

## Section 1. PRODUCT DESCRIPTION

### CONSTRUCTION FLANGE HEAD SCREW, TX – WKCP

Construction screw WKCP is made of yellow, blue (to order) zinc-plated low carbon steel or coated with SQ ceramic coating (to order). Screws are used for connecting structural wood elements including solid wood, glued laminated timber, X-Lam and LVL timber panels and wood-based panels. Screws have flange head with TX drive and a special cutting point suitable for connections in wooden structures.

#### Features and advantages of screws:

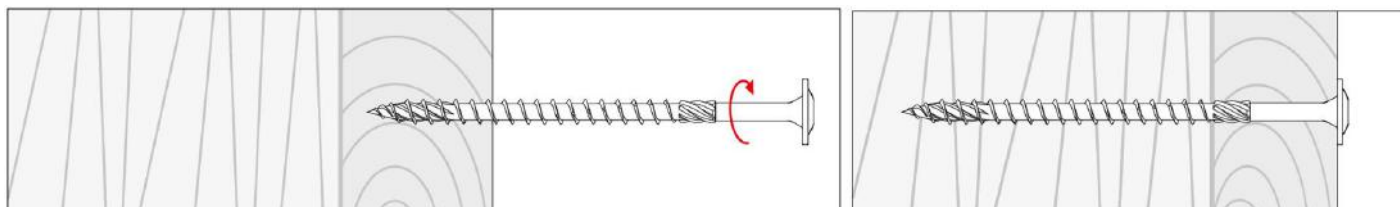
- wax coating – reduced torque, faster and easier installation
- flange head – increases the bearing area and provides tight connection as well as resistance to head pull-through.
- TX drive – guarantees optimum torque transfer as the screw advances
- shank ribs – reduce driving torque by reaming the hole
- serrated thread – cuts wood structural fibres as the screw advances
- special cutting point – makes the start of installation easier, without prior drilling
- length of screws up to 400mm



Zn - yellow    Zn - blue\*    SQ ceramic\*  
\*item on request and to order

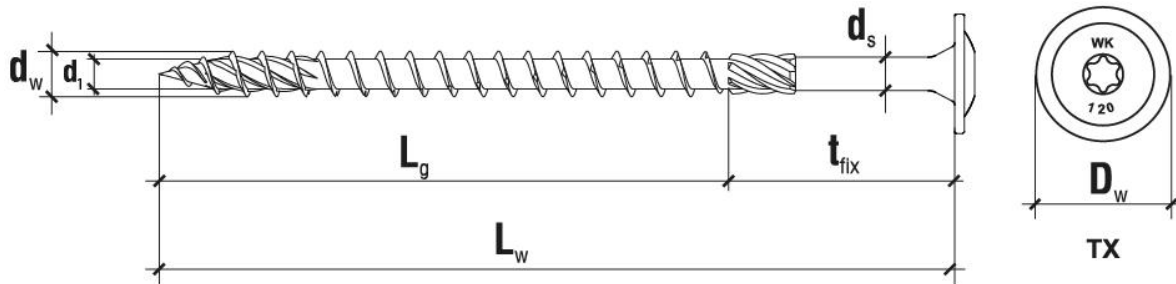
## Section 2. METHOD OF INSTALLATION

1. Original screws delivered by the manufacturer can be used only
2. Before installation select adequate length of screws depending on thickness of elements to be fastened and minimum anchorage depth
3. The fastened wooden elements should be defect-free (no knots, cracks, colourations, rots, structure and shape defects, mechanical damages) as any defects reduce their strength
4. Screws should be installed using screw gun and bit suitable for TX drive
5. Screws should be driven directly in wooden substrate without prior drilling



