PCB flow detection:

For the operation of this circuit I refer to an article as published in Modelspoormagazine MSM 00-00 Stroomdetectie VKJ4 TC4 LD-DEF.pdf (Flemish language)

Different types of Si diodes can be used on this PCB. The current 1A diodes 1N4007 or 3A diodes 1N5408, others are also possible.

The layout of the PCB current detection has been slightly changed to also accommodate diodes up to 3A (the first version had holes that were too small for the wires of these 3A diodes)

There are several options to link this current detection with LocoNet feedbacks or S88 feedbacks.

The connection to the tracks to be detected are grouped per 4. Here, too, you can choose which connector type you place on the PCB. (pitch=3,81mm)

Cost price PCB:

PCB: 1,77€ (10 pcs. 17,72€) R 16x 0.0148 = 0,23€ IC ILQ620 4x0,284 = 1,14€ Connector 9pin 2,54 female 90° 2x0.11 = 0.22€ Connector 5pin 3,81mm 4x0.335 = 1,34€ Diode 1N4007 64x0,00674= 0,431€

Total: 5,131€

Option IC socket 16pin 4x0,2 = 0,8€ Option Diode 1N5408 64x0,04= 2,56€