

# **LOKRING & LOKCLIP**

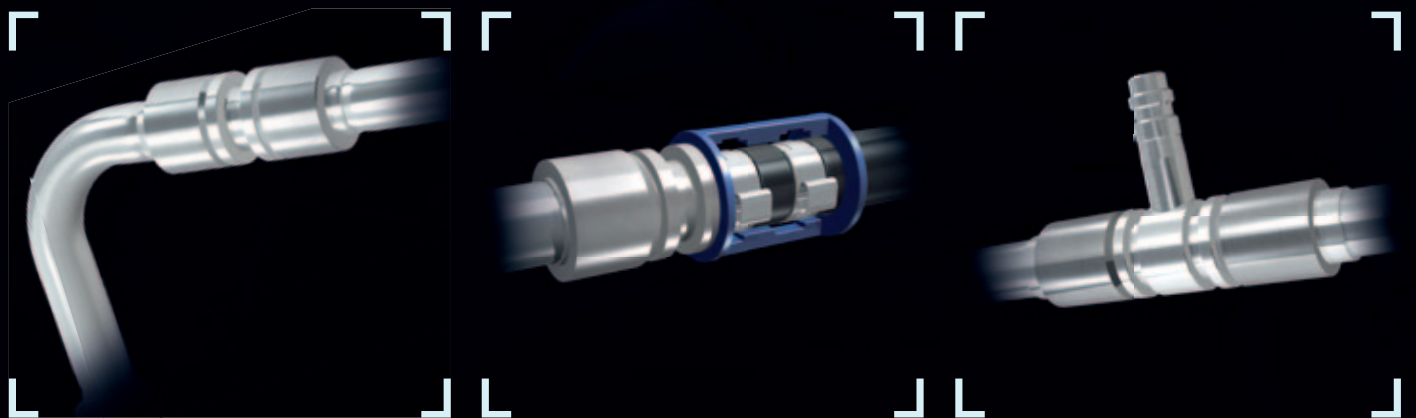
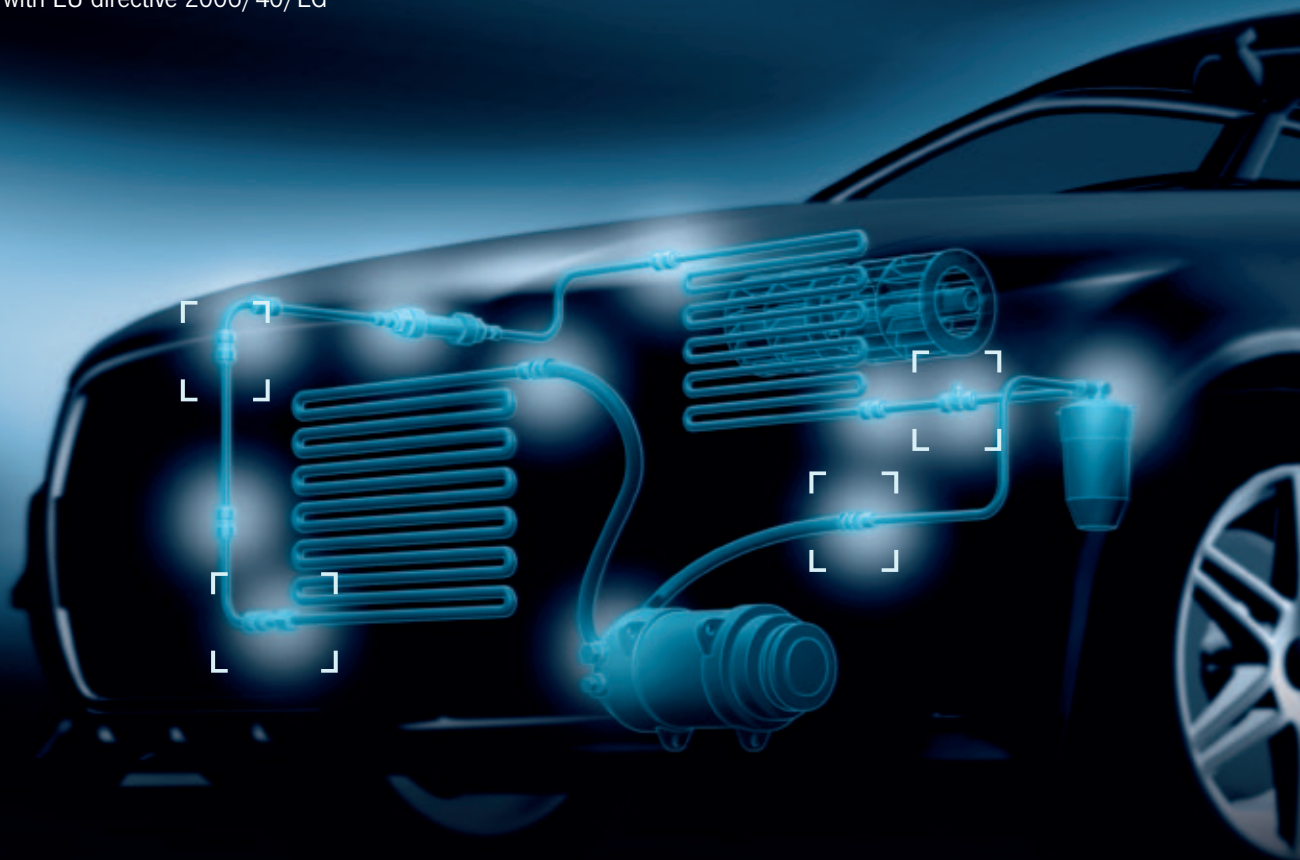
FOR THE BEST CONNECTIONS IN VEHICLES

