



ZTK series
Interchangeable Solid
Carbide Drills



CMT ZHUZHOU CEMENTED CARBIDE
CUTTING TOOLS CO., LTD.

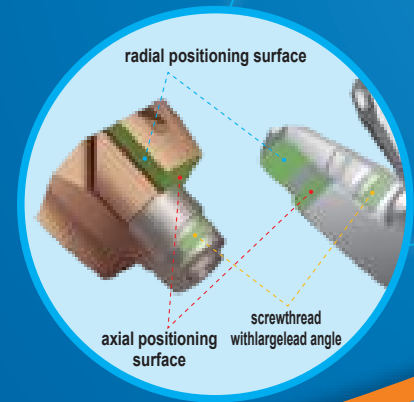
ZTK



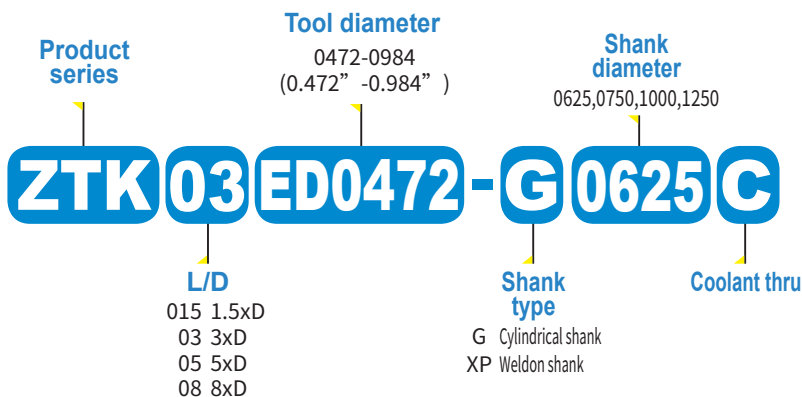
Interchangeable Solid Carbide Drills

High-performance interchangeable solid carbide drills with unique structure design reduces machining cost, improve production efficiency and achieve high precision and high efficiency cutting.

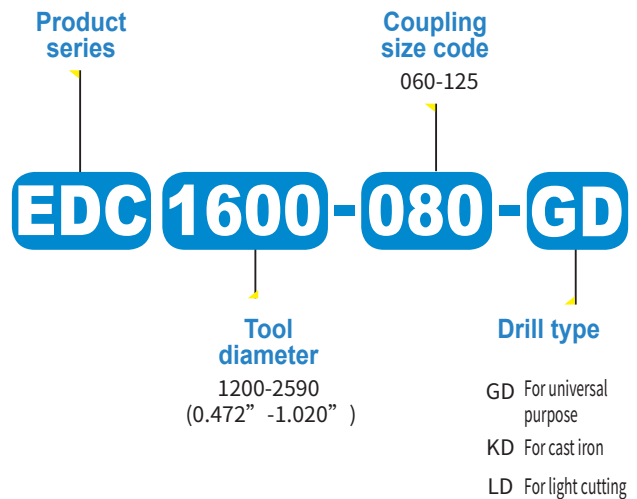
- Unique thread interface with large lead angle, ensures installation precision and makes it easy to assemble and disassemble.
- Double clamping
Both axial, radial positioning surface and thread interface coordinately clamping ensure stable and reliable tool head assembly.



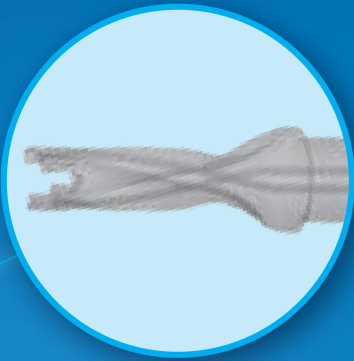
Code key of drill body



Code key of drill head



- Double helical internal coolant holes provide accurate cooling supply and good chip control during machining.



- Unique cutting edge design with good versatility ensures smooth cutting, achieve low resistance and efficient machining.



Three types of drill-head are able to meet requirements for machining various materials, prolong tool life, and achieve machining stability.



LD-For soft steel and stainless steel
Sharp cutting edge design, suitable for high cutting.

KD-For cast iron
Enhanced cutting edge prolong tool life.

GD-For universal purpose
The combination of curve and straight cutting edge contributes good universality.

Excellent machining accuracy

Case study

Drill body specification:
ZTK03-ED0492-G0625C
Drill head specification:
EDC1260-060-GD
Workpiece material: 42CrMo (HRC30)
Cutting parameters: $V_c=350\text{SFPM}$;
 $f=0.008\text{in/r}$; $ap=1.181\text{in}$.
Cooling type: internal coolant supply



ZTK



Similar product of company A

Excellent chip-breaking performance

Case study

TDrill body specification:
ZTK03-ED0630-G0750C
Drill head specification:
EDC1630-080-GD
Workpiece material: 50Mn (HB240)
Cutting parameters: $V_c=400\text{SFPM}$;
 $f=0.012\text{in/r}$; $ap=1.181\text{in}$.
Cooling type: internal coolant supply



