

CCP-K-6



- electronic pressure switch
- nominal pressure: from 0...2 bar up to 0...400 bar
- 1 or 2 independent PNP contacts, freely configurable
- no analogue output signal
- ceramic sensor
- accuracy 1 % span
- configurable via PC or programming device P6
- optional: oil- and fat free version, oxygen application



The electronic pressure switch **CCP-K-6** has been designed for universal applications. CCP-K-6 is suitable, among others, for applications in plant and machine engineering, hydraulics, measurement and controls. The one or two freely programmable contacts whose status is indicated by differently coloured LEDs can be quickly and comfortably configured either by means of the optionally available configuration kit or the programming device P6.

PREFERRED AREAS OF USE ARE



Plant and Machine Engineering



Energy industry



Fuels and oils

TECHNICAL DATA

Input pressure range									
Nominal pressure gauge	[bar]	2	5	10	20	50	100	200	400
Nominal pressure abs.	[bar]	2	5	10	20	50	100	200	400
Overpressure	[bar]	7	12	25	50	120	250	400	600
Supply									
Supply voltage V_s		12 ... 30 V _{DC}							
Current consumption		max. 14 mA (without contacts)							
Contacts									
Number		standard: 1				optional: 2			
Type		PNP							
Switching performance		max. 300 mA, short-circuit proof							
Accuracy of contacts		IEC 60770: $\leq \pm 1$ % span							
Repeatability		$\leq \pm 0.2$ % span							
Minimum hysteresis of contacts		$\leq \pm 0.5$ % span							
Status indication		SP 1: green				SP 2: yellow			
Switching function ¹		standard: n/o				optional: n/c			
Switching mode ¹		standard: hysteresis mode				optional: window mode			
Switch on point ¹		standard: factory setting 80 % span others: specify on order; adjustable range 5 ... 100 % span							
Switch off point ¹		standard: factory setting 75 % span others: specify on order; adjustable range 5 ... 100 % span							
Switch on / switch off delay ¹		standard: off others: specify on order, adjustable range from 10 msec up to 90 sec (step 10 msec)							
Switching frequency		200 Hz (without switching delay)							
Switching cycles		$> 100 \times 10^6$							
¹ Parameters can be programmed by customer either with the programming kit CIS 685 / CIS 686 or with the programming device P6 (available as accessories).									
Thermal effects (Offset and Span) / Permissible temperatures									
Thermal error		$\leq \pm 0.3$ % span / 10 K				in compensated range -25 ... 85 °C			
Permissible temperatures		medium / 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 RMS (20 ... 2000 Hz)							
Shock		100 g / 11 msec							



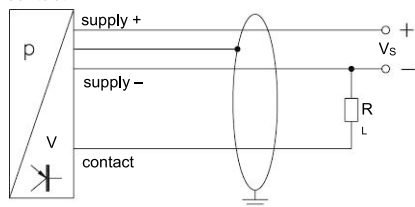
Pressure switches

Materials	
Pressure port	stainless steel 1.4305
Housing	stainless steel 1.4305, POM black
Seals (media wetted)	$P_N < 100$ bar: FKM, EPDM $P_N \geq 100$ bar: NBR other on request
Diaphragm	ceramic Al_2O_3 96 %
Media wetted parts	pressure port, seals, diaphragm
Miscellaneous	
Option oxygen application	for $P_N \leq 15$ bar: O-ring in 70 EPDM 281 (with BAM-approval); permissible maximum values are 15 bar / 60° C and 10 bar / 90° C for $P_N \leq 25$ bar: O-ring in FKM Vi 567 (with BAM-approval); permissible maximum values are 25 bar / 150° C
Weight	approx. 90 g
Installation position	any
Ingress protection	IP 67
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	

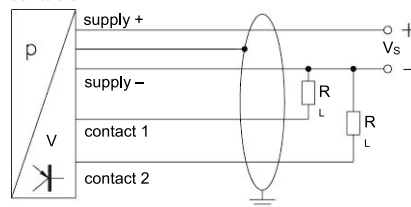
ELECTRICAL CONNECTION

Wiring diagrams

1 contact



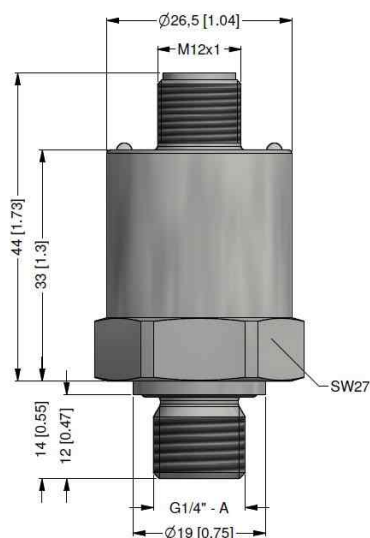
2 contacts



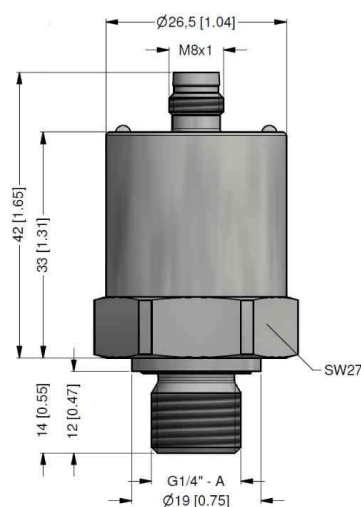
Pin configuration

Electrical connection	M12x1 (4-pin)		M8x1 (4-pin), metal	
Supply +	1		1	
Supply -	3		3	
Contact 1	4		4	
Contact 2	2		2	
Shield	plug housing		plug housing	

DIMENSIONS



G1/4" DIN 3852 with male plug M12x1



G1/4" DIN 3852 with male plug M8x1



Pressure switches

ORDER CODE

CCP-K-6- - - - - - - - -

Pressure												
Gauge	6	8	5									
Absolute	6	8	6									
Input [bar]												
0...2				2	0	0	1					
0...5				5	0	0	1					
0...10				1	0	0	2					
0...20				2	0	0	2					
0...50				5	0	0	2					
0...100				1	0	0	3					
0...200				2	0	0	3					
0...400				4	0	0	3					
Customer				9	9	9	9					
Customer - underpressure				X	X	X	X					
Number of switching output												
1 switching output												1
2 switching output												2
Analogue output												
Without analogue output												0
Electrical connection												
Connector M 12 x 1 (4-pin) - metal plug												M 1 3
Connector M 8 x 1 (4-pin) - metal plug												Q 0 0
Customer												9 9 9
Mechanical connection												
G 1/4" DIN 3852												3 0 0
Customer												9 9 9
Seals												
Viton												1
EPDM												3
Customer												9
Setting code												
Standard ¹												0 0 0
Customer ¹												9 9 9
Special version												
Standard												0 0 0
Oil and grease free												0 0 8
Customer												9 9 9
Software for the pressure switch DS 6												
CIS_685-USB-000+ SW for DS 6 and incl. Cable												

1 - parameters can be programmed by customer either with the programming kit CIS 680 / CIS 681 or with the programming device P6 (available as accessories).

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

