

A R M A T U R E S T O J A N O V I Ć

**ARMAS**

# PRODUCT CATALOG



Quality solutions, permanent certitude.



## Quality solutions, permanent certitude.

The aim of this catalog is to acquaint you with equipment produced by **ARMAS** which is applied for construction works (new investments) and reconstructions of pipelines, for daily maintenance of pipeline systems, and also for repairs of pipeline damages.

The **ARMAS** production program is derived from years of experience in design of water supply equipment, planning, construction and utilizing of waterworks objects. By cooperation with design and contractor companies, and also with the final users, we recognized a lack of connection elements in the field of construction and exploitation of pipeline systems. Those elements should significantly unify and facilitate installation, handling and utilizing of various pieces of equipment, as well as repairing of water supply network.

As result of this cooperation **ARMAS** joints were made with the idea to lower investment costs needed for construction of large pipeline systems, and to enable fast and reliable repairs of all possible damages during maintenance works.

Alongside production of classic joints for all types of pipes, we are also manufacturing a numerous special joints, which are used for quick, easy and efficient repairing of leakages at existing joints of pipes and for connecting new pipelines to existing water supply network, all that without cutting of pipes or consumers being cut-off.

Company **ARMAS** was founded in 1998. We are very proud of fact that during our perennial existence we had oportunity to work with very large number of clients and that there is no major water supply company in Serbia with whom we haven't established cooperation. Our joints are successfully installed in water supply systems throughout the country.

Company **ARMAS** has Quality Management System which is in compliance with standard SRPS ISO 9001:2008 for design and production of armature for pipeline systems.

During our existence, we have also established international cooperation, mainly with partners from Montenegro, Republic of Srpska and Federation of Bosnia and Herzegovina.

We are regular exhibitor at Belgrade's Water Fair and frequent participant of major symposiums regarding water.

For any additional information we suggest that you take a look at our website: [www.arms.co.rs](http://www.arms.co.rs).

We are inviting all interested parties to contact us, we will be happy to meet your request.

With desire to deepen our existing and make new cooperation,



A handwritten signature in blue ink, appearing to read 'Slobodan Stojanović'.

Slobodan Stojanović  
dipl.ing.maš.  
owner

# a ALFA

ALFA joints are used as a replacement for certain types of fittings. They are used for connecting the specific pipe with flange of shutter, fitting, cast iron or steel pipe.

ALFA joints are divided into two generations based on their constructive solution: **first (I)** and **second (II)**. The main difference between these two generations is based on desire to reduce weight of the product, and that is why second generation ALFA joint is actually upgraded version of first generation ALFA, with all the features and advantages of the first generation joints.

ALFA I generation joints are made separately for different types of material and pipes, as specified: AC - for asbestos-cement pipes, Č - for steel pipes, LG - for cast iron pipes, PE - for polyethylene pipes, PES - for polyester pipes, PVC - for PVC pipes.

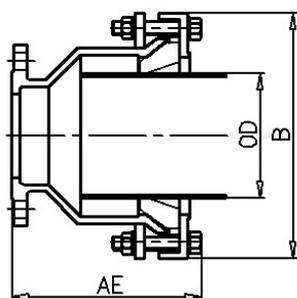
Main advantages of using ALFA first generation joints are:

- very simple installation and removal of the joint, which is not the case with the usual fittings;
- possibility of using joint as a detachable flange during installation of shutter in pipeline system;
- possibility of gasket tightening in case that, from whatever reason, leakage occurs.



ALFA I generation

ALFA II generation joints are made mutually identical for all types of material and pipes which are covered by ALFA I joints. There is difference in second generation ALFA-PE joint which has rubber gasket with toothed ring, which is also the case in the first generation. ALFA II generation joints have much wider range of diameter which is covered by one joint, as shown in the table below.



