



PRESSURE SENSORS FOR LIQUIDS & GASES

Pressure Sensors and Transducers/Barometer and Differential
Pressure Sensors/Pressure Calibrators and Controllers



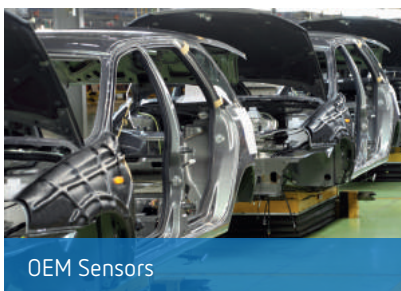
Your expert partner in sensors & controls

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ALTHEN
SENSORS & CONTROLS

INFORMATION ABOUT ALTHEN SENSORS & CONTROLS

Althen Sensors & Controls stands for pioneering measurement and sensor solutions. Since we are constantly looking to innovate we accept every measurement challenge, our engineers are only satisfied when the perfect solution for your measurement task is found. We develop customer-specific solutions in our in-house production facilities. Althen is partner of many recognized universities and leading organizations. We find ourselves in an intensive knowledge transfer, developing future technologies. Althen is one of the first companies in its branch with a certification by the German technical inspection association in Hessen (TÜV PROFICERT) in accordance with DIN EN ISO 9001:2015.



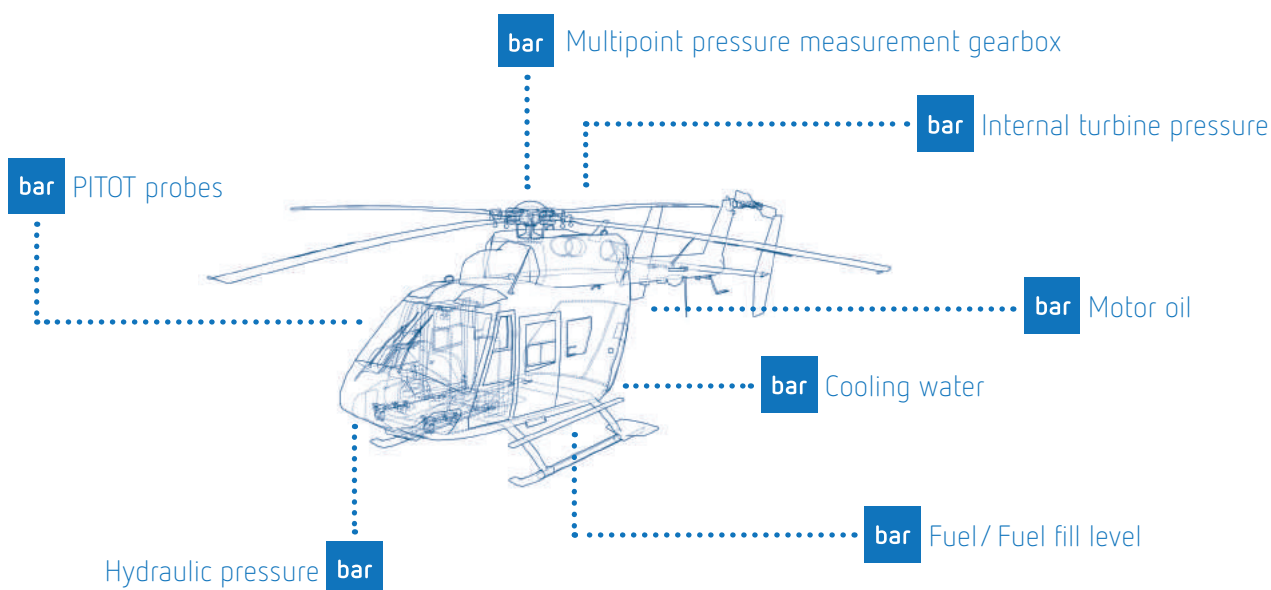
Our sensor solutions are divided into three main application areas: OEM, Test & Measurement and IIoT solutions.

Our in-house design and manufacturing capabilities allow us to develop customized sensor solutions and turn every measurement challenge into a sensor solution. In addition to our sensor solutions we offer complementary services such as: calibration, design & engineering, training and renting of measurement equipment. Your benefits of working with Althen: high quality sensor solutions, flexibility in developing a customized solution and fast prototyping.

