

CLASSIFICATION

E
BORING BARS

Name of Tool Holder	DMIN Minimum Cutting Diameter	Features	KAPR=75°		KAPR=91°		KAPR=93°	
MICRO-MINI TWIN Boring Bars 	φ2.2 — φ8.2	<ul style="list-style-type: none"> ● Solid carbide type with two cutting edges. ● Continuous cutting from boring to facing. ● With or without a chip breaker. 						
MICRO-MINI Boring Bars 	φ3.2 — φ5.2	<ul style="list-style-type: none"> ● Solid carbide type (Single cutting edges). ● l/d is 5 times the diameter. ● Cutting edge can be shaped according to the application. Thus, it covers a wide cutting range (threading, grooving, copying, etc.). 						
MICRO-DEX Boring Bars (Carbide Shank) 	φ5 — φ8	<ul style="list-style-type: none"> ● 7° positive insert. ● Carbide shank type. ● Easy-to-use tool geometries. ● Suitable for small workpieces. ● l/d is 5 times the diameter. 						
F Type Boring Bars 	φ5.8 — φ40	<ul style="list-style-type: none"> ● 11° positive insert. ● Screw-on type and Clamp-on type. ● l/d is 3 to 5 times the diameter. ● FSWL type is 7° positive insert. 						
DIMPLE BAR 	φ10 — φ40	<ul style="list-style-type: none"> ● 5°, 7°, 11° positive insert. ● Excellent vibration resistance due to a light dimple head. ● l/d is 3 to 5 times the diameter (Carbide shank is 3 to 8 times the diameter). 						
S Type Boring Bars 	φ11 — φ50	<ul style="list-style-type: none"> ● ISO standard. ● 7° positive insert. ● Screw-on type. ● l/d is 3 to 5 times the diameter (Carbide shank is 7 times the diameter). 						
AL Type Boring Bars (For Aluminium Alloy) 	φ20 — φ32	<ul style="list-style-type: none"> ● Suitable for non-ferrous metal. ● 20° positive insert. ● Screw-on type. ● l/d is 6 times the diameter. ● Excellent vibration resistance. 						
P Type Boring Bars 	φ20 — φ70	<ul style="list-style-type: none"> ● ISO standard. ● Economical negative insert. ● Lever lock type, and pin lock type. ● l/d is 3 times the diameter. 						
DOUBLE CLAMP DIMPLE BAR 	φ32 — φ50	<ul style="list-style-type: none"> ● Economical negative insert. ● Single action type. ● Excellent vibration resistance due to a light dimple head. (With coolant hole.) ● l/d is 3 to 4 times the diameter. 						
D Type Boring Head 	φ40 — φ60	<ul style="list-style-type: none"> ● Economical negative insert. ● Lever lock type. ● Exchangeable head type. 						
M Type Boring Bars 	φ63	<ul style="list-style-type: none"> ● Negative trigon shape insert. ● Double clamp type. ● l/d is 3 times the diameter. 						

Note 1) Holders with blue colour symbol have an anti-vibration carbide shank. (For Micro-dex boring bars, carbide shank only.)
 Note 2) l/d represents the ratio of the projection length L to the cutting edge and the shank diameter d.