

## Cable Capacitances - Tube Current

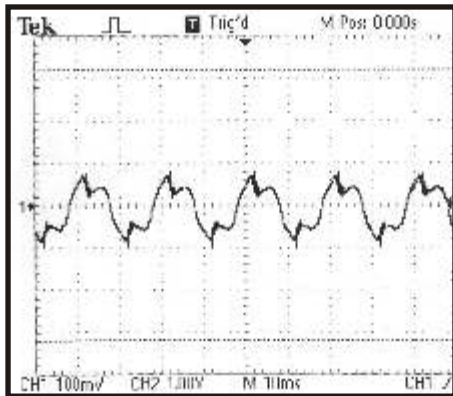
Using long cables from the transformer to the neon tubes results in cable capacitances.

These cables capacities generate current peaks which can damage the electrodes and cause radio interferences.

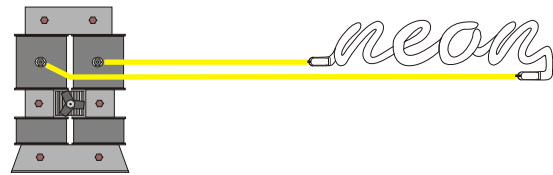
Greater capacitances occur when:

- the distance increases
- the cables are installed very close to each other
- earthed cables are used (e.g. NYLRZY)

### Tube current in an installation with a short cable connection

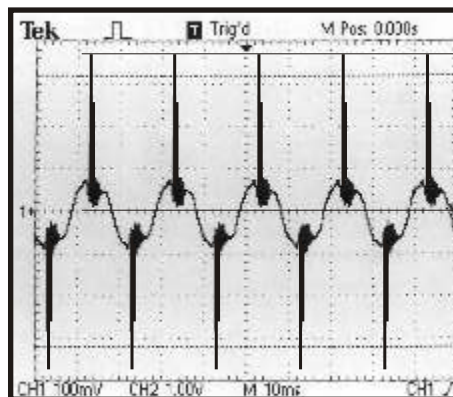


Tube current: 50mA  
Transformer: SRM 50mA; 8,000 volts



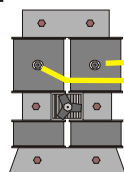
No current peaks are generated.

### Tube current in an installation with 10m NYL cables (installed in parallel)



Tube current: 50mA  
Transformer: SRM 50mA; 8,000 volts

Peak current  
~7.5 x r.m.s. value  
~375mA



Long neon cables cause considerable current peaks resulting in premature ageing or damage of the electrodes.