

4.3-10

Connector & Adapter Series for Mobile Applications

Excellent PIM Performance ●

Superior Electrical Performance ●

Compact Design (40% Less than 7/16) ●

Screw / Hand Screw / Quick Lock Coupling ●

Light Weight ●




vida^{RF}

Simple Solutions
for Complex Connections™



4.3-10 Series

GENERAL

4.3-10 Mini DIN series of coaxial connectors were developed to meet the growing demands of today's high performance mobile communications system. The connectors guarantee excellent return loss and passive intermodulation performance (PIM) levels. The 4.3-10 connectors are a much more compact design which allows for higher connector density on equipment while reducing the weight up to 60%. The result is a system that will support up to 500 Watt at 2 GHz in more compact equipment designs demanded by the evolving mobile environment. In addition, the new connector series is very variable, since one universal cable jack is suitable for mating with 3 different cable plug designs.



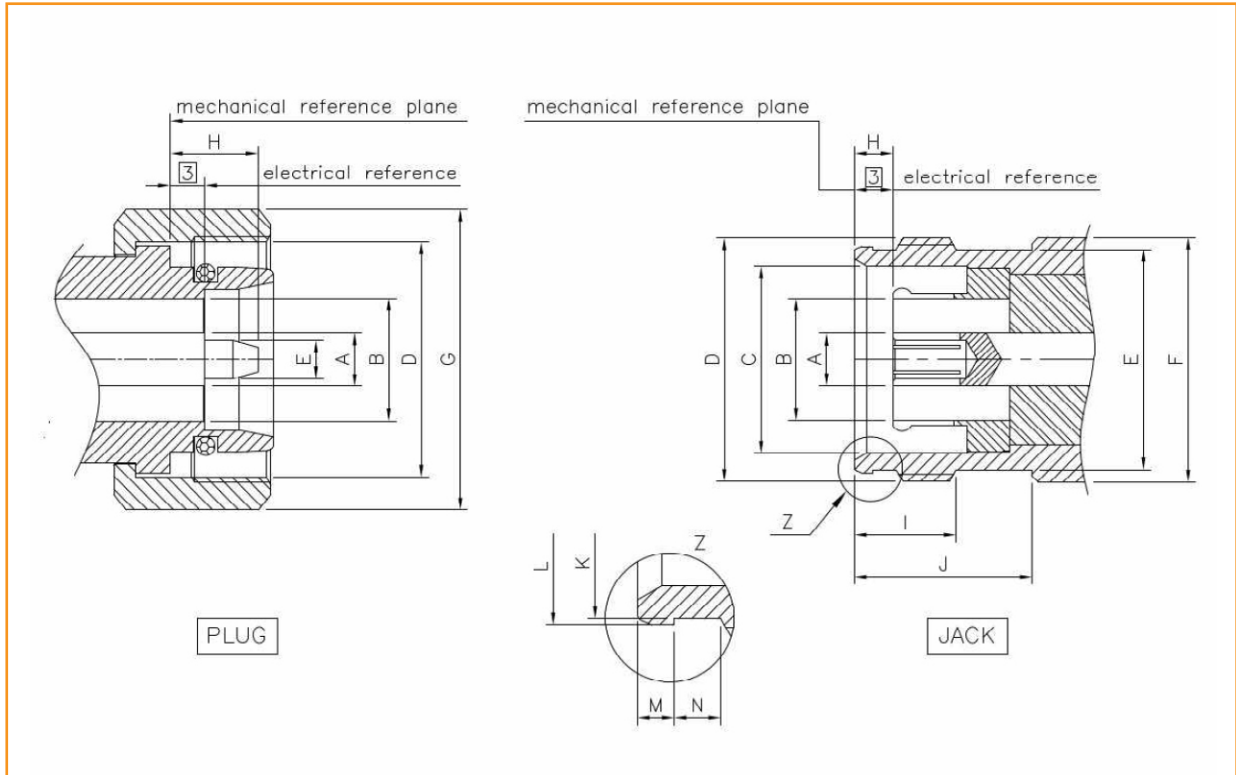
4.3-10 Series

CHARACTERISTICS

Requirements	Specifications
ELECTRICAL DATA	
Impedance	50Ω
Frequency range	DC to 12GHz
Return loss (cable connector straight)	≥36 dB @ DC to 4GHz ≥32 dB @ 4 GHz to 6GHz
Insertion loss	≤0.05 x √f (GHz) dB
Insulation resistance	≥5 GΩ
Center contact resistance	≤1 m Ω
Outer contact resistance	≤1 m Ω
Test voltage	2500 Vrms
Working voltage	500 Vrms
Power handling	500 W @ 2GHz / 90 °C
RF leakage - Interface	≥120 dB @ DC to 6GHz (screw type) ≥90 dB @ DC to 3GHz (hand-screw / quick-lock) ≥ 70 dB @ 3GHz to 6 GHz (hand-screw / quick-lock)