ALFA II generation



DN	OD range	Flange drilling	Bolts	Max AE	B
50	58 - 76	PN10/PN16	4 x M12	130	150
65	63 - 86	PN10/PN16	4 x M12	130	170
80	84 - 107	PN10/PN16	4 x M12	150	190
100	107 - 133	PN10/PN16	4 x M12	180	230
125	132 - 158	PN10/PN16	4 x M16	160	265
150	158 - 192	PN10/PN16	4 x M16	220	305
200 A	198 - 230	PN10 ili PN16	4 x M16	200	345
200 B	216 - 252	PN10 ili PN16	4 x M16	240	370
250 A	250 - 282	PN10 ili PN16	6 x M16	280	400
250 B	280 - 310	PN10 ili PN16	6 x M16	280	430
300 A	315 - 342	PN10 ili PN16	6 x M16	280	440
300 B	342 - 374	PN10 ili PN16	6 x M16	280	470

# b

## BETA

BETA joints are used for a mutual connection between polyethylene pipes and PVC pipes. If joint is connecting two polyethylene pipes it is marked BETA-PE while in case when connecting two PVC pipes it is marked BETA-PVC.

These joints have wide application in repairing failures on PVC pipelines and as alternative for jaw couplings, thanks to its constructive advantages, of which the most important are:

- in case of BETA-PE joints, diameter of the toothed ring which fix position of polyethylene pipe is adjustable, so that is possible to choose depth of ring engravement into the pipe wall, and sealing is not achieved on toothed part, but with a rubber gasket which has adjustable overlap;
- in case of BETA-PVC joints, size of overlap, ie. specific preassure of gasket on pipe, is adjustable with possibility of gasket tightening in case that, from whatever reason, leakage occurs.



BETA-PE



BETA-PVC

# C

## COMBI

COMBI joints came from customers' desire to make connections between pipes made from different materials and with great difference in outer diameters..

These joints are used in cases when joints with usual diameter extent can not be used for connecting pipes with great difference in outer diameters.

Looking at construction solution, COMBI joints are similar to first generation UNIVERSAL joints, difference being that COMBI joints are not symmetrical and they cover different diameters.

As a special product, COMBI joints are made at customer's request.



COMBI



## EXTRA

**EXTRA** joints are universal joints for pipe failures which make possible to repair pipes without cutting them. These joints are used for repairs of pipelines failures when a pipe rupture occurs, or as a substitution for existing joint if there is leakage on the connection.

We manufacture three types of these joints: EXTRA, EXTRA-C and EXTRA-D.

Basic advantages of using **EXTRA** joints are:

- repair is made without pipe cutting and without consumers being cut-off;
- for repair of one failure one joint is enough;
- allowed angular deviation of connecting pipes is up to 8°.

**EXTRA** joints are part of **ARMAS SYSTEM**.



EXTRA



## LONG EXTRA

**LONG EXTRA** joints are used for repairs of pipe failures in case that pipe breakage occurs, or as substitution for existing joint if there is leakage on connection. These joints are used for major breakages (300-500 mm) depending of pipe's nominal diameter.

Basic advantages of using **LONG EXTRA** joints are:

- repair is made without pipe cutting (for small leakages even without consumers being cut-off);
- with one joint you can repair pipe failure on any pipe with the same nominal diameter regardless of pipe's type of material;
- allowed angular deviation of connecting pipes is up to 5°.

**LONG EXTRA** joints are part of **ARMAS SYSTEM**.



LONG EXTRA



# LONG EXTRA+

**LONG EXTRA+** joints are used for connecting one or two secondary pipelines on the primary pipeline, while primary pipeline can be already in exploitation or in the process of construction like the secondary pipeline.

**LONG EXTRA+** joints replace certain fittings and E-pieces in installation, while the installation of joint is made without pipe cutting and, under specific conditions, without consumers being cut-off.

Depending on number of secondary pipelines, and their position in relation to the primary pipeline, there are following joints:

- LONG EXTRA-P
- LONG EXTRA-P45
- LONG EXTRA-P/P
- LONG EXTRA-P/P45
- LONG EXTRA-P45/P45

Basic advantages of using **LONG EXTRA+** joints are represented in fact that during the installation of secondary pipeline(s), pipe of the primary pipeline is not being cut, which makes forming the pipe connection, i.e. installation of joint, simple, fast and easy.

With this way of installing, every possibility for water power stroke is eliminated (because there is no pipe cutting during the installation of the joint, so there is no opportunity for air to enter the pipe), and advantage of installation without turning off the water is that after the installation of the pipeline there is no blurred water, nor are possible consumers cut-off during the installation.

