



R-Test RF/Microwave Cable Assemblies Milimeter-Wave Application

Edition 2018

ROSNOOL Online Dynamic Product Finder
contains the current standard product range
with specific details, including data sheets and
mounting dimension.

www.rosnol.com/en/product/index.aspx





ROSNOI



Manufacturing reliability and high performance RF connectivity solutions



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General Assembly Information

Rosnol designs and manufactures coaxial cables and connectors for most applications and in a multitude of versions.

The connector series comprise over 1'000 different types which prove their qualities all over the world.

Demanding customers trust the reliability and quality of Rosnol product lines.

These products have been tested to MIL and other standards.

Our extensive know-how in RF connectivity technology enables reliable and competent technical consulting and support.

You stand to benefit from a well matched cable and connector range as well as years vast experience of our technical engineers.

The Rosnol product line is dedicated to Test and Measurement applications requiring excellent electrical performance, high mechanical endurance and excellent resistance to wear and corrosion.

Product Features

- Cable assemblies for various frequencies up to 67 GHz
- High phase stability (depending on cable type)
- High flexibility (depending on cable type)
- Mating cycles >500

Rosnol Semi-Rigid offers 4 product categories to meet your needs:

- Semi-Rigid « Form And Stable RF Cables »
- Semi-Form « Handformable Alternative To Semi-Rigid RF Cables »
- Spiral Strip Flex « Flexible Alternative To RG-402 & RG-405 RF Cables »
- Delay Line « Offered utilizing a variety of cable and connector styles »

We use design simulation software to calculate the electrical and mechanical performance of delay lines.

Our cable and connector design experience allows our engineers to offer solutions optimized to meet stringent electrical requirements in demanding mechanical tasks.

Computer programs fully automate electrical testing throughout the manufacturing process.

This capability combines repeatable processes with speed and efficiency to deliver a complex delay line with high quality at a competitive price.

General Assembly Information

Rosnol R-Test offers 4 product categories to meet your needs:

- UltraFlex « Perfect Flexibility » is suitable for multi port test benches in production or labs due to its long life, stability and easy mounting in dynamic use.
- Low Loss « Low Loss » allows the use of long length cables with remote test stations and anechoic chambers.
Their high stability with temperature makes them easy to use in temperature chambers. They are also suitable for high power applications.
- Royal Blue Test Cable « Ruggedization, Phase & Amplitude Stability, Flexibility »
Royal Blue Test Cable features high precision quality with flexibility and offers loss stability with bending over an extended life cycle.
Royal Blue Test Cable is the ideal solution for Test and Measurement applications.
- Ultra Low Loss « Phase Stable & Ultra Low Loss » is suitable for test benches in production or labs due to its long life and stability in dynamic use.

Our R-Test product line is designed to operate in the DC - 67 GHz frequency range depending on connector and cable choice.

Three optional protective jackets, offer different protective levels:

- **Armor:** Is excellent for all defense systems tests running outdoors.
- **Armor with PVC Jacket:** Is excellent for all defense systems tests outdoors and wheatherized.
- **Armor with Polyurethane Jacket over Braid and Stainless Steel Spiral:**
Is a very flexible, waterproof, and UV resistant test cable assembly. Typical applications: Antenna range and Test labs.

All components are designed and manufactured by Rosnol in facilities operated under ISO9001 quality standards.

Standard Portfolio

Rosnol RF/Microwave Technology presents a standard portfolio of flexible microwave cable assemblies in defined lengths.

Piece parts are held in stock to ensure short delivery times.
Customer-specific cable assembly solutions are available on request.
For specific details, you will find information in technical data sheets or our online catalogue.

Rosnol also offers VNA test cables.
For further information, please see www.rosnol.com or contact our sales representatives.

General Assembly Information

Assembly Capability

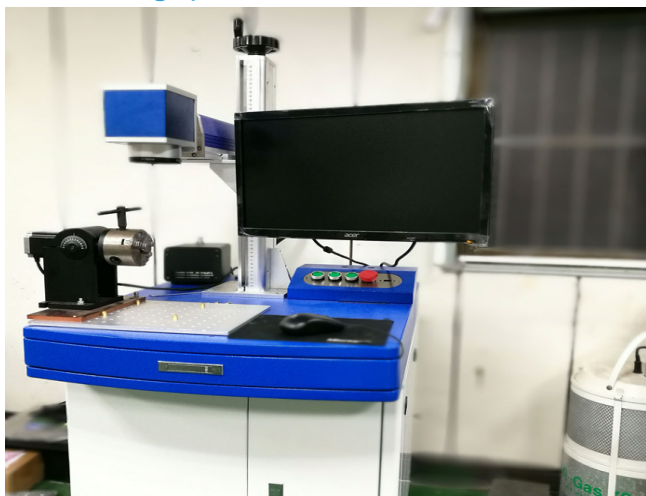
Automatic Stripping



Soldering Unit



Laser Marking System



- Customize RF Connectivity Solutions
- Laser Rotary Shaft
- Product Information Marking
- Customize Logo or Brand

RF Vector Network Analyzer Testing (DC up to 67 GHz)



- VSWR (Return Loss)
- Insertion Loss
- Delay Time
- Phase Length
- Intermodulation

General Assembly Information

Test method of cable life and flexure

Signal Integrity with Cable Flexure Life

To ensure stable performance levels during flexure and after repeated use, we compared the signal integrity of these new cable assemblies when flexed.

Specifically VSWR stability, insertion loss stability and phase stability was measured to determine the amount of signal distortion and loss of measurement accuracy.

Rosnol used the following test method:

1. The cable assembly was connected to a vector network analyzer (VNA). A torque wrench was used to connect the cable assembly
2. The analyzer was normalized and calibrated for the testing.
3. A cylinder with a 3 inch (76.2 mm) diameter was placed adjacent to one side of the cable assembly, approximately at its midpoint.
4. The cable assembly was coiled 360° around the cylinder and held in this position for one full sweep (Figures 1 and 2).
5. The maximum deviation over the frequency range of analysis was recorded.
6. The cable assembly was returned to its initial straight position, and the VNA was normalized again.
7. The cylinder was placed on the opposite side of the cable assembly, and the test was repeated.

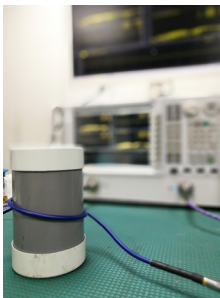
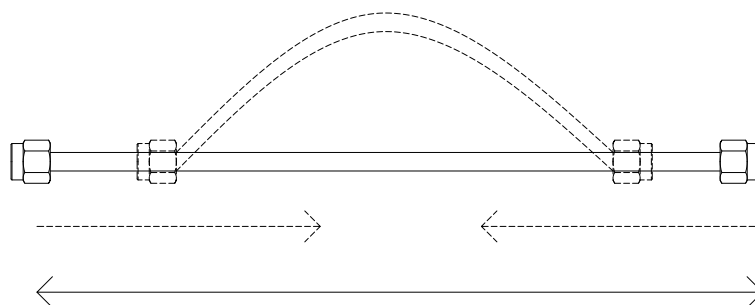


Figure 1.



Figure 2.

Cable Flexure Life (Snake Bending Test)



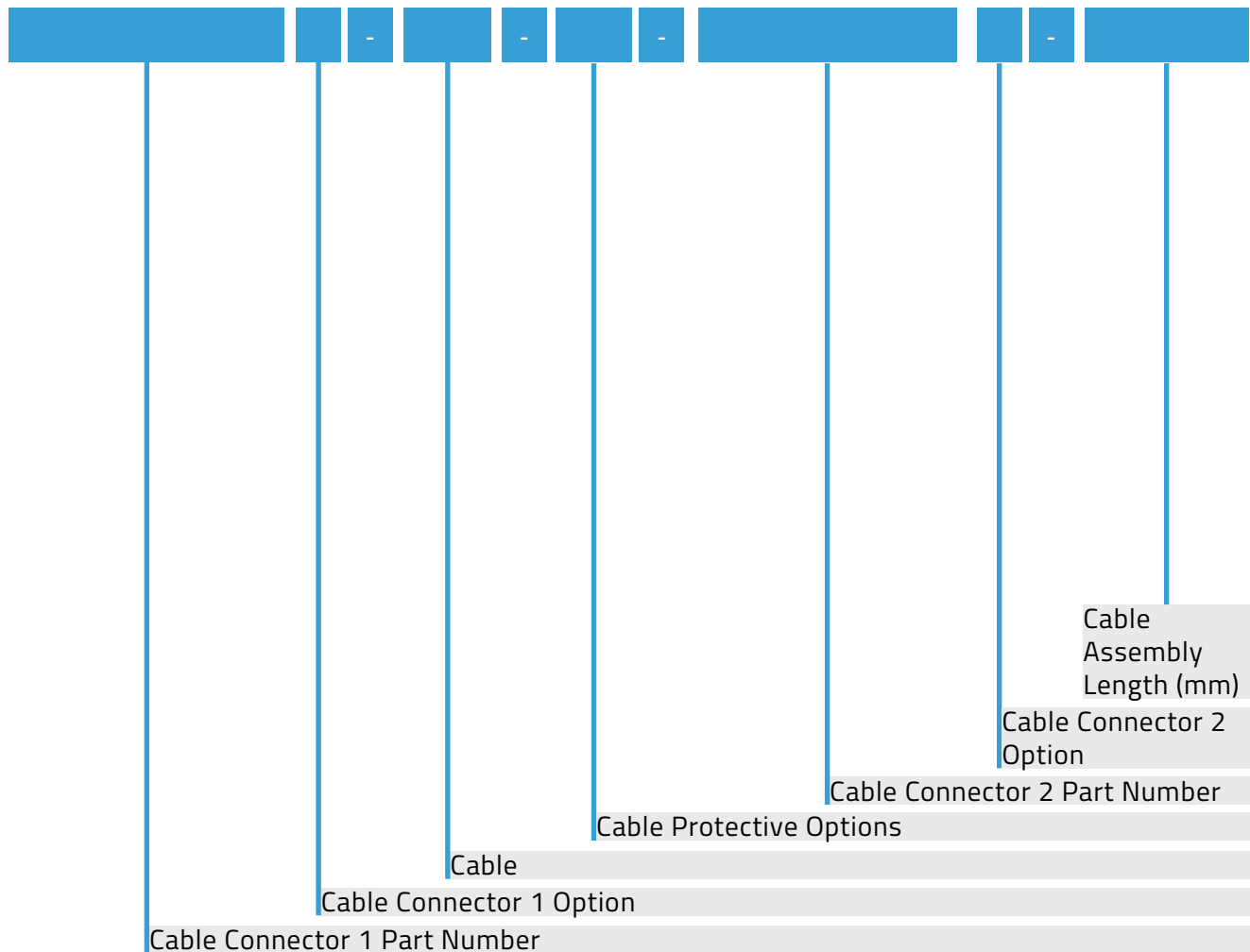
The cable shall withstand 100,000 unrestrained flexes (snake bending test) with minimal degradation.

R-Test Cable Assemblies

Classification

Part Number System

Cable Assembly Definition Code



Example

Part Number	Description
A1K50D-EW0420A AW-A1K50D-1000	SMA plug connectors with dust caps on each end, EW0420A Low Loss Cable, 0.210 inch (5.33 mm) diameter cable, silver-plated copper solid center conductor, armor with PVC jacket, 1000 mm long.

Cable Connector Classification

Rosnol offers customized high-performance connectors that cannot be obtained from conventional sources.

Design and materials of all connectors and connector parts according to MIL-PRF-39012, MIL-STD-348B and IEEE Std 287-2007.

The R-Test cable assembly connectors have been optimized to achieve the lowest VSWR across their bandwidth.

In addition, the unique connector attachment has been designed for assuring the high reliability and high performance. For all our cable assemblies, you can select different protection options, such as armored, armored and weatherized PVC, or weatherized PVC.

The vast majority of our connectors are made from stainless steel. Dielectric and center contact materials are usually made from completely captured beryllium copper. This guarantees that our cable assemblies will retain their excellent properties even after hard use. Please contact Rosnol's sales department or your local distributor to discuss your specific connector requirements.

Description	Part Number	Frequency	Maximum VSWR (Per Connector)	Suitable Cable
RPC2.4 Straight Plug	Q1K50	40 / 50 GHz	1.15 DC to 18 GHz 1.22 DC to 40 / 50 GHz	UP0264 (40 GHz), EW0269A (40 GHz) UP0220 (50 GHz)
RPC2.4 Straight Jack	Q2K50	40 / 50 GHz	1.15 DC to 18 GHz 1.22 DC to 40 / 50 GHz	UP0264 (40 GHz), EW0269A (40 GHz) UP0220 (50 GHz)
RPC2.92 Straight Plug	K1K50	33 / 40 GHz	1.15 DC to 18 GHz 1.20 DC to 33 / 40 GHz	UP0358 (33 GHz), UP0264 (40 GHz) EW0269A (40 GHz)
RPC2.92 Straight Jack	K2K50	33 / 40 GHz	1.15 DC to 18 GHz 1.20 DC to 33 / 40 GHz	UP0358 (33 GHz), UP0264 (40 GHz) EW0269A (40 GHz)
RPC2.92 Straight Bulkhead Jack	K2KA50	33 / 40 GHz	1.15 DC to 18 GHz 1.20 DC to 33 / 40 GHz	UP0358 (33 GHz), UP0264 (40 GHz) EW0269A (40 GHz)
RPC2.92 Straight Panel 4-Hole Flange Jack	K2KBF50	33 / 40 GHz	1.15 DC to 18 GHz 1.20 DC to 33 / 40 GHz	UP0358 (33 GHz), UP0264 (40 GHz) EW0269A (40 GHz)
RPC3.5 Straight Plug	PC1K50	26.5 GHz	1.15 DC to 18 GHz 1.20 DC to 26.5 GHz	UF0307 (26.5 GHz), EW0420A (26.5 GHz) UP0358 (33 GHz)
RPC3.5 Straight Jack	PC2K50	26.5 GHz	1.15 DC to 18 GHz 1.20 DC to 26.5 GHz	UF0307 (26.5 GHz), EW0420A (26.5 GHz) UP0358 (33 GHz)
RPC3.5 Straight Bulkhead Jack	PC2KA50	26.5 GHz	1.15 DC to 18 GHz 1.20 DC to 26.5 GHz	UF0307 (26.5 GHz), EW0420A (26.5 GHz) UP0358 (33 GHz)
RPC3.5 Straight Panel 4-Hole Flange Jack	PC2KBF50	26.5 GHz	1.15 DC to 18 GHz 1.20 DC to 26.5 GHz	UF0307 (26.5 GHz), EW0420A (26.5 GHz) UP0358 (33 GHz)
SMA Straight Plug	A1K50	18 / 26.5 GHz	1.15 DC to 18 GHz 1.20 DC to 26.5 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
SMA Straight Jack	A2K50	18 / 26.5 GHz	1.15 DC to 18 GHz 1.20 DC to 26.5 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)

Cable Connector

Classification

Description	Part Number	Frequency	Maximum VSWR (Per Connector)	Suitable Cable
SMA Straight Bulkhead Jack	A2KA50	18 / 26.5 GHz	1.15 DC to 18 GHz 1.20 DC to 26.5 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
SMA Straight Panel 4-Hole Flange Jack	A2KBF50	18 / 26.5 GHz	1.15 DC to 18 GHz 1.20 DC to 26.5 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
SMA Right Angle Plug	A1K59	18 GHz	1.20 DC to 18 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
SMA Right Angle Jack	A2K59	18 GHz	1.20 DC to 18 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
RPC7 Sexless	P7SK50	18 GHz	1.20 DC to 18 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
Precision N Straight Plug	PCN1K50	18 GHz	1.15 DC to 18 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
Precision N Straight Jack	PCN2K50	18 GHz	1.15 DC to 18 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
Precision TNC Straight Plug	PCT1K50	18 GHz	1.20 DC to 18 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
Precision TNC Straight Plug	PCT2K50	18 GHz	1.20 DC to 18 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
N Straight Plug	N1K50	12.4 GHz	1.20 DC to 12.4 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
N Straight Jack	N2K50	12.4 GHz	1.20 DC to 12.4 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
BNC Straight Plug	B1K50	4 GHz	1.20 DC to 4 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
BNC Straight Jack	B2K50	4 GHz	1.20 DC to 4 GHz	EW0630A (18 GHz), UF0307 (26.5 GHz) EW0420A (26.5 GHz), UP0358 (33 GHz) UP0625 (18 GHz)
SMP Straight Jack	P2K50	18 GHz	1.20 DC to 18 GHz	EF405 (18 GHz), UP0152 (67 GHz) UP0086
SMP Right Angle Jack	P2K59	18 GHz	1.20 DC to 18 GHz	EF405 (18 GHz), UP0152 (67 GHz) UP0086

The above are most common connector types used.

We invite you to contact Rosnol customer service or your local distributor with your specific applications for our recommendations or any special requirements.

Cable Connector Options

Classification

Most R-Test cable assembly connectors are available for many applications. Our connector options extend the assembly life and physical protection for specialized applications. Please contact Rosnol's sales department or your local distributor to discuss your specific connector requirements.

Description	Part Number
Dust Caps	D
Extended Boots	E
Phase Matched	PM

Dust Caps

Dust caps help to protect connector mating faces from contamination in harsh environments and when not being in use. They also prevent physical damage.

Piece Part	Material	Plating
Cap	Stainless Steel	Passivated
Ball Chain	Stainless Steel	Passivated

Extended Boots

Extended boot connectors, available only on these Rosnol R-Test Cable Assemblies, optimally balance the electrical and mechanical needs of all test set-ups. They can reduce the right angle's discontinuity capacitance of a cable, as well as, high attenuations.

Additionally, there is no need for costly angled adapters.

Phase Matched

The phase and electrical length of RF cable assemblies are often required to be an exact length. The phase and electrical length are determined by the electrical stability of the cable and its mechanical length. Rosnol R-Test Cable Assemblies offer the phase matching UP series, EW series and other types of cable.

Group

Phase matched in sets.
All of the cable assemblies are matched to each other.

Absolute

Phase matched to an electrical length.
As with a mechanical standard, this electrical length measured in degree or electrical delay time is determined by the customer or by Rosnol.

Pairs

Phase matched in pairs.
Selected from large groups of phase matched assemblies.

Offset

Phase offset matching.
One or more assemblies are provided with a defined phase offset as compared to other assemblies.

Standard

Phase matched to a standard.
All of the cables are matched to a standard.
This standard may have been established by previous projects or provided by the customer.

Cable

Classification

In order to simplify the cable selection process, individual cables have been grouped into product families. Most flexible cable users want minimal insertion loss consistent with smallest size and weight without sacrificing flexibility.

Other parameters will influence price and performance. Use the tables and information below to select the cable that best suits your needs.

Cables with solid center conductors tend to possess a better amplitude stability and flexibility than stranded center conductors.

- Cables with stranded center conductors tend to be of better phase stability and flexibility than solid center conductors.
For applications at 50 GHz or less, select the
- Low Loss UP0220 cables.
For applications at 40 GHz or less, select the
- Low Loss EW0269A or UP0264 cables.
For applications at 26.5 GHz or less, select the
- Low Loss EW0420A, EW0420B or UP0358 cables.
For applications at 26.5 GHz or less, select the UltraFlex UF0307 cables.
- If the cable will be used in a test lab environment, consider RB26 for applications at 26.5 GHz and RB40 for applications at 40 GHz.
- If lower insertion loss is required, Ultra Low Loss EW0378B or EW0399A should be chosen, applications at 26.5 GHz or less.
- If the application is less than 18 GHz, choose the Ultra Low Loss EW0630A or EW0589B.
- If size and flexibility are critical, consider the Low Loss EW0269B or Ultra Low Loss EW0274A cables.

