# DECLARATION OF PERFORMANCE No KPS-FAST-14/25

1. Unique identification code of the product-type: **KPS-FAST-14**
2. Intended use/es: **Plastic anchors for redundant non-structural systems in concrete and masonry.**
3. Manufacturer: **Klimas Wkręt-met Sp. z o.o.**
   **ul. Wincentego Witosa 170/176**
   **Kuźnica Kiedrzyńska 42-233 Mykanów**
4. Authorised representative: **not applicable**
5. System/s of AVCP: **system 2+**
6. **European Assessment Document:** **EAD 330284-00-0604**
   **European Technical Assessment:** **ETA-12/0272 18/03/2026**
   **Technical Assessment Body:** **Instytut Techniki Budowlanej**
   **Notified body/ies:** **1488**
7. Declared performance/s:

**Reaction to fire - Anchorages satisfy requirements for Class A1**

**Resistance to fire**

**Table C3.2: Characteristic values $F_{Rk}$ in any load direction under fire exposure in concrete C20/25 to C50/60, no permanent centric tension load and shear load with lever arm, for fixing of façade systems**

| Anchor type | Fire resistence class | $F_{rk}$, kN |
|---|---|---|
| KPR/FAST 10, KPRS/FAST 10<br>KPR-STRONG 10, KPS-STRONG 10<br>KPR-FAST 10, KPS-FAST 10 | R 90 | 0.8 |

**Resistance to steel failure under tension and shear loading**

**Table C1.1: Characteristic bending resistance of the specific screw in concrete and masonry**

| Anchor diameter | | ϕ8 | ϕ10 | ϕ12 | ϕ14 |
|---|---|---|---|---|---|
| Characteristic bending resistance | $M_{Rk,s}$ [Nm] | 10.5 [1] (10.2) [2] | 16.8 [1] (16.3) [2] | 16.2 [1] (23.4) [2] | 34.4 [1] (49.8) [2] |
| Partial safety factor | $\gamma_{Ms}$ [3] | 1.25 [1]/ 1.29 [2] | 1.25 [1]/ 1.29 [2] | 1.25 [1]/ 1.29 [2] | 1.25 [1]/ 1.29 [2] |

[1] galvanised steel
[2] stainless steel
[3] in the absence of other national regulations

**Table C1.2: Characteristic resistance of the screw for use in concrete – failure of expansion element (specific screw)**

| Anchor diameter | | ϕ8 | ϕ10 | ϕ12 | ϕ14 |
|---|---|---|---|---|---|
| Characteristic tension resistance | $N_{Rk,s}$ [kN] | 13.2 [1] (12.8) [2] | 18.1 [1] (17.5) [2] | 15.4 [1] (22.3) [2] | 25.4 [1] (36.9) [2] |
| Partial safety factor | $\gamma_{Ms}$ [3] | 1.50 [1]/ 1.55 [2] | 1.50 [1]/ 1.55 [2] | 1.50 [1]/ 1.55 [2] | 1.50 [1]/ 1.55 [2] |
| Characteristic shear resistance | $V_{Rk,s}$ [kN] | 6.6 [1] (6.4) [2] | 9.1 [1] (8.8) [2] | 7.70 [1] (11.2) [2] | 12.7 [1] (18.4) [2] |
| Partial safety factor | $\gamma_{Ms}$ [3] | 1.25 [1]/ 1.29 [2] | 1.25 [1]/ 1.29 [2] | 1.25 [1]/ 1.29 [2] | 1.25 [1]/ 1.29 [2] |

[1] galvanised steel
[2] stainless steel
[3] in the absence of other national regulations

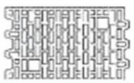
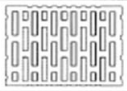
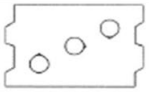
## Resistance to pull-out or concrete failure under tension loading (base material group a)

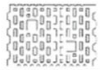
**Table C2.1: Characteristic resistance for use in concrete, pull-out failure (plastic sleeve); hammer drilling**

