Expansion plug SX Plus

The specialist for solid building materials.

Wall consoles

Shelves

SX Plus in concrete

SX Plus long in vertically perforated brick

$$l_s \geq h_{ef} + t_{fix} + d_s$$

$$l = h_{ef}$$

Applications

· Lamps
· Wardrobes
· Motion detectors
· Skirting boards
· Light wall shelves
· Mirror cabinets
· Mailboxes
· TV consoles
· Trellis
· Folding shutters
· Fire detector

Advantages

· The 4-way expansion ensures optimum force transmission into the building material and guarantees high holding values in solid and perforated building materials.
· The special fixing wings ensure pre-fixation of the screw, leaving both of the user's hands free during the setting process.
· The expansion-free plug neck prevents the creation of expansion forces on the material surface whilst screwing in the screw. This helps to prevent damage to

tiles and plaster.
· The special shape of the plug makes it easy to insert into the drill hole with just a few hammer blows.
· The pronounced edge of the plug prevents it from slipping deeper into the drill hole and enables secure installation.
· Due to the noticeable tightening torque, the user automatically recognizes when the screw is properly installed and thus prevents overtightening of the screw.
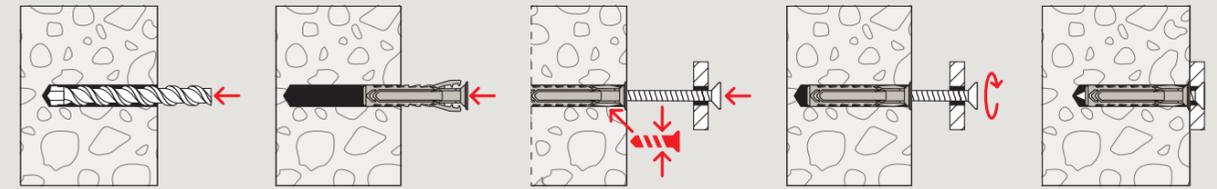
Certificates

★★★★★
Nylon Quality

Building materials

· Concrete
· Solid brick
· Solid sand-lime brick
· Aerated concrete
· Vertically perforated brick
· Perforated sand-lime brick
· Solid stone of leightweight concrete
· Hollow block of leightweight concrete
· Natural stone
· Hollow brick & concrete ceilings
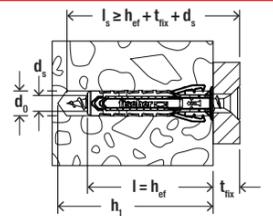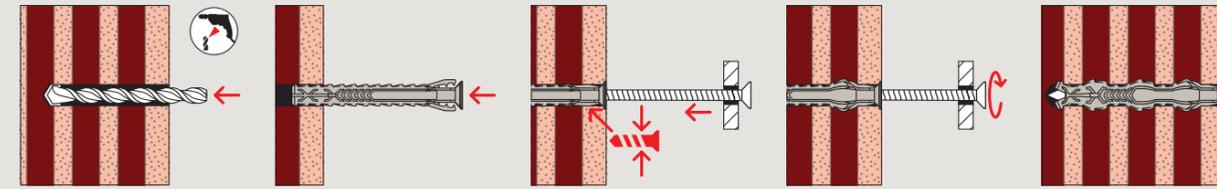· Solid gypsum boards

Functioning

· The SX Plus is suitable for pre-positioned and push-through installation.
· When the plug is inserted, the fixing wings fold inwards. This locks the screw in place when it is inserted into the plug and prevents it from falling out, which is particularly helpful in overhead applications.
· When the screw is tightened, the SX Plus expands in four directions and thus anchors itself securely in the building material.
· The anti-rotation lock prevents the plug from twisting and allows for easy installation.
· Suitable for wood and chipboard screws, as well as stud screws.
· The required screw length is given by the plug length + fixture thickness + the screw diameter.

