



AUTOMATION Product Portfolio 2020

The heart of your valve motion!



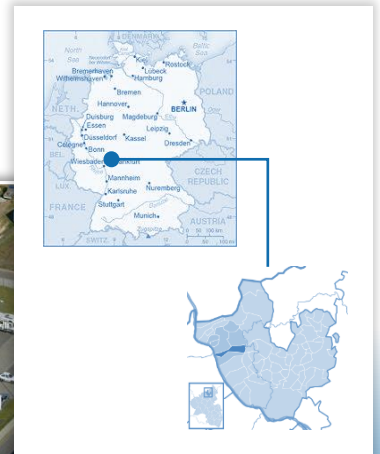
Automation Manufacturing Locations



www.valpes.com
33 years in business



www.bar-gmbh.de
41 years in business



Automation Market Segments



To automate all types of valves for all kinds of fluid.

The design and development of our electric actuators is carried out by our own R&D department. We have at our disposal all the necessary equipment and tools to study and manufacture specific products of high quality and reliability: laboratory, mechanical workshop equipped with machining tools and CNC machining. **Valpes fundamentals are:** *Innovation, efficiency, quality, fast & reliable deliveries, & customer satisfaction.*



Bar GmbH is an important partner of many well-known industrial companies with the production and worldwide sales of pneumatic and electric swivel drives as well as complete automatic valves and various accessories. bar GmbH is constantly working on product developments and innovations for plant construction and industrial process applications. The special competence lies in customized system solutions. With various components on each interface of the pneumatic part-turn actuator "actubar®" convincing application possibilities are offered.

Water Management and Treatment



Waterworks Torgau - Germany



Waterworks Pfronten - Germany



Swimming Pool – Chambéry, France



Water Treatment Swimming Pool



Water Treatment Unit Boiler Power Plant



Industry and / or Explosion Proof



Cold Dryer



Gas Distribution – Slovenia



ATEX Approved VSX150 – Kerosene Tank



Biogas Unit –CH4 Filtration Unit



Oil Well – North Dakota, USA

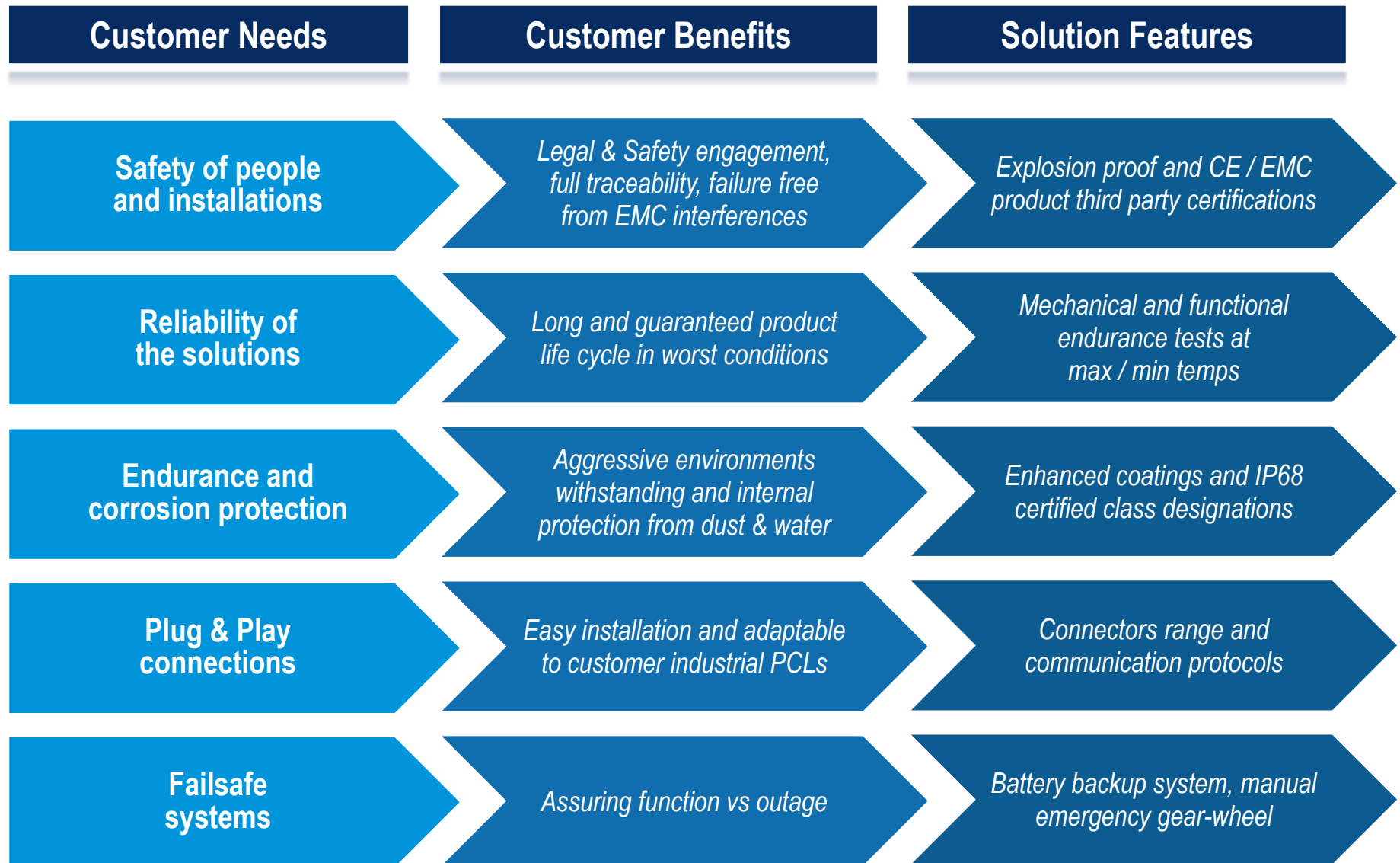
Refineries and Tanks on Offshore Platforms

