



SXR - A4

Stainless steel nylon anchors

Application

- Mechanical fastening of materials to primary substrate

Key Features

- Pre-assembled for perfect compatibility
- Integrated stop for push-through installation
- Anti-rotation lock, prevents anchor spinning in hole
- Combination head drive style with alternatives available
- A4/316 grade stainless steel for ultimate corrosion resistance

Datasheet

Document Reference: [DS-FS-SXRSS-7.17/01](#)

01 FASTENER SYSTEMS
SXR stainless steel nylon
anchors

SXR stainless steel nylon anchors

Fastener	Base material						
	Concrete	Dense natural stone	Cracked concrete	Solid brick	Aircrete	Perforated brick	Hollow block
SXR - A4	✓✓	✓	✓	✓✓	✓	✓✓	✓✓

✓✓ = Recommended for use ✓ = Acceptable for use

Hexagon head

Code	Plug diameter x length (mm)	Max fixing thickness (mm)	Drill size (mm)	Head size (mm)	Min drill depth (mm)
SXR-10 x 60-F-US-A4	10 x 60	10	10	13	70
SXR-10 x 80-F-US-A4	10 x 80	30	10	13	90
SXR-10 x 100-F-US-A4	10 x 100	50	10	13	110
SXR-10 x 120-F-US-A4	10 x 120	70	10	13	130
SXR-10 x 140-F-US-A4	10 x 140	90	10	13	150
SXR-10 x 160-F-US-A4	10 x 160	110	10	13	170
SXR-10 x 180-F-US-A4	10 x 180	130	10	13	190
SXR-10 x 200-F-US-A4	10 x 200	150	10	13	210
SXR-10 x 230-F-US-A4	10 x 230	180	10	13	240
SXR-10 x 260-F-US-A4	10 x 260	210	10	13	270



SXR-10-FUS-A4

Countersunk head

Code	Plug diameter x length (mm)	Max fixing thickness (mm)	Drill size (mm)	Head size (mm)	Min drill depth (mm)
SXR-10 x 60-T-A4	10 x 80	30	10	TX-40	90
SXR-10 x 100-T-A4	10 x 100	50	10	TX-40	110
SXR-10 x 120-T-A4	10 x 120	70	10	TX-40	130
SXR-10 x 140-T-A4	10 x 140	90	10	TX-40	150
SXR-10 x 160-T-A4	10 x 160	110	10	TX-40	170
SXR-10 x 180-T-A4	10 x 180	130	10	TX-40	190
SXR-10 x 200-T-A4	10 x 200	150	10	TX-40	210
SXR-10 x 230-T-A4	10 x 230	180	10	TX-40	240
SXR-10 x 260-T-A4	10 x 260	210	10	TX-40	270



SXR-10-T-A4

FIXFAST Ltd | Merlin House | Seven Mile Lane | Borough Green | Sevenoaks | Kent | TN15 8QY
T: 0845 450 7483 | F: 0845 450 7486 | E: info@fixfast.com | W: www.fixfast.com

Fixfast is a trading name of FIXFAST Ltd which is a company registered in England & Wales with number 09481218.
 The registered office is Fixfast, Merlin House, Seven Mile Lane, Borough Green, Sevenoaks, Kent, United Kingdom TN15 8QY

©Fixfast September 2017. All rights reserved. Due to a policy of continual development, Fixfast reserves the right to change product specification and descriptions without prior notice.



Certificate Number 10905
 ISO 9001: 2008
 ISO 14001: 2004
 BS OHSAS 18001: 2007

SXR steel nylon anchors

Loads

Frame fixing SXR⁴⁾

Highest permissible loads¹⁾ for a single anchor for multiple fixings of non-structural applications in masonry. For the design the complete approval ETA-07/0121 has to be considered.

					Solid brick masonry and perforated brick masonry		
Type	compressive brick strength f_b [N/mm ²]	brick type, naming acc. DIN [-] [-]	min. anchorage depth h_{nom} [mm]	min. member thickness h_{min} [mm]	permissible load F_{perm} ^{3) 5)} [kN]	min. spacing s_{min} ²⁾ [mm]	min. edge distance c_{min} ²⁾ [mm]
Solid brick Mz							
SXR 8	≥ 20	Mz	50	100	0,71	100	100
SXR 10	≥ 20	Mz	50	100	0,86	100	100
Solid sand-lime brick and solid block KS							
SXR 8	≥ 10	KS	50	100	0,71	100	100
SXR 10	≥ 10	KS	50	100	0,86	100	100
Vertically perforated brick HLz							
SXR 8	≥ 20	HLz	50	100	0,34	100	100
SXR 10	≥ 12	HLz	50	100	0,26	100	100
SXR 10	≥ 20	HLz	50	100	0,71	100	100
Perforated sand-lime brick KSL							
SXR 8	≥ 12	KSL	50	100	0,57	100	100
SXR 10	≥ 12	KSL	50	100	0,57	100	100
Hollow block of lightweight aggregate concrete Hbl							
SXR 8	≥ 10	Hbl	50	100	0,71	100	100
SXR 10	≥ 6	Hbl	50	100	0,71	100	100
SXR 10	≥ 10	Hbl	50	100	0,71	100	100
Solid brick and solid block of lightweight aggregate concrete V							
SXR 8	≥ 2	V	50	100	0,34	100	100
SXR 10	≥ 2	V	50	100	0,21	100	100
Aerated concrete blocks and reinforced panels AAC							
SXR 10	≥ 2	AAC	50	100	0,14 ⁷⁾	200	100
SXR 10	≥ 6	AAC	50	100	0,27	200	100

