



Specifications

Compatible Actuators:

EC2-D, NV-D, N2-D,
R2A-D, R3-D

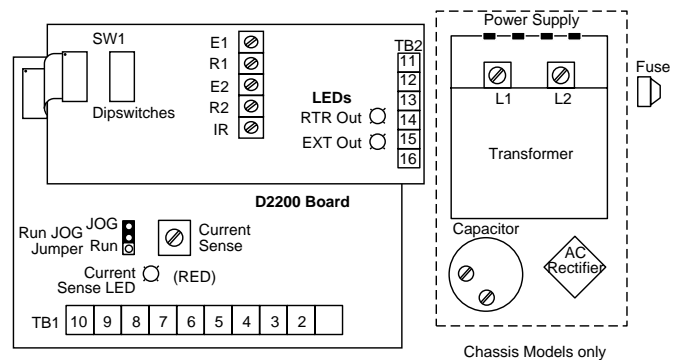


The D2300 is designed for positioning applications requiring simple linear extend and retract motion which REQUIRE variable speed control.

The D2300 commands linear move profiles based on input activation. Six optically coupled inputs and four open-collector outputs allow for a simple interface to external devices such as PLCs, I/O Cards, simple pushbutton operator stations, and “Normally Open” position sensors.

I/O Programmability via dipswitches adds increased versatility and auto function capabilities.

Physical Layout



Power Requirements

D2300
D2301, D2302, D2303

(Jumper Selectable)

20 to 30 VDC; 10 Amps maximum
105-125VAC; 50/60 Hz (from factory) @ 2 Amps max
208-245VAC; 50/60 Hz @ 1 Amp max (adjustable current trip: 0-10 Amps)
0-28 VDC, @ 10 Amps max (adjustable current trip: 0-10 Amps). Note: Motor rated for 4.5 Amps continuous; 10 Amps peak.

Motor Output

Inputs

Stop, EXT, RET, LS1, LS2, SP2

Sinking Inputs (1K Pullup to 12 VDC)
High Level (Off) 10.5 - 12.25 VDC (open circuit high)
Low Level (Activated) 0-0.8 VDC (sinking to ground) @ 12mA max

Outputs

EXT COMP, RTR COMP,
COM EXT-EN, COM RTR-EN

Open Collector Sinking Output (1K pullup to 12 VDC)
High Level (OFF) 10.5-12 VDC (open circuit high)
Low Level (On) 0-0.5 VDC capable of sinking 100mA

Operational

Variable Speed Range
PWM Frequency

15:1
2000Hz

Environmental

Operating Temperature
Storage Temperature

32° to 122°F [0° to 50°C]
-40° to 185°F [-40° to 85°C]

Dimensions

See page F-16

Remote Speed Pots

MOD300 - 6 ft ribbon cable with remote connections for on board speed potentiometers; E1, R1, E2, and R2. MOD300 is supplied with two 10K ohm, 0.25W potentiometers for E1 and R1 connections.

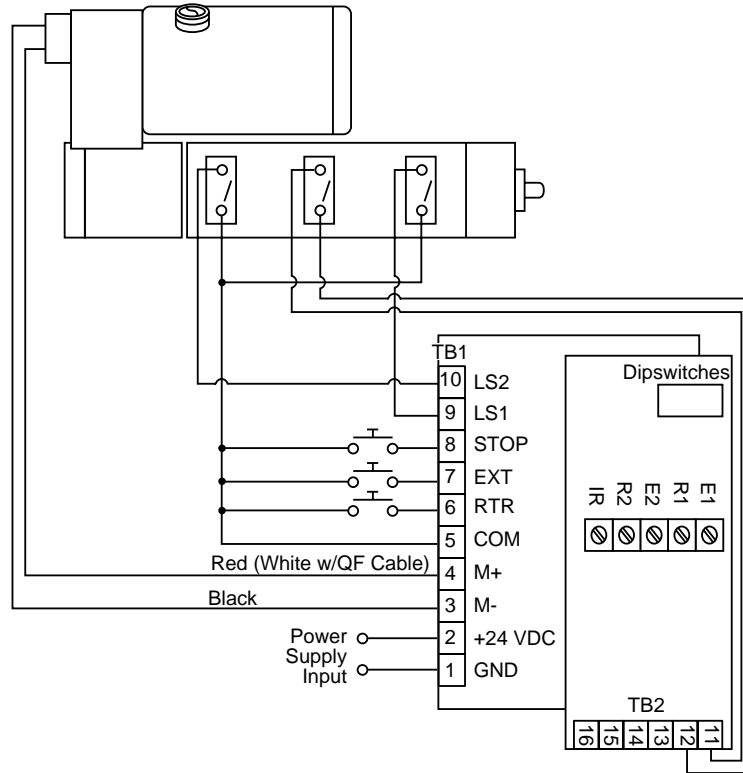
Timer Option

D2400 series - 0 to 20 sec. adjustable time delay allows control of dwell time between cycles. DIP switches allow configuration of the time delay to begin when:

- LS1 Limit Switch triggered
- LS2 Limit Switch triggered
- Motor Current Limit (Extend)
- Motor Current Limit (Retract)



