



Solutions for pipelines and irrigation networks for farming

Our references

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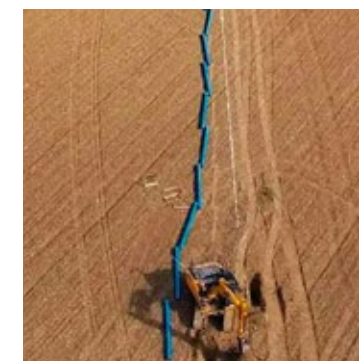
Aliaxis Italia

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Our identity

In a rapidly changing world, with a growing population and a changing climate, **water** is one of the most precious resources on our planet, so we must strive for a more conscientious and sustainable use.

As a global industry leader that connects people with water and energy, Aliaxis is ready to rise to this challenge and help shape a better tomorrow.

We offer water and energy management systems all over the world, and it is precisely the specific knowledge and experience of our people in the field that makes the difference for our customers, with whom we work closely to provide reliable performance, today and tomorrow.

Our brands have been providing innovative solutions for over 60 years and represent our history and know-how in the field of Construction, Infrastructures, Industry and Agriculture.

Aliaxis Italia develops customized solutions and supports the Customer from the idea to the execution of the project, collaborating to define the ideal solution which is able to meet their needs and objectives.

A dense network of distributors, structured to guarantee not only the availability of products but also direct support and advice, is one of the many advantages that Aliaxis Italia provides to its Customers.



LARETER

ASTORE

REDI



Nicoll

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aliaxis

From Design to construction site

Aliaxis Italia has a specialized team that works with contractors, Utility companies and Installers in the sector to offer:

- **Consultancy services**
- **Technology**
- **Solutions**

CONSULTANCY SERVICES

We listen to the needs of industry operators and contractors to find the most suitable solution. We accompany our partner from the tender stage to the construction site, providing design, technical and regulatory support to achieve the desired result.

Each project is unique, because the boundary conditions are different: the territory with its hydrogeological characteristics, regional standards and local regulations.

ADVANTAGES

Choosing the Aliaxis systems means:

- **Being able to choose a complete system**
- **Assistance during design**
- **Compliance with regulations**
- **High performance of materials**
- **Ease and speed of installation**
- **Savings in installation times**

Our team of technicians accompanies the designers and contractors **from the Design to the Construction Site**. We build our offer based on the needs of our partner.



APPLICATIONS

Water treatment and management in **farming**.

- **Channel networks**
- **Water transport networks**
- **Water diversions and distribution networks**

We adapt our offer to the needs of professionals and companies.

TECHNOLOGY

We provide solutions that comply with current regulations and on-site assistance during installation.

Using an expert in order to guarantee that the work is carried out professionally: providing the correct system and choosing the most suitable solution saves on installation time and guarantees the work of the contractor and the designer.

GLOBAL DISTRIBUTION NETWORK

Aliaxis can guarantee rapid on-site service and the availability of the same product locally thanks to its global presence. Through this network it can support its partners on all the continents with a presence in over 45 countries.

CERTIFICATIONS

Our solutions comply with the main Italian and international environmental sustainability protocols and are certified by the main reference bodies.



VDA® System

The **sustainable** and **innovative** solution for transporting and treating water, **simple** and **fast** to install, reliable and safe without maintenance.

