



# PKT 512A-RO

High impedance passive cable divider

## Features:

- BNC to BNC Connection
- 500 MHz System Bandwidth
- Double HF Adjustment
- For permanent installation in applications on vibrating equipment like machines and engines



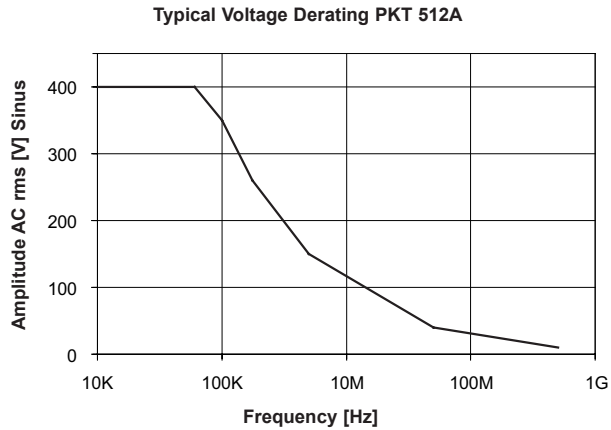
The PKT 512A is a 10:1 cable divider designed for instruments having 1 M $\Omega$  input resistance. The cable divider is rated 300 V rms CAT II and complies with the latest safety standards of the Low Voltage Directive (LVD) and is category 9 within the WEEE/RoHS directives of the EC. See page 4 for further explanation. A typical use for the PKT512A is an installation in applications on vibrating equipment like machines and engines, where a connection is made from BNC to BNC. System bandwidth is 500 MHz with a typical risetime of 700 ps. The PKT 512A is HF adjustable and offers a compensation range from 7 pF to 25 pF. With an operating temperature range from 0 °C to +50 °C and the availability of different cable length and sufficient protection to it like the optional silicon cable insulation and reinforced steel strain relief, it meets the requirements of a variety of measuring applications.

This datasheet supersedes all previously published material. Specifications that are not marked as guaranteed are published as general information to the user. The instrument should have warmed up for at least 20 minutes and the environmental conditions must not exceed the specified limits of the probe. Note that specifications are subject to change without notice.

### Electrical Specifications

<i>Attenuation Ratio</i> <sup>(1)</sup>	10:1	± 2 % at DC
<i>Voltage Coefficient</i>	0.00025 % / V	
<i>System Bandwidth</i>	500 MHz	(-3 dB)
<i>System Risetime</i>	700 ps	(10% – 90 %)
<i>Maximum Rated Input Voltage</i>	400 V rms	
<i>Measurement Category I:</i>	1250 V transient overvoltage	
<i>Measurement Category II:</i>	300 V rms CAT II	
<i>Pollution Degree</i>	2	

### Voltage Derating



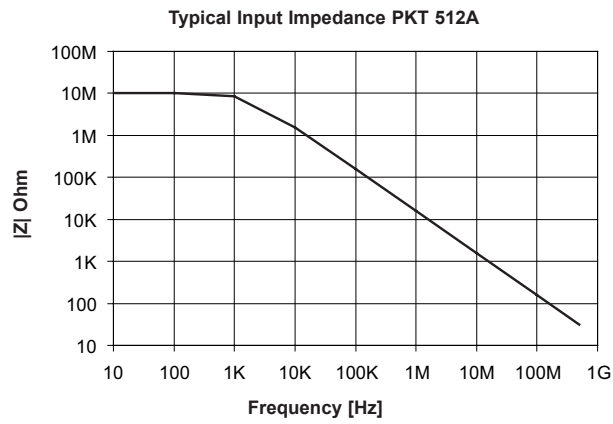
Note that the max. input voltage rating of the cable divider decreases as the frequency of the applied signal increases.

(1) Connected to oscilloscope with an input impedance of 1 MΩ ± 1 %.

### Electrical Characteristics

<i>Input Resistance (system)</i>	10 MΩ	± 1 %
<i>Input Capacitance (system)</i>	10 pF	
<i>Compensation Range</i>	7 pF – 25 pF	
<i>Input Coupling of the Measuring Instrument</i>	1 MΩ AC / DC	

### Input Impedance



Note that the input impedance of the probe decreases as the frequency of the applied signal increases.

### Mechanical Characteristics

Weight (cable divider only)	58 g
Cable Length	1.2 m
Connection to Signal	BNC



### Environmental Specifications

<i>Altitude</i>	operating	up to 2000 m
	non-operating	up to 15000 m
<i>Temperature range</i>	operating	0 °C to +50 °C
	non-operating	-40 °C to +71 °C
<i>Maximum relative humidity</i>	operating	80% relative humidity for temperatures up to +31 °C, decreasing linearly to 40 % at +50 °C

### Declaration of Conformity

The manufacturer declares the conformity of his products with the actual required safety standards in accordance with the Low Voltage Directive (LVD) 2006/95/EC:

CEI/IEC 61010-031:2002

Safety requirements for electrical equipment for measurement, control and laboratory use.

Part 031:

Safety requirements for hand-held probe assemblies for electrical measurement and test.

### WEEE/ RoHS Directives

PMK electronic products are classified within the WEEE/ RoHS\* category list as monitoring and control equipment (category 9). Category 9 products are exempt from the restrictions under the scope of the RoHS directive.

Your help and efforts are required to protect and keep clean our environment. Therefore return any electronic product at the end of its life either to Service Department of PMK Mess- und Kommunikationstechnik GmbH or take care of separate WEEE collection and professional WEEE treatment yourself. Do not dispose as unsorted municipal waste.

\* EC Directives:

- WEEE Directive 2002/96/EC – Waste Electrical and Electronic Equipment
- RoHS Directive 2002/95/EC – Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment



### Scope of Delivery PKT 512A-RO Order No. 858-512-A01

- |                                   |  |
|-----------------------------------|--|
| ■ Adjustment Tool T               | options:                                     |
| ■ Coding Rings (set) 3 x 4 colors | (not included in standard scope of delivery) |
| ■ Instruction Manual              | ■ Silicon Cable Insulation                   |
| ■ PKT Cable Divider               | ■ Reinforced Steel strain relief             |

### Safety Information

To avoid personal injury and to prevent fire or damage to this product or products connected to it, review and comply with the safety informations stated in the manual before using this product. Be aware that if you use this probe assembly in a manner not specified the protection this product provides may be impaired.

**Only qualified personnel should use this cable divider.**

### Manufacturer

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