



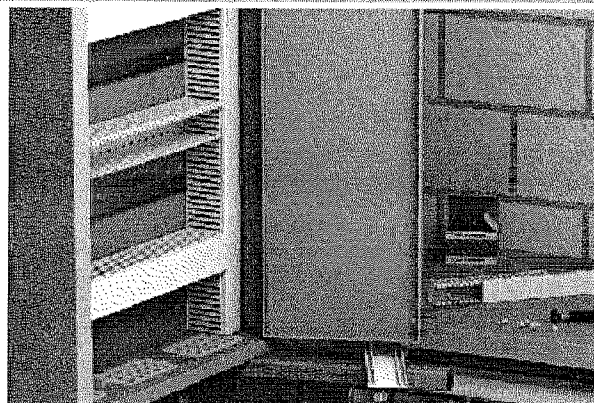
VK Wiring ducts systems

LK4 wiring duct



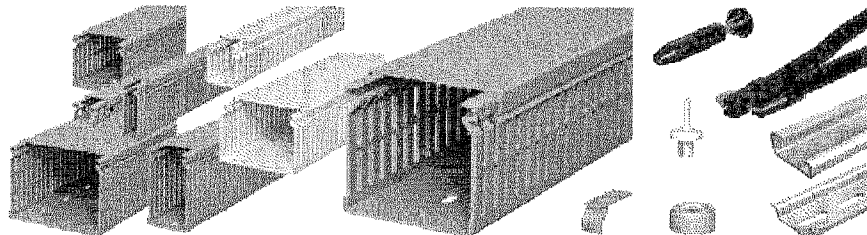
Dahl VK wiring duct with cover
Duct depths 15 to 100 mm

Supply length	2,000 mm
Colours	stone grey light grey
Test marks	UL



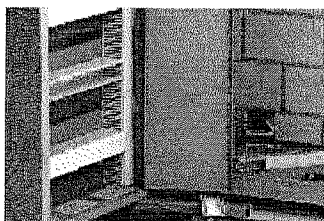
Switching systems must have a clear structure to make it easy to see the assignment of the technical devices. The Dahl VK wiring duct has been designed for professional wiring installation in the distributor cabinet. The complete product range comprises the versions between 15 x 15 mm and 80 x 120 mm for the LK4 range and 25 x 25 mm to 100 x 100 mm for the LKV range. The supply length is 2000 mm. The VK wiring ducts are available in PVC and halogen-free versions. The high manufacturing quality and the comprehensive range of accessories ensures optimum handling.

System components



LK4 wiring duct, LKV wiring duct, riveting tool, expansion rivet, holding clip, spacer, notching pliers

Area of application: distributor cabinet



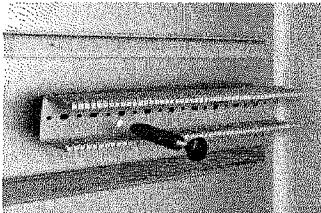
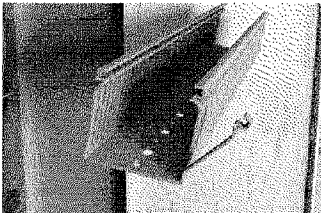
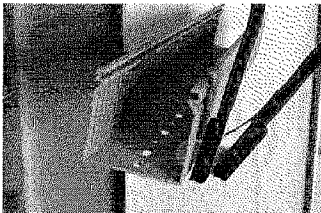
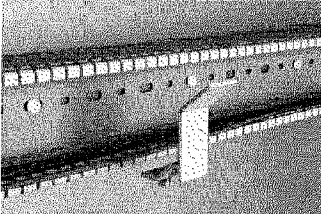
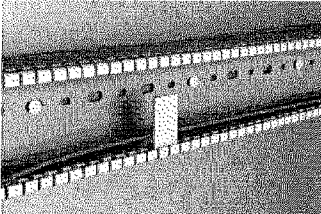
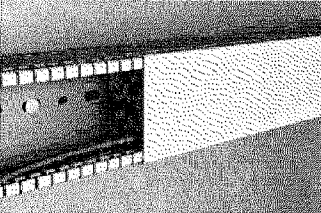
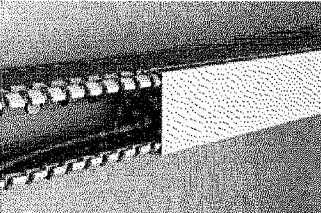
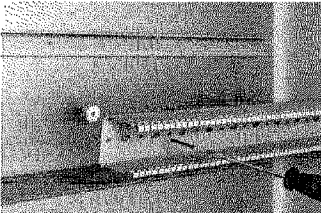
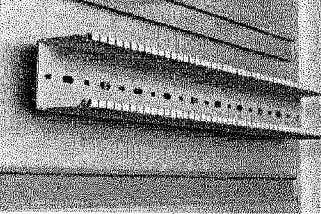
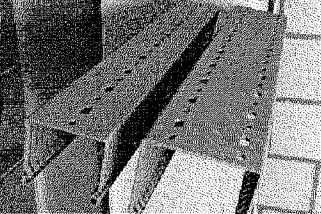
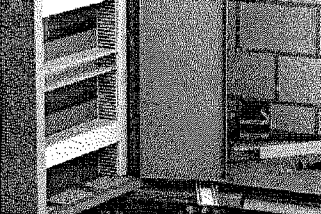
The VK wiring duct ensures tidy cable routing in the distributor cabinet.

