Flow Line Controls Rack & Pinion Actuator Specifications

The actuator shall be rack and pinion design with two pistons and linear output torque throughout its rotation. The output shaft must travel a minimum of 90° and have external adjustments for a minimum of 5° of additional rotation at each end of travel. Additional internal factory preset stops set to limit maximum travel if the external stops are not adjusted thus preventing damage to the actuator. The actuator piston and pinion gear shall be “fine tooth” construction with a three tooth engagement throughout the rotation. The output shaft and pinion shall be one-piece hardened steel with female drive conforming to ISO5211 square/star dimensions and the shaft accessory end conforming to Namur VDI/VDE 3845 dimensions. The actuator’s surface at the drive shaft shall have dimensions conforming to ISO5211 “F” flange sizes and the actuator’s accessory mounting surface shall have dimensions conforming to Namur VDI/VDE 3845 specifications. The actuator shall be provided with a solenoid valve mounting surface conforming to Namur VDI/VDE 3845 dimensions. The actuator shall be provided with a 3-D visual indicator that does not have to be removed for the installation of monitoring equipment and control accessories. The actuator housing shall be hard coat anodized and polyester powder coated for corrosion resistance and durability. All trim/hardware shall be stainless steel for corrosion resistance. The springs shall be restrained in bobbins to prevent bending during operation and shall fit into pockets in the actuator end caps and pistons.