

## PG55-CG55 Pressure Transmitters Gold Series Process and Cleanline

### FEATURES

- All stainless steel design
- 0.1% accuracy of adjusted span
- Strong flush mounted diaphragm
- Active temperature compensation
- Optional HART® protocol with 4-20 mA / 2 wire output
- Digital local display with several options
- Easy local adjustments using 3 pushbuttons
- HART DTM available for Microsoft Windows® OS
- Wide selection of electrical & process connections
- IP66/68 Ingress rating
- Approval for use in hazardous area

### TYPICAL USES

- Food and beverage industry
- Pharma industry
- Pulp and paper
- Chemical and petrochemical plants



Gold series  
PG55-CG55



### PERFORMANCE SPECIFICATIONS

Reference Temperature:	21 °C ±2 °C (70 °F ±2 °F)
Accuracy:	± 0.1 % of adjusted span
Stability:	≤ ±0.05 % of span / year
Adjustable Pressure Span:	0.1 to 100 bar see table on page 5
Pressure Type:	Gauge, Absolute Vacuum and Compound on request

### ENVIRONMENTAL SPECIFICATIONS

Thermal Coefficients:	0.15% / 10 K
Temperature Limits:	Ambient: -20 °C to 70 °C (-4 °F to 158 °F) Storage: -20 °C to 70 °C (-4 °F to 158 °F) Media (PG55): -20 °C to 80 °C (-4 °F to 176 °F) Media (CG55): -20 °C to 100 °C (-4 °F to 212 °F)
Humidity:	0-100 % R.H. (non-condensing)

### SOFTWARE SPECIFICATIONS

Driver and Software:	Microsoft Windows® 7 or higher
Interfaces:	PACTware™
Response Time (Output):	800 ms
On-field Adjustment:	See table "On-field Adjustments" on page 2

### PHYSICAL SPECIFICATION

Pressure:	Max. Overpressure: See table 1 on page 2 Proof: 75% of Max. Overpressure
Process Connection Size:	Check coding table "Process Connection" on page 3/4
Weather Protection:	Ingress Protection IP66 (optimal IP68)
Shock and Vibration Effects:	4.0 - 13.2 Hz constant displacement-amplitude 1.0 mm 13.2 - 100.0 Hz constant acceleration - 0.7 g 1 Sweep up with 1 oct/min.



II 1 G Ex ia IIC T4 Ga  
II 2 D Ex ib IIC T100°C Db  
II 3 G Ex ec IIC T4 Gc

### KEY BENEFITS

- Intelligent transmitters with adjustable span and high accuracy
- Minimum temperature effect
- Several setting and adjustment options

### ELECTRICAL SPECIFICATIONS

Output:	4-20 mA (2-wire configuration)
Electrical Connection:	PG9 Cable gland for more see "Ordering Code" at page 4
Power Supply:	Standard: 12 - 36 Vdc 12 - 26.5 Vdc (ATEX) HART®: 17 - 36 Vdc min. 250 Ω 17 - 26.5 Vdc (ATEX) min. 250 Ω
Non Sparking Area: (Nominal values)	U = 12...26.5 Vdc I = 4...20 mA P = 0.28 W
Intrinsically safe: (max. values)	U <sub>max</sub> = 26.5 Vdc I <sub>max</sub> = 110 mA P <sub>max</sub> = 0.9 W (Linear source) L <sub>max</sub> = 1.4 mH C <sub>max</sub> = 63 nF

### WETTED COMPONENTS

Diaphragm:	Stainless steel 316L (1.4404) optional: St. st. 316L (1.4404) gold plated optional: Hastelloy C-276 (2.4819)
Flange:	Stainless steel 316L (1.4404) optional: Hastelloy C-276 (2.4819) inlay optional: St. st. 316L (1.4404) Tantalum coated inlay

### NON-WETTED COMPONENTS

Housing:	Stainless steel 304 (1.4401) optional: Stainless steel 316 (1.4404)
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### ON-FIELD ADJUSTMENTS WITH KEYPAD

