

6-2

## **Description Pneumatic Actuators**

	Mini	Standard		Reinforced	NC/NO
Square	9,5		14	9,5	9,5
BV DN125-200	Χ				
BV DN125-200					
BV DN125-200			Χ		

The torque to open or close the valve is mainly defined by the size, the sealing material, the product and the media temperature. Since the change in volume of an elastomer is about 10-times higher compared to steel, the increase of temperature entails an increase of the torque too.

The elastomers of the butterfly valves contain materials, which reduce the surface friction. For the application of lubricating products (e.g. milk) the torque is reduced as well. Cleansing media wash out the low-friction substances on the surface of the seals, thus entailing an increase of the torque.

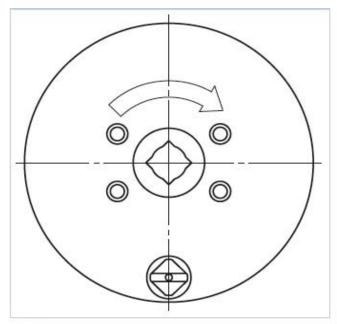
The butterfly valves are designed to be controlled by actuators at the max. permissible operating temperature. The actuators provide torque characteristics, which are adjusted to the torque curve of the butterfly valves. The media pressure has no influence on the switching behavior. However, high flow rates support the closing. Here, the speed has to be reduced by suitable means (throttle check valves in the compressed air line).

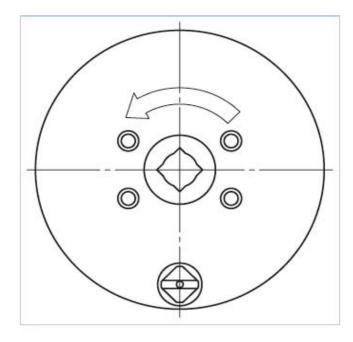
Туре	NC (Normally Closed)	NO (Normally Open)	Reinforced	
Functional Principles	A/S	A/S	A/S	
Torque Curve	Mt (Birque) NC	NO NO Open (90°) Gase (0°)	Mt (Torque) NC/NO	
Connection for Compressed Air	5 - 8 ber	5 - 8 bar	5-8 ber	
Characteristics	An open valve requires low torque and upon immersion of the flap into the sealing the torque is significantly increased. In closed position the maximum torque is provided. The butterfly valves is closed in the initial position.	These actuators have exactly opposite torque curves compared to NC. The butter-fly valves is open in the initial position.	This actuators has combined the torque characteristic of NC and NO. In both final positions the maximum torque is provided,	

## Clockwise Counterclockwise

viewing the drive shank from below

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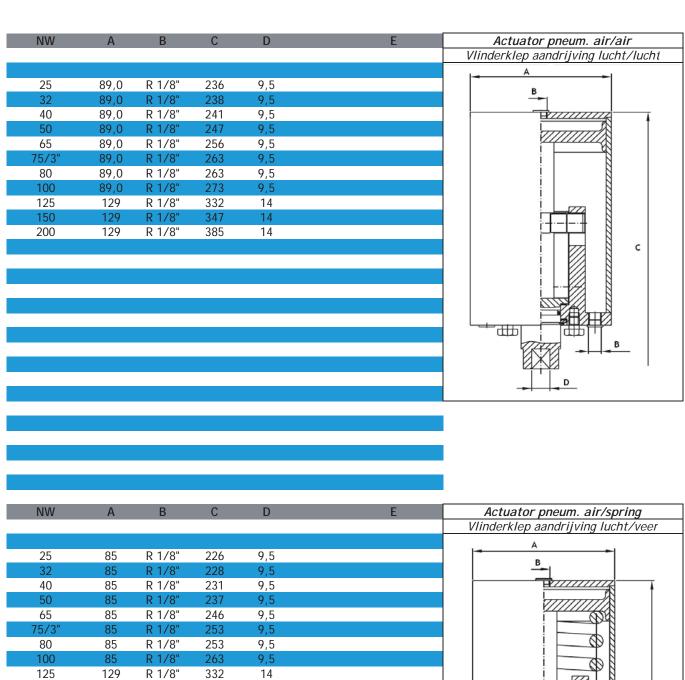


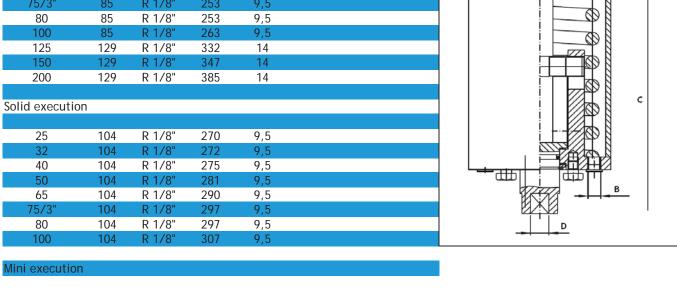


## Note:

The position feedback has to be checked accordingly. Leakage valves can only be operated with a actuator that provides clockwise rotation!

Туре	MINI	NC and NO	Air/Air A/A	
Functional Principles	A/S	A/S		
Torque Curve	Mt (fongue) NC  Close (0*) Open (90*)	Mt (Torque) NC/NO  Open (90") Open (90")	Mt (Torqui) NC/NO	
Connection for Compressed Air	5 - 8 ber	5 - 8 bar	5 - 8 ber	
Characteristics	This is a actuator with the torque characteristic NC	The torque curve is analogous to the reinforced design, yet on a lower level.	Due to the construction, the version air/air has a high torque at very low pressure. Typical application for T-butterfly valve.	





25 - 50

R 1/8"