

AN533 Servo Amplifier



The AN533 servo amplifier has been designed to control single-magnet proportional valves and throttle valves with position controller.

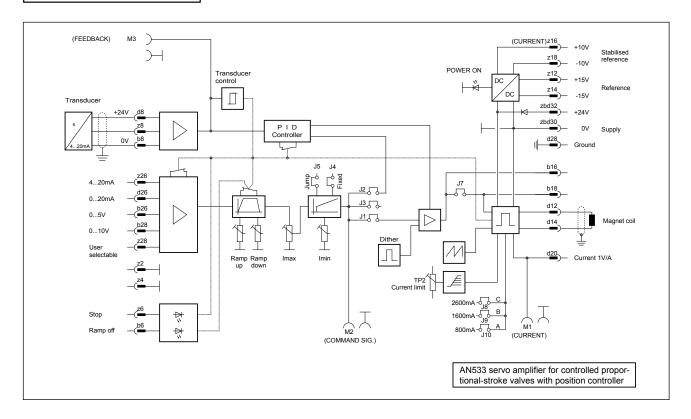
Features:

- protection against wrong polarity
- short-circuit proof
- external ramp switch-off
- wide range of ramp adjustment
- external enable (normally closed circuit)
- measurement sockets for setpoint voltage and magnet coil current and transducer signal
- the negative of the power supply is at the same potential as the input zero voltages and the zero potential of the reference voltages. This allows several servo amplifiers to be operated from a common power supply
- PWM output stages with high dynamic response and high carrier frequency
- 5 different setpoint inputs for the most common input voltages and currents giving great flexibility of input circuit
- LED indicators for 'Power on', 'Ramp off' and 'Fail safe'
- Potentiometers for ramps, zero overlap and amplification adjustable on the front plate

The AN 533 is compatible to the AN 233 in pin and function.



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Technical Data:

Dimensions	Eurocard format (160x100)mm
(overall dim.)	(40x128.7x189.7)mm (WxHxD), Front plate 3HUx8SU
Connection	48 pole connector DIN 41612 F48
Supply voltage	24V DC (23–32V DC)
Reference	±15V ±5%, 25mA, unstabilised
voltages	±10V ±0.5%, 10mA, stabilised
Output current	Imax = 2600 mA, 3 plug-selectable ranges: (0-800mA, 0-1600mA, 0-2600mA)
Short-circuit protection	for output stage and reference voltages
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Signal inputs	1x 4-20mA, 100Ω
	1x 0-20mA, 100Ω
	1x 0-5V, 50kΩ
	1x 0-10V, 100kΩ
	1x user selectable R1000, $10k\Omega/V$
Dither	Factory setting approx. 140Hz.
	Amplitude internally adjustable, approx. 0–20% of rated current.
Ramp times	Ramp up/down independently adjustable, 0.1–10sec 20%
Ramp off	Input voltage 24V, 10kΩ, Indication by LED 'Ramp off'
Stop	Normally closed circuit, Input voltage 24V, $10k\Omega$
	Indication by LED 'Fail safe'
Measurement	VALVE CURRENT $1V = 1A, \pm 5\%$,
sockets (2mm)	COMMAND SIG.setpoint 0-10V
Multi-turn	Adjustable on the front plate:
resistances	Imax: volumetric flow amplification
	Imin: overlap jump, approx. 0–40% of selected rated current
	Ramp up, Ramp down
	Internally adjustable on the card:
	TP2: current limit
	REF: reference voltages 10% (sealed)
	4–20mA: 4mA compensation (sealed)
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