KRUZ "H" series flange + higher helix body & carbide insert

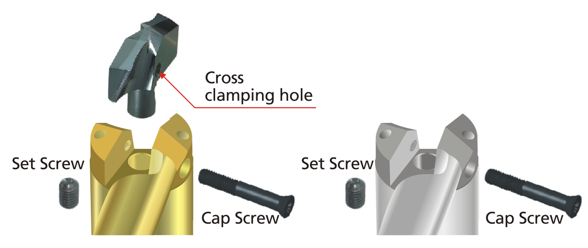
Caution >> "H" series insert should use only with "H" series body to avoid drilling failure.

KRUZ-FH

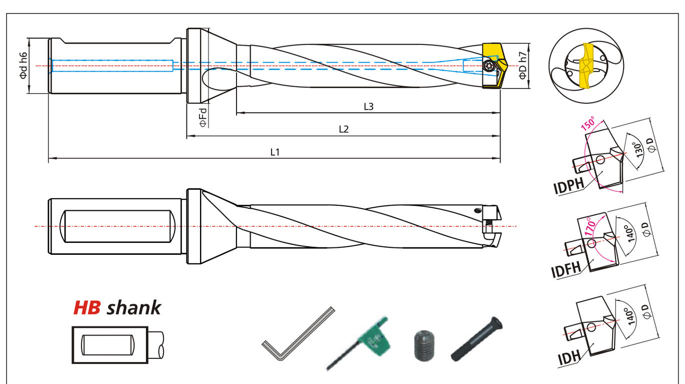
- Higher helix flute to reduce machine load and faster chip ejection
- Rugged flange type body to decrease vibration or chattering
- Interchangeable <IDPH>, <IDFH>, <IDH> carbide "H" drill inserts
- Drill body consists of premium tool steel with heat treatment
- Increased tool life by less vibration
- Internal coolant fed design
- "H" series body and insert available upon request only

Insert selection

IDPH	Deep hole & general purpose
IDFH	Thin plate & shallow depth
IDH	General purpose



KRUZ-FH body   YTDI-FH body



Please make required cutting depth in the □ like T, P, H, L

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body (IDPH / IDFH / IDH)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ12.0 ~Φ12.4	YTDI 120 □ FH KRUZ 120 □ FH	16.0	T(3xD)	109	61	48	21	IDPH 120, IDPH 121, IDPH 122, IDPH 123, IDPH 124 IDFH 120, IDFH 121, IDFH 122, IDFH 123, IDFH 124 IDH 120, IDH 121, IDH 122, IDH 123, IDH 124	CS120 -135 SL	T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm
			P(5xD)	133	85	72						
			H(7xD)	157	109	96						
			L(10xD)	193	145	132						
Φ12.5 ~Φ12.9	YTDI 125 □ FH KRUZ 125 □ FH		T(3xD)	111	63	50		IDPH 125, IDPH 126, IDPH 127, IDPH 128, IDPH 129 IDFH 125, IDFH 126, IDFH 127, IDFH 128, IDFH 129 IDH 125, IDH 126, IDH 127, IDH 128, IDH 129				
			P(5xD)	136	88	75						
			H(7xD)	161	113	100						
			L(10xD)	199	151	138						
Φ13.0 ~Φ13.4	YTDI 130 □ FH KRUZ 130 □ FH		T(3xD)	114	66	52		IDPH 130, IDPH 131, IDPH 132, IDPH 133, IDPH 134 IDFH 130, IDFH 131, IDFH 132, IDFH 133, IDFH 134 IDH 130, IDH 131, IDH 132, IDH 133, IDH 134				
			P(5xD)	140	92	78						
			H(7xD)	166	118	104						
			L(10xD)	205	157	143						
Φ13.5 ~Φ13.9	YTDI 135 □ FH KRUZ 135 □ FH		T(3xD)	116	68	54		IDPH 135, IDPH 136, IDPH 137, IDPH 138, IDPH 139 IDFH 135, IDFH 136, IDFH 137, IDFH 138, IDFH 139 IDH 135, IDH 136, IDH 137, IDH 138, IDH 139				
			P(5xD)	143	95	81						
			H(7xD)	170	122	108						
			L(10xD)	211	163	149						
Φ14.0 ~Φ14.4	YTDI 140 □ FH KRUZ 140 □ FH		T(3xD)	119	71	56		IDPH 140, IDPH 141, IDPH 142, IDPH 143, IDPH 144 IDFH 140, IDFH 141, IDFH 142, IDFH 143, IDFH 144 IDH 140, IDH 141, IDH 142, IDH 143, IDH 144	CS140 -155 SL			
			P(5xD)	147	99	84						
			H(7xD)	175	127	112						
			L(10xD)	217	169	154						
Φ14.5 ~Φ14.9	YTDI 145 □ FH KRUZ 145 □ FH	20.0	T(3xD)	123	73	58	27	IDPH 145, IDPH 146, IDPH 147, IDPH 148, IDPH 149 IDFH 145, IDFH 146, IDFH 147, IDFH 148, IDFH 149 IDH 145, IDH 146, IDH 147, IDH 148, IDH 149				
			P(5xD)	152	102	87						
			H(7xD)	181	131	116						
			L(10xD)	225	175	160						
Φ15.0 ~Φ15.4	YTDI 150 □ FH KRUZ 150 □ FH		T(3xD)	127	77	60		IDPH 150, IDPH 151, IDPH 152, IDPH 153, IDPH 154 IDFH 150, IDFH 151, IDFH 152, IDFH 153, IDFH 154 IDH 150, IDH 151, IDH 152, IDH 153, IDH 154				
			P(5xD)	157	107	90						
			H(7xD)	187	137	120						
			L(10xD)	232	182	165						

