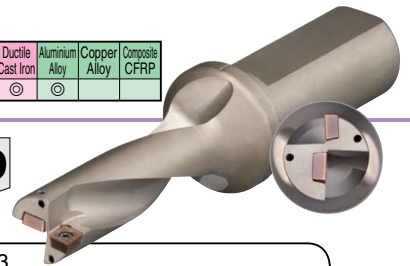


WDX Type (4D)

Carbon Steel Up to 0.28%	Alloy Steel From 0.28%	Tempered Steel	Hardened Steel Up to 49HRC From 49HRC	Stainless Steel	Ti-Alloy	Heat-resistant steel	Cast Iron	Ductile Cast Iron	Aluminum Alloy	Copper Alloy	Composite CFRP
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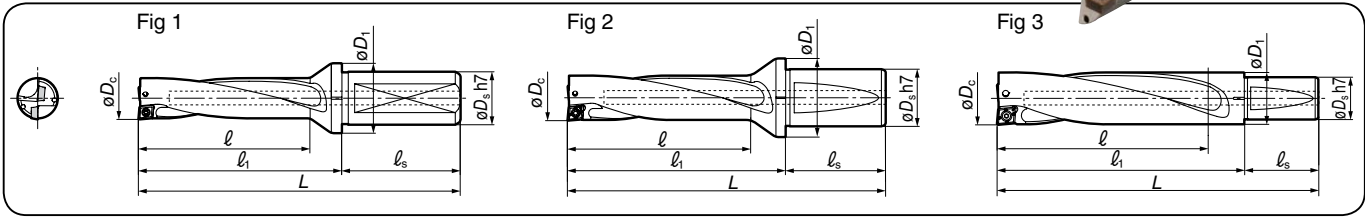


For 4D Boring Depth

Guide for machining tolerance: 0 to +0.25
Maximum depth $l \ 4 \times \phi D_c$



Recommended Cutting Conditions **J63**



Holder Diameter $\phi 13.0$ to $\phi 45.0$ mm (Refer to J60)

Diameter ϕD_c	Shank Diameter ϕD_s	Cat. No.	Stock	L	l	l ₁	l _s	ϕD_1	Radial Offset (Max)	Applicable Insert	Fig		
13.0	20	WDX 130D4S20	●	114	55	70			0.35	WDXT 042004	1		
13.5		135D4S20	●	116	57	72			0.30				
14.0		140D4S20	●	118	59	74	44	28.0	0.25				
14.5		145D4S20	●	120	61	76			0.20				
15.0		150D4S20	●	122	63	78			0.15				
15.5	20	WDX 155D4S20	●	124	65	80			0.40	WDXT 052504	1		
16.0		160D4S20	●	126	67	82			0.40				
16.5		165D4S20	●	128	69	84	44	30.0	0.35				
17.0		170D4S20	●	130	71	86			0.30				
17.5		175D4S25	●	144	73	88			0.25				
18.0	180D4S25	●	146	75	90	56	32.0	0.20	WDXT 063006	1			
18.5	WDX 185D4S25	●	148	77	92			0.50					
19.0	190D4S25	●	150	79	94			0.45					
19.5	195D4S25	●	152	81	96			0.40					
20.0	200D4S25	●	154	83	98			0.30					
20.5	25	WDX 205D4S25	●	156	85	100	56	33.0	0.30	WDXT 073506	2		
21.0		210D4S25	●	158	87	102			0.20				
21.5		215D4S25	●	160	89	104			0.15				
22.0		220D4S25	●	162	91	106			0.10				
22.5		225D4S25	●	164	93	108			0.05				
23.0	25	WDX 230D4S25	●	169	95	113			0.70	WDXT 094008	2		
23.5		235D4S25	●	171	97	115			0.70				
24.0		240D4S25	●	173	99	117	56	37.0	0.60				
24.5		245D4S25	●	175	101	119			0.50				
25.0		250D4S25	●	177	103	121			0.50				
25.5	32	WDX 255D4S32	●	185	105	125			0.45	WDXT 125012	2		
26.0		260D4S32	●	187	107	127			0.40				
26.5		265D4S32	●	189	109	129			0.35				
27.0		270D4S32	●	191	111	131	60	41.0	0.25				
27.5		275D4S32	●	193	113	133			0.20				
28.0	32	WDX 280D4S32	●	195	115	135			0.15	WDXT 094008	2		
28.5		285D4S32	●	197	117	137			0.10				
29.0		WDX 290D4S32	●	201	120	141			1.00				
29.5		295D4S32	●	203	122	143	60	50.0	0.95				
30.0		300D4S32	●	208	124	148			0.90				
31.0	40	WDX 310D4S32	●	212	128	152			0.80	WDXT 094008	2		
32.0		320D4S32	●	216	132	156			0.70				
30.0		WDX 300D4S40	●	218	124	148			0.90			WDXT 125012	2
31.0		310D4S40	●	222	128	152			0.80				
32.0		320D4S40	●	226	132	156			0.70				
33.0	330D4S40	●	230	136	160	70	54.0	0.55					
34.0	340D4S40	●	234	140	164			0.45					
35.0	40	WDX 350D4S40	●	238	144	168			0.35	WDXT 125012	2		
36.0		360D4S40	●	242	148	172			0.20				
37.0		WDX 370D4S40	●	253	153	183			1.00				
38.0		380D4S40	●	257	157	187			1.00				
39.0		390D4S40	●	261	161	191			0.90				
40.0	40	WDX 400D4S40	●	265	165	195			0.80	WDXT 125012	2		
41.0		410D4S40	●	269	169	199	70	49.5	0.70				
42.0		420D4S40	●	273	173	203			0.60				
43.0		430D4S40	●	277	177	207			0.50				
44.0		440D4S40	●	281	181	211			0.50				
45.0	450D4S40	●	285	185	215			0.40					

