

CCM-P-02



- battery powered digital pressure gauge
- nominal pressure: from 0...100mbar up to 0...600bar
- stainless steel sensor
- accuracy 0.25 % / 0.5 % span
- rotatable housing Ø 76,5 mm
- 2-line LC display: 4.5-digit 7-segment + 6-digit 14-segment additional
- min / max function with reset, offset and end point calibration
- setting the pressure unit (bar, mbar, psi, InHg, cmHg, mmHg, hPa, kPa, MPa, mH₂O, InH₂O)
- switch-off automatic



The battery-powered digital pressure gauge **CCM-P-02** enables a local displaying of values, satisfying the highest demands for accuracy and long-term stability. The pressure gauge may be applied in all media compatible with the stainless steel used; it shows an excellent robustness and a high overpressure protection. The CCM-P-02 display housing is rotatable, thus ensuring an easy reading even under unfavorable mounting conditions.

Additional functions:

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

PREFERRED AREAS OF USE ARE



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



Laboratory Techniques



Environmental Engineering
(water – sewage – recycling)

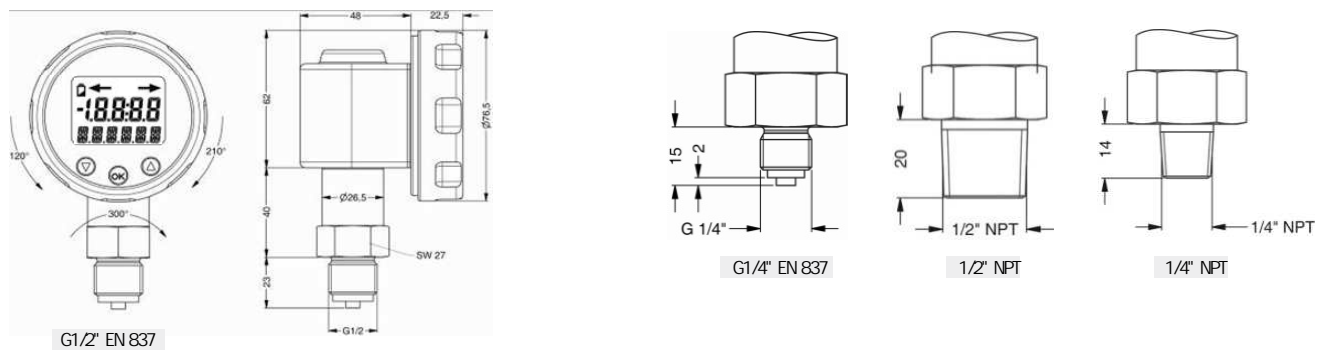
TECHNICAL DATA

Input pressure ranges														
Nominal pressure gauge	[bar]	0.10	0.16	0.25	0.40	0.60	1	1.6	2.5	4	6			
Nominal pressure abs.	[bar]	-	-	-	0.40	0.60	1	1.6	2.5	4	6			
Overpressure	[bar]	0.5	1	1	2	5	5	10	10	20	40			
Burst pressure	[bar]	1.5	1.5	1.5	3	7.5	7.5	15	15	25	50			
Nominal pressure gauge / abs.	[bar]	10	16	25	40	60	100	160	250	400	600			
Overpressure	[bar]	40	80	80	105	210	210	600	1050	1050	1250			
Burst pressure	[bar]	50	120	120	210	420	420	1000	1250	1250	1250			
Vacuum pressure		-1 ... 0 bar, overpressure: 5 bar, burst pressure: 7.5 bar other vacuum ranges on request												
Vacuum resistance		P _N 1 bar: unlimited vacuum resistance P _N < 1 bar: on request												
Performance														
Accuracy ¹		nominal pressure 0.4 bar: ± 0.25 % span												
		nominal pressure: < 0.4 bar: ± 0.5 % span												
Measuring rate		5/sec												
Long term stability		± 0.1 % span / year												
¹ accuracy according to IEC 60770- minimum value setting (non-linearity, hysteresis, repeatability)														
Thermal effects (Offset and Span)														
Nominal pressure P _N	[bar]	-1 ... 0				0.40			> 0.40					
Tolerance band	[% span]	± 0.75				± 1			± 0.75					
in compensated range	[°C]	-20... 85 °C				0... 70 °C			-20... 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 (316 L)
Display housing	PA 6.6, polycarbonate
Seals (media wetted)	FKM
Diaphragm	stainless steel 1.4435 (316 L)
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



for nominal pressure $P_N > 60$ bar increases the length of devices by 9 mm!



ORDER CODE

CCM-P-02- [] [] [] - [] [] [] - [0] - [] - [0] [K] [0] - [] [] [] - [] [] [] - [] [] [] - [N] - [] [] []

Pressure									
Gauge	M	0	E						
Absolute (possible from 0,4 bar)	M	0	F						
Input [bar]									
0 ... 0,1 (possible from 0,4 bar)				1	0	0	0		
0 ... 0,16 (possible from 0,4 bar)				1	6	0	0		
0 ... 0,25 (possible from 0,4 bar)				2	5	0	0		
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									
0,25 % (for P _N > 0,4 bar)								2	
0,5 % (for P _N 0,4 bar)								5	
0,25 % (for P _N > 0,4 bar) including Calibration Certificate								R	
0,5 % (for P _N 0,4 bar) including Calibration Certificate								T	
Customer								9	
Mechanical connection									
G 1/2" EN 837								2	0
G 1/4" EN 837								4	0
M 20x1,5 EN 837								8	0
1/2" NPT								N	0
1/4" NPT								N	4
Customer								9	9
Seals									
Viton (FKM) (P _N < 100 bar)								1	
NBR (P _N 100 bar)								5	
Without - welded								2	
Customer								9	
Pressure port									
Stainless steel 1.4404 (316 L)								1	
Customer								9	
Diaphragm									
Stainless steel 1.4435 (316 L)								1	
Customer								9	
Special version									
Standard									0
Customer									9
Accessories									
Battery (2 pcs needed)									1000377

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