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Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body (IDPH / IDFH / IDH)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ15.5 ~Φ15.9	YTDI 155 □ FH KRUZ 155 □ FH	20.0	T(3xD)	130	80	62	27	IDPH 155, IDPH 156, IDPH 157, IDPH 158, IDPH 159 IDFH 155, IDFH 156, IDFH 157, IDFH 158, IDFH 159 IDH 155, IDH 156, IDH 157, IDH 158, IDH 159	CS 140 -155 SL	T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm
			P(5xD)	161	111	93						
			H(7xD)	192	142	124						
			L(10xD)	239	189	171						
Φ16.0 ~Φ16.4	YTDI 160 □ FH KRUZ 160 □ FH		T(3xD)	132	82	64		IDPH 160, IDPH 161, IDPH 162, IDPH 163, IDPH 164 IDFH 160, IDFH 161, IDFH 162, IDFH 163, IDFH 164 IDH 160, IDH 161, IDH 162, IDH 163, IDH 164	CS 160 -175 SL			
			P(5xD)	164	114	96						
			H(7xD)	196	146	128						
			L(10xD)	244	194	176						
Φ16.5 ~Φ16.9	YTDI 165 □ FH KRUZ 165 □ FH		T(3xD)	135	85	66		IDPH 165, IDPH 166, IDPH 167, IDPH 168, IDPH 169 IDFH 165, IDFH 166, IDFH 167, IDFH 168, IDFH 169 IDH 165, IDH 166, IDH 167, IDH 168, IDH 169				
			P(5xD)	168	118	99						
			H(7xD)	201	151	132						
			L(10xD)	251	201	182						
Φ17.0 ~Φ17.4	YTDI 170 □ FH KRUZ 170 □ FH		T(3xD)	137	87	68		IDPH 170, IDPH 171, IDPH 172, IDPH 173, IDPH 174 IDFH 170, IDFH 171, IDFH 172, IDFH 173, IDFH 174 IDH 170, IDH 171, IDH 172, IDH 173, IDH 174				
			P(5xD)	171	121	102						
			H(7xD)	205	155	136						
			L(10xD)	256	206	187						
Φ17.5 ~Φ17.9	YTDI 175 □ FH KRUZ 175 □ FH		T(3xD)	139	89	70		IDPH 175, IDPH 176, IDPH 177, IDPH 178, IDPH 179 IDFH 175, IDFH 176, IDFH 177, IDFH 178, IDFH 179 IDH 175, IDH 176, IDH 177, IDH 178, IDH 179				
			P(5xD)	174	124	105						
			H(7xD)	209	159	140						
			L(10xD)	262	212	193						
Φ18.0 ~Φ18.4	YTDI 180 □ FH KRUZ 180 □ FH		T(3xD)	142	92	72		IDPH 180, IDPH 181, IDPH 182, IDPH 183, IDPH 184 IDFH 180, IDFH 181, IDFH 182, IDFH 183, IDFH 184 IDH 180, IDH 181, IDH 182, IDH 183, IDH 184	CS 180 -195 SL	T8 Torque 1.5Nm (Max)		
			P(5xD)	178	128	108						
			H(7xD)	214	164	144						
			L(10xD)	268	218	198						
Φ18.5 ~Φ18.9	YTDI 185 □ FH KRUZ 185 □ FH		T(3xD)	144	94	74		IDPH 185, IDPH 186, IDPH 187, IDPH 188, IDPH 189 IDFH 185, IDFH 186, IDFH 187, IDFH 188, IDFH 189 IDH 185, IDH 186, IDH 187, IDH 188, IDH 189				
			P(5xD)	181	131	111						
			H(7xD)	218	168	148						
			L(10xD)	274	224	204						
