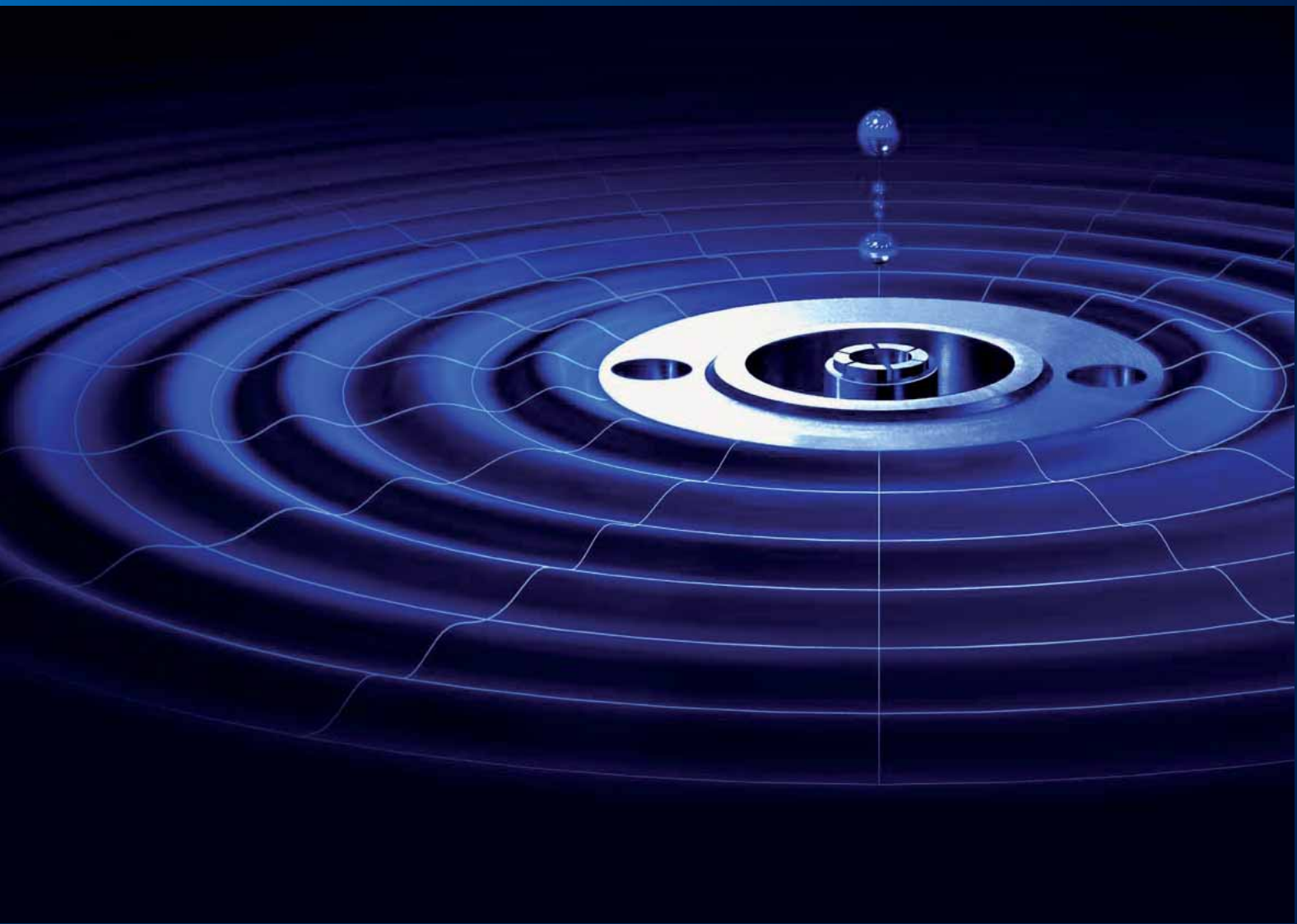


**Rosenberger**

**Test, Measurement & Calibration**





For vector network analyzer applications, Rosenberger offers high-flexible microwave test cables while maintaining excellent electrical characteristics. Outstanding phase and amplitude stability are guaranteed. A flexible armor protects the cable against mechanical damages.

Test cables are available as individual cable assemblies or cable sets containing 2 cables with 60cm standard length each. The various types of Rosenberger test cables are optimized for frequencies up to 26.5GHz, 40GHz or 50GHz. Test cable sets are supplied in stable wooden boxes.

The Rosenberger interchangeable port connector system has been designed for test equipment applications using test ports that will be continually mated and re-mated. The interchangeable port connector system – designed with a panel mounting half and an especially developed sexless interface – allows a high number of mating cycles without any damage to the equipment device interface.

