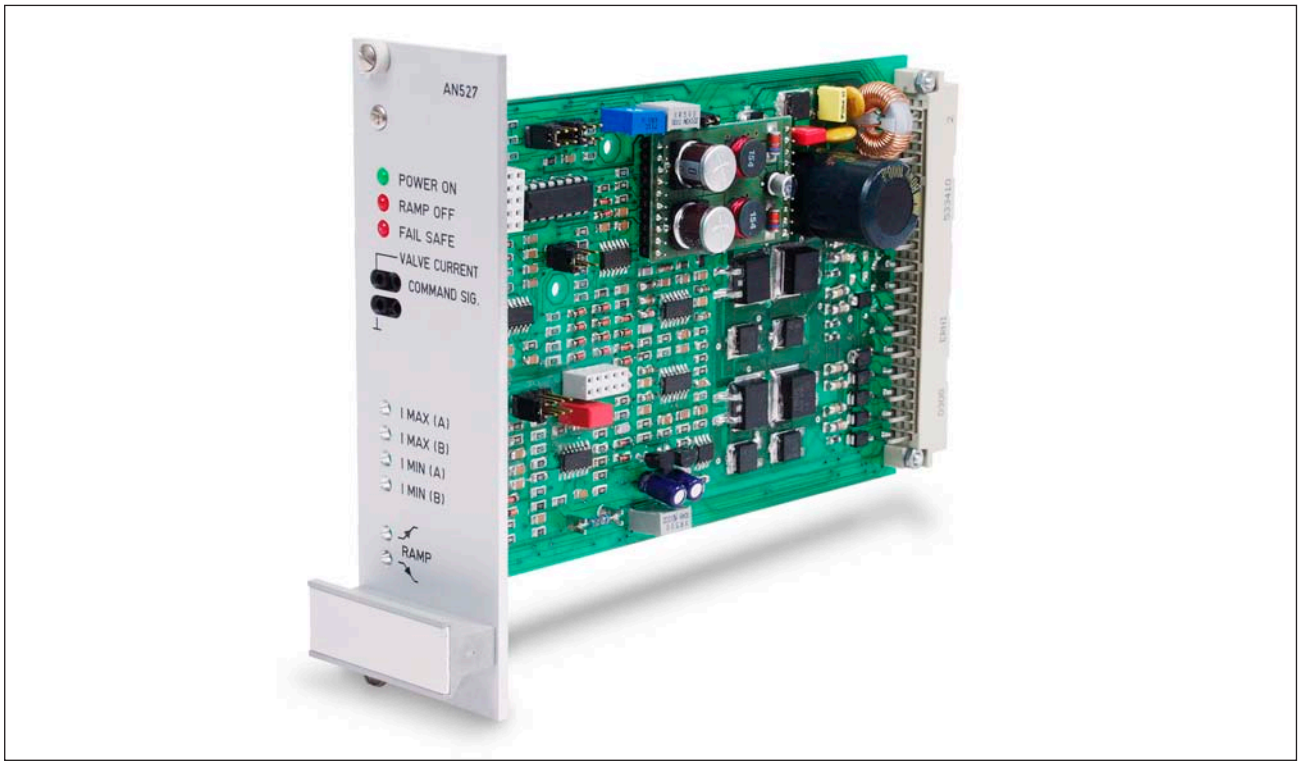
AN527 Servo Amplifier



The AN527 servo amplifier has been designed for controlled proportional-stroke valves with two magnet coils.

The AN527 is only used to control proportional valves. Therefore, as this board is not only an amplifier for controlled valves (AN527) but also the basis for the closed-loop controller (AN528) it is not completely packed, and some different adjustment possibilities are not described, if it's used as the AN527.

