Many applications require more than just end of stroke sensing of an actuator, but traditional methods of continuous sensing are expensive and difficult to implement.

Parker’s CPS series of the P8S sensor family enables quick, easy, precise, and contactless position sensing of a piston. This can be installed on a standard linear actuator and offers an outstanding price to performance ratio.

Smarter Sensing

The CPS product detects the position of an actuator via the magnet on the piston.

The sensors feature intelligent functionality such as the ability to acquire and locally process information, and communicate with upper level controllers and / or local networks.

The sensor settings can easily be adjusted during installation using the yellow teach button or during operation over the IO-Link communication.

Product Features:

- Continuous position sensing
- No modification to the actuator required
- 5 sizes with sensing ranges from 32 - 256mm
- Yellow teach button for easy set-up
- PUR cable 0.3m length
- IO-Link communication with M12 connector
- Analogue version with M8 connector
- IP67 design suitable for any industrial application
CPS Smarter Sensing

CPS continuously supplies data via analogue signals, IO-Link process data or flexible switching point.

This continuous transfer of position data 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, tie-rod, or S-slot 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

<table>
<thead>
<tr>
<th>Measuring Range (mm)</th>
<th>Order Code</th>
<th>Analog</th>
<th>IO-Link</th>
<th>L1 (mm)</th>
<th>L2 (mm)</th>
<th>L3 (mm)</th>
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<tbody>
<tr>
<td>32</td>
<td>P8SAGACHA</td>
<td>P8SAGHMHA</td>
<td>45</td>
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<tr>
<td>64</td>
<td>P8SAGACHB</td>
<td>P8SAGHMHB</td>
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<td>64</td>
<td>72</td>
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<td>128</td>
<td>P8SAGACHD</td>
<td>P8SAGHMHD</td>
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<td>192</td>
<td>P8SAGACHF</td>
<td>P8SAGHMHF</td>
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<tr>
<td>256</td>
<td>P8SAGACHH</td>
<td>P8SAGHMHH</td>
<td>269</td>
<td>256</td>
<td>264</td>
<td></td>
</tr>
</tbody>
</table>

How it Connects:

Analogue 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.

Parker Cylinder Series | Mounting Bracket
-----------------------|-------------------
P1A / P1S (ISO 6432)   | P8S-TMC0+          
P1D (ISO 15552)        | None              
P1P (ISO 21287)        | None              
P1D (Tie-Rod) (ISO 15552) | PD48955 (32-100) PD48956 (125-320) |
OSP (Rodless)          | Not compatible (consult factory) |
R Series (Round)       | P8S-TMC0+          |
P5T (Thrust)           | None              |

Further details:

www.parker.com/pde/cps

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