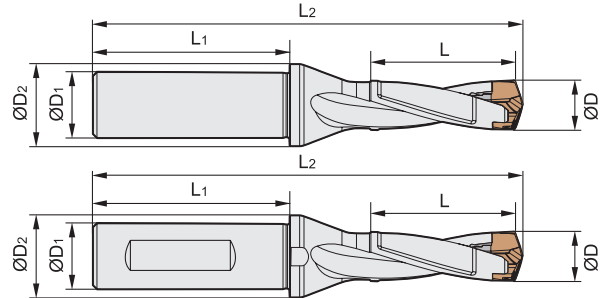
ZTK



Similar product of company A

ZTK015 1.5D

Drill bodies for 0.472" -1.020" diameter drill heads



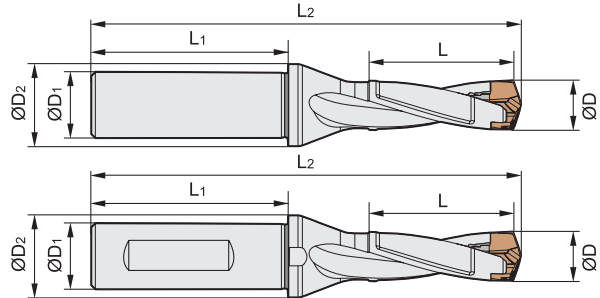
	Item	Stock	Dimension(inch)						Coupling	Wrench
			D	L	D ₁	D ₂	L ₁	L ₂		
ZTK015 Weldon shank	-ED0472-XP0625C	△	0.472-0.508	0.709	0.625	0.787	1.890	3.268	060	ZTK12-15.9
	-ED0512-XP0625C	△	0.512-0.547	0.768	0.625	0.787	1.890	3.366	065	ZTK12-15.9
	-ED0551-XP0625C	△	0.551-0.587	0.827	0.625	0.787	1.890	3.504	070	ZTK12-15.9
	-ED0591-XP0750C	△	0.591-0.626	0.886	0.750	0.984	1.969	3.799	075	ZTK12-15.9
	-ED0630-XP0750C	△	0.630-0.665	0.945	0.750	0.984	1.969	3.937	080	ZTK16-20.9
	-ED0669-XP0750C	△	0.669-0.705	1.004	0.750	0.984	1.969	4.035	085	ZTK16-20.9
	-ED0709-XP1000C	△	0.709-0.744	1.063	1.000	1.260	2.205	4.409	090	ZTK16-20.9
	-ED0748-XP1000C	△	0.748-0.783	1.122	1.000	1.260	2.205	4.508	095	ZTK16-20.9
	-ED0787-XP1000C	△	0.787-0.823	1.181	1.000	1.260	2.205	4.567	100	ZTK16-20.9
	-ED0827-XP1000C	△	0.827-0.862	1.240	1.000	1.260	2.205	4.941	105	ZTK21-25.9
	-ED0866-XP1000C	△	0.866-0.902	1.299	1.000	1.260	2.205	5.039	110	ZTK21-25.9
	-ED0906-XP1250C	△	0.906-0.941	1.358	1.250	1.654	2.362	5.177	115	ZTK21-25.9
	-ED0945-XP1250C	△	0.945-0.980	1.417	1.250	1.654	2.362	5.276	120	ZTK21-25.9
-ED0984-XP1250C	△	0.984-1.020	1.476	1.250	1.654	2.362	5.413	125	ZTK21-25.9	
Cylindrical shank	-ED0472-G0625C	△	0.472-0.508	0.709	0.625	0.787	1.890	3.268	060	ZTK12-15.9
	-ED0512-G0625C	△	0.512-0.547	0.768	0.625	0.787	1.890	3.366	065	ZTK12-15.9
	-ED0551-G0625C	△	0.551-0.587	0.827	0.625	0.787	1.890	3.504	070	ZTK12-15.9
	-ED0591-G0750C	△	0.591-0.626	0.886	0.750	0.984	1.969	3.799	075	ZTK12-15.9
	-ED0630-G0750C	△	0.630-0.665	0.945	0.750	0.984	1.969	3.937	080	ZTK16-20.9
	-ED0669-G0750C	△	0.669-0.705	1.004	0.750	0.984	1.969	4.035	085	ZTK16-20.9
	-ED0709-G1000C	△	0.709-0.744	1.063	1.000	1.260	2.205	4.409	090	ZTK16-20.9
	-ED0748-G1000C	△	0.748-0.783	1.122	1.000	1.260	2.205	4.508	095	ZTK16-20.9
	-ED0787-G1000C	△	0.787-0.823	1.181	1.000	1.260	2.205	4.567	100	ZTK16-20.9
	-ED0827-G1000C	△	0.827-0.862	1.240	1.000	1.260	2.205	4.941	105	ZTK21-25.9
	-ED0866-G1000C	△	0.866-0.902	1.299	1.000	1.260	2.205	5.039	110	ZTK21-25.9
	-ED0906-G1250C	△	0.906-0.941	1.358	1.250	1.654	2.362	5.177	115	ZTK21-25.9
	-ED0945-G1250C	△	0.945-0.980	1.417	1.250	1.654	2.362	5.276	120	ZTK21-25.9
-ED0984-G1250C	△	0.984-1.020	1.476	1.250	1.654	2.362	5.413	125	ZTK21-25.9	

