

## ASSY® plus 4 CSMP universal screw

### Hardened zinc-plated steel partial thread countersunk head

**Universal partial thread with countersunk head with milling pockets. Suitable for gap-free attachment close to edges without pre-drilling of wood-wood connections in indoor dry or sheltered areas.**

#### 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

#### Precise positioning and very clean drilling due to advanced centring drill tip

- Positioning and drilling without chipping
- Maximum drilling performance and precise drilling process through drilling cutting edges (similar to Forstner bits)
- Precise positioning on hard surfaces without slipping thanks to centring pin
- Quick screwing due to gentle start of thread

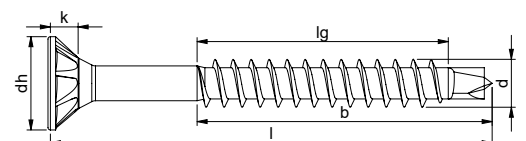
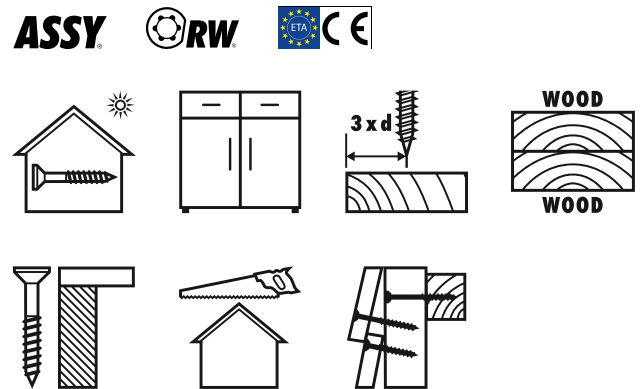
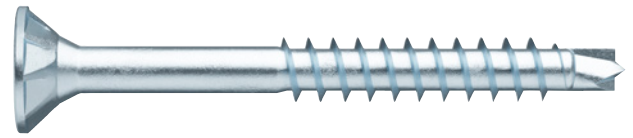
#### Clean countersinking in softwood or wood material

- Easy countersinking of screw head in wood thanks to optimised milling pockets
- No chipping in coated chipboards due to improved milling effect and increased number of milling pockets up to  $\varnothing$  4.5 mm
- Perfect fit of  $90^\circ$  head in fitting parts with metal countersinks

#### Maximum reliability of the screw connection due to asymmetrical single thread

- Optimal matching of drill tip and thread geometry
- Excellent anchoring in wood due to asymmetrical arrangement of thread flanks

