CCA-P-333P

- industrial pressure transmitter
- nominal pressure: from 0...60 bar up to 0...600 bar
- output signals: 2-wire: 4...20 mA; 3-wire: 0...10 V
- process connections with flush welded stainless steel diaphragm
- accuracy 0.35% / 0.25% span
- gold-plated process connection for hydrogen applications
- suited for viscous and pasty media

The pressure transmitter **CCA-P-333P** is suitable for measuring the pressure of viscous, pasty or gaseous media and for applications that require a front-flush, dead space-free process connection. Especially for hydrogen applications there is the possibility to use the process connection with gold plating. A wide range of electrical connection variants are available to enable the CCA-P-333P to be integrated easily and quickly in the various system configurations.

PREFERRED AREAS OF USE ARE

Plant and Machine Engineering

Hydrogen

Viscous and pasty media

TECHNICAL DATA

Input pressure range							
Nominal pressure gauge [1]	[bar]	60	100	-	-	-	-
Nominal pressure absolute	[bar]	60	100	160	250	400	600
Overpressure	[bar]	210	210	600	1000	1000	1000
Burst pressure ≥	[bar]	1000	1000	1000	1250	1250	1800
[1] measurement starts with ambient pressure							

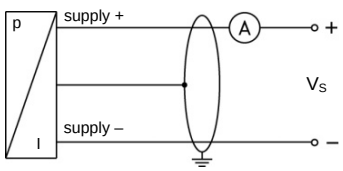
Output signal / Supply	
Standard	2-wire: 4 ... 20 mA / V_S = 8 ... 32 V_{DC}
Options 3-wire	3-wire: 0 ... 10 V / V_S = 14 ... 30 V_{DC}
Performance	
Accuracy [2]	standard: ≤ ± 0.35 % span option: ≤ ± 0.25 % span
Permissible load	current 2-wire: $R_{max} = [(U_B - U_{B\,min}) / 0.02\ A]$ W voltage 3-wire: R_{min} = 10 kW
Influence e ects	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
[2] accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)	
Thermal e ects (O set and Span) / Permissible temperatures	
Tolerance band	≤ ± 0.75 % span
In compensated range	-20 ... 80 °C
Permissible temperatures	medium: -40 ... 125 °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 according to DIN EN 60068-2-6	20 g RMS (25 ... 2000 Hz)
Shock according to DIN EN 60068-2-27	500 g / 1 msec

Filling fluids	
Standard	silicone oil others on request
Materials	
Housing	stainless steel 1.4404 (316 L)
Option compact field housing	stainless steel 1.4301 (304); cable gland M12x1.5, brass, nickel plated (clamping range 2 … 8 mm)
Pressure port	standard: stainless steel 1.4404 (316 L) option: stainless steel 1.4404 (316 L), golden others on request
Diaphragm	standard: stainless steel 1.4435 (316 L) option: stainless steel 1.4435 (316 L), golden others on request
Seals	FKM others on request
Media wetted parts	pressure port, seal, diaphragm
Miscellaneous	
Current consumption	signal output current: max. 25 mA signal output voltage: max. 7 mA
Weight	min. 200 g (depending on process connection)
Installation position	any (standard calibration in a vertical position with the pressure port connection down)
Operational life	100 million load cycles
CE-conformity	EMC Directive: 2014/30/EU

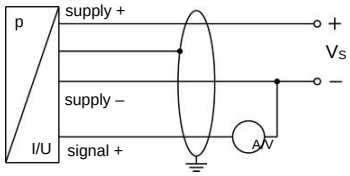
ELECTRICAL CONNECTION

Wiring diagrams

2-wire-system (current)



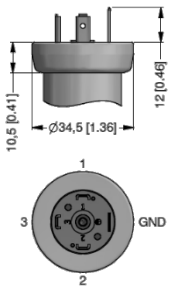
3-wire-system (current / voltage)



