

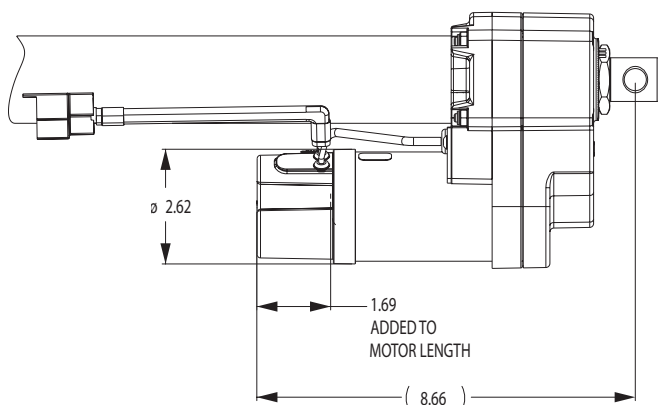
P1-DC Electronic Stroke Limit Control



The P1-DC Control provides end of stroke stopping by turning off power to the motor via an on board relay. Input power polarity must be reversed for the actuator to move again. The control uses solid-state hall effect sensors in combination with electronic dynamic braking to accurately stop at the end of stroke travel. The sensors are non-adjustable and are mounted inside the actuator cover tube for protection where they are switched via a non-contact magnet attached to the rod. The switches are sealed for life and will never wear out.

Specifications

- Supply Power: 12 or 24 vdc versions available
- Maximum Current: 25 Amps @ 12 vdc/12.5 Amps @ 24 vdc (at 25% duty cycle)
- Operating Temperature: -20° to 140° F



Features

- **Motor Power:** Switched by on board relay. The relay allows power to the motor as long as the actuator is not being commanded to go past the end limits.
- **End Limits:** Integrated end of stroke hall effect sensors trigger the control to turn power off to the motor until input power is reversed. Position is factory set.
- **Faster Stopping:** Electronic dynamic braking, (EDB) is applied after every move for accurate and fast stops.
- **Enclosure:** Attaches to back of motor or other surface and is potted to work in harsh environments.
- **Protection:** Zener diode suppression on the input and output for extra protection in noisy (electrical) environments.