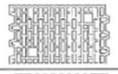
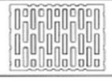
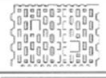
| Anchor type | KPR-FAST 8/50 KPS-FAST 8/50 | KPR-FAST 8/70 KPS-FAST 8/70 | KPR/FAST 10 KPS/FAST 10 | KPR-FAST 10/50 KPS-FAST 10/50 | KPR-FAST 10/70 KPS-FAST 10/70 | KPR-STRONG 10 KPS-STRONG 10 | KPR-FAST 12 KPS-FAST 12 | KPR-FAST 14 KPS-FAST 14 |
|---|---|---|---|---|---|---|---|---|
| Temperature range [°C] | -20 to +80 | | | | | | | |
| **Concrete ≥ C16/20** | | | | | | | | |
| Characteristic resistance $N_{Rk,p}$ [kN] | 3.5 | 4.5 | 4.0 | 4.0 | 8.5 | 6.0 | 5.0 | 7.5 |
| Partial safety factor $\gamma_{Mc}$ [1)] | 1.8 | | | | | | | |
| **Concrete C12/15** | | | | | | | | |
| Characteristic resistance $N_{Rk,p}$ [kN] | 2.5 | 3.0 | 3.0 | 3.0 | 6.0 | 4.5 | 3.5 | 5.0 |
| Partial safety factor $\gamma_{Mc}$ [1)] | 1.8 | | | | | | | |
| **Thin-wall concrete elements C16/20, h ≥ 30 mm** | | | | | | | | |
| Characteristic resistance $N_{Rk,p}$ [kN] | - | - | - | 4.0 | 4.0 | - | - | - |
| Partial safety factor $\gamma_{Mc}$ [1)] | 1.8 | | | | | | | |
| [1)] in the absence of other national regulations | | | | | | | | |

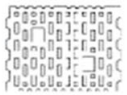
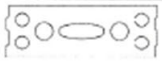
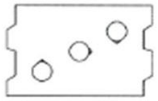
## Resistance in any load direction without lever arm (base material group b, c and d)

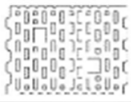
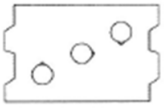
**Table C4.1: Characteristic resistance for use in masonry**

| Anchor type / Base material | Bulk density class [kg/dm³] | Mean compressive strength class [N/mm²] | Picture | Drill method | $F_{Rk}$ [16)] [kN] |
|---|---|---|---|---|---|
| **KPR-FAST 8/50 and KPS-FAST 8/50** | | | | | |
| Clay brick [1), 6)] | ≥ 2.00 | ≥ 10 |  | hammer | 3.0 |
| Clay brick [1), 6)] | ≥ 2.00 | ≥ 20 | | hammer | 3.0 |
| Calcium silicate brick [2), 7)] | ≥ 2.00 | ≥ 20 |  | hammer | 3.0 |
| **KPR-FAST 8/70 and KPS-FAST 8/70** | | | | | |
| Clay brick [1), 6)] | ≥ 2.00 | ≥ 10 |  | hammer | 2.5 |
| Clay brick [1), 6)] | ≥ 2.00 | ≥ 20 | | hammer | 3.0 |
| Calcium silicate brick [2), 7)] | ≥ 2.00 | ≥ 20 |  | hammer | 3.0 |
| Perforated ceramic brick [1), 9)] | ≥ 0.80 | ≥ 15 |  | rotary drilling only | 1.2 |
| Perforated ceramic brick [1), 10)] | ≥ 0.80 | ≥ 15 |  | rotary drilling only | 1.2 |
| Calcium silicate hollow block [2), 12)] | ≥ 1.60 | ≥ 12 |  | rotary drilling only | 2.5 |
| Hollow lightweight aggregate concrete element [3), 13)] | ≥ 0.80 | ≥ 2 |  | rotary drilling only | 2.0 |
| Autoclaved aerated concrete element AAC 2 [4)] | ≥ 0.35 | ≥ 2 | – | rotary drilling only | 0.6 |
| Autoclaved aerated concrete element AAC 7 [4)] | ≥ 0.65 | ≥ 6.5 | – | rotary drilling only | 2.0 |