- 1) The required partial safety factors for material resistance as well as a partial safety factor for load actions $L = 1,4$ are considered. As an single anchor counts e.g. an anchor with a minimum spacing s_{min} according table 11 resp. table 15 of the approval.
- 2) Minimum possible axial spacings (anchor group) resp. edge distance 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) 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) Valid for zinc coated screws and for screws made of stainless steel. For exterior use of the zinc coated screws measures against incoming humidity according approval have to be taken.
- 5) The given values for hollow or perforated masonry apply for rotary drilling (without impact). The given loads are reference values which may change due to type of brick and manufacturer. If the embedment depth is higher than $h_{nom} = 50$ mm, job site tests have to be carried out.
- 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) Drill hole created by punching.

FIXFAST Ltd | Merlin House | Seven Mile Lane | Borough Green | Sevenoaks | Kent | TN15 8QY
T: 0845 450 7483 | F: 0845 450 7486 | E: info@fixfast.com | W: www.fixfast.com

Fixfast is a trading name of FIXFAST Ltd which is a company registered in England & Wales with number 09481218.
 The registered office is Fixfast, Merlin House, Seven Mile Lane, Borough Green, Sevenoaks, Kent, United Kingdom TN15 8QY

©Fixfast September 2017. All rights reserved. Due to a policy of continual development, Fixfast reserves the right to change product specification and descriptions without prior notice.



Certificate Number 10905
 ISO 9001: 2008
 ISO 14001: 2004
 BS OHSAS 18001: 2007

SXR steel nylon anchors

Loads

Frame fixing SXR ⁴⁾

Highest permissible loads^{1) 6)} for a single anchor for multiple fixings of non-structural applications in normal concrete \geq C12/15 resp. \geq B15. For the design the complete approval ETA-07/0121 has to be considered.

Type	Cracked or Non-cracked concrete					
	Min. anchorage depth	Min. member thickness	Permissible tensile load	Permissible shear load	Min. spacing	Min. edge distance
	h_{nom} [mm]	h_{min} [mm]	$N_{perm}^{3)}$ [kN]	$V_{perm}^{3)}$	$s_{min}^{2)}$ [mm]	$c_{min}^{2)}$ [mm]
SXR 8	50	100	1,0	1,2 ⁵⁾	50	50
SXR 10	50	100	1,8	2,0 ⁵⁾	50	60

1) The required partial safety factors for material resistance as well as a partial safety factor for load actions $\gamma_{\Lambda} = 1,4$ are considered. As an single anchor counts e.g. an anchor with a spacing $s \geq s_{cr,N}$ and an edge distance $c \geq c_{cr,N}$ according table 8 of the approval.

2) Minimum possible axial spacings (anchor group) resp. edge distance for concrete \geq C16/20 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. Values for concrete C12/15 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) Valid for zinc coated screws and for screws made of stainless steel. For exterior use of the zinc coated screws measures against incoming humidity according approval have to be taken.

5) The permissible shear load determined acc. ETAG 020, Annex C considers exclusively steel failure of the screw. For SXR 8 it amounts $V_{perm} = 4,2$ kN for galvanised screws and $V_{perm} = 3,4$ kN for screws made of stainless steel. For SXR 10 it amounts $V_{perm} = 6,0$ kN. 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.

FIXFAST Ltd | Merlin House | Seven Mile Lane | Borough Green | Sevenoaks | Kent | TN15 8QY
T: 0845 450 7483 | F: 0845 450 7486 | E: info@fixfast.com | W: www.fixfast.com

Fixfast is a trading name of FIXFAST Ltd which is a company registered in England & Wales with number 09481218.

The registered office is Fixfast, Merlin House, Seven Mile Lane, Borough Green, Sevenoaks, Kent, United Kingdom TN15 8QY

©Fixfast September 2017. All rights reserved. Due to a policy of continual development, Fixfast reserves the right to change product specification and descriptions without prior notice.



Certificate Number 10905
 ISO 9001: 2008
 ISO 14001: 2004
 BS OHSAS 18001: 2007