



Posi-Control System

for Position Control Torque Arms

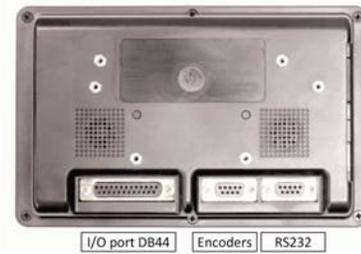
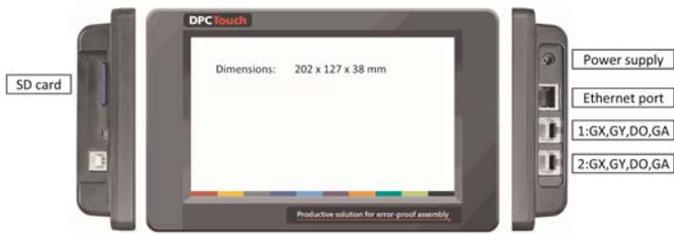


The position control torque arm system helps manufacturers detect and eliminate costly screw-fastening errors during the assembly process. This position control system is designed to reduce the risk of improperly fastened screws, ensuring that every screw is in the correctly tightened in the correct sequence. A good tightening sequence ensures that an even preload distribution is achieved in the joint. Using a position control system is like putting the eyes and ears of a quality control manager where they are needed most - right on the assembly area.

The position control system consists of a torque arm equipped with an encoder and a posi-control device. The **touch posi-control system** is used for programming and to track the movement of the position control torque arm.

Key Features

- Full touch screen programming.
- Programmable sequence operation.
- Error proofing.
- Secure the assembly process by ensuring that every screw is in the correct location at the right torque.
- Detects - cross threading, omissions, unfinished rundowns and cycle complete.
- Compatible with DC Controlled Tools, torque electric screwdrivers (with transformers or controllers), air tools (ported).
- Password protection and mountable.
- Can interface with most intelligent driver systems that store multiple torque programs and has external digital I/O control.
- Quick and easy to setup. Self teaching and automation program mode.
- Programmable: Positioning Tolerance, Min. and Max. time for Poka Yoke control (automatic or manual) and 99 memory points
- Programmable "Job Manager" interface makes it easy to create, save and recall saved jobs. (Maximum number of jobs is 255.
- Detection of sequence fastening error and buzzer alert. (Position Ok, Alarm and Cycle complete signals.).
- Screw count display.
- Inputs and Outputs for machine & PLC interface for line control (see page 3 for details).
- The **touch posi-control device** is compatible with EZ-Glider position control torque arms.



Model: DPC-Touch Posi-Control System
Item # 260245

Specifications

- Dimensions: 202(W) x 128(H) x 38(D) mm
- Weight 1.2 lbs.
- Screen: 7" LCD Touch screen, 800 x 480 px
- Inputs 24V: 12 w/assignable functions
- Outputs 24V: 12 w/assignable functions.
- Total Job Memory: 255
- Total positions memory: 255 jobs x 255 steps x 99 positions per fastening step max 100steps of the same type in one job
- Total Encoder Capacity: 4

Compatibility with Automation Devices

Open job structure allows set up for customized logical sequences of fastenings, messages and I/O devices.

- Part In/Out Management
- Proximity Sensor
- Pick-to-Light Sensors
- Bit / Socket Tray Selector
- Bar Code Scanner
- Signal Tree Management
- Screw Presenters
- Password Protection

Compatibility with EZ-Glider Position Control Torque Arms



Telescoping Arms



Articulating Arms

Cable Chart

For Connecting Tools to the DPC-Touch Posi-Control System

Description	Item #
ET-30D, FT-30D, STC-30 or STC-40	14-PELZ911
DC Tools	260160
HD-Series, SD-Series & SHC-System	260161

Job Manager

Job manager interface provides access to the list of saved jobs. It also allows to Edit or to Delete saved jobs as well as to create new ones.

There are five types of steps which can be used in any sequence to create a job:

- Fastening: this step contains fastening positions including information associated with these positions (positioning tolerance, tightening program, tightening time, etc.)
- Logical In: this step is used to verify an input signal in order to pass to the next step (e.g. a signal from proximity sensor, button, etc.).
- Logical Out: this step is used to send an output signal(s) to manage automation equipment on work station (e.g. pneumatic cylinders, lights, etc.).
- Delay: this step allows to keep the current state of I/O's for a certain time (e.g. a delay required between receiving an input signal and sending an output signal).
- Message: this step is used to display a graphical or text message on the operating screen during working cycle.

Inputs and Outputs

For machine & PLC interface for line control.

Inputs

- Job selection in binary or in direct logic (see operating settings). **(Continuous signal)**
- Reset & Refasten: Fastening NG/alarm reset . **(Impulse signal)**
- Skip position: skip the current position. **(Impulse signal)**
- Reset Step: current fastening step reset. **(Impulse signal)**
- Reset Job: running job reset. **(Impulse signal)**
- Motor Run: motor run signal from the tool. **(Continuous signal)**
- Alarm: fastening NG (alarm) signal from the tool. **(Impulse or Continuous signal)**
- Fastening OK: OK signal from the tool after successful tightening. **(Impulse signal)**
- Forward/Reverse: status of F/R switch on the tool in order to disable loosening. **(Continuous signal)**
- Non-assigned inputs can be used for "logical in steps".
- Reboot the controller in order to save I/O configuration.

Outputs

- Position OK: position ok signal is sent when the tool is in OK zone. **(Continuous signal)**
- Motor run: motor run signal from the tool. **(Continuous signal)**
- Torque Up: OK signal from the tool after successful tightening. **(Impulse signal)**
- Fastening OK: output signal if OK signal was received and tightening time was OK. **(Impulse signal)**
- Fastening NG: output signal if tightening was not successful. **(Impulse signal)**
- Controller Ready: controller is ready to select a new job. **(Continuous signal)**
- Job complete: all steps in the job are completed. **(Impulse signal)**
- Alarm: external alarm signal is received. **(Impulse or Continuous signal)**
- Selection of tightening programs. **(Continuous signal)**
- Driver Lock: to disable the tool when out of position or in alarm mode. **(Continuous signal)**