

# INJECTION SYSTEM WIT-PE 1000



585 ml



Cartridge sizes		Art. no.	Dispensing guns
440 ml	side-by-side	<b>5918 605 440</b>	p. 48
585 ml	side-by-side	<b>5918 605 585</b>	
1400 ml	side-by-side	<b>5918 605 140</b>	

### Application references



### Approvals and certificates



Threaded rod	Internal threaded rod	Rebar
✓	-	✓
p. 34-36	p. 36	not supplied by Würth

Temperature of base material	Gelling – working time	Min. curing time – dry conditions <sup>1)</sup>
5°C to 9°C	80 min	48 h
10°C to 14°C	60 min	28 h
15°C to 19°C	40 min	18 h
20°C to 24°C	30 min	12 h
25°C to 34°C	12 min	9 h
35°C to 39°C	8 min	6 h
+40°C	8 min	4 h

<sup>1)</sup> for wet base material the curing time must be doubled

Type of installation		
Pre-positioned	In-place	Stand-off
✓	-	✓

Installation condition		
Dry concrete	Wet concrete	Flooded drill hole
✓	✓	✓

Drilling method		
Hammer drill	Diamond drill	Hollow drill
✓	✓	✓

Rotary drilling in masonry required for some types of bricks and blocks

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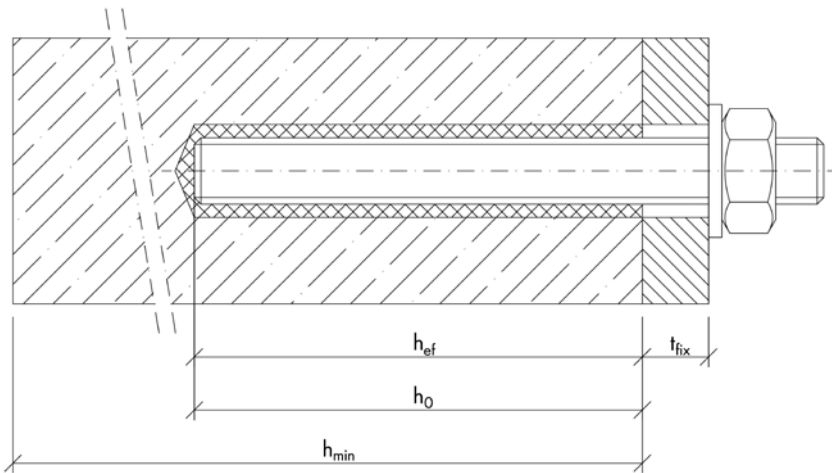
Loads – concrete

Thread size			M8	M10	M12	M16	M20	M24	M27	M30	
<b>Effective anchorage depth</b>	$h_{ef}$	[mm]	80	90	110	125	170	210	240	270	
<b>Non-cracked Concrete</b>											
<b>Tension</b>	5.8	$N_{rec}$	[kN]	8.7	13.8	20.1	32.7	51.9	71.3	87.1	103.9
	8.8			13.8	20.0	27.0	32.7	51.9	71.3	87.1	103.9
	A4-70			9.9	15.7	22.5	32.7	51.9	71.3	57.4	70.2
<b>Shear</b>	5.8	$V_{rec}$	[kN]	6.3	9.9	14.5	26.9	42.0	60.5	78.7	96.2
	8.8			8.6	13.1	19.4	36.0	56.0	80.6	105.1	128.0
	A4-70			6.0	9.2	13.7	25.2	39.4	56.8	34.5	42.0
<b>Cracked Concrete</b>											
<b>Tension</b>	5.8/8.8	$N_{rec}$	[kN]	6.7	9.4	16.8	22.9	36.3	49.9	61.0	72.7
	A4-70			6.7	9.4	16.8	22.9	36.3	49.9	57.4	70.2
<b>Shear</b>	5.8	$V_{rec}$	[kN]	6.3	9.9	14.5	26.9	42.0	60.5	78.7	96.2
	8.8			8.6	13.1	19.4	36.0	56.0	80.6	105.1	128.0
	A4-70			6.0	9.2	13.7	25.2	39.4	56.8	34.5	42.0

<sup>1)</sup> Loads are valid for single anchors. Normal spaced reinforcement in  $\geq C20/25$ . Material safety factor  $\gamma_{Mk}$  and safety factor for action  $\gamma_L = 1.4$  are included. The material safety factor depends on the failure mode.

