

## ASSY® 4 A2 CS fittings screw A2 stainless steel plain full thread countersunk head

**Full-thread screw made of high-quality austenitic A2 stainless steel with countersunk head for fixing metal profiles or fittings in wood in outdoor areas exposed to the elements or interior applications constantly exposed to corrosion**

### **Ideal power transmission thanks to RW drive**

- More power due to larger contact area at the bit
- More stability, one-handed working, precise positioning due to the tight-fit recess and perfect fit of the bit
- Fewer bit changes, one bit for many screw diameters
- Compatibility with previous AW drive

### **Form-fitting connection to metal fittings or in wooden products with high bulk density**

- For fitting connection with full-thread steel screws
- Perfect fit of 90° head in fitting parts with metal countersinks
- Pulls together without head milling due to lack of milling elements below the head
- The head is inserted by pressing

### **Higher breaking torque**

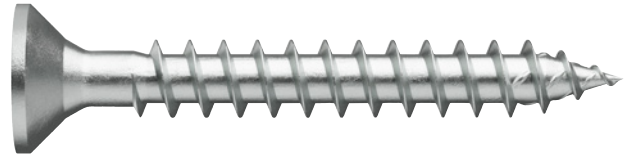
- Higher power transmission in hardwoods due to reinforced, asymmetrical thread flank geometry of the single thread
- Better anchoring thanks to higher thread flanks

### **Smooth thread start ensures optimised recessing and biting of the screw**

- Reduced splitting effect due to displacement effect of the dome-shaped milling elements in the tip
- Friction-reduced thread rotation allows reduction of the screw-in force to be applied

### **Stainless mounting for accessible wood connections in outdoor areas exposed to weathering**

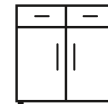
- Made of austenitic, non-magnetic and non-rusting A2 stainless steel
- Can be used in rural or urban environments or industrial atmospheres without significant exposure to chlorides or SO<sub>2</sub>
- With friction-reducing slide coating for easy fastening



