Modular Drill Carbide Insert Blades • KSEM™ • HPG Geometry • Grade KC7315™ • Through Coolant • Metric

Material Group		Cutting Speed — vc Range — m/min			Metric						
					Recommended Feed Rate (f) by Diameter						
		min	Starting Value	max		12,5	16,0	20,0	25,4	32,0	35,0
P	1	75	**110**	140	mm/r	0,15–0,34	0,17–0,40	0,19–0,45	0,25–0,58	0,29–0,66	0,33–0,76
	2	90	**120**	150	mm/r	0,15–0,34	0,17–0,40	0,19–0,45	0,25–0,58	0,29–0,66	0,33–0,76
	3	50	**75**	100	mm/r	0,15–0,28	0,17–0,34	0,19–0,40	0,25–0,51	0,29–0,58	0,33–0,66
	4	55	**75**	95	mm/r	0,12–0,31	0,14–0,34	0,16–0,40	0,20–0,51	0,23–0,58	0,26–0,66
	5	50	**65**	80	mm/r	0,09–0,17	0,11–0,20	0,12–0,23	0,15–0,28	0,17–0,32	0,20–0,36
	6	50	**65**	80	mm/r	0,12–0,25	0,14–0,29	0,16–0,32	0,20–0,42	0,23–0,47	0,26–0,54
K	1	90	**135**	175	mm/r	0,17–0,35	0,21–0,42	0,25–0,48	0,31–0,59	0,37–0,70	0,43–0,81
	2	90	**110**	125	mm/r	0,17–0,33	0,21–0,41	0,25–0,48	0,31–0,59	0,37–0,70	0,43–0,81
	3	40	**95**	125	mm/r	0,18–0,36	0,20–0,41	0,21–0,44	0,23–0,48	0,25–0,53	0,27–0,57

Modular Drill Carbide Insert Blades • KSEM • HPG Geometry • Grade KC7315 • Through Coolant • Inch

Material Group		Cutting Speed — vc Range — SFM			Inch						
					Recommended Feed Rate (f) by Diameter						
		min	Starting Value	max		0.462	0.630	0.787	1.000	1.260	1.575
P	1	250	**360**	460	IPR	.006–.013	.007–.016	.007–.018	.010–.023	.011–.026	.013–.030
	2	300	**390**	490	IPR	.006–.013	.007–.016	.007–.018	.010–.023	.011–.026	.013–.030
	3	160	**250**	330	IPR	.006–.011	.007–.013	.007–.016	.010–.020	.011–.023	.013–.026
	4	160	**210**	260	IPR	.005–.012	.006–.011	.006–.016	.008–.020	.009–.023	.010–.026
	5	160	**210**	260	IPR	.004–.007	.004–.008	.005–.009	.006–.011	.007–.013	.008–.014
	6	160	**210**	260	IPR	.005–.010	.006–.011	.006–.013	.008–.017	.009–.019	.010–.021
K	1	300	**440**	570	IPR	.007–.014	.008–.017	.010–.019	.012–.023	.015–.028	.017–.032
	2	300	**360**	410	IPR	.007–.013	.008–.016	.010–.019	.012–.023	.015–.028	.017–.032
	3	130	**310**	410	IPR	.007–.014	.008–.016	.008–.017	.009–.019	.010–.021	.011–.022

Modular Drill Carbide Insert Blades • KSEM™ • HPG Geometry • Grade KCPM45™ • Through Coolant • Metric

Material Group		Cutting Speed — vc Range — m/min min	Starting Value	max	Metric Recommended Feed Rate (f) by Diameter	12,5	16,0	20,0	25,4	32,0	40,0
P	1	100	**110**	120	mm/r	0,15–0,31	0,17–0,36	0,19–0,41	0,25–0,53	0,29–0,60	0,33–0,69
P	2	80	**95**	110	mm/r	0,15–0,31	0,17–0,36	0,19–0,41	0,25–0,53	0,29–0,60	0,33–0,69
P	3	65	**70**	80	mm/r	0,15–0,31	0,17–0,36	0,19–0,41	0,25–0,53	0,29–0,60	0,33–0,69
M	1	30	**60**	90	mm/r	0,09–0,14	0,11–0,17	0,13–0,20	0,16–0,25	0,18–0,28	0,21–0,31
M	2	30	**50**	90	mm/r	0,09–0,14	0,11–0,17	0,13–0,20	0,16–0,25	0,18–0,28	0,21–0,31
M	3	20	**40**	60	mm/r	0,09–0,14	0,11–0,17	0,13–0,20	0,16–0,25	0,18–0,28	0,21–0,31

