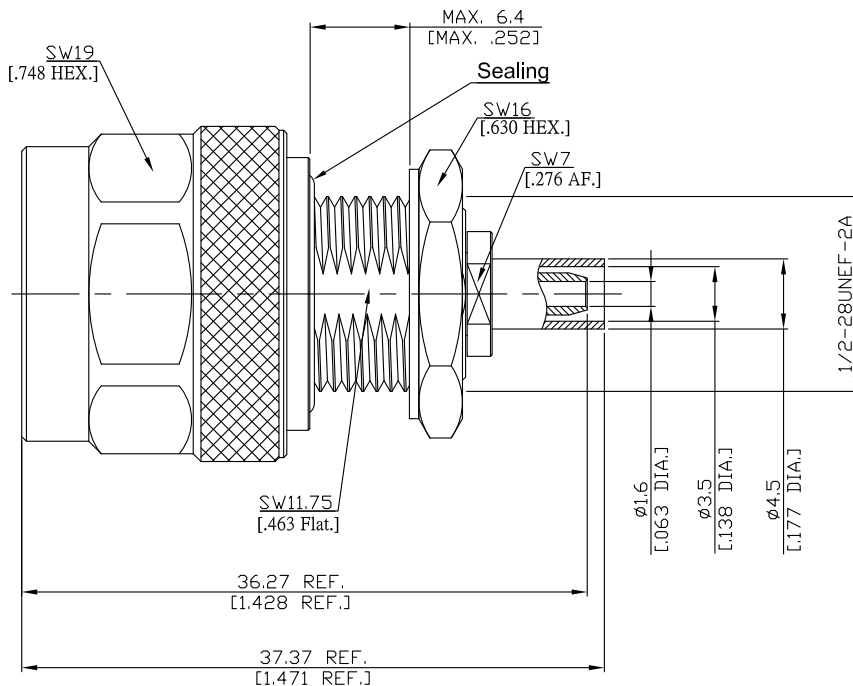
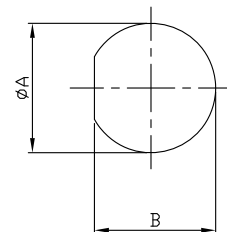


N Plug (Male) Bulkhead Rear Mount Connector Crimp/Solder or Crimp Attachment
for RG174-d, RG188-d, RG316-d, 11.75mm [.463 inch] D Hole DC-12GHz VSWR1.3

N1CA50-D316A / H44



Mounting Dimension



	mm		inch	
	Max.	Min.	Max.	Min.
A	12.7	12.6	.500	.496
B	11.95	11.85	.470	.467

All dimensions are in mm [inch]

Tolerances according to DIN ISO 2768-mH

Interface

According to

IEC 61169-16

MIL-STD-348B/304

Electrical Data

Impedance	50 Ω
Frequency	DC to 12 GHz
VSWR (Return Loss)	≤ 1.3 (≥ 17.7 dB)
Insertion Loss	≤ 0.5
Insulation Resistance	≥ 5 GΩ
Center Contact Resistance	≤ 1 mΩ
Outer Contact Resistance	≤ 0.25 mΩ
Working Voltage	500 V rms

- Limitations are possible due to the used cable type -

Material And Plating

Piece Parts	Material	Plating
Centre contact	Phosphor Bronze	Gold plating, 3 pinch (Non-magnetic nickel-phosphorus underplating, 80 pinch)
Body	Brass	Copper-Tin-Zinc-Alloy
Insulator	PTFE	
Gasket	Silicone Rubber	
Coupling nut	Brass	Copper-Tin-Zinc-Alloy
Washer	Brass	Copper-Tin-Zinc-Alloy
HEX Nut	Brass	Copper-Tin-Zinc-Alloy
Ferrule	Brass	Copper-Tin-Zinc-Alloy

The facts and figures herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Rev.: 1.0

Date:
Dec/14/2023

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N-CAGE Code: SFKK0 / ISO9001 Certified

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Mechanical Data

Coupling Mechanisms	Screw-Lock
Mating Cycles	≥ 500
Coupling Nut Retention	≥ 450 N
Center contact captivation: axial	≥ 28 N
Coupling Test Torque	≤ 1.7 Nm
Recommended Torque	0.7 Nm to 1.1 Nm
Centre Contact	Soldered or Crimped
Cable Entry	Crimped

Environmental Data

Temperature Range	-65°C to +165°C
Thermal Shock	MIL-STD-202, Method 107, Condition B
Corrosion	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition I
Moisture Resistance	MIL-STD-202, Method 106
RoHS	compliant

