

## Section 1. PRODUCT DESCRIPTION

### EXPANSION PLUG WITH STRAIGHT/ROUND/TAIL HOOK – PX/WX/HX



Expansion plug PX/WX/HX comprises sleeve made of polypropylene and steel screw with straight/round/tail hook with protective zinc coating. It is designed for fixing of light-duty interior finish systems and lightweight installations or mounting clamps on solid substrates. The plug is held firmly in place as the expansion lugs on its outside prevent it from turning once it is placed in the hole. On the inner side sleeves have guide lugs on the entire length to ensure guiding of a screw when being installed.

Types of substrates on which expansion plug PX/WX/HX can be installed:

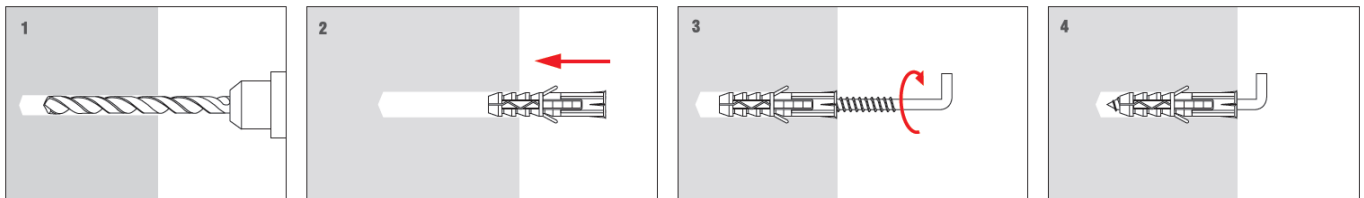
- Concrete
- Solid clay brick
- Solid sand-lime brick



Expansion plugs hold National Technical Assessment: ITB-KOT-2018/0528 Rev. I

## Section 2. METHOD OF INSTALLATION

1. Original expansion plugs delivered by the manufacturer can be used only
2. Before installation identify a substrate in which the plug will be installed and compare loads which the plug will carry to resistance values given in Product Data Sheet or National Technical Assessment
3. Select adequate length of plug (sleeve + screw)
4. Use proper method of drilling according to a substrate type (holes in masonry substrate made of autoclaved aerated concrete blocks should be drilled using a drill without impact)
5. Diameter of drilled holes should match diameter of the plugs used
6. Drilled holes in substrates of solid materials should be deeper by min. 10mm compared to the plug anchorage depth
7. Clean the holes in solid materials of drillings with a back and forth motion of the drill at a reduced speed
8. Then insert the plug into a drilled hole, and drive the screw until it completely penetrates the sleeve (pre-fastening installation)



## Section 3. TECHNICAL DATA

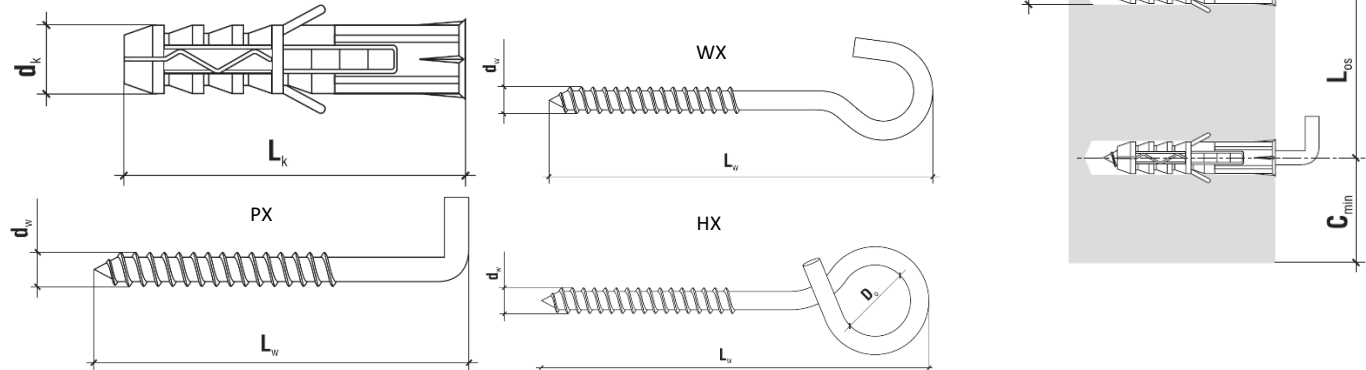
Substrate type	RESISTANCE						
	Design pull-out resistance [kN]						
	PX-6, WX-6	PX-8, WX-8	PX-10, WX-10	PX-10D	PX-12, WX-12	HX-12	PX-12D
Concrete C20/25	-	-	0,06	0,11	0,06	0,17	0,33
Solid clay brick	-	0,04	0,04	0,16	0,08	0,30	0,24
Solid sand-lime brick	-	0,04	0,04	0,16	0,08	0,36	0,48

**PRODUCT DATA SHEET – PX/WX/HX**

TECHNICAL PARAMETERS				
Parameter	Unit	Value		
		PX, WX	PX-10D, PX-12D	HX
Plug diameter	$d_k$ [mm]	6/8/10/12	10/12	12
Hole/drill diameter	$d_o$ [mm]	6/8/10/12	10/12	12
Effective anchorage depth	$h_{eff}$ [mm]	30/40/50/60	60/80	60
Drilled hole depth	$h_o$ [mm]	40/50/60/70	70/90	70
Sleeve material	[-]	PP – polypropylene	PP – polypropylene	PP – polypropylene
Screw material	[-]	Zinc-plated steel	Zinc-plated steel	Zinc-plated steel
National Technical Assessment	[-]	KOT-2018/0528	KOT-2018/0528	KOT-2018/0528

INSTALLATION PARAMETERS			
Plug type	Min. substrate thickness	Min. distance from edge	Min. axial distance
	$h_{min}$ [mm]	$c_{min}$ [mm]	$L_{os}$ [mm]
PX-6, WX-6	45	60	60/90*
PX-8, WX-8	60	80	80/120*
PX-10, WX-10	75	100	100/150*
PX-10D, PX-12, WX-12, HX-12	90	120	120/180*
PX-12D	120	160	160/240*

\*for concrete substrate/other substrates



SELECTION TABLE			
Product code	Sleeve diameter and length	Screw diameter and length	Number of pieces in a box [pcs]
	$d_k \times L_k$ [mm]	$d_w \times L_w$ [mm]	
PX-06	6,0x30	4,0x40	200
PX-08	8,0x40	4,5x55	100
PX-10	10x50	5,5x65	100
PX-10D	10x60	5,5x80	100
PX-12	12x60	7,0x80	100
PX-12D	12x80	8,0x105	50
WX-06	6,0x30	4,0x55	100
WX-08	8,0x40	4,5x75	100
WX-10	10x50	5,5x90	100
WX-12	12x60	7,0x105	100
HX-12	12x60	8,0x130	50

**Section 4. REMARKS**

- All previous versions of this Product Data Sheet shall cease to be valid
- 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.