

SCREWS AND FASTENERS FOR WINDOWS AND DOORS

2017

POLISH PRODUCER



The largest manufacturer of fastening systems in Poland

Klimas Wkręt-Met is the largest manufacturer of high quality fastening systems in Poland and Eastern and Central Europe. For years, the company has set standards in fastening technology. Our offer includes screws for installation in PVC; window and door fixings; frame and expansion anchors; fasteners for thermal insulation systems being an important element of passive houses; hardened screws and woodworking fasteners; self-drilling and self-tapping screws for steel sheets and roofing elements; mechanical and chemical anchors, metric bolts and screws, drywall anchors. Klimas Wkręt-Met sends its products to over 60 countries. The company started its operations in 1990. It was developed as a continuation of a family-run business dealing in production of plastic elements.

Initially, it was a site of 300 square meters with several production machines and limited storage facilities. Much has changes since that time.

Today, the company's production area covers over 50.000 square meters including a few production buildings and central high-bay storage area with a pallet racking system able to store over 24.000 pallets. The area intended for new investments covers as much as 100.000 square meters.

Wkręt-Met was the first company in Poland to have been granted a European Technical Approval for building products in 2005 and today the company holds 20 such approvals. Our other products have national technical approvals. Those certificates, proved by the tests conducted by both Polish and German certification bodies, confirm that the products we offer are of the highest quality.



Own production facilities

high production capacity

Independent production stands for continuous development and extension of the technological park. At present Wkręt-met production has a host of facilities at its disposal including:

- over 100 injection moulding machines,
- 200 presses and rolling mills (which can be used to manufacture metric screws Class 10.9 and 12.9 as well as A2 and A4 stainless steel screws),
- modern tool shop with advanced machining centres,
- a twenty-first century quality control department.

Our production facilities grant us independence at every stage of the production process. Our own facilities combined with high production capacity and quality control results in products which meet today's market demands. The in-house quality control ensures that consistent, repeatable products are manufactured which meet critical requirements.

Custom-made products

POLISH

Thanks to our wide experience and modern production facilities we offer custom-made products designed to meet individual customer needs. We provide product design, manufacture, control and packing as requested by the customer.



Production floor - over 200 presses and rolling mills



Production floor - multifunction presses



Production floor - injection moulding department



🛞 (E

MANUFACTURE

Metal products manufacturing process

- best quality material from European steelworks,
- a variety of steel grades (low carbon steel, A2 AISI
- 304 stainless steel, A4 AISI 316 acid resistant steel, heat-treatable steel),
- own research and product development department,
- · large machine park,
- · hardening (heat treatment),
- applying protective anti-corrosion coatings zinc electroplating or ceramic coating,
- heads and washers available in the RAL colours,
- a wide range of solutions suited for specific fixture and substrate,

DESIGN

PRESSES

AND ROLLING MILLS

- production offer of class 10.9 and 12.9 screws,
- quality control at each stage of manufacture,
- Polish and European technical approvals

METAL

1.300 TONS

OF METAL PRODUCTS

> PROCESSED MONTHLY

MANUFACTURING PROCESS

PRODUCTS

GALVANIZING PLANT AND PAINT SHOP

HARDENING PLANT

FROM BEGINNING TO END





MANUFACTURE

Plastic products manufacturing process

- top quality production material, polyamide, polyethylene, polypropylene,
- conditioning of polyamide products which ensures their elastisity,
- a wide range of products for universal and special application,
- own production facilities including/comprising best quality hybrid injection moulding machines with robots,
- automatic packaging process: from box/blister pack to pallet wrap/wrapping

DESIGN

700 TONS OF PLASTIC PROCESSED MONTHLY

PLASTIC PRODUCTS

MANUFACTURING PROCESS

INJECTION MOULDERS

CNC MACHINE TOOLS

INJECTION MOULDERS

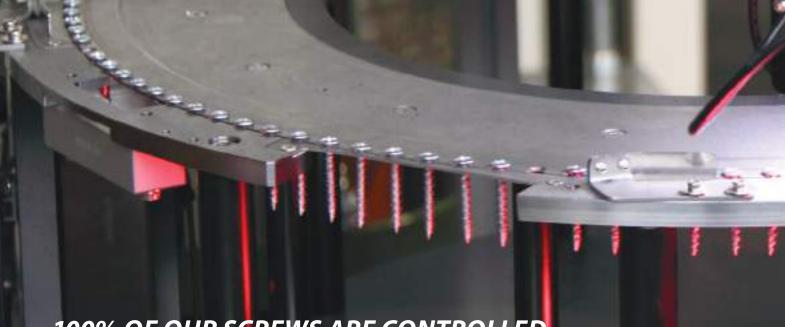
FROM BEGINNING TO END







CONTROL



100% OF OUR SCREWS ARE CONTROLLED





MEASURING MICROSCOPE





SALT SPRAY CHAMBER

Klimas Wkręt-met machinery park now boasts equipment for the 100 per cent control of our scews. The new optic equipment makes it possible to control the whole product batch after it has been manufactured and before it is packed. The parametrs checked include length, body diameter, thread diameter, head size, quality of the drive, pitch and thread length, tip and others. Screws which successfully pass the control procedure are sent to be packed whereas those which non-compliance with the standard are rejected.



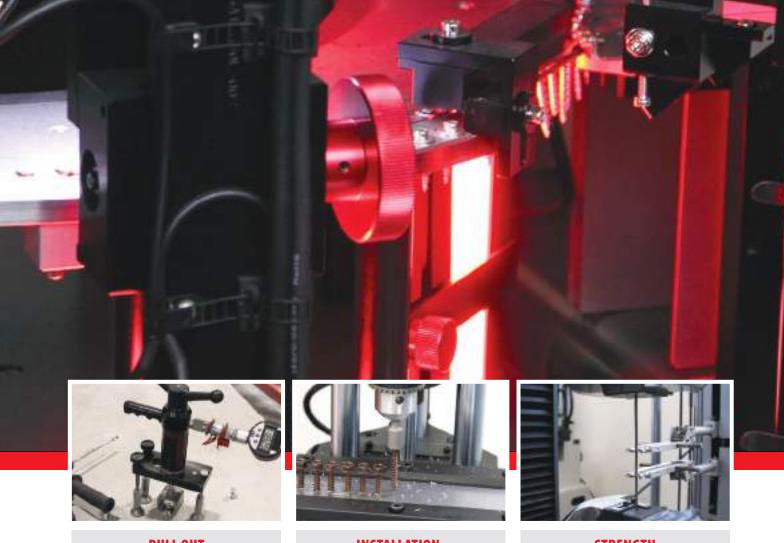
Our company is set on continuous improvement of its production control processes at each stage of manufacture. We wish to provide our customers with services of the highest-possible standard. To achieve that we have implemented the Quality Management System and have held the ISO 9001:2008 standard for a number of years now. Satisfying the standard requirements is continuously verified by both internal and external audits, which prove our successful operation at each stage of activity.



CALLIBRATION OF OUR CONTROL AND MEASUREMENT INSTRUMENTS

FROM BEGINNING TO END





PULL OUT TESTING

INSTALLATION TIME TESTING

STRENGTH TESTING

We have started a high-tech quality-control laboratory to ensure the highest quality of the products on offer. Our laboratory is equipped with measuring microscope, X-ray spectrometer, salt spray chamber, load capacity testing machine, Vickers microhardness tester, Rockwell hardness tester, torque converters, permascope and a number of other equipment, which allow us to:

- · check and control paint and zinc coat thickness;
- · check resistance of protective coating to highly corrosive environments;
- check hardness of the screw surface and body, thickness of carburized layer;
- compute the torque required for a given screw to be driven in;
- test the pull-out strength;
- compute rigidity of the support washer;
- calculate the time needed to drive-in a self-driving screw; and many others.



Is quality important for you? It IS for us!





