PRODUCT DATA SHEET SAWTEC

PRODUCT DESCRIPTION

SawTec is a wood screw with special screw tip and **saw teeth under the plate head.** The screw has a **two-stage cylinder head.** The special geometry of the screw tip **reduces screw-in torque** and also **avoids splitting effect when screwing in.**

ADVANTAGES

- Quicker and easier screwing in with DAG tip
- DAG tip reduces screw-in torque
- Lower splitting effect
- European Technical Approval (ETA)
- Saw teeth under the head reduce chipping
- TX drive prevents screws from knocking when screwed in
- Suitable for service classes 1 and 2

CERTIFICATION

- European Technical Assessment ETA-11/0024 - Self-tapping screws as wood fasteners

APPLICATION IMAGES

Compared to the plate head screw, the head of the Sawtec is lowered like that of a countersunk screw, due to its saw teeth.

Also suitable for steel / timber connections.

E.u.r.o.Tec GmbH • Unter dem Hofe 5 • D-58099 Hagen
Tel. +49 2331 62 45-0 • Fax +49 2331 62 45-200 • E-Mail info@eurotec.team

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MATERIAL

- Tempered carbon steel, blue zinc-plated

ARTICLE TABLE

SawTec, blue zinc-plated							
Art. no.	Dimensions Ød x L [mm]	Thread length lg [mm]	Head diameter Ødh [mm]	BHD* [mm]	BHH** [mm]	Drive	PU
954115	5,0 x 40	24	10,5	5,5	3,3	TX25 •	200
954117	5,0 x 50	30	10,5	5,5	3,3	TX25 •	200
954118	5,0 x 60	36	10,5	5,5	3,3	TX25 •	200
954119	5,0 x 70	42	10,5	5,5	3,3	TX25 •	200
954120	5,0 x 80	48	10,5	5,5	3,3	TX25 •	200
954121	5,0 x 90	54	10,5	5,5	3,3	TX25 •	200
954122	5,0 x 100	60	10,5	5,5	3,3	TX25 •	200
954124	5,0 x 120	60	10,5	5,5	3,3	TX25 •	200

*BHD = Bottom Head Diameter / *BHH = Bottom Head Height

SawTec, blue zinc-plated							
Art. no.	Dimensions Ød x L [mm]	Thread length lg [mm]	Head diameter Ødh [mm]	BHD* [mm]	BHH** [mm]	Drive	PU
954128	6,0 x 60	36	13,0	6,5	3,7	TX30 •	100
954129	6,0 x 70	42	13,0	6,5	3,7	TX30 •	100
954130	6,0 x 80	48	13,0	6,5	3,7	TX30 •	100
954131	6,0 x 100	60	13,0	6,5	3,7	TX30 •	100
954133	6,0 x 120	60	13,0	6,5	3,7	TX30 •	100
954135	6,0 x 140	70	13,0	6,5	3,7	TX30 •	100
954137	6,0 x 160	70	13,0	6,5	3,7	TX30 •	100
954138	6,0 x 180	70	13,0	6,5	3,7	TX30 •	100
954139	6,0 x 200	70	13,0	6,5	3,7	TX30 •	100
954140	6,0 x 220	70	13,0	6,5	3,7	TX30 •	100
954141	6,0 x 240	70	13,0	6,5	3,7	TX30 •	100
954142	6,0 x 260	70	13,0	6,5	3,7	TX30 •	100
954143	6,0 x 280	70	13,0	6,5	3,7	TX30 •	100
954144	6,0 x 300	70	13,0	6,5	3,7	TX30 •	100

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SawTec, blue zinc-plated							
Art. no.	Dimensions Ød x L [mm]	Thread length lg [mm]	Head diameter Ødh [mm]	BHD* [mm]	BHH** [mm]	Drive	PU
954145	8,0 x 80	48	18,0	10,25	4,5	TX40 •	50
954146	8,0 x 100	60	18,0	10,25	4,5	TX40 •	50
954147	8,0 x 120	60	18,0	10,25	4,5	TX40 •	50
954148	8,0 x 140	95	18,0	10,25	4,5	TX40 •	50
954149	8,0 x 160	95	18,0	10,25	4,5	TX40 •	50
954150	8,0 x 180	95	18,0	10,25	4,5	TX40 •	50
954151	8,0 x 200	95	18,0	10,25	4,5	TX40 •	50
954152	8,0 x 220	95	18,0	10,25	4,5	TX40 •	50

