



**First Sensor
TECHNOLOGY**



AnaComp

**Analogue Compensated Pressure
Sensor System**

AnaComp – Analogue Compensated Pressure Sensor System

Description

AnaComp is an analogue compensated and calibrated piezoresistive sensor system in a hybrid dual inline package. A wide range of supply voltage is possible.

Features

- Pressure ranges: 0-35 kPa, 0-100 kPa, 0-250 kPa, 0-500 kPa, 0-1 MPa
- Analogue compensated, calibrated and amplified voltage output: full span output 0.5 - 4.5 VDC
- Supply voltage 7 to 35 V with integrated voltage regulator
- Sensor output is ratiometric by 5 V supply voltage
- When using the voltage regulator (supply voltage being between 7 V and 35 V) the ratiometric sensor characteristic is lost
- Compensated temperature range from 0 °C to 80 °C
- Available as gauge and absolute versions

Application

- Barometric measurements
- Gas flow
- Alarm and surveillance
- Medical appliances
- Respirators and ventilators
- Automotive
- Domestic appliances
- Industrial controls
- Altimetry
- Pressure gauges
- Leakage control
- Pneumatic appliances
- Environment control units
- Process control

Electrical Characteristics

Parameter	Symbol	Limit Values		Unit
		min.	max.	
Over pressure ¹	P_{over}		$2 * P_n$	
Burst pressure ¹	P_{burst}	$5 * P_n$		
Operating temperature range	T_A	0	80	°C
Storage temperature range	A_J	-20	90	°C
Supply voltage for ratiometric output	V_{Br}	4.75	5.25	V
Supply voltage for non-ratiometric output	V_B	7	35	V
Current consumption	I_{SC}	8	14	mA
Load resistor at output	R_L	1	∞	k Ω
Pressure-dependent output voltage ³	V_{out}	0.5	4.5	V
Accuracy ⁴	Δx		5	% F.S.O.

¹ The system applies to $P_{max} = 1,500$ kPa

² P_n = nominal pressure

³ $V_{Br} = 5$ V, $T = 25$ °C, für $P_{min} = 0$ kPa und $P_{max} = P_n$
(type-dependent, see pressure ranges)

⁴ Better $\pm 3\%$ accuracy available upon request

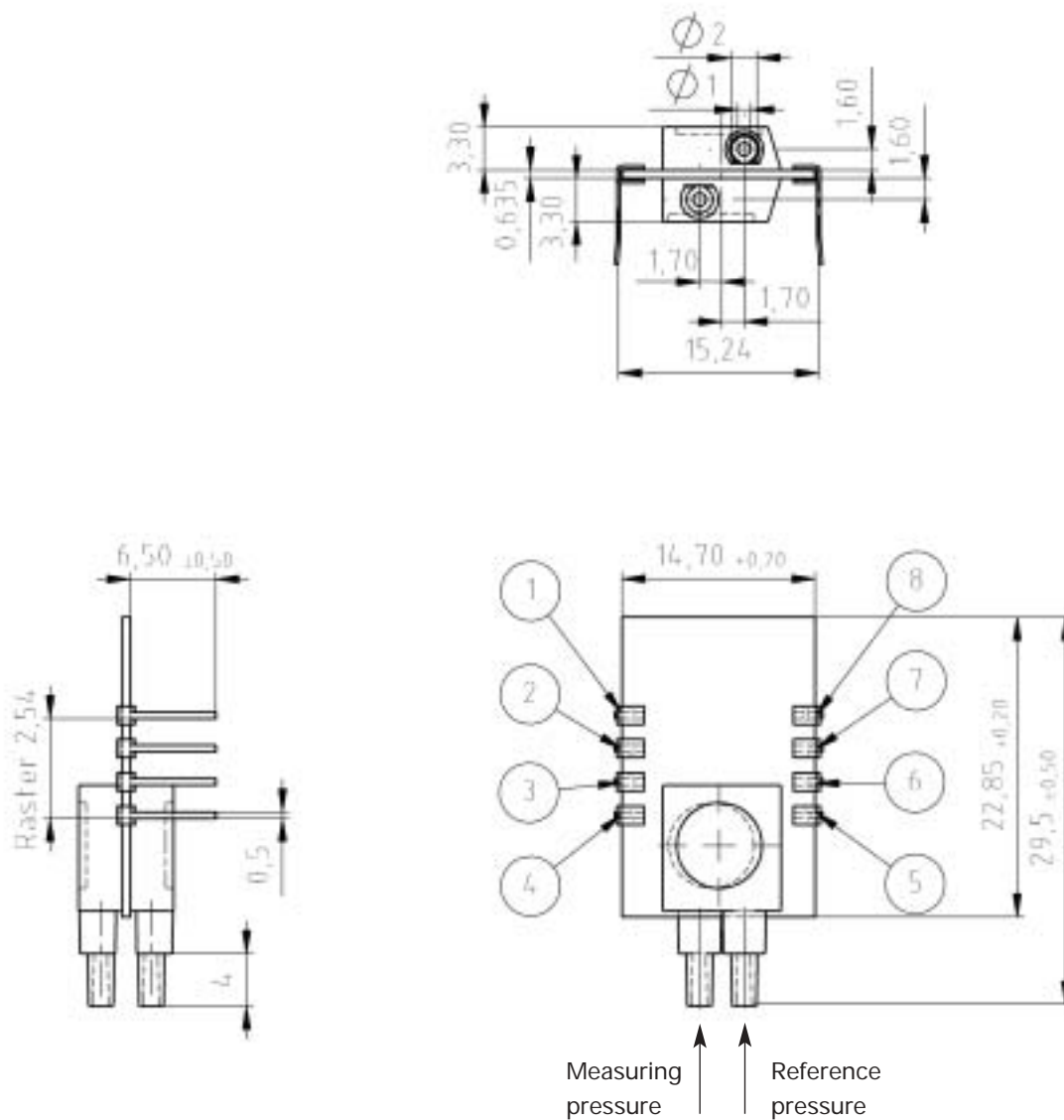
Pressure Ranges

Type	Color Code	P_n	Unit
ACLP035	purple	35	kPa
ACLP100	yellow	100	kPa
ACMP001	green	100	kPa
ACMP002.5	red	250	kPa
ACMP005	blue	500	kPa
ACMP010	white	1,000	kPa

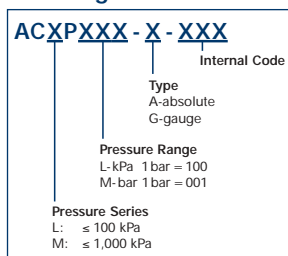
Electrical Connections

	Ratiometric Operation	Non-ratiometric Operation
	DC Voltage $5\text{ V} \pm 10\%$ an V_{Br}	DC Voltage 7 - 35 V an V_B connect Pin 3 with Pin 4!
Pin 1	-	Supply voltage V_B
Pin 2	Supply voltage GND	Supply voltage GND
Pin 3	-	+ 5 V (Voltage regulator output)
Pin 4	Supply voltage V_{Br}	V_{Br} (Bridge voltage max. 5.5 V)
Pin 5	-	-
Pin 6	-	-
Pin 7	Output voltage OUT	Output voltage OUT
Pin 8	Output voltage GND	Output voltage GND

Package Outlines



Ordering Code



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