- + Zero adjustment (4 mA)
- + Span adjustment (20 mA)
- + Cancel mounting position effect
- + Switch pressure units
- + Output current display
  - 4-20 mA
  - 20-4 mA (Reverse output)
- + Adjustable damping (0 to 25 sec)
- + Operational settings (protection, display, HART<sup>®</sup> versions)
- + Read out on display:
  - Current (4 - 20 mA)
  - Pressure unit (Conversion table)
  - Percentages
  - Temperature
- + Linearization:
  - Horizontal tank
  - Vertical tank (cone, spherical or truncated bottom)
  - Customer specific linearization
- + Burst mode settings
- + Data and information overview

### STANDARD PRESSURE RANGE

	RANGE	CODE	ADJUSTABLE SPAN RANGES	MAX. OVERPRESSURE
Process transmitter PG55	0 ... 0,4 bar	0P4BR	0 ... 0,1 bar to 0 ... 0,4 bar	6,4 bar
	0 ... 1,2 bar	1P2BR	0 ... 0,3 bar to 0 ... 1,2 bar	10,5 bar
	0 ... 10 bar	10BR	0 ... 1 bar to 0 ... 10 bar	30 bar
	0 ... 30 bar	30BR	0 ... 5 bar to 0 ... 30 bar	100 bar
	0 ... 100 bar	100BR	0 ... 20 bar to 0 ... 100 bar	200 bar
Cleanline transmitter CG55	0 ... 0,4 bar	0P4BR	0 ... 0,04 bar to 0 ... 0,4 bar	6,4 bar
	0 ... 1,2 bar	1P2BR	0 ... 0,1 bar to 0 ... 1,2 bar	10,5 bar
	0 ... 10 bar	10BR	0 ... 1 bar to 0 ... 10 bar	30 bar
	0 ... 30 bar	30BR	0 ... 5 bar to 0 ... 30 bar	100 bar
	0 ... 100 bar	100BR	0 ... 20 bar to 0 ... 100 bar	200 bar



## PG55-CG55 Pressure Transmitters Gold Series Process and Cleanline

ORDERING CODE		EXAMPLE:	CG55	010	20	150	RF	FG	FN	HA	10BR	XC3
<b>Model</b>												
PG55	Process pressure transmitter gold series											
CG55	Cleanline pressure transmitter gold series (sanitary)	CG55										
<b>Accuracy</b>												
010	0.1% of adjusted span			010								
<b>Connection size</b>												
		<b>Process series PG55</b>										
<b>Threaded</b>												
MG4F	G ½" (½" BSP) with flush diaphragm											
MG6F	G 1" (1" BSP) with flush diaphragm											
08F	1" NPT with flush diaphragm (available for 10, 30 and 100 bar ranges)											
<b>Weld-on Nipple</b>												
W33	Ø 33 mm connection nipple											
<b>Manufacturer compatibility</b>												
X2	M44x1,25 threaded lock ring (matches the 1-½" PMC and Rosemount)											
X10	Valcom process connection, ET 13											
X12	Satron / Valmet PASVE 1" BSP connection											
X37	Valcom process connection, ET 15											
		<b>Cleanline series CG55</b>										
<b>Threaded</b>												
85	G 1-½" with flush diaphragm											
71	G 2" with flush diaphragm											
67	1-½" NPT with flush diaphragm											
IC20	2" IDF coupling nut											
SU85	SMS-Union 1-½"											
SU71	SMS-Union 2"											
<b>Milk coupling</b>												
MD25	Milk coupling DN25 (DIN 11851) (available for 10, 30 and 100 bar ranges)											
MD40	Milk coupling DN40 (DIN 11851)											
MD50	Milk coupling DN50 (DIN 11851)											
<b>Tri-Clamp</b>												
S15	1-½" Tri-Clamp (DIN 32676) (available for 0,4 bar with min. span of 0,1 bar and 1,2 bar with min. span of 0,3 bar)											
S20	2" Tri-Clamp (DIN 32676)											
S30	3" Tri-Clamp (DIN 32676)											
<b>Weld-on Nipple</b>												
W62	Ø62 mm connection hygienic nipple											
W85	Ø85 mm connection hygienic nipple											
<b>Flange according ASME B16.5 or EN1092-1</b>												
10	Flange size 1" (ASME)											
15	Flange size 1-½" (ASME)											
20	Flange size 2" (ASME)				20							
30	Flange size 3" (ASME)											
DN25	Flange size DN25 (EN)											
DN40	Flange size DN40 (EN)											
DN50	Flange size DN50 (EN)											
DN80	Flange size DN80 (EN)											

continued at page 4



## PG55-CG55 Pressure Transmitters Gold Series Process and Cleanline

ORDERING CODE	EXAMPLE:	CG55	010	20	150	RF	FG	FN	HA	10BR	XC3
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**Connection size**
**Cleanline series CG55**
**Manufacturer compatibility**