| Anchor type / Base material | Bulk density class [kg/dm³] | Mean compressive strength class [N/mm²] | Picture | Drill method | $F_{Rk}$ [16] [kN] |
|---|---|---|---|---|---|
| **KPR-FAST 10/50 and KPS-FAST 10/50** | | | | | |
| Clay brick [1], [5] | ≥ 1.70 | ≥ 10 |  | hammer | 1.5 |
| Clay brick [1], [5] | ≥ 1.70 | ≥ 20 | | hammer | 2.0 |
| Clay brick [1], [6] | ≥ 2.00 | ≥ 10 |  | hammer | 2.0 |
| Clay brick [1], [6] | ≥ 2.00 | ≥ 20 | | hammer | 3.0 |
| Calcium silicate brick [2], [7] | ≥ 2.00 | ≥ 20 |  | hammer | 3.0 |
| Perforated ceramic brick [1], [8] | ≥ 0.80 | ≥ 15 |  | rotary | 1.2 |
| Perforated ceramic brick [1], [9] | ≥ 0.80 | ≥ 15 |  | rotary | 2.5 |
| Perforated ceramic brick [1], [10] | ≥ 0.80 | ≥ 15 |  | rotary | 2.5 |
| Perforated ceramic brick [1], [11] | ≥ 1.20 | ≥ 12 |  | rotary | 1.5 |
| Calcium silicate hollow block [2], [12] | ≥ 1.60 | ≥ 12 |  | rotary | 2.5 |
| Lightweight concrete blocks [3] | ≥ 0.80 | ≥ 2 |  | rotary | 1.5 |
| Aggregate concrete masonry units [3], [14] | ≥ 1.5 | ≥ 25 |  | rotary | 3.5 |
| Aggregate concrete masonry units [3], [15] | ≥ 1.0 | ≥ 20 |  | rotary | 4.0 |

| Anchor type / Base material | Bulk density class [kg/dm³] | Mean compressive strength class [N/mm²] | Picture | Drill method | $F_{Rk}$ [16] [kN] |
|---|---|---|---|---|---|
| **KPR-FAST 10/70 and KPS-FAST 10/70** | | | | | |
| Clay brick [1], [5] | ≥ 1.70 | ≥ 10 |  | hammer | 2.0 |
| Clay brick [1], [5] | ≥ 1.70 | ≥ 20 | | hammer | 3.5 |
| Clay brick [1], [6] | ≥ 2.00 | ≥ 10 |  | hammer | 2.0 |
| Clay brick [1], [6] | ≥ 2.00 | ≥ 20 | | hammer | 3.0 |
| Calcium silicate brick [2], [7] | ≥ 2.00 | ≥ 20 |  | hammer | 3.0 |
| Perforated ceramic brick [1], [8] | ≥ 0.80 | ≥ 15 |  | rotary | 1.0 |
| Perforated ceramic brick [1], [9] | ≥ 0.80 | ≥ 15 |  | rotary | 1.0 |
| Perforated ceramic brick [1], [10] | ≥ 0.80 | ≥ 15 |  | rotary | 1.0 |
| Perforated ceramic brick [1], [11] | ≥ 1.20 | ≥ 12 |  | rotary | 1.5 |
| Calcium silicate hollow block [2], [12] | ≥ 1.60 | ≥ 12 |  | rotary | 2.5 |
| Lightweight concrete blocks [3] | ≥ 0.80 | ≥ 2 |  | rotary | 1.5 |
| Aggregate concrete masonry units [3], [14] | ≥ 1.5 | ≥ 25 |  | rotary | 3.5 |
| Aggregate concrete masonry units [3], [15] | ≥ 1.0 | ≥ 20 |  | rotary | 4.0 |
| Autoclaved aerated concrete element AAC 2 [4] | ≥ 0.35 | ≥ 2 | – | rotary | 0.9 |
| Autoclaved aerated concrete element AAC 7 [4] | ≥ 0.65 | ≥ 6.5 | – | rotary | 2.0 |

