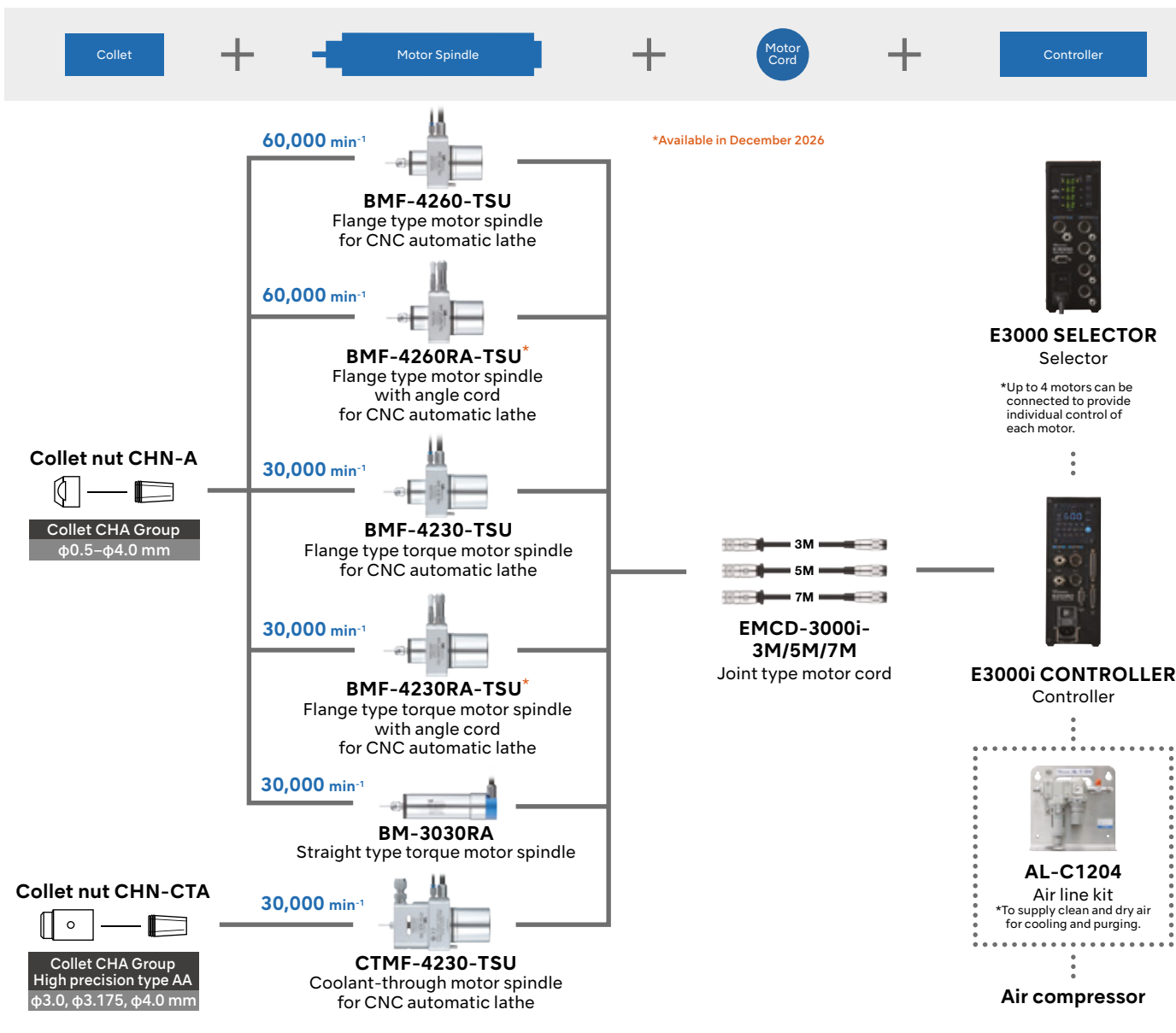


E30001



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 tools

For 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 realized

Expansion of applicable processing fields.

*Compared to iSpeed3 series having the smallest body size to date at Nakanishi.