▲Regular Stock △Made-to-order

ZTK03

3D

Drill bodies for 0472" -1.020" diameter drill heads

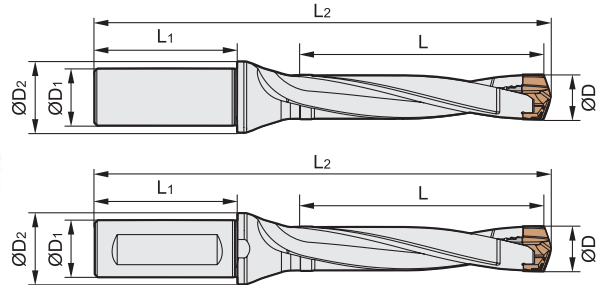


	Item	Stock	Dimension(inch)						Coupling	Wrench
			D	L	D ₁	D ₂	L ₁	L ₂		
ZTK03 Weldon shank	-ED0472-XP0625C	△	0.472-0.488	1.417	0.625	0.787	1.890	3.976	060	ZTK12-15.9
	-ED0492-XP0625C	△	0.492-0.508	1.457	0.625	0.787	1.890	4.055	060	ZTK12-15.9
	-ED0512-XP0625C	△	0.512-0.528	1.535	0.625	0.787	1.890	4.134	065	ZTK12-15.9
	-ED0531-XP0625C	△	0.531-0.547	1.614	0.625	0.787	1.890	4.213	065	ZTK12-15.9
	-ED0551-XP0625C	△	0.551-0.567	1.654	0.625	0.787	1.890	4.331	070	ZTK12-15.9
	-ED0571-XP0625C	△	0.571-0.587	1.732	0.625	0.787	1.890	4.409	070	ZTK12-15.9
	-ED0591-XP0750C	△	0.591-0.626	1.772	0.750	0.984	1.969	4.685	075	ZTK12-15.9
	-ED0630-XP0750C	△	0.630-0.665	1.890	0.750	0.984	1.969	4.882	080	ZTK16-20.9
	-ED0669-XP0750C	△	0.669-0.705	2.008	0.750	0.984	1.969	5.039	085	ZTK16-20.9
	-ED0709-XP1000C	△	0.709-0.744	2.126	1.000	1.260	2.205	5.472	090	ZTK16-20.9
	-ED0748-XP1000C	△	0.748-0.783	2.244	1.000	1.260	2.205	5.630	095	ZTK16-20.9
	-ED0787-XP1000C	△	0.787-0.823	2.362	1.000	1.260	2.205	5.748	100	ZTK16-20.9
	-ED0827-XP1000C	△	0.827-0.862	2.480	1.000	1.260	2.205	6.181	105	ZTK21-25.9
	-ED0866-XP1000C	△	0.866-0.902	2.598	1.000	1.260	2.205	6.339	110	ZTK21-25.9
	-ED0906-XP1250C	△	0.906-0.941	2.717	1.250	1.654	2.362	6.535	115	ZTK21-25.9
-ED0945-XP1250C	△	0.945-0.980	2.835	1.250	1.654	2.362	6.693	120	ZTK21-25.9	
-ED0984-XP1250C	△	0.984-1.020	2.953	1.250	1.654	2.362	6.890	125	ZTK21-25.9	
Cylindrical shank	-ED0472-G0625C	△	0.472-0.488	1.417	0.625	0.787	1.890	3.976	060	ZTK12-15.9
	-ED0492-G0625C	△	0.492-0.508	1.457	0.625	0.787	1.890	4.055	060	ZTK12-15.9
	-ED0512-G0625C	△	0.512-0.528	1.535	0.625	0.787	1.890	4.134	065	ZTK12-15.9
	-ED0531-G0625C	△	0.531-0.547	1.614	0.625	0.787	1.890	4.213	065	ZTK12-15.9
	-ED0551-G0625C	△	0.551-0.567	1.654	0.625	0.787	1.890	4.331	070	ZTK12-15.9
	-ED0571-G0625C	△	0.571-0.587	1.732	0.625	0.787	1.890	4.409	070	ZTK12-15.9
	-ED0591-G0750C	△	0.591-0.626	1.772	0.750	0.984	1.969	4.685	075	ZTK12-15.9
	-ED0630-G0750C	△	0.630-0.665	1.890	0.750	0.984	1.969	4.882	080	ZTK16-20.9
	-ED0669-G0750C	△	0.669-0.705	2.008	0.750	0.984	1.969	5.039	085	ZTK16-20.9
	-ED0709-G1000C	△	0.709-0.744	2.126	1.000	1.260	2.205	5.472	090	ZTK16-20.9
	-ED0748-G1000C	△	0.748-0.783	2.244	1.000	1.260	2.205	5.630	095	ZTK16-20.9
	-ED0787-G1000C	△	0.787-0.823	2.362	1.000	1.260	2.205	5.748	100	ZTK16-20.9
	-ED0827-G1000C	△	0.827-0.862	2.480	1.000	1.260	2.205	6.181	105	ZTK21-25.9
	-ED0866-G1000C	△	0.866-0.902	2.598	1.000	1.260	2.205	6.339	110	ZTK21-25.9
	-ED0906-G1250C	△	0.906-0.941	2.717	1.250	1.654	2.362	6.535	115	ZTK21-25.9
-ED0945-G1250C	△	0.945-0.980	2.835	1.250	1.654	2.362	6.693	120	ZTK21-25.9	
-ED0984-G1250C	△	0.984-1.020	2.953	1.250	1.654	2.362	6.890	125	ZTK21-25.9	

