

SHARK TWIST 2C multi-purpose anchor

The simple, innovative multi-purpose anchor combines flexibility and ease of installation with an eight-way knot

One anchor. Eight knots.

- The anchor can be inserted flush using just one finger, without the need for a hammer
- Easy to screw in, which allows for quick fastening

For universal use

- For fastening components in conjunction with a screw with a wood thread and metric thread
- Each anchor size can be combined with several screw diameters

High level of safety

- Eight knots with extremely large contact surface provides secure hold
- High load values for anchors in a redundant non-structural system in concrete and masonry in conjunction with the ASSY-D screw, proven in ETA assessment, for greater safety
- Low installation torque and high overtorque
- Overwind protection, prevents overtightening of the anchor in the drill hole

Durability and resistance

- Resistant to rotting, weathering and ageing
- UV-resistant for up to six weeks

Wide range of fastening options

- Ideal for fastening light to medium loads
- Can be used outdoors or in wet rooms in conjunction with a stainless steel screw

Other advantage

- Due to the special plastic combination of the SHARK TWIST, even screws with metric threads can be screwed in without any problems, for example, threaded studs or rods for suspended items in plumbing installations or metric screws



91.1



Material	Polypropylene - PP/polyamide - PA
Colour	White, Anthracite
Min./max. temperature conditions	-40 to 50 °C

Art. no.	5906 806 36	5906 808 46	5906 810 56	5906 812 66	5906 814 76
P. Qty.	200	200	100	50	20
Anchor diameter	6 mm	8 mm	10 mm	12 mm	14 mm
Anchor length (l)	36 mm	46 mm	56 mm	66 mm	76 mm
Nominal drill-bit diameter (d ₀)	6 mm	8 mm	10 mm	12 mm	14 mm
Drill hole depth (t)	45 mm	55 mm	65 mm	75 mm	85 mm
Edge clearance (a _r)	80 mm	80 mm	80 mm	150 mm	150 mm
Embedding depth (h _s)	35 mm	45 mm	55 mm	65 mm	75 mm
Min./max. required screw diameter	4-5 mm	5-6 mm	6-8 mm	8-10 mm	10-12 mm

Can be stored in the ORSY system

Installation parameters: Concrete + masonry

Anchor diameter [mm]		SHARK TWIST 6	SHARK TWIST 8	SHARK TWIST 10	SHARK TWIST 12	SHARK TWIST 14
Nominal drill dia.	d ₀ [mm]	6	8	10	12	14
Dia. of cutting edges	d _{cut} ≤ [mm]	6,4	8,45	10,45	12,5	14,5
Drill hole depth	h ₁ ≥ [mm]	ls + 5 mm - tfix				
Embedment depth of the anchor sleeve	h _{nom} [mm]	35	45	55	65	75
Through hole in the fixture	d _f ≤ [mm]	5,5	6,5	8,5	10,5	12,5

Performance data: Concrete

Anchors in a redundant non-structural system

Anchor diameter		[mm]	SHARK TWIST 6	SHARK TWIST 8	SHARK TWIST 10	SHARK TWIST 12	SHARK TWIST 14
Embedment depth of the anchor sleeve		h _{nom} [mm]	35	45	55	65	75
Centric tension load ¹⁾ for individual anchors or an anchor group	Concrete = C12/15 N _{adm} [kN]	30 °C ²⁾ /50 °C ³⁾	0,48	0,8	1,6	2,2	2,4
	Concrete ≥ C16/20 N _{adm} [kN]	30 °C ²⁾ /50 °C ³⁾	0,6	1,2	2,2	2,8	3,2
Shear load ¹⁾ for individual anchors or an anchor group		V _{adm} [kN]	1,62	2,59	4,67	6,79	8,55
Minimum member thickness		h _{min} [mm]	100	100	100	120	120
Characteristic edge distance	c _{cr} [mm]	C12/15	110	110	110	140	140
		≥ C16/20	80	80	80	100	100
Characteristic spacing	s _{cr} [mm]	C12/15	110	110	130	140	155
		≥ C16/20	80	80	90	100	110
Minimum edge distance ⁴⁾	c _{min} [mm]	C12/15	110	110	110	140	140
		≥ C16/20	80	80	80	100	100
Minimum spacing ⁴⁾	s _{min} [mm]	C12/15	110	110	110	140	140
		≥ C16/20	80	80	80	100	100

¹⁾ The partial safety factors of the resistances regulated in the approval and a partial safety factor of the actions of $\gamma_F = 1.4$ have been taken into account. For the combination of tensile and shear loads, please note EAD 330284-00-0604

