

### **Installation Procedure Supplement**

# Manual 26861 (Revision NEW, 5/2015) Digital Valve Positioner (DVP)



See manual 26329 for complete installation, operation, maintenance, and certification information. Publications can be found on our website at <a href="https://www.woodward.com/publications">www.woodward.com/publications</a>.

#### **Important Definitions**



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

- DANGER—Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
- WARNING—Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- CAUTION—Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- NOTICE—Indicates a hazard that could result in property damage only (including damage to the control).
- IMPORTANT—Designates an operating tip or maintenance suggestion.



The engine, turbine, or other type of prime mover should be equipped with an overspeed shutdown device to protect against runaway or damage to the prime mover with possible personal injury, loss of life, or property damage.

The overspeed shutdown device must be totally independent of the prime mover control system. An overtemperature or overpressure shutdown device may also be needed for safety, as appropriate.



Read this entire manual and all other publications pertaining to the work to be performed before installing, operating, or servicing this equipment. Practice all plant and safety instructions and precautions. Failure to follow instructions can cause personal injury and/or property damage.



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www.woodward.com/publications

The latest version of most publications is available on the *publications page*. If your publication is not there, please contact your customer service representative to get the latest copy.



Any unauthorized modifications to or use of this equipment outside its specified mechanical, electrical, or other operating limits may cause personal injury and/or property damage, including damage to the equipment. Any such unauthorized modifications: (i) constitute "misuse" and/or "negligence" within the meaning of the product warranty thereby excluding warranty coverage for any resulting damage, and (ii) invalidate product certifications or listings.



To prevent damage to a control system that uses an alternator or battery-charging device, make sure the charging device is turned off before disconnecting the battery from the system.

NOTICE

To prevent damage to electronic components caused by improper handling, read and observe the precautions in Woodward manual 82715, Guide for Handling and Protection of Electronic Controls, Printed Circuit Boards, and Modules.

Go to www.woodward.com/publications for complete instructions (manual 26329).

**Replacement/Exchange:** Replacement/Exchange is a premium program designed for the user who is in need of immediate service. It allows you to request and receive a like-new replacement unit in minimum time (usually within 24 hours of the request), providing a suitable unit is available at the time of the request, thereby minimizing costly downtime.

This option allows you to call your Full-Service Distributor in the event of an unexpected outage, or in advance of a scheduled outage, to request a replacement control unit. If the unit is available at the time of the call, it can usually be shipped out within 24 hours. You replace your field control unit with the like-new replacement and return the field unit to the Full-Service Distributor.

**Flat Rate Repair**: Flat Rate Repair is available for many of the standard mechanical products and some of the electronic products in the field. This program offers you repair service for your products with the advantage of knowing in advance what the cost will be.

**Flat Rate Remanufacture:** Flat Rate Remanufacture is very similar to the Flat Rate Repair option, with the exception that the unit will be returned to you in "like-new" condition. This option is applicable to mechanical products only.

#### **Returning Equipment for Repair**

If a control (or any part of an electronic control) is to be returned for repair, please contact your Full-Service Distributor in advance to obtain Return Authorization and shipping instructions.

When shipping the item(s), attach a tag with the following information:

- return number;
- name and phone number of contact person;
- description of the problem;

- name and location where the control is installed;
- complete Woodward part number(s) and serial number(s);
- instructions describing the desired type of repair.

#### **Contacting Woodward's Support Organization**

For the name of your nearest Woodward Full-Service Distributor or service facility, please consult our worldwide directory published at <a href="https://www.woodward.com/directory">www.woodward.com/directory</a>.

You can also contact the Woodward Customer Service Department at one of the following Woodward facilities to obtain the address and phone number of the nearest facility at which you can obtain information and service.

Products Used In Electrical Power Systems	Products Used In Engine Systems	Products Used In Industrial Turbomachinery Systems
FacilityPhone Number	FacilityPhone Number	FacilityPhone Number
Brazil+55 (19) 3708 4800	Brazil+55 (19) 3708 4800	Brazil+55 (19) 3708 4800
China+86 (512) 6762 6727	China+86 (512) 6762 6727	China+86 (512) 6762 6727
Germany:	Germany +49 (711) 78954-510	India+91 (129) 4097100
Kempen +49 (0) 21 52 14 51	India+91 (129) 4097100	Japan+81 (43) 213-2191
Stuttgart - +49 (711) 78954-510	Japan+81 (43) 213-2191	Korea+82 (51) 636-7080
India+91 (129) 4097100	Korea+82 (51) 636-7080	The Netherlands+31 (23) 5661111
Japan+81 (43) 213-2191	The Netherlands+31 (23) 5661111	Poland+48 12 295 13 00
Korea+82 (51) 636-7080	United States+1 (970) 482-5811	United States+1 (970) 482-5811
Poland+48 12 295 13 00		
United States+1 (970) 482-5811		

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Email and Website—www.woodward.com

## **Regulatory Compliance & Declarations**

#### **European Compliance for CE Marking:**

These listings are limited only to those units bearing the CE Marking.

**EMC Directive:** 2004/108/EC COUNCIL DIRECTIVE of 15 December 2004 on the approximation

of the laws of the Member States relating to electromagnetic compatibility and all

applicable amendments.