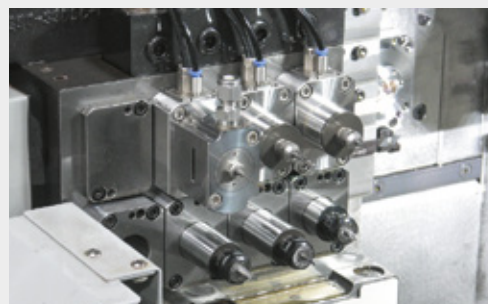
- **Provides higher durability than rotary tools and speed-increasing spindles.**

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-4230RA-TSU*

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

• O.D.: $\phi 42$ • Max. motor speed: 30,000 min⁻¹



BMF-4260RA-TSU*

Flange type motor spindle with angle cord for CNC automatic lathe

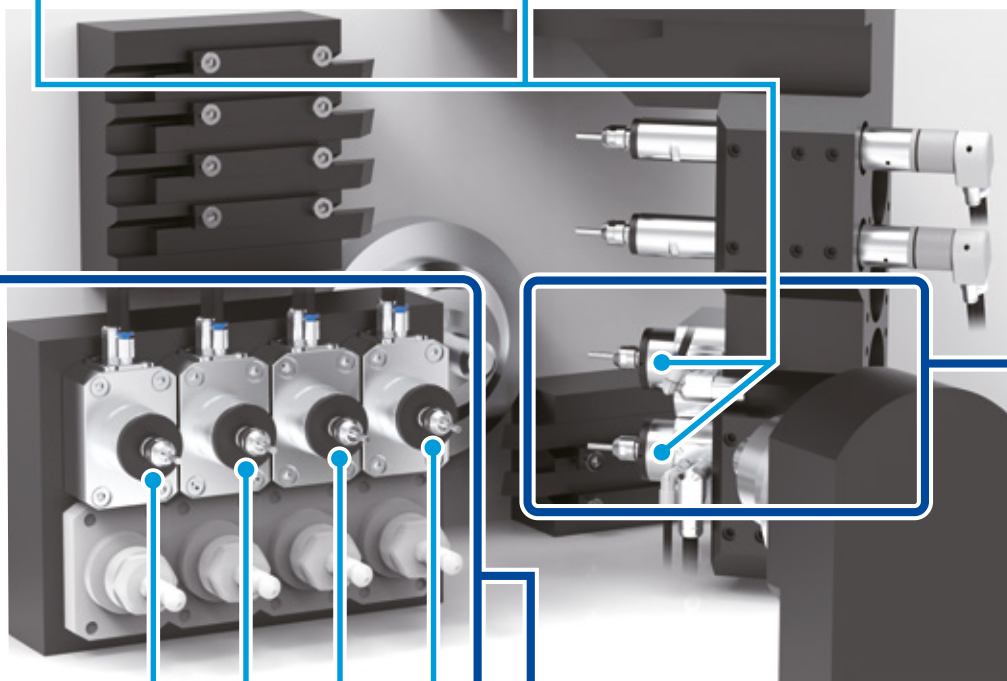
• O.D.: $\phi 42$ • Max. motor speed: 60,000 min⁻¹



Models supporting modular type B-axis tool post mounting

- SS207-II (-5AX)
- SS267-III (-5AX)
- SS327-III (-5AX)

*Available in December 2026



Models supporting back tool post mounting

- S205-II/S206-II
- S205A-II/S206A-II
- SS207-II (-5AX)
- B026/32-III
- B038-III
- SS267-III (-5AX)
- SS327-III (-5AX)

