

# Bettis™ Q-Series Pneumatic Actuator and “Fully Integrated” Controls

Your First Choice for a Valve Operating System™



**BETTIS™**

  
**EMERSON™**

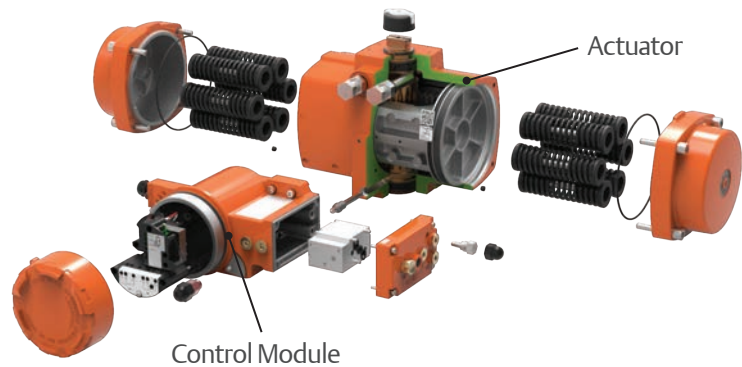
## The Industry's Only "Fully Integrated" Pneumatic Valve Operating System (VOS)

**Bettis Q-Series** offers a new way of looking at valve automation by combining field-proven rack and pinion pneumatic actuator with the necessary controls in an integrated modular package.

Gone are the non-integrated accessories from multiple vendors, mounting brackets, cumbersome external cabling and tubing that allows you to:

- **Achieve up to 20% reduction** in installation and commissioning time
- **Automate valves with small VOS footprint** offering flexibility for retrofit into existing pipe runs

The bottom line is that with the Bettis Q-Series you can improve installation time, reduce VOS complexity and automate valves in even the tightest of piping configuration.



### The Q-Series solution enables you to:

- Reduce commissioning cost by the easy to mount single unit.
- Provide maximum flexibility in various applications with the modular design.
- Use the Q-Series Valve Operating System in compact installations benefiting from the low profile.
- Prevent unplanned Plant-Down-Time using the PlantWeb™ or NAMUR NE 107 connectivity with predictive diagnostic capabilities.

### Integrated controls provide:

- A single electrical connection point, reducing wiring complexity.
- One Control Module for the full actuator range, reducing stock levels of various spare parts.
- One source of supply for Valve Operating Systems, reducing sourcing complexity.

### Actuator Features:

- Robust and durable spring-return or double-acting actuator design.
- Output torque ranging from 40 to 1600 Nm (354 to 14161 lbf.in)
- Easy exchangeable spring cartridges offer six different spring sets for a wide range of supply pressures.
- The high corrosion resistant design provides a long cycle life, also for aggressive industrial environments.
- The valve stem insert mounting options in accordance to ISO 5211 offers cost effective and versatile direct mounting to your valve.

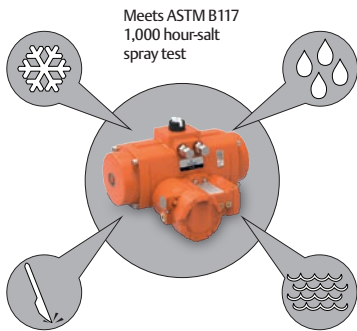
### Control Module Features:

- Easy exchangeable cartridges for pilot valves, limit switches or booster blocks.
- Standard "Breather" function protects spring chambers for corrosion.
- Externally adjustable switch point setting, from outside the Explosion Proof enclosure, prevents "hot-work-permits" or down time for switch adjustments.
- Easy accessible wiring compartment.
- Auto- Initialization by FOUNDATION™- Fieldbus or push button for easy setup.
- Available with FM, CSA, ATEX, INMETRO and IECEx approvals for use in explosive atmospheres



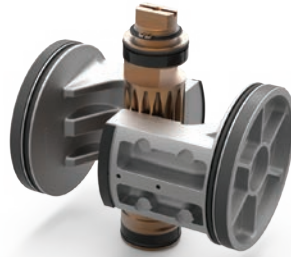


## Ensured reliability through innovative product design

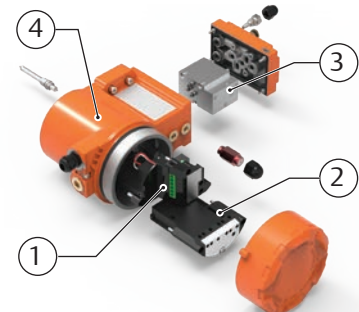


Meets ASTM B117  
1,000 hour-salt  
spray test

**Hard anodized** actuator body and module with protective finish protects from corrosive environments.

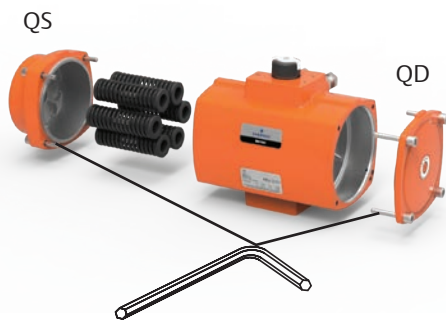


**Extended Life - Nylatron®** guide band and PTFE piston guide bands provides wear protection between housing and piston for extended service life.



**Innovative design** provides exchangeable cartridges for pilot valves (1), limit switches (2) or booster blocks (3) in an Explosion Proof enclosure (4) for maximum environmental protection.

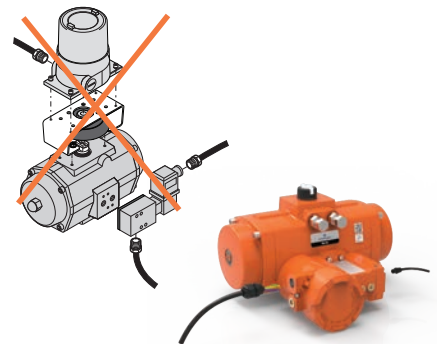
## Quick start up benefit from our simplified design



**Simple Conversion** - With an Allen key wrench, convert double-acting to spring-return configuration.



**Non-Intrusive Switch Setting:** Avoids the need for hot-work down time and maintains integrity of explosion proof environment.



**Plug and Play capability** reduces the need for mounting brackets, cabling and tubing and adapters.

## Increased personnel and process safety



Integrated controls in **explosion proof design module** offers FM, CSA, ATEX, IECEx and INMETRO approvals.



**Patented Intelligent Position Tracking** allows the integration of controls and feedback into one single product.



**Encapsulated spring design** provides superior field safety - when removed, springs remain part of the assembly.

This product is only intended for use in large-scale fixed installations excluded from the scope of Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS 2).



## The Bettis Q-Series Valve Operating System (VOS)

stands as a versatile, rugged, and efficient solution. It combines a field-proven rack and pinion pneumatic actuator with controls in an integrated modular package. The Bettis Q-Series solution offers true 'plug and play' capability without mounting brackets, cumbersome external cabling, and tubing.

**Patented Intelligent Position Tracking** allows the integration of controls and feedback into one single product.

**Non-Intrusive Switch Setting:** Avoids the need for hot-work down time and maintains integrity of explosion proof environment.



For complete technical and installation documentation scan QR.

[www.emerson.com/bettis](http://www.emerson.com/bettis)

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