

### Performance data

| Anchor diameter [mm]   |   | 6   | 6L  |     |
|--|---|---|-----|-----|
| Multiple attachment of non-load-bearing systems in concrete (for all load directions)  | $F_{perm}$ [kN] $\geq$ C20/25 and $\leq$ C50/60 <sup>1)</sup> | 0.8                                       | 1.4 |     |
|  | Perm. bending torque  | $M_{perm}$ [Nm]                           | 2.1 | 4.4 |
| Perm. load under fire stress (Technical Report TR 020) Axial and edge distances, see European Technical Approval ETA-07/0138 | R30; $F_{perm}$ [kN] <sup>2)</sup>                            | –   | 0.8 |     |
|  | R60; $F_{perm}$ [kN] <sup>2)</sup>                            | –   | 0.5 |     |
|  | R90; $F_{perm}$ [kN] <sup>2)</sup>                            | <b>F90 = 0.35</b> contained in Z-21.1-917 | –   | 0.3 |
|  | R120; $F_{perm}$ [kN] <sup>2)</sup>                           | –   | –   | 0.2 |

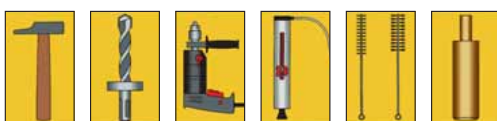
### Characteristic values

|   |                     | 6   | 6L  |
|---|---------------------|-----|-----|
| Minimum axial spacing                     | $s_{cr}$ [mm]       | 200 | 200 |
| Minimum edge spacing                      | $c_{cr}$ [mm]       | 150 | 150 |
| Min. component thickn.                    | $h_{min}$ [mm]      | 80  | 80  |
| Effective anchoring depth                 | $h_{ef}$ [mm]       | 26  | 36  |
| Nominal drill dia. <sup>3)</sup>          | $d_0$ [mm]          | 6.0 | 6.0 |
| Drill cutting dia. <sup>3)</sup>          | $d_{cut} \leq$ [mm] | 6.4 | 6.4 |
| Drilled hole depth                        | $h_1 =$ [mm]        | 32  | 42  |
| Through-hole in component to be connected | $d_t \leq$ [mm]     | 7   | 7   |

### Anchor dimensions

| Anchor diameter [mm]   |                | 6  |  |  |                                     | 6L   |
|--|----------------|--|--|--|-------------------------------------|--|
| Total length   | $l$ [mm]       | 38   | 64   | 84   | 114                                 | 48   |
| Max. mounting height   | $f_{fix}$ [mm] | 4  | 30   | 50   | 80                                  | 4  |
| Designation of anchor  |                | W-SD M6x4/38   | W-SD M6x30/64  | W-SD M6x50/84  | W-SD M6x80/114                      | W-SD M6Lx4/48  |
| W-SD Nail Anchor with hexagon nut + washer<br>Galvanized steel | Art. No.       | <b>0905 700 400</b>  | <b>0905 700 406</b>  | <b>0905 700 407</b>  | <b>0905 700 408</b>                 | <b>0905 700 404</b>  |
| Packing unit   | P. Qty.        | 100  | 100  | 100  | 100                                 | 100  |
| Designation of collared bit                                    |                | SDS 1  | SDS 3  | SDS 4  | SDS 5                               | SDS 2  |
| Collared bit with SDS  | Art. No.       | <b>0905 700 001</b>  | <b>0905 700 003</b>  | <b>0905 700 004</b>  | <b>0905 700 005</b>                 | <b>0905 700 002</b>  |
| Drilling length up to collar                                   | $l_{dr}$ [mm]  | 32   | 62   | 82   | 112                                 | 42   |
| Packing unit   | P. Qty.        | 1  | 1  | 1  | 1                                   | 1  |
| Setting tool, mason's mallet                                   |                | Mason's mallet: SWM-H  | Mason's mallet: SWM-H  | Mason's mallet: SWM-H  | Mason's mallet: SWM-H               | Mason's mallet: SWM-H  |
| Setting tool, hammer drill                                     |                | Hammer drill: SWM-SM   | Hammer drill: SWM-SM 50  | Hammer drill: SWM-SM 50  | Hammer drill: SWM-SM 50             | Hammer drill: SWM-SM   |
| Setting tool<br>Mason's mallet<br>Setting tool<br>Hammer drill | Art. No.       | Mason's mallet: <b>0905 700 505</b><br>Hammer drill: <b>0905 700 491</b> | Mason's mallet: <b>0905 700 505</b><br>Hammer drill: <b>0905 700 492</b> | Mason's mallet: <b>0905 700 505</b><br>Hammer drill: <b>0905 700 492</b> | Mason's mallet: <b>0905 700 505</b> | Mason's mallet: <b>0905 700 505</b><br>Hammer drill: <b>0905 700 491</b> |
| Packing unit   | P. Qty.        | 1  | 1  | 1  | 1                                   | 1  |

### Würth System Components



- <sup>1)</sup> The approval takes account of the part-safety coefficients of the resistances and a part-safety coefficient of the effects of  $\gamma_f = 1.4$ . For the combination of tensile and transverse loads, for edge influence and anchor groups, please refer to the guideline for European Technical Approval (ETAG) Appendix C.
- <sup>2)</sup> The approval takes account of the recommended part-safety coefficients for the load-bearing capacity under fire stress of  $\gamma_{w,fi} = 1.0$  and the part-safety coefficient of the effects of  $\gamma_f = 1.0$ .
- <sup>3)</sup> The carbide masonry drills must comply with the specifications of the information leaflet of the "Deutsches Institut für Bautechnik" (German Institute for Building Technology) and the "Fachverband Werkzeugindustrie e.V." (Professional Association of the Tool Industry) on the "Characteristics, requirements and tests of masonry drills with carbide cutting bodies used for producing drilled holes of dowel anchors". Würth hammer drills meet the stipulations of the code of practice.