

Technický list

SIMPSON

Strong-Tie

ATS-evo

Heavy duty safety bolt with seismic certification

Force-controlled expansion anchor for heavy loads in sizes M10 - M24 for anchoring in cracked and non-cracked concrete C20/25 - C50/60, as well as for seismic areas. Seismic actions of the performance category C1/C2

Applications

Material

White zinc plated

Benefits

- Seismic performance C1 and C2
- Cracked concrete
- Fire resistance R120

Applications

- Steel constructions
- Industrial construction
- Steel and metal construction (railings, brackets, etc.)
- Anchorages for gates and machines
- Cable routes / pipe installations
- Seismic effects of category C1/C2
- Fire impact R30 to R120
- Sprinkler systems / shelters

Suitable for

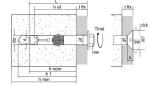
Cracked and un-cracked concrete



ATS-evo
Heavy duty safety bolt with seismic certification

Technical Data

ATS-evo B



Art. nr.	Product Reference	Type	Plug dimensions [ØxL] [mm]	Min. drill depth [mm]	Max. fixing thickness [mm]	Embedment depth [mm]	Ø drilling fixture [mm]	Min. support thickness [mm]	Installation torque [Nm]	Wrench size [SW] [mm]	Qty per box
79402B1509000	ATS-evo B	15/10-M10	15x90	95	10	67	17	140	45	17	20
79402B1510000	ATS-evo B	15/20-M10	15x100		20	67	17	140	45	17	20
79402B1513000	ATS-evo B	15/50-M10	15x130		50	67	17	140	45	17	20
79402B1518000	ATS-evo B	15/100-M10	15x180		100	67	17	140	45	17	20
79402B1812500	ATS-evo B	18/25-M12	18x125	100	25	88	20	180	80	19	20
79402B1820000	ATS-evo B	18/100-M12	18x200		100	88	20	180	80	19	20
79402B2412500	ATS-evo B	24/10-M16	24x125	130	10	99	26	200	150	24	10
79402B2414000	ATS-evo B	24/25-M16	24x140		25	99	26	200	150	24	10
79402B2416500	ATS-evo B	24/50-M16	24x165		50	99	26	200	150	24	10
79402B2421500	ATS-evo B	24/100-M16	24x215		100	99	26	200	150	24	10

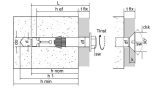
*Seismic certification category C1 only

Technický list

SIMPSON

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ATS-evo
Heavy duty safety bolt with seismic certification



ATS-evo S

Art. nr.	Product Reference	Type	Plug dimensions [ØxL] [mm]	Min. drill depth [mm]	Max. fixing thickness [mm]	Embedment depth [mm]	Ø drilling fixture [mm]	Min. support thickness [mm]	Installation torque [Nm]	Wrench [SW]	Qty per box
79302B1509000	ATS-evo S	15/10-M10	15x90	95	10	67	17	140	45	17	20
79302B1510000	ATS-evo S	15/20-M10	15x100		20	67	17	140	45	17	20
79302B1513000	ATS-evo S	15/50-M10	15x130		50	67	17	140	45	17	20
79302B1518000	ATS-evo S	15/100-M10	15x180		100	67	17	140	45	17	20
79302B1811000	ATS-evo S	18/10-M12	18x110	100	10	88	20	180	80	19	20
79302B1812500	ATS-evo S	18/25-M12	18x125		25	88	20	180	80	19	20
79302B1815000	ATS-evo S	18/50-M12	18x150		50	88	20	180	80	19	20
79302B1820000	ATS-evo S	18/100-M12	18x200		100	88	20	180	80	19	20
79302B2412500	ATS-evo S	24/10-M16	24x125	130	10	99	26	200	150	24	10
79302B2414000	ATS-evo S	24/25-M16	24x140		25	99	26	200	150	24	10
79302B2416500	ATS-evo S	24/50-M16	24x165		50	99	26	200	150	24	10
79302B2421500	ATS-evo S	24/100-M16	24x215		100	99	26	200	150	24	10
79302B2816000	ATS-evo S	28/10-M20	28x155	145	10	125	31	250	170	30	4
79302B2818000	ATS-evo S	28/30-M20	28x175		30	125	31	250	170	30	4
79302B2821000	ATS-evo S	28/60-M20	28x205		60	125	31	250	170	30	4
79302B2825000	ATS-evo S	28/100-M20	28x245		100	125	31	250	170	30	4
79302B3218000	ATS-evo S	32/10-M24	32x175	180	10	150	35	300	200	36	4
79302B3220000	ATS-evo S	32/30-M24	32x195		30	150	35	300	200	36	4
79302B3223000	ATS-evo S	32/60-M24	32x225		60	150	35	300	200	36	4

