

# W-FAZ-IG/S FIXING ANCHOR WITH FEMALE THREAD

02.7

| Performance data   |  | M6                                      | M6  | M8   | M8   | M10  | M10  | M12  | M12  |       |
|--|--|---|-----|------|------|------|------|------|------|-------|
| Anchor diameter [mm]   |  |   |     |      |      |      |      |      |      |       |
| Perm. centered tensile load <sup>1)</sup><br>on a single anchor without edge influence   | Tensile zone<br>(cracked concrete C20/25 <sup>2)</sup> ,<br>$s \geq 3 h_{ef}$ , $c \geq 1.5 h_{ef}$                                      | $N_{perm}$ [kN] = C20/25 <sup>2)</sup>  | 2.0 | 2.0  | 3.6  | 3.6  | 4.8  | 4.8  | 7.9  | 7.9   |
|  | Pressure zone<br>(uncracked concrete C20/25 <sup>2)</sup> ,<br>$s \geq 5 h_{ef}$ , $c \geq 2.5 h_{ef}$                                   | $N_{perm}$ [kN] = C20/25 <sup>2)</sup>  | 4.8 | 4.8  | 6.3  | 6.3  | 7.9  | 7.9  | 11.9 | 11.9  |
| Perm. central transverse load <sup>1)</sup><br>on a single anchor without edge influence | Tensile zone and pressure zone<br>(cracked and uncracked concrete C20/25 <sup>2)</sup> ,<br>Cotter-pin mounting<br>Through-bolt mounting | $V_{perm.}$ [kN] = C20/25 <sup>2)</sup> | 3.3 | 2.9  | 3.9  | 4.3  | 5.9  | 6.2  | 14.7 | 13.9  |
|  | Permissible bending torque<br>Cotter-pin mounting Through-bolt mounting  | $M_{perm.}$ [Nm]                        | 7.0 | 20.6 | 17.1 | 30.4 | 34.2 | 43.4 | 59.8 | 118.3 |

**Fire resistance duration** Permissible load under fire load (R30, R60, R90, R120) see European Technical Approval ETA-99/0011

| Characteristic values   |  |         |      |       |       |      |      |      |      |    |
|---|--|---------|------|-------|-------|------|------|------|------|----|
| Minimum component thickness   | $d \geq$ [mm]                          | 100     | 100  | 120   | 120   | 130  | 130  | 160  | 160  |    |
| Minimum axial spacing   | $s_{min} \geq$ [mm]                    | 50      | 50   | 60    | 60    | 70   | 65   | 80   | 80   |    |
|   | Cracked concrete    Uncracked concrete | 60      | 80   | 80    | 100   | 100  | 120  | 120  | 160  |    |
| Minimum edge spacing  | $c_{min} \geq$ [mm]                    | 50      | 50   | 60    | 60    | 70   | 70   | 80   | 100  |    |
|   | Cracked concrete    Uncracked concrete | 75      | 115  | 100   | 155   | 100  | 170  | 120  | 210  |    |
| Effective anchoring depth   | $h_{ef}$ [mm]                          | 45      | 45   | 58    | 58    | 65   | 65   | 80   | 80   |    |
| Nom. drill dia.   | $d_0$ [mm]                             | 8       | 8    | 10    | 10    | 12   | 12   | 16   | 16   |    |
| Drill cutting dia.  | $d_{cut} \leq$ [mm]                    | 8.45    | 8.45 | 10.45 | 10.45 | 12.5 | 12.5 | 16.5 | 16.5 |    |
| Drill hole depth  | $h_1 \geq$ [mm]                        | 60      | 60   | 75    | 75    | 90   | 90   | 105  | 105  |    |
| Min. screw-in depth threaded rod  | $L_{sd} \geq$ [mm]                     | 9       | 9    | 12    | 12    | 15   | 15   | 18   | 18   |    |
| Torque while installing anchor  | $T_{inst}$ [Nm]                        | Type S  | 10   | 10    | 30    | 30   | 30   | 30   | 55   | 55 |
|   |  | Type SK | 10   | 10    | 25    | 25   | 40   | 40   | 50   | 50 |
|   |  | Type B  | 8    | 8     | 25    | 25   | 30   | 30   | 45   | 45 |
| Through-hole in attachment part<br>Cotter-pin mounting    Through-bolt mounting | $d_f \leq$ [mm]                        | 7       | 9    | 9     | 12    | 12   | 14   | 14   | 18   |    |

## Würth System Components



<sup>1)</sup> The part safety coefficients of the resistances regulated in the approval and a part safety coefficient of the effects of  $\gamma_r = 1.4$  have been taken into account. 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 concrete has normal reinforcement. Higher values are possible for higher concrete strengths.