<sup>2)</sup> Loads for anchorages close to edge and/or with small spacing have to be reduced and should be calculated based on performance data given in the ETA.

<b>Clearance-hole in fixture</b>	<b>Pre-positioned</b>	$d_f$	[mm]	9	12	14	18	22	26	30	33
	<b>Push through</b>	$d_f$	[mm]	12	14	16	20	24	30	33	40
<b>Drill depth</b>		$h_0 = h_{ef}$	[mm]	80	90	110	125	170	210	240	270
<b>Minimum thickness of concrete member</b>		$h_{min}$	[mm]	110	120	140	161	214	266	300	340
<b>Minimum edge distance</b>		$c_{min}$	[mm]	35	40	45	50	60	65	75	80



Installation Concrete



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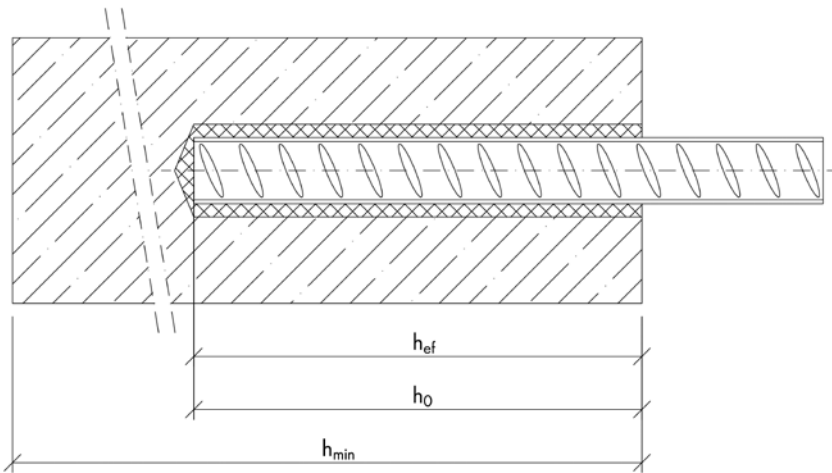
## Loads – REBAR

Rebar size			Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 20	Ø 25	Ø 28	Ø 32	
<b>Effective anchorage depth</b>	$h_{ef}$	[mm]	80	90	110	125	125	170	210	270	300	
<b>Non-cracked Concrete</b>												
<b>Tension</b>	B500B	$N_{rec}$	[kN]	14.0	20.0	27.0	32.7	32.7	51.9	71.3	103.9	121.7
<b>Shear</b>		$V_{rec}$	[kN]	6.5	10.3	14.8	20.2	26.3	41.1	64.3	80.7	105.3
<b>Cracked Concrete</b>												
<b>Tension</b>	B500B	$N_{rec}$	[kN]	6.7	9.4	16.8	22.3	22.9	36.3	49.9	72.7	85.2
<b>Shear</b>		$V_{rec}$	[kN]	6.5	10.3	14.8	20.2	26.3	41.1	64.3	80.7	105.3

<sup>1)</sup> Loads are valid for single anchors. Normal spaced reinforcement in  $\geq C20/25$ . Material safety factor  $\gamma_w$  and safety factor for action  $\gamma_L = 1.4$  are included. The material safety factor depends on the failure mode.

<sup>2)</sup> Loads for anchorages close to edge and/or with small spacing have to be reduced and should be calculated based on performance data given in the ETA.

<b>Nominal hole diameter</b>	$d_0$	[mm]	10	12	14	18	20	25	32	35	40
<b>Effective anchorage depth</b>	$h_{ef,min}$	[mm]	60	60	70	75	80	90	100	112	128
	$h_{ef,max}$	[mm]	160	200	240	280	320	400	500	560	640
<b>Minimum thickness of concrete member</b>	$h_{min}$	[mm]	110	120	140	161	165	220	274	340	380
<b>Minimum spacing</b>	$s_{min}$	[mm]	40	50	60	70	75	95	120	130	150
<b>Minimum edge distance</b>	$c_{min}$	[mm]	35	40	45	50	50	60	70	75	85



## Installation REBAR