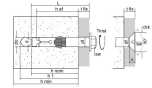
*Seismic certification category C1 only

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Heavy duty safety bolt with seismic certification



ATS-evo SK

Art. nr.	Product Reference	Type	Plug dimensions [ØxL] [mm]	Min. drill depth [mm]	Max. fixing thickness [mm]	Embedment depth [mm]	Ø drilling fixture [mm]	Min. support thickness [mm]	Installation torque [Nm]	Wrench [SW]	Qty per box
79303B1509000	ATS-evo SK	15/17-M10	15x90	95	17	67	17	140	45	8	20
79303B1510000	ATS-evo SK	15/27-M10	15x100		27	67	17	140	45	8	20
79303B1812500	ATS-evo SK	18/33-M12	18x125	100	33	88	20	180	80	10	20

*Seismic certification category C1 only

ATS-evo Heavy duty safety bolt with seismic certification

Recommended loads / non-cracked concrete / for single anchors / with no edge distances or spacings - ETA-10/0423

Art. nr.	Product Reference	Type	Non-cracked concrete								Bending moment M_{rec} [Nm]
			Tension - N_{rec}				Shear - V_{rec}				
			C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	
79402B1509000	ATS-evo B	15/10-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79402B1510000	ATS-evo B	15/20-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79402B1513000	ATS-evo B	15/50-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79402B1518000	ATS-evo B	15/100-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79402B1812500	ATS-evo B	18/25-M12	19.9	24.3	28.1	30.8	22.9	22.9	22.9	22.9	60
79402B1820000	ATS-evo B	18/100-M12	19.9	24.3	28.1	30.8	22.9	22.9	22.9	22.9	60
79402B2412500	ATS-evo B	24/10-M16	23.7	28.9	33.4	36.7	44.3	44.3	44.3	44.3	150
79402B2414000	ATS-evo B	24/25-M16	23.7	28.9	33.4	36.7	44.3	44.3	44.3	44.3	150
79402B2416500	ATS-evo B	24/50-M16	23.7	28.9	33.4	36.7	44.3	44.3	44.3	44.3	150
79402B2421500	ATS-evo B	24/100-M16	23.7	28.9	33.4	36.7	44.3	44.3	44.3	44.3	150
79302B1509000	ATS-evo S	15/10-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79302B1510000	ATS-evo S	15/20-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79302B1513000	ATS-evo S	15/50-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79302B1518000	ATS-evo S	15/100-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79302B1811000	ATS-evo S	18/10-M12	19.9	24.3	28.1	30.8	22.9	22.9	22.9	22.9	60
79302B1812500	ATS-evo S	18/25-M12	19.9	24.3	28.1	30.8	22.9	22.9	22.9	22.9	60
79302B1815000	ATS-evo S	18/50-M12	19.9	24.3	28.1	30.8	22.9	22.9	22.9	22.9	60
79302B1820000	ATS-evo S	18/100-M12	19.9	24.3	28.1	30.8	22.9	22.9	22.9	22.9	60
79302B2412500	ATS-evo S	24/10-M16	23.7	28.9	33.4	36.7	44.3	44.3	44.3	44.3	150
79302B2414000	ATS-evo S	24/25-M16	23.7	28.9	33.4	36.7	44.3	44.3	44.3	44.3	150
79302B2416500	ATS-evo S	24/50-M16	23.7	28.9	33.4	36.7	44.3	44.3	44.3	44.3	150
79302B2421500	ATS-evo S	24/100-M16	23.7	28.9	33.4	36.7	44.3	44.3	44.3	44.3	150
79302B2816000	ATS-evo S	28/10-M20	33.6	41	47.4	52.1	57.1	57.1	57.1	57.1	310
79302B2818000	ATS-evo S	28/30-M20	33.6	41	47.4	52.1	57.1	57.1	57.1	57.1	310
79302B2821000	ATS-evo S	28/60-M20	33.6	41	47.4	52.1	57.1	57.1	57.1	57.1	310