CTMF-4230-TSU

Coolant-through motor spindle for CNC automatic lathe

• O.D.: $\phi 42$ • Max. motor speed: 30,000 min⁻¹



BMF-4230-TSU

Flange type torque motor spindle for CNC automatic lathe

• O.D.: $\phi 42$ • Max. motor speed: 30,000 min⁻¹



BMF-4260-TSU

Flange type motor spindle for CNC automatic lathe

• O.D.: $\phi 42$ • Max. motor speed: 60,000 min⁻¹



BMF-4260-TSU

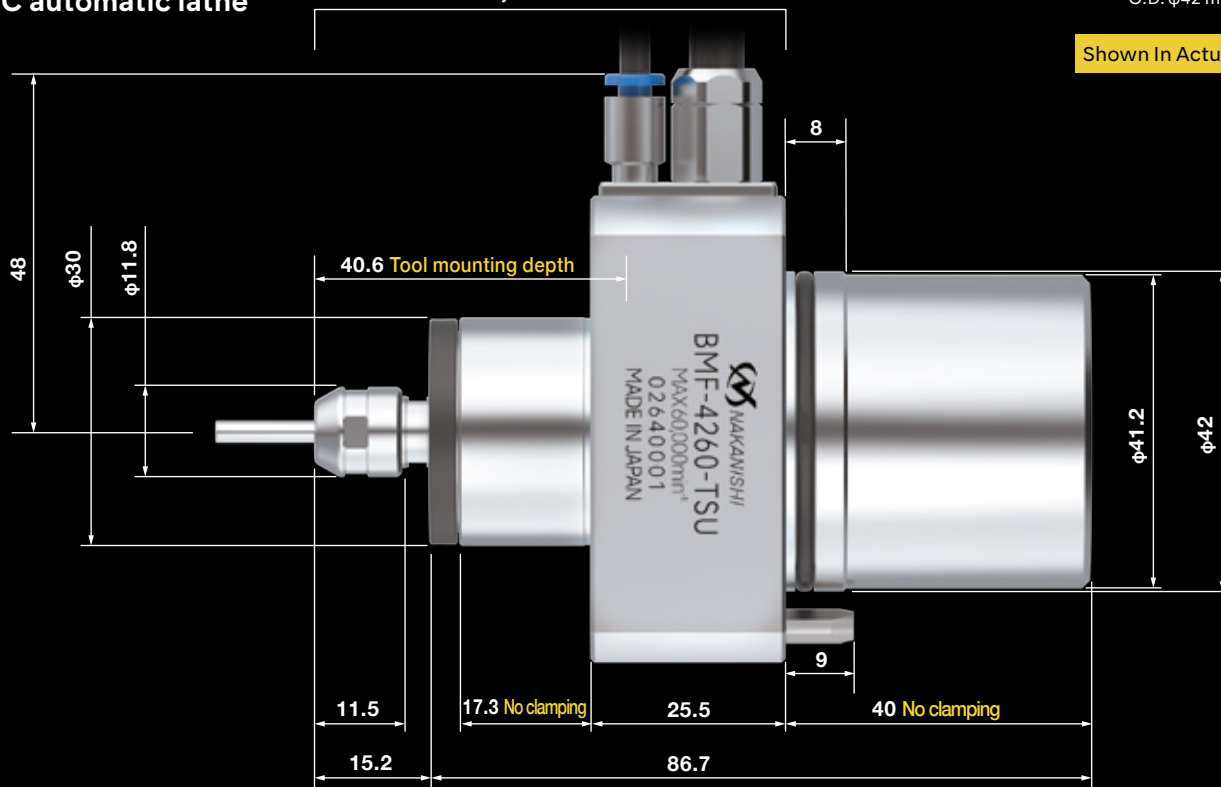
Flange type motor spindle
for CNC automatic lathe

