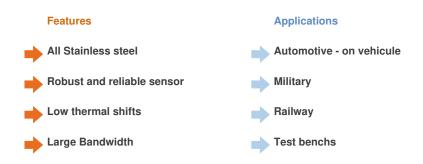


## **Compact Pressure Transducer for Harsh Environment**





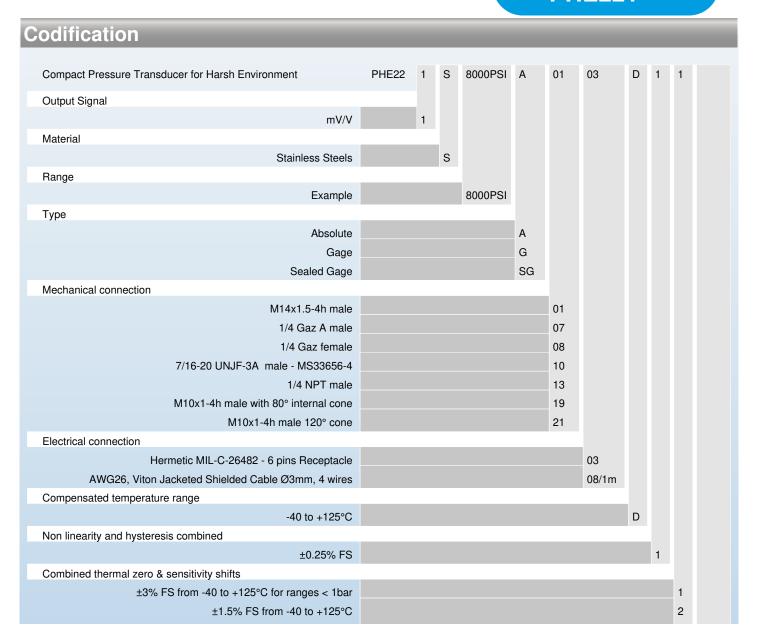
The PHE220 series is designed to operate in the harshest environments, including wide operating temperature, mechanical shocks and vibrations. It is well adapted to embedded measurements, on vehicules, aircrafts or satellites. With pressure ranges available from -1 up to 600 bar, absolute or gage, its all stainless steel construction makes it usable with most fluids used in industry, even corrosive ones. The PHE220 is manufactured with the ruggedized and premium sensitive elements and components developed by EFE. Its manufacturing process, including traceable controls and special burn-in, gives the best insurance of high performance and stability in the most challenging applications. The choice of mechanical threads and electrical connections makes its installation easier.