▲Regular Stock △Made-to-order

ZTK05 5D

Drill bodies for 0472" -1.020" diameter drill heads

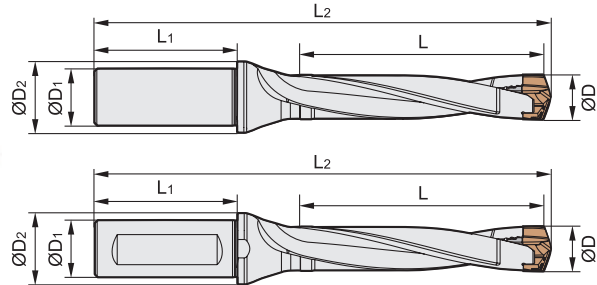


	Item	Stock	Dimension(inch)						Coupling	Wrench
			D	L	D1	D2	L1	L2		
ZTK05 Weldon shank	-ED0472-XP0625C	△	0.472-0.488	2.362	0.625	0.787	1.890	4.921	060	ZTK12-15.9
	-ED0492-XP0625C	△	0.492-0.508	2.441	0.625	0.787	1.890	5.039	060	ZTK12-15.9
	-ED0512-XP0625C	△	0.512-0.528	2.559	0.625	0.787	1.890	5.157	065	ZTK12-15.9
	-ED0531-XP0625C	△	0.531-0.547	2.677	0.625	0.787	1.890	5.276	065	ZTK12-15.9
	-ED0551-XP0625C	△	0.551-0.567	2.756	0.625	0.787	1.890	5.472	070	ZTK12-15.9
	-ED0571-XP0625C	△	0.571-0.587	2.874	0.625	0.787	1.890	5.551	070	ZTK12-15.9
	-ED0591-XP0750C	△	0.591-0.626	2.953	0.750	0.984	1.969	5.866	075	ZTK12-15.9
	-ED0630-XP0750C	△	0.630-0.665	3.150	0.750	0.984	1.969	6.142	080	ZTK16-20.9
	-ED0669-XP0750C	△	0.669-0.705	3.346	0.750	0.984	1.969	6.378	085	ZTK16-20.9
	-ED0709-XP1000C	△	0.709-0.744	3.543	1.000	1.260	2.205	6.890	090	ZTK16-20.9
	-ED0748-XP1000C	△	0.748-0.783	3.740	1.000	1.260	2.205	7.126	095	ZTK16-20.9
	-ED0787-XP1000C	△	0.787-0.823	3.937	1.000	1.260	2.205	7.402	100	ZTK16-20.9
	-ED0827-XP1000C	△	0.827-0.862	4.134	1.000	1.260	2.205	7.835	105	ZTK21-25.9
	-ED0866-XP1000C	△	0.866-0.902	4.331	1.000	1.260	2.205	8.071	110	ZTK21-25.9
	-ED0906-XP1250C	△	0.906-0.941	4.528	1.250	1.654	2.362	8.346	115	ZTK21-25.9
-ED0945-XP1250C	△	0.945-0.980	4.724	1.250	1.654	2.362	8.583	120	ZTK21-25.9	
-ED0984-XP1250C	△	0.984-1.020	4.921	1.250	1.654	2.362	8.858	125	ZTK21-25.9	
Cylindrical shank	-ED0472-G0625C	△	0.472-0.488	2.362	0.625	0.787	1.890	4.921	060	ZTK12-15.9
	-ED0492-G0625C	△	0.492-0.508	2.441	0.625	0.787	1.890	5.039	060	ZTK12-15.9
	-ED0512-G0625C	△	0.512-0.528	2.559	0.625	0.787	1.890	5.157	065	ZTK12-15.9
	-ED0531-G0625C	△	0.531-0.547	2.677	0.625	0.787	1.890	5.276	065	ZTK12-15.9
	-ED0551-G0625C	△	0.551-0.567	2.756	0.625	0.787	1.890	5.472	070	ZTK12-15.9
	-ED0571-G0625C	△	0.571-0.587	2.874	0.625	0.787	1.890	5.551	070	ZTK12-15.9
	-ED0591-G0750C	△	0.591-0.626	2.953	0.750	0.984	1.969	5.866	075	ZTK12-15.9
	-ED0630-G0750C	△	0.630-0.665	3.150	0.750	0.984	1.969	6.142	080	ZTK16-20.9
	-ED0669-G0750C	△	0.669-0.705	3.346	0.750	0.984	1.969	6.378	085	ZTK16-20.9
	-ED0709-G1000C	△	0.709-0.744	3.543	1.000	1.260	2.205	6.890	090	ZTK16-20.9
	-ED0748-G1000C	△	0.748-0.783	3.740	1.000	1.260	2.205	7.126	095	ZTK16-20.9
	-ED0787-G1000C	△	0.787-0.823	3.937	1.000	1.260	2.205	7.402	100	ZTK16-20.9
	-ED0827-G1000C	△	0.827-0.862	4.134	1.000	1.260	2.205	7.835	105	ZTK21-25.9
	-ED0866-G1000C	△	0.866-0.902	4.331	1.000	1.260	2.205	8.071	110	ZTK21-25.9
	-ED0906-G1250C	△	0.906-0.941	4.528	1.250	1.654	2.362	8.346	115	ZTK21-25.9
-ED0945-G1250C	△	0.945-0.980	4.724	1.250	1.654	2.362	8.583	120	ZTK21-25.9	
-ED0984-G1250C	△	0.984-1.020	4.921	1.250	1.654	2.362	8.858	125	ZTK21-25.9	

▲Regular Stock △Made-to-order

ZTK08 8D

Drill bodies for 0472" -1.020" diameter drill heads

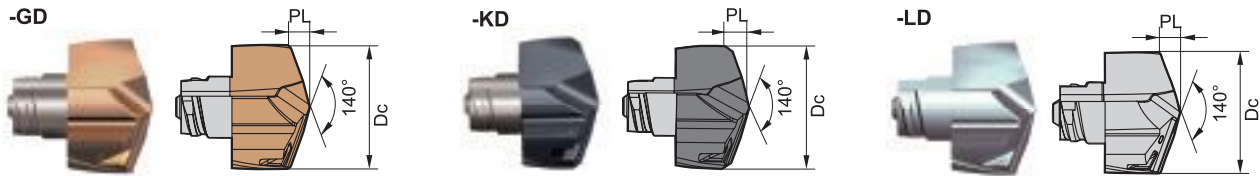


	Item	Stock	Dimension(inch)						Coupling	Wrench
			D	L	D ₁	D ₂	L ₁	L ₂		
ZTK08 Weldon shank	-ED0472-XP0625C	△	0.472-0.488	3.780	0.625	0.787	1.890	6.339	060	ZTK12-15.9
	-ED0492-XP0625C	△	0.492-0.508	3.917	0.625	0.787	1.890	6.516	060	ZTK12-15.9
	-ED0512-XP0625C	△	0.512-0.528	4.094	0.625	0.787	1.890	6.693	065	ZTK12-15.9
	-ED0531-XP0625C	△	0.531-0.547	4.272	0.625	0.787	1.890	6.870	065	ZTK12-15.9
	-ED0551-XP0625C	△	0.551-0.567	4.409	0.625	0.787	1.890	7.126	070	ZTK12-15.9
	-ED0571-XP0625C	△	0.571-0.587	4.587	0.625	0.787	1.890	7.264	070	ZTK12-15.9
	-ED0591-XP0750C	△	0.591-0.626	4.724	0.750	0.984	1.969	7.638	075	ZTK12-15.9
	-ED0630-XP0750C	△	0.630-0.665	5.039	0.750	0.984	1.969	8.031	080	ZTK16-20.9
	-ED0669-XP0750C	△	0.669-0.705	5.354	0.750	0.984	1.969	8.386	085	ZTK16-20.9
	-ED0709-XP1000C	△	0.709-0.744	5.669	1.000	1.260	2.205	9.016	090	ZTK16-20.9
	-ED0748-XP1000C	△	0.748-0.783	5.984	1.000	1.260	2.205	9.370	095	ZTK16-20.9
	-ED0787-XP1000C	△	0.787-0.823	6.299	1.000	1.260	2.205	9.764	100	ZTK16-20.9
	-ED0827-XP1000C	△	0.827-0.862	6.614	1.000	1.260	2.205	10.315	105	ZTK21-25.9
	-ED0866-XP1000C	△	0.866-0.902	6.929	1.000	1.260	2.205	10.669	110	ZTK21-25.9
	-ED0906-XP1250C	△	0.906-0.941	7.244	1.250	1.654	2.362	11.063	115	ZTK21-25.9
	-ED0945-XP1250C	△	0.945-0.980	7.559	1.250	1.654	2.362	11.417	120	ZTK21-25.9
-ED0984-XP1250C	△	0.984-1.020	7.874	1.250	1.654	2.362	11.811	125	ZTK21-25.9	
Cylindrical shank	-ED0472-G0625C	△	0.472-0.488	3.780	0.625	0.787	1.890	6.339	060	ZTK12-15.9
	-ED0492-G0625C	△	0.492-0.508	3.917	0.625	0.787	1.890	6.516	060	ZTK12-15.9
	-ED0512-G0625C	△	0.512-0.528	4.094	0.625	0.787	1.890	6.693	065	ZTK12-15.9
	-ED0531-G0625C	△	0.531-0.547	4.272	0.625	0.787	1.890	6.870	065	ZTK12-15.9
	-ED0551-G0625C	△	0.551-0.567	4.409	0.625	0.787	1.890	7.126	070	ZTK12-15.9
	-ED0571-G0625C	△	0.571-0.587	4.587	0.625	0.787	1.890	7.264	070	ZTK12-15.9
	-ED0591-G0750C	△	0.591-0.626	4.724	0.750	0.984	1.969	7.638	075	ZTK12-15.9
	-ED0630-G0750C	△	0.630-0.665	5.039	0.750	0.984	1.969	8.031	080	ZTK16-20.9
	-ED0669-G0750C	△	0.669-0.705	5.354	0.750	0.984	1.969	8.386	085	ZTK16-20.9
	-ED0709-G1000C	△	0.709-0.744	5.669	1.000	1.260	2.205	9.016	090	ZTK16-20.9
	-ED0748-G1000C	△	0.748-0.783	5.984	1.000	1.260	2.205	9.370	095	ZTK16-20.9
	-ED0787-G1000C	△	0.787-0.823	6.299	1.000	1.260	2.205	9.764	100	ZTK16-20.9
	-ED0827-G1000C	△	0.827-0.862	6.614	1.000	1.260	2.205	10.315	105	ZTK21-25.9
	-ED0866-G1000C	△	0.866-0.902	6.929	1.000	1.260	2.205	10.669	110	ZTK21-25.9
	-ED0906-G1250C	△	0.906-0.941	7.244	1.250	1.654	2.362	11.063	115	ZTK21-25.9
	-ED0945-G1250C	△	0.945-0.980	7.559	1.250	1.654	2.362	11.417	120	ZTK21-25.9
-ED0984-G1250C	△	0.984-1.020	7.874	1.250	1.654	2.362	11.811	125	ZTK21-25.9	