Connecting the dots

Our main market is Western Europe and USA, with offices in Germany, the Netherlands, France, Sweden and the USA. With over 40 years of experience in sensor technology, Althen is your expert partner for sensor and measurement solutions.

For more information please visit our website www.althensensors.com



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..... Wisely measured, efficiently turned
Intelligent remote monitoring of the
..... flow around rotor blades in wind turbines

SENSOR FOR VIBRATION
MONITORING/DRIVETRAIN

m/s^2 VIBRATION



TILT SENSOR
AT THE TOWER

$^\circ$ INCLINATION



bar PRESSURE

PRESSURE AND FLOW SENSOR
AT THE BLADE



$^\circ/s$ ANGULAR RATE

ROTATION SENSOR
AT THE GONDOLA





PRESSURE SENSORS

FOR LIQUIDS & GASES

PRESSURE CALIBRATORS & CONTROLLERS



We offer a wide selection of pressure sensors for use with liquids and gases in all industrial applications, along with the right services surrounding measurement and sensor technology: Pressure sensors and transmitters, barometers and differential pressure sensors in standard and miniaturized versions, with and without ATEX certification.

To ensure the correct operation, calibration, and maintenance of all kinds of systems, we also offer an excellent selection of pressure calibrators and controllers – for simple and automatic monitoring and calibration of many types of sensors.

Product image	Model	Measurement Range	Pressure Type	Accuracy	Output (Supply Voltage)
STANDARD PRESSURE SENSORS					
	M5700 Submersible Pressure Sensor	0-3,5 bar to 0-700 bar	vented gauge sealed compound	±0,25%	0,5-4,5 V [5 ± 0.25 V]
	U5700 Submersible Pressure Transducer	0-0,35 mbar to 0-700 bar	vented gauge absolute	±0,1 % bis ±0,75 %	0,5-4,5 V ratiometr. [5 VDC] 4-20 mA [9-30 VDC] 1-5 V, 0-5 V, 1-6 V [8-30 VDC] 0-10 V [15-30 VDC] 0,5-4,5 V [5-30 VDC]
	AGS4000 General Purpose Pressure Transducer	0-500 mbar to 0-700 bar	vented gauge absolute	±0,4%	2 mV/V [10 VDC, max. 15 VDC] 0-5 V [13-30 VDC] 0-10 V [13-30 VDC] 4-20 mA [13-36 VDC]
	AGS4200 Standard Pressure Transducer in SOS-technology	0-0,5 bar to 0-1.500 bar	vented gauge	±0,25%	0-5 V [13-30 VDC] 0-10 V [13-30 VDC] 4-20 mA [13-36 VDC]
	APS Absolute Pressure Transducer, low-range	900-1.100 hPa 800-1.200 hPa 0-1.000 hPa 0-500 hPa	absolute	±1%	0-10 V [19-31 VDC] ±5 V [19-31 VDC] ±10 V [19-31 VDC] 0-20 mA [19-31 VDC] 4-20 mA [19-31 VDC] 4-20 mA 2L [12-32 VDC] [opt.: 230 VAC, 115 VAC, 24 VAC]
	AS30 AS50 Precision thin-film Pressure Sensor (AS50 with pressure and temperature signal)	0-7 bar to 0-1.600 bar	vented gauge	±0,25%	0,5-4,5 V ratiometr. [5 VDC] 0,5-4,5 V [6,5-30 VDC] 1-5 V [7-30 VDC] 1-6 V [8-30 VDC] 1-10 V [12-30 VDC] only AS30: 4-20 mA [10-30 VDC] 0-5 V [7-30 VDC] 0-10 V [12-30 VDC]
	AS3XCN Precision thin-film Pressure Sensor	0-7 bar to 0-1.600 bar	vented gauge	±0,25%	CANopen DS301 & DS404
	AS40 Standard Pressure Sensor	0-1 bar to 0-16 bar	vented gauge absolute	±0,25%	0,5-4,5 V ratiometr. [5 VDC] 0,5-4,5 V [6,5-30 VDC] 1-5 V [7-30 VDC] 1-6 V [8-30 VDC] 1-10 V [12-30 VDC] 4-20 mA [10-30 VDC] 0-5 V [7-30 VDC] 0-10 V [12-30 VDC]

