



# Declaration of Performance No. 0679-CPD-0764

JCP Chemical Capsule Anchor - Quartz  
 JCP Construction Products,  
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Intended use or uses of the products according to EAD 330499-00-0601	
Generic type	Bonded Anchor
Base material	Non-cracked concrete C20/25 to C50/60 acc. EN 206-2:2003
Batch Number	Marked on individual boxes
Material	1] Galvanised carbon steel Grade 5.8 and 8.8 to EN ISO 891-1 2] Stainless Steel A4, 1.4401, 1.4404 or 1.4571 Property class 70 or 80 to EN ISO 3506 3] High corrosion resistant stainless steel, 1.4529, 1.4565
Durability	1] Dry internal conditions 2] Internal and external atmospheric exposure including industrial and marine environment, or exposure in permanently damp internal conditions, if no particularly aggressive conditions exist. 3] Internal and external atmospheric exposure including industrial and marine environment, or exposure in permanently damp internal conditions, and in other particularly aggressive conditions.
Loading	Static, quasi-static
Use category	Dry or wet concrete (Flooded holes are excluded)
Reaction to fire	Class A1
Temperature range(s)	-40°C to +40°C (max. short term temperature +40°C and Max. long term temperature +24°C)
ETA 12/0233 issued by	CSTB
On the basis of	EAD 330499-00-0601
Certificate of Conformity 0679-CPD-0764 issued by	CSTB
Under system	1

Declared performances according to ETA 12/0233 Issued 02/05/2018									
Essential Characteristics			Performance						
			M08	M10	M12	M16	M20	M24	M30
<b>Installation parameters</b>									
$d_o$	Nominal diameter of drill bit	[mm]	10	12	14	18	22	26	32
$d_f$	Fixture clearance hole	[mm]	9	12	14	18	22	26	33
$d_b$	Brush diameter	[mm]	11	13	16	20	24	28	34
$h_{ef}$	Effective anchorage depth	[mm]	80	90	110	125	170	210	280
$h_{nom}$	Minimum installation depth	[mm]	80	90	110	125	170	210	280
$h_1$	Depth of drill hole to deepest point	[mm]	80	90	110	125	170	210	280
$h_{min}$	Minimum thickness of concrete member	[mm]	110	120	140	160	220	260	340
$T_{inst}$	Nominal torque moment	[mm]	10	20	40	80	120	180	300
$S_{min}$	Minimum spacing	[mm]	40	45	55	65	85	105	140
$C_{min}$	Minimum edged distance	[mm]	40	45	55	65	85	105	140
<b>Tensile steel failure</b>									
NRk,s	Characteristic tensile resistance steel <b>Grade 5.8</b>	[kN]	18	29	42	78	123	177	281
NRk,s	Characteristic tensile resistance steel <b>Grade 8.8</b>	[kN]	29	46	67	126	196	282	449
$\gamma_{M,s}$	Partial safety factor		1.5						
NRk,s	Characteristic tensile resistance steel <b>Grade A4-70</b>	[kN]	26	40	59	110	172	247	393
$\gamma_{M,s}$	Partial safety factor		1.87						
NRk,s	Characteristic tensile resistance steel <b>Grade A4-80</b>	[kN]	29	46	67	126	196	282	449
$\gamma_{M,s}$	Partial safety factor		1.6						
NRk,s	Characteristic tensile resistance HCR steel <b>Grade 70</b>	[kN]	26	40	59	110	172	247	393
$\gamma_{M,s}$	Partial safety factor		1.87						
<b>Pull-out failure, concrete cone failure</b>									
$\tau_{Rk,p,ucr}$	Characteristic bond strength in uncracked concrete C20/25	[N/mm <sup>2</sup> ]	12	12	12	12	11	11	10
$\gamma_{M,p}$	Partial safety factor (Includes $\gamma_2$ )	[-]	1.5						

