

Model GC52 Rangeable Wet/Wet Differential Pressure Transmitter



FEATURES:

- Up to 8 times smaller than a conventional process transmitter
- Robust NEMA 4X (IP65) aluminum die cast housing
- Bright backlit LCD display
- All stainless steel wetted parts
- 2 wire 4-20 mA
- Internal "Push Button" configurability allows quick range changes
- Scaling function allows display to indicate arbitrary physical units
- Easily rotatable display, 90° increments

APPLICATIONS:

The GC52 utilizes Ashcrofts' proven Si-Glas™ silicon variable capacitance sensor technology in a wet-wet package ideal for applications where reliable, low differential pressure measurement is required with line (static) pressure to 300 psi.

Applications include:

- Pressurized & non-pressurized tank levels
- Flow (liquid/gas) measurement

PERFORMANCE SPECIFICATIONS

Reference condition: 23 °C ±2 °C

Accuracy: ±0,5 % FS (URL)

(Accuracy includes the effects of linearity, hysteresis and repeatability)

Stability: ≤ ±0,25 % F.S. / year

Response Time: ≤ 100 ms

Output Resolution: 0,1 % F.S. (URL)

Standard-Ranges (Bidirectional):
±4, ±8, ±20, ±40, ±80, ±200 in. H₂O

Standard-Ranges (Unidirectional):
0 ... 4, 8, 20, 40, 80, 200, 400 in. H₂O

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:

Operating: -10 ... 60 °C

Storage: -15 ... 65 °C

Compensated: -10 ... 60 °C

Temperature Effects:

±0,03 % / 1 K within -10 ... 60 °C (Ref. 23 °C)

FUNCTIONAL SPECIFICATIONS

Static (line) Pressure:

Pressure Range	Proof	Burst
All	20 bar	70 bar

Static (line) Pressure Effects:

Pressure Range	Effect
≥ 20, ≥ ±8 in. H ₂ O	≤ ±0,3% F.S. / 7 bar
8, ±4 in. H ₂ O	≤ ±0,7% F.S. / 7 bar
4 in. H ₂ O	≤ ±1,5% F.S. / 7 bar

Single side (differential) limits:

Pressure range	Proof	Burst
≥ 20, ≥ ±8 inch H ₂ O	7 bar	9 bar
≤ 8, ±4 inch H ₂ O	2 bar	9 bar

Vibration: 5 g at 150 Hz

Shock: 10 g at 60 Hz

ELECTRICAL SPECIFICATIONS

Output Signal: 4 ... 20 mA, 2 wire

Supply Voltage: 12 ... 32 VDC

Rangeability/Adjustment*:

Zero -10 % ... 110 % F.S.

Span -10 % ... 110 % F.S.

* Note: Accuracy and output resolution based upon full scale (URL) value

Isolation Resistance: > 100 MΩ at 50 VDC

CE-Compliance:

EN 613261 1997, A1/1998, A2/2001

MECHANICAL SPECIFICATIONS

Process Connection: ¼ NPT female

Enclosure:

Aluminum, epoxy coated

Rating According to IEC 529: IP65/NEMA 4

Electrical Connection (External Options):

- ½ NPT female conduit

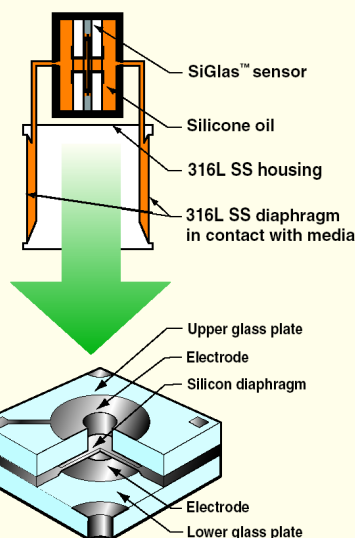
- Cable gland Ø 9 ... 12 mm

Weight: 0,67 kg

Mounting: Mounting bracket (see installation drawings on back)

Media: Fluids and gases compatible with stainless steel 316 (1.4404), Viton and Alumina ceramic

