

E30001



NAKANISHI INC.

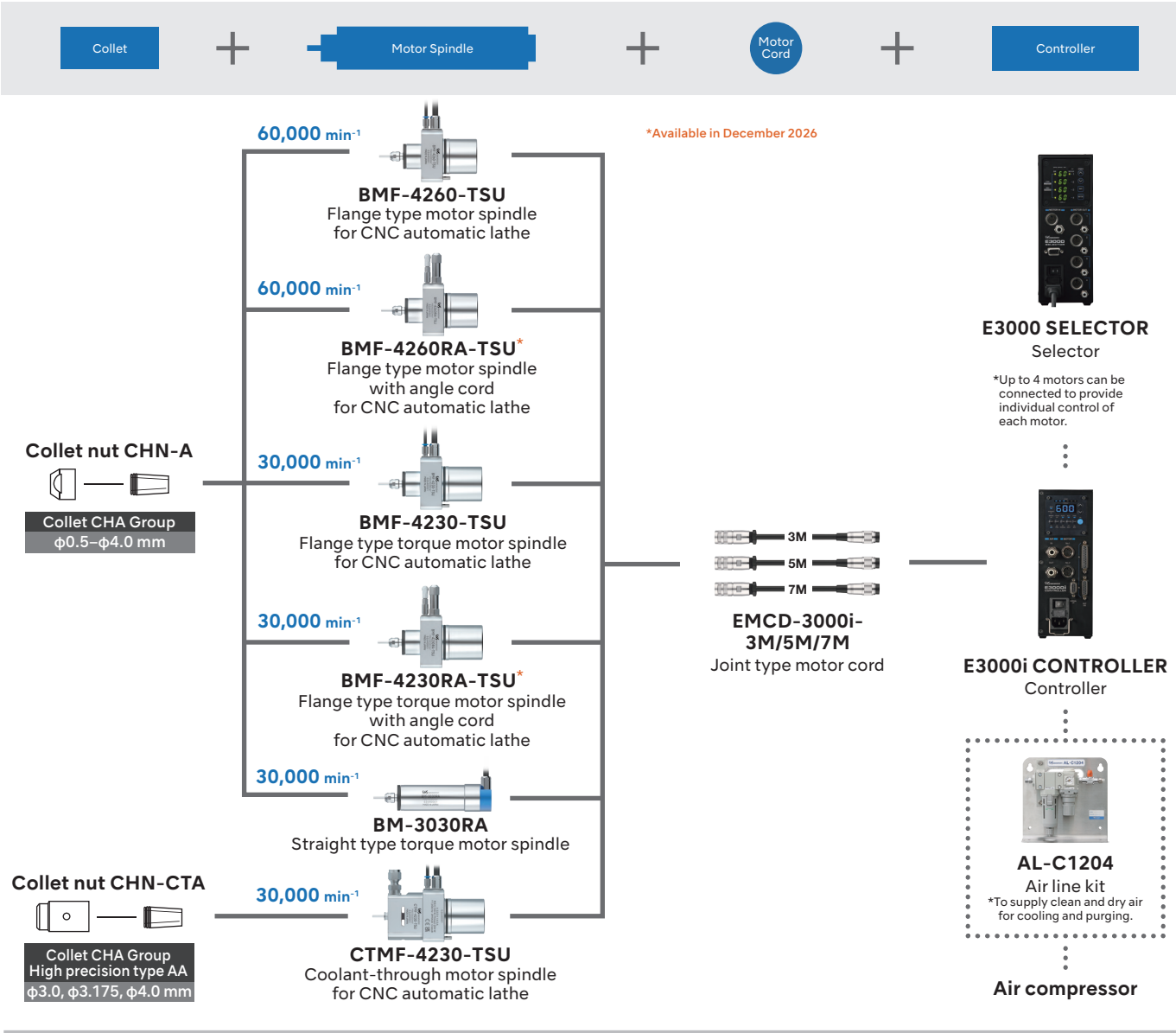
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en.nakanishi-spindle.com
PR-K441E Ver.1 2026-09-08 003. YP 970

*Specifications and design are subject to change without notice.



