

E3000 SERIES

HIGH-SPEED ROTATION & HIGH PRECISION

Great Variety

The largest range of products

φ30 mm Spindle

- Max. power: 350 W
- Max. motor speed: 80,000 min⁻¹

28 types of spindles are available

Spindle accuracy: within 1 μm

- Optimum for high-precision machining
- Longer tool life

Ceramic bearings

- Almost twice as durable as steel bearings
- Rigidity allows higher machining conditions

Brushless motor

- Eliminates the need of changing carbon brushes
- Higher power, longer product life, low maintenance and quiet operation



E4000

E3000

E2000

ISpeed3

Air-Speed

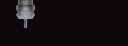
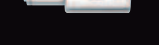
HES

TURBINES

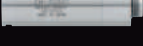
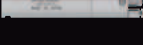
ACCESSORIES

Index

Spindle (Modular type)

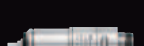
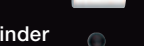
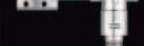
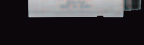
NR-3060S Short spindle		p. 2-7
NRF-3060S Short spindle with flange		p. 2-7
NR-3060 Straight spindle		p. 2-7
RAX-271E/RAX-71E Angle spindle with standard head		p. 2-9
RA-151E Angle spindle with short head		p. 2-9
RAS-151E Angle spindle with long head		p. 2-11
RA-271E Angle spindle with small head		p. 2-11
NR33-6000ATC-ESD Antistatic spindle		p. 2-13
NR50-6000ATC-RS Automatic tool change spindle Collet open/close by air cylinder		p. 2-15
NR50-5100 ATC RS Automatic tool change spindle Collet open/close by air cylinder		p. 2-15

Motor (Modular type)

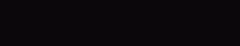
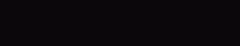
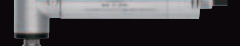
EM-3060 60,000 min ⁻¹ motor		p. 2-31
EM-3060J 60,000 min ⁻¹ motor with joint type motor cord		p. 2-31
EM-3030T 30,000 min ⁻¹ torque motor		p. 2-33
EM-3030T-J 30,000 min ⁻¹ torque motor with joint type motor cord		p. 2-33
EM-3080J 80,000 min ⁻¹ motor with joint type motor cord		p. 2-33

Spindle & Motor φ25 mm (Modular type)

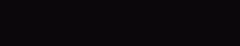
NR-2551 Straight spindle		p. 2-35
EM25N-5000J 50,000 min ⁻¹ motor		p. 2-35

NR40-5100 ATC Automatic tool change spindle Collet open/close by air cylinder		p. 2-17
NRR-3060 Lever type spindle Collet open/close by lever operation		p. 2-17
NR3060-AQC Air quick change spindle Collet holder clamp/unclamp by air cylinder		p. 2-19
NRR3060-QC Lever quick change spindle Collet holder clamp/unclamp by lever operation		p. 2-21
CTS-2630 Coolant through spindle		p. 2-23
CTS-2620A Coolant through spindle		p. 2-25
ARG-011E Speed reducer (1/4)		p. 2-27
ARG-021E Speed reducer (1/16)		p. 2-27
RG-3004M Oil mist type speed reducer (1/4)		p. 2-27
NR-3080S Short spindle		p. 2-29
NRAF-5080 Air bearing spindle		p. 2-29

Motor spindle (One-piece type)

EMS-3060K Motor spindle		p. 2-37
EMR-3008K Motor spindle with reduction gear		p. 2-37
EMA-3020K Angle motor spindle with standard head		p. 2-39
EMA-3020S Angle motor spindle with built-in head		p. 2-39
EMSF-3060K Motor spindle with flange		p. 2-41

Motor spindle (With option of straight or angle type motor cord)

EM30-S6000 φ30 motor spindle (use CHK collet)		p. 2-43
EM25-S6000 φ25 motor spindle (use CHA collet)		p. 2-43
EM20-S6000 φ20 motor spindle (use CHA collet)		p. 2-43

Controller

Selector

E3000 CONTROLLER 	p. 2-45	E3000 SELECTOR  Up to 4 motors can be connected providing individual control of each motor	p. 2-46
--	---------	---	---------

Motor cord

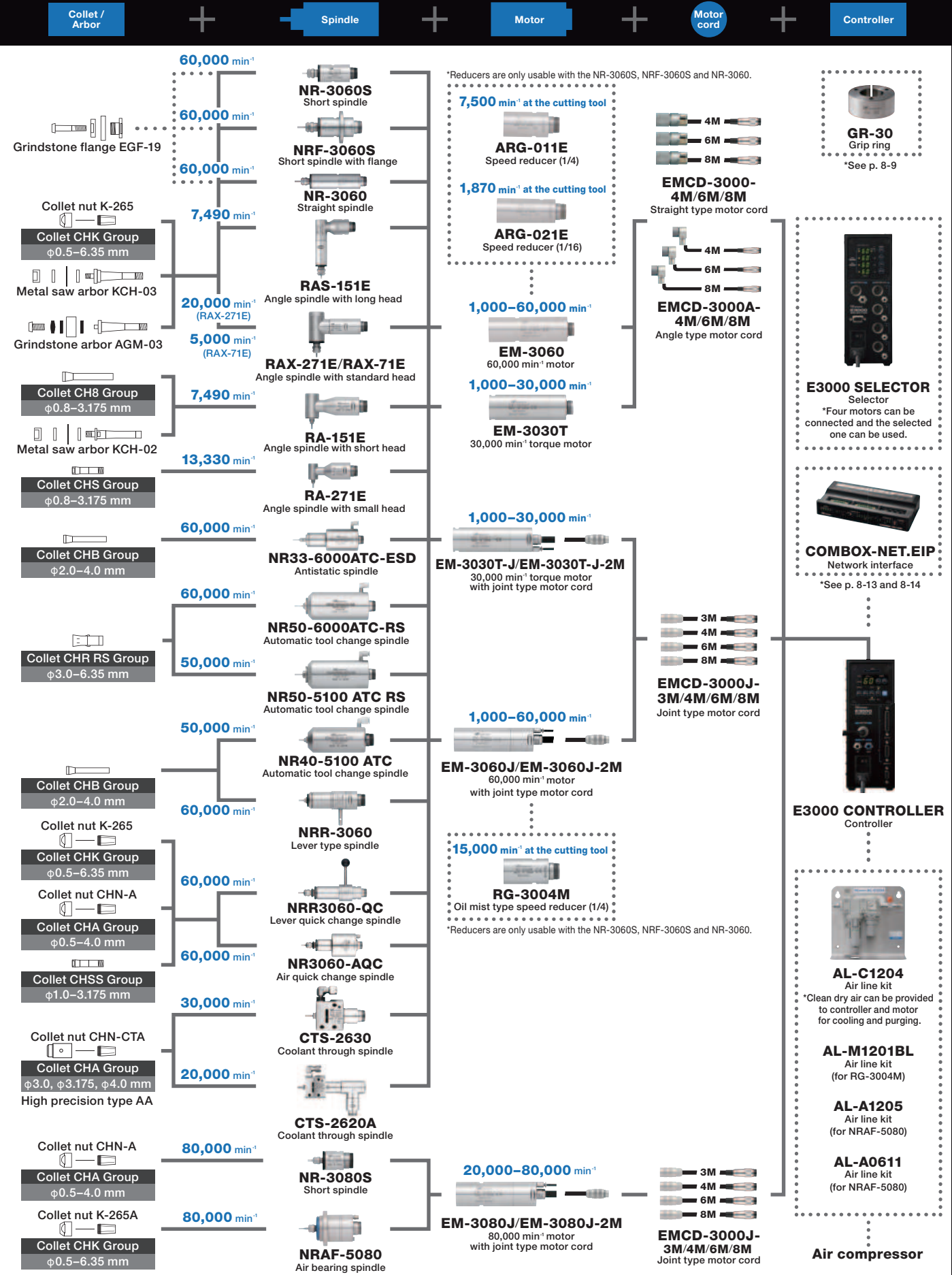
EMCD-3000 Straight type	p. 2-47	EMCD-3000A Angle type	p. 2-47	EMCD-3000J Joint type	p. 2-47
---	---------	---------------------------------------	---------	---------------------------------------	---------

Accessories

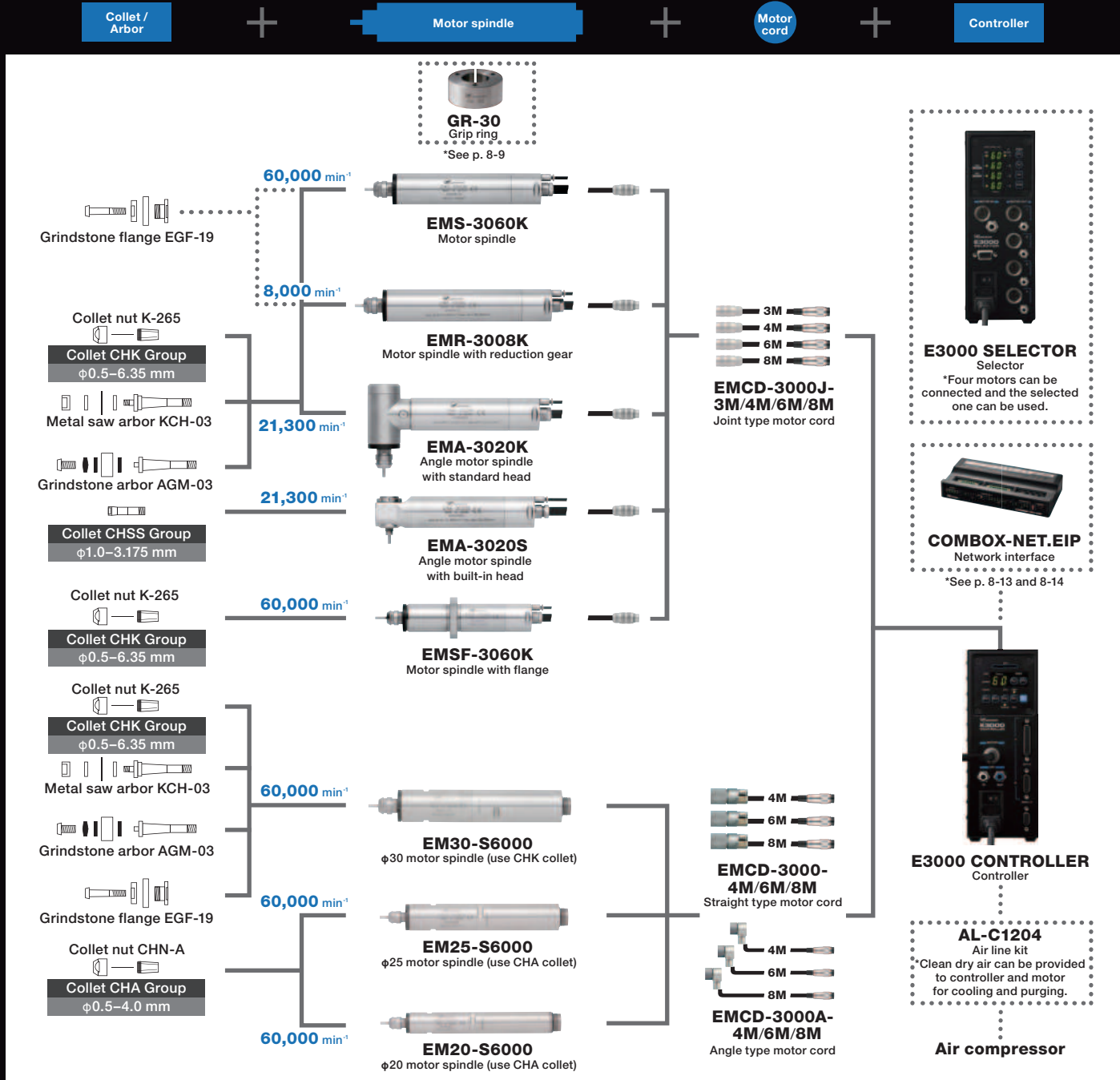
E3000-PEX4 Control panel extention cord (4 m)	p. 2-48
---	---------