What customers look for:

1. Safety of people and installations
2. Reliability of the solutions
3. Endurance and corrosion protection
4. Plug & Play connections
5. Failsafe systems



Customer Needs to Solutions Journey





 **valpes**
A WATTS Brand



 **bar**
A WATTS Brand

CUSTOMER NEEDS

SPECIFICATIONS

- On / Off to modulation
- Travel speed from 8s
- Functions and options
- Compact
- Electric

- Model
- Torque & Safety
- Accessories
- Voltage supply
- Control / signal
- Model options

CUSTOMER NEEDS

SPECIFICATIONS

- On / Off up to regulation
- Travel speed less than 2s
- Functions and accessories
- Custom solutions
- Pneumatic

- Model
- Torque & Safety
- Accessories
- Air Supply
- Control / signal

Electric Actuators



Electric Actuators Portfolio



ER Series

V Series

VT Series

VT+ Series

MT Series

LT Series

DV Series



Electric Actuators Standards



ER Series



V Series



VT Series

10Nm
≡
100Nm

Indice de protection
IP66
Enclosure protection

Facteur de marche
50%
Duty cycle

Anti-condensation
intégrée
Anticondensation
heater

CE

SP
C US

EAC

Powered by
AXMART
Modbus

20Nm
≡
100Nm

Indice de protection
IP65
Enclosure protection

Facteur de marche
30%
Duty cycle

CE **EAC**

25Nm
≡
300Nm

Indice de protection
IP68
Enclosure protection

Facteur de marche
50%
Duty cycle

Anticorrosion
Anticorrosion

Battery
Backup
BBPR

Positionnement
POSI
Positioning

3
POSITIONS

Powered by
AXMART

Modbus

CE **SP**
C US **EAC**

600Nm
≡
2400Nm

Indice de protection
IP68
Enclosure protection

Facteur de marche
50%
Duty cycle

Anti-condensation
intégrée
Anticondensation
heater

CE

EAC

Electric Actuators Standards



VT+ Series

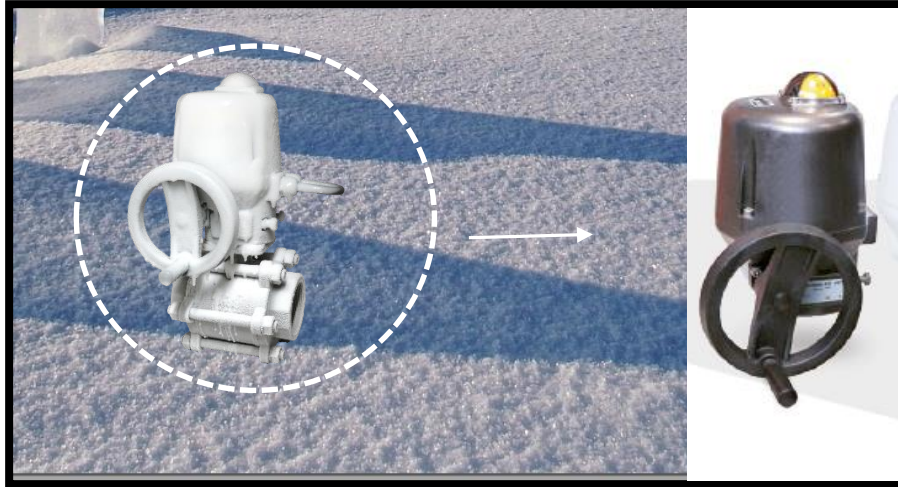


MT Series

600Nm 2400Nm	Indice de protection IP68 Etanchéité protection	Facteur de marche 50% Duty cycle	Anti-condensation Intégrée Anti-condensation heater	Battery Backup BBPR
Positionnement POSI Positioning	 BLUETOOTH®	AXMART®	CE EAC	

25Nm  75Nm	Indice de protection IP68 Etanchéité protection	Facteur de marche 50% Duty cycle	 5>250	Battery Backup BBPR
 BLUETOOTH®	Anti-condensation intégrée  Anti-condensation heater	Positionnement POSI Positioning	AXMART® Powered by	
CE EAC				

Electric Actuators Standards



LT Series



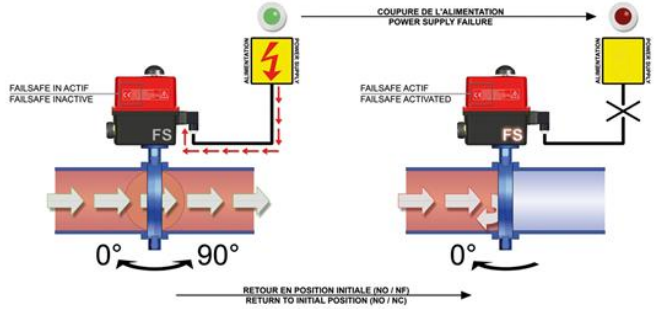
DV Series

25Nm 300Nm	Indice de protection IP68 <small>Enclosure protection</small>	Facteur de marche 50% <small>Duty cycle</small>	Systeme de chauffage Heating system	-50°C
Positionnement POSI <small>Positioning</small>	3 POSITIONS	Powered by AXMART®		