▲Regular Stock △Made-to-order

EDC drill heads

Diameter from 0.472" to 1.020"



Item	Grade	Dimension(inch)		Compatible drill body	Coupling	Wrench
	KDG3013	Dc	PL			
EDC1200-060-GD/KD/LD	▲	0.472	0.086	ZTK015-ED0472-□□ ZTK03-ED0472-□□ ZTK05-ED0472-□□ ZTK08-ED0472-□□	060	ZTK12-15.9
EDC1210-060-GD/KD/LD	△	0.476	0.087			
EDC1220-060-GD/KD/LD	△	0.480	0.087			
EDC1230-060-GD/KD/LD	△	0.484	0.088			
EDC1240-060-GD/KD/LD	△	0.488	0.089			
EDC1250-060-GD/KD/LD	▲	0.492	0.089			
EDC1260-060-GD/KD/LD	△	0.496	0.090			
EDC1270-060-GD/KD/LD	△	0.500	0.091			
EDC1280-060-GD/KD/LD	△	0.504	0.092			
EDC1290-060-GD/KD/LD	△	0.508	0.093			
EDC1300-065-GD/KD/LD	▲	0.512	0.093	ZTK015-ED0512-□□ ZTK03-ED0512-□□ ZTK05-ED0512-□□ ZTK08-ED0512-□□	065	ZTK12-15.9
EDC1310-065-GD/KD/LD	△	0.516	0.094			
EDC1320-065-GD/KD/LD	△	0.520	0.094			
EDC1330-065-GD/KD/LD	△	0.524	0.095			
EDC1340-065-GD/KD/LD	△	0.528	0.096			
EDC1350-065-GD/KD/LD	▲	0.531	0.097			
EDC1360-065-GD/KD/LD	△	0.535	0.097			
EDC1370-065-GD/KD/LD	△	0.539	0.098			
EDC1380-065-GD/KD/LD	△	0.543	0.099			
EDC1390-065-GD/KD/LD	△	0.547	0.100			
EDC1400-070-GD/KD/LD	▲	0.551	0.100	ZTK015-ED0551-□□ ZTK03-ED0551-□□ ZTK05-ED0551-□□ ZTK08-ED0551-□□	070	ZTK12-15.9
EDC1410-070-GD/KD/LD	△	0.555	0.101			
EDC1420-070-GD/KD/LD	△	0.559	0.102			
EDC1430-070-GD/KD/LD	△	0.563	0.102			
EDC1440-070-GD/KD/LD	△	0.567	0.103			
EDC1450-070-GD/KD/LD	▲	0.571	0.104			
EDC1460-070-GD/KD/LD	△	0.575	0.105			
EDC1470-070-GD/KD/LD	△	0.579	0.105			
EDC1480-070-GD/KD/LD	△	0.583	0.106			
EDC1490-070-GD/KD/LD	△	0.587	0.107			

