

STANDARD

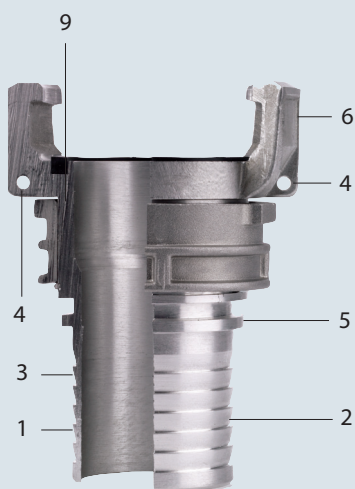
LMC's Guillemín couplings are symmetric couplings designed in compliance with EN 14420-8 / NF E 29-572.

OPERATION

A Guillemín coupling, consist of a seal * on the connection surface and is closed by placing two identical coupling pieces together. This symmetrical coupling is closed by turning the locking ring through a quarter turn, and is sealed by tightening the locking ring behind the lugs. Extra closure can be applied by locking the Guillemín coupling using a Guillemín GY wrench. Guillemín coupling locking rings can be turned through 360° when disconnected.

*Seal available only on Guillemín couplings with locking ring.

FEATURES



1. High quality surface finishing
2. Long hose shank for extra hose assembly rigidity
3. Extra wall thickness for longer life time
4. Reinforcement device with hole for chain attachment
5. Extra large collar
6. LMC-Couplings brand name
7. Heat treated material
8. Material composition as required by the standard
9. Standard black seal with excellent compression set properties

N.B.: Guillemín couplings are not interchangeable with DSP couplings

APPLICATION

For pressure and suction delivery of liquids and solids (such as powders and granulates)

Irrigation: ND 65 – 100

Hydrocarbons: ND 40 - 50 - 65 - 80 - 100

Granulates: ND 80 - 100

Chemicals: ND 20 - 100 (stainless steel)

N.B.: Guillemín couplings must never be used for steam or liquid gas applications

WORKING PRESSURE

16 bar / 230 psi

Test pressure: 30 bar / 435 psi

Minimum burst pressure: 50 bar / 725 psi



TEMPERATURE

-20°C / -4°F up to +65°C / 149°F

Hose, coupling, assembly method and seal must be chosen in relation with the desired application and temperature range.

MATERIAL

- Coupling
 - Aluminium heat treated
 - Stainless steel AISI 316 / 1.4401
- Seal
 - NBR - black standard for stainless steel and aluminium
 - EPDM - white
 - FPM - green
 - PTFE - white

ASSEMBLY

Worm drive clamps
 Band clamps
 RK-safety clamps complying with EN 14420-3 / DIN 2817
 FLEXOLINE® safety clamps
 Swage ferrules for helical hose shank
 Butt welding

THREADS

Male thread: EN ISO 228-1, BSP
 Female thread: EN ISO 228-1, BSP

TESTING

Guillemin couplings are often submitted to heavy handling impact when loading and unloading liquids and solids. These couplings are therefore subject to more demanding testing methods than other couplings.

LMC's guillemin couplings undergo a number of tests executed by our Research & Development department. In addition to our own testing methods, we also use the latest gauges specified by the European EN 14420-8 standard. The following product properties are tested:

- Lugs
- Locking ring
- Material test
- Dimensions
- Quality finishing

■ Lugs

A fall of a hose, assembled with Guillemín couplings, causes an impact on the lugs of the coupling. Therefore the mechanical strength of the lugs must be tested. The mechanical strength of the lugs is tested using a conical weight falling around its axis onto the coupling lugs. This 'Chinese head' test is developed to test the internal impact of the lugs. The external impact of the lugs is tested using the 'pan' test, which is the opposite of the 'Chinese head' procedure. LMC guillemín couplings passed both lug tests successfully. A gauge is then used to check the dimensions of the lug spacing, as specified by the EN 14420-8 standard.



■ Locking ring

The locking ring is tested by simulating a fall to the ground. The test device consists of a sway arm and a weight. When the arm falls onto the locking ring, the ring deforms as a result of the heavy impact. LMC-Couplings conducts this test to discover whether there are any signs of post-impact deformation or fracturing. In practice, a locking ring cannot deform, since it is mounted onto the body of the Guillemín coupling. However, if the chemical structure of the locking ring is inadequate, then the locking ring will break immediately. The LMC-Couplings locking ring resumed its original shape after testing, and displayed no evidence of fracture.



■ Material test

An in-house spectroscope is used to test the materials used in the Guillemín couplings. The spectroscope analyses the precise material substances found in the coupling. We can therefore offer our customers a guarantee that the materials used comply fully with the relevant standard.

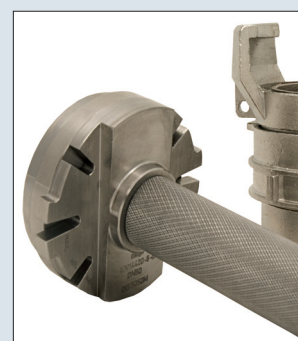


■ Dimensions

The dimensions of LMC Guillemín couplings comply with EN 14420-8 / NF E 29-572. Guillemín couplings manufactured in compliance with this standard are interchangeable. The Guillemín couplings are randomly checked for correct dimensions using two different measuring methods:

1. Measuring tool
2. Gauges

Our measuring system compares the dimensions of our Guillemín couplings comply with the standard. Although ordinary measuring systems are unable to give precise measurements, our measuring system is able to measure the less accessible parts and shapes of Guillemín couplings. This minimizes inspection times and ensures the highest levels of product quality. The European EN 14420-8 standard requires the use of gauges to guarantee interchangeability of Guillemín couplings. LMC-Couplings uses gauges as a random quality measurement system at several production stages, in our production department, on arrival in our warehouse and before goods are shipped to our customers. Using the gauges required by the European EN 14420-8 standard, LMC-Couplings measures the following four quality-point dimensions of its Guillemín couplings:



- A. Seal groove
- B. Locking ring
- C. Outside diameter
- D. Inside diameter



■ Quality finishing

LMC’s Guillemín couplings meet the high requirements of the EN 14420-8 / NF E 29-572 standard. A lot of attention was focused on product design. The design of the lugs, the ergonomic locking ring, the special treated surface, length of hose tail, plug with chain, branding ... and many more details guarantee a highly finished product.

Guillemín couplings vs DSP couplings

	GUILLEMIN COUPLINGS	DSP COUPLINGS
Standard	EN 14420-8 / NF E 29-572	NF S61-704 / NF S61-705
Main application	Pressure and suction purposes in wide range of industries	Pressure and suction purposes in fire fighting
Lug	Smooth (a)	Triangular (b)
Locking ring	Smooth Rotation of 360°	Serrated Rotation of 45°
Seal	Square seal	Profiled seal

