

De hoogwaardige kozijnbevestiging voor massieve bouwmaterialen en gescheurd beton



UITVOERINGEN

- elektrolytisch verzinkt staal
- roestvast staal

BOUWMATERIALEN

Geschikt voor:

- Beton C12/15
- Volle kalkzandsteen
- Cellenbeton
- Volle baksteen
- Natuursteen met hoge dichtheid
- Volle baksteen van lichtbeton
- Gipsblokken
- Drielaags samengestelde buitenwandpanelen
- Holle bouwsteen van licht beton

GOEDKEURINGEN



VOORDELEN

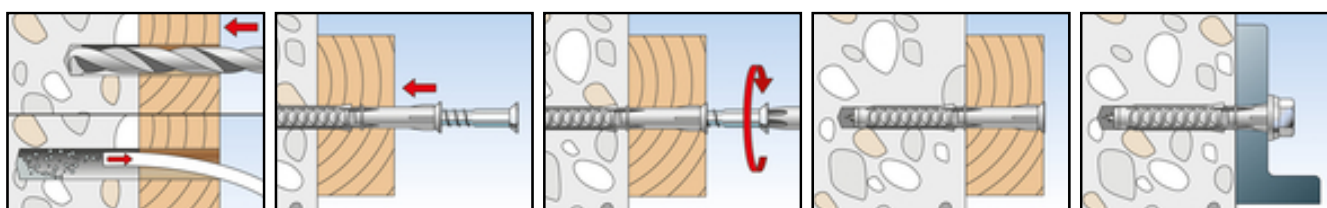
- De ideale interactie van de SXS met de fischer CO-NA schroef maakt een optimale belastingcapaciteit mogelijk in massieve bouwmaterialen en cellenbeton. Dit maakt een economische bevestiging mogelijk.
- De CO-NA schroef zorgt ervoor dat de plug uitzet in de scheur. Dit wordt bevestigd door de eerste goedkeuring voor een kunststof kozijnbevestiging voor afzonderlijke bevestigingen.
- De grote diameter van de CO-NA schroef staat hoge afschuifbelastingen toe. Hierdoor zijn er minder bevestigingspunten nodig.

TOEPASSINGEN

- Gevel- en dakconstructies van hout en metaal
- Ramen
- Hekwerken en deuren
- Hangende keukenkasten
- Rachelwerk
- Metalen beugels
- Metal ondersteuning

FUNCTIE

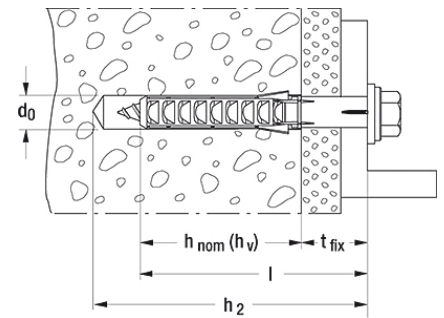
- De SXS is geschikt voor doorsteekmontage. Door de CO-NA schroef in te draaien kan de SXS in vier richtingen uitzetten en zich verankeren in het bouw materiaal.
- Wanneer er een scheur wordt gevormd in het beton, zetten de conussen van de schroef actief uit, waardoor het spreidingseffect en de kracht van de plug worden vergroot.
- Er worden verzonken schroeven aanbevolen voor installatie van houtconstructies; gebruik bij metaalconstructies pluggen met een brede hulskraag en een gegoten onderlegging op de schroef, die ook zorgt voor een geïntegreerde zeskantbus.



TECHNISCHE GEGEVENS



Constructieplug SXS-FUS



Elektrolytisch verzinkt

Artikelnaam	Art.-Nr.	Goed-keuring	Boorgatdiameter d_0 [mm]	Min. boorgatdiepte bij doorsteekmontage h_2 [mm]	Min. verankeringsdiepte $h_{nom} (h_v)$ [mm]
SXS 10 x 60 FUS	019599		10	70	50
SXS 10 x 80 FUS	019603		10	90	50
SXS 10 x 100 FUS	019614		10	110	50
SXS 10 x 120 FUS	019619		10	130	50
SXS 10 x 140 FUS	019624		10	150	50
SXS 10 x 160 FUS	024045		10	170	50
SXS 10 x 180 FUS	024046		10	190	50

Roestvast staal A4, corrosieweerstandsklasse III

Artikelnaam	Art.-Nr.	Goed-keuring	Boorgatdiameter d_0 [mm]	Min. boorgatdiepte bij doorsteekmontage h_2 [mm]	Min. verankeringsdiepte h_{nom} (h_v) [mm]
SXS 10 x 60 FUS A4	019600		10	70	50
SXS 10 x 80 FUS A4	019628		10	90	50
SXS 10 x 100 FUS A4	019615		10	110	50
SXS 10 x 120 FUS A4	019620		10	130	50
SXS 10 x 140 FUS A4	019626		10	150	50
SXS 10 x 160 FUS A4	024062		10	170	50
SXS 10 x 180 FUS A4	024063		10	190	50

LOADS

Frame fixing SXS ⁴⁾

Highest permissible loads¹⁾ for a single anchor for multiple fixings of non-structural applications in normal concrete \geq C16/20 resp. \geq B20⁷⁾. For the design the complete approval ETA-09/0352 has to be considered.

