

Welcome to the fifth issue of Techtorque for 2008. Your feedback about our newsletters as well as your suggestions for any particular products or applications that you would like to read about is always welcome. With your input, we will do our best to provide you with informative and relevant reading matter. Please email your comments and requests to our Sales and Marketing Manager, Chris Hoare, at choare@acrodyne.com.au.

Power Fail-Safe Device - PSEP - For Emergency Positioning Of Valves.

Acrodyne offers the PSEP fail safe device as one of the options of the PS Automation range of Intelligent Actuators. This feature is available for linear strokes upto 100mm and 25 kN shut off thrust and quarter turn shut off torques up-to 1000 Nm.

Valve specific force or torque values and process dependant emergency positions are freely selectable during parameterisation.

As soon as the actuator electronics recognises a mains power failure, it instantly switches to it's own PSEP energy pack and the actuator moves the valve to a pre-set safety position which is communicated to the control room via a potential free relay contact.

Special Features:

- Energy for at-least one positioning cycle.
- Safety position selectable.
- Potential free relay contact for error signal.
- Visual power failure indicator.
- Normal thrust/ torque while powered by energy pack.
- Compact & firmly fixed to actuator. Easily field installable.
- Standard supply voltages: 24 V AC/DC, 115 V AC / 230 V AC



TA ROLOFF

The Electric Actuator for Underwater Applications

- hermetically sealed enclosure
- applicable in 100% humidity
- compact size
- casing available in stainless steel
- manual override option

TA IP 68



Limitorque MX

the next generation smart actuation

- User friendly LCD display
- Patented absolute encoder
- B.I.S.T. (built in self test)
- State of the art controls platform
- Fast commissioning
- Non Intrusive setup
- More control Flexibility



Optional
Bluetooth
Connectivity



CHARACTER FIRST DEFERENCE

- Limiting my freedom so I don't offend others
- ... Honour traditions.
- ... Strengthen communication.
- ... Deal with conflict at work.



5 Keys to Building Deference:

- "Mind your Surroundings" – prepare for differences around you.
- "Notice Others" – recognise what others are experiencing.
- "Respect Differences" – ask questions so others can explain.
- "Consider Preferences" – remember others when making decisions.
- "Seek Resolution" – unite others around shared understanding.

Why is Deference important?

Deference enables us to consider the broad range of differences between people.

For more information regarding Character First contact Philip Greenwood at People and Culture on (03) 9018 7971 or 0411 131 449 www.peopleandculture.com.au

Acrodyne's new website is now live!

September saw an exciting new chapter at Acrodyne with the launch of our new website version 2.0. It has many advantages and gives our customers an abundance of information on each product and service we provide. To take full advantage of the site simply click on the subscribe link on the home page, fill out the form and a username and password will be emailed to you within 24 hours. We will continue to evolve the website over time with video tutorials and many other exciting member benefits.



RGS Solenoids

How it works series

TECHTORQUE ARTICLE

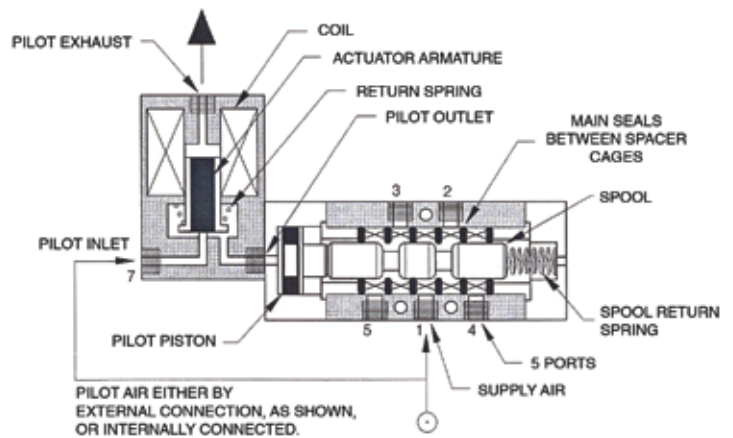
RGS Solenoids

Solenoid valves are used wherever air flow, either directly or to a pneumatic actuator or cylinder needs to be controlled automatically. They are being used to an increasing degree in varied plants, applications and equipment. The varieties of different designs that are available allow valves to be selected to suit a specific application; this makes the solenoid valve a versatile addition to any pneumatic solution.

A solenoid valve is operated upon the coil's armature being energized with either direct or alternating current, and whilst energised either allows or shuts off the flow of compressed air. The solenoid itself consists of an electromagnet that when energised creates a magnetic field causing the plunger encased within to rise; this in turn opens the passage for air to pass and operate either the solenoid valves spool or the actuator directly.

All RGS valves are static seal spool valves employing a compact solenoid actuator to initiate the valve's spool. When the actuator coil is energised, the movement of the actuator armature allows pilot air to displace the spool. This spool displacement consequently allows air flow between adjacent ports. The porting arrangement is either for 3-way or 4-way control for single or double acting cylinders or actuators.

Pilot air is either internally connected within the valve between the supply and actuator inlet port or is externally connected to the actuator inlet port. An external pilot is required when the supply or control pressure is below the minimum pilot pressure necessary to displace the spool.



RGS valve assemblies are also available with either a single or dual solenoid actuator/s. With a single actuator a spring is utilised to return the spool to its original position when the actuator coil is de-energised. With dual solenoid actuators the spool remains in a displaced position until the second solenoid is energised which then returns it to its original position.

In addition, the valve body can be supplied in a variety of different configurations. Port size can vary between 1/8" and 1" – both BSP and NPT, and body configuration can be produced in both Namur for compact installations and Remote mount for a more versatile approach.

Each solenoid actuator is available with a manual override option allowing both manual and automatic operation of RGS valves. With this option a mechanical lever displaces the actuator armature allowing the valve to function as if it were electrically energised.

Three versions of manual override are available – a push button which must be held in to operate the armature and a lever and screw-driver type which holds the armature open and which must be returned to its original position before the valve will again operate electrically.

