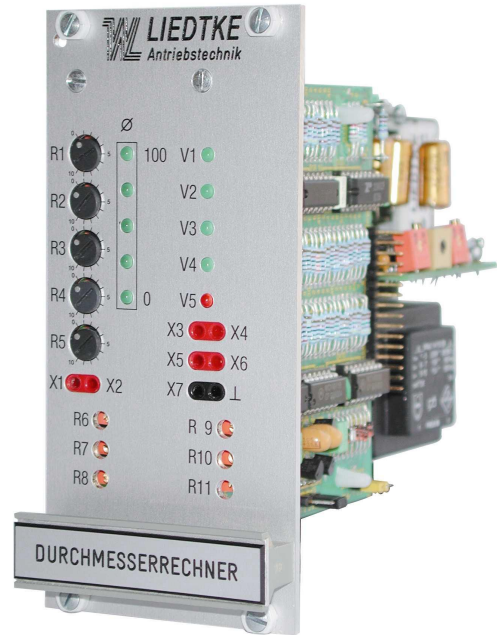




Winding calculator

The **winding calculator** is a winding card, which is suitable for the control and regulation of a centre winder for winding and unwinding drives with D.C. shunt-wound motors. Due to a constant diameter calculation the device delivers the necessary speed and torque nominal values to the output controller, so that the once selected tensile force is maintained over the whole winding area.



Functions:

- direct traction regulation via draft measurement or dancer
- indirect traction regulation via current limitation
- simple preselection of various winding modes by jumpers
- constant calculation of the diameter and automatic saving of the diameter when stopped with Reset-, Set- and Stop function
- preselection of two sleeve diameters or external default of the diameter
- calculation of the winder's torque
- tension reference integrator
- automatic reduction of the traction when stopped
- calculation of the winding shaft speed, so that also in case of an indirect traction regulation an overspeed protection is guaranteed over the whole winding area
- web-crack monitoring
- friction compensation
- superimposed P.I.D.-controller for direct traction regulation with metering bearing or dancer potentiometer
- preselection of the winding direction of rotation for „winding from the top“ or „winding from bottom“ by external switchover

Dimensions:	Eurocard	100 x 160 mm
	Front panel	3U / 12HP
	Connector	DIN 41612 / Design D32
	Supply	230VAC / 50-60Hz
	Reference input	0-10VDC
	Output signal	0 ... ±10VDC