

Quarter turn actuator DFPD



Highlights

- Single-acting or double-acting
- Very compact
- Highly modular
- End position adjustable at both ends
- Optimised spring setting design
- For extreme temperatures: -50 ... +150 °C
- Mounting plate for pilot valve in EU (G) and US version (NPT)

DFPD is the new benchmark for quarter turn actuators. It can be used as an individual actuator or as part of a complete automated process valve system from Festo. With a torque range from 10 to 9500 Nm in the standard version and up to 32000 Nm in the heavy duty (HD) version, a rotation angle up to 180° and corrosion-resistant versions, the single- or double-acting DFPD is suitable for ball valves, butterfly valves or air dampers in the chemical, pharmaceutical and beverage industries, as well as for water treatment.

Compact and modular

The compact rack-and-pinion combination - especially in the single-acting version – is easy to install even when space is at a premium. Its range of variants, the standardised hole patterns to NAMUR VDI/VDE 3845 for pilot valves as well as the many compatible peripheral devices mean that it can be operated in a large variety of applications. In addition, both the end stop positions can be adjusted and the direction of rotation of the singleand double-acting DFPD can be selected.

Optimised spring cartridge design for simple torque adaptation

Thanks to the spring design the pressure range can be optimally set for the task in hand. This allows pressures from 2 to 6 bar to be easily set in steps of 0.5 bar.

For large temperature ranges

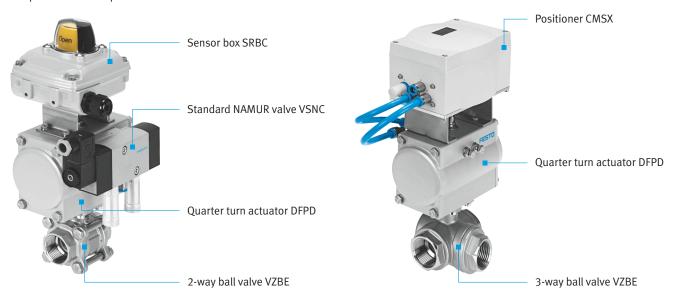
The DFPD operates reliably at extreme temperatures, with the breadth of low and high-emperature versions ranging from -50 ... +150 °C.



Completely automated process valves from a single supplier

When combined with a sensor box, a pilot valve or a positioner, the quarter turn actuator DFPD can be expanded into a complete automated process

valve system. This provides process reliability in the full confidence that everything fits together perfectly.



Technical data

Design		Rack and pinion
Mode of operation		Double-acting or single-acting
Torque (at operating pressure 5.5 bar)	DFPD-HD	10 4500 Nm (rack and pinion) 3500 9500 Nm (scotch yoke)
Size	DFPD-HD DFPD-HD	9000 32000 Nm (scotch yoke) 10, 20, 40, 60, 80, 120, 160, 240, 300, 480, 700, 900, 1200, 2300, 3500, 4500, 6500, 9500 9000, 18000, 32000
Operating pressure Mounting position		≤8 bar Any
Rotation angle	Standard as an option	90° 120, 135, 180° (sizes 40, 120, 240 and 480)
End position adjustment range	at 0° at 90°	-5 +5° +85 +95°
Operating temperature	Standard High temperature (as an option)	-20 +80 °C 0 +150 °C (sizes 40, 80, 120, 160, 240, 300, 480)
	Low temperature (as an option)	-50 +60 °C (sizes 40, 80, 120, 160, 240, 300, 480)
Version for corrosive environment		Shaft material: stainless steel, housing with epoxy coating DFPD-C: hard anodized end caps
Type of ignition protection for gas Type of ignition protection for dust		2G c T4 X 2D c 125°C X
Safety Integrity Level (SIL)		Up to SIL 3 Low Demand mode