

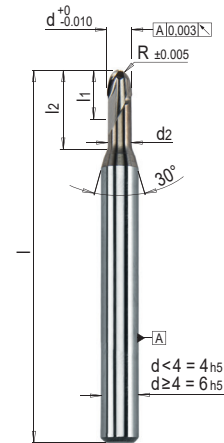


### PRODUCT DESCRIPTION

- » Ultimate precision in the μ range
- » Polished cutting edges and chip spaces
- » High-performance milling cutter for copper

### MATERIAL

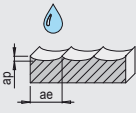
- » Carbide, polished



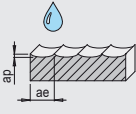
Z	d2	l	l1	R	d	l2	No.	EUR
2	0.18	50	0.3	0.1	0.2	1.5	WZF 28896/0,2/ 1,5	<>
2	0.27	50	0.5	0.15	0.3	1.5	WZF 28896/0,3/ 1,5	<>
2	0.27	50	0.5	0.15	0.3	3	WZF 28896/0,3/ 3	<>
2	0.27	50	0.5	0.15	0.3	4.5	WZF 28896/0,3/ 4,5	<>
2	0.27	50	0.5	0.15	0.3	6	WZF 28896/0,3/ 6	<>
2	0.36	50	0.6	0.2	0.4	2	WZF 28896/0,4/ 2	<>
2	0.36	50	0.6	0.2	0.4	4	WZF 28896/0,4/ 4	<>
2	0.36	50	0.6	0.2	0.4	6	WZF 28896/0,4/ 6	<>
2	0.45	50	0.7	0.25	0.5	2.5	WZF 28896/0,5/ 2,5	<>
2	0.45	50	0.7	0.25	0.5	5	WZF 28896/0,5/ 5	<>
2	0.45	50	0.7	0.25	0.5	7.5	WZF 28896/0,5/ 7,5	<>
2	0.45	50	0.7	0.25	0.5	10	WZF 28896/0,5/ 10	<>
2	0.55	50	1	0.3	0.6	3	WZF 28896/0,6/ 3	<>
2	0.55	50	1	0.3	0.6	6	WZF 28896/0,6/ 6	<>
2	0.55	50	1	0.3	0.6	9	WZF 28896/0,6/ 9	<>
2	0.55	50	1	0.3	0.6	12	WZF 28896/0,6/ 12	<>
2	0.75	50	1.2	0.4	0.8	4	WZF 28896/0,8/ 4	<>
2	0.75	50	1.2	0.4	0.8	8	WZF 28896/0,8/ 8	<>
2	0.75	50	1.2	0.4	0.8	12	WZF 28896/0,8/ 12	<>
2	0.75	50	1.2	0.4	0.8	16	WZF 28896/0,8/ 16	<>
2	0.95	50	1.6	0.5	1	5	WZF 28896/1 / 5	<>
2	0.95	50	1.6	0.5	1	10	WZF 28896/1 / 10	<>
2	0.95	50	1.6	0.5	1	15	WZF 28896/1 / 15	<>
2	0.95	50	1.6	0.5	1	20	WZF 28896/1 / 20	<>

Z	d2	l	l1	R	d	l2	No.	EUR
2	1.45	60	2.4	0.75	1.5	5	WZF 28896/1,5/ 5	<>
2	1.45	60	2.4	0.75	1.5	10	WZF 28896/1,5/ 10	<>
2	1.45	60	2.4	0.75	1.5	15	WZF 28896/1,5/ 15	<>
2	1.45	60	2.4	0.75	1.5	20	WZF 28896/1,5/ 20	<>
2	1.92	60	3	1	2	6	WZF 28896/2 / 6	<>
2	1.92	60	3	1	2	12	WZF 28896/2 / 12	<>
2	1.92	60	3	1	2	18	WZF 28896/2 / 18	<>
2	1.92	60	3	1	2	24	WZF 28896/2 / 24	<>
2	1.92	60	3	1	2	30	WZF 28896/2 / 30	<>
2	2.9	60	3.5	1.5	3	9	WZF 28896/3 / 9	<>
2	2.9	60	3.5	1.5	3	18	WZF 28896/3 / 18	<>
2	2.9	60	3.5	1.5	3	30	WZF 28896/3 / 30	<>
2	3.9	60	4	2	4	12	WZF 28896/4 / 12	<>
2	3.9	60	4	2	4	24	WZF 28896/4 / 24	<>
2	4.9	60	5	2.5	5	15	WZF 28896/5 / 15	<>
2	4.9	60	5	2.5	5	30	WZF 28896/5 / 30	<>
2	5.9	60	6	3	6	18	WZF 28896/6 / 18	<>
2	5.9	60	6	3	6	30	WZF 28896/6 / 30	<>
3	7.8	70	8	4	8	16	WZF 28896/8 / 16	<>
3	7.8	70	8	4	8	30	WZF 28896/8 / 30	<>
3	9.8	80	10	5	10	20	WZF 28896/10 / 20	<>
3	9.8	80	10	5	10	30	WZF 28896/10 / 30	<>
3	11.8	80	12	6	12	24	WZF 28896/12 / 24	<>
3	11.8	80	12	6	12	30	WZF 28896/12 / 30	<>

## REFERENCE VALUES FOR ROUGHING


WZF 28896	Material	Vc <sup>1</sup> m/min.	d												
			0.3	0.5	0.8	1	1.5	2	3	4	5	6	8	10	12
			fz <sup>2</sup> (mm/z)												
	Copper	200	0.012	0.020	0.032	0.040	0.060	0.080	0.120	0.160	0.200	0.240	0.26	0.3	0.35
	Aluminium	180	0.009	0.015	0.024	0.030	0.045	0.060	0.090	0.120	0.150	0.180	0.24	0.3	0.35
	Non-ferrous metal	140	0.008	0.013	0.020	0.025	0.038	0.050	0.075	0.100	0.125	0.150	0.2	0.25	0.3
	ap (mm)		0.04	0.06	0.10	0.12	0.18	0.24	0.36	0.48	0.60	0.72	0.96	1.2	1.44
	ae (mm)		0.11	0.18	0.28	0.35	0.53	0.70	1.05	1.40	1.75	2.10	2.8	3.5	4

## REFERENCE VALUES FOR 3D FINISH MILLING

WZF 28896	Material	Vc <sup>1</sup> m/min.	d												
			0.3	0.5	0.8	1	1.5	2	3	4	5	6	8	10	12
			fz <sup>2</sup> (mm/z)												
	Copper	320	0.003	0.005	0.008	0.010	0.015	0.020	0.030	0.040	0.050	0.060	0.08	0.1	0.12
	Aluminium	240	0.003	0.005	0.008	0.010	0.015	0.020	0.030	0.040	0.050	0.060	0.08	0.1	0.12
	Non-ferrous metal	190	0.003	0.005	0.008	0.010	0.015	0.020	0.030	0.040	0.050	0.060	0.08	0.1	0.12
	ap (mm)		0.01	0.02	0.03	0.05	0.05	0.07	0.1	0.1	0.15	0.2	0.27	0.33	0.4
	ae (mm)		0.02	0.03	0.04	0.05	0.06	0.07	0.1	0.1	0.12	0.15	0.16	0.18	0.2

1) Vc: cutting speed (m/min.)

2) fz: feed per cut (mm per tooth)

 You can find further materials and cutting values in the cutting data calculator.