Φ19.0 ~Φ19.4	YTDI 190 □ FH KRUZ 190 □ FH		T(3xD)	147	97	76		IDPH 190, IDPH 191, IDPH 192, IDPH 193, IDPH 194 IDFH 190, IDFH 191, IDFH 192, IDFH 193, IDFH 194 IDH 190, IDH 191, IDH 192, IDH 193, IDH 194				
			P(5xD)	185	135	114						
			H(7xD)	223	173	152						
			L(10xD)	280	230	209						
Φ19.5 ~Φ19.9	YTDI 195 □ FH KRUZ 195 □ FH		T(3xD)	149	99	78		IDPH 195, IDPH 196, IDPH 197, IDPH 198, IDPH 199 IDFH 195, IDFH 196, IDFH 197, IDFH 198, IDFH 199 IDH 195, IDH 196, IDH 197, IDH 198, IDH 199				
			P(5xD)	188	138	117						
			H(7xD)	227	177	156						
			L(10xD)	286	236	215						
Φ20.0 ~Φ20.4	YTDI 200 □ FH KRUZ 200 □ FH	25.0	T(3xD)	157	101	80	32	IDPH 200, IDPH 201, IDPH 202, IDPH 203, IDPH 204 IDFH 200, IDFH 201, IDFH 202, IDFH 203, IDFH 204 IDH 200, IDH 201, IDH 202, IDH 203, IDH 204	CS 200 -215 SL		M3x6	1.5mm
			P(5xD)	197	141	120						
			H(7xD)	237	181	160						
			L(10xD)	297	241	220						
Φ20.5 ~Φ20.9	YTDI 205 □ FH KRUZ 205 □ FH		T(3xD)	160	104	82		IDPH 205, IDPH 206, IDPH 207, IDPH 208, IDPH 209 IDFH 205, IDFH 206, IDFH 207, IDFH 208, IDFH 209 IDH 205, IDH 206, IDH 207, IDH 208, IDH 209				
			P(5xD)	201	145	123						
			H(7xD)	242	186	164						
			L(10xD)	304	248	226						
Φ21.0 ~Φ21.4	YTDI 210 □ FH KRUZ 210 □ FH		T(3xD)	162	106	84		IDPH 210, IDPH 211, IDPH 212, IDPH 213, IDPH 214 IDFH 210, IDFH 211, IDFH 212, IDFH 213, IDFH 214 IDH 210, IDH 211, IDH 212, IDH 213, IDH 214				
			P(5xD)	204	148	126						
			H(7xD)	246	190	168						
			L(10xD)	309	253	231						
Φ21.5 ~Φ21.9	YTDI 215 □ FH KRUZ 215 □ FH		T(3xD)	165	109	86		IDPH 215, IDPH 216, IDPH 217, IDPH 218, IDPH 219 IDFH 215, IDFH 216, IDFH 217, IDFH 218, IDFH 219 IDH 215, IDH 216, IDH 217, IDH 218, IDH 219				
			P(5xD)	208	152	129						
			H(7xD)	251	195	172						
			L(10xD)	316	260	237						
Φ22.0 ~Φ22.4	YTDI 220 □ FH KRUZ 220 □ FH		T(3xD)	167	111	88		IDPH 220, IDPH 221, IDPH 222, IDPH 223, IDPH 224 IDFH 220, IDFH 221, IDFH 222, IDFH 223, IDFH 224 IDH 220, IDH 221, IDH 222, IDH 223, IDH 224	CS 220 -235 SL			
			P(5xD)	211	155	132						
			H(7xD)	255	199	176						
			L(10xD)	321	265	242						
Φ22.5 ~Φ22.9	YTDI 225 □ FH KRUZ 225 □ FH		T(3xD)	169	113	90		IDPH 225, IDPH 226, IDPH 227, IDPH 228, IDPH 229 IDFH 225, IDFH 226, IDFH 227, IDFH 228, IDFH 229 IDH 225, IDH 226, IDH 227L, IDH 228L, IDH 229				
			P(5xD)	214	158	135						
			H(7xD)	259	203	180						
			L(10xD)	327	271	248						