*Für vektorielle Netzwerkanalysatoren bietet Rosenberger Testkabel mit hoher Flexibilität, die ausgezeichnete Werte für Phasen- und Amplitudenstabilität bei Biegung erreichen. Eine flexible Spezialarmierung schützt die Kabel gegen Beschädigungen.*

*Die Testkabel werden einzeln oder als Set, bestehend aus 2 Kabeln mit Standardlänge 60 cm, angeboten. Das Spektrum deckt Anwendungen bis 26,5GHz, 40GHz oder 50GHz ab. Die Lieferung erfolgt in einer stabilen Holzschatulle.*

*Das Rosenberger-Wechselport-Steckersystem wurde für Messgeräte entwickelt, deren Testports durch Serienmessungen sehr stark beansprucht werden. Das Wechselport-Steckersystem – mit einem Gehäuseeinbauteil und einem speziell entwickelten Innenleitersystem – gewährleistet wiederholte Steckungen ohne Verschleiß oder Beschädigung der Ausgangsstecker am Messgerät.*

# Test Cables & Interchangeable Port Connectors



## Features

Test Cable Kits

Test Cable Assemblies

Interchangeable Port Connector System

## Test Cables

### VA26 Test Cables

with RPC-3.50 and/or RPC-SL connectors: for applications up to 26.5 GHz  
with RPC-N (50  $\Omega$ ) and/or RPC-7 connectors: for applications up to 18 GHz

### VA40 Test Cables

with RPC-2.92 and/or RPC-SL connectors: for applications up to 40 GHz

### VA41 Test Cables

with RPC-2.92, RPC-2.40 and/or RPC-SL connectors: for applications up to 40 GHz

### VA50 Test Cables

with RPC-2.40 connectors: for applications up to 50 GHz

### VA75 Test Cables

With RPC-N (75  $\Omega$ ) connectors: for applications up to 4 GHz

### Test Cables with Interchangeable Connector Heads

Rosenberger offers a wide range of connector heads for test setups which often require other connector series, e.g. N, PC-7 or SMA connectors. Due to the special cable interface, mounting of changeable connector heads is very easy to handle, without any need for tools. Thus, test cables can be readily adapted to the required connector types already available on the DUT.

## Interchangeable Port Connector System

The **Rosenberger** Interchangeable Port Connector System was developed for use with test equipment featuring a test port that will be continually mated and re-mated. In a heavy use environment the test port is readily damaged and this can entail in large repair expenses. The **Rosenberger** Interchangeable Port Connector allows the equipment/device interface to be fully protected from damage.

The Interchangeable Port Connector consists of a panel mounting half and a sexless interface. This interface uses two spring loaded butt contacts, which ensure that no wear occurs during mating and allows no possibility of damage due to mismatching of the connector halves.

The interface between the panel mount and the adaptor is slotted. This ensures that at no time the mating faces will be allowed to rotate, thus preventing any damage. Adaptors can be interchanged and are available in different connector series.

The connector heads for these two ranges are not compatible and can be used inside their own system only.

## Testkabel

### VA 26-Testkabel

Mit RPC-3.50- und/oder RPC-SL Steckverbindern: für Anwendungen bis 26.5 GHz  
Mit RPC-N (50  $\Omega$ )- und/oder RPC-7-Steckverbindern: für Anwendungen bis 18 GHz

### VA 40-Testkabel

Mit RPC-2.92- und/oder RPC-SL-Steckverbindern: für Anwendungen bis 40 GHz

### VA 41-Testkabel

Mit RPC-2.92-, RPC-2.40- und/oder RPC-SL-Steckverbindern: für Anwendungen bis 40 GHz

### VA 50-Testkabel

Mit RPC-2.40-Steckverbindern: für Anwendungen bis 50 GHz

### VA 75-Testkabel

Mit RPC-N (75  $\Omega$ )-Steckverbindern: für Anwendungen bis 4 GHz

### Testkabel mit austauschbaren Wechselköpfen

Für Messaufbauten mit anderen Steckverbinder-Serien, z.B. N, PC-7 oder SMA, bietet Rosenberger eine Vielzahl von Steckerköpfen. Das spezielle Kabel-Interface ermöglicht dem Anwender, Steckerköpfe ohne Werkzeug selbst zu wechseln und Testkabel auf die gewünschte Steckverbinder-Serie umzurüsten.