**LONG EXTRA+** joints are part of **ARMAS SYSTEM**.



LONG EXTRA-P



LONG EXTRA-P45



LONG EXTRA-P/P



LONG EXTRA-P/P45



LONG EXTRA-P45/P45

# LINK

The main purpose of **LINK** joints is to stop leakage on the existing connection of pipes without pipe cutting and without consumers being cut-off.

Due to large number of types of material for connected pipes, and their connection possibilities, we manufacture following types of **LINK** joints:

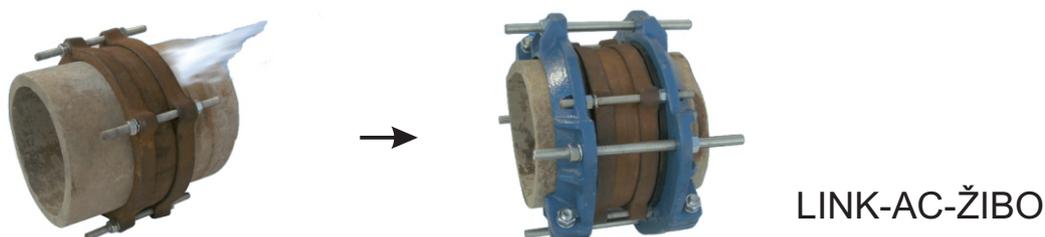
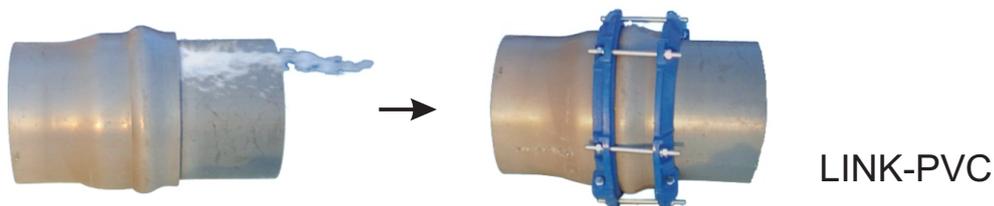
- 1) **LINK-AC** - are used to stop leakage on the existing connection of asbestos-cement pipes when the connection is made by using "Vitlak", "Dalma" or some similar joint;
- 2) **LINK-AC-ŽIBO** - are used for stopping leakage on the connection of asbestos-cement pipes when the connection is made by using "Gibault" joints;
- 3) **LINK-BETON** - are used for stopping leakage on connection between pipes made from concrete, when sealing is made with lead or rubber gasket;
- 4) **LINK-LG-O** - are used for stopping leakage on the sleeve of cast iron pipe on which sealing is made by lead;
- 5) **LINK-LG-ŽI** - are used for stopping leakage on the sleeve of cast iron pipe on which sealing is made by "ŽI" connection;
- 6) **LINK-PES** - are used for stopping leakage on connection between polyester pipes;
- 7) **LINK-PVC** - are used for stopping leakage on connection between PVC pipes (sleeve).

We manufacture three types of **LINK-AC** and **LINK-AC-ŽIBO** joints: B, C and D, depending of class for asbestos-cement pipe for which joints are designed.



LINK joints

Examples of eliminating leaks by using **LINK** joints:





## MDS

Basic purpose of **MDS** joints is easy and simple installation and removal of pipeline armature in pipeline systems.

Detachable joints - **MDS**, made by **ARMAS**, are lighter from the usual detachable joints 30 to 40% and have installation length smaller up to 50% when compared to the usual detachable joints, which all have effect on size decrease of the manhole.

Besides already mentioned, other advantages of using **MDS** joints are:

- there are only two flanges (in contrast from other products which have three or four) so there are less nuts to tight, which affects time of installation and removal of the pipeline armature;
- small installation length influence that **MDS** joint successfully connects flanges of armature and fitting at angular deviation up to 6°.



MDS



## MDS-OP

**MDS-OP** joints are made as a result of need to solve potential problems during the reconstruction of pipeline network and changing shutters.

As it is well-known, old oval shutters, which are being replaced, have larger installation length in comparison to new flat ones, resulting that after replacing shutters there is empty space between free flange of the shutter and flange of the F-F piece.

Because there was no conventional products for mentioned problem, we have made **MDS-OP** joints which, by installing, make replacing shutters fast and efficient.