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VK Wiring ducts systems



LK4 wiring duct

<p>Wiring duct installation</p>  <p>The VK wiring duct is fastened to the installation plate of the distributor cabinet using expansion rivets. The expansion rivets are installed using the plastic riveting tool.</p>	<p>Break-out of retainers</p>  <p>The retainers are bent outwards. They break when bent back.</p>	<p>Notching pliers</p>  <p>The side retainers can be removed down to the base of the duct using the notching pliers. When the side retainers have been broken out, there is no loss in volume in the transfer area to the next duct.</p>
<p>Wire retainers</p>  <p>The wire retainers can be adjusted according to the duct width. To do this, simply break off the wire retainer at the predetermined break point. This means that just one wire retainer is necessary for any duct width.</p>	<p>Wire retainer installation</p>  <p>The wire retainer is inserted into the side slot of the VK wiring ducts. This simplifies cable installation and keeps the cables in place in the VK wiring duct. It also guarantees easy attachment of the cover. If further cable installation is required at a later date, the cables are held in the duct and do not fall out when the cover is removed.</p>	
<p>Cover contour LK4</p>  <p>True-to-size processing enables easy mounting and removal of the cover, despite a firm cover fit.</p>	<p>Cover contour LKV</p>  <p>The special cover contours also guarantee a perfect fit in the LKV wiring duct.</p>	<p>Spacer installation</p>  <p>The spacer allows raised installation of the VK wiring duct above the installation plate.</p>
<p>Spacer installation</p>  <p>The spacers can be connected one on top of the other to allow greater distance to the installation plate. This allows a certain amount of height variation for any cables to be routed behind the VK wiring duct.</p>	<p>Floor holes</p>  <p>Single and dual-track floor holes to DIN 43859 enable precise work.</p>	<p>Finished installation</p>  <p>The practical dimensions and accessories allow professional installation in the distributor cabinet.</p>

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**Underwriters
Laboratories Inc.®**

333 Pfingsten Road
Northbrook, IL 60062-2096 USA
www.ul.com
tel: 1 847 272 8800
fax: 1 847 272 8129
Customer service: 1 877 854 3577

File E301798

Vol 1

Issued: 2007-01-05
Revised:

FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

COMPONENT - POSITIONING DEVICES
(ZODZ2, ZODZ8)

Manufacturer: OBO BETTERMANN GMBH & CO
(744875-001) HUINGSER RING 52
58710 MENDEN GERMANY

Applicant: SAME AS MANUFACTURER
(744875-001)

Recognized Company: SAME AS MANUFACTURER
(744875-001)

This Procedure authorizes the above manufacturer to use the marking specified by Underwriters Laboratories Inc. only on products covered by this Procedure, in accordance with the applicable Follow-Up Service Agreement.

The prescribed Mark or Marking shall be used only at the above manufacturing location on such products which comply with this Procedure and any other applicable requirements.

The Procedure contains information for the use of the above named Manufacturer and representatives of Underwriters Laboratories Inc. and is not to be used for any other purpose. It is lent to the Manufacturer with the understanding that it is not to be copied, either wholly or in part, and that it will be returned to Underwriters Laboratories Inc. upon request.

This PROCEDURE, and any subsequent revisions, is the property of UNDERWRITERS LABORATORIES INC. and is not transferable.

UNDERWRITERS LABORATORIES INC.

Sajeep Jesudas
Chief Operating Officer



Recognized Component Marking Data Page (RCMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

RECOGNIZED COMPONENT MARKING

Products Recognized under UL's Component Recognition Service are identified by marking elements consisting of:

1. The Recognized Company's identification specified in this document.
2. A catalog, model or other applicable product designation specified in the descriptive sections of this document.
3. The UL Recognized Component Mark shown below is optional unless required elsewhere in the Procedure.

