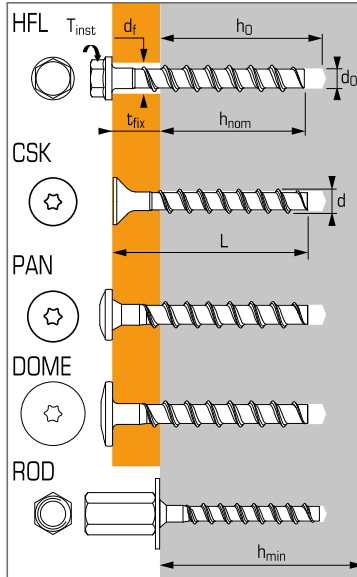




Concrete screw anchor for non-structural applications for use in concrete and beam slab



ETA Part 6 - 16/0373  
 (2)ETA Part 6 - 17/0174  
 ETA Option 1 - 16/0276 (Ø6)



### APPLICATION

- Channel, cable tray
- Brackets
- E-Clips, cowhorn
- Rod hanging

### MATERIAL

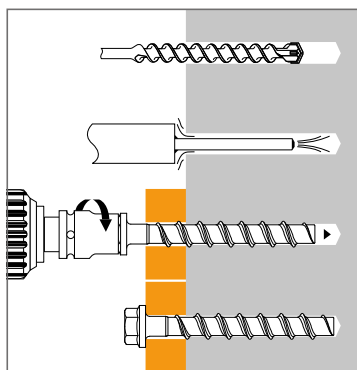
#### Zinc coated steel versions:

Min. tensile strength: 700 N/mm<sup>2</sup>  
 Min. zinc coated steel 5 µm

#### Stainless steel versions:

Min. tensile strength: 700 N/mm<sup>2</sup>  
 Stainless steel A4

### INSTALLATION



### Technical data

Versions	Anchor size	Minimum embedment depth				Maximum embedment depth				Thread Ø	Drilling Ø	Total anchor length	Tighten torque	Code
		Embed. depth min.	Max. thick. of part to be fixed	Drilling depth	Min. thick. of base material	Embed. depth max.	Max. thick. of part to be fixed	Drilling depth	Min. thick. of base material					
		h <sub>nom</sub> (mm)	t <sub>fix</sub> (mm)	h <sub>0</sub> (mm)	h <sub>min</sub> (mm)	h <sub>nom</sub> (mm)	t <sub>fix</sub> (mm)	h <sub>0</sub> (mm)	h <sub>min</sub> (mm)					

#### Zinc coated steel versions

HFL	5X40/5		5											
	5X50/15	35	15	40	80	-	-	-	-	6,5	5	50	8	058727
	5X60/25		25									60		058728
HFL	6X40/5		5									40		058729
	6X50/15 <sup>(1)</sup>	35	15	40	80	-	-	-	-	7,5	6	50	10	058730
	6X80/45-25 <sup>(1)</sup>		45			55	25	60	100			80		058731
	6X100/65-45 <sup>(1)</sup>		65			55	45	60	100			100		058732
CSK	5X40/5	35	5	40	80	-	-	-	-	6,5	5	40	8	058770
	5X60/25		25									60		058771
	6X40/5		5									40		058772
	6X60/25-5 <sup>(1)</sup>		25			55	5	60	100			60		058773
	6X80/45-25 <sup>(1)</sup>	35	45	40	80	55	25	60	100	7,5	6	80	10	058774
	6X100/65-45 <sup>(1)</sup>		65			55	45	60	100			100		058775
	6X120/85-65 <sup>(1)</sup>		85			55	65	60	100			120		058776
6X140/105-85 <sup>(1)</sup>		105			55	85	60	100			140		058777	
PAN	5X40/5		5									40		058779
	5X50/15	35	15	40	80	-	-	-	-	6,5	5	50	8	058780
	5X60/25		25									60		058781
	6X30/5 <sup>(2)</sup>	25	3	28	80	-	-	-	-	7,0	6	28	10	058787
DOME	6X40/5	35	5	40	80	-	-	-	-	7,5	6	40	10	058783
	6X60/25-5		25			55	5	60	100			60		058784
ROD	6X35/M6-M8	35	-	40	80	-	-	-	-	7,5	6	35		058788
	6X35/M8-M10	35	-	40	80	-	-	-	-	7,5	6	35	10	058785
	6X55/M8-M10 <sup>(1)</sup>	55	-	60	100	-	-	-	-			55		058786

#### Stainless steel A4 versions

HFL	6X50/15 A4 <sup>(1)</sup>	35	15	40	80	-	-	-	-	7,5	6	50	10	058806
	6X60/25-5 A4 <sup>(1)</sup>		25			55	5	60	100			60		058807

<sup>(1)</sup> for single application in cracked concrete and/or under seismic C1 condition, see page 59 to 62 with h<sub>nom</sub> = 40 mm and h<sub>nom</sub> = 55 mm

### Anchor mechanical properties

Anchor size		Ø5	Ø6
<b>Zinc coated &amp; A4</b>			
<b>A<sub>s</sub></b> (mm <sup>2</sup> )	Stressed cross-section	33,0	44,2
<b>W<sub>el</sub></b> (mm <sup>3</sup> )	Elastic section modulus	27,0	41,4
<b>M<sup>0</sup><sub>rk,s</sub></b> (Nm)	Characteristic bending moment	5,3	10,0
<b>M</b> (Nm)	Recommended bending moment	7,15	5,0



The loads specified on this page allow judging the product's performances, but cannot be used for the designing. The data given in the pages "CC method" have to be applied (3/4 and 4/4).

