

# ENGINEER TO ORDER

## SPECIAL PROJECT INFORMATION SHEET



Project Description	AC Servo Drive & Pneumatic Drive Valve Testing Controls Kit		
Date created	19 August 2019	Project Number	Q4325 / Q4746

### INTRODUCTION & APPLICATION

Testing of ball valves requiring cyclical rotation 0-90° / 90-0°, whilst recording torque vs angle data.  
Testing of gate valves / valve actuators by opening & closing whilst recording torque vs angle / turns data.  
The test must be remotely controlled from outside of the test chamber, where the test valve is pressurised.

### SOLUTION

Control package for use with customer's existing PneuTorque (108) + annular torque & angle transducer.

- Tool controller # Q4746.01 with 10" touchscreen HMI & fully programmable forward / reverse cycling routines, variable up to 32,000°. For operation of AC servo or Pneumatic drive tools.
- Remote control hand pendant # 61142.1000.
- AC servo drive kit # Q4325.02 to directly replace the 108 air motor drive on customer's PT tool.
- Cables to connect tool controller to the motor and to the torque & angle annular transducer.



PT5 & 3,500 N.m torque & angle transducer fitted with AC servo motor drive kit.



Tool controller & hand pendant

### TECHNICAL SPECIFICATION / DATA HIGHLIGHTS

- Test data capture and output in CSV format onto external USB drive, for the generation of customer test reports & graphs. Real time data streaming via RS232 serial port.
- Increased control and lower noise with AC servo drive.
- Controller Q4746.01 can operate either pneumatic (via solenoid valves), or AC servo drive tools.
- Controller input ports available for customer pressure, temperature and proximity sensors.
- The controls kit can be used to upgrade existing valve testing kits.
- Automatic recognition of Smart enabled transducers.