

LOKRING® & LOKCLIP ⇨⇩

SOLDER-FREE TUBE AND HOSE CONNECTIONS

For the installation and repair of vehicle air conditioning lines

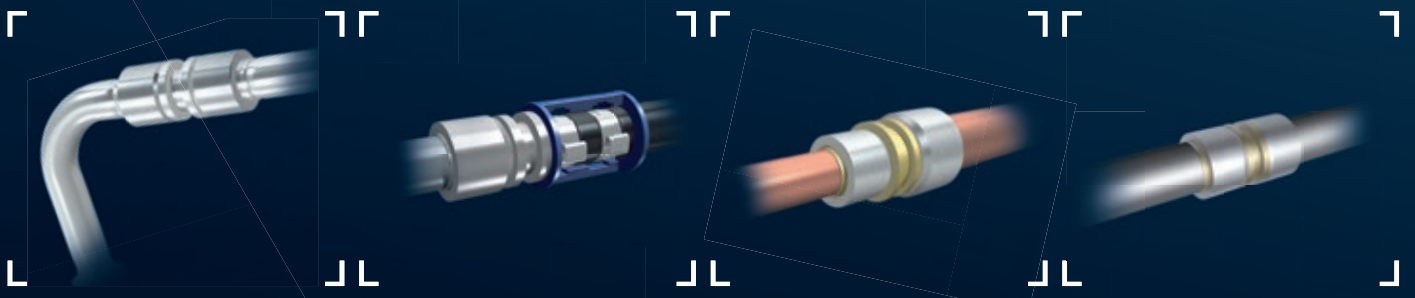


ONE SYSTEM ENDLESS POSSIBILITIES

- ⊕ MORE THAN 1.5 BILLION LOKRINGS HAVE BEEN SUCCESSFULLY FITTED SO FAR
- ⊕ SUITABLE FOR ALL TYPES OF VEHICLES
- ⊕ FOR ALL TUBE MATERIALS: ALUMINIUM, STEEL, COPPER
- ⊕ CUSTOMISED SOLUTIONS FOR THE SERIAL PRODUCTION POSSIBLE
- ⊕ NO WELDING, SOLDERING OR THREAD CUTTING NECESSARY
- ⊕ FOR MORE THAN 30 YEARS TRIED-AND-TRUSTED BY OEMS



LOKRING® & LOKCLIP





**VULKAN
LOKRING**

For more than 30 years now, **VULKAN LOKRING's success has been founded on worldwide patented, unique connecting elements for refrigerant lines.** In the meantime, more than 1,500,000,000 LOKRING® tube connections have been successfully used by leading car and bus manufacturers as well as manu-

facturers of refrigeration and air conditioning systems. Thanks to the new aluminium LOKRING® connectors it is possible to replace heavy tube materials like steel or copper by aluminium to reduce the total weight of the vehicle. LOKRING® & LOKCLIP is tested in accordance with EU directive 2006/40/EG.

LOKRING®

The typical LOKRING® union joint consists of two LOKRINGs and one tubular joint for the acceptance of the two tube ends. Thanks to the conical inner contour of the LOKRING® and the special outer contour of the joint, the diameter of the connection is reduced during assembly to such an extent that the joint

and the tube create a hermetically sealed metal-to-metal connection. The lifetime air-tightness of the fitted connection is guaranteed by the state of permanent elastic pre-tension, which is produced by the radial forces of the LOKRINGs acting in the opposite direction to the tube-joint connection.

BURST PRESSURE TEST UP TO
250 BAR (3750 PSI)

ALTERNATING PRESSURE TEST WITH
250,000 CYCLES

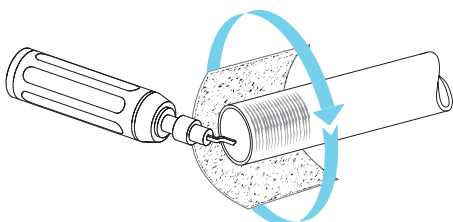
TESTED ACCORDING TO EU DIRECTIVE
2006/40/EG