Product image	Model	Measurement Range	Pressure Type	Accuracy	Output (Supply Voltage)
STANDARD PRESSURE SENSORS					
	HP Pressure Sensor For High Pressure	0-50 kpsi to 0-100 kpsi (ca.3.500 bar to 7.000 bar)	vented gauge	±0,5%	1 mV/V [10 VDC] 0-5 V, ±5 V [11-28 VDC] 0-10 V, ±10 V [15-28 VDC] 4-20 mA 3L [22-32 VDC] 4-20 mA 2L [9-32 VDC] 4-20 mA 2L ATEX [9-28 VDC]
	M5600 Wireless Pressure Sensor (Bluetooth)	0-3,5 bar to 0-700 bar	vented gauge sealed compound	±0,25%	0-2,3 VDC 2,3-3,6 VDC
	435/437 Wing Union/ Hammer Union Pressure Sensor	0 psi to 5000 psi; 0 psi to 6000 psi; 0 psi to 10000 psi; 0 psi to 15000 psi; 0 psi to 20000 psi; 0 bar to 350 bar; 0 bar to 400 bar; 0 bar to 700 bar; 0 bar to 1000 bar; 0 bar to 1350 bar	vented gauge	±0.1 %FSS ±0.2 %FSS	4 mA to 20 mA
	P981-0107 P981-0120 P981-0121 P981-0181 Schaevitz Pressure Transducers for Steelmill Applications	Different measuring ranges available	vented gauge	±0,1%	4-20 mA 2L [10-36 VDC]
	Z Absolute Pressure Transducer / General purpose gage	0-35 mbar to 0-4.000 bar	vented gauge absolute	±0,25%	3 mV/V [10 VDC] 0-5 V, ±5 V [11-28 VDC] 0-10 V, ±10 V [15-28 VDC] 4-20 mA 3L [22-32 VDC] 4-20 mA 2L [9-32 VDC] 4-20 mA 2L ATEX [9-28 VDC]
	M5800 Standard Pressure Transducer with rotatable pressure display	0-3,5 bar to 0-700 bar	vented gauge compound	±0,25%	1-5 V [8-30 V] 4-20 mA [12-30 V] 0-5 V [8-30 V] 0-10 V [12-30 V] 1-6 V [8-30 V] 0.5-4.5 V [8-30 V]
PRECISION PRESSURE SENSORS					
	FP2000 Series FPG FPA FPB FPV Configurable Pressure Transducer	0-35 mbar to 0-700 bar	vented gauge absolute vakuum, Barometer	0,1 % v.E. (FPx1) bzw. 0,25 % v.E (FPx2)	mV/V, 0-5 VDC, 0-10 VDC, 4-20 mA (2-Leiter)
	FP5000 Series Configurable Pressure Transducer	10 in-H2O [0,36 psi] to 5000 psi Absolut: 5-5000 psi	vented gauge absolute	Standard Accuracy 0.2 %FSS BFSL Hohe Accuracy 0.1 %FSS BFSL	0-5 VDC, 0-10 VDC, 4-20 mA