CE **SP** **EAC**

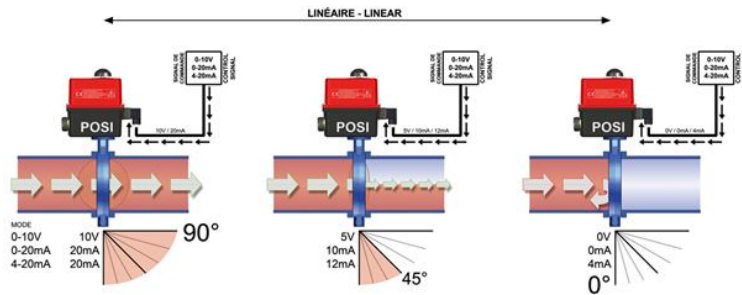
25Nm 300Nm	Indice de protection IP68 <small>Enclosure protection</small>	Facteur de marche 50% <small>Duty cycle</small>	Articulation 	Battery Backup BBPR
Positionnement POSI <small>Positioning</small>	3 POSITIONS	Powered by AXMART®		

CE **SP** **EAC** **DNV-GL**



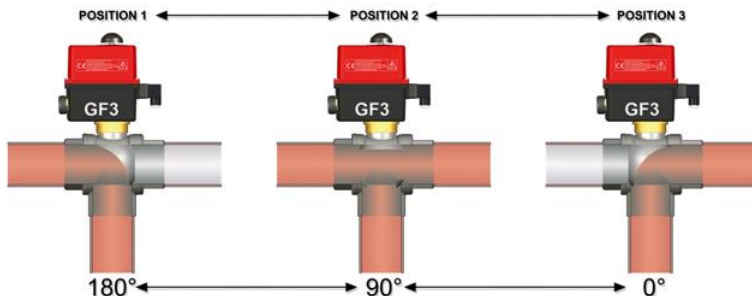
BBPR

- BBPR → Battery Backup Position Recovery System
- Return to initial position, thanks to battery backup
- Normally open / normally closed
- Cost effective solution, powered by Axmart® (ER+, V and DV series)



POSITIONING / MODULATING

- Selfconfigurable (0-10V, 4-20 mA)
- Setup training mode
- Up to 270° angle
- Available with BBPR system



3 POSITION ACTUATOR

- Dedicated function for 3 way ball valves or butterfly valves
- 3 position (ON / OFF / intermediate)
- Available with BBPR system



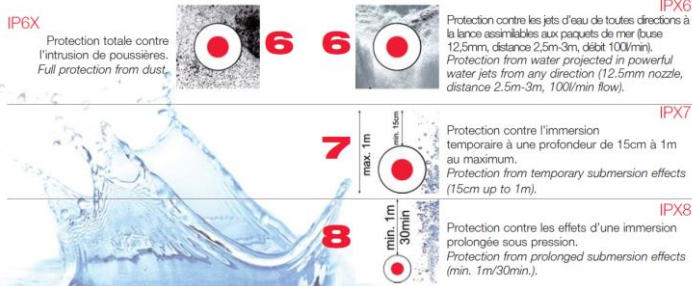
ATEX

- Explosion proof
- IEC 3rd party certification
- Full manufacturing liability and traceability
- Up to:
 - II 2 G1/G2 D21/D22
 - EX d IIB T5 Gb
 - EX tb IIIC T90°C Db



MARINE COATING

- Norsok grade M-501 rev 6 type 6A certification
- 15 years guarantee
- Equivalent to C5-M
- Applicable to V series, ATEX, LT and DV series



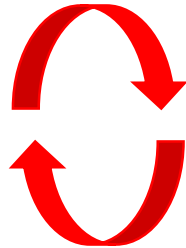
INDEX OF PROTECTION IP

- Up to IP68 10m 72 hours
- Full dust protection
- Full immersion protection at pressure



SHOCK AND VIBRATION RESISTANCE

- Protecting Electronics from fluid hammer shocks and installation or pumps vibrations
- Protecting from transport unforeseen shocks
- IEC 60068-2-27 and IEC 60068-2-6 compliant



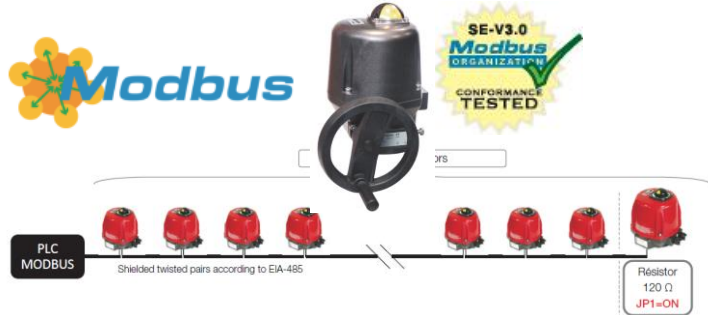
UPSIDE DOWN INSTALLING

- All installing positions
- Tested and guaranteed against leakages and environmental contamination
- Available on VR / VS series



