

[Subject] NEW Belt Drive Actuator type - DGE-RF
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BELT-DRIVEN LINEAR ACTUATOR SILENTLY MOVES LARGE PAYLOADS AT UP TO 10 METERS/SEC



Festo has added an extremely fast linear actuator to its electrical motion control range. Based on a toothed-belt mechanism with a roller guide, the electro-mechanical actuator can move large payloads at velocities of up to 10 metres/second - with virtually no noise. The low-cost product offers a versatile platform for boosting automation productivity and quality compared with some alternative linear actuation technologies.

The new DGE-RF linear actuator is available in lengths up to 5 metres as standard, or extended lengths by special order. Three variants are available, supporting payloads of up to 15, 30 or 60kg, with a repeatable positioning accuracy of ± 0.1 mm. The actuator body features mounting slots on three sides to facilitate system integration, and the carriage is also equipped with T-slots to simplify payload attachment. The product also integrates centering ring holes to ensure accurate mounting of additional equipment, which also ensure that shear stress is not transferred through any mounting bolts.

The DGE-RF offers many advantages to alternative linear motion technologies in application areas such as handling, sorting and pick-and-place; it is particularly suited to tasks demanding highly dynamic and repeatable positioning capabilities.

The key to the actuator's quiet operation is the integration of a low-friction roller-guide bearing inside the housing. This protected location additionally improves immunity to operating environment influences, for high reliability. Combined with built-in grease reserves, the actuator can operate for up to 10,000km of travel before any routine maintenance is required. Even then, the lubrication reserves can be refilled without opening the housing.

To support machine and automation builders, Festo offers free interactive configuration software that allows users to select a matching motor and drive for the linear actuator – eliminating guesswork and the associated risk. The software calculates the optimum size and drive options for the specific speed and loading characteristics demanded by an application.

Once a design decision has been made, Festo is able to supply the complete axis with accessories such as couplings, flanges and end-of-travel sensors as a single part number, in fully- or semi-assembled form if required, greatly simplifying purchasing and machine building.