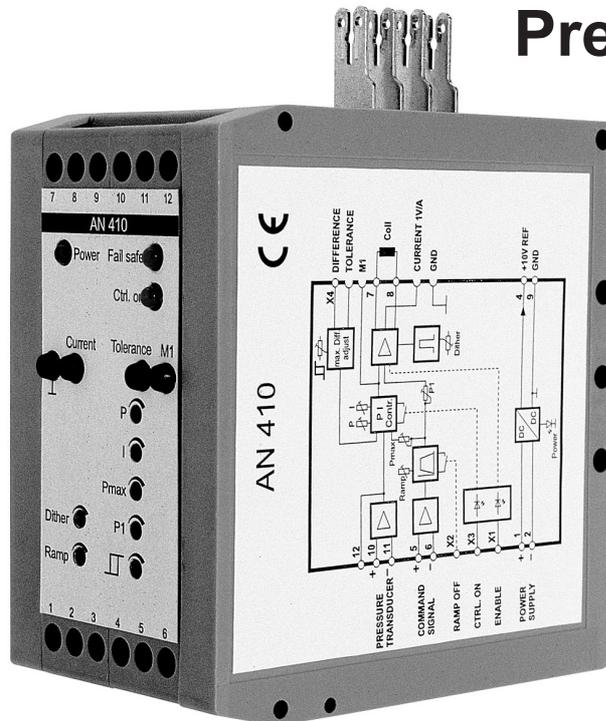# AN410
Pressure Controller

The AN410 pressure controller module is intended for pressure closed-loop-controls in conjunction with a pressure control valve.
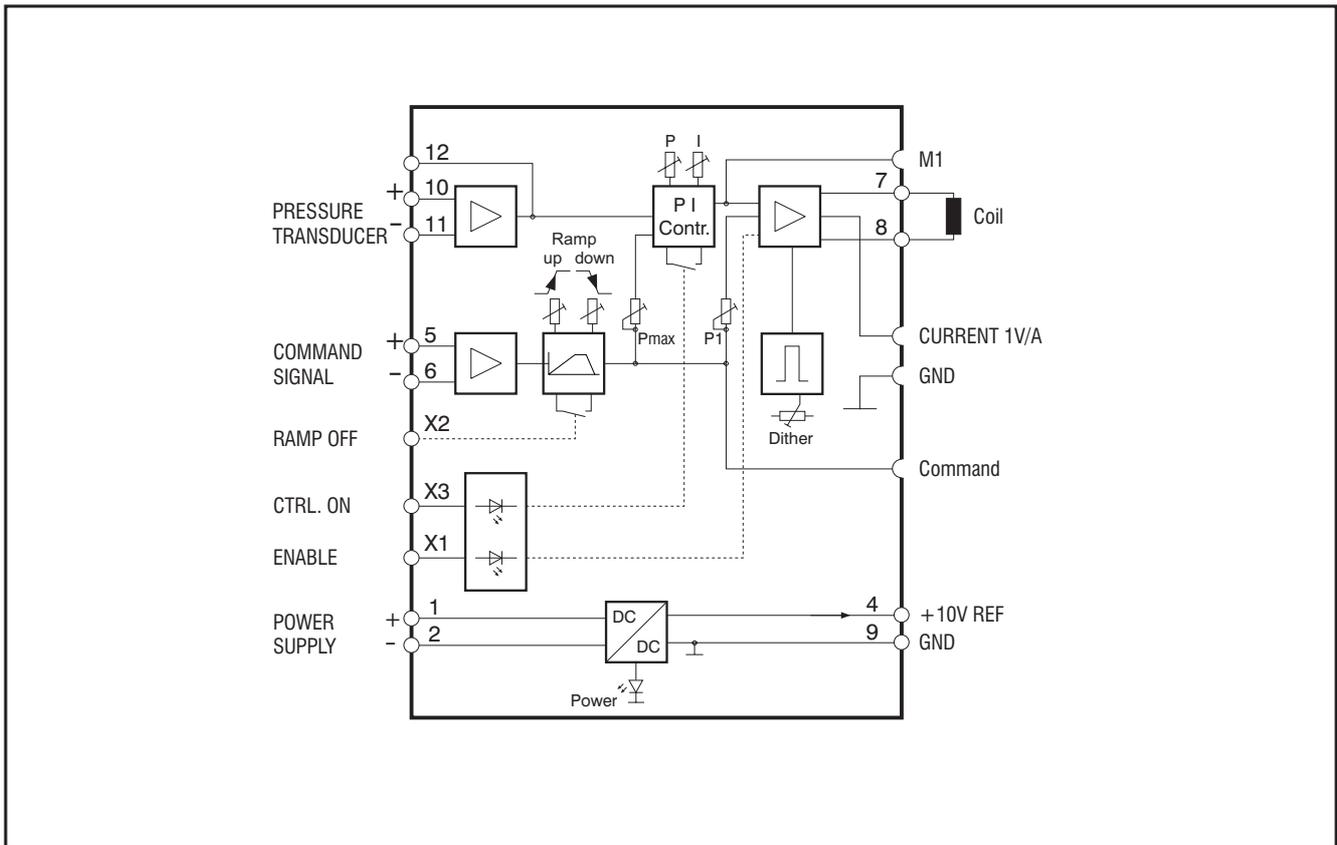
When the controller enable is switched off, the unit operates as an open loop controller in which the system pressure is adjusted in the usual manner by the valve current in conjunction with the control characteristic.

When the controller is enabled, the well-known disadvantages of open loop control are compensated and the pressure is controlled free of hysteresis, irrespective of the temperature and linear to the setpoint.

The actual pressure value is monitored for wire break and is available as a 0...10V signal on terminal 12 for measurement purposes. Adaptation to the control system is possible using the P and I potentiometers.

The snap-on housing enables the AN410 module to be mounted on normal carrier rails in control cabinets. The electrical connections are done by a terminal strip and 3 flat connectors.

AN410 Pressure Controller

Technical data:

Supply voltage	24V DC (22...32 V DC)	Enable	Input +24V, indication via 'Fail safe' LED
Auxiliary voltages	+10V, max. 10mA		
Temperature range	0 - 50 °C	Controller enable	Input +24V, indication via 'Ctrl. on' LED
Output stage	Duplex output stage with high dynamic response and rapid de-excitation (approx. 4...6 ms)	Ramp off	Input +24V
		Measuring sockets	Current: valve current 1V/A (10%) Command: setpoint signal (0...10V) M1: controller output
PWM frequency	Approx. 5 kHz		
Output current	according to version 0… 800mA 0…1600mA 0…2500mA	Multi-turn resistors	P: P component I: I component Pmax: setpoint coupling P1: precontrol Dither: dither amplitude Ramp up: acceleration ramp, adjustable in ratio 1:50 Ramp down: deceleration ramp, adjustable in ratio 1:50
Inputs	A variety of different input modules is available:		
Setpoint:	0...10V (differential input) 4...20mA (monitored differential input) 0...20mA (differential input)		
Actual value:	4...20mA (monitored differential input)		