SCREWS AND FASTENERS FOR WINDOWS AND DOORS

Table of Contents	page
Product index	11
PRODUCTION PROGRAMME	
Screws for window manufacture	13
Screws and fasteners for window and door installation	39



SCREWS AND FASTENERS FOR WINDOWS AND DOORS PRODUCT INDEX



 $\overline{}$

SCI	SCREWS FOR WINDOW MANUFACTURE - PRODUCTION PROGRAMME					
	Product name	Туре	Photo	Page		
1	Screw with ribs for fittings, PH	WPCV-R		14		
2	Screw without ribs for fittings, PH	WPCV		16		
3	Self-drilling screw with ribs for fittings and steel reinforcement, PH	WSPCV-R	zmannan	18		
4	Self-drilling screw without ribs for fittings and steel reinforcement, PH	WSPCV	-	20		
5	Self-drilling pan head screw, PH	WSWL	0	22		
6	Pan head sheet metal screw, PH	BWL		23		
7	Pan head sheet metal screw, TX	WBWT		24		
8	Flange head self-drilling screw, PH	WSPC		25		
9	Flange head screw, PH	WPC		26		
10	Screw for blind guides, PH	WRZP		27		
11	Flat head screw for woodworking, TX	кмwнт		28		
12	Hardened flat head wood screw with partial thread, PZ	KDH/KMH		30		
13	Hardened flat head wood screw with partial thread, TX	KDHT/KMHT	-managementer (E	32		
14	Hardened flat head wood screw with full thread, PZ	KDH/KMH	-management	34		
15	Hardened flat head wood screw with full thread, TX	KDHT/KMHT		36		

SCREWS AND FASTENERS FOR WINDOW AND DOOR INSTALLATION - PRODUCTION PROGRAMME

Product name Туре Photo Page Hardened self-tapping flat head screw for PVC frames - CONTRACTOR CONTRACTO 1 WHO 40 and connections in timber, TX Hardened self-tapping pan head screw for fixing timber WHOW 2 42 frames and connections in timber, TX C LO 3 Frame mounting fastener, PZ 44

POLISH

PRODUCER





SCREWS AND FASTENERS FOR WINDOWS AND DOORS

SCREWS FOR WINDOW MANUFACTURE PRODUCTION PROGRAMME

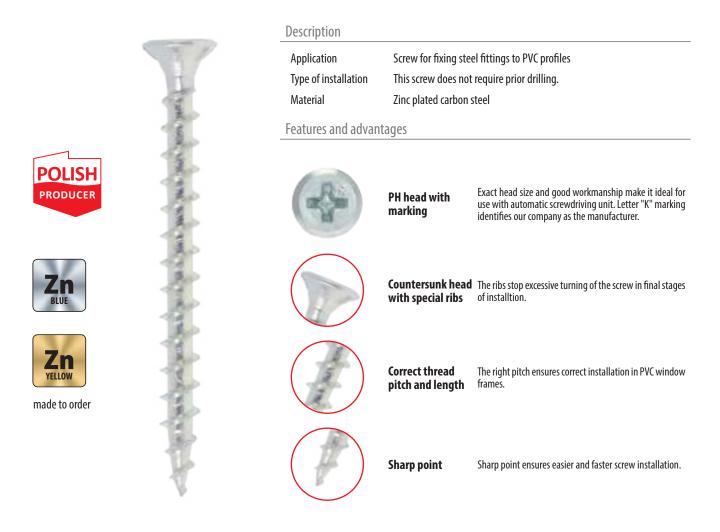




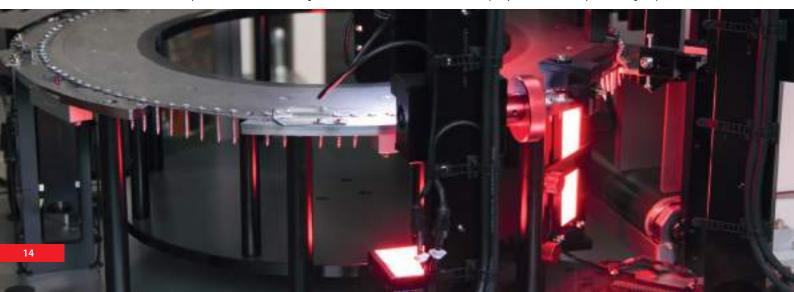
< <

SCREWS AND FASTENERS FOR WINDOWS AND DOORS SCREWS FOR WINDOW MANUFACTURE - PRODUCTION PROGRAMME

WPCV-R Screw with ribs for fittings, PH

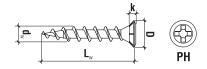


100% of screws controlled! The parameters checked include length, shank diameter, thread diameter, head size, quality of the drive, thread pitch and length, tip and others.



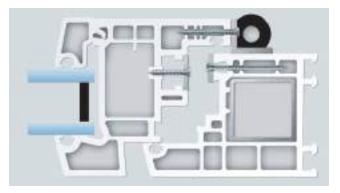


WPCV-R Screw with ribs for fittings, PH



Product marking

WPCV	R	B	40	016
Туре	Special ribs	White zinc	Diameter	Length



Sample application

	Code	d _w x L _w [mm]	D[mm]	k [mm]	рн 🕂	Pcs 🛅
a/ 0	WPCV-B-R-40016	4.0 x 16	7.3	2.4	PH 2	1000
ø 4.0	WPCV-B-R-40020	4.0 x 20	7.3	2.4	PH 2	1000
	WPCV-B-R-40025	4.0 x 25	7.3	2.4	PH 2	1000
	WPCV-B-R-40030	4.0 x 30	7.3	2.4	PH 2	1000
	WPCV-B-R-40035	4.0 x 35	7.3	2.4	PH 2	500
	WPCV-B-R-40040	4.0 x 40	7.3	2.4	PH 2	500
	WPCV-B-R-40045	4.0 x 45	7.3	2.4	PH 2	500
	WPCV-B-R-40050	4.0 x 50	7.3	2.4	PH 2	500
	WPCV-B-R-40055	4.0 x 55	7.3	2.4	PH 2	500

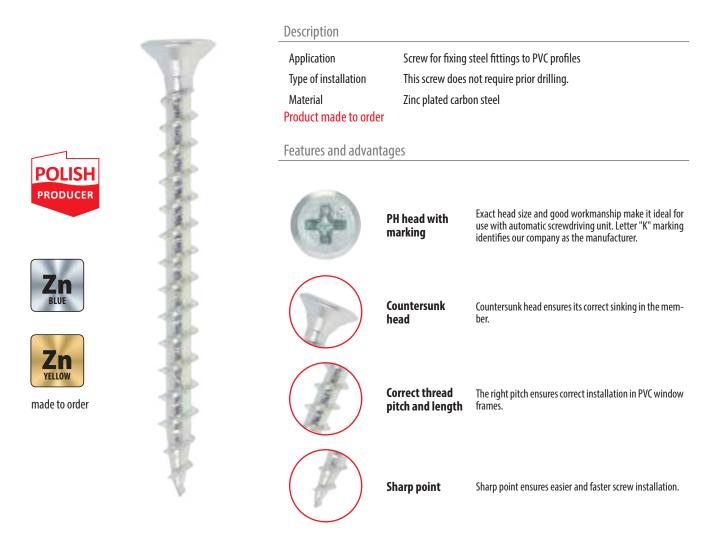






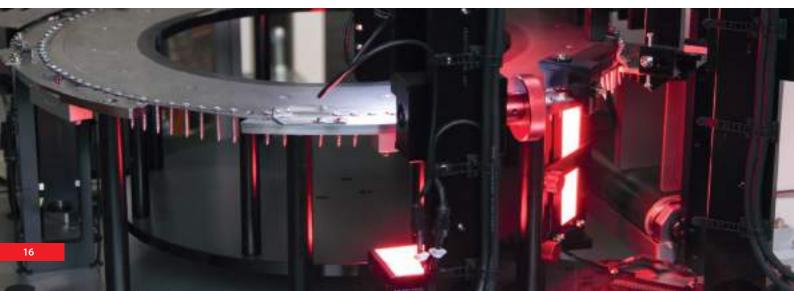
SCREWS AND FASTENERS FOR WINDOWS AND DOORS SCREWS FOR WINDOW MANUFACTURE - PRODUCTION PROGRAMME

WPCV Screw without ribs for fittings, PH



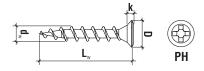
 $\langle \checkmark \rangle$

100% of screws controlled! The parameters checked include length, shank diameter, thread diameter, head size, quality of the drive, thread pitch and length, tip and others.



