SMRPC001

CE

- *Unique identification code of the product-type:*
  SMRPC

- *Type or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):*
  See annex 1 to this document

- *Intended uses of the construction product, in accordance with the applicable harmonized technical specification as foreseen by the manufacturer:*

Intended use or uses of the construction product according to ETAG 020 parts 1 – 4	
Generic type	Plastic anchors for multiple use for non-structural applications
Base material	Concrete, solid and hollow masonry
Material: - Anchor sleeve - Special screw	- Polyamide PA6 - Steel ($f_{y,k}$ ≥ 450 MPa, fu,k ≥ 580 MPa) o galvanized ≥ 5µm according to EN ISO 4042 o hot dip galvanized ≥ 25 µm to EN ISO 1461 - Stainless steel ($f_{y,k}$ ≥ 600 MPa, fu,k ≥ 800 MPa)
Durability	internal dry conditions (steel, stainless steel) permanently damp internal conditions (stainless steel) external atmospheric exposure (stainless steel)
Loading	static or quasi-static loads
Fire Resistance	R90 (if the admissible load [F_{Rk} / ($\gamma_M \cdot \gamma_F$)] is ≤ 0,8 kN – no permanent centric tension load)
Temperature range	In concrete: a) -40 to +40°C (max. short term temperature +40° C and max. long term temperature +24°C). b) -40 to +80°C (max. short term temperature +80° C and max. long term temperature +50°C). In aerated concrete a) -40 to +40°C (max. short term temperature +40° C and max. long term temperature +24°C).

- *Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11 (5):*
  pgb-Polska sp. Z o.o. – Ul. Jondy 5 – 44-100 Gliwice – Polska

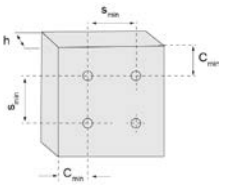
- *System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:*
  System 2+

- *In case of the declaration of performance concerning a construction product for which European Technical Assessment has been issued:*

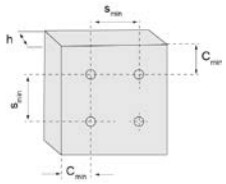
ETA - 10/0392 of 30/06/2014 issued by	ITB Poland
On the basis of	ETAG 020 used as European Assessment Document (EAD)
Certificate of Conformity 1488-CPD-0230Z issued by	ITB
Under System	2+

Declared performance – Essential characteristics – Performances

Installation parameters			
d_0	Nominal diameter of drill bit	[mm]	10
h_{ef}	Effective anchorage depth	[mm]	70

Declared performances according to ETAG 020 parts 1 - 4				
	$N_{Rk,s}$	Characteristic tension resistance of the screw - galvanized steel - stainless steel	[kN]	16,35 22,56
	γ_{Ms}	Partial safety factor for tension resistance screw failure	[-]	1,54
	$V_{Rk,s}$	Characteristic shear resistance of the screw - galvanized steel - stainless steel	[kN]	11,08 15,29
	γ_{Ms}	Partial safety factor for shear resistance screw failure	[-]	1,28
	$M_{Rk,s}$	Characteristic bending resistance of the screw - galvanized steel - stainless steel	[Nm]	22,62 31,22
	γ_{Ms}	Partial safety factor for bending resistance	[-]	1,28
Characteristic resistance in concrete (use category a)				
	h_{min}	Minimum thickness of the concrete member	[mm]	100
	s_{min}	Minimum spacing - Concrete ≥ C16/20 - Concrete C12/15	[mm]	80 112
	c_{min}	Minimum edge distance - Concrete ≥ C16/20 - Concrete C12/15	[mm]	100 140
	$N_{Rk,p,cr}$	Tension characteristic resistance in cracked concrete - C16/20 - C12/15	[kN]	2,5 1,5
	$N_{Rk,p,ucr}$	Tension characteristic resistance in un-cracked concrete	[kN]	4,0[1]
	γ_{Mc}	Partial safety factor	[-]	1,8
	$c_{cr,N}$	Critical edge distance - Concrete ≥ C16/20 - Concrete C12/15	[mm]	100 140
	F	Displacement under tension load	[kN]	1,00
	$\delta_{N0,cr}$	Short term displacement under tension load	[mm]	0,65
	$\delta_{N\infty,cr}$	Long term displacement under tension load	[mm]	1,30
	F	Displacement under shear load	[kN]	1,00
	δ_{V0}	Short term displacement under shear load	[mm]	0,83
	$\delta_{V\infty}$	Long term displacement under shear load	[mm]	1,24