Material	Hardened steel
Surface	Zinc plated
RoHS-compliant	Yes



Nominal diameter (d)	Length (l)	Thread length (lg) (lg)	Screw-thread length with drill tip (b) (b)	Head diameter (d <sub>h</sub> )	Head height (k)	Internal drive	Art. No.	P. Qty.
3.5 mm	35 mm	18 mm	21.5 mm	6.8 mm	2.2 mm	RW20	<b>0178 113 535</b>	500
3.5 mm	40 mm	22 mm	25.5 mm	6.8 mm	2.2 mm	RW20	<b>0178 113 540</b>	500
3.5 mm	45 mm	22 mm	25.5 mm	6.8 mm	2.2 mm	RW20	<b>0178 113 545</b>	500
3.5 mm	50 mm	27 mm	30.5 mm	6.8 mm	2.2 mm	RW20	<b>0178 113 550</b>	500
4 mm	30 mm	15 mm	18.5 mm	7.8 mm	2.5 mm	RW20	<b>0178 114 30</b>	500
4 mm	35 mm	18 mm	21.5 mm	7.8 mm	2.5 mm	RW20	<b>0178 114 35</b>	500
4 mm	40 mm	21 mm	24.5 mm	7.8 mm	2.5 mm	RW20	<b>0178 114 40</b>	500
4 mm	45 mm	26 mm	29.5 mm	7.8 mm	2.5 mm	RW20	<b>0178 114 45</b>	500
4 mm	50 mm	26 mm	29.5 mm	7.8 mm	2.5 mm	RW20	<b>0178 114 50</b>	500
4 mm	55 mm	31 mm	34.5 mm	7.8 mm	2.5 mm	RW20	<b>0178 114 55</b>	250
4 mm	60 mm	31 mm	34.5 mm	7.8 mm	2.5 mm	RW20	<b>0178 114 60</b>	250
4 mm	70 mm	31 mm	34.5 mm	7.8 mm	2.5 mm	RW20	<b>0178 114 70</b>	200
4.5 mm	35 mm	17 mm	21 mm	8.8 mm	2.6 mm	RW20	<b>0178 114 535</b>	500
4.5 mm	40 mm	22 mm	26 mm	8.8 mm	2.6 mm	RW20	<b>0178 114 540</b>	500
4.5 mm	45 mm	22 mm	26 mm	8.8 mm	2.6 mm	RW20	<b>0178 114 545</b>	500
4.5 mm	50 mm	24 mm	28 mm	8.8 mm	2.6 mm	RW20	<b>0178 114 550</b>	250
4.5 mm	60 mm	29 mm	33 mm	8.8 mm	2.6 mm	RW20	<b>0178 114 560</b>	250
4.5 mm	70 mm	34 mm	38 mm	8.8 mm	2.6 mm	RW20	<b>0178 114 570</b>	200
4.5 mm	80 mm	39 mm	43 mm	8.8 mm	2.6 mm	RW20	<b>0178 114 580</b>	200
5 mm	50 mm	26 mm	30 mm	9.5 mm	3.1 mm	RW20	<b>0178 115 50</b>	250
5 mm	60 mm	33 mm	37 mm	9.5 mm	3.1 mm	RW20	<b>0178 115 60</b>	250
5 mm	70 mm	38 mm	42 mm	9.5 mm	3.1 mm	RW20	<b>0178 115 70</b>	200
5 mm	80 mm	38 mm	42 mm	9.5 mm	3.1 mm	RW20	<b>0178 115 80</b>	200
5 mm	90 mm	43 mm	47 mm	9.5 mm	3.1 mm	RW20	<b>0178 115 90</b>	200
5 mm	100 mm	48 mm	52 mm	9.5 mm	3.1 mm	RW20	<b>0178 115 100</b>	200
6 mm	80 mm	45 mm	50 mm	12 mm	4.4 mm	RW40	<b>0178 116 80</b>	200
6 mm	90 mm	45 mm	50 mm	12 mm	4.4 mm	RW40	<b>0178 116 90</b>	200
6 mm	100 mm	55 mm	60 mm	12 mm	4.4 mm	RW40	<b>0178 116 100</b>	100
6 mm	120 mm	65 mm	70 mm	12 mm	4.4 mm	RW40	<b>0178 116 120</b>	100
6 mm	140 mm	65 mm	70 mm	12 mm	4.4 mm	RW40	<b>0178 116 140</b>	100
6 mm	160 mm	65 mm	70 mm	12 mm	4.4 mm	RW40	<b>0178 116 160</b>	100
6 mm	180 mm	65 mm	70 mm	12 mm	4.4 mm	RW40	<b>0178 116 180</b>	100
6 mm	200 mm	65 mm	70 mm	12 mm	4.4 mm	RW40	<b>0178 116 200</b>	100
6 mm	220 mm	65 mm	70 mm	12 mm	4.4 mm	RW40	<b>0178 116 220</b>	100
6 mm	240 mm	65 mm	70 mm	12 mm	4.4 mm	RW40	<b>0178 116 240</b>	100
8 mm	140 mm	75 mm	80.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 140</b>	75
8 mm	160 mm	75 mm	80.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 160</b>	75
8 mm	180 mm	75 mm	80.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 180</b>	75
8 mm	200 mm	75 mm	80.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 200</b>	75
8 mm	220 mm	95 mm	100.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 220</b>	75
8 mm	240 mm	95 mm	100.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 240</b>	75
8 mm	260 mm	95 mm	100.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 260</b>	75
8 mm	280 mm	95 mm	100.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 280</b>	75
8 mm	300 mm	95 mm	100.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 300</b>	75
8 mm	400 mm	95 mm	100.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 400</b>	50
8 mm	430 mm	95 mm	100.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 430</b>	50
8 mm	480 mm	95 mm	100.5 mm	15 mm	4.6 mm	RW40	<b>0178 118 480</b>	25