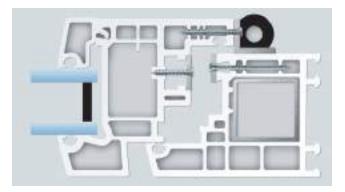


WPCV Screw without ribs for fittings, PH



Product marking





Sample application

	Code	d _w x L _w [mm]	D[mm]	k [mm]	рн 🕂	Pcs 🛅
a/ 0	WPCV-B-40016	4.0 x 16	7.3	2.4	PH 2	1000
ø 4.0	WPCV-B-40020	4.0 x 20	7.3	2.4	PH 2	1000
	WPCV-B-40025	4.0 x 25	7.3	2.4	PH 2	1000
	WPCV-B-40030	4.0 x 30	7.3	2.4	PH 2	1000
	WPCV-B-40035	4.0 x 35	7.3	2.4	PH 2	500
	WPCV-B-40040	4.0 x 40	7.3	2.4	PH 2	500
	WPCV-B-40045	4.0 x 45	7.3	2.4	PH 2	500
	WPCV-B-40050	4.0 x 50	7.3	2.4	PH 2	500
	WPCV-B-40055	4.0 x 55	7.3	2.4	PH 2	500







WSPCV-R Self-drilling screw with ribs for fittings and steel reinforcement, PH

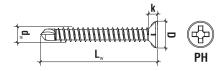


100% of screws controlled! The parameters checked include length, shank diameter, thread diameter, head size, quality of the drive, thread pitch and length, tip and others.

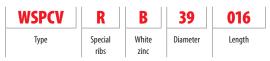


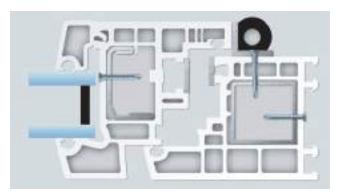


WSPCV-R Self-drilling screw with ribs for fittings and steel reinforcement, PH



Product marking





Sample application

	Code	d _w x L _w [mm]	D[mm]	k[mm]	рн 🕂	Pcs 🛅
a2 0	WSPCV-B-R-39016	3.9 x 16	7.5	3	PH 2	1000
ø 3.9	WSPCV-B-R-39019	3.9 x 19	7.5	3	PH 2	1000
	WSPCV-B-R-39025	3.9 x 25	7.5	3	PH 2	1000
	WSPCV-B-R-39032	3.9 x 32	7.5	3	PH 2	500
	WSPCV-B-R-39040	3.9 x 40	7.5	3	PH 2	500



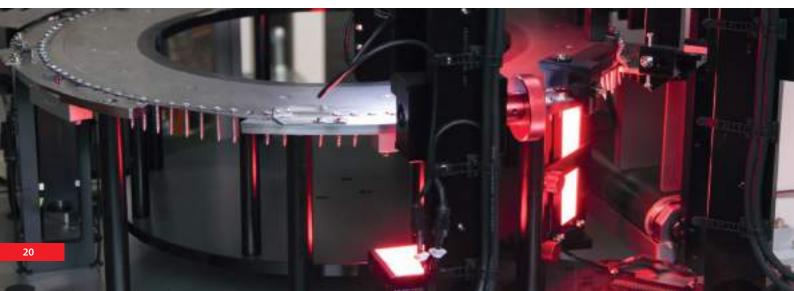


WSPCV Self-drilling screw without ribs for fittings and steel reinforcement, PH



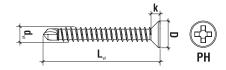
 $\langle \checkmark \rangle$

100% of screws controlled! The parameters checked include length, shank diameter, thread diameter, head size, quality of the drive, thread pitch and length, tip and others.



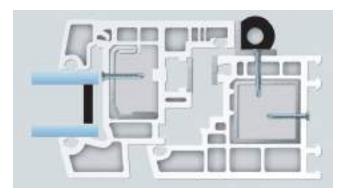


WSPCV Self-drilling screw without ribs for fittings and steel reinforcement, PH



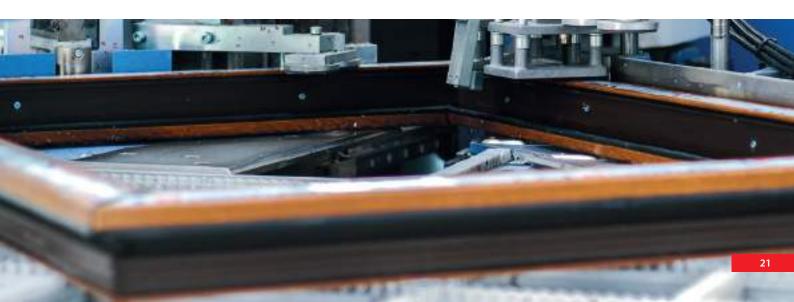
Product marking





Sample application

	Code	d _w x L _w [mm]	D[mm]	k[mm]	рн 🕂	Pcs 🛅
a 2 0	WSPCV-B-39016	3.9 x 16	7.5	3	PH 2	1000
ø 3.9	WSPCV-B-39019	3.9 x 19	7.5	3	PH 2	1000
	WSPCV-B-39025	3.9 x 25	7.5	3	PH 2	1000
	WSPCV-B-39032	3.9 x 32	7.5	3	PH 2	500
	WSPCV-B-39040	3.9 x 40	7.5	3	PH 2	500



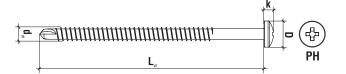


WSWL Self-drilling pan head screw, PH



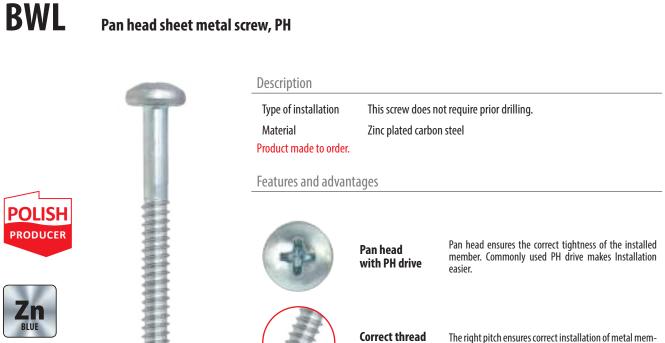


Type of installation Material	on This screw does not require prior drilling. Zinc plated carbon steel				
Product made to order.	-				
Features and advant	tages				
234	Pan head with PH drive	Pan head ensures the correct tightness of the install member. Commonly used PH drive makes Installati easier.			
	Correct thread pitch and length	The right pitch ensures correct installation of metal me bers.			
	Sharp self-drilling point	Special self-drilling point ensures easier and faster scre installation in steel.			



Code d _w xL _w [mm] D[mm] k[mm] PH	
ALO WSWL-48080 4.8 x 80 9.4 3.2 PI	12 400
Ø4.8 WSWL-48000 4.8 x 100 9.4 3.2 PI	12 200



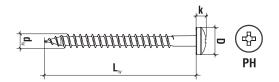


pitch and length

The right pitch ensures correct installation of metal members.

Sharp point

Sharp point ensures easier and faster screw installation.



	Code	d _w x L _w [mm]	D[mm]	k[mm]	рн 🕂	Pcs 🗎
ø 4.2	BWL-42013	4.2 x 13	8	3.2	PH 2	1000
a6 2	BWL-63070	6.3 x 70	12	4.5	PH 3	200
ø 6.3	BWL-63100	6.3 x 100	12	4.5	PH 3	100
	BWL-63120	6.3 x 120	12	4.5	PH 3	100

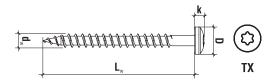


WBWT Pan head sheet metal screw, TX





Description		
Type of installation Material Product made to order.	This screw does not Zinc plated carbon	t require prior drilling. steel
Features and advant	tages	
	Pan head with TX drive	Pan head ensures the correct tightness of the installed member. TX drive guarantees optimum torque transfer.
	Correct thread pitch and length	The right pitch ensures correct installation in PVC frames.
	Sharp point	Sharp point ensures easier and faster screw installation.