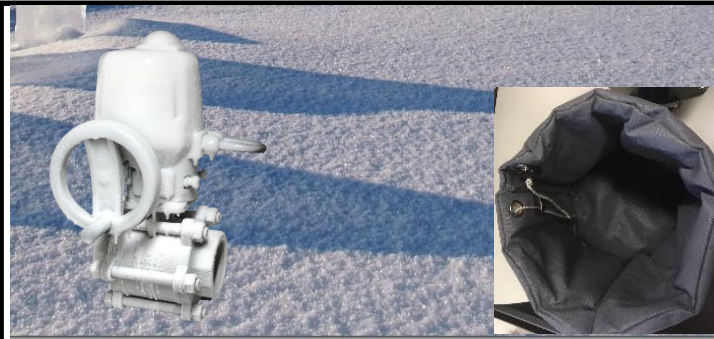
MULTIPIN CONNECTION

- Easy and fool-proof Plug & Play
- Allows relaxed projects planning
- Safe maintenance and setup



MODBUS® READY

- Modbus® RTU certified and tested by Modbus org
- Available on BBPR systems
- Expandable through different protocols on cabinet rack gateways
- Available on ER+, VR/VS, VRX/VSX, VT+/MT, LT and DV series



DEEP TEMPERATURE JACKET

- Grants actuator operativity extension to -60 °C ambient temperature
- Tested and warranted
- Available on LT series



HIGH TEMPERATURE JACKET

- Grants actuator operativity extension up to 130 °C ambient temperature for 30 minutes
- Tested and warranted
- Available on VS, VSX and DV line
- Suiting tunnel regulations or steam pipelines

Pneumatic Actuators





Premium - Actubar®



Agturn®



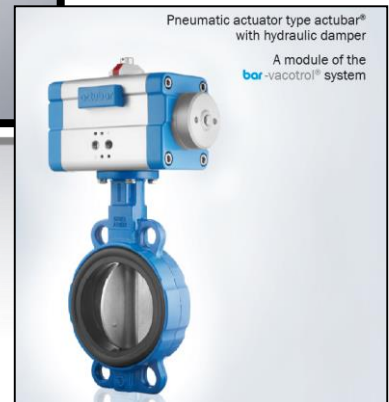
bar - ICS



bar - OPOS



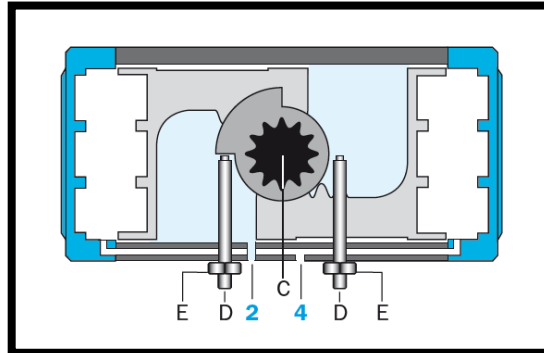
bar - PCS



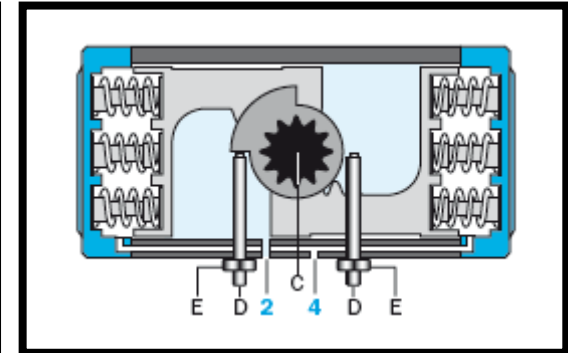
bar - damper

bar actuators are pinion-rack and available as:

- double acting
- single acting



Double acting

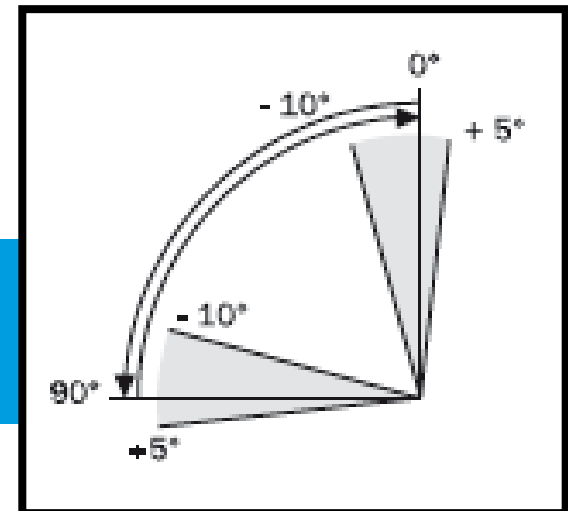


Single acting

bar actuators can work as:

- fail-open (in the case of actuator failure, the valve will stay open)
- fail-close (in the case of actuator failure, the valve will stay closed)

bar actuators work in the range of quarter turn valves with extended strokes up to 180°



