## Operating Instructions for the Probe PH MASDVT850W6 BL1.3 X/Y/F-H (H13863/0003)

## 1. Table of available $X / Y$ combinations

| X/Y-combination | X | Y | Modification mode |
| :---: | :---: | :---: | :---: |
|  | $f / \mathrm{MHz}$ | $f / \mathrm{MHz}$ |  |
| ${ }^{13} \mathrm{C} /{ }^{15} \mathrm{~N}-{ }^{2} \mathrm{H}$ | 213.7 | 86.0-130.5 | $\lambda / 4$-mode (screw in) |
| ${ }^{13} \mathrm{C} /{ }^{14} \mathrm{~N}$ | 213.7 | 61.4 | Not possible! |
| ${ }^{23} \mathrm{Na} /{ }^{15} \mathrm{~N}-{ }^{2} \mathrm{H}$ | 224.8 | 86.0-130.5 | $\lambda / 4$-mode (screw in) |
| ${ }^{23} \mathrm{Na} /{ }^{29} \mathrm{Si}$ | 224.8 | 168.9 | $\lambda / 2$-mode (screw out) |
| ${ }^{23} \mathrm{Na} /{ }^{14} \mathrm{~N}$ | 224.8 | 61.4 | with 220pF shunt and $\lambda / 4$-mode (screw in) |
| ${ }^{27} \mathrm{Al} /{ }^{15} \mathrm{~N}-{ }^{29} \mathrm{Si}$ | 221.5 | 86.0-168.9 | the same modifications as ${ }^{23} \mathrm{Na}$ only with $\mathbf{1 8 0} \mathbf{p F}$ for ${ }^{14} \mathrm{~N}$ |
| ${ }^{29} \mathrm{Si} /{ }^{15} \mathrm{~N}-{ }^{2} \mathrm{H}$ | 168.9 | 86.0 - 130.5 | $\lambda / 4$-mode (screw in) |
| ${ }^{11} \mathbf{B} /{ }^{17} \mathrm{O}-{ }^{29} \mathrm{Si}$ | 272.7 | 115.2-168.9 | $\lambda / 2$-mode (screw out) |

## Note:

${ }^{1} \mathrm{H}$ or ${ }^{19} \mathrm{~F}$ experiments in $\lambda / 4$-mode use the corresponding arrows, labeled at the $\lambda$-tube, see Figure 1 and 2. In all ${ }^{14} \mathbf{N}$ - experiments on the Y - channel it is neccessary to install a shunt capacitor as shown in Figure 3, 4 and 5 and in addition, set the short circuit screw to the $\lambda / 4$ mode, see also Figure 1 and 2.


Figure $1 \quad \lambda / 4$-mode for ${ }^{1} \mathrm{H}$

Figure 3 complete view



Figure $2 \quad \lambda / 4$-mode for ${ }^{19} \mathrm{~F}$


Figure 4 fixing beneath the clamb


Figure 5 fixing at the cube