## Wechselport-Steckersystem

Das **Rosenberger** Wechselport-Steckersystem wurde für Messgeräte entwickelt, deren Testports durch Serienmessungen stark beansprucht werden und die an die verschiedenen Steckerfamilien, ohne Einsatz von Übergängen, in kurzer Zeit angepasst werden müssen. Durch den Einsatz des **Rosenberger** Wechselport-Steckersystems wird der Ausgangsstecker des Messgerätes sicher vor Beschädigung geschützt.

Das Wechselport-Steckersystem besteht aus einem Gehäuseeinbauteil und einem speziell entwickelten Innenleitersystem, das eine Abnutzung der Innenleiterkontaktfläche verhindert. Die beiden federnden Innenleiter berühren sich nur auf ihren Kontaktflächen und gewährleisten so wiederholte Steckungen ohne Verschleiß.

Durch die im Gehäuse-Verbindungsstück eingefräste Nut ist eine definierte Positionierung der verwendeten Adapter gewährleistet. Die Adapter können leicht gewechselt werden und sind für verschiedene Steckerfamilien lieferbar.

Die Steckerköpfe sind nur innerhalb ihres Systems verwendbar und nicht untereinander austauschbar.

## Technical Data Test Cables

Cable Type	VA26	VA26	VA40 / VA41	VA 50
Length	60 cm	60 cm	60 cm	60 cm
Max. frequency range	18 GHz	26.5 GHz	40 GHz	50 GHz
Insertion loss	< 1.3 dB @ DC to 18 GHz	< 1.5 dB @ DC to 26.5 GHz	< 2.0 dB @ DC to 40 GHz	< 2.8 dB @ DC to 50 GHz
Return loss	28 dB @ DC to 4 GHz 20 dB @ 4 GHz to 18 GHz	26 dB @ DC to 4 GHz 20 dB @ 4 GHz to 26.5 GHz	26 dB @ DC to 4 GHz 17 dB @ 4 GHz to 40 GHz	26 dB @ DC to 4 GHz 17 dB @ 4 GHz to 50 GHz
Max. phase deviation <sup>1</sup> (after 90° bending)	< 0.5° @ DC to 4 GHz < 2.0° @ 4 GHz to 18 GHz	< 1.0° @ DC to 4 GHz < 3.0° @ 4 GHz to 26.5 GHz	< 1.3° @ DC to 4 GHz < 6.0° @ 4 GHz to 40 GHz	< 1.3° @ DC to 4 GHz < 7.0° @ 4 GHz to 50 GHz
max. phase deviation <sup>1</sup> (straight after 3x90° bending)	< 0.5° @ DC to 4 GHz < 1.5° @ 4 GHz to 18 GHz	< 0.5° @ DC to 4GHz < 1.5° @ 4 GHz to 26.5 GHz	< 1.0° @ DC to 4 GHz < 4.0° @ 4 GHz to 40 GHz	< 1.0° @ DC to 4 GHz < 4.5° @ 4 GHz to 50 GHz
Amplitude stability <sup>1</sup>	< 0.03 dB @ DC to 4 GHz < 0.05 dB @ 4 GHz to 18 GHz	< 0.03 dB DC to 4 GHz < 0.05 dB @ 4 GHz to 26.5 GHz	< 0.03 dB @ DC to 4 GHz < 0.08 dB @ 4 GHz to 40 GHz	< 0.03 dB @ DC to 4 GHz < 0.08 dB @ 4 GHz to 50 GHz
Return loss stability <sup>2</sup>	> 48 dB @ DC to 4 GHz > 40 dB @ 4 GHz to 18 GHz	> 48 dB @ DC to 4 GHz > 40 dB @ 4 GHz to 26.5 GHz	> 45 dB @ DC to 4 GHz > 35 dB @ 4 GHz to 40 GHz	> 45 dB @ DC to 4 GHz > 35 dB @ 4 GHz to 50 GHz

1. The test cable is terminated with a short circuit and tested on a calibrated vector network analyzer with a mandrel of 10 cm diameter. The one-way transmission phase stability is determined by dividing the two-way transmission phase measurement by two. The one-way transmission loss stability is determined by dividing the two-way transmission loss measurement by two. The DATA/MEM feature provides an indication of both stabilities.

2. The test cable is terminated with a fixed load and tested on a calibrated vector network analyzer with a mandrel of 10 cm diameter. The DATA/MEM feature provides an indication of the return loss stability.

1. Das Testkabel ist mit einem Kurzschluss abgeschlossen und wird an einem kalibrierten Netzwerkanalysator mit einem Biegedurchmesser von 10 cm getestet. Die Durchgangs-Phasenstabilität erhält man, indem man die Rückfluss-Phasenstabilität durch zwei teilt. Die Durchgangs-Amplitudenstabilität erhält man, indem man die Rückfluss-Amplitudenstabilität durch zwei teilt. Die DATA/MEM Funktion liefert eine Darstellung beider Stabilitäten.