Modular Drill Carbide Insert Blades • KSEM • HPG Geometry • Grade KCPM45 • MQL* • Metric

Material Group		Cutting Speed — vc Range — m/min min	Starting Value	max	Metric Recommended Feed Rate (f) by Diameter	12,5	16,0	20,0	25,4	32,0	40,0
P	1	60	**70**	80	mm/r	0,15–0,31	0,17–0,36	0,19–0,41	0,25–0,53	0,29–0,60	0,33–0,69
P	2	50	**60**	70	mm/r	0,15–0,31	0,17–0,36	0,19–0,41	0,25–0,53	0,29–0,60	0,33–0,69
P	3	65	**45**	80	mm/r	0,15–0,31	0,17–0,36	0,19–0,41	0,25–0,53	0,29–0,60	0,33–0,69
M	1	30	**40**	50	mm/r	0,09–0,14	0,11–0,17	0,13–0,20	0,16–0,25	0,18–0,28	0,21–0,31
M	2	25	**30**	35	mm/r	0,09–0,14	0,11–0,17	0,13–0,20	0,16–0,25	0,18–0,28	0,21–0,31
M	3	20	**25**	30	mm/r	0,09–0,14	0,11–0,17	0,13–0,20	0,16–0,25	0,18–0,28	0,21–0,31

*Recommended for drilling depths ≤1.5 x D.

Modular Drill Carbide Insert Blades • KSEM • HPG Geometry • Grade KCPM45 • Through Coolant • Inch

Material Group		Cutting Speed — vc Range — SFM min	Starting Value	max	Inch Recommended Feed Rate (f) by Diameter	.462	.630	.787	1.000	1.260	1.575
P	1	330	**360**	390	IPR	.006–.012	.007–.014	.007–.016	.010–.021	.011–.024	.013–.027
P	2	260	**310**	360	IPR	.006–.012	.007–.014	.007–.016	.010–.021	.011–.024	.013–.027
P	3	210	**230**	260	IPR	.006–.012	.007–.014	.007–.016	.010–.021	.011–.024	.013–.027
M	1	100	**200**	300	IPR	.004–.006	.004–.007	.005–.008	.006–.010	.007–.011	.008–.012
M	2	100	**160**	300	IPR	.004–.006	.004–.007	.005–.008	.006–.010	.007–.011	.008–.012
M	3	70	**130**	200	IPR	.004–.006	.004–.007	.005–.008	.006–.010	.007–.011	.008–.012

Modular Drill Carbide Insert Blades • KSEM • HPG Geometry • Grade KCPM45 • MQL* • Inch

Material Group		Cutting Speed — vc Range — SFM min	Starting Value	max	Inch Recommended Feed Rate (f) by Diameter	.462	.630	.787	1.000	1.260	1.575
P	1	200	**230**	260	IPR	.006–.012	.007–.014	.007–.016	.010–.021	.011–.024	.013–.027
P	2	160	**200**	230	IPR	.006–.012	.007–.014	.007–.016	.010–.021	.011–.024	.013–.027
P	3	210	**150**	260	IPR	.006–.012	.007–.014	.007–.016	.010–.021	.011–.024	.013–.027
M	1	100	**130**	160	IPR	.004–.006	.004–.007	.005–.008	.006–.010	.007–.011	.008–.012
M	2	80	**100**	110	IPR	.004–.006	.004–.007	.005–.008	.006–.010	.007–.011	.008–.012
M	3	70	**80**	100	IPR	.004–.006	.004–.007	.005–.008	.006–.010	.007–.011	.008–.012

*Recommended for drilling depths ≤1.5 x D.

