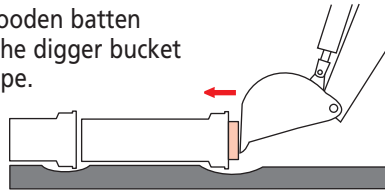


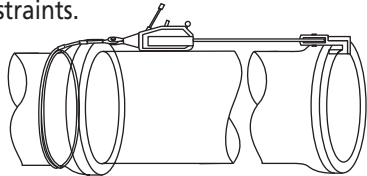
DIGGER BUCKET

Insert a wooden batten between the digger bucket and the pipe.



LIFTING TACKLE

An advantageous solution for difficult access constraints.



Use one or more lifting tackles* depending on the DN

DN	No. of lifting tackles
150 to 300	1 T516 (2.5 tonnes)
350 to 600	1 T532 (5 tonnes)
700 to 1200	2 T532 (2 x 5 tonnes)

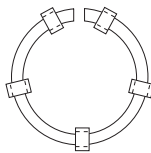
(* Available on request, see "Assembly Equipment"

DISMANTLING THE JOINT

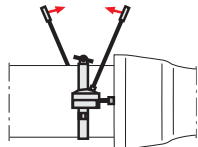
Push the spigot end to the bottom of the socket.



Open the ring using wedges (number of wedges depend on DN) inserted between pipe barrel and the ring, or each ring segment.



Pull the spigot out of the socket with a collar fitted with two hydraulic jacks.
Available on request.



SAINT-GOBAIN PAM LAYING RECOMMENDATIONS

- STORAGE
- HANDLING
- BACKFILL
- STANDARD JOINT
- STANDARD Vi JOINT
- STANDARD Ve JOINT
- UNIVERSAL Vi JOINT
- STANDARD V+i JOINT
- UNIVERSAL Ve JOINT DN 100 to 1200 MM
- EXPRESS JOINT
- EXPRESS Vi JOINT
- PIPE CUTTING
- WELD BEAD
- ANCHOR BLOCKS
- ANCHORING
- EXTERNAL COATING REPAIRS
- INTERNAL LINING REPAIRS
- PE SLEEVE INSTALLATION
- HYDRAULIC TESTING
- ASSEMBLY EQUIPMENT
- HORIZONTAL DIRECTIONAL DRILLING
- CONTACTS

AEP-MEM-15A VERSION 2007 - 4000 EX



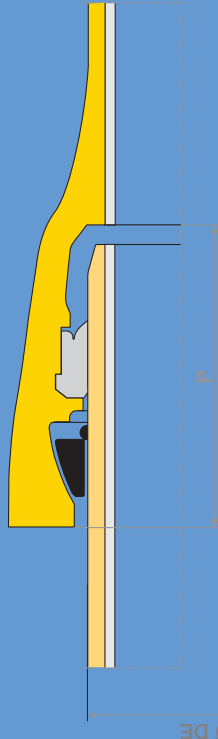
MARKETING DEPARTMENT
21 AVENUE CAMILLE CAVALLIER
54705 PONT A MOUSSON CEDEX
FRANCE
TEL: 03.83.80.73.50
www.pamline.fr

These recommendations are based upon our knowledge of the products and their use. It is the contractor's responsibility to ensure that installation is carried out according to the best rules of practice.

PAM

LAYING RECOMMENDATIONS

UNIVERSAL Ve JOINT DN 100 to 1200 mm



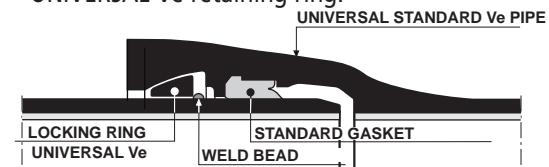
ASSEMBLING THE UNIVERSAL Ve JOINT FOR DN 100 to 1200 MM

! The Universal Ve anchoring system must not be used to push a string of pipes, but only to pull it (in a casing, on a bridge, in case of Horizontal Directional Drilling, for example).

PRELIMINARY REMARKS

STANDARD UNIVERSAL pipes with a weld bead and double chamber socket, designed for receiving the following, have to be used for the STANDARD UNIVERSAL Ve joint:

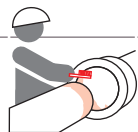
- STANDARD gasket,
- UNIVERSAL Ve retaining ring.



The assembly is locked by the **ring** and **weld bead** applied to the spigot end of the pipe. The STANDARD gasket provides watertightness.

CLEAN THEM

Clean the insides of the socket, the spigot end of the pipe, gasket and retaining ring.



INSTALLING THE GASKET

We recommend that this work is carried out before the pipe is lowered into the trench.



INSTALLING THE RING

• For DN 250/700 : place the ring in its socket housing by reducing its outside diameter with a suitable tool (except large diameter DN 600 and 700).



Make sure the ring opening is placed on the top of the pipe (to facilitate disassembly, if required).

• For DN 100/200 and 800/1200 :

Assembly of the locking ring : insert a rubber connecting piece in each segment and insert a metal pin in each hole in the rubber (except large diameter) with a hammer. Place the ring in its socket housing.

LUBRICATE

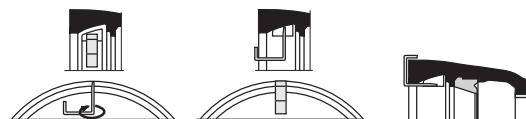
Apply the lubricating PAM paste to:

- the visible face of the gasket,
- the chamfer and spigot end of the pipe.



OPEN THE RING

• For DN 250/700 : Insert a wedge between the two ends of the ring, swivel it and place it in the position shown on the diagram below.



• For DN 100/200 and 800/1200 : Insert the locating clips in the groove of each segment, starting at the top, and working downwards, symmetrically on each side.

ASSEMBLY

Joints have to be assembled while keeping the centrelines aligned.



Insert the spigot end in the retaining ring then remove the wedge.

Push the spigot down to the bottom of the socket. The ring will slide over the weld bead and then settle on the pipe barrel.

EXTENDING THE JOINT

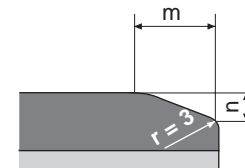


Extend the joint by pulling the spigot from the socket until the ring comes against its socket housing. Use a collar fitted with two hydraulic jacks, or pull it out with the digger bucket using a strap.

DIMENSIONS AND QUANTITIES

Chamfer dimensions

DN	100 to 600	700 to 1200
m (mm)	9	15
n (mm)	3	5



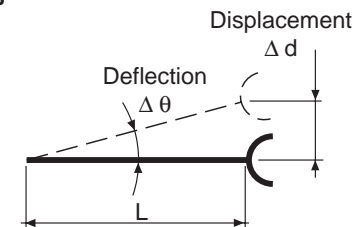
Quantity of lubricating paste for 100 joints

DN	Number of cans	DN	Number of cans	DN	Number of cans	DN	Number of cans
100	2	300	5	600	9	1100	21
125	2	350	5	700	13	1200	24
150	3	400	6	800	15		
200	3	450	6	900	17		
250	4	500	7	1000	19		

MAXIMUM ALLOWABLE DEFLECTION

Pipes shall be inserted keeping pipe centrelines perfectly aligned.

Only when joint assembly has been fully completed shall the deflection be made.



DN	Δθ	L m	Δ d cm
100 to 300	3°	5,95	32
350 to 450	3°	5,95	32
500 to 600	2°	5,97	21
700	2°	6	21
800	2°	7	25
900	1°5	6,87	18
1000	1°2	6,88	15
1200	1°1	8	15