E3000i Series System Chart

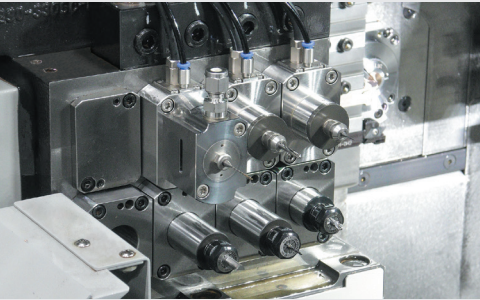


Features of Motor Spindle

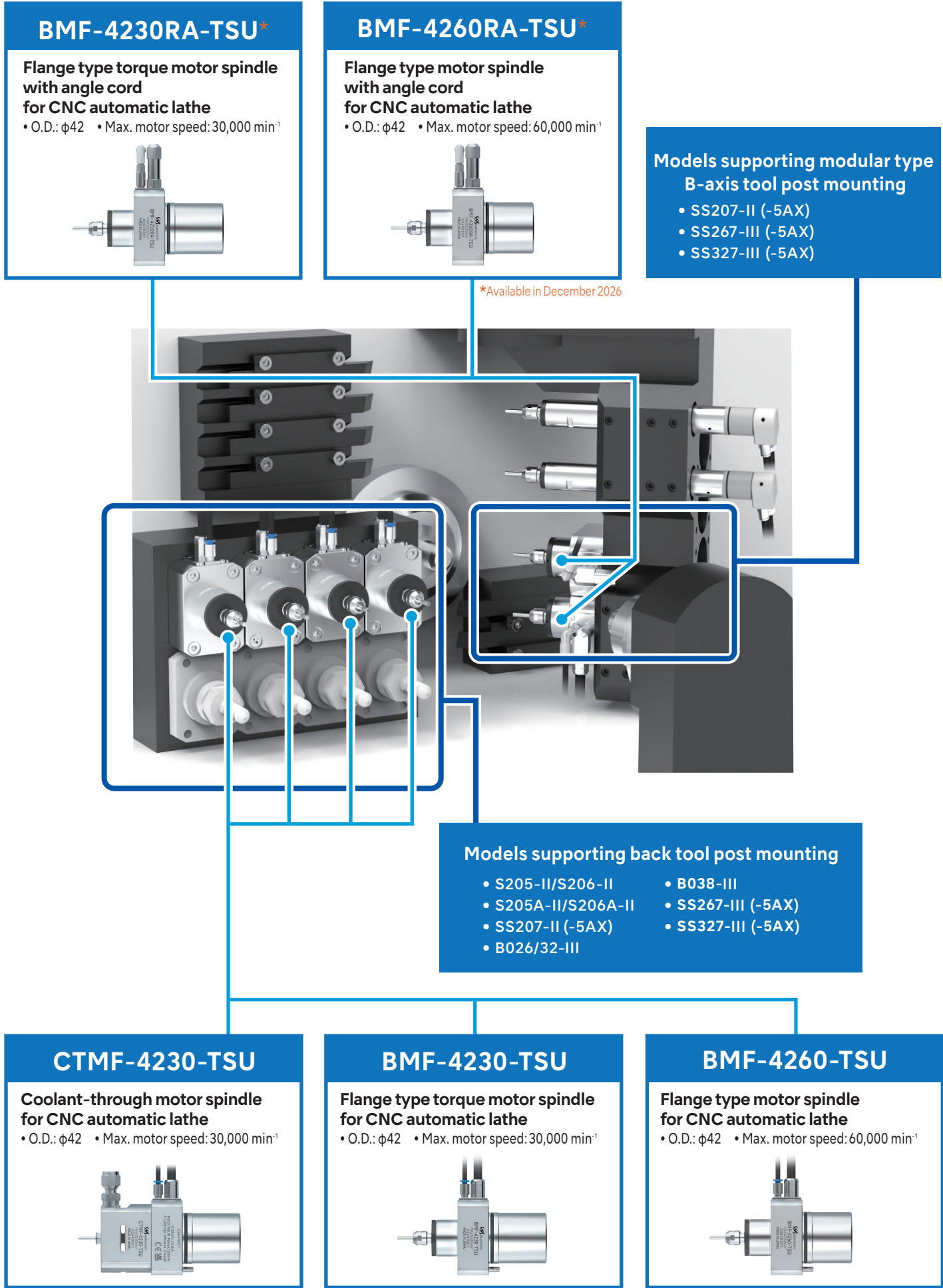
- **Various control functions realized by electric motor technology.**
Control of rotation speed, visualization of load factor, advanced adaptability to automation and stable machining performance.
- **Ultra-short body design with a min. length of 101.9 mm.**
For mounting on a CNC automatic lathes.
 - ▶ Can be mounted in a narrow machining chamber
 - ▶ Recommended as a new option for rotary toolsFor mounting on special purpose machines.
 - ▶ Enables downsizing of the dedicated machine itself
- **Realizes higher power than ever before.**
Equivalent body size up to now: maximum output of 150 W.
 - ▶ Maximum output of 350 W has been realizedExpansion of applicable processing fields.
*Compared to iSpeed3 series having the smallest body size to date at Nakanishi.
- **Provides higher durability than rotary tools and speed-increasing spindles.**
Solves the challenges encountered at work sites by minimizing vibration and heat generation, and higher durability.

What the E3000i series can achieve.

- Benefits realized from mounting on a CNC automatic lathe:
1. The high speed spindles enable a high feed rate.
→ **Increased machining efficiency**
 2. The high precision motor spindles ensure a precise finish.
→ **Increased machining accuracy**