2. Das Testkabel ist mit einem Festabschluss abgeschlossen und wird an einem kalibrierten Netzwerkanalysator mit einem Biegedurchmesser von 10 cm getestet. Die DATA/MEM Funktion liefert eine Darstellung der Rückfluss-Dämpfungsstabilität.

## Number Designation Test Cable Kits

## Nummernschlüssel Testkabel-Kits

VA26-	Nm-	Nm-	60
			Length cm
		Connector 2	
	Connector 1		
Vector Analyser			
Test Cable Kit			
(precise cable, connectors and armouring, please see data sheet)			



## Test Cable Kits

Ordering Number	Return Loss	Frequency	Length	Cable	Cable Assemblies	Connector 1	Connector 2
VA26-3.50m-3.50f-60	≥ 26 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 26.5 GHz	DC to 26.5 GHz	600 mm	RTK 162	2x LU7-055-600	RPC-3.50 male 03 S 123-2U7S3	RPC-3.50 female 03 K 123-2U7S3
VA26-Nm-Nm-60	≥ 28 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 18 GHz	DC to 18 GHz	600 mm	RTK 162	2x LU7-042-600	RPC-N 50 Ω male 05 S 123-2U7S3	RPC-N 50 Ω male 05 S 123-2U7S3
VA26-PC7-PC7-60	≥ 28 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 18 GHz	DC to 18 GHz	600 mm	RTK 162	2x LU7-070-600	RPC-7 07 P 123-2U7S3	RPC-7 07 P 123-2U7S3
VA26-TP-3.50-60	≥ 26 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 26.5 GHz	DC to 26.5 GHz	600 mm	RTK 162	1x LU7-039-600 1x LU7-043-600	RPC-3.50 ruggedized female 03 KR 123-2U7S3	RPC-3.50 male and female 03 S 123-2U7S3 03 K 123-2U7S3
VA26-TP-N-60	≥ 28 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 18 GHz	DC to 18 GHz	600 mm	RTK 162	1x LU7-069-600 1x LU7-059-600	RPC-3.50 ruggedized female 03 KR 123-2U7S3	RPC-N 50 Ω male and female 05 S 123-2U7S3 05 K 123-2U7S3
VA26-TP-PC7-60	≥ 28 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 18 GHz	DC to 18 GHz	600 mm	RTK 162	2x LU7-031-600	RPC-3.50 ruggedized female 03 KR 123-2U7S3	RPC-7 07 P 123-2U7S3
VA26-TP-W-60	≥ 26 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 26.5 GHz	DC to 26.5 GHz	600 mm	RTK 162	2x LU7-035-600	RPC-3.50 ruggedized female 03 KR 123-2U7S3	RPC-SL 26.5 GHz female 04 K 123-2U7S3
VA40-TP-2.92-60	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	1x LU1-005-600 1x LU1-006-600	RPC-2.92 ruggedized female 02 KR 123-2U1S3	RPC-2.92 male and female 02 S 123-2U1S3 02 K 123-2U1S3
VA40-TP-W-60	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	2x LU1-022-600	RPC-2.92 ruggedized female 02 KR 123-2U1S3	RPC-SL 40 GHz female P4 K 123-2U1S3
VA41-TP-2.40-60	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	1x LU1-003-600 1x LU1-025-600	RPC-2.40 ruggedized female 09 KR 123-2U1S3	RPC-2.40 male and female 09 S 123-2U1S3 09 K 123-2U1S3
VA41-TP-2.92-60	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	1x LU1-034-600 1x LU1-045-600	RPC-2.40 ruggedized female 09 KR 123-2U1S3	RPC-2.92 male and female 02 S 123-2U1S3 02 K 123-2U1S3
VA41-TP-W-60	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	2x LU1-004-600	RPC-2.40 ruggedized female 09 KR 123-2U1S3	RPC-SL 40 GHz female P4 K 123-2U1S3
VA50-TP-2.40-60	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 50 GHz	DC to 50 GHz	600 mm	RTK 125	1x LU8-005-600 1x LU8-006-600	RPC-2.40 ruggedized female 09 KR 123-2U8S3	RPC-2.40 male and female 09 S 123-2U8S3 09 K 123-2U8S3
VA75-Nm-Nm-60	≥ 28 dB @ DC to 3 GHz ≥ 23 dB @ 3 GHz to 4 GHz	DC to 4 GHz	600 mm	RG 216/U	2x L20-001-600	RPC-N 75 Ω male P5 S 123-320CS	RPC-N 75 Ω male P5 S 123-320CS