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



O.D. $\phi 42$ mm

Shown In Actual Size



BMF-4260RA-TSU

Flange type motor spindle
with angle cord
for CNC automatic lathe

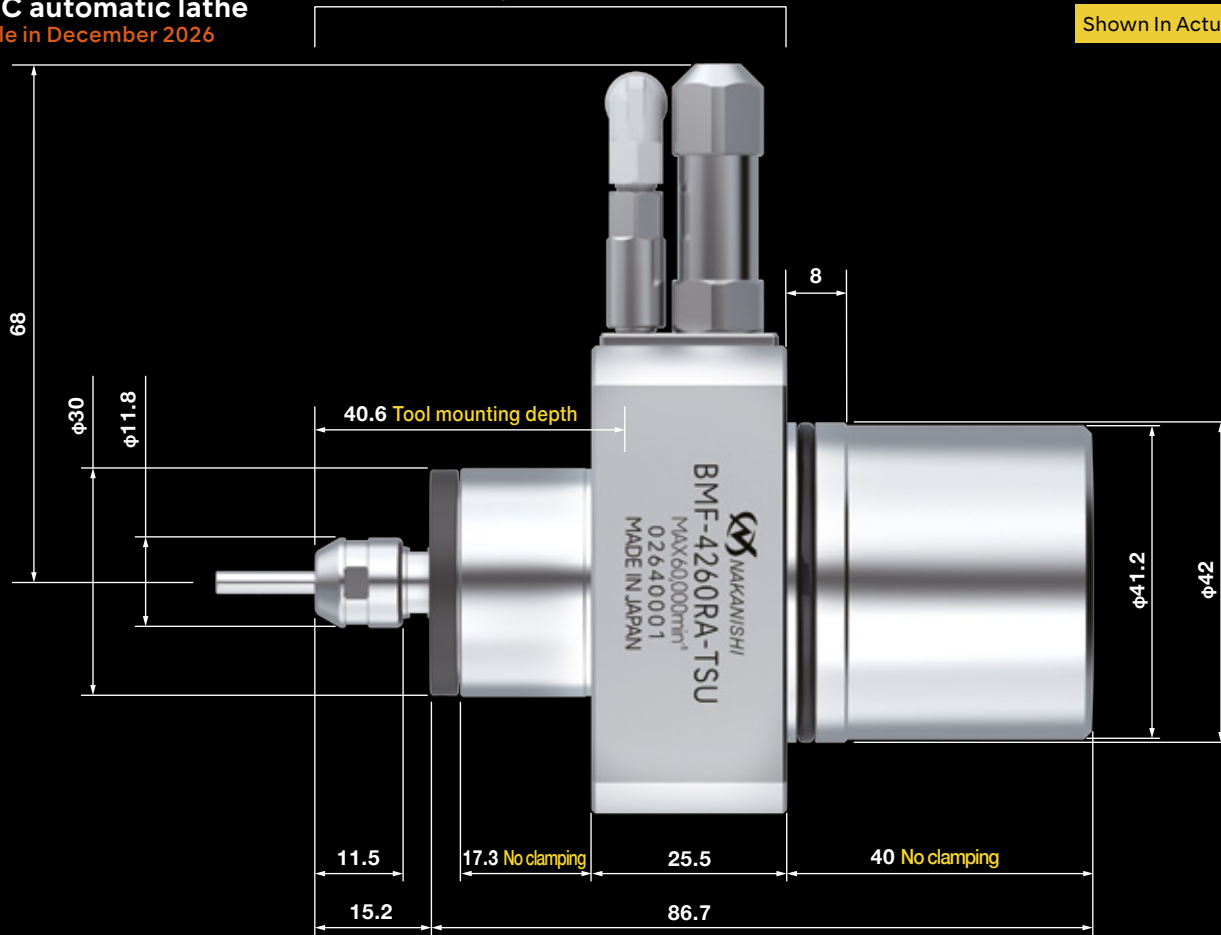
*Available in December 2026

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

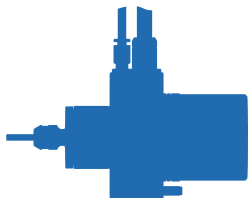


O.D. $\phi 42$ mm

Shown In Actual Size



BMF-4260-TSU



Code No.

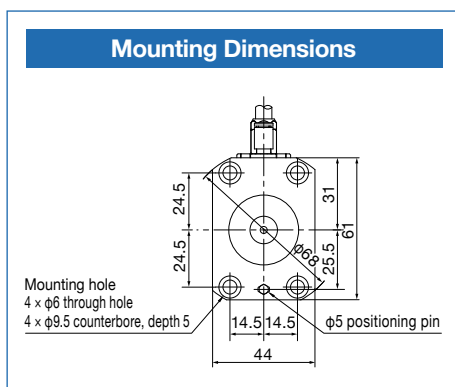
7946

Model

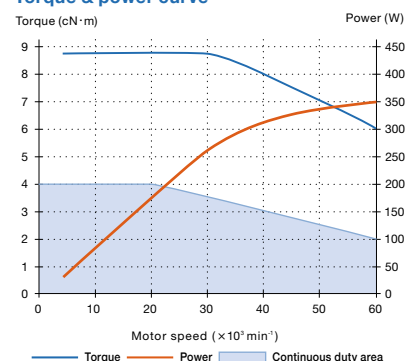
BMF-4260-TSU

CAD drawings

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



Torque & power curve



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

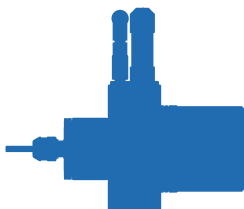
3282-Y041 (manufactured by TSUGAMI CORPORATION)

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



Code No.

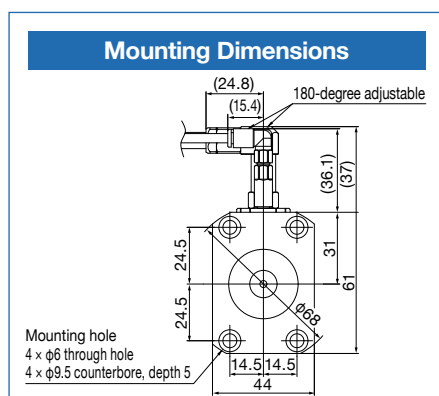
7947

Model

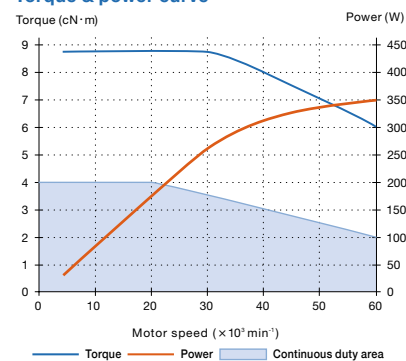
BMF-4260RA-TSU

CAD drawings

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



Torque & power curve



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.