R-TEST ULTRA FLEXIBLE

ROSNO L PART NUMBER		UF0221	UF0307	UF0550
Impedance	ohms	50	50	50
Frequency	GHz	40	26.5	18
Insertion Loss dB/ft (dB/m)	1 GHz	0.16 (0.52)	0.12 (0.38)	0.05 (0.18)
	3 GHz	0.28 (0.92)	0.21 (0.70)	0.10 (0.34)
	6 GHz	0.41 (1.33)	0.31 (1.03)	0.16 (0.51)
	12.4 GHz	0.61 (1.99)	0.48 (1.58)	0.24 (0.80)
	18 GHz	0.75 (2.45)	0.60 (1.98)	0.31 (1.02)
	26.5 GHz	0.93 (3.06)	0.77 (2.52)	—
	40 GHz	1.19 (3.89)	—	—
Power Handling	watts (CW) @ 12.4 GHz	30	40	70
Outer Diameter (Nominal)	inch (mm)	0.142 (3.60)	0.197 (5.00)	0.315 (8.00)
Center Conductor	type	stranded	stranded	stranded
Static Minimum Bend Radius	inch (mm)	0.567 (14.4)	0.787 (20.0)	0.787 (20.0)
Weight	g/ft (g/m)	9.14 (30.0)	15.24 (50.0)	39.62 (130.0)
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R-TEST LOW LOSS

ROSNOL PART NUMBER		EW0269A	EW0269B	EW0420A	EW0420B	EW0630A
Impedance	ohms	50	50	50	50	50
Frequency	GHz	40	40	26.5	26.5	18
Insertion Loss dB/ft (dB/m)	1 GHz	0.11 (0.36)	0.16 (0.52)	0.08 (0.26)	0.09 (0.30)	0.05 (0.16)
	10 GHz	0.39 (1.28)	0.52 (1.71)	0.27 (0.89)	0.30 (0.98)	0.15 (0.49)
	18 GHz	0.54 (1.77)	0.72 (2.36)	0.38 (1.25)	0.42 (1.38)	0.21 (0.69)
	26.5 GHz	0.67 (2.20)	0.89 (2.92)	0.48 (1.57)	0.53 (1.74)	—
	40 GHz	0.85 (2.79)	1.12 (3.67)	—	—	—
Power Handling	watts (CW) @ 10 GHz	158	149	301	282	645
Outer Diameter (Nominal)	inch (mm)	0.147 (3.73)	0.147 (3.73)	0.210 (5.33)	0.210 (5.33)	0.311 (7.90)
Center Conductor	type	solid	stranded	solid	stranded	solid
Static Bend Radius	inch (mm)	0.250 (6.35)	0.250 (6.35)	0.380 (9.65)	0.380 (9.65)	1.25 (31.75)
Weight	g/ft (g/m)	12.1 (39.7)	12.1 (39.7)	21.0 (68.9)	21.0 (68.9)	43.0 (141.0)
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R-TEST ROYAL BLUE TEST CABLE

ROSNOL PART NUMBER		RB40	RB26
Impedance	ohms	50	50
Frequency	GHz	40	26.5
Insertion Loss dB/ft (dB/m)	1 GHz	0.11 (0.36)	0.08 (0.27)
	10 GHz	0.36 (1.17)	0.26 (0.87)
	18 GHz	0.49 (1.60)	0.36 (1.18)
	26.5 GHz	0.60 (1.96)	0.45 (1.47)
	32 GHz	0.66 (2.17)	—
	40 GHz	0.75 (2.46)	—
Power Handling	watts (CW) @ 12.4 GHz	160	250
Outer Diameter (Nominal)	inch (mm)	0.142 (3.60)	0.197 (5.00)
Center Conductor	type	solid	solid
Static Bend Radius	inch (mm)	0.250 (6.35)	0.50 (12.70)
Weight	g/ft (g/m)	10.7 (35.0)	18.3 (60.0)
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R-TEST ULTRA LOW LOSS

ROSNO L PART NUMBER		UP0220	UP0264	UP0264B	UP0358	UP0358B	UP0442	UP0442B	UP0625	UP0625B
Impedance	ohms	50	50	50	50	50	50	50	50	50
Frequency	GHz	50	40	40	32	32	26.5	26.5	18	18
Insertion Loss dB/ft (dB/m)	1 GHz	0.12 (0.39)	0.11 (0.36)	0.12 (0.41)	0.08 (0.27)	0.09 (0.30)	0.06 (0.20)	0.068 (0.22)	0.044 (0.14)	0.051 (0.17)
	10 GHz	0.40 (1.32)	0.36 (1.17)	0.40 (1.32)	0.26 (0.87)	0.30 (0.97)	0.20 (0.67)	0.23 (0.75)	0.146 (0.48)	0.168 (0.55)
	18 GHz	0.56 (1.83)	0.49 (1.60)	0.55 (1.80)	0.36 (1.18)	0.41 (1.33)	0.28 (0.92)	0.31 (1.03)	0.20 (0.66)	0.23 (0.75)
	26.5 GHz	0.70 (2.30)	0.60 (1.96)	0.68 (2.22)	0.45 (1.47)	0.50 (1.64)	0.35 (1.14)	0.38 (1.25)	—	—
	32 GHz	0.78 (2.56)	0.66 (2.17)	0.75 (2.46)	0.49 (1.62)	0.52 (1.70)	—	—	—	—
	40 GHz	0.89 (2.92)	0.75 (2.46)	0.85 (2.78)	—	—	—	—	—	—
	50 GHz	1.02 (3.34)	—	—	—	—	—	—	—	—
Power Handling	watts (CW) @ 10 GHz	140	160	160	250	223	350	313	600	450
Outer Diameter (Nominal)	inch (mm)	0.130 (3.30)	0.144 (3.65)	0.144 (3.65)	0.190 (4.80)	0.190 (4.80)	0.230 (5.80)	0.230 (5.80)	0.305 (7.74)	0.305 (7.74)
Center Conductor	type	solid	solid	stranded	solid	stranded	solid	stranded	solid	stranded
Static Bend Radius	inch (mm)	0.25 (6.40)	0.50 (12.70)	0.50 (12.70)	0.50 (12.70)	0.50 (12.70)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)
Weight	g/ft (g/m)	8.5 (28.0)	10.1 (33.0)	9.4 (31.0)	17.7 (58.0)	16.5 (54.0)	22.0 (72.0)	22.0 (72.0)	39.0 (128.0)	70.1 (230.0)
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R-TEST ECONOMICAL FLEXIBLE

ROSNO L PART NUMBER		EF405	EF402
Impedance	ohms	50	50
Frequency	GHz	18	18
Insertion Loss dB/ft (dB/m)	1 GHz	0.21 (0.70)	0.12 (0.40)
	5 GHz	0.59 (1.94)	0.36 (1.18)
	10 GHz	0.74 (2.43)	0.45 (1.49)
	18 GHz	1.10 (3.60)	0.68 (2.23)
Outer Diameter (Nominal)	inch (mm)	0.104 (2.64)	0.197 (5.00)
Center Conductor	type	solid	solid
Static Bend Radius	inch (mm)	0.250 (6.35)	0.80 (20.32)
Weight	g/ft (g/m)	5.9 (19.4)	13.2 (43.3)
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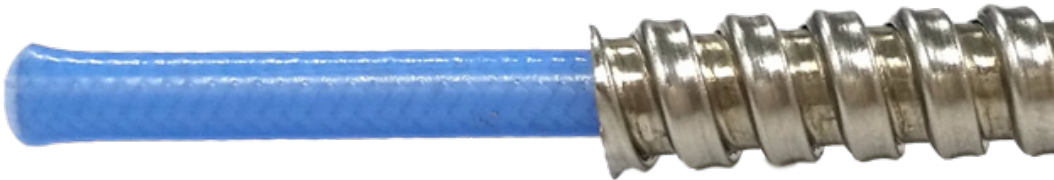
Cable Protective Options

Classification

To meet different environments and customer requirements. Rosnol precise performance microwave cable assemblies are offered cable assemblies protective option. Flex coats are able to enhance the physical protection and prolong the lifetime of flexible cable assemblies. Cable armors can equally increase physical protection and even further prolong a cable assembly's life time. Custom Armor is available upon request. Please contact Rosnol's sales department or your local distributor to discuss your specific connector requirements.

Description	Part Number
Armor	A
Armor With PVC Jacket	AW
ARMOR WITH POLYURETHANE JACKET OVER BRAID/STAINLESS STEEL SPIRAL	AS

ARMOR



ARMOR WITH PVC JACKET



ARMOR WITH POLYURETHANE JACKET OVER BRAID AND STAINLESS STEEL SPIRAL



R-Test Ultra Flexible

Cable Assemblies

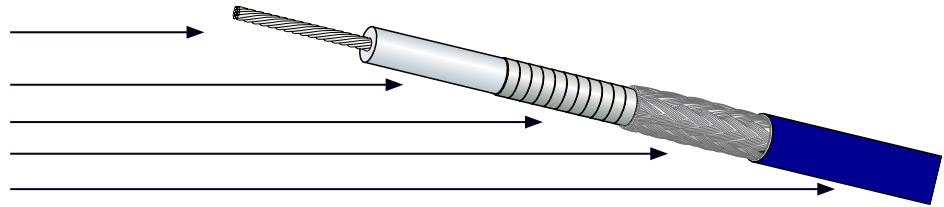
Stranded silver-plated copper wire

Low Density PTFE Dielectric

Silver-Plated Copper Shield

Silver-Plated Copper Braid

Polyurethane Jacket



ELECTRICAL CHARACTERISTICS

ULTRA FLEXIBLE TYPE		UF0221	UF0307	UF0550
Impedance	ohms	50	50	50
Frequency Range	GHz	DC - 40	DC - 26.5	DC - 18
Velocity of Propagation	%	76	76	76
Capacitance	pF/ft (pF/m)	26.2 (86.0)	26.2 (86.0)	26.2 (86.0)
Shielding Effectiveness	(dB @ 1 GHz)	> 90	> 90	> 90
VSWR	Refer to Cable Connector Select Navigation			
Insertion Loss dB/ft (dB/m)	See figure on next page			
	1 GHz	0.16 (0.52)	0.12 (0.38)	0.05 (0.18)
	3 GHz	0.28 (0.92)	0.21 (0.70)	0.10 (0.34)
	6 GHz	0.41 (1.33)	0.31 (1.03)	0.16 (0.51)
	12.4 GHz	0.61 (1.99)	0.48 (1.58)	0.24 (0.80)
	18 GHz	0.75 (2.45)	0.60 (1.98)	0.31 (1.02)
	26.5 GHz	0.93 (3.06)	0.77 (2.52)	—
	40 GHz	1.19 (3.89)	—	—
Power Handling	See figure on next page			
Phase Stability vs Flexure	10 GHz	2° *	2° **	2° **
	18 GHz	3° *	3° **	3° **
Phase Stability vs Temperature	See figure on next page			

* Cable wrapped once around a 1.5 inch (38.1 mm) diameter cylinder. ** Cable wrapped once around a 3 inch (76.2 mm) diameter cylinder.

MECHANICAL CHARACTERISTICS

Outer Diameter	inch (mm)	0.142 (3.60)	0.197 (5.00)	0.315 (8.00)
Center Conductor	Type	stranded	stranded	stranded
Static Minimum Bend Radius	inch (mm)	0.567 (14.4)	0.787 (20.0)	1.260 (32.0)
Cable Flexure Life *	Cycle	25,000	25,000	25,000

ENVIRONMENTAL CHARACTERISTICS

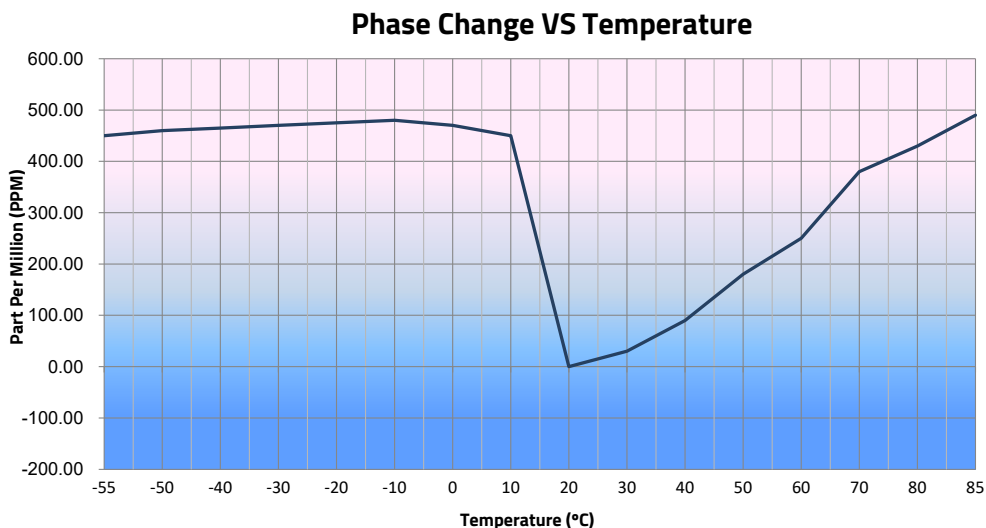
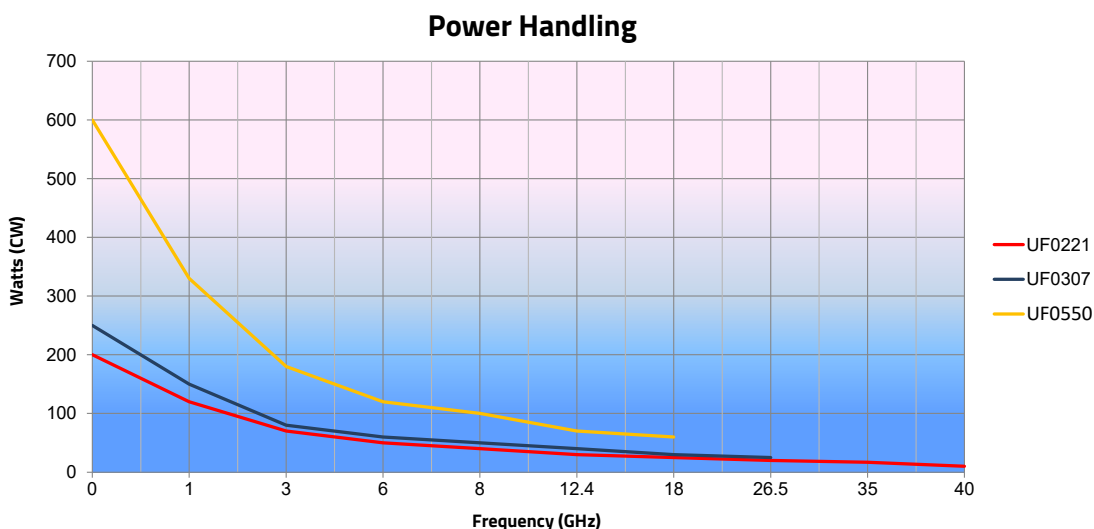
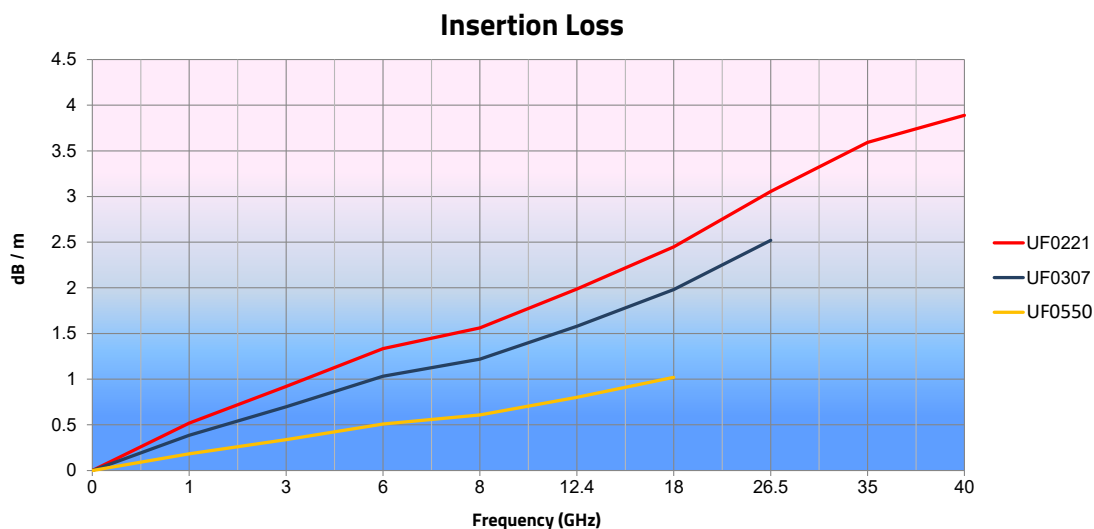
Temperature Range	°C	-55 to +85	-55 to +85	-55 to +85
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R-Test Ultra Flexible

Insertion Loss, Power Handling and Phase Change VS Temperature



R-Test ULTRA FLEXIBLE



R-Test Low Loss

Cable Assemblies

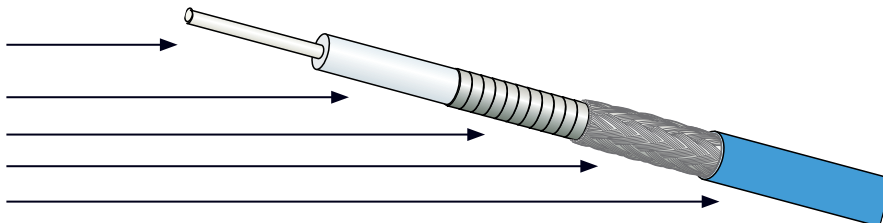
Solid: Silver-Plated Copper Clad Steel Wire
Stranded: Silver-Plated Copper Alloy Wire

Low Density PTFE Dielectric

Silver-Plated Copper Shield

Silver-Plated Copper Braid

FEP Jacket



ELECTRICAL CHARACTERISTICS

LOW LOSS TYPE		EW0269A	EW0269B	EW0420A	EW0420B	EW0630A
Impedance	ohms	50	50	50	50	50
Frequency Range	GHz	DC - 40	DC - 40	DC - 26.5	DC - 26.5	DC - 18
Velocity of Propagation	%	77	77	77	77	83
Capacitance	pF/ft (pF/m)	26.2 (86.0)	26.2 (86.0)	26.2 (86.0)	26.2 (86.0)	24.2 (79.4)
Shielding Effectiveness	(dB @ 1 GHz)	> 100	> 100	> 100	> 100	> 100
VSWR	Refer to Cable Connector Select Navigation					
Insertion Loss dB/ft (dB/m)	See figure on next page					
	1 GHz	0.11 (0.36)	0.16 (0.52)	0.08 (0.26)	0.09 (0.30)	0.05 (0.16)
	10 GHz	0.39 (1.28)	0.52 (1.71)	0.27 (0.89)	0.30 (0.98)	0.15 (0.49)
	18 GHz	0.54 (1.77)	0.72 (2.36)	0.38 (1.25)	0.42 (1.38)	0.21 (0.69)
	26.5 GHz	0.67 (2.20)	0.89 (2.92)	0.48 (1.57)	0.53 (1.74)	—
	40 GHz	0.85 (2.79)	1.12 (3.67)	—	—	—
Power Handling	See figure on next page					
Phase Stability vs Flexure *	10 GHz	2°	1°	2°	2°	2°
	18 GHz	4°	2°	4°	3°	3°
Phase Stability vs Temperature	See figure on next page					

* Cable wrapped once around a 3 inch (76.2 mm) diameter cylinder.

