HAMAR

DECLARATION OF PERFORMANCE

EN

In accordance with Annex III to Regulation (EU) No 305/2011 (Construction Products)

N° 009/2013/SLP-H4

Torque controlled expansion anchors SLP-H4

1. Unique Product identification code:
SLP-H4 M8 x L, SLP-H4 M10 x L, SLP-H4 M12 x L, SLP-H4 M16 x L

2 Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4): The identification of the product is given by the lot number specified on the label together with the CE marking.

3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:
The anchors are intend to be used only for anchorages subject to static or quasi-static loading in reinforced or unreinforced concrete classes C20/25 at minimum and C/50/60 at maximum. The anchors may be used in non-cracked or cracked concrete, in only structures subject to dry internal conditions. According to 1.2 ETA-13/0422. Use category ETAG 001-01 option 1.

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):
P.H.HAMAR Sp.J. B i H Grzesiak, ul. Hutnicza 7, 81-061 Gdynia, Polska

5. Where applicable, name and contact address of the authorized representative whose mandate covers the task specified in Article 12(2): NA

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V: System 1 attestation of conformity of all characteristics

7. In case of the declaration of performance concerning a construction product covered by the harmonized standard: NA

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:
Instytut Techniki Budowlanej issued the European Technical Approval no ETA-13/0422 from 27.06.2013 according to ETAG 001-02 in system 1. Notified Body no 1488 performed type testing and the initial inspection of the manufacturing plant and of the factory production control with continuous surveillance assessment and approval of the factory production control and issued the EC Certificate of Conformity no 1488-CPD-0376/W.

9. Declared performance:

Essentials characteristic	Performance				Harmonized Technical Specification ETA-13/0422
Installation parameters	**M8**	**M10**	**M12**	**M16**	
- Effective anchorage depth h_{ef} [mm]	40	45	70	80	
- Nominal drill hole diameter d_{cut} ≤[mm]	8,45	10,5	12,5	16,5	
- Depth of drill hole h_1 ≥ [mm]	45	50	75	85	
- Thread diameter d_{nom} [mm]	8	10	12	16	
- Diameter of clearance hole in fixture d_f ≤ [mm]	9	11	13	17	
- Minimum thickness of member h_{min} [mm]	100	100	150	170	
- Maximum thickness of of fixture t_{fix} [mm]	140	150	210	190	
- Minimum spacing s_{min} [mm]	40	45	70	80	
- Minimum edge distance c_{min} [mm]	60	67,5	105	120	
- Torque T_{inst} [Nm]	20	30	50	120	
Characteristic tension loads [kN]	**M8**	**M10**	**M12**	**M16**	
Steel failure $N_{Rk,s}$	24,89	39,44	57,32	106,76	
Pull-out failure from non-cracked concrete C20/25-C50/60 $N_{Rk,p}$	9	12	25	35	
Pull-out failure from cracked concrete C20/25-C50/60 $N_{Rk,p}$	6	9	20	25	
Concrete cone failure [mm]	**M8**	**M10**	**M12**	**M16**	
Effective Anchorage depth $h_{ef,}$	40	45	70	80	
Spacing $s_{cr,N}$	120	135	210	240	
Edge distance $c_{cr,N}$	60	67,5	105	120	
Reaction to fire	Class A1				

10. The performance of the product identified in 1 and 2 is in conformity with the declared performance in 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in 4.

Signed for and on behalf of the manufacturer by:

K. Swirbutowicz

M.Sc. Karolina Swirbutowicz, Quality Department

Gdynia 01.07.2013