System Chart

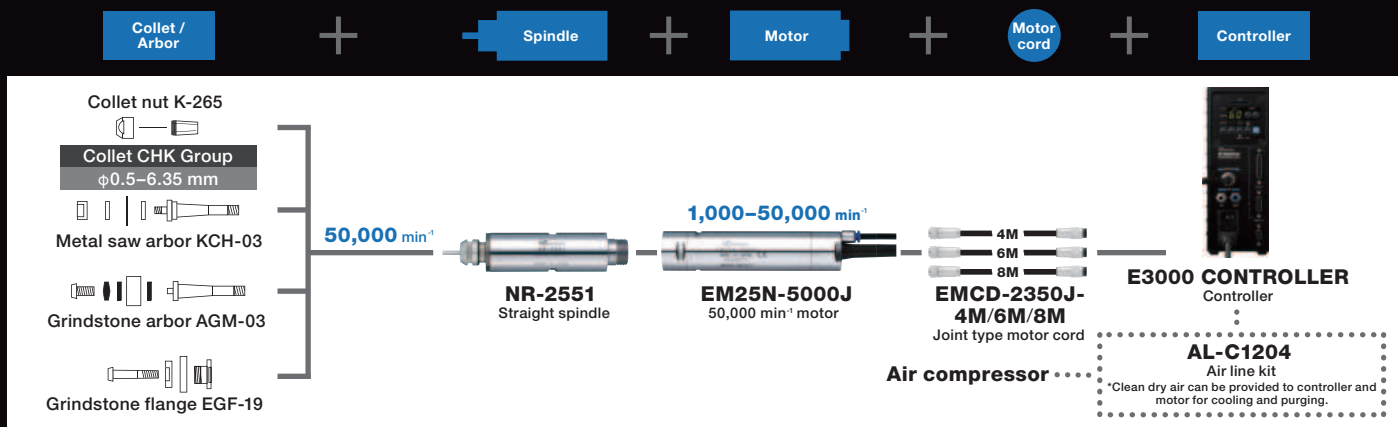
Modular type φ30 mm



One-piece type φ30, φ25, φ20 mm



Modular type φ25 mm



E4000

E3000

E2000

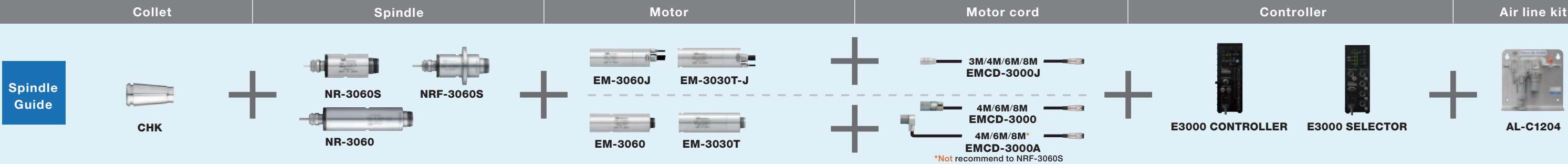
Speed3

Air-Speed

HES

TURBINES

ACCESSORIES



E3000 SERIES

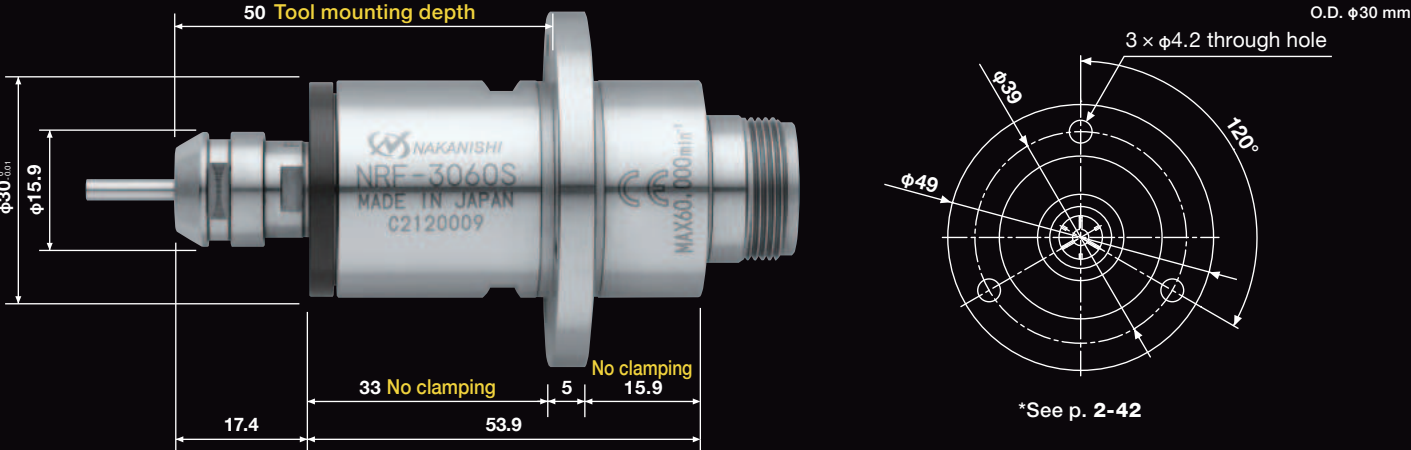
Spindle (Modular type)

Shown In Actual Size

NR-3060S
Short spindle



NRF-3060S
Short spindle with flange



NR-3060
Straight spindle



Specifications

CAD drawings

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

NR-3060S



O.D.	Allowable motor speed	Spindle accuracy	Collet	Net weight
φ30 mm	60,000 min ⁻¹	Within 1 μm	CHK Group (φ0.5–φ6.35 mm)	260 g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. · (22 × 27): 1 pc. *Collet is sold separately.			
Options	Collet (CHK Group): φ0.5–φ6.35 mm p. 8-5 Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) / Grindstone flange (EGF-19) p. 8-12			

NRF-3060S

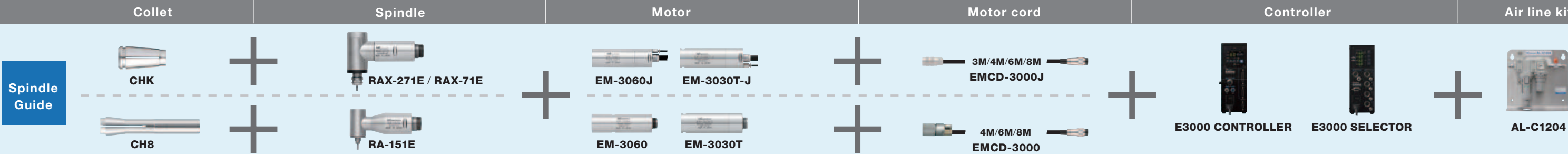


O.D.	Allowable motor speed	Spindle accuracy	Collet	Net weight
φ30 mm	60,000 min ⁻¹	Within 1 μm	CHK Group (φ0.5–φ6.35 mm)	285 g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. · (22 × 27): 1 pc. *Collet is sold separately.			
Options	Collet (CHK Group): φ0.5–φ6.35 mm p. 8-5 Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) / Grindstone flange (EGF-19) p. 8-12			

NR-3060



O.D.	Allowable motor speed	Spindle accuracy	Collet	Net weight
φ30 mm	60,000 min ⁻¹	Within 1 μm	CHK Group (φ0.5–φ6.35 mm)	480 g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. · (22 × 27): 1 pc. *Collet is sold separately.			
Options	Collet (CHK Group): φ0.5–φ6.35 mm p. 8-5 Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) / Grindstone flange (EGF-19) p. 8-12			