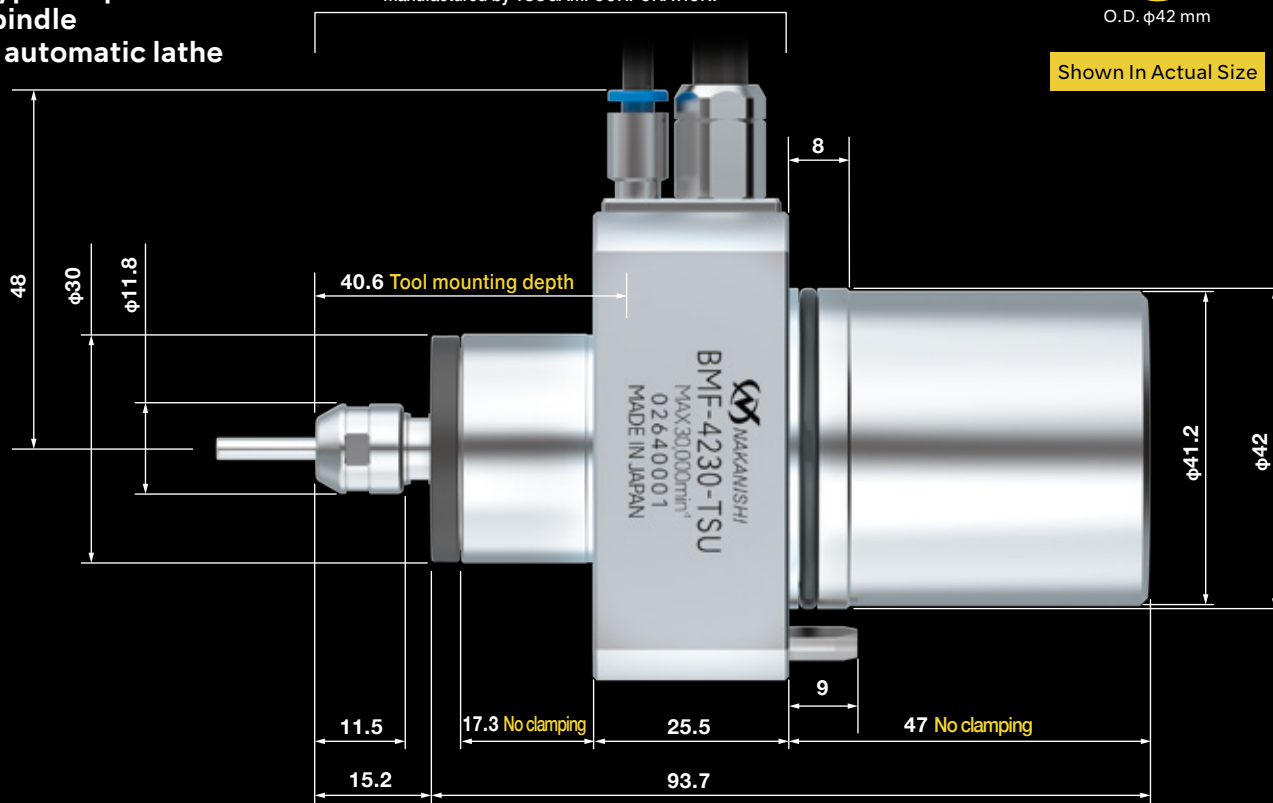
*Quick disconnect cord length: 1.0 m

Flange type torque motor spindle for CNC automatic lathe

42

O.D. $\phi 42$ mm

Shown In Actual Size

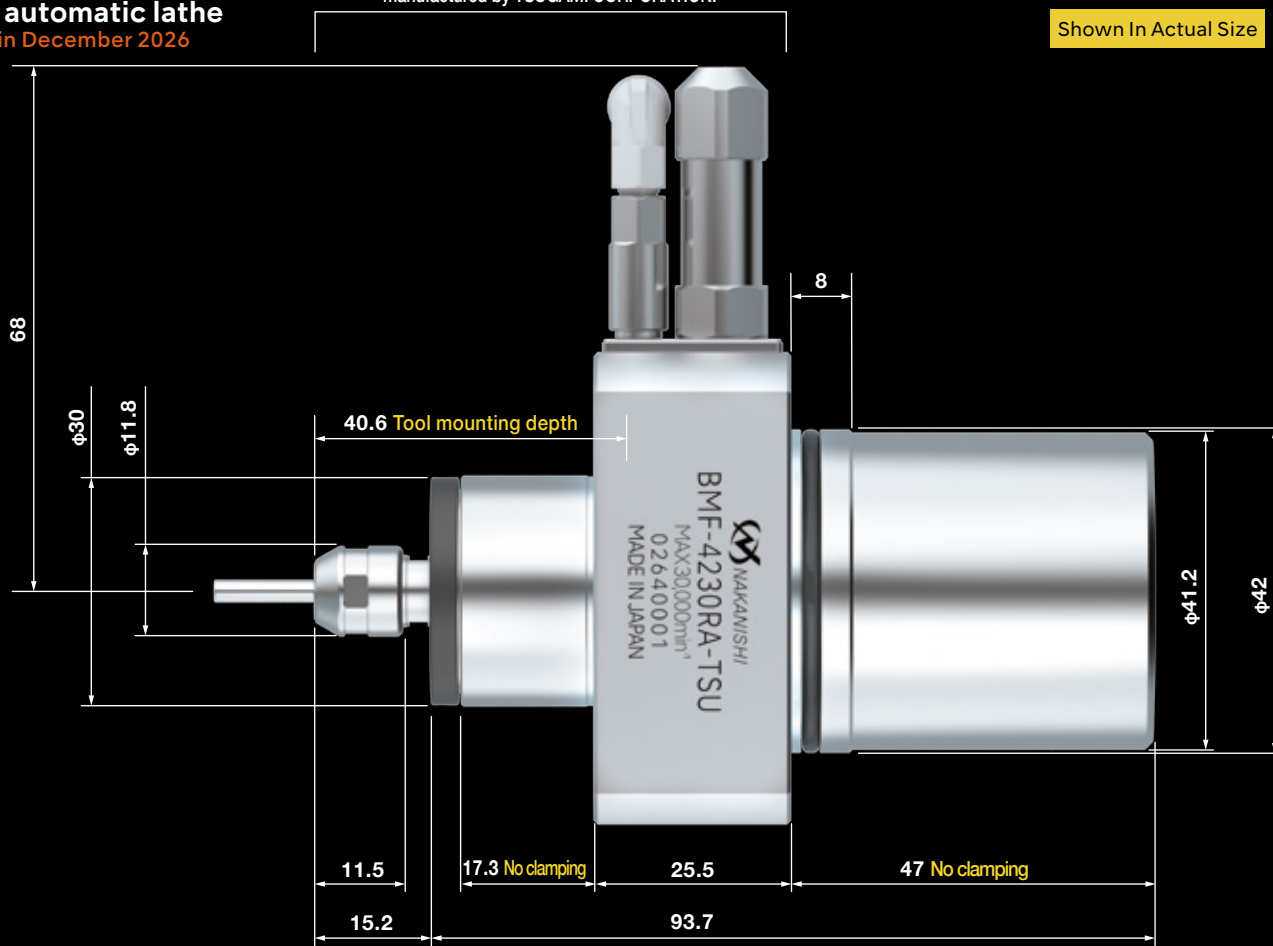


Flange type torque motor spindle with angle cord for CNC automatic lathe

42

O.D. $\phi 42$ mm

Shown In Actual Size



BMF-4230-TSU

Code No.

7948

Model

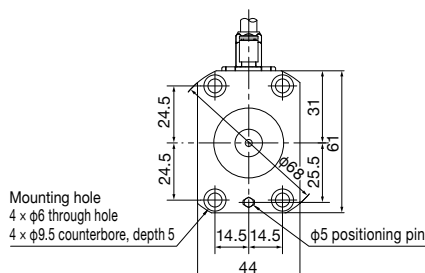
BMF-4230-TSU

CAD drawings

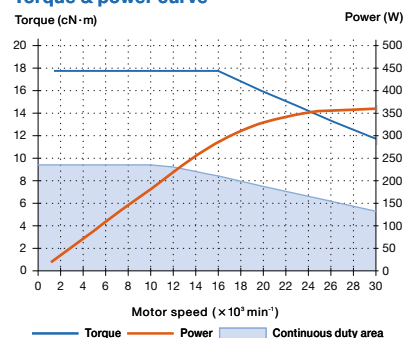
CAD drawings (DXF/STEP) are available on our website



Mounting Dimensions



Torque & power curve



O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
$\phi 42 \text{ mm}$	30,000 min^{-1}	350 W	Within 1 μm	CHA Group ($\phi 0.5$ – $\phi 4.0 \text{ mm}$)	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): $\phi 0.5$ – $\phi 4.0 \text{ mm}$
 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

Code No.