Features:

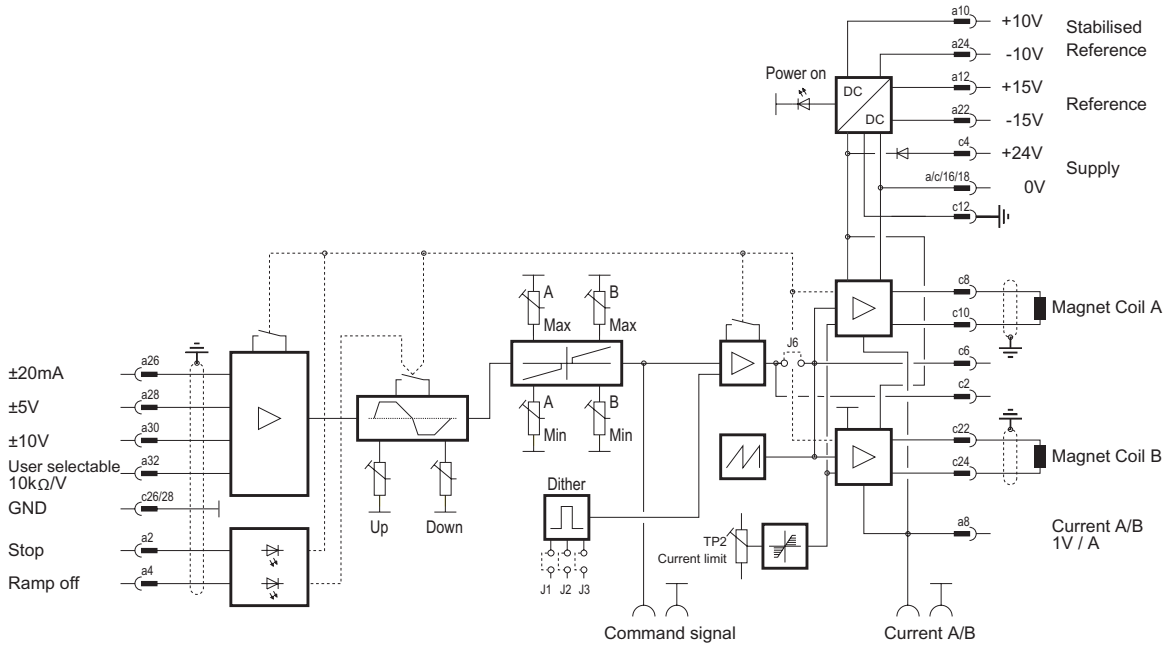
- Secured against wrong polarity
- Secure of short-circuit
- External switch-off ramp
- Ramp with quadrant identification
- Wide range of ramp adjustment
- External enable (no-load current circuit)
- Test jack for: command signal, valve current
- Same potential of: minus of the supply voltage,
  zero-potential of the inputs,
  zero-potential of the reference voltage
- PWM - output stages (high dynamic)
- 4 different inputs for the most popular input-voltages and -currents,
  allows very flexible input switching
- LED indication for: Power on, Ramp off, Fail-safe
- Potentiometer for: Ramp time, Zero overlapping, Gain

The pin assignments and functions of the AN527 are compatible with the AN227.

PEES

COMPONENTS

AN527 Servo Amplifier



AN527 servo amplifier for controlled proportional-stroke valves without position controller

527BLO07 Rev.02 (06.10.1997)

Technical Data:

Dimensions (overall dim.)	Eurocard format (160x100)mm (40.5x128.7x189.7)mm (WxHxD), Front plate 3HUx8SU
Connection	32 pin connector DIN 41612 D32
Supply voltage	24V DC (20–32V DC)
Reference voltages	±10V, 10mA, stabilised ±15V, 25mA, unstabilised
Output current	Imax = 2600 mA, 3 plug-selectable ranges: (0–800mA, 0–1600mA, 0–2600mA)
PWM frequency	Approx. 5.5 kHz
Short-circuit protection	for output stage and reference voltages
Signal inputs	1x ±20mA, 100Ω 1x ±5V, 50kΩ 1x ±10V, 100kΩ 1x user selectable 10kΩ/V
Dither	3 plug-selectable ranges (100 Hz, 140Hz, 280 Hz) Adjustable amplitude, approx. 0–10% of rated current.
Ramp times	Ramp up/down independently adjustable, 0.2–10sec 20%
Ramp off	Input voltage 24V, 10kΩ, Indication by LED 'Ramp off'
Stop	Normally closed circuit, Input voltage 24V, 10kΩ Indication by LED 'Fail safe'
Measurement sockets (ø 2 mm)	VALVE CURRENT: 1V = 1A, ±8%, COMMAND SIG: desired signal ±10V depends on the input voltage