Actubar® vs Agturn®

	Actubar®	Agturn®
Design	Pneumatic double piston actuator Type AD double acting Type AS single acting (with spring return)	Pneumatic double piston actuator Type GD double acting Type GS single acting (with spring return)
Constructional Features	Rack and pinion principle with self-centering piston guides in the housing; direct pneumatic interface on top of the actuator for conjunction without external piping or hosing; Single acting: with bar-safety springs	Rack and pinion principle with self-centering piston guides in the housing; Single acting: with safety springs
Mounting Position	Random	Random
Standards	Interface actuator / signal unit acc. VDI/VDE 3845 (NAMUR) and equipped for VDI/VDE 3847; Interface actuator / control valve acc. NAMUR resp. VDI/VDE 3845 Interface actuator / valve acc. EN ISO 5211	Interface actuator/ signal unit acc. VDI/VDE 3845 (NAMUR) Interface actuator / control valve acc. NAMUR resp. VDI/VDE 3845 Interface actuator / valve acc. EN ISO 5211
Directives	ATEX, Machine Guidelines	ATEX, Machine Guidelines
Materials	Housing: Aluminium-alloy anodised Caps: Aluminium alloy, powder coated Pistons/racks: Aluminium alloy Pinion: steel, corrosion protected Seals: NBR Bearings: self-lubricating plastic Screws: stainless steel A2	Housing: Aluminium-alloy hard anodised Caps: Aluminium alloy, epoxy coated Pistons/racks: Aluminium alloy Pinion: steel, corrosion protected Seals: NBR Bearings: self-lubricating plastic Screws: stainless steel A2
Ambient Temperature	-20°C to +80°C	-20°C to +80°C
Rated Pivoting Angle	double and single acting: 90° rated pivoting angle by standard from +5° to -10° adjustable in both end positions	double and single acting: 90° rated pivoting angle by standard from +5° to -5° adjustable in both end positions
Torque	2 Nm to 9.600 Nm	3 to 13.000 Nm
Control Pressure	2 to 8 bar	2 to 8 bar
Control Medium / Pressure	filtered air acc. ISO 8573-1:2010 [7:-4], dew point min. 10 °C less than lowest operating temperature	filtered air acc. ISO 8573-1:2010 [7:-4], dew point min. 10 °C less than lowest operating temperature