## **Technical specifications**

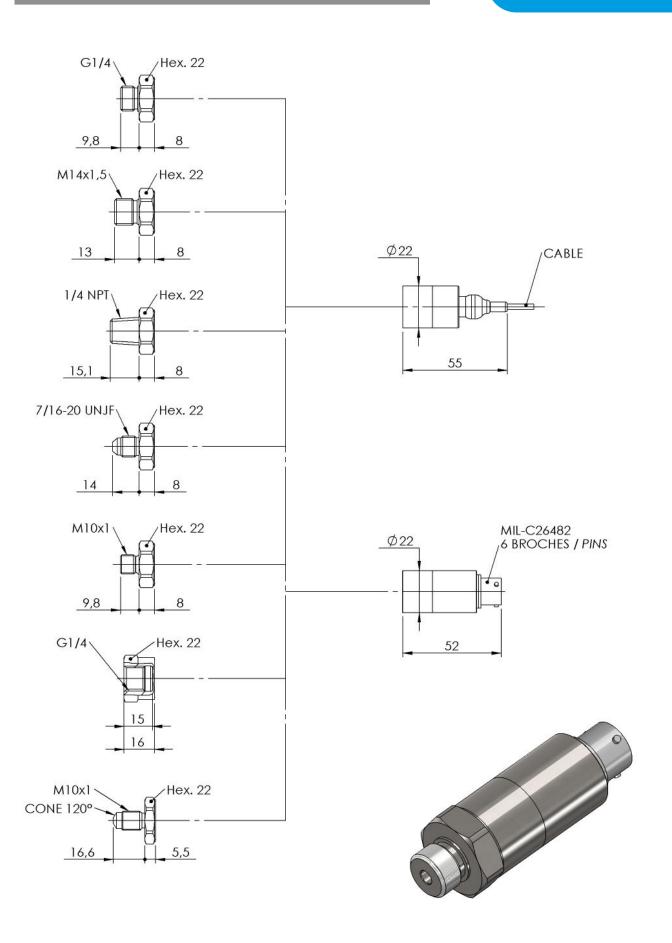
Pressure ranges (FS)	±100mbar; ±250mbar; ±500mbar;
	±1bar ; -1/+2bar ; -1/+5bar ;
	2bar; 5bar; 10bar; 20bar; 40bar; 100bar; 250bar; 400bar; 600bar;
	±1.5PSI; ±3.5PSI; ±7PSI; ±14.5PSI; -14.5/+30PSI; -14.5/+70PSI;
	8000PSI; 30PSI; 40PSI; 70PSI; 150PSI; 300PSI; 500PSI; 1500PSI; 3000PSI; 5000PSI
Туре	Absolute ; Gage
Type (for ranges > 40 bar)	Sealed Gage
Safe overload	150% FS
Burst pressure	300% FS
Output impedance	> 3000 Ohms typ.
Input impedance	> 3500 Ohms typ.
Power supply	5 to 15Vdc
Consumption	< 10mA
Insulation	> 1000 MOhms under 50Vdc at ambient temperature
Output at -100%FS (only for ± range)	Proportional to +100%FS

## **Technical Specifications**

0mV/V Output at 0%FS 3 to 10mV/V Output at 100%FS (FS < 3bar) Output at 100%FS (FS >= 3bar) 1.5mV/V nom. Zero and sensitivity settings tolerances ±3% FS Non linearity and hysteresis combined ±0.25% FS ±0.02% FS typ. Non repeatability Compensated temperature range -40 to +125°C -40 to +125°C Operating temperature range Combined thermal zero & sensitivity shifts  $\pm 1.5\%$  FS from -40 to +125°C ;  $\pm 3\%$  FS from -40 to +125°C for ranges < 1bar Constant acceleration in linear vibrations ± 0.02% FS/g (frequency 20-2000Hz, 50g max.) 100g ½ sinus 1ms Mechanical shock Electrical protection Protected against polarity inversion EMC protection Compliant to EN61000 Hermetic MIL-C-26482 - 6 pins Receptacle Electrical connection Option: AWG26, Viton Jacketed Shielded Cable Ø3mm, 4 wires Mechanical connection 1/4 Gaz A male; 1/4 NPT male; M14x1.5-4h male Option: 1/4 Gaz female; 7/16-20 UNJF-3A male - MS33656-4; M10x1-4h male with 80° internal cone; M10x1-4h male 120° cone Material(s) of wetted parts Stainless Steel 316L; Stainless Steel 17-4PH; Stainless steel 15-5PH Weight < 100g without cable Enclosure protection IP65 for absolute & sealed gage version



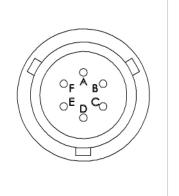
Dimensions PHE221



Dimensions: mm



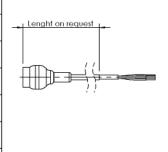
MIL-C26482 - 6 PINS		
mV/V OUTPUT	PIN	
+ EXCITATION	PIN A	
+ SIGNAL	PIN B	
- SIGNAL	PIN C	
- EXCITATION	PIN D	
SENSOR HOUSING	PINS E &F	





## #26 AWG, 4 CONDUCTOR SHIELDED VITON CABLE mV/V OUTPUT CONDUCTOR + EXCITATION RED + SIGNAL GREEN / YELLOW - SIGNAL WHITE - EXCITATION BLUE / BLACK

SHIELD





E.F.E.

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SENSOR HOUSING