Intermodulation	≤ -160 dBc (2 x 46 dBm) @ 0.4 to 4GHz
3rd order Impedance	≤ -166 dBc (2 x 43 dBm) @ 0.4 to 4GHz
MECHANICAL DATA	
Mating cycles	≥ 100
Coupling nut retention	≥450 N
Center contact captivation	axial : ≥ 30 N radial: ≥ 5 Ncm
Engagement force	100 N (typ.)
Disengagement force	80 N (typ.)
Coupling test torque	8 Nm
Coupling torque recommended	5 Nm
Pitch	≥25.4 mm
ENVIRONMENTAL DATA	
Temperature range	-55 °C to + 90 °C
Thermal shock	IEC 61169-1, Sub-clause 9.4.4
Damp heat	IEC 61169-1, Sub-clause 9.4.3
Climatic category	IEC 60068-2-1 55/155/56
Degree of protection (mated pair)	IEC 60529, IP 68
Corrosion resistance	ISO 21207 Method B
Vibration	IEC 61169-1, Sub-clause 9.3.3
Shock	IEC 60068-2-27
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260°C for 10 sec.

4.3-10 Series

Interface Dimensions

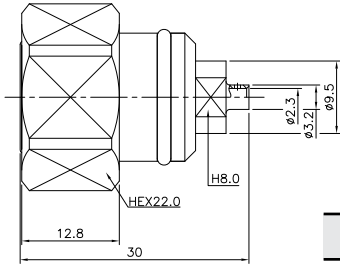


Interface Dimensions in mm/inch

	PLUG		JACK	
	Min.	Max.	Min.	Max.
A	4.35 nom		4.35 nom	
B	10.00 nom		9.80	10.20
C	-	-	15.15	15.30
D	M20X1.0P		M20X1.0P	
E	3.07	3.13	17.45	17.55
F	15.07	15.11	18.60	-
G	SW 22		-	-
H	-	8.00	3.10	3.50
I	-	-	8.70	9.00
J	-	-	13.90	14.10
K	-	-	17.40	17.50
L	-	-	18.44	18.50
M	-	-	1.44	1.50
N	-	-	1.70	1.90

4.3-10 Series

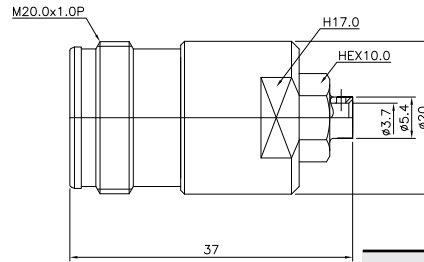
D4.3/10-Straight Plug (for Cable-UT085)



Part No.

D4310-101-001

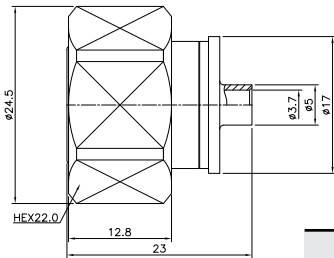
D4.3/10-Straight Jack (for Cable UT141)



Part No.

D4310-202-001

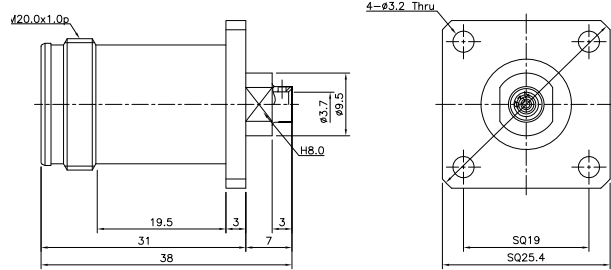
D4.3/10-Straight Plug (for Cable UT141)



Part No.

