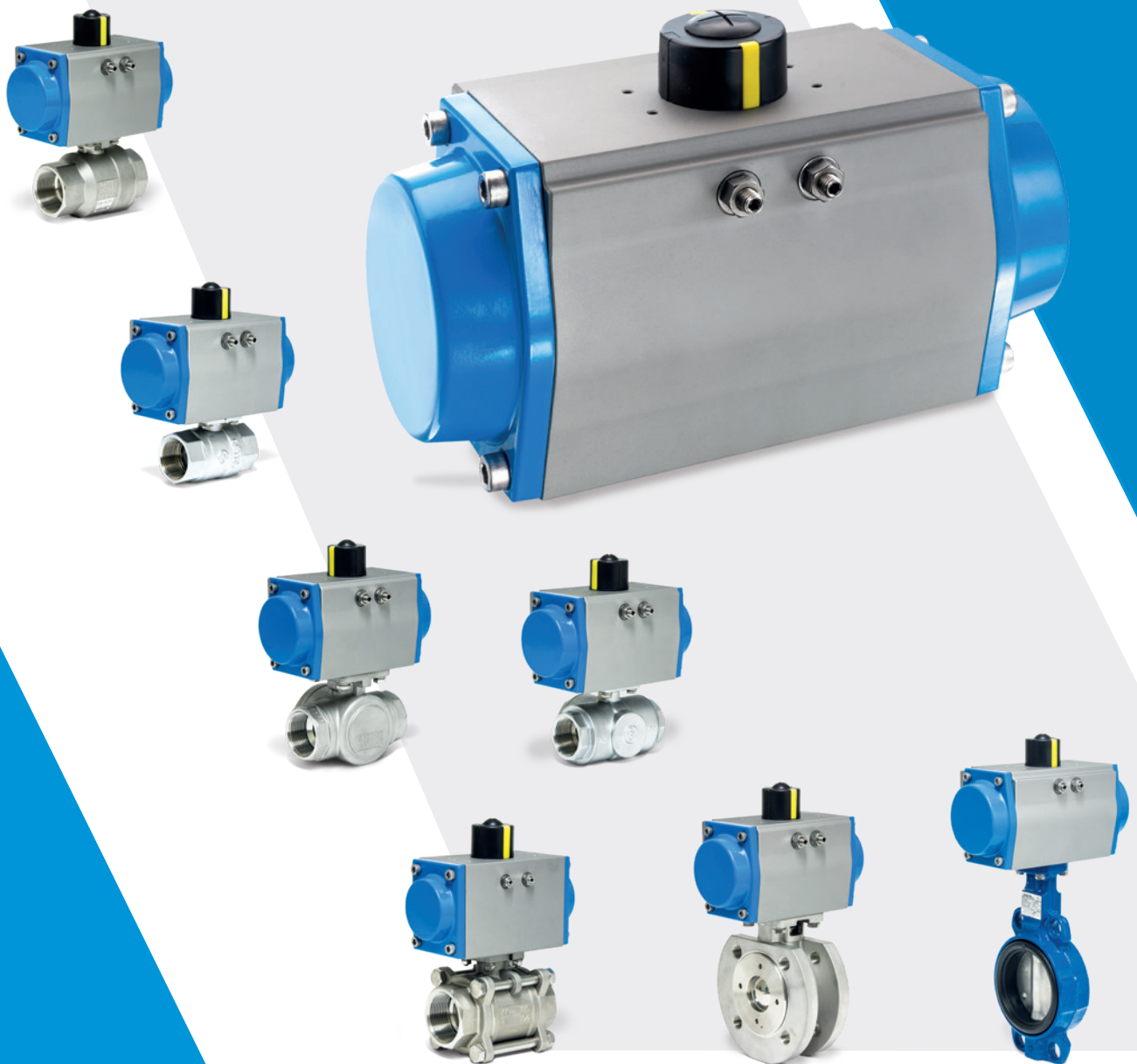


bar-agturn®

The versatile pneumatic actuator
for automation of valves



bar
A WATTS Brand

Technology, variants and certificates



Any swivel angle of 90° / 120° / 135° / 180°



Extended angle of rotation adjustment in the end positions



Low temperature -40 °C to +80 °C



High temperature -20 °C to +160 °C



ATEX



II 2 G Ex h IIC T6..T3 Gb
II 2 D Ex h IIIC T180°C Db



SIL 3 by TÜV Rheinland, Test specifications
IEC 61508 Parts 1-2 and 4-7:2010

SIL 3/PL
Capability
agturn® actuators



EAC-Certification for bar-agturn and
automated valves Type PKI,
PKN, PKT and PKW

№ EA9C RU C-DE.BH02.B.00597/20
Серия RU № 0253282



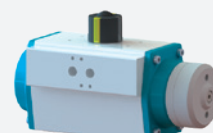
VDI/VDE 3845 (NAMUR) for interface actuator/signal box
and interface actuator/solenoid valve;
EN ISO 5211 with 4 resp. 8 inner threads inside the actuator
casing at interface actuator/valve.



Casing: Al-alloy hardcoated | Caps: Al-ally powdercoated
Piston/rack: Al-alloy | Shaft: corrosion protected steel | Sealings: NBR
Bearings: plastics | Screws: Stainless steel A2



Hydraulic damping



Objective

With 40 years of experience in automation we are able to meet the current requirements of the valve market and together with the bar-agturn we have developed a new pneumatic quarter-turn actuator for our diverse customer groups.

Thanks to its special design, robust construction and great versatility in technical characteristics, we fulfil the demands from the plant designer and plant manufacturer to the user.

This covers a wide range of torques with 2 up to 13.040 NM and random rotating angles at a nominal pressure of 2 up to 8 bar.

Use

- A suitable rotary actuator is available for each application of shut-off valves due to 18 different sizes and torques from 2 to 13.040 Nm.
- The high-quality powder coating of the cap and housing made of hard-coated aluminium allows the usage even in aggressive environmental conditions.
- The solenoid valve interface is located high on the profile and easily accessible which optimizes the installation of pilot valves.
- The end position adjustment on the opposite side of the solenoid valve connection facilitates the adjustment process.
- The standardised interface VDI/VDE 3845 can be used to set up all commercially available signal and control devices.
- The position indicator is part of the product which is equipped with variable clips for displaying the valve position.
- The end positions can be configured between 0° and 90° as well as from + 5° to -5°, whereby the valve can be optimally adjusted.
- There are 2 ISO flange patterns available for most of the sizes per each actuator size to ensure flexible automation of valves.
