CCA-P-334

- industrial pressure transmitter for high pressure
- nominal pressure: from 0...600 bar up to 0...2200 bar
- output signals: 2-wire: 4...20 mA; 3-wire: 0...10 V
- thinfilm sensor
- accuracy 0.35 % span
- extremely robust and excellent long-term stability
- pressure sensor welded
- optionally: pressure port M20 x 1.5 or 9/16 UNF, adjustability of span and offset, different kinds of electrical connections

The industrial pressure transmitter **CCA-P-334** has been especially designed for use in hydraulic systems up to 2200 bar. The base element of CCA-P-334 is a thinfilm sensor, that is welded with the pressure port and meets high demands of and reliability.
All of characteristics and the excellent mesurement data of CCA-P-334 as well as distinguished offset stability offer a pressure transmitter with easy handling, reliability and robustness for hydraulic user.
The CCA-P-334 is deliverable with standard HP connections.

PREFERRED AREAS OF USE ARE

Plant and machine engineering

Commercial vehicles and mobile hydraulics

TECHNICAL DATA

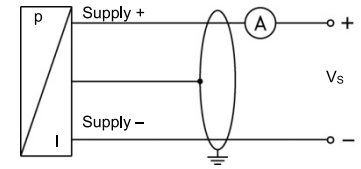
Input pressure range						
Nominal pressure gauge	[bar]	600 [1]	1000	1600	2000	2200
Overpressure	[bar]	800	1400	2200	2800	2800
Burst pressure ≥	[bar]	3000	4000	6000	6000	6000
[1] only available with pressure port G1/2“ EN 837						
Output signal / Supply						
Standard		2-wire: 4 ... 20 mA / V_S = 12 ... 36 V_{DC}				
Option 3-wire		3-wire: 0 ...10 V / V_S = 14 ... 30 V_{DC}				
Performance						
Accuracy		≤ ± 0.35 % span IEC 60770 [2]				
Permissible load		current 2-wire: R_{max} = [(V_S – V_S min) / 0.02 A] Ω voltage 3-wire: R_{min} = 10 kΩ				
Influence effects		supply: 0.05 % span / 10 V			load: 0.05 % span / kΩ	
Long term stability		≤ ± 0.2 % span / year				
Response time		< 5 msec				
Adjustability[3]		Adjustment of offset is possible within the range of ± 5 % of the nominal pressure range, please select "041" as a special version in the ordering code.				
[2] accuracy according to EN IEC 62828-2– limit point adjustment (non-linearity, hysteresis, repeatability) [3] adjustable version is not possible in combination with IS-version, compact field housing and cable outlet						
Thermal effects (Offset and Span) / Permissible temperatures						
Thermal error		≤ ± 0.25 % span / 10 K	in compensated range -20 ... 85 °C			
Permissible temperatures		medium: -40 ... 140 °C	electronics / environment: -40 ... 85 °C		storage: -40 ... 100 °C	
Electrical protection						
Short-circuit protection		permanent				
Reverse polarity protection		no damage, but also no function				
Electromagnetic compatibility		emission and immunity according to EN 61326				
Mechanical stability						
Vibration		10 g RMS (20 ... 2000 Hz)				
Shock		100 g / 11 msec.				
Materials						
Pressure port		stainless steel 1.4542 (17-4 PH)				
Housing		standard: stainless steel 1.4404 (316L) field housing: stainless steel 1.4404 (316L), cable gland: brass, nickel plated				
Option field housing		stainless steel 1.4301 (304); cable gland M16x1.5, brass, nickel plated (clamping range 2 … 8 mm)				
Seals (media wetted)		none (welded version)				
Diaphragm		stainless steel 1.4542 (17-4 PH)				
Media wetted parts		pressure port / diaphragm				

Miscellaneous		
Current consumption	signal output current: max. 25 mA signal output voltage: max. 8,5 mA	
Weight	approx. 240 g	
Installation position	any	
CE-conformity	EMC Directive: 2014/30/EU	Pressure Equipment Directive: 2014/68/EU (module A)

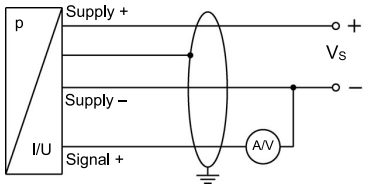
ELECTRICAL CONNECTION

Wiring diagrams

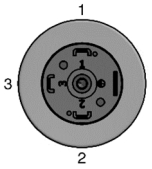
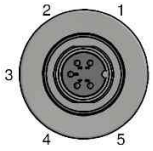
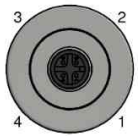
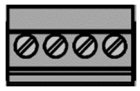
2-wire-system (current)



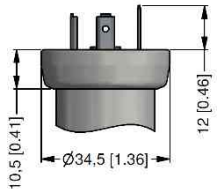
3-wire-system (current / voltage)



Pin configuration

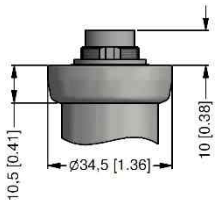
Electrical connection	ISO 4400	Binder 723 (5-pin)	M12x1 (4-pin)	Field housing	Cable colours (IEC 60757)
					
