

# XSAM-S

## MALE THREAD CONCRETE SCREW-ANCHOR / 316 (A4) STAINLESS STEEL / C1 SEISMIC RATED

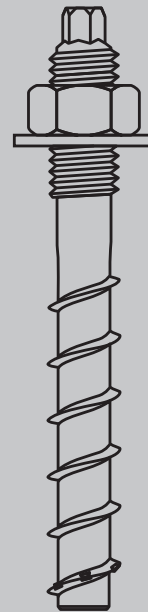
316

CERTIFICATION

TDS

FIRE REPORT

## Technical Data Sheet



**NCC**  
COMPLIANT  
AS 5216



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## XSAM-S

Male Thread Concrete Screw-Anchor,  
316 (A4) Stainless Steel, C1 Seismic Rated

High Performance ●●●●●



- Metric (male) connection thread. Hexagon drive.
- Connecting structural steel or timber to concrete
- Tunnel ceiling connections, pre-set and through-set installations
- 316 (A4) stainless steel for corrosive environments, outdoors

AS 5216 Compliant

ETA Cracked and Uncracked Concrete

C1 Seismic Rated

R30 - R120 Fire Rated, Fire Rated for Tunnels for 10mm

Supported by AFOS Anchor Design Software

### Anchor Summary

Part Number	Description, Dia x L, Dia <sub>thread</sub> x L <sub>thread</sub>	Max. Fixture Thickness, t <sub>fix</sub>	Embedment Depth, h <sub>nom</sub>	Effective Anchor Depth, h <sub>ef</sub>	Drill Hole Dia x Depth, d <sub>0</sub> x h <sub>1</sub>	Min. Concrete Thickness, h <sub>min</sub>	Seismic C1/C2	Design Capacity in 32MPa Cracked Concrete <sup>1)</sup>		Indicative Price Per Fixing <sup>2)</sup>
								Tension	Shear	
1078.0080105	8 x 105mm, M10 x 30mm	39mm	45mm	35mm	8 x 55mm	80mm	- / -	4.2kN	6.0kN	\$13.28
		29mm	55mm	43mm	8 x 65mm		- / -	7.5kN	8.1kN	
		19mm	65mm	52mm	8 x 75mm		✓ / -	10.1kN	10.8kN	
1078.0100140	10 x 140mm, M12 x 35mm	59mm	55mm	43mm	10 x 65mm	80mm	✓ / -	7.5kN	8.1kN	\$17.43
		39mm	75mm	60mm	10 x 85mm		- / -	13.5kN	27.0kN	
		29mm	85mm	68mm	10 x 95mm		102mm	✓ / -	16.2kN	

1) Without concrete edge or anchor spacing influence. Static and quasi-static load such as wind. To consider all design inputs and details, please refer to our AFOS Anchor Design Software or the ETA.

2) Based on a volume of 500+ fixings, as of March 2026.

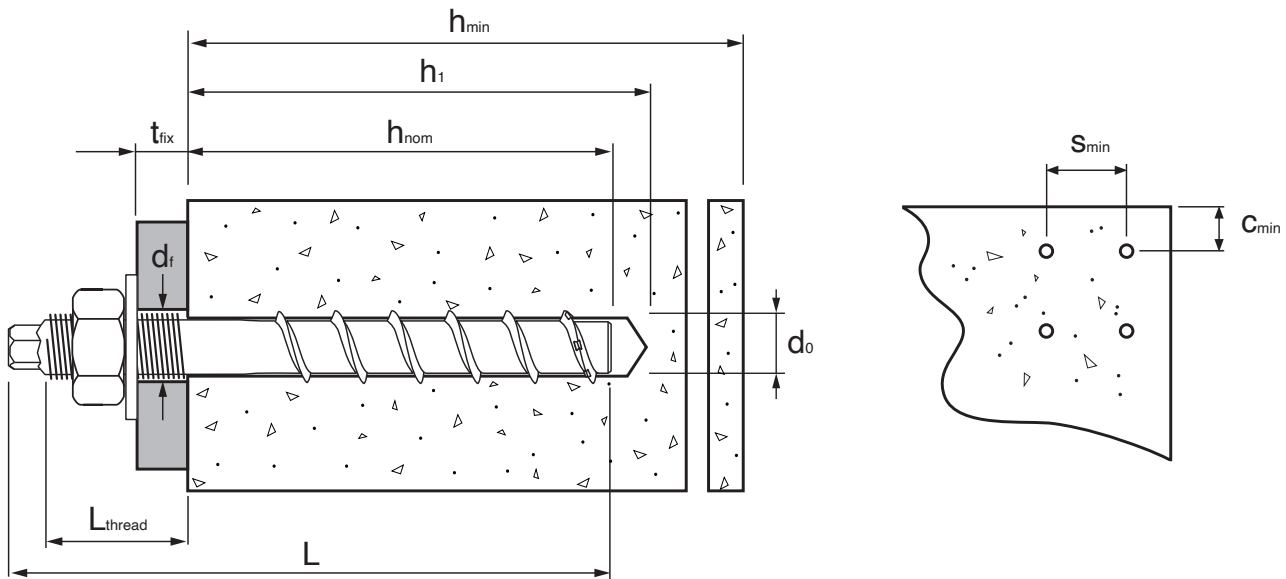
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## Installation Parameters