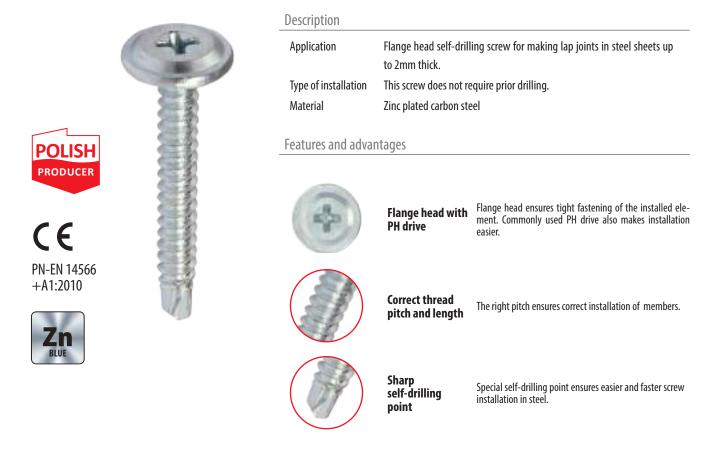


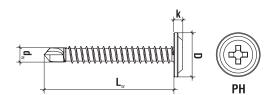
	Code	d _w x L _w [mm]	D[mm]	k[mm]	TX 🔿	Pcs 🛅
ø 5.0	WBWT-50090	5.0 x 90	9.5	3.2	TX 25	200



WSPC Flange he

Flange head self-drilling screw, PH



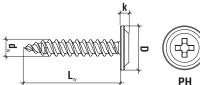


	Code	d _w x L _w [mm]	D[mm]	k[mm]	рн 🕂	Pcs 🛅
ø4.2	WSPC-42013	4.2 x 13	11.5	2	PH 2	1000
9 4. Z	WSPC-42016	4.2 x 16	11.5	2	PH 2	1000
	WSPC-42019	4.2 x 19	11.5	2	PH 2	1000
	WSPC-42025	4.2 x 25	11.5	2	PH 2	500
	WSPC-42032	4.2 x 32	11.5	2	PH 2	500
	WSPC-42045	4.2 x 45	11.5	2	PH 2	300
	WSPC-42055	4.2 x 55	11.5	2	PH 2	300



WPC Flange head screw, PH







	Code	d _w x L _w [mm]	D[mm]	k[mm]	рн 🕂	Pcs 🛅
ø4.2	WPC-42013	4.2 x 13	11.5	2	PH 2	1000
Ø 4. Z	WPC-42016	4.2 x 16	11.5	2	PH 2	1000
	WPC-42019	4.2 x 19	11.5	2	PH 2	1000
	WPC-42025	4.2 x 25	11.5	2	PH 2	500
	WPC-42032	4.2 x 32	11.5	2	PH 2	500
	WPC-42040	4.2 x 40	11.5	2	PH 2	400
	WPC-42050	4.2 x 50	11.5	2	PH 2	300
	WPC-42065	4.2 x 65	11.5	2	PH 2	250



WRZP Screw for blind guides, PH

PH

	Features and adv Material Product made to ord	Zinc plated carbon steel	
	Features and adv	antages	
Zn	*	Pan head, PH drive	Pan head ensures tight fastening of the installed element. Commonly used PH drive also makes installation easier.
BLUE		Sharp point	Sharp point ensures easier and faster screw installation.

	Code	d _w x L _w [mm]	D [mm]	k[mm]	рн 🕂	Pcs 🛅
ø 4.5	WRZP-45010	4.5 x 10	10	5	PH 2	1000

Product made to order

L





KMWHT Construction flat head screw, TX



CE PN-EN 14592:2008 +A1:2012



-	Description		
1	Application	Screw for connecting	wood and wood-based members to structural timber
	Type of installation	This screw does not r	
	Substrate	Chipboard, plywood,	wood, sterling board, MDF board
	Material	Zinc-plated low carb	on steel
	Features and ad	lvantages	
822		Wax coating	Wax coating applied during the production process signifi- cantly reduces the torque. This makes the installation easier, faster and saves energy, which is important in the case of battery-powered tools.
H	< 200 mm	Screw length	We manufacture screws up to 200 mm long, which are suitable for installing members up to 130 mm thick.
eletet	->	Countersunk head with TX drive	Countersunk head ensures flush fitting of the screw in the in- stalled member. TX drive guarantees optimum torque transfer.
		Cutting ribs	Self-countersinking head ensures aesthetic finish result.
T		Shank ribs	Shank ribs reduces driving torque by reaming the hole.
		Serrated thread	Special cutting notches on the thread cut wood structural fibres while the screw is advancing.
	M.	Special cut- ting point	Notched thread tip makes the start of installation easier and prevents timber from splitting.

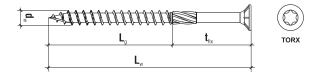


How to read the code, e.g. KMWHT-45040?





KMWHT Construction flat head screw, TORX



	Code	d _w x L _w [mm]	L _g [mm]	t _{fix} [mm]	τχ 🔿	Pcs 🛅
ø 3.0	KMWHT-30030	3.0 x 30	17	13	TX 10	500
9.C	KMWHT-30035	3.0 x 35	17	18	TX 10	500
	KMWHT-30040	3.0 x 40	22	18	TX 10	500
ø 3.5	KMWHT-35030	3.5 x 30	17	13	TX 15	500
U.	KMWHT-35035	3.5 x 35	17	18	TX 15	500
	KMWHT-35040	3.5 x 40	22	18	TX 15	500
	KMWHT-35050	3.5 x 50	30	20	TX 15	400
ø 4.0	KMWHT-40030	4.0 x 30	17	13	TX 20	500
ידע.	KMWHT-40035	4.0 x 35	17	18	TX 20	500
	KMWHT-40040	4.0 x 40	22	18	TX 20	500
	KMWHT-40045	4.0 x 45	30	15	TX 20	300
	KMWHT-40050	4.0 x 50	30	20	TX 20	300
	KMWHT-40060	4.0 x 60	35	25	TX 20	250
	KMWHT-40070	4.0 x 70	40	30	TX 20	250
ø4.5	KMWHT-45040	4.5 x 40	22	18	TX 20	250
ע-יבא	KMWHT-45050	4.5 x 50	30	20	TX 20	250
	KMWHT-45060	4.5 x 60	35	25	TX 20	250
	KMWHT-45070	4.5 x 70	40	30	TX 20	250
	KMWHT-45080	4.5 x 80	50	30	TX 20	250
ø 5.0	KMWHT-50040	5.0 x 40	22	18	TX 25	500
9. 0	KMWHT-50050	5.0 x 50	30	20	TX 25	300
	KMWHT-50060	5.0 x 60	35	25	TX 25	200
	KMWHT-50070	5.0 x 70	40	30	TX 25	200
	KMWHT-50080	5.0 x 80	50	30	TX 25	200
	KMWHT-50090	5.0 x 90	50	40	TX 25	200
	KMWHT-50100	5.0 x 100	60	40	TX 25	200
	KMWHT-50120	5.0 x 120	70	50	TX 25	200
ø6.0	KMWHT-60050	6.0 x 50	30	20	TX 30	200
20.0	KMWHT-60060	6.0 x 60	35	25	TX 30	200
	KMWHT-60070	6.0 x 70	40	30	TX 30	200
	KMWHT-60080	6.0 x 80	50	30	TX 30	200
	KMWHT-60090	6.0 x 90	50	40	TX 30	100
	KMWHT-60100	6.0 x 100	60	40	TX 30	100
	KMWHT-60120	6.0 x 120	70	50	TX 30	100
	KMWHT-60140	6.0 x 140	70	70	TX 30	100
	KMWHT-60160	6.0 x 160	70	90	TX 30	100
	KMWHT-60180	6.0 x 180	70	110	TX 30	100
	KMWHT-60200	6.0 x 200	70	130	TX 30	100



KDH / KMH Hardened countersunk flat head wood screw with partial thread, PZ



CE

+A1:2012

PN-EN 14592:2008

POLISH

PRODUCER

Description					
Application	also applied for cor	connections of wooden and wood-derived elements. It is necting furniture accessories, e.g. hinges, guide grooves lements,chipboard, plywood, OSB board.			
Type of installation	This screw does not	require prior drilling.			
Substrate	Chipboard, plywoo	d, wood, sterling board, MDF board			
Material	Zinc-plated low car	bon steel			
Features and adv	vantages				
	Wax coating	Wax coating applied during the production process significantly reduces the torque. This makes the installation easier, faster and saves energy, which is important in the case of battery-powered tools.			
	Countersunk head	This allows for ideally concealing the screw in the fastened ele- ment which facilitates the flow of the guide groove.			
	PZ drive	Commonly used PZ drive also makes installation easier			
	Profile of thread	Specially designed profile of thread leads to the assembly being quick, while the fastening of elements is long-lasting			
	Partial thread	Partial thread prevents splitting of elements being installed and guarantees their tight fastening.			
How	to read the code, e.g.	KDH-5007045-B(X5)?			
		50 070 45 -B (X5)			
	<i>''</i>	ameter Length Thread Blue zinc Packing 5.0mm 70mm length - 5 kg per box 45mm			