MECHANICAL CHARACTERISTICS

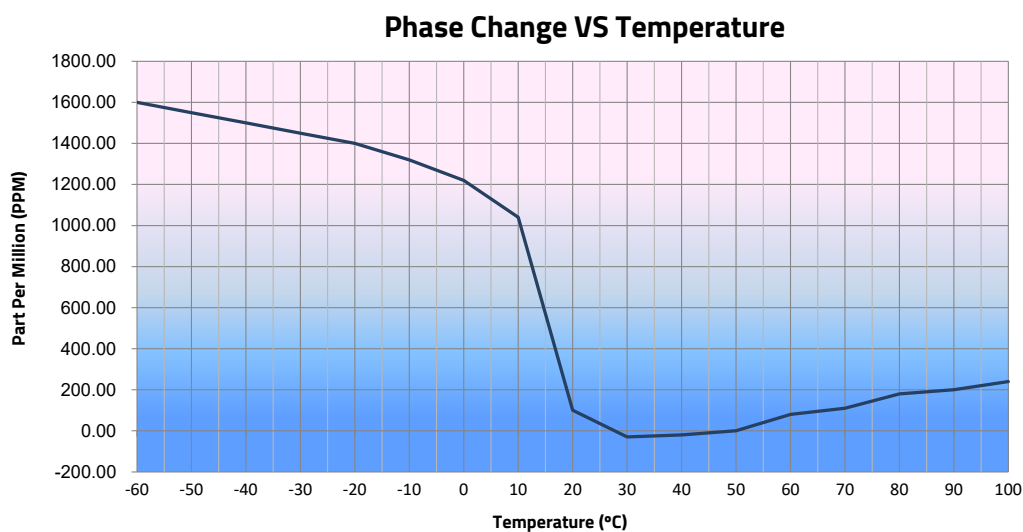
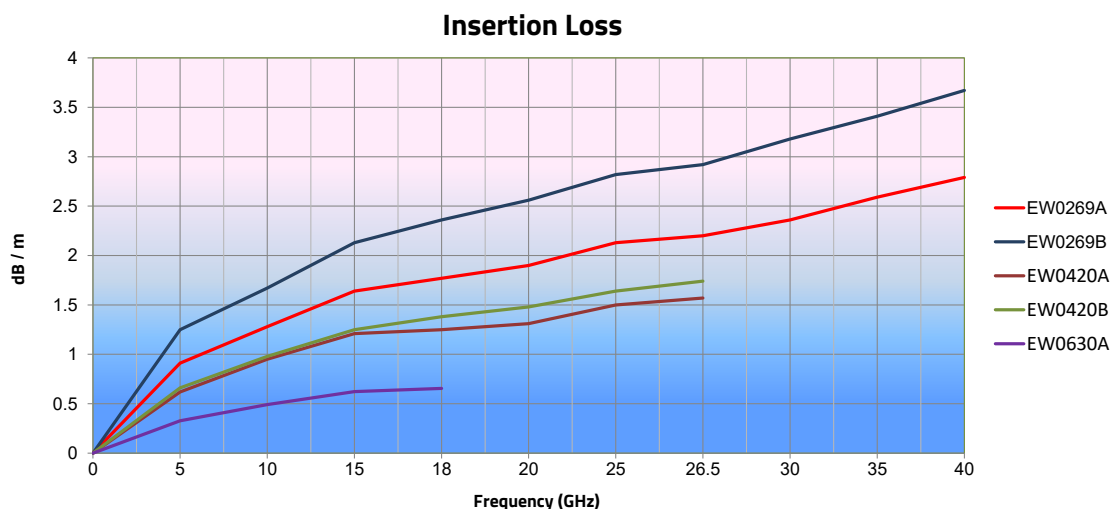
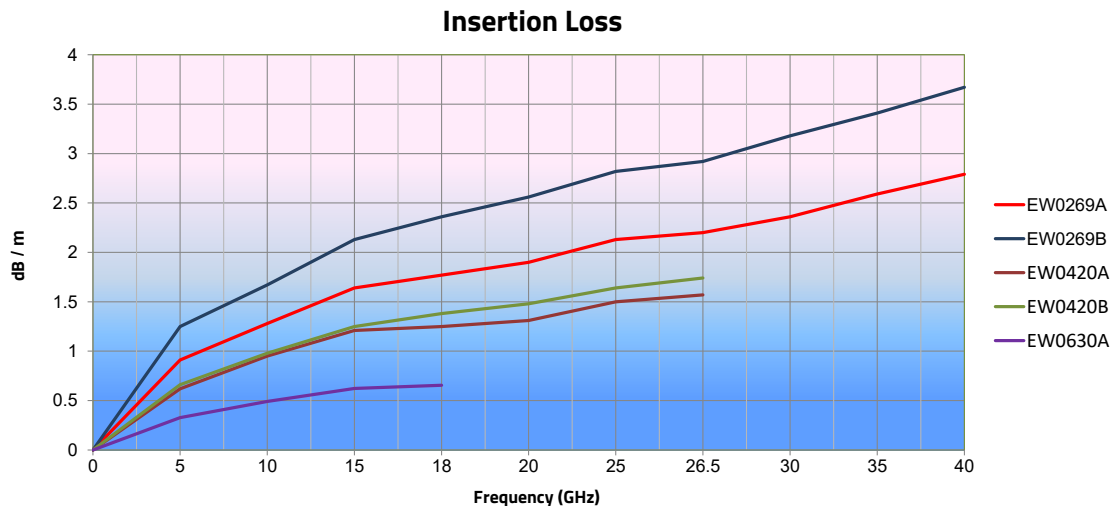
Outer Diameter	inch (mm)	0.147 (3.73)	0.147 (3.73)	0.210 (5.33)	0.210 (5.33)	0.311 (7.90)
Center Conductor	Type	solid	stranded	solid	stranded	solid
Static Minimum Bend Radius	inch (mm)	0.250 (6.35)	0.250 (6.35)	0.380 (9.65)	0.380 (9.65)	1.25 (31.75)
Weight	g/ft (g/m)	11.0 (36.1)	11.0 (36.1)	20.0 (65.6)	20.0 (65.6)	43.0 (141.0)

ENVIRONMENTAL CHARACTERISTICS

Temperature Range	°C	-65 to +165	-65 to +165	-65 to +165	-65 to +165	-65 to +165
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R-Test Low Loss

Insertion Loss, Power Handling and Phase Change VS Temperature



R-Test Royal Blue Test Cable

Cable Assemblies



ELECTRICAL CHARACTERISTICS

ROYAL BLUE TYPE		RB40	RB26
Impedance	ohms	50	50
Frequency Range	GHz	DC - 40	DC - 26.5
Velocity of Propagation	%	83	83
Capacitance	pF/ft (pF/m)	24 (78.72)	24 (78.72)
Shielding Effectiveness	(dB to 18 GHz)	> 90	> 90
VSWR	Refer to Cable Connector Select Navigation		
Insertion Loss dB/ft (dB/m)	See figure on next page		
	1 GHz	0.11 (0.36)	0.08 (0.27)
	10 GHz	0.36 (1.17)	0.26 (0.87)
	18 GHz	0.49 (1.60)	0.36 (1.18)
	26.5 GHz	0.60 (1.96)	0.45 (1.47)
	32 GHz	0.66 (2.17)	—
	40 GHz	0.75 (2.46)	—
Power Handling	See figure on next page		
Phase Stability vs Flexure *	10 GHz	1°	2°
	18 GHz	2°	3°
Phase Stability vs Temperature	See figure on next page		

* Cable wrapped once around a 3 inch (76.2 mm) diameter cylinder.

MECHANICAL CHARACTERISTICS

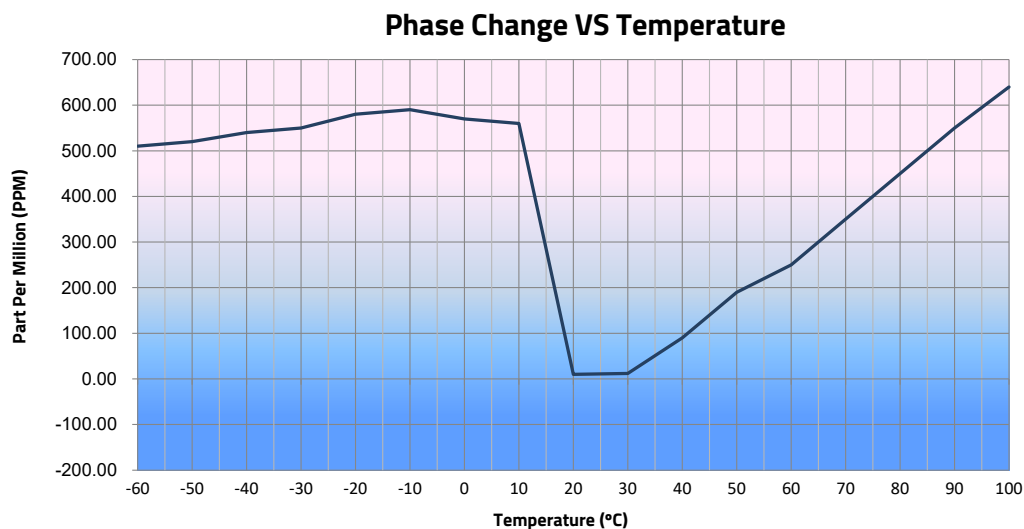
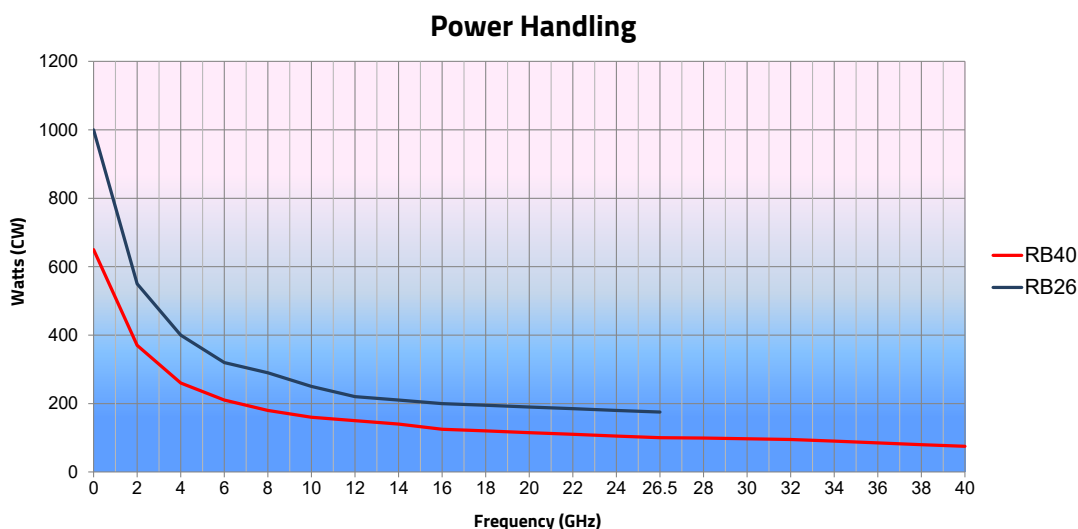
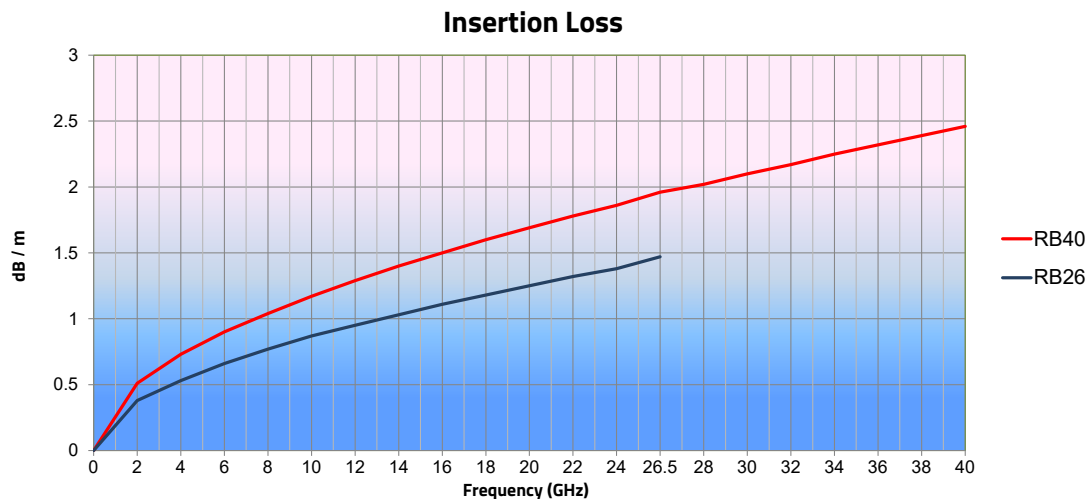
Outer Diameter	inch (mm)		
Center Conductor	Type	stranded	stranded
Static Minimum Bend Radius	inch (mm)	0.50 (12.7)	0.50 (12.7)
Weight	g/ft (g/m)	22.3 (73.0)	39.0 (128.0)

ENVIRONMENTAL CHARACTERISTICS

Temperature Range	°C	-65 to +100	-65 to +100
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R-Test Royal Blue Test Cable

Insertion Loss, Power Handling and Phase Change VS Temperature



R-Test Ultra Low Loss Cable Assemblies

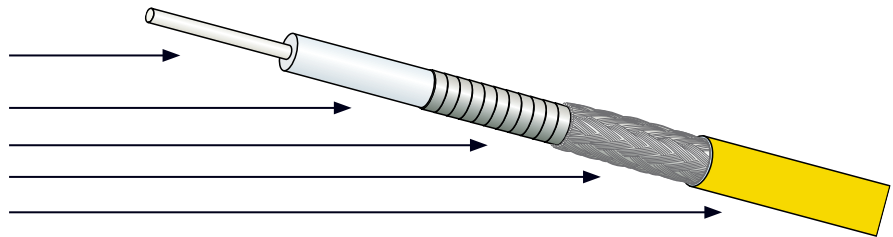
Solid: Silver-Plated Copper Clad Steel Wire
Stranded: Silver-Plated Copper Alloy Wire

Low Density PTFE Dielectric

Silver-Plated Copper Shield

Silver-Plated Copper Braid

FEP Jacket



ELECTRICAL CHARACTERISTICS

ULTRA LOW LOSS TYPE		UP0220	UP0264	UP0264B	UP0358	UP0358B	UP0442	UP0442B	UP0625	UP0625B
Impedance	ohms	50	50	50	50	50	50	50	50	50
Frequency	GHz	DC-50	DC-40	DC-40	DC-32	DC-32	DC-26.5	DC-26.5	DC-18	DC-18
Velocity of Propagation	%	83	83	83	83	83	83	83	83	83
Capacitance	pF/ft (pF/m)	24 (78.7)	24 (78.7)	25 (82.0)	24 (78.7)	25 (82.0)	24 (78.7)	25 (82.0)	24 (78.7)	25 (82.0)
Shielding Effectiveness	(dB to 18 GHz)	> 90	> 90	> 90	> 90	> 90	> 90	> 90	> 90	> 90
VSWR	Refer to Cable Connector Select Navigation									
Insertion Loss dB/ft (dB/m)	See figure on next page									
	1 GHz	0.12 (0.39)	0.11 (0.36)	0.12 (0.41)	0.08 (0.27)	0.09 (0.30)	0.06 (0.20)	0.07 (0.22)	0.04 (0.14)	0.05 (0.17)
	10 GHz	0.40 (1.32)	0.36 (1.17)	0.40 (1.32)	0.26 (0.87)	0.30 (0.97)	0.20 (0.67)	0.23 (0.75)	0.15 (0.48)	0.17 (0.55)
	18 GHz	0.56 (1.83)	0.49 (1.60)	0.55 (1.80)	0.36 (1.18)	0.41 (1.33)	0.28 (0.92)	0.31 (1.03)	0.20 (0.66)	0.23 (0.75)
	26.5 GHz	0.70 (2.30)	0.60 (1.96)	0.68 (2.22)	0.45 (1.47)	0.50 (1.64)	0.35 (1.14)	0.38 (1.25)	—	—
	32 GHz	0.78 (2.56)	0.66 (2.17)	0.75 (2.46)	0.49 (1.62)	0.52 (1.70)	—	—	—	—
	40 GHz	0.89 (2.92)	0.75 (2.46)	0.85 (2.78)	—	—	—	—	—	—
	50 GHz	1.02 (3.34)	—	—	—	—	—	—	—	—
Power Handling	See figure on next page									
Phase Stability vs Flexure *	10 GHz	2°	2°	2°	2°	2°	2°	2°	2°	2°
	18 GHz	3°	3°	3°	3°	3°	3°	3°	3°	3°
Phase Stability vs Temperature	See figure on next page									

* Cable wrapped once around a 3 inch (76.2 mm) diameter cylinder.

MECHANICAL CHARACTERISTICS

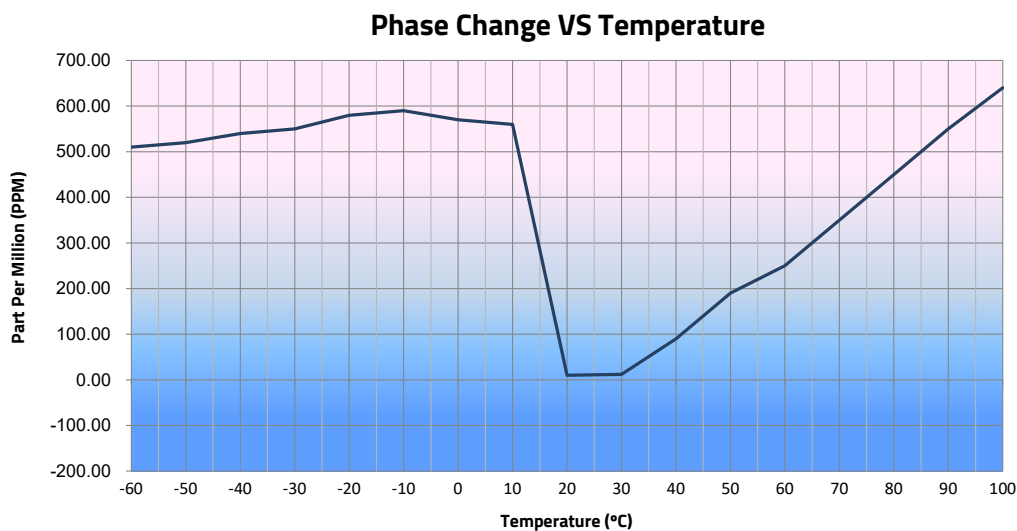
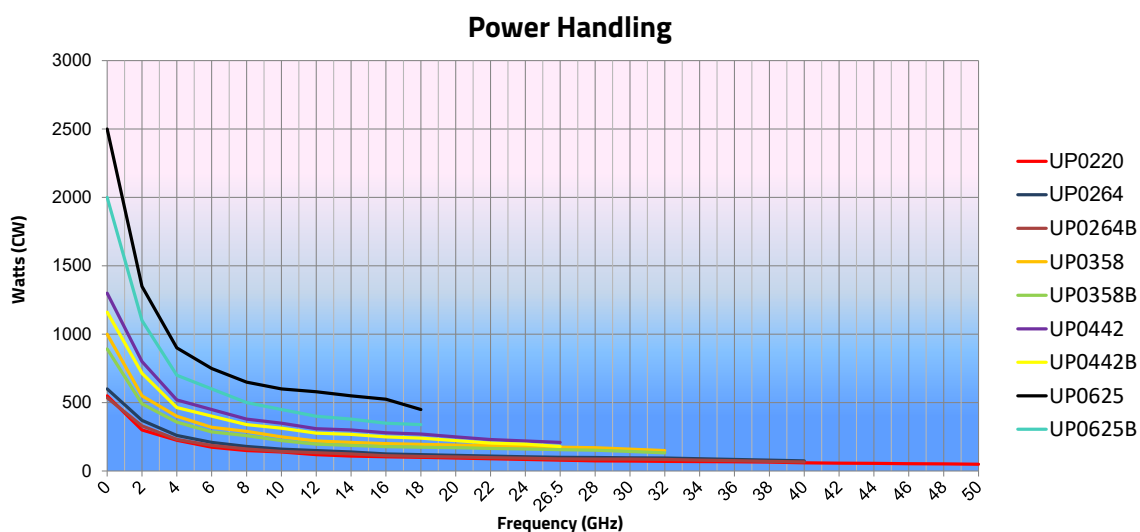
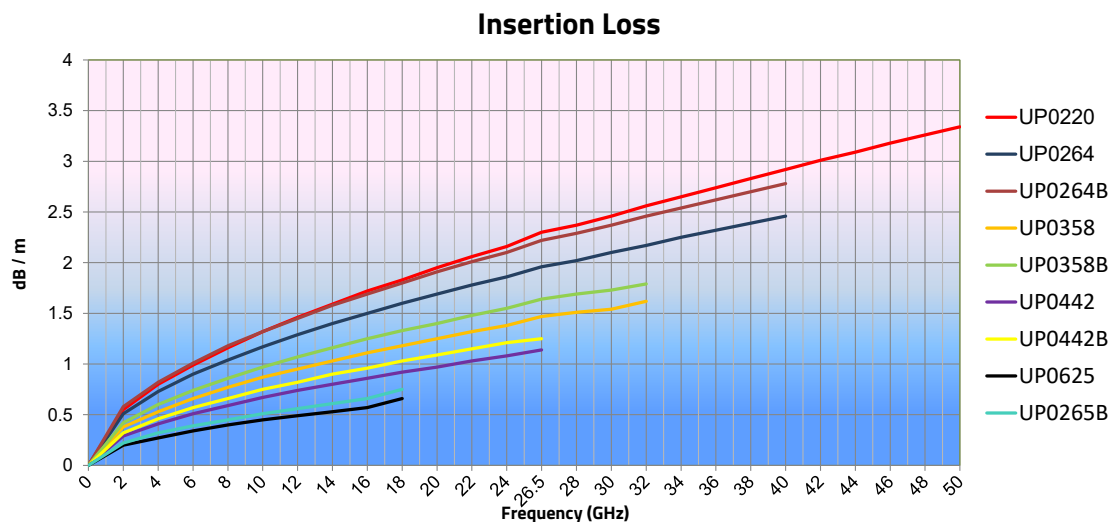
Outer Diameter	inch (mm)	0.142 (3.61)	0.197 (5.00)	0.205 (5.21)	0.293 (7.44)	0.311 (7.90)
Center Conductor	Type	solid	stranded	solid	stranded	solid
Static Minimum Bend Radius	inch (mm)	0.380 (9.65)	0.50 (12.70)	0.50 (12.70)	0.75 (19.05)	1.25 (31.75)
Weight	g/ft (g/m)	10.0 (33.0)	19.8 (65.0)	20.0 (65.6)	40.0 (131.2)	43.0 (141.0)