Modular Drill Carbide Insert Blades • KSEM™ • HPL Geometry • Grade KC7320™ • Through Coolant • Metric

Material Group		Cutting Speed — vc Range — m/min			Metric					
					Recommended Feed Rate (f) by Diameter					
		min	Starting Value	max		12,5	16,0	20,0	25,4	32,0
M	1	30	**60**	90	mm/r	0,09–0,14	0,11–0,17	0,13–0,20	0,16–0,25	0,18–0,28
M	2	30	**50**	90	mm/r	0,09–0,14	0,11–0,17	0,13–0,20	0,16–0,25	0,18–0,28
M	3	20	**40**	60	mm/r	0,09–0,14	0,11–0,17	0,13–0,20	0,16–0,25	0,18–0,28

Modular Drill Carbide Insert Blades • KSEM • HPL Geometry • Grade KC7320 • Through Coolant • Inch

Material Group		Cutting Speed — vc Range — SFM			Inch					
					Recommended Feed Rate (f) by Diameter					
		min	Starting Value	max		0.462	0.630	0.787	1.000	1.260
M	1	100	**200**	300	IPR	.004–.006	.004–.007	.005–.008	.006–.010	.007–.011
M	2	100	**160**	300	IPR	.004–.006	.004–.007	.005–.008	.006–.010	.007–.011
M	3	70	**130**	200	IPR	.004–.006	.004–.007	.005–.008	.006–.010	.007–.011

KSEM PLUS Carbide Insert Recommendations

Material Group	Outboard/ Inboard	Insert Style	Grade	Comments
P	O	DFR-GD	KCU25, KCU40	Recommended outboard insert style for working in all P-materials. Start with KCU40™ and use KCU25™ in stable conditions to achieve higher tool life.
		DFC-/DFT-HP		
		DFC-/DFT-DS	KCU40	Reduce feed rate by 10% to further improve chip formation in long-chipping steels and low carbon steel.
	I	KSEMP-HPG	KC7315	Must use KSEMP center inserts in P-materials to avoid excessive wear on head & inserts.
M	O	DFR-MD	KC7140	Recommended outboard insert style for working in all M-materials.
		DFC-/DFT-MD		
		DFC-/DFT-DS	KCU40	Reduce feed rate by 20% to further improve chip formation and/or run with lower power consumption.
	I	KSEMP-HPG	KC7315	Recommended inboard insert style for working in all M-materials.
		KSEM-PC	KC7315	For unstable conditions in stainless steel, use KSEM PC inserts.
		KSEM-HPL	KC7320	If chip control issue resulting from center insert occurs in M-materials, use KSEM HPL insert inboard. Reduction of feed rate up to 20% is recommended.
K	O	DFR-LD	KCU25	Recommended insert styles for working in all K-Materials.
		DFC-/DFT-HP		
	I	KSEM-HPCCL	KC7140	
N	O	DFR-GD	KC7225	Recommended outboard insert styles for working in all non-ferrous materials.
		DFC-/DFT-HP	KCU40	
		DFC-/DFT-DS	KCU40	Reduce feed rate by 15% for diameters <56mm and up to 50% for larger diameters to improve chip formation.
		DFR/DFT-ST	KD1425	Use PCD tipped outboard when working with CFRP, CFRP/metal stacks and plastics (N3, N5, and N6).
	I	KSEMP-HPG	KC7315	Recommended inboard insert style for working in all non-ferrous materials.
		KSEM-HPS	K715	This is a made-to-order item (uncoated/sharp) — use it to improve your results in N3, N5, and N6, if required.
S	O	DFR-GD	KC7140	Recommended outboard insert style for working in all S-materials.
		DFC-/DFT-HP	KCU40	
		DFC-/DFT-DS	KCU40	Reduce feed rate by 20% to further improve chip formation and/or run with lower power consumption.
	I	KSEM-PC	KC7315	If center breakage is an issue in S-materials, use KSEM PC insert inboard.

