Frame fixing screw FFS and FFSZ

Special screw for direct installation of windows.

OVERVIEW

FFSZ with cylinder head

FFS with flat head

For fixing of:
- Windows
- Door frames
- Fire protection doors
- Squared timbers

DESCRIPTION

- Frame fixing screw with Torx-drive and self-tapping thread.
- Flat head for metal and plastic windows, cylindrical head for recessed installation with wooden windows.

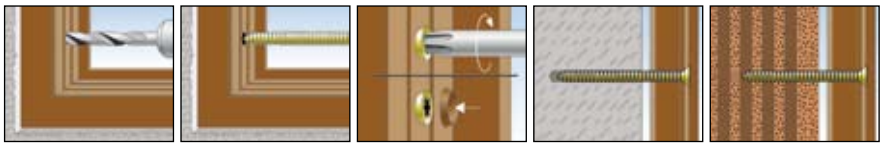
Advantages/benefits

- Stress-free stand-off installation without additional plugs.
- Universal use for all common building and frame materials
- Tapered thread diameter at the front for easy attachment.
- Optimised thread for a smooth, easy turn action.
- Only a 6 mm drill diameter necessary, thereby reduced work.
- The continuous thread prevents the fixture being pulled up against the building material.
- Cover caps to conceal fixing

INSTALLATION

Type of installation

- Push-through installation



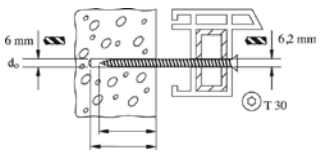
Installation tips

- Observe the drill hole and screw-in depths for various building materials as per the table.
- Flat head for metal and plastic windows, cylinder head for recessed installation with wooden windows.

TECHNICAL DATA

Type		Art.-No.	ID		drill-Ø d_0 [mm]	screw length l_s [mm]	drive	head [Ø mm]	qty. per box pcs.
FFSZ 7,5 x 52 T30	1)	**92695**	6		6	52	T30	7,5	100
FFSZ 7,5 x 62 T30	1)	**92697**	0		6	62	T30	7,5	100
FFSZ 7,5 x 72 T30	1)	**92698**	7		6	72	T30	7,5	100
FFSZ 7,5 x 82 T30	1)	**92699**	4		6	82	T30	7,5	100
FFSZ 7,5 x 92 T30	1)	**92700**	7		6	92	T30	7,5	100
FFSZ 7,5 x 102 T30	1)	**92701**	4		6	102	T30	7,5	100
FFSZ 7,5 x 112 T30	1)	**92702**	1		6	112	T30	7,5	100
FFSZ 7,5 x 122 T30	1)	**92703**	8		6	122	T30	7,5	100
FFSZ 7,5 x 132 T30	1)	**92704**	5		6	132	T30	7,5	100
FFSZ 7,5 x 152 T30	1)	**92705**	2		6	152	T30	7,5	100
FFSZ 7,5 x 182 T30	1)	**92706**	9		6	182	T30	7,5	100
FFSZ 7,5 x 202 T30	1)	**92708**	3		6	202	T30	7,5	100
FFSZ 7,5 x 212 T30	1)	**92709**	0		6	212	T30	7,5	100

1) Blue zinc galvanized
2) Yellow passivated



effect. anchoring depth h_{ef}
min. drill hole depth ≧ h_{ef} + **10 mm**

h_{ef} ≧ 20 mm in concrete
h_{ef} ≧ 40 mm in solid sand-lime brick
h_{ef} ≧ 40 mm in solid block
h_{ef} ≧ 50 mm in pumice
h_{ef} ≧ 50 mm in solid block made from light weight concrete
h_{ef} ≧ 60 mm in perforated brick

