

Sleeve anchor UHS

Versatile heavy-duty sleeve anchor for high performance with a design appearance. Approved for concrete, seismic, and fire protection.

Long Description

The Upat sleeve anchor UHS delivers high performance with design. It is particularly suitable for installation in cracked and uncracked concrete as well as dense natural stone, both indoors and outdoors. Thanks to its high lateral load capacity, the number of fixing points is reduced, giving the installation a discreet appearance.

Characteristics

- Certification/Approval: ETA Option 1 cracked concrete, ETA Option 7 uncracked concrete, ETA seismic, fire resistance, VdS CEA guidelines compliant
- Load range: Tension load 3.6-32.7kN, shear load 4.1-65.5kN
- Material: Zinc plated steel (zp), Stainless Steel (R)
- Variant: Hexagon head (S), countersunk head (SK), threaded bolt and nut (B), internal thread (I)
- Feature: Thread M6-M20, usable length 10-100mm
- Accessory: Blow-out pump UPM AB

Applications

- Balcony railings
- Stair railings
- High racks
- Support feet
- Bike racks
- Barrier
- Silos
- Pumps
- Canopies
- Garden gates

Advantages

- Discreet appearance: Available with countersunk or hexagonal heads, threaded bolts with nuts and internal threads
- Comprehensive approval package: ETA concrete approval option 1, seismic approval, fire resistance and sprinkler system approval
- High lateral loads: The screw shaft and sleeve are optimally matched to each other and enable high lateral loads
- Flexible installation: The metric internal thread allows threaded rods, hooks or screws to be flexibly installed and removed flush with the surface

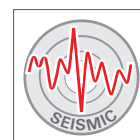
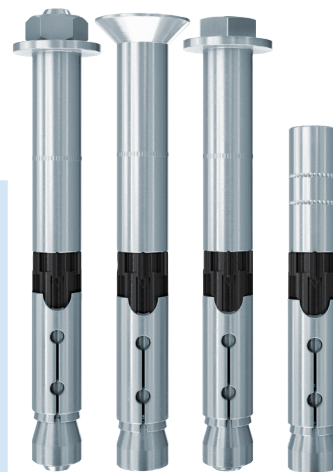
Materials

Approved for:

- Concrete C20/25 to C50/60, cracked and uncracked

Also suitable for:

- Concrete C12/15
- Natural stone with dense structure

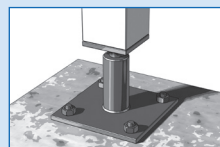
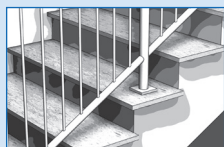
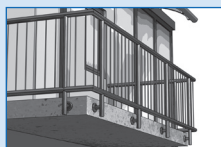