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ARTICLE TABLE

SawTec, blue zinc-plated							
Art. no.	Dimensions Ød x L [mm]	Thread length lg [mm]	Head diameter Ødh [mm]	BHD* [mm]	BHH** [mm]	Drive	PU
954153	8,0 x 240	95	18,0	10,25	4,5	TX40 •	50
954154	8,0 x 260	95	18,0	10,25	4,5	TX40 •	50
954155	8,0 x 280	95	18,0	10,25	4,5	TX40 •	50
954156	8,0 x 300	95	18,0	10,25	4,5	TX40 •	50
954157	8,0 x 320	95	18,0	10,25	4,5	TX40 •	50
954158	8,0 x 340	95	18,0	10,25	4,5	TX40 •	50
954159	8,0 x 360	95	18,0	10,25	4,5	TX40 •	50
954160	8,0 x 380	95	18,0	10,25	4,5	TX40 •	50
954161	8,0 x 400	95	18,0	10,25	4,5	TX40 •	50
954181	8,0 x 420	95	18,0	10,25	4,5	TX40 •	50
954182	8,0 x 440	95	18,0	10,25	4,5	TX40 •	50
954183	8,0 x 460	95	18,0	10,25	4,5	TX40 •	50
954184	8,0 x 480	95	18,0	10,25	4,5	TX40 •	50
954185	8,0 x 500	95	18,0	10,25	4,5	TX40 •	50
954186	8,0 x 550	95	18,0	10,25	4,5	TX40 •	50
954187	8,0 x 600	95	18,0	10,25	4,5	TX40 •	50

*BHD = Bottom Head Diameter / *BHH = Bottom Head Height

SawTec, blue zinc-plated							
Art. no.	Dimensions Ød x L [mm]	Thread length lg [mm]	Head diameter Ødh [mm]	BHD* [mm]	BHH** [mm]	Drive	PU
954162	10,0 x 100	60	22,0	11	5	TX50 •	50
954163	10,0 x 120	60	22,0	11	5	TX50 •	50
954164	10,0 x 140	95	22,0	11	5	TX50 •	50
954165	10,0 x 160	95	22,0	11	5	TX50 •	50
954166	10,0 x 180	95	22,0	11	5	TX50 •	50
954167	10,0 x 200	95	22,0	11	5	TX50 •	50
954168	10,0 x 220	95	22,0	11	5	TX50 •	50
954169	10,0 x 240	95	22,0	11	5	TX50 •	50
954170	10,0 x 260	95	22,0	11	5	TX50 •	50
954171	10,0 x 280	95	22,0	11	5	TX50 •	50
954172	10,0 x 300	95	22,0	11	5	TX50 •	50
954173	10,0 x 320	95	22,0	11	5	TX50 •	50
954174	10,0 x 340	95	22,0	11	5	TX50 •	50
954175	10,0 x 360	95	22,0	11	5	TX50 •	25
954176	10,0 x 380	95	22,0	11	5	TX50 •	25
954177	10,0 x 400	95	22,0	11	5	TX50 •	25

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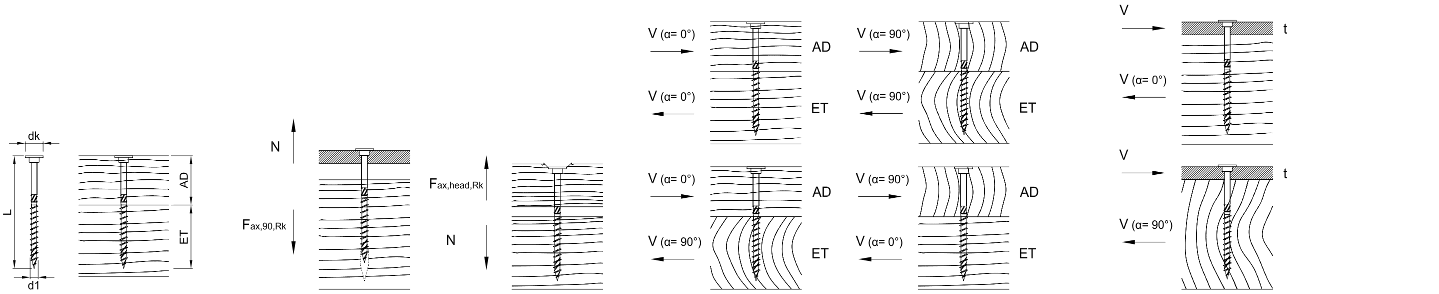
TECHNICAL INFORMATION

