

DELIVERING EXCELLENCE

## 7800 Vibrating Cylinder Pressure

### FEATURES

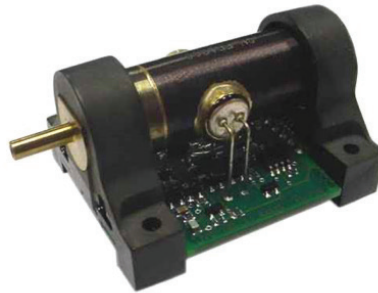
- 145kPa abs FSP range
- High Accuracy:  
< +/-140ppm FSP
- RVSM (sensor) accuracy:  
10.2 ft @29,000ft;  
16.9ft @ 41,000ft
- Low drift:  
< +/- 100ppm FSP/year
- Individual cal data stored  
on-board

### BENEFITS

- Lightweight, board-mountable
- Compact footprint
- Single sensor type for both Ps  
and Pt
- Long re-calibration intervals

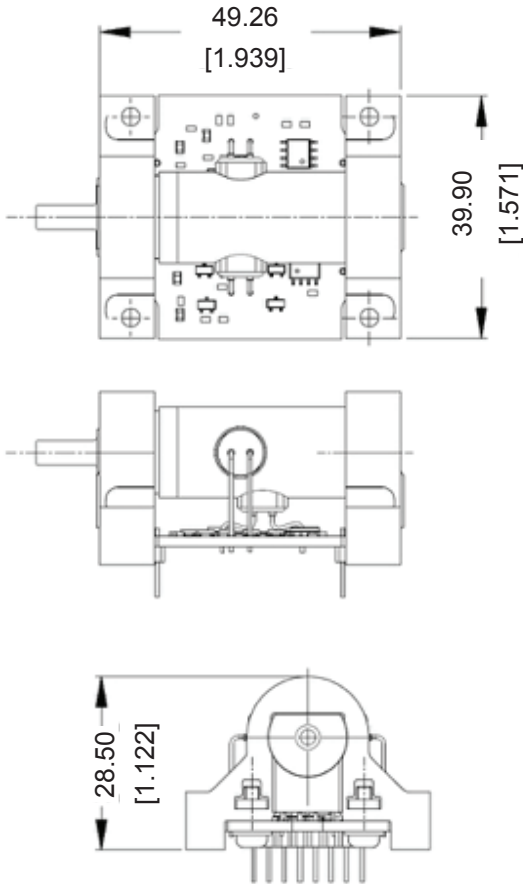
### APPLICATIONS

- Air Data Computers
- Air Data Test Sets



- With over 60 years of application and development, the vibrating cylinder is still recognised as the industry benchmark for accuracy and drift performance when it comes to pressure measurement.
- Using the flight-proven vibrating cylinder technique, developed by Auxitrol Weston at Farnborough since 1957, the 7800 series pressure sensors have been developed specifically for air-data applications.
- The high accuracy, repeatability and low drift make the vibrating cylinder one of the few technologies capable of meeting Reduced Vertical Separation Minima requirements.

### Typical Performance Specification



UNITS: MILLIMETRES [INCHES]

Pressure Calibration	
Range	10.3kPa to 145kPa absolute (other ranges available)
Over-Pressure Limits	
	No calibration change to 3 x FSP (435kPa) Burst pressure greater than 5 x FSP (725kPa)
Pressure Medium Air, non-condensing	
Operating Temperature Range	
	-40 to +85°C (optionally -55 to +85°C for sensor)
Combined Accuracy	
	Better than ± 140ppm of FSP
Repeatability	
	Better than ± 12ppm of FSP
Long-Term Drift	
	± 100ppm of FSP max per year, typically less than ± 50ppm
Pressure Output Signal	
	Square-wave frequency output related to pressure
Temperature Output Signal	
	Available on request
Sensor Power Supply	
	+15Vdc +/-1V, 20mA max
Non-volatile Memory	
Interface(for Calibration Coefficients)	
	I2C serial interface, 2.5 to 5.5V supply
Weight	
	60g
Environmental	
	Tested to RTCA DO-160

Featuring AUXITROL, WESTON & NORWICH products

Examples shown above are for information, dimensions can be modified to meet unique installations

#### SALES :

- Auxitrol SAS  
5 allée Charles Pathé  
ZAC de l'échangeur - CS20006  
18023 Bourges Cedex - France  
Tel : +33(0) 2 48 66 78 78

- Norwich Aero Products Inc.  
50 O'Hara Drive  
P.O Box 109  
Norwich, NY 13815-0109 - USA  
Tel: +1 (607) 373 4447

- Weston Aerospace Ltd  
124 Victoria Road  
Farnborough, Hampshire,  
GU14 7PW - United Kingdom  
Tel: +44 (0) 1252 544 433

#### AFTER - SALES SUPPORT :

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- Auxitrol Weston Singapore  
30 Loyang Way - #06-06  
Singapore 508769  
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