ENVIRONMENTAL CHARACTERISTICS

Temperature Range	°C	-65 to +165	-65 to +165	-65 to +165	-65 to +165	-65 to +165
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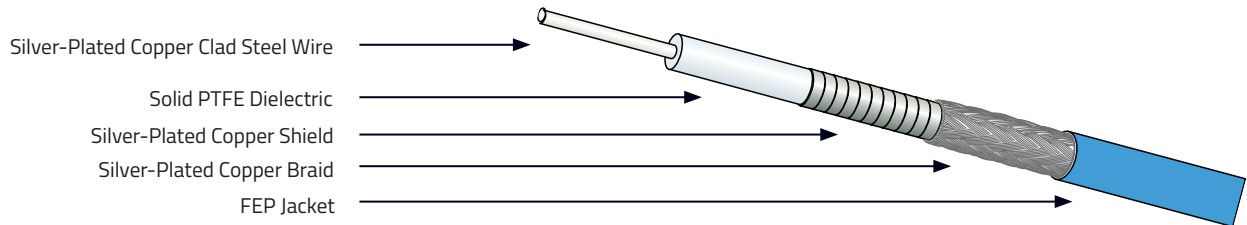
R-Test Ultra Low Loss

Insertion Loss, Power Handling and Phase Change VS Temperature



R-Test Economical Flexible

Cable Assemblies



ELECTRICAL CHARACTERISTICS

ROYAL BLUE TYPE		EF405	EF402
Impedance	ohms	50	50
Frequency Range	GHz	DC - 18	DC - 18
Velocity of Propagation	%	70	70
Capacitance	pF/ft (pF/m)	29.3 (96.1)	29.3 (96.1)
Shielding Effectiveness	(dB @ 1 GHz)	> 90	> 90
VSWR	Refer to Cable Connector Select Navigation		
Insertion Loss dB/ft (dB/m)	See figure on next page		
	1 GHz	0.21 (0.70)	0.12 (0.40)
	5 GHz	0.59 (1.94)	0.36 (1.18)
	10 GHz	0.74 (2.43)	0.45 (1.49)
	18 GHz	1.10 (3.60)	0.68 (2.23)
Power Handling	See figure on next page		

MECHANICAL CHARACTERISTICS

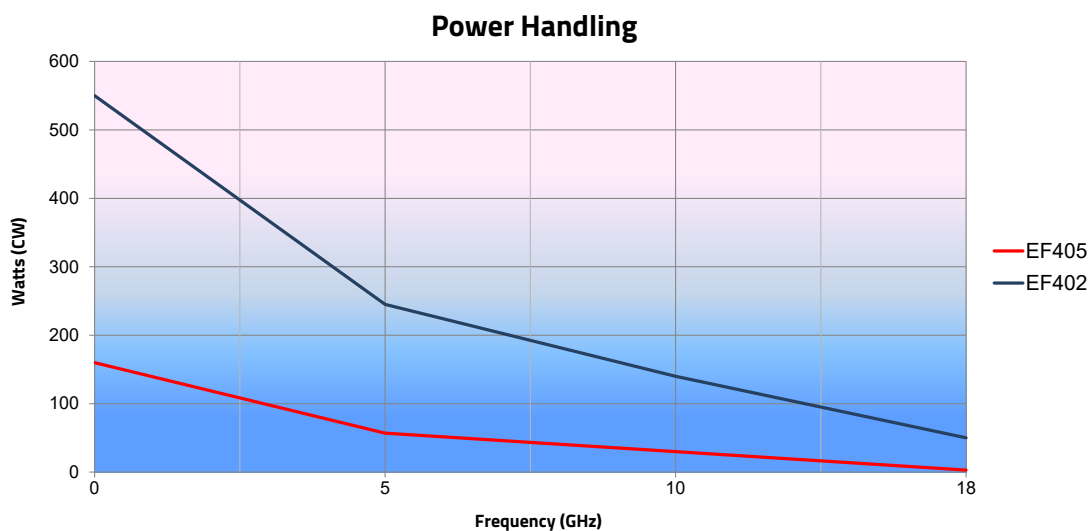
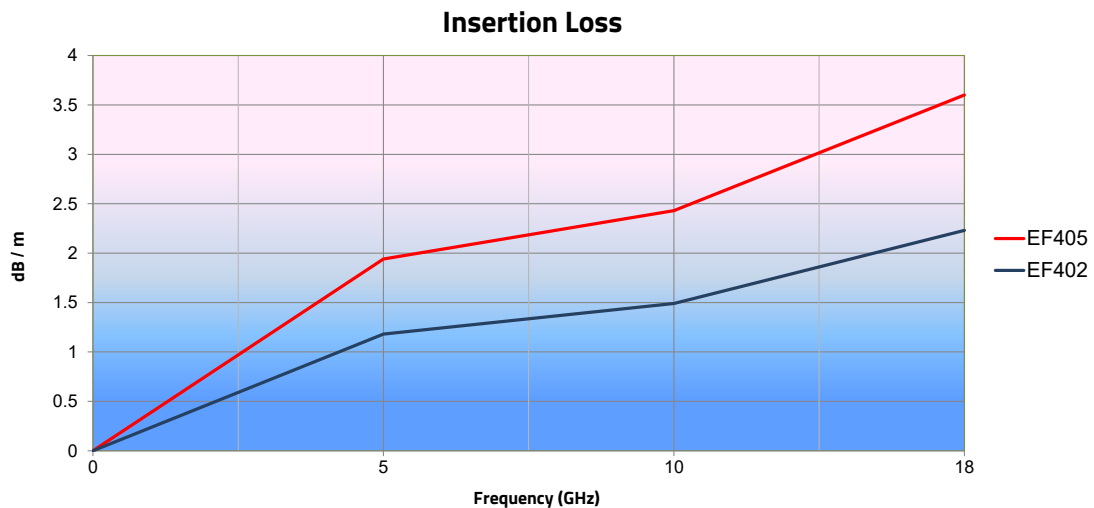
Outer Diameter	inch (mm)		
Center Conductor	Type	solid	solid
Static Minimum Bend Radius	inch (mm)	0.25 (6.35)	0.80 (20.32)
Weight	g/ft (g/m)	5.9 (19.4)	13.2 (43.3)

ENVIRONMENTAL CHARACTERISTICS

Temperature Range	°C	-55 to +200	-55 to +200
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R-Test Economical Flexible

Insertion Loss and Power Handling



Cable and Connector Care Procedures

Instruction

RF/Microwave cable assemblies are precision RF connectivity components that require proper use, routine inspection and periodic cleaning of the connectors and cables to maintain reliable performance.

Such care will extend the life of the cable assembly and all associated test equipment as well as ensure more accurate and reliability measurements.

Failure to observe these guidelines can result in inaccurate test data or permanent damage to both the assembly and other test equipment.

Connector Care Procedures

Periodically (Before every critical test) inspect all connector interfaces.

If necessary, clean out the connector interface by first blowing with compressed air.

If contamination remains, use a cotton swab slightly moistened with alcohol to remove impurities, then allow to dry before testing.

If any part of a connector interface becomes damaged, the connector should be replaced to prevent permanent damage to other test equipment components.

Mechanically inspect all connector interfaces using a calibrated connector gage kit to ensure the interface is in compliance with its controlling standard.

Always align connector centerlines before attempting to mate.

Take care to perform this step properly as any required play in the coupling nut may allow the threads to mate without proper center contact insertion.

This could damage critical connector components.

When threading male coupling nuts, don't rotate the female component of the mating interface. Otherwise, unnecessary wear will occur on both connectors causing degradation of measurements.

Always tighten connectors to the required torque using only the correct and properly calibrated torque wrench.

Tighten slowly to ensure that the ratchet mechanism on the wrench engages at the true torque value.

When nearing full mate, apply a backing wrench to the connector's wrench flat to prevent any twisting or turning of the connector and cable.

For knurled nuts, finger-tighten only, but we are not recommending this coupling nut because finger-tightening may lead to the application of too much or insufficient force to fix the torque.

Cable and Connector Care Procedures

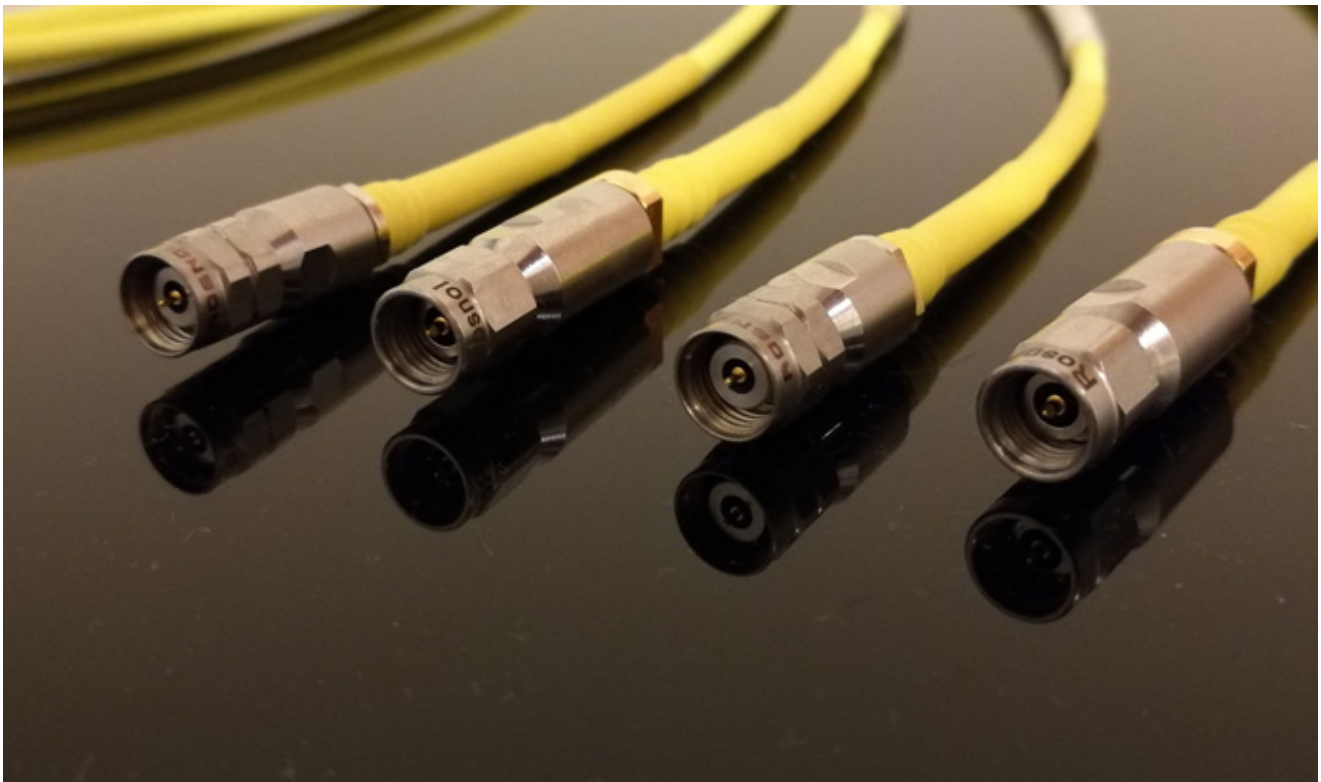
Cable Care Procedures

Always observe the specified cable minimum bend radius, especially at the ends of the connector strain reliefs where excessive stress should be avoided.

Failure to do so may result in permanent cable performance degradation.

Rosnol R-Test cables are designed to withstand heavy use, but avoid pinching or crushing the cable and do not drop heavy objects on the cable.

Never pull the cable when connected or use it to support any additional weight. Failure to do so may result in permanent cable performance degradation.



RPC 1.85



ROSNOL RPC1.85 connectors are precision connectors for use in microwave applications up to 67 GHz. The connectors features best electrical performance, excellent mechanical stability as well as extreme reliability. They are particularly well suited for semi-rigid, semi-flexible and flexible microwave cables. RPC1.85 is intermateable with RPC2.4.

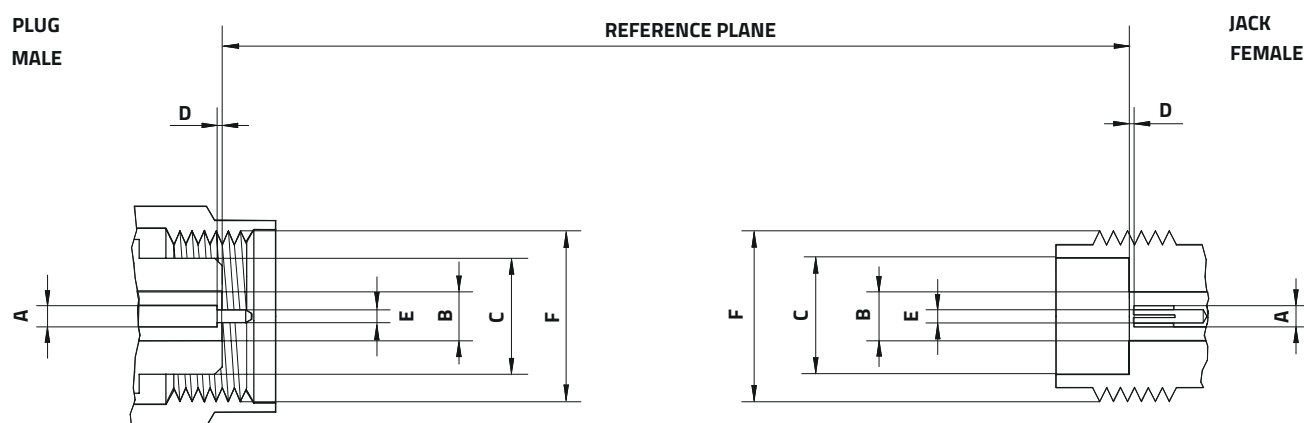
■ Features

- Interface according to IEEE-Std-287, IEC 60169-32
- Impedance 50 Ω
- Frequency range up to 67 GHz
- Return loss (cable connector straight) ≥ 20 dB (typ.)
- Screw-on coupling

■ Applications

- Cable Assemblies
- Telecommunications
- Test & Measurement

Interface Dimensions RPC1.85



	Plug I Male		Jack I Female	
dimension in mm/ inch	min.	max.	min.	max.
A	Ø 0.799/.031	Ø 0.809/.032	Ø 0.799/.031	Ø 0.809/.032
B	Ø 1.84/.072	Ø 1.86/.073	Ø 1.84/.072	Ø 1.86/.073
C	Ø 4.725/.186	Ø 4.750/.187	Ø 4.770/.188	Ø 4.795/.189
D	0.00/.000	0.05/.002	0.00/.000	0.05/.002
E	Ø 0.505/.020	Ø 0.52/.020	Ø 0.54/.021	Ø 0.56/.022
F	M7 x 0.75		M7 x 0.75	

-Features

Interface according to IEEE-Std-287, IEC 60169-32
 Impedance 50 Ω
 Frequency range up to 67 GHz
 Return loss (cable connector straight) ≥ 20 dB (typ.)
 Screw-on coupling

-Product Range

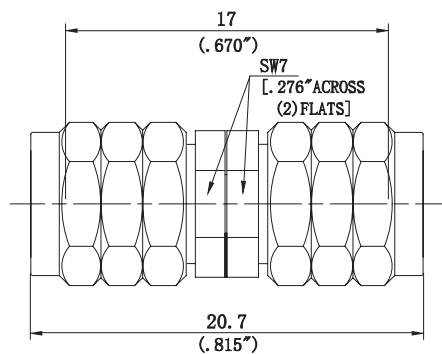
Cable assemblies
 PCB connectors
 Adaptors
 Tools and Accessories
 Further connectors available on request.

Technical Data RPC1.85

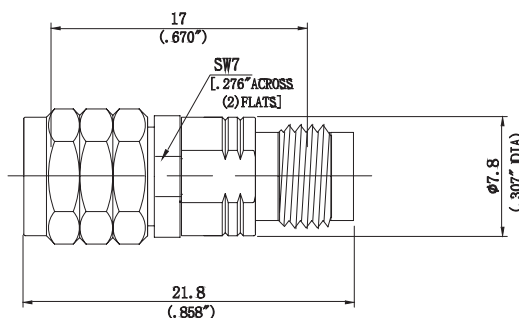
Applicable standards	
Interface according to	IEEE-Std-287, IEC 60169-32
Mechanically compatible with	RPC2.4
Electrical data	
Impedance	50 Ω
Frequency range	DC to 67 GHz
VSWR / Return loss (cable connector straight)	≤ 1.2 / ≥ 20.8 dB
Insertion loss	$\leq 0.05 \times \sqrt{f}$ (GHz) dB
Insulation resistance	≥ 5 G Ω
Center contact resistance	≤ 4 m Ω
Outer contact resistance	≤ 2.5 m Ω
Test voltage	500 V rms
Working voltage	150 V rms
Power handling	200 W @ 2 GHz
RF-leakage- Interface	≥ 100 dB @ DC to 1 GHz
Mechanical data	
Mating cycles	Stainless Steel: ≥ 500
Center contact captivation	≥ 20 N
Coupling test torque	1.65 Nm
Coupling torque recommended	0.80 Nm to 1.10 Nm
Environmental data	
Temperature range	-40 °C to +85 °C
Thermal shock	IEC 61169-1, Subclause 9.4.4
Corrosion resistance	IEC 61169-1, Subclause 9.4.6
Moisture resistance	IEC 61169-1, Subclause 9.4.3
Vibration	IEC 61169-1, Subclause 9.3.3
Shock	IEC 61169-1, Subclause 9.3.14
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260 °C for 10 sec.
Materials	
Center contact	Beryllium Copper, Gold plating
Outer contact	Stainless Steel, Passivated
Dielectric	PS

ROSNOL connectors fulfill in principle the indicated data of the Technical data.
Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution.
Specific data sheets for particular products can be provided on request from your ROSNOL sales representative.

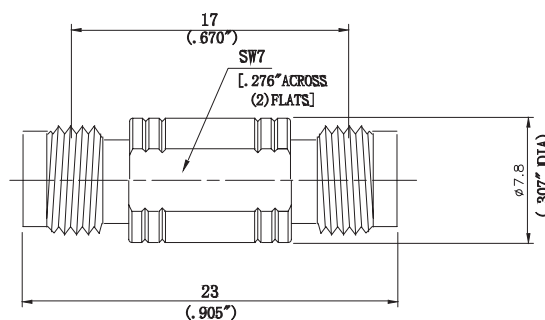
RPC 1.85



P/N	AD-V1V15A/9XX-9XX
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P/N	AD-V1V25A/9XX-9X
-----	------------------



P/N	AD-V2V25A/9X-9X
-----	-----------------



P/N	V1K50-UP0152-Q1K50-1000
-----	-------------------------



P/N	V2K50-UP0152-V2K50-1000
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RPC 2.4



ROSNOL RPC2.4 connectors are precision connectors for use in microwave applications up to 50 GHz. The connectors features best electrical performance, excellent mechanical stability as well as extreme reliability. They are particularly well suited for semi-rigid, semi-flexible and flexible microwave cables. RPC2.4 is intermateable with RPC1.85.