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KRUZ "H" series flange + higher helix body & carbide insert

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body (IDPH / IDFH / IDH)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ23.0 ~Φ23.4	YTDI 230 □ FH KRUZ 230 □ FH	25.0	T(3xD)	172	116	92	32	IDPH 230, IDPH 231, IDPH 232, IDPH 233, IDPH 234 IDFH 230, IDFH 231, IDFH 232, IDFH 233, IDFH 234 IDH 230, IDH 231, IDH 232, IDH 233, IDH 234	CS 220 -235 SL	T8 Torque 1.5Nm (Max)	M3x6	1.5mm
			P(5xD)	218	162	138						
			H(7xD)	264	208	184						
			L(10xD)	333	277	253						
Φ23.5 ~Φ23.9	YTDI 235 □ FH KRUZ 235 □ FH		T(3xD)	174	118	94		IDPH 235, IDPH 236, IDPH 237, IDPH 238, IDPH 239 IDFH 235, IDFH 236, IDFH 237, IDFH 238, IDFH 239 IDH 235, IDH 236, IDH 237, IDH 238, IDH 239				
			P(5xD)	221	165	141						
			H(7xD)	268	212	188						
			L(10xD)	339	283	259						
Φ24.0 ~Φ24.4	YTDI 240 □ FH KRUZ 240 □ FH	32.0	T(3xD)	181	121	96	39	IDPH 240, IDPH 241, IDPH 242, IDPH 243, IDPH 244 IDFH 240, IDFH 241, IDFH 242, IDFH 243, IDFH 244 IDH 240, IDH 241, IDH 242, IDH 243, IDH 244	CS 240 -255 SL	T15 Torque 3.5Nm (Max)		
			P(5xD)	229	169	144						
			H(7xD)	277	217	192						
			L(10xD)	349	289	264						
Φ24.5 ~Φ24.9	YTDI 245 □ FH KRUZ 245 □ FH		T(3xD)	183	123	98		IDPH 245, IDPH 246, IDPH 247, IDPH 248, IDPH 249 IDFH 245, IDFH 246, IDFH 247, IDFH 248, IDFH 249 IDH 245, IDH 246, IDH 247, IDH 248, IDH 249				
			P(5xD)	232	172	147						
			H(7xD)	281	221	196						
			L(10xD)	355	295	270						
Φ25.0 ~Φ25.4	YTDI 250 □ FH KRUZ 250 □ FH		T(3xD)	185	125	100		IDPH 250, IDPH 251, IDPH 252, IDPH 253, IDPH 254 IDFH 250, IDFH 251, IDFH 252, IDFH 253, IDFH 254 IDH 250, IDH 251, IDH 252, IDH 253L, IDH 254				
			P(5xD)	235	175	150						
			H(7xD)	285	225	200						
			L(10xD)	360	300	275						
Φ25.5 ~Φ25.9	YTDI 255 □ FH KRUZ 255 □ FH		T(3xD)	188	128	102		IDPH 255, IDPH 256, IDPH 257, IDPH 258, IDPH 259 IDFH 255, IDFH 256, IDFH 257, IDFH 258, IDFH 259 IDH 255, IDH 256, IDH 257, IDH 258, IDH 259				
			P(5xD)	239	179	153						
			H(7xD)	290	230	204						
			L(10xD)	367	307	281						
Φ26.0 ~Φ26.4	YTDI 260 □ FH KRUZ 260 □ FH		T(3xD)	190	130	104		IDPH 260, IDPH 261, IDPH 262, IDPH 263, IDPH 264 IDFH 260, IDFH 261, IDFH 262, IDFH 263, IDFH 264 IDH 260, IDH 261, IDH 262, IDH 263, IDH 264	CS 260 -275 SL			
			P(5xD)	242	182	156						
			H(7xD)	294	234	208						
			L(10xD)	372	312	286						
