

CCA-P-331



- industrial pressure transmitter for low pressure
- nominal pressure: from 0...100 mbar up to 0...40 bar
- output signals: 2-wire: 4...20 mA; 3-wire: 0...20 mA / 0...10 V, others
- stainless steel sensor
- accuracy 0.35% / 0.25% span
- perfect thermal behaviour
- excellent long term stability
- pressure port G 1/2" flush from 100 mbar
- options: pressure sensor welded



The pressure transmitter **CCA-P-331** can be used in all industrial areas when the medium is compatible with stainless steel 1.4404 (316 L) or 1.4435 (316 L). Additional are different elastomer seals as well as a helium tested welded version available. The modular concept of the device allows to combine different stainless steel sensors and electronic modules with a variety of electrical and mechanical versions. Thus a diversity of variations is created, meeting almost all requirements in industrial applications.

PREFERRED AREAS OF USE ARE



Plant and Machine Engineering



Environmental Engineering
(water - sewage - recycling)



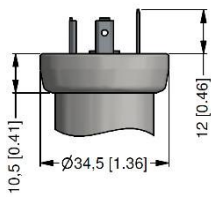
Energy Industry

TECHNICAL DATA

Input pressure range									
Nominal pressure gauge	[bar]	-1...0	0.10	0.16	0.25	0.40	0.60	1	1.6
Nominal pressure abs.	[bar]	-	-	-	-	0.40	0.60	1	1.6
Overpressure	[bar]	5	0.5	1	1	2	5	5	10
Burst pressure	[bar]	7.5	1.5	1.5	1.5	3	7.5	7.5	15
Nominal pressure gauge / abs.	[bar]	2.5	4	6	10	16	25	40	
Overpressure	[bar]	10	20	40	40	80	80	105	
Burst pressure	[bar]	15	25	50	50	120	120	210	
Vacuum resistance		P _N 1 bar: unlimited vacuum resistance P _N < 1 bar: on request							
Output signal / Supply									
Standard		2-wire: 4 ... 20 mA / V _S = 8 ... 32 V _{DC}							
Options 3-wire		3-wire: 0 ... 20 mA / V _S = 14 ... 30 V _{DC} 0 ... 10 V / V _S = 14 ... 30 V _{DC}							
Performance									
Accuracy ¹		standard: nominal pressure < 0.4 bar: ± 0.5 % span nominal pressure 0.4 bar: ± 0.35 % span option 1: nominal pressure 0.4 bar: ± 0.25 % span							
Permissible load		current 2-wire: R _{max} = [(V _S - V _S min) / 0.02 A] W current 3-wire: R _{max} = 500 W voltage 3-wire: R _{min} = 10 kW							
Influence effects		supply: 0.05 % span / 10 V				load: 0.05 % span / kW			
Long term stability		± 0.1 % span / year at reference conditions							
Response time		2-wire: 10 msec				3-wire: 3 msec			
¹ accuracy according to EN IEC 62828-2 – limit point adjustment (non-linearity, hysteresis, repeatability)									
Thermal effects (O set and Span)									
Nominal pressure P _N	[bar]	-1 ... 0			< 0.40			0.40	
Tolerance band	[% span]	± 0.75			± 1			± 0.75	
in compensated range	[°C]	0 ... 85			0 ... 70			0 ... 85	
Permissible temperatures									
Permissible temperatures		medium:		-40 ... 125 °C					
		electronics / environment:		-40 ... 85 °C					
		storage:		-40 ... 100 °C					

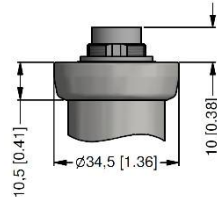


standard

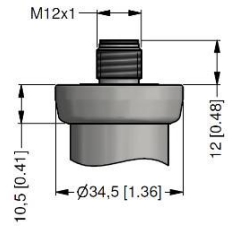


ISO 4400
(IP 65)

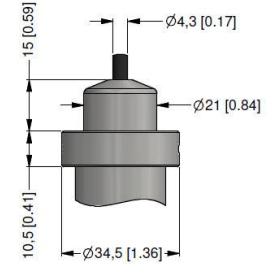
option



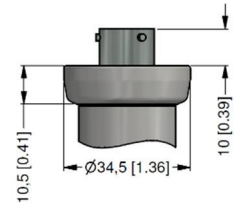
Binder Series 723 5-pin
(IP 67)



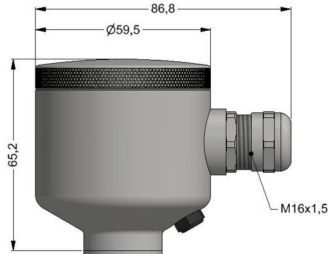
M12x1 4-pin
(IP 67)



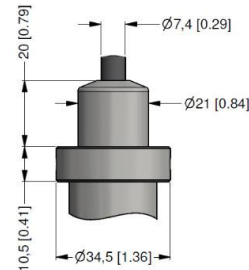
cable gland PG7 / cable length specify
(IP 67)⁵