Modular Drill • KSEM PLUS™ • Metric • A1 and B1 Style

Metric											
Material Group		Condition	Cutting Speed — vc Range — m/min			Recommended Feed Rate (fz) by Diameter					
			min	Starting Value	max	Ø	KSEM 14….17 DFR/DFC04... 28.00–31,74	KSEM 15….18 DFT/DFC05... 31,74–35,99	KSEM 13….22 DFT/DFC06... 36,00–44,99	KSEM 18….28 DFT/DFC07... 45,00–55,99	KSEM 20….34 DFT/DFC09... 56,00–70
P	1	S	115	**235**	290	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		U	90	**160**	215	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		I	65	**100**	140	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
	2	S	90	**190**	230	mm/r	0,160–0,280	0,160–0,280	0,200–0,360	0,200–0,400	0,200–0,450
		U	71	**130**	170	mm/r	0,160–0,280	0,160–0,280	0,200–0,360	0,200–0,400	0,200–0,450
		I	50	**80**	110	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
	3	S	90	**180**	230	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
		U	70	**120**	170	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
		I	50	**70**	106	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
	4	S	90	**140**	220	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
		U	70	**110**	160	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
		I	50	**80**	110	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
	5	S	90	**130**	210	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
		U	70	**100**	150	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
		I	50	**70**	100	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
	6	S	70	**90**	180	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
		U	50	**75**	120	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
		I	40	**60**	100	mm/r	0,160–0,280	0,160–0,280	0,200–0,320	0,200–0,400	0,200–0,450
M	1	S	60	**110**	135	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		U	40	**70**	90	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		I	30	**50**	65	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
	2	S	60	**100**	135	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		U	40	**60**	90	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		I	30	**50**	65	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
	3	S	50	**90**	135	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		U	40	**60**	90	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		I	25	**40**	65	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
K	1	S	90	**170**	230	mm/r	0,180–0,300	0,180–0,300	0,216–0,360	0,240–0,420	0,300–0,480
		U	60	**120**	160	mm/r	0,180–0,300	0,180–0,300	0,216–0,360	0,240–0,420	0,300–0,480
		I	40	**70**	90	mm/r	0,180–0,300	0,180–0,300	0,216–0,360	0,240–0,420	0,300–0,480
	2	S	90	**160**	220	mm/r	0,180–0,300	0,180–0,300	0,216–0,360	0,240–0,420	0,300–0,480
		U	60	**110**	160	mm/r	0,180–0,300	0,180–0,300	0,216–0,360	0,240–0,420	0,300–0,480
		I	40	**70**	100	mm/r	0,180–0,300	0,180–0,300	0,216–0,360	0,240–0,420	0,300–0,480
	3	S	90	**150**	210	mm/r	0,180–0,300	0,180–0,300	0,216–0,360	0,240–0,420	0,300–0,480
		U	60	**100**	150	mm/r	0,180–0,300	0,180–0,300	0,216–0,360	0,240–0,420	0,300–0,480
		I	35	**60**	90	mm/r	0,180–0,300	0,180–0,300	0,216–0,360	0,240–0,420	0,300–0,480
N	1	S	150	**240**	360	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		U	100	**160**	240	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		I	60	**100**	160	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
	2	S	150	**220**	360	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		U	100	**150**	240	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		I	60	**100**	160	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
	3	S	150	**200**	360	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		U	100	**140**	240	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		I	60	**90**	160	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
	4	S	150	**200**	360	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		U	100	**140**	240	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		I	60	**90**	160	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
	5	S	150	**200**	360	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		U	100	**140**	240	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		I	60	**90**	160	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
	6	S	150	**200**	360	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		U	100	**140**	240	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		I	60	**90**	160	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
	7	S	110	**220**	260	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		U	70	**140**	170	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
		I	45	**90**	110	mm/r	0,120–0,200	0,120–0,200	0,144–0,280	0,160–0,320	0,200–0,400
S	1	S	25	**50**	75	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		U	20	**40**	60	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		I	15	**30**	50	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
	2	S	20	**40**	60	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		U	15	**30**	45	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		I	12	**25**	35	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
	3	S	20	**40**	60	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		U	15	**30**	45	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		I	12	**25**	40	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
	4	S	20	**40**	60	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		U	15	**30**	45	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360
		I	12	**25**	40	mm/r	0,130–0,250	0,130–0,250	0,160–0,280	0,160–0,320	0,200–0,360