X1	Universal adapter E+H flush
X4	Varivent (baseplate from GEA, Tuchenhagen DN50 up to DN125)
X6	APV baseplate
X7	DRD flange
X13	VEGA "LA" DN40
X25	Anderson

**Flange Pressure Rating**

150	Flange rating 150 lbs (ASME)	150
300	Flange rating 300 lbs (ASME)	
600	Flange rating 600 lbs (ASME)	
900	Flange rating 900 lbs (ASME)	
PN10	Flange rating PN 10 (EN)	
PN16	Flange rating PN 16 (EN)	
PN25	Flange rating PN 25 (EN)	
PN40	Flange rating PN 40 (EN)	

**Flange**

RF	Raised face (ASME)	RF
B1	Raised face form B (EN)	

**Flange-Instrument Connection**

FT	Threaded	
FG	Welded	FG

**Diaphragm Size**

FN	Standard diaphragm diameter Ø 35 mm	FN
FE	Increased diaphragm diameter Ø 76,1 mm	

**Output Signal**

42	4 - 20 mA	
HA	4 - 20 mA with HART <sup>®</sup> protocol (only available for non-ATEX executions)	HA

**Pressure Ranges - Coding example only, see standard ranges on page 2**

10BR	10 bar	10BR
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**Options (If choosing an option(s) must include a "X")**
**Pressure Type**

G	Gauge pressure (standard)
A	Sensor connected to reference chamber for absolute pressure
V	Compound or vacuum ranges

**High Temperatur**

HT	High temperature execution with integrated cooling tower (only for CG55; with ATEX max. 100°C)
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**Wetted Parts**

S	Diaphragm in Stainless steel 316L (1.4404) (standard)
H	Diaphragm in Hastelloy <sup>®</sup> C-276 (2.4819)
H1	Wetted parts (diaphragm and flange) in Hastelloy <sup>®</sup> C-276 (2.4819)
U	Wetted parts (diaphragm and flange) with Tantalum coating
W	Diaphragm in Stainless steel 316L (1.4404) and with Gold coating

continued at page 5



## PG55-CG55 Pressure Transmitters Gold Series Process and Cleanline

**ORDERING CODE**      **EXAMPLE:**    CG55   010   20   150   RF   FG   FN   HA   10BR   XC3

Options (If choosing an option(s) must include a "X")

X\_

**Reducing Nipple**
**Process series PG55**

RN1	G ¼" BSP Male
RN2	G ¼" BSP Female and G ½" BSP Male
RN3	G ½" BSP Male
RN4	G ½" BSP Female
RN5	G ½" BSP Male gauge connection DIN 16288
RN6	G ¾" BSP Male
RN7	¼" NPT Male
RN8	½" NPT Male
RN9	½" NPT Female
RN10	½" NPT Male and ¼" NPT Female
RN11	¾" NPT Male
RN12	M20x1,5

**Process series CG55**

RN13	½" BSP Male
RN14	1" BSP Male
RN15	½" NPT Male
RN16	½" NPT Female
RNO	Others

**Case**

YW	Enclosure stainless steel 316L (1.4404)
IP68	Ingress protection IP68

**Ventilation cable length**

0,5 ... 100 Ventilation cable length in 0,5 m steps

**Digital Indicator**

	Blind cover (same material as enclosure; standard)
DG	Transparent polycarbonate cover (only available for non-ATEX and ATEX execution EX1)

**Remote Sensor**

RE	Remote Sensor connected with cable to enclosure and separated electronics
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**Remote Sensor cable length**

3 ... 100 Remote cable length in 0,5 m steps

**Electrical Connection**

	PG9 cable gland (standard)
EW	M12, 4-pin in stainless steel 316 (1.4401)
HM	Hirschmann connector plug (only available for non-ATEX executions)
JL	½ NPT Female conduit
JM	M20x1,5 Female
KV2	PG 11 cable gland
KV3	PG 13,5 cable gland

