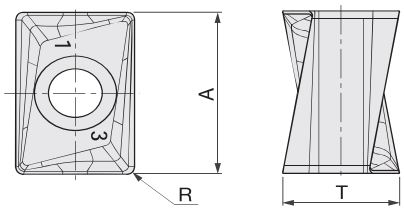
Inserts



Cat. No.	Accuracy	Honing	Stock Coated AH725	Stock Coated AH120	Stock Coated AH140	Dimensions (in) A	Dimensions (in) T	Dimensions (in) R	Cutter
LQMU110704PNER-MJ	M	with	●	●	●	.433	.327	.016	EPQ11 TPQ11
LQMU110708PNER-MJ	M	with	●	●	●	.433	.327	.031	
LQMU110716PNER-MJ	M	with	●	●	●	.433	.327	.063	
LQMU180804PNER-MJ	M	with	●	●	●	.689	.433	.016	TPQ18
LQMU180808PNER-MJ	M	with	●	●	●	.689	.433	.031	
LQMU180816PNER-MJ	M	with	●	●	●	.689	.433	.063	
LQMU180824PNER-MJ	M	with	●	●	●	.689	.433	.094	

Bore type Components

Description		Replacement Parts Cat. No.	
Applicable cutter		TPQ11R...	TPQ18R...
Clamping Screw		CSTB-3.5L115	SR14-591
Wrench	Torx Bit	BLDT10/S7	BT15S
	Grip	SW6-SD	H-TBS
Mono block type substitution wrench		T-10D	T-15T

Standard cutting conditions

Work Material	Hardness HB	Grades	Cutting Speed *Vc* (SFM)	Feed per tooth *fz* (ipt)
Low carbon steel (1018, 8620 etc.)	~ 200	AH725	330 - 800	.004 - .010
High carbon steel (1045, 1055 etc.)	200 ~ 300		330 - 750	.004 - .008
Alloyed steel (4140, 4340 etc.)	500 ~ 980			
Tool steel (H13, D2 etc.)	~ 300		330 - 600	
Stainless steel (304, 316 etc.)	-	AH140	300 - 600	.004 - .010
Grey cast iron (CLASS 25-40 etc.)	500 ~ 800	AH120	450 - 800	.004 - .010
Ductile cast iron (65-45-12 etc.)				
Heat-resisting alloy (Ti-6AL-4V, Inconel 718 etc.)	-	AH725	65 - 160	.003 - .008

· To remove excessive chip accumulation use an air blast.
· When cutting interrupted surfaces like a casting skin, the cutting feed (fz) should be set below the values shown in the above table.
· Tool overhang should be minimized. When machining with long overhang applications the tool tends to chatter. Please reduce the feed rate fz.
· Cutting conditions are limited by machine power and material rigidity. When the cutting width or depth is large, set Vc and fz below the recommended values and check the machine vibration and spindle load.

● : Stocked items.

Relating pages
Technical Reference (14–1)