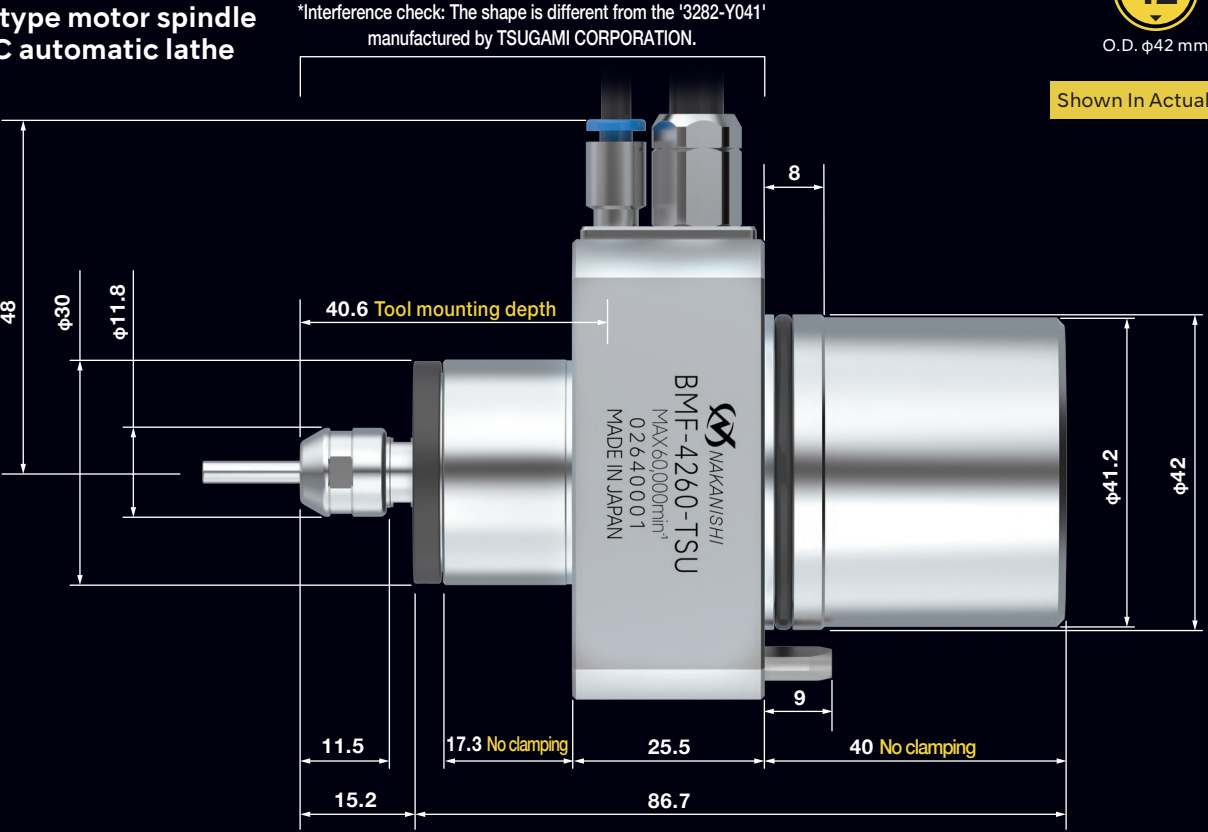


Case Study of TSUGAMI CNC Precision Automatic Lathe



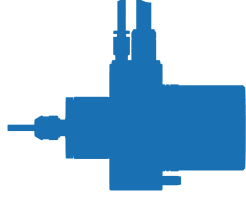
BMF-4260-TSU

Flange type motor spindle for CNC automatic lathe



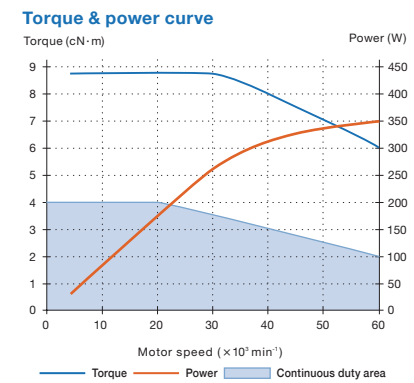
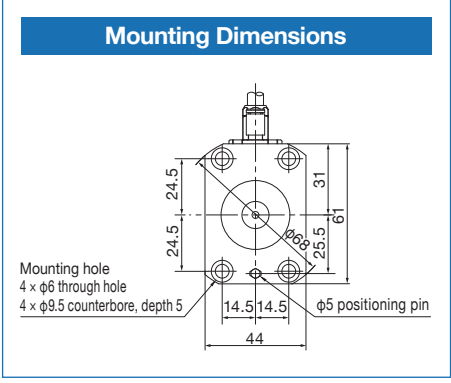
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BMF-4260-TSU



Code No. 7946 Model BMF-4260-TSU

CAD drawings CAD drawings (DXF/STEP) are available on our website



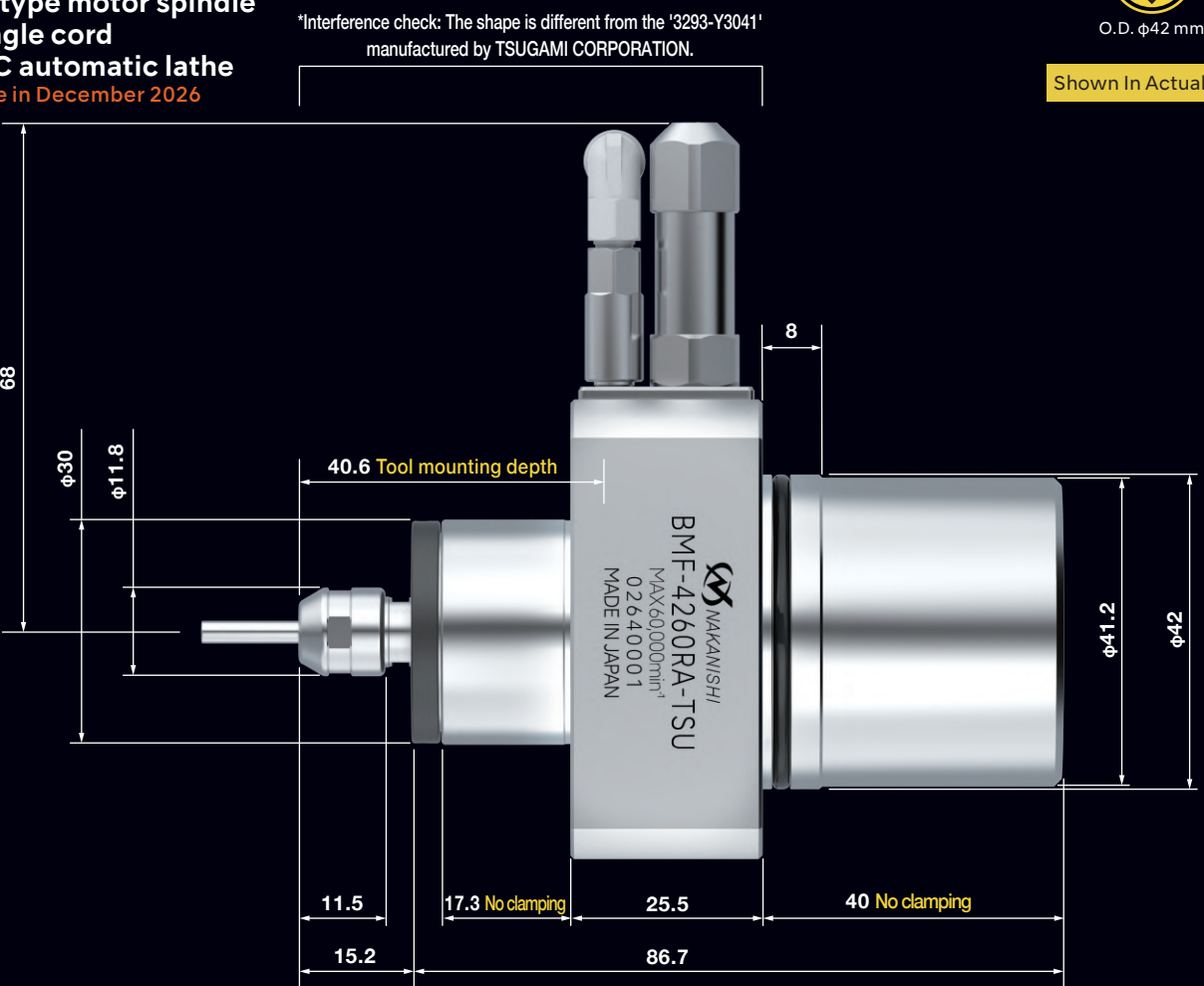
O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
φ42 mm	60,000 min ⁻¹	350 w	Within 1 μm	CHA Group (φ0.5–φ4.0 mm)	60 mm	965 g
Standard Equipment and Accessories	Collet nut (CHN-A) / Wrench (8 × 5) · (9 × 11): 1 pc. each / Hex. socket bolt (M5 × 30): 4 pcs. *Collet is sold separately.					
Options	Collet (CHA Group): φ0.5–φ4.0 mm Motor cord: 3 m (7931), 5 m (7932), 7 m (7933)					
Interchangeable Rotary Tool	3282-Y041 (manufactured by TSUGAMI CORPORATION)					
Applicable CNC Precision Automatic Lathe	Back tool post for S205-II/S206-II, S205A-II/S206A-II, SS207-II (-5AX), B026/32-III, B038-III, SS267-III (-5AX), SS327-III (-5AX), etc.					