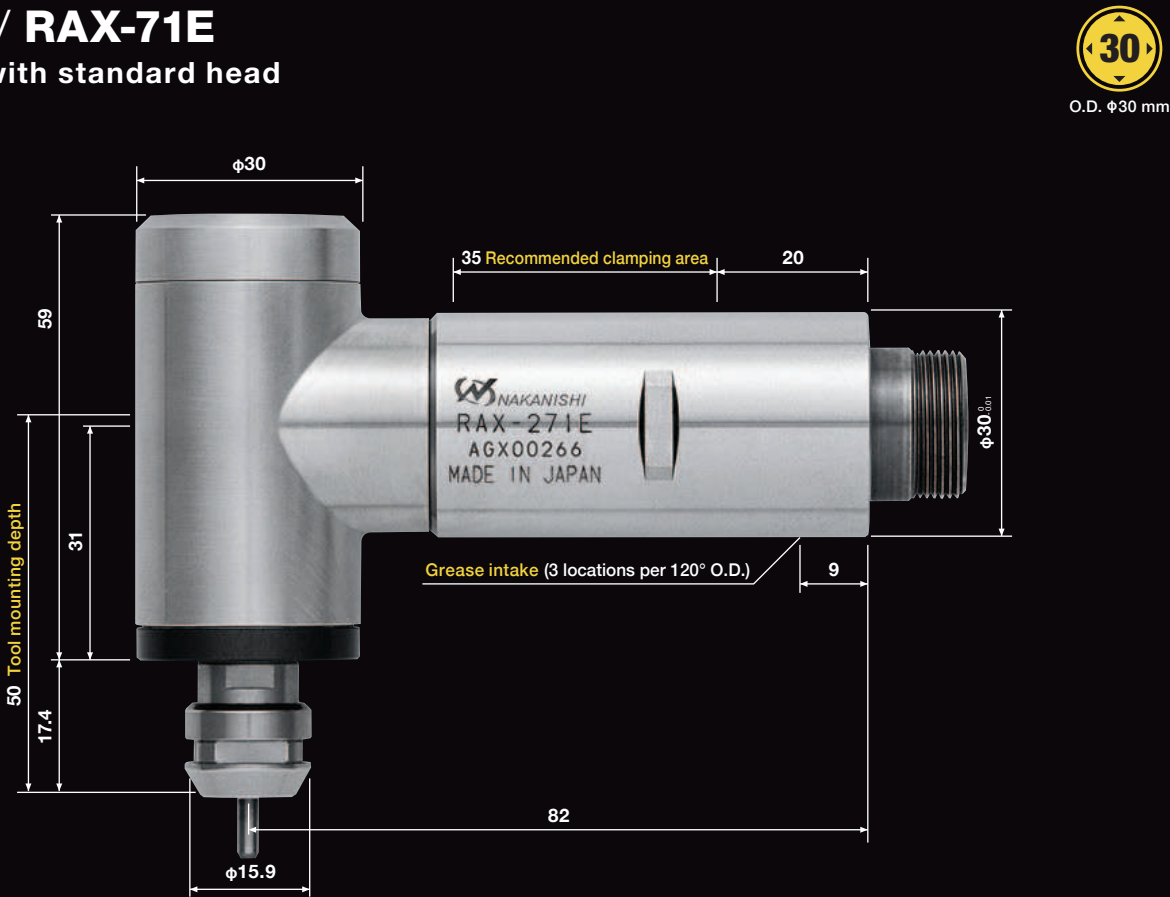


E3000 SERIES

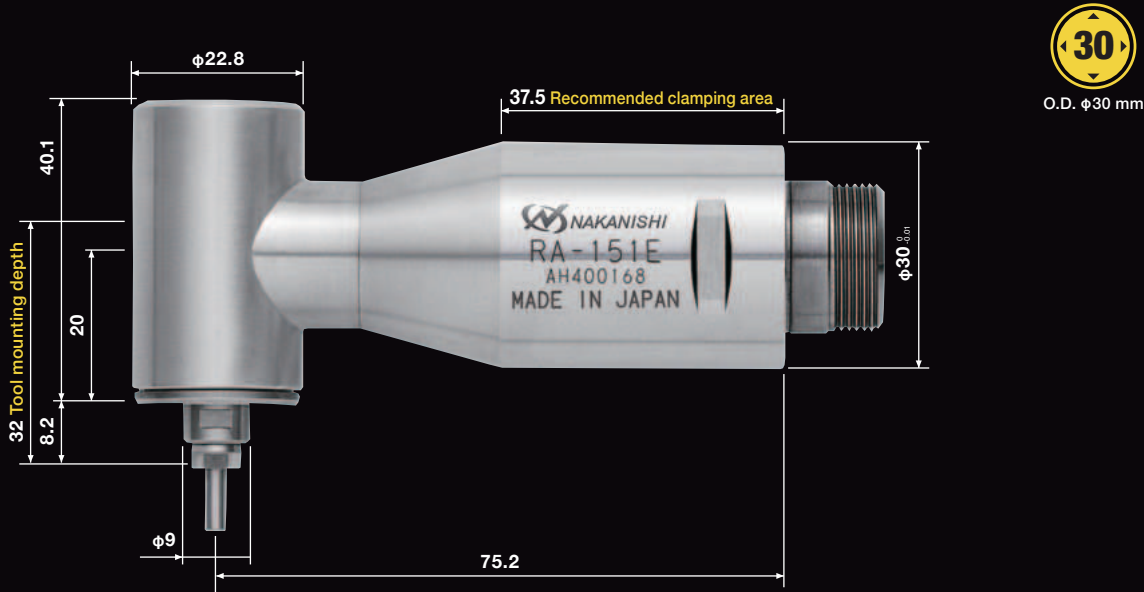
Spindle (Modular type)

Shown In Actual Size

RAX-271E / RAX-71E
Angle spindle with standard head



RA-151E
Angle spindle with short head



Specifications

CAD drawings

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

RAX-271E / RAX-71E



Code No.	7856	Model	RAX-271E
Code No.	7857	Model	RAX-71E

[Model]	O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed
RAX-271E	φ30 mm	20,000 min ⁻¹	1/1.5	30,000 min ⁻¹ (Allowable rotational speed)
Spindle accuracy	Collet	Net weight		
Within 2 μm	CHK Group (φ0.5–φ6.35 mm)	580 g		
[Model]	O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed
RAX-71E	φ30 mm	5,000 min ⁻¹	1/6	30,000 min ⁻¹ (Allowable rotational speed)
Spindle accuracy	Collet	Net weight		
Within 2 μm	CHK Group (φ0.5–φ6.35 mm)	580 g		
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. · (22 × 27): 1 pc. Grease for Speed reducer (10 mL) / Grease nipple: 1 pc. *Collet is sold separately.			
Options	Collet (CHK Group): φ0.5–φ6.35 mm p. 8-5 Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) p. 8-12			



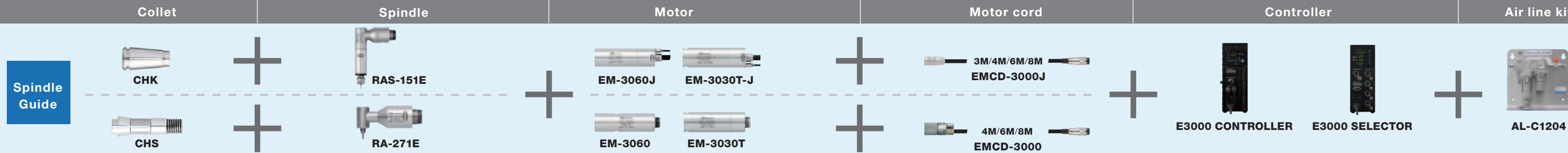
Inject grease every 70–100 hours to extend the life of the Speed reducer.
Grease injection prevents the friction of the internal gears and the degradation of the existing grease.

RA-151E



Code No.	1505	Model	RA-151E
----------	------	-------	---------

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Collet	Net weight
φ30 mm	7,490 min ⁻¹	1/2.67	20,000 min ⁻¹ (Allowable rotational speed)	CH8 Group (φ0.8–φ3.175 mm)	385 g
Standard equipment and accessories	Collet: φ3.0 mm (CH8-3.0) / Wrench (7 × 5.5) · (8 × 5) · (22 × 27): 1 pc. each				
Options	Collet (CH8 Group): φ0.8–φ3.175 mm p. 8-7 Metal saw arbor (KCH-02): 3 sizes p. 8-12				



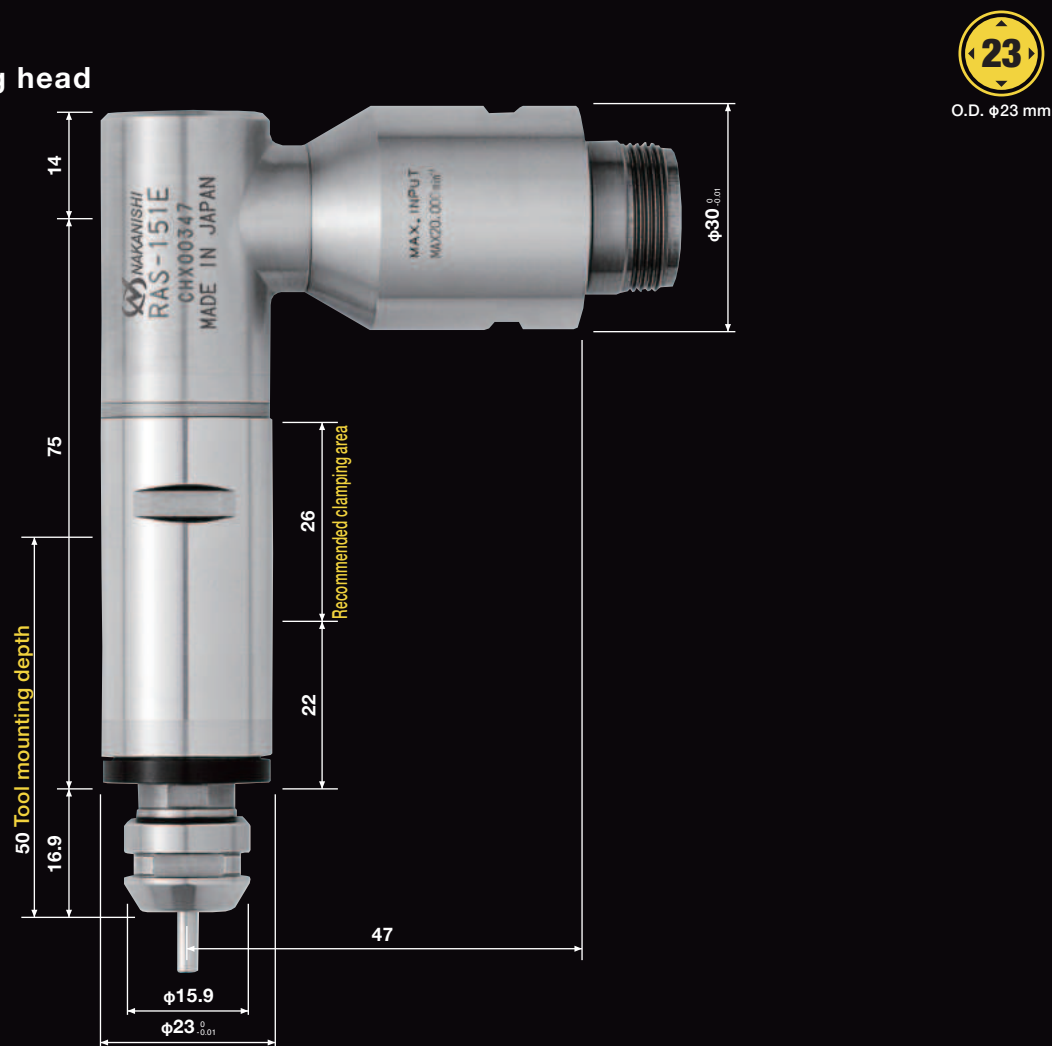
E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

