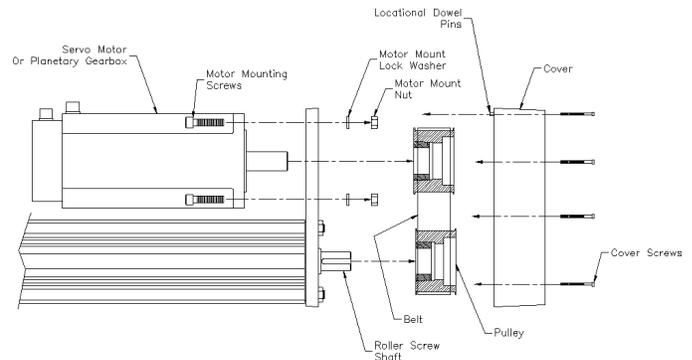


## Force Tube Parallel Motor Mount Assembly

The Exlar® FT Series actuators combined with a parallel motor mounting configuration use a polymer reinforced belt drive system. The drive train does not require any lubrication and any oil or dirt contamination within the belt drive system will decrease belt effectiveness and life. The belt and pulley system should be inspected periodically for excessive wear and proper tensioning.

Do not remove the belt cover while the actuator is operating. Always remove power from the attached motor before removing the belt cover to service any component of the drive train (i.e. belts, pulleys, bushings, inline couplings, gears, etc). Failure to do so can result in damage to the actuator or cause serious injury to the operator.

The following picture is only an example of a typical belt and pulley drive train in an FT Series actuator.



These belt drives do not require as much tension as other belt drives that depend on friction to transmit the load. The installation procedure should begin by installing the belt with a snug fit, neither too tight nor too loose. Now, measure the belt span, (t), as shown in the picture above. With one pulley free to rotate, use a spring scale to apply a perpendicular force to the center of the belt width at the mid-point of the belt span. For belts wider than 2", it is suggested that a strip of keystock, or something similar be placed across the belt under the point of force to prevent distortion. Measure the deflection of the belt at the mid-point. While applying the correct force, there should be 1/64" of deflection for each inch of belt span. For example, the total deflection for a 32" belt span is  $32 \times 1/64 = 1/2$ ". The appropriate amount of force for each belt is shown on the customer approval drawing, or you may contact our application engineers for assistance.

Proper Belt Tension

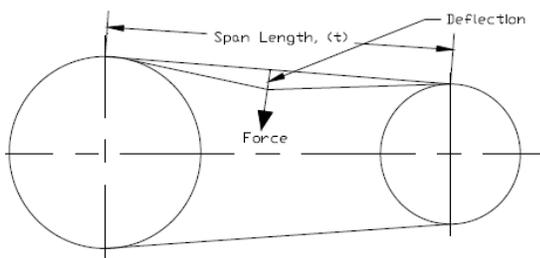


Figure 9: Belt Tension Diagram