

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
- Flow measurement and totalization (square root extraction)
- Easily rotatable display, 90° increments

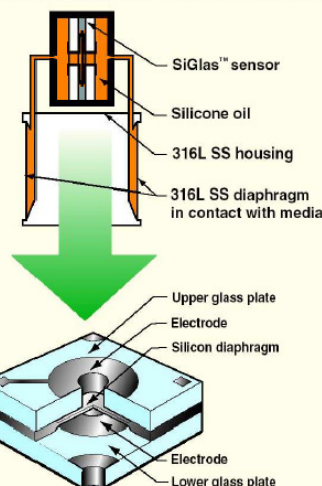
APPLICATIONS:

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

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

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	55 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):

- PG13,5 female thread

- ½ NPT female conduit

- Cable gland PG9

Weight: 0,67 kg

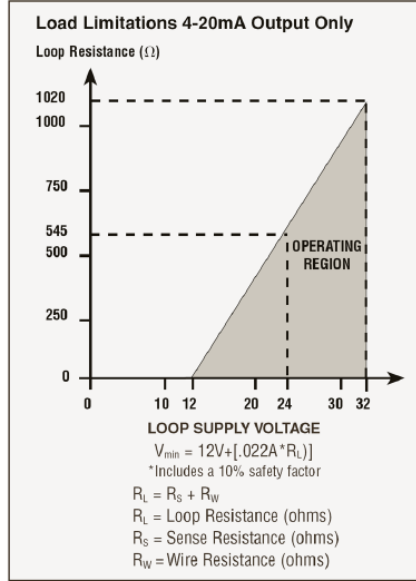
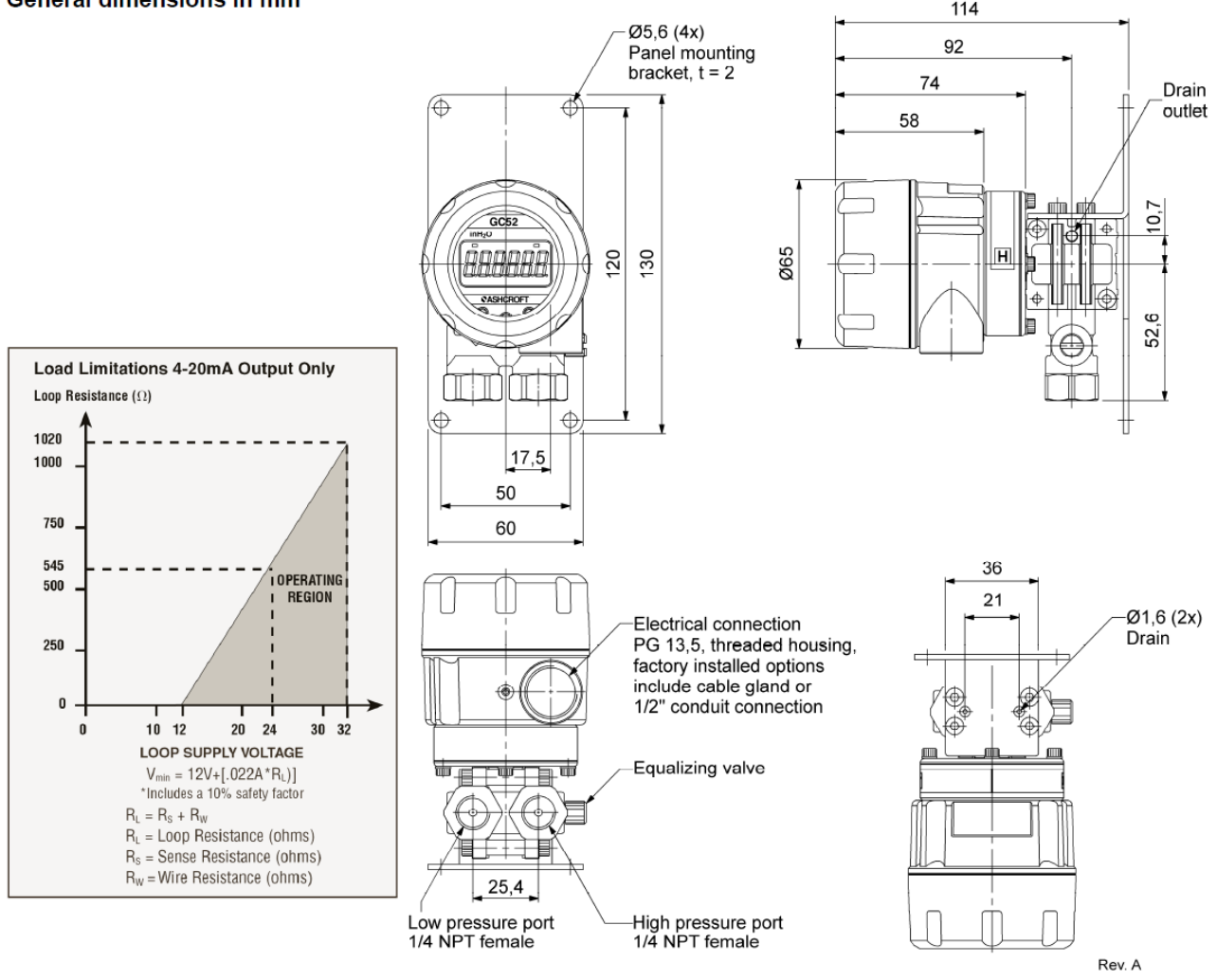
Mounting: Mounting bracket (see installation drawings on back)

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

All specifications are subject to change without notice.

G5.GC52/E Rev. A 31/08/2010

General dimensions in mm



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) PG13.5 female thread (CD) 1/2 MNPT conduit (PG9) Cable gland PG9	Bidirectional: 4 ±4 8 ±8 20 ±20 40 ±40 80 ±80 200 ±200	IWL in. H ₂ O	(NH) Tagging wired (RH) 9 point NIST traceable calibration certificate
					Unidirectional: 4 4 8 8 20 20 40 40 80 80 200 200 400 400	IW in. H ₂ O	mbar and others to be set by firm-ware

Order example

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