

Coaxial DS-N, DS-BNC, S-UHF and LP 7/16

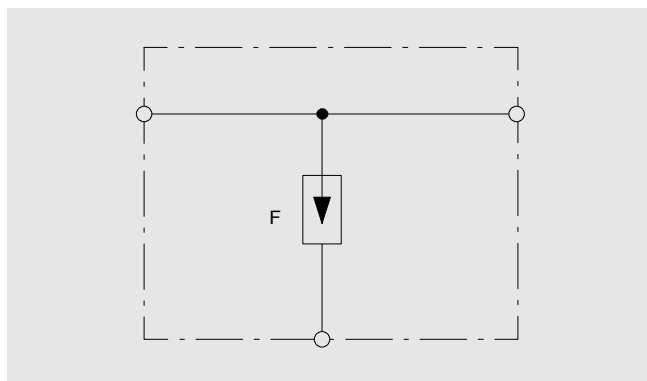


Function and application DS-N, DS-BNC and S-UHF

DS-N, DS-BNC and S-UHF are coaxial surge protectors with a high surge current capacity, suitable for use at zone interface 0 to 2. They are designed primarily for the RF region. Their low insertion loss and low-capacitance design also make these surge protectors ideal for very high frequency ranges. The voltage limiting component is a gas discharge tube with a high power handling capacity.

Function and application Lambda Protector 7/16

The $\lambda/4$ -protectors of type LP 7/16 act as narrow-band filters. They pass only a narrow frequency range. Other frequencies are short-circuited and diverted. In surge protectors of this design, a direct short-circuit is established between the inner and outer conductors. This short-circuit takes the form of a coaxial line of precisely defined length, an electrical wavelength of one-quarter of the wavelength ($\lambda/4$) of the frequency to be transmitted.



Block diagram of DS-N, DS-BNC and S-UHF

Mounting

The coaxial surge protectors are inserted into the line at zone interface 0 to 2. To simplify installation, the modules can be supplied in different combinations of plug and socket.

Note: a set of adapters suitable for the DS-BNC m/f device is available for F-connections.

Features at a glance DS-N, DS-BNC, S-UHF	Advantages in use
Low insertion loss at 2.5 GHz	▶ Use in high frequency ranges
Powerful gas discharge tube	▶ High lightning current discharge capacity
Surge impedance with DS-BNC for 50Ω and 75Ω	▶ Universal use in a large number of applications
Various plug combinations	▶ Adapters for simple installation

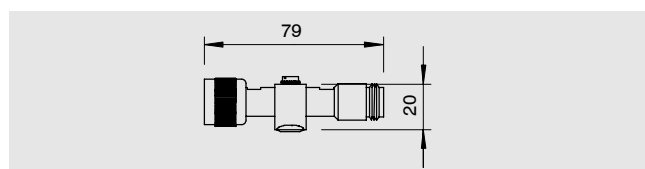
Technical data

Coaxial broad-based protection devices		DS-N	DS-BNC	S-UHF
Transmission power			400 W	
LPZ			0 → 2	
Nominal discharge current	I_n (8/20)		5 kA	
Impulse current	I_{imp} (10/350)		2 x 2.5 kA	
Transmission frequency	f	2.5 GHz		1 GHz
Insertion loss up to 2.5 GHz	a_e	≤ 0.8 dB		-
Response time	t_A		< 100 ns	
Weight		80 g	50 g	80 g
Temperature range	ϑ	-35 °C to +80 °C		

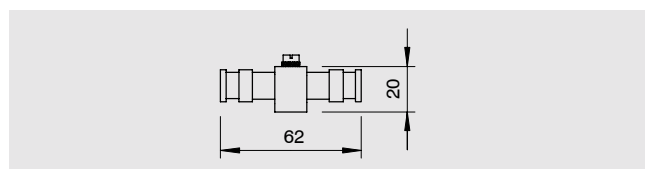
$\lambda/4$ -surge protectors		LP 7/16-850 MF-C	LP 7/16-180 MF-C
Frequency range		800-900 MHz	1700-1900 MHz
Discharge capacity	I_{max} (8/20) I_{imp} (10/350)		100 kA 50 kA
Voltage standing wave ratio (VSWR)			≤ 1.15
Insertion loss			≤ 0.1 dB
Coupling torque			25-35 Nm
Durability (connections)			≥ 500
IP Code to DIN 40050/IEC 529			IP 67

Ordering data

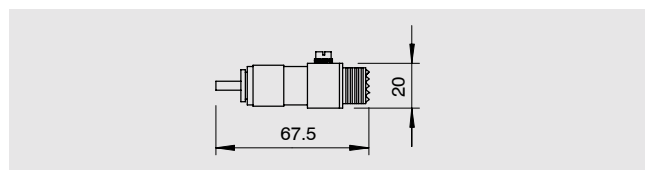
Type	Description	Order no.
DS-N m/f	N plug-in system (female/male)	5093 99 6
DS-BNC f/f	BNC plug-in system (female/female)	5093 23 6
DS-BNC m/f	BNC plug-in system (female/male)	5093 25 2
DS-BNC m/m	BNC plug-in system (male/male)	5093 26 0
BNC-F/A-S	Adapter set connector for DS-BNC m/f	5093 28 0
S-UHF f/f	S-UHF plug-in system (female/female)	5093 01 5
S-UHF m/f	S-UHF plug-in system (female/male)	5093 02 3



DS-N

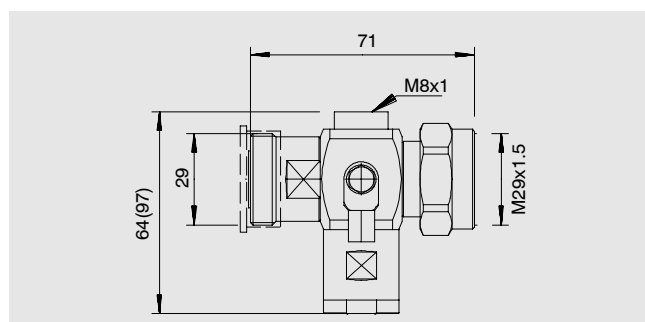


DS-BNC m/m



S-UHF m/f

Type	Description	Order no.
LP 7/16-850 MF-C	$\lambda/4$ -surge protector 800-900 MHz	5093 15 5
LP 7/16-1800 MF-C	$\lambda/4$ -surge protector 1700-1900 MHz	5093 16 0



LP7/16-1800MF-C