

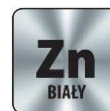
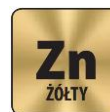
## Section 1. PRODUCT DESCRIPTION

### HARDENED COUNTERSUNK FLAT HEAD WOOD SCREW WITH PARTIAL THREAD, PZ – KDH/KMH

Hardened screw KDH/KMH is made of zinc-plated low carbon steel coated with yellow or blue protective coating. Screws for connecting wooden elements including solid wood, glued laminated timber, X-Lam and LVL timber panels and wood-based panels. Screws have counter-sunk head with PZ drive, partial thread and a special cutting point suitable for connections in wooden structures.

#### Features and advantages of screws:

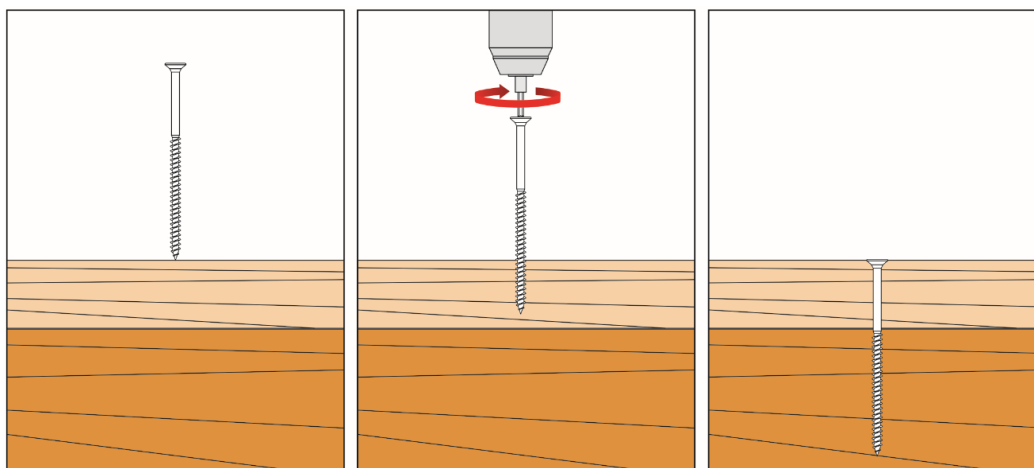
- wax coating – reduced torque, faster and easier installation
- counter-sunk head – ensures flush fitting of the screw in the installed member
- PZ drive – ensures fast and reliable installation
- profile of thread – provides fast and reliable connection
- partial thread – prevents cracking of elements being installed and guarantees their tight fastening



Screws conform to European standard: PN-EN 14592:2008+A1:2012

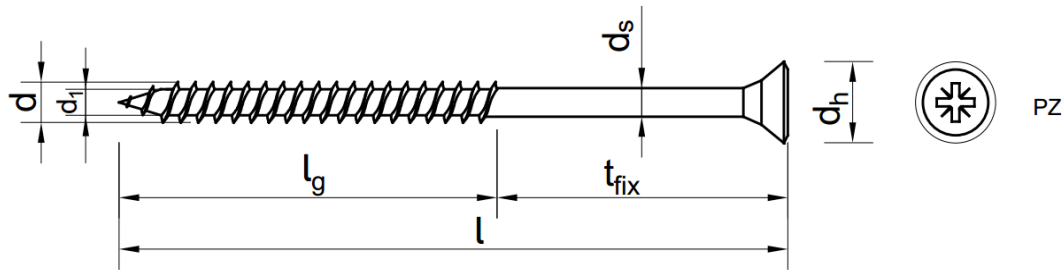
## Section 2. METHOD OF INSTALLATION

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 PZ drive
5. Screws should be driven directly in wooden substrate without prior drilling



