

Filters NK00014XX for DOtech Type U53:

Technical specification



Use of the filters NK00014XX

The filters NK00014XX are low pass filters that are solely developed for the use with DOtech Type U53. They are matched to the input impedance of the transmitter of DOtech Type U53. The use of these filters with other systems is not specified and therefore no warranty is supplied by NK-Elektronik for the use with other systems. Using these combined filter/dividers allows the user to extend the amplitude range of the system DOtech Type U53 up to $\pm 100V$ and to limit the cut off frequency of the signal to be transmitted down to 50 kHz, depending on the filter/divider used.

The existing filters with different divider ratios and cut off frequencies are shown in the table below. Further customer specific filter modules are available on request.

Filter	Divider ratio	Cutoff frequency
NK00014A1	1:1	$f_g = 10 \text{ MHz}$
NK00014A2	1:5	$f_g = 10 \text{ MHz}$
NK00014A3	1:15	$f_g = 10 \text{ MHz}$
NK00014A4	1:30	$f_g = 10 \text{ MHz}$
NK00014A5	1:100	$f_g = 10 \text{ MHz}$
NK00014B1	1:1	$f_g = 2,5 \text{ MHz}$
NK00014B2	1:5	$f_g = 2,5 \text{ MHz}$
NK00014B3	1:15	$f_g = 2,5 \text{ MHz}$
NK00014B4	1:30	$f_g = 2,5 \text{ MHz}$
NK00014B5	1:100	$f_g = 2,5 \text{ MHz}$

Filter	Divider ratio	Cutoff frequency
NK00014C1	1:1	$f_g = 1 \text{ MHz}$
NK00014C2	1:5	$f_g = 1 \text{ MHz}$
NK00014C3	1:15	$f_g = 1 \text{ MHz}$
NK00014C4	1:30	$f_g = 1 \text{ MHz}$
NK00014C5	1:100	$f_g = 1 \text{ MHz}$
NK00014D1	1:1	$f_g = 500 \text{ kHz}$
NK00014D2	1:5	$f_g = 500 \text{ kHz}$
NK00014D3	1:15	$f_g = 500 \text{ kHz}$
NK00014D4	1:30	$f_g = 500 \text{ kHz}$
NK00014D5	1:100	$f_g = 500 \text{ kHz}$
NK00014E1	1:1	$f_g = 250 \text{ kHz}$
NK00014E2	1:2	$f_g = 250 \text{ kHz}$
NK00014E3	1:5	$f_g = 250 \text{ kHz}$
NK00014E4	1:15	$f_g = 250 \text{ kHz}$
NK00014E5	1:30	$f_g = 250 \text{ kHz}$
NK00014E6	1:100	$f_g = 250 \text{ kHz}$
NK00014F1	1:1	$f_g = 50 \text{ kHz}$
NK00014F2	1:5	$f_g = 50 \text{ kHz}$
NK00014F3	1:15	$f_g = 50 \text{ kHz}$
NK00014F4	1:30	$f_g = 50 \text{ kHz}$
NK00014F5	1:100	$f_g = 50 \text{ kHz}$