*Quick disconnect cord length: 0.5 m

BMF-4260RA-TSU

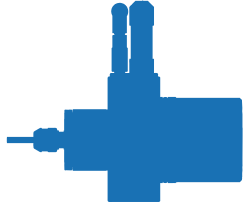
Flange type motor spindle with angle cord for CNC automatic lathe

*Available in December 2026



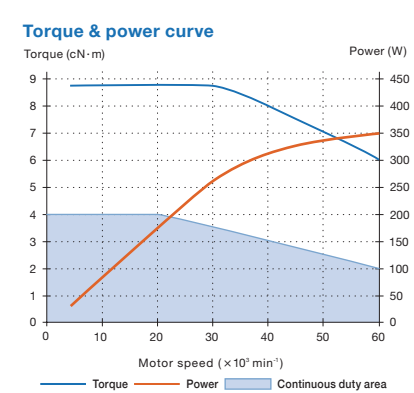
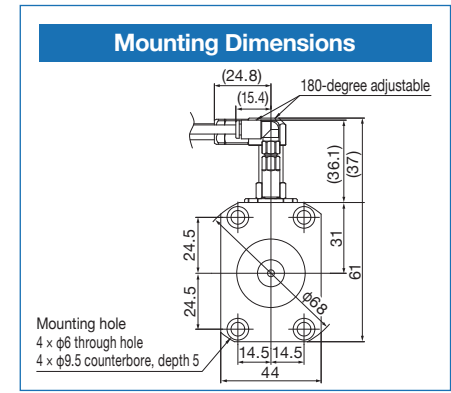
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BMF-4260RA-TSU



Code No. 7947 Model BMF-4260RA-TSU

CAD drawings CAD drawings (DXF/STEP) are available on our website



O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
φ42 mm	60,000 min ⁻¹	350 w	Within 1 μm	CHA Group (φ0.5–φ4.0 mm)	60 mm	1,030 g
Standard Equipment and Accessories	Collet nut (CHN-A) / Wrench (8 × 5) · (9 × 11): 1 pc. each / Hex. socket bolt (M5 × 30): 4 pcs. *Collet is sold separately.					
Options	Collet (CHA Group): φ0.5–φ4.0 mm Motor cord: 3 m (7931), 5 m (7932), 7 m (7933)					
Interchangeable Rotary Tool	3293-Y3041 (manufactured by TSUGAMI CORPORATION)					
Applicable CNC Precision Automatic Lathe	Modular type B-axis tool post (option) for SS207-II (-5AX), SS267-III (-5AX), SS327-III (-5AX), etc.					

*Quick disconnect cord length: 1.0 m

BMF-4230-TSU

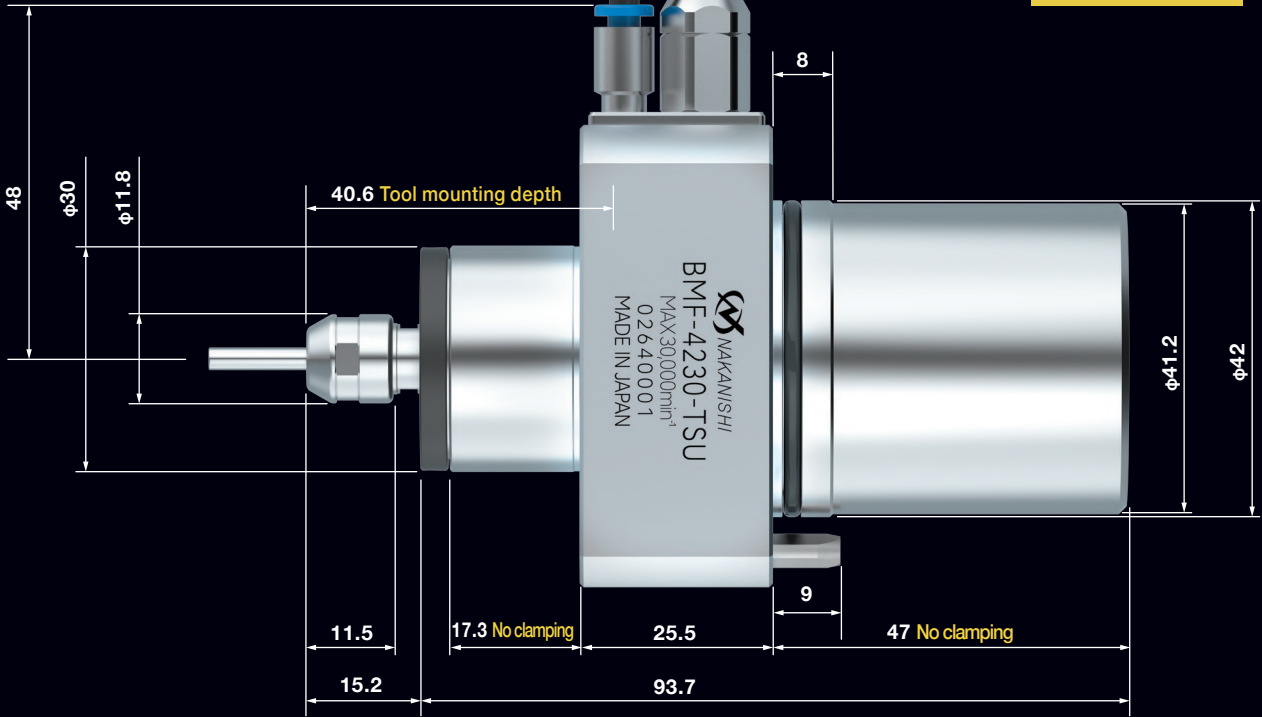
Flange type torque motor spindle for CNC automatic lathe

*Interference check: The shape is different from the '3282-Y041' manufactured by TSUGAMI CORPORATION.