- The octagonal pinion connection adapts a parallel or diagonal selector shaft alignment of the valve and ensures a space-saving actuator construction.
- Simple assembly and disassembly of the safety springs which are designed for a balanced ratio between pneumatic torque and spring torque.
- Each control pressure is assigned to a defined number of springs and facilitates the actuator selection based on the torques.
- A laser engraving on the actuator housing marks the flange patterns and air connections for a clear allocation.
- The serial number is also laser engraved; this helps to trace the actuator manufacturing at any time.
- Precisely milled piston tooth system ensures smoother running, optimum torque and low wear.
- A long service life is achieved by using the plain bearing for all moving parts.
- The actuators cover a wide range of applications thanks to the actuator variants with different swivel angles.
- A reduced stock level is achieved by using identical caps for single- and double-acting actuators.
- The distinctive shape is patent protected and grants the original actuator type with a design based on the principle „form follows function“.
- Increased failure safety in the plant by our SIL 3 certified actuators.

Automation of ball valves and butterfly valves in process orientated industries by the pneumatic actuator bar-agturn®.



2/2-way automatic valve – type PKO2, brass



3/2-way automatic valve – type PMK2, brass



Automatic butterfly valve – type PZDS



2/2-way automatic valve – type PKI, stainless steel, three parts



2/2-way automatic valve – type PKN, stainless steel



3/2-way automatic valve – type PKT, stainless steel



2/2-way automatic valve – type PKW, stainless steel

Applications



Control of ball valves at a phosphorus immersion bath for metal parts



Control of a ball valve in chemical industry application

Robust in application and versatile in combination with valves, positioner and limit switch boxes even challenging medium conditions and environmental conditions will be managed safely.

The heart of your valve motion!

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bar GmbH reserves the right to make technical and constructive changes to its products without prior notice.

Warranty: All purchases and sales contracts expressly require the Purchaser to accept the General Terms and Conditions of Sale and Delivery which can be found on www.bar-gmbh.de/agb. bar GmbH hereby objects to any deviating or additional condition to the General Terms and Conditions of Sale and Delivery which has been communicated to the Purchaser in any form without the written consent of a representative of bar GmbH.

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