

# DECLARATION OF PERFORMANCE

No. 2018-004



1. Unique identification code of the product type: *WKH, WKN, WKNB, WKF, WKFB* .....
2. Intended use/es: *hardened screws for wood, chipboard and wood-based materials*.....
3. Manufacturer: *ARVEX GROBELNY Sp. z o.o.* .....
- ul. Makuszyńskiego 4, 30-969 Krakow, POLAND* .....
4. Authorised representative: ----- .....
5. System/s of AVCP: *system 3* .....
- 6a. Harmonised standard: *PN-EN 14592+A1:2012 - „Timber structures – Dowel-type fasteners – Requirements”, 2012* .....
- Notified Body/ies: *1015, certificate of accreditation 292/2016, Strojirenský Zkušební Ústav, s.p., Czech Republic.*
- 6b. European Assessment Document: ----- .....
- European Technical Assessment: ----- .....
- Technical Assessment Body: ----- .....
- Notified Body/ies: ----- .....
7. Declared performance: ----- .....

Essential characteristics	Product type	Size*	Performance	Harmonised technical specification
Characteristic yield moment – $M_{y,k}$	WKH/WKN/WKNB/WKF/WKFB	2.5/xx	1085 [Nmm]	PN-EN 14592+A1:2012
	WKH/WKN/WKNB/WKF/WKFB	3.0/xx	1824 [Nmm]	
	WKH/WKN/WKNB/WKF/WKFB	3.5/xx	2279 [Nmm]	
	WKH/WKN/WKNB/WKF/WKFB	4.0/xx	3813 [Nmm]	
	WKH/WKN/WKNB/WKF/WKFB	4.5/xx	5242 [Nmm]	
	WKH/WKN/WKNB/WKF/WKFB	5.0/xx	7021 (thread section) [Nmm] 9230 (smooth section) [Nmm]	
	WKH/WKN/WKNB/WKF/WKFB	6.0/xx	12739 [Nmm]	
Characteristic withdrawal parameter for loading across the fibre – $f_{ax,k}$ [for characteristic density of wood $\rho_k = 370 \text{ kg/m}^3$ ]	WKH/WKN/WKNB/WKF/WKFB	2.5/xx	18.04 [N/mm <sup>2</sup> ]	PN-EN 14592+A1:2012
	WKH/WKN/WKNB/WKF/WKFB	3.0/xx	19.07 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	3.5/xx	18.82 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	4.0/xx	17.49 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	4.5/xx	17.40 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	5.0/xx	18.99 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	6.0/xx	18.01 [N/mm <sup>2</sup> ]	
Characteristic withdrawal parameter for loading along the fibre – $f_{ax,k}$ [for characteristic density of wood $\rho_k = 370 \text{ kg/m}^3$ ]	WKH/WKN/WKNB/WKF/WKFB	2.5/xx	11.69 [N/mm <sup>2</sup> ]	PN-EN 14592+A1:2012
	WKH/WKN/WKNB/WKF/WKFB	3.0/xx	14.39 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	3.5/xx	13.49 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	4.0/xx	13.43 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	4.5/xx	13.38 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	5.0/xx	12.19 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	6.0/xx	12.28 [N/mm <sup>2</sup> ]	
Characteristic head pull-through parameter – $f_{head,k}$ [for characteristic density of wood $\rho_k = 400 \text{ kg/m}^3$ ]	WKH/WKN/WKNB/WKF/WKFB	2.5/xx	30.80 [N/mm <sup>2</sup> ]	PN-EN 14592+A1:2012
	WKH/WKN/WKNB/WKF/WKFB	3.0/xx	27.49 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	3.5/xx	25.41 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	4.0/xx	21.36 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	4.5/xx	20.85 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	5.0/xx	21.39 [N/mm <sup>2</sup> ]	
	WKH/WKN/WKNB/WKF/WKFB	6.0/xx	20.04 [N/mm <sup>2</sup> ]	

Characteristic tensile capacity – $f_{tens,k}$	WKH/WKN/WKNB/WKF/WKFB	2.5/xx	2.87 [kN]	PN-EN 14592+A1:2012
	WKH/WKN/WKNB/WKF/WKFB	3.0/xx	4.04 [kN]	
	WKH/WKN/WKNB/WKF/WKFB	3.5/xx	4.05 [kN]	
	WKH/WKN/WKNB/WKF/WKFB	4.0/xx	6.57 [kN]	
	WKH/WKN/WKNB/WKF/WKFB	4.5/xx	8.05 [kN]	
	WKH/WKN/WKNB/WKF/WKFB	5.0/xx	6.75 [kN]	
	WKH/WKN/WKNB/WKF/WKFB	6.0/xx	14.04 [kN]	
Characteristic torsional ratio ( $f_{tor,k} / R_{tor,k}$ ) [for characteristic density of wood $\rho_k = 450 \text{ kg/m}^3$ ]	WKH/WKN/WKNB/WKF/WKFB	2.5/xx	5.69	PN-EN 14592+A1:2012
	WKH/WKN/WKNB/WKF/WKFB	3.0/xx	2.03	
	WKH/WKN/WKNB/WKF/WKFB	3.5/xx	2.56	
	WKH/WKN/WKNB/WKF/WKFB	4.0/xx	3.66	
	WKH/WKN/WKNB/WKF/WKFB	4.5/xx	2.97	
	WKH/WKN/WKNB/WKF/WKFB	5.0/xx	2.01	
	WKH/WKN/WKNB/WKF/WKFB	6.0/xx	3.45	
Durability	WKH/WKN/WKNB/WKF/WKFB	2.5/xx 3.0/xx 3.5/xx 4.0/xx	Yellow/white zinc plated, min. $3\mu\text{m}$ (Service Class 1 acc. to PN-EN 1995-1-1)	PN-EN 14592+A1:2012
		4.5/xx 5.0/xx 6.0/xx	Yellow/white zinc plated, min. $3\mu\text{m}$ (Service Class 1 and 2 acc. to PN-EN 1995-1-1)	

\*xx – applies to any length of the specified diameter of the screw; x/xx – applies to any length and diameter of the screw.

8. Appropriate Technical Documentation and/or Specific Technical Documentation: *Certificates to the reports on assessment of the performance of construction products No.: E-30-20258-16, E-30-20259-16, E-30-20261-16, E-30-20264-16, E-30-20267-16, E-30-20270-16, E-30-20271-16 issued on 31st May 2016 by Strojirenský Zkušební Ústav, s.p., Czech Republic.*

The performance of the product identified above is in conformity with the set of declared performance/s. 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:

Jerzy Grobelny.....  
[name]

in Krakow..... on 1st August 2018.....  
[place] [date of issue]

.....  
[signature]

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