Typical Wiring



TB1 10 Pin Terminal Strip

- 1 GND External Supply Input: DC Ground
- 2 +24V External Supply Input: +24 VDC
- 3 M- Motor Negative Terminal
- 4 M+ Motor Positive Terminal
- 5 COM DC Ground
- 6 RTR Retract Input
- 7 EXT Extend Input
- 8 Stop Stop Input
- 9 LS1 Limit Switch Input #1
- 10 LS2 Limit Switch Input #2

TB2 6 Terminal Connector

- 11 SP2 Speed Change
- 12 COM EXT-EN Common - extend enable
- 13 COM RTR-EN Common - retract enable
- 14 EXTCOMP Extend Complete Output
- 15 RTRCOMP Retract Complete Output

Dipswitch Functions

- 1 On One-shot retract triggered by LS1
- Off One-shot stop triggered by LS1
- 2 On One-shot extend triggered by LS1
- Off One-shot stop triggered by LS1
- 3 On One-shot retract triggered by LS2 (Term 10)
- Off One-shot stop triggered by LS2
- 4 On One-shot extend triggered by LS2
- Off One-shot stop triggered by LS2
- 5 Extend complete output Terminal 14 triggered by:
 - On Current overload
 - Off LS1 (Term 9)
- 6 Retract complete output Terminal 15 triggered by:
 - On Current overload
 - Off LS1 (Term 9)
- 7 On After current sensing overload auto retract
- Off After current sensing overload stop
- 8 On After current sensing overload auto extend
- Off After current sensing overload stop

Limit Switches

Industrial Devices Corporation offers “Normally Open” magnetic position sensors which interface directly with the D2300 to stop motion or initiate other functions. See page F-16.

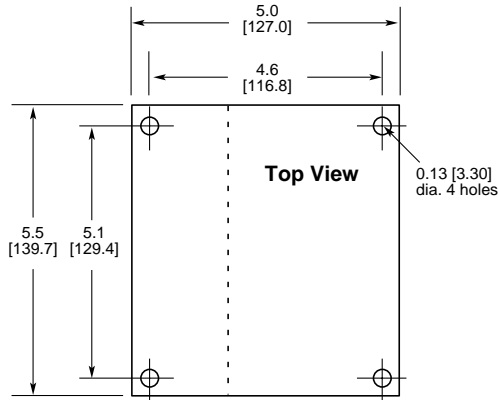


Dimensions in [mm]

Board Only Models

D2200 Single Board: Depth 1.2 in. [30.48]

D2300 Two Boards: 2.1 in. [53.34]

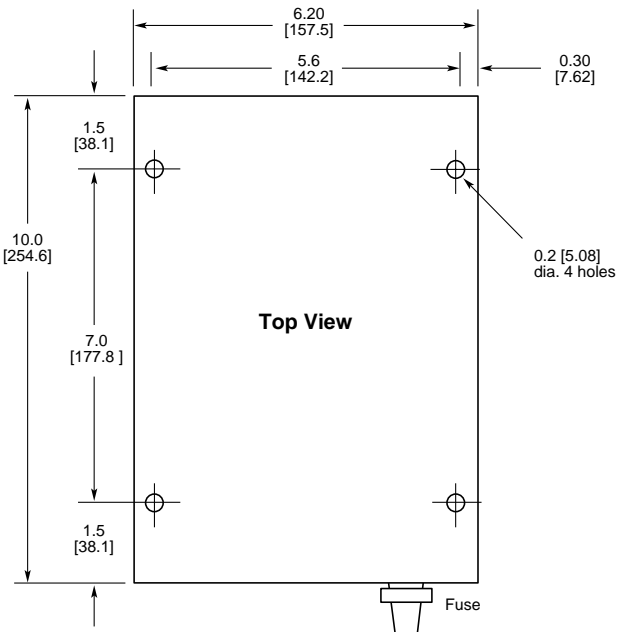


Chassis Models

D2201, D2301

D2202, D2302: Depth 2.9 in. [73.66]

D2203, D2303: Depth 3.6 in. [91.44]



How To Order

Model	Description	Options	Description
D2200	Board only	-MOD 204	LS1 Hard EOT (D2200, D2300, D2400)
D2201	Board, Power Supply, Chassis		
D2202	Board, Power Supply, Chassis w/ Enclosure	-MOD300	Remote Speed Potentiometers (D2300, D2400)
D2203	Board, Power Supply, Chassis w/ Enclosure, Push Buttons	-MOD313	0-10 VDC Remote Speed Control Input (D2300, D2400)
Variable Speed Controls			
D2300	Board only		
D2301	Board, Power Supply, Chassis		
D2302	Board, Power Supply, Chassis w/ Enclosure		
D2303	Board, Power Supply, Chassis w/ Enclosure, Push Buttons		
Variable Speed w/ Time Delay Controls			
D2400	Board only		
D2401	Board, Power Supply, Chassis		
D2402	Board, Power Supply, Chassis w/ Enclosure		
D2403	Board, Power Supply, Chassis w/ Enclosure, Push Buttons		



To confirm your selection, review the checklist on page F-8.