| Anchor type / Base material | Bulk density class [kg/dm³] | Mean compressive strength class [N/mm²] | Picture | Drill method | $F_{Rk}$ [16] [kN] |
|---|---|---|---|---|---|
| **KPR-FAST 12 and KPS-FAST 12** | | | | | |
| Clay brick [1), 5)] | ≥ 1.70 | ≥ 10 |  | hammer | 2.5 |
| Clay brick [1), 5)] | ≥ 1.70 | ≥ 20 | | hammer | 3.5 |
| Clay brick [1), 6)] | ≥ 2.00 | ≥ 10 |  | hammer | 3.5 |
| Clay brick [1), 6)] | ≥ 2.00 | ≥ 20 | | hammer | 3.5 |
| Calcium silicate brick [2), 7)] | ≥ 2.00 | ≥ 20 |  | hammer | 3.5 |
| Perforated ceramic brick [1), 11)] | ≥ 1.20 | ≥ 12 |  | rotary | 2.0 |
| Calcium silicate hollow block [2), 12)] | ≥ 1.60 | ≥ 12 |  | rotary | 3.0 |
| Hollow lightweight aggregate concrete element [3), 13)] | ≥ 0.80 | ≥ 2 |  | rotary | 2.0 |
| Autoclaved aerated concrete element AAC 2 [4)] | ≥ 0.35 | ≥ 2 | – | rotary | 0.75 |
| Autoclaved aerated concrete element AAC 7 [4)] | ≥ 0.65 | ≥ 6.5 | – | rotary | 3.0 |

| Anchor type / Base material | Bulk density class [kg/dm³] | Mean compressive strength class [N/mm²] | Picture | Drill method | $F_{Rk}$ [16] [kN] |
|---|---|---|---|---|---|
| **KPR-FAST 14 and KPS-FAST 14** | | | | | |
| Clay brick [1), 5)] | ≥ 1.70 | ≥ 10 |  | hammer | 4.0 |
| Clay brick [1), 5)] | ≥ 1.70 | ≥ 20 | | hammer | 4.0 |
| Clay brick [1), 6)] | ≥ 2.00 | ≥ 10 |  | hammer | 4.0 |
| Clay brick [1), 6)] | ≥ 2.00 | ≥ 20 | | hammer | 4.0 |
| Calcium silicate brick [2), 7)] | ≥ 2.00 | ≥ 20 |  | hammer | 4.0 |
| Perforated ceramic brick [1), 11)] | ≥ 1.20 | ≥ 12 |  | rotary | 2.0 |
| Calcium silicate hollow block [2), 12)] | ≥ 1.60 | ≥ 12 |  | rotary | 3.5 |
| Hollow lightweight aggregate concrete element [3), 13)] | ≥ 0.80 | ≥ 2 |  | rotary | 2.0 |
| Autoclaved aerated concrete element AAC 2 [4)] | ≥ 0.35 | ≥ 2 | – | rotary | 0.9 |
| Autoclaved aerated concrete element AAC 7 [4)] | ≥ 0.65 | ≥ 6.5 | – | rotary | 3.0 |
| Partial safety factor $\gamma_{Mm}$ [17)] | 2.5 / 2.0 | | | | |