Product image	Model	Measurement Range	Pressure Type	Accuracy	Output (Supply Voltage)
PRECISION PRESSURE SENSORS					
	HI2000 Premium Pressure Transmitter in SOS-technology	0-0,5 bar to 0-1.500 bar	vented gauge	±0,1%	10 mV/V [5-15 VDC] 0-5 V [13-30 VDC] 0-10 V [13-30 VDC]
	HI2300 Pressure Transmitter In SOS-technology For High Temperatures	0-1 bar to 0-1.500 bar	vented gauge	±0,1%	10 mV/V [5-15 VDC]
	HP1000 HP1100 High Pressure Transmitter in SOS-technology	0-400 bar to 0-4.000 bar	vented gauge	±0,25%	10 mV/V [10 VDC] 0-5 V [13-30 VDC] 0-10 V [13-30 VDC] 4-20 mA [10-36 VDC]
	P900 High-Precision Pressure Transducer	0-700 mbar to 0-700 bar	vented gauge absolute	±0,2% bzw. ±0,10%	2 mV/V [10 VDC, max. 12 VDC] 0-2,5 V [11-18 VDC] 0-5 V [10 VDC / 18-32 VDC / ±15 VDC] 0-10 V [15-36 VDC] 4-20 mA [10-36 VDC]
	P1200 Heavy Industrial Pressure Transducer	0-5 bar to 0-700 bar	vented gauge absolut (separately orderable)	±0,15%	20 mV [10 VDC max. 12 V] 100 mV [10 VDC max. 12 V] 5 VDC [10 VDC max. 12 V] 5 VDC [18-32 VDC max. 12 V] 4-20 mA (16% mA ±2%) [10-36 VDC]
	PR3100 PROTRAN Pressure Transducer	0-1 bar to 0-600 bar	vented gauge absolute	±0,3%	2 mV/V [5-15 VDC] 0-5 V [13-30 VDC] 0-10 V [13-30 VDC] 4-20 mA [13-36 VDC] ATEX available
	Super TJE High-Precision Pressure Transducer	0-10 psi to 0-7.500 psi (ca. 700 mbar to 500 bar)	vented gauge absolute	±0,05%	2 mV/V [10 VDC] 0-5 V, ±5 V [11-28 VDC] 0-10 V, ±10 V [15-28 VDC] 4-20 mA 3L [22-32 VDC] 4-20 mA 2L [9-32 VDC] 4-20 mA 2L ATEX [9-28VDC]
	TJE High-Precision Pressure Transducer	0-70 mbar to 0-4.000 bar	vented gauge absolute	±0,1%	3 mV/V [10 VDC] 0-5 V, ±5 V [11-28 VDC] 0-10 V, ±10 V [15-28 VDC] 4-20 mA 3L [22-32 VDC] 4-20 mA 2L [9-32 VDC] 4-20 mA 2L ATEX [9-28VDC]
	U5200 UltraStable Pressure Transducer for measurement of liquid or gas pressure	0-0,14 mbar to 0-700 bar	vented gauge absolute	±0,1% to ±0,75 v.E (depending on measurement range)	0,5-4,5 V ratiometr. [5 VDC] 4-20 mA [9 - 30 VDC] 1-5 V, 0-5 V, 1-6 V [8-30 VDC] 0-10 V [15-30 VDC] 0,5-4,5 V [5-30 VDC]

Product image	Model	Measurement Range	Pressure Type	Accuracy	Output (Supply Voltage)
PRECISION PRESSURE SENSORS					
	U5300 UltraStable High-Accuracy Pressure Transducer for measurement of liquid or gas pressure	0-0,35 mbar to 0-700 bar	vented gauge absolute	±0,1%	0,5-4,5 V ratiometr. [5 VDC] 4-20 mA [9-30 VDC] 1-5 V, 0-5 V, 1-6 V [8-30 VDC] 0-10 V [15-30 VDC] 0,5-4,5 V [5-30 VDC]
	U5600 Wireless Pressure Transmitter	0-0,35 mbar to 0-700 bar	vented gauge absolute	±0,1% to ±0,75%	2,5-3,6 VDC
ULTRA-HIGH PRECISION SENSORS					
	1000 6000 9000 Serie Intelligent Pressure Transmitters	Absolute pressure: 0,1 MPa to 275,8 MPa Gauge pressure: 0,1 MPa to 1,38 Mpa	vented gauge absolute	±0,01%	RS-232 and RS-485
	Model 715 Model 735 Display Models for Pressure and Temperature Data	Model 715: for all High-precision Pressure Transducers with RS-232- and RS-485-interfaces Model 735: Supports all functions of 745 standard	vented gauge absolute	±0,01%	RS-232 and RS-485
	2000 Serie Absolute and Gauge Pressure Transducers	Absolute Pressure: 0,1 MPa to 3,45 MPa Gauge Pressure: 0,01 MPa to 1,38 Mpa	vented gauge absolute	±0,01%	Frequency output [5-16 VDC]
	202BG Low range bi-directional gauge Pressure Transducer	±15 kPa	vented gauge	±0,01%	Frequency output [5-16 VDC]
	3000 4000 Serie Absolute Pressure Transducers	0-6,9 Mpa to 0 - 276 Mpa	absolute	±0,01%	Frequency output [5-12 VDC]
	4000KR Serie Absolute Pressure Transducers	0-13,8 Mpa to 0-138 Mpa	absolute	±0,01%	Frequency output [5-16 VDC]

