

Data Sheet

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 Check table "Standard pressure range" on page 2
Pressure Type:	Gauge, Absolute Vacuum and Compound on request

ENVIRONMENTAL SPECIFICATIONS

Thermal Coefficients:	0.15% / 10 K $((T_{amb} - T_{ref})/10) * 0.15\%$ 0.3% / 10 K for $T_{amb} < 0 °C$
Temperature Limits:	Check table "Temperature Limits" on page 2
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:	Check 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.

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 _{max} = 26.5 Vdc I _{max} = 110 mA P _{max} = 0.9 W (Linear source) L _{max} = 1.4 mH C _{max} = 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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II 1 G Ex ia IIC T4 Ga
II 2 D Ex ib IIIC T100°C Db
II 3 G Ex ec IIC T4 Gc

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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® 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

TEMPERATURE LIMITS

Ambient/Storage: -20 °C to 70 °C (-4 °F to 158 °F)

Process: -20 °C to 80 °C (-4 °F to 176 °F)
optional up to 100 °C (210 °F)

Active Temp. compensation on process side:

PG55
 Standard: 0 °C to 80 °C (30 °F to 180 °F)
 optional up to 100 °C (210 °F)
 Low Temp option: -20 °C to +70 °C (-4 °F to 160 °F)

CG55
 Standard: 0 °C to 100 °C (30 °F to 210 °F)
 Low Temp option: -20 °C to +70 °C (-4 °F to 160 °F)
 High Temp option: 100 °C to 200 °C (210 °F to 390 °F)
 Ultra-High Temp option: 150 °C to 280 °C (300 °F to 540 °F)

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	FN	HA	KV1	G	10BR	S	XC3
Model														
PG55	Process pressure transmitter gold series													
CG55	Cleanline pressure transmitter gold series (sanitary)		CG55											
Accuracy														
010	0.1% of adjusted span			010										
Connection size														
		Process series PG55												
		Threaded; see category "Reducing Nipple" for more connection options												
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)													
		Weld-on Nipple												
W33	Ø 33 mm connection nipple													
		Manufacturer compatibility												
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													
		Cleanline series CG55												
		Threaded; see category "Reducing Nipple" for more connection options												
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"													
		Milk coupling												
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)													
		Tri-Clamp												
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)													
		Weld-on Nipple												
W62	Ø62 mm connection hygienic nipple													
W85	Ø85 mm connection hygienic nipple													
		Flange according ASME B16.5 or EN1092-1												
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)													

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ORDERING CODE		EXAMPLE:	CG55	010	20	150	RF	FN	HA	KV1	G	10BR	S	XC3
Connection size														
Cleanline series CG55														
Manufacturer compatibility														
X1	Universal adapter E+H flush													
X4	Varivent (baseplate from GEA, Tuchenhausen 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)													
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® protocol (only available for non-ATEX executions)	HA												
Electrical Connection														
KV1	PG9 cable gland (standard)	KV1												
KV2	PG 11 cable gland													
KV3	PG 13,5 cable gland													
EW	M12, 4-pin in stainless steel 316 (1.4401)													
HM	Hirschmann connector plug (only available for non-ATEX executions)													
JL	1/2 NPT Female conduit													
JM	M20x1,5 Female													
Pressure Type														
G	Gauge pressure (standard)	G												
A	Sensor connected to reference chamber for absolute pressure													
V	Compound or vacuum ranges													
Pressure Ranges - Coding example only, see standard ranges on page 2														
10BR	10 bar	10BR												
Wetted Parts														
S	Diaphragm in Stainless steel 316L (1.4404) (standard)	S												
H	Diaphragm in Hastelloy® C-276 (2.4819)													
H1	Wetted parts (diaphragm and flange) in Hastelloy® 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													

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PG55-CG55 Pressure Transmitters Gold Series Process and Cleanline

ORDERING CODE **EXAMPLE:** CG55 010 20 150 RF FN HA KV1 G 10BR S XC3

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

X__

Temperatur Option

HT	High temperature execution with integrated cooling tower (Temperature range: 100 - 200 °C) (CG55 only; ATEX (Ex) max. 100 °C)
UT	Ultra High temperature execution with integrated cooling tower (Temperature range: 150 - 280 °C) (CG55 only; not available for ATEX)
LT	Low temperature execution (Temperature range: < 0 °C)