## Edge distance and spacing

**Table B2: Minimum thickness of member, edge distance and spacing in concrete**

| Anchor type | Base material | $h_{min}$ [mm] | $c_{cr,N}$ [mm] | $s_{cr,N}$ [mm] | $c_{min}$ [mm] | $s_{min}$ [mm] |
|---|---|---|---|---|---|---|
| KPR-FAST 8/50<br>KPS-FAST 8/50 | Concrete ≥ C16/20 | 100 | 70 | 70 | 50 | 50 |
| | Concrete ≥ C12/15 | 100 | 100 | 95 | 70 | 70 |
| KPR-FAST 8/70<br>KPS-FAST 8/70 | Concrete ≥ C16/20 | 100 | 100 | 80 | 60 | 60 |
| | Concrete ≥ C12/15 | 100 | 140 | 115 | 80 | 80 |
| KPR/FAST 10<br>KPS/FAST 10 | Concrete ≥ C16/20 | 100 | 100 | 75 | 60 | 60 |
| | Concrete ≥ C12/15 | 100 | 140 | 105 | 80 | 80 |
| KPR-FAST10/50<br>KPS-FAST10/50 | Concrete ≥ C16/20 | 100 | 100 | 75 | 50<br>for s ≥ 150 mm | 50<br>for c ≥ 100 mm |
| | Concrete ≥ C12/15 | 100 | 140 | 105 | 70<br>for s ≥ 210 mm | 70<br>for c ≥ 140 mm |
| | Thin wall concrete elements ≥ C16/20 | 30 | 100 | 100 | 100 | 100 |
| KPR-FAST10/70<br>KPS-FAST10/70 | Concrete ≥ C16/20 | 100 | 100 | 110 | 50<br>for s ≥ 150 mm | 50<br>for c ≥ 100 mm |
| | Concrete ≥ C12/15 | 100 | 140 | 150 | 70<br>for s ≥ 210 mm | 70<br>for c ≥ 150 mm |
| | Thin wall concrete elements ≥ C16/20 | 30 | 100 | 100 | 100 | 100 |
| KPR-FAST 12<br>KPS-FAST 12 | Concrete ≥ C16/20 | 100 | 100 | 85 | 100 | 100 |
| | Concrete ≥ C12/15 | 100 | 140 | 120 | 140 | 140 |
| KPR-FAST 14<br>KPS-FAST 14 | Concrete ≥ C16/20 | 100 | 100 | 115 | 100 | 100 |
| | Concrete ≥ C12/15 | 100 | 140 | 160 | 140 | 140 |

**Table B3: Minimum thickness of member, edge distance and spacing in masonry**

| Anchor diameter | Base material | Type of element | Single anchor | | | Anchor group [1] | |
|---|---|---|---|---|---|---|---|
| | | | $h_{min}$ [mm] | $c_{min}$ [mm] | $s_{min}$ [mm] | $s_{min1}$ [2] [mm] | $s_{min2}$ [3] [mm] |
| ϕ8 | masonry made of ceramic, calcium silicate and lightweight aggregate concrete elements | solid | 120 | 100 | 100 | 100 | 200 |
| | | perforated or hollow | 180 | 100 | 100 | 100 | 200 |
| | masonry made of autoclaved aerated concrete elements | – | 100 | 100 | 100 | 100 | 200 |
| ϕ10 | masonry made of ceramic, calcium silicate and lightweight aggregate concrete elements | solid | 120 | 100 | 100 | 100 | 200 |
| | | perforated or hollow | 180 | 100 | 100 | 100 | 200 |
| | masonry made of autoclaved aerated concrete elements | – | 100 | 100 | 100 | 100 | 200 |
| ϕ12 | masonry made of ceramic, calcium silicate and lightweight aggregate concrete elements | solid | 120 | 100 | 100 | 100 | 200 |
| | | perforated or hollow | 180 | 100 | 100 | 100 | 200 |
| | masonry made of autoclaved aerated concrete elements | – | 100 | 100 | 100 | 100 | 200 |
| ϕ14 | masonry made of ceramic, calcium silicate and lightweight aggregate concrete elements | solid | 120 | 100 | 100 | 100 | 200 |
| | | perforated or hollow | 180 | 100 | 100 | 100 | 200 |
| | masonry made of autoclaved aerated concrete elements | – | 100 | 100 | 100 | 100 | 200 |