**PRODUCT DATA SHEET – KDH/KMH**

**Section 3. TECHNICAL DATA**



TECHNICAL PARAMETERS						
Parameter	Unit	Value				
Thread outer diameter	d [mm]	3,5	4	4,5	5	6
Thread inner diameter	d <sub>1</sub> [mm]	2,25	2,65	2,8	3,1	3,8
Smooth part diameter	d <sub>s</sub> [mm]	-	-	-	-	-
Head diameter	d <sub>n</sub> [mm]	7	8	9	10	12
Head area	A [mm <sup>2</sup> ]	38	50	64	79	113
Length range	l [mm]	40-60	40-80	55-80	50-120	70-200
Drive type	-	PZ-2	PZ-2	PZ-2	PZ-2	PZ-3
Screw material	-	carbon steel				
Corrosion protection	galvanized	≥ 5 μm				
Corrosivity category	-	C1/C2				
Substrate material	wood	≥ C24				
European standard	-	PN-EN 14592:2008+A1:2012				

STRENGTH PARAMETERS						
Parameter	Unit	ø3,5	ø4	ø4,5	ø5	ø6
Material characteristic yield strength	M <sub>y,k</sub> [Nm]	3,641	5,162	7,023	9,247	14,815
Characteristic pull-out resistance	f <sub>ax,k,90</sub> [N/mm <sup>2</sup> ]	22,69	23,59	24,09	22,42	12,19
Characteristic resistance to head pull-through	f <sub>head,k</sub> [N/mm <sup>2</sup> ]	26,51	24,74	26,09	22,93	20,46
Characteristic resistance for tension	f <sub>tens,k</sub> [kN]	5,04	5,57	7,03	8,25	9,58
Characteristic torsional strength	f <sub>tor,k</sub> [Nm]	2,32	2,80	4,65	5,59	9,29
Screw resistance factor	R <sub>tor,k</sub> [Nm]	1,29	1,46	2,37	3,04	3,89

SELECTION TABLE										
Product marking		Number of pieces in a box	Product marking		Number of pieces in a box	Screw diameter	Screw length	Working thread length	Usable length	Drive type
Zn - yellow	Zn - blue		Zn - yellow	Zn - blue						
KDH-3504025(X5)*	KDH-3504025-B(X5)*	5	-	-	-	3,5	40	25	15	PZ-2
KDH-3504030(X5)*	KDH-3504030-B(X5)*	5	-	-	-	3,5	40	30	10	PZ-2
KDH-3505025(X5)*	KDH-3505025-B(X5)*	5	-	-	-	3,5	50	25	25	PZ-2
KDH-3505030(X5)*	KDH-3505030-B(X5)*	5	-	-	-	3,5	50	30	20	PZ-2
KDH-3505035(X5)*	KDH-3505035-B(X5)*	5	-	-	-	3,5	50	35	15	PZ-2
KDH-3506035(X5)*	KDH-3506035-B(X5)*	5	-	-	-	3,5	60	35	25	PZ-2
KDH-4004020(X5)*	KDH-4004020-B(X5)*	5	-	-	-	4,0	40	20	20	PZ-2
KDH-4005030(X5)*	KDH-4005030-B(X5)*	5	-	-	-	4,0	50	30	20	PZ-2
KDH-4005035(X5)*	KDH-4005035-B(X5)*	5	-	-	-	4,0	50	35	15	PZ-2
KDH-4005540(X5)*	KDH-4005540-B(X5)*	5	-	-	-	4,0	55	40	15	PZ-2
KDH-4006035(X5)*	KDH-4006035-B(X5)*	5	-	-	-	4,0	60	35	25	PZ-2
KDH-4006040(X5)*	KDH-4006040-B(X5)*	5	-	-	-	4,0	60	40	20	PZ-2
KDH-40070(X5)	KDH-40070-B(X5)	5	KMH-40070	KMH-40070-B*	250	4,0	70	55	15	PZ-2
KDH-4007045(X5)*	KDH-4007045-B(X5)*	5	-	-	-	4,0	70	45	25	PZ-2
KDH-4007050(X5)*	KDH-4007050-B(X5)*	5	-	-	-	4,0	70	50	20	PZ-2
KDH-40080(X5)	KDH-40080-B(X5)	5	-	-	-	4,0	80	55	25	PZ-2
KDH-4505540(X5)*	KDH-4505540-B(X5)*	5	-	-	-	4,5	55	40	15	PZ-2

