

UPT 200 Series

ULTRAMINIATURE PRESSURE TRANSDUCER

Applications

Aerospace
Impact dynamics test
Fluid mechanics test
Industrial Automation
Research Laboratory
Energy and power



Features

High Precision and Stability
Miniaturized probe-based integration
Flexible Customization
Fast Response and Low Power Consumption
Comprehensive Safety Certification
High Frequency

10mm



Profiles

UPT200 series by Dabey is a robust pressure sensor designed for probes, pressure rake probes and other similar test assemblies.

Adopting high-strength packaging, it delivers high-reliability measurements for both dynamic and static pressure.

Built with an all-stainless-steel structure, the sensor features excellent mechanical strength and environmental tolerance, capable of withstanding vibration, shock and wide-range temperature fluctuations.

It is built upon stable and reliable piezoresistive sensing technology, combined with full-range temperature compensation and anti-interference circuit design, to ensure accurate and stable pressure signal output under complex operating conditions.

DATASHEET
PRESSURE MEASUREMENT

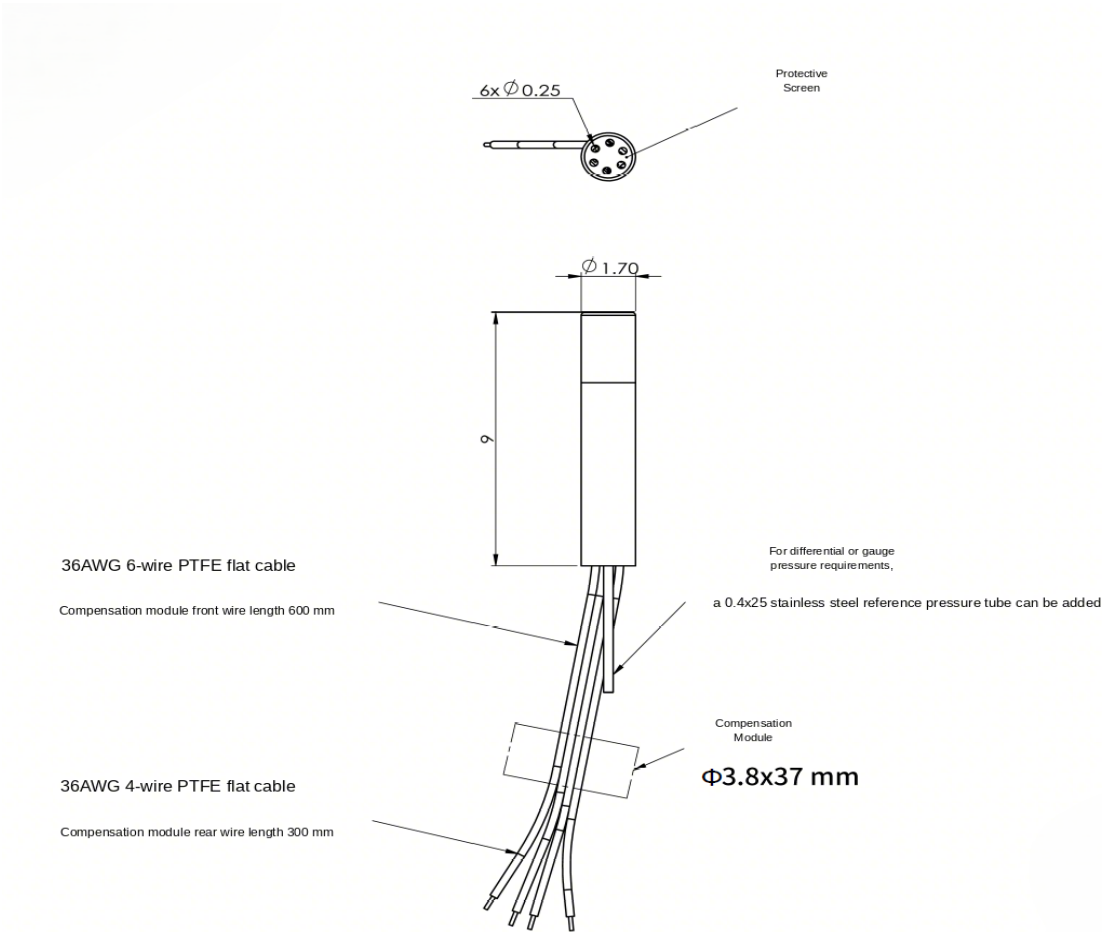
Dabey Technology Co., LTD
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Performance Parameters
Main Performance Indicators

Specification				Description						
Pressure Range	0.035	0.07	0.1	0.17	0.35	0.7	1.7	3.5	7	MPA
	5	10	15	25	50	100	250	500	1000	PSI
Operational Mode	Absolute,Gauge ,Differential			Absolute, Gauge ,Differential ,Sealed gauge			Absolute,Sealed gauge			
Overload Pressure	> 2xFS									
Burst Pressure	> 3xFS									
Pressure Media	All non-conductive, non-corrosive liquids or gases									
Rated Excitation Voltage	10 VDC									
Maximum Excitation Voltage	12 VDC									
Input Impedance	> 4000 Ω									
Output Impedance	5000 Ω (Typical)									
Full Scale Output (FSO)	100 mV (Typical)									
Zero Offset	± 5 mV(Typical)									
Accuracy (Combined Non-linearity, Hysteresis & Repeatability)	± 0.1% FS(Typical) , ± 0.2% FS(Max)									
Resolution	Infinitesimal									
Unscreened Natural Frequency (kHz) (Typical)	150	175	200	240	300	380	550	700	1000	
Acceleration Sensitivity (%FS/g)	1.5x10 ⁻³	1.0x10 ⁻³	6.5x10 ⁻⁴	5.0x10 ⁻⁴	3.0x10 ⁻⁴	1.5x10 ⁻⁴	1.0x10 ⁻⁴	6.5x10 ⁻⁵	4.5x10 ⁻⁵	
Insulation Resistance	> 100 MΩ @ 50 VDC									
Operating Temperature Range	-40℃~125℃									
Compensated Temperature Range	20℃~85 ℃(Typical) Customizable to any temperature range within the operating temperature limits									
Zero Thermal Shift	± 3% FS/100℃ (Typical)			± 1.5% FS/100℃ (Typical)						
Sensitivity Thermal Shift	± 3% FS/100℃ (Typical)			± 1.5% FS/100 ℃ (Typical)						
Vibration Resistance	Max. 20g, 10~2000Hz									
Shock Resistance	20g, ≤20ms									
Electrical Connection	4 × 36 AWG ribbon cable, 1000mm length									
Weight	0.6g (Typ.), excluding module and leads									
Sensing Principle	4-arm Wheatstone bridge									

DATASHEET
PRESSURE MEASUREMENT
Outline Drawing (mm [inch])

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Pin	Red	Green	White	Black
Definition	VIN+	VOUT+	VOUT-	VIN-

How to Order? Look at the selection table below

Model No :

UPT200	Pressure Range 0~50	Unit MPa PSI	Type A (Absolute Pressure) G (Gauge pressure) S (Sealed gauge pressure) D (Differential)	Special Requirements Refer to the purchase contract for details on 'S'.
UPT200	0~30	PSI	A	S

UPT200-(0~30) PSI-A-S

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