

Description of Product

UniLok is a family of nickel-titanium shape memory alloy rings used for permanent and semi-permanent fastening, sealing, and electrical interconnection. The rings shrink in diameter when heated, producing a uniform radial clamping pressure. Alloys H and C are used for permanent fastening, alloys B and D for demateable fastening, and alloys G and N for short term clamping and actuation.

Index of Related Documents

- PD ACE Rectangular Section, Cryogenic
- PD AGE Rectangular Section, 105°C Recovery Temperature
- PD AHE Rectangular Section, Heat-To-Recover
- PD ANE Rectangular Section, 125°C Recovery Temperature
- PD ADE Rectangular Section, 35°C Recovery Temperature
- PD BGE Circular Section Welded, 105°C Recovery Temperature
- PD BHE Circular Section Welded, Heat-To-Recover, English Units
- PD 003 Installation Procedure, Heat-To-Recover
- PD 004 Installation Procedure, Cryogenic
- PD 005 Material Properties
- PD 008 Geometric Modifications
- PD 009 Clamping Force Calculation

Part Numbering System

AHE0505-0071-0141I

A H E 0505 0071 0141 I

Geometry

- A - ring with rectangular cross section
- B - ring fabricated by forming and welding round wire

Alloy

- B - 55°C recovery temperature
- D - 35°C recovery temperature
- H - heat to recover
- C - cryogenic
- G - 105°C recovery temperature
- N - 125°C recovery temperature

Units

- E - English (inches)
- M - Metric (mm)

Inside Diameter of Ring, Minimum, As Supplied

Format: Y.YYY" X 1000 or YY.YY mm X 100 (example, 0.505")
 For Alloys G & N, this is as measured at the minimum recovery temperature.

Thickness of Ring, Nominal, As Supplied

Format: Y.YYY" X 1000 or YY.YY mm X 100 (example, 0.071")

Axial Length of Ring, Nominal, As Supplied

Format: Y.YYY" X 1000 or YY.YY mm X 100 (example, 0.141")
 Omit for welded wire rings.

Modifications

- B - Matte finish.
- O - Grey / black oxide finish.
- C - With geometric modification per PD 008.
- V - With fixed surface finishing process for in vivo applications.
- I - With electrical insulating layer applied to ring ID to aid direct resistance heating.
- J - With electrical insulating layer applied to ring ID and end faces to aid direct resistance heating.
- P - With temperature indicating paint corresponding to full clamping force temperature.
- E - Alloy H with recovery temperature >60°C
- T- surface textured for enhanced friction & adhesion
- S - sized to a particular diameter, delivered shrunk

Intrinsic Devices, Inc.

2353 Third Street
 San Francisco, CA 94107-3108
 tel: 415 252-5902 fax: 415 252-1624

intrinsicdevices.com

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Product Document

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