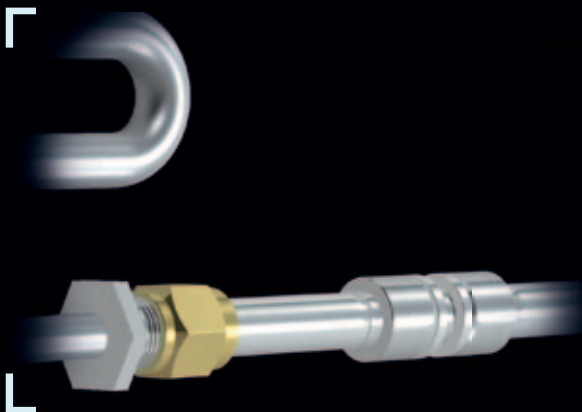


# LOKRING® & LOKCLIP

## REPAIR OF TUBES AND HOSES IN AIR CONDITIONING SYSTEMS

- ⊕ for universal use, independent of the vehicle type and model year
- ⊕ no waiting for expensive original spare parts
- ⊕ no welding, soldering or thread cutting necessary
- ⊕ in many cases, the faulty line may not even have to be removed
- ⊕ for more than 30 years tried-and-trusted by OEMs
- ⊕ in compliance with EU directive 2006/40/EG





**ONE SYSTEM - ENDLESS POSSIBILITIES  
WITH LOKRING® & LOKCLIP YOU CAN REPAIR:**

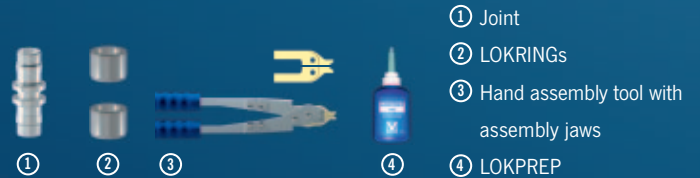
- ⊗ Straight tubes and elbows
- ⊗ Hoses
- ⊗ Hose-to-Tube connections
- ⊗ Pressure switch connections
- ⊗ Spring-Lock connections
- ⊗ Threaded connections



# LOKRING ASSEMBLY

ONE JOINT, TWO RINGS, 4 STEPS – THAT'S ALL THERE IS TO IT.

## THE COMPONENTS OF A LOKRING CONNECTION



### STEP 01 | CLEAN THE TUBE ENDS

To ensure that the connection is hermetically sealed, the tube ends have to be metallically bright. First, use our abrasive mat to remove all soiling. In order to prevent longitudinal grooves, the tube ends have to be cleaned in a rotary direction. Avoid sanding movements in the longitudinal direction of the tube.