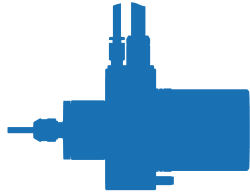


O.D. $\phi 42$ mm

Shown In Actual Size



BMF-4230-TSU

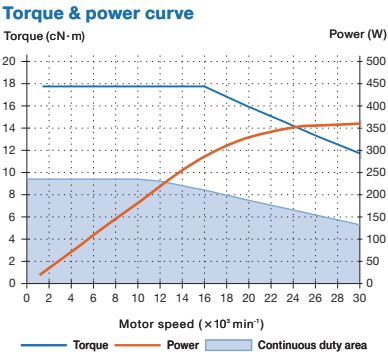
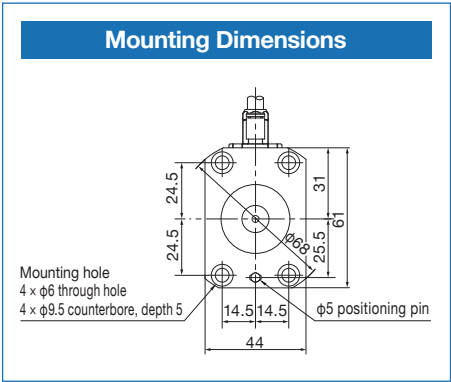


Code No. 7948

Model BMF-4230-TSU

CAD drawings

CAD drawings (DXF/STEP) are available on our website



O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
$\phi 42$ mm	30,000 min ⁻¹	350 w	Within 1 μ m	CHA Group ($\phi 0.5$ – $\phi 4.0$ mm)	60 mm	1,010 g
Standard Equipment and Accessories	Collet nut (CHN-A) / Wrench (8 × 5) · (9 × 11): 1 pc. each / Hex. socket bolt (M5 × 30): 4 pcs. *Collet is sold separately.					
Options	Collet (CHA Group): $\phi 0.5$ – $\phi 4.0$ mm Motor cord: 3 m (7931), 5 m (7932), 7 m (7933)					
Interchangeable Rotary Tool	3282-Y041 (manufactured by TSUGAMI CORPORATION)					
Applicable CNC Precision Automatic Lathe	Back tool post for S205-II/S206-II, S205A-II/S206A-II, SS207-II (-5AX), B026/32-III, B038-III, SS267-III (-5AX), SS327-III (-5AX), etc.					

*Quick disconnect cord length: 0.5 m

BMF-4230RA-TSU

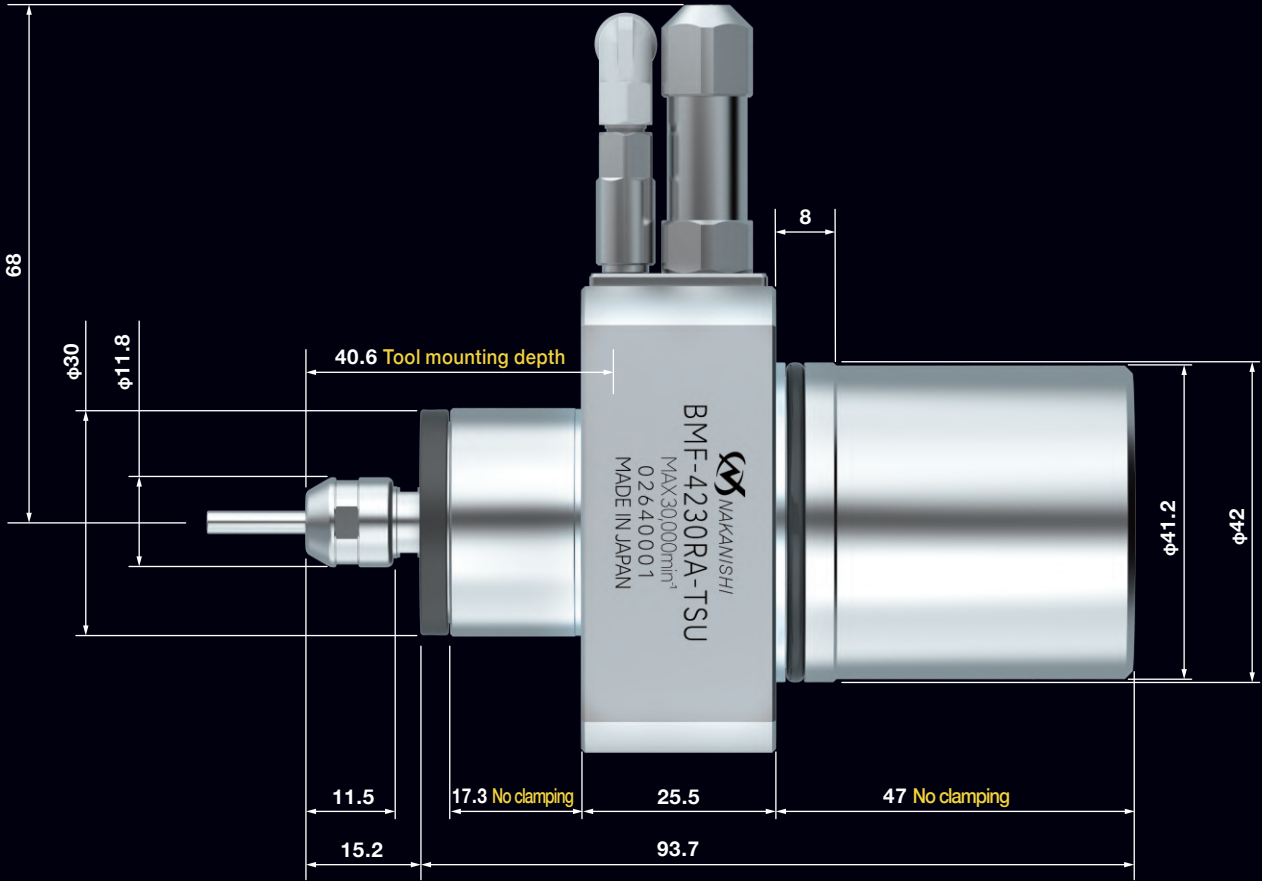
Flange type torque motor spindle with angle cord for CNC automatic lathe

*Interference check: The shape is different from the '3293-Y3041' manufactured by TSUGAMI CORPORATION.

