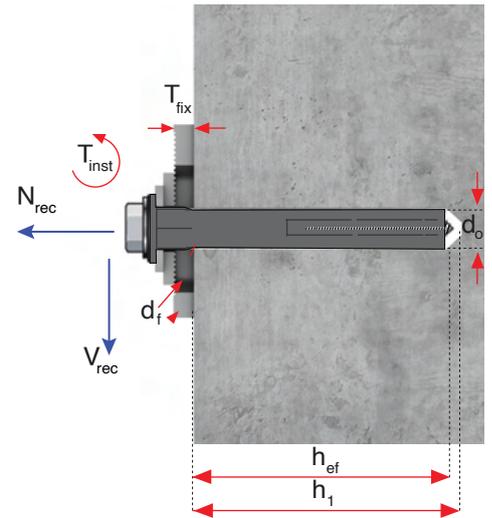
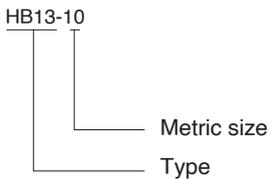


HB13 Wall Plug - Technical Details



Product Code	Technical Details						
	Bolt Size	Drill Hole Diameter	Drill Length	Minimum Embedment	Maximum Fixture Thickness	Fixture Hole Diameter	Maximum Torque
	(mm)	D (mm)	H _i (mm)	E _{min} (mm)	S _{max} (mm)	D _i (mm)	M _{lmax} (Nm)
HB13-10/80	M10x80	10	100	80	10	10.5	15
HB13-10/100	M10x100	10	110	100	30	10.5	15
HB13-10/120	M10x120	10	120	110	50	10.5	15
HB13-10/140	M10x140	10	130	120	70	10.5	15

Product Code Explanation:



Admissible Loads	
<i>Compressive strength of aerated concrete [N/mm²]</i>	
Aerated concrete $f_b \geq 2$ N/mm ²	0.27 kN
Aerated concrete $f_b \geq 3$ N/mm ²	0.47 kN
Aerated concrete $f_b \geq 4$ N/mm ²	0.67 kN
Aerated concrete $f_b \geq 6$ N/mm ²	1.07 kN
<i>Characteristic Bending Moment</i>	
Steel screw ($\gamma_{Ms} = 1.5$)	11.80 Nm
Stainless steel screw ($\gamma_{Ms} = 1.187$)	11.02 Nm

Application:

For fastening fixtures to aerated concrete walls and block work walls

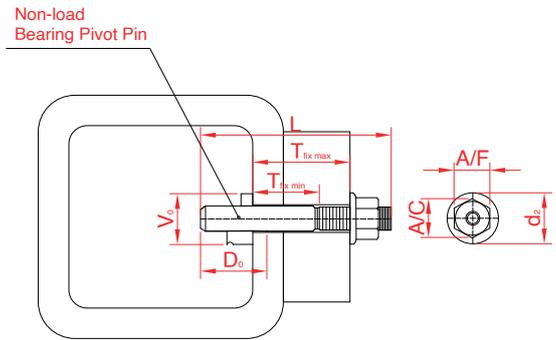
Available in:

Stainless Steel AISI 304 & AISI 316 and E.galvanized Mild Steel



HBB Blind Bolt - Technical Details

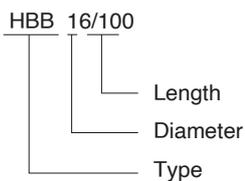
The BlindBolt is a blind fixing made from zinc flake-coated or stainless steel A4-70, designed for use in girder cavities or box sections. Its innovative design shortens installation time, and the variety of sizes allows for flexible selection based on fixture thickness.



