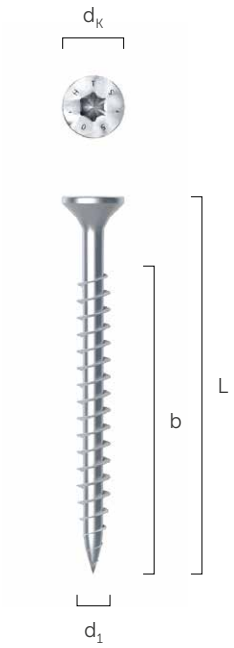
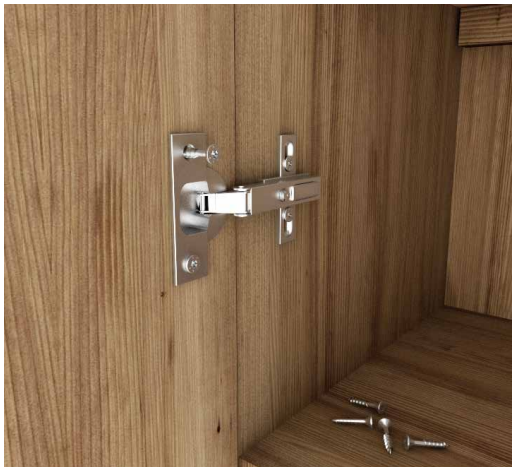


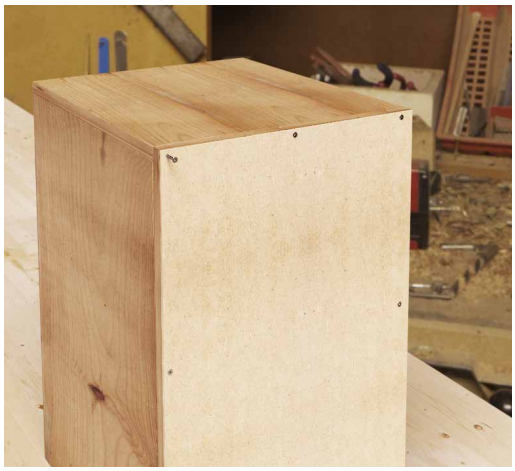
HTS-H

CE EN 14592

FULL THREAD SCREW FOR WOODWORK

- Fine threading guarantees exceptional screwing accuracy in joinery work and on MDF panels
- The total thread is 80% the length of the screw for maximum coupling efficiency with fibre board panels
- Countersunk head with smooth under-head for excellent compatibility with metal hinges





MATERIAL: carbon steel with bright zinc plated

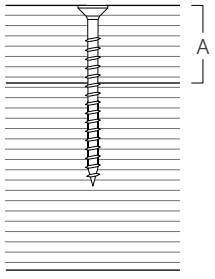
Zn ELECTRO PLATED

INCLUDED

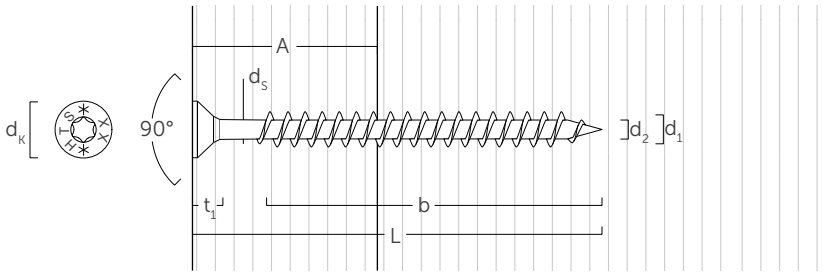
d_1 [mm]	d_K [mm]	CODE	L [mm]	b [mm]	A [mm]	pcs
3 TX 10	6,00	HTS312H(*)	12	6	-	500
		HTS316H(*)	16	10	-	500
		HTS320H	20	14	-	500
		HTS325H	25	19	7	500
		HTS330H	30	24	12	500
3,5 TX 15	7,00	HTS3516H(*)	16	10	-	500
		HTS3520H(*)	20	14	-	500
		HTS3525H	25	19	-	500
		HTS3530H	30	24	9	500
		HTS3535H	35	27	14	200
		HTS3540H	40	32	19	200
		HTS3550H	50	42	29	200
4 TX 20	8,00	HTS420H(*)	20	14	-	500
		HTS425H	25	19	-	500
		HTS430H	30	24	6	500
		HTS440H	40	32	16	200
		HTS450H	50	42	26	200
4,5 TX 20	8,80	HTS4530H	30	24	3	200
		HTS4540H	40	32	13	200
		HTS4545H	45	37	18	200
		HTS4550H	50	42	23	200
5 TX 25	9,70	HTS530H	30	24	-	200
		HTS540H	40	32	10	200
		HTS550H	50	42	20	200
		HTS560H	60	50	30	100
		HTS570H	70	60	40	100
		HTS580H	80	70	50	100

(*) Not holding CE marking.