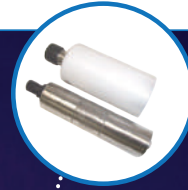
Product image	Model	Measurement Range	Pressure Type	Accuracy	Output (Supply Voltage)
ULTRA-HIGH PRECISION SENSORS					
	745 6000 Barometer Digi quartz® barometric pressure standards	Model 6000-16B: 800-1.100 hPa Model 745-16B: 500-1.100 hPa	absolute	±0,08 hPa	Model 6000-16B: RS-232 and RS-485 [6-16 VDC] Model 745-16B: RS-232 [6-25 VDC, battery AA]
	745 Serie Portable Standards	Absolute Pressure: 0,1 MPa to 276 MPa Gauge Pressure: 0,1 MPa to 1,38 Mpa	vented gauge absolute	±0,008%	RS-232 [6-25 VDC]
	765 Serie Portable Standards	Absolute Pressure: 0,1 MPa to 276 MPa Gauge Pressure: 0,1 MPa to 1,38 Mpa	vented gauge absolute	±0,008%	RS-232 [100-240 VAC, internal battery]
	765-16B Portable Barometer	500-1.100 hPa	absolute	±0,08 hPa	RS-232 [100-240 VAC, internal battery]
	8000 Serie Submersible Depth Sensor	0-10 m H2O to 0-7000 m H2O 0-30 psia to 0-10,000 psia	vented gauge absolute	±0,01%	USB 2.0 TTL + Diode RS232 RS485 CAN Bus
MINIATURE PRESSURE SENSORS					
	EB100 High Accuracy Miniature Pressure Transducer	0-20 bar to 0-350 bar	absolute	±0,25%	0,5-4,5 V [8-30 V (current <5 mA)]
	EPB Miniature pressure sensor with stainless steel diaphragm	0-0,35 bar to 0-350 bar	vented gauge absolute	±0,5% bis ±1%	1 to 12,5 mV/V [10 VDC], depending on measurement range
	EBP-PW Small pressure probe sensor for pore water applications in centrifuges or laboratory equipment	0-1bar to 0-70 bar	sealed gauge	±0,5%	5-12,5 mV/V [1-10 VDC]
	EPIH Subminiature pressure sensor with high frequency response	0-0,35 bar to 0-20 bar	vented gauge absolute	±1%	2,4 to 15 mV/V [5 VDC], depending on measurement range

Extreme challenges

Man and material must be able to withstand the worst weather conditions and metre-high waves.

SENSOR FOR LEVEL PROBES

bar PRESSURE



bar PRESSURE

SENSOR FOR FOUNTAINS AND
SOURCE EXTRACTION



bar PRESSURE

SENSOR FOR RINSING PUMPS

Product image	Model	Measurement Range	Pressure Type	Accuracy	Output (Supply Voltage)
MINIATURE PRESSURE SENSORS					
	EPL Miniature surface mount Pressure Sensor with stainless steel diaphragm	0-0,35 bar to 0-70 bar	vented gauge absolute	±1% bzw. ±0,5%	1 to 12,5 mV/V [10 VDC], depending on measurement range
	EPRB-1 Pressure transducer in miniature design with amplified output	0-3,5 bar to 0-700 bar	absolute	±0,25%	0,5-4,5 V [8 - 32 VDC] 0,5-4,5 V ratiometr. [5 VDC]
	EPRB-2 Pressure transducer in miniature design with amplified output	0-0,35 bar to 0-700 bar	vented gauge absolute	±0,25%	0,5-4,5 V [8-32 VDC] 0-5 V [8-32 VDC] 0,5-4,5 V ratiometr. [5 VDC]
	EPRB-3 Ultra miniature pressure transducer with platinum RTD	0-3,5 bar to 0-700 bar	absolute	±0,25%	0,5-4,5 V [8 - 32 VDC] 0,5-4,5 V ratiometr. [5 VDC]
	FP110 Flush Diaphragm Pressure Transducer with thread M16 x 1,5	0-10 bar to 10-500 bar	vented gauge	±0,3% to ±0,5%	1.2 mV/V [10 VDC] 4 V ±0,2 V [10-30 VDC] 5 V ±0,2 V [±15 VDC]
	FP1124 High Temperature Pressure Transducer for measurement of pressure on the brake circuit, including ABS brake systems	0-30 bar to 30-350 bar	vented gauge	±0,3%	5V ±0.2 V [10-36 VDC]
	LM PVC isolated liquid level Pressure Transducer for small measurement ranges	0-1 psi to 0-150 psi (ca. 0,07 bar to 10 bar)	vented gauge absolute	±1%	0,5-4,5 V [5 VDC]
	MP40 Flush mount Pressure Transducer	0-1 bar to 0-700 bar	vented gauge absolute	±0,5 % bzw. ±0,25 %	20 mV/V [5 VDC] 4-20 mA [24 VDC]
	XPM4 Miniature threaded (M4 x 0,7) Pressure Transducer	0-5 bar to 0-200 bar	vented gauge	±0,35% bzw. ±0,50%	3 to 10 mV/V [10 VDC] depending on measurement range