KDH/KMH Hardened flat head wood screw with partial thread, PZ

	Code			Со	de	Pcs divi			
	Zn	Zn	E	Zn	Zn		d _w x L _w [mm]	L _g [mm]	•
a2 5	KDH-3504025(X5)*	KDH-3504025-B(X5)*	5	-	-	-	3.5 x 40	25	PZ 2
ø 3.5	KDH-3504030(X5)*	KDH-3504030-B(X5)*	5	-	-	-	3.5 x 40	30	PZ 2
	KDH-3505025(X5)*	KDH-3505025-B(X5)*	5	-	-	-	3.5 x 50	25	PZ 2
	KDH-3505030(X5)*	KDH-3505030-B(X5)*	5	-	-	-	3.5 x 50	30	PZ 2
	KDH-3505035(X5)*	KDH-3505035-B(X5)*	5	-	-	-	3.5 x 50	35	PZ 2
	KDH-3506035(X5)*	KDH-3506035-B(X5)*	5	-	-	-	3.5 x 60	35	PZ 2
a1 0	KDH-4004020(X5)*	KDH-4004020-B(X5)*	5	-	-	-	4.0 x 40	20	PZ 2
ø 4.0	KDH-4005030(X5)*	KDH-4005030-B(X5)*	5	-	-	-	4.0 x 50	30	PZ 2
	KDH-4005035(X5)*	KDH-4005035-B(X5)*	5	-	-	-	4.0 x 50	35	PZ 2
	KDH-4005540(X5)*	KDH-4005540-B(X5)*	5	-	-	-	4.0 x 55	40	PZ 2
	KDH-4006035(X5)*	KDH-4006035-B(X5)*	5	-	-	-	4.0 x 60	35	PZ 2
	KDH-4006040(X5)*	KDH-4006040-B(X5)*	5	-	-	-	4.0 x 60	40	PZ 2
	KDH-40070(X5)	KDH-40070-B(X5)	5	KMH-40070	KMH-40070-B	250	4.0 x 70	55	PZ 2
	KDH-4007045(X5)*	KDH-4007045-B(X5)*	5	-	-	-	4.0 x 70	45	PZ 2
	KDH-4007050(X5)*	KDH-4007050-B(X5)*	5	-	-	-	4.0 x 70	50	PZ 2
	KDH-40080(X5)	KDH-40080-B(X5)	5	-	-	-	4.0 x 80	55	PZ 2
ø 4.5	KDH-4505540(X5)*	KDH-4505540-B(X5)*	5	-	-	-	4.5 x 55	40	PZ 2
ут.Ј	KDH-45070(X5)	KDH-45070-B(X5)	5	KMH-45070	KMH-45070-B	250	4.5 x 70	55	PZ 2
	KDH-45080(X5)	KDH-45080-B(X5)	5	KMH-45080	KMH-45080-B	250	4.5 x 80	55	PZ 2
~ []	KDH-5005030(X5)*	KDH-5005030-B(X5)*	5	-	-	-	5.0 x 50	30	PZ 2
ø 5.0	KDH-5006035(X5)*	KDH-5006035-B(X5)*	5	-	-	-	5.0 x 60	35	PZ 2
	KDH-50070(X5)	KDH-50070-B(X5)	5	KMH-50070	KMH-50070-B	200	5.0 x 70	55	PZ 2
	KDH-5007045(X5)*	KDH-5007045-B(X5)*	5	-	-	-	5.0 x 70	45	PZ 2
	KDH-50080(X5)	KDH-50080-B(X5)	5	KMH-50080	KMH-50080-B	200	5.0 x 80	55	PZ 2
	KDH-50090(X5)	KDH-50090-B(X5)	5	KMH-50090	KMH-50090-B	200	5.0 x 90	55	PZ 2
	KDH-50100(X5)	KDH-50100-B(X5)	5	KMH-50100	KMH-50100-B	200	5.0 x 100	55	PZ 2
	KDH-5010030(X5)*	KDH-5010030-B(X5)*	5	-	-	-	5.0 x 100	30	PZ 2
	KDH-50120(X5)	KDH-50120-B(X5)	5	KMH-50120	KMH-50120-B	100	5.0 x 120	75	PZ 2
-60	KDH-60070(X5)	KDH-60070-B(X5)	5	KMH-60070	KMH-60070-B	200	6.0 x 70	55	PZ 3
ø 6.0	KDH-60080(X5)	KDH-60080-B(X5)	5	KMH-60080	KMH-60080-B	200	6.0 x 80	55	PZ 3
	KDH-6008075(X5)*	KDH-6008075-B(X5)*	5	-	-	-	6.0 x 80	75	PZ 3
	KDH-60090(X5)	KDH-60090-B(X5)	5	KMH-60090	KMH-60090-B	100	6.0 x 90	55	PZ 3
	KDH-60100(X5)	KDH-60100-B(X5)	5	KMH-60100	KMH-60100-B	100	6.0 x 100	55	PZ 3
	KDH-6010070(X5)*	KDH-6010070-B(X5)*	5	-	-	-	6.0 x 100	70	PZ 3
	KDH-60110(X5)	KDH-60110-B(X5)	5	KMH-60110	KMH-60110-B	100	6.0 x 110	75	PZ 3
	KDH-60120(X5)	KDH-60120-B(X5)	5	KMH-60120	KMH-60120-B	100	6.0 x 120	75	PZ 3
	KDH-60140(X5)	KDH-60140-B(X5)	5	KMH-60140	KMH-60140-B	100	6.0 x 140	75	PZ 3
	KDH-60160(X5)	KDH-60160-B(X5)	5	KMH-60160	KMH-60160-B	100	6.0 x 160	75	PZ 3
	KDH-60180(X5)	KDH-60180-B(X5)	5	KMH-60180	KMH-60180-B	100	6.0 x 180	75	PZ 3
	KDH-60200(X5)	KDH-60200-B(X5)	5	KMH-60200	KMH-60200-B	100	6.0 x 200	75	PZ 3

* items made to order



KDHT/KMHT Hardened flat head wood screw with partial thread, TX



Zn

POLISH

PRODUCER

CE

+A1:2012

PN-EN 14592:2008

Application	also applied for conn	Screw tempered for connections of wooden and wood-derived elements. It is also applied for connecting furniture accessories, e.g. hinges, guide grooves etc. with wooden elements,chipboard, plywood, OSB board.			
Type of installation	This screw does not re	equire prior drilling.			
Substrate	Chipboard, plywood,	wood, sterling board, MDF board			
Material	Zinc-plated low carbo	on steel			
Features and a	dvantages				
	Wax coating	Wax coating applied during the production process signifi- cantly reduces the torque. This makes the installation easier, faster and saves energy, which is important in the case of battery-powered tools.			
	Countersunk head	This allows for ideally concealing the screw in the fastene element which facilitates the flow of the guide groove.			
	TX drive	TX drive guarantees optimum torque transfer.			
	Profile of thread	Specially designed profile of thread leads to the assemb being quick, while the fastening of elements is long-lasting			
	Partial thread	Partial thread prevents splitting of elements being installe and guarantees their tight fastening.			

How to read the code, e.g. KDHT-5010030?