### STEP 02 | APPLY LOKPREP

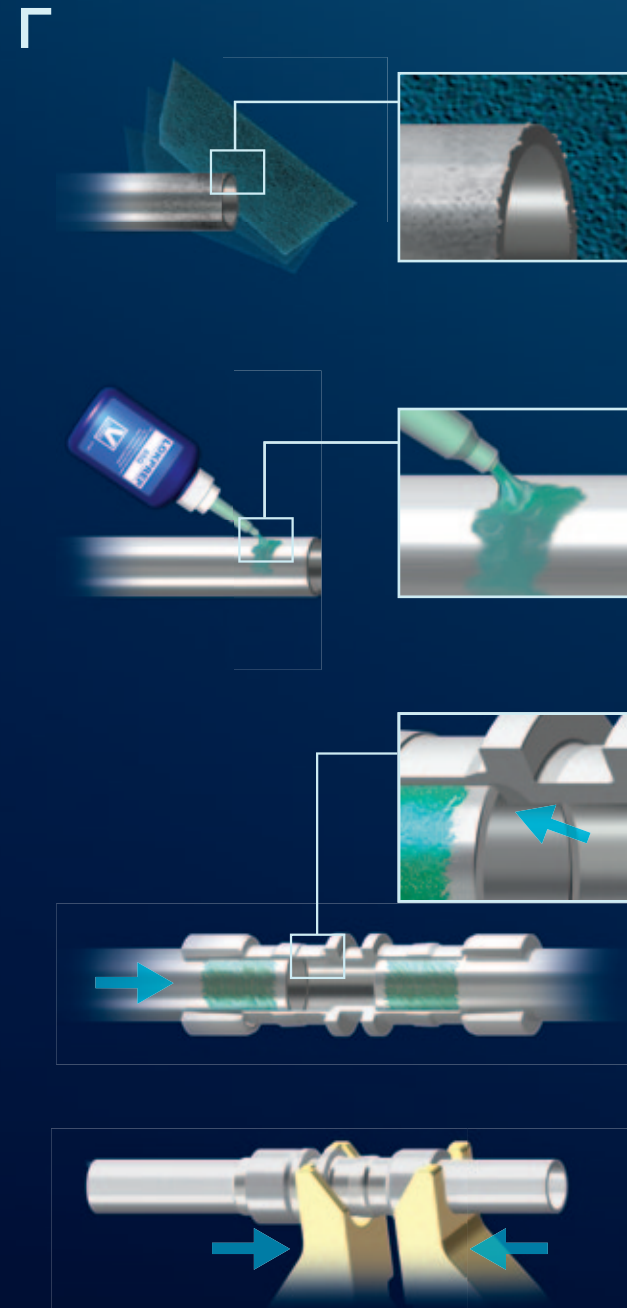
Next; moisten the whole tube circumference with LOKPREP by guiding the bottle 360° around the outside of the tube. Apply the LOKPREP a little away from the cut edge to prevent it getting onto the inside of the tube. Depending on the repair situation, there are several different possibilities of applying LOKPREP over an area - see opposite.

### STEP 03 | INSERT TUBES

Next; insert the tubes with the LOKPREP film into the joint. Make sure that the ends of the tubes are inserted to the inner limit and remain fixed in this position during assembly.

