



# Plays well in the dirt.



## CPC-II Current-to-Pressure Converter.

Built to handle steam turbine users' #1 reliability problem – *dirty oil* – the new Woodward CPC-II features a robust design and self-cleaning action that **increases reliability**. The superb accuracy and resolution of this servo positioner make it ideal for improving steam turbine valve control performance.



Turbomachinery Controls  
Improve Reliability • Enhance Performance

## Woodward's CPC-II Provides:

### High Tolerance to Dirty Oil

- Handles turbine lube oil – no additional filtering needed
- Corrosion-resistant materials 440C stainless steel for key components
- Self-cleaning control valve
- Large internal ports for contamination resistance
- “Silt-buster” algorithm to flush out dirt

### Enhanced Feature Set

- Fast 2.5 ms scan time reduces control error
- 10-30 ms total response time for accurate control
- Redundant signal and power inputs for high reliability
- Two units can be installed in parallel for redundant control
- Easily test turbine servo system range with a screwdriver
- Isolated I/O eliminates electrical noise-induced errors
- Correction curve for non-linear systems delivers more predictable control
- PC-based service and trending tools for system troubleshooting
- Increased diagnostics information for better troubleshooting

### Specification Highlights

- IECEx certified for use in hazardous locations
- ATEX compliant, CSA Certified, INMETRO Certified
- GOST R certified for use in explosive atmospheres
- Accuracy:  $< \pm 0.2\%$  of full range
- Repeatability: 0.1% of full range
- Temperature drift:  $< \pm 0.01\%$  of full range / °C
- Pressure stability:  $< \pm 2\%$  of setpoint
- Operating temperature range, - 40 °C to + 85 °C

For more information, please refer to product spec 03352 and manual 26615.



**Field Proven**

## The CPC-II Advantages:

Over the Old Style Woodward CPC



- 4 times the valve force
- Same mounting configuration
- Better tolerance to dirty oil

Over a Conventional I/H Converter



- More stable operation
- No sticking
- Greater linearity
  - < 0.2% for CPC-II
  - < 1.0% for I/H Converter
- Same mounting configuration, when using Woodward adaptor kit 9828-7240
- Better tolerance to dirty oil
- More valve force

## The CPC-II

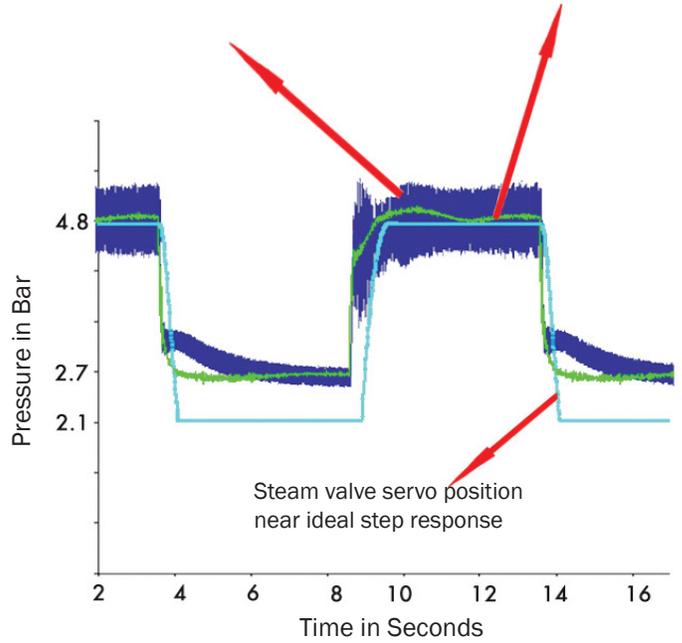
Compared to conventional I/H converter systems, the CPC-II output is quiet and stable —

### Conventional I/H Converter Pressure Signal

Excess pressure “noise” causes increased wear in the servo system, while over-damped dynamics causes slow response

### CPC-II Pressure Signal

Stable pressure for reduced system wear with rapid response



### Models

Maximum Supply & Control Pressure Rating	Zone 2, Category 3 Group II G, Ex nAnL IIC T4 Gc Class I, Div. 2 Groups A, B, C, D, T4
<b>Supply 25 Bar Control 10 Bar</b>	<b>9907-1200</b>
<b>Supply 25 Bar Control 25 Bar</b>	<b>9907-1198</b>

Maximum Supply & Control Pressure Rating	Zone 1, Category 2 Group II G, d IIC T4 Gb Zone 2, Category 3 Group II G, Ex nAnL IIC T4 Gc Class I, Div. 1 Groups C and D and Class I, Div. 2 Groups A, B, C, D, T4
<b>Supply 25 Bar Control 10 Bar</b>	<b>9907-1199</b>
<b>Supply 25 Bar Control 25 Bar</b>	<b>9907-1197</b>

For more information go to [woodward.com](http://woodward.com) or email [turboinfo@woodward.com](mailto:turboinfo@woodward.com).



Turbomachinery Controls  
Improve Reliability • Enhance Performance

51353 B