

# Model GC55 Wet/Wet Differential Pressure Transducer



Two sensor DP design means three measurement variables in one device. Output, display and switch settings can be set in nearly ANY independent configuaration to monitor, high pressure port (P1), low pressure (P2), differential (P1-P2).

### FEATURES

- Robust aluminum die cast housing
- Bright LED display of pressure and switch status
- All stainless steel wetted parts
- 4-20mA or 1-5Vdc outputs
- Internal "Push-Button" configurability allows quick user pressure range changes or relay adjustments
- External "Push-Button" allows user to display P1, P2 or DP without opening cover
- Two sensor design well suited for high DP ranges

#### **APPLICATIONS**

The GC55 utilizes two polysilicon thin film sensors to achieve a wet-wet, high differential, pressure measurement. Fully welded assembly of all stainless steel with high overpressure capability makes the GC55 ideal for fluid pump systems in applications such as:

• Level measurement in large size and/or pressurized tanks

• Pump monitoring of building hydronic heating and cooling systems



 Filter monitoring in water purification or hydraulic systems



### PERFORMANCE SPECIFICATIONS

Analog Output (4-20mA or 1-5Vdc): Accuracy: ± 0.5% FS (Accuracy includes the effects of Linearity, Hysteresis and Repeatability) Response Time: 20msec Output Resolution: 0.2% FS

### **Pressure Switch Output:**

Type: TTL/CMOS up to 40Vdc/200mA Setting Accuacy: ± 1.0% FS Number of Contacts: 2 Response Time: 20msec – 2.0 sec (by user) Hysteresis: Variable (by user)