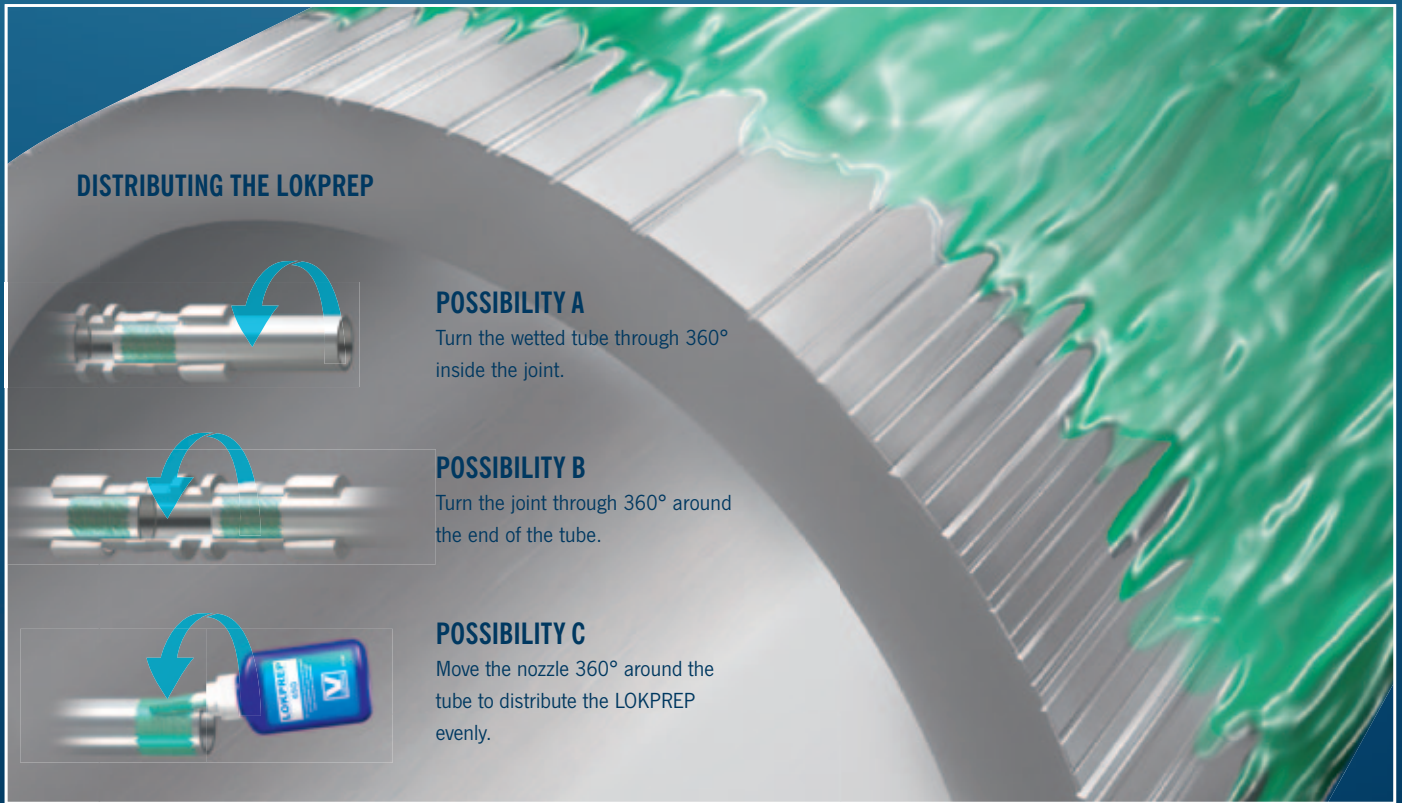
### STEP 04 | PRESS

Finally; apply the manual assembly tool to the union joint so that the LOKRINGs are seated squarely in the assembly jaws and then press the LOKRINGs axially onto the joint until they meet at the centre stop. - That's it.



# LOKPREP FLUID

## HERMETIC SEAL FOR YOUR TUBE CONNECTION.



### 360° LOKPREP FOR THE TUBE - NO WORRIES FOR YOU ALL ROUND

Metal tubes can have longitudinal grooves on the surface from production. These production-related faults can be compensated quite easily by moistening the tube ends to be connected with LOKPREP fluid before assembly. Thanks to its capillary characteristic, it can even flow into microscopic cavities and fill these out completely. LOKPREP is not an adhesive, rather an anaerobic sealant which hardens under oxygen exclusion and in contact with free metal ions.

Its elastic structure is permanently retained in a temperature range of -50 to +150°C – thus compensating material-specific deformations due to fluctuations in temperature. Since LOKPREP does not contain solvents which have to evaporate during hardening, the finished connection is ready for use shortly after assembly.



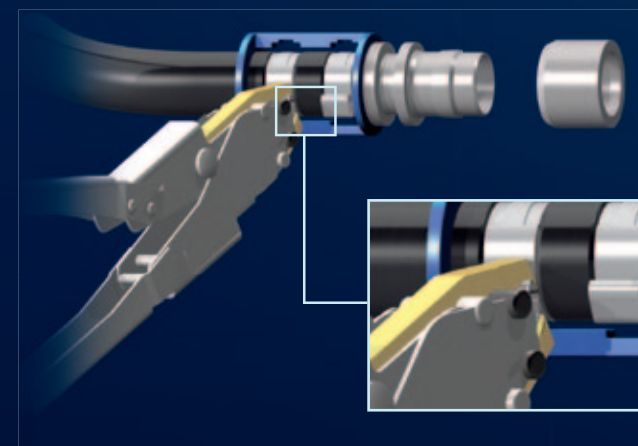
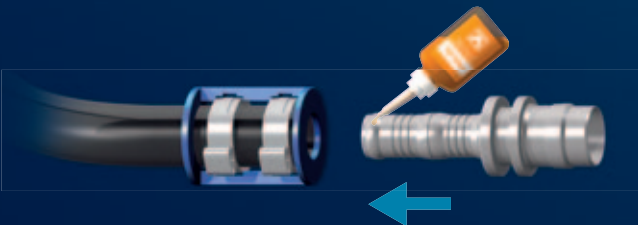
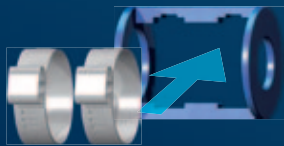
**LOKPREP 65G**  
Anaerobic sealant

| Article no. | Article name | Quantity |
|-------------|--------------|----------|
| L14000878   | LOKPREP 65G  | 15 ml    |

