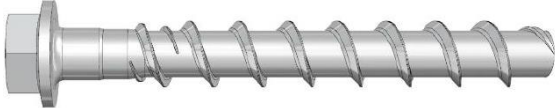





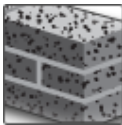
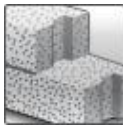
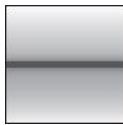




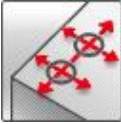






HUS4 Screw anchor

Ultimate performance screw anchor for single point fastening

Anchor version		Benefits
	HUS4-H(F) (8-16)*	- High productivity - less drilling and fewer operations than with conventional anchors
	HUS4-C (8-10)	- ETA approval for cracked and non-cracked concrete - ETA approval for Seismic C1 and C2
	HUS4-A(F) (10-14)	- ETA approval for adjustability (unscrew-rescrew) - Smaller edge and spacing distance - aBG (DIBt) approval for reusability in fresh concrete ($f_{ck, cube} = 10/15/20/25 \text{ Nmm}^2$) for temporary applications - Three embedment depths for maximum design flexibility and flexible design for concrete cone capacity - No cleaning required size 8 to 14 - HUS4-HF and HUS4-AF with multilayer coatings for additional corrosion protection - Through fastening with H, A and C head - Pre-fastening with A head

Base material				Load conditions			
							
Concrete (non-cracked)	Concrete (cracked)	Hollow core slabs	Solid brick	Autoclaved aerated concrete	Static / quasi-static	Seismic ETA-C1/C2	Fire resistance

Installation conditions	Other information			
				
Small edge distance and spacing	European Technical Assessment	CE conformity	PROFIS Engineering design software	DIBt Approval Reusability

Approvals / certificates		
Description	Authority	No. / date of issue
European Technical Assessment	DIBt	ETA-20/0867 / 14-04-2022
Fire test report	DIBt	ETA-20/0867 / 14-04-2022
aBG for temporary fastening	DIBt	Z-21.8-2137 / 21-12-2021

*HUS4-HF not available in size 12

Materials

Mechanical properties




Anchor size		8	10	12	14	16
Nominal tensile strength	f_{uk} [N/mm ²]	758	799	767	728	622
Yield strength	f_{yk} [N/mm ²]	606	639	613	582	494
Stressed cross-section	A_s [mm ²]	47,5	68,9	103	139	173
Moment of resistance	W [mm ³]	35	67	130	213	321
Characteristic bending resistance	$M^0_{Rk,s}$ [Nm]	32	64	120	186	240

Material quality

Type	Material
HUS4 - H, A, C	Carbon steel, galvanized
HUS4 - HF, AF	Carbon steel, multi-layer coating ^{a)}

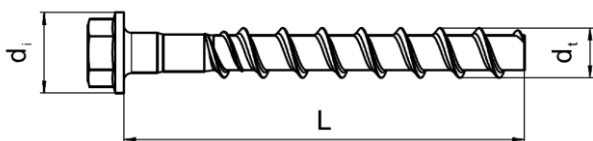
a) Multi-layer coating provides a higher corrosion resistance compared to regular hot dip galvanized (HDG) systems with a 40µm coating thickness.

Head configuration

Type	Part	
HUS4-H HUS4-HF	Hexagonal head	
HUS4-C	Countersunk head	
HUS4-A	External thread	 Hilti HUS4-A, size 10 with external thread M12 and size 14 with external thread M16

Fastener dimensions and marking HUS4-H(F)

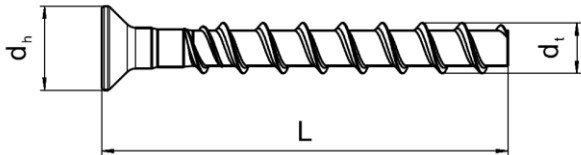
Anchor size		8	10	12	14	16
Type	HUS4	H, HF	H, HF	H	H, HF	H, HF
Outer diameter of screw thread	d_t [mm]	10,50	12,70	14,70	16,70	18,80
Diameter of integrated washer	d_i [mm]	17,50	20,50	23,60	29,00	32,60
Length of the screw (min/max)	L [mm]	45/150	60/305	70/150	75/150	100/205



HUS4: Hilti Universal Screw 4th generation
H: Hexagonal head
10: Screw diameter
100: total length of the screw

Fastener dimensions and marking HUS4-C

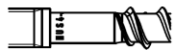
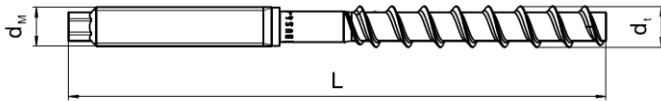
Anchor size		8	10
Type		C	C
Outer diameter of the screw thread	d_t [mm]	10,50	12,70
Countersunk head diameter	d_h [mm]	18,00	21,00
Length of the screw (min/max)	L [mm]	55/85	70/120



HUS4: Hilti Universal Screw 4th generation
C: Countersunk head
10: Screw diameter
100: total length of the screw

Fastener dimensions and marking HUS4-A(F)

Anchor size		10	14
Type		A, AF	A, AF
Outer diameter of the screw thread	d_t [mm]	12,70	16,70
Diameter of the metric thread	d_M [mm]	M12	M16
Length of the screw (min/max)	L [mm]	120/165	155/205



E.g. HUS4-A 10x165



HUS4: Hilti Universal Screw 4th generation
A: Threaded head
10: Screw diameter
100: total length of the screw
8: carbon steel 8.8
K: length of the screw (more info in ETA)