

HLV-X Light duty anchors

Economical sleeve anchor

Anchor version



HLV-X
Through fastening

Benefits

- Available in a variety of sizes in though fastening configuration
- Rigid sleeve with ribbed design.
- Carbon steel grade 4.8, zinc galvanized to min 5µm

Base material



Concrete
(non-cracked)

Static resistance

All data in this section is Hilti technical data and applies to:

- Correct setting (See setting instruction)
- No edge distance and spacing influence
- Minimum base material thickness
- Concrete C20/25, $f_{ck,cube} = 25 \text{ N/mm}^2$

Design resistance

Anchor size		10	12
Tensile N_{Rd}	[kN]	2,3	3,7
Shear V_{Rd}	[kN]	3,9	5,0

Recommended loads ^{a)}

Anchor size		10	12
Tensile N_{rec}	[kN]	1,6	2,6
Shear V_{rec}	[kN]	2,8	3,6

a) With overall partial safety factor for action $\gamma = 1,4$. The partial safety factors for action depend on the type of loading and shall be taken from national regulations.

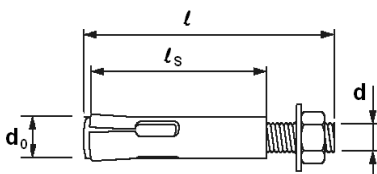
Materials

Material quality

Part	Material
Anchor body	Carbon steel, $f_{uk} \geq 400 \text{ N/mm}^2$, $f_{yk} \geq 320 \text{ N/mm}^2$, zinc galvanized to min. 5 μm

Anchor dimensions

Anchor size	Thread size d [-]	Length of anchor bolt L[mm]	Length of sleeve l_s [mm]	Thickness of fixture $t_{fix} \leq$ [mm]
10x45/15	M8	58	45	15
10x55/25	M8	68	55	25
10x75/45	M8	88	75	45
10x95/65	M8	108	95	65
12x50/15	M10	74	50	15
12x70/35	M10	94	70	35
12x95/60	M10	119	95	60



Setting information

Setting details

Anchor size		10	12
Thread size		M8	M10
Nominal diameter of drill bit	d_o [mm]	10	12
Cutting diameter of drill bit	$d_{cut} \leq$ [mm]	10,45	12,5
Depth of drill hole	$h_1 \geq$ [mm]	50	55
Width across nut flats	SW [mm]	13	17
Diameter of clearance hole in the fixture	$d_f \leq$ [mm]	12	14
Effective anchorage depth	h_{ef} [mm]	30	35
Max. torque moment	T_{inst} [Nm]	25	40

Installation equipment

Anchor size	10	12
Rotary hammer for setting	TE 2 – TE 16	
Other tools	hammer, torque wrench, blow up pump	

Setting parameters

Anchor size	10	12
Minimum base material thickness	$h_{min} \geq$ [mm]	80 ^{a)}
Minimum spacing	$s_{min} \geq$ [mm]	200
Minimum edge distance	$c_{min} \geq$ [mm]	100

a) In case of deeper embedment than h_{ef} , $h_{min} \geq 2x$ embedment depth.

Setting instructions

*For detailed information on installation see instruction for use given with the package of the product.

Setting instruction	
Through fastening	
1. Drilling 	2. Cleaning
3. Inserting the anchor by hammer 	4. Apply installation torque