

DN 100 to 1000 Universal Ve (Standard TT) pipes with :

- thick polyethylene external coating for DN 100 to 700
- for DN 800 to 1000 : consult us
- for rocky soils : consult us

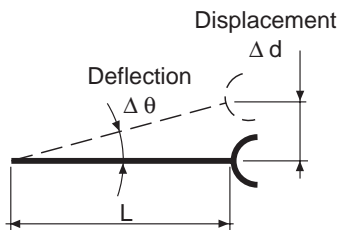
Anchored joints

- UNIVERSAL STD Ve (not Vi) DN 100 to 1000

Pulling head :

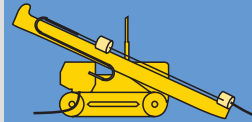
A pulling head specially designed for this application provides the connection between the first pipe and the boring machine (*contact us*).

DN	Type of joint	Effective length L	Maximum angle deflection	Δd	Maximum traction load
		<i>m</i>	<i>degree</i>	<i>cm</i>	<i>kN</i>
100	UNI Ve	6	3°	32	87
150	UNI Ve	6	3°	32	136
200	UNI Ve	6	3°	32	201
250	UNI Ve	6	3°	32	270
300	UNI Ve	6	3°	32	340
350	UNI Ve	5.97	3°	32	430
400	UNI Ve	5.97	3°	32	510
450	UNI Ve	5.97	3°	32	580
500	UNI Ve	5.97	2°	21	670
600	UNI Ve	5.97	2°	21	860
700	UNI Ve	6	2°	21	1000
800	UNI Ve	7	2°	25	1110
900	UNI Ve	6.87	1°5	18	1260
1000	UNI Ve	6.88	1°2	15	1380



LAYING RECOMMENDATIONS

Trenchless installation Horizontal directional drilling



P R I N C I P L E

This type of installation is suggested for crossing under obstacles, rivers, motorways, railways etc., **without recourse to an open trench** and without disrupting the activity on the ground surface.

Cast iron pipes are laid with directional drilling in several stages :

a) **sub-soil survey**, notably with the use of georadar,

b) **drilling a pilot hole** using a powered adjustable head that excavates the ground, and pulls a train of rotating rods,

c) **boring a larger hole and pulling cast iron pipes**. The drill string installed in the pilot hole on completion of stage b) is used for pulling (« back acting ») the boring head followed by cast iron pipes, which are assembled and locked together as the pulling work progresses. Bentonite is injected and permanently circulated in the hole during stages b) and c).

Make sure that the connection to the reamer does not generate any torque on the pipeline.