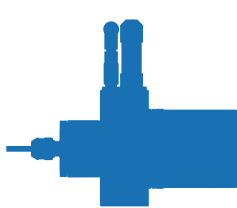


O.D. $\phi 42$ mm

Shown In Actual Size



BMF-4230RA-TSU

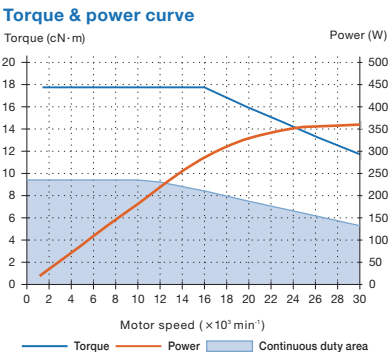
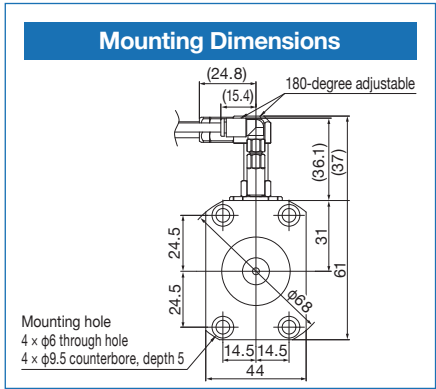


Code No. 7949

Model BMF-4230RA-TSU

CAD drawings

CAD drawings (DXF/STEP) are available on our website



O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
$\phi 42$ mm	30,000 min ⁻¹	350 w	Within 1 μ m	CHA Group ($\phi 0.5$ – $\phi 4.0$ mm)	60 mm	1,075 g
Standard Equipment and Accessories	Collet nut (CHN-A) / Wrench (8 × 5) · (9 × 11): 1 pc. each / Hex. socket bolt (M5 × 30): 4 pcs. *Collet is sold separately.					
Options	Collet (CHA Group): $\phi 0.5$ – $\phi 4.0$ mm Motor cord: 3 m (7931), 5 m (7932), 7 m (7933)					
Interchangeable Rotary Tool	3293-Y3041 (manufactured by TSUGAMI CORPORATION)					
Applicable CNC Precision Automatic Lathe	Modular type B-axis tool post (option) for SS207-II (-5AX), SS267-III (-5AX), SS327-III (-5AX), etc.					

*Quick disconnect cord length: 1.0 m

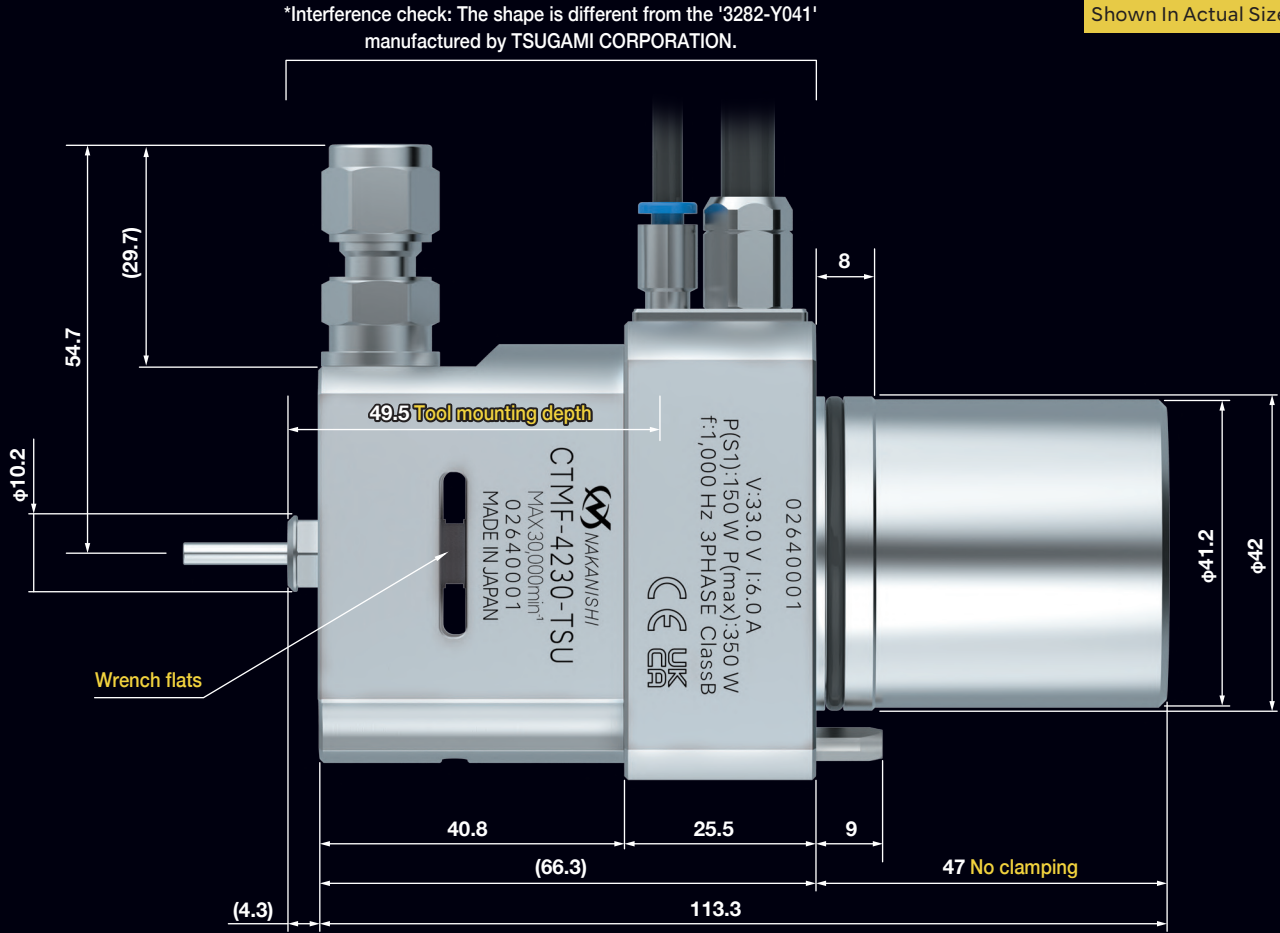
CTMF-4230-TSU

Coolant-through motor spindle
for CNC automatic lathe

High pressure pump and coolant
hose, etc. are to be arranged
by the customer.