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Art. nr.	Product Reference	Type	Non-cracked concrete								Bending moment M_{rec} [Nm]
			Tension - N_{rec}				Shear - V_{rec}				
			C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	
79302B2825000	ATS-evo S	28/100-M20	33.6	41	47.4	52.1	57.1	57.1	57.1	57.1	310
79302B3218000	ATS-evo S	32/10-M24	44.1	53.8	62.2	68.4	69	69	69	69	530
79302B3220000	ATS-evo S	32/30-M24	44.1	53.8	62.2	68.4	69	69	69	69	530
79302B3223000	ATS-evo S	32/60-M24	44.1	53.8	62.2	68.4	69	69	69	69	530
79303B1509000	ATS-evo SK	15/17-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79303B1510000	ATS-evo SK	15/27-M10	13.2	16.1	18.6	20.5	19.2	19.2	19.2	19.2	34
79303B1812500	ATS-evo SK	18/33-M12	19.9	24.3	28.1	30.8	22.9	22.9	22.9	22.9	60

ATS-evo
Heavy duty safety bolt with seismic certification

Recommended loads / cracked concrete / for single anchors / with no edge distances or spacings - ETA-10/0423

Art. nr.	Product Reference	Type	cracked concrete								Bending moment M_{rec} [Nm]
			Tension - N_{rec}				Shear - V_{rec}				
			C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	
79402B1509000	ATS-evo B	15/10-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79402B1510000	ATS-evo B	15/20-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79402B1513000	ATS-evo B	15/50-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79402B1518000	ATS-evo B	15/100-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79402B1812500	ATS-evo B	18/25-M12	11.9	14.5	16.8	18.5	22.9	22.9	22.9	22.9	60
79402B1820000	ATS-evo B	18/100-M12	11.9	14.5	16.8	18.5	22.9	22.9	22.9	22.9	60
79402B2412500	ATS-evo B	24/10-M16	16.9	20.6	23.9	26.1	32.3	44.3	44.3	44.3	150
79402B2414000	ATS-evo B	24/25-M16	16.9	20.6	23.9	26.1	32.3	44.3	44.3	44.3	150
79402B2416500	ATS-evo B	24/50-M16	16.9	20.6	23.9	26.1	32.3	44.3	44.3	44.3	150
79402B2421500	ATS-evo B	24/100-M16	16.9	20.6	23.9	26.1	32.3	44.3	44.3	44.3	150
79302B1509000	ATS-evo S	15/10-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79302B1510000	ATS-evo S	15/20-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79302B1513000	ATS-evo S	15/50-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79302B1518000	ATS-evo S	15/100-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79302B1811000	ATS-evo S	18/10-M12	11.9	14.5	16.8	18.5	22.9	22.9	22.9	22.9	60
79302B1812500	ATS-evo S	18/25-M12	11.9	14.5	16.8	18.5	22.9	22.9	22.9	22.9	60
79302B1815000	ATS-evo S	18/50-M12	11.9	14.5	16.8	18.5	22.9	22.9	22.9	22.9	60
79302B1820000	ATS-evo S	18/100-M12	11.9	14.5	16.8	18.5	22.9	22.9	22.9	22.9	60
79302B2412500	ATS-evo S	24/10-M16	16.9	20.6	23.9	26.1	32.3	44.3	44.3	44.3	150
79302B2414000	ATS-evo S	24/25-M16	16.9	20.6	23.9	26.1	32.3	44.3	44.3	44.3	150
79302B2416500	ATS-evo S	24/50-M16	16.9	20.6	23.9	26.1	32.3	44.3	44.3	44.3	150
79302B2421500	ATS-evo S	24/100-M16	16.9	20.6	23.9	26.1	32.3	44.3	44.3	44.3	150
79302B2816000	ATS-evo S	28/10-M20	23.9	29.1	33.9	37.1	45.8	56.1	57.1	57.1	310
79302B2818000	ATS-evo S	28/30-M20	23.9	29.1	33.9	37.1	45.8	56.1	57.1	57.1	310
79302B2821000	ATS-evo S	28/60-M20	23.9	29.1	33.9	37.1	45.8	56.1	57.1	57.1	310

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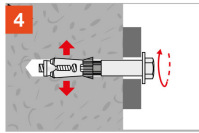
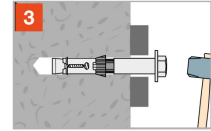
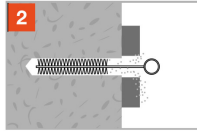
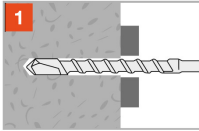
ATS-evo