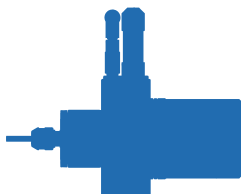
7949

Model

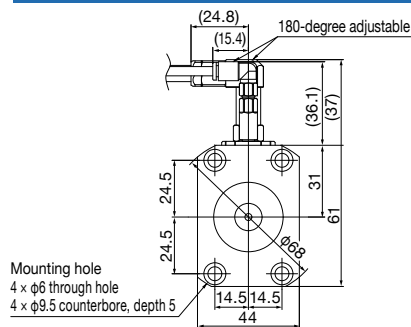
BMF-4230RA-TSU

CAD drawings

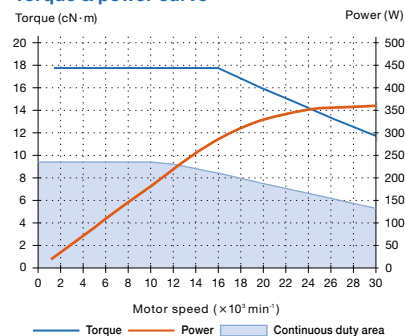
CAD drawings (DXF/STEP) are available on our website



Mounting Dimensions



Torque & power curve



O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
$\phi 42 \text{ mm}$	30,000 min^{-1}	350 W	Within 1 μm	CHA Group ($\phi 0.5$ – $\phi 4.0 \text{ mm}$)	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): $\phi 0.5$ – $\phi 4.0 \text{ mm}$
 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



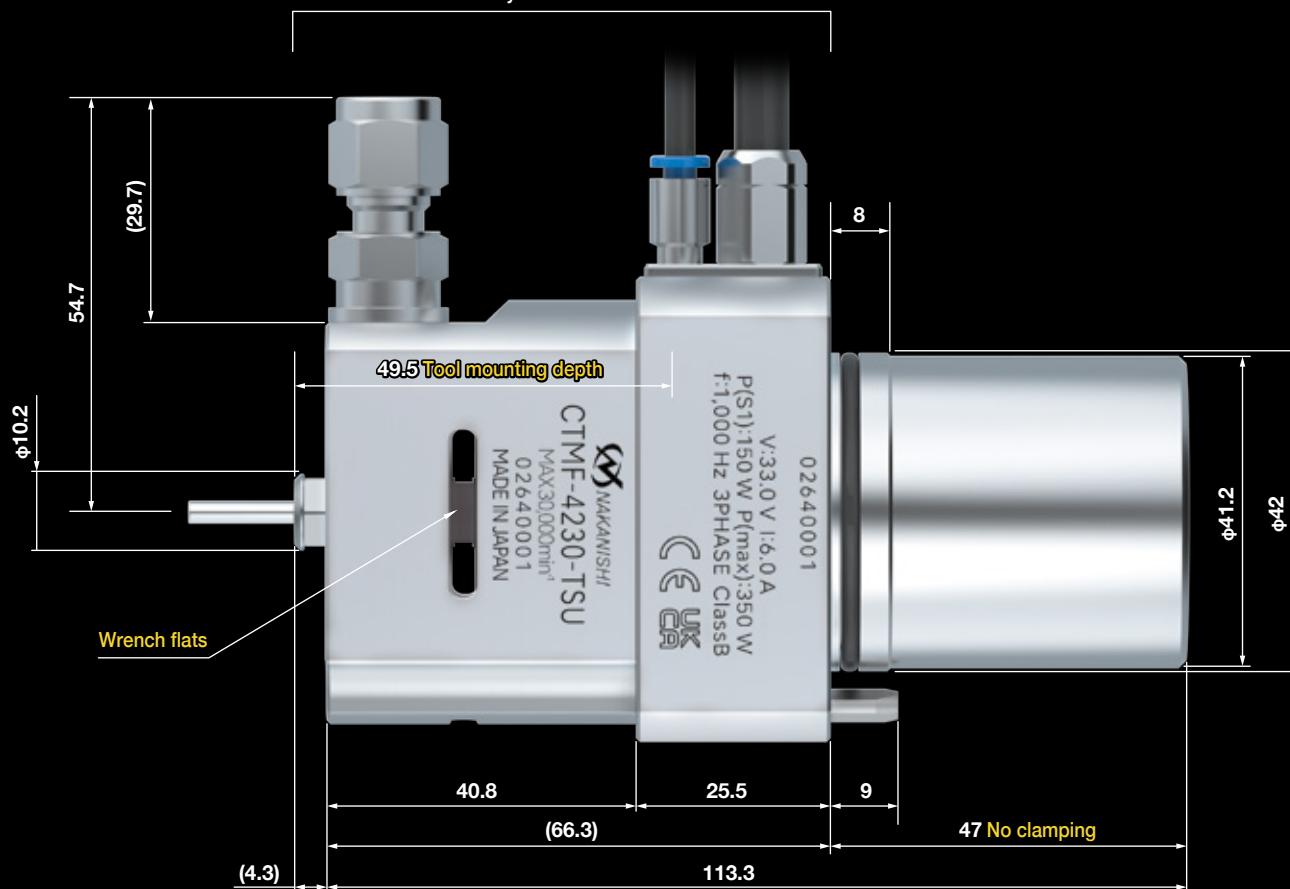
High pressure pump and coolant
hose, etc. are to be arranged
by the customer.



