



**Probing Solutions.  
Made in Germany.**

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**ENVI<sup>®</sup>**

**High Impedance Environmental  
Passive Probe**

Datasheet

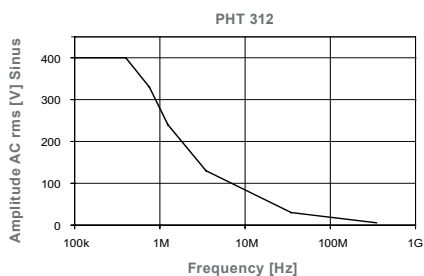


		PHT 312-RO
Order-Number without Read-Out	-	
Order-Number with Read-Out	835-312-001	
<b>Electrical Specifications</b>		
Attenuation Ratio ( $\pm 2\%$ at DC) (1)	10:1	
Voltage Coefficient   (at DC)	0.00025 %/V	
System Bandwidth   (-3 dB)	350 MHz	
Probe Risetime   (10% - 90%)	1 ns	
Input Resistance (System) ( $\pm 1\%$ )	5 M $\Omega$	
Input Capacitance (System)	20 pF	
Compensation Range	10 pF - 25 pF	
Input Coupling of the Measuring Instrument	1 M $\Omega$ AC / DC	
<b>Maximum Rated Input Voltages, CAT II (2)</b>		
Pollution Degree	3	
Measurement Category II	300 V CAT II	
<b>Maximum Rated Input Voltages, No Measurement Category, not in CAT II, III, IV (2)</b>		
Pollution Degree	2	
No Measurement Category	400 V / 1650 V peak	
<b>Maximum Pulse Rating, No Measurement Category, not in CAT II, III, IV (2)</b>		
Upulse(3)	Upulse(3) 1650 V (Step 0 V to 1650 V)	
<b>Mechanical Specifications</b>		
Weight (probe only)	93 g	
Cable Length	2 m	
Probe Tip Diameter	5 mm	
<b>Environmental Specifications</b>		
<b>BNC Connector and with (*) marked Parts</b>		
Altitude	operating	up to 2000 m
	non-operating	up to 15000 m
Temperature Range	operating	0° C to +50° C
	non-operating	-40° C to +71° C
Maximum Relative Humidity	operating	80 % relative humidity for temperatures up to +31° C, decreasing linearly to 40 % at +50° C
<b>Probe and Cable</b>		
Altitude	operating	up to 2000 m
	non-operating	up to 15000 m
Temperature Range	operating	-55° C to +155° C
	non-operating	98 %
Maximum Relative Humidity	operating	98 %

**Typical Voltage Derating (4)**



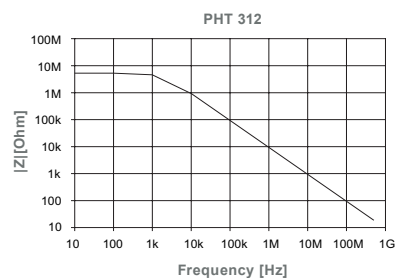
Note that the maximum input voltage rating of the probe decreases as the frequency of the applied signal increases.