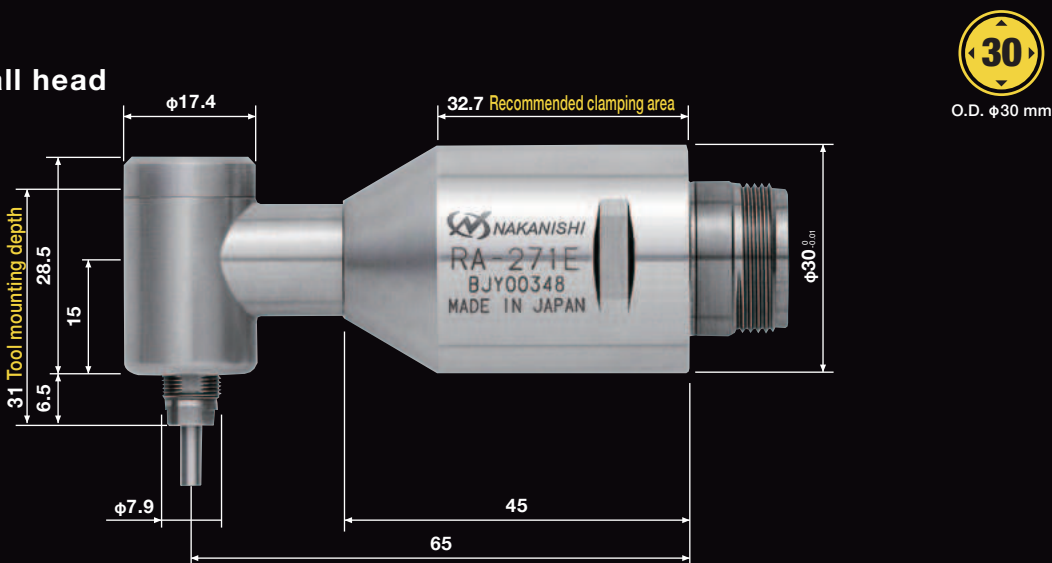
RAS-151E

Angle spindle with long head



RA-271E

Angle spindle with small head



Specifications

CAD drawings

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

Order by Code No.

RAS-151E



Code No. **7840** Model **RAS-151E**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed
$\phi 23$ mm Recommended clamping area	7,490 min ⁻¹	$\frac{1}{2.67}$	20,000 min ⁻¹ (Allowable rotational speed)
Spindle accuracy	Collet	Net weight	
Within 2 μ m	CHK Group ($\phi 0.5$ – $\phi 6.35$ mm)	413 g	
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. · (22 × 27): 1 pc. *Collet is sold separately.		
Options	Collet (CHK Group): $\phi 0.5$ – $\phi 6.35$ mm p. 8-5		
	Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) p. 8-12		

RA-271E



Code No. **1506** Model **RA-271E**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Collet	Net weight
$\phi 30$ mm	13,330 min ⁻¹	$\frac{1}{1.5}$	20,000 min ⁻¹ (Allowable rotational speed)	CHS Group ($\phi 0.8$ – $\phi 3.175$ mm)	240 g
Standard equipment and accessories	Collet: $\phi 3.0$ mm (CHS-3.0) / Wrench (7 × 5.1) · (8 × 5) · (22 × 27): 1 pc. each				
Options	Collet (CHS Group): $\phi 0.8$ – $\phi 3.175$ mm p. 8-6				

E4000

E3000

E2000

iSpeed3

Air-Speed

HES

TURBINES

ACCESSORIES

Spindle
Guide

CHB



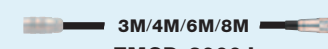
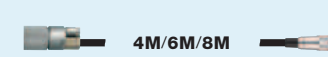
NR33-6000ATC-ESD



EM-3060J



EM-3060

3M/4M/6M/8M
EMCD-3000J4M/6M/8M
EMCD-3000

E3000 CONTROLLER



E3000 SELECTOR



AL-C1204

E3000 SERIES

Shown In Actual Size

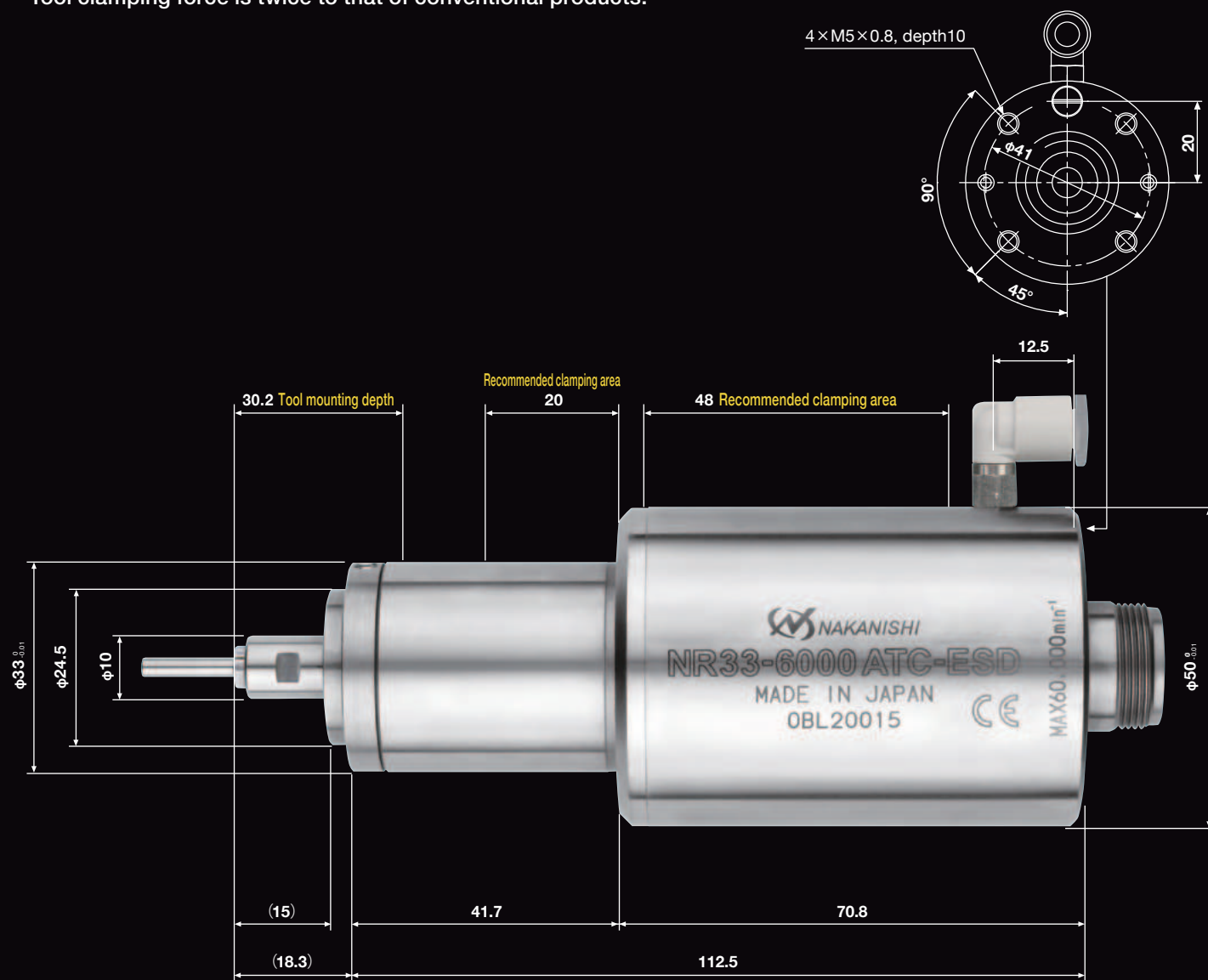
Spindle (Modular type)

NR33-6000ATC-ESD

Antistatic spindle

O.D. ϕ 33 mmO.D. ϕ 50 mm

- Quick and automatic tool change by supplying air to open the collet.
- Prevents damage to electronic components on the PCB by discharging the static electricity generated during machining.
- The long nose design will help avoid contact between the spindle and parts installed on the PCB.
- Tool clamping force is twice to that of conventional products.



Specifications

CAD drawings

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

Order by Code No.

NR33-6000ATC-ESD

Code No.

7788

Model

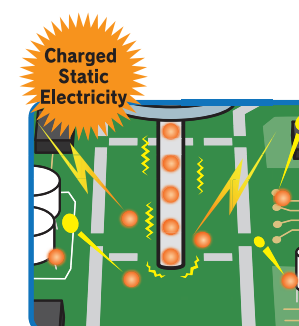
NR33-6000ATC-ESD



What is an ESD Spindle?

Non-ESD Spindles

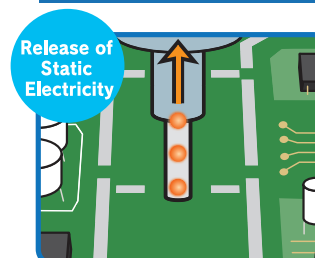
The static electricity could accidentally be discharged to the PCB during machining to damage the mounted components.