ZTK Interchangeable Solid Carbide Drills

Item	Grade	Dimension (inch)		Compatible drill body	Coupling	Wrench			
	KDG3013	Dc	PL						
EDC1500-075-GD/KD/LD	▲	0.591	0.107	ZTK015-ED0591-□□ ZTK03-ED0591-□□ ZTK05-ED0591-□□ ZTK08-ED0591-□□	075	ZTK12-15.9			
EDC1510-075-GD/KD/LD	△	0.594	0.108						
EDC1520-075-GD/KD/LD	△	0.598	0.109						
EDC1530-075-GD/KD/LD	△	0.602	0.109						
EDC1540-075-GD/KD/LD	△	0.606	0.110						
EDC1550-075-GD/KD/LD	▲	0.610	0.111						
EDC1560-075-GD/KD/LD	△	0.614	0.112						
EDC1570-075-GD/KD/LD	△	0.618	0.113						
EDC1580-075-GD/KD/LD	△	0.622	0.113						
EDC15875-075-GD/KD/LD	△	0.625	0.114						
EDC1590-075-GD/KD/LD	△	0.626	0.114						
EDC1600-080-GD/KD/LD	▲	0.630	0.115				ZTK015-ED0630-□□ ZTK03-ED0630-□□ ZTK05-ED0630-□□ ZTK08-ED0630-□□	080	ZTK16-20.9
EDC1610-080-GD/KD/LD	△	0.634	0.115						
EDC1620-080-GD/KD/LD	△	0.638	0.116						
EDC1630-080-GD/KD/LD	△	0.642	0.117						
EDC1640-080-GD/KD/LD	△	0.646	0.117						
EDC1650-080-GD/KD/LD	▲	0.650	0.118						
EDC1660-080-GD/KD/LD	△	0.654	0.119						
EDC1670-080-GD/KD/LD	△	0.657	0.120						
EDC1680-080-GD/KD/LD	△	0.661	0.120						
EDC1690-080-GD/KD/LD	△	0.665	0.121						
EDC1700-085-GD/KD/LD	▲	0.669	0.122	ZTK015-ED0669-□□ ZTK03-ED0669-□□ ZTK05-ED0669-□□ ZTK08-ED0669-□□	085				
EDC1710-085-GD/KD/LD	△	0.673	0.122						
EDC1720-085-GD/KD/LD	△	0.677	0.123						
EDC1730-085-GD/KD/LD	△	0.681	0.124						
EDC1740-085-GD/KD/LD	△	0.685	0.124						
EDC1750-085-GD/KD/LD	▲	0.689	0.125						
EDC1760-085-GD/KD/LD	△	0.693	0.126						
EDC1770-085-GD/KD/LD	△	0.697	0.127						
EDC1780-085-GD/KD/LD	△	0.701	0.128						
EDC1790-085-GD/KD/LD	△	0.705	0.128						

▲Regular Stock △Made-to-order

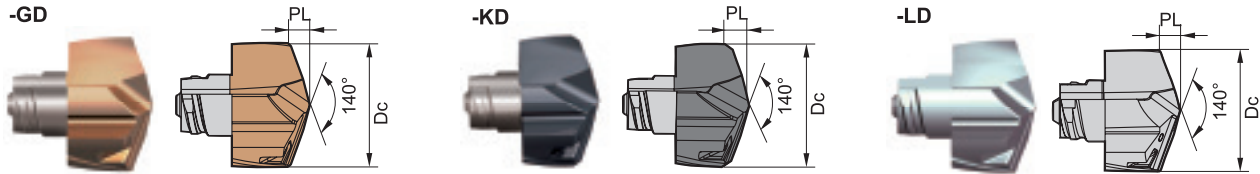
Workpiece materials application table

○Very Suitable for ○Suitable for

Workpiece materials										
Soft steel HB≤180	Carbon steel Alloy steel	Pre-hardened steel, Hardened steel			Stainless steel	Cast iron	Nodular cast iron	Aluminum alloy	Copper alloy	Heat resistant alloy
		~40HRC	~50HRC	~60HRC						
○	○	○			○	○	○			

EDC drill heads

Diameter from 0.472" to 1.020"



Item	Grade	Dimension(inch)		Compatible drill body	Coupling	Wrench
	KDG3013	Dc	PL			
EDC1800-090-GD/KD/LD	▲	0.709	0.129	ZTK015-ED0709-□□ ZTK03-ED0709-□□ ZTK05-ED0709-□□ ZTK08-ED0709-□□	090	
EDC1810-090-GD/KD/LD	△	0.713	0.130			
EDC1820-090-GD/KD/LD	△	0.717	0.130			
EDC1830-090-GD/KD/LD	△	0.720	0.131			
EDC1840-090-GD/KD/LD	△	0.724	0.132			
EDC1850-090-GD/KD/LD	▲	0.728	0.132			
EDC1860-090-GD/KD/LD	△	0.732	0.133			
EDC1870-090-GD/KD/LD	△	0.736	0.134			
EDC1880-090-GD/KD/LD	△	0.740	0.135			
EDC1890-090-GD/KD/LD	△	0.744	0.135			
EDC1900-095-GD/KD/LD	▲	0.748	0.136			
EDC1905-095-GD/KD/LD	▲	0.750	0.136			
EDC1910-095-GD/KD/LD	△	0.752	0.137			
EDC1920-095-GD/KD/LD	△	0.756	0.137			
EDC1930-095-GD/KD/LD	△	0.760	0.138			
EDC1940-095-GD/KD/LD	△	0.764	0.139			
EDC1950-095-GD/KD/LD	▲	0.768	0.140			
EDC1960-095-GD/KD/LD	△	0.772	0.140			
EDC1970-095-GD/KD/LD	△	0.776	0.141			
EDC1980-095-GD/KD/LD	△	0.780	0.142			
EDC1990-095-GD/KD/LD	△	0.783	0.143			
EDC2000-100-GD/KD/LD	▲	0.787	0.143	ZTK015-ED0787-□□ ZTK03-ED0787-□□ ZTK05-ED0787-□□ ZTK08-ED0787-□□	100	
EDC2010-100-GD/KD/LD	△	0.791	0.144			
EDC2020-100-GD/KD/LD	△	0.795	0.144			
EDC2030-100-GD/KD/LD	△	0.799	0.145			
EDC2040-100-GD/KD/LD	△	0.803	0.146			
EDC2050-100-GD/KD/LD	▲	0.807	0.147			
EDC2060-100-GD/KD/LD	△	0.811	0.148			
EDC2070-100-GD/KD/LD	△	0.815	0.148			
EDC2080-100-GD/KD/LD	△	0.819	0.149			
EDC2090-100-GD/KD/LD	△	0.823	0.150			

