# **ZoomLock**<sup>™</sup> Flame-Free Refrigerant Fittings

Form P-528, Engineering Specification, February 2018





### **PART 1: GENERAL**

#### 1.0 SUMMARY

- A. ZoomLock flame-free refrigerant fittings are specially designed to join HVAC/R copper tubes without brazing. ZoomLock is intended for HVAC/R applications.
- B. ZoomLock copper fittings include two pre installed o-rings. The system is assembled only using the Parker approved ZoomLock Klauke® or RIDGID® approved pressing jaws to create a permanent leak proof joint.
- C. ZoomLock fittings cannot be assembled using Viega ProPress jaws. The installer shall be mindful that the crimp location of a ZoomLock fitting is in a different location than the ProPress fittings.
- D. ZoomLock fittings and Klauke pressing tools and jaws are sold by your nearest authorized Parker Hannifin or Sporlan Division wholesaler.
- E. ZoomLock RIDGID pressing jaws are sold by your nearest authorized Parker Hannifin or Sporlan Division wholesaler. RIDGID tools are sold by your nearest RIDGID authorized wholesaler.

## **PART 2: PRODUCTS**

#### 2.0 REFERENCES

- A. UL 207: Standard for Refrigerant-Containing Components and Accessories, Nonelectrical
- B. UL 109: Standard for Tube Fittings for Flammable and Combustible Fluids, Refrigeration Services, and Marine Use. Vibration Test 8.1
- C. ASME B31.5: Refrigeration Piping and Heat Transfer Components
- D. ASTM B75: Standard Specification for Seamless Copper Tube
- E. ASTM B88: Standard Specification for Seamless Copper Water Tube
- F. ASTM B743: Standard Specification for Seamless Copper Tube in Coils
- G. ASTM B280: Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service
- H. EN 12735-1: Copper and Copper Alloys. Seamless, round copper tubes for air conditioning and refrigeration. Tubes for piping systems
- I. ASHRAE 15: Safety Standard for Refrigeration Systems
- J. ICC-ES, PMG-1296: Division 23 00 00-Heating, Ventilation and Air Conditioning
- K. ICC: International Mechanical Code (IMC)
- L. ICC: International Residential Code (IRC)
- M. IAPMO: Uniform Mechanical Code (UMC)
- N. CRN (Canadian Registration Number): #0A18303.5C
- O. Parker Catalog K-1, ZoomLock Engineering Submittal

#### 2.1 PRODUCT PARAMETERS

- Applications: HVAC/R, Glycol and Non-Potable Water
- B. Continuous Operating Temperature: 250°F (121°C)
- C. O-Ring Temperature Rating: -40 to 300°F (-40 to 149°C)
- D. Maximum Rated Pressure: 700 psi (48 bar)
- E. Minimum Burst Pressure: 2,100 psi (145 bar)
- F. Vacuum Pressure Capability: 20 micron
- G. Maximum Leak Rate: 0.1 oz Helium per Year
- H. Vibration Resistance: Conforms to UL 109

#### 2.2 APPROVED REFRIGERANTS AND OILS

A. For the latest approved refrigerants refer to www.sporlanonline.com/ZoomLock

#### 2.3 QUALITY ASSURANCE

- A. All qualified installers shall be trained on the safe installation of ZoomLock flame-free refrigerant fittings. They should also be licensed within the jurisdiction.
- B. ZoomLock fittings shall be installed using the proper tools and pressing jaws defined by the manufacturer.
- C. Installation of HVAC/R copper tubing shall conform to the requirements of the International Mechanical and Residential Codes and Uniform Mechanical Code.

#### 2.4 DELIVERY, STORAGE AND HANDLING

- Do not stack boxes on top of ZoomLock fittings weighing more than 20 lbs.
- B. When using a knife for unpacking, take special care not to scratch copper tubing or ZoomLock fittings since this can lead to leaks.
- C. ZoomLock fittings and copper tubing shall be shipped to the job site in such a manner to protect the tubing and fittings. ZoomLock fittings and tubing shall not be roughly handled during shipment. Tubing and fittings shall be unloaded with reasonable care.
- D. Protect the stored products from moisture, dirt and debris. Maintain elevated above grade. Do not exceed the structural capacity of the floor when stored inside.

#### 2.5 PROJECT CONDITIONS

A. Allow the Klauke tool to reach ambient temperature if it is stored for prolonged periods of time at extreme temperatures. The ZoomLock Klauke tool's operating temperature is 14° to 104°F. The RIDGID RP-200-B operating temperature is 15°F to 122°F and the RP-210-B operating temperature is 15°F to 140°F. Both RIDGID tools work with the Compact Series RIDGID jaws.

#### 2.6 WARRANTY

- A. ZoomLock fittings shall be free from defects in material and workmanship. The warranty shall only be applicable to the ZoomLock fittings installed in accordance with the installation instructions.
- B. ZoomLock product warranty is maintained in Catalog K-1 ZoomLock Engineering Submittal.