Only those components, which actually bear the Marking, should be considered as being covered under the Recognition Program. The UL Listing or Classification Mark is not authorized for use on or in connection with Recognized Components.

Recognized Component Mark



Minimum size of the Recognized Component Mark is not specified as long as it is legible. Minimum height of the registered symbol ® shall be 3/64 inch but may be omitted if it is out of proportion to the Recognized Component Mark or not legible to the naked eye.

The manufacturer may reproduce the Mark electronically. Any decision regarding the acceptability of the manufacturer's Mark reproduction will be made at the Reviewing Office.

Recognized Component Marking Data Page (RCMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

RECOGNIZED COMPONENT MARKING

Products Recognized under UL's Component Recognition Service are identified by marking elements consisting of:

1. The Recognized Company's identification specified in this document.
2. A catalog, model or other applicable product designation specified in the descriptive sections of this document.
3. The UL Recognized Component Mark shown below:
 - (A) Recognized only to Canadian safety requirements, or;
 - (B) Recognized to both U.S. and Canadian safety requirements.

Only those components, which actually bear the Marking, should be considered as being covered under the Recognition Program. The UL Listing or Classification Mark is not authorized for use on or in connection with Recognized Components.

Recognized Component Mark

(A)



(B)



Minimum size of the Recognized Component Mark is not specified as long as it is legible. Minimum height of the registered symbol ® shall be 3/64 inch but may be omitted if it is out of proportion to the Recognized Component Mark or not legible to the naked eye.

The manufacturer may reproduce the Mark electronically. Any decision regarding the acceptability of the manufacturer's Mark reproduction will be made at the Reviewing Office.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Positioning Devices, Slotted Wiring Ducts Cat Nos.

LK4 15015, LK4 30015, LK4 30025, LK4 40025, LK4 40040, LK4 40060, LK4 40080,
LK4 40100, LK4 60015, LK4 60025, LK4 60040, LK4 60060, LK4 60080, LK4 60100,
LK4 60120, LK4 80025, LK4 80040, LK4 80060, LK4 80080, LK4 80100, LK4 80120

LKV 25025, LKV 37025, LKV 37037, LKV 50025, LKV 50037, LKV 50050, LKV 50075,
LKV 75025, LKV 75037, LKV 75050, LKV 75075, LKV 75100, LKV 75125, LKV 10037,
LKV 10050, LKV 10075, LKV 100100

LK4/N 60015, LK4/N 60025, LK4/N 60040, LK4/N 60060, LK4/N 60080, LK4/N 60100,
LK4/N 60120, LK4/N 80025, LK4/N 80040, LK4/N 80060, LK4/N 80080, LK4/N 80100,
LK4/N 80120

LKV/N 75025, LKV/N 75037, LKV/N 75050, LKV/N 75075, LKV/N 75100, LKV/N 75125,
LKV/N 10037, LKV/N 10050, LKV/N 10075, LKV/N 100100

GENERAL DESCRIPTION OF PRODUCT (NOT FOR FIELD REPRESENTATIVE USE):

These devices are molded thermoplastic wiring ducts, intended to support single or multiple stranded units such as electric wires, cables, flexible tubing, etc. in accordance with the National Electrical Code.

GENERAL DESCRIPTION OF INVESTIGATION (NOT FOR FIELD REPRESENTATIVE USE):

Products designated USR have been investigated using requirements contained in the Standard for Positioning Devices, UL 1565.

Products designated CNR have been investigated using requirements contained in the Standard for Positioning Devices, CSA C22.2 No. 18.5.

ENGINEERING CONSIDERATION (NOT FOR FIELD REPRESENTATIVE USE):

Use - For use only in products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability - The following are among the considerations to be made in judging the use of this material in an end-use product.

1. The devices shall not be used in applications where the temperature rating is exceeded.
2. The suitability for outdoor use has not been determined by this investigation.
3. Reference should be made to the end-product standards and most current guides to the use of plastics (such as Subject 746) with regard to other requirements, which should be considered in judging the suitability of these materials in end-products.
4. These cable ducts are suitable for indoor use at temperatures not exceeding 50°C.
5. The devices were molded from compounds Recognized meeting a minimum V-0 flammability rating. Flame tests were not conducted on the wire ducts.
6. The suitability for use when exposed to oil, chemicals, refrigerant, soap, x-rays, ultraviolet light, etc. have not been determined by this investigation unless otherwise indicated. The environmental conditions, maximum and minimum use temperatures are indicated in this report.
7. The number of conductors must not exceed the manufacturer's recommended loading.
8. The deformation of the horizontal channel walls under recommended conductor loading has been subjected to limited investigation. The acceptability of the deformation under more rigorous conditions such as load bearing or required mechanical spacing must be evaluated in the end-use investigation.
9. This duct has not been evaluated with live conductors. The need for a temperature test shall be considered in the end product. Consideration shall be given to the amount of fill of conductors within the duct. These temperature increases within the duct with live conductors need to be evaluated in the end-use investigation.