Type	Min. embedment depth h_{nom} (h_v) [mm]	Min. member thickness h_{min} [mm]	Cracked or Non-cracked concrete			
			Permissible tensile load N_{perm} ^{3) 6)} [kN]	Permissible shear load V_{perm} ³⁾ [kN]	Min. spacing s_{min} ²⁾ [mm]	Min. edge distance c_{min} ²⁾ [mm]
SXS 10	50	100	2,0	2,0 ⁵⁾	50	50

¹⁾ The required partial safety factors for material resistance as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered.

²⁾ Minimum possible axial spacings resp. edge distance (anchor group) while reducing the permissible load. The combination of the given min. spacing and min. edge distance as well as the min. member thickness is not possible. Details see approval.

³⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

⁴⁾ gvz and A4. For exterior applications of galvanised screws measures against incoming humidity have to be taken.

⁵⁾ The permissible shear load determined acc. ETAG 020, Annex C considers exclusively steel of the screw. It amounts $V_{perm} = 7,4$ kN for galvanised screws and $V_{perm} = 6,9$ kN for screws made of stainless steel. Due to that the expected displacements will disable the proper function of the fixture a maximum shear load on the basis of table 7 of the approval is recommended.

⁶⁾ Valid for temperatures in the substrate up to +50°C (resp. short term up to 80°C). For long term temperatures up to 30°C higher permissible loads may be possible.

⁷⁾ Values for concrete C12/15 see approval.

LOADS

Frame fixing SXS ⁴⁾

Highest permissible loads¹⁾ for a single anchor in normal concrete \geq C20/25 resp. \geq B25.

For the design the complete approval Z-2 1.2-1734 has to be considered.

Type	Min. embedment depth h_{nom} (h_v) [mm]	Min. member thickness h_{min} [mm]	Cracked concrete				Non-cracked concrete			
			Permissible tensile load N_{perm} ⁶⁾ [kN]	Permissible shear load V_{perm} ⁶⁾ [kN]	Min. spacing s_{min} ²⁾ [mm]	Min. edge distance c_{min} ²⁾ [mm]	Permissible tensile load N_{perm} ⁶⁾ [kN]	Permissible shear load V_{perm} ⁶⁾ [kN]	Min. spacing s_{min} ²⁾ [mm]	Min. edge distance c_{min} ²⁾ [mm]
SXS 10	50	100	1,0	2,5	55	50	1,3	2,5	55	50

¹⁾ The required partial safety factors for material resistance as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered.

²⁾ Minimum possible axial spacings resp. edge distance (anchor group) while reducing the permissible load. The combination of the given min. spacing and min. edge distance is not possible. One of them has to be increased according approval.

³⁾ For combinations of tensile loads, shear loads, bending moments as well as reduced edge distances or spacings (anchor groups) see approval.

⁴⁾ gvz and A4. For exterior applications of galvanised screws measures against incoming humidity have to be taken.

⁶⁾ Valid for temperatures in the substrate up to +50°C (resp. short term up to 80°C). For long term temperatures up to 30°C higher permissible loads may be possible.

LOADS

Frame fixing SXS 10⁴⁾

Highest permissible loads¹⁾ for a single anchor for multiple fixings of non-structural applications in masonry.
For the design the complete approval ETA-09/0352 has to be considered.

Type	Compressive brick strength f_b [N/mm ²]	Brick type, naming acc. DIN [-] [-]	Min. embedment depth h_{nom} (h_v) [mm]	Min. member thickness h_{min} [mm]	Solid brick masonry		
					Permissible load F_{perm} ^{3) 6)} [kN]	Min. spacing s_{min} ²⁾ [mm]	Min. edge distance c_{min} ²⁾ [mm]
Solid brick Mz							
SXS10	≥ 20	Mz	50	115	0,71	250	100
Solid sand-lime brick KS							
SXS10	≥ 28	KS	50	115	1,40	250	100
Solid brick and solid block of lightweight aggregate concrete V							
SXS10	≥ 12	V	50	115	1,00	250	100
Aerated concrete block PB2, PP2							
SXS10	≥ 2	PP/PB	50	175	0,32 ⁵⁾	250	80
Aerated concrete block PB7, PP7							
SXS10	≥ 7	PP/PB	50	175	1,07 ⁵⁾	250	100

¹⁾ The required partial safety factors for material resistance as well as a partial safety factor for load actions of $\gamma_L = 1,4$ are considered.

²⁾ Minimum possible axial spacing (anchor group) while reducing the permissible load.

³⁾ Valid for tensile load, shear load and oblique load under any angle. For combinations of tensile loads, shear loads and bending moments see approval.

⁴⁾ gvz and A4. For exterior applications of galvanised screws measures against incoming humidity have to be taken.

⁵⁾ Drill hole created by hammer drill without impact.

⁶⁾ Valid for temperatures in the substrate up to +50°C (resp. short term up to 80°C). For long term temperatures up to 30°C higher permissible loads may be possible.