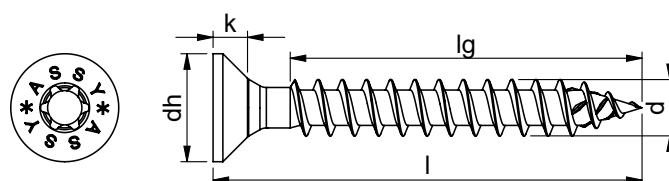
**ASSY®**



**INOX  
STAINLESS STEEL**



Material	Stainless steel A2
Surface	Plain
RoHS-compliant	Yes

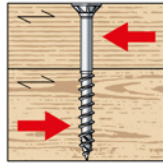


Nominal diameter (d)	Length (l)	Thread length (lg)	Head diameter (dh)	Head height (k)	Internal drive	Art. no.	P. Qty.
3 mm	16 mm	13 mm	5.9 mm	1.9 mm	RW10	0187 230 16	500
3 mm	20 mm	17 mm	5.9 mm	1.9 mm	RW10	0187 230 20	500
3 mm	25 mm	22 mm	5.9 mm	1.9 mm	RW10	0187 230 25	500
3 mm	30 mm	25 mm	5.9 mm	1.9 mm	RW10	0187 230 30	500
3 mm	35 mm	30 mm	5.9 mm	1.9 mm	RW10	0187 230 35	500
3.5 mm	16 mm	13 mm	7 mm	2.3 mm	RW20	0187 235 16	200
3.5 mm	20 mm	17 mm	7 mm	2.3 mm	RW20	0187 235 20	200
3.5 mm	25 mm	22 mm	7 mm	2.3 mm	RW20	0187 235 25	200
3.5 mm	30 mm	25 mm	7 mm	2.3 mm	RW20	0187 235 30	200
3.5 mm	35 mm	30 mm	7 mm	2.3 mm	RW20	0187 235 35	200
3.5 mm	40 mm	35 mm	7 mm	2.3 mm	RW20	0187 235 40	200
4 mm	16 mm	12 mm	8 mm	2.5 mm	RW20	0187 240 16	200
4 mm	20 mm	16 mm	8 mm	2.5 mm	RW20	0187 240 20	200
4 mm	25 mm	21 mm	8 mm	2.5 mm	RW20	0187 240 25	500
4 mm	30 mm	24 mm	8 mm	2.5 mm	RW20	0187 240 30	200
4 mm	35 mm	29 mm	8 mm	2.5 mm	RW20	0187 240 35	200
4 mm	40 mm	34 mm	8 mm	2.5 mm	RW20	0187 240 40	200
4 mm	45 mm	39 mm	8 mm	2.5 mm	RW20	0187 240 45	500
4 mm	50 mm	44 mm	8 mm	2.5 mm	RW20	0187 240 50	500
4 mm	55 mm	49 mm	8 mm	2.5 mm	RW20	0187 240 55	250
4.5 mm	20 mm	16 mm	8.9 mm	2.8 mm	RW20	0187 245 20	200
4.5 mm	25 mm	21 mm	8.9 mm	2.8 mm	RW20	0187 245 25	500
4.5 mm	30 mm	26 mm	8.9 mm	2.8 mm	RW20	0187 245 30	200
4.5 mm	35 mm	28 mm	8.9 mm	2.8 mm	RW20	0187 245 35	200
4.5 mm	40 mm	33 mm	8.9 mm	2.8 mm	RW20	0187 245 40	200
4.5 mm	45 mm	38 mm	8.9 mm	2.8 mm	RW20	0187 245 45	100
4.5 mm	50 mm	43 mm	8.9 mm	2.8 mm	RW20	0187 245 50	250
4.5 mm	60 mm	50 mm	8.9 mm	2.8 mm	RW20	0187 245 60	250
4.5 mm	65 mm	56 mm	8.9 mm	2.8 mm	RW20	0187 245 65	100
4.5 mm	70 mm	63 mm	8.9 mm	2.8 mm	RW20	0187 245 70	100
4.5 mm	80 mm	73 mm	8.9 mm	2.8 mm	RW20	0187 245 80	100
5 mm	30 mm	25 mm	9.6 mm	3.2 mm	RW20	0187 250 30	100
5 mm	40 mm	32 mm	9.6 mm	3.2 mm	RW20	0187 250 40	500
5 mm	50 mm	42 mm	9.6 mm	3.2 mm	RW20	0187 250 50	250
5 mm	60 mm	52 mm	9.6 mm	3.2 mm	RW20	0187 250 60	250
5 mm	70 mm	62 mm	9.6 mm	3.2 mm	RW20	0187 250 70	200
6 mm	40 mm	32 mm	12 mm	4.4 mm	RW30	0187 260 40	100
6 mm	50 mm	42 mm	12 mm	4.4 mm	RW30	0187 260 50	100
6 mm	60 mm	50 mm	12 mm	4.4 mm	RW30	0187 260 60	200
6 mm	70 mm	60 mm	12 mm	4.4 mm	RW30	0187 260 70	100
6 mm	80 mm	70 mm	12 mm	4.4 mm	RW30	0187 260 80	100

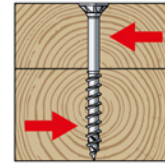
Can be stored neatly in ORSY racks or ORSYMAT vending machines

## Shear load

Bracket between force and grain direction  $\alpha = 0^\circ$



Bracket between force and grain direction  $\alpha = 90^\circ$



Minimum clearances for non-pre-drilled screws in wooden components  $\rho_k \leq 420 \text{ kg/m}^3$

Screw diameter		Male thread diameter in mm						Screw diameter		Male thread diameter in mm					
Dia. 3 to 4.5 mm	Dia. 5 to 14 mm	3	3,5	4	4,5	5	6	Dia. 3 to 4.5 mm	Dia. 5 to 14 mm	3	3,5	4	4,5	5	6
10 x d	12 x d	30	35	40	45	60	72	5 x d	5 x d	15	18	20	23	25	30
5 x d	5 x d	15	17,5	20	22,5	25	30	5 x d	5 x d	15	18	20	23	25	30
15 x d	15 x d	45	52,5	60	67,5	75	90	10 x d	10 x d	30	35	40	45	50	60
10 x d	10 x d	30	35	40	45	50	60	10 x d	10 x d	30	35	40	45	50	60
5 x d	5 x d	15	17,5	20	22,5	25	30	7 x d	10 x d	21	25	28	32	50	60
5 x d	5 x d	15	17,5	20	22,5	25	30	5 x d	5 x d	15	18	20	23	25	30

