



| PTE 7000 SERIES

MSG PRESSURE SENSOR

Introduction

Utilizing Sensata's industry leading silicon MEMS strain gage technology (MSG), iMSG is a hermetic high pressure sensor ideal for industrial applications including injection molding, off-road vehicle and other hydraulic or pneumatic applications.



Features

- Highly configurable
- High accuracy
- Stain steel housing
- Hermetically sealed pressure port
- Wide temperature range

Applications

- Off-road vehicle
- Material handling
- Plastic injection molding
- Air Condition & Refrigeration (CO2)



SPECIFICATIONS

Pressure range

From 0 to ...		60	100	200	250	350	400
Proof Pressure	bar (gage)	200	200	500	500	800	800
Burst Pressure		400	400	1000	1000	1600	1600

Performance

Electrical Connection	DIN 175301-803A
Pressure Connection	G1/4 A, PT 1/4
Pressure Reference	Gauge
Operating Temperature	-10° to +100°C
Storage Temperature	-40° to 125°C

Physical

Random Vibration	20G
Mechanical Shock	50G
Drop (any Axis)	1m

Electrical

Output signal	0 to 10 VDC	0 to 5 VDC	4 to 20mA
Operating supply voltage	13 to 33 VDC	8 to 33 VDC	8 to 33 VDC
Overvoltage protection	Yes ^(A)	Yes	Yes
Short-circuit proofness	Yes ^(B)	Yes	Not Applicable
Reverse polarity protection	Yes	Yes	Yes
Load	≥ 4.7 k	≥ 4.7 k	≤ (Vsup-8 VDC)/(0.02 A)



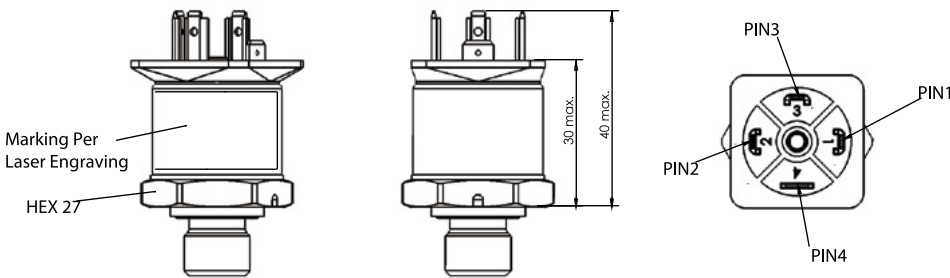
DIMENSIONS

All dimensions are in millimeters

Built In Electrical Connector Options

(PRESSURE PORT G1/4A DIN 3852-E SHOWN)

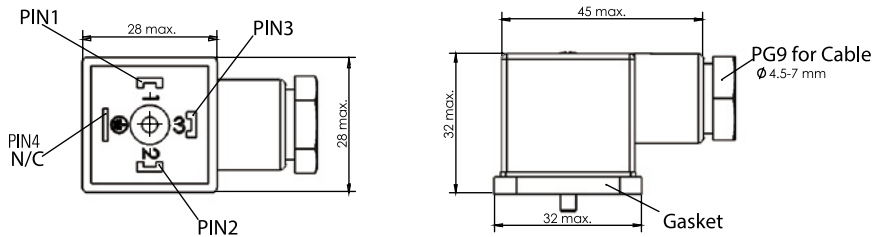
Compatible with DIN 175301-803A (18mm)



Output	PIN 1	PIN 2	PIN 3	PIN 4
Voltage	V+	V-	Vout	... ^(C)
Current	V+	V-	... ^(C)	... ^(C)

Mating Connector Options

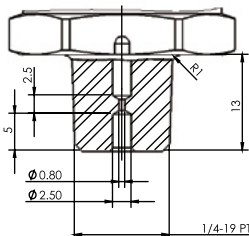
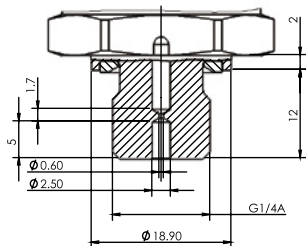
Compatible with DIN 175301-803A (18mm)



Pressure Connection Port Options

G1/4A (MALE) DIN 3852-E

1/4-19 PT (1/4-19 BSPT)
(R1/4)





ORDERING OPTIONS

Example : PTE7000-250B1A1A

	PTE7000	250B	1	A	1	A
Family	PTE7000: 1:V+; 2: V-; 3:Vout; 4:N/A PTE7001: 1:V+; 2: Vout; 3:V-; 4:N/A					
Pressure Range	250B: 0-250barG					
Output / Input	1: 4-20mA / 9-33VDC 3: 0-5VDC / 9-33VDC 4: 0-10VDC / 13-33VDC					
Pressure Connection	A: G1/4A DIN 3852-E with 0.6mm Damping Hole B: 1/4-19PT (R1/4) with 0.8mm Damping Hole					
External Sealing	0: None 1: Fluorocarbon Sealing Ring (FKM)					
Electrical Connection	A: DIN 175301-803 A (18mm) Without Mating Connector Z: DIN 175301-803 A (18mm) With Mating Connector					



GENERAL NOTES

- (A) For min. 3 intervals at 5 minutes each
- (B) For min. 10 seconds on assigned pins
- (C) Not Connected V+: Supply Voltage Vout: Output Voltage V-: Ground



AGENCY APPROVALS & CERTIFICATIONS

RoHS
CE



WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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