Straight to the product

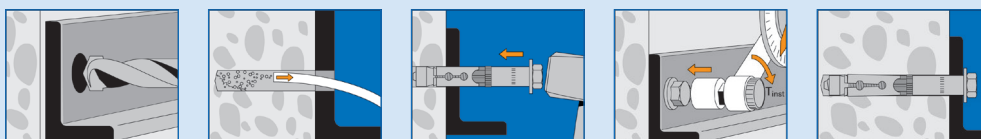


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Application examples



Assembly



Sleeve anchor UHS

Product variants

Product	Art.-No. (zp)	Art.-No. (R)	Anchor length	Drill diameter	Min. drill hole depth for through fixings	Max. fixture thickness	Fire resistance	ETA approval	Sales unit (zp)	Sales unit (R)
UHS 10/10 B	547273	-	70	10	65	10	R120	✓	50	-
UHS 10/25 B	547274	-	75	10	80	25	R120	✓	50	-
UHS 10/50 B	547275	-	110	10	105	50	R120	✓	50	-
UHS 12/10 B	547276	-	95	12	90	10	R120	✓	50	-
UHS 12/25 B	547277	-	110	12	105	25	R120	✓	50	-
UHS 12/50 B	547278	-	135	12	130	50	R120	✓	25	-
UHS 12/100 B	547279	-	185	12	180	100	R120	✓	25	-
UHS 15/10 B	547280	-	110	15	100	10	R120	✓	25	-
UHS 15/25 B	547281	-	125	15	115	25	R120	✓	25	-
UHS 15/50 B	547282	-	150	15	140	50	R120	✓	25	-
UHS 15/100 B	547283	-	200	15	190	100	R120	✓	20	-
UHS 18/25 B	547284	-	140	18	130	25	R120	✓	20	-
UHS 18/50 B	547285	-	165	18	155	50	R120	✓	20	-
UHS 18/100 B	547286	-	215	18	205	100	R120	✓	10	-
UHS 24/25 B	547287	-	167	24	150	25	R120	✓	10	-
UHS 24/50 B	547288*	-	192	24	175	50	R120	✓	10	-
UHS 24/100 B	547289	-	242	24	225	100	R120	✓	5	-
UHS 28/30 B	547290*	-	199	28	185	—	R120	✓	4	-
UHS 28/60 B	547291	-	229	28	215	60	R120	✓	4	-
UHS 12/M6 I	547265	547269*	77,5	12	85	3 - 5	R120	✓	25	25
UHS 12/M8 I	547266	547270*	77,5	12	85	3 - 5	R120	✓	25	25
UHS 15/M10 I	547267	547271	90	15	95	—	R120	✓	25	25
UHS 15/M12 I	547268	547272	90	15	95	—	R120	✓	20	20
UHS 10/10 S	547252	547261*	70	10	65	10	R120	✓	50	50
UHS 10/25 S	547253	-	75	10	80	25	R120	✓	50	-
UHS 10/50 S	547254*	-	110	10	105	50	R120	✓	50	-
UHS 12/10 S	547255	547262	90	12	90	10	R120	✓	50	50
UHS 12/25 S	547256	547263	105	12	105	25	R120	✓	50	20
UHS 12/50 S	547257	-	130	12	130	50	R120	✓	25	-
UHS 15/10 S	547258	547264	106	15	100	10	R120	✓	25	50
UHS 15/25 S	547259	-	121	15	115	25	R120	✓	25	-
UHS 15/50 S	547260*	-	146	15	140	50	R120	✓	25	-
UHS 10/15 SK	541303	-	65	10	70	15	R120	✓	50	-
UHS 10/25 SK	547241	-	75	10	80	25	R120	✓	50	-
UHS 10/50 SK	547242*	-	100	10	105	50	R120	✓	50	-
UHS 12/15 SK	541304	547248	90	12	95	15	R120	✓	25	25
UHS 12/25 SK	547243	-	100	12	105	25	R120	✓	25	-
UHS 12/30 SK	-	547249	105	12	110	30	R120	✓	-	25
UHS 12/50 SK	547244	547250	125	12	130	50	R120	✓	25	25
UHS 15/15 SK	547245	547251	100	15	105	15	R120	✓	25	25
UHS 15/25 SK	547246	-	110	15	115	25	R120	✓	25	-
UHS 15/50 SK	547247	-	135	15	140	50	R120	✓	25	-

Stainless steel (R): For fastenings outdoors or in damp rooms

Galvanised steel (zp/gvz): For fastenings in dry indoor areas

Hexagon head (S): For secure application of torque from the outside, even in confined installation spaces

Countersunk head (SK): For a visually appealing and flush-mounted fastening

Threaded bolt and nut (B): For series mounting and precise adjustment of the attachment

Internal thread (I): For use with metric screws and flush removal

* Note: Available upon request. Not part of the standard product range.

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Load table

Permissible loads of a single anchor¹⁾ in normal concrete of strength class C20/25

For the design the complete current assessment ETA-17/0288 has to be considered.

