
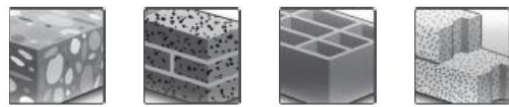




HPS-1 Plastic anchors

Economical plastic impact anchor

Anchor version	Benefits
 <p>HPS-1 (M4-M8)</p>	<ul style="list-style-type: none"> - Impact anchor for light frames, battens and profiles on solid base materials - Impact and temperature resistant - High quality plastic

Base material
 <p>Concrete (non-cracked) Solid brick Hollow brick Autoclaved aerated concrete</p>

Basic loading data

- All data in this section applies to:
- Correct setting (See setting instruction)
 - No edge distance and spacing influence
 - Base material as specified in the table
 - Minimum base material thickness
 - Loads shall be reduced if the temperature sustains above 40°C

Recommended loads^{a)}

Anchor size		4/0	5/0	5/5-5/15	6/0-6/25	6/30-6/40	8/0	8/10-8/40	8/60-8/100
Concrete ≥ C16/20	N _{Rd} [kN]	0,05	0,10	0,15	0,25	0,25	0,30	0,40	0,40
	V _{Rd} [kN]	0,15	0,30	0,35	0,55	0,35	0,50	0,90	0,50
Engineering brick, 12 hole, class B	N _{Rd} [kN]	0,05	0,10	0,15	0,25	0,25	0,30	0,40	0,40
	V _{Rd} [kN]	0,15	0,30	0,35	0,55	0,35	0,50	0,90	0,50
Perforated brick 3 hole common	N _{Rd} [kN]	0,05	0,10	0,15	0,20	0,20	0,25	0,30	0,30
	V _{Rd} [kN]	0,15	0,30	0,35	0,55	0,35	0,50	0,90	0,55
Thermalite block, 7 N lightweights	N _{Rd} [kN]	-	-	0,08	0,15	0,15	0,20	0,25	0,25
	V _{Rd} [kN]	-	-	0,15	0,25	0,15	0,40	0,40	0,25
Thermalite block, 1/2 N lightweights	N _{Rd} [kN]	-	-	0,05	0,08	0,08	-	0,12	0,12
	V _{Rd} [kN]	-	-	0,10	0,15	0,10	-	0,25	0,15
Autoclaved aerated concrete AAC 4, ACC 6	N _{Rd} [kN]	-	-	0,08	0,10	0,10	-	0,15	0,15
	V _{Rd} [kN]	-	-	0,10	0,12	0,10	-	0,30	0,20
Extruded brick, Boral 10	N _{Rd} [kN]	0,05	0,10	0,15	0,20	0,20	0,25	0,35	0,35
	V _{Rd} [kN]	0,15	0,25	0,30	0,40	0,25	0,50	0,90	0,55

a) With overall global safety factor $\gamma = 5$ to the characteristic loads and a partial safety factor of $\gamma = 1,4$ to the design values.



Materials

Material quality

Part	Material
Plastic sleeve	Polyamide 6.6
Screw	Carbon steel, galvanised to min. 5µm
	Stainless steel, grade A2
	Stainless steel, grade A2, copper-plated

Setting information

Installation temperature
 -10 °C to +40°C

Service temperature range
 Hilti HPS-1 impact anchor may be applied in the temperature range below.

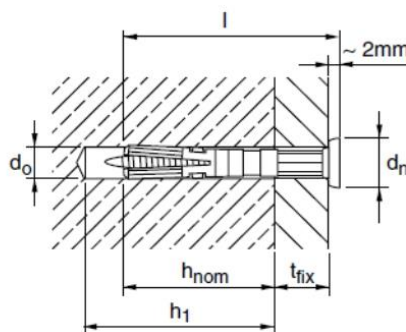
Temperature range	Base material temperature	Max. long term base material temperature	Max. short term base material temperature
Temperature range	-40 °C to +80 °C	+50 °C	+80 °C

Max. short term base material temperature
 Short-term elevated base material temperatures are those that occur over brief intervals, e.g. as a result of diurnal cycling.

Max. long term base material temperature
 Long-term elevated base material temperatures are roughly constant over significant periods of time.

Setting details HPS-1

Anchor		HPS-1 4	HPS-1 5	HPS-1 6	HPS-1 8
Nominal diameter of drill bit	d_o [mm]	4	5	6	8
Cutting diameter of drill bit	$d_{cut} \leq$ [mm]	4,35	5,35	6,4	8,45
Depth of drill hole	$h_1 \geq$ [mm]	25	30	40	50
Nominal embedment depth	h_{nom} [mm]	20	20	25	30
Anchor length	l [mm]	21,5	22 - 37	27 - 67	28,5 - 132,5
Max fixture thickness	t_{fix} [mm]	2	15	40	100



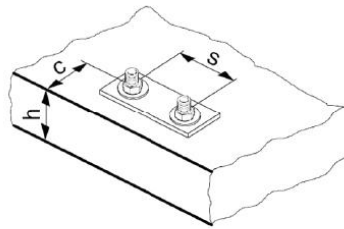


Installation equipment

Anchor	HPS-1 4	HPS-1 5	HPS-1 6	HPS-1 8
Rotary hammer	TE2 - TE16			
Other tools	Screwdriver			

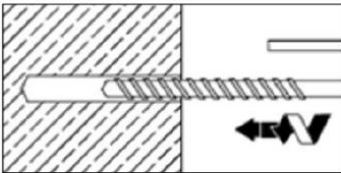
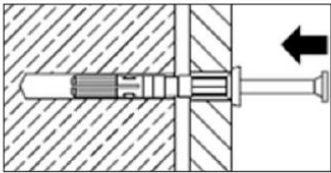
Setting parameters HPS-1

Anchor	HPS-1 4	HPS-1 5	HPS-1 6	HPS-1 8
Spacing	s [mm]	20	25	30
Edge distance	c [mm]	20	25	30



Setting instruction

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

Setting instructions		
<p>1. Drill hole with drill bit</p> 	<p>2. Install anchor</p> 	<p>3. Hammer in anchor</p> 