TENSILE TEST
EN 1

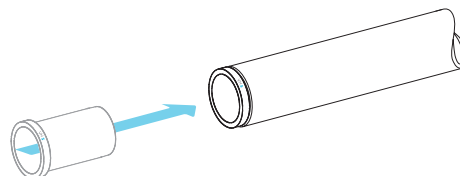


LOKRING® – ASSEMBLY

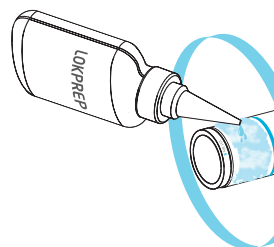
STEP 01 | CLEAN AND DEBURR THE TUBE



STEP 02 | PLACE THE INSERT INTO THE TUBE



STEP 03 | APPLY LOKPREP ALL





CORROSION TEST ACCORDING TO
ISO 9227 NSS

TEMPERATURE CHANGE
CYCLE TEST

T ACCORDING TO
LO 204

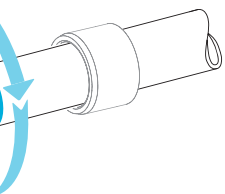
LOKRING® – MATERIAL COMBINATIONS

Aluminium		Aluminium
Aluminium		Copper
Copper		Copper
Copper		Steel
Steel		Steel

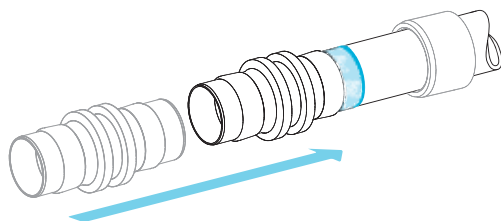


The following illustration is only showing the principle of a LOKRING® assembly. Always respect the detailed assembly instructions on www.vulkan.com.

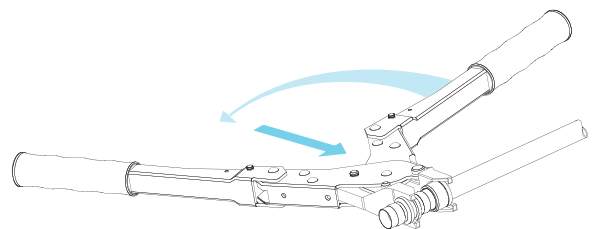
AROUND THE TUBE



STEP 04 | INSERT THE TUBE TO THE STOP



STEP 05 | ASSEMBLE THE RINGS TO THE STOP



LOKCLIP

LOKCLIP technology provides you with a simple and low-cost alternative to pressed and screwed connections for tubes. LOKCLIPS can be used to set up both hose-to-hose and hose-to-tube connections for all conceivable repair situations. The system, comprising stainless steel clips, clip position

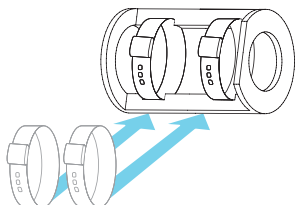
holder and contoured joint practically excludes application mistakes during assembly. Alongside the important SAE J2064, LOKCLIPS meet all the required standards.

OPERATING PRESSURE
34.50 BAR

TESTED ACCORDING TO EU DIRECTIVE
2006/40/EG

LOKCLIP – ASSEMBLY

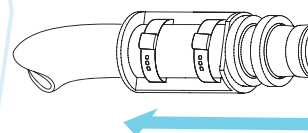
STEP 01 | INSERT STAINLESS STEEL CLIPS



STEP 02 | PUSH THE LOKCLIP ONTO THE TUBE

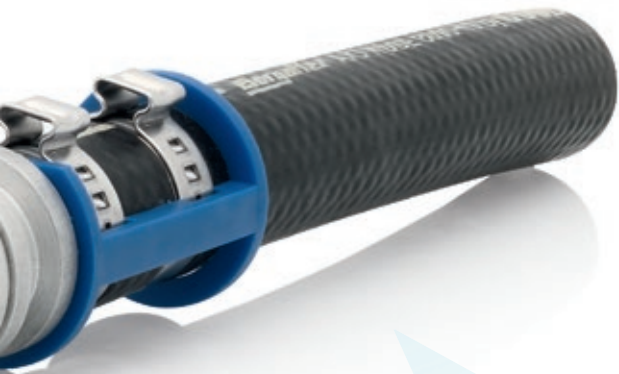
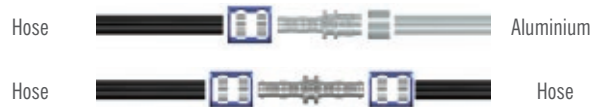


STEP 03 | LUBRICATE AND TIGHTEN



LOKCLIP – MATERIAL COMBINATIONS

OPERATING TEMPERATURE
-40°C – 135°C



BURST PRESSURE
121 BAR

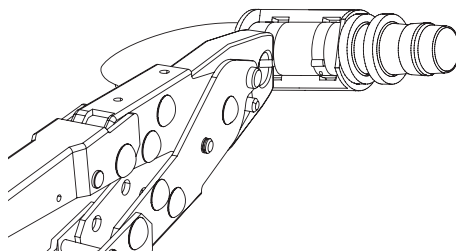


The following illustration is only showing the principle of a LOKCLIP assembly. Always respect the detailed assembly instructions on www.vulkan.com.

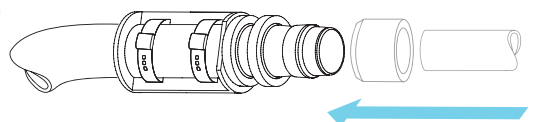
STEP 03 | PUSH IN JOINT



STEP 04 | PRESS



STEP 05 | SET UP A TUBE CONNECTION





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