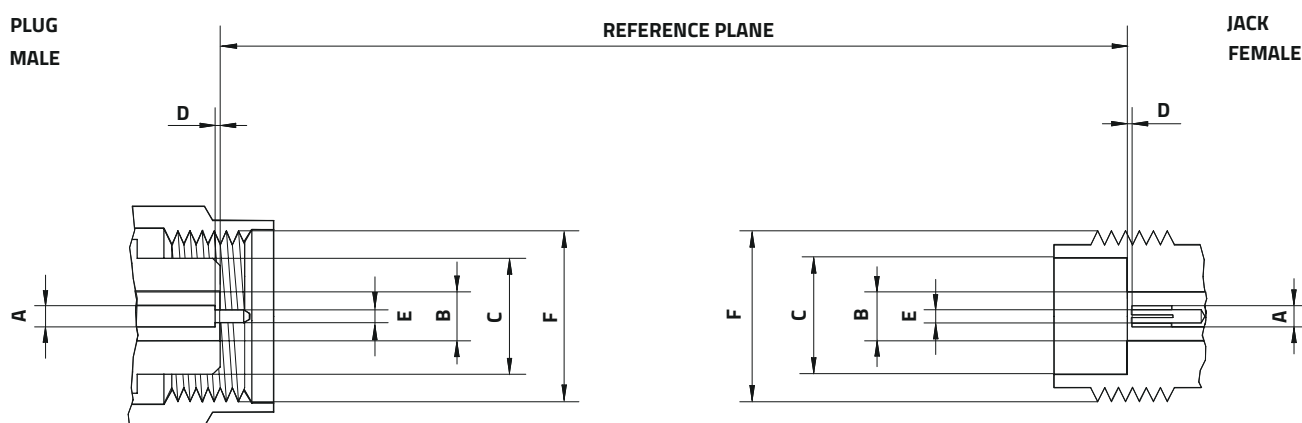
■ Features

- Interface according to IEEE-Std-287, MIL-STD-348B/324
- Impedance 50 Ω
- Frequency range up to 50 GHz
- Return loss (cable connector straight) ≥ 20 dB (typ.)
- Screw-on coupling

■ Applications

- Cable Assemblies
- Telecommunications
- Test & Measurement

■ Interface Dimensions RPC2.4



	Plug I Male		Jack I Female	
dimension in mm/ inch	min.	max.	min.	max.
A	Ø 1.03/.041	Ø 1.05/.041	Ø 1.03/.041	Ø 1.05/.041
B	Ø 2.39/.094	Ø 2.41/.095	Ø 2.39/.094	Ø 2.41/.095
C	Ø 4.725/.186	Ø 4.750/.187	Ø 4.770/.188	Ø 4.795/.189
D	0.00/.000	0.05/.002	0.00/.000	0.05/.002
E	Ø 0.505/.020	Ø 0.52/.020	Ø 0.54/.021	Ø 0.56/.022
F	M7 x 0.75		M7 x 0.75	

-Features

Interface according to IEEE-Std-287, MIL-STD-348B/324
 Impedance 50 Ω
 Frequency range up to 50 GHz
 Return loss (cable connector straight) ≥ 20 dB (typ.)
 Screw-on coupling

-Product Range

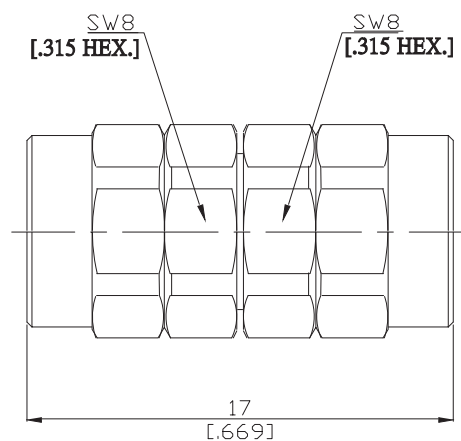
Cable assemblies
 PCB connectors
 Adaptors
 Tools and Accessories
 Further connectors available on request.

Technical Data RPC2.4

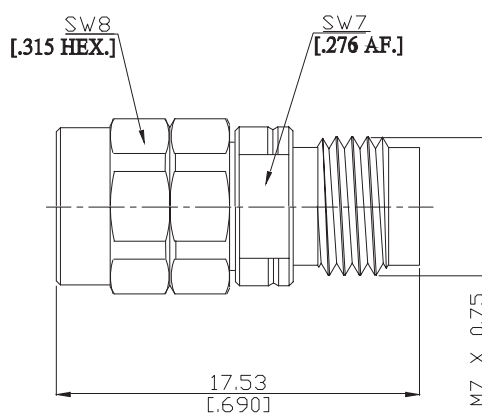
Applicable standards	
Interface according to	IEEE-Std-287, MIL-STD-348B/324
Mechanically compatible with	RPC1.85
Electrical data	
Impedance	50 Ω
Frequency range	DC to 50 GHz
VSWR / Return loss (cable connector straight)	≤ 1.2 / ≥ 20.8 dB
Insertion loss	$\leq 0.05 \times \sqrt{f}$ (GHz) dB
Insulation resistance	≥ 5 G Ω
Center contact resistance	≤ 4 m Ω
Outer contact resistance	≤ 2.5 m Ω
Test voltage	500 V rms
Working voltage	150 V rms
Power handling	200 W @ 2 GHz
RF-leakage- Interface	≥ 100 dB @ DC to 1 GHz
Mechanical data	
Mating cycles	Stainless Steel: ≥ 500
Center contact captivation	≥ 20 N
Coupling test torque	1.65 Nm
Coupling torque recommended	0.80 Nm to 1.10 Nm
Environmental data	
Temperature range	-40 °C to +85 °C
Thermal shock	IEC 61169-1, Subclause 9.4.4
Corrosion resistance	IEC 61169-1, Subclause 9.4.6
Moisture resistance	IEC 61169-1, Subclause 9.4.3
Vibration	IEC 61169-1, Subclause 9.3.3
Shock	IEC 61169-1, Subclause 9.3.14
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260 °C for 10 sec.
Materials	
Center contact	Beryllium Copper, Gold plating
Outer contact	Stainless Steel, Passivated
Dielectric	PS

ROSNOL connectors fulfill in principle the indicated data of the Technical data.
Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution.
Specific data sheets for particular products can be provided on request from your ROSNOL sales representative.

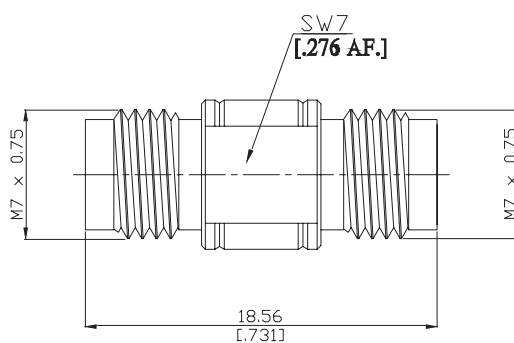
RPC 2.4



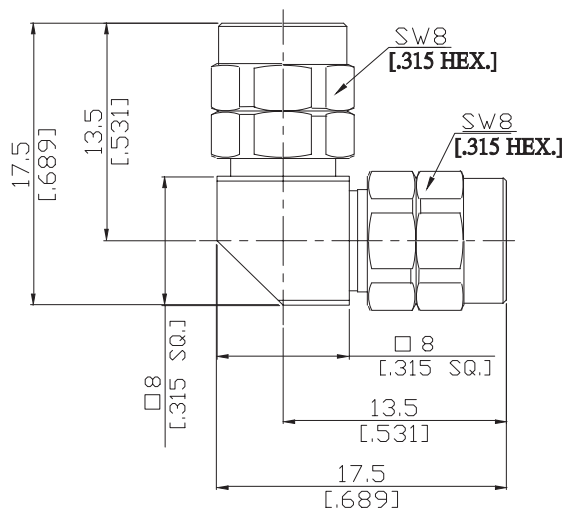
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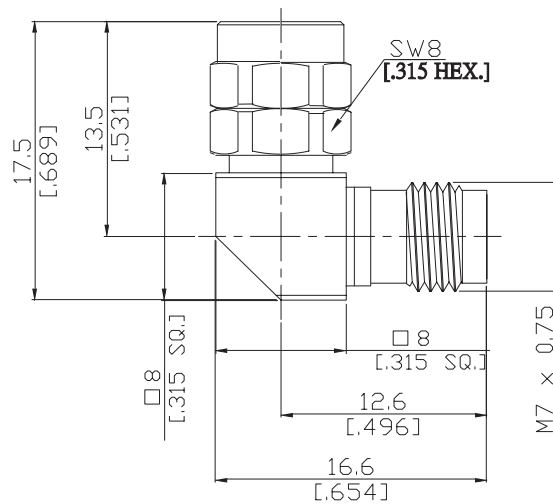
P/N AD-Q1Q25A/9XX-9X



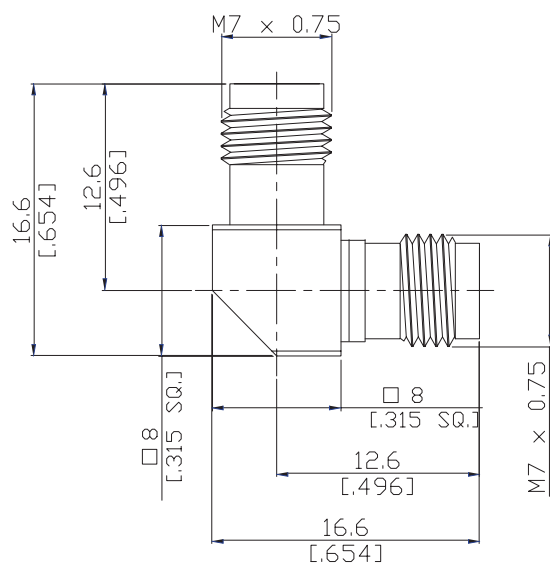
P/N AD-Q2Q25A/9X-9X



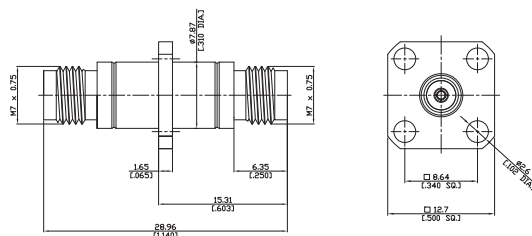
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P/N ASL-Q1Q25A/9XX-9X

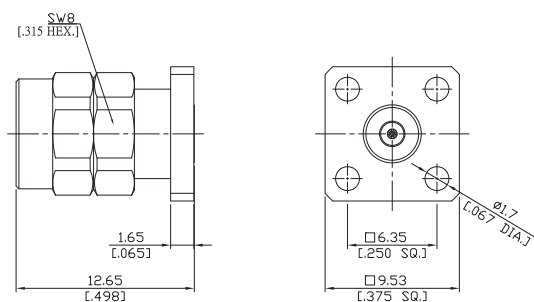


P/N ASL-Q1Q15A/9X-9X

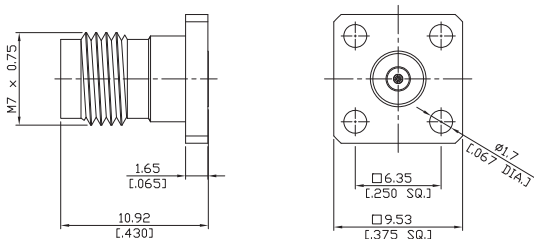


P/N AD-Q2Q25A-PF/9X-9X

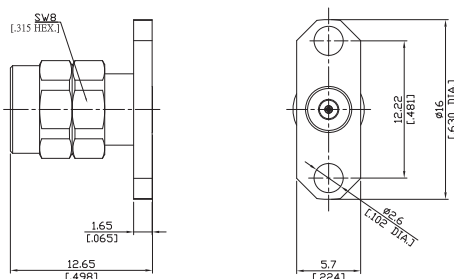
RPC 2.4



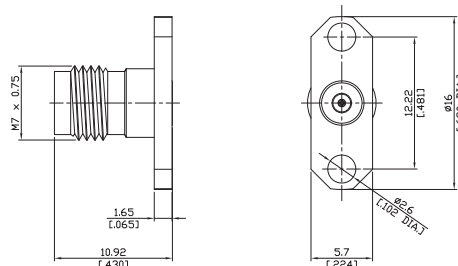
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Q1BF50-0012B/9XX	.0030/.0012
Q1BF50-0020B/9XX	.0051/.0020



P/N	Accept Pin (mm/inch)
Q2BF50-0009B/9X	.0023/.0009
Q2BF50-0012B/9X	.0030/.0012
Q2BF50-0020B/9X	.0051/.0020



P/N	Accept Pin (mm/inch)
Q1BT50-0009A/9XX	.0023/.0009
Q1BT50-0012A/9XX	.0030/.0012
Q1BT50-0020A/9XX	.0051/.0020



P/N	Accept Pin (mm/inch)
Q2BT50-0009A/9X	.0023/.0009
Q2BT50-0012A/9X	.0030/.0012
Q2BT50-0020A/9X	.0051/.0020

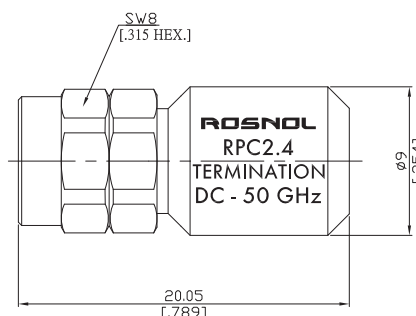
RPC 2.4 Termination & Fixed Attenuator

■ Product description

Terminators (also called RF loads or dummy loads) are applied to an open end of a transmission line, e.g. an RF port, to prevent the back-reflection of an RF signal. They are used in a large variety of test & measurement, defence and communication applications.

■ Features

- Impedance matched
- Standard or precision types
- Various bandwidth
- Low and medium power



P/N	T-Q15-50G1WA/9XX
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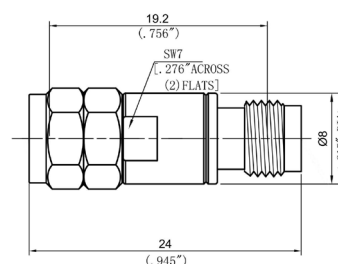
■ Product description

RF attenuators are used to reduce the power of a signal without causing distortion of its waveform. They are used in many test & measurement and communication applications

- Power adjustment between different channels or inline subsystems
- As a protection for the input of test equipment to reduce excess RF power
- To improve impedance matching between subsystems or for test instrumentation

■ Features

- 50 Ω or 75 Ω impedance
- Fixed attenuation level from 01 dB up to 30 dB
- Various bandwidth to improve the impedance matching between subsystems of its waveform
- Wide range of interfaces
- Made to female connetorisation



P/N	FA-Q1Q25A-50G1W-/-/9XX-9X
Frequency	50G
dB	01-30dB

■ Product description

Power dividers are designed to split a RF signal equally into two output signals.

■ Features

- Broadband down to DC
- Very low return loss
- Cost effective solution to tap off a signal
- Very compact



2-Way

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD2-Q2-12.5-44G_A	12.5	44	1.7	1.6	1.3	16	0.4	5
PD2-Q2-46-50G_A	46	50	1.7	1.7	1.8	20	0.6	10

3-Way

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD3-Q2-10-45G_A	10	45	1.8	1.8	2	16	1.2	16

6-Way

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD6-Q2-10-45G_A	10	45	1.7	1.7	2.5	16	1.2	18

2-Way Resistive Power Divider

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD2-Q2-1-50G_B	DC	50	1.6	2.5	1.5	10	0.8	7

RPC 2.92



ROSNOL RPC2.92 connectors are precision connectors for use in microwave applications up to 40 GHz. The connectors features best electrical performance, excellent mechanical stability as well as extreme reliability. They are particularly well suited for semi-rigid, semi-flexible and flexible microwave cables. RPC2.92 is intermateable with RPC3.5 and SMA.

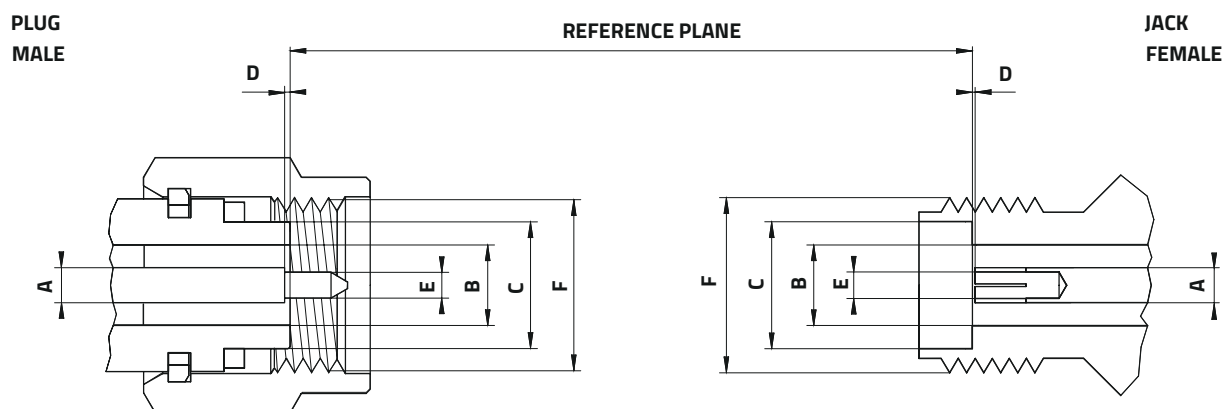
■ Features

- Interface according to IEEE-Std-287, MIL-STD-348B/323
- Impedance 50 Ω
- Frequency range up to 40 GHz
- Return loss (cable connector straight) ≥ 20 dB (typ.)
- Screw-on coupling

■ Applications

- Cable Assemblies
- Telecommunications
- Test & Measurement

Interface Dimensions RPC2.92



	Plug I Male		Jack I Female	
dimension in mm/ inch	min.	max.	min.	max.
A	Ø 1.26/.050	Ø 1.28/.050	Ø 1.26/.050	Ø 1.28/.050
B	Ø 2.91/.115	Ø 2.93/.115	Ø 2.91/.115	Ø 2.93/.115
C	Ø 4.57/.180	Ø 4.59/.181	Ø 4.62/.182	Ø 4.65/.183
D	0.00/.000	0.08/.003	0.00/.000	0.08/.003
E	Ø 0.91/.036	Ø 0.93/.037	Ø 0.96/.038	Ø 0.98/.039
F	1/4-36UNS-2B		1/4-36UNS-2A	

-Features

Interface according to IEEE-Std-287, MIL-STD-348B/323
 Impedance 50 Ω
 Frequency range up to 40 GHz
 Return loss (cable connector straight) ≥ 20 dB (typ.)
 Screw-on coupling

-Product Range

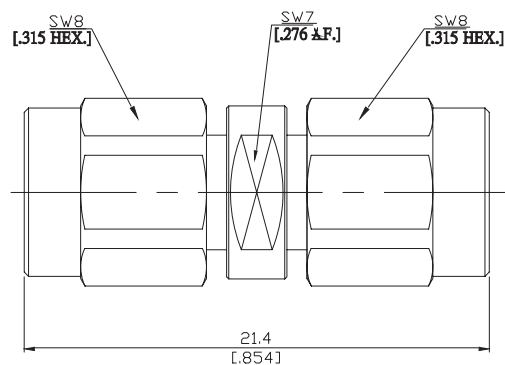
Cable assemblies
 PCB connectors
 Adaptors
 Tools and Accessories
 Further connectors available on request.

Technical Data RPC2.92

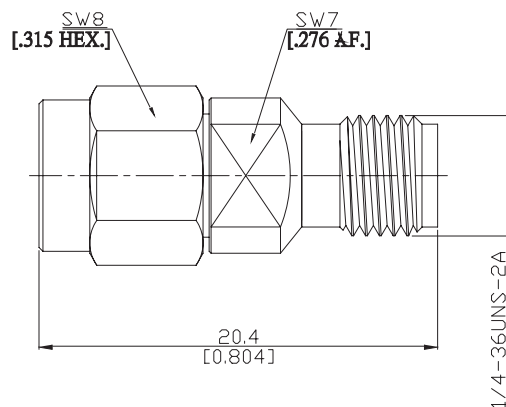
Applicable standards	
Interface according to	IEEE-Std-287, MIL-STD-348B/323
Mechanically compatible with	RPC3.5 and SMA
Electrical data	
Impedance	50 Ω
Frequency range	DC to 40 GHz
VSWR / Return loss (cable connector straight)	≤ 1.2 / ≥ 20.8 dB
Insertion loss	$\leq 0.04 \times \sqrt{f}$ (GHz) dB
Insulation resistance	≥ 5 G Ω
Center contact resistance	≤ 3.0 m Ω
Outer contact resistance	≤ 2.0 m Ω
Test voltage	750 V rms
Working voltage	250 V rms
Power handling	200 W @ 2 GHz
RF-leakage- Interface	≥ 100 dB @ DC to 1 GHz
Mechanical data	
Mating cycles	Stainless Steel: ≥ 500
Center contact captivation	≥ 22 N
Coupling test torque	1.70 Nm
Coupling torque recommended	0.80 Nm to 1.10 Nm
Environmental data	
Temperature range	-40 °C to +85 °C
Thermal shock	MIL-STD 202, Method 107, Condition B
Corrosion resistance	MIL-STD 202, Method 101, Condition B
Moisture resistance	MIL-STD 202, Method 106
Vibration	MIL-STD 202, Method 204, Condition D
Shock	MIL-STD 202, Method 213, Condition I
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260 °C for 10 sec.
Materials	
Center contact	Beryllium Copper, Gold plating
Outer contact	Stainless Steel, Passivated
Dielectric	PS

ROSNOL connectors fulfill in principle the indicated data of the Technical data.
Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution.
Specific data sheets for particular products can be provided on request from your ROSNOL sales representative.

