

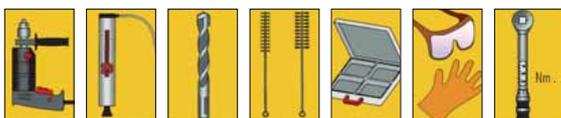
INJECTION SYSTEM W-VIZ/A4/W-VIZ/HCR M8 TO M12

23.2

Characteristic values W-VIZ/A4 (W-VIZ/HCR see ETA-04/0095)												
Anchor diameter [mm]		M8 hef 40	M8 hef 50	M10 hef 60	M10 hef 75	M12 hef 70	M12 hef 80	M12 hef 95	M12 hef 100	M12 hef 110	M12 hef 125	
Minimum component thickness		$h_{min} \geq$ [mm]										
Minimal axis distance		80										
cracked concrete		40										
non-cracked concrete		40										
Minimal edge clearance		$s_{min} \geq$ [mm]										
cracked concrete		40										
non-cracked concrete		40										
Axial spacing		$c_{cr,N}$ [mm]										
Edge spacing		60										
Effective anchoring depth		$h_{ef} \geq$ [mm]										
Nom. drill dia.		d_o [mm]										
Drill hole depth		$h_o \geq$ [mm]										
Through-hole in the component being connected – cotter-pint mounting		$d_f \leq$ [mm]										
Through-hole in the component being connected – pass-through mounting ⁷⁾		$d_f \leq$ [mm]										
torque while installing anchor		$T_{inst} \leq$ [Nm]										
Cleaning brush dia.		$D \geq$ [mm]										

Performance data W-VIZ/A4 (W-VIZ/HCR see ETA-04/0095)												
Anchor diameter [mm]		M8 hef 40	M8 hef 50	M10 hef 60	M10 hef 75	M12 hef 70	M12 hef 80	M12 hef 95	M12 hef 100	M12 hef 110	M12 hef 125	
Permissible central tensile load ¹⁾ of a single anchor without edge influence	Tensile zone (cracked concrete C20/25 ²⁾ , $s \geq 3 h_{ef}$, $c \geq 1.5 h_{ef}$	4.3	6.1	8.0	11.1	10.0	12.3	15.9	17.1	19.8	24.0	
	Pressure zone (non-cracked concrete C20/25 ²⁾) Minimum axial and edge spacing ($s_{cr,sp} \geq 3 h_{ef}$, $c_{cr,sp} \geq 1.5 h_{ef}$)	2.4	3.6	5.7	5.7	7.6	9.5	9.5	14.3	14.3	14.3	
	Pressure zone (non-cracked concrete C20/25 ²⁾) maximum carrying capacity ($s_{cr,sp}$ and $c_{cr,sp}$ see permit)	3.6	4.3	7.6	9.5	9.5	17.2	14.3	19.1	16.7	19.1	
		2.9	4.3	7.6	7.6	7.6	11.9	11.9	14.3	14.3	14.3	
Perm. transverse load ¹⁾ of a single anchor without edge influence	Tensile zone (cracked concrete C20/25 ²⁾ , $c \geq 10 h_{ef}$	8.6	8.6	13.1	13.1	19.4	19.4	19.4	19.4	19.4	19.4	
	Pressure zone (non-cracked concrete C20/25 ²⁾ , $c \geq 10 h_{ef}$	8.6	8.6	13.1	13.1	19.4	19.4	19.4	19.4	19.4	19.4	
Permissible bending torque		$T_{perm.}$ [Nm]										
Fire resistance duration		F30 [kN]										
		F60 [kN]										
		F90 [in kN]										
		F120 [kN]										

Würth system components



¹⁾ The partial safety factors of the resistances regulated in the approval and a partial safety factor of the effects of $\gamma_F = 1.4$ have been taken into account. Please refer to the European Technical Approval Guidelines (ETAG), Appendix C, for information on combining tensile and transverse loads, edge influence and groups of anchors.

²⁾ The concrete has normal reinforcement. Higher values are possible for higher concrete strengths.

³⁾ Maximum long-term temperature.

⁴⁾ Maximum short-term temperature.

⁵⁾ The back of the concrete component must be checked to ensure that no chipping has occurred during drilling (see ETA-04/0095).

⁶⁾ Min. axis distance $s_{min} = 55$ mm for edge clearance $c \geq 80$ mm.

⁷⁾ The ring gap in the attached part must be completely filled with excess mortar after the setting.