KDHT	50	100	30
Туре	Diameter 5.0mm	Length 100mm	Thread length 30mm

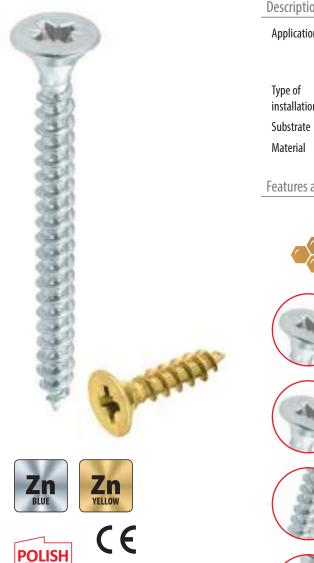


KDHT/KMHT Hardened flat head wood screw with partial thread, TX

	Code		Code	Pcs			
		kg			d _w x L _w	Lg	\mathbf{O}
	Zn		Zn		[mm]	[mm]	V
ø 3.5	KDHT-3504025	5	-	-	3.5 x 40	25	TX 15
UD.J	KDHT-3504030	5	-	-	3.5 x 40	30	TX 15
	KDHT-3505025	5	-	-	3.5 x 50	25	TX 15
	KDHT-3505030	5	-	-	3.5 x 50	30	TX 15
	KDHT-3505035	5	-	-	3.5 x 50	35	TX 15
	KDHT-3506035	5	-	-	3.5 x 60	35	TX 15
ø 4.0	KDHT-4004020	5	-	-	4.0 x 40	20	TX 20
9 4. 0	KDHT-4005030	5	-	-	4.0 x 50	30	TX 20
	KDHT-4005035	5	-	-	4.0 x 50	35	TX 20
	KDHT-4005540	5	-	-	4.0 x 55	40	TX 20
	KDHT-4006035	5	-	-	4.0 x 60	35	TX 20
	KDHT-4006040	5	-	-	4.0 x 60	40	TX 20
	KDHT-40070	5	KMHT-40070	250	4.0 x 70	55	TX 20
	KDHT-4007045	5	-	-	4.0 x 70	45	TX 20
	KDHT-4007050	5	-	-	4.0 x 70	50	TX 20
	KDHT-40080	5	-	-	4.0 x 80	55	TX 20
ø4.5	KDHT-4505540	5	-	-	4.5 x 55	40	TX 20
9 4. J	KDHT-45070	5	KMHT-45070	250	4.5 x 70	55	TX 20
	KDHT-45080	5	KMHT-45080	250	4.5 x 80	55	TX 20
~ 5 0	KDHT-5005030	5	-	-	5.0 x 50	30	TX 25
ø 5.0	KDHT-5006035	5	-	-	5.0 x 60	35	TX 25
	KDHT-50070	5	KMHT-50070	200	5.0 x 70	55	TX 25
	KDHT-5007045	5	-	-	5.0 x 70	45	TX 25
	KDHT-50080	5	KMHT-50080	200	5.0 x 80	55	TX 25
	KDHT-50090	5	KMHT-50090	200	5.0 x 90	55	TX 25
	KDHT-50100	5	KMHT-50100	200	5.0 x 100	55	TX 25
	KDHT-5010030	5	-	-	5.0 x 100	30	TX 25
	KDHT-50120	5	KMHT-50120	100	5.0 x 120	75	TX 25
~6 ^	KDHT-60070	5	KMHT-60070	200	6.0 x 70	55	TX 30
ø 6.0	KDHT-60080	5	KMHT-60080	200	6.0 x 80	55	TX 30
	KDHT-6008075	5	-	-	6.0 x 80	75	TX 30
	KDHT-60090	5	KMHT-60090	100	6.0 x 90	55	TX 30
	KDHT-60100	5	KMHT-60100	100	6.0 x 100	55	TX 30
	KDHT-6010070	5	-	-	6.0 x 100	70	TX 30
	KDHT-60110	5	KMHT-60110	100	6.0 x 110	75	TX 30
	KDHT-60120	5	KMHT-60120	100	6.0 x 120	75	TX 30
	KDHT-60140	5	KMHT-60140	100	6.0 x 140	75	TX 30
	KDHT-60160	5	KMHT-60160	100	6.0 x 160	75	TX 30
	KDHT-60180	5	KMHT-60180	100	6.0 x 180	75	TX 30
	KDHT-60200	5	KMHT-60200	100	6.0 x 200	75	TX 30



KDH / KMH Hardened countersunk flat head wood screw with full thread, PZ

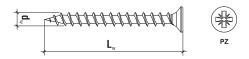


PN-EN 14592:2008

+A1:2012

PRODUCER

otion					
ation	Screw tempered for connections of wooden and wood-derived elements. It is also applied for connecting furniture accessories, e.g. hinges, guide grooves etc. with wooden elements, chipboard, plywood, OSB board.				
f ation	This screw does no	ot require prior drilling.			
ate	Chipboard, plywo	od, wood, sterling board, MDF board			
al	Zinc-plated low ca	arbon steel			
es and adv	/antages				
	Wax	Wax coating applied during the production process significantly reduces the torgue. This makes the installation easier, faster and			
	coating	saves energy, which is important in the case of battery-powered tools.			
	Counter- sunk head	This allows for ideally concealing the screw in the fastened ele- ment which facilitates the flow of the guide groove.			
	PZ drive	Commonly used PZ drive also makes installation easier			
	Profile of thread	Specially designed profile of thread leads to the assembly being quick, while the fastening of elements is long-lasting			
	Full thread	Full thread provides maximum efficiency of connection when in- stalling thin elements.			



How to read the code KDH-50030-B(X5)?

KDH	50	030	- B	(X5)
Screw type	Screw diameter 5.0mm	Screw length 30mm	Zinc color - blue	Packing - 5kg/box

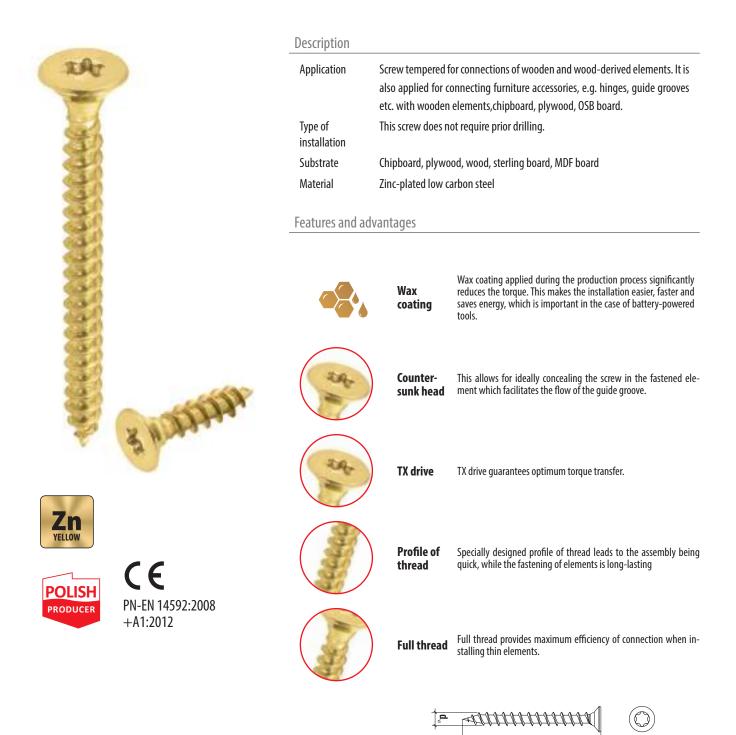
SCREWS AND FASTENERS FOR WINDOWS AND DOORS SCREWS FOR WINDOW MANUFACTURE - PRODUCTION PROGRAMME



