		Document Number	Revision Level
		57-62004-00	Rev C
Engineering Requirement		Prepared By / Date	Reviewed By / Date
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Title: FlexCLI <sup>TM</sup> HOSE AND FITTING SYSTEM: <i>Marketing Guidelines, or, Labeling and Packaging Guidelines</i>			

**1.0 Purpose:** This standard provides guidelines for private labeling and packaging of the FlexCLIK™ hose and fitting product line.

**2.0 Scope:** These guidelines are applicable for all FlexCLIK™ components and/or kits referencing this specification on the component documentation.

**3.0 Background:** Privatized hose system name (FlexCLIK™), color coding approach, packaging, and component/kit labeling scheme was deemed necessary to market this hose and fitting system.

- Private labeling and color coding approach was applied to product offering to give market differentiation and added value to the product.
- Component marking and/or kit labeling is necessary to identify components supplied by BCC to various Bus OEM's and other customers for the purpose of improved part identification during installation and subsequent service operations (hose only). Also aids in production processing, part receipt process, replacement part identification, and tracking of inventory.
- Bulk shipping container labels also aid production processing, part receipt process, replacement part identification, and tracking of inventory. These labels are to be constructed of a material and printed such as required to remain legible for the relatively short life of the shipping container used in a typical shipping and warehouse environment.
- Packaging requirements required in addition to those specified on the drawing documentation will be managed here. This includes general information that can be controlled in a single location rather than on each and every component or kit bill of material.

**4.0 Private labeling and color code system:** The following describes private labeling requirements and color code system in detail.

4.1 FlexCLIK™ is the name assigned and trademarked for the hose and fitting system.



**Figure 1 - Trademark representation**

4.2 Supplier and supplier product name must not be visible on all components except for the following exceptions:

4.2.1 40-64008-00/01/02/03/04 Cage.

4.2.2 Flare, ORS, JIC fitting hex-nuts.

Note: the goal is for supplier name to be eliminated in all cases where possible.

4.3 Color code system is intended to clearly identify hose and fitting kits by application (suction = blue, discharge = red, liquid line = green) as well as identify physical size and markings.

#### 4.4 Hose Layline Artwork



Figure 2 – Layline Artwork

#### 4.5 Hose Layline Specification in Table Form

Hose	Tape Width (inch)	Logo Height	Logo Color	FlexCLIK Font	FlexCLIK Height (inch)	Other Font	Other Font Height (inch)	Font Color	Background Color
58-64105-01	0.500	0.380	White - Pantone 072	Times Roman Italic	0.320	Arial Rounded	0.240	Green - Pantone PMS 363	Black
58-64105-02	0.500	0.380	White - Pantone 072	Times Roman Italic	0.320	Arial Rounded	0.240	Red - Pantone PMS 186	Black
58-64105-03	0.500	0.380	White - Pantone 072	Times Roman Italic	0.320	Arial Rounded	0.240	Blue- Pantone PMS 300	Black
58-64105-04	0.500	0.380	White - Pantone 072	Times Roman Italic	0.320	Arial Rounded	0.240	Blue- Pantone PMS 300	Black

Figure 3 – Layline Artwork Specifications

#### 4.6 Hose Marking: Sizes #8 (58-64105-01), #10 (58-64105-02), #12 (58-64105-03), #16 (58-64105-04) incorporates a color combination BCC logo, text, and tape lay-line. Text is repeated every 24"

##### 4.6.1 58-64105-01 – Liquid Line

Lay-line Color: Background Black

Text Color: Green PMS 363

Text: "58-64105-01 #8 (10MM) 35 BAR SAE J2064 TYPE E 7 DIGIT SERIAL"

##### 4.6.2 58-64105-02 – Discharge Line

Lay-line Color: Background Black

Text Color: Red PMS 186

Text: "58-64105-02 #10 (13MM) 35BAR SAE J2064 TYPE E 7 DIGIT SERIAL"