Anchor Size		[mm]	8			10		
Embedment depth	$h_{nom}$	[mm]	45	55	65	55	75	85
Drill hole diameter	$d_o$	[mm]	8			10		
Depth of drill hole	$h_1 \geq$	[mm]	55	65	75	65	85	95
Diameter of clearance hole in fixture	$d_f \leq$	[mm]	12			14		
Max. installation torque for screws with metric connection thread	$T_{inst} \leq$	[Nm]	20			40		
Tangential impact screw driver <sup>1)</sup>	$T_{imp,max}$	[Nm]	300			400		
Driver	Hex	[mm]	17 / 7			19 / 9		
Minimum thickness of concrete member	$h_{min}$	[mm]	80			80	90	102
Minimum spacing	$s_{min}$	[mm]	40	50		50		
Minimum edge distance	$c_{min}$	[mm]	40	50		50		

1) Installation with tangential impact screw driver, with maximum power output  $T_{imp,max}$  according to manufacturer's instructions is possible.



**Installation Instructions**

Drill hole preparation and cleaning		
<b>1</b>		Drill hole perpendicular to concrete surface. Using a vacuum drill, continue with step 3.
<b>2</b>		Blow out dust or alternatively vacuum clean down to the bottom of the hole.

Install concrete screw-anchor		
<b>3</b>		Screw in anchor by using a torque wrench or impact driver. Ensure specified embedment depth $h_{nom}$ is met.
<b>4</b>		Install fixture. Then, install washer and nut. Apply installation torque $T_{inst}$ by using a calibrated torque wrench or by tool setting $T_{imp,max}$ if using an impact driver.
<b>5</b>		Observe completed setting and full contact of nut and washer with fixture. Nut and washer must be undamaged.

**Adjustment (if needed)**

Adjustment 1		
<b>6</b>		Anchor maybe untightened maximum 10mm.
<b>7</b>		After adjustment, screw in the anchor with a torque wrench or a tangential impact driver.
<b>8</b>		Apply installation torque $T_{inst}$ by using a calibrated torque wrench or by tool setting $T_{imp,max}$ if using an impact driver.
<b>9</b>		After initial adjustment the nut and washer must be in full contact with fixture and must remain undamaged.

Adjustment 2		
<b>10</b>		Anchor maybe untightened a second time by maximum 10mm.
<b>11</b>		After adjustment, screw in the anchor with a torque wrench or a tangential impact driver.
<b>12</b>		Apply installation torque $T_{inst}$ by using a calibrated torque wrench or by tool setting $T_{imp,max}$ if using an impact driver.
<b>13</b>		After the second adjustment the nut and washer must be in full contact with fixture and must remain undamaged.

**Notes:**

1. Adjustment is permitted for fixings with concrete screw anchors size 8mm and 10mm, all anchorage depths
2. The anchor may be adjusted max. 2 times. The anchor must not be screwed back by more than 10mm in each case. The relining carried out during adjustments must not exceed 10mm in total. Specified embedment depth,  $h_{nom}$ , must still be maintained after adjustment.

**For other anchor properties, please refer to the ETA on our website.**



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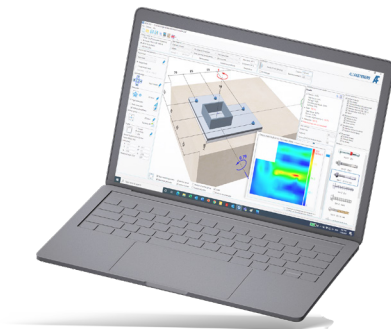
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**AFOS**<sup>®</sup>  
Anchor Design Software

DOWNLOAD

[allfasteners.com.au/afos](https://allfasteners.com.au/afos)



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