## Number Designation Test Cable Assemblies

## Nummernschlüssel Testkabel-Assemblies

L-	U7-	031-	600
			Length cm
		Successive Number	
		(precise connectors and armouring, please see data sheet)	
	Cable group		
Leitung (Test Cable Assembly)			





## Test Cable Assemblies

Ordering Number	Return Loss	Frequency	Length	Cable	Connector 1	Connector 2	Armouring
L20-001-600	≥ 28 dB @ DC to 3 GHz ≥ 23 dB @ 3 GHz to 4 GHz	DC to 4 GHz	600 mm	RG 216/U	RPC-N 75 Ω male, P5 S 123-320CS	RPC-N 75 Ω male, P5 S 123-320CS	Protection braid
LU1-003-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	RPC-2.40 female ruggedized, 09 KR 123-2U1S3	RPC-2.40 male, 09 S 123-2U1S3	ETFE Tubing with protection braid
LU1-004-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	RPC-2.40 female ruggedized, 09 KR 123-2U1S3	RPC-SL 40 GHz female, P4 K 123-2U1S3	ETFE Tubing with protection braid
LU1-005-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	RPC-2.92 female ruggedized, 02 KR 123-2U1S3	RPC-2.92 male, 02 S 123-2U1S3	ETFE Tubing with protection braid
LU1-006-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	RPC-2.92 female ruggedized, 02 KR 123-2U1S3	RPC-2.92 female, 02 K 123-2U1S3	ETFE Tubing with protection braid
LU1-022-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	RPC-2.92 female ruggedized, 02 KR 123-2U1S3	RPC-SL 40 GHz female, P4 K 123-2U1S3	ETFE Tubing with protection braid
LU1-025-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	RPC-2.40 female ruggedized, 09 KR 123-2U1S3	RPC-2.40 female, 09 K 123-2U1S3	ETFE Tubing with protection braid
LU1-034-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	RPC-2.40 female ruggedized, 09 KR 123-2U1S3	RPC-2.92 male, 02 S 123-2U1S3	ETFE Tubing with protection braid
LU1-045-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 40 GHz	DC to 40 GHz	600 mm	RTK 106	RPC-2.40 female ruggedized, 09 KR 123-2U1S3	RPC-2.92 female, 02 K 123-2U1S3	ETFE Tubing with protection braid
LU7-031-600	≥ 28 dB @ DC to 4 GHz ≥ 20 dB @ 4 to 18 GHz	DC to 18 GHz	600 mm	RTK 162	RPC-3.50 female ruggedized, 03 KR 123-2U7S3	RPC-7, 07 P 123-2U7S3	ETFE Tubing with protection braid
LU7-035-600	≥ 26 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 26.5 GHz	DC to 26.5 GHz	600 mm	RTK 162	RPC-3.50 female ruggedized, 03 KR 123-2U7S3	RPC-SL 26.5 GHz female, 04 K 123-2U7S3	ETFE Tubing with protection braid
LU7-039-600	≥ 26 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 26.5 GHz	DC to 26.5 GHz	600 mm	RTK 162	RPC-3.50 male, 03 S 123-2U7S3	RPC-3.50 female ruggedized, 03 KR 123-2U7S3	ETFE Tubing with protection braid
LU7-042-600	≥ 28 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 18 GHz	DC to 18 GHz	600 mm	RTK 162	RPC-N 50 Ω male, 05 S 123-2U7S3	RPC-N 50 Ω male, 05 S 123-2U7S3	ETFE Tubing with protection braid
LU7-043-600	≥ 26 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 26.5 GHz	DC to 26.5 GHz	600 mm	RTK 162	RPC-3.50 female, 03 K 123-2U7S3	RPC-3.50 female ruggedized, 03 KR 123-2U7S3	ETFE Tubing with protection braid
LU7-055-600	≥ 26 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 26.5 GHz	DC to 26.5 GHz	600 mm	RTK 162	RPC-3.50 male, 03 S 123-2U7S3	RPC-3.50 female, 03 K 123-2U7S3	ETFE Tubing with protection braid
LU7-056-600	≥ 28 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 18 GHz	DC to 18 GHz	600 mm	RTK 162	RPC-3.50 female ruggedized, 03 KR 123-2U7S3	RPC-N 50 Ω female, 05 K 123-2U7S3	ETFE Tubing with protection braid
LU7-069-600	≥ 28 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 18 GHz	DC to 18 GHz	600 mm	RTK 162	RPC-3.50 female ruggedized, 03 KR 123-2U7S3	RPC-N 50 Ω male, 05 S 123-2U7S3	ETFE Tubing with protection braid
LU7-070-600	≥ 28 dB @ DC to 4 GHz ≥ 20 dB @ 4 GHz to 18 GHz	DC to 18 GHz	600 mm	RTK 162	RPC-7, 07 P 123-2U7S3	RPC-7, 07 P 123-2U7S3	ETFE Tubing with protection braid
LU8-005-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 50 GHz	DC to 50 GHz	600 mm	RTK 125	RPC-2.40 male, 09 S 123-2U8S3	RPC-2.40 female ruggedized, 09 KR 123-2U8S3	ETFE Tubing with protection braid
LU8-006-600	≥ 26 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 50 GHz	DC to 50 GHz	600 mm	RTK 125	RPC-2.40 female, 09 K 123-2U8S3	RPC-2.40 female ruggedized, 09 KR 123-2U8S3	ETFE Tubing with protection braid

