

## Motor Technology News – Winter 2017

### Technical Answers – What is the smallest speed increment you can set on a servo motor? Part One

Welcome to the Winter 2017 edition of Motor Technology News. We're starting the year with a brand new feature called, Technical Answers, in which we're going to address questions that have been put to us recently by customers regarding their real-life industrial applications. If you've got a question you'd like us to answer drop us a line. We'll send a free laser pen to any reader of Motor Technology News whose question we feature here. Write to us [here](#).



We've always sought to produce easy-to-understand articles that provide help and advice with every day servo and automation issues that will hopefully help all our customers. Like our Back-to-Basics article on servo motors that was a huge hit and ended up being published in **Design Solutions** magazine, as well as many other hopefully helpful articles and guides we've published over the years.

In this first in the series of Technical Answers we're going to Vienna, to visit a company operating **Fuji Techno Industries Super Metering Pumps**, for which we're the European agents. The pumps were on a high precision dosing application and our customer wanted to know what was the smallest speed increment that could be set on the servo motors driving them.

The question was straightforward but in reality the answer is a little more complex. We demystify the whole issue and provide a simple, easy to understand explanation in two parts on our website.

Click [here](#) to read part one now and watch out for the next edition of Motor Technology News, coming soon, in which we'll publish part two.

### Cable colour coding – understanding DESINA

Just recently we discovered that the orange cable we had been purchasing, for feedback on servo systems, was no longer available. The same specification cable was available – for feedback – it just wasn't orange any more. The manufacturer of the cable was now making it with a green outer sheath instead of orange. The situation was confusing and it seemed that even the cable manufacturer, in trying to conform to DESINA standards, had got its colour coding slightly wrong.



According to DESINA orange cable is for servo, so in that sense the manufacturer was right in the first place. But, not entirely. The thing is, cable that is specifically for measuring and feedback functions, should be green, even for servo. So, if a cable manufacturer could get it slightly wrong we thought it might be worthwhile explaining the DESINA standards – where they apply to the colour coding of cables – to clarify the situation.

Put simply DESINA is a standardisation for certain components used on industrial machines, drives and control systems, including, of course, the cabling. DESINA specifies different colours for cables that have different functions within a system. There's a full explanation of this on our web site where we've provided a useful guide for reference purposes that we hope will help you quickly and easily understand the DESINA colour coding system.

Click [here](#) to go to our DESINA guide

### New ratio and fast delivery for gearbox range

Girard Transmissions have announced the introduction of a new ratio of 3:1 on sizes 45 and 55 of its Dynabox gearbox range. The Dynabox range of gearboxes provide high levels of accuracy and precision and are ideally suited for the most demanding servo applications. They are available with three levels of accuracy, BASIC, MEDIUM and EXPERT, with less than 10, 5 and 1 arcminute of backlash respectively.



Girard has also introduced fast delivery options. The company states that following investment and restructuring it is now able to supply the entire standard DynaBOX range with solid and hollow-shaft output, from the smallest size 25 to the largest size 110, rated to over 800Nm, within 2 weeks. Additionally there is also now an urgent build service with a turnaround of just three days.

Click [here](#) for more information on our range of Dynabox gearboxes from Girard



### Stand alone drives offer low cost option

AXOR have added a low-cost, stand-alone, option to its new multi-axis MackDRIVE servo drive series. The new MackINDY is specifically designed for single and low axis count applications where cost is paramount.

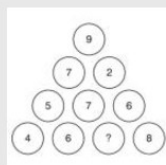
Click [here](#) to learn more...



### Servomotor range is discontinued

LTI-Motion's LSH range of servomotors is to be discontinued after 15 successful years of service. The discontinuation affects the entire range although orders can still be placed until 31 March 2017.

Click [here](#) to learn more...



### Puzzle Corner – The Mystery of the Great Pyramid

An inscription carved thousands of years ago on the stone doorway that led to the inner chamber of the Great Pyramid of Djedi promised entry to all those who could solve a simple mathematical puzzle.

Click [here](#) to learn more...