

# 100% digital electrohydraulics

Atos digital proportionals offer a powerful mix of innovative features

Complete range of valves and controls with rugged design and outstanding performance



## Digital range

The outstanding performance of Atos digital proportionals are the result of long-lasting R&D activities

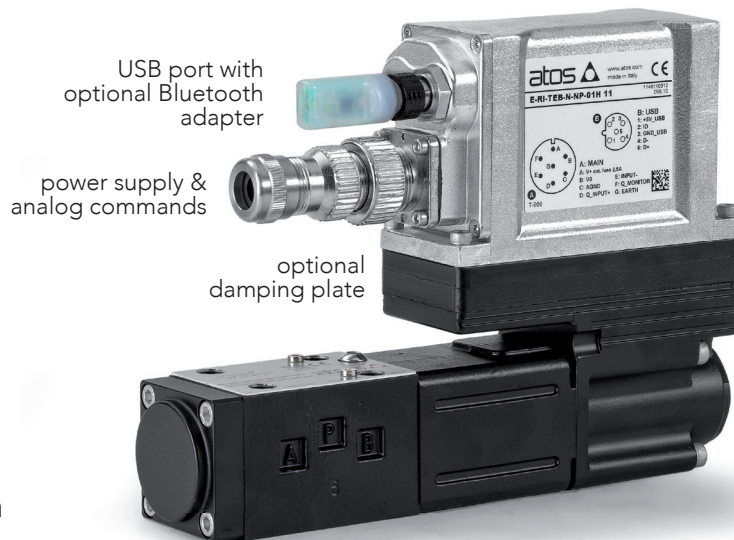
### Basic B silver execution:

- analog or IO-Link command signal
- shock up to 100g with damping plate
- temperature range  $-40^{\circ}\text{C} \div +60^{\circ}\text{C}$
- water & dust proof - IP66/67
- Smart tuning: dynamic response selection

### Full S black execution adds:

- wide range of fieldbus interfaces
- p/Q control function
- TÜV certified safety functions

- 1 High performance proportional
- 2 Direct & pilot operated servoproportionals
- 3 Pilot operated servoproportional, size 35

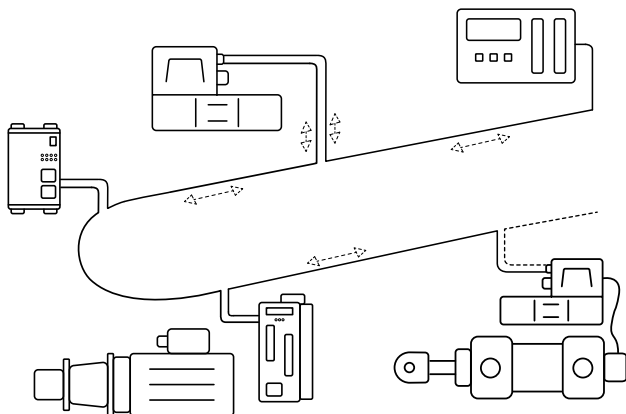
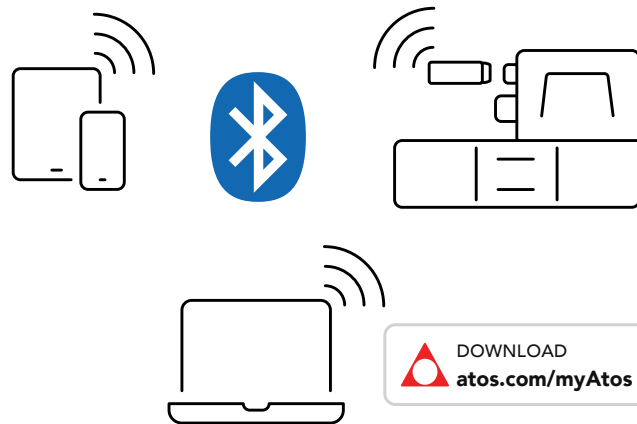


**LOOKS ANALOG  
WORKS DIGITAL**



## Free mobile App & PC software

Atos CONNECT App and Windows PC software allow easy access to configurations, advanced diagnostics, alarms history and built-in oscilloscope