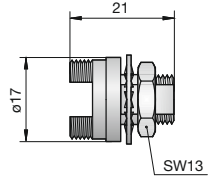
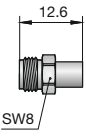
## Technical Data RPC-SL 26.5 GHz

<b>Applicable standards   Anwendbare Standards</b>	
Interface according to   <i>Interface gemäß</i>	Interchangeable port connector system
<b>Electrical data   Elektrische Daten</b>	
Impedance   <i>Wellenwiderstand</i>	50 $\Omega$
Frequency range   <i>Frequenzbereich</i>	DC to 26.5 GHz
Return loss (mated pair)   <i>Rückflußdämpfung (gestecktes Paar)</i>	$\geq 21$ dB, DC to 26.5 GHz
Insertion loss (mated pair)   <i>Dämpfung (gestecktes Paar)</i>	$\leq 0.03$ dB x $f$ [GHz]
Insulation resistance   <i>Isolationswiderstand</i>	$\geq 5$ G $\Omega$
Center contact resistance   <i>Übergangswiderstand Innenleiter</i>	$\leq 3.0$ m $\Omega$
Outer contact resistance   <i>Übergangswiderstand Außenleiter</i>	$\leq 2.0$ m $\Omega$
Test voltage   <i>Prüfspannung</i>	1000 V rms
Working voltage   <i>Betriebsspannung</i>	335 V rms
RF-leakage   <i>Schirmdämpfung</i>	$\geq 100$ dB up to 1 GHz
<b>Mechanical data   Mechanische Daten</b>	
Mating cycles   <i>Steckzyklen</i>	$\geq 3000$
Center contact captivation   <i>Innenleiter Haltekraft</i>	$\geq 27$ N
Coupling torque recommended   <i>Anzugsdrehmoment empfohlen</i>	2.0 Nm
<b>Environmental data   Umweltdaten</b>	
Temperature range   <i>Temperaturbereich</i>	-40 °C to +85 °C
Thermal shock   <i>Temperaturzyklen</i>	MIL-STD 202, Method 107, Condition B
Corrosion resistance   <i>Korrosionsbeständigkeit</i>	MIL-STD 202, Method 101, Condition B
Vibration   <i>Vibration</i>	MIL-STD 202, Method 204, Condition D
Shock   <i>Schock</i>	MIL-STD 202, Method 213, Condition I
Moisture resistance   <i>Feuchtigkeitsbeständigkeit</i>	MIL-STD 202, Method 106
Max. soldering temperature   <i>Maximale Löttemperatur</i>	IEC 61760-1, +260 °C for 10 sec.
<b>Materials   Materialien</b>	
Center contact   <i>Innenleiter</i>	Beryllium copper, gold-plated
Outer contact   <i>Außenleiter</i>	Stainless steel, gold-plated
Dielectric   <i>Dielektrikum</i>	PS

Rosenberger-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 Rosenberger sales partner.