MDS-OP

# U UNIVERSAL

**UNIVERSAL** joints are universal joints for pipe failures which connect pipes made from either same or different material. These joints are used for repairs of pipelines failures when a pipe rupture is of such a length that cutting off pipe and inserting new piece of pipe is necessary.

**UNIVERSAL** joints are divided into two generations based on their constructive solution: **first (I)** and **second (II)**.

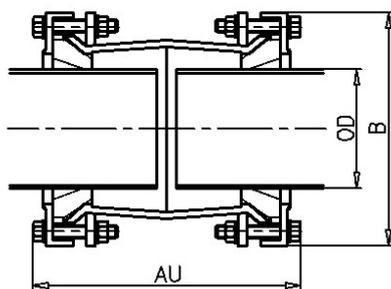
Regarding **UNIVERSAL I** generation joints, we manufacture three types of these joints: **UNIVERSAL**, **UNIVERSAL-C** and **UNIVERSAL-D**.

It is important to mention that during selection of diameter range which is covered by these joints, special attention was made in order to make possible repairing failures on asbestos-cement pipes type C and D by inserting pipe part made of steel, cast iron or plastic, in case that providing appropriate asbestos-cement pipe is not possible.



UNIVERSAL I generation

**UNIVERSAL II** generation joints are upgraded version of first generation **UNIVERSAL** joints, with all the features and advantages of the first generation joints. However, **UNIVERSAL** joints second generation have larger installation lengths and much wider range of diameter which is covered by one joint, as shown in the table below.



UNIVERSAL II generation



DN	OD range	Flange drilling	Bolts	Max AU	B
50	58 - 76	PN10/PN16	8 x M12	220	150
65	63 - 86	PN10/PN16	8 x M12	220	170
80	84 - 107	PN10/PN16	8 x M12	240	190
100	107 - 133	PN10/PN16	8 x M12	260	230
125	132 - 158	PN10/PN16	8 x M16	280	265
150	158 - 192	PN10/PN16	8 x M16	300	305
200 A	198 - 230	PN10 ili PN16	8 x M16	320	345
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250 B	280 - 310	PN10 ili PN16	12 x M16	340	430
300 A	315 - 342	PN10 ili PN16	12 x M16	340	440
300 B	342 - 374	PN10 ili PN16	12 x M16	340	470



# NEW ACHIEVEMENTS

One of the fundamental principles on which **ARMAS** is based is the constant improvement and development of products. In accordance with these ideas, we strive to permanently develop new and improve existing products, such as **ALFA** and **UNIVERSAL** joints with their second generation.

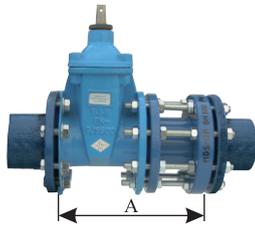
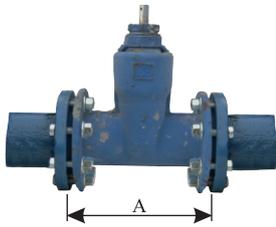


ALFA II generation



UNIVERSAL II generation

Alongside these improved products, we also offer to the market totally unique products for which we see there will be demand, such as **LINK** joints, especially **LINK-AC-ŽIBO** joints, or **MDS-OP** joints which make replacement of the old oval shutters (which have larger installation length in comparison to new flat ones, which are installed) fast and efficient.



Example of installation - MDS-OP

We are especially proud of **LONG EXTRA+** joints (with all their variations) which have potential to completely improve the way in which new water supply networks are connected to existing.



Example of installation - LONG EXTRA-P

As a response to the needs of our long-standing partners, we are now also actively involved in manufacturing joints for large-diameter pipelines. These joints are made of steel as welded constructions, instead of casting, due to technological and other restrictions.