	Co	ode		C	ode			
	Zn	Zn	kg	Zn	Zn	Pcs 🗂	d " x L _w [mm]	+
ø 3.0	KDH-30012(X5)	KDH-30012-B(X5)	5	KMH-30012	KMH-30012-B	2000	3.0 x 12	PZ 1
93.0	KDH-30013(X5)	KDH-30013-B(X5)	5	KMH-30013	KMH-30013-B	2000	3.0 x 13	PZ 1
	KDH-30016(X5)	KDH-30016-B(X5)	5	KMH-30016	KMH-30016-B	2000	3.0 x 16	PZ 1
	KDH-30020(X5)	KDH-30020-B(X5)	5	KMH-30020	KMH-30020-B	2000	3.0 x 20	PZ 1
	KDH-30025(X5)	KDH-30025-B(X5)	5	KMH-30025	KMH-30025-B	1500	3.0 x 25	PZ 1
	KDH-30030(X5)	KDH-30030-B(X5)	5	KMH-30030	KMH-30030-B	1000	3.0 x 30	PZ 1
	KDH-30035(X5)	KDH-30035-B(X5)	5	KMH-30035	KMH-30035-B	1000	3.0 x 35	PZ 1
	KDH-30040(X5)	KDH-30040-B(X5)	5	KMH-30040	KMH-30040-B	500	3.0 x 40	PZ 1
ø 3.5	KDH-35013(X5)	KDH-35013-B(X5)	5	KMH-35013	KMH-35013-B	2000	3.5 x 13	PZ 2
UD.J	KDH-35016(X5)	KDH-35016-B(X5)	5	KMH-35016	KMH-35016-B	2000	3.5 x 16	PZ 2
	KDH-35020(X5)	KDH-35020-B(X5)	5	KMH-35020	KMH-35020-B	1500	3.5 x 20	PZ 2
	KDH-35025(X5)	KDH-35025-B(X5)	5	KMH-35025	KMH-35025-B	1000	3.5 x 25	PZ 2
	KDH-35030(X5)	KDH-35030-B(X5)	5	KMH-35030	KMH-35030-B	500	3.5 x 30	PZ 2
	KDH-35035(X5)	KDH-35035-B(X5)	5	KMH-35035	KMH-35035-B	500	3.5 x 35	PZ 2
	KDH-35040(X5)	KDH-35040-B(X5)	5	KMH-35040	KMH-35040-B	500	3.5 x 40	PZ 2
	KDH-35045(X5)	KDH-35045-B(X5)	5	KMH-35045	KMH-35045-B	500	3.5 x 45	PZ 2
	KDH-35050(X5)	KDH-35050-B(X5)	5	KMH-35050	KMH-35050-B	400	3.5 x 50	PZ 2
	KDH-35060(X5)	KDH-35060-B(X5)	5	KMH-35060	KMH-35060-B	400	3.5 x 60	PZ 2
ø 4.0	KDH-40013(X5)	KDH-40013-B(X5)	5	KMH-40013	KMH-40013-B	1500	4.0 x 13	PZ 2
9 4. 0	KDH-40016(X5)	KDH-40016-B(X5)	5	KMH-40016	KMH-40016-B	1000	4.0 x 16	PZ 2
	KDH-40020(X5)	KDH-40020-B(X5)	5	KMH-40020	KMH-40020-B	1000	4.0 x 20	PZ 2
	KDH-40025(X5)	KDH-40025-B(X5)	5	KMH-40025	KMH-40025-B	1000	4.0 x 25	PZ 2
	KDH-40 030(X5)	KDH-40030-B(X5)	5	KMH-40030	KMH-40030-B	500	4.0 x 30	PZ 2
	KDH-40035(X5)	KDH-40035-B(X5)	5	KMH-40035	KMH-40035-B	500	4.0 x 35	PZ 2
	KDH-40040(X5)	KDH-40040-B(X5)	5	KMH-40040	KMH-40040-B	500	4.0 x 40	PZ 2
	KDH-40045(X5)	KDH-40045-B(X5)	5	KMH-40045	KMH-40045-B	300	4.0 x 45	PZ 2
	KDH-40050(X5)	KDH-40050-B(X5)	5	KMH-40050	KMH-40050-B	300	4.0 x 50	PZ 2
	KDH-40055(X5)	KDH-40055-B(X5)	5	KMH-40055	KMH-40055-B	250	4.0 x 55	PZ 2
	KDH-40060(X5)	KDH-40060-B(X5)	5	KMH-40060	KMH-40060-B	250	4.0 x 60	PZ 2
ø 4.5	KDH-45016(X5)	KDH-45016-B(X5)	5	KMH-45016	KMH-45016-B	1000	4.5 x 16	PZ 2
9 4. J	KDH-45020(X5)	KDH-45020-B(X5)	5	KMH-45020	KMH-45020-B	1000	4.5 x 20	PZ 2
	KDH-45025(X5)	KDH-45025-B(X5)	5	KMH-45025	KMH-45025-B	500	4.5 x 25	PZ 2
	KDH-45030(X5)	KDH-45030-B(X5)	5	KMH-45030	KMH-45030-B	500	4.5 x 30	PZ 2
	KDH-45035(X5)	KDH-45035-B(X5)	5	KMH-45035	KMH-45035-B	500	4.5 x 35	PZ 2
	KDH-45040(X5)	KDH-45040-B(X5)	5	KMH-45040	KMH-45040-B	300	4.5 x 40	PZ 2
	KDH-45045(X5)	KDH-45045-B(X5)	5	KMH-45045	KMH-45045-B	300	4.5 x 45	PZ 2
	KDH-45050(X5)	KDH-45050-B(X5)	5	KMH-45050	KMH-45050-B	250	4.5 x 50	PZ 2
	KDH-45060(X5)	KDH-45060-B(X5)	5	KMH-45060	KMH-45060-B	250	4.5 x 60	PZ 2
ø 5.0	KDH-50025(X5)	KDH-50025-B(X5)	5	KMH-50025	KMH-50025-B	500	5.0 x 25	PZ 2
WJ.U	KDH-50030(X5)	KDH-50030-B(X5)	5	KMH-50030	KMH-50030-B	500	5.0 x 30	PZ 2
	KDH-50035(X5)	KDH-50035-B(X5)	5	KMH-50035	KMH-50035-B	500	5.0 x 35	PZ 2
	KDH-50040(X5)	KDH-50040-B(X5)	5	KMH-50040	KMH-50040-B	500	5.0 x 40	PZ 2
	KDH-50045(X5)	KDH-50045-B(X5)	5	KMH-50045	KMH-50045-B	300	5.0 x 45	PZ 2
	KDH-50050(X5)	KDH-50050-B(X5)	5	KMH-50050	KMH-50050-B	300	5.0 x 50	PZ 2
	KDH-50060(X5)	KDH-50060-B(X5)	5	KMH-50060	KMH-50060-B	200	5.0 x 60	PZ 2
ø 6.0	KDH-60040(X5)	KDH-60040-B(X5)	5	KMH-60040	KMH-60040-B	200	6.0 x 40	PZ 3
90.0	KDH-60050(X5)	KDH-60050-B(X5)	5	KMH-60050	KMH-60050-B	200	6.0 x 50	PZ 3
	KDH-60060(X5)	KDH-60060-B(X5)	5	KMH-60060	KMH-60060-B	200	6.0 x 60	PZ 3



KDHT/KMHT Hardened flat head wood screw with full thread, TX



How to read the code, e.g. KDHT-50030?

KDHT	50	30	
Туре	Diameter 5.0mm	Length 30mm	

SCREWS AND FASTENERS FOR WINDOWS AND DOORS SCREWS FOR WINDOW MANUFACTURE - PRODUCTION PROGRAMME



	Code		Code			
	Zn	kg	Zn	Pcs	d "x L _w [mm]	\mathbf{O}
2.0	KDHT-30012	5	KMHT-30012	2000	3.0 x 12	TX 10
ø 3.0	KDHT-30013	5	KMHT-30013	2000	3.0 x 13	TX 10
	KDHT-30016	5	KMHT-30016	2000	3.0 x 16	TX 10
	KDHT-30020	5	KMHT-30020	2000	3.0 x 20	TX 10
	KDHT-30025	5	KMHT-30025	1500	3.0 x 25	TX 10
	KDHT-30030	5	KMHT-30030	1000	3.0 x 30	TX 10
	KDHT-30035	5	KMHT-30035	1000	3.0 x 35	TX 10
	KDHT-30040	5	KMHT-30040	500	3.0 x 40	TX 10
	KDHT-35013	5	KMHT-35013	2000	3.5 x 13	TX 15
Ø 3.5	KDHT-35015	5	KMHT-35015	2000	3.5 x 16	TX 15
	KDHT-35020	5	KMHT-35020	1500	3.5 x 20	TX 15
	KDHT-35025	5	KMHT-35025	1000	3.5 x 25	TX 15
	KDHT-35025	5	KMHT-35030	500	3.5 x 30	TX 15
-	KDHT-35030	5	KMHT-35035	500	3.5 x 35	TX 15
	KDHT-35040	5	KMHT-35040	500	3.5 x 40	TX 15
	KDHT-35045	5	KMHT-35045	500	3.5 x 45	TX 15
-	KDHT-35050	5	KMHT-35050	400	3.5 x 50	TX 15
	KDHT-35060	5	KMHT-35060	400	3.5 x 60	TX 15
	KDHT-40013	5	KMHT-40013	1500	4.0 x 13	TX 20
ø 4.0	KDHT-40016	5	KMHT-40016	1000	4.0 x 16	TX 20
	KDHT-40020	5	KMHT-40020	1000	4.0 x 20	TX 20
	KDHT-40025	5	KMHT-40025	1000	4.0 x 25	TX 20
	KDHT-40030	5	KMHT-40030	500	4.0 x 30	TX 20
	KDHT-40035	5	KMHT-40035	500	4.0 x 35	TX 20
	KDHT-40040	5	KMHT-40040	500	4.0 x 40	TX 20
	KDHT-40045	5	KMHT-40045	300	4.0 x 45	TX 20
	KDHT-40050	5	KMHT-40050	300	4.0 x 50	TX 20
	KDHT-40055	5	KMHT-40055	250	4.0 x 55	TX 20
	KDHT-40060	5	KMHT-40060	250	4.0 x 60	TX 20
~ / F	KDHT-45016	5	KMHT-45016	1000	4.5 x 16	TX 20
ø 4.5	KDHT-45020	5	KMHT-45020	1000	4.5 x 20	TX 20
	KDHT-45025	5	KMHT-45025	500	4.5 x 25	TX 20
	KDHT-45030	5	KMHT-45030	500	4.5 x 30	TX 20
	KDHT-45035	5	KMHT-45035	500	4.5 x 35	TX 20
	KDHT-45040	5	KMHT-45040	300	4.5 x 40	TX 20
	KDHT-45045	5	KMHT-45045	300	4.5 x 45	TX 20
	KDHT-45050	5	KMHT-45050	250	4.5 x 50	TX 20
	KDHT-45060	5	KMHT-45060	250	4.5 x 60	TX 20
~ [0	KDHT-50025	5	KMHT-50025	500	5.0 x 25	TX 25
ø 5.0	KDHT-50030	5	KMHT-50030	500	5.0 x 30	TX 25
	KDHT-50035	5	KMHT-50035	500	5.0 x 35	TX 25
	KDHT-50040	5	KMHT-50040	500	5.0 x 40	TX 25
	KDHT-50045	5	KMHT-50045	300	5.0 x 45	TX 25
	KDHT-50050	5	KMHT-50050	300	5.0 x 50	TX 25
	KDHT-50060	5	KMHT-50060	200	5.0 x 60	TX 25
-6.0	KDHT-60040	5	KMHT-60040	200	6.0 x 40	TX 30
ø 6.0	KDHT-60050	5	KMHT-60050	200	6.0 x 50	TX 30
	KDHT-60060	5	KMHT-60060	200	6.0 x 60	TX 30