²⁾ Maximum long-term temperature

³⁾ Maximum short-term temperature

⁴⁾ Admissible load must be reduced

Performance data: Masonry₄₎, (temperature range 30 °C²⁾/50 °C³⁾)

For other types of stone, raw densities, minimum compressive strengths, edge distances, spacings or temperature ranges, please refer to the assessment ETA-22/0877

Stone type	Stone format [mm]	Raw density class [kg/dm ³]	Minimum compressive strength [N/mm ²]	F _{adm} [kN] ¹⁾⁵⁾ (for individual anchors or an anchor group)		
				SHARK TWIST 10	SHARK TWIST 12	SHARK TWIST 14
Effective anchorage depth	h _{nom} [mm]			55	65	75
Masonry brick Mz, EN 771-1:2011+A1:2015	≥NF (≥240x115x71)	≥ 1.8	10	0,34	0,42	0,42
			12,5	0,42	0,57	0,57
			15	0,57	0,71	0,71
			20	0,71	1,00	1,00
			25	0,85	1,28	1,28
			35	1,28	1,57	1,57
			45	1,71	1,85	2,00
			54,8	1,85	2,00	2,14
Vertically perforated brick HLz, EN 771-1:2011+A1:2015	≥2DF (≥240x115x113)	≥1.2	10	0,21	0,42	0,57
			12,5	0,25	0,57	0,71
			15	0,34	0,57	0,71
			20	0,42	0,71	0,71
			24,1	0,57	0,71	0,71
Solid calcium silicate block KS, EN 771-2:2011+A1:2015	≥NF (≥240x115x71)	≥ 1.8	10	0,34	0,42	0,42
			12,5	0,42	0,57	0,57
			15	0,57	0,71	0,71
			20	0,71	1,00	0,85
			25	1,00	1,28	1,14
			35	1,42	1,57	1,57
			45	1,71	1,85	2,00
			49,4	1,71	1,85	2,00
Solid calcium silicate block KS, EN 771-2:2011+A1:2015	≥4DF (≥248x175x248)	≥ 1.8	10	0,85	1,00	1,00
			12,5	1,00	1,14	1,14
			15	1,14	1,14	1,28
			20	1,28	1,42	1,42
			23,4	1,28	1,42	1,42
Hollow calcium silicate block KS L, EN 771-2:2011+A1:2015	≥2DF (≥240x115x113)	≥ 1.8	10	0,42	0,71	0,71
			12,5	0,57	0,71	0,71
			15	0,57	0,71	0,71
			18,8	0,71	0,71	0,71
Hollow calcium silicate block KS L, EN 771-2:2011+A1:2015	≥8DF (≥248x240x238)	≥ 1.8	7,5	-	0,57	0,71
			10	-	0,71	0,71
Solid blocks made of light-weight concrete V and Vbl, EN 771-3:2011+A1:2015	≥NF (≥240x115x71)	≥1.2	2,5	0,21	0,34	0,42
			5	0,42	0,57	0,57
			7,3	0,57	0,71	0,71
Solid blocks made of light-weight concrete V and Vbl, EN 771-3:2011+A1:2015	≥NF (≥240x115x71)	≥2.0	12,5	0,85	1,14	-
			15	1,00	1,42	-
			20	1,28	1,85	-
			25	1,71	2,00	-
			29	1,85	2,00	-

¹⁾ The partial safety factors of the resistances regulated in the approval and a partial safety factor of the actions of $\gamma_F = 1.4$ have been taken into account. For the combination of tensile and shear loads, please note EAD 330284-00-0604

²⁾ Maximum long-term temperature

³⁾ Maximum short-term temperature

⁴⁾ For other types of stone, raw densities, minimum compressive strengths or temperature ranges, please refer to the >>assessment ETA-22/0877

⁵⁾ The stone geometry should be compared with the assessment ETA-22/0877.