Premium - Actubar®



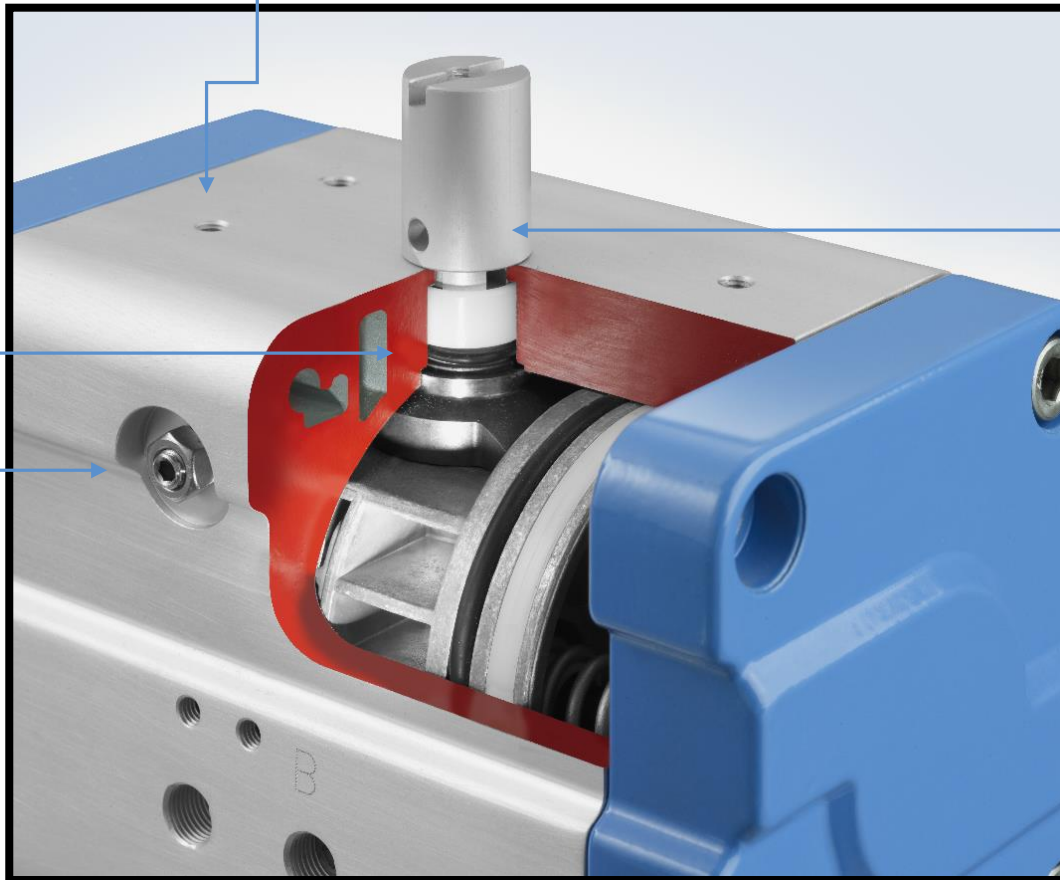
Agturn®

Air channels in the top prepared for new standard 3847/2

Direct Mounting on integrated air channels without external connections

Removable part of 2-piece shaft to enable direct mounting

Both end stops of actuator come adjustable as standard



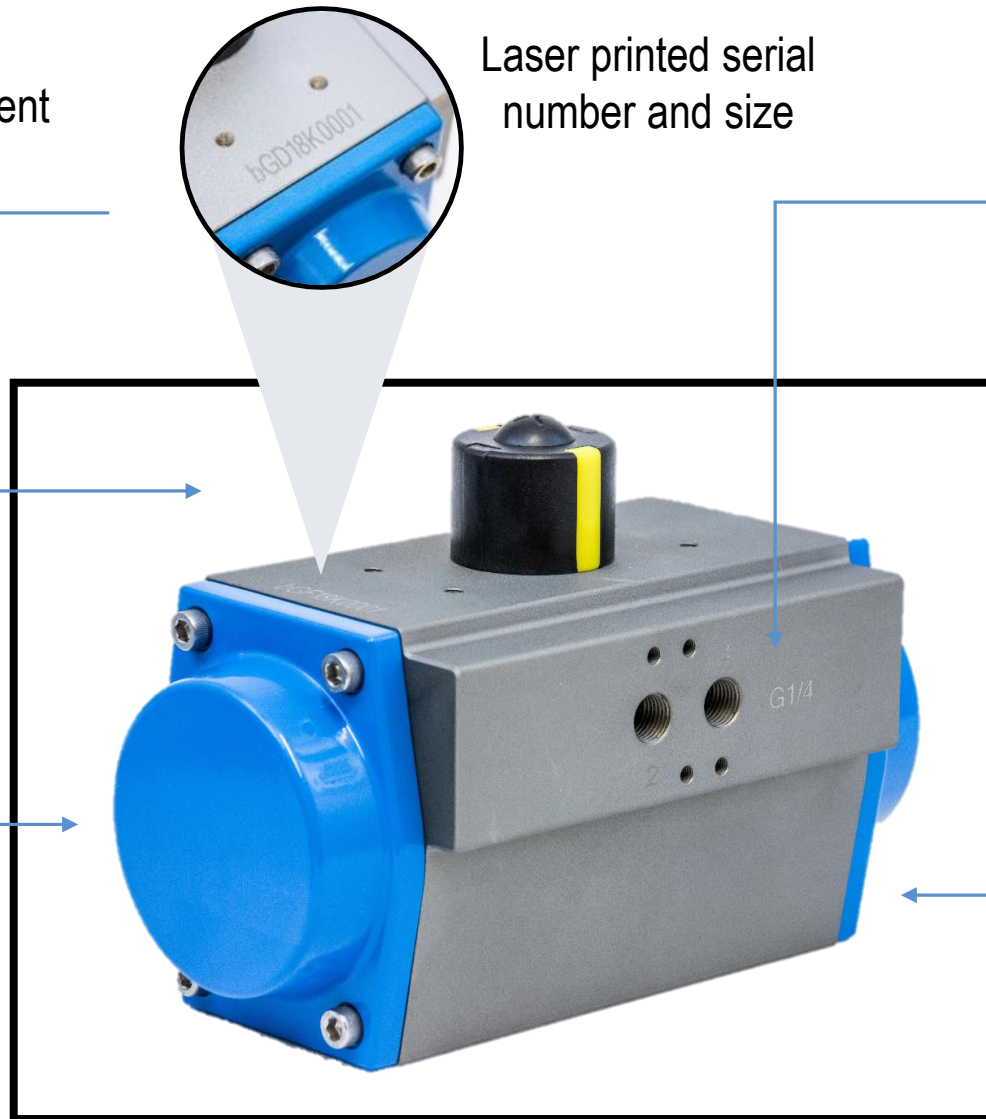
Position indicator with
variable clips for different
valve types

Laser printed serial
number and size

Namur
connection for
solenoid valves
in top of the
actuator to
avoid space
problems with
valve ISO Top
flanges

End caps same
size for double
and single
acting
actuators
Surface epoxy
powder coated