NR33-6000ATC-ESD

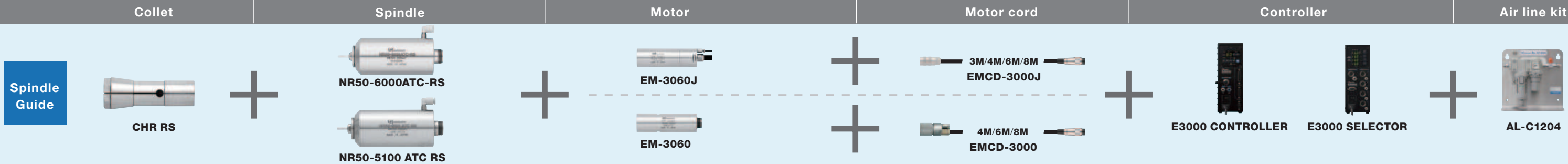
The static electricity is discharged through the spindle during machining.

Prevents damage to components mounted on the PCB.



* Image is for illustrative purpose only.

O.D.	Allowable motor speed	Air for collet opening	Spindle accuracy	Collet	Net weight
ϕ 33 mm / ϕ 50 mm	60,000 min ⁻¹	0.55–0.6 MPa	Within 1 μ m	CHB Group (ϕ 2.0– ϕ 4.0 mm)	1,170 g
Standard equipment and accessories	Collet: ϕ 3.175 mm (CHB-3.175) / Wrench (6.1 $\times$ 8) · (9 $\times$ 11): 1 pc. each / Bar wrench (K-236): 1 pc. Air hose with filter (K-251): ϕ 6 mm $\times$ 2 m				
Options	Collet (CHB Group): ϕ 2.0– ϕ 4.0 mm p. 8-5				



E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

NR50-6000ATC-RS

Automatic tool change spindle

- Tool clamping force is twice to that of conventional products.
 - Dust proof cover on spindle tip minimizes foreign objects to enter the spindle body.
 - Rubber-sealed (RS) collet prevents cutting dust from entering the collet slot to prevent tool jamming.
- Recommended for use with cutting fluids on metal or glass workpieces.



O.D. ϕ 50 mm



NR50-5100 ATC RS

Automatic tool change spindle

- Dust proof cover on spindle tip minimizes foreign objects to enter the spindle body.
 - Rubber-sealed (RS) collet prevents cutting dust from entering the collet slot to prevent tool jamming.
- Recommended for use with cutting fluids on metal or glass workpieces.



O.D. ϕ 50 mm



Specifications

CAD drawings

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

Order by Code No.

NR50-6000ATC-RS



Code No.	7909	Model	NR50-6000ATC-RS
----------	------	-------	-----------------

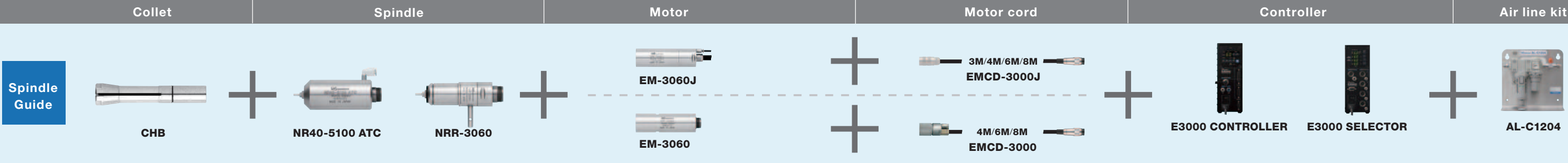
O.D.	Allowable motor speed	Air for collet opening	Spindle accuracy	Collet	Net weight
ϕ 50 mm	60,000 min ⁻¹	0.55–0.6 MPa	Within 1 μ m	CHR RS Group (ϕ 3.0– ϕ 6.35 mm)	1,280 g
Standard equipment and accessories	Collet: ϕ 3.175 mm (CHR-3.175RS) / Wrench (9 × 11) · (12 × 14): 1 pc. each / Bar wrench (K-236): 1 pc. Air hose with filter (K-251): ϕ 6 mm × 2 m				
Options	Collet (CHR RS Group): ϕ 3.0– ϕ 6.35 mm p. 8-6				

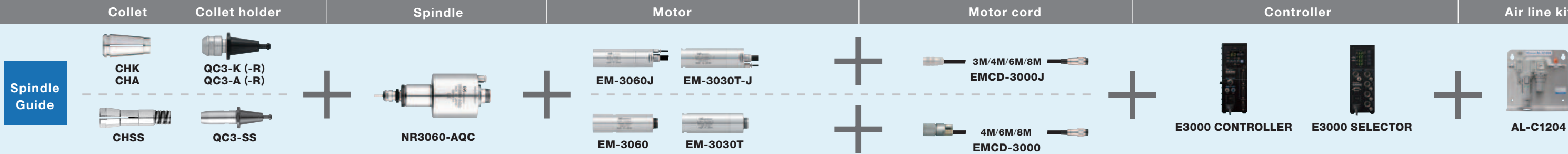
NR50-5100 ATC RS



Code No.	7690	Model	NR50-5100 ATC RS
----------	------	-------	------------------

O.D.	Allowable motor speed	Air for collet opening	Spindle accuracy	Collet	Net weight
ϕ 50 mm	50,000 min ⁻¹	0.55–0.6 MPa	Within 1 μ m	CHR RS Group (ϕ 3.0– ϕ 6.35 mm)	1,370 g
Standard equipment and accessories	Collet: ϕ 3.175 mm (CHR-3.175RS) / Wrench (9 × 11) · (12 × 14): 1 pc. each / Bar wrench (K-236): 1 pc. Air hose with filter (K-251): ϕ 6 mm × 2 m				
Options	Collet (CHR RS Group): ϕ 3.0– ϕ 6.35 mm p. 8-6				





E3000 SERIES

Shown In Actual Size

Spindle (Modular type)

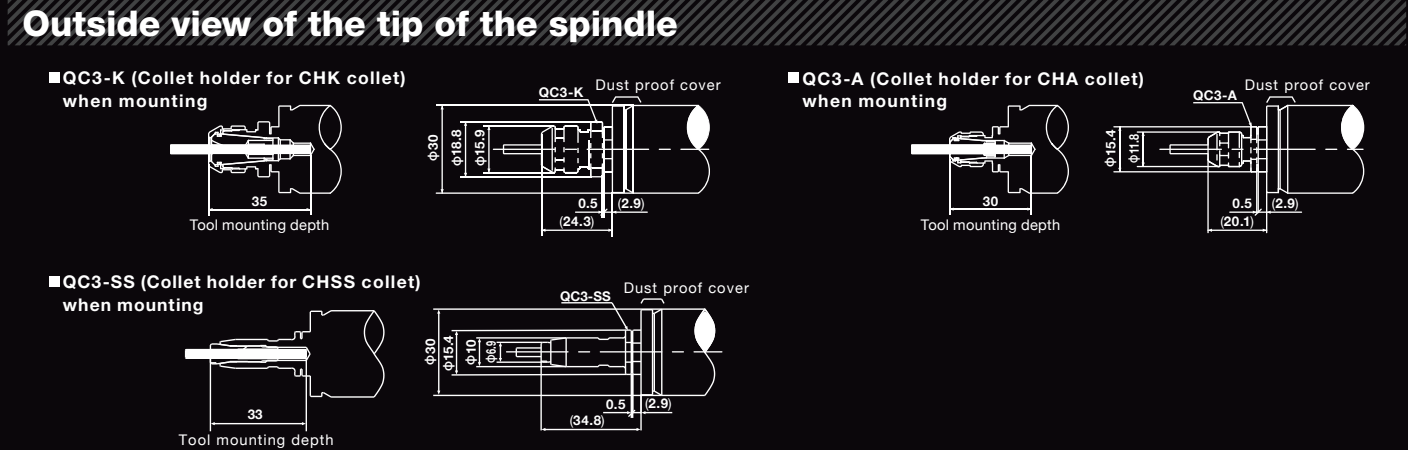
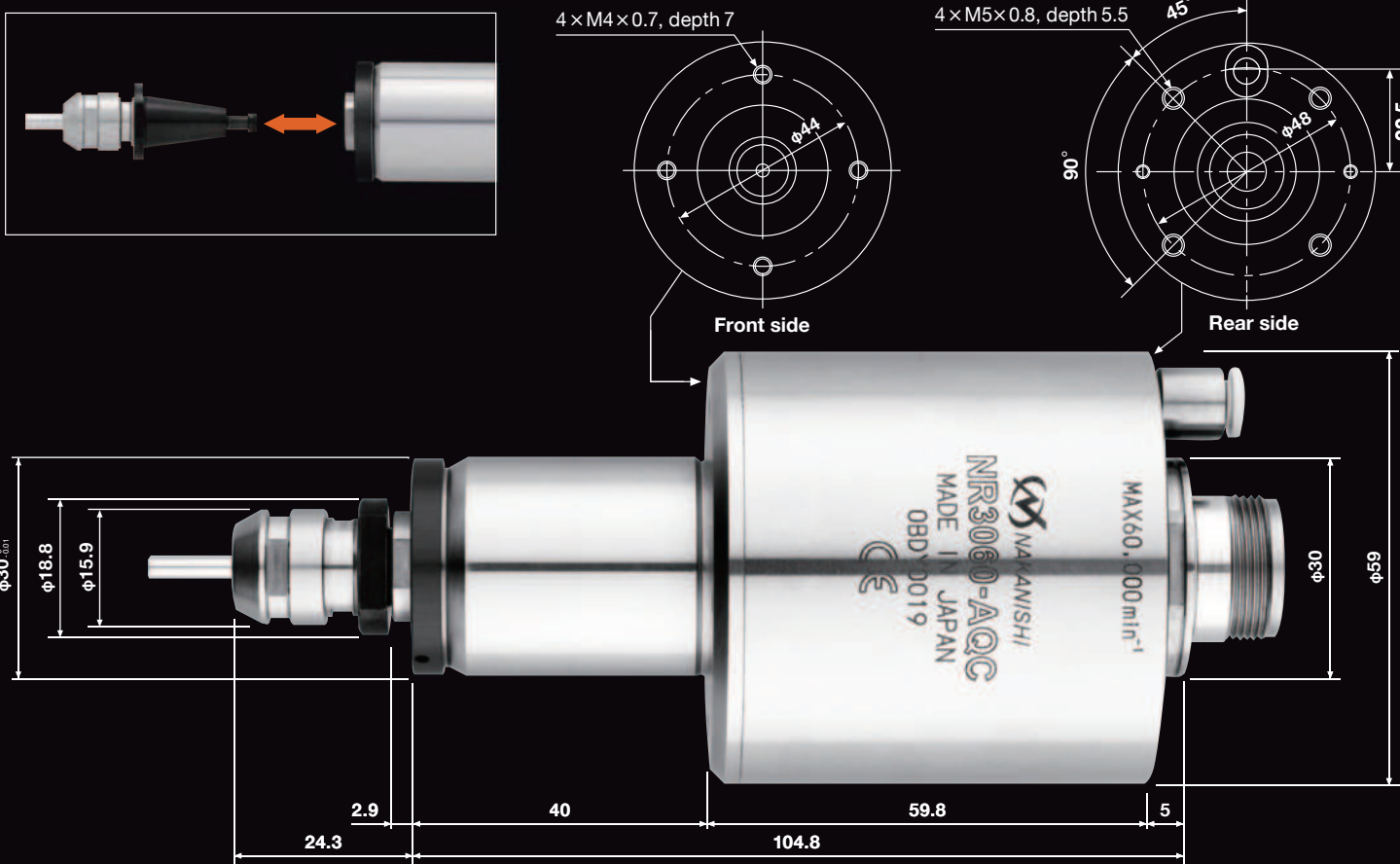
NR3060-AQC