D4310-102-001

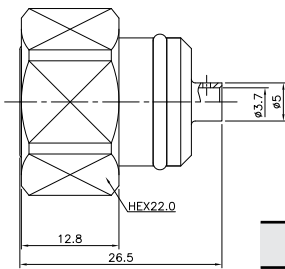
D4.3/10-Panel 4 Hole Jack (for Cable SF141)



Part No.

D4310-402-001

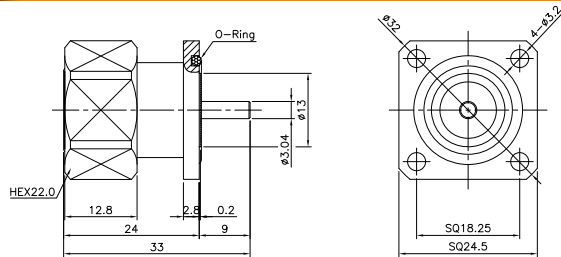
D4.3/10-Straight Plug (for Cable-UT141)



Part No.

D4310-102-003

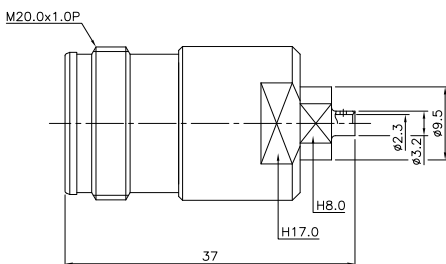
D4.3/10-Panel 4 Hole Plug Receptacle



Part No.

D4310-503-003

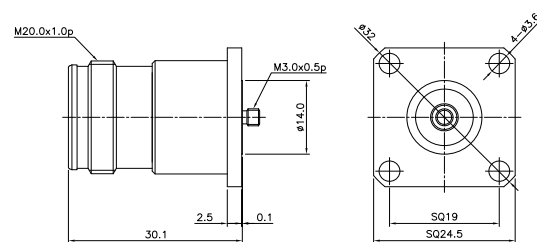
D4.3/10-Straight Jack (for Cable UT085)



Part No.

D4310-201-001

D4.3/10-Panel 4 Hole Jack Receptacle

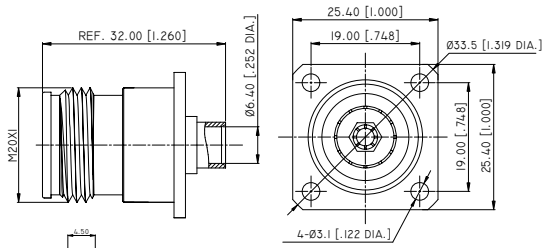


Part No.

D4310-504-001_R1

4.3-10 Series

D4.3/10-Straight Jack Solder (for .250 Cable - Push Pull Type)

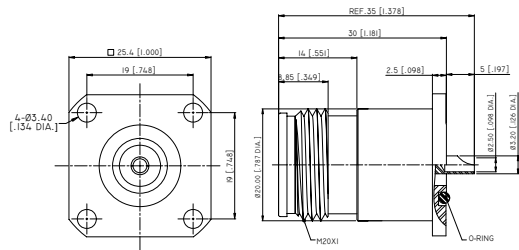


CABLE STRIPPING DIMENSIONS

Part No.

D4310-807-005

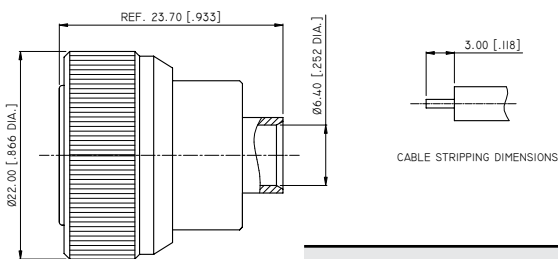
D4.3/10-Jack 4 Holes Flange Solder Cup Contact



Part No.

