL's requirements. If changes in construction are discovered, appropriate action will be taken for products not in conformance with UL's requirements and continued use of the UL Recognition Mark may be withdrawn.

Very truly yours,

Reviewed by:

**CELESTE CAPULONG (x 32161)**  
Project Handler  
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Sr. Engineering Associate



<u>Cat. No.</u>	<u>Recovered Size, ID</u>	<u>Color</u>	<u>Tyco Compound</u>	<u>VW-1 Rated</u>
RNF-100, BP135, PLF-100, SP, SPUL, RP-4800, RT-421, CGPT, BP125, LTF-100, SPC, RNF-3000, SP-3X, BP300, PLF-103, XBPT, TMS, FPO PLF-100GXS, GPO-135	0.018 to 2.50 in. (0.45 to 63.5 mm)	+	1342 or 253 <sup>@</sup>	No
G2	<b>0.014</b> to 0.59 in. ( <b>0.35</b> to 15.0 mm)	Black	381 <sup>&amp;</sup>	Yes
Versafit, Versafit V, Versafit V2	<b>0.014</b> to 0.61 in. ( <b>0.35</b> to 15.5 mm)	Black	308 <sup>\$a</sup>	Yes
Versafit, Versafit V, Versafit FBT, Versafit V2, Thermofix	<b>0.014</b> to 0.50 in. ( <b>0.35</b> to 12.7 mm)	+	369B <sup>^</sup>	Yes
Versafit, Versafit V2	0.157 to 0.59 in. (4.0 to 15.0 mm)	Black	363 <sup>b</sup>	Yes

All compound pellets made at Tyco Electronics, Menlo Park, CA (800878-033) unless otherwise noted.

+ - All colors except clear.

@ - Tubing made with material Grade 253 may be expanded up to maximum 329% of its original extruded inside diameter.

& - Tubing made with material grade 381 may be expanded up to maximum 324% of its original extruded inside diameter.

\$ - Tubing made with material grade 308 may be expanded up to maximum 291% of its original extruded inside diameter.

^ - Tubing made with material grade 369B may be expanded up to maximum 393% of its original extruded inside diameter.

a - 308 compound pellets are made at the Tyco Electronics factory (800878-033) or Raychem Electronics (Shanghai) Ltd. factory (285157-002). Tubing manufacturer shall maintain records of the compound pellet manufacturer.

b - 363 compound pellets are made at the Tyco Electronics factory (800878-033) or Raychem Electronics (Shanghai) Ltd. factory (285157-002). Tubing manufacturer shall maintain records of the compound pellet manufacturer. Tubing may be expanded up to 222% of its original extruded inside diameter.

<u>Cat. No.</u>	<u>Recovered Size, ID</u>	<u>Color</u>	<u>Tyco Compound</u>	<u>VW-1 Rated</u>
<b>ZH2</b>	<b>0.014</b> to 0.591 in. <b>(0.35</b> to 15.0 mm)	Black	838 <sup>c</sup>	Yes
CRN, RT-3	0.023 to 0.375 in. (0.58 to 9.52 mm)	Black	294 <sup>d</sup>	No

All compound pellets made by Tyco Electronics, Menlo Park, CA (800878-033) unless otherwise noted.

c - Tubing made with material grade 838 may be expanded up to maximum 392% of its original extruded inside diameter.

d - Tubing made with material grade 294 may be expanded up to maximum 249% of its original extruded inside diameter.

## CONSTRUCTION DETAILS:

The tubing shall conform to the following:

Cat. No.	Unrecovered Size, ID	Size Table#	Color	Tyco Compound	VW-1 Rated
Versafit V4	3/64 to 3 in.	1	+	587	Yes
	<b>1 to 10.5 mm</b>	2			
Versafit V4	3/64 to 1 in.	1	+	369	Yes
	<b>1 to 10.5 mm</b>	2			
Cat. No.	Recovered Size, ID	Table#	Color	Tyco Compound	VW-1 Rated
G4	0.0098 to 0.59 in.	1	Black	381 <sup>&amp;</sup>	Yes
	<b>0.25 to 10.5 mm</b>	2			
Versafit V4	0.0098 to 0.61 in.	1	Black	308 <sup>\$\$</sup>	Yes
	<b>0.25 to 10.5 mm</b>	2			
Versafit V4	0.0098 to 0.5 in.	1	Black	369B	Yes
	<b>0.25 to 10.5 mm</b>	2			
<b>ZH4</b>	0.0098 to 0.20 in.	1	Black	838 <sup>a</sup>	Yes
	<b>0.25 to 5.0 mm</b>	2			

+ - All, except clear.

# - See Tables 1 and 2 for sizes and dimensions.

& - Tubing made with material grade 381 may be expanded up to 324% of its original extruded inside diameter.

\$ - Tubing made with material grade 308 may be expanded up to 291% of its original extruded inside diameter.

^ - 308 compound pellets may be made at the Tyco Electronics factory (800878-033) or Raychem Electronics (Shanghai) Ltd. factory (285157-002). Tubing manufacturer shall maintain records of the compound pellet manufacturer.

<sup>a</sup> - Tubing made with material grade 838 may be expanded up to 300% of its original extruded inside diameter.

## RECOVERY:

Recover tubing **ZH4 (formally V4-ZH)** for 3 minutes at 200C.

Recover all other tubing for 5 minutes at 200C.