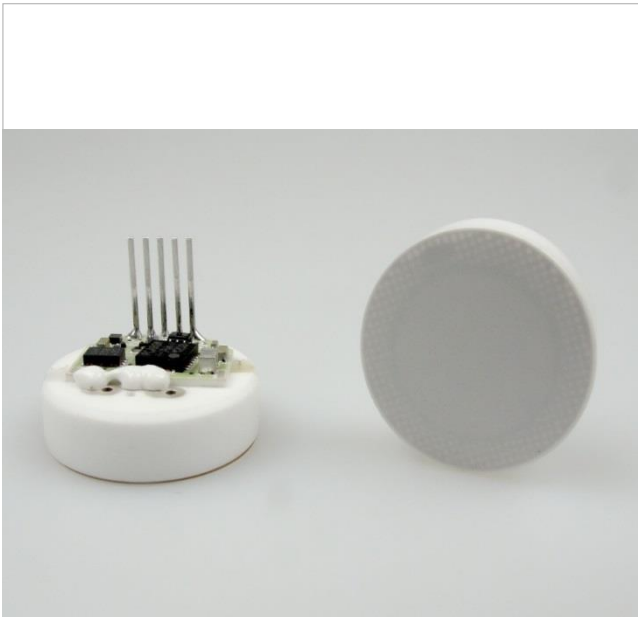


DSK 720L



Ready to assemble Pressure Sensor

- ▶ Capacitive ceramic pressure sensor
- ▶ Pressure ranges from 100 mbar to 50 bar
- ▶ Several output signals available
- ▶ Configuration by an integrated interface, e.g. for compensation of mounting effects, adjustment of offset and span & so.

Technical Data

Pressure ranges / Accuracy / Thermal errors							
Nominal pressure [bar]		Permissible overpressure	Permissible negative pressure	Burst pressure	Accuracy ¹⁾	Thermal error offset ²⁾	Thermal error span ²⁾
gauge	absolute	[bar]	[bar]	[bar]	[% FSO]	[% FSO]	[% FSO]
0,1 ^{*)}	-	3	-0,2	4	≤ ± 0,5	1,0	1,0
0,2 ^{*)}	-	4	-0,3	6			
0,4	-	5	-0,5	8			
1	1	7	-0,5 (abs.: -1)	9	≤ ± 0,25	0,6	0,6
2	2	12		18			
5	5	20		25			
10	10	20		30			
20	20	40		45			
50	50	70		80			
¹⁾ accuracy according IEC 60770 – terminal based (nonlinearity, hysteresis, repeatability) ^{*)} on request ²⁾ Error band within the compensated temperature range < -20 °C ... 80 °C (other compensation ranges on request)							
Supply							
Supply voltage	[V]	2,7 ... 5,5					
Current consumption	[mA]	max. 1,1 mA					
Performance							
Output signal	[% Vs]	10 ... 90 (optional I ² C)					
Accuracy of offset calibration	[%FSO]	≤ 0,5 (≤ 0,25 if calibrated after mounting in a metallic transmitter housing)					
Accuracy of span calibration	[%FSO]	≤ 0,5 (≤ 0,25 if calibrated after mounting in a metallic transmitter housing)					
Response time (10 ... 90 %)	[ms]	< 15 (others on request)					
Turn on time	[ms]	< 200					
Long term stability	[FSO/year]	≤ ± 0,1					
Permissible load	[kΩ] / [nF]	≥ 10 / ≤ 10					
Temperature output signal (I ² C interface)	[°C]	-40 ... 125 (accuracy : ≤ ± 2 within -20 ... 80)					
Operating temperature							
Medium	[°C]	- 40 ... 125					
Ambient	[°C]	- 40 ... 105 (optional -40 ... 125)					
Storage	[°C]	- 40 ... 105 (optional -40 ... 125)					

DSK 720L

Ready to assemble Pressure Sensor Module

Technical data

Electrical protection	
Short circuit protection	permanent
Reverse polarity protection	none
Declaration of CE conformity	no / the measures for getting the CE conformity of the complete transmitter must be taken by the user
Option Ex-Schutz IBExU 08 ATEX 1062 U	on request
Electrical connection / Ingress protection	
Standard	Pins (8mm) Wires 100mm (optional)
Design	
Standard	Pressure sensor module with integrated electronic and spacer
Option	Pressure sensor module with integrated electronic, spacer, venting tube and PTFE filter
Werkstoffe	
Membrane	Standard: Ceramic Al ₂ O ₃ 96 % Optional: Ceramic Al ₂ O ₃ 99,9% (on request)
Venting tube (optional)	PBT
Spacer	Brass
O-Ring (optional)	FKM (temperature range: -25 ... 125°C) EPDM (temperature range: -40 ... 125°C) FFKM (temperature range: -20 ... 125°C) others on request
Miscellaneous	
Weight	ca. 21 g
Operational life time	> 100 x 10 ⁶ pressure cycles
Configuration	
Programming adapter including programming software (optional)	- calibration by connected pressure reference - configuration of starting point and end point of pressure range, offset adjustment
Wiring diagram / Dimensions [mm]	
<p><u>Ratiometric voltage output signal</u></p>	<p><u>I²C-Interface</u></p>

DSK720L_0M/2013

Visit the website: www.impress-sensors.co.uk

Company Reg. No.: 4346738, VAT No.:786 6596 54, Reg Address: Impress Sensors & Systems Ltd, Unit 6 Mercury House, Calleva Park, Aldermaston, Berkshire, RG7 8PN

DSK 720L

Ready to assemble Pressure Sensor

Ordering code

Ordering code

DSK **7 2 0 L** - - - - - - - - -

Type of pressure																				
	gauge	0	6	5																
	absolute	0	6	6																
Nominal pressure [bar]																				
on request	0,1				1	0	0	0												
on request	0,2				2	0	0	0												
	0,4				4	0	0	0												
	1				1	0	0	1												
	2				2	0	0	1												
	5				5	0	0	1												
	10				1	0	0	2												
	20				2	0	0	2												
	50				5	0	0	2												
special measuring ranges					9	9	9	9												
Output signal																				
	0,5 ... 4,5 V 3L ratiometric								R											
	I ² C interface								IC											
	others on request								9											
Accuracy																				
	≤ 0,2 bar: ≤ ± 0,5 %FSO								5											
	> 0,2 bar: ≤ ± 0,25 %FSO								2											
	others on request ²⁾								9											
Operating temperature range																				
	T _{storage/ambient} - 40 ... 105 °C									T										
optional	T _{storage/ambient} - 40 ... 125 °C									H										
	others on request									9										
Electrical connection																				
	Pins										0	0	1							
	Wires 100 mm										0	1	1							
	others on request										9	9	9							
Membrane																				
	Ceramic Al ₂ O ₃ 96%															2				
	Ceramic Al ₂ O ₃ 99,9%															C				
	other on request															9				
Sealing																				
	without															0				
	FKM															1				
	EPDM															3				
	FFKM															7				
	others															9				
Special design																				
	Standard															0	0	0		
	others on request															9	9	9		

These ordering codes contains product specification, properties are not guaranteed. Subject to change without notice.

¹⁾ absolute pressure for p_{nom} < 1 bar on request