Options

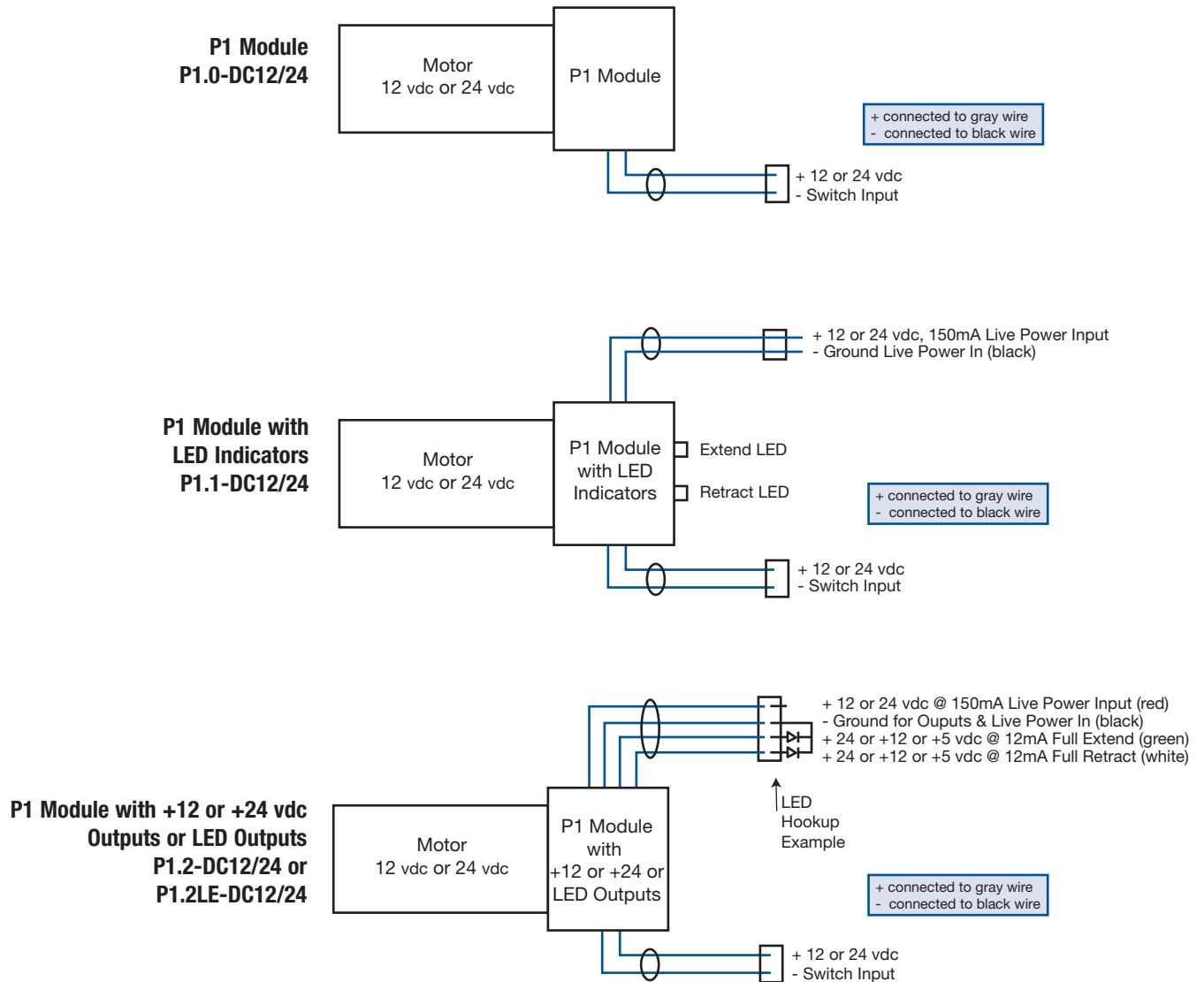
- **LED Indicators:** Two LED's on the outside of the control module to indicate when the end of stroke is reached. Included with the LED's is a live power input that can be used to keep the outputs on when switch power is off. 12/24vdc, 150mA is needed.
- **+12V Outputs:** Two +12 volt, 12mA outputs plus a ground to indicate when the end of stroke is reached. This output can signal a relay, lamp, or isolated PLC input. Included with the outputs is a live power input which can be used to keep the outputs on when switch power is off. 12/24vdc, 150mA is needed.
- **LED Outputs:** Two +5 volt, 25mA outputs plus a ground to indicate when the end of stroke is reached. This output can be used to light an LED. Included with the outputs is a live power input that can be used to keep the outputs on when switch power is off. A 12/24vdc, 150mA supply is needed.

P1 Electronic Stroke Limit Control

Model Selection

| Model No. | Input Voltage (vdc) | Maximum Output Current (Amps) | Features |
|-------------|---------------------|-------------------------------|--|
| P1.0-DC12 | 12 | 25 | Base = Electronic Stroke Limit with Electronic Dynamic Braking |
| P1.0-DC24 | 24 | 12.5 | Base = Electronic Stroke Limit with Electronic Dynamic Braking |
| P1.1-DC12 | 12 | 25 | Base & LED Indicators on Housing |
| P1.1-DC24 | 24 | 12.5 | Base & LED Indicators on Housing |
| P1.2-DC12 | 12 | 25 | Base & +12 vdc Outputs |
| P1.2-DC24 | 24 | 12.5 | Base & +24 vdc Outputs |
| P1.2LE-DC12 | 12 | 25 | Base & LED Outputs +5 vdc |
| P1.2LE-DC24 | 24 | 12.5 | Base & LED Outputs +5 vdc |