D_o: Depth Clearance
V_o: Anchor Clearance

Product Code	Physical Features										
	Size	Length	Hole Diameter	Fixture Thickness		Anchor Clearance	Depth Clearance	Minimum Hole Centres	Width Across Flats	Width Across Corners	Washer Diameter
				Minimum	Maximum						
(mm)	L (mm)	d _o (mm)	t _{fix, min} (mm)	t _{fix, max} (mm)	V _o (mm)	D _o (mm)	p _{min} (mm)	A/F (mm)	A/C (mm)	d ₂	
HBB-8/50	M8x50	50	9	9	24	19	25	20	13	15	18
HBB-10/60	M10x60	60	11	10	30	23	30	20	16	17	22
HBB-10/95	M10x95	95	11	25	65	23	30	20	16	17	22
HBB-10/130	M10x130	130	11	55	100	23	30	20	16	17	22
HBB-12/70	M12x70	70	13	12	35	26	35	25	18	20.5	26
HBB-12/120	M12x120	120	13	30	85	26	35	25	18	20.5	26
HBB-12/180	M12x180	180	13	80	140	26	5	25	18	20.5	26

Product Code Explanation:



Application:

- Box Sections
- Vertical Cylindrical Sections
- Hollow Profiles
- Simple Connections

Available in:

Stainless Steel AISI 316 and Hot Deep Galvanized Mild Steel

10mm thickness base material class.

Load Direction	a degree	Allowable Loads (kN)		
		M8	M10	M12
Pull Out (Nrec)	0	6.9	12.9	18.8
Shear (Vrec)	90	14.6	23.2	33.7

A safety factor of 1.25 has been used against mean ultimate failure loads

Fixing Instructions



Drilling



Cleaning



Placing



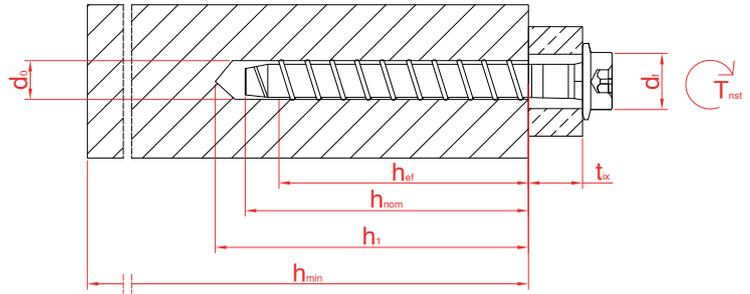
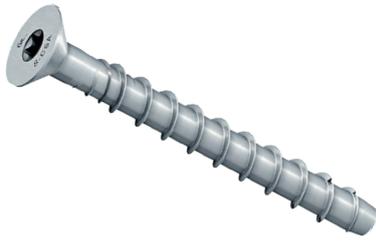
Placing



Torque

HSDS-4 Concrete Screw - Technical Details

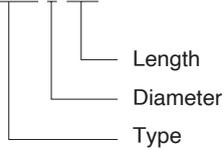
The HSDS-4 concrete screws, offer quick and easy installation without the need for extra tools or steps. They support high loads even with minimal spacing and edge distances, and their removability makes them ideal for temporary fixings.



Product Code	Physical Features									
	Size	Length	Fixture Thickness	Embedment Depth	Nominal Diameter	Drill Hole Diameter	Eff. Anchorage Depth	Fixture Hole	Width Across Flats	Required Torque
	(mm)	L (mm)	t _{ex} (mm)	h _{nom} (mm)	h ₁ (mm)	d ₀ (mm)	h _{ef}	d ₁ ≤	SW	T _{inst}
HSDS-4-6-50	M6x50	60	5	55	65	6	27.6	7.7-9.0	11 or 13	14
HSDS-4-6-80	M6x80	80	25	55	65	6	27.6	7.7-9.0	11 or 13	14
HSDS-4-6-100	M6x100	100	45	55	65	6	27.6	7.7-9.0	11 or 13	14
HSDS-4-6-120	M6x120	120	65	55	65	6	27.6	7.7-9.0	11 or 13	14

Product Code Example:

HSDS-4-8/110



Application:

Facade scaffolds, temporary fastening, contact surfaces, shelves, cable racks, hand rails.

Available in:

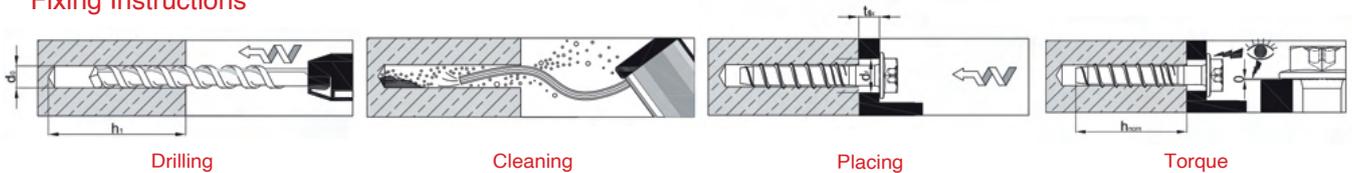
Zinc-plated steel

10mm thickness base material class.