SHARK TWIST load capacities

Anchor size	6	8	10	12	14
Base material	F_{rec} [kN]	F_{rec} [kN]	F_{rec} [kN]	F_{rec} [kN]	F_{rec} [kN]
Concrete $\geq$ C20/25	0,9	1,2	2	3	3,2
Solid brick $\geq$ MZ12	0,6	0,9	1,5	2	2,2
Solid calcium silicate block $\geq$ KSV12	0,7	1,4	2,3	3	3,2
Vertically perforated brick $\geq$ Hlz12	0,25	0,35	0,4	0,5	0,6
Hollow calcium silicate block $\geq$ KSL12	0,5	0,7	1	1,4	1,6
Autoclaved aerated concrete PB2; PP2	0,15	0,2	0,25	0,4	0,5
Gypsum building panels $\rho \geq 0.85 \text{ kg/dm}^3$	0,22	0,35	0,5	0,6	0,7
Gypsum plasterboard dia. = 12.5 mm	0,1	0,2	0,2	-	-
Gypsum plasterboard dia. = 25 mm	0,2	0,25	0,35	-	-
Gypsum fibreboard dia. = 10 mm	0,3	0,35	0,45	-	-

Stone type	Mirror thick- ness d_u [mm]	Minimum compressive strength [N/ mm ²]	F_{adm} [kN] ¹⁾⁵⁾ (for individual anchors or an anchor group)				
			SHARK TWIST 6	SHARK TWIST 8	SHARK TWIST 10	SHARK TWIST 12	SHARK TWIST 14
Effective anchorage depth	h_{nom} [mm]		35	45	55	65	75
Hollow-core prestressed concrete EN 206:2013+A1:2016	≥ 25	$\geq$ C30/37	0,30	0,48	0,48	0,48	0,48
	≥ 40	$\geq$ C30/37	0,60	0,60	0,60	0,60	0,60

¹⁾ The partial safety factors of the resistances regulated in the approval and a partial safety factor of the actions of $\gamma_F = 1.4$ have been taken into account. For the combination of tensile and shear loads, please note EAD 330284-00-0604

²⁾ Maximum long-term temperature

³⁾ Maximum short-term temperature

⁴⁾ For other types of stone, raw densities, minimum compressive strengths or temperature ranges, please refer to the assessment ETA-22/0877

⁵⁾ The stone geometry should be compared with the assessment ETA-22/0877.

Assignment of metric fasteners by anchor size

	Anchor dia. 6	Anchor dia. 8	Anchor dia. 10	Anchor dia. 12	Anchor dia. 14
Suitable screw diameter (wood thread)	4 to 5 mm	5 to 6 mm	6 to 8 mm	8 to 10 mm	10 to 12 mm
Suitable screw diameters (metric) - solid and perforated construction materials	M4	M5	M6	M8	M10
Suitable screw diameters (metric) - panel mate- rials	M3	M4	M5	-	-

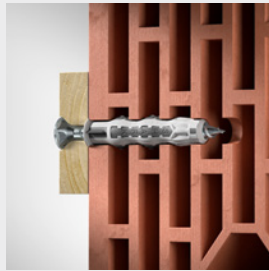
Details/Application

- Universal plastic anchor
- Can be used in concrete, solid brick, solid sand-lime block, vertically perforated brick, hollow sand-lime block, autoclaved aerated concrete, gypsum plasterboard, gypsum fibreboard
- Suitable for fastening light to medium loads, such as curtain rails, wall shelves, lightweight hanging cabinets, picture frames, mirrors, lamps, cable ducts, cable clamps, electrical switches, washbasins, towel rails, information signs and motion detectors

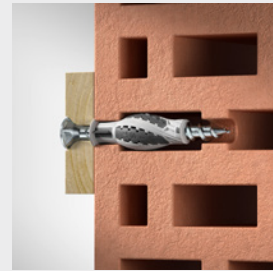




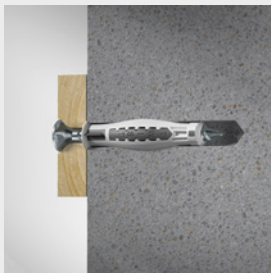
Autoclaved aerated (cellular) concrete



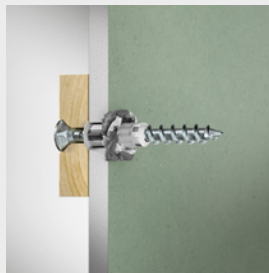
Vertically perforated brick with small bars



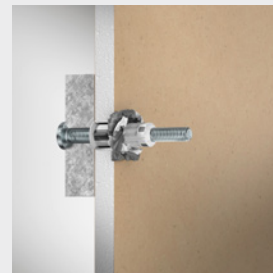
Vertically perforated bricks with lateral bars