Shown In Actual Size

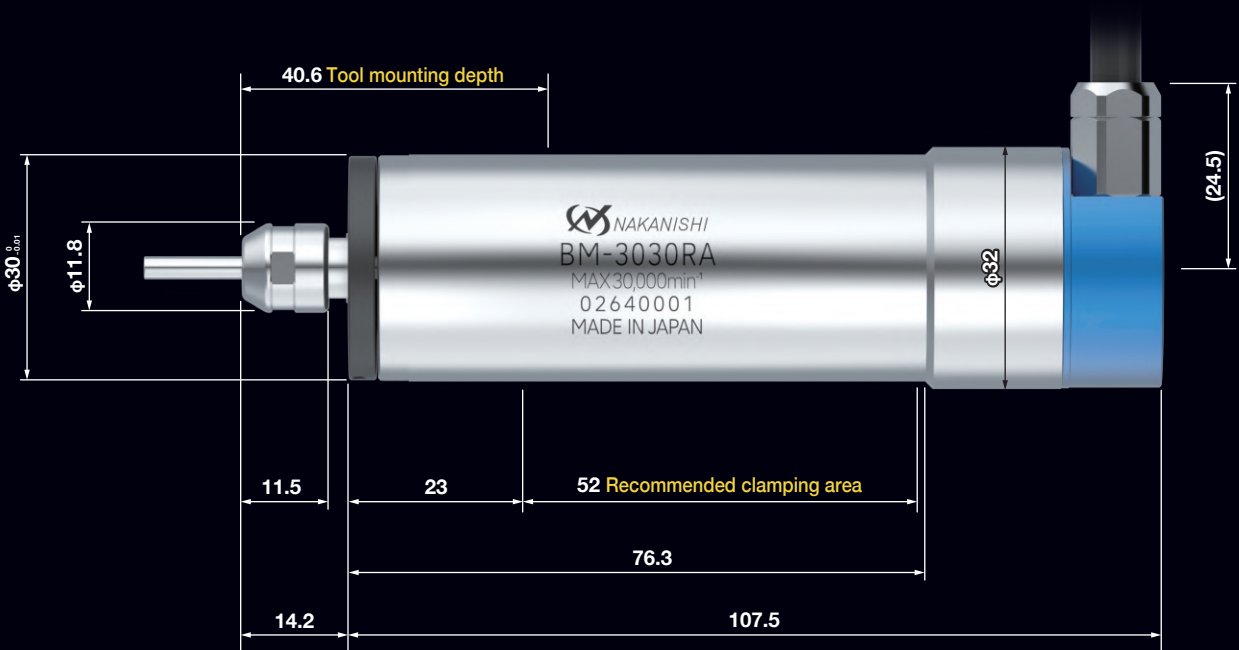


BM-3030RA

Straight type torque motor spindle



Shown In Actual Size

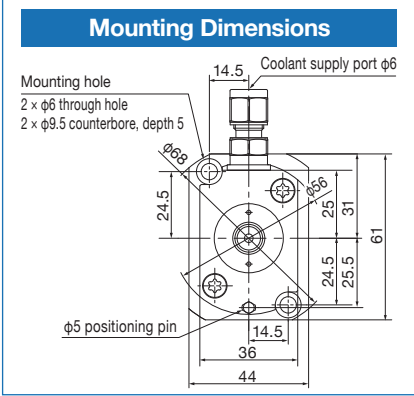


CTMF-4230-TSU

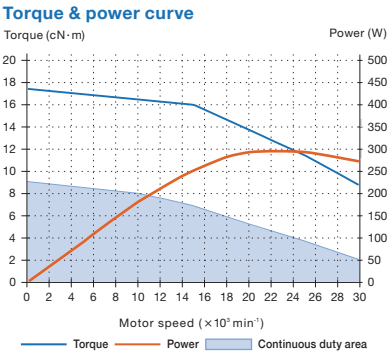


Code No. 7950 Model CTMF-4230-TSU

CAD drawings CAD drawings (DXF/STEP) are available on our website



*The graph below shows the torque output characteristics reflecting the influence of load during coolant supply.



O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
$\phi 42$ mm	30,000 min ⁻¹	350 w	Within 1 μ m	CHA Group AA ($\phi 3.0$, $\phi 3.175$, $\phi 4.0$ mm)	60 mm	1,420 g
Standard Equipment and Accessories	Wrench (8 × 5) · (9 × 11): 1 pc. each / Hex. socket bolt (M5 × 30): 2 pcs. *Collet and Collet nut are sold separately.					
Specifications	Coolant pressure: 3.0–20.0 MPa / Coolant filtration: 5 μ m or less					
Options	Collet (CHA group high precision type AA): $\phi 3.0$, $\phi 3.175$, $\phi 4.0$ mm					
	Collet nut (CHN-CTA): 3.0, 3.175, 4.0 mm *Please match the Collet and Collet nut size.					
	Motor cord: 3 m (7931), 5 m (7932), 7 m (7933)					
Interchangeable Rotary Tool	3282-Y041 (manufactured by TSUGAMI CORPORATION)					
Applicable CNC Precision Automatic Lathe	Back tool post for S205-II/S206-II, S205A-II/S206A-II, SS207-II (-5AX), B026/32-III, B038-III, SS267-III (-5AX), SS327-III (-5AX), etc.					

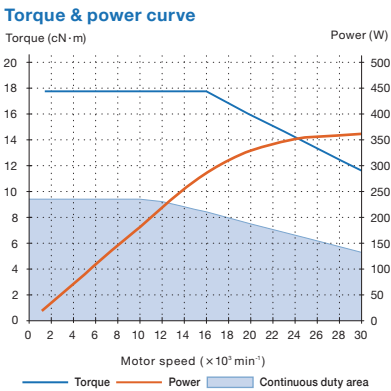
*Quick disconnect cord length: 0.5 m

BM-3030RA



Code No. 7925 Model BM-3030RA

CAD drawings CAD drawings (DXF/STEP) are available on our website



O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
$\phi 30$ mm	30,000 min ⁻¹	350 w	Within 1 μ m	CHA Group ($\phi 0.5$ – $\phi 4.0$ mm)	60 mm	474 g
Standard Equipment and Accessories	Collet nut (CHN-A) / Wrench (8 × 5) · (9 × 11): 1 pc. each *Collet is sold separately.					
Options	Collet (CHA Group): $\phi 0.5$ – $\phi 4.0$ mm					
	Motor cord: 3 m (7931), 5 m (7932), 7 m (7933)					

*Quick disconnect cord length: 0.5 m

E3000i Controller

• **Wide speed range**
The controllable speed ranges from 1,000 to 80,000 min⁻¹, while the 3-digit display allows speed setting in units of 200 min⁻¹.

• **Load monitor LED**
Load meter enables setting of optimum cutting conditions.



• **Controls E3000/E2000/iSpeed3/HES series motor spindles.**

• **Two motors can be connected to provide individual control of each motor.**

• **External inputs**
Motor ON/OFF, Rotating direction, Motor speed setting, Safety relay brake, etc.

• **External outputs**
Motor current, Rotating pulse, Error, Load, etc.