RATINGS:

Temperature Rating:

All wiring ducts covered by this Report are rated 50°C.

MARKING:

The product or the smallest unit package in which the product is shipped is to be marked with the following:

Full Recognized company name or file number "E301798", factory identification (see Section General), "For use within enclosures only" and type number on the duct or on the smallest unit package, box or container.

INSTRUCTIONS:

Installation instructions shall be provided on or in the smallest unit container.

See Ill. 1

GENERAL CONSTRUCTION:

LK4 Series

Cat No	Width (mm)	Height (mm)	Thickness (mm)	Max # 14 AWG wires
LK4 15015	15	15	1.5	14
LK4 30015	15	30	1.5	28
LK4 30025	25	30	1.8	45
LK4 40025	25	40	1.7	61
LK4 40040	40	40	1.8	97
LK4 40060	60	40	1.8	149
LK4 40080	80	40	2.0	200
LK4 40100	100	40	2.0	252
LK4 60015	15	60	2.0	57
LK4 60025	25	60	2.0	93
LK4 60040	40	60	2.0	150
LK4 60060	60	60	2.0	227
LK4 60080	80	60	2.2	304

LK4 Series (Continued)

LK4 60100	100	60	2.3	382
LK4 60120	120	60	2.5	460
LK4 80025	25	80	2.4	126
LK4 80040	40	80	2.2	202
LK4 80060	60	80	2.2	305
LK4 80080	80	80	2.4	408
LK4 80100	100	80	2.2	511
LK4 80120	120	80	2.4	613

LK4/N Series

Cat No	Width (mm)	Height (mm)	Thickness (mm)	Max # 14 AWG wires
LK4/N 60015	15	60	2.0	57
LK4/N 60025	25	60	2.0	93
LK4/N 60040	40	60	2.0	150
LK4/N 60060	60	60	2.0	227
LK4/N 60080	80	60	2.2	304
LK4/N 60100	100	60	2.3	382
LK4/N 60120	120	60	2.5	460
LK4/N 80025	25	80	2.4	126
LK4/N 80040	40	80	2.2	202
LK4/N 80060	60	80	2.2	305
LK4/N 80080	80	80	2.4	408
LK4/N 80100	100	80	2.2	511
LK4/N 80120	120	80	2.4	613

LKV Series

Cat No	Width (mm)	Height (mm)	Thickness (mm)	Max # 14 AWG wires
LKV 25025	25	25	1.6	24
LKV 37025	25	37.5	1.8	45
LKV 37037	37.5	37.5	1.8	72
LKV 50025	25	50	1.7	61
LKV 50037	37.5	50	2.0	99
LKV 50050	50	50	2.1	136
LKV 50075	75	50	2.1	209
LKV 75025	25	75	2.1	94
LKV 75037	37.5	75	2.2	147
LKV 75050	50	75	2.2	204
LKV 75075	75	75	2.2	318
LKV 75100	100	75	2.5	428

LKV Series (Continued)

Cat No	Width (mm)	Height (mm)	Thickness (mm)	Max # 14 AWG wires
LKV 75125	125	75	2.2	456
LKV 10037	37.5	100	2.2	195
LKV 10050	50	100	2.1	272
LKV 10075	75	100	2.2	427
LKV 100100	100	100	2.4	570

LKV/N Series

Cat No	Width (mm)	Height (mm)	Thickness (mm)	Max # 14 AWG wires
LKV/N 75025	25	75	2.1	94
LKV/N 75037	37.5	75	2.2	147
LKV/N 75050	50	75	2.2	204
LKV/N 75075	75	75	2.2	318
LKV/N 75100	100	75	2.5	428
LKV/N 75125	125	75	2.2	456
LKV/N 10037	37.5	100	2.2	195
LKV/N 10050	50	100	2.1	272
LKV/N 10075	75	100	2.2	427
LKV/N 100100	100	100	2.4	570

CONSTRUCTION DETAILS:

1. The cable ducts may be extruded from the following materials:

- a. R/C (QMFZ2) Begra 01875, supplied by Begra Granulate GMBH & Co KG (Grey)

Temperature Limitations:

Material	Color	Minimum Thickness	Relative Thermal Index		
			Elec.	Mec. w/Impact	Mec. w/o Impact
Begra 01875	All	0.75 mm	50	50	50