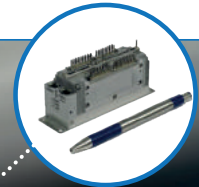
Product image	Model	Measurement Range	Pressure Type	Accuracy	Output (Supply Voltage)
MINIATURE PRESSURE SENSORS					
	XPM5 Miniature threaded (M5 x 0,8) Pressure Transducer	0-1 bar to 0-350 bar	vented gauge absolute	±0,25% to ±0,50%	2 bis 10 mV/V [10 VDC], depending on measurement range 0,5-4,5 V [10 - 30 VDC]
	XPM6 Miniature threaded (M6 x 1,0) Pressure Transducer	1-100 bar to 0-1000 bar	vented gauge	±0.25	10mV/V [10 VDC regulated] 4 V ±0.2 V [10-30 VDC]
	XP1113 Miniature threaded (M8 x 1,0) Pressure Transducer	0-1 bar to 0-350 bar	vented gauge absolute	±0.25	5 to 10 mV/V [10 VDC] 0,5-4,5 V [10-30 VDC]
	XPC10 High temperature Miniature Pressure Sensor with thread (M10 x 1,0)	0-10 bar to 0-500 bar	vented gauge absolute	±0,25% to ±0,50%	1,2 mV/V [10 VDC] 0,5-4,5 V [10-30 VDC]
	XPM10 Miniature Pressure Sensor with thread (M10 x 1,0)	0-1 bar to 0-350 bar	vented gauge absolute	±0,25% to ±0,35%	5 bzw. 10 mV/V [10 VDC], depending on measurement range 0,5-4,5 V [10-30 VDC] 0-5 V [±12 - ±18]
	XPR46 Miniature Pressure Sensor with integrated temperature compensation	0-0.5 bar to 0-100 bar	absolute sealed gauge	±0,5% to ±1%	2.5 mV/V - 12.5mV/V [10 VDC]
MULTI-CHANNEL PRESSURE SCANNERS / TEMPERATURE MEASURING SYSTEMS					
	DSA3016 DSAEN-CL3200 Pressure Scanner	±2,5 kPa to ±5.250 kPa	vented gauge	±0,05%	Ethernet [115 VAC, 230 VAC]
	DSA3207 DSA3307 Pressure Scanner	0-5 psi to 0-1.000 psi (ca. 35 kPa to 70 kPa)	vented gauge absolute diff.	±0,12% to ±0,50%	Ethernet [20-36 VDC]
	DSA3217 DSA3218 Pressure Scanner	103 kPa to 689 kPa bar ±2,5 kPa to ±5.171 kPa	absolute diff.	±0,2% to ±0,08%	Ethernet [20-36 VDC]
	MPS4000 Miniature Pressure Scanner	6,89 kPa to 995,4 kPa	vented gauge	±0,06% to ±0,2%	Ethernet [9-36 VDC]
	PSC 8 16 24 Multi Channel Pressure Scanner	±1,25 mbar ±150 mbar	vented gauge absolute diff.	±0,25%	USB, LAN, CAN, Bus, RS 232

Perfect aerodynamics and acoustics

In a wind tunnel, sensors are used to investigate and measure the aerodynamic and aeroacoustic properties of objects.