## Fieldbus

Real-time access to parameters, transducers and diagnostics

**BC** CANopen

**BP** PROFIBUS DP

**EH** EtherCAT

**EW** POWERLINK

**EI** EtherNet/IP

**EP** PROFINET

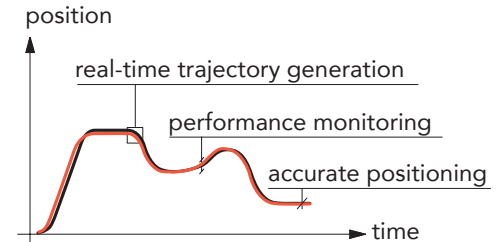
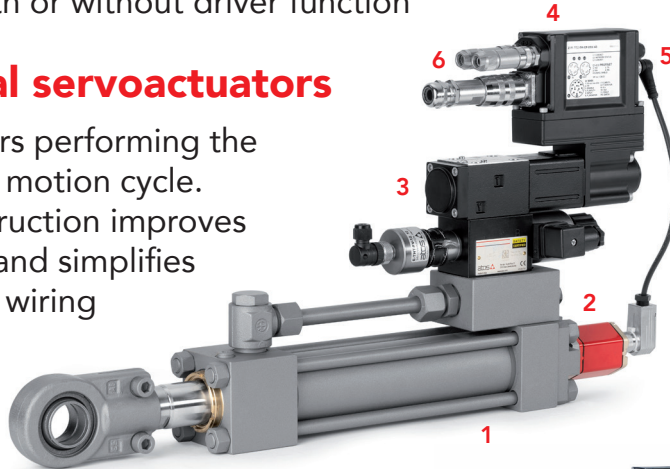
## TEZ axis controls with autotuning

Servoproportional valves with LVDT transducer, on-board digital driver & axis card perform position, speed and force controls of any electrohydraulic axis

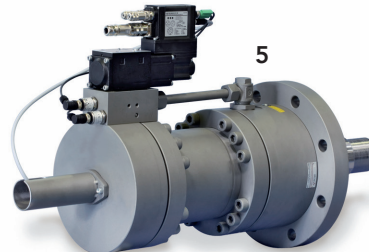
Axis cards are also available for cabinet installations in off-board execution, with or without driver function

## AZC digital servoactuators

Smart actuators performing the complete axis motion cycle. Integral construction improves performance and simplifies the machine's wiring



Servocylinder **1** with position transducer **2**, servoproportional valve **3**, integral TEZ controller **4**, connections to position transducer **5**, to electric power, electronic signals and fieldbus **6**



- 4** Z-BM-TEZ off-board digital axis card with driver function
- 5** AZC servoactuator with flow/force control by 2 pressure transducers

# TEB & TES proportionals with LVDT transducer

Directional and flow control valves with on-board digital driver

Off-board digital drivers are available for cabinet installation



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## High Performance proportionals

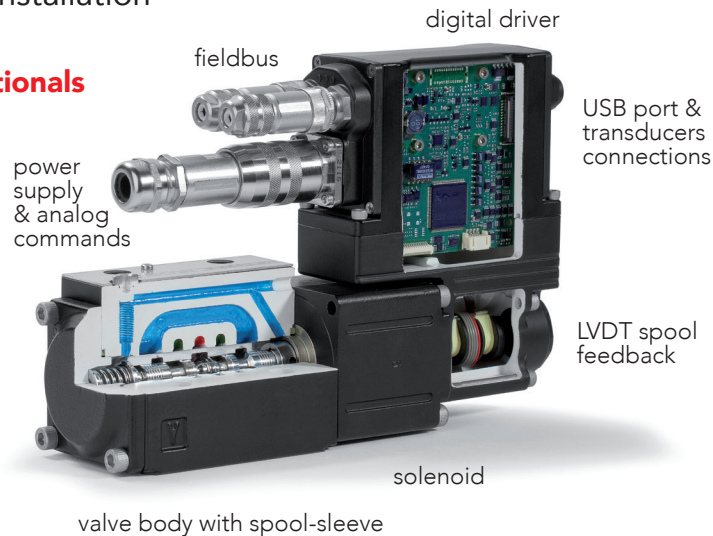
Positive overlap spool and central rest position