Reducing Nipple
Process series PG55

RN1	G 1/4" BSP Male
RN2	G 1/4" BSP Female and G 1/2" BSP Male
RN3	G 1/2" BSP Male
RN4	G 1/2" BSP Female
RN5	G 1/2" BSP Male gauge connection DIN 16288
RN6	G 3/4" BSP Male
RN7	1/4" NPT Male
RN8	1/2" NPT Male
RN9	1/2" NPT Female
RN10	1/2" NPT Male and 1/4" NPT Female
RN11	3/4" NPT Male
RN12	M20x1,5

Process series CG55

RN13	1/2" BSP Male
RN14	1" BSP Male
RN15	1/2" NPT Male
RN16	1/2" NPT Female
RNO	Others

Case

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

Electrical Cable

	without cable (standard)
EC	with electrical cable

Electrical Cable Length

0,5 ... 100 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

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

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ORDERING CODE	EXAMPLE:	CG55	010	20	150	RF	FN	HA	KV1	G	10BR	S	XC3
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Options (If choosing an option(s) must include a "X")

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)

Cleaning

6B	Cleaned for gaseous Oxygen or other strong oxidizing agents
YF	Cleaned silicone free

Marking/Tagging

NH	Stainless steel tag, wired to case
NH1	Extra large stainless steel tag, wired to case
NN	Paper tag, bonded to enclosure

Testing/Certificates

CD2	Material test report according to EN 10204 / 2.2
C3	Material report according to EN 10204 / 3.1
C4	Individual calibration chart
CL	Calibration according customer requirements

X__

C3



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GOLD SERIES - PROCESS DIMENSIONS IN MM [INCH]

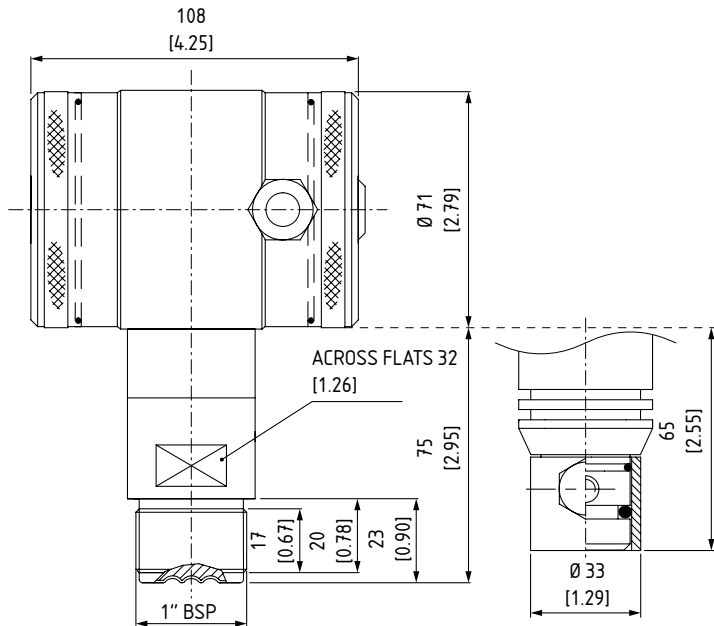
For reference only, consult Ashcroft for specific dimensional drawings