ZTK Interchangeable Solid Carbide Drills

Item	Grade	Dimension(inch)		Compatible drill body	Coupling	Wrench
	KDG3013	Dc	PL			
EDC2100-105-GD/KD/LD	▲	0.827	0.150	ZTK015-ED0827-□□ ZTK03-ED0827-□□ ZTK05-ED0827-□□ ZTK08-ED0827-□□	105	
EDC2110-105-GD/KD/LD	△	0.831	0.151			
EDC2120-105-GD/KD/LD	△	0.835	0.152			
EDC2130-105-GD/KD/LD	△	0.839	0.153			
EDC2140-105-GD/KD/LD	△	0.843	0.153			
EDC2150-105-GD/KD/LD	▲	0.846	0.154			
EDC2160-105-GD/KD/LD	△	0.850	0.155			
EDC2170-105-GD/KD/LD	△	0.854	0.156			
EDC2180-105-GD/KD/LD	△	0.858	0.156			
EDC2190-105-GD/KD/LD	△	0.862	0.157			
EDC2200-110-GD/KD/LD	▲	0.866	0.157	ZTK015-ED0866-□□ ZTK03-ED0866-□□ ZTK05-ED0866-□□ ZTK08-ED0866-□□	110	ZTK21-25.9
EDC2210-110-GD/KD/LD	△	0.870	0.158			
EDC2220-110-GD/KD/LD	△	0.874	0.159			
EDC2230-110-GD/KD/LD	△	0.878	0.160			
EDC2240-110-GD/KD/LD	△	0.882	0.161			
EDC2250-110-GD/KD/LD	▲	0.886	0.161			
EDC2260-110-GD/KD/LD	△	0.890	0.162			
EDC2270-110-GD/KD/LD	△	0.894	0.163			
EDC2280-110-GD/KD/LD	△	0.898	0.163			
EDC2290-100-GD/KD/LD	△	0.902	0.164			
EDC2300-105-GD/KD/LD	▲	0.906	0.165	ZTK015-ED0906-□□ ZTK03-ED0906-□□ ZTK05-ED0906-□□ ZTK08-ED0906-□□	115	
EDC2310-105-GD/KD/LD	△	0.909	0.165			
EDC2320-115-GD/KD/LD	△	0.913	0.166			
EDC2330-115-GD/KD/LD	△	0.917	0.167			
EDC2340-115-GD/KD/LD	△	0.921	0.168			
EDC2350-115-GD/KD/LD	▲	0.925	0.168			
EDC2360-115-GD/KD/LD	△	0.929	0.169			
EDC2370-115-GD/KD/LD	△	0.933	0.170			
EDC2380-115-GD/KD/LD	△	0.937	0.170			
EDC2390-115-GD/KD/LD	△	0.941	0.171			

▲Regular Stock △Made-to-order

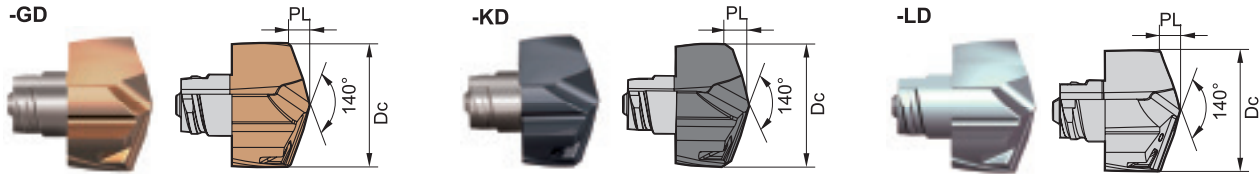
Workpiece materials application table

○Very Suitable for ○Suitable for

Workpiece materials										
Soft steel HB≤180	Carbon steel Alloy steel	Pre-hardened steel, Hardened steel			Stainless steel	Cast iron	Nodular cast iron	Aluminum alloy	Copper alloy	Heat resistant alloy
		~40HRC	~50HRC	~60HRC						
○	○	○			○	○	○			

EDC drill heads

Diameter from 0.472" to 1.020"



Item	Grade	Dimension(inch)		Compatible drill body	Coupling	Wrench		
	KDG3013	Dc	PL					
EDC2400-120-GD/KD/LD	▲	0.945	0.172	ZTK015-ED0945-□□ ZTK03-ED0945-□□ ZTK05-ED0945-□□ ZTK08-ED0945-□□	120	ZTK21-25.9		
EDC2410-120-GD/KD/LD	△	0.949	0.172					
EDC2420-120-GD/KD/LD	△	0.953	0.173					
EDC2430-120-GD/KD/LD	△	0.957	0.174					
EDC2440-120-GD/KD/LD	△	0.961	0.175					
EDC2450-120-GD/KD/LD	▲	0.965	0.176					
EDC2460-120-GD/KD/LD	△	0.969	0.176					
EDC2470-120-GD/KD/LD	△	0.972	0.177					
EDC2480-120-GD/KD/LD	△	0.976	0.178					
EDC2490-120-GD/KD/LD	△	0.980	0.178					
EDC2500-125-GD/KD/LD	▲	0.984	0.179				ZTK015-ED0984-□□ ZTK03-ED0984-□□ ZTK05-ED0984-□□ ZTK08-ED0984-□□	125
EDC2510-125-GD/KD/LD	△	0.988	0.180					
EDC2520-125-GD/KD/LD	△	0.992	0.180					
EDC2530-125-GD/KD/LD	△	0.996	0.181					
EDC2540-125-GD/KD/LD	△	1.000	0.182					
EDC2550-125-GD/KD/LD	▲	1.004	0.183					
EDC2560-125-GD/KD/LD	△	1.008	0.183					
EDC2570-125-GD/KD/LD	△	1.012	0.184					
EDC2580-125-GD/KD/LD	△	1.016	0.185					
EDC2590-125-GD/KD/LD	△	1.020	0.185					

▲Regular Stock △Made-to-order

▶ Workpiece materials application table ○Very Suitable for ○Suitable for

Workpiece materials										
Soft steel HB≤180	Carbon steel Alloy steel	Pre-hardened steel, Hardened steel			Stainless steel	Cast iron	Nodular cast iron	Aluminum alloy	Copper alloy	Heat resistant alloy
		~40HRC	~50HRC	~60HRC						
○	○	○	○	○	○	○	○			

★ Application and tolerance

Geometry	-GD				-KD				-LD			
Workpiece materials	P、M、K				K				P、M			
L/D	1.5D、3D、5D		8D		1.5D、3D、5D		8D		1.5D、3D、5D		8D	
	0.472-0.709 (inch)	0.709-1.024 (inch)	0.472-0.709 (inch)	0.709-1.024 (inch)	0.472-0.709 (inch)	0.709-1.024 (inch)	0.472-0.709 (inch)	0.709-1.024 (inch)	0.472-0.709 (inch)	0.709-1.024 (inch)	0.472-0.709 (inch)	0.709-1.024 (inch)
Tolerance of hole (inch)	0/+0.0017	0/+0.0020	0/+0.0027	0/+0.0033	0/+0.0017	0/+0.0020	0/+0.0027	0/+0.0033	0/+0.0017	0/+0.0020	0/+0.0027	0/+0.0033

