

Temporary strand anchor type B



FREYSSINET
SUSTAINABLE TECHNOLOGY

- CE anchor head
- High pressure injection
- Reliable

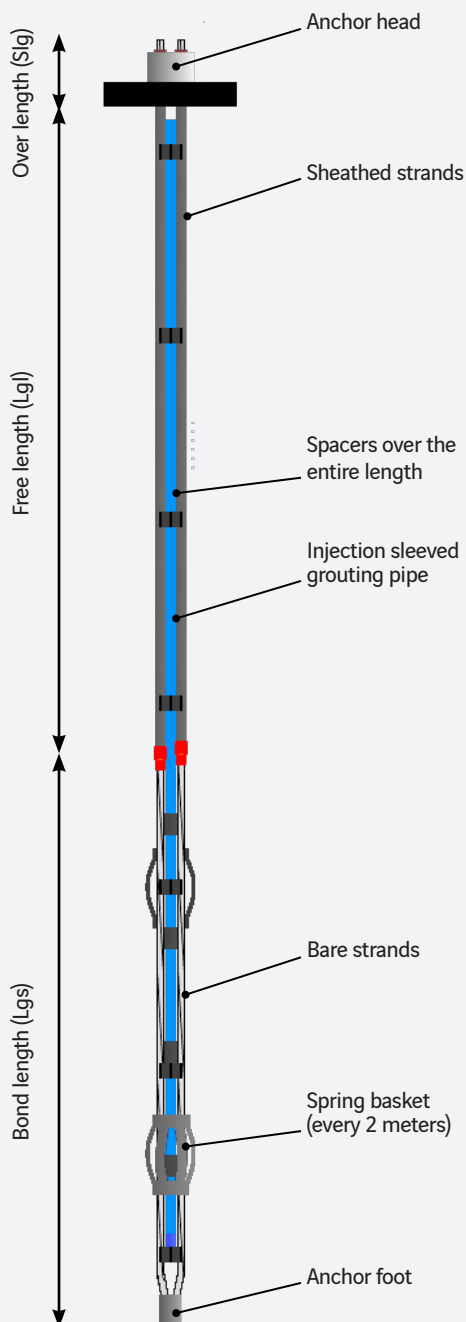
**Retaining walls,
slope stabilization, anchoring**

Technical data sheet reference n°: FT En C IX 1 1 4

The system

The strand anchor comprises a part contained in a bore hole (anchor body) and an external part (anchor head) that connects to the structure.

The anchor body is bonded to the ground by injecting a cement-based grout. The grout is injected through a plastic sleeved grouting pipe.



Tendon

The Freyssinet strand anchor comprises a bundle of prestressing strands.

Type	Yield strength (N/mm ²)	Ultimate strength (N/mm ²)	Cross section (mm ²)	Strand Weight (kg/m)	Ultimate load Fpk (kN)	Yield load Fp0.1% (kN)	Young modulus (kN/mm ²)
2T15.3	2x0.6"	1640	1860	280	2.18	520	458
3T15.3	3x0.6"			420	3.27	780	687
4T15.3	4x0.6"			560	4.36	1040	916
5T15.3	5x0.6"			700	5.45	1300	1145
6T15.3	6x0.6"			840	6.54	1560	1374
7T15.3	7x0.6"			980	7.63	1820	1603
8T15.3	8x0.6"			1120	8.72	2080	1832
9T15.3	9x0.6"			1260	9.81	2340	2061
10T15.3	10x0.6"			1400	10.9	2600	2290
11T15.3	11x0.6"			1540	11.99	2860	2519
12T15.3	12x0.6"			1680	13.08	3120	2748
13T15.3	13x0.6"			1820	14.17	3380	2977
2T15.7	2x0.62"			1640	1860	300	2.36
3T15.7	3x0.62"	450	3.54			837	738
4T15.7	4x0.62"	600	4.72			1116	984
5T15.7	5x0.62"	750	5.90			1395	1230
6T15.7	6x0.62"	900	7.08			1674	1476
7T15.7	7x0.62"	1050	8.26			1953	1722
8T15.7	8x0.62"	1200	9.44			2232	1968
9T15.7	9x0.62"	1350	10.62			2511	2214
10T15.7	10x0.62"	1500	11.80			2790	2460
11T15.7	11x0.62"	1650	12.98			3069	2706
12T15.7	12x0.62"	1800	14.16			3348	2952
13T15.7	13x0.62"	1950	15.34			3627	3198

Stronger tendons are available upon request. The service load depends on the applicable standard.



