

PS55-CS55 Pressure Transmitters Silver Series Process and Cleanline

FEATURES

- All stainless steel design
- 0,2 % accuracy of adjusted span (opt. 0,1 %)
- 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

TYPICAL USES

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



Silver series
PS55-CS55



PERFORMANCE SPECIFICATIONS

Reference Temperature:	21 °C ±2 °C (70 °F ±2 °F)
Accuracy:	± 0.2 % of adjusted span optional: 0.1 %
Stability:	≤ ±0.08 % of span / year
Adjustable Pressure	0.04 to 80 bar
Span:	see table on page 2
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 (PS55)	-20 °C to 80 °C (-4 °F to 176 °F)
	Media (CS55)	-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):	700 ms

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 (optional 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 5	
Power Supply:	Standard:	12 - 36 Vdc
	HART®:	17 - 36 Vdc min. 250 Ω

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 316L (1.4404)
----------	---

PS55-CS55 Pressure Transmitters Silver Series Process and Cleanline

ON-FIELD ADJUSTMENTS

- + 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
- + Burst mode settings
- + Data and information overview

STANDARD PRESSURE RANGE

RANGE	CODE	ADJUSTABLE SPAN RANGES	MAX. OVERPRESSURE	NOTE
0 ... 0.1 bar	0P1BR	0 ... 40 mbar to 0 ... 100 mbar	3 bar	not available for PS55
0 ... 0.4 bar	0P4BR	0 ... 0.1 bar to 0 ... 0.4 bar	6.4 bar	
0 ... 1.6 bar	1P6BR	0 ... 0.4 bar to 0 ... 1.6 bar	10.5 bar	
0 ... 4 bar	4BR	0 ... 1 bar to 0 ... 4 bar	16 bar	
0 ... 10 bar	10BR	0 ... 2 bar to 0 ... 10 bar	30 bar	
0 ... 24 bar	24BR	0 ... 6 bar to 0 ... 24 bar	100 bar	
0 ... 100 bar	100BR	0 ... 20 bar to 0 ... 100 bar	200 bar	



PS55-CS55 Pressure Transmitters Silver Series Process and Cleanline

ORDERING CODE		EXAMPLE:	CS55	010	20	150	RF	FG	FN	HA	10BR	XC3
Model												
PS55	Process pressure transmitter silver series											
CS55	Cleanline pressure transmitter silver series (sanitary)	CS55										
Accuracy												
010	0,1% of adjusted span			010								
020	0,2% of adjusted span											
Connection size												
		Process series PS55										
Threaded												
MG4F	G ½" (½" BSP) with flush diaphragm (available for 1.6, 4, 10, 24 and 80 bar range)											
MG6F	G 1" (1" BSP) with flush diaphragm											
08F	1" NPT with flush diaphragm (available for 4, 10, 24 and 80 bar range)											
Weld-on Nipple												
W33	Ø 33 mm connection nipple											
Manufacturer compatibility												
X2	M44x1,25 threaded lock ring (matches the 1-1/2" PMC and Rosemount)											
X10	Valcom process connection, ET 13											
X12	Satron / Valmet PASVE 1" BSP connection											
X37	Valcom process connection, ET 15											
		Cleanline series CS55										
Threaded												
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 4, 10, 24 and 80 bar range)											
MD40	Milk coupling DN40 (DIN 11851)											
MD50	Milk coupling DN50 (DIN 11851)											
Tri-Clamp												
S15	1-½" Tri-Clamp (DIN 32676) (available for ranges > 0,1 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)											
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



PS55-CS55 Pressure Transmitters Silver Series Process and Cleanline

ORDERING CODE		EXAMPLE:	CS55	010	20	150	RF	FG	FN	HA	10BR	XC3
Connection size												
Cleanline series CS55												
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 [®] protocol											HA
Pressure Ranges - Coding example only, see standard ranges on page 2												
10BR	10 bar											10BR
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											
Wetted Parts												
S	Diaphragm in Stainless steel 316L (1.4404) (standard)											
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											

continued at page 5



**PS55-CS55 Pressure Transmitters Silver Series
 Process and Cleanline**
ORDERING CODE **EXAMPLE:** CS55 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 (only available for standard electrical connection PG9; venting cable required)

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

Remote Sensor

RE	Remote Sensor connected with cable to enclosure and separated electronics
----	---

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
JL	½ NPT Female conduit
JM	M20x1,5 Female
KV2	PG 11 cable gland
KV3	PG 13,5 cable gland

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)

continued at page 5



**PS55-CS55 Pressure Transmitters Silver Series
Process and Cleanline**

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

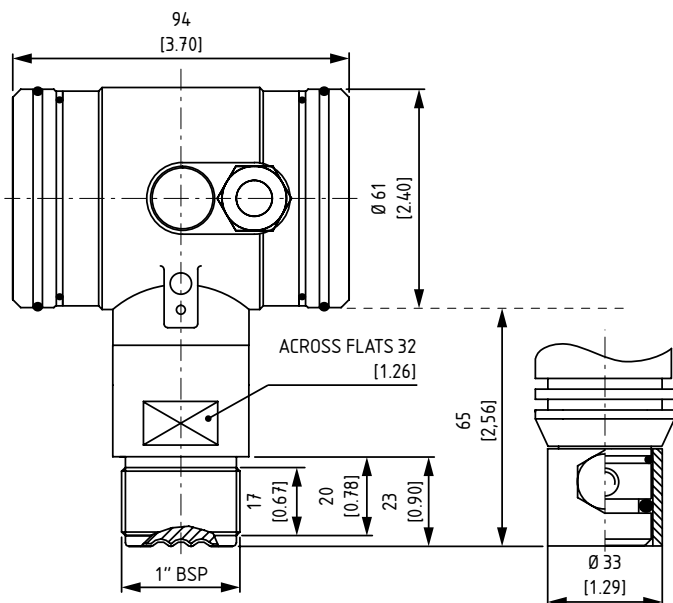
For reference only, consult Ashcroft for specific dimensional drawings