				U_B+ U_B- S+ GND	
Supply + Supply – Signal + (only for 3-wire)	1 2 3	3 4 1	1 2 3	IN + IN - OUT+	wh (white) bn (brown) gn (green)
Shield	ground pin ⏚	5	4	⏚	gn/ye (green / yellow)

standard

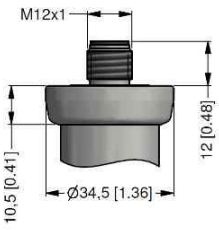


ISO 4400 (IP 65)

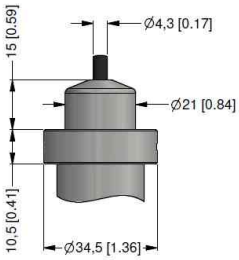
options



Binder series 723 (IP 67)



M12x1 4-pin (IP 67)



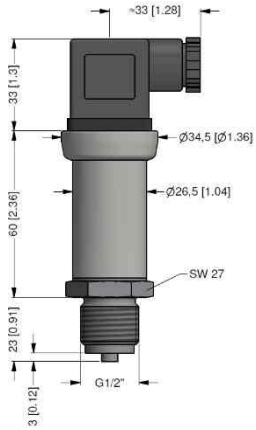
cable gland PG7/
cable length specify (IP 67) [4]

field housing (IP 67)

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

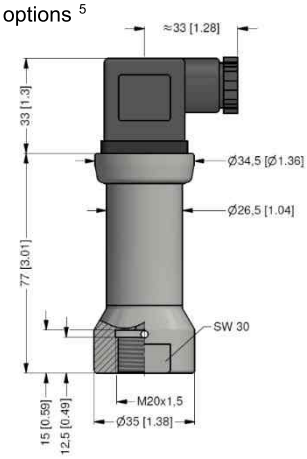
DIMENSION DRAWINGS

standard [5]

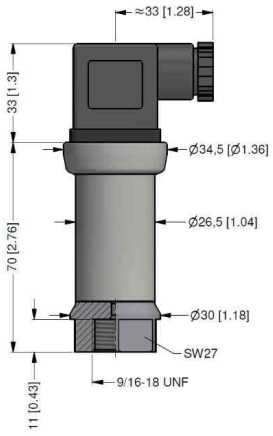


G1/2" EN 837 [6]

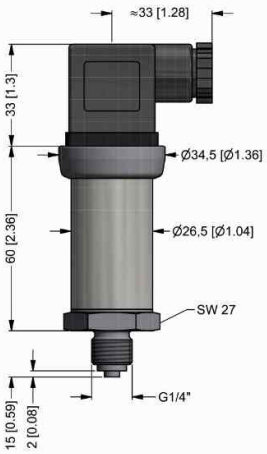
options [5]



M20x1.5 internal thread



9/16-18 UNF internal thread



G ¼“ EN 837 [7]

[5] adjustable version is not possible in combination with field housing and cable outlet
[6] according to EN 837, the pressure port and the complement at pressure over 1000 bar must be preferably made of stainless steel with a tensile strength of R_P > 260 N/mm² in accordance with DIN 17440. The maximum allowed pressure is 1600 bar!
[7] according to EN 837, maximum possible pressure is 1000 bar!

ORDER CODE

CCA-P-334-[ ][ ][ ] - [ ][ ][ ][ ] - [ ] - [ ] - [ ][ ][ ] - [ ][ ][ ] - [ ] - [ ][ ][ ]

Pressure	
Gauge	140
Input [bar]	
0 … 600 [1]	6003
0 … 1000	1004
0 … 1600	1604
0 … 2000	2004
0 … 2200	2204
Customer	9999
Output	
4 … 20 mA / 2-wire	1
0 … 20 mA / 3-wire	2
0 … 10 V / 3-wire	3
Customer	9
Accuracy	
0,35 % (standard)	3
0,35 % including Calibration Certificate	S
Table of measured values for accuracy 0,35 %	M
Customer	9
Electrical connection	
Connector DIN 43650 (ISO 4400) (IP 65)	100
Connector Binder 723 5-pin (IP 67)	200
Cable gland PG7 / cable length specify (IP 67)	400
+ PVC cable / 1 m	
Connector Buccaneer (IP 68)	500
Field housing stainless steel, cable gland M16 x 1,5 (IP 67)	800
Connector DIN 43650 (ISO 4400) - potting compound inside (IP 67)	E00
Connector M12 x 1, 4-pin (IP 67)	M00
Connector M12 x 1, 4-pin (IP 67) - metal	M10
Cable outlet, cable with ventilation tube (IP 68)	TR0
+ PVC cable / 1 m	
Customer	999
Mechanical connection	
G 1/2" EN 837 ($P_N \leq 1000$ bar) [2]	200
G 1/4" DIN 837 ($P_N \leq 1000$ bar)	400
M 16 x 1,5 internal thread	P00
M 20 x 1,5 internal thread	D28
9/16 UNF internal thread	V00
Customer	999
Seals	
Without seals - welded	2
Customer	9
Special version	
Standard	000
Adjustable (using trimmers)	041
Customer	999

1 - only available with pressure port G1/2" EN 837
2 - according to EN 837, the pressure port and the complement, at pressure over 1000 bar must be preferably made of stainless steel with a tensile strength of RP > 260 N/mm² in accordance with DIN 17440. The maximum allowed pressure is 1600 bar!

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