Dimensions				Extraction resistance	Head pull-through resistance	Shearing timber-timber				Shearing steel-timber		



d1 x L [mm]	dk [mm]	AD [mm]	ET [mm]	$F_{ax,90,Rk}$ [kN]	$F_{ax,head,Rk}$ [kN]	$F_{la,Rk}$ [kN]	$F_{la,Rk}$ [kN]	$F_{la,Rk}$ [kN]	$F_{la,Rk}$ [kN]	t [mm]	$F_{la,Rk}$ [kN]	$F_{la,Rk}$ [kN]
								α_{AD}= 0°	α_{AD}= 90°			
						α= 0°	α=90°	α_{ET}= 90°	α_{ET}= 0°		α= 0°	α= 90°
5,0 x 40	10,5	16	24	1,45	1,10	1,09				2	1,44	
5,0 x 50	10,5	20	30	1,82	1,10	1,22				2	1,67	
5,0 x 60	10,5	24	36	2,18	1,10	1,31				2	1,76	
5,0 x 70	10,5	28	42	2,54	1,10	1,41				2	1,85	
5,0 x 80	10,5	32	48	2,90	1,10	1,49				2	1,94	
5,0 x 90	10,5	36	54	3,27	1,10	1,49				2	2,03	
5,0 x 100	10,5	40	60	3,63	1,10	1,49				2	2,12	
5,0 x 120	10,5	60	60	3,63	1,10	1,49				2	2,12	
6,0 x 60	13,0	24	36	2,46	1,69	1,70				2	2,26	
6,0 x 70	13,0	28	42	2,87	1,69	1,81				2	2,36	
6,0 x 80	13,0	32	48	3,28	1,69	1,92				2	2,46	
6,0 x 100	13,0	40	60	4,10	1,69	2,07				2	2,67	
6,0 x 120	13,0	60	60	4,10	1,69	2,07				2	2,67	
6,0 x 140	13,0	70	70	4,79	1,69	2,07				2	2,84	
6,0 x 160	13,0	90	70	4,79	1,69	2,07				2	2,84	
6,0 x 180	13,0	110	70	4,79	1,69	2,07				2	2,84	
6,0 x 200	13,0	130	70	4,79	1,69	2,07				2	2,84	
6,0 x 220	13,0	150	70	4,79	1,69	2,07				2	2,84	
6,0 x 240	13,0	170	70	4,79	1,69	2,07				2	2,84	
6,0 x 260	13,0	190	70	4,79	1,69	2,07				2	2,84	
6,0 x 280	13,0	210	70	4,79	1,69	2,07				2	2,84	
6,0 x 300	13,0	230	70	4,79	1,69	2,07				2	2,84	

Dimensioning according to ETA-11/0024. Bulk density ρ_k= 350 kg/m³. All stated mechanical values must be considered as dependent on the assumptions made and represent design examples.
All values are calculated minimum values and subject to typesetting and printing errors.
a) The characteristic values for the load-bearing capacity R_k must not be equated with the max. possible action (the max. force). Characteristic values for the load-bearing capacity R_k must be reduced to the design values R_d with regard to the service and load duration class: $R_d = R_k \cdot k_{mod} / \gamma_M$. The design values for the load-bearing capacity R_d must be compared with the design values for the actions E_d ($R_d \geq E_d$).

Example:

Characteristic value for the continuous action (dead load) G_k= 2.00 kN and variable action, e.g. snow load Q_k= 3,00 kN. k_{mod}= 0,9. γ_M= 1,3.
→ Design value of the action E_d= 2,00 · 1,35 + 3,00 · 1,5= 7,20 kN.
The load-bearing capacity of the connection is considered to be proven if $R_d \geq E_d$. → min $R_k = R_d \cdot \gamma_M / k_{mod}$
That is to say that the characteristic minimum value for the load-bearing capacity is calculated as: min $R_k = R_d \cdot \gamma_M / k_{mod}$ → R_k= 7,20 kN · 1,3/0,9= 10,40 kN → Comparison with the table values.

