

# W-VI/A4 W-VI/HCR INJECTION SYSTEM

23.9

Performance data				M8	M10	M12	M16	M20	M24	M30
Perm. centr. tensile load <sup>1)</sup> on a single anchor without edge influence	Pressure zone (uncracked concrete C20/25 <sup>2)</sup> , $s \geq 2 h_{ef}$ , $c \geq 1 h_{ef}$ )	$N_{perm}$ [kN] = C20/25 <sup>2)</sup>	50°C <sup>3)</sup> / 80°C <sup>4)</sup>	7.6	11.9	16.7	23.8	45.2	54.8	81.0
			72°C <sup>3)</sup> / 120°C <sup>4)</sup>	5.7	7.6	11.9	19.1	28.6	35.7	54.8
Perm. transverse load <sup>1)</sup> on a single anchor without edge influence	Pressure zone (uncracked concrete C20/25 <sup>2)</sup> , $c \geq 10 h_{ef}$ )	$V_{perm}$ [kN] = C20/25 <sup>2)</sup>		7.4	11.4	17.1	31.4	49.1	70.3	50.0
Permissible bending torque		$M_{perm}$ [Nm]		14.9	29.7	52.6	133.1	259.4	448	401.1
Fire resistance duration <sup>3)</sup>		F30 [kN]		1.9	4.5	6.0	11.0	16.0	19.83	31.52
		F60 [kN]		0.85	2.1	3.0	6.6	9.0	11.49	18.25
		F90 [kN]		0.55	1.35	2.0	4.9	6.4	7.31	11.62
		F120 [kN]		0.4	1.0	1.5	4.0	5.0	5.23	8.31

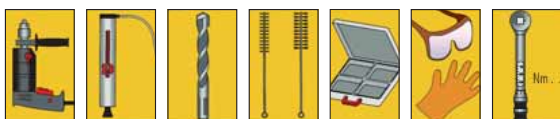
Characteristic values		M8	M10	M12	M16	M20	M24	M30
Minimum axial spacing	$s_{min}$ [mm]	40	45	55	65	85	105	135
Axial spacing	$s_{cr,N}$ [mm]	160	180	220	250	340	420	540
Minimum edge spacing	$c_{min}$ [mm]	40	45	55	65	85	105	135
Edge spacing	$c_{cr,N}$ [mm]	90	110	125	170	210	270	
Minimum component thickness	$h_{min}$ [mm]	100	130	160	200	220	280	350
Reduced minimum component thickness	$h_{min,red}$ [mm]	-	120	140	160	-	-	-
Effective anchoring depth	$h_{ef}$ [mm]	80	90	110	125	170	210	270
Nom. drill dia.	$d_0$ [mm]	10	12	14	18	22	26	32
Drill hole depth	$h_0 \geq$ [mm]	80	90	110	125	170	210	270
Through-hole in the component being connected	$d_f \leq$ [mm]	9	12	14	18	22	26	33
Torque while installing anchor	$T_{inst}$ [Nm]	10	20	40	60	120	150	300
Cleaning brush dia.	$D \geq$ [mm]	11	13	15	19	23	27	34

Drill hole cleaning		M8 - M16: Blow out 2x, brush out mechanically 2x, blow out 2x M20 - M30: Blow-out with compressed air (6 bar) 2x, brush-out mechanically 2x, blow-out with compressed air (6 bar) 2x							
Cleaning Brush (Steel)	Art. No. P.Qty = 1	0905 499 001	0905 499 002	0905 499 003	0905 499 004	0905 499 007	0905 499 006	Special order	
Machine Mount	Art. No. P.Qty = 1	Hexagon: Art. No. 0905 499 101 SDS-plus: Art. No. 0905 499 102							
Extension	Art. No. P.Qty = 1	0905 499 111							
Brush Template	Art. No. P.Qty = 1	0905 499 099							
Blow-Out Pump / Compressed-Air Nozzle designed for Art. No. 0714 92 13	Art. No. P.Qty = 1	Blow-Out Pump: Art. No. 0903 990 001					Compressed-Air Nozzle <sup>5)</sup> : Art. No. 0905 499 201		

Anchor dimensions		M8	M10	M12	M16	M20	M24	M30														
Anchor diameter																						
Total length	$l$ [mm]	110	150	115	130	165	190	135														
Max. attachment height	$t_{fix}$ [mm]	20	60	15	30	65	90	10														
Designation		W-VI-A4 M8-20/110	W-VI-A4 M8-60/150	W-VI-A4 M10-15/115	W-VI-A4 M10-30/130	W-VI-A4 M10-65/165	W-VI-A4 M10-90/190	W-VI-A4 M12-10/135	W-VI-A4 M12-35/160	W-VI-A4 M12-85/210	W-VI-A4 M12-125/250	W-VI-A4 M12-175/300	W-VI-A4 M16-20/165	W-VI-A4 M16-45/190	W-VI-A4 M16-85/230	W-VI-A4 M16-105/250	W-VI-A4 M16-155/300	W-VI-A4 M20-20/220	W-VI-A4 M20-60/260	W-VI-A4 M20-100/300	W-VI-A4 M24-15/260	W-VI-A4 M24-55/300
Anchor bar W-VI-A/A4 Stainless steel A4	Art. No.	5915 208 110	5915 208 150	5915 210 115	5915 210 130	5915 210 165	5915 210 190	5915 212 135	5915 212 160	5915 212 210	5915 212 250	5915 212 300	5915 216 165	5915 216 190	5915 216 230	5915 216 250	5915 216 300	5915 220 220	5915 220 260	5915 220 300	5915 224 260	5915 224 300
Packing unit	P.Qty.	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	5	5
WIT-VM 200 Mortar Cartridge	Art. No.	Mortar Cartridge, 330 ml (incl. 1 static mixer) Art. No. 0903 450 003 P.Qty. = 1/12																				
Number of attachment points/cartridge	Approx. qty.	47	35					23					14					8			5	3
Application Gun	Art. No. P.Qty = 1	Application gun: Art. No. 0891 003 Art. No. 0891 007..																				
Static Mixer	Art. No. P.Qty = 10	0903 420 001																				
Extension for static mixer	Art. No. P.Qty = 10	0903 420 004																				

Available on special order

## 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  $\gamma_F = 1.4$  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.

<sup>3)</sup> Maximum long-term temperature

<sup>4)</sup> Maximum short-term temperature

<sup>5)</sup> Compressed air nozzle designed for blow-out gun Art. No. 0714 92 13