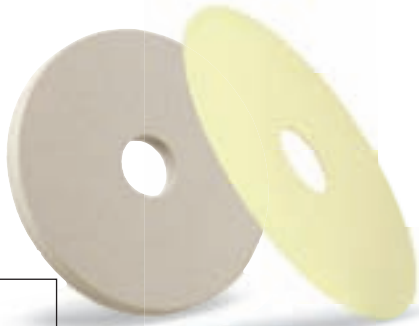




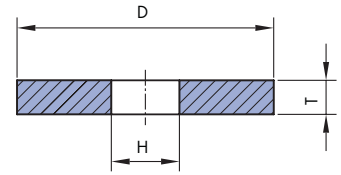
# Grinding and tool sharpening

## Grinding wheel F1

D x T x H  
Flat grinding wheel



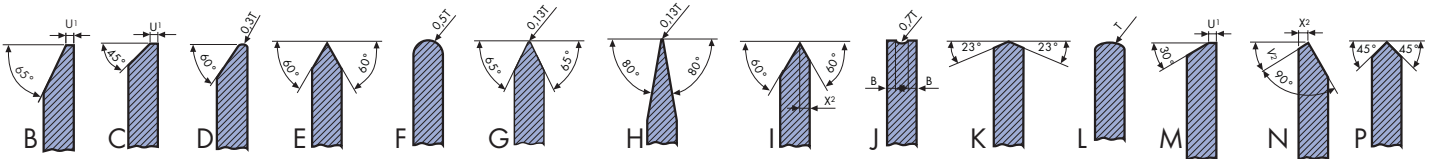
Order printout sample:  
F1 250x13x32  
22A60K7VL



D	T	H
80	0.8 to 13	10, 13
100	1 to 20	13, 20
125	1 to 20	20
150	1 to 20	20, 32
175	1.5 to 20	20, 32
200	1.5 to 20	20, 32
250	2 to 20	20, 32

## Grinding wheel F1\_

D x T x H  
Saw grinding wheel



Order printout sample:  
F1B 200x8x20  
40A60M/22A60K5VL

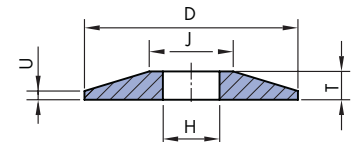
D	T	H
100	1 to 4	10, 13, 20
125	1 to 5	16, 20
150	2 to 13	20
175	2 to 13	20
200	2 to 16	20, 32
225	2.5 to 16	20, 32
250	4 to 20	20, 32
300	6 to 25	32, 40

## Grinding wheel F3

D / J x T / U x H  
Grinding wheel tapered on one side



Order printout sample:  
F3 100/50x6/1.5x20  
3SA60/3M6VL



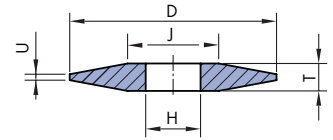
D	J	T	U	H
80	40	5	1	13
100	50	6	1.5	20
125	63	8	2	20, 32
150	75	8	2	20, 32
175	85	10	3	20, 32
200	100	13	3	20, 32
250	125	14	3	32



## Grinding wheel F4

D / J x T / U x H

Grinding wheel tapered on both sides



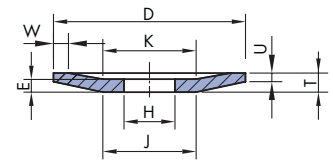
Order printout sample:  
F4 100/50x10/2x20  
40A60M7VL

D	J	T	U	H
80	40	8	2	13
100	50	10	2	20
125	63	10	2	20, 32
150	75	13	2	20, 32
175	85	13	3	20, 32
200	100	16	3	20, 32
250	125	20	4	32

## Grinding wheel F12

D / J x T / U x H - W x E x K

Dish-shaped grinding wheel



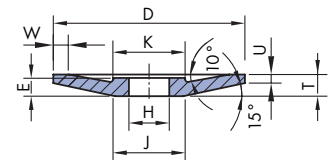
Order printout sample:  
F12 80/31x10/2,5x13-4x6x31  
22A46/3M7VL

D	J	T	U	H	W	E	K
50	25	10	2	13	4	6	25
80	31	10	2.5	13	4	6	31
100	36	13	3.2	20	5	7	36
125	61	13	3.2	20	6	7	61
150	66	16	3.2	20	8	9	66
175	78	18	3.2	20	9	10	78
200	90	20	3.2	20, 32	10	10	90
250	140	22	4	32	12	12	140

## Grinding wheel FB

D x T x H - U x J x E

Dish-shaped grinding wheel



Order printout sample:  
FB 100x6x20-3x35x8  
40A60M7VL

D	T	H	U	J=K	E
80	8	20	2	30	6
100	12	20	3	35	8
125	14	20	3	40	9
150	15	20	3	50	10
175	18	20	3	60	11
200	19	20, 32	3	70	12
250	21	32	3	100	13