THREADED

Code: MG6F
G 1" with flush diaphragm

WELD-ON NIPPLE

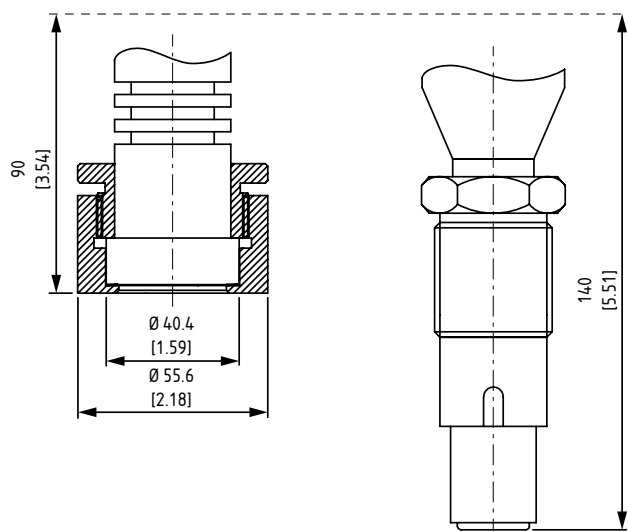
Code: W33
Ø 33 mm connection nipple



MANUFACTURER COMPATIBILITY

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

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



PS55-CS55 Pressure Transmitters Silver Series

Process and Cleanline

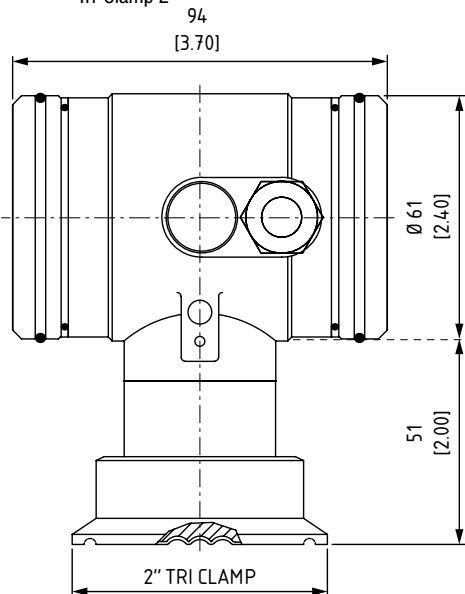
SILVER SERIES - CLEANLINE
DIMENSIONS IN MM [INCH]

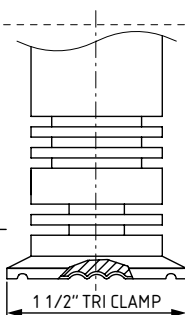
For reference only, consult Ashcroft for specific dimensional drawings

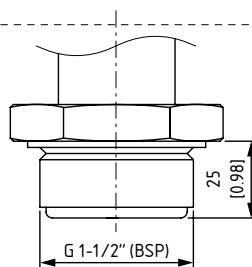
TRI-CLAMP

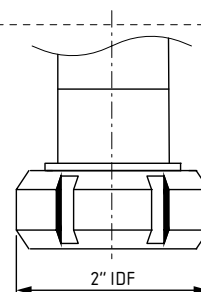
Code: S20

Tri-Clamp 2"

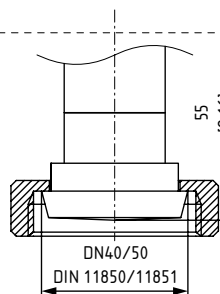

TRI-CLAMP

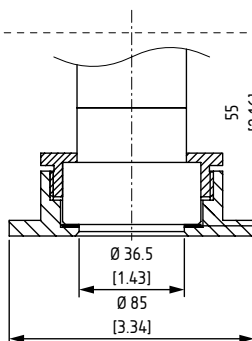
 Code: S15
 Tri-Clamp 1-1/2"

FLUSH DIAPHRAGM

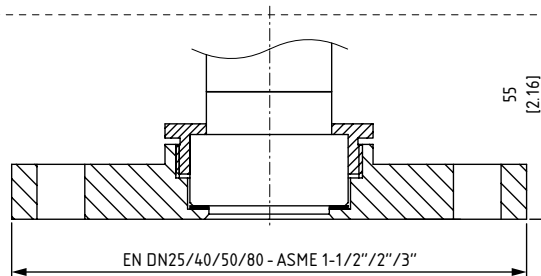
 Code: 85
 G 1-1/2" threaded with flush diaphragm

IDF

 Code: IC20
 2" IDF coupling nut

MILK-COUPLING

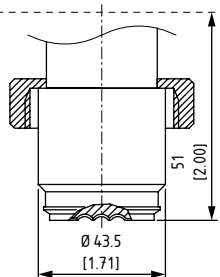
Code: MD25, MD40 or MD50


WELD-ON NIPPLE

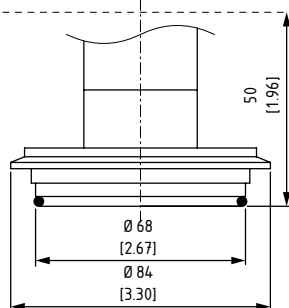
 Code: W85
 Ø 85 Hygenic nipple connection

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

