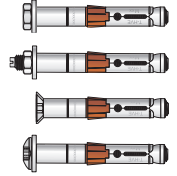


## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



#### 1 - Intended use

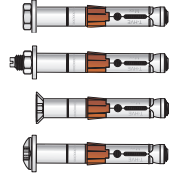
<b>Product-type:</b>	Metal anchor for use in concrete
<b>Anchor type:</b>	Torque controlled expansion anchor for use in concrete under static, quasi-static or seismic action (performance category C1 and C2)
<b>Technical description of the product:</b>	The Tecfi HVE Rock is an anchor made of galvanised steel of sizes M6, M8, M10, M12 and M16 which is placed into a drilled hole and anchored by torque-controlled expansion
<b>Specification of the intended use in accordance with the applicable EAD:</b>	The anchors are intended to be used for anchorages for which requirements for mechanical resistance and stability, safety in case of fire and safety in use in the sense of the Basic Work Requirements 1, 2 and 4 of Regulation 305/2011 (EU) (BWR 1, BWR2 and BWR 4) shall be fulfilled and failure of anchorages made with these products would compromise the stability of the works, cause risk to human life and/or lead to considerable economic consequences.
<b>Base material:</b>	Reinforced or unreinforced normal weight concrete of strength class C20/25 at minimum to C50/60 at maximum according to EN 206-1.
<b>Installation:</b>	Perpendicular Hole drilling by rotary plus hammer mode (maximum deviation 5°). In case of aborted hole: new drilling at a minimum distance away of twice the depth of the aborted hole or smaller distance if the aborted hole is filled with high strength mortar and if under shear or oblique tension load it is not the direction of the load application.
<b>Loading:</b>	- Static and quasi-static loads: all sizes - Seismic loads performance category C1: all sizes - Seismic loads performance category C2: all sizes
<b>Durability:</b>	The anchor may be used in structures subject to dry internal conditions only. The verifications and assessment methods on which the relevant European Technical Assessment is based lead to the assumption of a working life of the anchor of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.
<b>Service temperature:</b>	The anchors may be used in the following temperature range: [ -40°C ; +80°C ]
<b>Resistance to fire:</b>	See tables from 4.g to 4.o
<b>Reaction to fire:</b>	The anchor is classified A1 according to EC Decision 96/603/EC.
<b>European Assessment Document:</b>	330232-00-0601
<b>European Technical Assessment:</b>	ETA 10/0060
<b>Technical Assessment Body:</b>	Deutsches Institut für Bautechnik, Kolonnenstr. 30 B, 10829 Berlin, GERMANY
<b>Design methods:</b>	EN 1992-4:2016
<b>Assessment and Verification of Constancy of Performance:</b>	EC Certificate No. 1020 - CPR - 010 - 040905
<b>Notified Body:</b>	TZUS - Technický a zkušební ústav stavební Praha, s.p. Prosecká 811/76° Prosek, 190 00 Praha 9
<b>Under the system:</b>	1

## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia

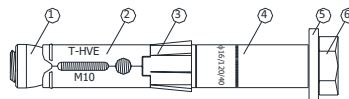


## 2 - Anchor's components

ITEM	Description	Finishing
1	Zinc plated conical steel nut	Materials galvanised $\geq 5$ [ $\mu\text{m}$ ] according to ISO 4042
2	Zinc plated expansion steel sleeve (marking: T-HVE / bolt size, e.g. M10)	
3	Nylon 6.6 cylinder with helix, red brick color	
4	Zinc plated steel extension (marking: $d_{\text{nom}}/l_t/t_{\text{fix}}$ e.g. $\varnothing 16/120/40$ )	
5	Zinc plated steel washer	
6	Zinc plated steel hexagonal head bolt, class 8.8 according to ISO 898-1	
7	Zinc plated steel hexagonal nut, class 8 according to ISO 898-2	
8	Zinc plated steel threaded stud, class 8.8 according to ISO 898-1	
9	Zinc plated steel countersunk washer, according to EN 10083	
10	Zinc plated steel flat countersunk head screw, class 8.8 according to ISO 898-1	
11	Zinc plated steel mushroom head screw, class 8.8 according to ISO 898-1	