★ Recommended cutting parameters

Workpiece materials	Soft steel HB ≤ 180		Carbon steel Alloy steel ~ 30HRC		Pre-hardened steel ~ 40HRC		Stainless steel		Cast iron		Modular cast iron	
Cutting speed	260-500SFPM		260-500SFPM		160-260SFPM		160-260SFPM		260-500SFPM		200-400SFPM	
Diameter inch	Revolution speed min ⁻¹	Feed rate inch/r	Revolution speed min ⁻¹	Feed rate inch/r	Revolution speed min ⁻¹	Feed rate inch/r	Revolution speed min ⁻¹	Feed rate inch/r	Revolution speed min ⁻¹	Feed rate inch/r	Revolution speed min ⁻¹	Feed rate inch/r
0.472"	3200	0.008~0.012	3200	0.008~0.012	1900	0.008~0.012	1600	0.005~0.008	3200	0.008~0.012	2400	0.008~0.012
0.551"	2700	0.009~0.014	2700	0.009~0.014	1600	0.009~0.014	1300	0.005~0.009	2700	0.009~0.014	2100	0.009~0.014
0.630"	2400	0.010~0.014	2400	0.010~0.014	1400	0.010~0.014	1200	0.006~0.010	2400	0.010~0.014	1800	0.010~0.014
0.709"	2100	0.011~0.015	2100	0.011~0.015	1200	0.011~0.015	1050	0.006~0.011	2100	0.011~0.015	1600	0.011~0.015
0.787"	1900	0.012~0.016	1900	0.012~0.016	1100	0.012~0.016	950	0.006~0.012	1900	0.012~0.016	1400	0.012~0.016
0.984"	1500	0.013~0.017	1500	0.013~0.017	900	0.013~0.017	700	0.007~0.013	1500	0.013~0.017	1100	0.013~0.017

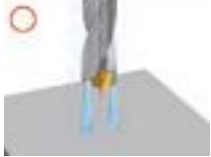


Please note: it is necessary to refer to the following criteria to set the feed rate in accordance with the increasing drill head diameters (1.5D→3D→5D→8D)

Criteria: for 1.5D, 3D, 5D=80% or below, 8D=60% or below.

Cooling: it is recommended to adopt internal cooling or external cooling drilling no deeper than 2D. Dry cutting is prohibited.

ZTK Interchangeable Solid Carbide Drills

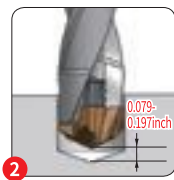
★ Cooling requirement

Internal coolant supply	External coolant supply (Drilling depth <math>< 2D</math>)	Prohibit dry cutting
		

★ User guide for drills with 8D drill bodies



1 Pre-drilling with standard 1.5xD drills, hole depth: 0.5D~1.5D;



2 Drill to 2~5mm above the pre-drilled hole with low cutting speed, turn on the internal cooling supply and then hover for 2 to 3 seconds.

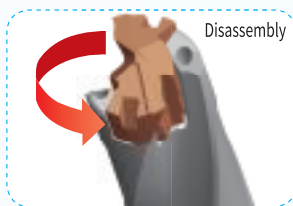


3 Apply normal cutting data in drilling operation

Assembly instructions:

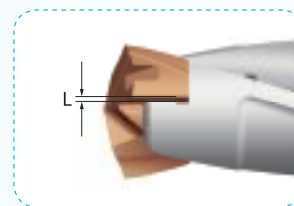


Assembly



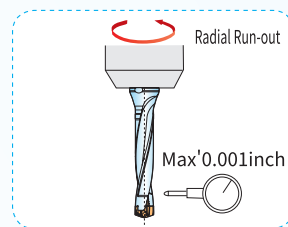
Disassembly

Insert the head into the shank, and tighten it with a wrench. When removing, turn the wrench in the opposite direction.

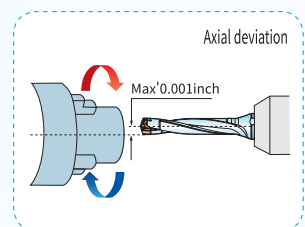


There will be a gap on radial direction after being tightened with a wrench. (The gap will be automatically eliminated in cutting)

Maximum deviation in assembly:

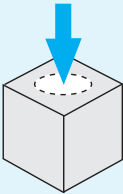
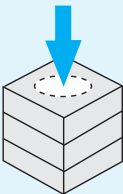
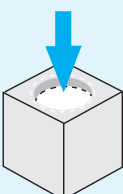
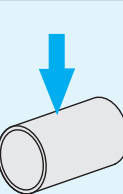
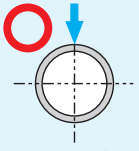
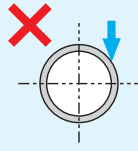


Max' 0.001inch

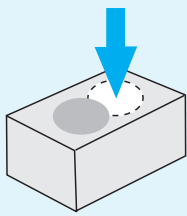
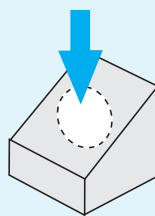
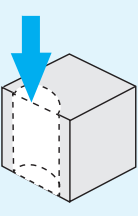
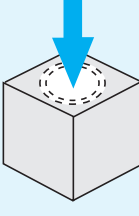


Max' 0.001inch

★ Compatible workpiece shape

	Drill type	shape machining
Plane surface		<ol style="list-style-type: none"> For stainless steel machining, the feed speed is preferably set up to be below 1.5mm/rev from entrance to the 0.5D 0.5D depth position; To achieve smooth chip control or removal, internal cooling is recommended. The availability of both internal and external coolants is recommended in machining stainless steel materials.
Overlapping plate		<ol style="list-style-type: none"> In order to prevent misalignment, it is necessary to strengthen the fixation of the workpiece during the processing of overlapping plates.
Concave hole		<ol style="list-style-type: none"> When interrupted cutting happens, before peripheral edge entering into the hole entirely, please set feed rate half below the recommended parameters. Adopt micro-adjustment method when long chipping occurs.
Cylindrical surface hole		<ol style="list-style-type: none"> It can be used for hole machining on the central axis of the shaft The curve part not recommend. <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Center part machining</p> </div> <div style="text-align: center;">  <p>Curve part machining</p> </div> </div>

★ Drilling Limitations

Drill type	Overlapped hole	Slope	Half-section	Reaming
workpiece shape				



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