Modular Drill • KSEM PLUS™ • Inch • A1 and B1 Style

Inch											
Material Group		Condition	Cutting Speed — vc Range — SFM			Recommended Feed Rate (fz) by Diameter					
			min	Starting Value	max	Ø	KSEM 14....17 DFR/DFC04... 1.102–1.249	KSEM 15....18 DFT/DFC05... 1.250–1.416	KSEM 13....22 DFT/DFC06... 1.417–1.771	KSEM 18....28 DFT/DFC07... 1.772–2.204	KSEM 20....34 DFT/DFC09... 2.205–4.0295
P	1	S	370	**775**	944	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		U	290	**532**	698	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		I	205	**327**	451	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
	2	S	295	**623**	755	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		U	233	**427**	558	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		I	164	**262**	361	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
	3	S	295	**591**	755	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		U	230	**394**	558	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		I	164	**230**	361	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
	4	S	295	**459**	722	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		U	230	**361**	525	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		I	264	**262**	361	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
	5	S	295	**427**	689	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		U	230	**328**	689	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		I	164	**230**	492	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
	6	S	230	**295**	591	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		U	164	**246**	394	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
		I	131	**197**	328	IPR	0.006–0.011	0.006–0.011	0.008–0.014	0.008–0.016	0.008–0.018
M	1	S	197	**361**	443	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		U	131	**230**	295	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		I	98	**164**	213	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
	2	S	197	**328**	443	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		U	131	**197**	295	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		I	98	**164**	213	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
	3	S	164	**295**	443	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		U	131	**197**	295	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		I	82	**131**	213	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
K	1	S	295	**558**	755	IPR	0.007–0.012	0.007–0.012	0.009–0.014	0.009–0.017	0.012–0.019
		U	197	**394**	525	IPR	0.007–0.012	0.007–0.012	0.009–0.014	0.009–0.017	0.012–0.019
		I	131	**230**	295	IPR	0.007–0.012	0.007–0.012	0.009–0.014	0.009–0.017	0.012–0.019
	2	S	295	**525**	722	IPR	0.007–0.012	0.007–0.012	0.009–0.014	0.009–0.017	0.012–0.019
		U	197	**361**	525	IPR	0.007–0.012	0.007–0.012	0.009–0.014	0.009–0.017	0.012–0.019
		I	131	**230**	328	IPR	0.007–0.012	0.007–0.012	0.009–0.014	0.009–0.017	0.012–0.019
	3	S	295	**492**	689	IPR	0.007–0.012	0.007–0.012	0.009–0.014	0.009–0.017	0.012–0.019
		U	197	**328**	492	IPR	0.007–0.012	0.007–0.012	0.009–0.014	0.009–0.017	0.012–0.019
		I	115	**197**	295	IPR	0.007–0.012	0.007–0.012	0.009–0.014	0.009–0.017	0.012–0.019
N	1	S	492	**787**	1181	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		U	328	**525**	787	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		I	197	**328**	525	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
	2	S	492	**722**	1181	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		U	328	**492**	787	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		I	197	**328**	525	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
	3	S	492	**722**	1181	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		U	328	**492**	787	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		I	197	**328**	525	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
	4	S	492	**722**	1181	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		U	328	**492**	787	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		I	197	**328**	525	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
	5	S	492	**722**	1181	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		U	328	**492**	787	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		I	197	**328**	525	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
	6	S	492	**656**	1181	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		U	328	**459**	787	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		I	197	**295**	525	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
	7	S	361	**722**	853	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		U	230	**459**	558	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
		I	148	**295**	361	IPR	0.005–0.008	0.005–0.008	0.006–0.011	0.006–0.013	0.008–0.016
S	1	S	82	**164**	246	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		U	66	**131**	197	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		I	49	**98**	164	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
	2	S	66	**131**	197	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		U	49	**98**	148	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		I	39	**82**	115	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
	3	S	66	**131**	197	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		U	49	**98**	148	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		I	39	**82**	131	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
	4	S	66	**131**	197	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		U	49	**98**	148	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014
		I	39	**82**	131	IPR	0.005–0.010	0.005–0.010	0.006–0.011	0.006–0.013	0.008–0.014