**PRODUCT DATA SHEET – WKCP**

**Section 3. TECHNICAL DATA**



TECHNICAL PARAMETERS				
Parameter	Unit	Value		
Thread outer diameter	$d_w$ [mm]	6	8	10
Thread inner diameter	$d_1$ [mm]	3,9	5,4	6,4
Smooth part diameter	$d_s$ [mm]	4,3	5,8	7
Head diameter	$D_w$ [mm]	14	21	25
Head area	$A$ [mm <sup>2</sup> ]	154	346	491
Length range	$L_w$ [mm]	50-300	40-400	120-400
Drive type	-	TX-30	TX-40	TX-40
Screw material	-	carbon steel		
Corrosion protection	galvanized	$\geq 5 \mu\text{m}$		
	ceramic coating SQ	$\geq 8 \mu\text{m}$		
Corrosivity category	galvanized	C1/C2		
	ceramic coating SQ	C3		
Substrate material	wood	$\geq \text{C24}$		

STRENGTH PARAMETERS				
Parameter	Unit	WKCP $\phi 6$	WKCP $\phi 8$	WKCP $\phi 10$
Material characteristic yield strength	$M_{y,k}$ [Nm]	10,0	25,0	43,0
Characteristic pull-out resistance	$f_{ax,k,90}$ [N/mm <sup>2</sup> ]	12,0	12,0	11,0
Characteristic resistance to head pull-through	$f_{head,k}$ [N/mm <sup>2</sup> ]	9,4	9,4	9,4
Characteristic resistance for tension	$f_{tens,k}$ [kN]	13,0	25,0	36,0
Characteristic torsional strength	$f_{tor,k}$ [Nm]	10,0	27,0	45,0

SELECTION TABLE								
Product marking			Screw diameter	Screw length	Working thread length	Max. usable length	Drive type	Number of pieces in a box
Galvanized - yellow	Galvanized - white*	SQ Ceramic*	$d_w$ [mm]	$L_w$ [mm]	$L_g$ [mm]	$t_{fix}$ [mm]	[-]	pcs
WKCP-06050	WKCP-06050-B	WKCP-06050-D	6,0	50	30	20	TX-30	100
WKCP-06060	WKCP-06060-B	WKCP-06060-D	6,0	60	35	25	TX-30	100
WKCP-06070	WKCP-06070-B	WKCP-06070-D	6,0	70	40	30	TX-30	100
WKCP-06080	WKCP-06080-B	WKCP-06080-D	6,0	80	50	30	TX-30	100
WKCP-06090	WKCP-06090-B	WKCP-06090-D	6,0	90	50	40	TX-30	50
WKCP-06100	WKCP-06100-B	WKCP-06100-D	6,0	100	60	40	TX-30	50
WKCP-06120	WKCP-06120-B	WKCP-06120-D	6,0	120	70	50	TX-30	50
WKCP-06140	WKCP-06140-B	WKCP-06140-D	6,0	140	70	70	TX-30	50
WKCP-06160	WKCP-06160-B	WKCP-06160-D	6,0	160	70	90	TX-30	50
WKCP-06180	WKCP-06180-B	WKCP-06180-D	6,0	180	70	110	TX-30	50
WKCP-06200	WKCP-06200-B	WKCP-06200-D	6,0	200	70	130	TX-30	50
WKCP-06220	WKCP-06220-B	WKCP-06220-D	6,0	220	70	150	TX-30	50
WKCP-06240	WKCP-06240-B	WKCP-06240-D	6,0	240	70	170	TX-30	50
WKCP-06260	WKCP-06260-B	WKCP-06260-D	6,0	260	70	190	TX-30	50
WKCP-06280	WKCP-06280-B	WKCP-06280-D	6,0	280	70	210	TX-30	50
WKCP-06300	WKCP-06300-B	WKCP-06300-D	6,0	300	70	230	TX-30	50
WKCP-08040	WKCP-08040-B	WKCP-08040-D	8,0	40	40	-	TX-40	50