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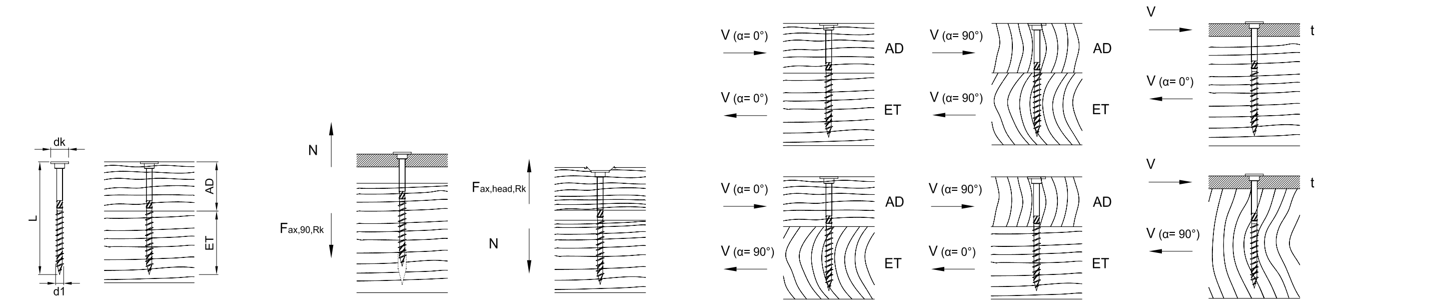
TECHNICAL INFORMATION



Dimensions				Extraction resistance	Head pull-through resistance	Shearing timber-timber				Shearing steel-timber		
d1 x L [mm]	dk [mm]	AD [mm]	ET [mm]	$F_{ax,90,Rk}$ [kN]	$F_{ax,head,Rk}$ [kN]	$F_{la,Rk}$ [kN]	$F_{la,Rk}$ [kN]	$F_{la,Rk}$ [kN]	$F_{la,Rk}$ [kN]	t [mm]	$F_{la,Rk}$ [kN]	$F_{la,Rk}$ [kN]
								α_{AD}= 0°	α_{AD}= 90°			
						α= 0°	α=90°	α_{ET}= 90°	α_{ET}= 0°		α= 0°	α= 90°
8,0 x 80	18,0	30	50	4,26	3,24	3,89	3,08	3,89	3,08	3	4,61	3,94
8,0 x 100	18,0	40	60	5,33	3,24	4,31	3,48	4,31	3,48	3	4,83	4,20
8,0 x 120	18,0	60	60	5,33	3,24	4,31	3,68	4,31	3,68	3	4,83	4,20
8,0 x 140	18,0	40	100	8,44	3,24	4,31	3,48	4,31	3,48	3	5,60	4,98
8,0 x 160	18,0	60	100	8,44	3,24	4,31	3,68	4,31	3,68	3	5,60	4,98
8,0 x 180	18,0	80	100	8,44	3,24	4,31	3,68	4,31	3,68	3	5,60	4,98
8,0 x 200	18,0	100	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 220	18,0	120	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 240	18,0	140	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 260	18,0	160	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 280	18,0	180	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 300	18,0	200	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 320	18,0	220	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 340	18,0	240	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 360	18,0	260	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 380	18,0	280	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 400	18,0	300	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 420	18,0	320	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 440	18,0	340	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 460	18,0	360	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 480	18,0	380	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 500	18,0	400	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 550	18,0	450	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98
8,0 x 600	18,0	500	100	8,44	3,24	4,31	3,68	3,68	4,31	3	5,60	4,98

Dimensioning according to ETA-11/0024. Bulk density ρ_k= 350 kg/m³. All stated mechanical values must be considered as dependent on the assumptions made and represent design examples.
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Example:

Characteristic value for the continuous action (dead load) G_k= 2.00 kN and variable action, e.g. snow load Q_k= 3,00 kN. k_{mod}= 0,9. γ_M= 1,3.
→ Design value of the action E_d= 2,00 · 1,35 + 3,00 · 1,5= 7,20 kN.
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That is to say that the characteristic minimum value for the load-bearing capacity is calculated as: min $R_k = R_d \cdot \gamma_M / k_{mod}$ → R_k= 7,20 kN · 1,3/0,9= 10,40 kN → Comparison with the table values.

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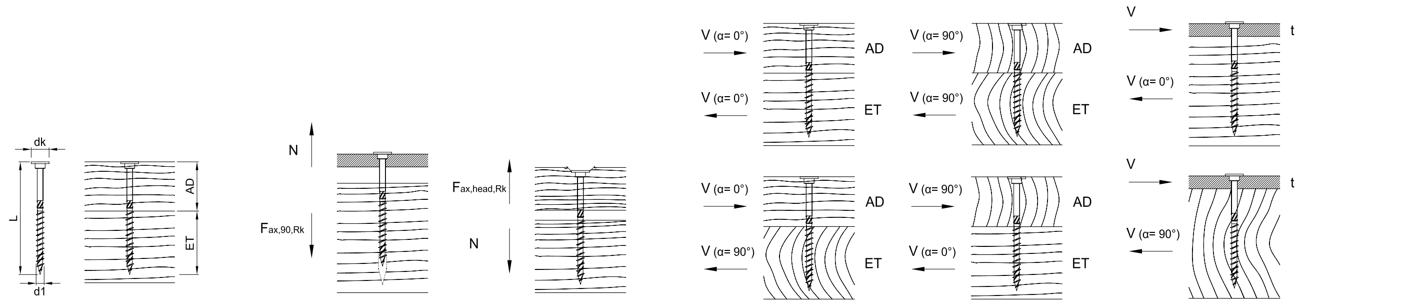
TECHNICAL INFORMATION