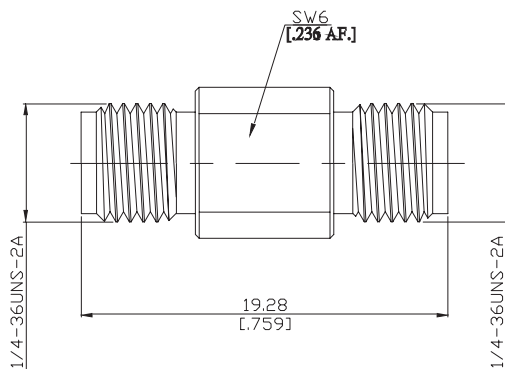
RPC 2.92



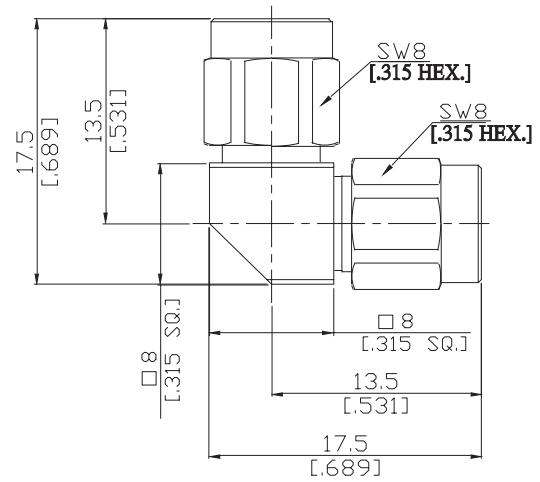
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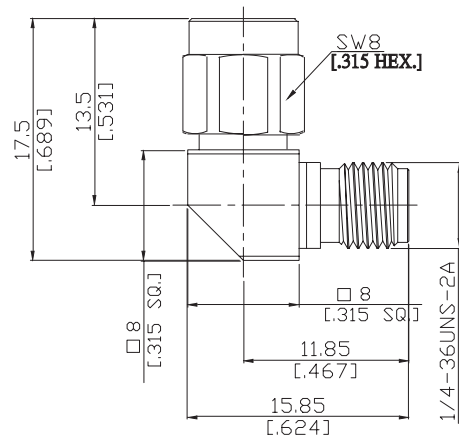
P/N AD-K1K25A/9XX-9X



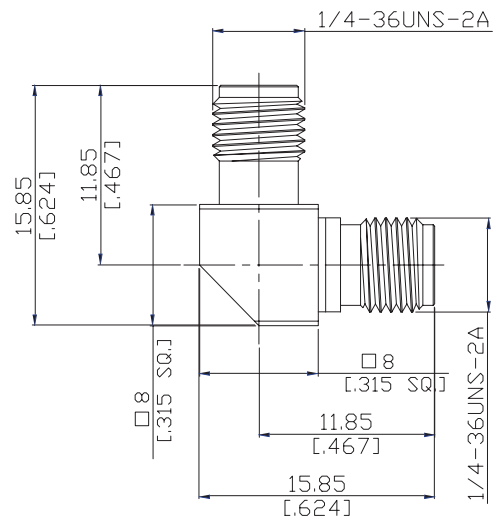
P/N AD-K2K25A/9X-9X



P/N ASL-K1K15A/9XX-9XX

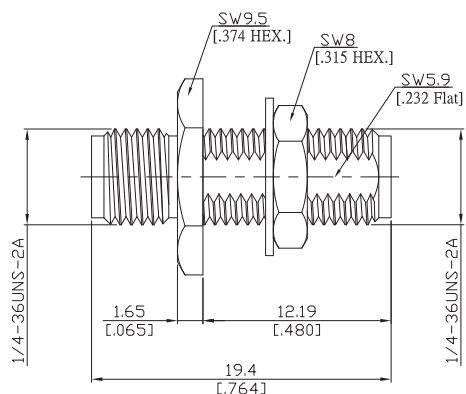


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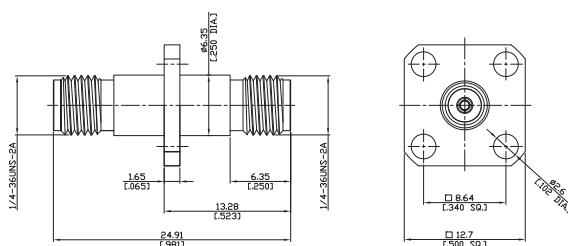


P/N ASL-K2K25A/9X-9X

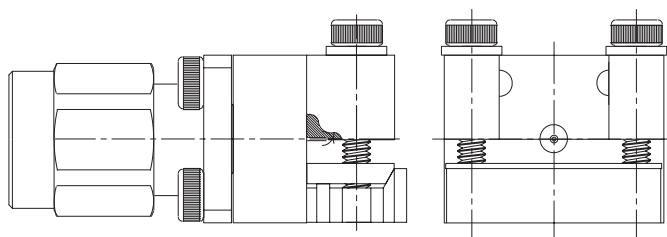
RPC 2.92



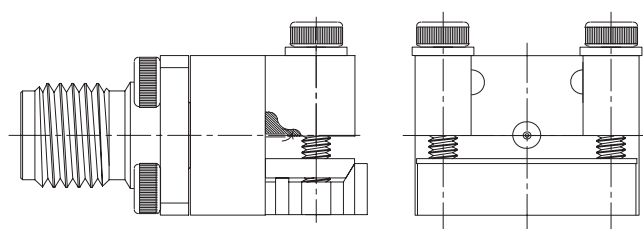
P/N AD-K2K25A-BH/9X-9X



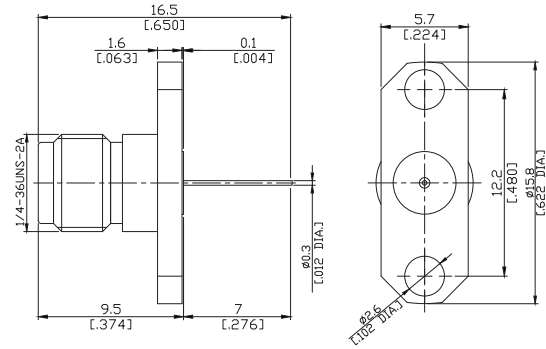
P/N AD-K2K25A-PF/9X-9X



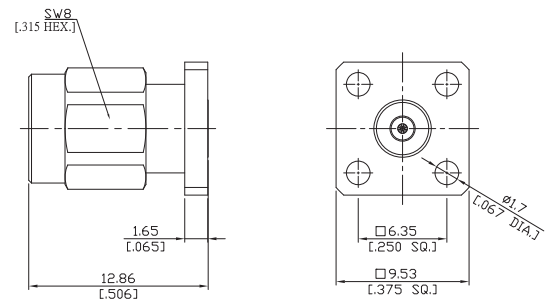
P/N K1HA50-2226A/9XX



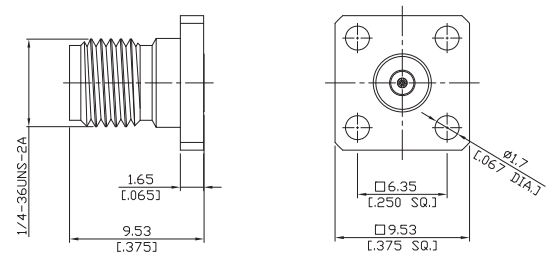
P/N K2HA50-1892A/9X



P/N	K2GTA50-1650A/9X
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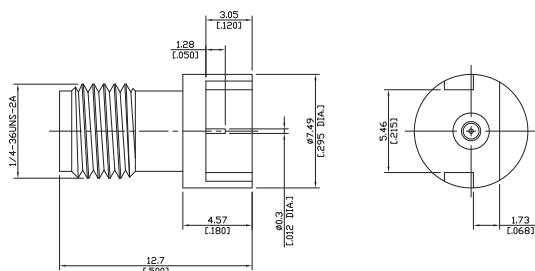


P/N	Accept Pin (mm/inch)
K1BF50-0009B/9XX	.0023/.0009
K1BF50-0012B/9XX	.0030/.0012
K1BF50-0020B/9XX	.0051/.0020

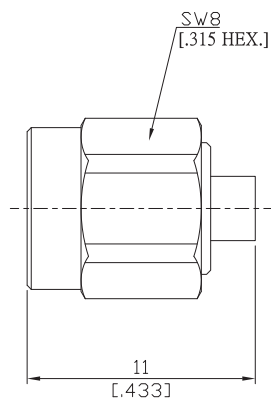


P/N	Accept Pin (mm/inch)
K2BF50-0009B/9X	.0023/.0009
K2BF50-0012B/9X	.0030/.0012
K2BF50-0020B/9X	.0051/.0020

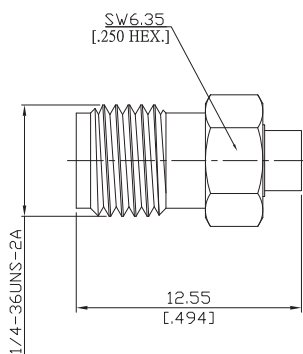
RPC 2.92



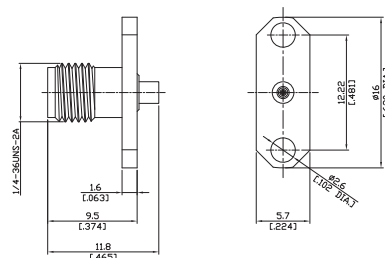
P/N K2HA50-0173A/9Q



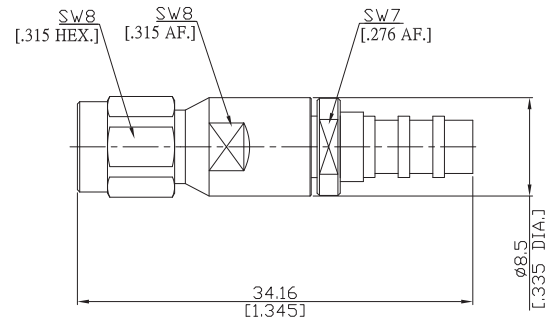
P/N	Cable Group
K2E50-0047A/91X	.047
K2E50-0085A/91X	.085,.086



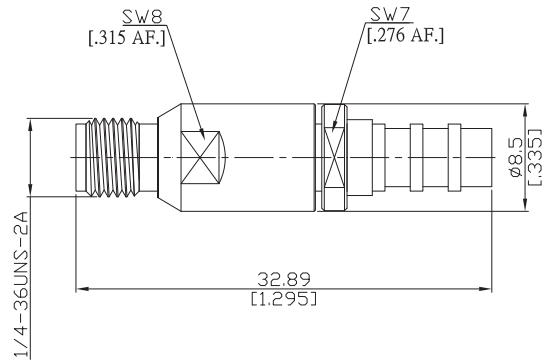
P/N	Cable Group
K2E50-0047A/9X	.047
K2E50-0085A/9X	.085,.086



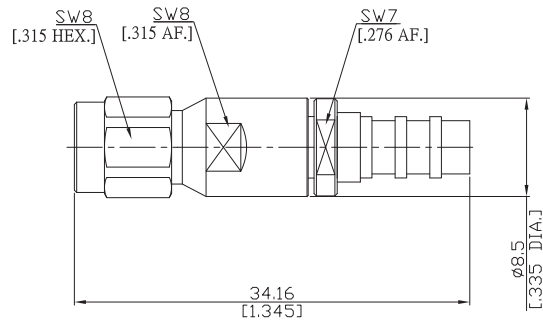
P/N	Cable Group
K2EBT50-0047A/9X	.047
K2EBT50-0085A/9X	.085,.086



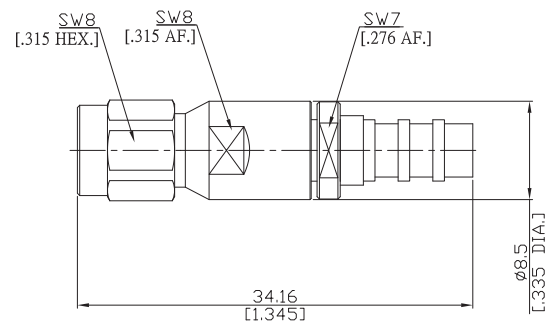
P/N K1K50-UP0264-K1K50-1000



P/N K2K50-UP0264-K2K50-1000



P/N K1K50-UP0264-AM-K1K50-1000



P/N K1K50-RB40-K1K50-1000

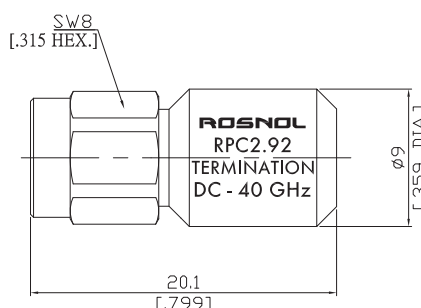
RPC 2.92 Termination & DC Block

■ Product description

Terminators (also called RF loads or dummy loads) are applied to an open end of a transmission line, e.g. an RF port, to prevent the back-reflection of an RF signal. They are used in a large variety of test & measurement, defence and communication applications.

■ Features

- Impedance matched
- Standard or precision types
- Various bandwidth
- Low and medium power



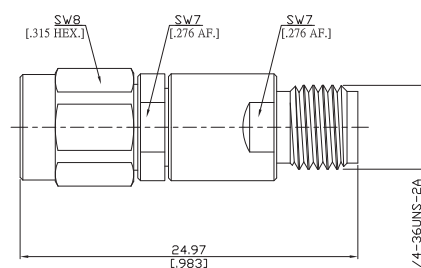
P/N	T-K15-40G1WA/9XX
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■ Product description

A DC block separates or blocks DC voltage (galvanic isolation) and allows passage of RF frequency along a coaxial transmission line.

■ Features

- Broadband
- RF signal passes with negligible loss
- Blocking of DC
- Galvanic isolation of centre conductor



P/N	DB-K1K25A/9XX-9X
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RPC 2.92 Fixed Attenuator

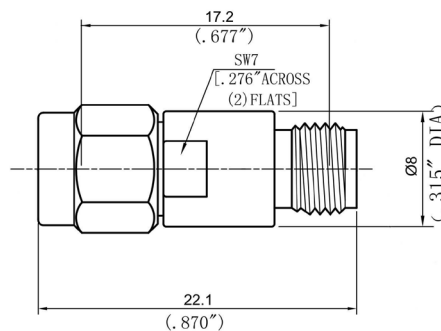
■ Product description

RF attenuators are used to reduce the power of a signal without causing distortion of its waveform. They are used in many test & measurement and communication applications

- Power adjustment between different channels or inline subsystems
- As a protection for the input of test equipment to reduce excess RF power
- To improve impedance matching between subsystems or for test instrumentation

■ Features

- 50 Ω or 75 Ω impedance
- Fixed attenuation level from 01 dB up to 30 dB
- Various bandwidth to improve the impedance matching between subsystems of its waveform
- Wide range of interfaces
- Made to female connetorisation



P/N	FA-K1K25A-40G1W- -/9XX-9X
Frequency	40G
dB	01-30dB

RPC 2.92 Power Divider

■ Product description

Power dividers are designed to split a RF signal equally into two output signals.

■ Features

- Broadband down to DC
- Very low return loss
- Cost effective solution to tap off a signal
- Very compact



2-Way

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD2-K2-0.5-40G_A	0.5	40	1.6	1.6	3.5	16	1	12
PD2-K2-26.5-40G_A	26.5	40	1.6	1.6	1.5	20	0.6	6

3-Way

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD3-K2-20-30G_A	10	45	1.8	1.8	2	16	1.2	16
PD3-K2-26.5-40G_A	26.5	40	1.6	1.6	1.8	18	1.2	12

4-Way

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD4-K2-10-40G_A	10	40	1.65	1.65	2.9	18	1	14

6-Way

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD6-K2-10-30G_A	10	30	1.6	1.6	2	16	1	12
PD6-K2-18-40G_A	18	40	1.8	1.8	2.4	17	1.2	18

8-Way

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD8-K2-0.5-40G_A	0.5	40	1.8	1.8	11	15	1.6	18

16-Way

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD16-K2-18-40G_A	18	40	1.8	1.8	5	17	1.2	12

2-Way Resistive Power Divider

P/N	Freq.(Min) GHz	Freq.(Max) GHz	VSWR Input.	VSWR Output.	Insertion Loss(dB)	Isolation (dB)	Amp. Bal. (deg)	Phase Bal. (deg)
PD2-K2-1-40G_B	DC	40	1.5	2.5	1.5	10	0.6	5

RPC 3.5



ROSNOL RPC3.5 connectors are precision connectors for use in microwave applications up to 26.5 GHz. The connectors features best electrical performance, excellent mechanical stability as well as extreme reliability. They are particularly well suited for semi-rigid, semi-flexible and flexible microwave cables. RPC3.5 is intermateable with RPC2.92 and SMA.

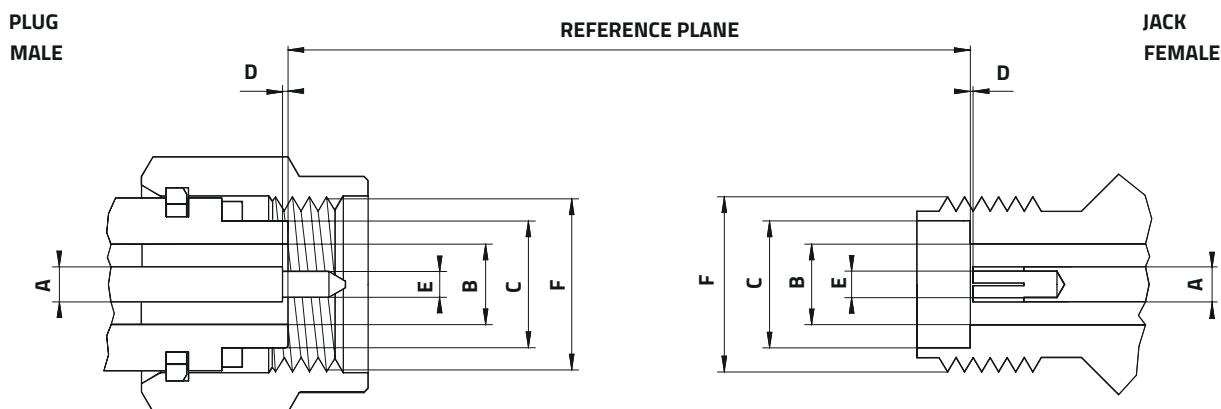
■ Features

- Interface according to IEEE-Std-287, IEC 60169-23
- Impedance 50 Ω
- Frequency range up to 26.5 GHz
- Return loss (cable connector straight) ≥ 20 dB (typ.)
- Screw-on coupling

■ Applications

- Cable Assemblies
- Telecommunications
- Test & Measurement

■ Interface Dimensions RPC3.5



	Plug I Male		Jack I Female	
dimension in mm/ inch	min.	max.	min.	max.
A	Ø 1.51/.059	Ø 1.53/.060	Ø 1.51/.059	Ø 1.53/.060
B	Ø 3.49/.137	Ø 3.51/.138	Ø 3.49/.137	Ø 3.51/.138
C	Ø 4.57/.180	Ø 4.59/.181	Ø 4.63/.182	Ø 4.65/.183
D	0.00/.000	0.08/.003	0.00/.000	0.08/.003
E	Ø 0.91/.036	Ø 0.93/.037	Ø 0.96/.038	Ø 0.98/.039
F	1/4-36UNS-2B		1/4-36UNS-2A	

-Features

Interface according to IEEE-Std-287, IEC 60169-23
 Impedance 50 Ω
 Frequency range up to 26.5 GHz
 Return loss (cable connector straight) ≥ 20 dB (typ.)
 Screw-on coupling

-Product Range

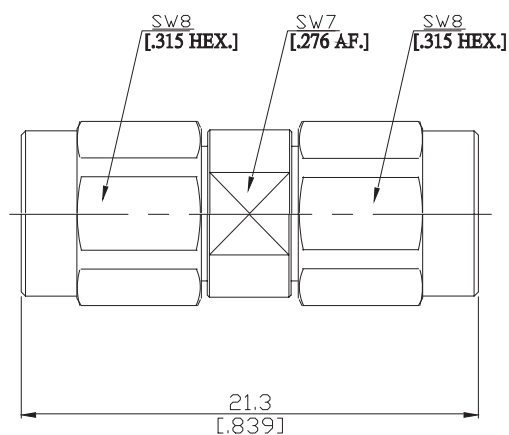
Cable assemblies
 PCB connectors
 Adaptors
 Tools and Accessories
 Further connectors available on request.