[1] According to test report n° LOK 02-6026/12/R080SK

Characteristic resistance in masonry (use category b,c,d)				
	h_{min}	Minimum thickness of the member for single anchor - Clay brick - Vertically perforated clay brick - Autoclaved Aerated Concrete (AAC)	[mm]	 115 115 100
	s_{min}	Minimum spacing single anchor	[mm]	250
	c_{min}	Minimum edge distance single anchor	[mm]	100
	s_{min1} [2] / s_{min2} [3]	Minimum spacing for anchor group - Clay brick o In direction perpendicular to free edge o In direction parallel to free edge - Vertically perforated clay brick o In direction perpendicular to free edge o In direction parallel to free edge - AAC o In direction perpendicular to free edge o In direction parallel to free edge	[mm]	 > 240 / > 480 > 240 / > 480 > 200 / > 400
 b	F_{Rk}	Tension characteristic resistance in masonry - Clay brick Mz 20-2,0, EN 771-1 - Perforated ceramic brick Hlz, EN 771-1 - Vertically perforated porosited block (Porotherm 25 P+W), EN 771-1 - Vertical perforated ceramic block (Max 250), EN 771-1 - Autoclaved aerated concrete AAC2 - Autoclaved aerated concrete AAC7	[kN]	 4,5 [4] / 4,0 [5] 1,5 [4] / 1,2 [5] 0,9 [4] / 0,75 [5] 0,9 [4 5] 0,5 [4] 1,5 [4]
	γ_{Mc}	Partial safety factor	[-]	2,5
 c	F	Displacement under tension load - Clay brick - Perforated ceramic brick - Vertically perforated porosited block - Vertical perforated ceramic block - Autoclaved aerated concrete AAC2 - Autoclaved aerated concrete AAC7	[kN]	 1,28 0,43 0,26 0,26 0,17 0,53
 d	$\delta_{N0,cr}$	Short term displacement under tension load - Clay brick - Perforated ceramic brick - Vertically perforated porosited block - Vertical perforated ceramic block - Autoclaved aerated concrete AAC2 - Autoclaved aerated concrete AAC7	[mm]	 1,51 0,80 0,68 0,51 0,24 0,61
	$\delta_{N\infty,cr}$	Long term displacement under tension load - Clay brick - Perforated ceramic brick - Vertically perforated porosited block - Vertical perforated ceramic block - Autoclaved aerated concrete AAC2 - Autoclaved aerated concrete AAC7	[mm]	 3,02 1,60 1,36 1,02 0,48 1,22
	F	Displacement under shear load - Clay brick - Perforated ceramic brick - Vertically perforated porosited block - Vertical perforated ceramic block - Autoclaved aerated concrete AAC2 - Autoclaved aerated concrete AAC7	[kN]	 1,28 0,43 0,26 0,26 0,17 0,53

[2] In direction perpendicular to free edge
[3] In direction parallel to free edge
[4] Temperature range a (+24°C to +40°C)
[5] Temperature range b (+24°C tot +80°C)

	δ_{V0}	Short term displacement under shear load - Clay brick - Perforated ceramic brick - Vertically perforated porosited block - Vertical perforated ceramic block - Autoclaved aerated concrete AAC2 - Autoclaved aerated concrete AAC7	[mm]	 1,07 0,36 0,22 0,22 0,34 1,06
	$\delta_{V\infty}$	Long term displacement under shear load - Clay brick - Perforated ceramic brick - Vertically perforated porosited block - Vertical perforated ceramic block - Autoclaved aerated concrete AAC2 - Autoclaved aerated concrete AAC7	[mm]	 1,60 0,54 0,33 0,33 0,51 1,59

The performances of the product identified by the above identification code are in conformity with the declared performance. This declaration of performance is issued under the sole responsibility of pgb-Europe. Signed for and behalf of the manufacturer by:

Place and date of issue	Signature
Melle, 30/06/2014	nv pgb-Europe sa Gontrode Heirweg 170 9090 MELLE BE 0425 888 396 Johannes Heye, product manager

Annex 1 : Product overview

Frame plug with cylinder head and hex screw with pressed-on washer

CARTON BOX PACKING

size	pgb code	EAN13		
10x100	SMRPC310100 NZN	5902134719702	50	
10x120	SMRPC310120 NZN	5902134719719	50	
10x140	SMRPC310140 NZN	5902134719726	25	
10x160	SMRPC310160 NZN	5902134719733	25	

Frame plug with cylinder head and hex screw with pressed-on washer

WINDOW BOX PACKING

size	pgb code	EAN13		
10x100	SMRPCE10100 NZN	5902134720753	25	
10x120	SMRPCE10120 NZN	5902134720760	25	
10x140	SMRPCE10140 NZN	5902134720777	25	
10x160	SMRPCE10160 NZN	5902134720784	25	