Product made to order





SCREWS AND FASTENERS FOR WINDOWS AND DOORS

SCREWS AND FASTENERS FOR WINDOW AND DOOR INSTALLATION PRODUCTION PROGRAMME





WHO Hardened self-tapping flat head screw for PVC frames and connections in timber, TX



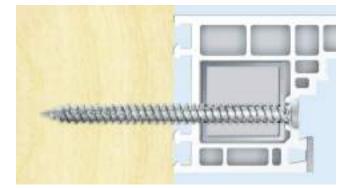


AT-15-8977/2012



Description					
Application	Screw for installation of e.g. window and door frames				
Type of installation	This screw does require prior drilling				
Substrate	Concrete, masonry, timber				
Material	Zinc-plated low ca	arbon steel			
Features and adv	antages				
212 mm	Screw length	We manufacture screws up to 212 mm long.			
S)	TX drive	TX drive guarantees optimum torque transfer.			
	Coun- tersunk head with cutting ribs	Countersunk head ensures flush fitting of the screw in the instal- led member. Self-countersinking head ensures aesthetic finish result.			
	Serrated thread	Thread design guarantees reliable and long-lasting connection — both in timber and masonry			

Sample application



DESIGN RESISTANCE

Substrate	Anchorage h _{eff} [mm]	Value [kN]
Design resistance in concrete C20/25*	30	1.68
Design resistance in solid brick**	40	0.95
Design resistance in solid silica brick***	40	0.97

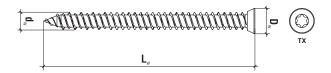
*Normal weight concrete C20/25

**Solid clay brick, class not lower than 10

***Solid sand-lime brick, class not lower than 20



WHO Hardened self-tapping flat head screw for PVC frames and connections in timber, TX



	Code	d _w x L _w [mm]	D _w [mm]	Pre-drilled hole d₀[mm]	тх 🔿	Pcs 🗎
a 7 5	WH0-75042	7.5 x 42	11	6	TX 30	200
ø 7.5	WH0-75062	7.5 x 62	11	6	TX 30	200
	WH0-75082	7.5 x 82	11	6	TX 30	100
	WH0-75102	7.5 x 102	11	6	TX 30	100
	WH0-75112	7.5 x 112	11	6	TX 30	100
	WH0-75132	7.5 x 132	11	6	TX 30	100
	WH0-75152	7.5 x 152	11	6	TX 30	100
	WH0-75182	7.5 x 182	11	6	TX 30	100
	WH0-75212	7.5 x 212	11	6	TX 30	100





WHOW Hardened self-tapping pan head screw for fixing timber frames and connections in timber, TX





AT-15-8977/2012



Description						
Application	Screw for fixing woodwork					
Type of installation	This screw does require prior drilling					
Substrate	Concrete, masonry, timber					
Material	Zinc-plated low carbon steel					
Features and ad	lvantages					
< 212 mm	Screw length	We manufacture screws up to 212 mm long.				
	TX drive	TX drive guarantees optimum torque transfer.				
	Pan head	The shape of the head ensures its required sinking in the installed timber elements				
	Serrated thread	Thread design guarantees reliable and long-lasting connection — both in timber and masonry				
	Application Type of installation Substrate Material	Application Screw for fixing with the screw does restricted by the screw does restrict				

Sample application



DESIGN RESISTANCE

Substrate	Anchorage h _{eff} [mm]	Value [kN]
Design resistance in concrete C20/25*	30	1.68
Design resistance in solid brick**	40	0.95
Design resistance in solid silica brick***	40	0.97

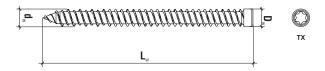
*Normal weight concrete C20/25

**Solid clay brick, class not lower than 10

***Solid sand-lime brick, class not lower than 20



WHOW Hardened self-tapping pan head screw for fixing timber frames and connections in timber, TX



	Code	d _w x L _w [mm]	D _w [mm]	Pre-drilled hole d₀[mm]	тх 🔿	Pcs 🛅
a 7 5	WHOW-75042	7.5 x 42	7.8	6	TX 30	200
ø 7.5	WHOW-75062	7.5 x 62	7.8	6	TX 30	200
	WHOW-75082	7.5 x 82	7.8	6	TX 30	100
	WHOW-75102	7.5 x 102	7.8	6	TX 30	100
	WHOW-75112	7.5 x 112	7.8	6	TX 30	100
	WHOW-75132	7.5 x 132	7.8	6	TX 30	100
	WHOW-75152	7.5 x 152	7.8	6	TX 30	100
	WHOW-75182	7.5 x 182	7.8	6	TX 30	100
	WH0W-75212	7.5 x 212	7.8	6	TX 30	100





SCREWS AND FASTENERS FOR WINDOWS AND DOORS SCREWS AND FASTENERS FOR WINDOW AND DOOR INSTALLATION - PRODUCTION PROGRAMME

LO Frame mounting fastener, PZ



Zn/Al



Application	Fastener for fixing PVC and wooden window frames, door frames, and metal fittings
Type of installation	Required to bore a hole
Substrate	Concrete and masonry
Material	Material: steel, Zn-Al alloy

Features and advantages



Countersunk head with PZ drive

Countersunk head ensures its correct sinking in the instal-led element. Commonly used PZ drive also makes installation easier.

Expansion in the Plug expansion in the element being installed ensures a installed element correct fixing in the substrate.

Expansion in the substrate

Special design of the expansion zone ensures correct fixing both in solid substrate (concrete, ceramic/clay brick, aerated concrete, sand-lime brick) and in ceramic/clay hollow brick.

Substrates



DESIGN RESISTANCE

Substarte	Anchorage depth	Value
Design resistance in concrete C20/25	30 mm	1.70 kN
Design resistance in solid brick	40 mm	1.11 kN
Design resistance in solid silica brick	40 mm	1.14 kN
Design resistance in hollow brick	60 mm	0.29 kN
Design resistance in AAC	60 mm	0.29 kN

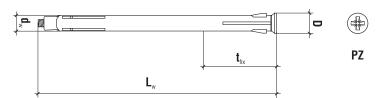
Normal weight concrete strength, class not lower than C20/25 according to PN-EN 206/1:2003 in the compression zone Solid clay brick, class not lower than 15 according to PN-EN 771-1:2011 Sand-lime brick, class not lower than 20 according to PN-EN 771-2:2011 Aerated concrete type 600 class 5 according to PN-EN 771-4:2011 Hollow clay brick, class 15 according to PN-EN 771-1:2011

Sample application





LO Frame mounting fastener, PZ



	Code	d _w x L _w [mm]	D [mm]	t _{fix} [mm]	PZ 🕂	Pcs 🛅
~10	L0-10072	10 x 72	13	42	PZ 3	100
ø10	L0-10092	10 x 92	13	62	PZ 3	100
	L0-10112	10 x 112	13	82	PZ 3	100
	L0-10132	10 x 132	13	102	PZ 3	100
	L0-10152	10 x 152	13	122	PZ 3	100
	L0-10182	10 x 182	13	152	PZ 3	50
	L0-10202	10 x 202	13	172	PZ 3	50

Z Cover cap for frame fastener - LO

Code	Colour	Diameter [mm]	Pcs 🛅
ZB	White	16	100
ZBR	Brown	16	100
ZCZ	Black	16	100
ZSZ	Gray	16	100









NOTES







Klimas Sp. z o.o. ul. Wincentego Witosa 135/137 Kuźnica Kiedrzyńska 42-233 Mykanów, POLAND



www.wkret-met.com