Can be stored neatly in ORSY racks or ORSYMAT vending machines

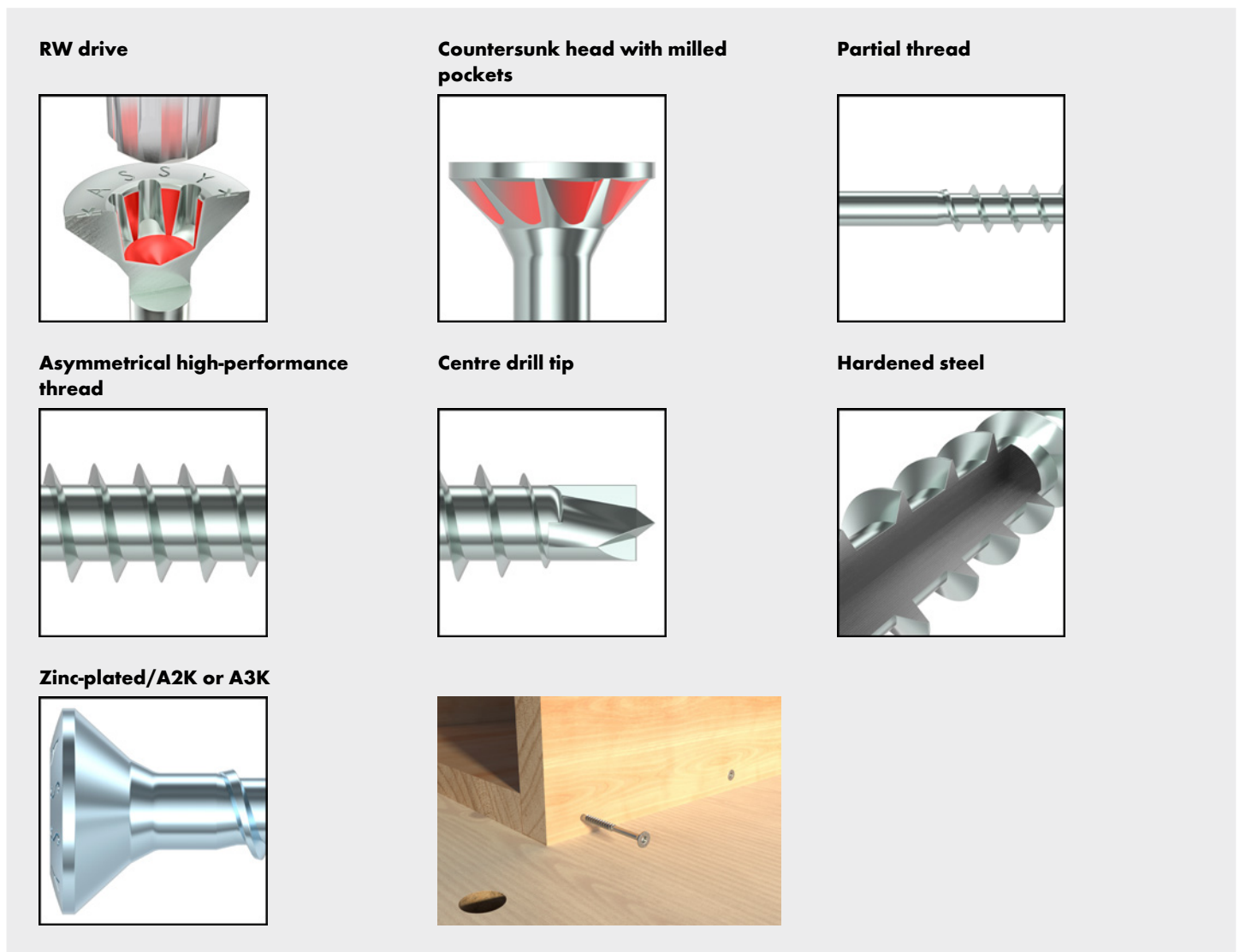
## Details/Application

### For wood-wood connections designed to pull together

A wood-wood connection designed to pull together is possible owing to partial thread starting immediately after the shank. The thread in this case is positioned entirely in the lower second component.

### For applications in utilisation class 1 and utilisation class 2 (from $\varnothing > 4$ mm)

- High-quality surface protection zinc blue passivated chromium(VI)-free, up to  $\varnothing 4$  mm A2K 5  $\mu\text{m}$ , from  $\varnothing 4.5$  mm A3K 8  $\mu\text{m}$  layer thickness
- Suitable for use in utilisation class 1 (interior) and from  $\varnothing > 4$  mm in utilisation class 2 (wet area or covered outdoor area) according to EN 1995-1-1:2010-12 + DIN SPEC 1052-100:2013-08
- For screws from  $\varnothing 4.5$  mm with zinc layer thickness 8  $\mu\text{m}$  with Cr(III) passivation, the requirement of classification T2/C2 is fulfilled in accordance with prEN 14592:2017 (D)



### Instructions

- To increase the joining effect or head pull-through resistance, combining with perfectly fitting washers for ASSY 4 is recommended
- For optimum use of the screw, the right-size RW bit must be used
- Partial-thread screws are ideal for connecting wooden components. To achieve optimum assembly of the components, the components to be fixed must not be thicker than the length of the shank
- If countersunk head screws are used for a metal-to-wood mounting, the metal to be connected must be provided with suitable

countersunk holes

- For a load-bearing wood-metal connection, ASSY screws must be tightened to a specific torque value. Tightening torque = required prevailing torque x 1.2 < 90% of the breaking torque

### Proof of performance

ETA-11/0190 approved



### Notice

- Do not use the screw in applications with direct exposure to the elements or in humid rooms with atmospheres containing chlorine gas. Please use ASSYplus 4 stainless steel screws for outdoor applications and rooms with constant high humidity
- 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.