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WKCP-08050	WKCP-08050-B	WKCP-08050-D	8,0	50	50	-	TX-40	50
WKCP-08060	WKCP-08060-B	WKCP-08060-D	8,0	60	50	10	TX-40	50
WKCP-08080	WKCP-08080-B	WKCP-08080-D	8,0	80	50	30	TX-40	50
WKCP-08100	WKCP-08100-B	WKCP-08100-D	8,0	100	50	50	TX-40	50
WKCP-08120	WKCP-08120-B	WKCP-08120-D	8,0	120	80	40	TX-40	50
WKCP-08140	WKCP-08140-B	WKCP-08140-D	8,0	140	80	60	TX-40	50
WKCP-08160	WKCP-08160-B	WKCP-08160-D	8,0	160	80	80	TX-40	50
WKCP-08180	WKCP-08180-B	WKCP-08180-D	8,0	180	80	100	TX-40	50
WKCP-08200	WKCP-08200-B	WKCP-08200-D	8,0	200	80	120	TX-40	50
WKCP-08220	WKCP-08220-B	WKCP-08220-D	8,0	220	80	140	TX-40	50
WKCP-08240	WKCP-08240-B	WKCP-08240-D	8,0	240	80	160	TX-40	50
WKCP-08260	WKCP-08260-B	WKCP-08260-D	8,0	260	80	180	TX-40	50
WKCP-08280	WKCP-08280-B	WKCP-08280-D	8,0	280	80	200	TX-40	50
WKCP-08300	WKCP-08300-B	WKCP-08300-D	8,0	300	80	220	TX-40	50
WKCP-08320	WKCP-08320-B	WKCP-08320-D	8,0	320	80	240	TX-40	50
WKCP-08340	WKCP-08340-B	WKCP-08340-D	8,0	340	80	260	TX-40	50
WKCP-08360	WKCP-08360-B	WKCP-08360-D	8,0	360	80	280	TX-40	50
WKCP-08380	WKCP-08380-B	WKCP-08380-D	8,0	380	80	300	TX-40	50
WKCP-08400	WKCP-08400-B	WKCP-08400-D	8,0	400	80	320	TX-40	50
WKCP-10120	WKCP-10120-B	WKCP-10120-D	10,0	120	80	40	TX-40	50
WKCP-10140	WKCP-10140-B	WKCP-10140-D	10,0	140	80	60	TX-40	50
WKCP-10160	WKCP-10160-B	WKCP-10160-D	10,0	160	80	80	TX-40	50
WKCP-10180	WKCP-10180-B	WKCP-10180-D	10,0	180	80	100	TX-40	50
WKCP-10200	WKCP-10200-B	WKCP-10200-D	10,0	200	80	120	TX-40	50
WKCP-10220	WKCP-10220-B	WKCP-10220-D	10,0	220	80	140	TX-40	25
WKCP-10240	WKCP-10240-B	WKCP-10240-D	10,0	240	80	160	TX-40	25
WKCP-10260	WKCP-10260-B	WKCP-10260-D	10,0	260	80	180	TX-40	25
WKCP-10280	WKCP-10280-B	WKCP-10280-D	10,0	280	80	200	TX-40	25
WKCP-10300	WKCP-10300-B	WKCP-10300-D	10,0	300	80	220	TX-40	25
WKCP-10320	WKCP-10320-B	WKCP-10320-D	10,0	320	80	240	TX-40	25
WKCP-10340	WKCP-10340-B	WKCP-10340-D	10,0	340	80	260	TX-40	25
WKCP-10360	WKCP-10360-B	WKCP-10360-D	10,0	360	80	280	TX-40	25
WKCP-10380	WKCP-10380-B	WKCP-10380-D	10,0	380	80	300	TX-40	25
WKCP-10400	WKCP-10400-B	WKCP-10400-D	10,0	400	80	320	TX-40	25

\*item on request and to order

#### Section 4. REMARKS

1. All previous versions of this Product Data Sheet shall cease to be valid
2. Data given in this Product Data Sheet is in accordance with current knowledge and published in good faith. KLIMAS Sp. z o.o. is not responsible for correctness and quality of the fixing if recommendations regarding method of use and installation are not followed.