[1] the design method valid for single anchor and anchor groups with two or four anchors
[2] in direction perpendicular to free edge
[3] in direction parallel to free edge

**Table C5.1: Displacements under tension and shear loading in masonry**

| Anchor type | Base material | Tension load | | | Shear load | | |
|---|---|---|---|---|---|---|---|
| | | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] |
| KPR-FAST 8/50<br>KPS-FAST 8/50 | Clay brick [1), 6)] | 0.86 | 1.71 | 3.42 | 0.86 | 1.71 | 3.42 |
| | Calcium silicate brick [3), 7)] | 0.86 | 0.19 | 0.38 | 0.86 | 0.19 | 0.38 |
| KPR-FAST 8/70<br>KPS-FAST 8/70 | Clay brick [1), 6)] | 0.86 | 0.35 | 0.70 | 0.86 | 0.35 | 0.70 |
| | Calcium silicate brick [2), 7)] | 0.86 | 0.20 | 0.40 | 0.86 | 0.20 | 0.40 |
| | Perforated ceramic brick [1), 9)] | 0.34 | 0.23 | 0.46 | 0.34 | 0.23 | 0.46 |
| | Perforated ceramic brick [1), 10)] | 0.34 | 0.23 | 0.46 | 0.34 | 0.23 | 0.46 |
| | Calcium silicate hollow block [2), 12)] | 0.71 | 0.31 | 0.62 | 0.71 | 0.31 | 0.62 |
| | Hollow lightweight aggregate concrete element [3), 13)] | 0.43 | 1.10 | 2.20 | 0.57 | 1.10 | 2.20 |
| | Autoclaved aerated concrete element AAC 2 [4)] | 0.21 | 0.42 | 0.84 | 0.21 | 0.42 | 0.84 |
| | Autoclaved aerated concrete element AAC 7 [4)] | 0.71 | 0.30 | 0.60 | 0.71 | 0.30 | 0.60 |

| Anchor type | Base material | Tension load | | | Shear load | | |
|---|---|---|---|---|---|---|---|
| | | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] |
| KPR/FAST 10<br>KPS/FAST 10 | Clay brick [1), 5)] | 1.00 | 0.20 | 0.40 | 1.00 | 0.83 | 1.25 |
| | Clay brick [1), 6)] | 1.00 | 1.07 | 2.13 | 1.00 | 0.83 | 1.25 |
| | Calcium silicate brick [3), 7)] | 1.00 | 0.09 | 0.18 | 1.00 | 0.83 | 1.25 |
| | Perforated ceramic brick [1), 9)] | 0.30 | 0.73 | 1.46 | 0.26 | 0.51 | 0.77 |
| | Perforated ceramic brick [1), 10)] | 0.30 | 0.73 | 1.46 | 0.26 | 0.51 | 0.77 |
| | Perforated ceramic brick [1), 11)] | 0.60 | 1.38 | 2.75 | 0.57 | 1.14 | 1.71 |
| | Calcium silicate hollow block [2), 12)] | 0.70 | 0.55 | 1.09 | 0.71 | 1.43 | 2.14 |
| | Hollow lightweight aggregate concrete element [3), 13)] | 0.43 | 1.35 | 2.70 | 0.57 | 1.14 | 1.71 |
| | Autoclaved aerated concrete element AAC 2 [4)] | 0.20 | 0.15 | 0.29 | 0.21 | 0.43 | 0.64 |
| | Autoclaved aerated concrete element AAC 7 [4)] | 0.50 | 0.02 | 0.04 | 0.54 | 1.07 | 1.61 |
| KPR-STRONG 10 | Clay brick [1), 6)] | 1.00 | 1.10 | 2.20 | 1.00 | 0.83 | 1.25 |
| KPS- STRONG 10 | Calcium silicate brick [2), 7)] | 1.00 | 0.15 | 0.30 | 1.00 | 0.83 | 1.25 |

