Customer Value Proposition:

Many applications require more than just end of stroke sensing of an actuator, but traditional methods of continuous sensing are expensive to implement. Parker’s CPS (Continuous Position Sensor) enables quick, precise and contactless continuous position sensing of a magnetic piston.

CPS sensors continuously supply data via analog outputs or IO-Link. Analog position sensors have a voltage output of 0 V ... 10 V as well as a current output of 4 mA ... 20 mA. CPS enables flexible machine concepts, making it possible to solve tasks in areas such as quality monitoring and process control in conjunction with pneumatic cylinders. This continuous transfer of position data upgrades the functionality of the pneumatic cylinders by making them more intelligent, and as a result, more versatile. CPS settings can be adjusted during or after installation using a teach button or using IO-Link.

CPS can be mounted directly in standard T-slots without the need for additional accessories. Mounting on other cylinder types, (round, tie rod) is possible with adapters.

Contact Information:

Parker Hannifin Corporation
Pneumatic Division
Richland, MI 49083
269-629-5575

www.parker.com/pdn/cps
- Instruction sheets
- IODD file
- Function blocks
- CAD
- Catalog pages

Product Features:

- Continuous position sensing
- No modification to the actuator
- 5 sizes with sensing ranges from 32mm to 256mm
- Yellow teach button for easy set-up
- IO-Link communication with M12 connector
- Analog version with M8 connector
- IP67 design suitable for any industrial application
How it Works:
The CPS product detects the position of an actuator via the magnet on the piston. The sensor settings can easily be adjusted during installation using the yellow teach button or during operation over the IO-Link communication. This upgrades the functionality of the pneumatic actuator by making it more intelligent and versatile in support of the Industry 4.0 initiative.

- 1ms sampling rate
- 0.03% full scale resolution
- 0.06% full scale repeatability
- 0.3mm Linearity error

How it Installs:
The Parker CPS requires the use of a magnetic piston. The product will fit T-slot cylinders without any additional mounting hardware. Use on a round body or tie-rod cylinder is possible with the appropriate bracket.

1. Pivot the sensor into the slot
2. Teach the CPS unit the desired measuring range*
3. Tighten set screws

How it Connects:
Analog version has a M8 connector and a voltage output of 0-10V as well as a current output of 4-20mA.

IO-Link version has a M12 connector and transmits position via 2 bytes of process input data and also allows for parameter control of measuring range and locking of the teach button. It can be controlled by Class A or Class B IO-Link Masters.