Bayonet MIL-C-26482 (10-6)
(IP 67)



field housing
(IP 67)



cable outlet, cable with ventilation tube
(IP 68)⁶

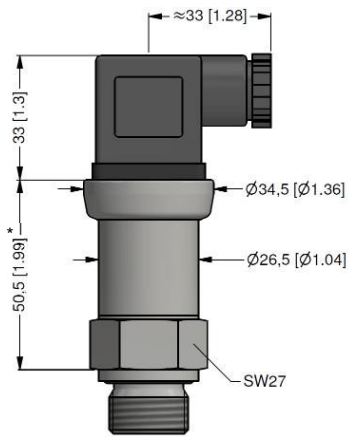
— universal field housing stainless steel 1.4404 (316 L) with cable gland M20x1.5 (ordering code 880) and other versions on request

⁵ standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 ... 70°C)

⁶ different cable types and lengths available, permissible temperature depends on kind of cable

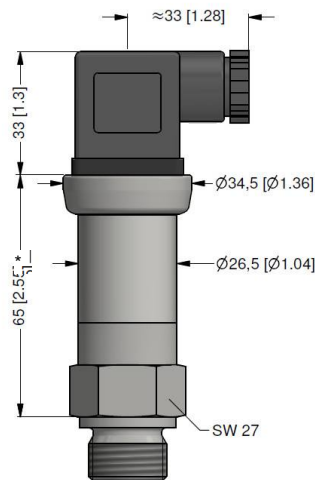
DIMENSION DRAWINGS

standard for accuracy 0.5 % / 0.35 / 0.25 %



G1/2" DIN 3852
with ISO 4400

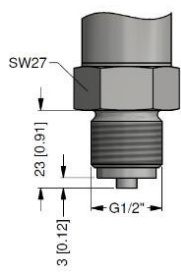
standard for accuracy 0.1%



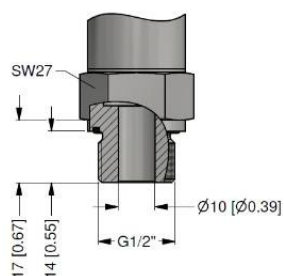
G1/2" DIN 3852
with ISO 4400

*with electrical connection Bayonet MIL-C-26482 (10-6) increases the length of devices by 5 mm

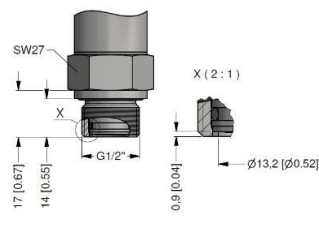
options



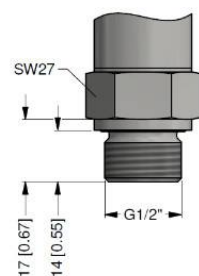
G1/2" EN 837



G1/2" open port



G1/2" DIN 3852
with flush sensor



G1/2" DIN 3852

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Electrical connection										
Connector DIN 43650 (ISO 4400) (IP 65)	1	0	0							
Connector Binder 723 5-pin (IP 67)	2	0	0							
Cable gland PG7 / cable length specify (IP 67) + PVC cable / 1 m	4	0	0							
Connector Buccaneer (IP 68)	5	0	0							
Field housing stainless steel, cable gland M 16 x 1,5 (IP 67)	8	0	0							
Field housing stainless steel, cable gland M 20 x 1,5 (IP 67)	8	8	0							
Connector DIN 43650 (ISO 4400) - potting compound inside (IP 67)	E	0	0							
Connector M12 x 1, 4-pin (IP 67)	M	0	0							
Connector M12 x 1, 4-pin (IP 67) - metal	M	1	0							
Cable outlet, cable with ventilation tube (IP 68) ¹ + PVC cable / 1 m	T	R	0							
Customer	9	9	9							
Mechanical connection										
G 1/2" DIN 3852	1	0	0							
G 1/2" EN 837	2	0	0							
G 1/4" DIN 3852	3	0	0							
G 1/4" EN 837	4	0	0							
M 20 x 1,5 DIN 3852	5	0	0							
M 12 x 1 DIN 3852	6	0	0							
M 10 x 1 DIN 3852	7	0	0							
M 20 x 1,5 EN 837	8	0	0							
M 12 x 1,5 DIN 3852	C	0	0							
G 1/2" DIN 3852 with flush sensor diaphragm ²	F	0	0							
M 20 x 1,5 DIN 3852 with flush sensor diaphragm	F	0	4							
G 1/2" DIN 3852 with flush sensor diaphragm - welded (only with FFKM seal)	G	0	0							
G 1/2" open port (port ø 14 mm) ²	H	0	0							
1/2" NPT	N	0	0							
1/4" NPT	N	4	0							
G 1/8" DIN 3852	Z	3	7							
Customer	9	9	9							
Seals										
Viton (FKM)								1		
Viton (FKM) up to -40°C (for special version 022)								F		
Without seals - welded (only with EN 837) ^{2,3}								2		
EPDM (drinking water)								3		
FFKM								7		
Customer								9		
Special version										
Standard								0	0	0
Temperature compensation -20...+50 °C								0	0	6
Temperature compensation -40...+60 °C (only with seals "F" or welded "2")								0	2	2
Reduced supply voltage 7...30 V DC only for 4...20 mA / 2-wire								0	2	A
Adjustable (using trimmers)								0	4	1
Customer								9	9	9

1 - code TR0 = PVC cable, cable with ventilation tube available in different types and lengths; cable not included in the price

2 - only for P_N = 40 bar

3 - welded version only with pressure ports according to EN 837

Manufacturer reserves the right to change sensor specifications without further notice.

