

BRAY RECOMMENDED SPECIFICATIONS**Series 92/93 Pneumatic Actuators**

The Pneumatic Actuator shall be Bray Series 92 Direct Acting or Series 93 Spring Return or approved equal.

The actuator shall be designed for pneumatic operation for pressure up to a maximum of 140 psig and temperature range of -40°F (-40°C) to +300°F (+149°C). Optional units shall be available to operate with hydraulic or water if specified.

The actuator shall be rack and pinion style with output torque linear throughout travel which must travel a minimum of 95° in each direction to allow for over travel adjustment. All actuators shall be totally enclosed in a single enclosure with no external moving parts, factory lubricated with no field lubrication required, mount in any position without loss of performance and suitable for both on-off and throttling applications. Conversion to spring return actuators shall be done utilizing a self-contained spring cartridge system in the same housing as the double acting actuator with no additional housing extensions.

The actuator shall have an extruded, anodized aluminum alloy housing with zinc plated carbon steel external fasteners, integral passageways to eliminate the need for external tubing, one-piece cast aluminum pistons with acetal guided and rings, one-piece hardened, zinc plated alloy steel output shaft, Buna-N seals, lubricated acetal bearings and corrosion resistant polyester coated end caps.

All actuators shall mount directly to the valve mounting flange and stem without the need for any brackets or couplings. The Actuator shall have the following approvals and certifications: SIL, ABS and Bureau Veritas.