Frame fixing screw FFS and FFSZ

TECHNICAL DATA

Type		Art.-No.	ID		drill-Ø d_0 [mm]	screw length l_s [mm]	drive	head [Ø mm]	qty. per box pcs.
FFS 7,5 x 42	1)	**62379**	4		6	42	T30	11,5	100
FFS 7,5 x 52	1)	**62395**	4		6	52	T30	11,5	100
FFS 7,5 x 62	1)	**62396**	1		6	62	T30	11,5	100
FFS 7,5 x 72	1)	**61550**	8		6	72	T30	11,5	100
FFS 7,5 x 82	1)	**68955**	4		6	82	T30	11,5	100
FFS 7,5 x 92	1)	**61551**	5		6	92	T30	11,5	100
FFS 7,5 x 102	1)	**68956**	1		6	102	T30	11,5	100
FFS 7,5 x 112	1)	**61552**	2		6	112	T30	11,5	100
FFS 7,5 x 122	1)	**68957**	8		6	122	T30	11,5	100
FFS 7,5 x 132	1)	**61553**	9		6	132	T30	11,5	100
FFS 7,5 x 152	1)	**61554**	6		6	152	T30	11,5	100
FFS 7,5 x 182	1)	**61555**	3		6	182	T30	11,5	100
FFS 7,5 x 202	1)	**68958**	5		6	202	T30	11,5	100
FFS 7,5 x 212	1)	**61556**	0		6	212	T30	11,5	100
FFS 7,5 x 72-bl	2)	**93736**	5		6	72	T30	11,5	100
FFS 7,5 x 92-bl	2)	**93737**	2		6	92	T30	11,5	100
FFS 7,5 x 112-bl	2)	**93739**	6		6	112	T30	11,5	100
FFS 7,5 x 132-bl	2)	**93740**	2		6	132	T30	11,5	100
FFS 7,5 x 152-bl	2)	**93741**	9		6	152	T30	11,5	100
FFS 7,5 x 182-bl	2)	**93742**	6		6	182	T30	11,5	100
FFS 7,5 x 212-bl	2)	**93744**	0		6	212	T30	11,5	100

1) Blue zinc galvanized
2) Yellow passivated

Cover cap **FFS A**

Type	Art.-No.	ID			cap [Ø mm]	cap height [mm]	qty. per box pcs.
FFS A-BR dark brown	**61561**	4			15	4	100
FFS A-W white	**61560**	7			15	4	100

FIXING PRINCIPLES

In detail: The general principles for installation, the correct drilling procedure and much more on page 303.

Window frame screw FFSZ and FFS

Highest recommended loads[1] for a single screw.

Type		FFS 7,5 / FFSZ 7,5								
Screw diameter	[mm]	7,5								
Anchoring depth	$h_{ef} \geq$ [mm]	30			40			60		
		recommended tensile load	recommended shear load	min. edge distance	recommended tensile load	recommended shear load	min. edge distance	recommended tensile load	recommended shear load	min. edge distance
		N_{rec}[4]	V_{rec}[4]	c_{min}[5]	N_{rec}[4]	V_{rec}[4]	c_{rec}[5]	N_{rec}[4]	V_{rec}[4]	c_{min}[5]
		[kN]	[kN]	[mm]	[kN]	[kN]	[mm]	[kN]	[kN]	[mm]
Concrete	≥ C20/25 bzw. ≥ B25	1,00	0,70	30	-	-	-	-	-	-
Solid sand-lime brick	≥ KS 12	-	-	-	1,00	0,60	40	-	-	-
Solid brick	≥ Mz 12	-	-	-	0,40[2]	0,30[2]	40	0,80	0,70	40
Vertical perforated brick	≥ HLz 12 [2]	-	-	-	-	-	-	0,25	0,40	40
Aerated concrete block	≥ PB2, PP2 [3]	-	-	-	-	-	-	0,10	0,10	40
Aerated concrete block	≥ PB4, PP4 [3]	-	-	-	-	-	-	0,25	0,25	40

[1] A single screw is, e.g. a screw with an axial spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1{,}5 \times h_{ef}$. The required safety factors are considered with a displacement of 3 mm in case of shear loads.

[2] Drill method rotary drilling.

[3] Without pre-drilling.

[4] Without influence from edge distances and spacings.

[5] Minimal possible edge distance while reducing the recommended loads.