

Roadmap for new digital range

- **TEB/TES** and **REB/RES** are finally in series production, so we invite you to speed up the switching over from analog and old digital versions that will be soon phased-out, to the new current digital ones.
- New open loop proportionals **AEB/AES** and DIN rail digital drivers **E-BM-AES** & **E-BM-RES** respectively for **A** & **R** valves are ready for sampling; the pre-series supplies will start from Q2/2016
- **POWERLINK** communication has been implemented in TES/LES directional and flow controls and it is now available for sampling or small pre-series

For a quick resume of the updated Roadmap [click here](#)

New LIQZH, high dynamic servoproportional cartridges

LIQZH are high dynamic 2-way servocartridges for the injection phases control in high performance die casting machines. They are characterized by **30 ÷ 40%** faster response times than the LIQZP-LES model and aligned with Parker TDP servocartridges.

LIQZH are available from size **32** to **100** with basic LEB or full LES digital control

Availability and List price: on request

Documentation: tech. table [TFS330](#) will be available soon in Atos on-line catalog



REB pressure relief valve



LIQZH high dynamic servocartridge

2016 NEW DEVELOPMENTS

• Safety ISO cartridges valves size 63 to 100

LIDA/FI and **LIDAS/FI** size **63**, **80** and **100** complete the range of safety cartridges, currently available only up to size 50, and fulfill safety functions in big vertical presses with flow up to 16.000 l/min. They are equipped only with **FI** inductive proximity sensor (FV proximity switch available for LIDAS sizes 16 ÷ 50 only).

Availability: samples from September '16 - series by the end of 2016



LIDA/FI safety cartridge

• Low leakage ex-proof and intrinsically safe valves

The new low leakage line “**L**” of ex-proof and intrinsically safe solenoid valves size 06 is the ideal solution for marine and off-shore systems assisted by hydraulic accumulators.

In these applications the total internal leakage of the high numbers of installed valves causes frequent pump interventions to re-charge the accumulators by heating fluid and wasting power. The **DHAL**, **DHAXL** and **DHWL** are provided with 8 mm diameter spool accurately coupled to the valve's body to minimize the internal leakages below **10 cc/min** at 200 bar with fluid viscosity 15cSt @ 40°C. Max flow performances are 20 to 30 l/min

Availability: samples from September '16 - series from the beginning of 2017



New DHAL “low leakage”

• SC LI “high flow” cartridges - pmax 420 bar

The new series of SC LI directional slip-in cartridges with 32, 33, 42 and 43 poppet type has been re-designed to withstand a max pressure of 420 bar and to improve the flow capability with low ΔP. Their P/Q performances are similar to SH LI “high flow” model, but with a consistent price reduction. The cartridges are available from sizes 16 to 100 in standard or optional leak free execution with poppet seals (option /R). They will replace the correspondent SC LI old series and SHLI(R) model which will be phased out in 2017

Availability: sizes 16 to 32 from June '16 - others sizes by the end of 2016



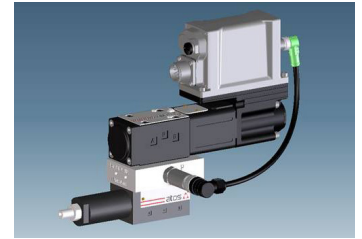
New SC LI high flow

APPLICATIONS

Atos digital solution for directional & constant speed controls

The innovative & cost effective Atos **Q/T** digital solution is successfully applied in steel sheet processing lines for the accurate directional & constant speed control of drilling heads, obtaining acceptable performances in place of expensive closed loop axis controllers.

The core of the system is a digital servoproportional valve with special "intrinsic temperature compensation", permitting to keep constant the axis speed regardless of the influence of the fluid temperature and viscosity variation which may occur during the machining process. At the same time a modular compensator makes the flow regulation independent from the load variations.



Q/T digital solution

Hydraulic system for mooring control

Atos power units & control blocks operate the innovative vacuum-based automatic mooring systems by Cavotec that ensures the ship anchorage without ropes and contemporary permits the waving movement of the vessel.

The power units are provided with two variable speed motors powered by inverter, plus internal gear pumps permitting to control the cylinders' extension speed during the anchorage phase of the vessel. In "idle" condition the motors operate the pumps at very low speed just to ensure the piloting pressure to the proportional valves which permit the "damped" floating



Power unit for vacuum base mooring

Stainless steel cylinders for hydrofoil boats

CNXN are stainless steel servocylinders in AISI 316L used for fins control in hydrofoil boats, fully compatible with marine salty environment. They are designed to withstand high corrosive environmental conditions with a test proved resistance > **1200h in salt spray**.

The built-in magnetostrictive transducer with analog output ensures compact execution and **IP69K** protection class according to EN60529



Vacuum-base mooring

WORKSHOP NEWS

New Test Benches for Cylinders and Servocylinders

New automatic testing benches improve acceptance test reliability and traceability of cylinders and servocylinders in the standard production line.

Stroke, cushioning length and high pressure test up to 320 bar are performed according to ISO 10100 on 100% of cylinders production, an additional low pressure test highlights any seal leakage. Test results are stored into a database and they are available for consultation by means of data matrix code.



Hydrofoil boat

New Washing and testing stand for solenoid tubes

Atos is going to introduce in the manufacturing line of solenoid tubes a new automatic washing & testing facility which fully replaces the current manual operations, with a consistent improvement of production quality and efficiency.

In particular the new system performs an accurate washing of the solenoid tubes after the machining phase. A second washing step prepare the tubes for the subsequent zinc treatment. The new system also implements the pressure test up to 210 bar to prevent any accidental external leakage, as already present in the current production line.



Cylinder's automatic test benches