SENSOR FOR MULTIPOINT
PRESSURE MEASUREMENT MODULES

bar PRESSURE



bar PRESSURE

SENSOR FOR MEASUREMENTS
IN MODELS



bar PRESSURE

SENSOR FOR
FLOW SPEED

Product Image	Model	Measurement Range	Pressure Type	Accuracy	Output (Supply Voltage)
MULTI-CHANNEL PRESSURE SCANNERS / TEMPERATURE MEASURING SYSTEMS					
	DSM4000 Digital Service Module for up to 8 ZOC multi channel pressure modules	—	—	—	Ethernet Arinc [9-36 VDC]
	DTS4050 Digital Temperature Scanner, accepts 16, 32, or 64 thermocouple inputs	Thermoelement-Types: E, J, K, N, R, S, T, B		±0,25°C bis ±4°C	Ethernet, °C, °F [18-36 VDC]
	E-RAD4000 Pressure Measurement System, scalable from 1 to 8 ZOC multi channel pressure modules	—	—	—	Ethernet [±15 VDC, +5 VDC]
	SPC4000 Pressure Calibrator	0-0,36 psi to 0-850 psi	vented gauge	0.01% F.S.	[100-240 VAC]
	ZOC22B Analog Multi-Channel Module	±2,5 kPa to ±350 kPa	diff.	±0,08% bis ±0,15%	±2,5 V [±15 VDC] ±5 V [±15 VDC] ±10 V [±15 VDC]
	ZOC23B Analog Multi-Channel Module	±2,5 kPa to ±350 kPa	diff.	±0,1% bis ±0,25%	±2,5 V [±15 VDC] ±5 V [±15 VDC] ±10 V [±15 VDC]
	ZOC33 Analog Multi-Channel Module	±2,5 kPa to ±350 kPa	diff.	±0,08% bis ±0,15%	±2,5 V [±15 VDC] ±5 V [±15 VDC] ±10 V [±15 VDC]
DIFFERENTIAL PRESSURE SENSORS					
	D5100 Differential Pressure Transducer for demanding environments	0-0,07 bar to 0-35 bar	diff.	±0,1% (from 1 bar)	0-100 mV [10 VDC, max. 14 VDC] 0,5-4,5 V ratiom. [5 VDC] 1-5 V [8-30 VDC] 4-20 mA [9-30 VDC]
	DPS Differential Pressure Transducer for low ranges, for non-aggressive gases	0,1 mbar to 1.000 mbar	diff. vented gauge	±1% ±0,5% ±0,2%	0-10 V [19-31 VDC] ±5 V [19-31 VDC] ±10 V [19-31 VDC] 0-20 mA [19-31 VDC] 4-20 mA [19-31 VDC] 4-20 mA 2L [12-32 VDC] [opt.: 230 VAC, 115 VAC, 24 VAC]

Product Image	Model	Measurement Range	Pressure Type	Accuracy	Output (Supply Voltage)
DIFFERENTIAL PRESSURE SENSORS					
	FDD FDW Differential Pressure Transducers Modell FDW wwet/wet Modell FDD wet/dry	0-35 mbar to 0-70 bar	diff.	±0,1% bzw. ±0,25%	5-10 mV/V [10 VDC] 0-5 V [9-28 VDC] 0-10 V [15-28 VDC] 4-20 mA [9-32 VDC] 4-20 mA ATEX [9-28 VDC]
	AST5300 AST53ED AST53EN Differential Pressure Transducers	1-10 PSI to 0-5.000 PSI	diff.	±1%	10-28 VDC
	AST5400 AST54ED AST54EN Differential Pressure Transducers	0-1 PSI to 0-10 PSI	diff.	±0,5%	10-28 VDC
	KZ Low Range Wet/ Wet Differential Pressure Transducer	±35 mbar to ±2 bar	diff.	±0,25%	1-2 mV/V [10 VDC] 0-5 V, ±5 V [11-28 VDC] 0-10 V, ±10 [15-28 VDC] 4-20 mA 3L [22-32 VDC] 4-20 mA 2L [9-32 VDC] 4-20 mA 2L ATEX [9-28 VDC]
	Z A-5 Mid Range Wet/ Wet Differential Pressure Transducer	±3,5 mbar to ±50 bar	diff.	±0,25% ±0,50%	2 mV/V [10 VDC] 0-5 V, ±5 V [11-28 VDC] 0-10 V, ±10 [15-28 VDC] 4-20 mA 3L [22-32 VDC] 4-20 mA 2L [9-32 VDC] 4-20 mA 2L ATEX [9-28 VDC]
	HL-Z High Line Wet/ Wet Differential Pressure Transducer	±3,5 mbar to ±500 bar	diff.	±0,25%	2 mV/V [10 VDC] 0-5 V, ±5 V [11-28 VDC] 0-10 V, ±10 [15-28 VDC] 4-20 mA 3L [22-32 VDC] 4-20 mA 2L [9-32 VDC] 4-20 mA 2L ATEX [9-28 VDC]
PRESSURE PROBES					
	Conventional Multi-hole Probes	5 m/sec to 320 m/sec	—	—	—
	µADS - Micro-Air-Data-System and Air-Data-Pressure Probes	5 m/sec to MACH 2.0	vented gauge + barometer	—	7-30 VDC
	PSC 5 5 channels / 1 barometer	Baro 600 - 1100mbar 0-1,100 mbar ±1,25 mbar ±150 mbar	vented gauge with REF to BARO	±0,25%	CAN, USB
	Fast-Response Probes	5 m/sec to 320 m/sec	vented gauge	—	10-18 VDC
	Omniprobe	5 m/sec to 320 m/sec	—	—	—