Dimensions				Extraction resistance	Head pull-through resistance	Shearing timber-timber				Shearing steel-timber		
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								α_{AD}= 0°	α_{AD}= 90°			
						α= 0°	α=90°	α_{ET}= 90°	α_{ET}= 0°		α= 0°	α= 90°
10,0 x 100	22, 0	40	60	6,48	4,84	6,03	4,67	6,03	4,67	3	6,78	5,81
10,0 x 120	22, 0	60	60	6,48	4,84	6,37	5,40	6,37	5,40	3	6,78	5,81
10,0 x 140	22, 0	40	100	10,26	4,84	6,03	4,67	6,03	4,67	3	7,72	6,76
10,0 x 160	22, 0	60	100	10,26	4,84	6,37	5,40	6,37	5,40	3	7,72	6,76
10,0 x 180	22, 0	80	100	10,26	4,84	6,37	5,40	6,37	5,40	3	7,72	6,76
10,0 x 200	22, 0	100	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 220	22, 0	120	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 240	22, 0	140	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 260	22, 0	160	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 280	22, 0	180	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 300	22, 0	200	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 320	22, 0	220	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 340	22, 0	240	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 360	22, 0	260	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 380	22, 0	280	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76
10,0 x 400	22, 0	300	100	10,26	4,84	6,37	5,40	5,40	6,37	3	7,72	6,76

Dimensioning according to ETA-11/0024. Bulk density ρ_k= 350 kg/m³. All stated mechanical values must be considered as dependent on the assumptions made and represent design examples.
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That is to say that the characteristic minimum value for the load-bearing capacity is calculated as: min $R_k = R_d \cdot \gamma_M / k_{mod}$ → R_k= 7,20 kN · 1,3/0,9= <u>10,40 kN</u> → Comparison with the table values.

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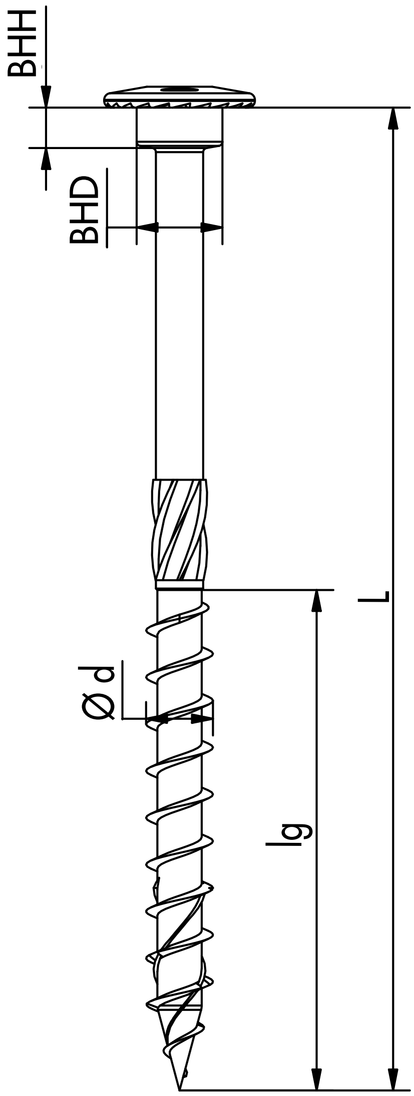
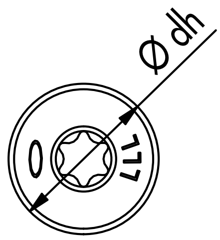
PRODUCT DATA SHEET SAWTEC

DRAWING

- SawTec, blue zinc-plated



Side view



Top view

If you are not familiar with how this product is used, and particularly with the product's intended use, please contact our Application Technology department (technik@eurotec.team).

E.u.r.o.Tec GmbH • Unter dem Hofe 5 • D-58099 Hagen
Tel. +49 2331 62 45-0 • Fax +49 2331 62 45-200 • E-Mail info@eurotec.team