D4310-807-001

D4.3/10-Straight Plug Solder (for .250 Cable - Push Pull Type)

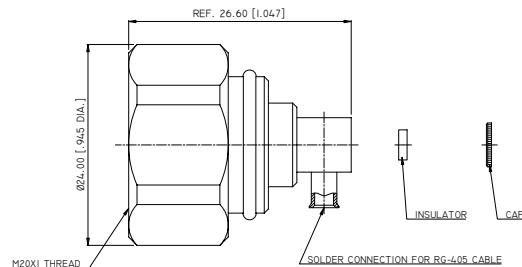


CABLE STRIPPING DIMENSIONS

Part No.

D4310-807-006

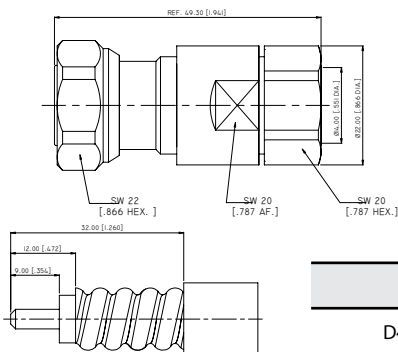
D4.3/10-Right Angle Plug Solder (for RG405 Cable) Low PIM



Part No.

D4310-807-002

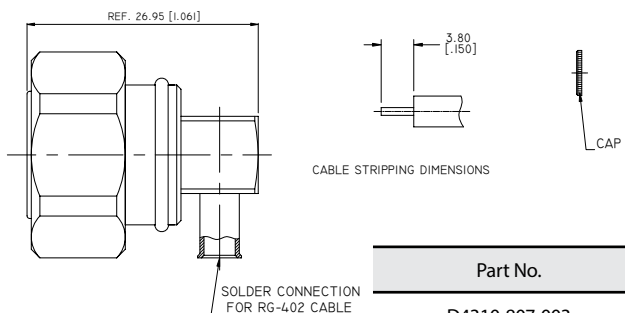
Screw 4.3/10-Plug Straight Clamp (for 1/2" Super Flex Cable)



Part No.

D4310-807-007

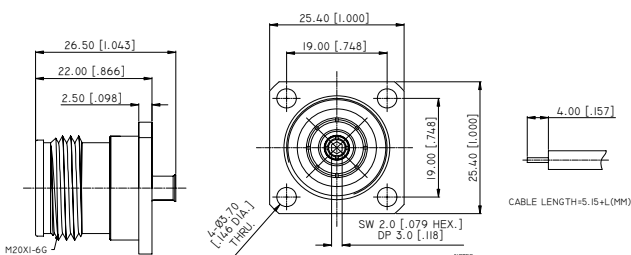
D4.3/10-Right Angle Plug Solder (for .141 Cable) Low PIM



Part No.

D4310-807-003

D4.3/10-Straight Jack 4 hole Flange Solder (for .141 Cable)



CABLE LENGTH=5.15+L(0MM)

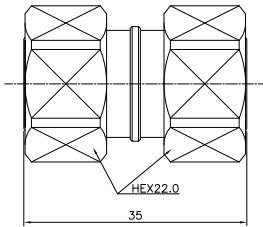
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D4310-807-004

4.3-10 Series

Adapters

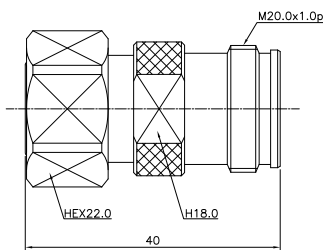
D4.3/10-Straight Plug to Plug Adapter



Part No.

D4310-801-001

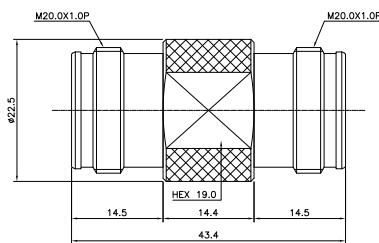
D4.3/10-Straight Plug to Jack Adapter



Part No.

D4310-802-001

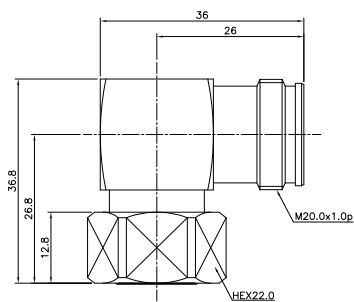
D4.3/10-Jack to Jack Adapter



Part No.