Diameters $\phi 30$, $\phi 31$, $\phi 32$ are available in stock with shank diameters $\phi 32$ and $\phi 40$.

Spare Parts

Screw	Spanner	Spanner	Recommended Tightening Torque (N·m)	Applicable Holders
BFTX01604N	TRX06		0.3	WDX130D4S20 to WDX150D4S20
BFTX0204N	TRX06		0.5	WDX155D4S20 to WDX180D4S25
BFTY02206		TRD07	1.0	WDX185D4S25 to WDX225D4S25
BFTX02506N		TRD08	1.5	WDX230D4S25 to WDX285D4S32
BFTX03584		TRD15	3.5	WDX290D4S32 to WDX360D4S40
BFTX0511N		TRD20	5.0	WDX370D4S40 to WDX450D4S40
BFTX0615N		TRD25	5.0	WDX460D4S40 to WDX630D4S40

Holder Diameter $\phi 46.0$ to $\phi 63.0$ mm (Refer to J60)

Diameter ϕD_c	Shank Diameter ϕD_s	Cat. No.	Stock	L	l	l ₁	l _s	ϕD_1	Radial Offset (Max)	Applicable Insert	Fig
46.0	40	WDX 460D4S40	●	289	189	219			1.50	WDXT 156012	2
47.0		470D4S40	●	293	193	223			1.40		
48.0		480D4S40	●	297	197	227			1.30		
49.0		490D4S40	●	301	201	231			1.20		
50.0		500D4S40	●	305	205	235			1.10		
51.0		510D4S40	●	309	209	239			1.00		
52.0		520D4S40	●	313	213	243			0.90		
53.0		530D4S40	●	317	217	247			0.80		
54.0		540D4S40	●	321	221	251			0.60		
55.0		550D4S40	●	325	225	255			0.50		
56.0	40	WDX 560D4S40	●	334	232	264			2.00	WDXT 186012	3
57.0		570D4S40	●	338	236	268			1.80		
58.0		580D4S40	●	342	240	272			1.70		
59.0		590D4S40	●	346	244	276			1.60		
60.0		600D4S40	●	350	248	280			1.50		
61.0		610D4S40	●	354	252	284			1.40		
62.0		620D4S40	●	358	256	288			1.30		
63.0		630D4S40	●	362	260	292			1.20		

Inserts P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metal S Exotic Alloy H Hardened Steel

Application	Grade	Coated Carbide			Fig	Dimensions (mm)			Applicable Holders
		High Speed/Light	General Purpose	Roughing		l	Thickness	r _E	
Application	High Speed/Light	●	●	●	Fig	l	Thickness	r _E	Applicable Holders
	General Purpose	●	●	●					
	Roughing	●	●	●					
Cat. No.	ACP300	●	●	●	Fig	l	Thickness	r _E	Applicable Holders
	ACK300	●	●	●					
Cat. No.	DL1500	●	●	●	Fig	l	Thickness	r _E	Applicable Holders
	DL1500	●	●	●					
WDXT 042004-L	●	●	●	4	4.2	2.0	0.4	WDX130D4S20 to WDX150D4S20	
042004-G	●	●	●	5					
042004-H	●	●	●	6					
WDXT 052504-L	●	●	●	4	5.0	2.5	0.4	WDX155D4S20 to WDX180D4S25	
052504-G	●	●	●	5					
052504-H	●	●	●	6					
WDXT 063006-L	●	●	●	4	6.0	3.0	0.6	WDX185D4S25 to WDX225D4S25	
063006-G	●	●	●	5					
063006-H	●	●	●	6					
WDXT 073506-L	●	●	●	4	7.5	3.5	0.6	WDX230D4S25 to WDX285D4S32	
073506-G	●	●	●	5					
073506-H	●	●	●	6					
WDXT 094008-L	●	●	●	4	9.6	4.0	0.8	WDX290D4S32 to WDX360D4S40	
094008-G	●	●	●	5					
094008-H	●	●	●	6					
WDXT 125012-L	●	●	●	4	12.4	5.0	1.2	WDX370D4S40 to WDX450D4S40	
125012-G	●	●	●	5					
125012-H	●	●	●	6					
WDXT 156012-L	●	●	●	4	15.2	6.0	1.2	WDX460D4S40 to WDX550D4S40	
156012-G	●	●	●	5					
156012-H	●	●	●	6					
WDXT 186012-L	●	●	●	4	18.0	6.0	1.2	WDX560D4S40 to WDX630D4S40	
186012-G	●	●	●	5					
186012-H	●	●	●	6					

Insert Identification **J59**