

File E140310  
Project 4787608008

January 12, 2017

REPORT

on

[Outlet Boxes and Fittings - Component] Outlet Bushings and Fittings -  
Component

JACOB GMBH  
Kernen, Germany

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## DESCRIPTION

## PRODUCT COVERED:

USR, CNR Component - Cord Connector Assemblies, Cat. Nos. F310-9035-02, F310-9057-01, F310-9080-03, F310-9102-02, F310-9125-04, F310-9035-01, F310-9080-01, F310-9080-02, F310-9102-01, F310-9125-01, F310-9125-02, F310-9125-03 KADL 5K, KADL 10K, KADL 15K, KADL 20K, KADL 25K, KADL 1K/2G, KADL 2K/4G, KADL 6K/2G, KADL 11K/2G, KADL 3K/6G, KADL 7K/4G, and KADL 16K/2G .

The following Cat. Nos. are identical

Cat. No.	Alternate Cat. No.
F310-9035-02	KADL 5K
F310-9057-01	KADL 10K
F310-9080-03	KADL 15K
F310-9102-02	KADL 20K
F310-9125-04	KADL 25K
F310-9035-01	KADL 1K/2G
F310-9080-01	KADL 2K/4G
F310-9080-02	KADL 6K/2G
F310-9102-01	KADL 11K/2G
F310-9125-01	KADL 3K/6G
F310-9125-02	KADL 7K/4G
F310-9125-03	KADL 16K/2G

## TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):


Products designated USL have been investigated using requirements contained in the Standard for Conduit, Tubing, and Cable Fittings, UL 514B.

Products designated CNL have been investigated using requirements contained in the Standard for Conduit, Tubing, and Cable Fittings, CAN/CSA-C22.2 No. 18.3.

## Conditions of Acceptability -

1. These devices have been subjected to the Assembly Test, Oven Aging, Flexing Test and Pull Test in accordance with UL 514B and CSA C22.2 No. 18.3.
2. Pull forces used during the pull test are listed in the table \*(pull tests were performed with the F311-9xxx-zz series of grommets.) Refer to Item 4 for additional information.
3. Testing was conducted using the screw mounts in the corners of this device. The suitability of the mounting of these cord connectors shall be considered in the end product.

## CONSTRUCTION DETAILS:

Marking - Listee's trademark  on device. Description No. on device. Cat. No. and Description No. on smallest unit package. The cord diameter range may be provided on the product or smallest unit container. Cord connectors shall be provided with instructions as per Ill. 1.

Cat. No.	Description No.	Outside Diameter, mm	Cord Range, mm	Pull Force, kgs
F311-9001-01	TK 3-5	22.2	3 - 5	3 <sup>3</sup> or 2.26 <sup>5</sup>
F311-9001-02	TK 5-7	22.2	5 - 7	5
F311-9001-03	TK 7-9	22.2	7 - 9	5
F311-9001-04	TK 9-11	22.2	9 - 11	5
F311-9001-05	TK 11-13	22.2	11 - 13	5
F311-9001-06	TK 13-15	22.2	13 - 15 <sup>1</sup>	5
F311-9001-07	TK 15-16	22.2	15 <sup>2</sup> - 16	5
<b>F311-9002-01</b>	<b>TG 15-17</b>	<b>38.7</b>	<b>15 - 17</b>	<b>5</b>
<b>F311-9002-02</b>	<b>TG 17-19</b>	<b>38.7</b>	<b>17 - 19</b>	<b>5</b>
<b>F311-9002-03</b>	<b>TG 19-21</b>	<b>38.7</b>	<b>19 - 21</b>	<b>5</b>
<b>F311-9002-04</b>	<b>TG 21-23</b>	<b>38.7</b>	<b>21 - 23</b>	<b>5</b>
<b>F311-9002-05</b>	<b>TG 23-25</b>	<b>38.7</b>	<b>23 - 25</b>	<b>5</b>
<b>F311-9002-06</b>	<b>TG 25-27<sup>4</sup></b>	<b>38.7</b>	<b>25 - 27</b>	<b>5</b>
<b>F311-9002-07</b>	<b>TG 27-29</b>	<b>38.7</b>	<b>27 - 29</b>	<b>5</b>
<b>F311-9002-08</b>	<b>TG 29-31</b>	<b>38.7</b>	<b>29 - 31</b>	<b>5</b>
<b>F311-9002-09</b>	<b>TG 31-32.5</b>	<b>38.7</b>	<b>31 - 32.5</b>	<b>5</b>

<sup>1</sup>Only when used with Cable tie by Panduit, Cat. No. PLT2S-C30, see item 5

<sup>2</sup>Only when used with Cable tie by Hellerman Tyton, Cat. No. T50S, see item 5

<sup>3</sup>When used with 5mm cable, this fitting may be marked for a 5 kg pull

<sup>4</sup> For the KADL 1K/2G maximum clamping diameter is limited to 27 mm, and KADL 2K/4G and KADL 3K/6G maximum clamping diameter is limited to 27 mm in the upper row(s)

<sup>5</sup> When used with 3mm - 5mm cable, this fitting may be marked for a 2.26 kg pull and when used with 5mm cable, this fitting may be marked for a 5 kg pull in the models KADL 1K/2G, KADL 2K/4G, KADL 6K/2G, KADL 11K/2G, KADL 3K/6G, KADL 7K/4G, and KADL 16K/2G

5. Cable ties - UL Listed Cable Tie (ZODZ), E64963, Hellerman Tyton, Cat. No. T50S or UL Listed Cable Tie (ZODZ), E56854, Panduit Cat. No. PLT2S-C30 Assembled to cable/grommet after installation.

#### Illustrations:

<b>Figs. 1 &amp; 5</b>	<b>Assembly Configurations</b>
<b>Figs. 2-4</b>	<b>Assembly Frame parts</b>
<b>Ill. 1</b>	<b>Installation Instructions</b>
<b>Ills. 2 &amp; 3</b>	<b>Grommet Dimensions</b>
<b>Ills. 4-10</b>	<b>Configured Plate Dimensions</b>

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20180711-E140310  
**Report Reference** E140310-20170112  
**Issue Date** 2018-JULY-11

**Issued to:** JACOB GMBH  
Elektrotechnische Fabrik  
Gottlieb-Daimler-Strasse 11  
71394 Kernen GERMANY


**This is to certify that representative samples of** COMPONENT - OUTLET BUSHINGS AND FITTINGS  
See next page for models

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** UL 514B and CSA C22.2 No. 18.3-12, Standards for Conduit, Tubing, and Cable Fittings

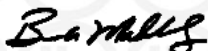
**Additional Information:** See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

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Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

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**Certificate Number** 20180711-E140310  
**Report Reference** E140310-20170112  
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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Cord Connector Assemblies, Cat. Nos. F310-9035-02, F310-9057-01, F310-9080-03, F310-9102-02, F310-9125-04, F310-9035-01, F310-9080-01, F310-9080-02, F310-9102-01, F310-9125-01, F310-9125-02, F310-9125-03 KADL 5K, KADL 10K, KADL 15K, KADL 20K, KADL 25K, KADL 1K/2G, KADL 2K/4G, KADL 6K/2G, KADL 11K/2G, KADL 3K/6G, KADL 7K/4G, and KADL 16K/2G.



Bruce Mahrenholz, Director North American Certification Program

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