### Characteristic loads ( $N_{Rk}$ , $V_{Rk}$ ) in kN

Mean Ultimate loads are derived from test results in admissible service conditions, and characteristic loads are statistically determined.

#### TENSILE

Anchor size Zinc coated & A4	Ø5	Ø6	Ø6	Ø6
<b>Cracked and non-cracked concrete (C20/25)</b>				
$h_{nom}$	<b>35</b>	<b>25</b>	<b>35</b>	<b>55</b>
$N_{Rk}^*$	1,5	0,9	3,0	7,5

\* multiple use for non-structural application

#### SHEAR

Anchor size Zinc coated & A4	Ø5	Ø6	Ø6
<b>Cracked &amp; non-cracked concrete (C20/25)</b>			
$h_{nom}$	<b>35</b>	<b>25<sup>(1)</sup></b>	<b>≥35</b>
$V_{Rk}$	4,4	0,9	7,0

<sup>(1)</sup> for  $h_{nom} = 25$  mm,  $V_{Rk} = N_{Rk}$

### Design loads ( $N_{Rd}$ , $V_{Rd}$ ) for one anchor without edge or spacing influence in kN

$$N_{Rd} = \frac{N_{Rk}^*}{\gamma_{Mc}}$$

\*Derived from test results

$$V_{Rd} = \frac{V_{Rk}^*}{\gamma_{Ms}}$$

#### TENSILE

Anchor size Zinc coated & A4	Ø5	Ø6	Ø6	Ø6
<b>Cracked and non-cracked concrete (C20/25)</b>				
$h_{nom}$	<b>35</b>	<b>25</b>	<b>35</b>	<b>55</b>
$N_{Rd}^*$	0,8	0,6	2,0	5,0

$\gamma_{Mc} = 1,8$  for Ø5

$\gamma_{Mc} = 1,5$  for Ø6

\* multiple use for non-structural application

#### SHEAR

Anchor size Zinc coated & A4	Ø5	Ø6	Ø6
<b>Cracked &amp; non-cracked concrete (C20/25)</b>			
$h_{nom}$	<b>35</b>	<b>25<sup>(1)</sup></b>	<b>≥35</b>
$V_{Rd}$	3,5	0,6	5,6

$\gamma_{Ms} = 1,25$

<sup>(1)</sup> for  $h_{nom} = 25$  mm,  $V_{Rd} = N_{Rd}$

### Recommended loads ( $N_{rec}$ , $V_{rec}$ ) for one anchor without edge or spacing influence in kN

$$N_{rec} = \frac{N_{Rk}^*}{\gamma_M \cdot \gamma_F}$$

\*Derived from test results

$$V_{rec} = \frac{V_{Rk}^*}{\gamma_M \cdot \gamma_F}$$

#### TENSILE

Anchor size Zinc coated & A4	Ø5	Ø6	Ø6	Ø6
<b>Cracked and non-cracked concrete (C20/25)</b>				
$h_{nom}$	<b>35</b>	<b>25</b>	<b>35</b>	<b>55</b>
$N_{rec}^*$	0,6	0,4	1,4	3,6

$\gamma_F = 1,4$

$\gamma_{Mc} = 1,8$  for Ø5

$\gamma_{Mc} = 1,5$  for Ø6

\* multiple use for non-structural application

#### SHEAR

Anchor size Zinc coated & A4	Ø5	Ø6	Ø6
<b>Cracked &amp; non-cracked concrete (C20/25)</b>			
$h_{nom}$	<b>35</b>	<b>25<sup>(1)</sup></b>	<b>≥35</b>
$V_{rec}$	2,5	0,4	4,0

$\gamma_F = 1,4$ ;  $\gamma_{Ms} = 1,25$

<sup>(1)</sup> for  $h_{nom} = 25$  mm,  $V_{rec} = N_{rec}$

### Recommended loads ( $F_{rec}$ ) in beam slab in kN

Hollow concrete slab	Edge distance & minimum spacing $\geq 100$ mm		
	wall thickness $\geq 25$ mm	wall thickness $\geq 30$ mm	wall thickness $\geq 35$ mm
Anchor size	$F_{rec}$	$F_{rec}$	$F_{rec}$
Ø6 ( $h_{nom} = 25$ mm)	0,25	0,5	0,5
Ø6 ( $h_{nom} = 35$ mm)	0,47	0,95	1,43