Wiring Diagrams



PQS-DC Quick Stop Control



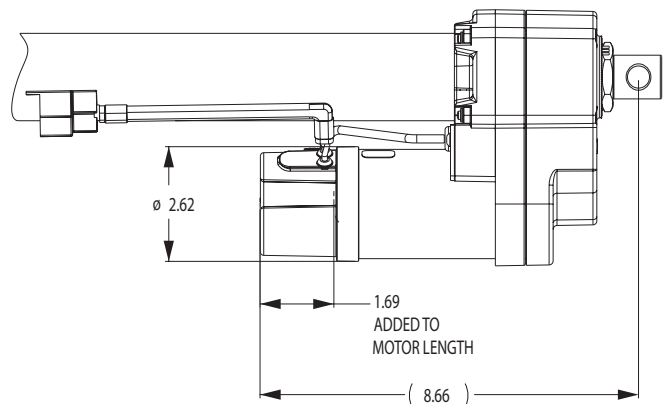
The PQS-DC is a bi-directional current limit control which monitors current during actuator motion and quickly stops the actuator if an object gets in the way causing an over limit current draw. Input power polarity must be reversed for the actuator to move again. The precise current limit can be set via potentiometers accessible from the side of the control housing. The current limit can be adjusted for each direction independently for those applications that need a lighter setting in one direction only.

Features

- **Quick Stop:** Adjustable current limits can be set in either direction. Current limits are set via potentiometers accessible from the side of the control housing.
- **Motor Power:** Switched by on board relay. The relay allows power to the motor as long as the actuator is not being commanded to go past the end limits.
- **Faster Stopping:** Electronic dynamic braking, (EDB) is applied after every move for accurate and fast stops.
- **Enclosure:** Attaches to back of motor or other surface and is potted to work in harsh environments.
- **Protection:** Zener diode suppression on the input and output for extra protection in noisy (electrical) environments.

Specifications

- Supply Power: 12 or 24 vdc
- Maximum Current: 25 Amps @ 12vdc or 12.5 Amps @ 24vdc (at 25% duty cycle)
- Operating Temperature: -20° to 140° F

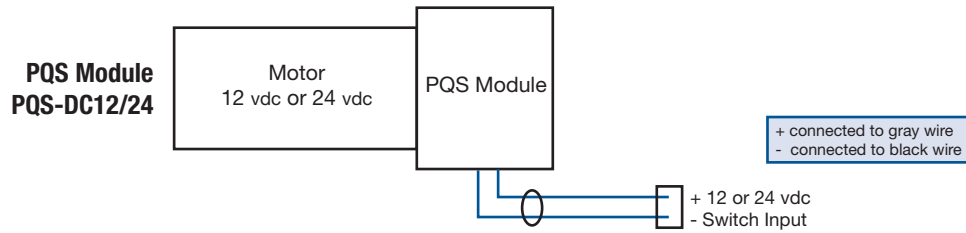


PQS-DC Quick Stop Control

Model Selection

| Model No. | Input Voltage (vdc) | Maximum Output Current (Amps) | Features |
|-----------|---------------------|-------------------------------|---|
| PQS-DC12 | 12 | 25 | Base = Electronic Stroke Limit with Mid-stroke Current Limit and Electronic Dynamic Braking |
| PQS-DC24 | 24 | 12.5 | Base = Electronic Stroke Limit with Mid-stroke Current Limit and Electronic Dynamic Braking |