Allowable Loads (kN)		
Load Direction	a degree	M6
Pull Out (Nrec)	0	2.1
Shear (Vrec)	90	4.5

A safety factor of 1.25 has been used against mean ultimate failure loads

Fixing Instructions



Additional Bolts

Self Drill Screws

HSDS-1



Used for connecting profiled steel sheets to steel substructures between 1.5 mm and 4 mm thick.

Product Code	Physical Features	
	Length	Clamping Thickness
	(mm)	(mm)
HSDS-1-6-6.3x22	22	0 - 7
HSDS-1-6-6.3x25	25	0 - 10
HSDS-1-6-6.3x38	38	0 - 23

HSDS-2



- For fastening profiled steel sheets to steel substructures 4 mm to 10 mm thick
- For fastening profiled aluminum sheets or sandwich panels to steel substructures 4 mm to 10 mm thick

Product Code	Physical Features	
	Length	Clamping Thickness
	(mm)	(mm)
HSDS-2-12-5.5x40	40	0 - 11
HSDS-2-5.5x58	58	0 - 31
HSDS-2-5.5x118	118	65 - 91

- For fastening profiled aluminum sheets or sandwich panels to aluminum substructures 4 mm to 12 mm thick

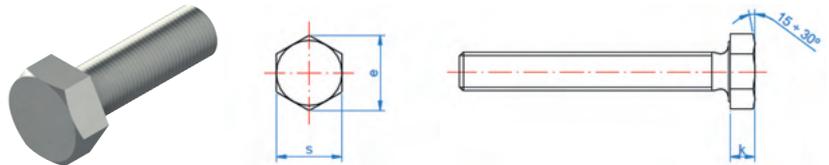
HSDS-3



Used in roofing or cladding sheets to steel sections, aluminium sections and timber.

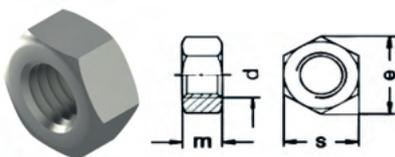
Product Code	Physical Features	
	Length	Clamping Thickness
	(mm)	(mm)
HSDS-3-6.5x75	75	0 - 25
HSDS-3-6.5x90	90	12 - 40
HSDS-3-6.5x115	115	37 - 65

DIN933



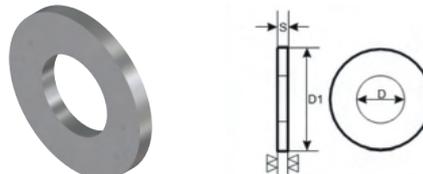
Product Code	Physical Features			
	Head Thickness	Distance Between Faces	Distance Between Apexes	Torque Wrench
	k (mm)	s (mm)	e (mm)	
DIN933-6	4	10	10.89	10
DIN933-8	5.3	13	14.20	13
DIN933-10	6.4	17	18.72	17
DIN933-12	7.5	19	20.88	19
DIN933-16	10	24	26.17	24

DIN934



Product Code	Physical Features				
	Diameter	Thread Pitch	m	s	e
		(mm)	(mm)	(mm)	(mm)
DIN934-6	M6	1	4.7-5	9.78-10	11.05
DIN934-8	M8	1.25	6.14-6.5	12.73-13	14.38
DIN934-10	M10	1.5	7.64-8	16.73-17	18.9
DIN934-12	M12	1.75	9.64-10	18.67-19	21.1

DIN125



Product Code	Physical Features				
	Nominal Diameter	Inner Diameter	Outer Diameter	Thickness	Weight
		D (mm)	D1 (mm)	S (mm)	kg / 1000 pcs
DIN125-6	M6	6.4	12.5	1.6	1.14
DIN125-8	M8	8.4	17	1.6	2.14
DIN125-10	M10	10.5	21	2	4.08
DIN125-12	M12	13	24	2.5	6.27