Φ26.5 ~Φ26.9	YTDI 265 □ FH KRUZ 265 □ FH		T(3xD)	193	133	106		IDPH 265, IDPH 266, IDPH 267, IDPH 268, IDPH 269 IDFH 265, IDFH 266, IDFH 267, IDFH 268, IDFH 269 IDH 265, IDH 266, IDH 267, IDH 268, IDH 269				
			P(5xD)	246	186	159						
			H(7xD)	299	239	212						
			L(10xD)	379	319	292						
Φ27.0 ~Φ27.4	YTDI 270 □ FH KRUZ 270 □ FH		T(3xD)	195	135	108		IDPH 270, IDPH 271, IDPH 272, IDPH 273, IDPH 274 IDFH 270, IDFH 271, IDFH 272, IDFH 273, IDFH 274 IDH 270, IDH 271, IDH 272, IDH 273, IDH 274			M4x8	2.0mm
			P(5xD)	249	189	162						
			H(7xD)	303	243	216						
			L(10xD)	384	324	297						
Φ27.5 ~Φ27.9	YTDI 275 □ FH KRUZ 275 □ FH		T(3xD)	197	137	110		IDPH 275, IDPH 276, IDPH 277, IDPH 278, IDPH 279 IDFH 275, IDFH 276, IDFH 277, IDFH 278, IDFH 279 IDH 275, IDH 276, IDH 277, IDH 278, IDH 279				
			P(5xD)	252	192	165						
			H(7xD)	307	247	220						
			L(10xD)	390	330	303						
Φ28.0 ~Φ28.4	YTDI 280 □ FH KRUZ 280 □ FH		T(3xD)	200	140	112		IDPH 280, IDPH 281, IDPH 282, IDPH 283, IDPH 284 IDFH 280, IDFH 281, IDFH 282, IDFH 283, IDFH 284 IDH 280, IDH 281, IDH 282, IDH 283, IDH 284	CS 280 -295 SL			
			P(5xD)	256	196	168						
			H(7xD)	312	252	224						
			L(10xD)	396	336	308						
Φ28.5 ~Φ28.9	YTDI 285 □ FH KRUZ 285 □ FH		T(3xD)	202	142	114		IDPH 285, IDPH 286, IDPH 287, IDPH 288, IDPH 289 IDFH 285, IDFH 286, IDFH 287, IDFH 288, IDFH 289 IDH 285, IDH 286, IDH 287, IDH 288, IDH 289				
			P(5xD)	259	199	171						
			H(7xD)	316	256	228						
			L(10xD)	402	342	314						
Φ29.0 ~Φ29.4	YTDI 290 □ FH KRUZ 290 □ FH		T(3xD)	205	145	116		IDPH 290, IDPH 291, IDPH 292, IDPH 293, IDPH 294 IDFH 290, IDFH 291, IDFH 292, IDFH 293, IDFH 294 IDH 290, IDH 291, IDH 292, IDH 293, IDH 294				
			P(5xD)	263	203	174						
			H(7xD)	321	261	232						
			L(10xD)	408	348	319						
Φ29.5 ~Φ29.9	YTDI 295 □ FH KRUZ 295 □ FH		T(3xD)	207	147	118		IDPH 295, IDPH 296, IDPH 297, IDPH 298, IDPH 299 IDFH 295, IDFH 296, IDFH 297, IDFH 298, IDFH 299 IDH 295, IDH 296, IDH 297, IDH 298, IDH 299				
			P(5xD)	266	206	177						
			H(7xD)	325	265	236						
			L(10xD)	414	354	325						
Φ30.0 ~Φ30.4	YTDI 300 □ FH KRUZ 300 □ FH		T(3xD)	209	149	120		IDPH 300, IDPH 301, IDPH 302, IDPH 303, IDPH 304 IDFH 300, IDFH 301, IDFH 302, IDFH 303, IDFH 304 IDH 300, IDH 301, IDH 302, IDH 303, IDH 304	CS 300 -315 SL	T15 Torque 3.5Nm (Max)		
			P(5xD)	269	209	180						
			H(7xD)	329	269	240						
			L(10xD)	419	359	330						