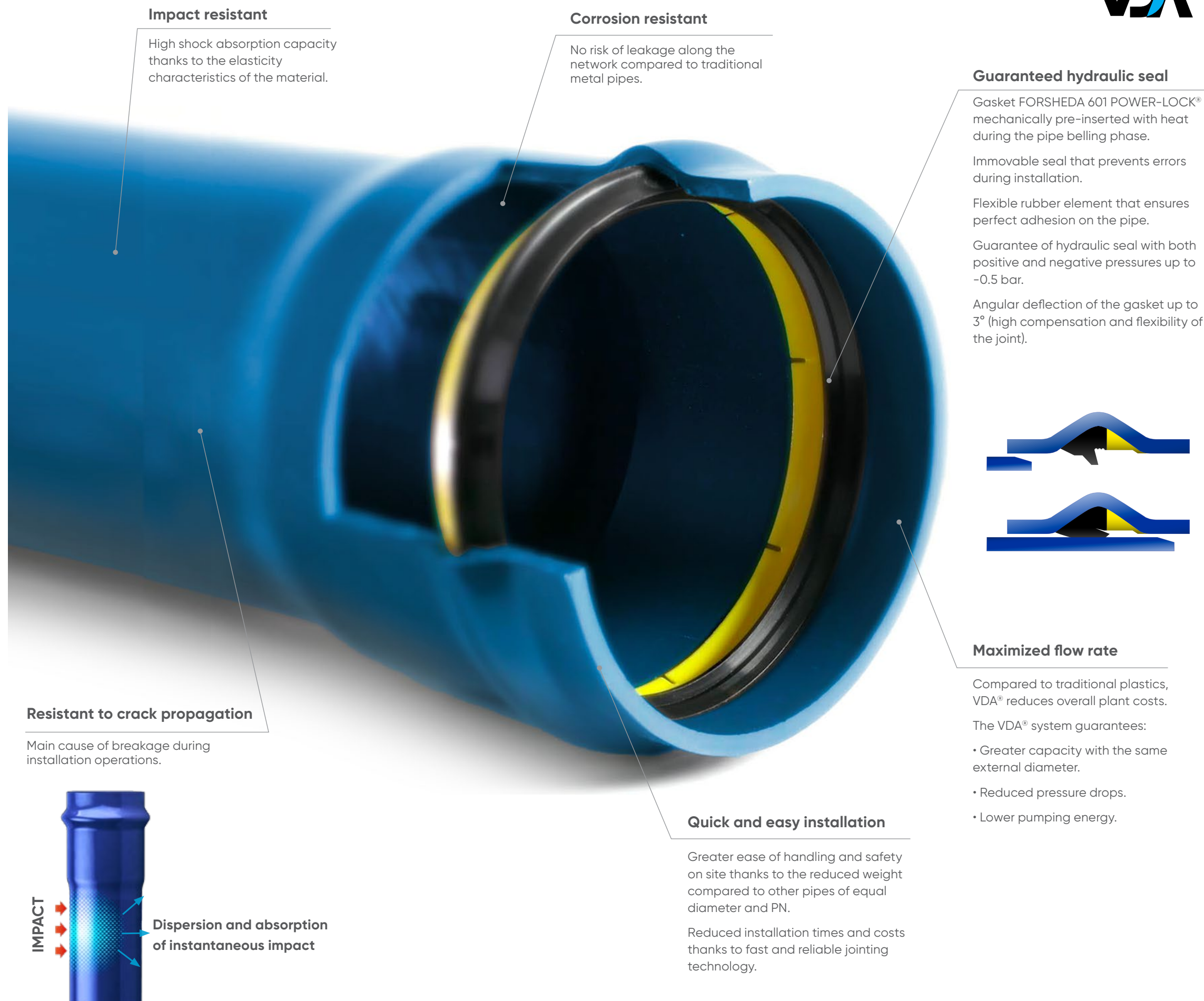
VDA® is the revolutionary high-efficiency Aliaxis system for transporting water under pressure made of PVC-A, an innovative additive PVC polymer alloy that combines the resistance of PVC-U with the ductility of Polyethylene, thus creating a product that is very resistant to crack propagation.

This material offers mechanical and hydraulic performance levels superior to those of traditional plastics, greater guarantees of seal of the pipes over time, quality of the water transported, ease of transport and installation, reduced installation and operating costs.

The VDA® range includes POWER-LOCK® pipes and curves from Ø50 to Ø500 mm with operating pressures of 8 - 10 - 12.5 - 16 - 20 bar.

CHARACTERISTICS

- High resistance to crack propagation during laying
- Significant impact resistance to concentrated loads even at low temperatures
- Good tolerance to chemicals
- Lower weight with the same diameter and pressure
- Longer plant life: life cycle greater than 50/80 years
- Increased water service delivery efficiency
- Simplified installation
- Great sealing reliability thanks to the FORSHEDA 601 POWER-LOCK® seal
- Reduced installation and maintenance costs
- Zero risk of incorrect laying of pipes



Impact resistant

High shock absorption capacity thanks to the elasticity characteristics of the material.

Corrosion resistant

No risk of leakage along the network compared to traditional metal pipes.

