

TECHTORQUE NEWS

**Volume 5
Issue 7**

Welcome to the seventh 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.

Acrodyne Universal Chainwheels



Acrodyne universal chainwheels allow for easy operation of hard to access valves simply by utilising easy to adapt chainwheels and chain length to order. Chainwheels are available in both ductile iron and now in 316SS suitable for corrosive environments. One major advantage of the universal chainwheel is the ease of adaption, simply clamp the chainwheel to the existing handwheel utilising the supplied hardware, this unique feature allows for easy onsite retro-fitting also. The chainwheel mounting is adjustable which allows either a smaller or larger diameter chainwheel to fit to existing valve handwheel, chainwheels are available to suit from 50mm to 914mm diameter handwheels, there are 10 sizes covering this range.

Stock of both chainwheels and chain is held in our warehouse ready for immediate delivery.

Acrodyne have increased stock levels of YT- 850 position indicating switches due to popular demand.

The IP67 weatherproof housing is in powder-coated aluminium and is compact in its design. It features a short series Namur shaft and a low profile Stainless steel mounting bracket to accommodate all VDI/VDE actuators with 80 X 30mm drilling up to 30mm high. Other standard features include an easy to see domed indicator beacon displaying open-closed indication. The unit includes 2 X SPDT switches which can be easily adjusted using fine splined spring loaded quick-set cams.

AOG **australian oil & gas**
exhibition conference

17-19 February 2009 Perth Convention and Exhibition Centre

Explore \$63 Billion of opportunity!
You simply can't afford to miss it!

AOG is the premier oil and gas industry exhibition in Australia. It's staged in the stunning city of Perth - Western Australia - every two years and has run for over a quarter of a century. In February 2009, it will be the largest oil and gas expo ever held in the Southern Hemisphere.

Exhibition Hours
Tuesday 17th February 2009
11am - 7pm
Wednesday 18th February 2009
11am - 7pm
Thursday 19th February 2009
11am - 4pm



ACRODYNE
Actuation and Control

Come and say hello to us at Stand N26

Submersible Gearbox

- Hyperbarically tested and certified to 408 bar
- Double sealing
- Torque ranges from 1,356Nm to 56,500Nm
- "Intelligent internal pressure compensation"

Tested to 13,650 feet



MASTERGEAR
WORLDWIDE

CHARACTER FIRST DETERMINATION

Accomplishing goals regardless of opposition

- ... Know your purpose.
- ... Manage distractions.
- ... Creatively overcome obstacles.



5 Keys to Building Determination:

- "Set Goals" – stick to your values and priorities.
- "Get Moving" – once goals are set, make things happen.
- "Deal with Distractions" – prioritise tasks, learn to say "No".
- "Face Challenges" – get ready to make sacrifices to secure what is important.
- "Change Tactics" – if a plan fails consider different solutions or find someone who can assist.

Why is Determination important?

Determination allows us to pursue what is right, and overcome obstacles on the way.

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

Employee Profile - Li Ping

Li Ping joined Acrodyne in August filling the position of Administration Assistant. Li Ping was born in Brunei and has lived in Australia for 5 years where she now resides in Mulgrave, *and her age will remain a mystery*. This month Li Ping will complete her studies and graduate in Accounting and Management at Monash University. Her hobbies include reading, voluntary work and Karate (*this is why I will not reveal her age*).



Aunspach Torque Overload Protection

TECHTORQUE ARTICLE

WHY USE OVERTORQUE PROTECTION?

Each year, many valves and actuators are damaged by excess operating torque.

The results can include unnecessary and expensive repair/replacement costs, system downtime, loss of production, possible personnel injury and potential legal liabilities.

Experience has shown that overtorque protection is a reliable and cost effective component guarding possible catastrophic damage to the actuator/gearbox or valve.

WHERE ARE THEY USED?

Overtorque protectors are generally fitted between the drive sleeve of an actuator or input shaft of a gearbox and a manual operator e.g. handwheel. They are also commonly used to protect costly input stops for large high reduction gearboxes thus providing reliable asset protection.

Other applications are chainwheels and shaft to shaft couplings

This is a permanently mounted device requiring minimal adaption.

HOW THEY OPERATE

Operating torque is applied through a handwheel or other means and transmitted through the shaft (10) to the detent plate(1) and drive balls (2) to the body(6) then to the driven equipment. If excessive torque is applied, the drive balls will rise out of the detents against the force of the springs(11) and disengage the drive.

Re-engagement at the pre-set trip torque is automatic in any direction.



A good analogy would be the feature found in a petrol cap of a modern motor car.

“You cannot over tighten it”

Overtorque protectors are a factory (or field) calibrated tamper proof device set to a pre-determined limit nominated as trip torque. The trip torque is set to a level to safely operate the valve in normal conditions and limit the torque before equipment failure due to overtorque. Acrodyne can offer overtorque protectors ranging from 7Nm to 678Nm as factory standard. Higher capacity torques are also available.

MATERIALS OF CONSTRUCTION

Aunspach overtorque protectors consist of heavy duty mechanisms permanently lubricated and hermetically sealed inside rugged housings and protected by epoxy coatings inside and out thus giving excellent protection for buried service. The units are maintenance free.

END CONNECTIONS

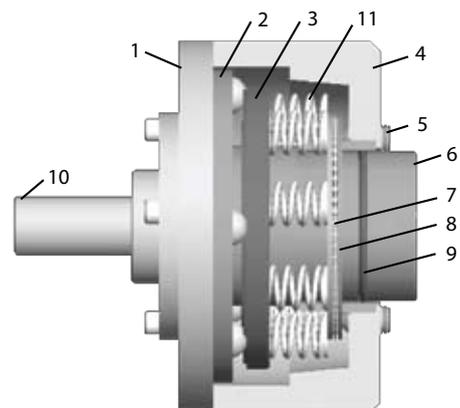
Various end connections ranging from bored shafts and keyways, cross drills or splines, AWWA nuts or sockets are available with other options available upon request

OPERATING TEMPERATURES

Operating temperatures range from -29 to 93 C as standard with the option of higher operating temperatures available.

Acrodyne can offer a range of models specifically designed for various applications.

Please contact Acrodyne for further model information.



Number	Component
1	Detent Plate
2	Bearing Ball
3	Spring Seat
4	Housing
5	Calibration Screw
6	Body
7	Roller Bearing
8	Bearing Washer
9	O-Ring Seal
10	Shaft
11	Spring