

CCP-P-217



- electronic pressure switch
- nominal pressure: from 0..6 bar up to 0..600 bar
- 1 or 2 independent PNP contacts, freely configurable
- output signals: 3-wire: 4...20 mA
- stainless steel sensor, welded
- accuracy 0.5 % span
- indication of measured values on a 4-digit LED display
- rotatable and configurable display module
- optional: analogue output



The electronic pressure switch **CCP-P-217** is the successful combination of intelligent pressure switch and digital display and due to welded sensor has been designed for the usage with fuels and oils, water and gases (oxygen). As standard the CCP-P-217 offers a PNP contact and a rotatable display module with 4-digit LED display. Additional features like e.g. an analogue output complete the profile.

PREFERRED AREAS OF USE ARE



Plant and Machine Engineering



Medical technology



Energy industry



Oxygen applications

TECHNICAL DATA

Input pressure range												
Nominal pressure gauge [bar]	6	10	16	25	40	60	100	160	250	400	600	
Overpressure (static) [bar]	12	20	32	50	80	120	200	320	500	800	1 200	
Burst pressure [bar]	30	50	80	125	200	300	500	800	1 400	2 000	3 000	
Vacuum resistance	unlimited											
Contact												
Number / type	standard: 1 PNP contact optionally: max. 2 independent PNP contact; 1 analogue output											
Switching current	standard: contact rating max. 125 mA, short-circuit resistant											
Accuracy of switching points ¹	± 1.5 % span											
Repeatability	± 0.5 % span											
Switching frequency	max. 10 Hz											
Switching cycles	> 100 x 10 ⁶											
Delay time	0 ... 100 sec											
Analogue output (optionally) / Supply												
3-wire current signal	4 ... 20 mA / V _S = 24 V _{DC} ± 10 %											
Accuracy ¹	± 0.5 % span											
Permissible load	3-wire: R _{max} = 500 W											
Influence effects	supply: 0.05 % span / 10 V load: 0.05 % span / kW											
Measuring rate	10 Hz											
¹ accuracy according to EN IEC 62828-2 – limit point adjustment (non-linearity, hysteresis, repeatability)												
Thermal effects (Offset and Span) / Permissible temperatures												
Thermal error	± 0.5 % span / 10 K in compensated range -25 ... 85 °C											
Permissible temperatures	medium: -25 ... 125 °C electronics / environment: -25 ... 85 °C storage: -40 ... 85 °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 (25 ... 2000 Hz) according to DIN EN 60068-2-6											
Shock	500 g / 1 msec according to DIN EN 60068-2-27											



Materials	
Pressure port / housing	stainless steel 1.4571 (316 Ti) / stainless steel 1.4301 (304)
Display housing	PA 6.6, polycarbonate
Seal sensor	none (welded)
Diaphragm	stainless steel 1.4542 (17-4PH)
Media wetted parts	pressure port, seal pressure port, diaphragm
Miscellaneous	
Weight	approx. 160 g
Display	4-digit, red LED display, digit height 7 mm, digit width 4.85 mm (angle 10°); range of indication -1999 ... +9999; accuracy 0.1% ± 1 digit; digital damping 0.3 ... 30 sec (programmable); measured value update 0.0 ... 10 sec (programmable)
Long term stability	± 0.3 % span / year at reference conditions
Operational life	100 million load cycles
CE-conformity	EMC Directive: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (module A) ²

² This directive is only valid for devices with maximum permissible overpressure > 200 bar.

ELECTRICAL CONNECTION

Wiring diagrams	
3-wire-system (current)	
Pin configuration	
Electrical connections	M12x1 (5-pin) plastic
supply +	1
supply -	3
signal + (only for 3-wire)	2
contact 1	4
contact 2	5
shield	via pressure port

DIMENSION DRAWINGS