Guaranteed hydraulic seal

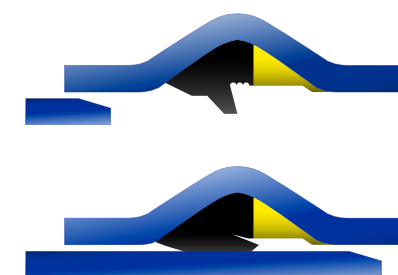
Gasket FORSHEDA 601 POWER-LOCK® mechanically pre-inserted with heat during the pipe belling phase.

Immovable seal that prevents errors during installation.

Flexible rubber element that ensures perfect adhesion on the pipe.

Guarantee of hydraulic seal with both positive and negative pressures up to -0.5 bar.

Angular deflection of the gasket up to 3° (high compensation and flexibility of the joint).



Maximized flow rate

Compared to traditional plastics, VDA® reduces overall plant costs.

The VDA® system guarantees:

- Greater capacity with the same external diameter.
- Reduced pressure drops.
- Lower pumping energy.

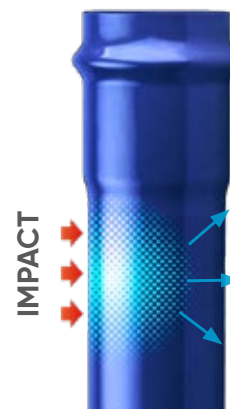
Quick and easy installation

Greater ease of handling and safety on site thanks to the reduced weight compared to other pipes of equal diameter and PN.

Reduced installation times and costs thanks to fast and reliable jointing technology.

Resistant to crack propagation

Main cause of breakage during installation operations.



Dispersion and absorption of instantaneous impact



Farming

Feeding an ever-growing population is a global challenge that will inevitably become a central factor in the coming decades.

Promoting more efficient farming is essential to ensure a sustainable future for the planet and its inhabitants.

Aliaxis offers a wide range of solutions to achieve this goal, with quality systems that allow farmers to manage both the irrigation of crops and the watering of livestock.

The VDA[®] system offers pipes and curves made of PVC-A, an innovative polymeric alloy that combines the practicality of PVC with the elasticity of Polyethylene.

The VDA[®] system reduces the cases of breakages thanks to the high crack absorption capacity and, thanks to the FORSHEDA 601 POWER-LOCK[®] system, simplifies the piping installation process, reducing irregularities and tolerances.



Water
quality



Ease of
installation



Environmental
sustainability

Hungary: new water pipeline for 240 hectares of land

Construction of new networks for Linear and Center Pivot irrigation systems



| | |
|--------------|------------|
| Application | Irrigation |
| Location | Hungary |
| Year | 2023 |
| Total length | 1,800 m |

Type of project

Construction of a new irrigation network for the cultivation of corn and carrots over an area of 240 hectares. The irrigation plant consists of two systems: Linear and Center Pivot. In order to supply water to the plant, the VDA® system was used for a total capacity of 525 m³/h.

Advantages

Reduced installation times and costs thanks to the coupling technology. Easy handling thanks to the reduced weight compared to other pipes of the same diameter and PN. Accidental breakage is avoided thanks to the elasticity of the material.

| Item | PN | Ø | Bar length |
|----------|----|-----|------------|
| VDA pipe | 10 | 225 | 6 metres |



Slovenia: new water infrastructure for irrigation systems

Conversion of a 110-hectare lot to farmland



| | |
|--------------|----------------------------|
| Application | Irrigation/Infrastructures |
| Location | Slovenia Letuš |
| Year | 2023 |
| Total length | 3,500 m |

Type of project

Conversion of 110 hectares to farmland, for the cultivation of corn, wheat, barley and hops. Construction of a drip and direct, irrigation system with dedicated hydrants for each farmer along the pipeline; capacity of 200 m³/h.