Air quick change spindle

- Quick and easy Collet holder change with air chucking mechanism.
- Enhancing productivity by enabling external tool set-up.
- There are 3 models of Collet holders. The Collet holder model depends on the Collet type selected.

Various sizes of Collets are available. (CHK $\phi 0.5$ mm– $\phi 6.35$ mm, CHA $\phi 0.5$ mm– $\phi 4.0$ mm, CHSS $\phi 1.0$ mm– $\phi 3.175$ mm)

*The position of the mounting holes in front side and the rear side varies from product to product.



Specifications

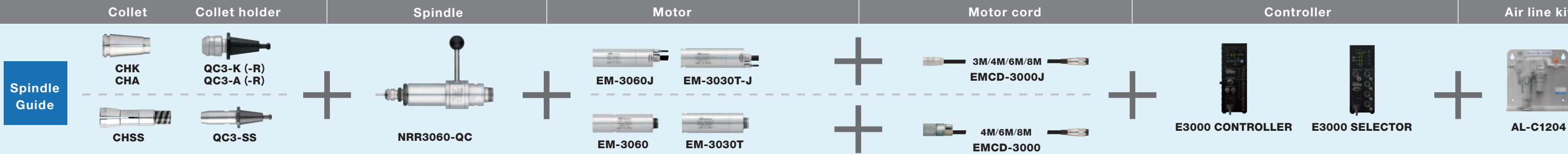
CAD drawings

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

Order by Code No.

NR3060-AQC		Code No.	9220	Model	NR3060-AQC
O.D.	Allowable motor speed	Air for replacing collet holders	Spindle accuracy	Collet holders	Net weight
$\phi 30$ mm	60,000 min ⁻¹	0.6 MPa	Within 1 μ m	QC3-K / QC3-K-R (for CHK collet) QC3-A / QC3-A-R (for CHA collet) QC3-SS (for CHSS collet)	1,230 g
Standard equipment and accessories		Wrench (22 × 27): 1 pc. / Air hose with filter (K-251): $\phi 6$ mm × 2 m			

Options					
Collet	You can choose the I.D. size (The following is an example of $\phi 3.0$ mm.)		Collet holder (Collet nut included)	Wrench	
			QC3-K / A D-Cut	QC3-K / A-R	
CHK	Code No.	91 5 3 0	9210	9223	2026
I.D. $\phi 0.5$ – $\phi 6.35$ mm p. 8-5	Model	CHK- 3 . 0 (I.D. $\phi 3.0$ mm)	QC3-K (for CHK collet)	QC3-K-R (for CHK collet)	Wrench 12 × 14 (*Required 2 pcs.)
CHA	Code No.	914 3 0	9209	9222	2012 + 2054
I.D. $\phi 0.5$ – $\phi 4.0$ mm p. 8-5	Model	CHA- 3 . 0 (I.D. $\phi 3.0$ mm)	QC3-A (for CHA collet)	QC3-A-R (for CHA collet)	Wrench 8 × 5 (1 pc.) + Wrench 9 × 11 (1 pc.)
CHSS	Code No.	930 3 0	7794	2069	2054
I.D. $\phi 1.0$ – $\phi 3.175$ mm p. 8-6	Model	CHSS- 3 . 0 (I.D. $\phi 3.0$ mm)	QC3-SS (for CHSS collet)	Wrench 6.1 × 8 (1 pc.)	Wrench 9 × 11 (1 pc.)
Preset adapter (for QC3 Collet holders)	Code No.	9211	[Use below wrenches when using Preset adapter] for CHK collet: Wrench 12 × 14 (1 pc.) for CHA collet: Wrench 9 × 11 (1 pc.) for CHSS collet: Wrench 6.1 × 8 (1 pc.) See p. 8-11		
	Model	QC3-ADP			



E3000 SERIES

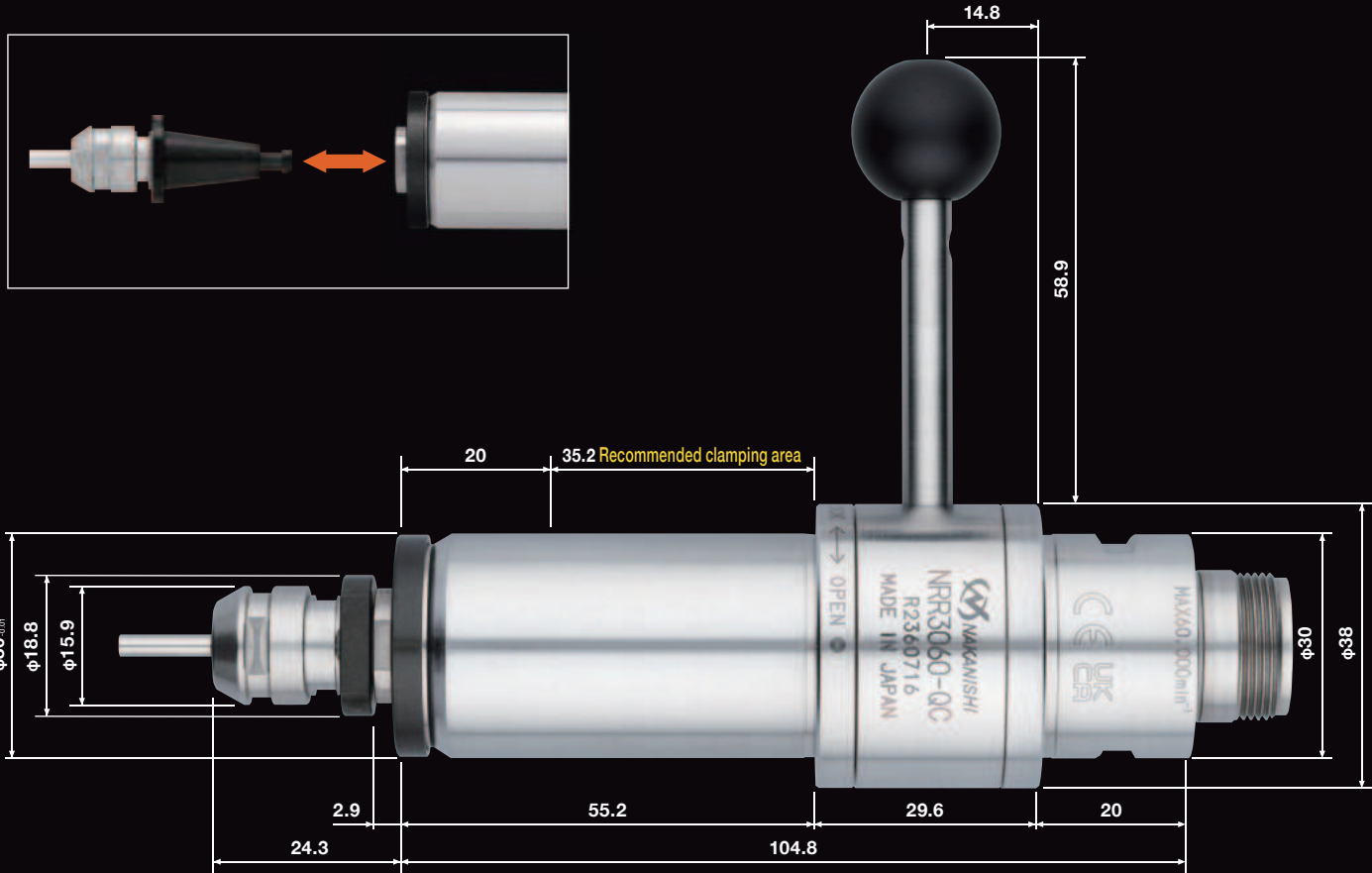
Shown In Actual Size

Spindle (Modular type)

NRR3060-QC

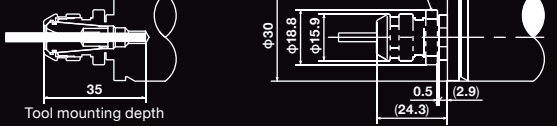
Lever quick change spindle

- Quick and easy Collet holder change with lever chucking mechanism.
 - Enhancing productivity by enabling external tool set-up.
 - There are 3 models of Collet holders. The Collet holder model depends on the Collet type selected.
- Various sizes of Collets are available. (CHK $\phi 0.5$ mm– $\phi 6.35$ mm, CHA $\phi 0.5$ mm– $\phi 4.0$ mm, CHSS $\phi 1.0$ mm– $\phi 3.175$ mm)

