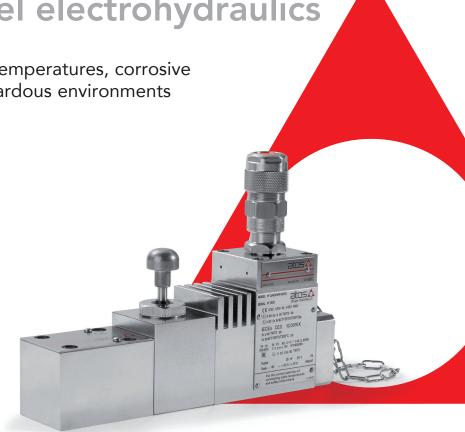


The highest resistance to low temperatures, corrosive atmospheres and fluids, in hazardous environments







# Stainless steel electrohydraulics

• Extreme temperatures, full compatibility with a wide range of temperatures according to selected execution, even for polar environments







 Multi-fluid compatibility, specific options allow correct seals selection according to the hydraulic fluid, also for fluids with very high percentage of water or even pure water









 Multi-certified components according to international directives and regulations for safe operations in environments with potentially explosive mixtures of liquids, gases and dusts



**EUROP** 



) CHINA



INTERNATIONAL





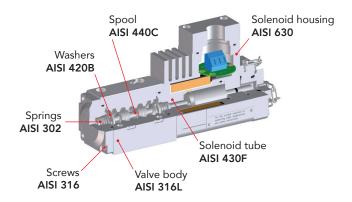




### Stainless steel executions



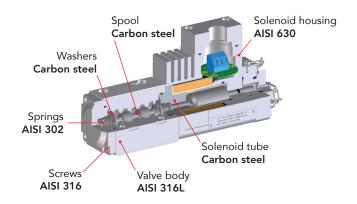
All parts are stainless steel made for a complete protection of valve external and internal surfaces



Suitable for applications which require water-based fluids or pure water, in presence of corrosive or salty atmospheres



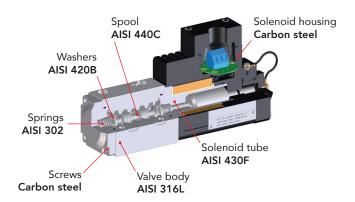
Only external parts are stainless steel made, while internal parts are carbon steel made



Suitable for applications which require standard mineral oils or synthetic fluids, in presence of corrosive or salty atmospheres



Only internal parts are stainless steel made, while external parts are mainly carbon steel made

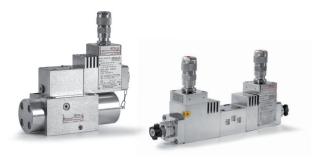


Suitable for applications which require water-based fluids or pure water, in absence of corrosive or salty atmospheres



# **Stainless steel range**

The most complete range of electrohydraulics components for extreme environments, from on-off valves to complete systems. Stainless steel components can operate in potentially explosive environments thanks to ex-proof certifications



**Ex-proof on-off valves** 





**On-off valves** 



**System** 

## **On-off valves**

A full range of stainless steel valves to satisfy the most demanding applications in extreme environments

#### **Directional valves**

Hydraulic operated valves or solenoid valves with ex-proof certification. Standard leakage or leak-free executions



Subplate valves • ISO sizes 06 ÷ 16 **Qmax** 220 l/min • **Pmax** 350 bar

### Pressure valves

Relief cartridges or modular valves, poppet type. Optional PED Pressure Equipment Directive certification



Screw-in cartridges • sizes G ½" ÷ M35 Qmax 150 l/min • Pmax 420 bar



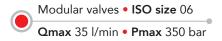
High flow pressure relief ISO

cartridges and functional covers

**ISO** cartridges

Cartridges • ISO size 25

**Qmax** 370 l/min • **Pmax** 350 bar



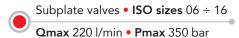
# **Safety**

The Atos range includes specific executions aimed to increase the safety level in corrosive environments

#### SIL certification

Safety Integrity Level directive states the max acceptable level of risk in process control systems, in order to reduce hazardous events

The stainless steel range offer directional valves dedicated to functional safety, certified SC3 up to SIL2 / SIL3 according to IEC 61508





Pressure Equipment Directive regulates the design, manufacture and conformity assessment of pressure equipment

The stainless steel range offer pressure relief cartridges certified according to PED 2014/68/EU







# **Cylinders**

Standard range of full stainless steel ISO 6020-1 cylinders and servocylinders to provide the highest resistance to corrosive environments and fluids

Optional stainless steel built-in position transducer for high precision motion control



## **Special applications**

Cylinders can be customized in order to fulfil functional or environmental requirements of the most demanding sectors





## Beverage packaging

Engineered with materials suitable for food contact and specific shapes to avoid deposits of processing residues, according to Hygienic Design directive

## Railway cross switching

Ultra-slim design for easy field maintenance and extended operative life in outdoor environments with temperatures down to  $-40^{\circ}\text{C}$ 

# **Systems**

Power units for marine, oil & gas, energy and chemical sectors, engineered for operations in corrosive environments and/or with water-based fluids. Certified by TÜV, DEKRA, UL, CSA, ABS, BV, DNV GL, RINA







Stainless steel power units for LNG vessel or off-shore/on-shore rigs are designed according to explosion proof directive for safe operations in environments with presence of flammable gas, vapours or combustible dust Certified ATEX, IECEx, EAC up to zone 1

Hydraulic blocks tailored for extreme working conditions, also in potentially explosive environments



Full stainless steel blocks simultaneously satisfy the requirements for the most demanding applications for corrosive environments with extreme temperatures and water-based fluids





## 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



### Atos spa

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