ATEX – Potentially Declared to 94/9/EEC COUNCIL DIRECTIVE of 23

**Explosive** March 1994 on the approximation of the laws of the **Atmospheres** Member States concerning equipment and protective

**Directive:** systems intended for use in potentially explosive atmospheres.

Zone 2, Category 3 G, Ex nA IIC T4 X Certificate SIRA 14ATEX4088X

#### Other European and International Compliance (for 125 V version only):

GOST-R: Certified for use in ordinary locations within the Russian Federation per GOST-R

certificate

POCC US.МЛ03.В00713

**IECEx:** Ex nA IIC T4 Gc

Certificate: IECEx CSA 12.0005x

IEC 60079-0: 2007-10 Explosive Atmospheres - Part 0: Equipment General

requirements

IEC 60079-15: 2005-03 Electrical apparatus for explosive gas atmospheres part

15: Construction, test and marking of Type of protection "n" electrical

apparatus

#### **North American Compliance:**

These listings are limited only to those units bearing the CSA identification.

CSA: CSA Certified for Class I, Division 2, Groups A, B, C, and D, T4 at 55 °C (3-

Board Configuration) and 70 °C

(2-Board Configuration) ambient for use in USA and Canada

Certificate 160584-1682018

#### Marine Compliance (24 V DVP, IP56, 2-board configuration)

LR: Lloyds Type Approval Environmental Categories ENV1, ENV2, and ENV3 as

defined in LR Test Specification No. 1: 2002

This product is certified as a component for use in other equipment. The final combination is subject to acceptance by the authority having jurisdiction or local inspection.

#### **Special Conditions for Safe Use**

Wiring must be in accordance with North American Class I, Division 2 and European Zone 2, Category 3 wiring methods as applicable, and in accordance with the authority having jurisdiction.

Field wiring must be suitable for at least 95 °C (203 °F).



#### **EXPLOSION HAZARD—ENCLOSURE REQUIREMENT**

ATEX / IECEx Zone 2, Category 3G applications require the final installation location to provide a minimum IP54 ingress protection enclosure against dust and water per IEC 60529. The enclosure must meet IEC 60079-0 Design & Test Requirements.

The DVP IP30 model shall be installed in an enclosure that is coded Ex nA, providing an ingress protection of IP54 minimum. The installer shall ensure that the maximum ambient temperature of the module when installed is not exceeded.

The DVP IP56 enclosure model shall only be installed in areas where there is low mechanical risk.

The DVP shall not be installed in areas exceeding in Pollution Degree 2, as defined in IEC 60664-1.

The user shall ensure that a minimum clearance of 6.4 mm between live parts and earthed metal is maintained.

Only approved cells or batteries shall be used as identified by the manufacturer.

Transient protection for the DVP is to be provided externally by the end user. The transient protection device is to be set at a level not exceeding 140% of the peak rated voltage (150 Vdc). Transient protection is not required for equipment marked for 18 Vdc to 32 Vdc.



EXPLOSION HAZARD—Do not remove covers or connect/disconnect electrical connectors unless power has been switched off or the area is known to be non-hazardous.

Substitution of components may impair suitability for Class I, Division 2 or Zone 2.



RISQUE D'EXPLOSION—Ne pas enlever les couvercles, ni raccorder / débrancher les prises électriques, sans vous en assurez auparavant que le système a bien été mis hors tension; ou que vous vous situez bien dans une zone non explosive.

La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Classe I, Division 2 et/ou Zone 2.



Do not use any test points on the power supply or control boards unless the area is known to be non-hazardous.



Ne pas utiliser les bornes d'essai du block d'alimentation ou des cartes de commande à moins de se trouver dans un emplacement non dangereux.

#### DECLARATION OF CONFORMITY

Manufacturer's Name: WOODWARD GOVERNOR COMPANY (WGC)

Industrial Controls Group

Manufacturer's Address: 1000 E. Drake Rd.

Fort Collins, CO, USA, 80525

Model Name(s)/Number(s): Digital Valve Positioner (DVP) IP-30, IP-56 Rated

Conformance to Directive(s): 2004/108/EC COUNCIL DIRECTIVE of 15 December 2004 on the

approximation of the laws of the Member States relating to electromagnetic compatibility and all applicable amendments.

94/9/EC COUNCIL DIRECTIVE of 23 March 1994 on the

approximation of the laws of the Member States concerning equipment:

and protective systems intended for use in potentially explosive

atmospheres

Marking(s): Category 3 Group II G, Ex nA IIC T4 X

Applicable Standards: EN61000-6-4, 2007: EMC Part 6-4: Generic Standards - Emissions for

Industrial Environments

EN61000-6-2, 2005: EMC Part 6-2: Generic Standards - Immunity for

Industrial Environments

EN60079-15, 2005: Electrical apparatus for explosive gas atmospheres

- Part 15: Type of protection 'n'

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

MANUFACTURER

Signature

Suhail Horan

**Full Name** 

Quality Manager

Position

WGC, Loveland, CO, USA

Place

14- Jun-2010

Date

5-09-1183 Rev 11, 24-May-06

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