Advantages

The choice of the VDA® system with FORSHEDA POWER-LOCK® gasket makes installation faster:

- Breakage is avoided thanks to the high shock-absorbing capacity.
- Greater capacity with the same diameter.
- Compliance with quality standards and ease of installation.

| Item | PN | Ø | Bar length |
|----------|----|-----|------------|
| VDA pipe | 10 | 110 | 6 metres |
| VDA pipe | 10 | 280 | 6 metres |



Romania: new high flow rate Center Pivot irrigation system

Plant for the cultivation of maize on 50 hectares of converted land



| | |
|--------------|-----------------|
| Application | Irrigation |
| Location | Romania, Tulcea |
| Year | 2023 |
| Total length | 900 m |

Type of project
Installation of a new irrigation system for 50 hectares of land converted to farming, for the cultivation of corn.
The VDA® system was used to serve a Center Pivot system, with a flow rate of 100 m³/h.

Advantages
Reduced installation times and costs thanks to the coupling technology.
Easy handling thanks to the reduced weight compared to other pipes of the same diameter and PN.
Accidental breakage is avoided thanks to the shock-absorbing capacity of the material.

| Item | PN | Ø | Bar length |
|----------|------|-----|------------|
| VDA pipe | 12.5 | 160 | 6 metres |
| VDA pipe | 12.5 | 500 | 6 metres |



Italy: irrigation network for planting a new olive grove

Extension of 800 hectares for the Olivastraia Frantoio Stanghellini olive grove



| | |
|--------------|-----------------|
| Application | Irrigation |
| Location | Tuscany - Italy |
| Year | 2023 |
| Total length | 11,000 m |

Type of project
Irrigation works on about 800 hectares of land dedicated to the production of high quality extra virgin olive oil.

Advantages
Maximized flow rate; reduced pressure losses and optimized plant management costs thanks to the larger internal diameter with the same PN.

Quick and easy installation:
Greater ease of handling and safety on site thanks to the reduced weight compared to other pipes of equal diameter and PN.
Reduced installation times and costs thanks to fast and reliable jointing technology.

| Item | PN | Ø | Bar length |
|----------|----|-----|------------|
| VDA pipe | 10 | 110 | 6 metres |
| VDA pipe | 10 | 125 | 6 metres |
| VDA pipe | 10 | 140 | 6 metres |
| VDA pipe | 10 | 160 | 6 metres |



Italy: Replacement of old steel pipes to eliminate water leaks

Creation of new, more efficient and sustainable networks for the Aterno & Sagittario Abruzzo Internal Basin Reclamation Consortium



| | |
|--------------|------------------------------------|
| Application | Renewal of irrigation system lines |
| Location | Abruzzo - Italy |
| Year | 2023 |
| Total length | 6,472 m |

Type of project
Renovation and improvement of the efficiency of the old steel pipes for the irrigation system, with drawing of water from the lakes, in the Bagno & Ocre hamlet of the l'Aquila municipalities,

Managing Body
Aterno & Sagittario Abruzzo Internal Basin Reclamation Consortium.

Advantages
Reduced installation times and costs thanks to fast and reliable jointing technology.

Corrosion resistant:
No risk of leakage along the network compared to traditional metal pipes.

| Item | PN | Ø | Bar length |
|----------|----|-----|------------|
| VDA pipe | 16 | 200 | 6 metres |
| VDA pipe | 16 | 225 | 6 metres |
| VDA pipe | 16 | 250 | 3 meters |
| VDA pipe | 16 | 315 | 6 metres |
| VDA pipe | 16 | 400 | 6 metres |
| VDA pipe | 16 | 500 | 6 metres |



Italy: new Center Pivot irrigation system

High flow rate and water saving plant for sustainable cereal cultivation



| | |
|--------------|-----------------------|
| Application | Irrigation |
| Location | Friuli Venezia Giulia |
| Year | 2023 |
| Total length | 600 m |

Type of project

A large irrigation project for 30 hectares of land used for cereal cultivation. The water supply to the Pivot system was constructed with VDA® pipes, with a flow rate of 144 m³/h.

Advantages

The choice of the VDA® system with FORSHEDA gasket makes installation faster:

- Breakage is avoided thanks to the high shock-absorbing capacity.
- Greater capacity with the same diameter.
- Compliance with quality standards and ease of installation.

| Item | PN | Ø | Bar length |
|----------|----|-----|------------|
| VDA pipe | 16 | 225 | 6 metres |



Lareter spa

Via Occhiobello, 732

45024 Fiesso Umbertiano, Rovigo, Italy

Tel. +39 0425 745511

info@lareter.it

www.aliaxis.it