Technical data

Expansion plug SX Plus

SX Plus SX Plus SX Plus S SX Plus PH

Item	without screw Item no.	with screw Item no.	Drill diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Anchor length l [mm]	Wood and chipboard screws d_s [mm]	Max. fixture thickness t_{fix} [mm]	Sales unit [pcs]
SX Plus 4 x 20	568004	–	4	25	20	2.0 - 3.0	–	200
SX Plus 5 x 25	568005	–	5	35	25	3.0 - 4.0	–	100
SX Plus 6 x 30	568006	–	6	40	30	4.0 - 5.0	–	100
SX Plus 6 x 30 S	–	568206	6	40	30	4.5 x 40	5	50
SX Plus 6 x 30 S PH TX	–	567935	6	40	30	4.5 x 40	5	100
SX Plus 6 x 50	568106	–	6	60	50	4.0 - 5.0	–	100
SX Plus 8 x 40	568008	–	8	50	40	4.5 - 6.0	–	90
SX Plus 8 x 40 S	–	568208	8	50	40	5.0 x 55	10	50
SX Plus 8 x 65	568108	–	8	75	65	4.5 - 6.0	–	50
SX Plus 10 x 50	568010	–	10	70	50	6.0 - 8.0	–	50
SX Plus 10 x 80	568110	–	10	100	80	6.0 - 8.0	–	25
SX Plus 12 x 60	568012	–	12	80	60	8.0 - 10.0	–	25
SX Plus 14 x 70	568014	–	14	90	70	10.0 - 12.0	–	20

Technical data

Expansion plug SX Plus in bucket

SX Plus in bucket

Item	Item no.	Drill diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Anchor length l [mm]	Wood and chipboard screws d_s [mm]	Sales unit [pcs]
SX Plus 6 x 30	567893	6	40	30	4.0 - 5.0	3200
SX Plus 8 x 40	567899	8	50	40	4.5 - 6.0	1200
SX Plus 10 x 50	567900	10	60	50	6.0 - 8.0	720
SX Plus 12 x 60	567901	12	80	60	8.0 - 10.0	350

Technical data

Assortment boxes

Meisterbox SX Plus   FixTainer SX Plus   RedBox UX / SX Plus   fischer Box UX / SX-S Plus

Item	Item no.	Contents	Sales unit [pcs]
MeisterBox SX Plus DE	041648	60 x Expansion plug SX Plus 6 x 30, 60 x Expansion plug SX Plus 8 x 40, 12 x Expansion plug SX Plus 10 x 50	1
MeisterBox SX Plus + screws DE	513777	50 x Expansion plug SX 6 x 30, 30 x Expansion plug SX 8 x 40, 50 x Countersunk screw 4,5 x 40, 30 x Countersunk screw 5 x 55	1
ProfiBox SX Plus 6,8,10	567896	60 x SX Plus 6x30, 30 x SX Plus 8x40, 12 x SX Plus 10x50	1
ProfiBox SX Plus 6,8 + screws	567897	50 x Expansion plug SX Plus 6 x 30, 30 x Expansion plug SX Plus 8 x 40, 50 x Chipboard screws 4,5 x 40, 30 x Chipboard screws 5 x 55	1
FixTainer SX Plus, UX, GK 6 + screws	567905	50 x Expansion plug SX Plus 6 x 30, 50 x Expansion plug UX 6 x 35, 25 x Plasterboard fixing GK, 15 x Plasterboard fixing metal GKM, 50 x Chipboard screw 4,5 x 40, 50 x Chipboard screw 4,5 x 45	1
FixTainer SX Plus 6,8,10	567904	120 x Expansion plug SX Plus 6 x 30, 60 x Expansion plug SX Plus 8 x 40, 30 x Expansion plug SX Plus 10 x 50	1
FixTainer SX Plus 5,6,8 + hooks + screws	567903	50 x Expansion plug SX Plus 5 x 25, 25 x Plug Screw 3,5 x 5, 50 x Expansion plug SX Plus 6 x 30, 25 x Plug screw 4,5 x 40, 20 x Expansion plug SX Plus 8 x 40, 10 x Plug Screw 5 x 55, 8 x Hook Fast&Fix Black, 8 x Hook Fast&Fix White, 8 x GKM, 8 x Panhead screw 4,5 x 35	1

