

**• New additional spools for proportional directional valves**

New spools have been introduced in the standard range of Atos proportional directional valves to increase the opportunities to challenge the BRR competition. In fact the new spools provide the same characteristics of BRR equivalent ones, thus permitting the complete valve to valve interchangeability.

Vice versa new specific spools type V9, D9 and L9 provide dedicated solutions in applications like plastics and blow moulding, for example for closed loop injection control (V9) and for clamp control with regenerative circuit (D9, L9). They are specifically designed for proportional valves with /S\* option, to optimize the alternate p/Q control.

For the complete list of new spool and the correspondent BRR codes, [click here](#)

Documentation: included in the updated tech tables [F165](#), [F175](#) and [F180](#), see Atos catalog-on-line

Availability: from May - April '09, depending to the spool type

Prices: available in price list 09100

**• New pressure relief cartridge SP-CART M-4**

New compact pressure relief cartridges have flow range up to 15 l/min to harmonizes the flow gap between the existing cartridges SP-CART M-3 (2,5 l/min) and SP-CART M-5 (50 l/min). Main features are the low leakage characteristics and the low sensitivity to contaminations, specifically optimized for load balancing function in Press Brake applications.

The valve will be available in 3 executions:

- ▶ standard with adjustable setting (includes the option /R for low leakage characteristics)
- ▶ RS, certified to Machine Directive 98/37/CE, for press brakes
- ▶ PED, certified to PED Directive 97/23/CE

Documentation: included in the update tech table [C010-8](#), see Atos catalog-on-line

Availability: from March '09

Prices: available in price list 09100

**• News about DKE and DKER solenoid valves**

The following Coil voltages and connectors options have been recently introduced in the standard range of DKE and DKER:

- ▶ **14VDC** and **28VDC**, particularly used in mobile applications (already available for DHI and DHU)
- ▶ **125DC**, required in particular sectors, like energy and power plants
- ▶ **115AC/60Hz** and **230AC/60Hz** with improved performances respect to the double frequency coils 110AC/50/60Hz and 230AC/50/60Hz, for countries using standard 60Hz power supply.
- ▶ Special electric connectors with IP67 protection degree for mobile applications, type: AMP Junior Timer (XJ), Deutsch (XK, only for DKE) and Lead wire (XS, only for DKE), like ones already available for DHI and DHU

Documentation: included in the update tech table [E025-3](#), see Atos catalog-on-line

Availability: for CAE 28DC and 115/60AC; CAER 115/60AC and 230/60AC the availability is running. For others voltages and for special connector the availability has to be checked

Prices: available in price list 09100

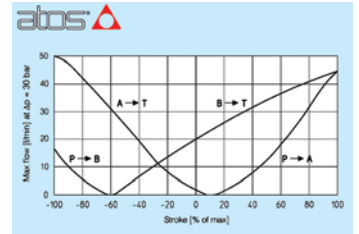
**• DKQ modular flow control valves with solenoids AE and AER**

The new series 30 of DKQ modular flow control valves is equipped with the same solenoid of DKE (code DKQ-0\*\*/EX\*\*) and DKER (code DKQ-0\*\*/ERX). It replaces the old series 21 and 22 respectively equipped with solenoids of DKI and DKU.

Documentation: tech table [D170-6](#), see Atos catalog-on-line

Availability: DKQ-011 from week 05/09, other versions from March '09 anyway after the exhaustion of the old series 21 and 22

Price: available in price list 09100



V9 spool for injection



Digital proportional valves



SP-CART-M4



AMP Jet, Deutsch & flying leds connectors



DKQ series 30

## • New Ex Certifications for ex-proof valves

The several worldwide applications of ex-proof components have evidenced the opportunity to extend the range of Atos Ex certifications. The following new Ex certifications have been already achieved by Atos to match specific market requirements:

- ▶ North American certification **UL1002**, Class I, Groups C&D for Stainless Steel range for ex-proof valves: type **X** (full parts in stainless steel), **XS** (external parts in stainless steel) and **XW** (internal parts in stainless steel) - relevant tech. tables will be updated soon
- ▶ ATEX Mining certification **Ex I M2 Ex ia I** for intrinsically safe valves DHW/M

Documentation: tech. table [E130-16](#), see Atos catalog-on-line

Availability: running

Prices: available in price list 09100

In the next months, the following certifications will be also available for all the ex-proof valves (standard and stainless steel versions):

- ▶ **ATEX** certification for Dust environment, protection mode **Ex II 2GD** for environments with flammable dust (i.e. plants for coke treatment)
- ▶ **C UL US** certification which extend the actual UL certifications to the Canadian CSA specifications. This extension will permit an easier application of Atos ex-proof components in the North American territory

## • Atex certification for PFE and PVPC pumps

Atos is achieving the Atex certification **Ex II 2/2 GD cbk IIC T6/T5** for pumps type PFEA and PVPCA, for applications in ex-proof hazardous areas.

