

## **General Purpose Aerospace Pressure Transducer**



Features	Applications
Available with Built in Electronic	Aerospace
All Stainless steel	OEM
Robust and reliable sensor	Military
Large Bandwidth	Test benchs

The PGA220 series is a general purpose aerospace pressure sensor. The sensing element is an advanced piezo-resistive pressure module which together with the latest compensation techniques, provides high performance measurements. It is available with unamplified (mV/V) or amplified (Vdc, mA) outputs. Wetted parts being all stainless steel (other materials are available on request), the sensor is compatible with most media used in Aerospace industry, especially corrosive ones (Skydrol, Kerosene...). High accuracy pressure measurements on test bench is one of the main application for the PGA220. Thanks to compact dimensions and a large choice in mechanical and electrical connections, installation is easier.

## Technical specifications

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Pressure ranges (FS)	-1/+2bar ; -1/+5bar ;
	3bar ; 5bar ; 10bar ; 20bar ; 40bar ; 100bar ; 250bar ; 400bar ; 600bar ;
	-14.5/+30PSI ; -14.5/+70PSI ;
	8000PSI; 40PSI; 70PSI; 150PSI; 300PSI; 500PSI; 1500PSI; 3000PSI; 10000PSI; 5000PSI
Туре	Absolute ; Gage
Type (for ranges > 40 bar)	Sealed Gage
Safe overload	150% FS
Burst pressure	300% FS
Power supply	8 to 30Vdc
Consumption	< 10mA
Insulation	> 1000 MOhms under 50Vdc at ambient temperature
Output at -100%FS (only for ± range)	0Vdc
Output at 0%FS (except ranges ±)	0Vdc
Output at 100%FS	5Vdc
Zero and sensitivity settings tolerances	±50mV

## **Technical Specifications**

Non linearity and hysteresis combined ±0.25% FS

Option: ±0.1% FS

Non repeatability  $\pm 0.02\%$  FS typ.

Signal bandwidth 1000Hz @ -3dB

Compensated temperature range -55 to +125°C

Operating temperature range -55 to +125°C

Combined thermal zero & sensitivity shifts ±0.03% FS/°C

Option: ±0.02% FS/°C

Constant acceleration in linear vibrations ± 0.02% FS/g (frequency 20-2000Hz, 50g max.)

Mechanical shock 100g ½ sinus 1ms

Electrical protection Protected against polarity inversion

EMC protection Compliant to EN61000

Electrical connection Hermetic MIL-C-26482 - 6 pins Receptacle

Option: MIL-DTL-38999 - 6 pins Receptacle

Mechanical connection 1/4 Gaz A male ; M14x1.5-4h male

Option: 7/16-20 UNJF-3A male - MS33656-4; M10x1-4h male with 80° internal cone

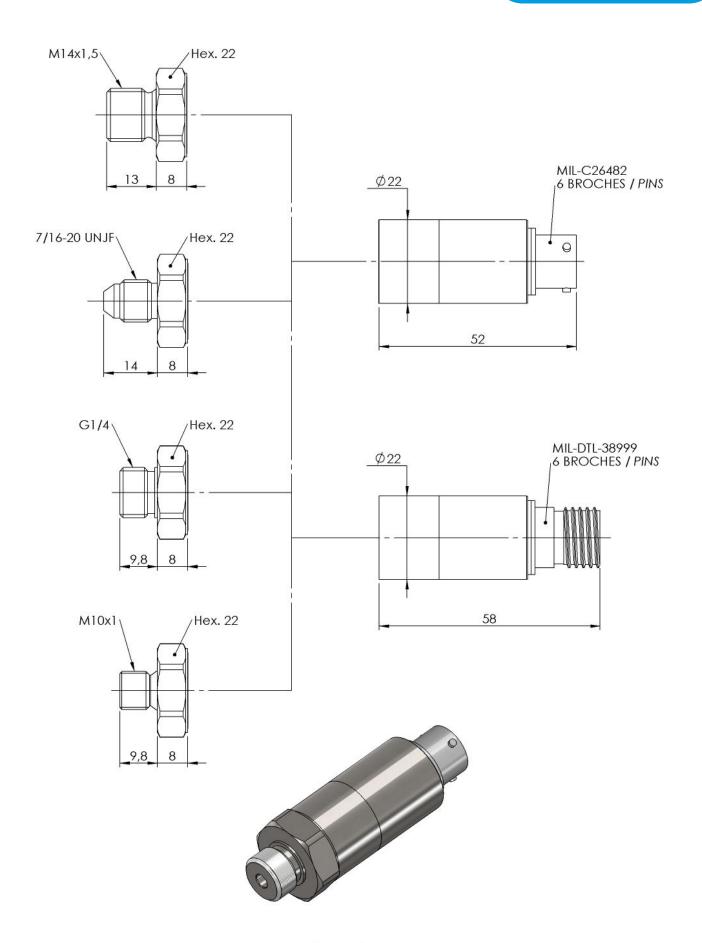
Material(s) of wetted parts Stainless Steel 316L; Stainless Steel 17-4PH; Stainless steel 15-5PH

Weight < 120g without cable

Enclosure protection IP67 for absolute & sealed gage version

## Codification General Purpose Aerospace Pressure Transducer PGA22 4 10bar 03 Output Signal 0-5Vdc 4 Material Stainless Steels S Range Example 10bar Туре Absolute Α G Gage SG Sealed Gage Mechanical connection M14x1.5-4h male 01 1/4 Gaz A male 07 7/16-20 UNJF-3A male - MS33656-4 10 M10x1-4h male with 80° internal cone 19 Electrical connection Hermetic MIL-C-26482 - 6 pins Receptacle 03 MIL-DTL-38999 - 6 pins Receptacle 20 Compensated temperature range -55 to +125°C Е Non linearity and hysteresis combined ±0.25% FS ±0.1% FS 2 Combined thermal zero & sensitivity shifts ±0.02% FS/°C ±0.03% FS/°C 3

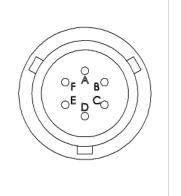
Dimensions PGA224



Dimensions: mm

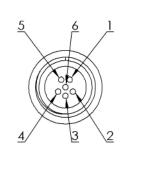


MIL-C26482 - 6 PINS		
VOLTAGE OUTPUT	PIN	
+ EXCITATION	PIN A	
+ SIGNAL	PIN B	
0 VOLT	PIN C	
0 VOLT	PIN D	
SENSOR HOUSING	PINS E &F	





MIL-DTL-38999 - 6 PINS		
VOLTAGE OUTPUT	PIN	
+ EXCITATION	PIN 1	
+ SIGNAL	PIN 3	
- SIGNAL (0 Vdc)	PIN 4	
- EXCITATION (0 Vdc)	PIN 2	
NC	PIN 5	
NC	PIN 6	
SENSOR HOUSING	CONNECTOR HOUSING	





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