D4310-803-003

D4.3/10-Right Angle Plug to Jack Adapter



Part No.

D4310-806-001



4.1-9.5 Series

GENERAL

4.1/9.5 Min DIN series developed to meet the growing demands of today's high performance mobile communications systems, the 4.1/9.5 has an operational frequency range of DC-14 GHz. This IEC Standard interface offers the right combination of power handling, operational frequency, low VSWR and Low PIM performance. It also offers excellent VSWR performance and Low Passive Intermodulation (Low PIM) < -165 dBc. This makes it ideally suited for use in cellular base stations, distributed antenna systems (DAS) and small cell applications.



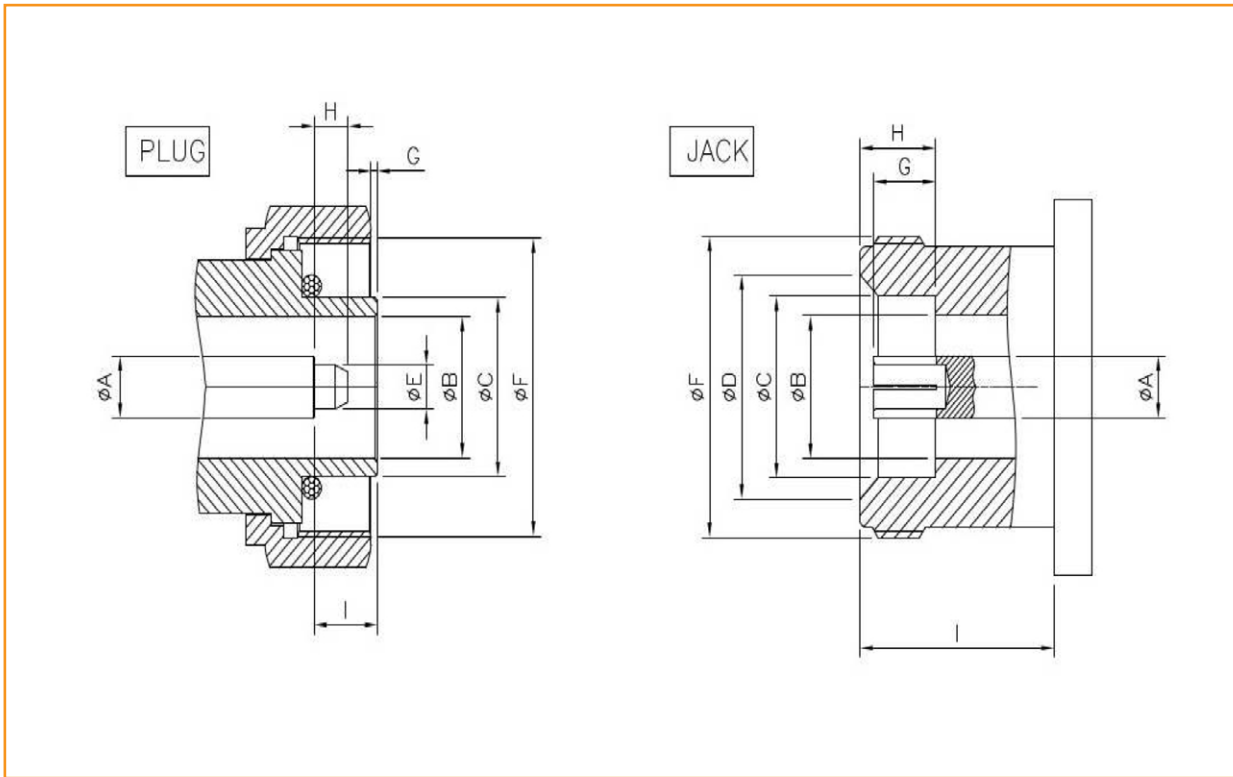
4.1-9.5 Series

CHARACTERISTICS

Requirements	Specifications
ELECTRICAL DATA	
Impedance	50Ω
Frequency range	DC to 14 GHz
Return loss (cable connector straight)	≥ 30 dB @ DC to 0.5 GHz ≥ 23 dB @ 0.5 GHz to 4 GHz ≥ 20 dB @ 4 GHz to 10 GHz
Insertion loss	≤ 0.05 x √f (GHz) dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 1 m Ω
Outer contact resistance	≤ 0.1 m Ω
Working voltage	500 V r m s
Power handling	450 W @ 2 GHz / 90°C
RF leakage - Interface	≥ 114 dB @ DC to 1 GHz
Intermodulation 3rd order Impedance	≤ -160 dB c (2 X 43 dB m)
MECHANICAL DATA	
Mating cycles	≥ 500