Technical Data RPC3.5

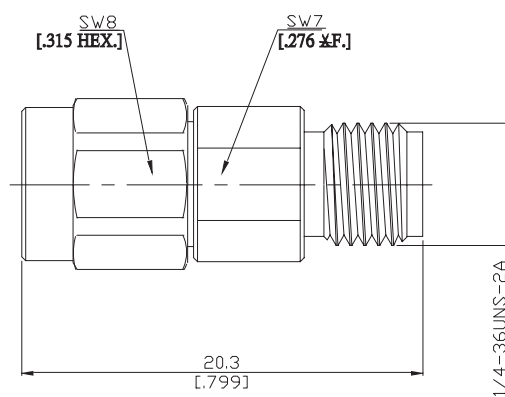
Applicable standards	
Interface according to	IEEE-Std-287, IEC 60169-23
Mechanically compatible with	RPC2.92 and SMA
Electrical data	
Impedance	50 Ω
Frequency range	DC to 26.5 GHz
VSWR / Return loss (cable connector straight)	≤ 1.2 / ≥ 20.8 dB
Insertion loss	$\leq 0.03 \times \sqrt{f}$ (GHz) dB
Insulation resistance	≥ 5 G Ω
Center contact resistance	≤ 3.0 m Ω
Outer contact resistance	≤ 2.0 m Ω
Test voltage	1000 V rms
Working voltage	335 V rms
Power handling	200 W @ 2 GHz
RF-leakage- Interface	≥ 100 dB @ DC to 1 GHz
Mechanical data	
Mating cycles	Stainless Steel: ≥ 500
Center contact captivation	≥ 27 N
Coupling test torque	1.70 Nm
Coupling torque recommended	0.80 Nm to 1.10 Nm
Environmental data	
Temperature range	-40 °C to +85 °C
Thermal shock	MIL-STD 202, Method 107, Condition B
Corrosion resistance	MIL-STD 202, Method 101, Condition B
Moisture resistance	MIL-STD 202, Method 106
Vibration	MIL-STD 202, Method 204, Condition D
Shock	MIL-STD 202, Method 213, Condition I
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260 °C for 10 sec.
Materials	
Center contact	Beryllium Copper, Gold plating
Outer contact	Stainless Steel, Passivated
Dielectric	PS

ROSNOL connectors fulfill in principle the indicated data of the Technical data.
Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution.
Specific data sheets for particular products can be provided on request from your ROSNOL sales representative.

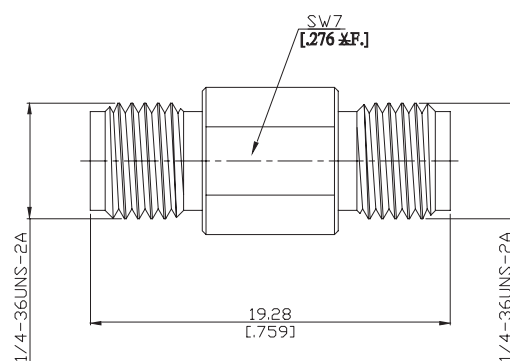
RPC 3.5



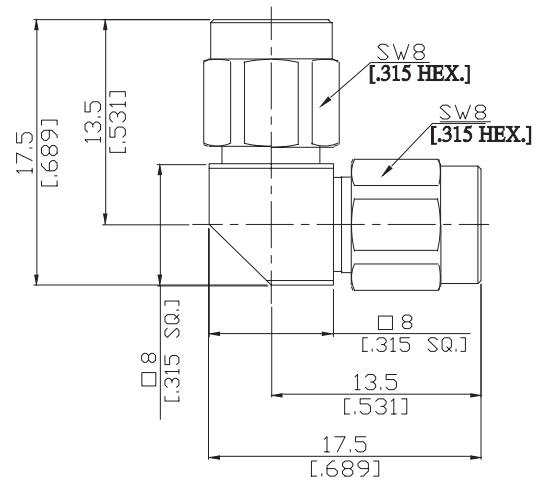
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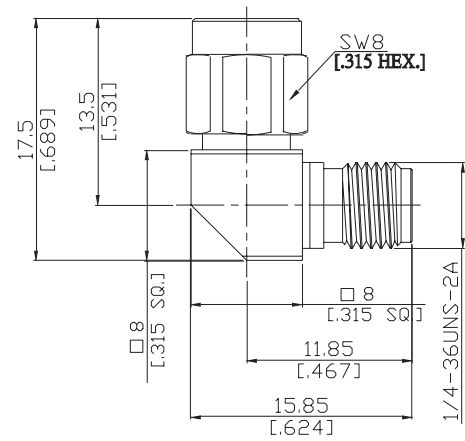
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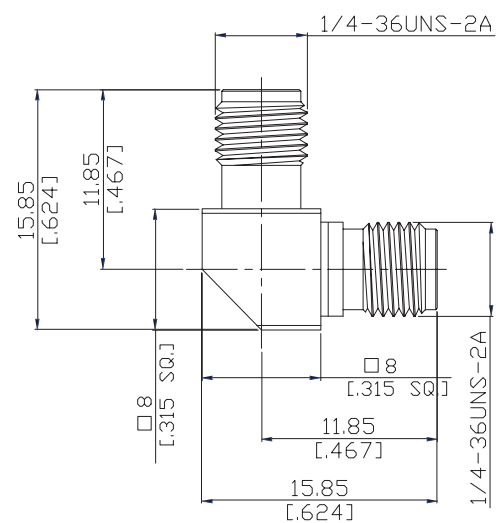
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P/N ASL-PC1PC5A/9XX-9XX

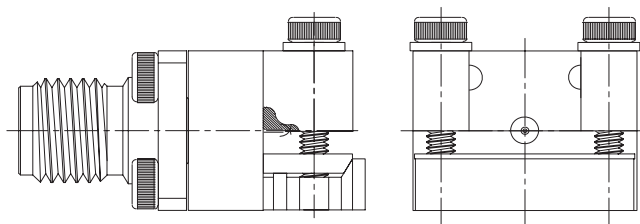
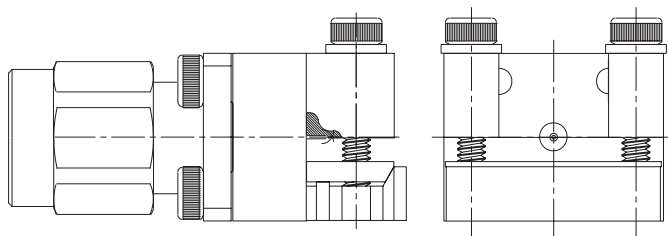
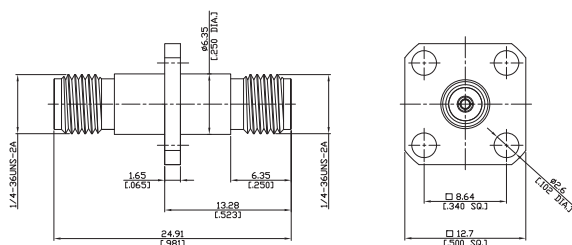
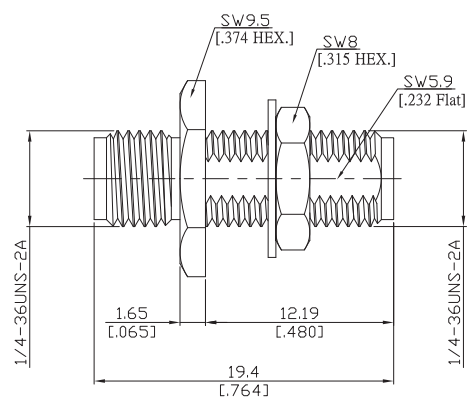


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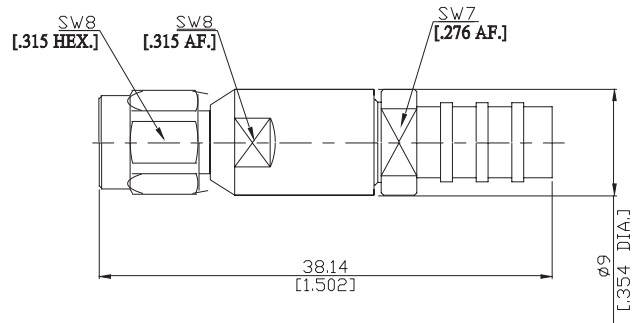


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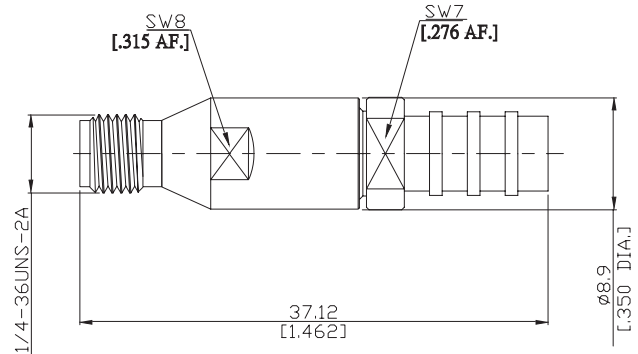
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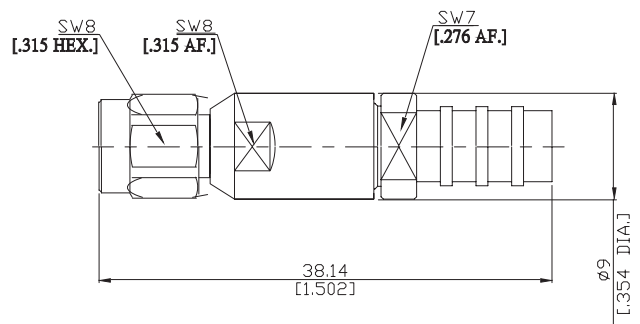
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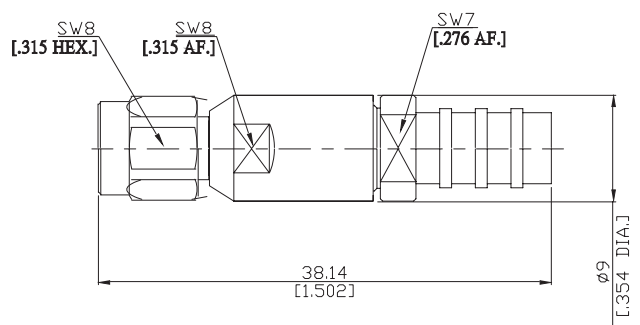
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P/N PC2K50-UP0358-PC2K50-1000



P/N PC1K50-EW0420A-PC1K50-1000



P/N PC1K50-UF0307-PC1K50-1000

SMP



ROSNOL's SMP and Mini-SMP coaxial connector series is available with different retention variants. Connectors of this series are mainly applied as PCB connectors and in board-to-board connections.

Using adaptors, so-called bullets, equalization of radial and axial misalignments is possible, maintaining constant electrical characteristics. Bullets are available in different lengths to allow for any board spacing.

SMP coaxial connectors are available as smooth bore, catchers mitt, limited detent and full detent versions. They are suitable for a wide range of board-to-board interconnect applications up to 40 GHz - from low up to the highest mechanical loads, e.g. in telecommunication, test & measurement or aerospace applications.

■ Features

- Interface according to US MIL-STD 348A, Fig. 326
- Frequency range DC to 40 GHz
- Return loss (cable connector straight) ≥ 23 dB @ DC to 20 GHz
- Impedance 50 Ω
- Minimum board-to-board distance ≥ 9.05 mm

■ Applications

- Cable Assemblies
- Telecommunications
- Test & Measurement

■ Retention Variants

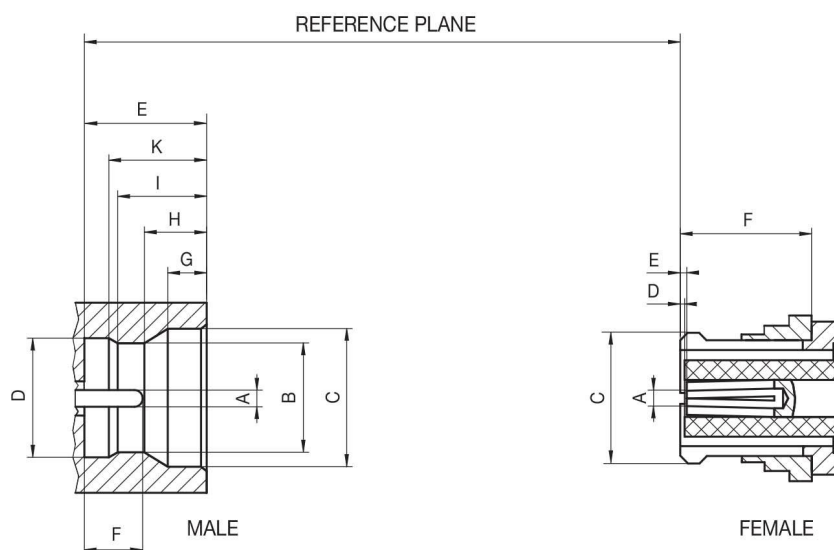
Smooth bore
Sliding contact
For modular systems, backplane applications

Catchers mitt
Sliding contact with extended catching range
For modular systems, backplane applications

Limited detent
Medium-tight retention
For applications with low to medium mechanical loads:
telecommunications
and test and measurement applications

Full detent
Fixed retention, vibration resistant
For high mechanical loads, e.g. in aerospace applications

Interface Dimensions SMP



	Plug I Male						Jack I Female	
	Smooth bore		Limited detent		Full detent			
dimension in mm	min.	max.	min.	max.	min.	max.	min.	max.
A	Ø 0.36	Ø 0.41	Ø 0.36	Ø 0.41	Ø 0.36	Ø 0.41	-	-
B	Ø 3.12	Ø 3.23	Ø 3.00	Ø 3.10	Ø 2.90	Ø 3.00	-	-
C	Ø 3.53	Ø 3.68	Ø 3.53	Ø 3.68	Ø 3.53	Ø 3.68	-	Ø 3.43
D	-	-	Ø 3.15	Ø 3.20	Ø 3.15	Ø 3.20	0.00 nom.	
E	2.74	2.84	2.74	2.84	2.74	2.84	0.20 nom.	
F	1.14	1.40	1.14	1.40	1.14	1.40	Ø 2.84	-
G	0.84	0.94	0.84	0.94	0.84	0.94	-	-
H	-	-	1.40	1.45	1.40	1.45	-	-
I	-	-	1.98	2.08	1.98	2.08	-	-
J	-	-	2.19	2.29	2.19	2.29	-	-

-Features

Interface according to US MIL-STD 348A, Fig. 326

Frequency range DC to 40 GHz

Return loss (cable connector straight) ≥ 23 dB @ DC to 20 GHz

Impedance 50 Ω

Minimum board-to-board distance ≥ 9.05 mm

Snap-on coupling

-Product Range

Cable assemblies

PCB connectors

Panel Connectors

Adaptors

Termination

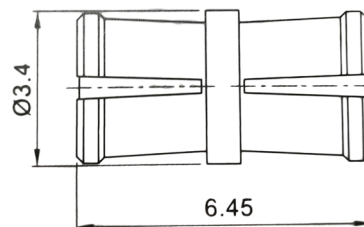
Technical Data SMP

Applicable standards	
Interface according to	MIL-STD-348A, Fig. 326
Electrical data	
Impedance	50 Ω
Frequency range	DC to 40 GHz
VSWR / Return loss (cable connector straight)	≤ 1.15 / ≥ 23 dB @ DC to 20GHz ; ≤ 1.50 / ≥ 14 dB @ DC to 40GHz
Insertion loss	$\leq 0.1 \times \sqrt{f}$ (GHz) dB
Insulation resistance	≥ 5 G Ω
Center contact resistance	≤ 6.0 m Ω
Outer contact resistance	≤ 2.0 m Ω
Test voltage	500 V rms
Working voltage	335 V rms
Power handling	65 W @ 2.2 GHz
RF-leakage- Interface	≥ 85 dB @ DC to 4 GHz
Mechanical data	
Mating cycles	Full detent: ≥ 100 Limited detent: ≥ 500 Smooth bore, Catchers mitt: ≥ 1000
Center contact captivation	axial: ≥ 7 N
Axial misalignment	± 0.3 mm
Radial misalignment	4° (interface)
Board-to-board distance (min.)	9.05 mm (solder paste thickness not included)
Environmental data	
Temperature range	-65 °C to +155 °C
Thermal shock	MIL-STD 202, Method 107, Condition B
Corrosion resistance	IEC 61169-1, Sub-clause 9.4.5 (+155 °C, 1000 hours)
Moisture resistance	MIL-STD 202, Method 106
Vibration	MIL-STD 202, Method 204, Condition B
Shock	MIL-STD 202, Method 213, Condition A
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260 °C for 10 sec.
Materials	
Spring loaded contact parts	Beryllium Copper, Gold plating
Center contact	Beryllium Copper, Gold plating
Outer contact	Brass, Gold plating
Crimp Ferrule	Brass, Gold plating
Dielectric	PTFE

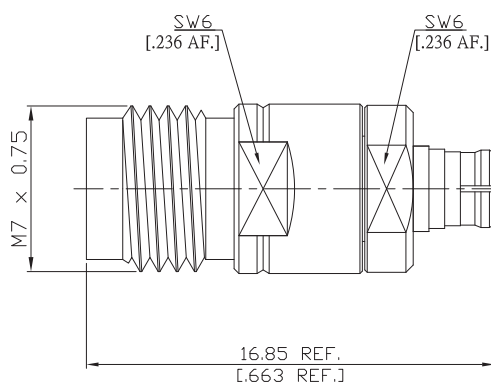
ROSNOL connectors fulfill in principle the indicated data of the Technical data.
Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution.
Specific data sheets for particular products can be provided on request from your ROSNOL sales representative.

SMP

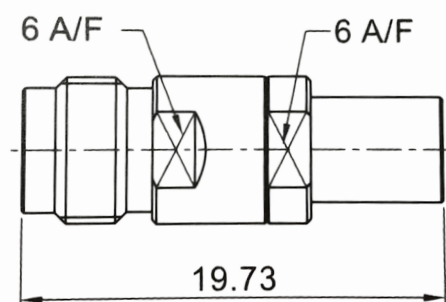
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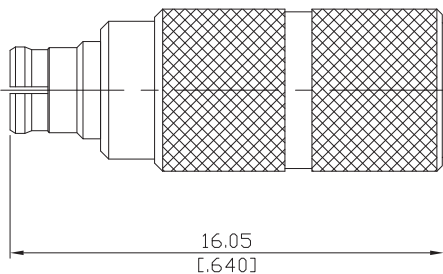
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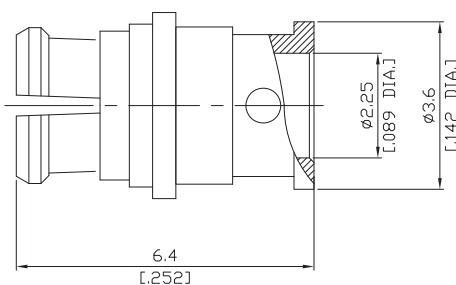
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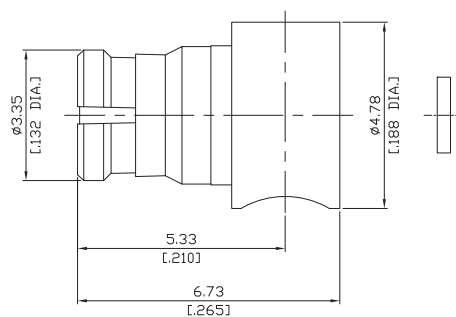
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P/N	T-P25-40G1WA/99
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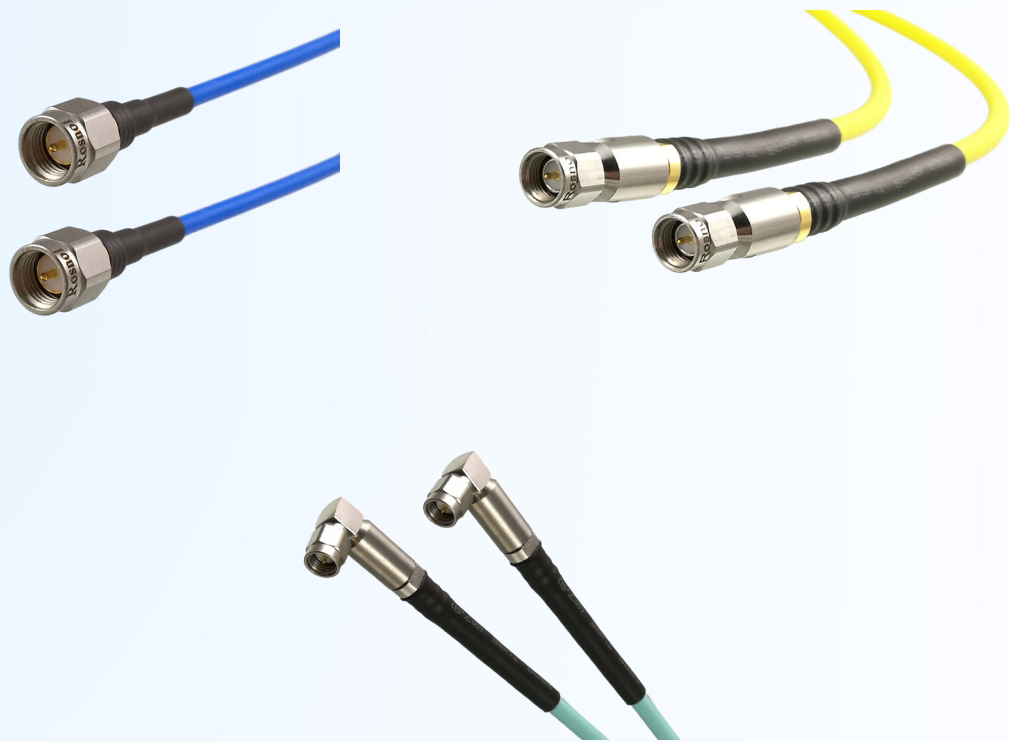


P/N	P2E50-0085A/99
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P/N	P2E59-0085A/99
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SMA



The SMA series is a very popular coax connector with screw coupling. It can be used for frequencies up to 18 GHz and even be extended to 26.5 GHz (depending on type).

