

Rosenberger SLink™ Surge Arresters

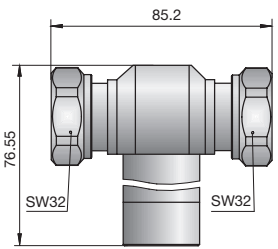
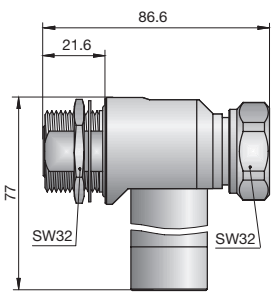
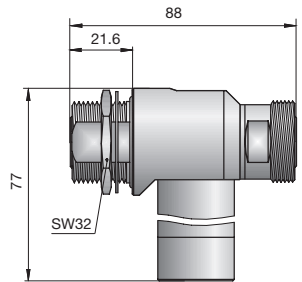
Lightning protection components are essential for protecting high- cost radio base stations against over voltages. Coaxial surge arresters from Rosenberger – integrated directly into the cabling system from the antenna down to the base station – safeguard the system and provide reliable deflection in case of over voltages, e. g. by lightning strikes.

Effective lightning protection systems deflect over voltages, causing surge currents of 20 kA, resulting in a residual output voltage of only 100 V. Rosenberger offers coaxial surge arresters with N and 7- 16 interfaces, for "non- directed" mounting, with and without gas discharge tubes.

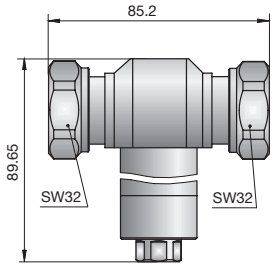
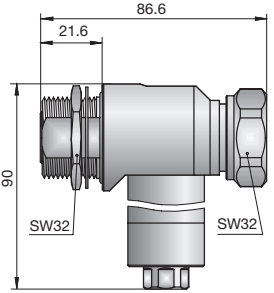
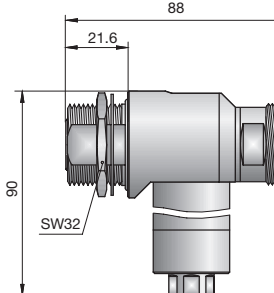
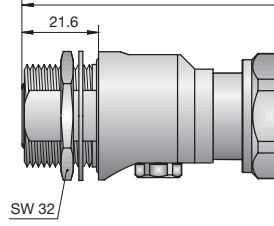
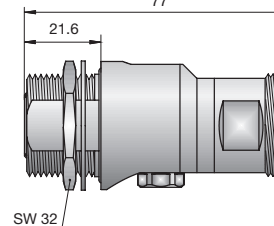


Series 7- 16

Wideband Surge Arresters

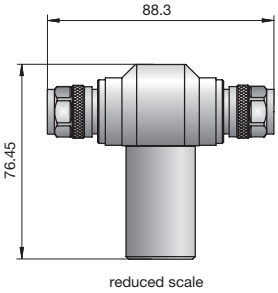
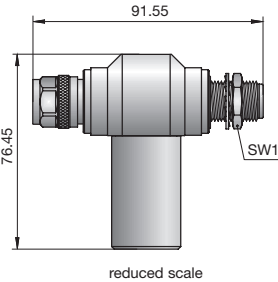
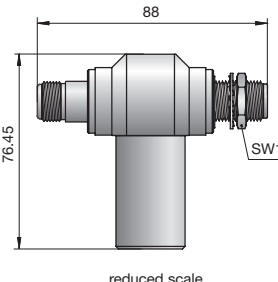
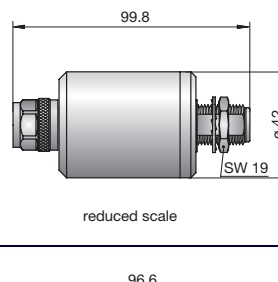
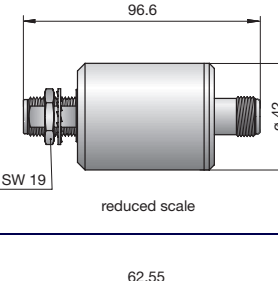
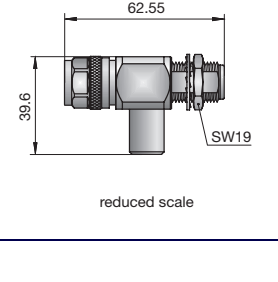
Ordering Number	Version	Remarks	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
60 HS 161- S00 N1	male - male	800- 2500 MHz grounded center contact			1	 reduced scale
60 HK 561- S00 N1	female - male	800- 2500 MHz grounded center contact	60 X02	B 75	1	 reduced scale
60 HK 561- K00 N1	female - female	800- 2500 MHz grounded center contact	60 X02	B 75	1	 reduced scale