Coupling nut retention	≥ 500 N
Center contact captivation	axial : ≥ 8 0 N
Coupling test torque	≤ 15 Nm
Coupling torque recommended	10 Nm
Pitch	≥ 25.4 mm
ENVIRONMENTAL DATA	
Temperature range	-55°C to + 155°C
Thermal shock	IEC 60169-1, Sub-clause 16.4
Climatic category	IEC 60068-2-1 55/155/56
Climatic sequence	IEC 60169-1, Sub-clause 16.2, 55/155/56
Degree of protection (mated pair)	IEC 60529, IP68
Corrosion resistance	IEC 60169-1, Sub-clause 16.7
Vibration	IEC 60169-1, Sub-clause 15.2.2
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260°C for 10 sec.

4.1-9.5 Series

Interface Dimensions

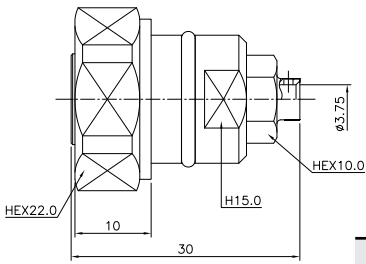


Interface Dimensions in mm/inch

	PLUG		JACK	
	Min.	Max.	Min.	Max.
A	4.13 nom		4.13 nom	
B	9.40	9.60	9.40	9.60
C	11.84	12.02	12.03	12.21
D	-	-	14.90	15.00
E	2.855	2.945	-	-
F	M20X1.0P		M20X1.0P	
G	0.00	1.00	4.73	5.03
H	2.00	4.00	5.80	6.20
I	5.05	5.35	8.00	-

4.1-9.5 Series

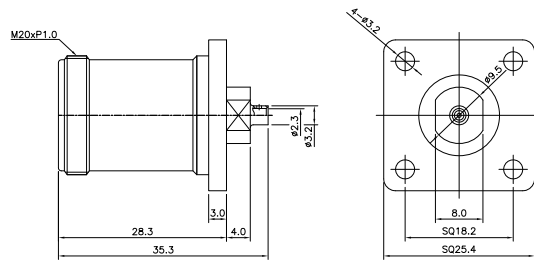
D4.1/9.5-Straight Plug (for Cable-UT141) Low PIM



Part No.

D4195-102-001

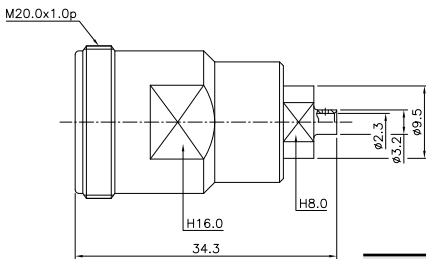
D4.1/9.5-Panel 4 Hole Jack (for Cable-UT085) Low PIM



Part No.

D4195-401-001_R1

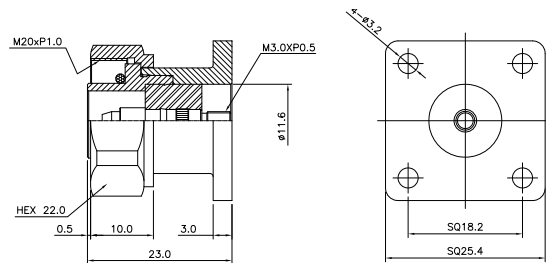
D4.1/9.5-Straight Jack (for Cable-UT085) Low PIM



Part No.