1) The minimum clearances are specified in accordance with DIN EN 1995-1-1 tab. 8.2 for non-pre-drilled nail holes, where d is the male thread diameter

2) The minimum distances between  $0^\circ < \alpha < 90^\circ$  force to the direction of the grain can be calculated more precisely in accordance with DIN EN 1995-1-1 tab. 8.2

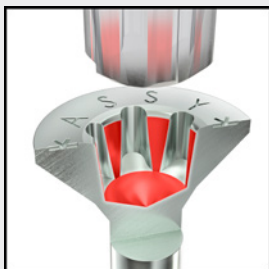
## Details/Application

### For steel-wood connections designed for tensile forces

The full thread starting immediately below the head allows for e.g. fitting-wood or sheet material-wood connections designed for tensile forces with high load-bearing capacity. Greater screw pull-out force is achieved by the maximum thread length.

Can be used for outdoor applications and utilisation class 3

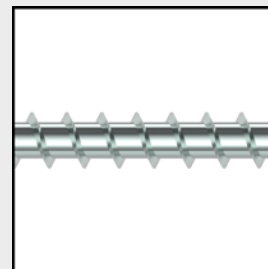
RW recess



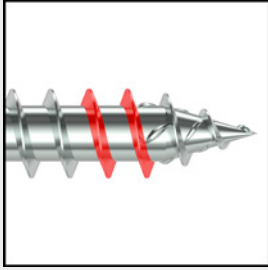
Countersunk head



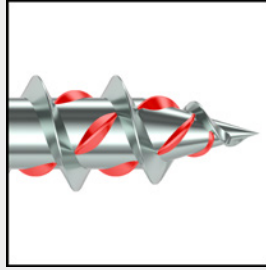
Full thread



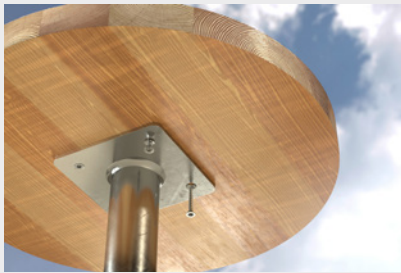
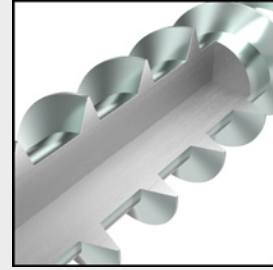
Asymmetrical high-performance thread (input)



Tip with milling ribs



A2 stainless steel



## Instructions

- ASSY screws are approved for quasi-static loads
- For optimum use of the screw, the right-size RW bit must be used
- Full-thread screws are suitable for secure mounting of fittings or thin materials. The screw length to be selected should be less than the plate thickness of substrate the screw is to be driven in
- If countersunk head screws are used for a metal-to-wood mounting, the metal to be connected must be provided with suitable countersunk holes

## Proof of performance

ETA-11/0190 approved



## Notice

- Austenitic stainless steel is characterised by a high degree of corrosion resistance against aggressive industrial air, sea air, tap water, river water, mine water and salt water, as well as woods containing tannic acid. It is resistant to acid to a certain extent and not suitable for atmospheres containing chlorine gas
- We recommend using the Würth software or the corresponding design aids for planning and dimensioning your assembly. Use the Würth timber construction software for dimensioning of ASSY screws from a diameter of 5 mm
- ASSY 4, ASSYplus 4 and ASSYplus 4 FT chipboard screws are optimised for use in wood and wood materials. For applications in plastic anchors where load capacity can also be reduced, use only screws without an optimised thread tip (tip with milling ribs, drill tip, self-clearing groove etc.), such as the ASSY D screws with countersunk head or pan head

The requirements of the European Technical Approval (ETA) must be observed