Wideband Surge Arresters - Gas filled

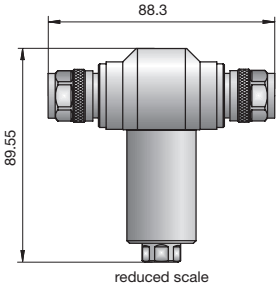
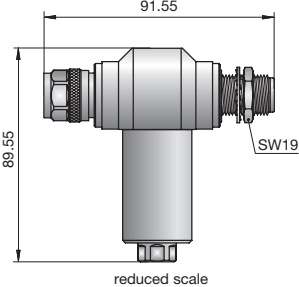
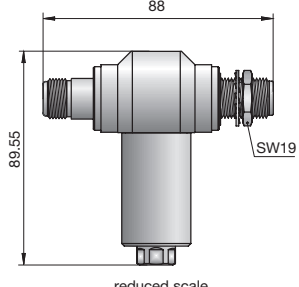
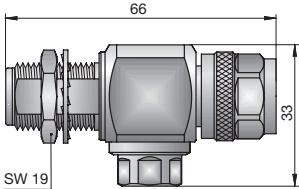
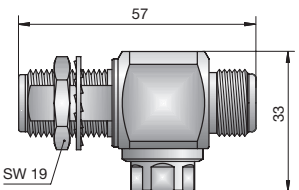
Ordering Number	Version	Remarks	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
60 BS 161- S00 N1	male - male	800- 2500 MHz discharge tube 90 V included			1	 reduced scale
60 BK 561- S00 N1	female - male	800- 2500 MHz discharge tube 90 V included	60 X02	B 75	1	 reduced scale
60 BK 561- K00 N1	female - female	800- 2500 MHz discharge tube 90 V included	60 X02	B 75	1	 reduced scale
60 BK 531- S00 N1	female - male	DC- 2200 MHz discharge tube 350 V included	60 X02	B 75	1	 reduced scale
60 BK 531- K00 N1	female - female	DC- 2200 MHz discharge tube 350 V included	60 X02	B 75	1	 reduced scale

Series N

Wideband Surge Arresters

Ordering Number	Version	Remarks	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
53 HS 161- S00 N1	male - male	800- 2500 MHz			1	
53 HK 561- S00 N1	female - male	800- 2500 MHz	60 X02	B 13	1	
53 HK 561- K00 N1	female - female	800- 2500 MHz	60 X02	B 13	1	
53 HS 501- K00 N1	male - female	800- 2500 MHz Grounded center contact		B 13	1	
53 HK 501- K00 N1	female - female	800- 2500 MHz Grounded center contact		B 13	1	
53 HK 502- S00 N1	female - male	2400- 5800 MHz for WiMAX and WLAN- applications		B 13	1	

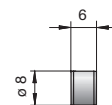
Wideband Surge Arresters - Gas filled

Ordering Number	Version	Remarks	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
53 BS 161- S00 N1	male - male	DC 800- 2500 MHz discharge tube 90 V included			1	
53 BK 561- S00 N1	female - male	DC 800- 2500 MHz discharge tube 90 V included	60 X02	B 13	1	
53 BK 561- K00 N1	female - female	DC 800- 2500 MHz discharge tube 90 V included	60 X02	B 13	1	
53 BK 501- S00 N1	female - male	DC- 2500 MHz discharge tube not included	53MV- A001	B 13	1	
53 BK 501- K00 N1	female - female	DC- 2500 MHz discharge tube not included	53MV- A001	B 13	1	

Gas Discharge Tubes for 7- 16 and N Series

Gas Discharge Tube

Ordering Number	Remarks	Packing Unit
53 Z B01- 090	Norm. sparkover voltage 90 V	1
53 Z B01- 230	Norm. sparkover voltage 230 V	1
53 Z B01- 350	Norm. sparkover voltage 350 V	1



Rosenberger SLink™

Adaptors, Terminations, Attenuators

For site solution applications, adaptors, terminations and attenuators are available in N and 7-16 series. The product range includes:

Adaptors, straight and right angle adaptors

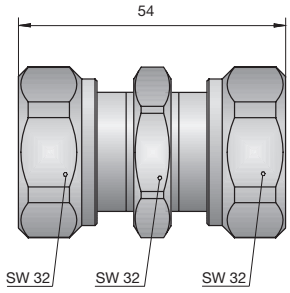
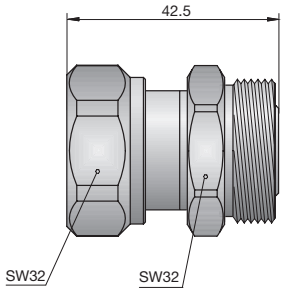
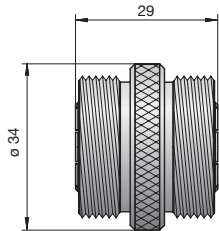
Terminations, male and female, 1 and 20 W

Attenuators, 5 and 20 W power rating, from 3 dB to 20 dB attenuation

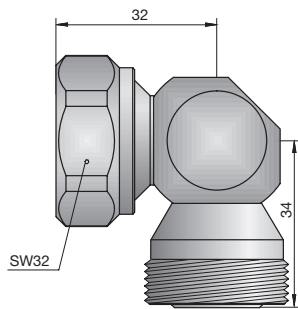


Adaptors Series 7- 16

Straight Adaptor

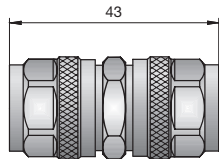
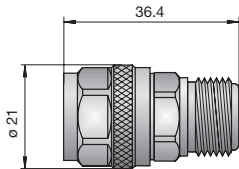
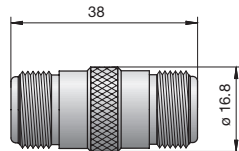
Ordering Number	Version	Remarks	Packing Unit	
60 S 101- S50 N1	straight	7- 16 male - male	1	
60 S 101- K50 N1	straight	7- 16 male - female	1	
60 K 101- K50 N1	straight	7- 16 female - female	1	

Right Angle Adaptor

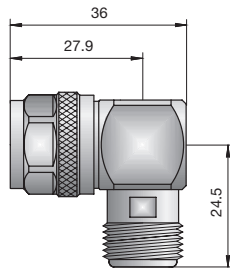
Ordering Number	Version	Remarks	Packing Unit	
60 S 231- K00 N1	right angle	7- 16 male - female	1	

Adaptors Series N

Straight Adaptor

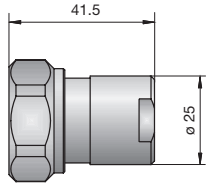
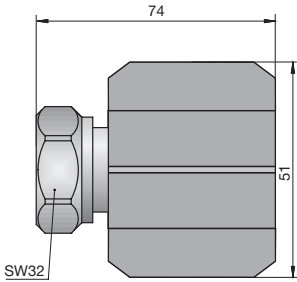
Ordering Number	Version	Remarks	Packing Unit	
53 S 101-S00 N5	straight	N male - male	1	
53 S 101-K00 N5	straight	N male - female	1	
53 K 101-K00 N5	straight	N female - female	1	

Right Angle Adaptor

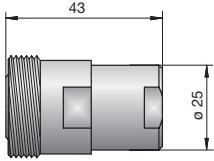
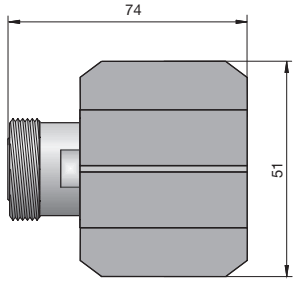
Ordering Number	Version	Remarks	Packing Unit	
53 S 201-K00 N5	right angle	N male - female	1	

Terminations Series 7- 16

Termination 7- 16 male

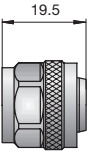
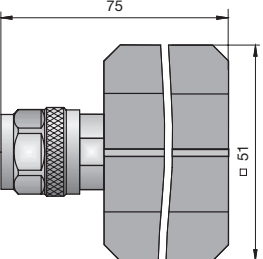
Ordering Number	Remarks	Return Loss	Packing Unit	
60 S 17R- 001 N1	1 Watt; Frequency DC - 8 GHz	$\geq 34.1 \text{ dB @ DC to 2 GHz}$ $\geq 20 \text{ dB @ 2 GHz to 8 GHz}$	1	
60 S 17R- 020 N1	20 Watt; Frequency DC - 8 GHz	$\geq 34.1 \text{ dB @ DC to 1 GHz}$ $\geq 30.7 \text{ dB @ 1 GHz to 2 GHz}$ $\geq 20 \text{ dB @ 2 GHz to 8 GHz}$	1	

