



# AS1895/7 & AS1895/23 METAL SEALS FOR AEROSPACE INDUSTRY

## Trusted Metal Sealing Solutions: Bleed Air System Applications

Safety, reliability and compliance ... high expectations demanded by the aviation industry where failure is never an option. Specific SAE industry standards such as AS or AMS ensure quality assurance by defining repeatable techniques and consistent manufacturing processes.

Omniseal Solutions' SAE AS1895/7 and AS1895/23 metal seals are valued due to solving extreme temperature and pressure challenges. Additional demands include constant vibration, friction and exposure to corrosive chemicals.

### Certified Quality Standards

- The AS1895 standard defines the requirements used for a grooved clamp coupling, flanges and seals suitable for joining high pressure and high temperature ducting in aircraft bleed air systems.
- Our AS1895 metal seals meet ISO9001 and AS9100 standards and are NADCAP approved to ensure aerospace industry compliance.

### Flexible Size Range & Optimized Seal Profiles

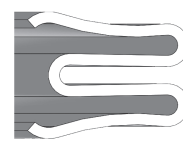
- Our AS1895 metal seals are available in sizes from -100 to -750 series, with seal fit ducts from 1 to 7.5 inches for various aircraft platforms.
- Our Omniseal® Metal E-Seals are engineered to suit rigid couplings. This design provides low load, allowing for hand closing and opening of the AS1895 coupling.

### Material Selection

- Our AS1895 certified seals are made of Inconel 718, ensuring an extended lifetime and temperature resistance.

### Ease Of installation

- Our metal seals have a snap fit design, to slightly press fit into coupling for retention in vertical or horizontal installations.



AS1895/7



AS1895/23



9100D:2016



9001:2015



# Precision AS1895 Metal Seals: Applications & Technology Advantages



## High-Performance Aerospace Seals

- AS1895/7 and /23 seals are used in the bleed air systems of commercial, military and business aircraft, where temperatures can reach +1200°F (+650°C) and pressure level is high.
- To fulfill safety and reliability requirements, each seal design undergoes an extensive testing campaign to validate performance under simulated operating conditions. The seals are heat treated per AMS 5596 to achieve material optimal strength and elastic recovery.

## Proven Efficiency & Extended Lifespan

- Due to our snap-fit installation, assembly time is reduced.
- Industry sealing studies show that over 110 billion flight hours have been logged with no failures, demonstrating a record of reliability.
- Reliable metal seals reduce maintenance frequency and operational downtime, enhancing cost-efficiency for OEMs.

## How to read an AS1895 part number?

**Example: AS1895/7-325**

**AS1895** = SAE Standard    **/7** = Design Type    **325** = Dash Number

## Robust Aerospace Solutions Portfolio & Expertise

Omniseal Solutions not only provides precision AS1895 metal seals for bleed air systems, we also support other critical applications (APUs, flight controls and sensors) through custom polymer sealing and wear and friction control solutions. Our 70+ years of aerospace expertise has protected commercial aircraft, helicopters, drones and defense, and advanced air mobility (AAM).

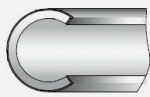
To further enhance seal performance and compatibility, we offer a wide range of advanced coatings and platings, e.g., tin, silver, gold, nickel, and proprietary NCCM coating. These additional layers improve seal lifetime by minimizing wear and maintaining seal performance over extended service periods.

Our global team offers engineering services such as testing campaigns, including leak and load tests, and cross-sectional assessment to analyze seal behavior. These results can be combined with our advanced simulation capabilities to validate customer real-life application conditions.

### The following is an overview of our main seal designs portfolio for aerospace applications:



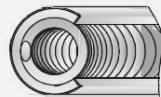
**Omniseal®  
Metal O-Ring**



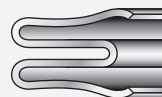
**Omniseal®  
Metal C-Seal**



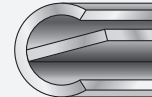
**Omniseal®  
Axial C-Seal**



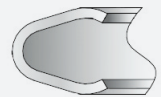
**Omniseal®  
Spring-Energized  
C-Seal**



**Omniseal®  
Metal E-Seal**



**Omniseal®  
Metal Boss Seal**



**Omniseal®  
Metal  
Oysterseal®**

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