| Anchor type | Base material | Tension load | | | Shear load | | |
|---|---|---|---|---|---|---|---|
| | | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] |
| KPR-FAST 10/50<br>KPS-FAST 10/50 | Clay brick [1), 5)] | 0.6 | 0.1 | 0.2 | 0.6 | 0.9 | 0.6 |
| | Clay brick [1), 6)] | 0.9 | 0.5 | 1.0 | 0.7 | 1.1 | 0.7 |
| | Calcium silicate brick [3), 7)] | 0.9 | 0.3 | 0.6 | 0.7 | 1.1 | 0.7 |
| | Perforated ceramic brick [1), 8)] | 0.7 | 0.6 | 1.2 | 0.7 | 0.6 | 0.9 |
| | Perforated ceramic brick [1), 9)] | 0.7 | 1.0 | 2.0 | 0.7 | 0.5 | 0.8 |
| | Perforated ceramic brick [1), 10)] | 0.7 | 1.0 | 2.0 | 0.7 | 0.5 | 0.8 |
| | Perforated ceramic brick [1), 11)] | 0.4 | 0.5 | 1.0 | 0.4 | 0.4 | 0.6 |
| | Calcium silicate hollow block [2), 12)] | 0.7 | 0.6 | 1.2 | 0.7 | 0.5 | 0.8 |
| | Lightweight concrete blocks [3)] | 0.4 | 1.1 | 2.2 | 0.4 | 1.0 | 1.5 |
| | Aggregate concrete masonry units [3), 14)] | 1.0 | 0.4 | 0.8 | 1.0 | 0.5 | 0.75 |
| | Aggregate concrete masonry units [3), 15)] | 1.1 | 0.4 | 0.8 | 1.1 | 0.5 | 0.75 |

| Anchor type | Base material | Tension load | | | Shear load | | |
|---|---|---|---|---|---|---|---|
| | | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] |
| KPR-FAST 10/70<br>KPS-FAST 10/70 | Clay brick [1), 5)] | 1.0 | 0.3 | 0.6 | 1.0 | 0.8 | 1.2 |
| | Clay brick [1), 6)] | 0.9 | 0.8 | 1.6 | 0.9 | 0.7 | 1.1 |
| | Calcium silicate brick [3), 7)] | 0.9 | 0.2 | 0.4 | 0.9 | 0.7 | 1.1 |
| | Perforated ceramic brick [1), 8)] | 0.3 | 0.5 | 1.0 | 0.3 | 0.4 | 0.6 |
| | Perforated ceramic brick [1), 9)] | 0.3 | 0.6 | 1.2 | 0.3 | 0.4 | 0.6 |
| | Perforated ceramic brick [1), 10)] | 0.3 | 0.6 | 1.2 | 0.3 | 0.4 | 0.6 |
| | Perforated ceramic brick [1), 11)] | 0.4 | 0.6 | 1.2 | 0.4 | 0.4 | 0.6 |
| | Calcium silicate hollow block [2), 12)] | 0.7 | 0.7 | 1.4 | 0.7 | 1.4 | 2.1 |
| | Lightweight concrete blocks [3)] | 0.4 | 1.0 | 2.0 | 0.4 | 1.0 | 1.5 |
| | Autoclaved aerated concrete element AAC 2 [4)] | 0.3 | 0.2 | 0.4 | 0.3 | 0.5 | 0.8 |
| | Autoclaved aerated concrete element AAC 7 [4)] | 0.7 | 0.3 | 0.6 | 0.7 | 0.7 | 1.1 |
| | Aggregate concrete masonry units [3), 14)] | 1.0 | 0.4 | 0.8 | 1.0 | 0.5 | 0.75 |
| | Aggregate concrete masonry units [3), 15)] | 1.1 | 0.4 | 0.8 | 1.1 | 0.6 | 0.9 |

