

Exhaust Back Pressure Valve

Introduction: The Exhaust Back Pressure Valve is a fast acting ALL Stainless Steel Butterfly Valve controlled by an electronic actuator. It is used for adjusting and simulating the effective back pressure of the test bed exhaust system. The monitoring signal for the control loop is provided by a pressure transducer (not supplied) this pressure signal is read by one of CADETV12's fast analogue channels.

The EBPV's main components are:

- Stainless Steel 4" Main Valve Body
- TIG Welded Stainless Steel Flanges
- TIG Welded Stainless Steel Actuator Supports
- Stainless Steel Tubular Drive Shaft for Low Heat Conduction
- Fast Response Electronic Actuator

Actuator position feedback is provided by the internally mounted servo potentiometer, accuracy is ensured by the direct coupling of the potentiometer to the output shaft.

The unit is very easy to install in the exhaust system due to its compact size (only 141mm long). There is just one electrical loom to attach, via the splash-proof connector and the actuator can be mounted in any plane. The stainless steel build materials and the IP55 rating of the actuator enclosure provide sufficient protection for most environments in test cells, CP recommends further protection should the unit be intended for use outside, this can be specified at time of order.



EBPV fitted with actuator unit

SPECIFICATION	
Overall Size inc. Actuator	420 x 187 x 162 mm (HxWxD)
Weight	5 kg
Drive Type	Permanent Magnet 12V DC Motor
Valve Speed	0-90deg in 150mSec