The impedance is controlled at 50 Ω .

Connector styles are available for flexible, conformable and semi-rigid cable types. Versions of the SMA connector are available for mounting to printed circuit boards using both through-hole soldered and through-hole press-fit techniques, as well as surface mount types (SMD).

Solder, crimp and clamp techniques are used to terminate this series to cables.

There is a huge variety of applications for ROSNOL SMA connectors, as in telecommunication and mobile communication, satellite, test & measurement equipment and instruments, etc.

Mating face sealing for SMA connectors between plug (male) and jack (female) mated according to IP 68.

This classification is a general statement for the relevant series. Individual connectors may deviate from the values shown.

If in doubt, please consult our sales engineers.

■ Features

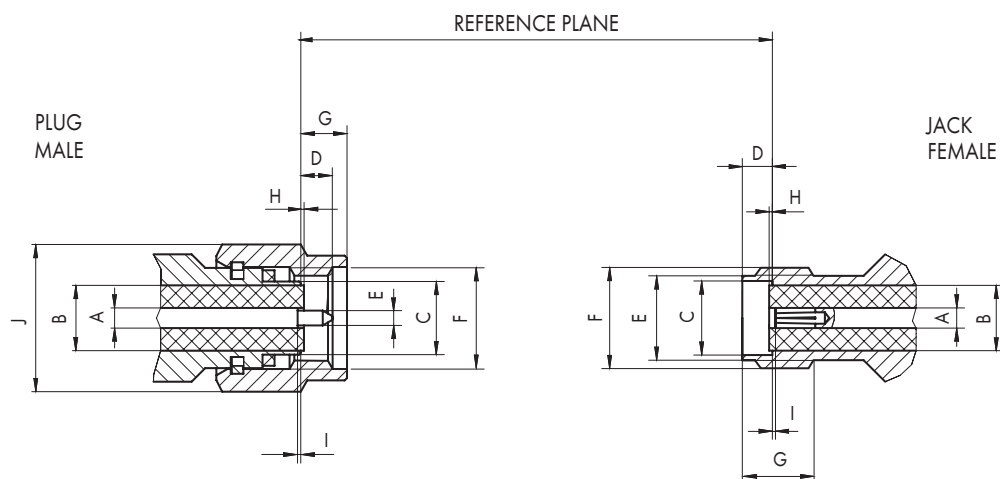
- Interface according to MIL-STD-348B/310, IEC 60169-15
- Impedance 50 Ω
- Frequency range up to 18 GHz
- Extended frequency version up to 26.5 GHz
- Return loss (cable connector straight) ≥ 20 dB (typ.)
- Screw-on coupling

■ Applications

- Aerospace
- Base Stations
- Cable Assemblies
- Instrumentation
- Process Controls
- Telecommunications



Interface Dimensions SMA



dimension in mm/ inch	Plug I Male		Jack I Female	
	min.	max.	min.	max.
A	Ø 1.245/.049	Ø 1.295/.050	Ø 1.245/.049	Ø 1.295/.050
B	-	Ø 4.178/.164	-	Ø 4.178/.164
C	-	Ø 4.59/.180	Ø 4.60/.181	Ø 4.67/.183
D	-	2.54/.100	1.88/.074	1.98/.077
E	Ø 0.902/.035	Ø 0.940/.037	Ø 5.28/.207	Ø 5.49/.216
F	1/4-36UNS-2B		1/4-36UNS-2A	
G	-	3.43/.135	4.32/.170	-
H	-0.18/-.007	+0.05/+0.002	-0.18/-.007	+0.05/+0.002
I	0.00/.000	-	0.00/.000	0.41/.016
J	Hex.8			

-Features

Interface according to MIL-STD-348B/310, IEC 60169-15

Frequency range up to 18 GHz, extended frequency version up to 26.5 GHz

Excellent VSWR (Return Loss)

Mechanically compatible with RPC2.92 and RPC3.5

-Product Range

Cable connectors

Bulkhead connectors

Panel connectors (coaxial, solder, semicircular and flat end types)

PCB connectors (SMD, coaxial, solder, semicircular, flat, through hole versions, end launch versions, edge mount, compression mount versions)

Hermetically sealed versions

Adaptors

Terminations

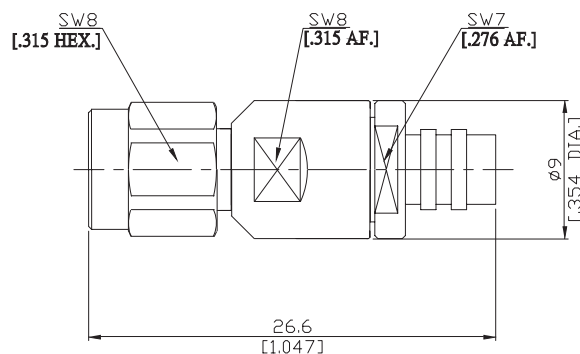
Tools and Accessories

Further connectors available on request.

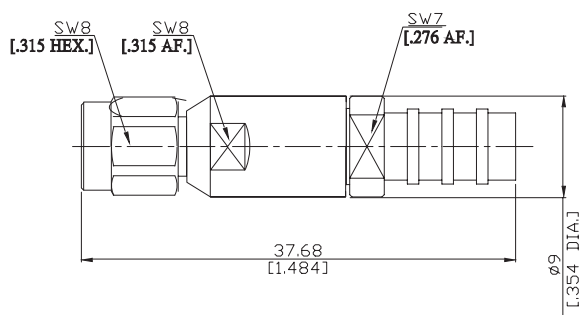
Technical Data SMA

Applicable standards	
Interface according to	MIL-PRF-39012, MIL-STD-348B/310, IEC 60169-15
Electrical data	
Impedance	50 Ω
Frequency range	DC to 18 GHz Extended frequency version up to 26.5 GHz
VSWR / Return loss (cable connector straight)	≤ 1.2 / ≥ 20.8 dB
Insertion loss	$\leq 0.04 \times \sqrt{f}$ (GHz) dB
Insulation resistance	≥ 5 G Ω
Center contact resistance	≤ 3 m Ω
Outer contact resistance	≤ 2 m Ω
Test voltage	1000 V rms
Working voltage	480 V rms
Power handling	200 W @ 2 GHz
RF-leakage- Interface	≥ 100 dB @ DC to 1 GHz
Mechanical data	
Mating cycles	Beryllium Copper / Stainless Steel: ≥ 500 Brass: ≥ 100
Coupling nut retention	Stainless Steel: ≥ 270 N ; Brass: ≥ 180 N
Center contact captivation	Beryllium Copper / Stainless Steel: axial: ≥ 27 N, radial: ≥ 3 Ncm Brass: axial: ≥ 20 N, radial: ≥ 1 Ncm
Coupling test torque	Beryllium Copper / Stainless Steel: ≤ 1.7 Nm Brass: ≤ 0.6 Nm
Coupling torque recommended	Beryllium Copper / Stainless Steel: 0.8 Nm to 1.1 Nm ; Brass: ≤ 0.5 Nm
Environmental data	
Temperature range	-65 °C to +165 °C
Thermal shock	MIL-STD-202, Method 107, Condition B
Corrosion resistance	MIL-STD-202, Method 101, Condition B
Moisture resistance	MIL-STD-202, Method 106
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260 °C for 10 sec.
Materials	
Spring loaded contact parts	Beryllium Copper, Gold plating
Center contact	Pin: Brass, Gold plating or Beryllium Copper, Gold plating Socket: Beryllium Copper, Gold plating
Outer contact	Stainless Steel, Passivated / Gold plating Brass, Gold / Copper-Tin-Zinc alloy plating
Body	Stainless Steel, Passivated / Gold plating Brass, Gold / Copper-Tin-Zinc alloy plating
Coupling nut	Stainless Steel, Passivated / Gold plating Brass, Gold / Copper-Tin-Zinc alloy plating
Crimping ferrule	Soft copper, Copper-Tin-Zinc alloy / Gold plating
Dielectric	PTFE
Gasket	Silicone Rubber

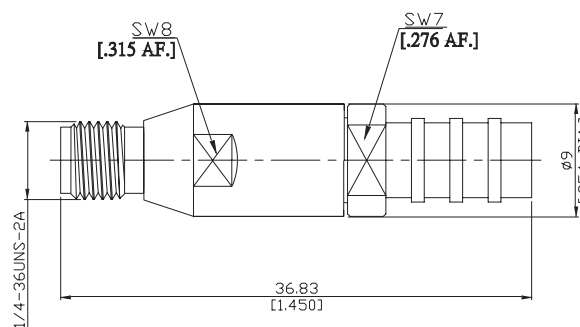
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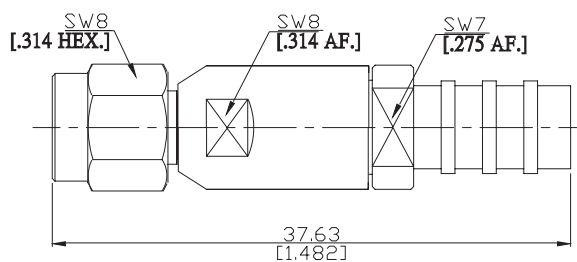
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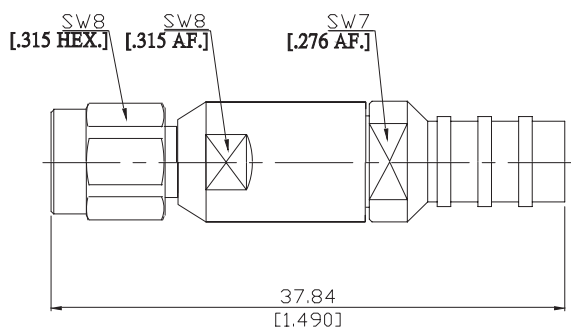
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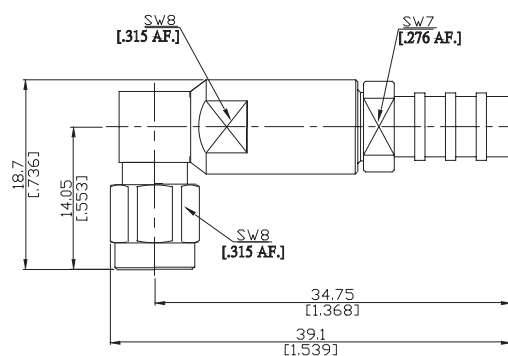
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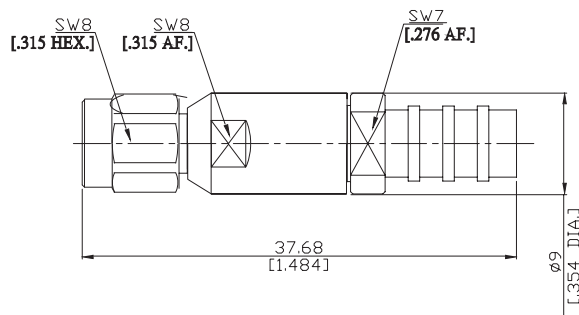


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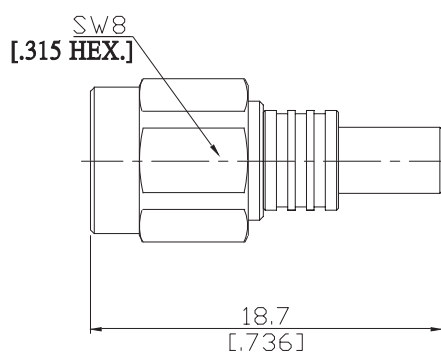


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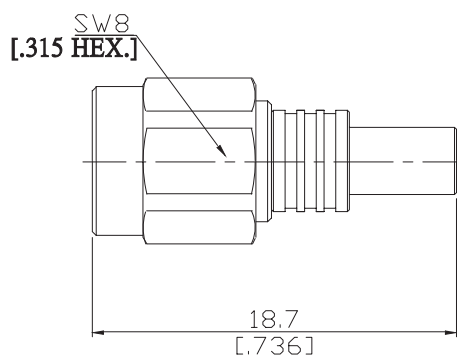
SMA



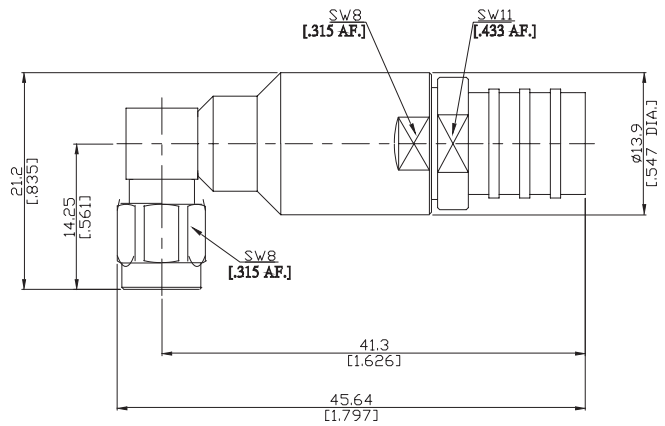
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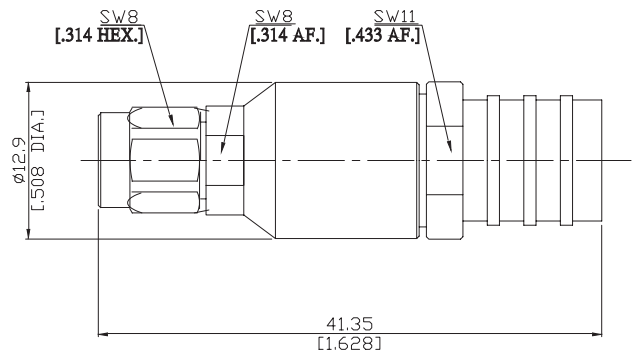
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P/N A1K59-EW0630A-A1K59-1000



P/N A1K50-EW0630A-A1K50-1000

VSWR and Return Loss Form

R.L.(dB)	VSWR	R.L.(dB)	VSWR	R.L.(dB)	VSWR
46.064	1.01	15.211	1.42	10.654 1.83	1.83
40.086	1.02	15.043	1.43	10.581 1.84	1.84
36.607	1.03	14.879	1.44	10.509 1.85	1.85
34.151	1.04	14.719	1.45	10.437 1.86	1.86
32.256	1.05	14.564	1.46	10.367 1.87	1.87
30.714	1.06	14.412	1.47	10.298 1.88	1.88
29.417	1.07	14.264	1.48	10.23 1.89	1.89
28.299	1.08	14.12	1.49	10.163 1.90	1.90
27.318	1.09	13.979	1.50	10.097 1.91	1.91
26.444	1.10	13.842	1.51	10.032 1.92	1.92
25.658	1.11	13.708	1.52	9.968 1.93	1.93
24.943	1.12	13.577	1.53	9.904 1.94	1.94
24.289	1.13	13.449	1.54	9.842 1.95	1.95
23.686	1.14	13.324	1.55	9.78 1.96	1.96
23.127	1.15	13.201	1.56	9.72 1.97	1.97
22.607	1.16	13.081	1.57	9.66 1.98	1.98
22.12	1.17	12.964	1.58	9.601 1.99	1.99
21.664	1.18	12.849	1.59	9.542 2.00	2.00
21.234	1.19	12.736	1.60	9.485 2.01	2.01
20.828	1.20	12.625	1.61	9.428 2.02	2.02
20.443	1.21	12.518	1.62	9.372 2.03	2.03
20.079	1.22	12.412	1.63	9.317 2.04	2.04
19.732	1.23	12.308	1.64	9.262 2.05	2.05
19.401	1.24	12.207	1.65	9.208 2.06	2.06
19.085	1.25	12.107	1.66	9.155 2.07	2.07
18.783	1.26	12.009	1.67	9.103 2.08	2.08
18.493	1.27	11.913	1.68	9.051 2.09	2.09
18.216	1.28	11.818	1.69	8.999 2.10	2.10
17.949	1.29	11.725	1.70	8.949 2.11	2.11
17.69	1.30	11.634	1.71	8.899 2.12	2.12
17.445	1.31	11.545	1.72	8.849 2.13	2.13
17.207	1.32	11.457	1.73	8.8 2.14	2.14
16.977	1.33	11.37	1.74	8.752 2.15	2.15
16.755	1.34	11.285	1.75	8.705 2.16	2.16
16.54	1.35	11.202	1.76	8.657 2.17	2.17
16.332	1.36	11.12	1.77	8.611 2.18	2.18
16.131	1.37	11.039	1.78	8.565 2.19	2.19
15.936	1.38	10.96	1.79	8.519 2.20	2.20
15.747	1.39	10.881	1.80	8.474 2.21	2.21
15.563	1.40	10.804	1.81	8.43 2.22	2.22
15.385	1.41	10.729	1.82	8.386 2.23	2.23

VSWR and Return Loss Form

R.L.(dB)	VSWR	R.L.(dB)	VSWR	R.L.(dB)	VSWR
8.342	2.24	6.896	2.65	5.893	3.06
8.299	2.25	6.867	2.66	5.872	3.07
8.257	2.26	6.839	2.67	5.852	3.08
8.215	2.27	6.811	2.68	5.832	3.09
8.173	2.28	6.783	2.69	5.811	3.10
8.138	2.29	6.755	2.70	5.791	3.11
8.091	2.30	6.728	2.71	5.771	3.12
8.051	2.31	6.7	2.72	5.751	3.13
8.011	2.32	6.673	2.73	5.732	3.14
7.972	2.33	6.646	2.74	5.712	3.15
7.933	2.34	6.62	2.75	5.693	3.16
7.894	2.35	6.594	2.76	5.674	3.17
7.856	2.36	6.567	2.77	5.654	3.18
7.818	2.37	6.541	2.78	5.635	3.19
7.781	2.38	6.516	2.79	5.617	3.20
7.744	2.39	6.49	2.80	5.598	3.21
7.707	2.40	6.465	2.81	5.579	3.22
7.671	2.41	6.44	2.82	5.561	3.23
7.635	2.42	6.415	2.83	5.542	3.24
7.599	2.43	6.39	2.84	5.524	3.25
7.564	2.44	6.366	2.85	5.506	3.26
7.529	2.45	6.341	2.86	5.488	3.27
7.494	2.46	6.317	2.87	5.47	3.28
7.46	2.47	6.293	2.88	5.452	3.29
7.426	2.48	6.27	2.89	5.435	3.30
7.393	2.49	6.246	2.90	5.417	3.31
7.36	2.50	6.223	2.91	5.4	3.32
7.327	2.51	6.2	2.92	5.383	3.33
7.294	2.52	6.177	2.93	5.365	3.34
7.262	2.53	6.154	2.94	5.348	3.35
7.23	2.54	6.131	2.95	5.331	3.36
7.198	2.55	6.109	2.96	5.315	3.37
7.167	2.56	6.086	2.97	5.298	3.38
7.135	2.57	6.064	2.98	5.281	3.39
7.105	2.58	6.042	2.99	5.265	3.40
7.074	2.59	6.021	3.00	5.248	3.41
7.044	2.60	5.999	3.01	5.232	3.42
7.014	2.61	5.97	3.02	5.216	3.43
6.984	2.62	5.956	3.03	5.2	3.44
6.954	2.63	5.935	3.04	5.184	3.45
6.925	2.64	5.914	3.05		

Additional Notes

[illegible]

Additional Notes

[illegible]

ROSNOL certifiend according to ISO 9001.

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.

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