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Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body (IDPH / IDFH / IDH)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ30.5 ~Φ30.9	YTDI 305 □ FH KRUZ 305 □ FH	32.0	T(3xD)	212	152	122	39	IDPH 305, IDPH 306, IDPH 307, IDPH 308, IDPH 309 IDFH 305, IDFH 306, IDFH 307, IDFH 308, IDFH 309 IDH 305, IDH 306, IDH 307, IDH 308, IDH 309	CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M4x8	2.0mm
			P(5xD)	273	213	183						
			H(7xD)	334	274	244						
			L(10xD)	426	366	336						
Φ31.0 ~Φ31.4	YTDI 310 □ FH KRUZ 310 □ FH		T(3xD)	214	154	124		IDPH 310, IDPH 311, IDPH 312, IDPH 313, IDPH 314 IDFH 310, IDFH 311, IDFH 312, IDFH 313, IDFH 314 IDH 310, IDH 311, IDH 312, IDH 313, IDH 314			M5x10	2.5mm
			P(5xD)	276	216	186						
			H(7xD)	338	278	248						
			L(10xD)	431	371	341						
Φ31.5 ~Φ31.9	YTDI 315 □ FH KRUZ 315 □ FH		T(3xD)	217	157	126		IDPH 315, IDPH 316, IDPH 317, IDPH 318, IDPH 319 IDFH 315, IDFH 316, IDFH 317, IDFH 318, IDFH 319 IDH 315, IDH 316, IDH 317, IDH 318, IDH 319				
			P(5xD)	280	220	189						
			H(7xD)	343	283	252						
			L(10xD)	438	378	347						
Φ32.0 ~Φ32.4	YTDI 320 □ FH KRUZ 320 □ FH		T(3xD)	219	159	128		IDPH 320, IDPH 321, IDPH 322, IDPH 323, IDPH 324 IDFH 320, IDFH 321, IDFH 322, IDFH 323, IDFH 324 IDH 320, IDH 321, IDH 322, IDH 323, IDH 324	CS 320 -355 SL			
			P(5xD)	283	223	192						
			H(7xD)	347	287	256						
			L(10xD)	443	383	352						
Φ32.5 ~Φ32.9	YTDI 325 □ FH KRUZ 325 □ FH		T(3xD)	221	161	130		IDPH 325, IDPH 326, IDPH 327, IDPH 328, IDPH 329 IDFH 325, IDFH 326, IDFH 327, IDFH 328, IDFH 329 IDH 325, IDH 326, IDH 327, IDH 328, IDH 329				
			P(5xD)	286	226	195						
			H(7xD)	351	291	260						
			L(10xD)	449	389	358						
Φ33.0 ~Φ33.4	YTDI 330 □ FH KRUZ 330 □ FH		T(3xD)	224	164	132		IDPH 330, IDPH 331, IDPH 332, IDPH 333, IDPH 334 IDFH 330, IDFH 331, IDFH 332, IDFH 333, IDFH 334 IDH 330, IDH 331, IDH 332, IDH 333, IDH 334				
			P(5xD)	290	230	198						
			H(7xD)	356	296	264						
			L(10xD)	455	395	363						
Φ33.5 ~Φ33.9	YTDI 335 □ FH KRUZ 335 □ FH		T(3xD)	226	166	134		IDPH 335, IDPH 336, IDPH 337, IDPH 338, IDPH 339 IDFH 335, IDFH 336, IDFH 337, IDFH 338, IDFH 339 IDH 335, IDH 336, IDH 337, IDH 338, IDH 339				
			P(5xD)	293	233	201						
			H(7xD)	360	300	268						
			L(10xD)	461	401	369						
Φ34.0 ~Φ34.4	YTDI 340 □ FH KRUZ 340 □ FH	40.0	T(3xD)	239	169	136	55	IDPH 340, IDPH 341, IDPH 342, IDPH 343, IDPH 344 IDFH 340, IDFH 341, IDFH 342, IDFH 343, IDFH 344 IDH 340, IDH 341, IDH 342, IDH 343, IDH 344				
			P(5xD)	307	237	204						
			H(7xD)	375	305	272						
			L(10xD)	477	407	374						
Φ34.5 ~Φ34.9	YTDI 345 □ FH KRUZ 345 □ FH		T(3xD)	241	171	138		IDPH 345, IDPH 346, IDPH 347, IDPH 348, IDPH 349 IDFH 345, IDFH 346, IDFH 347, IDFH 348, IDFH 349 IDH 345, IDH 346, IDH 347, IDH 348, IDH 349				
			P(5xD)	310	240	207						
			H(7xD)	379	309	276						
			L(10xD)	483	413	380						
Φ35.0 ~Φ35.4	YTDI 350 □ FH KRUZ 350 □ FH		T(3xD)	243	173	140		IDPH 350, IDPH 351, IDPH 352, IDPH 353, IDPH 354 IDFH 350, IDFH 351, IDFH 352, IDFH 353, IDFH 354 IDH 350, IDH 351, IDH 352, IDH 353, IDH 354				
			P(5xD)	313	243	210						
			H(7xD)	383	313	280						
			L(10xD)	488	418	385						
Φ35.5 ~Φ35.9	YTDI 355 □ FH KRUZ 355 □ FH		T(3xD)	246	176	142		IDPH 355, IDPH 356, IDPH 357, IDPH 358, IDPH 359 IDFH 355, IDFH 356, IDFH 357, IDFH 358, IDFH 359 IDH 355, IDH 356, IDH 357, IDH 358, IDH 359				
			P(5xD)	317	247	213						
			H(7xD)	388	318	284						
			L(10xD)	495	425	391						
Φ36.0 ~Φ36.4	YTDI 360 □ FH KRUZ 360 □ FH		T(3xD)	248	178	144		IDPH 360, IDPH 361, IDPH 362, IDPH 363, IDPH 364 IDFH 360, IDFH 361, IDFH 362, IDFH 363, IDFH 364 IDH 360, IDH 361, IDH 362, IDH 363, IDH 364	CS 360 -395 SL			
			P(5xD)	320	250	216						
			H(7xD)	392	322	288						
			L(10xD)	500	430	396						
Φ36.5 ~Φ36.9	YTDI 365 □ FH KRUZ 365 □ FH		T(3xD)	251	181	146		IDPH 365, IDPH 366, IDPH 367, IDPH 368, IDPH 369 IDFH 365, IDFH 366, IDFH 367, IDFH 368, IDFH 369 IDH 365, IDH 366, IDH 367, IDH 368, IDH 369				
			P(5xD)	324	254	219						
			H(7xD)	397	327	292						
			L(10xD)	507	437	402						
Φ37.0 ~Φ37.4	YTDI 370 □ FH KRUZ 370 □ FH		T(3xD)	253	183	148		IDPH 370, IDPH 371, IDPH 372, IDPH 373, IDPH 374 IDFH 370, IDFH 371, IDFH 372, IDFH 373, IDFH 374 IDH 370, IDH 371, IDH 372, IDH 373, IDH 374				
			P(5xD)	327	257	222						
			H(7xD)	401	331	296						
			L(10xD)	512	442	407						
Φ37.5 ~Φ37.9	YTDI 375 □ FH KRUZ 375 □ FH		T(3xD)	255	185	150		IDPH 375, IDPH 376, IDPH 377, IDPH 378, IDPH 379 IDFH 375, IDFH 376, IDFH 377, IDFH 378, IDFH 379 IDH 375, IDH 376, IDH 377, IDH 378, IDH 379				
			P(5xD)	330	260	225						
			H(7xD)	405	335	300						
			L(10xD)	518	448	413						