# LOKCLIP ASSEMBLY

EXPENSE? - YOU CAN COUNT IT ON THE FINGERS OF ONE HAND.

## THE COMPONENTS OF A LOKCLIP CONNECTION



### STEP 01 | INSERT STAINLESS STEEL CLIPS

Insert the two stainless steel clips in the clip position holder in such a way that the clips are easily accessible for the subsequent pressing process using the assembly tool.

### STEP 02 | PUSH THE LOKCLIP ONTO THE TUBE

Insert the tube into the position holder with pre-mounted clips as far as it will go.

### STEP 03 | LUBRICATE AND PUSH IN JOINT

Moisten the joint with a little refrigerant oil - this makes pushing it into the tube end easier. Then push the joint into the tube as far as it will go.

### STEP 04 | PRESS

Press the stainless steel clips using the hand assembly tool. Start with the clip positioned at the side of the tube.

### STEP 05 | SET UP A TUBE CONNECTION

The LOKCLIP connection is ready to use! Now, as shown with this variant, you can connect a tube on the other side with the aid of a LOKRING as before. For a more detailed explanation of LOKRING assembly see pages 04/05. In the case of a tube-to-tube connection, the steps shown here are repeated.

# LOKRING AND LOKCLIP MATERIAL COMBINATIONS

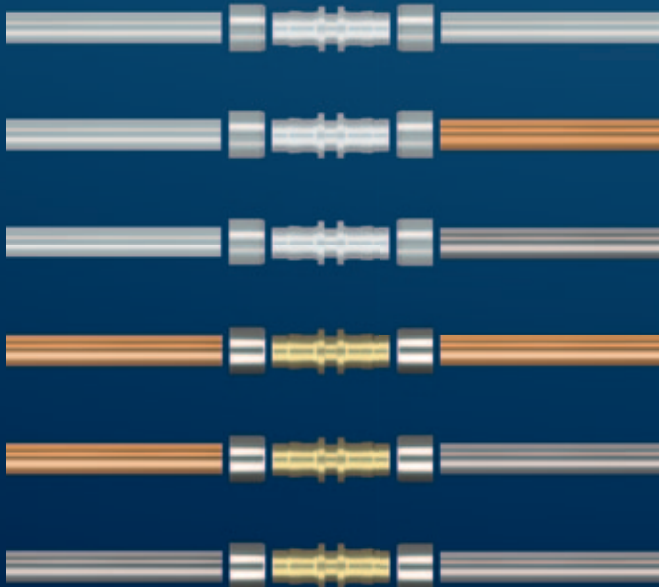
## DOESN'T WORK? - THERE'S NO SUCH THING!

The LOKRING and LOKCLIP connection technology will make it easier for you to repair connections in the refrigerant circuit. Conventional methods such as soldering, welding or thread-cutting are time-consuming, cause damaging soiling and lead to weak spots in the refrigerant circuit.

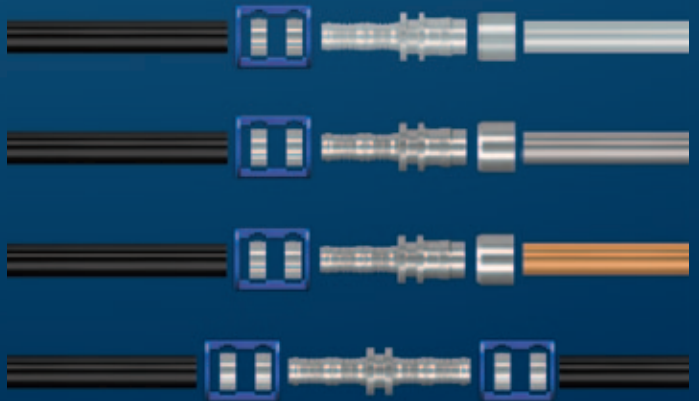
In contrast, the LOKRING/LOKCLIP system offers you the possibility of connecting a wide range of different materials to each other - without diminishing the quality of the connection in comparison to expensive original spare parts.