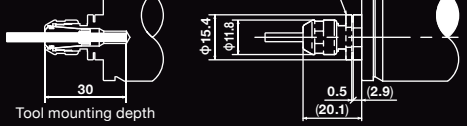


Outside view of the tip of the spindle

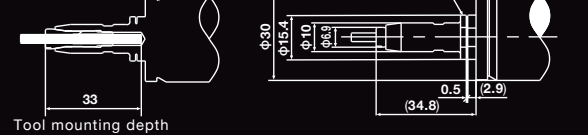
■QC3-K (Collet holder for CHK collet) when mounting



■QC3-A (Collet holder for CHA collet) when mounting



■QC3-SS (Collet holder for CHSS collet) when mounting



Specifications

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

NRR3060-QC

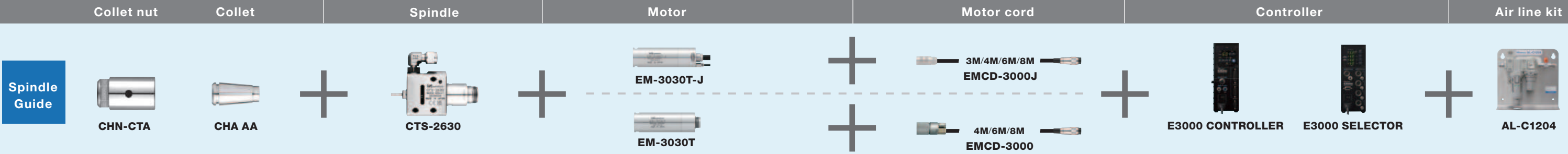
O.D.	Allowable motor speed	Lever operating angle	Spindle accuracy	Collet holders	Net weight
$\phi 30$ mm Recommended clamping area	60,000 min ⁻¹	90°	Within 1 μ m	QC3-K / QC3-K-R (for CHK collet) QC3-A / QC3-A-R (for CHA collet) QC3-SS (for CHSS collet)	570 g
Standard equipment and accessories	Wrench (22 × 27): 1 pc.				

Options					
Collet	You can choose the I.D. size (The following is an example of $\phi 3.0$ mm.)		Collet holder (Collet nut included)	Wrench	
			QC3-K / A D-Cut	QC3-K / A-R	
CHK I.D. $\phi 0.5$ – $\phi 6.35$ mm p. 8-5	Code No.	91 5 3 0	9210	9223	2026
	Model	CHK- 3 . 0 (I.D. $\phi 3.0$ mm)	QC3-K (for CHK collet)	QC3-K-R (for CHK collet)	Wrench 12 × 14 (*Required 2 pcs.)
CHA I.D. $\phi 0.5$ – $\phi 4.0$ mm p. 8-5	Code No.	914 3 0	9209	9222	2012 + 2054
	Model	CHA- 3 . 0 (I.D. $\phi 3.0$ mm)	QC3-A (for CHA collet)	QC3-A-R (for CHA collet)	Wrench 8 × 5 (1 pc.) + Wrench 9 × 11 (1 pc.)
CHSS I.D. $\phi 1.0$ – $\phi 3.175$ mm p. 8-6	Code No.	930 3 0	7794	2069	2054
	Model	CHSS- 3 . 0 (I.D. $\phi 3.0$ mm)	QC3-SS (for CHSS collet)	Wrench 6.1 × 8 (1 pc.)	Wrench 9 × 11 (1 pc.)

Preset adapter (for QC3 Collet holders)

Code No.	9211
Model	QC3-ADP

[Use below wrenches when using Preset adapter]
for CHK collet: Wrench 12 × 14 (1 pc.)
for CHA collet: Wrench 9 × 11 (1 pc.)
for CHSS collet: Wrench 6.1 × 8 (1 pc.)
See p. 8-11



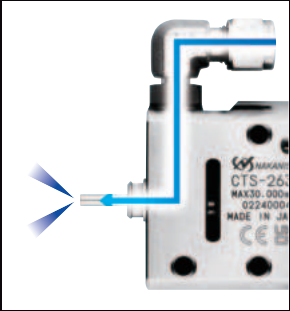
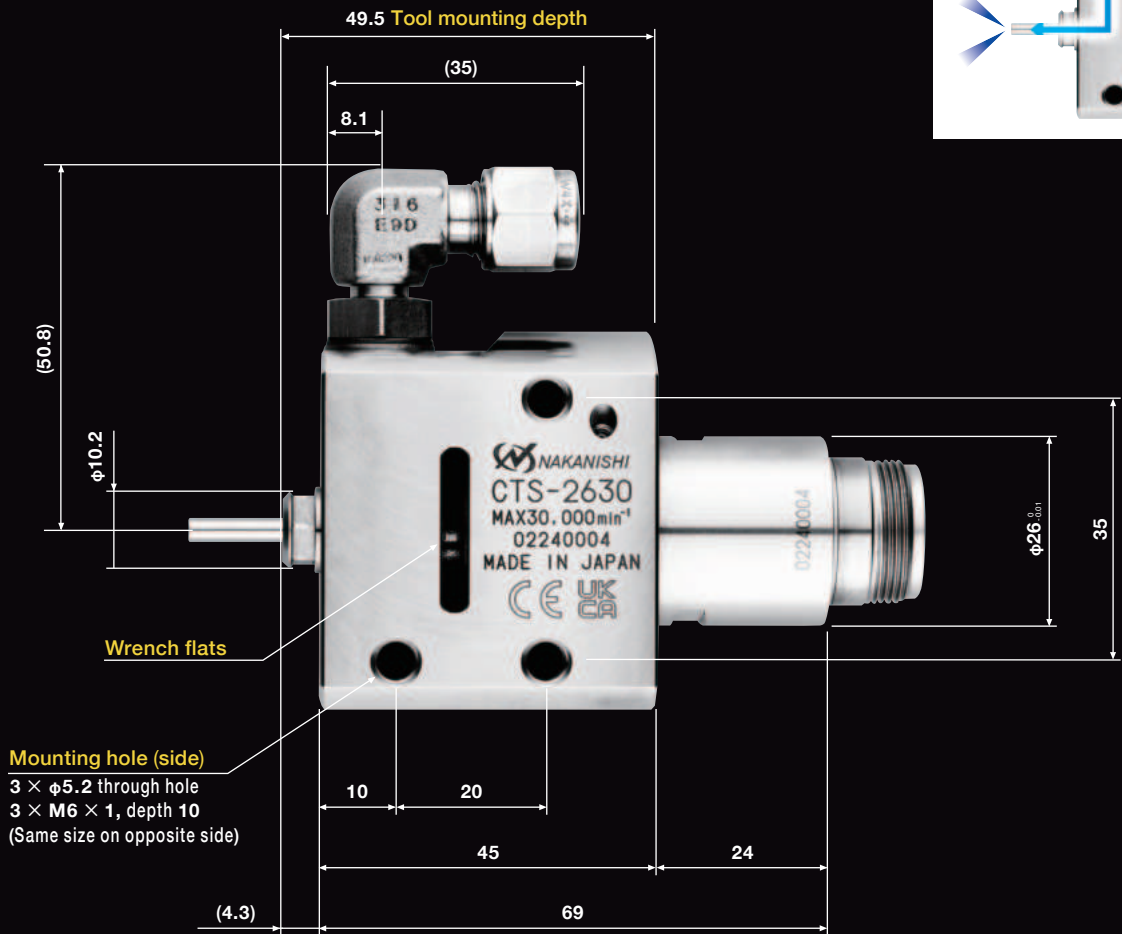
E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

CTS-2630
Coolant through spindle

- For deep hole drilling with an oil hole drill.
- There are several advantages to injecting coolant from the tip of the drill: improved chip discharge, reduced drilling time, longer tool life, and high precision drilling.



! High pressure pump and coolant hose, etc. must be arranged by the customer.

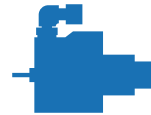
Specifications

CAD drawings

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

Order by Code No.

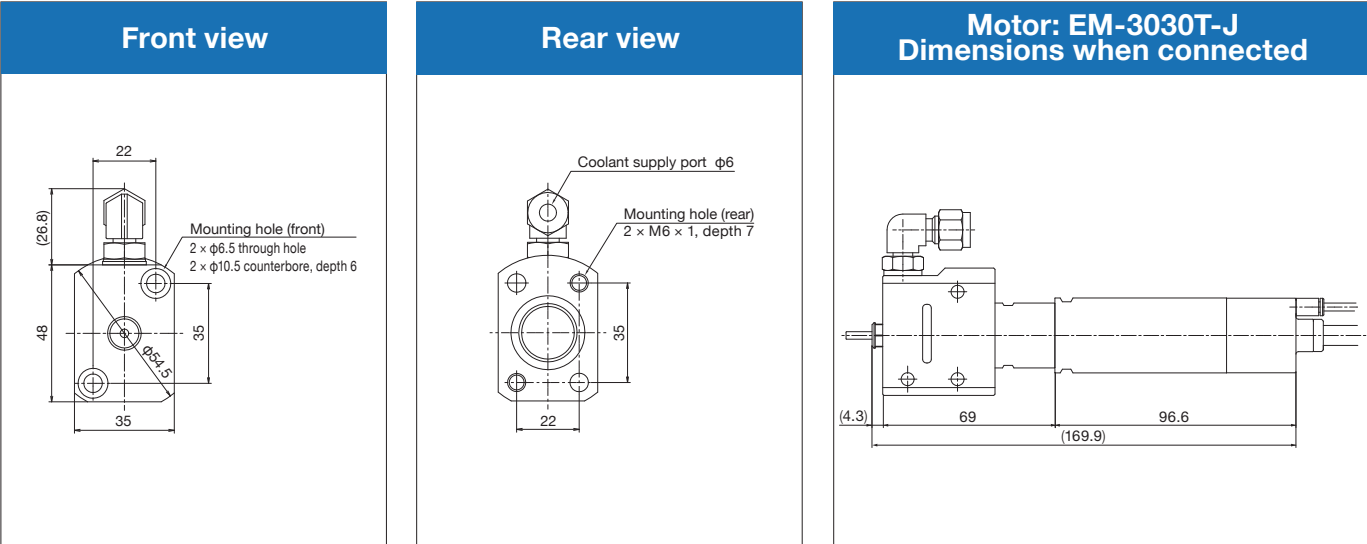
CTS-2630



Code No.	7907	Model	CTS-2630
----------	------	-------	----------

O.D.	Allowable motor speed	Spindle accuracy	Collet	Net weight
φ26 mm	30,000 min ⁻¹	Within 1 μm	CHA Group AA (φ3.0, φ3.175, φ4.0 mm)	570 g
Standard equipment and accessories	Wrench (8 × 5) · (9 × 11) · (20 × 24): 1 pc. each *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 p. 8-5			
	Collet nut (CHN-CTA): 3.0, 3.175, 4.0 mm *Please match the Collet and Collet nut size. p. 8-8			

