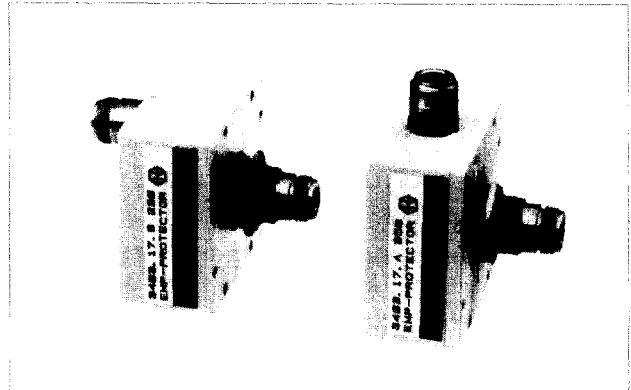


## Features

- smaller residual pulse
- frequency range up to 600 MHz
- chassis panel mounting principle
- secondary protection circuit
- available with two static sparkover voltages (230V/350V)



## Description

SUHNER designed the series 3403 EMP/NEMP protectors for all applications where the protective capability of standard EMP protectors is not sufficient (sensitive or strategically important RF-communications equipment). The high current handling capability makes these protectors also suitable for lightning protection. The design is based on the standard surge arrester principle, with the addition of a secondary

protection circuit. The protectors are designed as coaxial feedthroughs and are available in two different mechanical versions. The surge arrester capsule is permanently installed. Two different static sparkover voltage levels are available (230/350V).

**All bold printed types within the following table are normally available from stock.**

## Technical Datas

### RF-Data:

Impedance:	$50 \pm 2 \Omega$		
Frequency range:	DC – 600 MHz		
VSWR:	$\leq 1.25$ typ.	at	300 MHz
	$\leq 1.35$ typ.	at	600 MHz
Insertion loss:	$\leq 0.30$ dB typ.	at	300 MHz
	$\leq 0.50$ dB typ.	at	600 MHz

### Diversion behaviour:

Description	SUHNER Type	3403.17.A.230 3403.17.B.230	3403.17.A.350 3403.17.B.350
	Static sparkover voltage		230 V $\pm$ 20 %
Dynamic sparkover voltages – for a 1 kV/ $\mu$ s pulse – for a 1 kV/ns pulse		< 400 V (typ.) < 600 V (typ.)	< 600 V (typ.) < 900 V (typ.)
Current handling capability $I_s$ (pulse shape 8/20 $\mu$ s)		10 kA	10 kA
NEMP residual pulse energy with input pulse (5/200 ns; 5 kV; 50 mJ)		$\approx$ 600 V (20 $\mu$ J) (typ.)	$\approx$ 900 V (65 $\mu$ J) (typ.)

# SERIES 3403

# FINE PROTECTOR

Suhner Type	Connectors*	Static sparkover voltage	Housing type	Weight
3403.17.A.230	N neg.-N neg.	230 V ± 20 %	A	350 g
3403.17.A.350	N neg.-N neg.	350 V ± 20 %	A	350 g
3403.17.B.230	N neg.-N neg.	230 V ± 20 %	B	350 g
3403.17.B.350	N neg.-N neg.	350 V ± 20 %	B	350 g

\* other connectors on request

## Materials:

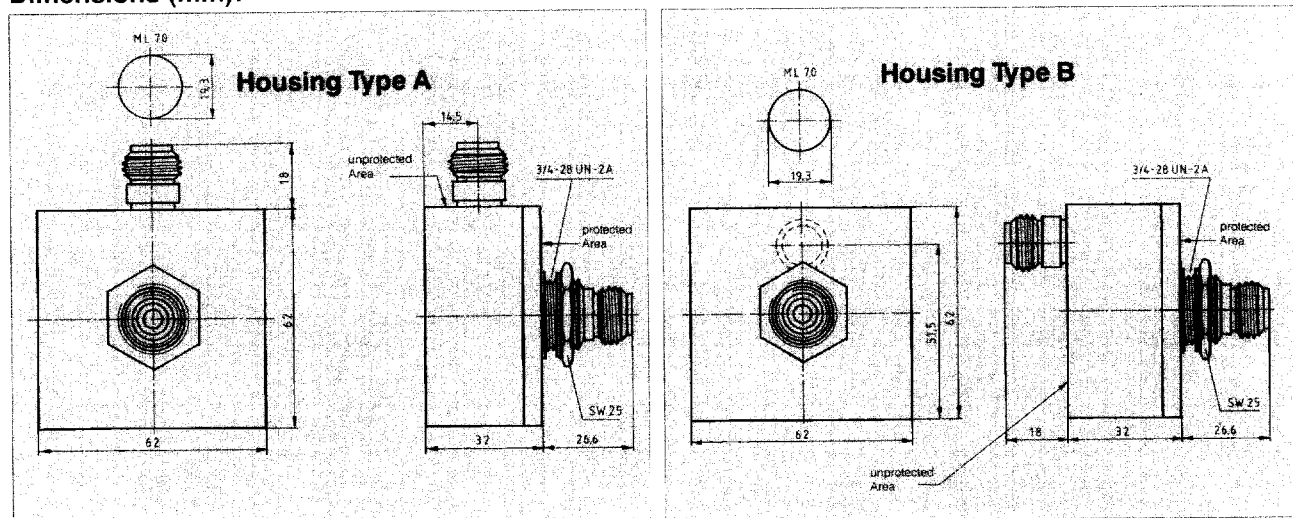
Protector part	Material	Standard	Surface treatment
Main body	Aluminium	Anticorodal Pb 109	grey coated
Washer	Soft copper	SUHNER Norm	Nickel
Insulators	PTFE	L-P-403	
Centre conductors	Beryllium-copper	QQ-C-530, MIL-H-7199, CuBe2	2.5 μ, gold plated, MIL-G-45204
Connector body	Stainless steel	X12CrNi S 18/8	passivated

## Environmental conditions:

Operating temperature range: - 40 ... + 100 ° C

Tests:                      Vibration:                      MIL-STD-202, Method 204, Condition D, 20 g, 10 – 2000 Hz  
                                   Moisture resistance:        MIL-STD-202, Method 106 D, 10 cycles  
                                   Temperature shock:        MIL-STD-202, Method 107 F, Condition B, - 65 ° C/ + 125 ° C  
                                   Low pressure:                SUHNER, 66.6 Pa (0.66 mbar)

## Dimensions (mm):



Maximum allowable panel thickness  
 Recommended torque for hexagonal nut

= 6.5 mm  
 = 6.0 Nm = 4.43 in-lbf