##### 4.6.3 58-64105-03 – Suction Line

Lay-line Color: Background Black  
Text Color: Blue PMS 300  
Text: "58-64105-03 #12 (16MM) 35 BAR SAE J2064 TYPE E 7 DIGIT SERIAL"

4.6.4 58-64105-04 – Suction Line  
Lay-line Color: Background Black  
Text Color: Blue PMS 300  
Text: "58-64105-04 #16 (22MM) 35 BAR, SAE J2064 TYPE E 7 DIGIT SERIAL"

4.6.5 Hose Marking: Size #6 (58-64105-00) refrigerant hose. Due to the limited use of #6 refrigerant hose in typical bus applications the decision was made to forgo the lay-line using the more standard print wheel with white text. This is repeated every 24".  
58-64105-00 – Liquid Line  
Lay-Line Color: NONE  
Text Color: White  
Text: "58-64105-00 #6 (8MM) 35 BAR SAE J2064 TYPE E 7 DIGIT SERIAL"

4.6.6 Agreed upon Layline Artwork (provided by Eaton) see 4.4 and 4.5:

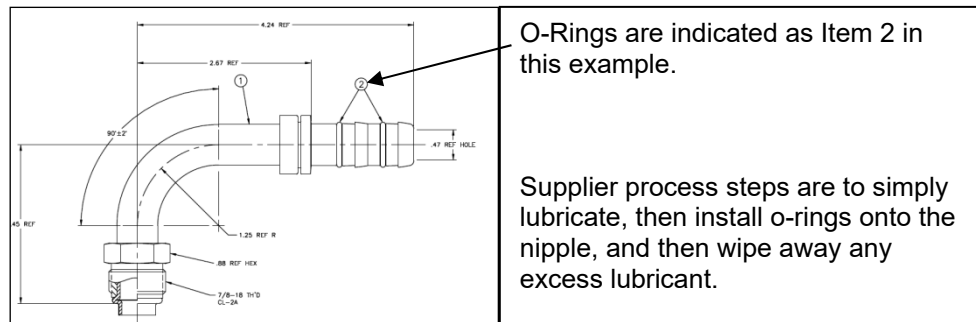
4.6.7 BCC logo must conform to all BCC Visual Identity Guidelines.

**5.0 Packaging requirements:** The following describes packaging requirements not otherwise specified in component prints or kit bills of materials.

5.1 Refrigerant Fittings to include o-rings on the nipple end of the fitting.

5.1.1 O-rings to be installed on fitting as received from supplier.

5.1.2 O-ring is to be clean and free of defects.



**Figure 4 - Reference only – Danfoss Power Solutions Drawing**

5.1.3 These o-rings vary by fitting size (hose ID).

Nipple Size	O-ring Quantity	O-ring BCC Part Number
#6	2	42-62157-01
#8	2	42-62157-02
#10	2	42-62157-03
#12	2	42-62157-04
#16	2	42-62157-05

5.2 Refrigerant Fitting Kits consist of a grouping of a fitting, pilot (or bump) tube o-rings, and clamp/cages. The kit contents are controlled by bill of material. This specification will provide additional information regarding packaging options.

5.2.1 Parts are to be package in a vented plastic bag adequate to meet cleanliness specification and provide protection from shipping damage.

5.2.2 Fittings provided in a vented plastic bag do not require additional caps on fitting or nipple ends.

5.2.3 Individual o-rings and/or clamps/ cages included in a kit should be packaged in separate bags to further protect from damage. Separate bags shall be inside the main kit packaging.