In fact customers often require to officially guarantee the component's compliance with the safety requirements. For PVPCA the ex-proof certification will be available also for proportional controls CZ, LZQZ and PERS

Documentation: tech. table [A015-0](#), see Atos catalog-on-line

Availability: running for PFEA and within end of March '09 for PVPCA

Prices: available in TAK 09110 price list

## • New optional hand lever /MV and /MO for ON/OFF and proportional valves

The hand lever executions (options /MV and /MO) available for DHI, DHU, DHZO and QVHZO have been re-designed to improve their functional characteristics, to simplify the assembling procedure and to optimize the overall costs, see [click here](#).

Besides, the new version is more appropriate for applications in mobile sectors thanks to the lever spring internal to the valve instead of external (consequently not exposed to the environmental conditions or to the mechanical shocks) and the plastic knob on the top of the lever. The new lever execution has been introduced also for DHA and DHZA ex-proof valves (ATEX and UL), previously available in TAK list price with special code 050284 and now available in standard product range. The series number of all the valves with the new lever execution will be identified with series number 30.

Documentation: tech table [E138-3](#), see Atos catalog-on-line

Availability: within May '09

Price: available in price list 09100

## • New ex-proof pressure transducer type E-ATRA

New range of analog pressure transducers in ex-proof execution, ATEX certified according to the protection mode **Ex II 2G Ex d IIC T6**. They equip the ex-proof proportional pressure control valves with integral digital electronics, -TERS type available on request. They can also be used in association with other Atos ex-proof proportional valves to perform closed loop pressure controls, like for -AERS valves version.

- ▶ Pressure range: 4 ranges from 60 to 400 bar
- ▶ Output voltage: 4 to 20 mA
- ▶ Compatibility for applications with natural gas (methane, propane, butane)

Documentation: tech table [G466-0](#), see Atos catalog-on-line

Availability: running

Price: available in price list 09100



UL Stainless steel valves



Intrinsically safe valves



Vane and piston pumps with ATEX certification



Ex-proof valve with hand lever



E-ATRA ex-proof pressure transducer

**• New series 52 of -TERS proportional pressure controls**

The new series 52 of -TERS proportional pressure control valves is equipped with a new pressure transducer type E-ATR-7 which provides the same electrical characteristics and mechanical interface of previous model E-ATR-6, but with reduced length. In the -TERS valves the dimension corresponding to the pressure transducer protection is consequently reduced.

Documentation: tech table [F007](#), [F070](#) and [F300](#), see Atos catalog-on-line

Availability: running

Price: available in price list 09100



New series 52 of TERS pressure control valves

**• New size 80 and 100 for LIDEW and LIDBH cartridge valves**

The range of LIDEW and LIDBH cartridge valves, previously limited to size 63, has been extended to the sizes 80 and 100 (max flow up to 8000 l/min), increasing the opportunities in applications with high flow rates, like in steel and forging sectors.

Please note that for sizes 80 and 100, the pilot solenoid valve is size 10, DKE type.

Documentation: tech table [H030-18](#), see Atos catalog-on-line

Availability: from May 09

Price: available in price list 09100



LIDBH size 100

**• LIMZO size 80**

The range of LIMZO-A, AE and -AES (without pressure transducer), previously limited to size 63, has been now extended to the size 80 for pressure controls in high flow systems up to 4500 l/min.

Documentation: tech table [F300-17](#), see Atos catalog-on-line

Availability: from May 09

Price: available in price list 09100



LIMZO size 80

**• ISO TS 16949 technical specification**

Atos is going to align all the management procedures and methodologies to the **ISO TS 16949** technical specification, typically used in the automotive sector.

This specification is intended to the continuous optimization of the procedures to prevent defects of final products, by means of specific tools providing a preventive analysis of the possible failure causes:

- ▶ analysis of the possible designing defects (Design DFMEA)
- ▶ analysis of the possible process defects (Process PFMEA)
- ▶ Control Plan - to keep under control all the manufacturing processes
- ▶ Statistical Process Control - to fix variability and limits of manufacturing processes
- ▶ programmed preventive maintenance of the production machinery (according to ISO 9001)
- ▶ free pass from acceptance control for supplies of certified suppliers

ISO TS represent a strong improvement of Atos quality standards.

Availability: the above procedures will be running within end 2009



Cartridge quality control

**• DATA MATRIX**

The traceability of any single produced valve and the possibility to link it to the relevant testing data is more and more required in the modern industry and markets.

From September '09 Atos will introduce, starting from the proportional valves and then progressively extended to all other components, the Data Matrix, consisting in a bi-dimensional bar code printed on the valve nameplate.

The bar code shall permit an immediate and univocal traceability of the historical data relevant to any single valve. In case of valve's working failure in the customer application, through the Data Matrix, Atos quality dept. can immediately check the valve characteristics measured in the production test and give evidence to the customers.



Valve's nameplate with data matrix