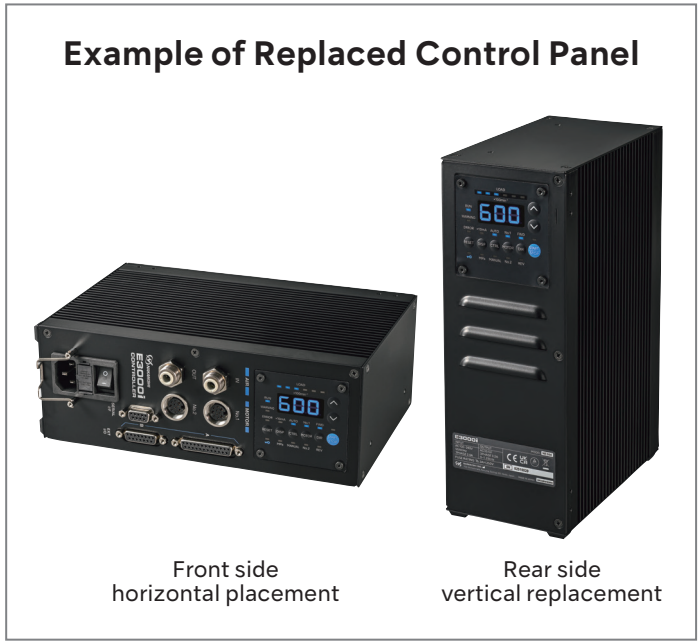
• **Parameter setting**
Maximum motor speed setting, Fix motor speed, etc.

• **Improved installation flexibility with interchangeable operation panel.**
The panel can be changed vertically, horizontally, or on the back, taking into consideration the installation space and the direction of the cord wiring.

- [Other functions]
- Display function of motor current value: Motor load status, prevents excessive tightening when mounting the spindles to machines.
 - Air pressure display function: Allows confirmation of air pressure supplied to the controller.
 - Key hold function: Disables button operation on the operation panel.

*For more information, please refer to the operation manual on our website.

Code No.	Motor Speed	
7927	1,000–80,000 min ⁻¹	
Input Voltage		
AC100–240 V Without plug Multiple output power		
Max. Power	Power Consumption	Net Weight
350 w	AC1.8 A	3.0 kg
Air Consumption		
1 Motor spindle: 30 NL/min (0.2–0.4 MPa) 2 Motor spindles: 60 NL/min (0.3–0.45 MPa) *The air pressure requirement varies with the number of the motor connections and the total length of the hose.		
Standard Equipement and Accessories		
Power cord: 3 m / ϕ6 mm Air hose with filter (K-251: 2058): 2 m Branch adapter / Connector cap: 2 pcs. / Reducer Connector cover A · B · Serial IF / Power cord hook Bracket (bottom·rear): 2 pcs. each / Rubber pad: 4 pcs. Fuse: 2 pcs. / Mounting screw: 8 pcs.		



Accessories

Order by Code No.

Motor Cord	Code No.	Model	Cord Length	Standard Accessories	Compatible Model
	7931	EMCD-3000i-3M	3 m	Air hose Connector cap (included)	BMF-4260-TSU BMF-4260RA-TSU BMF-4230-TSU BMF-4230RA-TSU CTMF-4230-TSU BM-3030RA
	7932	EMCD-3000i-5M	5 m		
	7933	EMCD-3000i-7M	7 m		

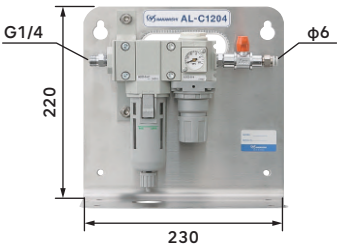
*The minimum cord bending radius is 60 mm.

Collet	Code No.	Model	I.D.	Compatible Model
	91430	CHA-3.0	ϕ3.0	BMF-4260-TSU BMF-4260RA-TSU BMF-4230-TSU BMF-4230RA-TSU CTMF-4230-TSU (Type AA only) BM-3030RA *High precision type AA (Run-out accuracy within 2 μm)
	91440	CHA-4.0	ϕ4.0	
	91492	CHA-2.35	ϕ2.35	
	91493	CHA-3.175	ϕ3.175	
	91494	CHA-3.0AA	ϕ3.0AA*	
	91495	CHA-4.0AA	ϕ4.0AA*	
	91496	CHA-3.175AA	ϕ3.175AA*	
	914□□	CHA-□□	ϕ0.5, ϕ0.6, ϕ0.7, ϕ0.8, ϕ0.9	
			ϕ1.0, ϕ1.5, ϕ2.0, ϕ2.5, ϕ3.5	
			ϕ1.1, ϕ1.2, ϕ1.3, ϕ1.4, ϕ1.6, ϕ1.7, ϕ1.8, ϕ1.9	
			ϕ2.1, ϕ2.2, ϕ2.3, ϕ2.4, ϕ2.6, ϕ2.7, ϕ2.8, ϕ2.9	
			ϕ3.1, ϕ3.2, ϕ3.3, ϕ3.4, ϕ3.6, ϕ3.7, ϕ3.8, ϕ3.9	

Collet Nut	Code No.	Model	Compatible Model
	2102	CHN-A	BMF-4260-TSU BMF-4260RA-TSU BMF-4230-TSU BMF-4230RA-TSU BM-3030RA
	7798 7799 7800	CHN-CTA-3.0 CHN-CTA-3.175 CHN-CTA-4.0	CTMF-4230-TSU

Bracket	Code No.	Model	Compatible Model
	7943	DL-Type brackets for securing the E3000i controller horizontally: 2 pcs.	E3000i Controller *Remove the rubber pad before fitting the brackets.

Air Line Kit
Filtration: 0.3 μm

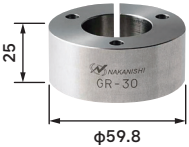


■Air Piping
Inlet: G1/4 male thread for connection hose
Outlet: ϕ6.0 mm

■Net Weight: 1.9 kg

Code No.	4504	Model	AL-C1204
Standard Accessories	Hose pipe (K-275): 2 m / Rubber pad: 4 pcs. Mounting screw (M6 × 20): 4 pcs. Washer: 4 pcs. / Hose band: 1 pc.		
Standard Equipment	Air filter / Air regulator / Air pressure gauge ON-OFF valve		

Grip Ring



■Net Weight: 385 g

Code No.	1885	Model	GR-30
Standard Accessories	Mounting bolt (M5 × 25L): 3 pcs.		
Compatible Model	BM-3030RA		

Control Panel
Extension Cord (4 m)



Code No.	7940	Model	E3000i-PEX4
Standard Accessories	Assembled product (cord length: 4 m) Mounting screw (M3): 4 pcs. / Flange nut: 4 pcs.		