

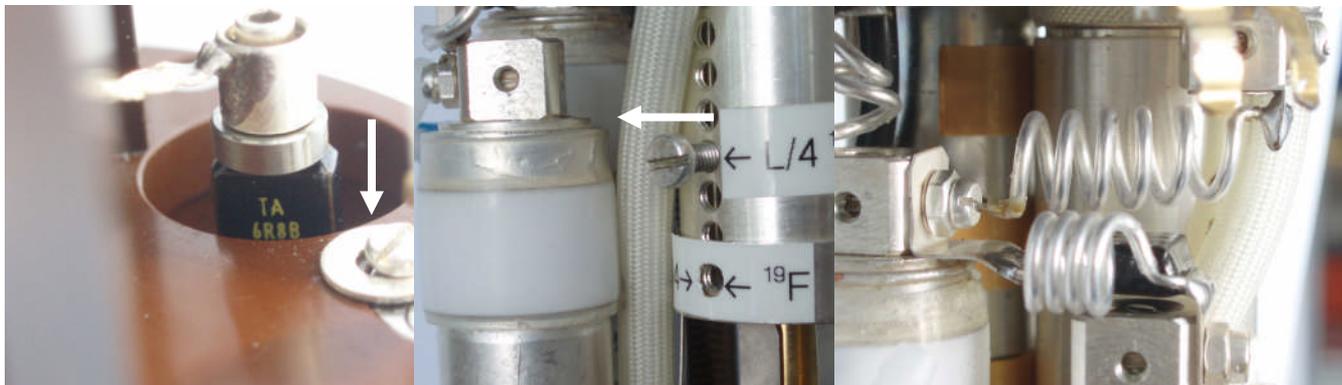
Operating Instructions for the Probe PH MASDVT850W6 BL4 X/Y/F-H (H13694/0002)

1. Table of delivered X/Y combinations

X/Y-combination	X	Y	Modification mode
	f/MHz	f/MHz	
$^{31}\text{P} / ^{29}\text{Si} - ^{23}\text{Na}$	344.0	168.9 – 224.8	6.8pF serial C in, $\lambda/2$ -mode (screw out), with 5.5turns range coil
$^{31}\text{P} / ^{13}\text{C} - ^{11}\text{B}$	344.0	213.7 – 272.7	2.7pF serial C in, $\lambda/2$ -mode (screw out), with 5.5turns range coil
$(^1\text{H}) \ 31\text{P} / ^{17}\text{O}$	344.0	115.2	no serial C, $\lambda/4$ -mode (screw in), with 2.5turns range coil
$(^{19}\text{F}) \ 31\text{P} / ^{17}\text{O}$	344.0	115.2	no serial C, $\lambda/2$ -mode (screw out), with 2.5turns range coil
$^{11}\text{B} / ^{17}\text{O} - ^{29}\text{Si}$	272.7	115.2 – 168.9	no serial C, $\lambda/2$ -mode (screw out), with 8turns range coil
$^{11}\text{B} / ^{29}\text{Si} - ^{23}\text{Na}$	272.7	168.9 – 224.8	6.8pF serial C in, $\lambda/2$ -mode (screw out), without range coil

2. Documentation with photo's

$^{31}\text{P} / ^{29}\text{Si} - ^{23}\text{Na}$

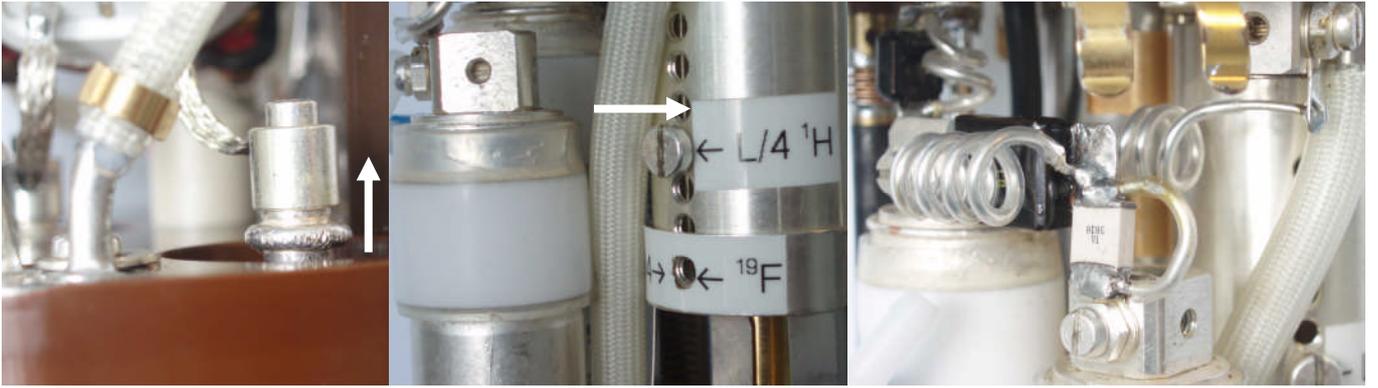


$^{31}\text{P} / ^{13}\text{C} - ^{11}\text{B}$



Note: The top of the transmission line is moveable. To use a serial C push down the transmission line to a mechanical stop. In the other case without serial C lift up the top of the transmission line as shown on the photo!

$^1\text{H} \text{ } ^{31}\text{P} / ^{17}\text{O}$



$^{19}\text{F} \text{ } ^{31}\text{P} / ^{17}\text{O}$



$^{11}\text{B} / ^{17}\text{O} - ^{29}\text{Si}$



$^{11}\text{B} / ^{29}\text{Si} - ^{23}\text{Na}$



3. Exchange or remove the serial C



4. X – Frequency Table in double resonance mode

<i>X-nuclei</i>	<i>X range</i>		Modification mode
	<i>f/MHz</i>		
$^{14}\text{N} - ^{29}\text{Si}$	53.3 – 202.7 (only ^1H possible)		no serial C, $\lambda/4$ -mode (screw in), ^{19}F not possible
$^{29}\text{Si} - ^{71}\text{Ga}$	^1H – adjust	142.5 – 265.7	no serial C, $\lambda/2$ -mode (screw out),
$^6\text{Li} - ^{23}\text{Na}$	^{19}F – adjust	121.3 – 243.8	
$^{13}\text{C} - ^{23}\text{Na}$	203.0 – 324.8 (only ^1H possible)		2.7pF serial C in, $\lambda/4$ -mode (screw in), ^{19}F not possible
$^{27}\text{Al} - ^{31}\text{P}$	^1H – adjust	219.0 – 347.8	2.7pF serial C in, $\lambda/2$ -mode (screw out),
$^{27}\text{Al} - ^{11}\text{B}$	^{19}F – adjust	214.6 – 340.6	
$^{29}\text{Si} - ^{71}\text{Ga}$	^1H – adjust	152.5 – 271.5	6.8pF serial C in, $\lambda/4$ -mode (screw in),
$^{29}\text{Si} - ^{71}\text{Ga}$	^{19}F – adjust	151.5 – 267.2	
$^{13}\text{C} - ^{11}\text{B}$	^1H – adjust	187.5 – 321.3	6.8pF serial C in, $\lambda/2$ -mode (screw out),
$^{13}\text{C} - ^{11}\text{B}$	^{19}F – adjust	179.5 – 300.4	