Suitable Cables

RG174-d, RG188-d, RG316-d

Weight

N/A

Packing

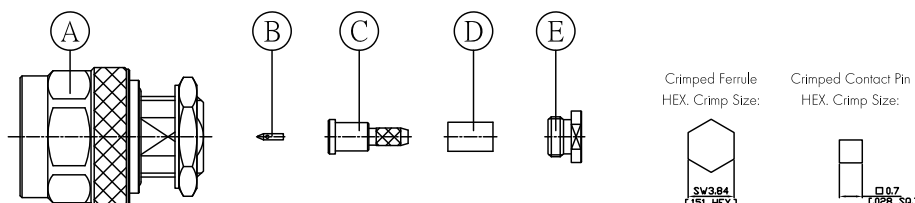
Single or 100

N Plug (Male) Bulkhead Rear Mount Connector Crimp/Solder or Crimp Attachment
for RG174-d, RG188-d, RG316-d, 11.75mm [.463 inch] D Hole DC-12GHz VSWR1.3

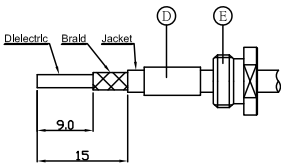
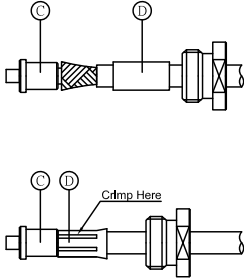
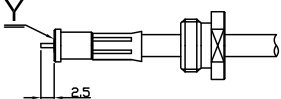
N1CA50-D316A / H44

Connector Type:	N1CA50-D316A/H44	Inner Conductor Contact:	Soldered or Crimped
Suitable Cable:	RG174-d, RG188-d, RG316-d	Outer Conductor Contact:	Crimped

Parts List of Connector:

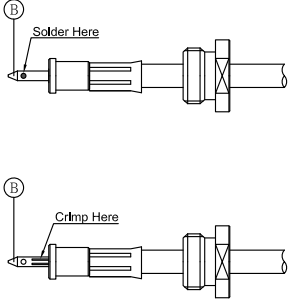
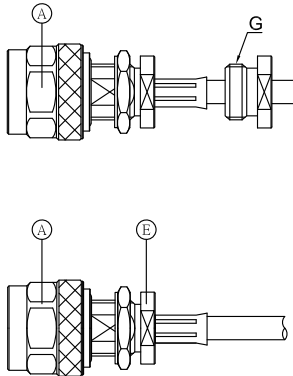


Assembly Steps:

Picture	Process	Attention/Check	Tools Required
	Push ferrule "D" and clamp nut "E" over the cable. Prepare the cable according to the diagram.	Do not damage center conductor, dielectric and braid.	Blade Scissor
	Splay out braid and slide barrel "C" until stop. Slide ferrule "D" over braid to about barrel "C" as possible and crimp.	Ensure that braid lies above crimp neck.	Crimp tool: CT-L3 Crimp insert: CH-L33T1A
	Cut off dielectric at plane "Y" carefully.	Do not damage center conductor Check dimension 2.5 mm. Clean the surface "Y" of the barrel.	Blade or Laser machine.

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	Push contact pin "B" over inner conductor of cable up to cable dielectric and solder or crimp.	Do not damage center conductor and dielectric.	Solder tool: Solder iron or Resistance soldering unit. Crimp tool: CT-L3 Crimp insert: CL33T1A
	Slide cable into connector body "A" until stop. Apply the glue on the first complete screw thread groove(G). Screw clamp nut "E" into connector body A. Tightening torque 3 Nm.	Check the screwed connection by untighten it. Measured torque has to exceed 3 Nm. Cable may not rotate in the connector. Be careful to not pollute the inside surface with glue, of the Body "A".	LOCTITE glue. Spanner AF 12mm. Torque wrench 3 Nm. AF 7mm.

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N1CA50-D316A / H44

Cable Assembly P/N	N1CA50-RG316D-N1CA50-270A/12G
Connector 1	N1CA50-D316A/H44
Connector 2	N1CA50-D316A/H44
Cable	RG316D
Cable Length	270mm
Vector Network Analyzer (VNA)	Keysight N5235A
Calibration Kit	Keysight 85054D
Test Method	Port 1: N Bulkhead Rear Mount Plug (Male)
	Port 2: N Bulkhead Rear Mount Plug (Male)
	Port 1 + DUT + Port 2

