VALVCON V-Series
AUXILIARY FEEDBACK POTENTIOMETER KIT,
PART NUMBER VC099200

Installation, Maintenance and Operating Instructions
Table of Contents

1 GENERAL ................................................. 3  
   1.1 Description - Potentiometer Kit .............. 3  
   1.2 Operation ........................................ 3  

2 INSTALLATION ....................................... 3  
   2.1 Tools Required ................................... 3  
   2.2 Installation Instructions ....................... 3  

READ THESE INSTRUCTIONS FIRST!

These instructions provide information about safe handling and operation of the actuator. 
If you require additional assistance, please contact the manufacturer or manufacturer’s representative. 
Addresses and phone numbers are printed on the back cover. 
See also www.metso.com/valvcon for the latest documentation. 

SAVE THESE INSTRUCTIONS!

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1 GENERAL

This instruction manual contains important information regarding the installation, operation, and troubleshooting of Metso’s Auxiliary Feedback Potentiometer. Please read these instructions carefully and save them for future reference.

1.1 Description - Potentiometer Kit

The Auxiliary Feedback Potentiometer Kit, P/N VC099200 provides an external tracking signal that is variable and proportional to the output position of actuator. Designed for 90-degree rotation, the kit consists of a 0 to 1000 OHM potentiometer and all necessary mounting hardware.

For 180-degree rotation select P/N VC099180 Gear Kit in addition to the Auxiliary Feedback Potentiometer Kit. For 270-degree rotation select P/N VC099270 Gear Kit. For details on Gear Kits, see IMO-I9900.

For termination inside the actuator enclosure, a 12-position terminal block is included with the kit.

This option will fit V-Series actuators with the letter “N” preceding the voltage designator in the part number on the product nameplate.

1.2 Operation

Geared directly to the actuator final output drive, the potentiometer resistance produces a change in an externally supplied voltage that is variable and proportional to the rotation of the output shaft of the actuator.

2 INSTALLATION

2.1 Tools Required

- 1/2 inch wrench
- Phillips screwdriver #1 (for optional terminal block)
- Small flat blade screwdriver

2.2 Installation Instructions

1. Remove 1/2” locking nut from potentiometer (Pot) shaft and insert Pot shaft up through either 3/8” hole in upper support bracket. Align locking tab and tighten the locking nut on pot shaft to secure the pot to the bracket.

2. Using spacers under gears to attain proper alignment, place small (20-tooth) gear on Pot shaft and tighten setscrew. Then place large (60-tooth) gear on camshaft. Properly positioned, gears should mesh evenly. Cam shaft must extend 1/8” min. above gear in order to engage position indicator.

3. Connect an OHM meter to the potentiometer leads to synchronize desired potentiometer position to the desired actuator position. Tighten cam shaft gear set screw.