CCM-K-05

- battery powered digital pressure gauge
- nominal pressure: from 0...400 mbar up to 0...600 bar
- ceramic sensor
- accuracy 0.5 % span
- rotatable housing Ø 76,5 mm
- 2-line LC display: 4.5-digit 7-segment + 6-digit 14-segment additional
- different mechanical connections: inch, NPT threads
- min / max function with reset function
- offset and end point calibration
- setting the pressure unit
- switch-off automatic configuration

The battery-powered digital pressure gauge **CCM-K-05** has been designed for measuring the pressure (absolute or gauge) of fluids, oils and gases. The display housing is rotatable, thus ensuring an easy reading even under unfavourable mounting conditions.
Additional functions:

- changing unit,
- displaying min / max values,
- calibrating the o set and of span,
- configuring the automatic switching-o .

PREFERRED AREAS OF USE ARE

Plant and Machine Engineering
Pneumatics / Hydraulics
Measurement Technology
Calibration and Test Purposes

Laboratory Techniques

Environmental Engineering
(water – sewage – recycling)

TECHNICAL DATA

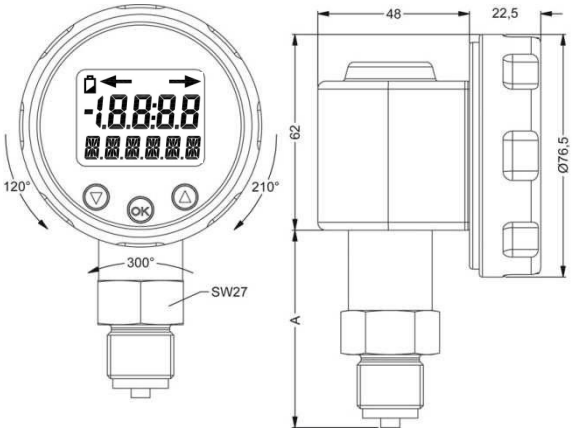
Input pressure range																		
Nominal pressure gauge [bar]	0.4	0.6	1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400	600
Nominal pressure abs. [bar]	-	0.6	1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400	600
Overpressure [bar]	1	2	2	4	4	10	10	20	40	40	100	100	200	400	400	600	800
Burst pressure [bar]	2	4	4	5	5	12	12	25	50	50	120	120	250	500	500	650	880
Vacuum pressure	-1 … 0 bar, overpressure: 4 bar, burst pressure: 7 bar																
Vacuum resistance	$P_N \geq 1$ bar: unlimited vacuum resistance $P_N < 1$ bar: on request																

Performance		
Accuracy [1]	≤ ± 0.5 % span	
Measuring rate	5/sec	
[1] *accuracy according to IEC 60770 (non-linearity, hysteresis, repeatability)*		
Thermal effects (Offset and Span)		
Thermal effects	≤ ± 0.2 % span / 10 K	in compensated range -25 ... 85 °C
Permissible temperatures		
Permissible temperatures	medium: -20 ... 85 °C	environment: -20 ... 70 °C storage: -30 ... 80 °C
Mechanical stability		
Vibration	5 g RMS (25 ... 2000 Hz)	according to DIN EN 60068-2-6
Shock	100 g / 1 ms	according to DIN EN 60068-2-27
Materials		
Pressure port / housing	stainless steel 1.4404 (316L)	
Display housing	PA 6.6, Polycarbonate	
Seals (media wetted)	FKM	
Diaphragm	ceramics Al_2O_3 96 %	
Media wetted parts	pressure port, seals, diaphragm	

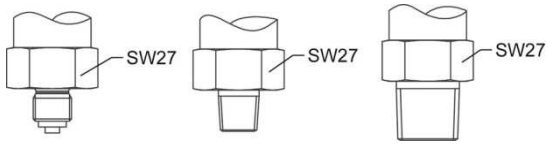
Miscellaneous	
Display	LC display, visible range 40 x 30 mm; 4.5-digit 7-segment-display, digit height 11 mm, range of indication ±19999; 6-digit 14-segment additional display, digit height 7.5 mm
Electromagnetic compatibility	emission and immunity according to EN 61326
Supply	3.6 V Lithium battery; 2 piece (type 1/2 AA)
Data storage	EEPROM (non-volatile)
Ingress protection	IP 65
Installation position	any [2]
Weight	approx. 300 g
AD-converter solution	14 Bit
Operational life of battery	standby mode: approx. 5 years
mech. operational life	100 million load cycles
CE-conformity	EMC Directive: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (Module A) [3]

[2] The digital pressure gauge is calibrated in a vertical position with the pressure connection down. If this position is changed on installation there can be slight deviations in the zero point for devices with stainless steel sensor and pressure range $P_N \leq 1$ bar.
[3] This directive is only valid for devices with maximum permissible overpressure > 200 bar.

DIMENSION DRAWINGS



G1/2" EN 837



G1/4" EN 837 1/4" NPT 1/2" NPT

dimensioning value A:	
pressure port	mm:
G1/2" EN 837	62.5
G1/4" EN 837	54.5
1/4" NPT	54.5
1/2" NPT	60.5

ORDER CODE

CCM-K-05- □□□ - □□□□ - 0 - □ - 0K0 - □□□ - □ - □ - □ - N - □□□

Option	Code
Pressure	
Gauge	M 0 0
Absolute	M 0 1
Input [bar]	
0 … 0,4	4 0 0 0
0 … 0,6	6 0 0 0
0 … 1	1 0 0 1
0 … 1,6	1 6 0 1
0 … 2,5	2 5 0 1
0 … 4	4 0 0 1
0 … 6	6 0 0 1
0 … 10	1 0 0 2
0 … 16	1 6 0 2
0 … 25	2 5 0 2
0 … 40	4 0 0 2
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
-1 … 0	X 1 0 2
Customer	9 9 9 9
Customer underpressure	X X X X
Customer (P_N > 40 bar)	9 9 9 9
Customer underpressure (P_N > 40 bar)	X X X X
Accuracy	
0,5 %	5
0,5 % including Calibration Certificate	T
1 % (P_N < 0 bar)	8
Customer	9
Mechanical connection	
G 1/2" EN 837	2 0 0
G 1/4" EN 837	4 0 0
M 20 x 1,5 EN 837	8 0 0
1/2" NPT	N 0 0
1/4" NPT	N 4 0
Customer	9 9 9
Seals	
Viton (FKM) (P_N < 100 bar)	1
NBR (P_N ≥ 100 bar)	5
Customer	9
Pressure port	
Stainless steel 1.4404 (316 L)	1
Customer	9
Diaphragm	
Ceramic Al_2O_3 96 %	2
Customer	9
Special version	
Standard	0 0 0
Version for oxygen (Viton o-rings, max. 25 bar)	0 0 7
Customer	9 9 9
Accessories	
Battery (order always 2pcs)	1000377

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