

Dichiarazione di Prestazione

DoP nr. Clr6

Vite calcestruzzo testa esagonale con rondella in acciaio galvanizzato


 1. Identification of the product: **CLR6**

2. Identification code (art. 11.4), for the batch or serial number see packaging (ETA-19/0343):

CLR6 – H Hex head with built-in washer screw				
do ¹⁾	L ²⁾ [mm]	Fixture thickness [mm] t _{fix}	Marking	Code
6	60	5	SSW 7.5x60 o LR-H 7.5x60	72009b08060
	80	25	SSW 7.5x80 o LR-H 7.5x80	72009b08080
	100	45	SSW 7.5x100 o LR-H 7.5x100	72009b08100
	120	65	SSW 7.5x120 o LR-H 7.5x120	72009b08120

CLR6 – P Pan head screw				
do ¹⁾	L ²⁾ [mm]	Fixture thickness [mm] t _{fix}	Marking	Code
6	60	5	SST 7.5x60 o LR-P 7.5x60	72006b08060
	75	20	SST 7.5x75 o LR-P 7.5x75	72006b08075

CLR6 – E Special head screw with metric thread				
do ¹⁾	L ²⁾ [mm]	Metric thread	Marking	Code
6	55	M8	o	72007b08055

CLR6 – I Special head screw assembled with double metric thread hex connecting nut				
do ¹⁾	L ²⁾ [mm]	Metric thread	Marking	Code
6	55	M8-M10	o	72008b08055

¹⁾ Drill hole diameter; ²⁾ Screw length.

3. Intended use:

Generic type	Concrete Screw for use in concrete
Base material	Cracked and un-cracked concrete C20/25 to C50/60 acc. to EN 206-1
Fastener material	Carbon steel cold formed and galvanized according EN ISO 4042 or EN10683
Durability	Internal dry conditions
Loading	Static, quasi-static
Fire Resistance	R120 according TR020
Fire Reaction	A1 according to EN 13501-1

4. Manufacturer (art. 11.5):

Friulsider SpA via trieste,1 - 33048 San Giovanni al Natisone (UD) - Italy

5. Authorised representative (art. 12.2):

Not Relevant

6. System of Assessment AVCP (annex V):

System 1

7/8. Harmonised Specification & Notified Body:

	Name of Body	System of Assessment	Reference	EAD / hEN Document
Technical Specification Document	IETCC [TAB]	1	ETA-19/0343	EAD 330232-00-0601
Constancy of Performance & FPC	IETCC [NB]	1	1219-CPR-0230	EAD 330232-00-0601

9. Declared Performance:

See Annexes

10. The performance of the product identified in points 1 and 2 is in conformity with declared performance in point 9.

This declaration of performance is issued under the sole responsibility of Friulsider SpA.

Signed for and behalf of the manufacturer by:

Function	Name	Signature	Place and date of issue
Technical Manager C.E.O	Claudio Peleson Claudio Peleson		San Giovanni al Natisone, 13/09/2019