Type	Material / surface ²⁾	Effective an- chorage depth h_{ef} [mm]	Minimum mem- ber thickness h_{min} [mm]	Installation- torque T_{inst} [Nm]	Cracked concrete				Non-cracked concrete			
					Permissible Tension (N_{perm}), Shear loads (V_{perm}), minimum spacing (s_{min}) and edge distances (c_{min})				Permissible Tension (N_{perm}), Shear loads (V_{perm}), minimum spacing (s_{min}) and edge distances (c_{min})			
					$N_{perm}^{3)}$ [kN]	$V_{perm}^{3)}$ [kN]	$s_{min}^{3)}$ [mm]	$c_{min}^{3)}$ [mm]	$N_{perm}^{3)}$ [kN]	$V_{perm}^{3)}$ [kN]	$s_{min}^{3)}$ [mm]	$c_{min}^{3)}$ [mm]
UHS 10 S	zp	40	80	10	3.6	4.1	50	50	5.9	5.9	50	50
	R	40	80	15	3.6	4.1	50	50	5.9	5.9	50	50
UHS 12 S	zp	60	120	22.5	5.7	15.2	60	60	10.9	18.9	70	70
	R	60	120	25	5.7	15.2	60	60	9.5	17.7	70	70
UHS 15 S	zp	70	140	40	7.6	19.2	70	70	13.7	27.4	80	80
	R	70	140	40	7.6	19.2	70	70	13.7	27.4	80	80
UHS 10 SK	zp	40	80	10	3.6	4.1	50	50	5.9	5.9	50	50
UHS 12 SK	zp	60	120	22.5	5.7	15.2	60	60	10.9	18.9	70	70
	R	60	120	22.5	5.7	15.2	60	60	10.9	18.9	70	70
UHS 15 SK	zp	70	140	40	7.6	19.2	70	70	13.7	27.4	80	80
	R	70	140	40	7.6	19.2	70	70	13.7	27.4	80	80
UHS 18 SK	zp	80	160	80	11.7	23.5	80	80	16.8	33.5	90	90
UHS 12 / M 6 I	zp	60	125	15	4.3	2.9	60	60	4.7	2.9	70	70
	R	60	125	15	4.3	3.2	60	60	5.4	3.2	70	70
UHS 12 / M 8 I	zp	60	125	15	4.3	5.1	60	60	8.6	5.1	70	70
	R	60	125	15	4.3	5.9	60	60	8.6	5.9	70	70
UHS 15 / M10 I	zp	70	150	25	5.7	8.6	70	70	13.8	8.6	80	80
	R	70	150	25	5.7	9.1	70	70	14.1	9.1	80	80
UHS 15 / M12 I	zp	70	150	25	5.7	12	70	70	14.1	12	80	80
	R	70	150	25	5.7	13.7	70	70	14.1	13.7	80	80
UHS 10 B	zp	40	80	10	3.6	4.1	50	50	5.9	5.9	50	50
UHS 12 B	zp	60	120	17.5	5.7	15.2	60	60	10.9	15.5	70	70
UHS 15 B	zp	70	140	38	7.6	19.2	70	70	13.7	24.5	80	80
UHS 18 B	zp	80	160	80	11.7	23.5	80	80	16.8	33.5	90	90
UHS 24 B	zp	100	200	120	16.4	32.8	100	100	23.4	46.9	125	125
UHS 28 B	zp	125	250	180	22.9	45.8	125	150	32.7	65.5	150	150

¹⁾ Design according to EN 1992-4:2018 (for static resp. quasi-static loads). The partial safety factors for material resistance as regulated in the ETA as well as a partial safety factor for load actions of $\gamma_L = 1.4$ are considered. As a single anchor counts e.g. an anchor with a spacing $s \geq 3 \times h_{ef}$ and an edge distance $c \geq 1.5 \times h_{ef}$. Accurate data see ETA.

²⁾ Further steel grades, versions and technical data see ETA, e.g. for dry internal conditions, galvanised steel zp; for damp interior stainless steel R and exterior conditions, e.g. material 1.4362, 1.4401.

³⁾ In the case of combinations of tensile and shear loads, bending moments and reduced edge and axial spacings (anchor groups), the design must be carried out in accordance with the provisions of the complete ETA and the provisions of the EN 1992-4:2018. We recommend to use our anchor design software DesignFiX.