ALFA DN1400 PN10



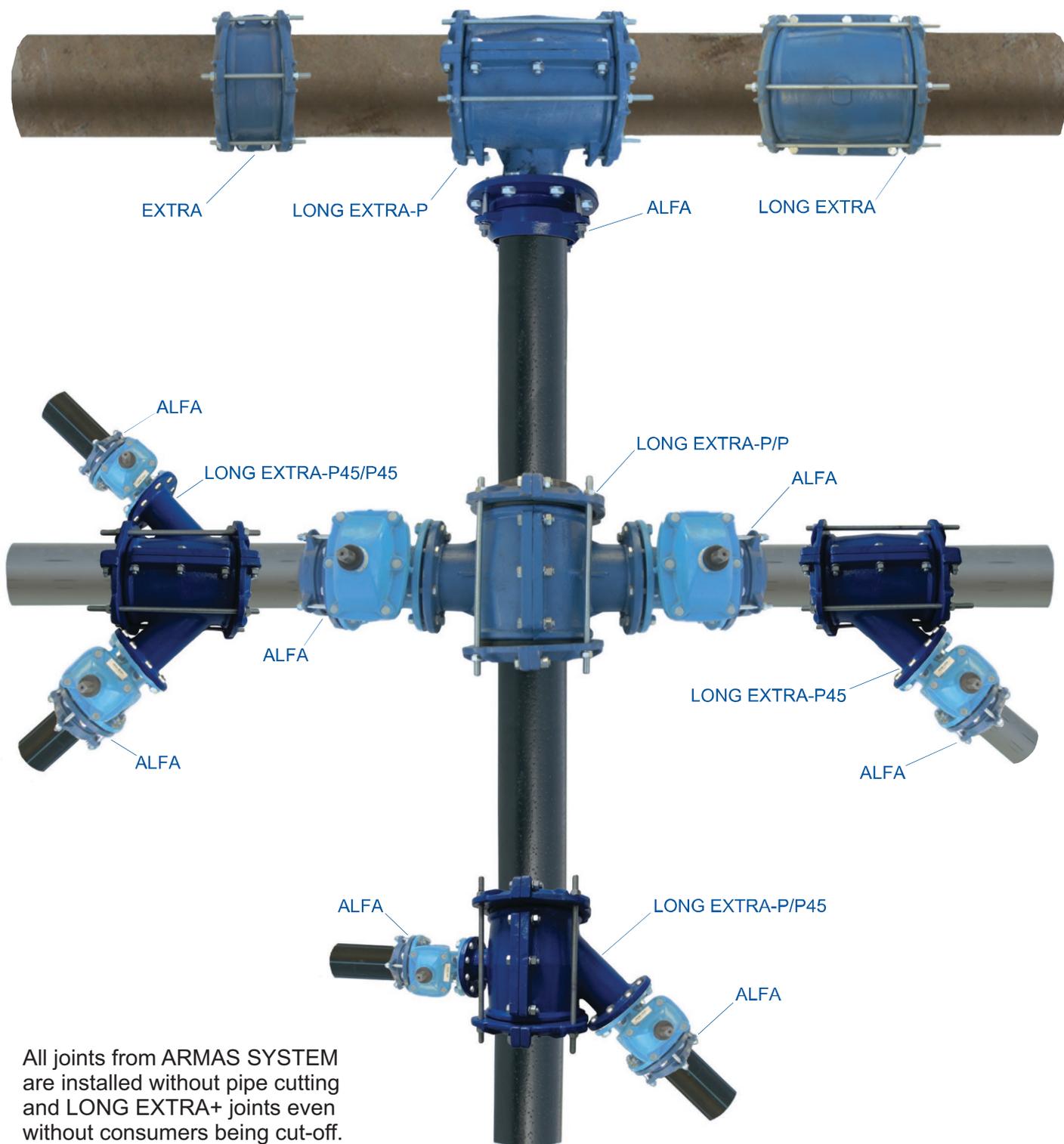
ALFA DN800 PN10



UNIVERSAL DN800 PN10

LONG EXTRA-P  
DN800/DN50 PN10

# ARMAS SYSTEM



All joints from ARMAS SYSTEM are installed without pipe cutting and LONG EXTRA+ joints even without consumers being cut-off.



ALFA-AC DN350 PN10



ALFA-PVC400 DN400 PN10



EXTRA DN350 PN16



LONG EXTRA DN500 PN16



LONG EXTRA-P DN400/DN100



LONG EXTRA-P DN200/DN100 PN10



LINK-AC DN350 PN10



UNIVERSAL DN300 PN16



LINK-BETON DN600 PN10



**A R M A S**

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