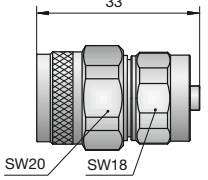
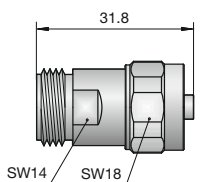
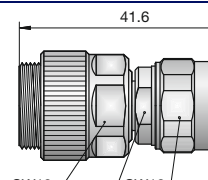
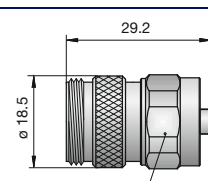
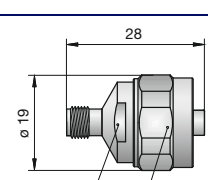
*Rosenberger-Steckverbinder erfüllen grundsätzlich die in den Technischen Daten angegebenen Daten. Je nach Anwendung, Bauart, Kabeltyp, Montageart und -ausführung können einzelne Werte von Steckverbindern hiervon abweichen. Spezifische Datenblätter zu einzelnen Produkten erhalten Sie auf Anfrage von Ihrem Rosenberger-Ansprechpartner.*

## Adaptor and Cable Clamp RPC-SL 26.5 GHz

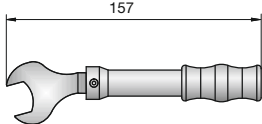
Ordering Number	Version	Remarks	Return Loss	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	
04 K 529-K00 S3	straight	RPC-SL 26.5 GHz female - female, panel mount, round flange	$\geq 21$ dB @ DC to 26.5 GHz			MB 82	
03 Z 001-272 D	straight	RPC-3.50 cable clamp for 04K529-K00S3, UT 141		72	03 A		

Test Cables & Interchangeable Port Connectors

## Adaptor RPC-SL 26.5 GHz

Ordering Number	Version	Remarks	Return Loss	
05 S 104-S00 S3	straight	RPC-N 50 $\Omega$ male - RPC-SL 26.5 GHz male, max. Frequency 18 GHz	$\geq 21$ dB @ DC to 18 GHz	
05 K 104-S00 S3	straight	RPC-N 50 $\Omega$ female - RPC-SL 26.5 GHz male, max. Frequency 18 GHz	$\geq 21$ dB @ DC to 18 GHz	
07 P 104-S00 S3	straight	RPC-7 - RPC-SL 26.5 GHz male, max. Frequency 18 GHz	$\geq 21$ dB @ DC to 18 GHz	
03 S 104-S00 S3	straight	RPC-3.50 male - RPC-SL 26.5 GHz male	$\geq 21$ dB @ DC to 26.5 GHz	
03 K 104-S00 S3	straight	RPC-3.50 female - RPC-SL 26.5 GHz male	$\geq 21$ dB @ DC to 26.5 GHz	

## Torque Wrench

Ordering Number	Remarks	
04 W 021-000	flat 18 mm - 2 Nm torque for RPC-SL 26.5 GHz, RPC-SL 40 GHz	

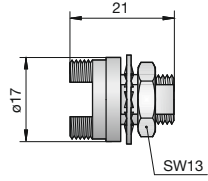
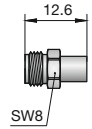
## Technical Data RPC-SL 40 GHz

<b>Applicable standards   Anwendbare Standards</b>	
Interface according to   <i>Interface gemäß</i>	Interchangeable port connector system
<b>Electrical data   Elektrische Daten</b>	
Impedance   <i>Wellenwiderstand</i>	50 $\Omega$
Frequency range   <i>Frequenzbereich</i>	DC to 40 GHz
Return loss (mated pair)   <i>Rückflußdämpfung (gestecktes Paar)</i>	$\geq 19$ dB, DC to 40 GHz
Insertion loss (mated pair)   <i>Dämpfung (gestecktes Paar)</i>	$\leq 0.04$ dB x $f$ [GHz]
Insulation resistance   <i>Isolationswiderstand</i>	$\geq 5$ G $\Omega$
Center contact resistance   <i>Übergangswiderstand Innenleiter</i>	$\leq 3.0$ m $\Omega$
Outer contact resistance   <i>Übergangswiderstand Außenleiter</i>	$\leq 2.0$ m $\Omega$
Test voltage   <i>Prüfspannung</i>	750 V rms
Working voltage   <i>Betriebsspannung</i>	250 V rms
RF-leakage   <i>Schirmdämpfung</i>	$\geq 100$ dB up to 1 GHz
<b>Mechanical data   Mechanische Daten</b>	
Mating cycles   <i>Steckzyklen</i>	$\geq 3000$
Center contact captivation   <i>Innenleiter Haltekraft</i>	$\geq 22$ N
Coupling torque recommended   <i>Anzugsdrehmoment empfohlen</i>	2.0 Nm
<b>Environmental data   Umweltdaten</b>	
Temperature range   <i>Temperaturbereich</i>	-40 °C to +85 °C
Thermal shock   <i>Temperaturzyklen</i>	MIL-STD 202, Method 107, Condition B
Corrosion resistance   <i>Korrosionsbeständigkeit</i>	MIL-STD 202, Method 101, Condition B
Vibration   <i>Vibration</i>	MIL-STD 202, Method 204, Condition D
Shock   <i>Schock</i>	MIL-STD 202, Method 213, Condition I
Moisture resistance   <i>Feuchtigkeitsbeständigkeit</i>	MIL-STD 202, Method 106
Max. soldering temperature   <i>Maximale Löttemperatur</i>	IEC 61760-1, +260 °C for 10 sec.
<b>Materials   Materialien</b>	
Center contact   <i>Innenleiter</i>	Beryllium copper, gold-plated
Outer contact   <i>Außenleiter</i>	Stainless steel, gold-plated
Dielectric   <i>Dielektrikum</i>	PS