### LOKRING MATERIAL COMBINATIONS



### LOKCLIP MATERIAL COMBINATIONS



#### MATERIAL ASSIGNMENT

|   |   |  |
|---|---|--|
|  Steel |  Aluminium     |  Copper |
|  Brass |  Hose material |  |

What can you connect using LOKRINGS? There's a simple answer to that: All the metal tubes used in air-conditioning and cooling technology with a wall thickness of 0.5 mm to 1.5 mm. There is almost no limit to the combination variations here. One rule of thumb is: If at least one of the tubes to be connected is made of aluminium, an aluminium LOKRING must be used as well. In all other cases, a brass LOKRING is used.

With the LOKCLIP it's also a case of "Doesn't work? - there's no such thing!" As shown, you can connect every hose either with a hose connection or any other material used for tubes in air-conditioning and cooling technology.

# QUICK. EASY. AND HERMETICALLY SEALED.

## LOKRING AND LOKCLIP A CLEAN TEAM.

### ➔ NO WAITING FOR EXPENSIVE SPARE PARTS

No matter whether it's a car, truck, commercial vehicle or bus. No matter which manufacturer or model year it is. You will always have the suitable solution with LOKRING & LOKCLIP. Where other service providers are still looking for the right original spare part and have to put up with long delivery times, your vehicles are back on the road. Your customers do not have to wait!

#### REPAIRS WITH LOKRING AND LOKCLIP



#### CONVENTIONAL REPAIRS



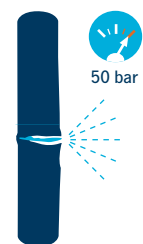
### ➔ SIMPLE ASSEMBLY

LOKRINGS and LOKCLIPS can be pressed into place extremely easily using only one tool and in next to no time. In most cases, you can carry out assembly directly in the engine compartment without having to remove the faulty refrigerant tube. Saving you time and money.



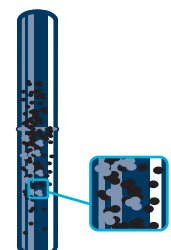
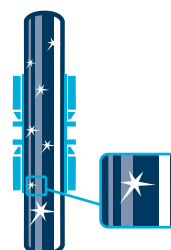
### ➔ HERMETICALLY SEALED AND PRESSURE-RESISTANT

The German Technical Board (TÜV) confirms: LOKRING connections are hermetically sealed and pressure-resistant up to 50 bar (with four times the safety). Burst pressure tests have shown: The tube is more likely to yield than a LOKRING. Tensile loads of up to 2 tonnes are no problem for the connection either. It's not for nothing that the system, which has proved its worth millions of times over, is used by leading air-conditioning manufacturers. The LOKCLIP system meets the requirements of the international standard SAE J2064 and reduces refrigerant loss by up to 74% compared with conventional systems.



### ➔ NEAT AND TIDY SOLUTION

Faulty tubes are still often soldered or welded. The result: soiling such as scale or solder residue often gets into the air-conditioning circuit and damage the whole system. One problem you don't even have to think about with LOKRING & LOKCLIP. The refrigerant keeps clean – and every connection is a neat and tidy solution.





# REACH MORE CUSTOMERS.

## HOW TO MAXIMIZE YOUR TURNOVER WITH LOKRING PRODUCTS.

### ➔ A BRIEF ANALYSIS OF ECONOMIC FEASIBILITY

The LOKRING principle makes it easy for you to convince your customers. And there are lots of good reasons for you to put your money on LOKRING products. LOKRING offers you service and turnover advantages:

- ➔ No delivery time for ordered spare parts
- ➔ Low labour costs for the individual repairs  
in particular in comparison with repairs using the original part
- ➔ Overall, more repairs can be carried out within the same working hours
- ➔ No unnecessary waiting times for your customers

#### REPAIRS WITH LOKRING AND LOKCLIP

OFTEN, REMOVAL IS NOT NECESSARY!



