Pneumatic actuator type actubar®

with hydraulic damper

Technical data sheet







Product description

actubar is the latest generation in our range of pneumatic actuators. Externally unmistakable and technically unique, the actubar offers new advantages and uses. Technically speaking, actubar is the main component in the novel valve control system barvacotrol.

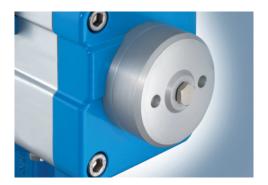
Working together with our directly-mountable system components as bar-positurn or any other positioner of the system for actubar is monitoring and regulating automatic valves economically and effectively.

Objective

The hydraulic damper is an additional module for lengthening the actuation time. An evenly constant actuation speed is achieved through a piston which oscillates inside a cylinder containing hydraulic medium.

Torque remains the same and sudden movements are avoided so that pipework, valves and actuator are intrinsically protected.

Hydraulic dampers are deployed where there are slamming valves such as double-eccentric butterfly valves and used for preventing water surges.



And furthermore, it is possible to dictate whether the damping effect is only present at the end positions or ensures an even speed over the whole pivoting angle.

Layout of the hydraulic damper is compact. The module has been designed and constructed to be secure against manipulation, so that unplanned changes in the settings are not possible.

Deployment

This unique construction of the actubar allows addition of components in accordance with VDI/VDE 3847 and best of all, without hoses or pipework.

- control and end switch boxes with solenoid valves can be added directly without additional piping and together form a compact unit with the actubar
- all commercially available signalling units can be enhanced using the standardised interface VDI/VDE 3845
- end positions are adjustable between +5° and -10° in the 0° and 90° position
- flexible automation of valves via various ISO-F flange faces per actuator size
- optional coatings and materials enable deployment even in aggressive environments
- long service life is achieved through slide bearings on all moving parts
- an internal octagon in the pinion enables actubar to be universally mounted onto valves with parallel or diagonal switching angle position
- the blowout-safe pinion minimizes danger of accidents
- extremely long switching times can be achieved
- a smooth, even movement of the valve is assured independent of the operating conditions
- a soft arrival at the end position is achieved



Technical data

	Standard model	Options available
Description	pneumatic double piston actuator-with additional hydraulic piston type AD = double-acting	
Constructional features	rack and pinion principle with self-centering piston guides in the housing	
Mounting position	as desired	
Normen	interface actuator/signal unit: acc. to VDI/VDE 3845 (NAMUR) and VDI/VDE 3847 interface actuator/control valve: acc. to NAMUR i.e. VDI/VDE 3845 interface actuator/valve: 4 i.e. 8 internal threaded in actuator housing acc. to EN ISO 5211	differing mounting and connecting dimensions possible pinion optional with internal double-D acc. to EN ISO 5211 or on request
Materials	casing: Aluminium-alloy, anodized damperhousing: Aluminium-alloy, anodized cap: Aluminium-alloy, anodized, powder-coated piston/Racks: Aluminium-alloy pinion: steel corrosion-protected seals: NBR bearings: easy sliding plastics screws: stainless steel	casing: anodized; coated with: powder-coated; PTFE cap coated with: PTFE pinion: Stainless steel AISI 303; AISI 316 seals: FKM
Ambient temperature	-20 °C to +80 °C	different temperature range on request
Rated pivoting angle	double acting: 90° rated pivoting angle as standard from +5° to -10° adjustable in both end positions	
Torque	2,5 Nm to 6.000 Nm	
Control pressure	2 to 8 bar	
Control medium / quality	filtered air in respect to remaining oil content, dust and water minimum acc. to DIN ISO 8573 – 1 class 4	also upon request: other non-aggressive gaseous or liquid mediums

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bar pneumatische Steuerungssysteme GmbH
Auf der Hohl 1 • 53547 Dattenberg • Germany
Tel. +49 (0) 2644 96070 • Fax +49 (0) 2644 960735
bar-info@wattswater.com • www.bar-gmbh.de