#### Display:

Type: 3½ digit, 10mm LED Accuracy: ± 1.0% FS (URL) + last digit

## Standard Ranges (Differential):

/5psi	050	
100psi	250psi	
150psi	300psi	
ENVIRONMENTAL SPECIFICATIONS Temperature Limits:		
Storage: -20 to 60°C (-4 to 140°F)		
Operating: -10 to 50°C (14 to 122°F)		
Compensated: $-10$ to $50$ °C (14 to $122$ °F)		
Temperature Effects:		
		m 23°C reference
temperature		
FUNCTIONAL SPECIFICATIONS		
Static (Line) Pres	sure:	
Pressure Range	Proof	Burst
All	2X FS (URL)	10X FS (URL)
Static (Line) Pressure Effects: None		
Single Side (Differential) Limits:		
Pressure Range	Proof	Burst
All	2X FS (URL)	10X FS (URL)
ELECTRICAL SPECIFICATIONS		
Transducer	Supply	Supply
Output Signal	Voltage	<u>Current</u>
Output Signal 4-20mA (3 wire)	Voltage 15-27 Vdc	Current 80mA
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire)	<u>Voltage</u> 15-27 Vdc 11-27 Vdc	<u>Current</u> 80mA 60mA
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts:	<u>Voltage</u> 15-27 Vdc 11-27 Vdc	Current 80mA 60mA lay outputs; Load
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max) Rangeablility / Ac	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re , 40Vdc; ; Hystere Ijustment*:	Current 80mA 60mA lay outputs; Load
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max). Rangeablility / Ac Zero -105%	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re , 40Vdc; ; Hystere Ijustment*: to +105% FS	Current 80mA 60mA lay outputs; Load
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeablility / Ac Zero -105% Span -105%	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re , 40Vdc; ; Hystere <b>Jjustment*:</b> to +105% FS to +105% FS	<u>Current</u> 80mA 60mA lay outputs; Load sis (variable)
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max). Rangeablility / Ac Zero -105% Span -105% *Note: Accuracy b	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re , 40Vdc; ; Hystere djustment*: to +105% FS to +105% FS based upon full sc	Current 80mA 60mA lay outputs; Load sis (variable) sale (URL) value
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeablility / Ac Zero -105% Span -105% *Note: Accuracy b MECHANICAL	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re, 40Vdc; ; Hystere tjustment*: to +105% FS to +105% FS based upon full sc SPECIFICATIO	Current 80mA 60mA lay outputs; Load sis (variable) ale (URL) value NS
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeability / Ac Zero -105% Span -105% *Note: Accuracy to MECHANICAL Pressure Connect	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re, 40Vdc; ; Hystere tjustment*: to +105% FS to +105% FS based upon full sc SPECIFICATIO tion: % Female NP	Current 80mA 60mA lay outputs; Load sis (variable) ale (URL) value NS
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeablility / Ac Zero -105% Span -105% *Note: Accuracy to MECHANICAL Pressure Connect Enclosure: Alumin	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re, 40Vdc; ; Hystere tjustment*: to +105% FS to +105% FS based upon full sc SPECIFICATIO tion: % Female NP	Current 80mA 60mA lay outputs; Load sis (variable) ale (URL) value NS
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeablility / Ac Zero -105% Span -105% *Note: Accuracy to MECHANICAL Pressure Connect Enclosure: Alumir Rating: IP64	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re, 40Vdc; ; Hystere tjustment*: to +105% FS to +105% FS based upon full sc SPECIFICATIO tion: % Female NP	Current 80mA 60mA lay outputs; Load sis (variable) ale (URL) value NS
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeablility / Ac Zero -105% *Note: Accuracy to MECHANICAL Pressure Connect Enclosure: Alumir Rating: IP64 Electrical Connect	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re, 40Vdc; ; Hystere tjustment*: to +105% FS to +105% FS based upon full so SPECIFICATIO tion: % Female NP hum	Current 80mA 60mA lay outputs; Load sis (variable) ale (URL) value NS
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeablility / Ac Zero -105% Span -105% *Note: Accuracy b MECHANICAL Pressure Connect Enclosure: Alumir Rating: IP64 Electrical Connec - ½ Female NF	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re, 40Vdc; ; Hystere <b>ijustment*:</b> to +105% FS to +105% FS based upon full sc <b>SPECIFICATIO</b> tion: % Female NP hum	Current 80mA 60mA lay outputs; Load sis (variable) cale (URL) value <b>NS</b> PT (2)
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeablility / Ac Zero -105% \$pan -105% *Note: Accuracy to MECHANICAL Pressure Connect Enclosure: Alumir Rating: IP64 Electrical Connec - ½ Female NF - Cable Gland	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re, 40Vdc; ; Hystere tjustment*: to +105% FS to +105% FS based upon full so SPECIFICATIO tion: % Female NP hum tion: 2T Conduit (cable diameters	Current 80mA 60mA lay outputs; Load sis (variable) cale (URL) value <b>NS</b> PT (2)
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeablility / Ac Zero -105% Span -105% *Note: Accuracy b MECHANICAL Pressure Connect Enclosure: Alumir Rating: IP64 Electrical Connec - ½ Female NF - Cable Gland Weight: Approx. 1	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re, 40Vdc; ; Hystere <b>ijustment*:</b> to +105% FS to +105% FS based upon full sc <b>SPECIFICATIO</b> tion: % Female NP num tion: PT Conduit (cable diameters 0.0 lb	Current 80mA 60mA lay outputs; Load sis (variable) cale (URL) value NS PT (2) 0.16″ to 0.31″)
Output Signal 4-20mA (3 wire) 1-5Vdc (3 wire) Switch Contacts: 200mA (max), Rangeablility / Ac Zero -105% \$pan -105% *Note: Accuracy to MECHANICAL Pressure Connect Enclosure: Alumir Rating: IP64 Electrical Connec - ½ Female NF - Cable Gland	Voltage 15-27 Vdc 11-27 Vdc (2) Photo MOS re, 40Vdc; ; Hystere <b>ijustment*:</b> to +105% FS to +105% FS based upon full sc <b>SPECIFICATIO</b> tion: % Female NP num tion: PT Conduit (cable diameters 0.0 lb mm mounting ho	Current 80mA 60mA lay outputs; Load sis (variable) cale (URL) value NS PT (2) 0.16″ to 0.31″)

Media: Fluids and gases compatible with 304SS (sensor housing) and 17-4 pH SS (sensor diaphragm)

#### ISO 9001 REGISTERED FIRM



# Model GC55 Wet/Wet Differential **Pressure Transducer**





**ISO 9001** REGISTERED FIRM

Configuration (GC55)

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