Technical data

Assortment boxes

Meisterbox SX Plus   FixTainer SX Plus   RedBox UX / SX Plus   fischer Box UX / SX-S Plus

Item	Item no.	Contents	Sales unit [pcs]
RedBox SX Plus/UX	569147	60 x Expansion plug SX Plus 6 x 30, 50 x Expansion plug SX Plus 8 x 40, 20 x Expansion plug SX Plus 10 x 50, 60 x Universal plug UX 6 x 35 R, 40 x Universal plug UX 6 x 50 R, 50 x Universal plug UX 8 x 50 R, 10 x Universal plug UX 10 x 60 R	1
fischer Box SX Plus 5,6,8	567891	100 x Expansion plug SX Plus 5 x 25, 100 x Expansion plug SX Plus 6 x 30, 100 x Expansio plug SX Plus 8 x 40	1
fischer Box SX Plus, UX 6,8 S	567919	50 x Universal plug UX 6 x 35, 50 x Chipboard screw 4,5 x 45, 50 x Expansion plug SX Plus 6 x 30, 50 x Chipboard screw 4,5 x 40, 25 x Universal plug UX 8 x 50, 25 x Chipboard screw 5 x 65, 25 x Expansion plug SX Plus 8 x 40, 25 x Chipboard screw 5 x 55	1

Loads

Expansion plug SX Plus

Recommended loads[1] for a single anchor.
The given loads are valid for wood screws with the specified diameter.

Type			SX Plus 4x20	SX Plus 5x25	SX Plus 6x30	SX Plus 6x50	SX Plus 8x40	SX Plus 8x65	SX Plus 10x50	SX Plus 10x80	SX Plus 12x60	SX Plus 14x70
Wood screw diameter		[mm]	3	4	5	5	6	6	8	8	10	12
Min. edge distance in concrete	c_{min}	[mm]	20	25	35	35	40	50	50	65	65	100
Recommended loads in the respective base material F_{rec} [2]												
Concrete	≥ C20/25	[kN]	0.20	0.35	0.65	1.30	0.75	1.50	1.40	2.90	2.40	3.50
Solid brick	≥ Mz 12	[kN]	0.15	0.27	0.35	0.50	0.60	0.80	1.00	1.40	1.25	1.30
Solid sand-lime brick	≥ KS 12	[kN]	0.20	0.35	0.65	1.30	0.75	1.50	1.40	2.90	2.40	3.50
Aerated concrete	≥ PB2, AAC 2	[kN]	0.03	0.03	0.07	0.12	0.10	0.15	0.18	0.28	0.22	0.35
Aerated concrete	≥ PB4, AAC 4	[kN]	0.10	0.15	0.20	0.35	0.30	0.40	0.50	0.90	0.80	1.00
Perforated sand-lime brick	≥ KSL 12	[kN]	0.18	0.25	0.30	0.35	0.40	0.80	0.45	1.50	0.70	1.00
Vertically perforated brick	≥ HLz 12, Doppio UNI 19	[kN]	0.13	0.13	0.15	0.17	0.25	0.40	0.25	0.50	0.35	0.40
Vertically perforated brick	Forato Type F8	[kN]	0.08[3]	0.08[3]	0.10[3]	-	0.10[3]	-	0.12[3]	-	-	-
Light-weight concrete hollow block	Sepa Parpaing	[kN]	0.15	0.20	0.25	0.30[3]	0.25	0.30[3]	0.35	0.40[3]	0.50[3]	0.50[3]

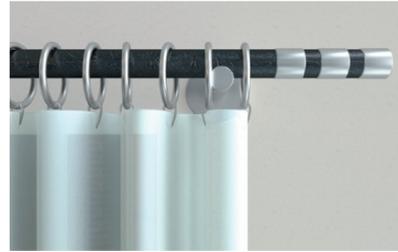[1] Required safety factors are considered.
[2] Valid for tension, shear and combined tension and shear load.
[3] Load determination on plastered wall.

