

DYNISCO MODEL DPC535

Differential Pressure Controller

Description

The DPC535 differential pressure controller for the extrusion market offers the option of utilizing 350 Ohm strain gage transducers. It offers the ability to control the differential pressure and to display and alarm at independently settable upstream and downstream setpoints. Retransmission of the differential can be configured. Digital communications via a RS485 port is optional.

Features

- Plug-in output capabilities directly
- Latching alarm function
- Versatile alarm strategy
- RS485 option
- Highly visible 3 line vacuum fluorescent display
- NEMA 4X rated
- On-board PID/self-tuning

Benefits

- Pressure signals to the operator or to the machine
- Shuts down an extruder at dangerous pressure levels
- Provides variety of interlocks and signals
- Communicates information to and from PCs
- Eliminates display "washouts"
- Useable in hostile environments
- Adaptable to a variety of applications



Specifications

Performance Characteristics

Power supply: Universal 90 to 250 Vac, 48 to 62 Hz

Power consumption: 15 VA @ 120 Vac, 60 Hz (typical)

Electrical Characteristics

Primary input:

Selectable via jumper and keyboard:

22 thermocouple ranges: B, E, J, K, N, R, S, T, W, W5, Platinel II

6 RTD ranges: DIN, JIS or SAMA calibrations

2 DC current ranges: 4 to 20 mA, 0 to 20 mA

2 DC voltage ranges: 0 to 5 V, 1 to 5 V

5 DC millivolt ranges: 0 to 10 mV, 0 to 30 mV, 0 to 60 mV, 0 to 100 mV, -25 to 25 mV

350 Ohm strain gage with 10 Vdc power supply: DPC535-x-x-x-xK instruments only

Secondary input:

Selectable via jumper and keyboard:

22 thermocouple ranges: B, E, J, K, N, R, S, T, W, W5, Platinel II

6 RTD ranges: DIN, JIS or SAMA calibrations

2 current ranges: 4 to 20 mA, 0 to 20 mA

2 voltage ranges: 0 to 5 V, 1 to 5 V

5 millivolt ranges: 0 to 10 mV, 0 to 30 mV, 0 to 60 mV, 0 to 100 mV, -25 to 25 mV

350 Ohm strain gage with 10 Vdc power supply: DPC535-x-x-x-xK instruments only

Input impedance:

Current: 250 Ohms

Thermocouple: 10 megohms

Voltage: 1 megohms

RTD: 10 megohms

Sampling rate:

Input and output: 100 mSec

Display: 200 mSec

Outputs (DPC535-x-x-x-xK) dual strain gage input:

Main Control: Mechanical relay, SDPT, 5 A @ 120/240 Vac

Output 2: Mechanical relay, SPDT, 5 A @ 120/240 Vac

Output 3: Mechanical relay, SPDT, 5 A @ 120/240 Vac

Output 4: Analog mA (0 to 20, 4 to 20 selectable)

Outputs (DPC535-x-x-x-x) amplified transducer input:

Main Control: Mechanical relay, SPDT, 5 A @ 120/240 Vac

Output 2: Mechanical relay, SPDT, 5 A @ 120/240 Vac

Output 3: Mechanical relay, SPDT, 5 A @ 120/240 Vac

Output 4: Loop power supply, 24 Vdc (nominal) @ 40 mA

(See following page for optional plug-in output modules)

Temperature Characteristics

Ambient temperature:

Operating: 32°F to 122°F (0°C to 50°C)

Storage: -40°F to 158°F (-40°C to 70°C)

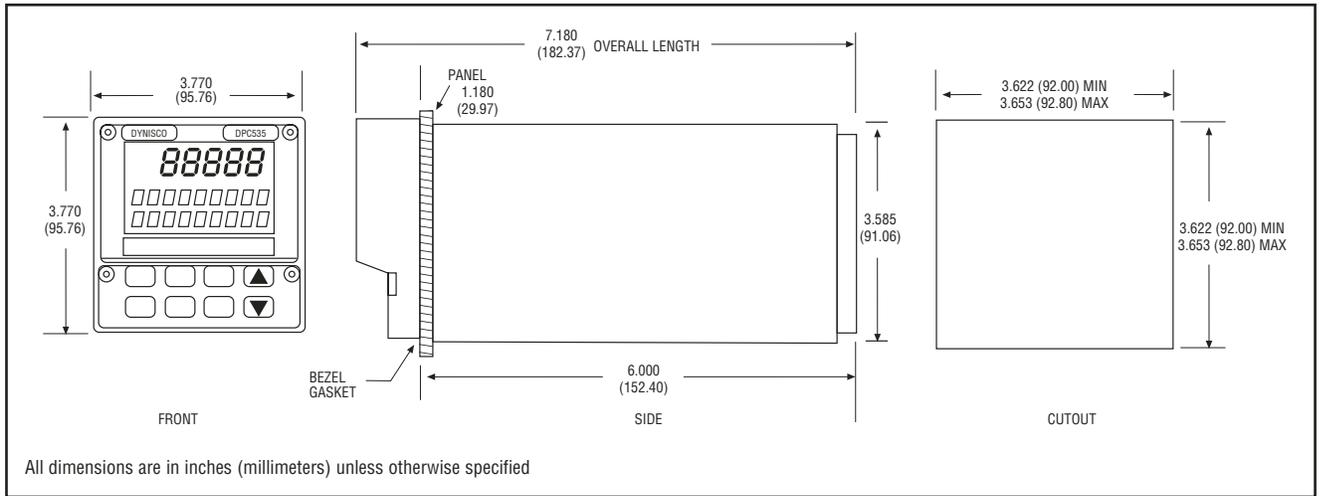
Humidity: 10 to 90% recondensing

Serial Communications (optional)

Serial interface: RS-485

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Ordering Guide

Model	Control Output		2nd Output		3rd Output		4th Output		Input Type		Power
	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	
DPC535	1	Relay	1	Relay	1	Relay	2	Analog mA 0-20, 4-20 selectable	K	350 Ohm SG transducer	90 to 250 Vac
							5	Loop power supply 24 Vdc			

Ordering Example: DPC535 - 1 - 1 - 1 - 2K

- Differential pressure controller with 350 Ohm strain gage input, mechanical relay control output, two additional relay outputs and analog mA output operating from 90 to 250 Vac, 48 to 62 Hz

Ordering Example: DPC535 - 1 - 1 - 1 - 5

- Differential pressure controller utilizing amplified transducer input, mechanical relay control output, two additional relay outputs, 24 loop power supply operating from 90 to 250 Vac, 48 to 62 Hz

Plug-in Modules (available separately)

Model	Description
DPC535-600	Mechanical relay 5A @120/240 Vac; 0.5A @ 24 Vac (output 4 only)
DPC535-601	Analog, mA
DPC535-602	Triac, 1A @ 120/240 Vac; 0.5A @ 24 Vac (output 4 only)
DPC535-603	SSR drive, "ON" voltage 1.7 Vdc; "OFF" voltage less than 0.5 Vdc
DPC535-604	Loop powered supply 24 Vdc (nominal) 40 mA
DPC535-705	RS-485

Delivery

Please call for specific delivery information.