**18 min + 32.58 €\***

\* LOKRING material costs

#### REPAIRS WITH ORIGINAL SPARE PARTS



**192 min + 117 €\*\***

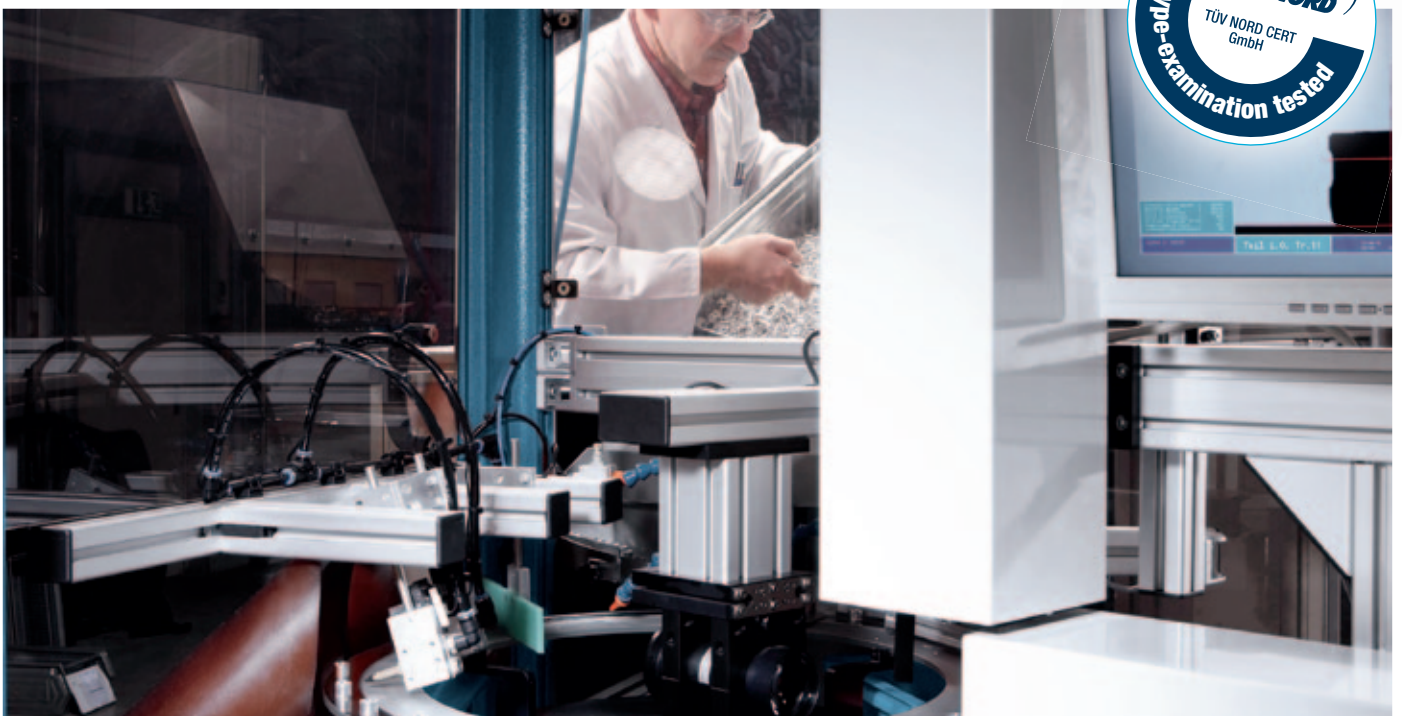
\*\* Original spare part material costs  
7M1820741Q

## WHEN WE EXCHANGE RINGS, WE'RE MAKING A PROMISE.

### GUARANTEED BY OUR QUALITY CONTROL.

The name VULKAN LOKRING has been standing for top quality for 30 years. Our quality and environmental management system has been certified by the material testing authority in North-Rhine Westphalia according to DIN EN ISO 9001:2008 and DIN EN 14001:2005. To guarantee this quality permanently, we manufacture our LOKRINGS using our own production and control procedures.

Thanks to highly developed systems for industrial image processing, we manage to carry out dimension tolerance checks on all the LOKRINGS we produce. As an original equipment manufacturer to the automotive industry, we are used to not making mistakes.



# SIMPLIFY YOUR LIFE.

## OVERVIEW OF THE LOKRING AND LOKCLIP RANGE

### LOKRING | BRIEF OVERVIEW



Sometimes, life can be so easy. The LOKRING system provides you with the suitable solution for every tube connection. Whether its connectors and reduced connectors you need, or service, pressure switch, O-ring, repair or angled connections – all components have been perfectly matched to one another. The portfolio is rounded off by the LOKBOX service set, the handy system box that contains everything you need for assembly.