Slope stabilization under bridge foundation

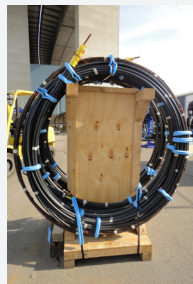
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Transportation

On delivery, anchors are generally wound. They can be hung on a recoverable metallic frame,



or on a lost wooden support or pallet, best solution for transport in containers or on long distance.



Installation

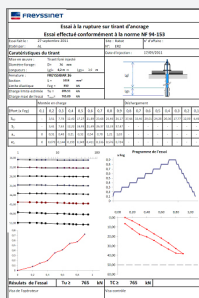
An uncoiler can be sent to the site to allow the anchors to be quickly and safely installed.



Freyssinet uncoiler

Tensioning and testing

Specific hire equipment is available for tensioning and testing the anchors. Freyssinet also offers on-site technical assistance for tensioning and testing. Where tensioning and testing are performed by Freyssinet, a report is issued for each anchor to confirm compliance with the applicable standard.



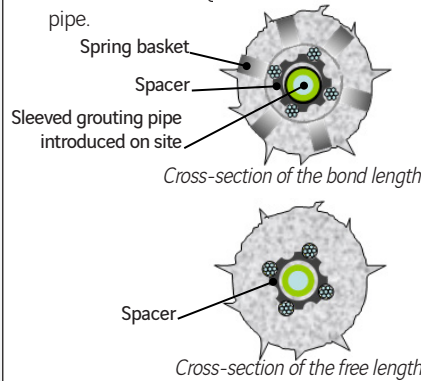
Example of report

Quality insurance

A conformity certificate is sent with each delivery.

Anchor body type B0 and B1

Across the free length, the strands are individually covered by a PE sheathing. They can be greased (type B1) or left ungreased (type B0). This model can be used to position a 50mm sleeved grouting pipe in the centre of the strand bundle thanks to the spacers across the entire length. The tube is introduced on site once the anchor has been unwound. Grouting is performed using the sleeved grouting pipe.



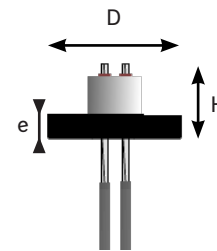
	Free length (mm)	Bond length (mm)
2T15	112	108
3T15	112	108
4T15	112	108
5T15	112	108
6T15	112	108
7T15	112	108
8T15	112	108
9T15	112	108
10T15	112	108
11T15	112	108
12T15	112	108
13T15	112	108

External diameter of the anchor

Anchor heads

Anchor head without protection:

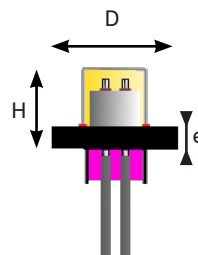
For short life time anchors, a version of the anchor head without any corrosion protection can be used. It is then composed of a bearing plate, an anchor block and jaws.



External dimensions of the anchor head

	D (mm)	H (mm)	e (mm)
2 to 4T15	220	70	30
5 to 7T15	220	80	35
8 and 9T15	240	80	35
10 to 13T15	240	80	50

Note: The stated dimensions correspond to a maximum recess diameter of 170 mm. The strength of the concrete bearing surface must be checked separately. If needed, those dimensions can be adapted on request.



Anchor head with temporary protection:

When a temporary protection is required (depending on the service life and the aggressive nature of the environment), a special sealing is installed under the bearing plate, and a cap full of grease or wax covers the block.

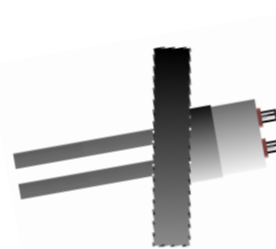
	D (mm)	H (mm)	e (mm)
2 to 4T15	220	110	30
5 to 7T15	220	130	35
8 and 9T15	240	185	35
10 to 13T15	240	200	50

Note: The stated dimensions correspond to a maximum recess diameter of 170 mm. The strength of the concrete bearing surface must be checked separately. If needed, those dimensions can be adapted on request.

Systems are available for fitting the anchor head to the structure with the right angle. They can be directly integrated into the structure.



Head with temporary protection and bearing chair



Recess in the concrete