

Outstanding 80,000 min⁻¹ with Nakanishi's smallest-ever diameter of $\phi 15.875$ mm!

Straight type motor spindle for CNC Automatic Lathe

BM-1580RA

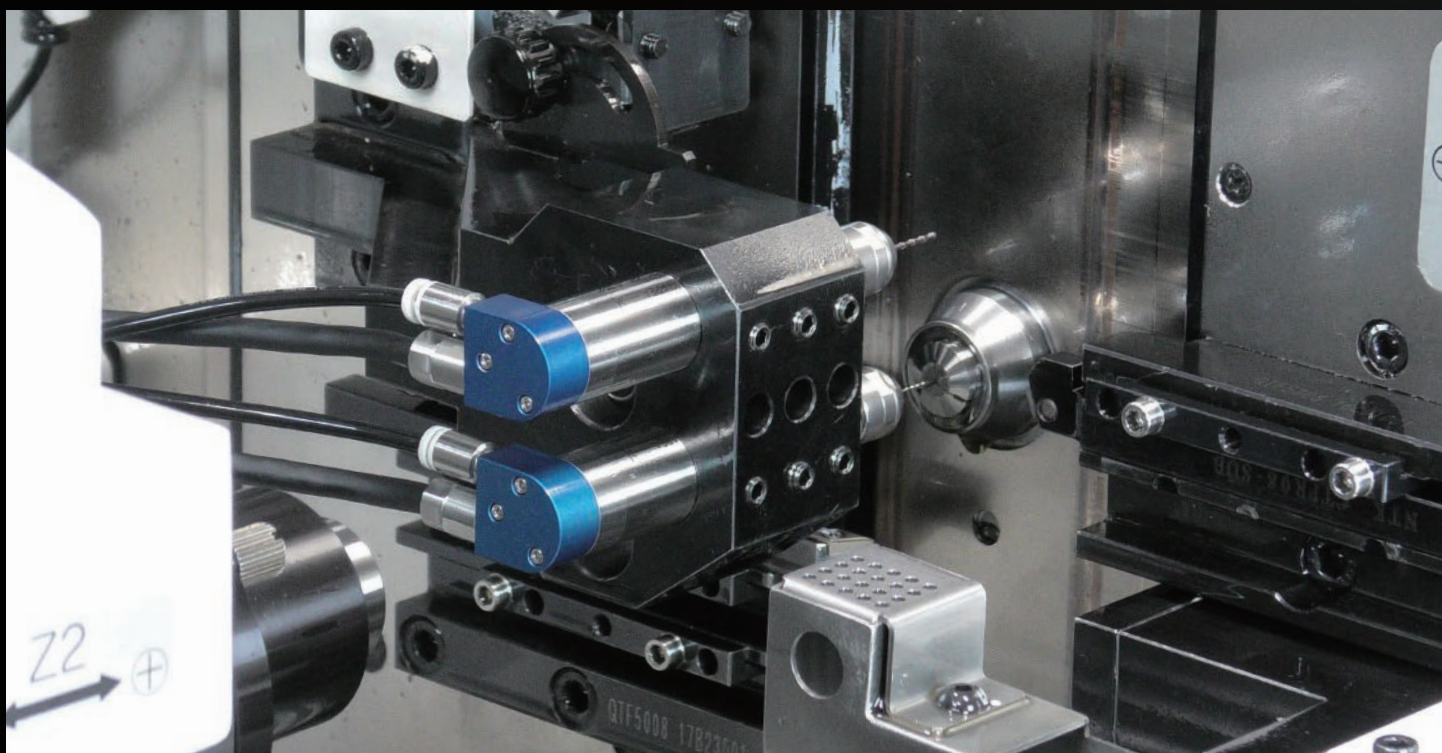
For use with $\phi 0.5$ - $\phi 4.0$ mm diameter tools

This product is a motor spindle that achieves the smallest diameter in Nakanishi history at $\phi 15.875$ mm.

Compatible with Sliding Headstock Type Automatic CNC Lathe, it excels in fine precision machining at speeds of up to 80,000 min⁻¹.