### TOOLS



### CONNECTORS, REDUCED CONNECTORS



### SERVICE CONNECTIONS



### PRESSURE SWITCH CONNECTIONS



### TUBE MATERIALS



### BASIC EQUIPMENT



### LOKCLIP | BRIEF OVERVIEW



Even more possibilities with LOKCLIP! Setting up flexible hose connections is child's play. And with the compatible LOKRING, even hose-to-tube combinations are no problem. And the handy LOKBOX service set for the LOKCLIP, keeps everything you need for a perfect connection on hand.

### TOOLS



### LOKRING CONNECTIONS



### ANGLED CONNECTIONS



### UNION NUT CONNECTIONS



### COMPRESSOR CONNECTIONS



### SPLICERS



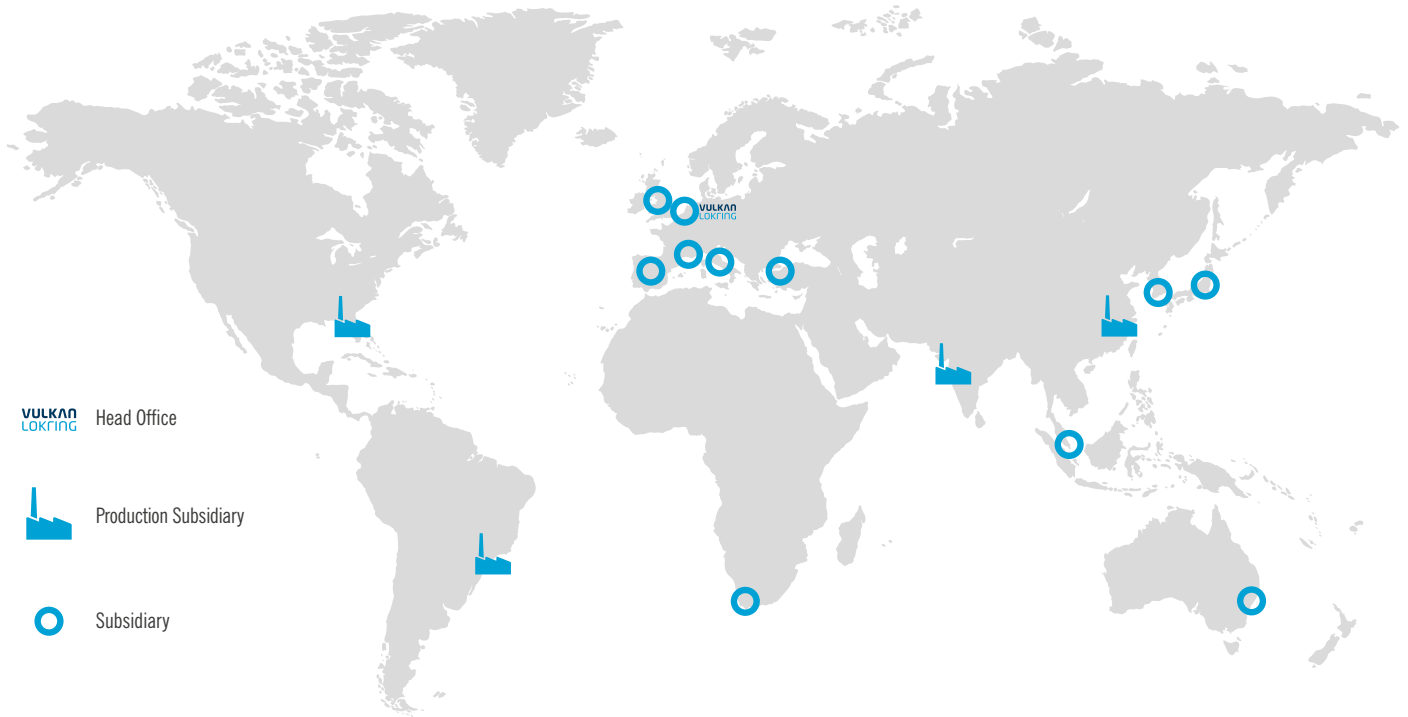
**WELL INFORMED RATHER THAN WRONGLY CONNECTED**  
WE WILL BE HAPPY TO HELP

( Linking - Weltweite Verbindungen )

( Linking - connecting Worldwide )







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