$\Psi_{c25/30}$	Increasing factor for concrete C25/30	[-]								1.06
$\Psi_{c30/37}$	Increasing factor for concrete C30/37	[-]								1.14
$\Psi_{c35/45}$	Increasing factor for concrete C35/45	[-]								1.22
$\Psi_{c40/50}$	Increasing factor for concrete C40/50	[-]								1.26
$\Psi_{c45/55}$	Increasing factor for concrete C45/55	[-]								1.30
$\Psi_{c50/60}$	Increasing factor for concrete C50/60	[-]								1.34
<b>Splitting failure</b>										
$S_{cr,sp}$	Critical spacing (Splitting)	[mm]	320	270	280	320	430	530	700	
$C_{cr,sp}$	Critical edge distance (Splitting)	[mm]	160	135	140	160	215	265	350	
$\gamma_{M,sp}$	Partial safety factor (Includes $\gamma_2$ )	[-]				1.5				1.8
<b>Displacement on tensile loading</b>										
$N_{u,cr}$	Service tensile loads in uncracked concrete	[kN]	9.6	13.5	19.7	29.9	48.3	71.6	94.2	
$\delta_{N0,u,cr}$	Short term displacement under tensile loads	[mm]	0.17	0.18	0.18	0.19	0.19	0.20	0.21	
$\delta_{N\infty,u,cr}$	Long term displacement under tensile loads	[mm]				0.50				
<b>Shear steel failure without lever arm</b>										
$V_{i,Rk,s}$	Characteristic shear steel failure <b>Grade 5.8</b>	[kN]	9	14	21	39	61	88	140	
$V_{i,Rk,s}$	Characteristic shear steel failure <b>Grade 8.8</b>	[kN]	15	23	34	63	98	141	224	
$\gamma_{m,sv}$	Partial safety factor	[-]				1.25				
$V_{i,Rk,s}$	Characteristic shear steel failure <b>Grade A4-70</b>	[kN]	13	20	30	55	86	124	196	
$\gamma_{m,sv}$	Partial safety factor	[-]				1.56				
$V_{i,Rk,s}$	Characteristic shear steel failure <b>Grade A4-80</b>	[kN]	15	23	34	63	98	141	224	
$\gamma_{m,sv}$	Partial safety factor	[-]				1.33				
$V_{i,Rk,s}$	Characteristic shear steel failure HCR steel <b>Grade 70</b>	[kN]	13	20	30	55	86	124	196	
$\gamma_{m,sv}$	Partial safety factor	[-]				1.56				
<b>Shear steel failure with lever arm</b>										
$M_{i,Rk,s}^0$	Characteristic bending moment <b>Grade 5.8</b>	[Nm]	19	37	66	166	325	561	1125	
$M_{i,Rk,s}^0$	Characteristic bending moment <b>Grade 8.8</b>	[Nm]	30	60	105	266	519	898	1799	
$\gamma_{m,sv}$	Partial safety factor	[-]				1.25				
$M_{i,Rk,s}^0$	Characteristic bending moment <b>Grade A4-70</b>	[Nm]	26	52	92	233	454	786	1574	
$\gamma_{m,sv}$	Partial safety factor	[-]				1.56				
$M_{i,Rk,s}^0$	Characteristic bending moment <b>Grade A4-80</b>	[Nm]	30	60	105	266	519	898	1799	
$\gamma_{m,sv}$	Partial safety factor	[-]				1.33				
$M_{i,Rk,s}^0$	Characteristic bending moment HCR steel <b>Grade 70</b>	[Nm]	26	52	92	233	454	786	1574	
$\gamma_{m,sv}$	Partial safety factor	[-]				1.56				
<b>Shear concrete edge failure</b>										
$l_{ef}$	Effective anchorage length	[mm]	80	90	110	125	170	210	280	
<b>Displacement on shear load</b>										
$V$	Service shear load in concrete	[kN]	5.2	8.3	12	22.4	35.0	50.4	80.1	
$\delta_{V0}$	Short term displacement under shear load	[mm]	2.0	2.1	2.2	2.5	2.6	2.8	3.0	
$\delta_{V\infty}$	Long term displacement under shear load	[mm]	2.9	3.1	3.3	3.7	4.0	4.1	4.4	

The performance data above relates to the following product codes

d	Marking	Diam [mm]	Length [mm]	Product Code
M8	JFIX Q SPIN M8	9	80	JCAPSM08
M10	JFIX Q SPIN M10	11	80	JCAPSM10
M12	JFIX Q SPIN M12	13	95	JCAPSM12
M16	JFIX Q SPIN M16	17	95	JCAPSM16
M29	JFIX Q SPIN M20	17	160	JCAPSM20
M24	JFIX Q SPIN M24	22	175	JCAPSM24
M30	JFIX Q SPIN M30	25	230	JCAPSM30

Amendments	Date
ETAG changed to EAD	20/12/2017
Temperature Range changed	23/08/2018
Bond Strength changed	

The performances of the product identified by the above product codes are in conformity with the declared performance

This Declaration of performance is issued under the sole responsibility of JCP Construction Products

Signed for and on behalf of the manufacturers

Name and function	Place and date of issue	Signature
Brian Deluce	Teddington	
Technical Manager	23/08/2018	