**Typical Input Impedance (4)**

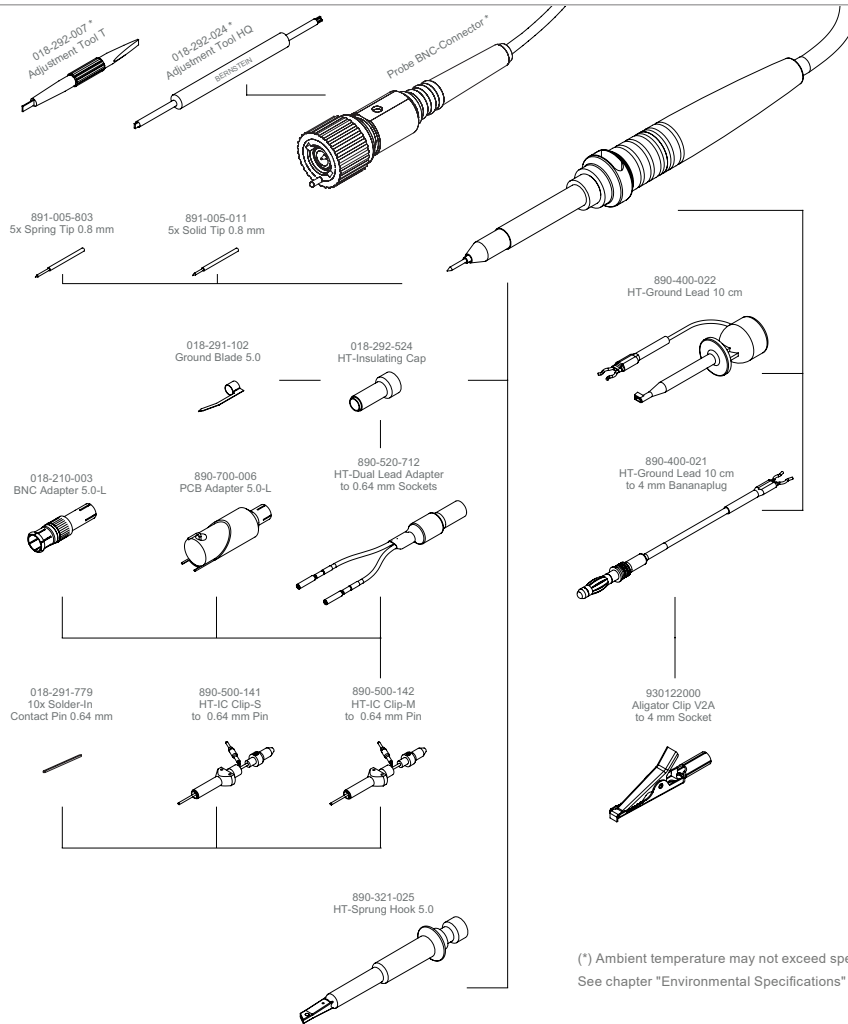


Note that the input impedance of the probe decreases as the frequency of the applied signal increases.



(1) Connected to oscilloscope with an input impedance of 1 M $\Omega$   $\pm$  1%. (2) As defined in IEC 61010-031. (3) No overshoot permitted. (4) The charts given here are valid for no measurement category, not in CAT II, III, IV

Probe Accessories



(\* Ambient temperature may not exceed specified limits. See chapter "Environmental Specifications" on the left page.

Scope of Delivery

Item	Qty	Item	Qty
Adjustment Tool T	1	HT-Ground Lead to Mini Hook	1
Alligator Clip V2A to 4 mm Socket	1	HT-Ground Lead 10 cm to 4 mm Bananaplug	1
BNC Adapter 5,0-L	1	PCB Adapter 5.0-L	1
Ground Blade 5.0	1	Solder-In Contact Pin 0.64 mm	10
HT-Dual Lead Adapter to 0.64 mm Sockets	1	Solid Tip 0.8 mm	1
HT-IC Clip-M	1	Solid Tip CuBe 0.8 mm	1
HT-IC Clip-L	1	Spring Tip 0.8 mm	2(1)
Instruction Manual	1	Sprung Hook 5.0-HT	1(2)
HT-Insulating Tube	1	User Information	1



Use ground lead only for connections to earth ground.



The accessories provided with the probe have been safety tested. Do not use any other accessories than those "originally" provided.

Rating Accessories

**PCB Adapter 5,0-L**  
(890-700-006)

Maximum Rated Input Voltages, No Measurement Category, not in CAT II, III, IV (3)

Pollution Degree: 2

No Measurement Category: 2000 V, 6000 V peak

Maximum Pulse Rating, No Measurement Category, not in CAT II, III, IV (3)

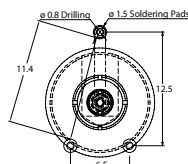
Upulse (4) = 6000 V (Step 0 V to 6000 V)



**Drilling / Soldering Template**



The minimum distance between all solder pads of 11.4 mm (see adjacent template) must not be undercut under any circumstances. Undercutting this distance will void the rating.



(1) plugged on probe. (2) installed in probe. (3) As defined in IEC 61010-031. (4) No overshoot permitted.

## Manufacturer

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