Termination 7- 16 female

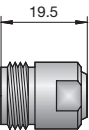
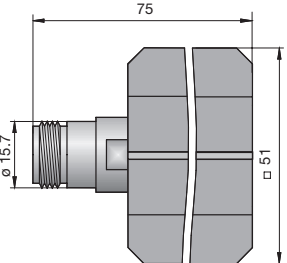
Ordering Number	Remarks	Return Loss	Packing Unit	
60 K 17R- 001 N1	1 Watt; Frequency DC - 8 GHz	$\geq 34.1 \text{ dB @ DC to 2 GHz}$ $\geq 20 \text{ dB @ 2 GHz to 8 GHz}$	1	
60 K 17R- 020 N1	20 Watt; Frequency DC - 8 GHz	$\geq 34.1 \text{ dB @ DC to 1 GHz}$ $\geq 30.7 \text{ dB @ 1 GHz to 2 GHz}$ $\geq 20 \text{ dB @ 2 GHz to 8 GHz}$	1	

Terminations Series N

Termination N male

Ordering Number	Remarks	Return Loss	Packing Unit	
53 S 1RR-001 N3	1 Watt; Frequency DC - 4 GHz	$\geq 28.3 \text{ dB @ DC to 1 GHz}$ $\geq 20.8 \text{ dB @ 1 GHz to 2.5 GHz}$ $\geq 17.7 \text{ dB @ 2.5 GHz to 12.4 GHz}$	1	
53 S 15R-020 N3	20 Watt; Frequency DC - 3 GHz	$\geq 20.8 \text{ dB @ DC to 3 GHz}$	1	

Termination N female

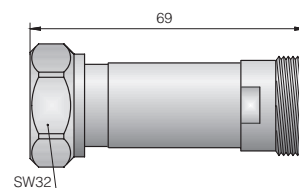
Ordering Number	Remarks	Return Loss	Packing Unit	
53 K 1RR-001 N3	1 Watt; Frequency DC - 4 GHz	$\geq 23.1 \text{ dB @ DC to 4 GHz}$	1	
53 K 15R-020 N3	20 Watt; Frequency DC - 3 GHz	$\geq 20.8 \text{ dB @ DC to 3 GHz}$	1	

Attenuators Series 7- 16

Attenuators male- female

5 Watt

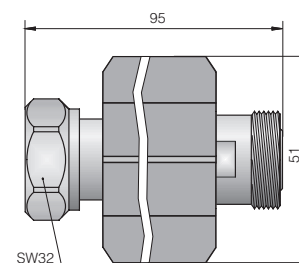
Ordering Number	Return Loss	Attenuation	Tolerance	Power Handling
60 AS 105- K03 N1	≥ 30.7 dB @ DC to 1 GHz ≥ 26.4 dB @ 1 GHz to 2 GHz ≥ 20.0 dB @ 2 GHz to 8 GHz	3 dB	±0.3 dB @ 2 GHz ±0.4 dB @ 4 GHz ±0.8 dB @ 8 GHz	5 W @ 25° C to 0 W @ 125°C
60 AS 105- K06 N1	≥ 30.7 dB @ DC to 1 GHz ≥ 26.4 dB @ 1 GHz to 2 GHz ≥ 20.0 dB @ 2 GHz to 8 GHz	6 dB	±0.3 dB @ 2 GHz ±0.4 dB @ 4 GHz ±0.8 dB @ 8 GHz	5 W @ 25° C to 0 W @ 125°C
60 AS 105- K10 N1	≥ 30.7 dB @ DC to 1 GHz ≥ 26.4 dB @ 1 GHz to 2 GHz ≥ 20.0 dB @ 2 GHz to 8 GHz	10 dB	±0.3 dB @ 2 GHz ±0.4 dB @ 4 GHz ±0.8 dB @ 8 GHz	5 W @ 25° C to 0 W @ 125°C
60 AS 105- K20 N1	≥ 30.7 dB @ DC to 1 GHz ≥ 26.4 dB @ 1 GHz to 2 GHz ≥ 20.0 dB @ 2 GHz to 8 GHz	20 dB	±0.4 dB @ 4 GHz ±0.8 dB @ 8 GHz	5 W @ 25° C to 0 W @ 125°C