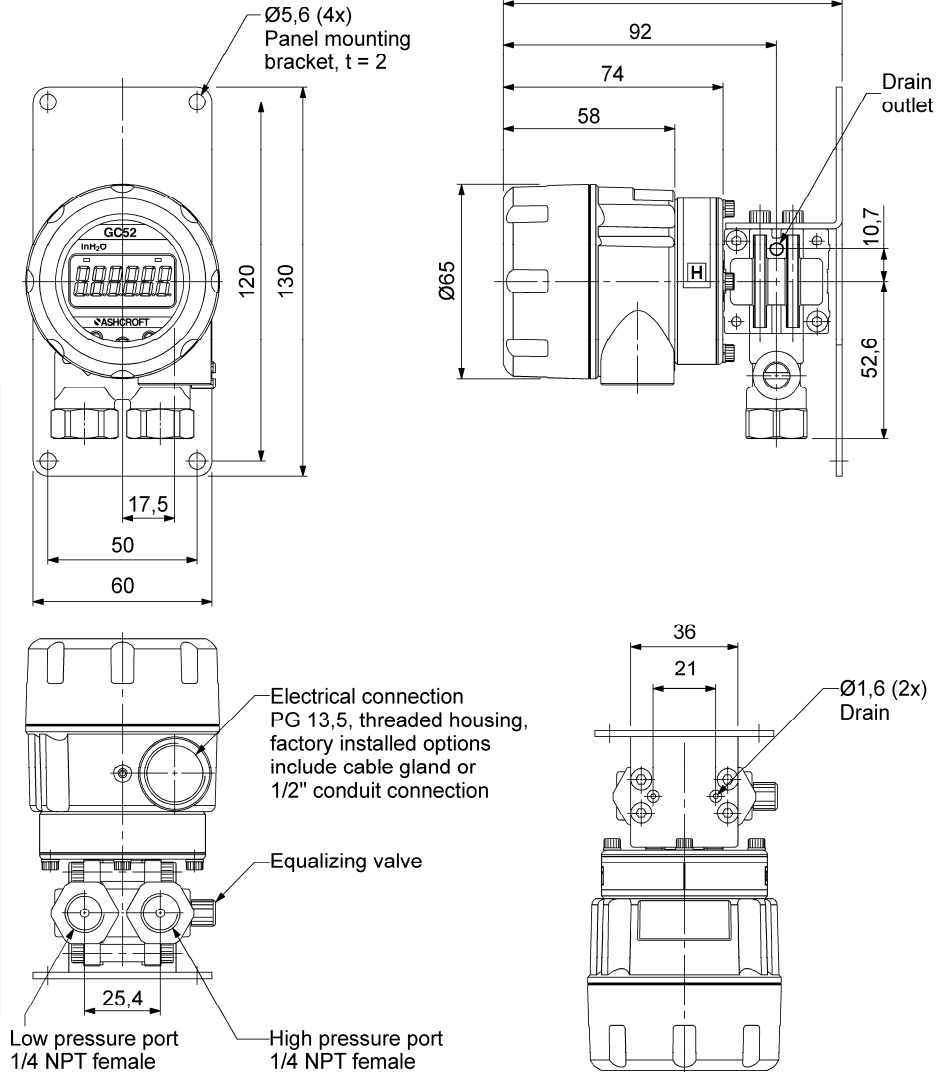
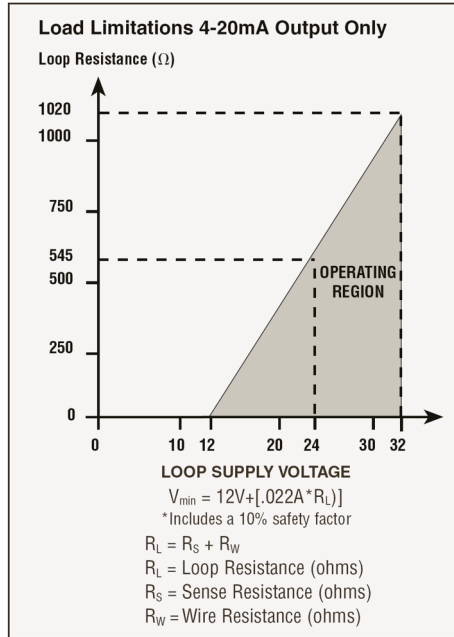
SENSOR ASSEMBLY CROSS SECTION



The silicon diaphragm sensor has no glues or other organics to contribute to drift or mechanical degradation over time while providing.

- High overpressure
- Inherent long term stability
- High sensitivity for low pressure sensing

General dimensions in mm



Rev. A

Order information

Type	Accuracy	Process connection	Output signal	Electrical connection	Range	Eng. unit	Options
GC52	(7) 0,5 %	(F02) 1/4 NPT female	(42) 4/20 mA	(CG) Cable gland (CD) 1/2" MNPT conduit	Bidirectional:	IWL in. H ₂ O	(NH) Tagging wired (RH) 9 point NIST traceable calibration certificate
					4 ±4 8 ±8 20 ±20 40 ±40 80 ±80 200 ±200		
					Unidirectional:	IW in. H ₂ O	
					4 4 8 8 20 20 40 40 80 80 200 200 400 400	mbar and others to be set by firmware	

Order example

Type	Accuracy	Process connection	Output signal	Electrical connection	Range	Engineering unit	Options
GC52	7	F02	42	CG	20	IW	NH

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