THREADED

Code: MG6F
G 1" with flush diaphragm

WELD-ON NIPPLE

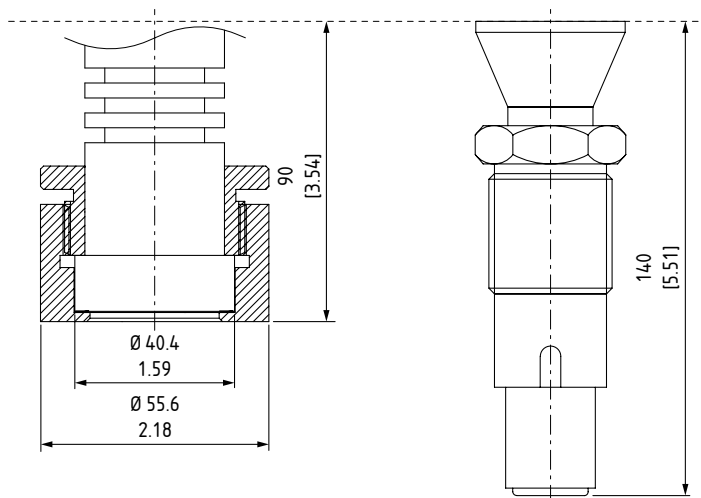
Code: W33
Ø 33 mm connection nipple



MANUFACTURER COMPATIBILITY

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

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



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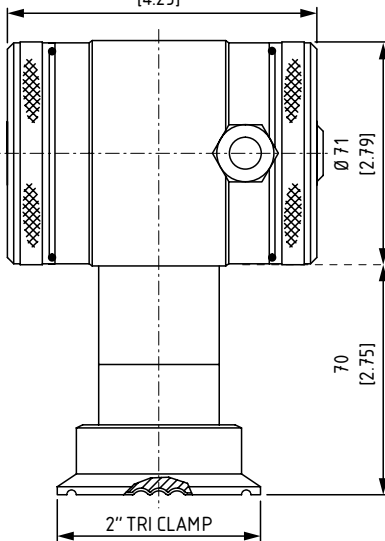
GOLD SERIES - CLEANLINE DIMENSIONS IN MM [INCH]

For reference only, consult Ashcroft for specific dimensional drawings

TRI-CLAMP

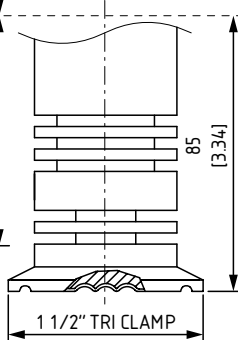
Code: S20
Tri-Clamp 2"

108
[4.25]



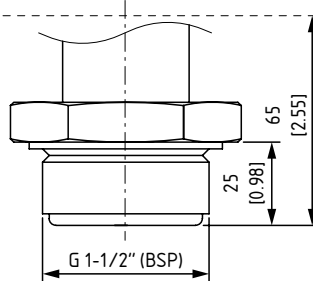
TRI-CLAMP

Code: S15
Tri-Clamp 1-1/2" with
cooling tower



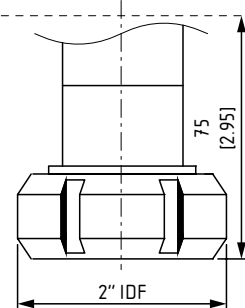
FLUSH DIAPHRAGM

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



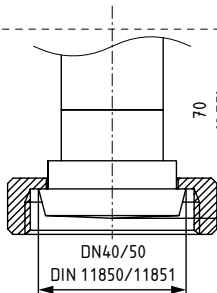
IDF

Code: IC20
2" IDF coupling nut



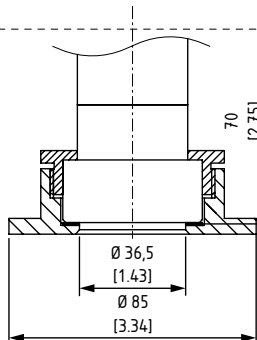
MILK-COUPLING

Code: MD25, MD40 or
MD50



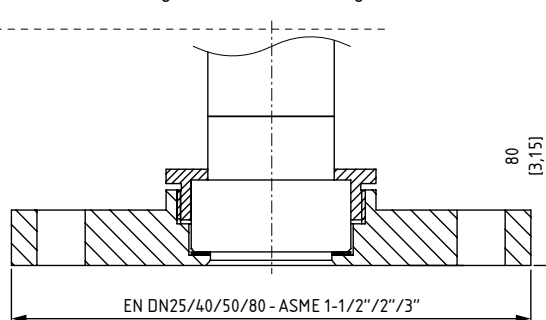
WELD-ON NIPPLE

Code: W85
Ø 85 Hygenic nipple connection



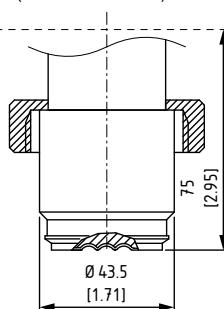
FLANGED

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

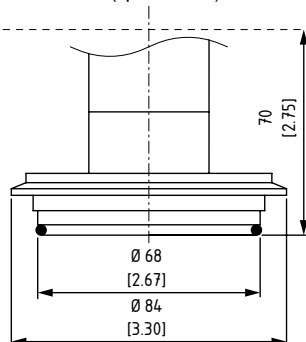


MANUFACTURER COMPATIBILITY

Code: X1
Universal flush diaphragm
(Endress & Hauser)



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



Code: X13
VEGA "LA" DN40