Wiring Diagrams



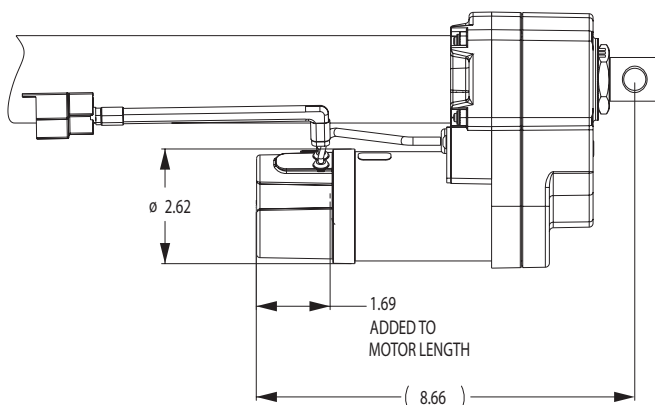
P2-DC Position Feedback Control



The P2 DC is a microprocessor position feedback control providing a 0 -10 volt analog output throughout actuator travel. The control uses two inductive pulse count sensors and a counting wheel to accurately determine position. A third sensor at the full retract position serves as the home or zero position. Factory set end limits turn power off to the motor via a relay until power polarity is reversed. All sensors are non-contact and sealed for life. They are integrated inside the B-Track actuator to protect them from the environment.

Specifications

- Supply Power: 12 or 24 vdc
- Maximum Current: 25 Amps @ 12vdc or 12 Amps @ 24vdc (at 25% duty cycle)
- Operating Temperature: -20° to 140° F



Features

- **Motor Power:** Switched by on board relay. The relay allows power to the motor until the end of stroke is reached.
- **End Limits:** Factory programmed location of .125" from either end. Power is removed from the motor until input polarity is reversed.
- **Faster Stopping:** Electronic dynamic braking, (EDB) is applied after every move for accurate and fast stops.
- **Enclosure:** Attaches to back of motor or other surface and is potted to work in harsh environments.
- **Protection:** Zener diode suppression on the input and output for extra protection in noisy environments.
- **Reset Function:** When the input is grounded, the actuator goes to its full retract position, or home sensor, and this location is set to zero. While performing this function the 0-10 volt output does not change. This feature is useful on initial startup and after service to home the actuator.
- **Analog Output:** 0-10 volt signal throughout the stroke length of the actuator while power is provided to the motor. The output is 0 volts at full retract position and 10 volts at full extend position. The output is 16 bit with a resolution of .15mV. The stop position is remembered when power is removed via on-board memory. A live power input is provided to keep the output on when switch power is off. A 12/24vdc, 150mA supply is needed.
- **Bi-Directional Current Limit:** Set to turn off power to the actuator when a current level is reached.

Options

- **LED Indicators:** Two LED's on the outside of the control module to indicate when the end of stroke is reached. The LED's will remain lit until the actuator is moved from the end of stroke position.
- **+12VDC Outputs:** Two +12 volt, 12mA outputs plus a ground to indicate when the end of stroke is reached. This output can signal a relay, lamp, or isolated PLC input. The outputs will remain on until the actuator is moved from the end of stroke position.
- **LED Outputs:** Two +5 volt, 25mA outputs plus a ground to indicate when the end of stroke is reached. This output can be used to light an LED. The outputs will remain on until the actuator is moved from the end of stroke position.

P2-DC Position Feedback Control

Model Selection

| Model No. | Input Voltage (vdc) | Maximum Output Current (Amps) | Features |
|-------------|---------------------|-------------------------------|---|
| P2.0-DC12 | 12 | 25 | Base = Electronic Stroke Limits with 0 to + 10V Analog Output and EDB |
| P2.0-DC24 | 24 | 12.5 | Base = Electronic Stroke Limits with 0 to + 10V Analog Output and EDB |
| P2.1-DC12 | 12 | 25 | Base & LED Indicators on Housing |
| P2.1-DC24 | 24 | 12.5 | Base & LED Indicators on Housing |
| P2.2-DC12 | 12 | 25 | Base & + 12 vdc Outputs |
| P2.2-DC24 | 24 | 12.5 | Base & + 12 vdc Outputs |
| P2.2LE-DC12 | 12 | 25 | Base & LED Outputs + 5 vdc |
| P2.2LE-DC24 | 24 | 12.5 | Base & LED Outputs + 5 vdc |

Wiring Diagrams