ANNEX I°

Prestazioni Dichiarate secondo **ETA-19/0343** - EAD 330232-00-0601

Metodo di Progettazione secondo EN 1992-4:2018

ESSENTIAL CHARACTERISTICS		PERFORMANCE
Parametri di posa		
d_0	Nominal diameter of drill bit [mm]	6
h_{nom}	Minimum installation depth [mm]	55
h_{ef}	Effective anchorage depth [mm]	42
h_{min}	Minimum thickness of the concrete member [mm]	100
s_{min}	Minimum spacing [mm]	45
c_{min}	Minimum edge distance [mm]	45
Tension Steel failure		
$N_{Rk,s}$	Tension Steel characteristic failure [kN]	18,7
$\gamma_{m,sN}^{1)}$	Partial safety factor for tension steel failure [-]	1,5
Rottura per sfilamento		
$N_{Rk,p,cr}$	Tension characteristic load in cracked concrete C20/25 [kN]	6,0
$N_{Rk,p,ucr}$	Tension characteristic load in un-cracked concrete C20/25 [kN]	9,0
γ_{inst}	Partial safety factor [-]	1,2
$\gamma_{m,p}^{1)}$	Partial safety factor [-]	1,8
$\Psi_{C\ C30/37}$	Increasing factor for concrete C30/37 [-]	1,22
$\Psi_{C\ C40/50}$	Increasing factor for concrete C40/50 [-]	1,41
$\Psi_{C\ C50/60}$	Increasing factor for concrete C50/60 [-]	1,58
Concrete Cone and Splitting failure		
h_{ef}	Effective anchorage depth [mm]	42
$s_{cr,N}$	Critical spacing [mm]	126
$c_{cr,N}$	Critical edge distance [mm]	63
$s_{cr,sp}$	Critical spacing (splitting) [mm]	126
$c_{cr,sp}$	Critical edge distance (splitting) [mm]	63
Displacement on Tension Load		
N_{cr}	Service tension load in cracked concrete C20/25 [kN]	2,4
$\delta_{N0,cr}$	Short term displacement under tension load [mm]	0,6
$\delta_{N\infty,cr}$	Long term displacement under tension load [mm]	1,4
N_{ucr}	Service tension load in un-cracked concrete C20/25 [kN]	3,6
$\delta_{N0,ucr}$	Short term displacement under tension load [mm]	0,4
$\delta_{N\infty,ucr}$	Long term displacement under tension load [mm]	1,0
Shear Steel failure		
h_{nom}	Minimum installation depth [mm]	55
$V_{Rk,s}$	Shear Steel characteristic failure [kN]	7,5
$M^0_{Rk,s}$	Bending Moment characteristic failure [Nm]	15,2
$\gamma_{m,sV}^{1)}$	Partial safety factor for shear steel failure [-]	1,25
Shear Concrete Pry-out failure		
k	Factor according EN 1992-4:2018 design method [-]	1
Shear Concrete Edge failure		
l_{ef}	Effective anchorage length [mm]	42
d_{nom}	Nominal diameter of anchor [mm]	7,5
$\gamma_{mc}^{1)}$	Partial safety factor [-]	1,5
Displacement on Shear Load		
V	Service shear load in concrete [kN]	3,0
δ_{V0}	Short term displacement under shear load [mm]	1,3
$\delta_{V\infty}$	Long term displacement under shear load [mm]	2,0

¹⁾ In absence of other national regulations.

ANNEX II°

FIRE RESISTANCE Declared Performances acc.to ETA-16/0177

Design Method according to TR020

ESSENTIAL CHARACTERISTICS			PERFORMANCE
Tension steel failure			
h_{nom}	Minimum installation depth	[mm]	55
$N_{Rk,s,fi,R30}$	Characteristic Tension Resistance = 30 min.	[kN]	0,23
$N_{Rk,s,fi,R60}$	Characteristic Tension Resistance = 60 min.	[kN]	0,21
$N_{Rk,s,fi,R90}$	Characteristic Tension Resistance = 90 min.	[kN]	0,16
$N_{Rk,s,fi,R120}$	Characteristic Tension Resistance = 120 min.	[kN]	0,12
$S_{cr,N,fi}$	Critical spacing under fire exposure	[mm]	168
$C_{cr,N,fi}$	Critical edge distance under fire exposure	[mm]	84
$\gamma_{M,fi}^{(1)}$	Partial safety factor under fire exposure	[-]	1
Shear steel failure without lever arm			
h_{nom}	Minimum installation depth	[mm]	55
$V_{Rk,s,fi,R30}$	Characteristic Shear Resistance = 30 min.	[kN]	0,23
$V_{Rk,s,fi,R60}$	Characteristic Shear Resistance = 60 min.	[kN]	0,21
$V_{Rk,s,fi,R90}$	Characteristic Shear Resistance = 90 min.	[kN]	0,16
$V_{Rk,s,fi,R120}$	Characteristic Shear Resistance = 120 min.	[kN]	0,12
Shear steel failure with lever arm			
$M^0_{Rk,s,fi,R30}$	Characteristic Bending Moment = 30 min.	[Nm]	0,19
$M^0_{Rk,s,fi,R60}$	Characteristic Bending Moment = 60 min.	[Nm]	0,17
$M^0_{Rk,s,fi,R90}$	Characteristic Bending Moment = 90 min.	[Nm]	0,13
$M^0_{Rk,s,fi,R120}$	Characteristic Bending Moment = 120 min.	[Nm]	0,10
Rottura a TAGLIO per scalzamento (pry-out)			
k	Factor according EN 1992-4:2018 calculation method	[-]	1,0
Shear concrete edge failure			
The characteristic resistance $V^0_{Rk,c,fi}$ in C20/25 to C50/60 concrete is determined by: $V^0_{Rk,c,fi} = 0,25 \times V^0_{Rk,c}$ ($\leq R90$) e $V^0_{Rk,c,fi} = 0,20 \times V^0_{Rk,c}$ (R120) with $V^0_{Rk,c}$ initial value of the characteristic resistance in cracked concrete C20/25 under normal temperature acc. EN 1992-4:2018.			

¹⁾ In absence of other national regulations.