O.D. $\phi 42$ mm

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

Shown In Actual Size



BM-3030RA

Straight type torque motor spindle



O.D. $\phi 30$ mm

Shown In Actual Size



CTMF-4230-TSU



Code No.

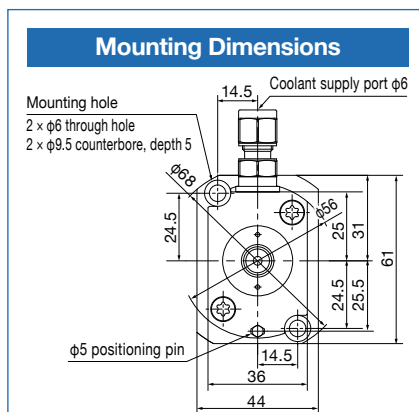
7950

Model

CTMF-4230-TSU

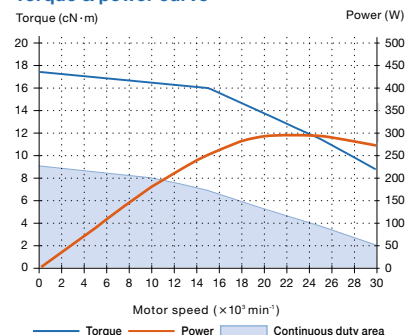
CAD drawings

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.

Torque & power curve



O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
φ42 mm	30,000 min ⁻¹	350 W	Within 1 μm	CHA Group AA (φ3.0, φ3.175, φ4.0 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 μm or less

Options

Collet (CHA group high precision type AA): φ3.0, φ3.175, φ4.0 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

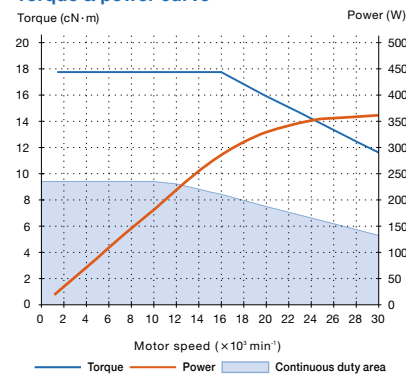
Model

BM-3030RA

CAD drawings

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

Torque & power curve



O.D.	Motor Speed	Max. Power	Spindle Accuracy	Collet	Min. Bending Cord Radius	Net Weight
φ30 mm	30,000 min ⁻¹	350 W	Within 1 μm	CHA Group (φ0.5-φ4.0 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): φ0.5-φ4.0 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.

LOAD

Continuous load area

Intermittent load area

Overload
- 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 Equipment 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.		

Example of Replaced Control Panel



Front side horizontal placement Rear side vertical replacement

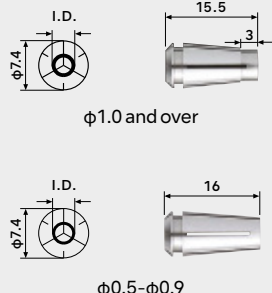


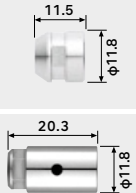
Accessories

Order by Code No.

Motor Cord	Code No.	Model	Cord Length	Standard Accessories	Compatible Model
 Joint type	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		

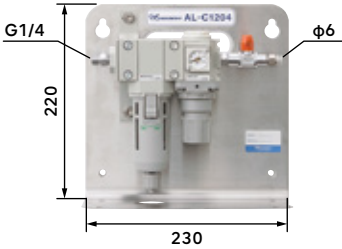
*The minimum cord bending radius is 60 mm.

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	CHN-CTA-3.0	CTMF-4230-TSU
	7799	CHN-CTA-3.175	
	7800	CHN-CTA-4.0	

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.		



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*Specifications and design are subject to change without notice.