

File E499904
Project 4788274160

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REPORT

on

BARE AND COVERED FERRULES

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Schramberg, Germany

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DESCRIPTION

PRODUCT COVERED:

USL, CNL - Listed Covered single Ferrules, Cat. Nos. **E115-E118, E140-E142, E144-E147, E150-E151, E155-E156, E160-E161, E165-E167, E210-E212, E215-E218, E220-E223, E230-E234, E250-E251, E255-E256, E265-E267, E270-E272, E275-E276, E310-E312, E315-E323, E330-E334, E340-E342, E344-E347, E350, E351, E355, E356, E360, E361, E365-E367, E370-E372, E375, E376.**

USL, CNL - Listed Covered Ferrules, Cat. Nos. **XE140, XE142, XE145, XE150, XE155, XE160, XE230, XE234, XE250, XE255, XE260, XE330, XE334, XE340, XE342, XE345, XE350, XE355, XE360.**

USL, CNL - Listed Covered twin Ferrules, Cat. Nos. **Z115, Z118, Z140, Z142, Z145, Z150, Z155, Z160, Z210, Z215, Z218, Z220, Z223-Z225, Z230, Z234-Z235, Z255, Z260, Z310, Z315, Z318-Z320, Z323-Z325, Z330, Z334, Z335, Z340, Z342, Z345, Z350, Z355, Z360.**

USL, CNL - Listed Covered Ferrules, cut strip form, Cat. Nos. **S115, S140, S210, S215, S220, S230, S310, S315, S320, S330, S340.**

USL, CNL - Listed Covered Ferrules, small reel form, Cat. Nos. **K115, K140, K210, K215, K220, K230, K310, K315, K320, K330, K340.**

USL, CNL - Listed Covered Ferrules, CRIMPSTAR Reel, Cat. Nos. **C115, C140, C210, C215, C220, C230, C310, C315, C320, C330, C340.**

USL, CNL - Listed Covered Ferrules, Middle Reel, Cat. Nos. **M115, M140, M210, M215, M220, M230, M310, M315, M320, M330, M340.**

USL, CNL - Listed Bare Ferrules, Cat. Nos. U141, U143, U146, U163, U165, U170, U171, U176, U130, U134, U270, U310-U313, U315-U325, U330-U335, U340-U368, U370-U372, U375-U377.

GENERAL CHARACTER AND USE:

The devices described in this Report are of the following type.

Type of Wiring Termination -

Crimp type ferrules

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE USE):

Products designated USL have been investigated using requirements contained in the Standard UL 486F.

Products designated CNL have been investigated using requirements contained in CSA C22.2 No. 291-14.

WIRE RANGE:

Refer to Ills. 1 and 2

Tooling Used as follows:

TOOL	WIRE RANGE (mm ²)	WIRE RANGE (AWG)
AE 0816/6K WEZAG Art-No. 0167-04000, AE 0816/4K WEZAG Art-No. 0167-09000, Wezag tool AE 0816, Rennsteig tool 610 185 3, Rennsteig tool 610 088 3	0.08 - 16.0 mm ²	28 - 5
Wezag tool AE 2	0.14 - 6.0 mm ²	26 - 10
Wezag tool AE 4	0.5 - 10.0 mm ²	20 - 8
Rennsteig tool 610 184 3, Rennsteig tool 610 186 3, 610 087 3	0.08 - 10.0 mm ²	28 - 7
Rennsteig tool 624 000 3 with die set 624 090 3	0.25-0.75 / 1.0-1.5 / 2.5 / 4.0 / 6.0 mm ²	--
Rennsteig tool 624 000 3 with die set 624 091 3	10 / 16 / 25 mm ²	--
Rennsteig tool 624 000 3 with die set 624 092 3	35 / 50 mm ²	--
Rennsteig tool 624 000 3 with die set 624 097 3	2x6 / 2x10 / 2x16 mm ²	--
Wezag tool CK 90 L - AE 1050	10 / 16 / 25 / 35 / 50 mm ²	8 / 6 / 4 / 2 / 1
Klauke tool K28	4 - 50 mm ²	12 - 1
Single ferrules:	10 - 50 mm ²	8 - 1
Twin ferrules:	2x4 - 2x16 mm ²	2x12 - 2x6

Wire Strip Length (mm) - Refer to Installation Instructions, Ill. 3

MARKING:

The following shall appear on or with the smallest package:

- a) manufacturer's name, trademark or trade name or UL File Number;
- b) a distinctive catalog number or the equivalent;
- c) wire type, CU or Copper;
- d) stranding type, (ie. Class B, C...);
- e) installation tool, manufacturer's name and catalog number; and
- f) strip length.

ILL. 1

Covered single Ferrules, Cat. Nos. **E115-E118, E140-E142, E144-E147, E150-E151, E155-E156, E160-E161, E165-E167, E210-E212, E215-E218, E220-E223, E230-E234, E250-E251, E255-E256, E265-E267, E270-E272, E275-E276**, E310-E312, E315-E323, E330-E334, E340-E342, E344-E347, E350-E351, E355-E356, E360-E361, E365-E367, E370-E372, E375-E376.

Covered Ferrules, Cat. Nos. **XE140, XE142, XE145, XE150, XE155, XE160, XE230, XE234, XE250, XE255, XE260**, XE330, XE334, XE340, XE342, XE345, XE350, XE355, XE360.

Covered twin Ferrules, Cat. Nos. **Z115, Z118, Z140, Z142, Z145, Z150, Z155, Z160, Z210, Z215, Z218, Z220, Z223-Z225, Z230, Z234-Z235, Z255, Z260**, Z310, Z315, Z318-Z320, Z323-Z325, Z330, Z334, Z335, Z340, Z342, Z345, Z350, Z355, Z360.

Covered Ferrules, cut strip form, Cat. Nos. **S115, S140, S210, S215, S220, S230**, S310, S315, S320, S330, S340.

Covered Ferrules, small reel form, Cat. Nos. **K115, K140, K210, K215, K220, K230**, K310, K315, K320, K330, K340.

Covered Ferrules, CRIMPSTAR Reel, Cat. Nos. **C115, C140, C210, C215, C220, C230**, C310, C315, C320, C330, C340.

Covered Ferrules, Middle Reel, Cat. Nos. **M115, M140, M210, M215, M220, M230**, M310, M315, M320, M330, M340.

General - The photograph depicts the general shape and design of all catalog numbers covered by this Report.

1. Connector Body - Tin plated copper alloy, min 80% copper. See ILL. 1 for dimensional details.

*2. Plastic Sleeve - R/C plastic (QMFZ2), Grade HF420FB by BOREALIS POLYOLEFINE GMBH (E108112) and Moplen Grade HP548R by Basell Polyolefine GmbH (E31765). See ILL. 1 for connector and dimensional details; **the color is informative only: all colors are acceptable.**

ILL. 2

Bare Ferrules, Cat. Nos. U141, U143, U146, U163, U165, U170, U171, U176, U130, U134, U270, U310-U313, U315-U325, U330-U335, U340-U368, U370-U372, U375-U377.

General - The photograph depicts the general shape and design of all catalog numbers covered by this Report.

1. Connector Body - Tin plated copper alloy, min 80% copper. See ILL. 2 for dimensional details.