5.2.4 Packaging should be sized to provide adequate room for components.

5.3 Privatized marking associated with packaging should meet these requirements.

5.3.1 Packaging should be free from supplier markings such as product or supplier identifiers.

5.3.2 Packaging shall include bar code meeting Engineering standard 57-00565.

5.3.3 Packaging to include the following items:

5.3.3.1 Pre-Printed BCC Bus Climate Control horizontal logo.

5.3.3.2 Color coded bar selected by fitting hose size and using colors specified below:

5.3.3.2.1 #6 or #8 Hose – Green

5.3.3.2.2 #10 Hose – Red

5.3.3.2.3 #12 or #16 Hose – Blue

5.3.3.2.4 Multiple Sizes – use color designated for larger of the hose sizes

5.3.3.3 Include key product information and bar coding as shown here in Figure 5.

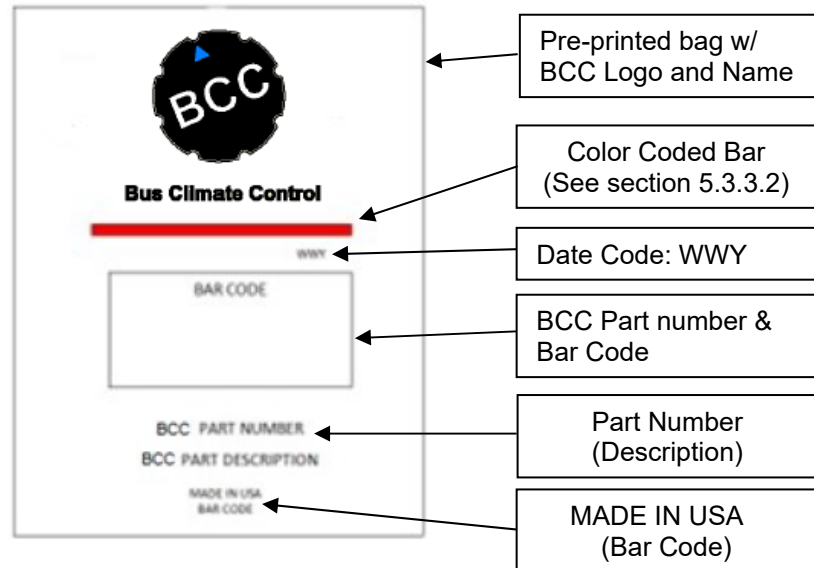


Figure 5 – Fitting Kit Packaging Example

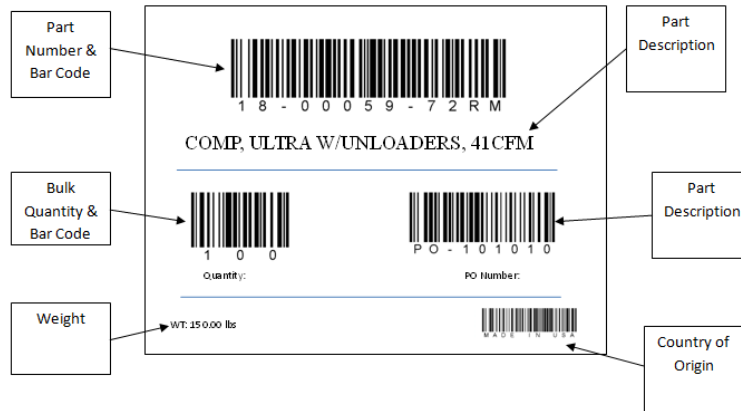
5.4 Hose Cut to length (see individual drawing)

5.5 Hose assemblies (see individual drawing)

## 6.0 Bulk Packaging Requirement:



Figure 6A - Packaging and Labeling Requirement (carton)



**Figure 6B - Packaging and Labeling Requirement (shrink-wrapped skid)**

**7.0** Purchasing groups shall review and approve all label designs to verify that the necessary information is present and in correct formats. It is the responsibility of the supplier to verify all requirements are met or submit request for deviations.

C	Convert to BCC layline and associated product/packaging markings	ECN-13501	S.Baumgardner	M.Glatfelter	2/19/2024
B	Preliminary Revised – Convert to MCC layline and associated product/packaging markings	ECN0077Y11	K.Sutton	J.Sharbaugh	2/14/2012
A	Initial Release	68N0001P10	K.Sutton	J.Sharbaugh	25Mar2010
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