Standard
hard coated
aluminium
profile



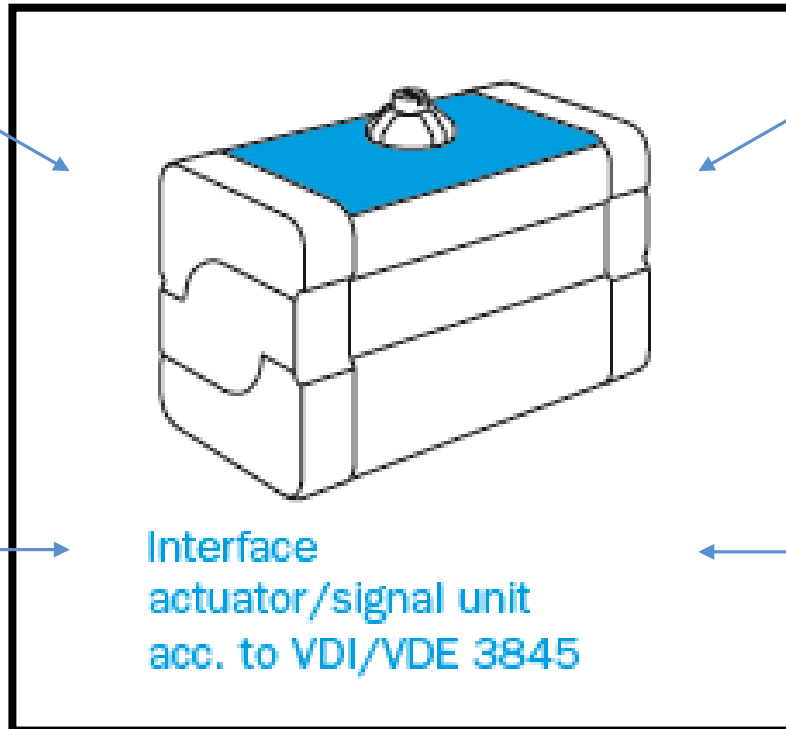


bar-positrol /
bar-valve & switch

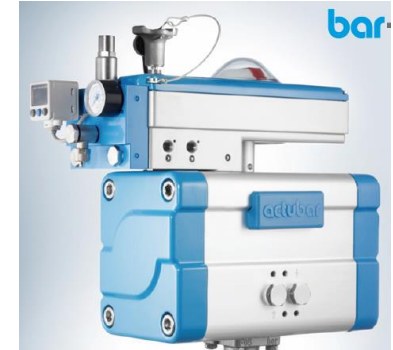


bar-posifixx for
ABB positioner

Using bar-vacotrol interface
without external piping



Interface
actuator/signal unit
acc. to VDI/VDE 3845



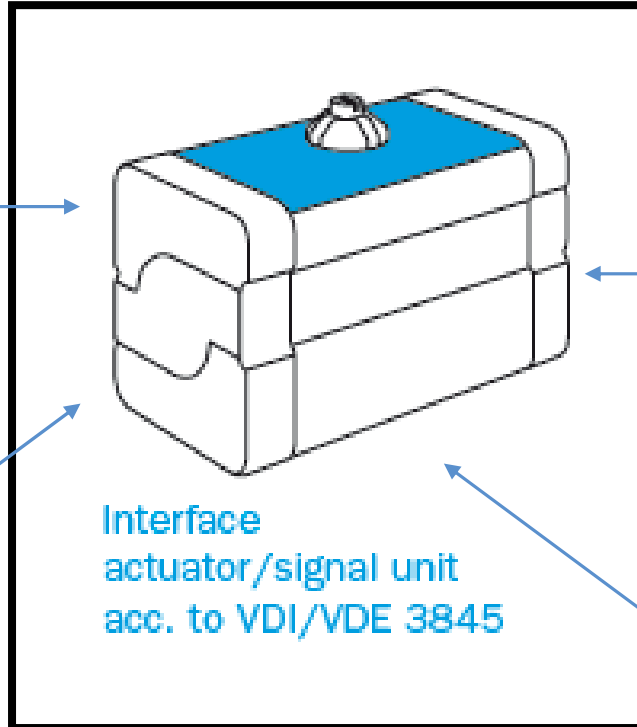
bar control units
PCS/ICS



bar-posifixx for
Siemens PS2
positioner



bar-switch control



Switch master



bar-miniswitch ...
Mounting size 50/25 mm
Shaft extension 15 mm



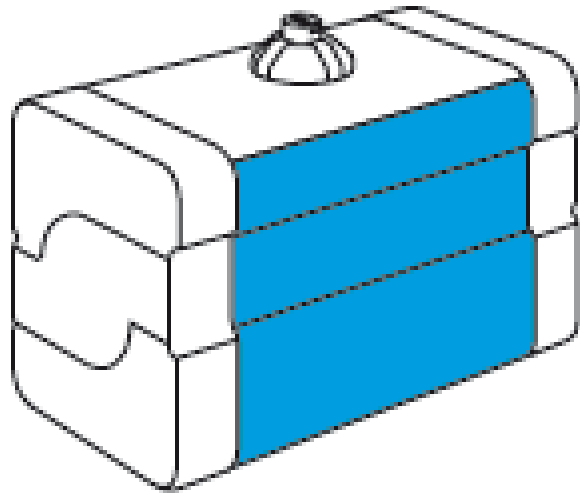
... with 2 distance plates
and adapter plate
Mounting size 80/30 mm
Shaft extension 30 mm

bar-mini switch



bar-posi switch

Accessories for Pneumatic Input of Air Pressure



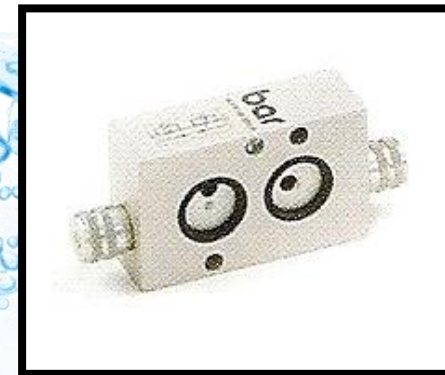
Interface
actuator/solenoid valves
acc. VDI/VDE 3845 Namur