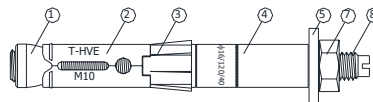
Anchor type HVE01 with hexagon head screw

HVE01



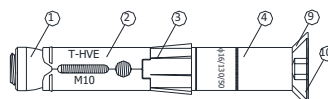
Anchor type HVE02 with threaded stud

HVE02



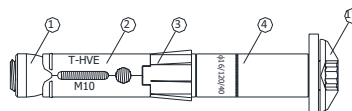
Anchor type HVE03 with countersunk washer and flat countersunk head screw

HVE03



Anchor type HVE04 with mushroom head screw

HVE04

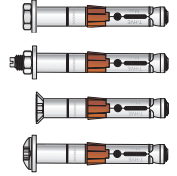


## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

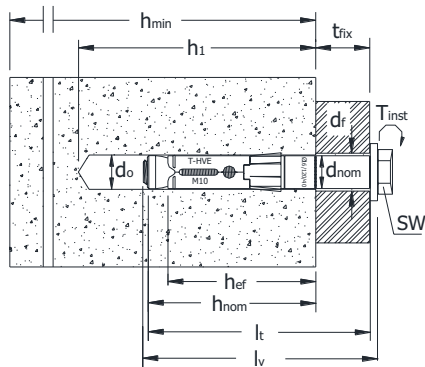
### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia

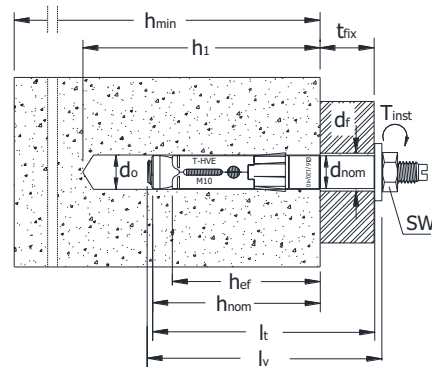


## 3 - Installation

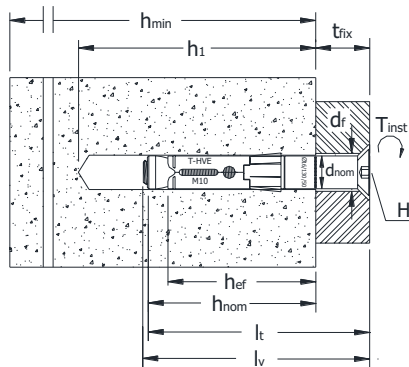
### HVE01



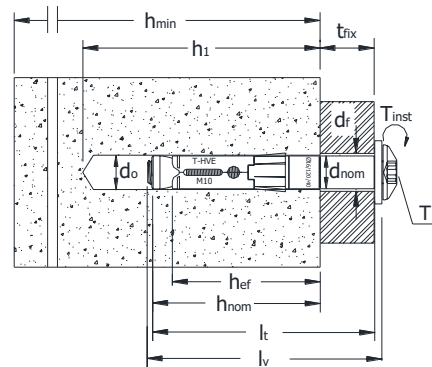
### HVE02



### HVE03



### HVE04



Static, quasi-static loads and seismic loads (performance category C1 and C2)

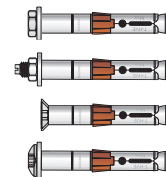
$d_{nom}$	Outside diameter of the anchor
$T_{inst}$	Required torque moment
$t_{fix}$	Thickness of the fixtures
$d_0$	Diameter of the drill hole
$d_f$	Diameter of the clearance hole in the fixture
$h_{min}$	Minimum thickness of the concrete member
$h_{nom}$	Overall anchor embedment depth
$h_{ef}$	Anchorage depth
$l_t$	Anchor length
$l_v$	Bolt length
$T$	Hexalobular socket number
$SW$	Wrench size/Socket size
$H$	Hexagonal socket

## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

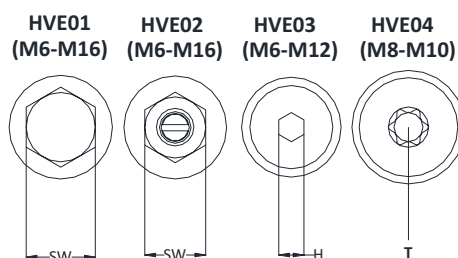
Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



### 3.1 - Installation data

Parameter		HVE M6	HVE M8	HVE M10	HVE M12	HVE M16
Nominal drill hole diameter	$d_o =$ [mm]	10	12	16	18	24
Cutting diameter of drill bit	$d_{cut} \leq$ [mm]	10,45	12,50	16,50	18,50	24,55
Effective anchorage depth	$h_{ef} =$ [mm]	55	60	70	90	105
Depth of drill hole	$h_1 =$ [mm]	80	90	100	120	140
Diameter of clearance in the fixture	$d_f =$ [mm]	12	14	18	20	26
Overall anchor embedment depth in the concrete	$h_{nom} =$ [mm]	65	70	80	100	120
Required torque moment	$T_{inst} =$ [Nm]	15	30	50	100	160
Outside diameter of anchor	$d_{nom} =$ [mm]	10	12	16	18	24
Minimum thickness of concrete member	$h_{min} =$ [mm]	110	120	140	180	210
Minimum edge distance	$c_{min} =$ [mm]	70	100	90	175	180
	$s \geq$ [mm]	110	160	175	255	290
Minimum spacing	$s_{min} =$ [mm]	55	110	80	135	130
	$c \geq$ [mm]	110	145	120	220	240

### Wrenches, sockets and maximum thickness of fixture



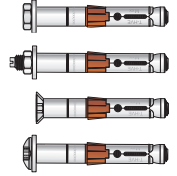
Item		HVE M6	HVE M8	HVE M10	HVE M12	HVE M16
<b>HVE 01 – Wrench size</b>	SW = [mm]	10	13	17	19	24
Thickness of fixture	$t_{fix,max} =$ [mm]	55	70	80	100	100
	$t_{fix,min} =$ [mm]	5	10	20	20	20
<b>HVE 02 – Wrench size</b>	SW = [mm]	10	13	17	19	24
Thickness of fixture	$t_{fix,max} =$ [mm]	55	70	80	100	100
	$t_{fix,min} =$ [mm]	5	10	20	20	20
<b>HVE 03 – Hexagonal socket size</b>	SW = [mm]	4	5	6	8	-
Thickness of fixture	$t_{fix,max} =$ [mm]	60	55	50	100	-
	$t_{fix,min} =$ [mm]	20	15	30	20	-
<b>HVE 04 – Hexalobular socket number</b>	SW = [mm]	-	40	40	-	-
Thickness of fixture	$t_{fix,max} =$ [mm]	-	50	40	-	-
	$t_{fix,min} =$ [mm]	-	10	20	-	-

## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



### 3.2 - Installation instructions for HVE01, HVE02, HVE03 and HVE04 for static, quasi-static loads and seismic loads

Anchor Type	Step 1	Step 2	Step 3	Step 4	Step 5	
HVE01						
	Step 1	Drill a hole into the concrete in rotary plus hammer mode	Step 2	Remove the dust into the hole using a brush and a blowing pump	Step 3	Place the fixture and hammer the anchor in the drill hole
	Step 4	Apply the required torque moment				
HVE02						
	Step 1	Drill a hole into the concrete in rotary plus hammer mode	Step 2	Remove the dust into the hole using a brush and a blowing pump	Step 3	Place the fixture and hammer the anchor in the drill hole
	Step 4	Apply the required torque moment				
HVE03						
	Step 1	Drill a hole into the concrete in rotary plus hammer mode	Step 2	Remove the dust into the hole using a brush and a blowing pump	Step 3	Place the fixture and hammer the anchor in the drill hole
	Step 4	Apply the required torque moment				
HVE04						
	Step 1	Drill a hole into the concrete in rotary plus hammer mode	Step 2	Remove the dust into the hole using a brush and a blowing pump	Step 3	Place the fixture and hammer the anchor in the drill hole
	Step 4	Apply the required torque moment				
	Step 5	Insert the special anti-theft cap to be hammered				