| Anchor type | Base material | Tension load | | | Shear load | | |
|---|---|---|---|---|---|---|---|
| | | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] | F [kN] | $\delta_{NO}$ [mm] | $\delta_{N\infty}$ [mm] |
| KPR-FAST 12<br>KPS-FAST 12 | Clay brick [1), 5)] | 1.00 | 0.36 | 0.72 | 1.00 | 0.83 | 1.25 |
| | Clay brick [1), 6)] | 1.00 | 0.27 | 0.54 | 1.00 | 0.83 | 1.25 |
| | Calcium silicate brick [2), 7)] | 1.00 | 0.28 | 0.56 | 1.00 | 0.83 | 1.25 |
| | Perforated ceramic brick [1), 11)] | 0.57 | 0.72 | 1.44 | 0.57 | 1.14 | 1.71 |
| | Calcium silicate hollow block [2), 12)] | 0.86 | 0.43 | 0.86 | 0.86 | 1.71 | 2.57 |
| | Hollow lightweight aggregate concrete element [3), 13)] | 0.43 | 0.06 | 0.12 | 0.57 | 1.14 | 1.71 |
| | Autoclaved aerated concrete element AAC 2 [4)] | 0.27 | 0.39 | 0.78 | 0.27 | 0.54 | 0.80 |
| | Autoclaved aerated concrete element AAC 7 [4)] | 1.07 | 0.36 | 0.72 | 1.07 | 2.14 | 3.21 |
| KPR-FAST 14<br>KPS-FAST 14 | Clay brick [1), 5)] | 1.14 | 0.28 | 0.56 | 1.14 | 0.95 | 1.43 |
| | Clay brick [1), 6)] | 1.14 | 0.27 | 0.54 | 1.14 | 0.95 | 1.43 |
| | Calcium silicate brick [2), 7)] | 1.14 | 0.09 | 0.18 | 1.14 | 0.95 | 1.43 |
| | Perforated ceramic brick [1), 11)] | 0.57 | 0.13 | 0.26 | 0.57 | 1.14 | 1.71 |
| | Calcium silicate hollow block [2), 12)] | 1.00 | 0.16 | 0.32 | 1.00 | 2.00 | 3.00 |
| | Hollow lightweight aggregate concrete element [3), 13)] | 0.57 | 0.09 | 0.18 | 0.57 | 1.14 | 1.71 |
| | Autoclaved aerated concrete element AAC 2 [4)] | 0.32 | 0.39 | 0.78 | 0.32 | 0.64 | 0.96 |
| | Autoclaved aerated concrete element AAC 7 [4)] | 1.07 | 0.17 | 0.34 | 1.07 | 2.14 | 3.21 |

**Durability – corrosion of metal parts**

**Use conditions (environmental conditions):**

- Structures subject to dry internal conditions (zinc coated steel, stainless steel).
- Structures subject to external atmospheric exposure, if anchor is not directly subjected to this exposure, i.e. external cladding elements screen the anchor, and the head of screw is additionally protected by permanently elastic coating which precludes corrosion from occurring and prevents moisture from entering into plastic sleeve (zinc coated steel).
- Structures subject to external atmospheric exposure including industrial and marine environment (stainless steel).
- Structures subject to permanently damp internal condition, if no particular aggressive conditions exist (stainless steel).

  Note: Particular aggressive conditions are e.g. permanent, alternating immersion in seawater or the splash zone of seawater, chloride atmosphere of indoor swimming pools or atmosphere with extreme chemical pollution (e.g. in desulphurization plants or road tunnels where de-icing materials are used).

**Durability – high alkalinity of plastic sleeve**

**No influence of high alkalinity**

8. Appropriate Technical Documentation and/or Specific Technical Documentation: not applicable

*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:*

*Kuźnica Kiedrzyńska*
*24-08-2026*

[place]
[date of issue]

Signature Not Verified
Dokument podpisany przez ADAM SZCZEPANOWSKI; Wkręt-met
Data: 2026.08.24 13:58:22 CEST

[name]
[signature]