

## PTE 7100 Series

- The pressure sensor detects the system pressure and converts it into an analog output signal.
- These operating instructions contain important information on handling the instrument.
- All safety instructions and work instructions should be observed to prevent injury or harm.
- Observe the relevant local accident prevention regulations and general safety regulations for the instrument's range of use.
- The operating instructions are part of the product and must be kept in the immediate vicinity of the instrument and readily accessible to skilled personnel at any time. Pass the operating instructions on to the next operator or owner of the instrument.
- The general terms and conditions contained in the sales documentation shall apply.
- Subject to technical modifications.

### Explanation of Symbols

**!** **WARNING!** ...indicates a potentially dangerous situation that can result in serious injury or death, if not avoided.

**!** **CAUTION!**...indicates a potentially dangerous situation that can result in light injury or damage to property or the environment, if not avoided.

**i** **INFORMATION**...points out useful tips, recommendations, and information for efficient and trouble-free operation.

### FUNCTIONS & FEATURES

#### Pressures

The pressure transmitter is used for measuring pressure. The measured pressure is output as an electrical signal. Proper pressure range should be selected based on application requirement.

From 0 to ...	barG	50	100	200	250	350	400	600
Proof Pressure	barG	200	200	400	500	800	800	1200
Burst Pressure	barG	400	400	1000	1000	1600	1600	2400

**!** Avoid overload pressure exceeding the specified maximum permissible pressure by taking appropriate measures. The indicated bursting pressure must not be exceeded. Even if the bursting pressure is exceeded only for short time, the unit may be destroyed. ATTENTION: Risk of injury!

#### INSTALLATION

**!** Before installing and removing the unit: Make sure that no pressure is applied to the system. Only use the pressure transmitter if it is in perfect condition with respect to safety. Prior to commissioning, the pressure transmitter must be subjected to a visual inspection. Leaking fluid is indicative of damage.

The mounting point must meet the following

Tighten firmly. Recommended tightening torque:

Final value of the measuring range in bar	Tightening torque in Nm
10...400	25...35
600	30...50

Depends on lubrication, seal on pressure rating!

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## SPECIFICATIONS

### Electrical

<b>Pressure Ranges</b>	0-50 to 0-600 bar (0-725 to 0-8700 psi)
<b>Pressure Reference</b>	Gauge
<b>Supply Voltage/Output</b>	8-32VDC for 4-20mA output; 5±0.25VDC for 0.5-4.5VDC output; 8-32VDC for 0-5VDC output 12-32VDC for 0-10VDC output; 8-32VDC for 1-5VDC output; 8-32VDC for 0.5-4.5VDC output
<b>Output Load</b>	≥ 4.7 kΩ for voltage output; ≤ (Vsup-8)/20mA for current supply
<b>Output Response Time</b>	<2 ms
<b>Overvoltage Protection</b>	36 VDC
<b>Reverse Voltage Protection</b>	Yes
<b>Short Circuit Protection</b>	Yes
<b>Insulation Resistance</b>	> 100 MΩ at 500V
<b>EMC</b>	IEC 61326-1 and EN 61326-2-3
<b>Dielectric Strength</b>	500 VAC
<b>Enhanced Radiated Immunity</b>	30V/m(80MHz~2GHz)
<b>Enhanced ESD</b>	±8KV Contact; ±15KV Air

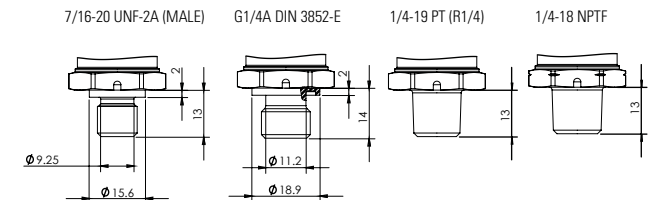
### Physical

<b>Random Vibration</b>	IEC 60068-2-6, 30g (10...2000Hz)
<b>Mechanical Shock</b>	EN 60068-2-27, 500g
<b>Drop (any Axis)</b>	1m
<b>Ingress Protection</b>	IP65 - IP67 (see connector options)
<b>Media Compatibility</b>	Fluids and gases compatible with 17-4PH stainless steel

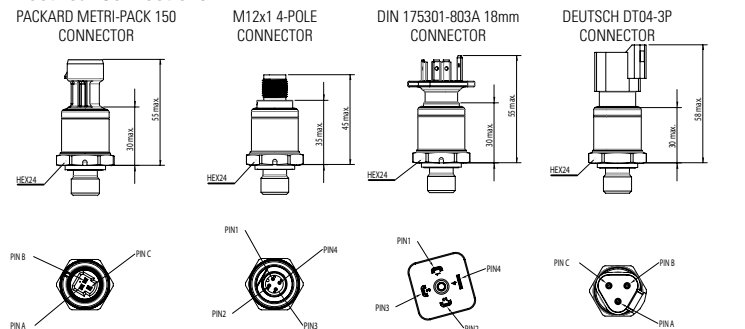
### Performance

<b>Pressure (Best Fit Straight)</b>	± 0.5%FS@25°C
<b>Pressure (Total Error Band)</b>	±1.5%FS @-20° to 85°C
<b>Operating Endurance</b>	>10M cycles
<b>Operating Ambient Temperature</b>	-40°C to +100°C
<b>Operating Media Temperature</b>	-40°C to +125°C
<b>Storage Temperature</b>	-40°C to +125°C

### Pressure Port Connections

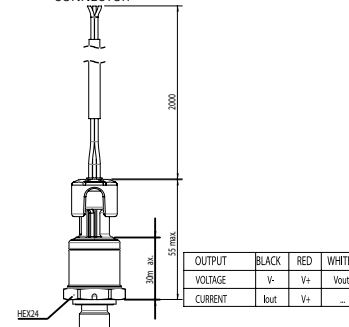


### Electrical Connections



OUTPUT	PIN A	PIN B	PIN C	OUTPUT	PIN 1	PIN 2	PIN 3	PIN 4	OUTPUT	PIN 1	PIN 2	PIN 3	PIN 4	OUTPUT	PIN A	PIN B	PIN C
VOLTAGE	V-	V+	Vout	VOLTAGE	V+	...	V-	Vout	VOLTAGE	V+	V-	Vout	...	VOLTAGE	V+	V-	Vout
CURRENT	Iout	V+	...	CURRENT	V+	...	Iout	...	CURRENT	V+	Iout	...	...	CURRENT	V+	Iout	...

### FLY LEAD HARNESS (2m) CONNECTOR



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