Expansion plug SX Plus Green

The specialist for solid building materials with renewable raw materials.

Curtain rails

Mirrors

SX Plus Green in concrete

SX Plus Green long in vertically perforated brick

Applications

· Lamps
· Wardrobes
· Motion detectors
· Skirting boards
· Light wall shelves
· Mirror cabinets
· Mailboxes
· TV consoles
· Trellis
· Folding shutters
· Fire detector

Certificates

BIOBASED 50 85%
DIN
geprüft
8C029

★★★★★
Nylon
Quality

Advantages

· The SX Plus Green is produced with at least 50% renewable raw materials and therefore particularly environmentally friendly.
· The 4-way expansion ensures optimum force transmission into the building material and guarantees high holding values in solid and perforated building materials.
· The special fixing wings ensure pre-fixation of the screw, leaving both of the user's hands free during the setting process.

· The expansion-free plug neck prevents the creation of expansion forces on the material surface whilst screwing in the screw. This helps to prevent damage to tiles and plaster.
· The special shape of the plug makes it easy to insert into the drill hole with just a few hammer blows.
· The pronounced edge of the plug prevents it from slipping deeper into the drill hole and enables secure installation.
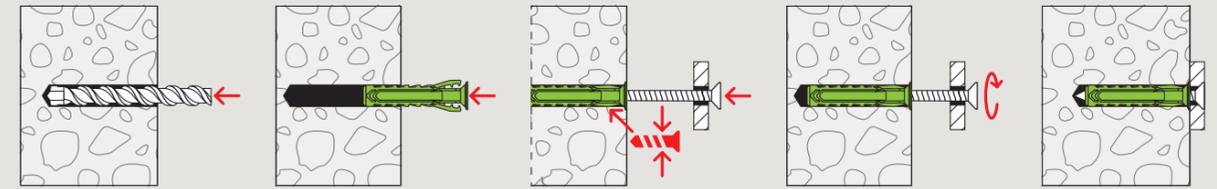
Building materials

· Concrete
· Solid brick
· Solid sand-lime brick
· Aerated concrete
· Vertically perforated brick
· Perforated sand-lime brick
· Solid stone of leightweight concrete
· Hollow block of leightweight concrete
· Natural stone
· Hollow brick & concrete ceilings
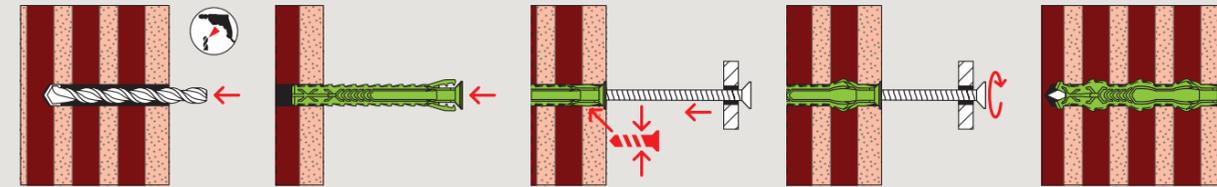· Solid gypsum boards

Functioning

· The SX Plus Green is suitable for pre-positioned and push-through installation.
· When the plug is inserted, the fixing wings fold inwards. This locks the screw in place when it is inserted into the plug and prevents it from falling out, which is particularly helpful in overhead applications.
· When the screw is tightened, the SX Plus Green expands in four directions and thus anchors itself securely in the building material.
· The anti-rotation lock prevents the plug from twisting and allows for easy installation.
· Suitable for wood and chipboard screws, as well as stud screws.
· The required screw length is given by the plug length + fixture thickness + the screw diameter.