**PRODUCT DATA SHEET – KDH/KMH**

KDH-45070(X5)	KDH-45070-B(X5)	5	KMH-45070	KMH-45070-B*	250	4,5	70	55	15	PZ-2
KDH-45080(X5)	KDH-45080-B(X5)	5	KMH-45080	KMH-45080-B*	250	4,5	80	55	25	PZ-2
KDH-5005030(X5)*	KDH-5005030-B(X5)*	5	-	-	-	5,0	50	30	20	PZ-2
KDH-5006035(X5)*	KDH-5006035-B(X5)*	5	-	-	-	5,0	60	35	25	PZ-2
KDH-50070(X5)	KDH-50070-B(X5)	5	KMH-50070	KMH-50070-B	200	5,0	70	55	15	PZ-2
KDH-5007045(X5)*	KDH-5007045-B(X5)*	5	-	-	-	5,0	70	45	25	PZ-2
KDH-50080(X5)	KDH-50080-B(X5)	5	KMH-50080	KMH-50080-B	200	5,0	80	55	25	PZ-2
KDH-50090(X5)	KDH-50090-B(X5)	5	KMH-50090	KMH-50090-B	200	5,0	90	55	35	PZ-2
KDH-50100(X5)	KDH-50100-B(X5)	5	KMH-50100	KMH-50100-B	200	5,0	100	55	45	PZ-2
KDH-5010030(X5)*	KDH-5010030-B(X5)*	5	-	-	-	5,0	100	30	70	PZ-2
KDH-50120(X5)	KDH-50120-B(X5)	5	KMH-50120	KMH-50120-B	100	5,0	120	75	45	PZ-2
KDH-60070(X5)	KDH-60070-B(X5)	5	KMH-60070	KMH-60070-B*	200	6,0	70	55	15	PZ-3
KDH-60080(X5)	KDH-60080-B(X5)	5	KMH-60080	KMH-60080-B	200	6,0	80	55	25	PZ-3
KDH-6008075(X5)*	KDH-6008075-B(X5)*	5	-	-	-	6,0	80	75	5	PZ-3
KDH-60090(X5)	KDH-60090-B(X5)	5	KMH-60090	KMH-60090-B*	100	6,0	90	55	35	PZ-3
KDH-60100(X5)	KDH-60100-B(X5)	5	KMH-60100	KMH-60100-B*	100	6,0	100	55	45	PZ-3
KDH-6010070(X5)*	KDH-6010070-B(X5)*	5	-	-	-	6,0	100	70	30	PZ-3
KDH-60110(X5)	KDH-60110-B(X5)	5	KMH-60110	KMH-60110-B*	100	6,0	110	75	35	PZ-3
KDH-60120(X5)	KDH-60120-B(X5)	5	KMH-60120	KMH-60120-B	100	6,0	120	75	45	PZ-3
KDH-60140(X5)	KDH-60140-B(X5)	5	KMH-60140	KMH-60140-B*	100	6,0	140	75	65	PZ-3
KDH-60160(X5)	KDH-60160-B(X5)	5	KMH-60160	KMH-60160-B*	100	6,0	160	75	85	PZ-3
KDH-60180(X5)	KDH-60180-B(X5)	5	KMH-60180	KMH-60180-B*	100	6,0	180	75	105	PZ-3
KDH-60200(X5)	KDH-60200-B(X5)	5	KMH-60200	KMH-60200-B*	100	6,0	200	75	125	PZ-3

\*Screw 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.