Attenuators male- female

20 Watt

Ordering Number	Return Loss	Attenuation	Tolerance	Power Handling
60 AS 120- K03 N1	≥ 30.7 dB @ DC to 1 GHz ≥ 26.4 dB @ 1 GHz to 2 GHz ≥ 20.0 dB @ 2 GHz to 8 GHz	3 dB	±0.3 dB @ 2 GHz ±0.4 dB @ 4 GHz ±0.8 dB @ 8 GHz	20 W @ 25° C to 0 W @ 125°C
60 AS 120- K06 N1	≥ 30.7 dB @ DC to 1 GHz ≥ 26.4 dB @ 1 GHz to 2 GHz ≥ 20.0 dB @ 2 GHz to 8 GHz	6 dB	±0.3 dB @ 2 GHz ±0.4 dB @ 4 GHz ±0.8 dB @ 8 GHz	20 W @ 25° C to 0 W @ 125°C
60 AS 120- K10 N1	≥ 30.7 dB @ DC to 1 GHz ≥ 26.4 dB @ 1 GHz to 2 GHz ≥ 20.0 dB @ 2 GHz to 8 GHz	10 dB	±0.3 dB @ 2 GHz ±0.4 dB @ 4 GHz ±0.8 dB @ 8 GHz	20 W @ 25° C to 0 W @ 125°C
60 AS 120- K20 N1	≥ 30.7 dB @ DC to 1 GHz ≥ 26.4 dB @ 1 GHz to 2 GHz ≥ 20.0 dB @ 2 GHz to 8 GHz	20 dB	±0.4 dB @ 4 GHz ±0.8 dB @ 8 GHz	20 W @ 25° C to 0 W @ 125°C

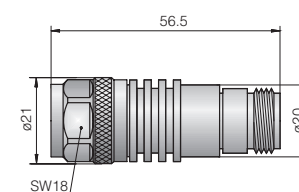


Attenuators Series N

Attenuators male- female

5 Watt

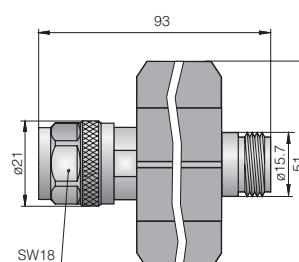
Ordering Number	Return Loss	Attenuation	Tolerance	Power Handling
53 AS 105- K03 N3	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14.0 dB @ 5 GHz to 10 GHz	3 dB	±0.3 dB @ 2 GHz ±0.5 dB @ 4 GHz ±1.0 dB @ 10 GHz	5 W @ 25° C to 0 W @ 125°C
53 AS 105- K06 N3	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14.0 dB @ 5 GHz to 10 GHz	6 dB	±0.3 dB @ 2 GHz ±0.5 dB @ 4 GHz ±1.0 dB @ 10 GHz	5 W @ 25° C to 0 W @ 125°C
53 AS 105- K10 N3	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14.0 dB @ 5 GHz to 10 GHz	10 dB	±0.3 dB @ 2 GHz ±0.5 dB @ 4 GHz ±1.0 dB @ 10 GHz	5 W @ 25° C to 0 W @ 125°C
53 AS 105- K20 N3	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14.0 dB @ 5 GHz to 10 GHz	20 dB	±0.4 dB @ 2 GHz ±0.5 dB @ 4 GHz ±1.5 dB @ 10 GHz	5 W @ 25° C to 0 W @ 125°C



Attenuators male- female

20 Watt

Ordering Number	Return Loss	Attenuation	Tolerance	Power Handling
53 AS 120- K03 N3	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14.0 dB @ 5 GHz to 10 GHz	3 dB	±0.3 dB @ 2 GHz ±0.5 dB @ 4 GHz ±1.0 dB @ 10 GHz	20 W @ 25° C to 0 W @ 125°C
53 AS 120- K06 N3	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14.0 dB @ 5 GHz to 10 GHz	6 dB	±0.3 dB @ 2 GHz ±0.5 dB @ 4 GHz ±1.0 dB @ 10 GHz	20 W @ 25° C to 0 W @ 125°C
53 AS 120- K10 N3	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14.0 dB @ 5 GHz to 10 GHz	10 dB	±0.3 dB @ 2 GHz ±0.5 dB @ 4 GHz ±1.0 dB @ 10 GHz	20 W @ 25° C to 0 W @ 125°C
53 AS 120- K20 N3	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14.0 dB @ 5 GHz to 10 GHz	20 dB	±0.4 dB @ 2 GHz ±0.5 dB @ 4 GHz ±1.5 dB @ 10 GHz	20 W @ 25° C to 0 W @ 125°C



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pA 143612

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Production **Thewald Kommunikation**