

# Series 3403

## Fine Protectors

### Description

SUHNER fine protectors are a very special group of lightning protectors which provide a very high degree of protection, especially for applications with DC powering via coaxial cable. They offer an extremely effective surge pulse reduction,

which makes them suitable to protect even very sensitive microelectronic circuits, e.g. GPS timing systems for CDMA mobile communications systems.

### Features

- Rugged, stable and reliable fine protectors with very low residual pulse energy
- DC bypass function
- Easy installation – screw or bulkhead
- Full lightning protection as standard gas capsule protectors
- Gas capsule preinstalled
- N and DIN 7/16 connectors
- Waterproof IP 66

### Specifications

Electrical data	Requirements
RF:	
Impedance	50 $\Omega$
Frequency range	1.2 to 2.0 GHz
RL*	20 dB min.
IL*	0.4 dB max.
RF power transmission	30 W
DC bypass voltage	6 or 15 V, according to detail specification
DC bypass current	1 A max.
DC bypass resistance	1 $\Omega$ max.
Protection:	
Surge-current-handling capability	40 kA once and 20 kA multiple (8/20 $\mu$ s test pulse)
Residual pulse energy	typ. 6 $\mu$ J (test pulse 4 kV/2kA, 8/20 $\mu$ s)

\* with gas capsule 73 Z-0-0-47 (230 V)

Mechanical data	Requirements
Coupling nut torque force	according to IEC/MIL
Durability (matings)	500 min.
Bulkhead mounting torque force:	
Mounting hole diameter	
19 mm/ 3/4" max.	20 Nm/14.7 ft-lb
larger than 19 mm	35 Nm/25.8 ft-lb

Environmental data	Requirements/Test conditions
Operation temperature range	- 40 °C...+ 85 °C/ - 40 °F...+ 185 °F
Waterproof degree (IEC 529)	refer to product specification, data refer to the coupled state
Temperature shock	MIL-STD-202, Meth. 107 F, Cond. A, - 55 °C/+ 85 °C
Moisture resistance	MIL-STD-202, Meth. 106 D, 10 cycles
Vibration	MIL-STD-202, Meth. 204, Cond. A, 10 G, 10-500 Hz

Material data			
Component part	Standard	Material	Plating
Housing		aluminium	chromatized
Connector bodies	QQ-B-626	brass	SUCOPLATE®
Male contacts	QQ-B-626	brass	gold or silver plating
Female contacts	QQ-C-530	CuBe2	gold or silver plating
Insulators	ASTM-D-1457	PTFE	
Gaskets	ASTM-E-1418 PS 1	silicone rubber	