bar solenoid valves

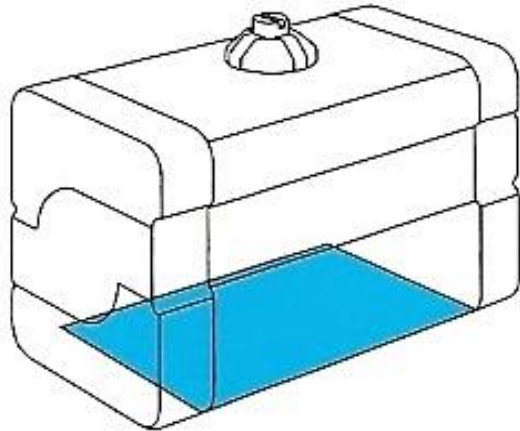


Multi bar pressure booster



Throttle plate

Components for Connection of Actuator to Valve



Interface for connecting
actuator and valve according
to DIN EN ISO 5211



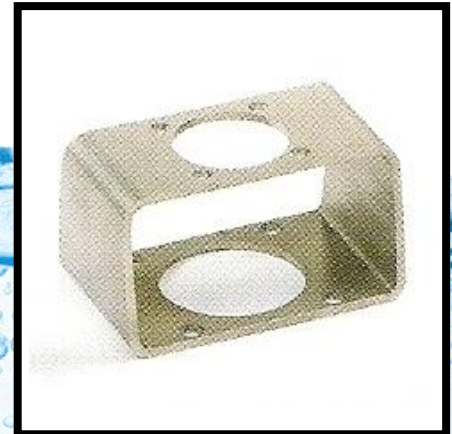
manual override gear



reduction pieces



couplings



mounting brackets

Valve Positioning with bar-positurn

Electric-pneumatic positioner
developed specially for regulating flow
capacities of butterfly valves and ball
valves.

Direct mounted with external solenoid
valves.

Self-adjusting setup once assembled.

A Module of the Valve-Control System bar-vacotrol

bar-positurn2



Hydraulic Damping System

Avoids pressure shocks in pipes
(based on too high pressure and fast actuation of valves)

An important tool to save the pipes, the valves and as well the actuator

Specially for automation of butterfly valves, diverter valves and dampers



bar-ICS Product Description

Shut-off valves are used in transport equipment for bulk powder and granulate, whose shut-off mechanism (ball-valve, butterfly or knight-gate valves) is fitted with an inflatable sealing. The OPEN or CLOSED position of the cut-off mechanism is achieved with a pneumatic actuator. In the CLOSED position, an optimum sealing effect is achieved through an inflatable sealing between the valve body and the disc, calotte or knife.

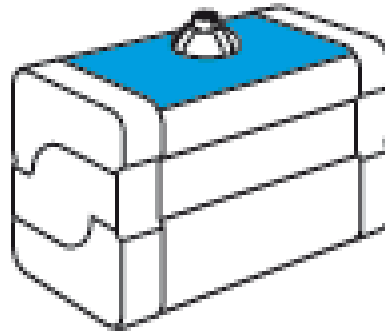
An electro-pneumatic control unit type ICS co-ordinates the functional achievement of the OPENING / CLOSING movement of the shut-off valve and the sealing pressure.

The control unit ICS positively compliments the bar-vacotrol® family series from bar GmbH, and especially when working together with the pneumatic rotary actuator actubar®, automates complex systems operating around the valve.



IPM Interface According to 3847/2

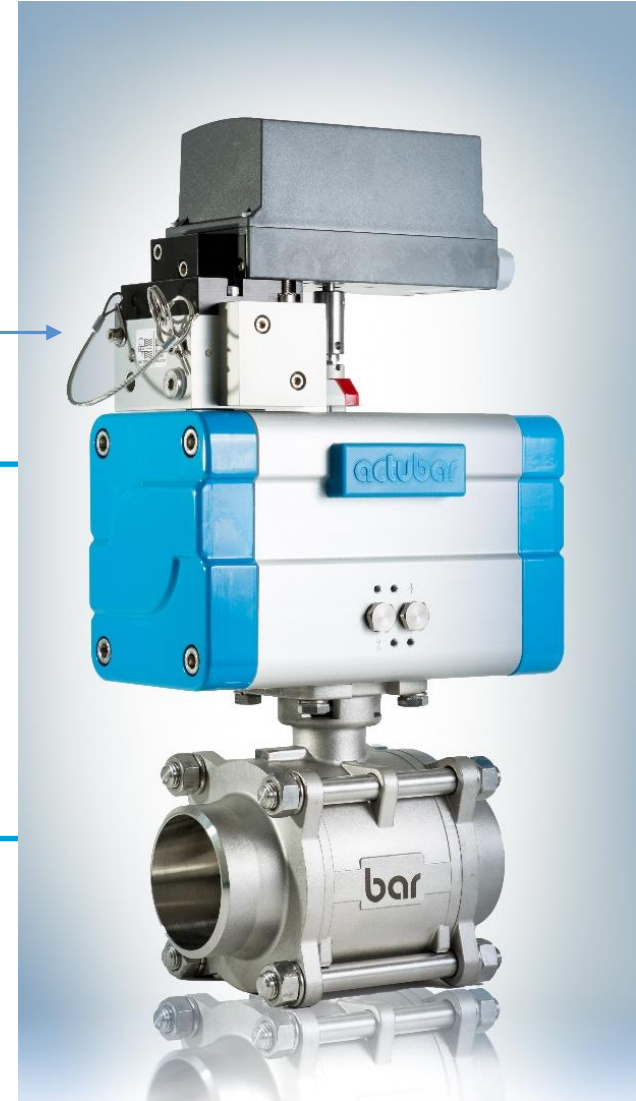
The IPM Interface is for the efficient connection of an intelligent positioner and a linear or part-turn pneumatic actuator.



The benefits are:

- reduced mounting costs
- reduced spare parts inventory
- increased reliability and stability
- the ability to safely replace the positioner by integrated interlocking during operation

The IPM Interface improves the SIL rating of the complete valve package by reducing the number of mechanical components and connections.



Thank You!

