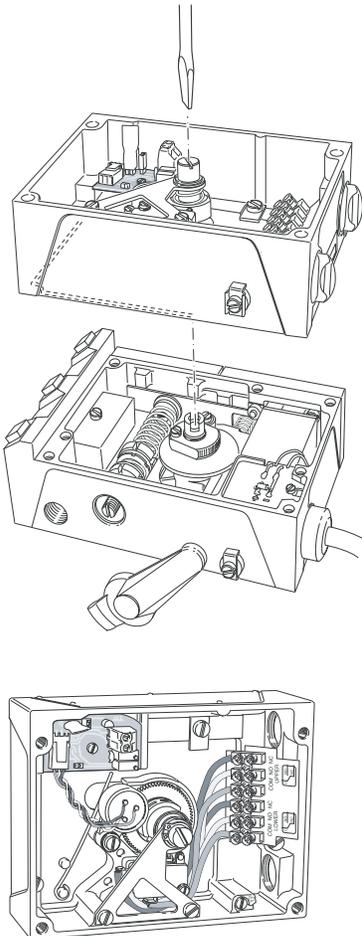




VALVE ACCESSORIES & CONTROLS, INC.

Principle of Operation

R100/R300 Feedback Module



A “feedback module” is an accessory that can be added to a control package to provide “information” in the form of on/off indication or full scale (0-100%/4-20 mA) feedback to be applied in a number of applications. The R100 module mounts directly (“piggybacks”) on to any of the V100 series positioners with no extra mounting brackets or special tools. The positioner is pre-drilled to accept the R100 feedback modules drive as well as the three retained screws that accompany the R100. The bottom of the R100 is gasketed and couples directly to the V100-tighten the three screws and you are secure-all in a matter of minutes, using only a screwdriver. The module can be equipped with two mechanical switches or two reed switches, a 4-20 mA transmitter only, or combination of the switches and one transmitter. The switches would indicate on/off or open/closed position or could be interlocked to “trip” or activate some other device or piece of equipment. The switch cams are spring loaded, so the upper and lower switch can be set by hand. The 4-20 mA transmitter has a tension spring holding it against the gear wheel, which makes calibration simple as well as provides a snug and constant tension fit against the gear wheel. The transmitter board has span and zero pots for calibration as well as jumpers for turning rotation and range. The package is then fitted with a gasketed and sealed cover with a flat or dome indicator. Mounting, calibration is simple, quick, and can be factory mounted or field mounted.....no special kits, tools.....or complicated instructions. The entire positioner and feedback package is around 5 ½” high and provides direct coupled feedback from the valve/damper, up through the actuator and tightly coupled with the positioner-no dead band or hysteresis.

The R300 is merely the R100 fitted with a bottom plate that has the F05 mounting pattern and our interchangeable drive (spindle) options, and thus can be used as a stand alone feedback module...with all the simple features of the R100.