Continued ▶▶

KRUZ "H" series flange + higher helix body & carbide insert

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body (IDPH / IDFH / IDH)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ38.0 ~Φ38.4	YTDI 380 □ FH KRUZ 380 □ FH	40.0	T(3xD)	258	188	152	55	IDPH 380, IDPH 381, IDPH 382, IDPH 383, IDPH 384 IDFH 380, IDFH 381, IDFH 382, IDFH 383, IDFH 384 IDH 380, IDH 381, IDH 382, IDH 383, IDH 384	CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm
			P(5xD)	334	264	228						
			H(7xD)	410	340	304						
			L(10xD)	524	454	418						
Φ38.5 ~Φ38.9	YTDI 385 □ FH KRUZ 385 □ FH		T(3xD)	260	196	154		IDPH 385, IDPH 386, IDPH 387, IDPH 388, IDPH 389 IDFH 385, IDFH 386, IDFH 387, IDFH 388, IDFH 389 IDH 385, IDH 386, IDH 387, IDH 388, IDH 389				
			P(5xD)	337	267	231						
			H(7xD)	414	344	308						
			L(10xD)	530	460	424						
Φ39.0 ~Φ39.4	YTDI 390 □ FH KRUZ 390 □ FH		T(3xD)	263	193	156		IDPH 390, IDPH 391, IDPH 392, IDPH 393, IDPH 394 IDFH 390, IDFH 391, IDFH 392, IDFH 393, IDFH 394 IDH 390, IDH 391, IDH 392, IDH 393, IDH 394				
			P(5xD)	341	271	234						
			H(7xD)	419	349	312						
			L(10xD)	536	466	429						
Φ39.5 ~Φ39.9	YTDI 395 □ FH KRUZ 395 □ FH		T(3xD)	265	195	158		IDPH 395, IDPH 396, IDPH 397, IDPH 398, IDPH 399 IDFH 395, IDFH 396, IDFH 397, IDFH 398, IDFH 399 IDH 395, IDH 396, IDH 397, IDH 398, IDH 399				
			P(5xD)	344	274	237						
			H(7xD)	423	353	316						
			L(10xD)	542	472	435						
Φ40.0 ~Φ40.4	YTDI 400 □ FH KRUZ 400 □ FH		T(3xD)	267	197	160		IDPH 400, IDPH 401, IDPH 402, IDPH 403, IDPH 404 IDFH 400, IDFH 401, IDFH 402, IDFH 403, IDFH 404 IDH 400, IDH 401, IDH 402, IDH 403, IDH 404	CS 400 -445 SL		M6x12	3.0mm
			P(5xD)	347	277	240						
			H(7xD)	427	357	320						
			L(10xD)	547	477	440						
Φ40.5 ~Φ40.9	YTDI 405 □ FH KRUZ 405 □ FH		T(3xD)	270	200	162		IDPH 405, IDPH 406, IDPH 407, IDPH 408, IDPH 409 IDFH 405, IDFH 406, IDFH 407, IDFH 408, IDFH 409 IDH 405, IDH 406, IDH 407, IDH 408, IDH 409				
			P(5xD)	351	281	243						
			H(7xD)	432	362	324						
			L(10xD)	554	484	446						
Φ41.0 ~Φ41.4	YTDI 410 □ FH KRUZ 410 □ FH		T(3xD)	272	202	164		IDPH 410, IDPH 411, IDPH 412, IDPH 413, IDPH 414 IDFH 410, IDFH 411, IDFH 412, IDFH 413, IDFH 414 IDH 410, IDH 411, IDH 412, IDH 413, IDH 414				
			P(5xD)	354	284	246						
			H(7xD)	436	366	328						
			L(10xD)	559	489	451						
Φ41.5 ~Φ41.9	YTDI 415 □ FH KRUZ 415 □ FH		T(3xD)	275	205	166		IDPH 415, IDPH 416, IDPH 417, IDPH 418, IDPH 419 IDFH 415, IDFH 416, IDFH 417, IDFH 418, IDFH 419 IDH 415, IDH 416, IDH 417, IDH 418, IDH 419				
			P(5xD)	358	288	249						
			H(7xD)	441	371	332						
			L(10xD)	566	496	457						
Φ42.0 ~Φ42.4	YTDI 420 □ FH KRUZ 420 □ FH		T(3xD)	277	207	168		IDPH 420, IDPH 421, IDPH 422, IDPH 423, IDPH 424 IDFH 420, IDFH 421, IDFH 422, IDFH 423, IDFH 424 IDH 420, IDH 421, IDH 422, IDH 423, IDH 424				
			P(5xD)	361	291	252						
			H(7xD)	445	375	336						
			L(10xD)	571	501	462						
Φ42.5 ~Φ42.9	YTDI 425 □ FH KRUZ 425 □ FH		T(3xD)	279	209	170		IDPH 425, IDPH 426, IDPH 427, IDPH 428, IDPH 429 IDFH 425, IDFH 426, IDFH 427, IDFH 428, IDFH 429 IDH 425, IDH 426, IDH 427, IDH 428, IDH 429				
			P(5xD)	364	294	255						
			H(7xD)	449	379	340						
			L(10xD)	577	507	468						
Φ43.0 ~Φ43.4	YTDI 430 □ FH KRUZ 430 □ FH		T(3xD)	282	212	172		IDPH 430, IDPH 431, IDPH 432, IDPH 433, IDPH 434 IDFH 430, IDFH 431, IDFH 432, IDFH 433, IDFH 434 IDH 430, IDH 431, IDH 432, IDH 433, IDH 434				
			P(5xD)	368	298	258						
			H(7xD)	454	384	344						
			L(10xD)	583	513	473						
Φ43.5 ~Φ43.9	YTDI 435 □ FH KRUZ 435 □ FH		T(3xD)	284	214	174		IDPH 435, IDPH 436, IDPH 437, IDPH 438, IDPH 439 IDFH 435, IDFH 436, IDFH 437, IDFH 438, IDFH 439 IDH 435, IDH 436, IDH 437, IDH 438, IDH 439				
			P(5xD)	371	301	261						
			H(7xD)	458	388	348						
			L(10xD)	589	519	479						
Φ44.0 ~Φ44.4	YTDI 440 □ FH KRUZ 440 □ FH		T(3xD)	287	217	176		IDPH 440, IDPH 441, IDPH 442, IDPH 443, IDPH 444 IDFH 440, IDFH 441, IDFH 442, IDFH 443, IDFH 444 IDH 440, IDH 441, IDH 442, IDH 443, IDH 444				
			P(5xD)	375	305	264						
			H(7xD)	463	393	352						
			L(10xD)	595	525	484						
Φ44.5 ~Φ44.9	YTDI 445 □ FH KRUZ 445 □ FH		T(3xD)	289	219	178		IDPH 445, IDPH 446, IDPH 447, IDPH 448, IDPH 449 IDFH 445, IDFH 446, IDFH 447, IDFH 448, IDFH 449 IDH 445, IDH 446, IDH 447, IDH 448, IDH 449				
			P(5xD)	378	308	267						
			H(7xD)	467	397	356						
			L(10xD)	601	531	490						
Φ45.0 ~Φ45.4	YTDI 450 □ FH KRUZ 450 □ FH		T(3xD)	291	221	180		IDPH 450, IDPH 451, IDPH 452, IDPH 453, IDPH 454 IDFH 450, IDFH 451, IDFH 452, IDFH 453, IDFH 454 IDH 450, IDH 451, IDH 452, IDH 453, IDH 454	CS 450 -500 SL			
			P(5xD)	381	311	270						
			H(7xD)	471	401	360						
			L(10xD)	606	536	495						