Concrete



Panel materials with chipboard screw



Panel materials with metric screw

Instructions

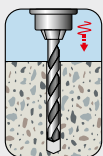


Inserting the anchor

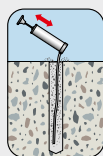


Can be used with one finger without a hammer

Application in concrete and solid brick



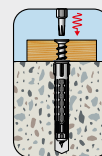
Drill the hole



Remove drill cuttings from drill hole

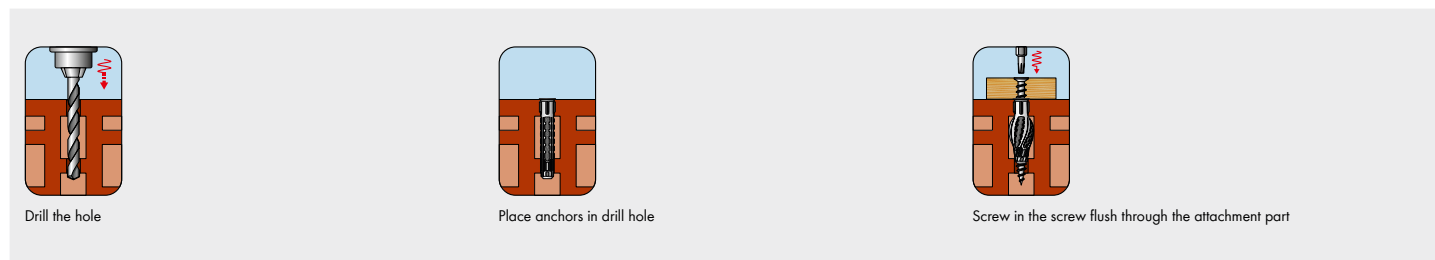


Place anchors in drill hole

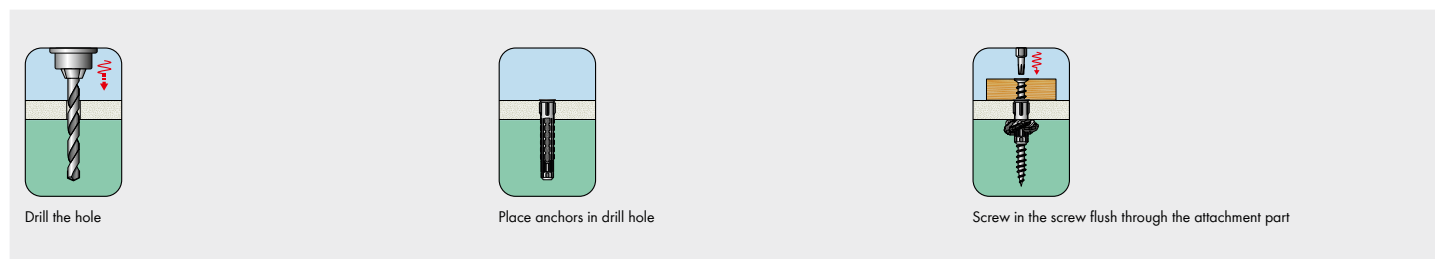


Screw in the screw flush through the attachment part

Use in the perforated construction material



Use in panel material



Proof of performance

ETA-22/0877



Notice

For installation, we recommend the ASSY-D screw.

Related products		Art. no.
2C SHARK® TWIST multi-purpose anchor assortment 450 pieces		5964 590 680
Related products for	Designation	Art. no.
5906 806 36	ASSY® D plug screw Countersunk head	0151 020 503
	ASSY® D plug screw Countersunk head	0151 020 505
	ASSY® D plug screw Countersunk head	0151 020 506
	ASSY® D plug screw Pan head, without drill tip	0153 020 503
	ASSY® D plug screw Pan head, without drill tip	0153 020 505
	Plus Quadro-L Vario hammer drill bit	0648 056 011

Related products for	Designation	Art. no.
5906 808 46	ASSY® D plug screw Countersunk head	0151 020 601
	ASSY® D plug screw Countersunk head	0151 020 603
	ASSY® D plug screw Countersunk head	0151 020 605
	ASSY® D plug screw Pan head, without drill tip	0153 020 601
	ASSY® D plug screw Pan head, without drill tip	0153 020 603
	Plus Quadro-L Vario hammer drill bit	0648 058 011
5906 810 56	ASSY® D plug screw Countersunk head	0151 020 802
	ASSY® D plug screw Pan head, without drill tip	0153 020 802
	Plus Quadro-L Vario hammer drill bit	0648 051 016
5906 812 66	ASSY® D plug screw Countersunk head	0151 021 001
	ASSY® D plug screw Pan head, without drill tip	0153 021 001
	Plus Quadro-L Vario hammer drill bit	0648 051 216
5906 814 76	Plus Quadro-L Vario hammer drill bit	0648 051 421