Rosenberger-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 Rosenberger sales partner.

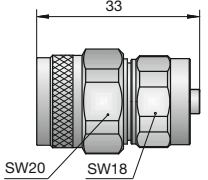
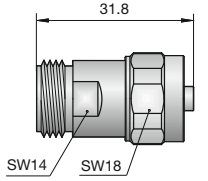
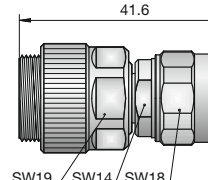
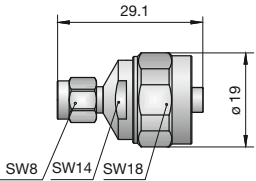
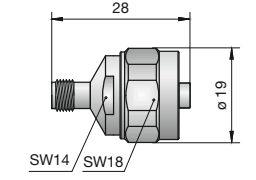
*Rosenberger-Steckverbinder erfüllen grundsätzlich die in den Technischen Daten angegebenen Daten. Je nach Anwendung, Bauart, Kabeltyp, Montageart und -ausführung können einzelne Werte von Steckverbindern hiervon abweichen. Spezifische Datenblätter zu einzelnen Produkten erhalten Sie auf Anfrage von Ihrem Rosenberger-Ansprechpartner.*

## Adaptor and Cable Clamp RPC-SL 40 GHz

Ordering Number	Version	Remarks	Return Loss	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	
P4 K 52A-K00 S3	straight	RPC-SL 40 GHz female - female, panel mount, round flange	$\geq 21$ dB @ DC to 26.5 GHz $\geq 16$ dB @ 26.5 to 40 GHz			MB 82	
02 Z 001-2W9 D	straight	RPC-2.92 cable clamp for P4K52A-K00S3, UT 118		W9	03 A		

Test Cables & Interchangeable Port Connectors

## Adaptor RPC-SL 40 GHz

Ordering Number	Version	Remarks	Return Loss	
05 S 1P4-S00 S3	straight	RPC-N 50 $\Omega$ male - RPC-SL 40 GHz male, max. Frequency 18 GHz	$\geq 21$ dB @ DC to 18 GHz	
05 K 1P4-S00 S3	straight	RPC-N 50 $\Omega$ female - RPC-SL 40 GHz male, max. Frequency 18 GHz	$\geq 21$ dB @ DC to 18 GHz	
07 P 1P4-S00 S3	straight	RPC-7 - RPC-SL 40 GHz male, max. Frequency 18 GHz	$\geq 21$ dB @ DC to 18 GHz	
02 S 1P4-S00 S3	straight	RPC-2.92 male - RPC-SL 40 GHz male	$\geq 21$ dB @ DC to 26.5 GHz $\geq 19$ dB @ 26.5 to 40 GHz	
02 K 1P4-S00 S3	straight	RPC-2.92 female - RPC-SL 40 GHz male	$\geq 21$ dB @ DC to 26.5 GHz $\geq 19$ dB @ 26.5 to 40 GHz	

Ordering Number	Version	Remarks	Return Loss	
09 S 1P4-S00 S3	straight	RPC-2.40 male - RPC-SL 40 GHz male	$\geq 21$ dB @ DC to 26.5 GHz $\geq 19$ dB @ 26.5 GHz to 40 GHz	
09 K 1P4-S00 S3	straight	RPC-2.40 female - RPC-SL 40 GHz male	$\geq 21$ dB @ DC to 26.5 GHz $\geq 19$ dB @ 26.5 GHz to 40 GHz	

## Torque Wrench

Ordering Number	Remarks	
04 W 021-000	flat 18 mm - 2 Nm torque for RPC-SL 26.5 GHz, RPC-SL 40 GHz	

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Certified by ISO/TS 16949 · ISO 9001 · ISO 14001

Ordering No.  
info300TMCCat/5000/01-2010  
pA 125380

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Production **Thewald Kommunikation**