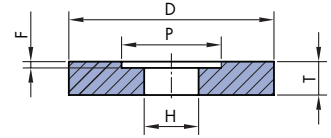
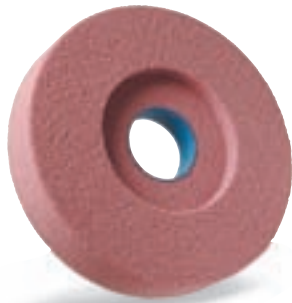


# Grinding and tool sharpening

## Grinding wheel F5

D x T x H - P x F

Flat, recessed on one side



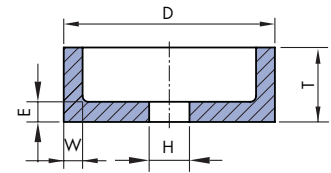
Order printout sample:  
F5 300x50x127-200x20  
40A60M7VL

D	T	H	P	F,G
250	10 to 32	51, 76	130	F+G = max. T/2
300	13 to 50	76, 127	190	
350	16 to 50	76, 127	215	
400	20 to 80	127, 152.4	230	
450	20 to 80	127, 152.4	290	
500	25 to 100	127, 152.4	290	
600	32 to 100	127, 152.4	290	

## Grinding cup F6

D x T x H - W x E

Cylindrical flat cup



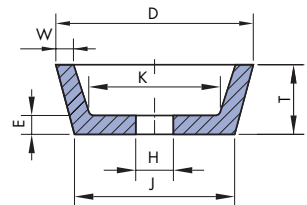
Order printout sample:  
F6 150x80x20-10x16  
22A60K7VRL

D	T	H	W	E
50	32	13	5	8
80	40	20	6	10
100	50	20	8	10
125	63	20	8	13
150	80	20	10	16
175	100	32	15	20
200	100	32	20	25
250	100	76	20	25

## Grinding cup F11

D / J x T x H - W x E x K

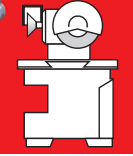
Cylindrical flaring cup



Order printout sample:  
F11 150/114x45x20-10x13x96  
3SA46K5VL

D	J	T	H	W	E	K
50	27	32	13	4	8	22
80	57	32	13	6	8	46
100	71	40	20	8	10	56
125	96	40	20	10	10	81
150	114	45	20	10	13	96
175	135	45	32	12.5	15	120
200	155	50	32	20	20	140
250	200	60	76	30	20	180

Grinding cups of other dimensions can be made to special order.



## Quality of grinding wheels for grinding and tool sharpening

	Ground material	Manual grinding	Mechanical grinding	
 <p>Turning cutters</p>	Tool steel	22A60K7VL	22A60J8VL, 3SA60J8VL	
	High-speed steel (HSS)	40A60K7VL	62A60J8VL, 3SA60J8VL	
	Tungsten carbides	10C60K6VL	10C60K6VL	
 <p>Spiral drills</p>		Profiling	Sharpening	
	Tool steel	22A60M8VL,	22A100L8VL, 3LA120I6VL	
	High-speed steel (HSS)	82A60J6VL	22A100L8VL, 3LA120I6VL	
 <p>Cutters, drills</p>		Profiling	Sharpening	
	Tool steel	82A46/3J6VL, 82A100I8VL	22A46/1H9/0VL, 22A46H10/0VL	
	High-speed steel (HSS)	82A46/3J6VL, 82A100I8VL	22A46/1H9/0VL, 22A46H10/0VL	
 <p>Pull and push broaches</p>	High-speed steel (HSS)	02B64P4VC150, 03B46P3VC125, 3SA70/3K5VL		
<p>Planing knives</p>		Profiling	Sharpening	
	Wood working	22A30/1J7VL, 42A46G8B	22A80I12/2SVL, 42A60G8B	
	Printing works	22A30/1J7VL, 42A46G8B	22A80I12/2SVL, 42A60G8B	
 <p>Saw sharpening</p>		Profiling	Sharpening	Grinding of tooth flank
	Circular saws (HSS) - tool steel	11A60/3L7VL, 22A46/3M6VL, 3SA46/2K5V12R2L, 40A60N/22A60L5VL	3SA60/3M6VL 40A46/3M6VL	40A60M7VRL 22A60K7VRL
	Circular saws (Stellite)	11A60/3M7VL	22A60/3L7V13L	40A60M7VRL, 22A60K7VRL
	Band saws (HSS)	3SA60/3N5VL , 22A46/3M5VL,	3SA60/3N5VL , 22A46/3M5VL,	
	Band saws (Stellite)	40A46M/22A46K5VL	22A60/3K7V13RL	40A60M7VRL , 22A60K7VRL
	Chain saws (HSS)	40A60M6VL		
Band-block saw (HSS)	3SA46/3O5VL , 22A46/3N5VRL	3SA60/3O5VRL , 22A46/3N5VRL	40A60M7VRL , 22A60K7VRL	

**Note:**

Use finer and harder grinding wheels for sharpening narrow band saws and fine-toothed circular saws!