Heavy duty safety bolt with seismic certification

Art. nr.	Product Reference	Type	cracked concrete								Bending moment M_{rec} [Nm]
			Tension - N_{rec}				Shear - V_{rec}				
			C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	C20/25 [kN]	C30/37 [kN]	C40/50 [kN]	C50/60 [kN]	
79302B2825000	ATS-evo S	28/100-M20	23.9	29.1	33.9	37.1	45.8	56.1	57.1	57.1	310
79302B3218000	ATS-evo S	32/10-M24	31.5	38.2	44.6	48.8	60.4	69	69	69	530
79302B3220000	ATS-evo S	32/30-M24	31.5	38.2	44.6	48.8	60.4	69	69	69	530
79302B3223000	ATS-evo S	32/60-M24	31.5	38.2	44.6	48.8	60.4	69	69	69	530
79303B1509000	ATS-evo SK	15/17-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79303B1510000	ATS-evo SK	15/27-M10	7.6	9.3	10.7	11.8	18	19.2	19.2	19.2	34
79303B1812500	ATS-evo SK	18/33-M12	11.9	14.5	16.8	18.5	22.9	22.9	22.9	22.9	60

ATS-evo
Heavy duty safety bolt with seismic certification

Installation



ATS-evo Heavy duty safety bolt with seismic certification

Spacing and edge distances

Art. nr.	Product Reference	Type	Spacing and edge distances			
			Min. edge distance [cmin] [mm]	Min. spacing [smin] [mm]	Characteristic edge distance [ccr,N] [mm]	Characteristic spacing(5) - Scr,N [scr,N] [mm]
79402B1509000	ATS-evo B	15/10-M10	70	70	101	201
79402B1510000	ATS-evo B	15/20-M10	70	70	101	201
79402B1513000	ATS-evo B	15/50-M10	70	70	101	201
79402B1518000	ATS-evo B	15/100-M10	70	70	101	201
79402B1812500	ATS-evo B	18/25-M12	80	80	132	264
79402B1820000	ATS-evo B	18/100-M12	80	80	132	264
79402B2412500	ATS-evo B	24/10-M16	100	100	149	297
79402B2414000	ATS-evo B	24/25-M16	100	100	149	297
79402B2416500	ATS-evo B	24/50-M16	100	100	149	297
79402B2421500	ATS-evo B	24/100-M16	100	100	149	297
79302B1509000	ATS-evo S	15/10-M10	70	70	101	201
79302B1510000	ATS-evo S	15/20-M10	70	70	101	201
79302B1513000	ATS-evo S	15/50-M10	70	70	101	201
79302B1518000	ATS-evo S	15/100-M10	70	70	101	201
79302B1811000	ATS-evo S	18/10-M12	80	80	132	264
79302B1812500	ATS-evo S	18/25-M12	80	80	132	264
79302B1815000	ATS-evo S	18/50-M12	80	80	132	264
79302B1820000	ATS-evo S	18/100-M12	80	80	132	264
79302B2412500	ATS-evo S	24/10-M16	100	100	149	297
79302B2414000	ATS-evo S	24/25-M16	100	100	149	297
79302B2416500	ATS-evo S	24/50-M16	100	100	149	297
79302B2421500	ATS-evo S	24/100-M16	100	100	149	297
79302B2816000	ATS-evo S	28/10-M20	125	125	188	375
79302B2818000	ATS-evo S	28/30-M20	125	125	188	375
79302B2821000	ATS-evo S	28/60-M20	125	125	188	375
79302B2825000	ATS-evo S	28/100-M20	125	125	188	375
79302B3218000	ATS-evo S	32/10-M24	150	150	225	450

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Art. nr.	Product Reference	Type	Spacing and edge distances			
			Min. edge distance [cmin] [mm]	Min. spacing [smin] [mm]	Characteristic edge distance [ccr,N] [mm]	Characteristic spacing(5) - Scr,N [scr,N] [mm]
79302B3220000	ATS-evo S	32/30-M24	150	150	225	450
79302B3223000	ATS-evo S	32/60-M24	150	150	225	450
79303B1509000	ATS-evo SK	15/17-M10	70	70	101	201
79303B1510000	ATS-evo SK	15/27-M10	70	70	101	201
79303B1812500	ATS-evo SK	18/33-M12	80	80	132	264

ATS-evo
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