### 3.3 - Tools for installation

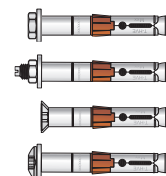
	Drill bit		Blowing pump
	Anchor size	Drill bit item code	
	M6 / Ø10	EO 01 10 210	
		EOX 41 10 210	
	M8 / Ø12	EO 01 12 210	
		EOX 41 12 210	
	M10 / Ø16	EO 01 16 210	
		EOX 41 16 210	
M12 / Ø18	EO 01 18 210		
M16 / Ø24	EO 01 24 210		
			Item code: DW 01 00 001

## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



#### 4 - Declared performance according to EAD 330232-00-0601

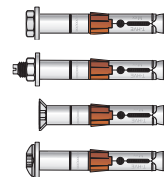
Type of anchor / Size			HVE M6	HVE M8	HVE M10	HVE M12	HVE M16
<b>Steel Failure</b>							
Characteristic Resistance	$N_{Rk,s}$	[kN]	16	29	46	67	125
Partial safety factor	$\gamma_{Ms}^{(1)}$		1,50				
<b>Pull-out failure</b>							
Effective embedment depth	$h_{ef}$	[mm]	55	60	70	90	105
Characteristic Resistance in uncracked concrete C20/25	$N_{Rk,p}$	[kN]	16	16	20	35	45
Characteristic Resistance in cracked concrete C20/25			5	6	16	25	35
Characteristic Resistance for seismic performance category C1	$N_{Rk,p,seis,C1}$	[kN]	5	4,2	14,4	25	35
Characteristic Resistance for seismic performance category C2	$N_{Rk,p,seis,C2}$	[kN]	3,9	4,2	11,7	18,5	31
Increasing factors for $N_{Rk,p}$ for cracked and uncracked concrete	$\psi_c$	C30/37	1,22				
		C40/50	1,41				
		C50/60	1,58				
Installation safety factor	$\gamma_2 = \gamma_{inst}$		1,00				
<b>Concrete cone failure and splitting failure</b>							
Effective embedment depth	$h_{ef}$	[mm]	55	60	70	90	105
Spacing	$S_{cr,N}$	[mm]	165	180	210	270	315
Edge distance	$C_{cr,N}$	[mm]	85	90	105	135	160
Spacing (splitting)	$S_{cr,sp}$	[mm]	220	320	240	370	390
Edge distance (splitting)	$C_{cr,sp}$	[mm]	110	160	120	185	195
Factor k1 for uncracked concrete	$K_{ucr}$		11				
Factor k1 for cracked concrete	$K_{cr}$		7,7				
Installation safety factor	$\gamma_2 = \gamma_{inst}$		1,00				
<b>Steel Failure without level arm (shear)</b>							
Characteristic Resistance	$V_{Rk,s}$	[kN]	16	25	43	58	107
Characteristic Resistance for seismic performance category C1	$V_{Rk,s,seis,C1}$	[kN]	11,40	17	28	43,50	96,30
Characteristic Resistance for seismic performance category C2	$V_{Rk,s,seis,C2}$	[kN]	6	10,7	23,2	40,6	74,9
Partial safety factor	$\gamma_{Ms}^{(1)}$		1,45				
<b>Steel Failure with level arm (shear)</b>							
Characteristic bending moment	$M^{0Rk,s}$	[Nm]	12	30	60	105	266
Ductility Factor	$K_7$	-	8				
Partial safety factor	$\gamma_{Ms}^{(1)}$		1,45				
<b>Concrete pryout failure (shear)</b>							
Effective embedmen depth	$h_{ef}$	[mm]	55	60	70	90	105
Factor for pryout failure	$K = K_g$		1	2	2	2	2
Installation safety factor	$\gamma_2 = \gamma_{inst}$		1,00				

## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



#### 4 (cont.) - Declared performance according to EAD 330232-00-0601

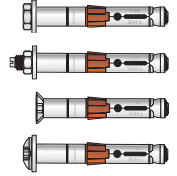
Type of anchor / Size			HVE M6	HVE M8	HVE M10	HVE M12	HVE M16
<b>Concrete edge failure (shear)</b>							
Effective anchorage length	$l_{ef}$	[mm]	55	60	70	90	105
Effective external diameter anchor	$d_{nom}$	[mm]	10	12	16	18	24
Installation safety factor	$\gamma_2 = \gamma_{inst}$		1,00				
<b>Performance under fire exposure</b>							
<b>Duration of fire resistance = 30min</b>							
<b>Steel Failure</b>							
Characteristic Resistance	$N_{0Rk,s,fi,30}$	[kN]	0,2	0,4	0,9	1,7	3,1
Pull-out failure							
Characteristic Resistance in concrete C20/25 to C50/60	$N_{0Rk,p,fi,30}$	[kN]	1,3	1,5	4,0	6,3	8,8
Concrete cone failure							
Characteristic Resistance in concrete C20/25 to C50/60	$N_{0Rk,c,fi,30}$	[kN]	4,0	5,0	7,4	13,8	20,3
<b>Duration of fire resistance = 60min</b>							
<b>Steel Failure</b>							
Characteristic Resistance	$N_{0Rk,s,fi,60}$	[kN]	0,2	0,3	0,8	1,3	2,4
Pull-out failure							
Characteristic Resistance in concrete C20/25 to C50/60	$N_{0Rk,p,fi,60}$	[kN]	1,3	1,5	4,0	6,3	8,8
Concrete cone failure							
Characteristic Resistance in concrete C20/25 to C50/60	$N_{0Rk,c,fi,60}$	[kN]	4,0	5,0	7,4	13,8	20,3
<b>Duration of fire resistance = 90min</b>							
<b>Steel Failure</b>							
Characteristic Resistance	$N_{0Rk,s,fi,90}$	[kN]	0,1	0,3	0,6	1,1	2,0
Pull-out failure							
Characteristic Resistance in concrete C20/25 to C50/60	$N_{0Rk,p,fi,90}$	[kN]	1,3	1,5	4,0	6,3	8,8
Concrete cone failure							
Characteristic Resistance in concrete C20/25 to C50/60	$N_{0Rk,c,fi,90}$	[kN]	4,0	5,0	7,4	13,8	20,8
<b>Duration of fire resistance = 120min</b>							
<b>Steel Failure</b>							
Characteristic Resistance	$N_{0Rk,s,fi,120}$	[kN]	0,1	0,2	0,5	0,8	1,6
Pull-out failure							
Characteristic Resistance in concrete C20/25 to C50/60	$N_{0Rk,p,fi,120}$	[kN]	1,0	1,2	3,2	5,0	7,0
Concrete cone failure							
Characteristic Resistance in concrete C20/25 to C50/60	$N_{0Rk,c,fi,120}$	[kN]	3,2	4,0	5,9	11,1	16,3
Spacing	$S_{cr,N}$	[mm]	4 x $h_{ef}$				
	$S_{min}$		55	110	80	135	130
Edge distance	$C_{cr,N}$	[mm]	2 x $h_{ef}$				
	$C_{min}$		$C_{min} = 2xh_{ef}$ , se l'attacco del fuoco proviene da più lati, la distanza dal bordo deve essere $\geq 300mm$ o $\geq 2xh_{ef}$				

## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



#### 4 (cont.) - Declared performance according to EAD 330232-00-0601

Type of anchor / Size			HVE M6	HVE M8	HVE M10	HVE M12	HVE M16
<b>Duration of fire resistance = 30min, anchor type HVE</b>							
Shear load without lever arm							
Characteristic Resistance	$V_{0Rk,s,fi,30}$	[kN]	0,3	0,5	1,2	2,1	3,9
Shear load with lever arm							
Characteristic bending resistance	$M_{0Rk,s,fi,30}$	[Nm]	0,2	0,4	1,1	2,6	6,7
<b>Duration of fire resistance = 60min, anchor type HVE</b>							
Shear load without lever arm							
Characteristic Resistance	$V_{0Rk,s,fi,60}$	[kN]	0,3	0,4	1,0	1,6	2,9
Shear load with lever arm							
Characteristic bending resistance	$M_{0Rk,s,fi,60}$	[Nm]	0,1	0,3	1,0	2,0	5,0
<b>Duration of fire resistance = 90min, anchor type HVE</b>							
Shear load without lever arm							
Characteristic Resistance	$V_{0Rk,s,fi,90}$	[kN]	0,2	0,3	0,8	1,4	2,5
Shear load with lever arm							
Characteristic bending resistance	$M_{0Rk,s,fi,90}$	[Nm]	0,1	0,3	0,8	1,7	4,3
<b>Duration of fire resistance = 120min, anchor type HVE</b>							
Shear load without lever arm							
Characteristic Resistance	$V_{0Rk,s,fi,120}$	[kN]	0,2	0,2	0,6	1,0	1,9
Shear load with lever arm							
Characteristic bending resistance	$M_{0Rk,s,fi,120}$	[Nm]	0	0,2	0,6	1,3	3,3

#### Concrete pryout failure

The characteristic resistance  $V_{Rk,cp,fi,Ri}$  in concrete C20/25 to C50/60 is determined by:

$$V_{Rk,c,fi,(90)} = K \times N_{Rk,c,fi,(90)} (\leq R90) \text{ e } V_{Rk,c,fi,(120)} = K_g \times N_{Rk,c,fi,(120)} (\text{up to R120})$$

#### Concrete edge failure

The characteristic resistance  $V_{Rk,cp,fi,Ri}$  in concrete C20/25 to C50/60 is determined by:

$$V_{0Rk,c,fi,(90)} = 0,25 \times V_{0Rk,c} (R30, R60, R90) \text{ and } V_{0Rk,c,fi,(120)} = 0,20 \times V_{0Rk,c} (R120) \text{ with}$$

$V_{0Rk,c}$  as an initial value of the characteristic resistance of a single anchor in cracked concrete C20/25

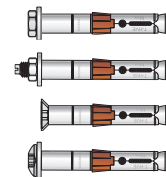


## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



#### 4 (cont.) - Declared performance according to EAD 330232-00-0601

Tension loads in cracked and uncracked concrete			HVE M6	HVE M8	HVE M10	HVE M12	HVE M16
Service tension load in uncracked concrete C20/25	N	[kN]	7,6	7,6	9,5	16,7	21,4
Displacements	$\delta_{N0}$	[mm]	1,3	1,5	1,0	1,3	1,8
	$\delta_{N\infty}$	[mm]	1,3	1,5	1,0	1,3	1,8
Service tension load in cracked concrete C20/25	N	[kN]	2,4	2,9	7,6	11,9	16,7
Displacements	$\delta_{N0}$	[mm]	1,0	0,7	1,0	1,2	1,5
	$\delta_{N\infty}$	[mm]	1,6	1,3	1,6	1,7	1,5

#### Shear loads in cracked and uncracked concrete

Service shear load in cracked and uncracked concrete C20/25	V	[kN]	7,7	12,3	21,0	23,3	52,5
Displacements	$\delta_{V0}$	[mm]	2,4	2,6	2,5	3,0	4,0
	$\delta_{V\infty}$	[mm]	3,6	3,9	3,8	4,5	6,0

#### Seismic performance category C2

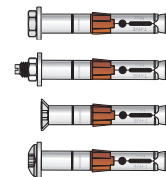
Damage limit state							
Tension load	$\delta_{N,eq(DLS)}$	[mm]	5,56	5,24	4,23	5,39	6,74
Shear load	$\delta_{V,eq(DLS)}$	[mm]	3,18	5,74	5,12	5,98	6,93
Ultimate limit state							
Tension load	$\delta_{N,eq(DLS)}$	[mm]	22,70	17,65	14,50	16,03	20,59
Shear load	$\delta_{V,eq(DLS)}$	[mm]	4,82	11,02	9,37	9,42	12,96

## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



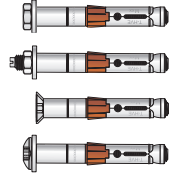
Item code	Size ØxL [mm]	t <sub>fix</sub> [mm]
HVE0110070 - HVE0210070	10x70	5
HVE0110080 - HVE0210080	10x80	15
HVE0110100 - HVE0210100	10x100	35
HVE0110120 - HVE0210120	10x120	55
HVE0112080 - HVE0212080	12x80	10
HVE0112100 - HVE0212100	12x100	30
HVE0112120 - HVE0212120	12x120	50
HVE0112140 - HVE0212140	12x140	70
HVE0116100 - HVE0216100	16x100	20
HVE0116120 - HVE0216120	16x120	40
HVE0116140 - HVE0216140	16x140	60
HVE0116160 - HVE0216160	16x160	80
HVE0118120 - HVE0218120	18x120	20
HVE0118150 - HVE0218150	18x150	50
HVE0118170 - HVE0218170	18x170	70
HVE0118200 - HVE0218200	18x200	100
HVE0124140 - HVE0224140	24x140	20
HVE0124170 - HVE0224170	24x170	50
HVE0124200 - HVE0224200	24x200	80
HVE0124220 - HVE0224220	24x220	100
HVE0310085	10x85	20
HVE0310105	10x105	40
HVE0310125	10x125	60
HVE0312085	12x85	15
HVE0312105	12x105	35
HVE0312125	12x125	55
HVE0316110	16x110	30
HVE0316130	16x130	50
HVE0318120	18x120	20
HVE0318140	18x140	40
HVE0412080	12x80	10
HVE0412100	12x100	30
HVE0412120	12x120	50
HVE0416100	16x100	20
HVE0416120	16x120	40

## Declaration of Performance No1109-BRP-0057

According to the Regulation EU No 305/2011

### HVE01 - HVE02 - HVE03 - HVE04

Manufacturer: Tecfi S.p.A. - S.S. Appia, km 193 - 81050 Pastorano (CE), Italia



## 5 - Label

Art. HVE 01 12 100

**Ancorante in acciaio zincato per alte prestazioni, con vite TE cl. 8.8**

High performance steel anchor with hex head screw 8.8 grade, zinc plated

Cheville haute performances en acier zingué a vec vis tête hexagonale classe 8.8

Verzinkter Hochleistungs - Schwerlastanker mit Sechskantschraube Klasse 8.8

Anclaje de acero cincado para Altas Prestaciones, montado con tornillo cabeza hexagonal clase 8.8

Chave/AF: 13

$\varnothing 12 \times 100 / 30$   
d<sub>nom</sub> X l / t<sub>fix</sub>

Tecfi S.p.A. 1109

HVE01  
ETAG001, Part 1 and 2  
Metal anchor for use in concrete, option 1

Essential characteristics given in the DoP No. 1109-BRP-0057  
www.tecfi.it/DoP

25

840265330432931

Tecfi certezze per lavorare bene

Art. HVE 01 12 100

Lotto/Lot: 12345

Chave/AF: 13

$\varnothing 12 \times 100 / 30$   
d<sub>nom</sub> X l / t<sub>fix</sub>

www.tecfi.it info@tecfi.it

- |  |   |
|--|---|
| 1 Item Code  | 10 Intended use of the product as laid down in the European standard applied, level of performance declared |
| 2 Descriptions   | 11 DoP Number   |
| 3 Picture  | 12 Link to DoP  |
| 4 Anchor Diameter (d <sub>nom</sub> )                                | 13 Lot Number   |
| 5 Anchor Length (l)  | 14 Number of Pieces per Box   |
| 6 Maximum Thickness of fixture (t <sub>fix</sub> )                   | 15 Fire Resistance  |
| 7 Identification number of the Notified Body                         | 16 Wrench Size/hexalobular socket number  |
| 8 Last two digits of the year in which the marking was first affixed |   |
| 9 European Technical Specification                                   |   |

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.  
Signed for and on behalf of the manufacturer by:

Firmato a nome e per conto di:

Name and function	Place and date of issue	Signature
Presidente Antonio Guarino	Pastorano, 11 Gennaio 2023	