SPEED AND VECTOR SENSOR
bar PRESSURE



SENSOR FOR VIBRATION MONITORING
m/s² VIBRATION



bar PRESSURE
PRESSURE SENSOR IN COOLANT



N FORCE
LOAD SENSOR IN STEERING LINKAGE



bar PRESSURE
SENSOR FOR BRAKE PRESSURE



KA-Racing goes Michigan
Althen sensors for brake pressure
measurement

IT'S ALL ABOUT THE REFERENCE PRESSURE

Pressure sensors and transmitters vary not only by their shape and output signal, but especially with regards to the type of reference pressure used: There are pressure sensors for relative pressure and absolute pressure, as well as differential pressure.

RELATIVE PRESSURE

For measuring relative pressure, we apply the surrounding air pressure to the back of the sensor element. In a typical assembly, this is done via a small tube leading from the back of the sensor to the plug or through the connecting lines. These pressure sensors have the advantage that changes in air pressure do not lead to variance in the sensor output.

ABSOLUTE PRESSURE

Sensors for absolute pressure have a small chamber on the back of the sensor membrane which is completely evacuated and therefore has an absolute pressure of 0 bars. As long as no particular pressure is applied, these pressure sensors show the current air pressure, which lies between 950 and 1050 mbar. Any change in air pressure (e.g., from changing weather conditions) therefore leads to a change in the measurement signal, even if there is no change in the actual pressure you are measuring. Barometers are a special type of absolute pressure sensors which measure the surrounding air pressure with great precision.

Another special type of pressure sensors are so-called sealed gauge sensors. Their reference chamber is sealed at approx. 1000 mbar. These pressure sensors are primarily used for measurements above 10 bar. The seal protects the reference chamber against the introduction of aggressive gases, which can cause corrosion.

DIFFERENTIAL PRESSURE SENSORS

The so-called differential pressure sensors are another special type of pressure sensors. The back of their sensor membrane is mechanically constructed in such a way that it serves as its own pressure connector for pressure measurements. A pressure sensor (pressure socket or pressure measurement socket) like this will measure zero pressure if the pressure is the same on the input and reference sides. Differential pressure sensors come in a wide variety of mechanical designs. There are simple designs which can only be used with dry gases on the reference side, or highly specialized pressure transducers that allow for more than 200 bar overload, even on one side, and still measure in the range of 35 mbar.

PRESSURE TRANSDUCER

Pressure transducers are typically constructed to be very rugged and provide a common output signal of 4-20 mA for process measurement technology.

THE RIGHT SOLUTION FOR YOUR REQUIREMENTS







Thanks to our decades of experience, we at Althen can provide both standard and highly specialized custom sensors as well as complete measurement systems for our customers.

Our product portfolio covers all physical measurements, and we use a wide range of technologies to ensure you always get the best solution for your measurement requirements. Thanks to our vast knowledge, technical expertise, our strong team of engineers from various professional backgrounds, and our broad range of products, we can offer you the most efficient solution for almost any application in every industry.

Our team will be happy to give you advice!

You can call us at **+49 (0)6195 70060** or send an email to **sales@althen.de**.

OUR PRODUCT SCOPE

bar	Pressure	mm	Displacement	g	Acceleration		Amplifier
N	Force	α	Rotation	m/s²	Vibration		Datenlogger
Nm	Torque		Joystick	°/s	Angular Rate		Automation
ε	Strain		Inclination	°C	Temperature		Measurement Solutions



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