**Agency Approval**

EX1	ATEX: II 1 G Ex ia IIC T4 Ga and IECEx: Ex ia IIC T4 Ga
EX2	ATEX: II 2 D Ex ib IIIC T100°C Db and IECEx: Ex ib IIIC T100°C Db
EX3	ATEX: II 3 G Ex ec IIC T4 Gc and IECEx: Ex ec IIC T4 Gc

**Mounting**

FW	Wall mounting bracket, material 304 (1.4301)
FW1	Wall mounting bracket, material 316L (1.4404)
TM	2" pipe mounting bracket, material 304 (1.4301)
TM1	2" pipe mounting bracket, material 316L (1.4404)

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**PG55-CG55 Pressure Transmitters Gold Series  
Process and Cleanline**

**GOLD SERIES - PROCESS  
DIMENSIONS IN MM [INCH]**

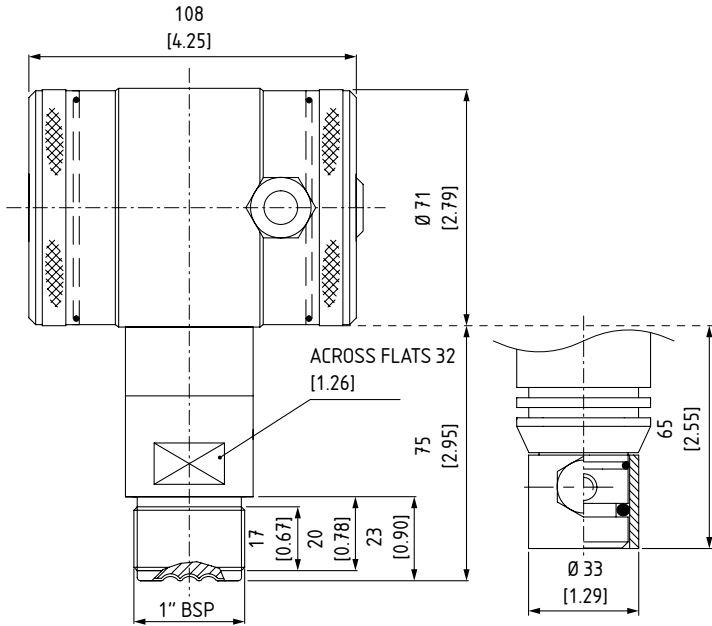
For reference only, consult Ashcroft for specific dimensional drawings

**THREADED**

Code: MG6F  
G 1" with flush diaphragm

**WELD-ON NIPPLE**

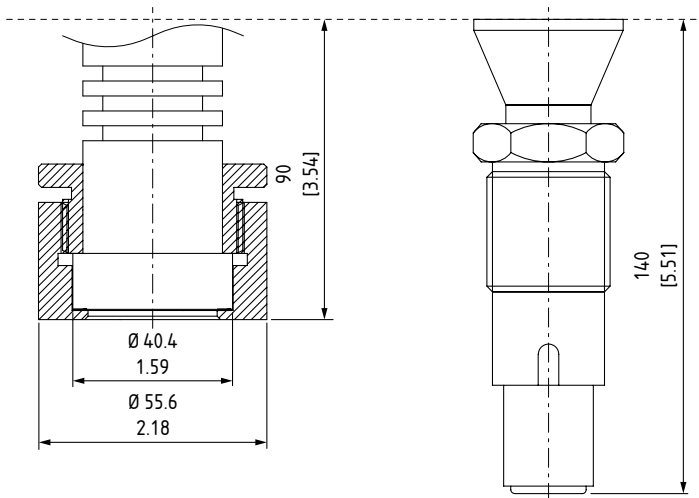
Code: W33  
Ø 33 mm connection nipple



**MANUFACTURER COMPATIBILITY**

Code: X2 (left)  
M44x1.25 threaded lock ring  
(1-1/2" PMC and Rosemount)

Code: X12 (right)  
PASVE 1" BSP  
(Satron/Valmet)