## Servoproportionals

Sleeve execution with zero overlap spool for accurate closed loop position controls & fail safe function  
Pilot operated directional control valves **6** & high dynamic servocartridges **7** are equipped with 2 position transducers



7



fieldbus

digital driver

USB port & transducers connections

LVDT spool feedback

solenoid

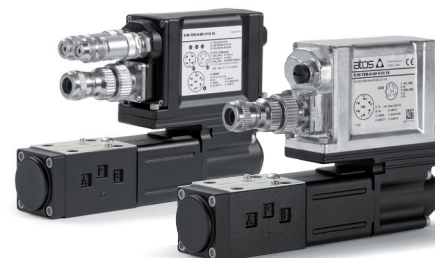
valve body with spool-sleeve

8 E-BM-TES off-board digital driver, DIN rail mounting

9 TEB & TES servoproportionals



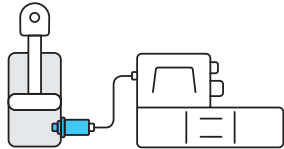
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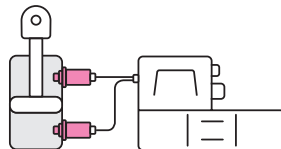
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## p/Q control for TEZ, TES & PES

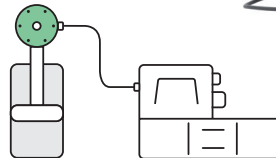
Integrate max pressure or force control to the standard flow regulation of proportional valves and pumps



**SP**  
pressure control  
1 pressure transducer



**SF**  
force control  
2 pressure transducers



**SL**  
force control  
load cell



10



11



12

- 10** PES axial pistons pump with p/Q control
- 11** TES servoproportional with SF option
- 12** E-BM-RES digital driver, DIN rail mounting

## REB & RES pressure controls

Relief or reducing proportionals with pressure closed loop to ensure best accuracy and repeatability

Pressure valves allow the open loop control mode for maintenance purpose

power supply  
& analog  
commands



pressure transducer

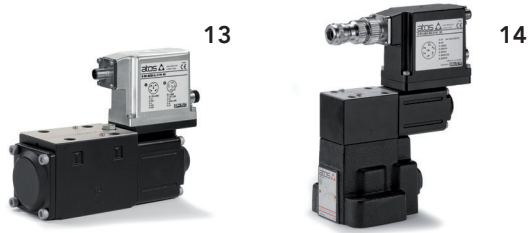
fieldbus

USB  
port

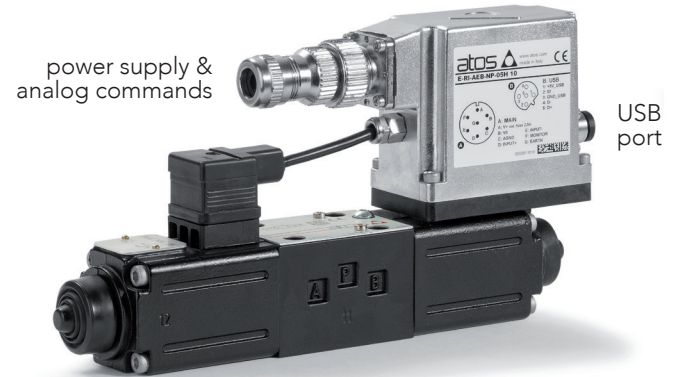


## AEB & AES proportionals without LVDT transducer

Directional, flow and pressure control valves with on-board digital drivers



- 13 IO-Link AEB directional proportional
- 14 CANopen AES pilot operated pressure control
- 18 DHZO-A directional proportional
- 19 AGMZE-A pilot operated pressure control



### Digital off-board drivers

DIN rail mounting for cabinet installation

- E-BM-AS cost-effective solution 15
- E-BM-AES high performance with fieldbus 16
- W option adds max power limitation pXQ

### ZO-A & ZE-A proportionals

Directional, flow and pressure control valves without LVDT transducer & electronic driver:

- ZO-A rugged flanged solenoid
- ZE-A screwed solenoid
- E-MI-AS digital driver, coil mounting 17



## Worldwide Sales Organization

A sales network with 25 branches, 120 sales professionals and distributors in more than 80 countries, together with great responsiveness and focus on customers.



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