Technical data

Expansion plug SX Plus Green

SX Plus Green   SX Plus Green   SX Plus Green S

Item	without screw Item no.	with screw Item no.	Drill diameter d_0 [mm]	Min. drill hole depth h_1 [mm]	Anchor length l [mm]	Wood and chipboard screws d_s [mm]	Max. fixture thickness t_{fix} [mm]	Sales unit [pcs]
SX Plus Green 5 x 25	567806	–	5	35	25	3.0 - 4.0	–	90
SX Plus Green 6 x 30	567807	–	6	40	30	4.0 - 5.0	–	90
SX Plus Green 6 x 30 S	–	567813	6	40	30	4.5 x 40	5	45
SX Plus Green 6 x 50	567808	–	6	60	50	4.0 - 5.0	–	90
SX Plus Green 8 x 40	567809	–	8	50	40	4.5 - 6.0	–	90
SX Plus Green 8 x 40 S	–	567814	8	50	40	5.0 x 55	10	45
SX Plus Green 8 x 65	567810	–	8	75	65	4.5 - 6.0	–	45
SX Plus Green 10 x 50	567811	–	10	70	50	6.0 - 8.0	–	45
SX Plus Green 12 x 60	567812	–	12	80	60	8.0 - 10.0	–	45

Technical data

Assortment boxes

MeisterBox

Item	Item no.	Contents	Sales unit [pcs]
MeisterBox SX Plus Green 6,8 + screw A2 DE	531227	50 x Expansion plug SX 6 x 30 Green, 30 x Expansion plug SX 8 x 40 Green, 25 x Countersunk screw 4,5 x 40 A2, 15 x Countersunk screw 5 x 55 A2	1
ProfiBox SX Plus Green 6,8 + screws A2	567898	50 x Expansion plug SX Plus 6 x 30 Green, 30 x Expansion plug SX Plus 8 x 40 Green, 25 x Chipboard screw 4,5 x 40, 15 x Chipboard screw 5 x 55	1

Loads

Expansion plug SX Plus

Recommended loads[1] for a single anchor.
The given loads are valid for wood screws with the specified diameter.

Type		SX Plus 4x20	SX Plus 5x25	SX Plus 6x30	SX Plus 6x50	SX Plus 8x40	SX Plus 8x65	SX Plus 10x50	SX Plus 10x80	SX Plus 12x60	SX Plus 14x70
Wood screw diameter	[mm]	3	4	5	5	6	6	8	8	10	12
Min. edge distance in concrete c_{min}	[mm]	20	25	35	35	40	50	50	65	65	100
Recommended loads in the respective base material F_{rec} [2]											
Concrete ≥ C20/25	[kN]	0.20	0.35	0.65	1.30	0.75	1.50	1.40	2.90	2.40	3.50
Solid brick ≥ Mz 12	[kN]	0.15	0.27	0.35	0.50	0.60	0.80	1.00	1.40	1.25	1.30
Solid sand-lime brick ≥ KS 12	[kN]	0.20	0.35	0.65	1.30	0.75	1.50	1.40	2.90	2.40	3.50
Aerated concrete ≥ PB2, AAC 2	[kN]	0.03	0.03	0.07	0.12	0.10	0.15	0.18	0.28	0.22	0.35
Aerated concrete ≥ PB4, AAC 4	[kN]	0.10	0.15	0.20	0.35	0.30	0.40	0.50	0.90	0.80	1.00
Perforated sand-lime brick ≥ KSL 12	[kN]	0.18	0.25	0.30	0.35	0.40	0.80	0.45	1.50	0.70	1.00
Vertically perforated brick ≥ HLz 12, Doppio UNI 19	[kN]	0.13	0.13	0.15	0.17	0.25	0.40	0.25	0.50	0.35	0.40
Vertically perforated brick Forato Type F8	[kN]	0.08[3]	0.08[3]	0.10[3]	-	0.10[3]	-	0.12[3]	-	-	-
Light-weight concrete hollow block Sepa Parpaing	[kN]	0.15	0.20	0.25	0.30[3]	0.25	0.30[3]	0.35	0.40[3]	0.50[3]	0.50[3]

[1] Required safety factors are considered.
[2] Valid for tension, shear and combined tension and shear load.
[3] Load determination on plastered wall.