

### Atam. Living technology.

Atam. Since 1970, encapsulated and external armature coils, ATEX-IECEx coils, industrial connectors and sensors, digital pressure switches.



# atam

### The Atam Group. Smart solutions from a brilliant synergy.

Atam is at the heart of a Group which bears its name and which incorporates a number of companies that collaborate synergistically in the production of complementary products and accessories. The Group was born with the common intention to diversify strategies and researches with the purpose of completely satisfy the customer. The continuous technological evolution, oriented to anticipate the market demands and the competition, allows Atam Group to be an active and trusted partner in order to grant the maximum performances of each product in terms of choice, flexibility, integration and reliability.

- Agriculture
- Forestry
- Farming
- Air
- Water
- Fluid
- Steam
- Gas
- Automotive
- On and off-highway vehicles
- Construction
- Earthmoving

Since 1992, Atam produces components for the automatic regulation and, more in general, for the wide market of industrial automation and engineering oil hydraulic. The product range includes electromagnets, encapsulated electric coils, pneumatic and hydraulic actuators, industrial electrical connecting and sensing devices.

These products are principally intended for use in the fields of hydraulics, pneumatics, refrigeration, gas, steam, domestic appliances and automotive industry.

- Energy
- Petrochemical
- Food
- Beverage
- Vending
- Industrial
- Automation
- Robotics
- Marine
- Ports
- Mining Quarrying
- Cement
- Mixina

Our company is organised and committed to seek continuous improvements at every level. Innovation and our ability to support our customers with dedicated solutions allow us to be the ideal partner for companies looking for high level of quality and service.

Our commitment to innovation in terms of organisation, the traceability of all of the various processes together with our ability and desire to constantly support our customers from the products conception and throughout its complete lifetime, allows Atam to cooperate internationally with market leading organisations in the following sectors:

- Packaging
- Bottling
- Power
- Transmission Hydraulics
- Pneumatics
- Transport
- Services
- Transfer Machines
- Assembly

CREAT STREET 12 1 1 1 1 1 1 1

Agrate Brianza Production Plant



#### TYPE 455 EXPLOSION-PROOF SOLENOID

A new solenoid with an explosion-proof casing and with ATEX and IECEx certification for gas and dust for Zone 1 and 2.

The highlight is on the 455 solenoid that features an explosion-proof casing and ATEX and IECEx certifications for gas and dust for 1 and 2 zone, addressed to high demanding hydraulic applications. The 455 solenoid stands out for its important characteristics that make it totally safe in all potentially explosive atmosphere applications, such as those in mining. The 455 solenoid can be delivered with or without cable, in order to allow customers to connect the solenoid with the most adequate cable in accordance with applicable regulation.

#### **TECHNICAL CHARACTERISTICS**

Homologation		Marking					
ATEX	II 2G Ex db IIC T6, T5, T4 Gb II 2D Ex tb IIIC T.85°C, T.100°C, T. 135°C Db I M2 Ex db 1Mb						
IECEx	Ex db IIC T6, T5, T4 Gb Ex tb IIIC T.85°C, T.100°C, T. 135°C Db Ex db 1Mb						
Temperature Class	Duty Cycle	Voltage range	Max. Power 20°C	Environmental Temp. range	Working Pressure		
T4 (135°C)	100%	6240V DC	30W	-60°C +80°C	350 bar		

T4	(135°C)	100%	6240V DC	30W	-60°C +80°C	350 bar
			6240V AC rectifier	30W	-60°C +80°C	350 bar
Τ5	(100°C)	100%	6240V DC	14W	-60°C +80°C	350 bar
			6240V AC rectifier	14W	-60°C +80°C	350 bar
T6	(85°C)	100%	6240V DC	10W	-60°C +60°C	350 bar
			6240V AC rectifier	10W	-60°C +60°C	350 bar

- Homologation ATEX + IECEx Gas and Dust for Zone 2 and 1
- Coil metal housing from low carbon steel micro-fusion
- Coil metal casing and flanges are Zinc-Nickel plated for high corrosion protection
- The solenoid can be supplied with or without cable and cable gland but in accordance with the ATEX and IECEx norms.
- User easy wiring solution for highest flexibility





#### COILS 471 - 479 WITH EXTERNAL MAGNETIC CIRCUIT

A new coil family with external armature to concentrate the magnetic flux for the coil winding.

These coils are designed to meet the protection degree requirements of industrial applications where weather resistance is required. These coils are fully encapsulated in class H material and are offered with DIN - Deutsch and AMP connection. The external armature provides a complete protection against impacts and ensures durability in heavy conditions. The coils are protected against salt spray oxidation.

#### **TECHNICAL CHARACTERISTICS**

Height	I.dia	Din	Amp J	Deutsch	Insulation	Max Power
[mm]	[mm]	[conn]	[conn]	[conn]	[class]	[W] ED 100%
51	19	YES	YES	YES	H (F)	30
54,5	22	YES	YES	YES	H (F)	38
54,5	23	YES	YES	YES	H (F)	38
72,5	31	YES	YES	YES	H (F)	60
	[mm] 51 54,5 54,5	[mm] [mm] 51 19 54,5 22 54,5 23	[mm] [mm] [conn] 51 19 YES 54,5 22 YES 54,5 23 YES	[mm]     [mm]     [conn]     [conn]       51     19     YES     YES       54,5     22     YES     YES       54,5     23     YES     YES	[mm][conn][conn][conn]5119YESYESYES54,522YESYESYES54,523YESYESYES	[mm]     [conn]     [conn]     [conn]     [class]       51     19     YES     YES     YES     H (F)       54,5     22     YES     YES     YES     H (F)       54,5     23     YES     YES     YES     H (F)

- Nominal voltage : 12 24 VDC / 24 110 115 230 VAC (other voltages on request)
- Class H coil in accordance with the IEC 85 standard (on request class F)
- Class H copper wire (≥200°C)
- IP65 /IP69K protection (according to the integrated connector) in accordance with the IEC 60529 standard
- Coils are designed to withstand the maximum temperatures corresponding to the following classes:
  Class F 155° C
  Class H 180° C
- Salt spray resistance: 120h for white rust and 360h for red rust
- Applications in Oil-hydraulic Pneumatic Steam Gas





## Catalogue 1

Encapsulated coils - Electromagnets - Electrical windings

ATAM develops and produces coils from 15 to 65 mm width, for mobile and industrial applications. They can be provided with a wide range of connections as DIN, AMP, Deutsch and customized versions.

### Catalogue 2

**Operators** 

Valve operators for water treatment, electrical appliances, industrial process, heating and air-conditioning, medical equipment, automotive and pneumatic.

### Catalogue 3

Electrohydraulic operators

Electromagnetic solenoids for oilhydraulic, gas, lubricants and high pressure fluids; our range includes standard or customized executions with tube diameter 10 to 31mm.

### Catalogue 4

Connecting devices for actuators and sensors

ATAM connectors are available as cable entry version or with moulded cable. These connectors offer protection from IP 65 to IP 67 and IP69K to IEC 60529. In addition we offer a complete range of circular connectors.



Proximity switches for magnetic cylinders - Pressure switches

This range of sensors is used to detect the position of a magnetic piston element found in pneumatic cylinders. In addition we offer a range of pressure sensors for controlling the pressure of air.





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