A maximum fastening thickness



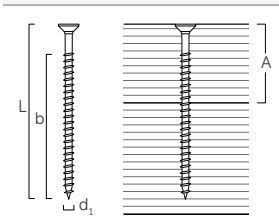
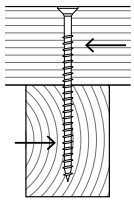
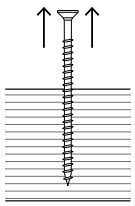
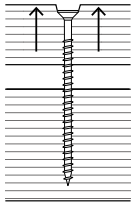
GEOMETRY AND MECHANICAL CHARACTERISTICS



nominal diameter	**d_1**	**[mm]**	**3**	**3,5**	**4**	**4,5**	**5**
head diameter	d_K	[mm]	6,00	7,00	8,00	8,80	9,70
thread diameter	d_2	[mm]	2	2,20	2,50	2,80	3,20
shank diameter	d_S	[mm]	2,20	2,45	2,75	3,20	3,65
head thickness	t_1	[mm]	2,20	2,40	2,70	2,80	2,80
pre-drilling hole diameter(1)	d_V	[mm]	2,0	2,0	2,5	2,5	3,0
characteristic yield moment	$M_{y,k}$	[Nm]	2,2	2,7	3,8	5,8	8,8
characteristic withdrawal-resistance parameter(2)	$f_{ax,k}$	[N/mm^2]	18,5	17,9	17,1	17,0	15,5
characteristic head-pull-through parameter(2)	$f_{head,k}$	[N/mm^2]	26,0	25,1	24,1	23,1	22,5
characteristic tensile strength	$f_{tens,k}$	[kN]	4,2	4,5	5,5	7,8	11,0

(1) Pre-drilling valid for softwood.
(2)Associated density ρ_a = 350 kg/m^3.

STRUCTURAL VALUES

				SHEAR	TENSION	
geometry				timber-to-timber	thread withdrawal[1]	head pull-through[2]
						
d_1 [mm]	L [mm]	b [mm]	A [mm]	$R_{V,k}$ [kN]	$R_{ax,k}$ [kN]	$R_{head,k}$ [kN]
3	12	6	-	-	0,36	1,01
	16	10	-	-	0,60	1,01
	20	14	-	-	0,84	1,01
	25	19	7	0,38	1,14	1,01
	30	24	12	0,60	1,44	1,01
3,5	16	10	-	-	0,68	1,33
	20	14	-	-	0,95	1,33
	25	19	-	-	1,28	1,33
	30	24	9	0,53	1,62	1,33
	35	27	14	0,77	1,83	1,33
	40	32	19	0,82	2,16	1,33
	50	42	29	0,89	2,84	1,33
4	20	14	-	-	1,03	1,66
	25	19	-	-	1,40	1,66
	30	24	6	0,38	1,77	1,66
	40	32	16	0,97	2,36	1,66
	50	42	26	1,08	3,10	1,66
4,5	30	24	3	0,21	1,98	1,93
	40	32	13	0,90	2,64	1,93
	45	37	18	1,15	3,05	1,93
	50	42	23	1,21	3,47	1,93
5	30	24	-	-	2,01	2,28
	40	32	10	0,76	2,68	2,28
	50	42	20	1,39	3,51	2,28
	60	50	30	1,52	4,18	2,28
	70	60	40	1,65	5,02	2,28
	80	70	50	1,65	5,85	2,28

NOTES

(1) The axial thread withdrawal resistance was calculated considering a 90° angle between the grain and the connector and for a fixing length of b.
(2) The axial resistance to head pull-through was calculated using timber elements.

GENERAL PRINCIPLES

- Characteristic values according to EN 1995:2014.
- Design values can be obtained from characteristic values as follows:

$$R_d = \frac{R_k \cdot k_{mod}}{\gamma_M}$$

  The coefficients γ_M and k_{mod} should be taken according to the current regulations used for the calculation.
- The values have been calculated considering a minimum tip pull-through depth of $6d_1$.
- For the calculation process a timber characteristic density ρ_k = 385 kg/m^3 has been considered.
- Dimensioning and verification of the timber elements must be carried out separately.
- The characteristic shear strength are calculated for screws inserted without pre-drilling hole.