Continued ▶▶

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body (IDPH / IDFH / IDH)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ45.5 ~Φ45.9	YTDI 455 □ FH KRUZ 455 □ FH	40.0	T(3xD)	294	224	182	55	IDPH 455, IDPH 456, IDPH 457, IDPH 458, IDPH 459 IDFH 455, IDFH 456, IDFH 457, IDFH 458, IDFH 459 IDH 455, IDH 456, IDH 457, IDH 458, IDH 459	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	385	315	273						
			H(7xD)	476	406	364						
			L(10xD)	613	543	501						
Φ46.0 ~Φ46.4	YTDI 460 □ FH KRUZ 460 □ FH		T(3xD)	296	226	184		IDPH 460, IDPH 461, IDPH 462, IDPH 463, IDPH 464 IDFH 460, IDFH 461, IDFH 462, IDFH 463, IDFH 464 IDH 460, IDH 461, IDH 462, IDH 463, IDH 464				
			P(5xD)	388	318	276						
			H(7xD)	480	410	368						
			L(10xD)	618	548	506						
Φ46.5 ~Φ46.9	YTDI 465 □ FH KRUZ 465 □ FH		T(3xD)	299	229	186		IDPH 465, IDPH 466, IDPH 467, IDPH 468, IDPH 469 IDFH 465, IDFH 466, IDFH 467, IDFH 468, IDFH 469 IDH 465, IDH 466, IDH 467, IDH 468, IDH 469				
			P(5xD)	392	322	279						
			H(7xD)	485	415	372						
			L(10xD)	625	555	512						
Φ47.0 ~Φ47.4	YTDI 470 □ FH KRUZ 470 □ FH		T(3xD)	301	231	188		IDPH 470, IDPH 471, IDPH 472, IDPH 473, IDPH 474 IDFH 470, IDFH 471, IDFH 472, IDFH 473, IDFH 474 IDH 470, IDH 471, IDH 472, IDH 473, IDH 474				
			P(5xD)	395	325	282						
			H(7xD)	489	419	376						
			L(10xD)	630	560	517						
Φ47.5 ~Φ47.9	YTDI 475 □ FH KRUZ 475 □ FH		T(3xD)	303	233	190		IDPH 475, IDPH 476, IDPH 477, IDPH 478, IDPH 479 IDFH 475, IDFH 476, IDFH 477, IDFH 478, IDFH 479 IDH 475, IDH 476, IDH 477, IDH 478, IDH 479				
			P(5xD)	398	328	285						
			H(7xD)	493	423	380						
			L(10xD)	636	566	523						
Φ48.0 ~Φ48.4	YTDI 480 □ FH KRUZ 480 □ FH		T(3xD)	306	236	192		IDPH 480, IDPH 481, IDPH 482, IDPH 483, IDPH 484 IDFH 480, IDFH 481, IDFH 482, IDFH 483, IDFH 484 IDH 480, IDH 481, IDH 482, IDH 483, IDH 484				
			P(5xD)	402	332	288						
			H(7xD)	498	428	384						
			L(10xD)	642	572	528						
Φ48.5 ~Φ48.9	YTDI 485 □ FH KRUZ 485 □ FH		T(3xD)	308	238	194		IDPH 485, IDPH 486, IDPH 487, IDPH 488, IDPH 489 IDFH 485, IDFH 486, IDFH 487, IDFH 488, IDFH 489 IDH 485, IDH 486, IDH 487, IDH 488, IDH 489				
			P(5xD)	405	335	291						
			H(7xD)	502	432	388						
			L(10xD)	648	578	534						
Φ49.0 ~Φ49.4	YTDI 490 □ FH KRUZ 490 □ FH		T(3xD)	311	241	196		IDPH 490, IDPH 491, IDPH 492, IDPH 493, IDPH 494 IDFH 490, IDFH 491, IDFH 492, IDFH 493, IDFH 494 IDH 490, IDH 491, IDH 492, IDH 493, IDH 494				
			P(5xD)	409	339	294						
			H(7xD)	507	437	392						
			L(10xD)	654	584	539						
Φ49.5 ~Φ49.9	YTDI 495 □ FH KRUZ 495 □ FH		T(3xD)	313	243	198		IDPH 495, IDPH 496, IDPH 497, IDPH 498, IDPH 499 IDFH 495, IDFH 496, IDFH 497, IDFH 498, IDFH 499 IDH 495, IDH 496, IDH 497, IDH 498, IDH 499				
			P(5xD)	412	342	297						
			H(7xD)	511	441	396						
			L(10xD)	660	590	545						
Φ50.0 ~Φ50.4	YTDI 500 □ FH KRUZ 500 □ FH		T(3xD)	315	245	200		IDPH 500, IDPH 501, IDPH 502, IDPH 503, IDPH 504 IDFH 500, IDFH 501, IDFH 502, IDFH 503, IDFH 504 IDH 500, IDH 501, IDH 502, IDH 503, IDH 504				
			P(5xD)	415	345	300						
			H(7xD)	515	445	400						
			L(10xD)	665	595	550						

KRUZ-FH Drills, Cutting Speed Recommendation

Drill Dia. / Condition / Material Group		Φ8~16mm		Φ16~25mm		Φ25~32mm		Φ32~40mm		Φ40~50mm	
		Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)
Grey cast iron	(FC)	80~150	0.20~0.30	80~150	0.25~0.45	80~160	0.35~0.55	90~200	0.34~0.58	90~200	0.38~0.60
Nodular cast iron	(FCD)	80~140	0.15~0.25	80~140	0.22~0.45	80~150	0.32~0.52	90~160	0.35~0.62	90~200	0.38~0.60
Carbon steel	(S45C)	80~140	0.15~0.30	80~140	0.16~0.40	80~150	0.20~0.40	80~150	0.22~0.48	80~160	0.25~0.54
Alloy steel	(SCM440)	70~140	0.15~0.30	70~140	0.15~0.40	70~140	0.18~0.40	80~140	0.25~0.47	80~140	0.27~0.52
Hardened steel	(SKD11)	40~50	0.10~0.20	40~50	0.12~0.28	40~50	0.16~0.35	40~60	0.20~0.38	40~60	0.22~0.42
Stainless steel	(SUS)	30~40	0.10~0.20	35~50	0.10~0.22	35~50	0.15~0.28	40~55	0.18~0.30	40~55	0.22~0.32
Aluminum 130HB	(AL)	120~200	0.20~0.30	120~200	0.25~0.40	120~200	0.30~0.45	120~200	0.30~0.45	120~200	0.30~0.50

☞ This data is recommended for 3xDia. And should be reduced about 15~20% for 5xD, 7xD, 10xD drills.
☞ The data is normally suggested for oil-mist(MQL) coolant condition and also possible to run in other normal condition if machining environment like clamping etc. are secured in good .