Shown in actual size



Mounted on Sliding Headstock Type Automatic CNC Lathe: CITIZEN MACHINERY CO., LTD. Cincom R04

Machining data

■ Drill

Workpiece	Tool	Hole depth [mm]	Cutting speed [m/min]	Motor speed [min ⁻¹]	Feed per rev. [mm/rev]	Feed rate [mm/min]	Load meter
SUS304	ATOMADR $\phi 0.5$	2 0.1 mm/step	57	30,000	0.005	150	Green 3

Specifications

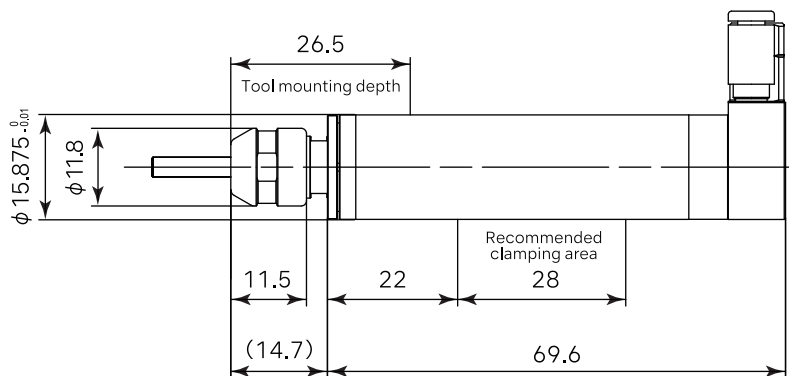
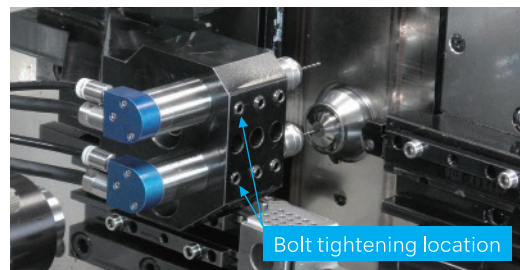
Code No. : 7945

Model : BM-1580RA

For installation on CITIZEN Cincom R01/R04

Tighten the clamping bolt only at the location shown in the figure below on the $\phi 15.875$ sleeve holder (within the CLAMPING AREA).

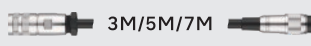
[Recommended tightening torque (M5) : 0.7 N · m]



O.D.	Motor speed	Max. power	Spindle accuracy	Net weight
$\phi 15.875$ mm	80,000 min ⁻¹	115 W	Within 1 μ m	140 g
Standard equipment and accessories	Collet nut (CHN-A) / Wrench (8 × 5) · (9 × 11) : 1 pc. each *Collet is sold separately.			
Applicable Sliding Headstock Type Automatic CNC Lathe	CITIZEN MACHINERY CO., LTD. Cincom R01 / R04			

*Cord length: 0.5 m

Combination example

Collet	Motor spindle	Motor cord	Controller	Air line kit
				
CHA $\phi 0.5 - \phi 4.0$ mm	BM-1580RA	EMCD-3000i-3M/5M/7M	E3000i CONTROLLER	AL-C1204

*Compatible controllers:
S/Ns starting with A-Z

*Supply cooling air

Machining data

■ Drill

Workpiece	Tool	Hole depth [mm]	Cutting speed [m/min]	Motor speed [min ⁻¹]	Feed/rev. [mm/rev]	Feed rate [mm/min]	Load meter
A5052 (Aluminum alloy)	ATOM ADR $\phi 1.5$	6 3 mm/step	188	40,000	0.020	800	Yellow 2
SUS304 (Stainless steel)	ATOM ADR $\phi 0.8$	4 0.2 mm/step	75	30,000	0.005	150	Green 3

■ End mill

Workpiece	Tool	Cutting speed [m/min]	Motor speed [min ⁻¹]	Feed per blade [mm/tooth]	Feed rate [mm/min]	Depth of cut $A_p \times A_e$ [mm]	Load meter
A5052 (Aluminum alloy)	NSTOOL CO., LTD. MX230 $\phi 2$	377	60,000	0.025	3,000	0.05 × 1.5	Green 1
SUS304 (Stainless steel)	NSTOOL CO., LTD. MX230 $\phi 1$	126	40,000	0.005	400	0.05 × 0.8	Green 1



NAKANISHI INC.

Headquarters

700 Shimohinata, Kanuma, Tochigi 322-8666, Japan
TEL : +81-289-64-3520 / FAX : +81-289-62-1135

*Specifications and design are subject to change without notice.

en.nakanishi-spindle.com
NAKANISHI INC. 2026

PR-K432E Ver.1 2026-03-27 XXX.NX [XXX]

