

# Atam. Living technology.

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



# 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.

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.

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:

- Agriculture
- Forestry
- Farming
- Air
- Water
- Fluid
- Steam
- Gas
- Automotive
- On - and off-highway vehicles
- Construction
- Earthmoving
- Energy
- Petrochemical
- Food
- Beverage
- Vending
- Industrial Automation
- Robotics
- Marine
- Ports
- Mining
- Quarrying
- Cement Mixing
- Packaging
- Bottling
- Power Transmission
- Hydraulics
- Pneumatics
- Transport
- Services
- Transfer Machines
- Assembly



Agrate Brianza Production Plant

## CABLE ENTRY VALVE CONNECTORS TO EN 175301-803

ATAM can now offer a complete range of connectors for solenoid valves, which also stand out for the custom solutions developed with our customers.

They are intended for various fields of application and can be assembled on state-of-the-art production lines for both productivity and product quality check purposes. Cable entry valve connectors stand out for their strong design and the enclosure's housing, which facilitates faster and easier wiring operations.

Every finished connector comes with a contact provided with an integrated mechanical protection between the fixing screw and the cable. This way, we avoid damaging the strands of the copper wires during cable installation.

Moreover, the connectors are assembled on automatic lines with final optical control via cutting-edge video cameras to ensure the utmost quality of every workpiece. Connectors manufactured with electronic control circuits are also available to provide additional functions, such as LED visual indication, protection against overvoltage, rectifiers and PWM control circuit designed to activate solenoid valves while optimising energy consumption. VDE (Verband Deutscher Elektrotechniker) - the highest European authority in regulations for electrical technologies - has recently certified our KA and KB cable entry connectors in compliance with the DIN EN 60529 (VDE 0470) standard.

Besides the two VDE-approved lines, there is an additional series of KA connectors carrying the UL marking, which is required for applications in the North American market.

ATAM's connectors are resistant to water and dust (protection rating = IP65) and, therefore, perfect for pneumatic and hydraulic applications.



### TECHNICAL CHARACTERISTICS

Cable entry types : KA - KB - KC - KD

Type	Form A ( KA )	Form B Industrial ( KB )	Form C ( KC )	Form C Industrial ( KD )
Standard	EN 175301-803	Industrial ( 11mm )	EN 175301-803	Industrial ( 9,4mm )
Construction type	A	B	C	C
Housing colour	Black - Grey - Transparent			
Number of contacts	2P+PE	2P+PE	2P+PE	2P+PE
	3P+ PE		3P+ PE	3P+ PE
Cable gland	PG9 - PG11 - M16		PG7	
Rated voltage	without circuit 250V max			
	with circuit 12V - 24V - 115V - 230V			
Rated current (EN 60512-5-2 test 5b)	10A max.		6A max.	
Contact resistance	15m Ω max.			
Contact screw torque	max. 0,5 N/m			
Protection class (EN 60529)	IP65 when correctly assembled			
Inflammability class	HB UL 94			
Temperature range : NBR gasket	-40 to +100°C			
	silicon gasket -40 to +125°C			

- Robust design with much room to facilitate cable assembly to the contacts
- Single piece contacts with protection spring between conductor fixing screw and contact, to prevent conductor damage
- Fixing screw end stop to prevent curvature and damage to the housing when assembled
- Wide range of circuits available
- VDE approval (KA – KB) and UL approval (KA)
- Highly automated production on automated lines monitored by video camera enabling a 100% control



## ATAM OVERMOULDED RANGE OF VALVE CONNECTORS

ATAM, a leading company in encapsulated coils and industrial connections for pneumatic, hydraulic, steam, gas and water applications, is presenting its range of overmoulded valve connectors with IP69K protection degree, suitable for off-highway vehicles. The overmoulded valve connectors are available in different forms and stand out for some technical features such as an integrated gasket and captive screws that ensure long-lasting tightness even in extremely demanding applications. The connectors are already assembled and the integration of the screw and the gasket effectively eliminates the possibility of losing essential components during disassembly for maintenance. The complete range of ATAM overmoulded connectors is offered with a protection degree ranging from IP65 to IP69K, making it the ideal choice for all “dirty” applications in the presence of oils, chemicals, mud and water. The excellent durable performance is guaranteed by an encapsulation in polyurethane, a material that avoids contamination and allows the use even at very low temperature. The technical synergy between the development and production of encapsulated coils and industrial connectors and a state-of-the-art laboratory allow ATAM to simulate the combined conformity. This way, we are sure to provide our clients with optimal solutions in terms of reliability, quality and affordability.



### TECHNICAL CHARACTERISTICS

Types with moulded cable : MA-MB-MC-MD

Type	Form A ( MA )	Form B Industrial ( MB )	Form C ( MC )	Form C Industrial ( MD )
Standard	EN 175301-803	Industrial ( 11mm )	EN 175301-803	Industrial ( 9,4mm )
Construction type	A	B	C	C
Housing colour	Dark transparent			
Number of contacts	2P	2P	2P	2P
	2P+PE	2P+PE	2P+PE	2P+PE
	2P+PE bridged		2P+PE bridged	2P+PE bridged
	3P+ PE		3P+ PE	3P+ PE
Rated voltage without circuit	250V max			
with circuit	12V-24V-115V-230V			
Rated current (EN 60512-5-2 test 5b)	10A max		6A max	
Contact resistance	15m Ω max			
Protection class (EN 60529)	IP65 - IP67 - IP69K when correctly assembled			
Inflammability class: contact holder	V0			
housing moulded	HB			
Temperature range: with static PVC cable	-15 to +70°C			
with static PUR cable	-40 to +80°C			

- internally bridged earth contacts (on forms A, C and C industrial)
- built- in cable clamping insert to allow high strain relief performances
- double electrical protection insulation to the external surface
- transparent lens cover to protect the electronic components and to diffuse the LED luminosity
- integrated gasket (on all versions), identification label and captive screw available in all versions
- IP65 – IP67 and IP69K protection degree
- wide range of circuits available
- visible external printing for easy identification of circuit type and voltage
- built-in circuit board in the LED versions allowing higher electrical performances
- wide selection of cable types in stock and possibility to utilize and incorporate special cables



# 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 oil-hydraulic, 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.



# Catalogue 5

*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.





**ATAM S.p.A.**

Via Archimede, 7  
20864 Agrate Brianza (MB) Italy  
Tel. +39 039 60746.1  
Fax +39 039 6074643  
E-mail: [info@atam.it](mailto:info@atam.it)

Atam (UK) Ltd.

The Fluid Power Centre - Watling Street  
Nuneaton - Warwickshire - CV11 6BQ (UK)  
Tel. +44 24 76 326060  
Fax +44 24 76 381589  
E-mail: [sales@atam.uk.com](mailto:sales@atam.uk.com)

ATAM Electric and Engineering Co., Ltd.

No. 71, Huazong Rd., Xuejia Dist.  
Tainan City 72645, Taiwan (R.O.C.)  
Tel. +886 6 7838268  
Fax +886 6 7837268  
E-mail: [info@atam.tw](mailto:info@atam.tw)