TRICLAMP COUPLINGS  DIN / INCH / ISO / IMPERIAL

STANDARD

LMC’s Triclamp couplings are quick couplings used in working environments demanding high levels of hygiene; e.g. the food, pharmaceutical, chemical and life science industries. The Triclamp couplings are available in DIN 32676, INCH, IMPERIAL or ISO 1127 standards.

OPERATION

Triclamp couplings are easily identified by their flange design. The transition from the flange side to the hose side is made by a conical profile. The flange side is used to connect to another flange of the same dimension and standard. Users should ensure that only Triclamp’s complying with the same standard are connected together. The Triclamp seal (profiled or non-profiled) is fitted to one of the flanges. The second Triclamp is then brought together with the flange containing the seal. The heavy-duty clamp is applied to the flanges and closed. The coupling can easily be connected, disconnected and reused.

N.B.: Closing the heavy-duty clamp too tightly will alter the mechanical structure of the flange seal. Always use the recommended torque setting of 5 NM.

FEATURES

1. Lightly-grooved hose shank for assembly with EN 14420-3 RK safety clamps, HRRK or HRP-swage ferrules
2. Bacterial growth is prevented due to the sanitary transition of the inside of the hose shank
3. The rounded end of the hose shank prevents hose damage
4. Low internal Ra value of ≤ 0.8 µm (Ra test report available)
5. Outer diameter in relation with inner flange dimension. No disconnection necessary to define the type of tube system.
6. All sizes are fully vacuum-resistant up to 130°C / 265°F
7. Transition is possible between Triclamp couplings with same flange size/standard, same ID flange side and different hose dimension
8. EN 10204-type 3.1 certificate available on request
APPLICATION

For food, beverage, chemical, pharmaceutical and life science industry applications, as well as bio-engineering, filter and water treatment technology.

WORKING PRESSURE

Coupling
ND 10 to ND 50: maximum 16 bar / 230 psi
ND 65 to ND 100: maximum 10 bar / 145 psi

TEMPERATURE

-30°C / -22°F up to +300°C / 572°F
Hose, coupling, assembly method and seal must be chosen in relation with the desired application and temperature range.

MATERIAL

- Coupling
  Triclamp coupling with hose shank
  Stainless steel AISI 316Ti / 1.4571
  Polypropylene or reinforced PTFE (on request)
  HASTELLOY® C-276 alloy on request
  HASTELLOY® is a registered trademark of Haynes International, Inc.
  Triclamp coupling with butt weld
  Stainless steel AISI 316L - 1.4404

- Seals
  DIN 32676: NBR, EPDM, FPM, PTFE, MVQ
  INCH: NBR, EPDM, FPM, PTFE
  ISO1127: Silicone, EPDM, FPM, GYLON BIO-PRO®
  IMPERIAL: NBR, EPDM, FPM, PTFE
  Other materials on request
  GYLON BIO-PRO® is a registered trademark of Garlock Sealing Technologies

ASSEMBLY

- Stainless steel RK safety clamps EN 14420-3 / DIN 2817
- Stainless steel HRRK swage ferrules for rubber hoses
- Stainless steel HRP swage ferrules for PTFE hoses
- Butt welding

RA TEST REPORT

A roughness test report for our standard range of Triclamp couplings is available on request.
Ra value (or Roughness average value) is the average of a set of individual measurements of the peaks and troughs of a given surface.

Inner roughness average value (Ra) ≤ 0.8 µm
Outer roughness average value (Ra) ≤ 1.2 µm

Inner Ra value of ≤ 0.3 µm available on request.