Pin configuration

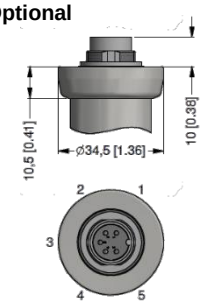
Electrical connection	ISO 4400	Binder 723 (5-pin)	M12x1 / metal (4-pin)	field housing	cable colours (IEC 60757)
Supply +	1	3	1	IN +	WH (white)
Supply –	2	4	2	IN -	BN (brown)
Signal + (only 3-wire)	3	1	3	OUT+	GN (green)
Shield	ground pin ⏚	5	4	⏚	GNYE (green-yellow)

Standard

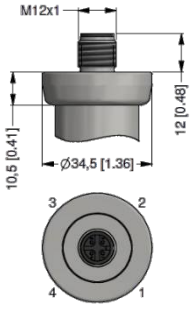


ISO 4400
(IP 65)

Optional

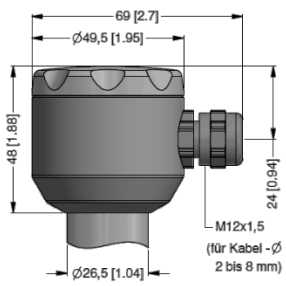


Binder series 723, 5-pin
(IP 67)

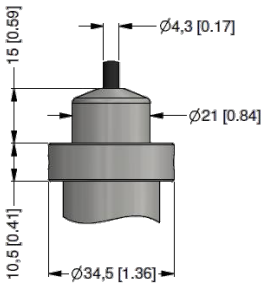


M12x1, 4-pin
(IP 67)

ELECTRICAL CONNECTION



compact field housing
(IP 67)

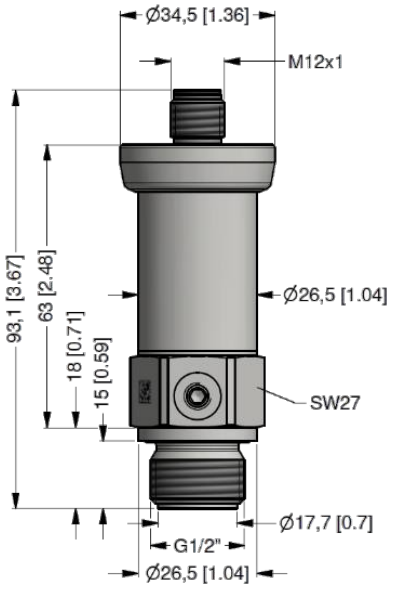


cable outlet
with PVC cable (IP 67) [3]

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

[3] standard: 2 m PVC cable without ventilation tube (permissible temperature: -5 … 70°C)
[4] di erent cable types and lengths available, permissible temperature depends on kind of cable

DIMENSION DRAWINGS



G1/2" flush DIN 3852

ORDER CODE

CCA-P-333P-□□□-□□□□-□-□-□□□-□□□-□-□-□-□□□

Pressure	
Gauge[1]	5 4 C
Absolute	5 4 D
Input [bar]	
0 … 60	6 0 0 2
0 … 100	1 0 0 3
0 … 160	1 6 0 3
0 … 250	2 5 0 3
0 … 400	4 0 0 3
0 … 600	6 0 0 3
Customer	9 9 9 9
Output	
4…20 mA / 2-wire	1
0 … 10 V / 3-wire	3
Customer	9
Accuracy	
0,35 %	3
0,25 %	2
Customer	9
Electrical connection	
Connector DIN 43650 (ISO 4400) (IP 65)	1 0 0
Connector Binder 723 5-pin (IP 67)	2 0 0
Cable outlet with PVC-cable (IP67) + PVC cable / 1 m	T A 0
Connector M12 x 1, 4-pin (IP 67) - metal	M 1 0
Compact field housing - stainless steel 1.4301 (304)	8 5 0
Customer	9 9 9
Mechanical connection	
G 1/2" DIN 3852 flush	Z 0 0
Customer	9 9 9
Diaphragm	
Stainless steel 1.4435 (316 L)	1
Stainless steel 1.4435 (316L), gold-plated	G
Customer	9
Seals	
Viton (FKM)	1
Customer	9
Filling Fluids	
Silicone oil	1
Customer	9
Special version	
Standard	0 0 0
Customer	9 9 9

!!!! When you make an order it is necessary to fill the questionnaire for transmitter with separators!!!

1 - measurement starts with ambient pressure

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