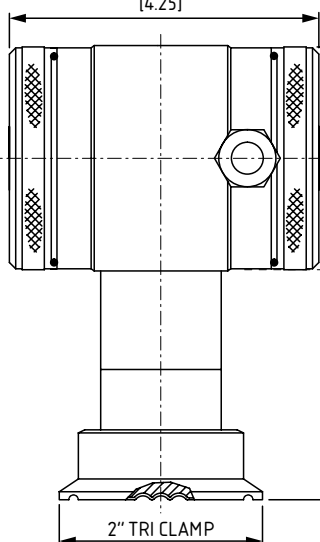
# PG55-CG55 Pressure Transmitters Gold Series

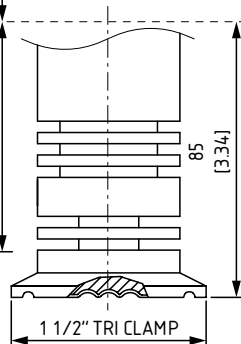
## Process and Cleanline

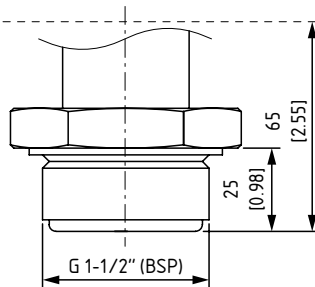
**GOLD SERIES - CLEANLINE DIMENSIONS IN MM [INCH]**

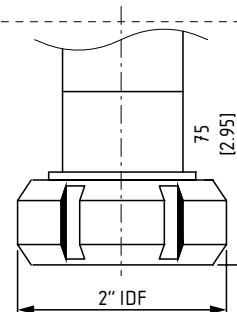
For reference only, consult Ashcroft for specific dimensional drawings

**TRI-CLAMP**

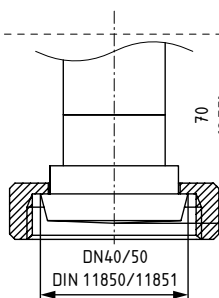
 Code: S20  
 Tri-Clamp 2"  
 108  
 [4.25]

**TRI-CLAMP**

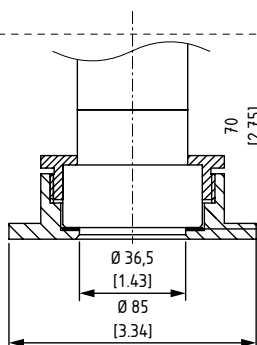
 Code: S15  
 Tri-Clamp 1-1/2"

**FLUSH DIAPHRAGM**

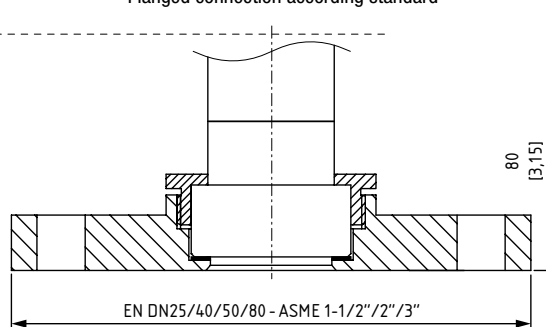
 Code: 85  
 G 1-1/2" threaded with flush diaphragm

**IDF**

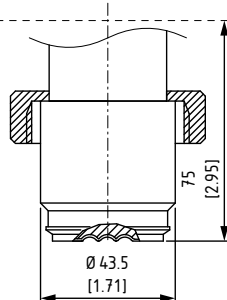
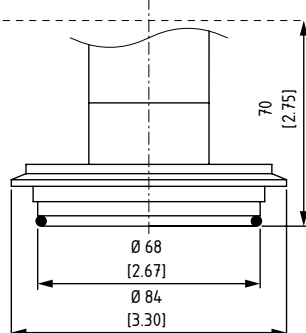
 Code: IC20  
 2" IDF coupling nut

**MILK-COUPLING**

Code: MD25, MD40 or MD50


**WELD-ON NIPPLE**

 Code: W85  
 Ø 85 Hygenic nipple connection

**FLANGED**

 Code for EN 1092-1: DN25, DN40, DN50 or DN80  
 Code for ASME B16.5: 15, 20 or 30  
 Flanged connection according standard

**MANUFACTURER COMPATIBILITY**

 Code: X1  
 Universal flush diaphragm (Endress & Hauser)

 Code: X4  
 GEA Tuchenhagen Varivent® DN50 (up to DN125)

 Code: X13  
 VEGA "LA" DN40