D4195-201-001

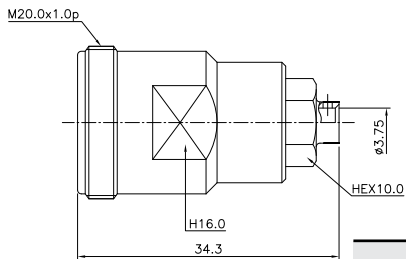
D4.1/9.5-Panel 4 Hole Plug Receptacle



Part No.

D4195-503-001

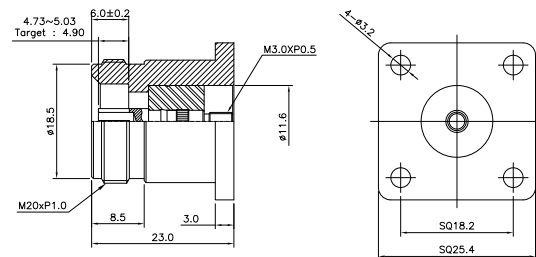
D4.1/9.5-Straight Jack (for Cable-UT141) Low PIM



Part No.

D4195-202-001

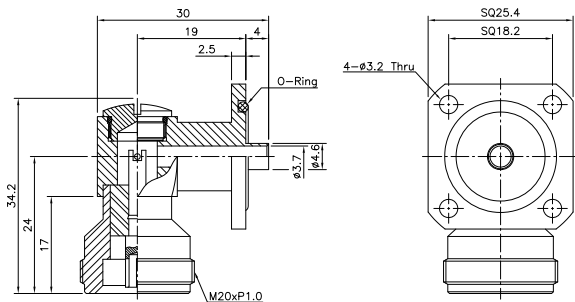
D4.1/9.5-Panel 4 Hole Jack Receptacle



Part No.

D4195-504-012

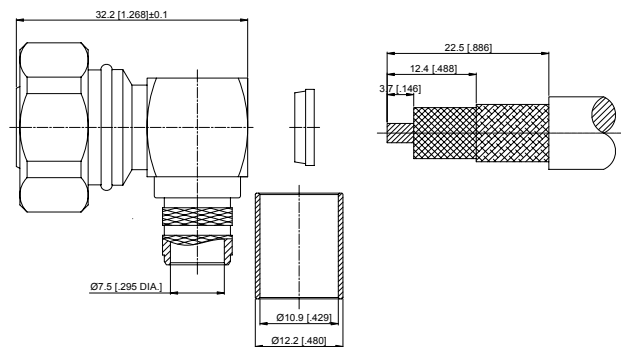
D4.1/9.5-Right Angle Panel 4 Hole Jack (For Cable -UT141)



Part No.

D4195-302-001

D4.1/9.5-Right Angle Plug Crimp (for LMR400 Cable)



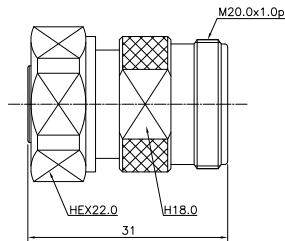
Part No.

D4195-302-001

4.1-9.5 Series

Adapters

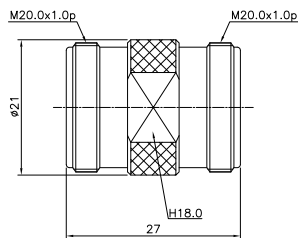
D4.1/9.5-Straight Plug to Jack



Part No.

D4195-802-001

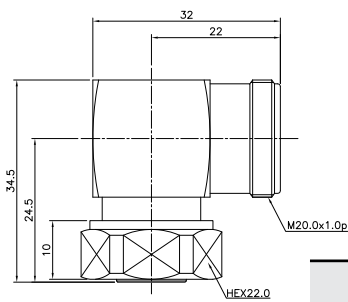
D4.1/9.5-Straight Jack to Jack Adapter



Part No.

D4195-803-001

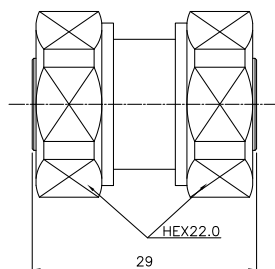
D4.1/9.5-Right Angle Plug to Jack Adapter



Part No.

D4195-806-001

D4.1/9.5-Straight Plug to Plug Adapter



Part No.

D4195-801-001



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