Shank diameter of corresponding tool	Collet nut		+	Collet	
	Code No.			Code No.	
φ3.0	7798	CHN-CTA-3.0	+	91494	CHA-3.0AA
φ3.175	7799	CHN-CTA-3.175	+	91496	CHA-3.175AA
φ4.0	7800	CHN-CTA-4.0	+	91495	CHA-4.0AA



Speed reducer (Modular type)

ARG-011E

Speed reducer (1/4)



O.D. φ30 mm

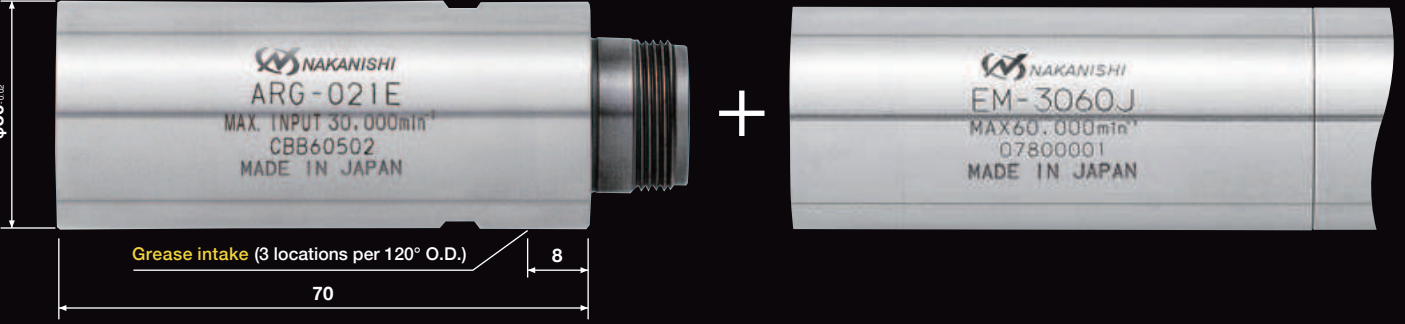


ARG-021E

Speed reducer (1/16)



O.D. φ30 mm



RG-3004M

Oil mist type speed reducer (1/4)



O.D. φ30 mm

- Max. input speed is 60,000 min⁻¹.
 - Longer spindle life by oil mist lubrication.
 - No need to inject grease, which reduces labor hours.
- *Oil mist supply is required.
- *Not supported for dry machining.



Specifications

CAD drawings

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

Order by Code No.

ARG-011E



Code No. 1507 Model ARG-011E

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Net weight
φ30 mm	7,500 min ⁻¹	$\frac{1}{4}$	30,000 min ⁻¹ (Allowable rotational speed)	242 g
Standard equipment and accessories	Grease for Speed reducer (10 mL) / Grease nipple: 1 pc.			

Inject grease every 70–100 hours to extend the life of the Speed reducer.
Grease injection prevents the friction of the internal gears and the degradation of the existing grease.

ARG-021E



Code No. 1508 Model ARG-021E

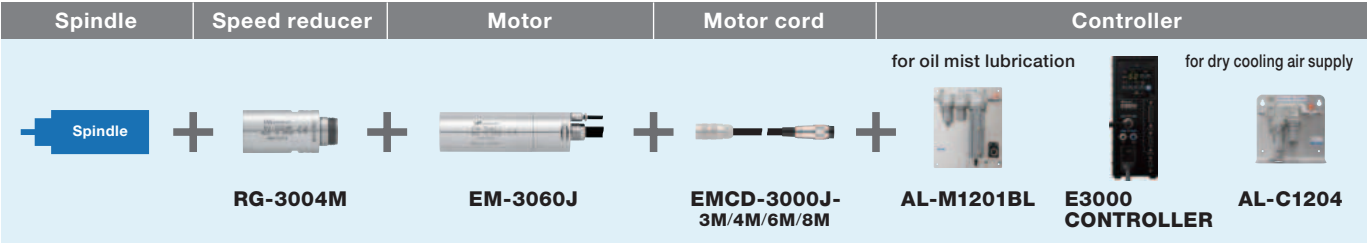
O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Net weight
φ30 mm	1,870 min ⁻¹	$\frac{1}{16}$	30,000 min ⁻¹ (Allowable rotational speed)	325 g
Standard equipment and accessories	Grease for Speed reducer (10 mL) / Grease nipple: 1 pc.			

Inject grease every 70–100 hours to extend the life of the Speed reducer.
Grease injection prevents the friction of the internal gears and the degradation of the existing grease.

RG-3004M



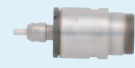
Code No. 7348 Model RG-3004M



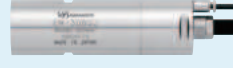
O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Net weight
φ30 mm	15,000 min ⁻¹	$\frac{1}{4}$	60,000 min ⁻¹ (Allowable rotational speed)	240 g

Spindle
Guide

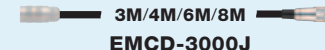
CHA



NR-3080S



EM-3080J

3M/4M/6M/8M
EMCD-3000J

E3000 CONTROLLER



E3000 SELECTOR



AL-C1204

E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

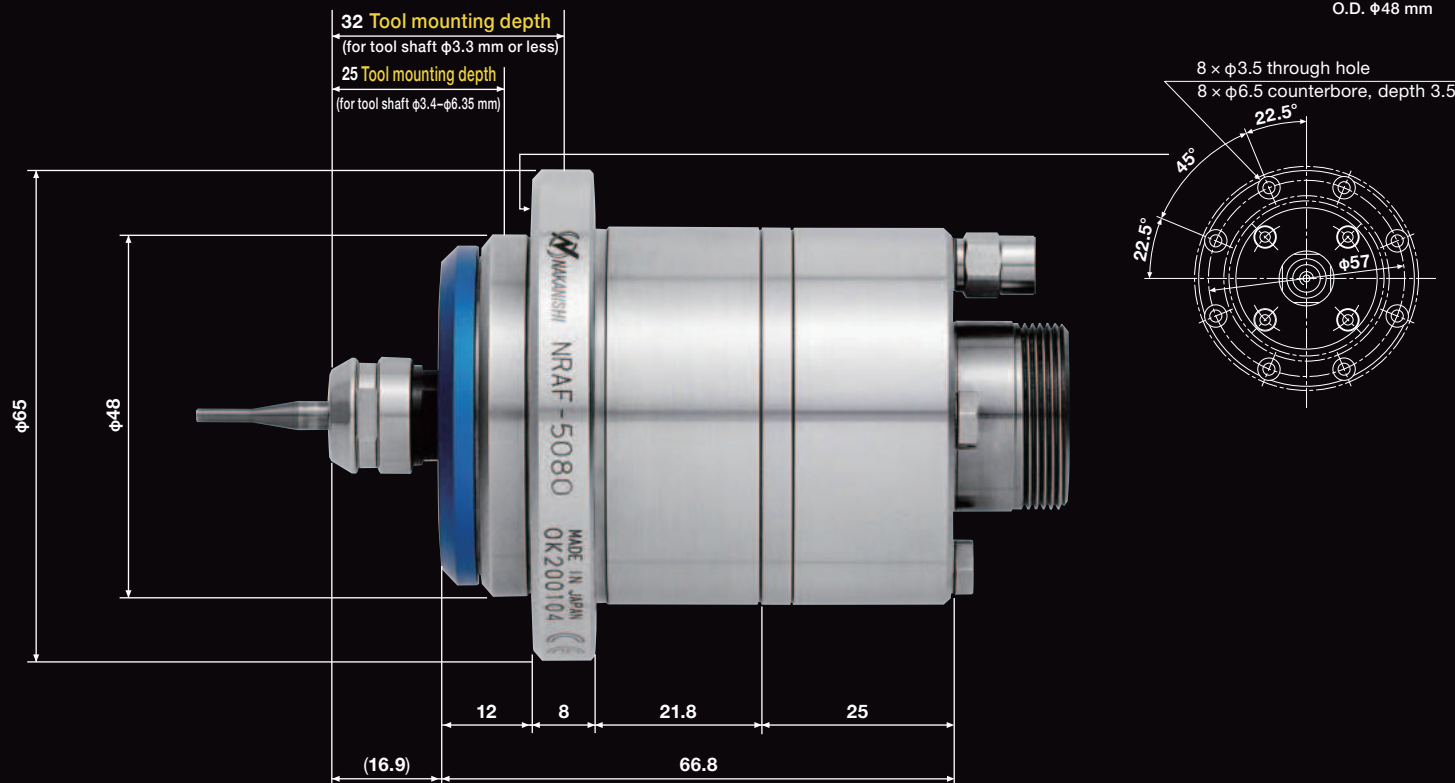
NR-3080S

Short spindle

O.D. $\phi 30$ mm

NRAF-5080

Air bearing spindle

O.D. $\phi 48$ mm

Specifications

CAD drawings

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

Order by Code No.

NR-3080S



Code No.

7876

Model

NR-3080S

O.D.	Allowable motor speed	Spindle accuracy	Collet	Net weight
$\phi 30$ mm	80,000 min ⁻¹	Within 1 μ m	CHA Group ($\phi 0.5$ – $\phi 4.0$ mm)	170 g
Standard equipment and accessories	Collet nut (CHN-A) / Wrench (22 × 27) · (8 × 5) · (9 × 11): 1 pc. each *Collet is sold separately.			
Options	Collet (CHA Group): $\phi 0.5$ – $\phi 4.0$ mm p. 8-5			

NRAF-5080



Code No.

1782

Model

NRAF-5080

Spindle	Motor	Motor cord	Controller	Air line kit					
 NRAF-5080	+	 EM-3080J	+	 EMCD-3000J-3M/4M/6M/8M	+	 E3000 CONTROLLER	+	 AL-A0611	 AL-A1205

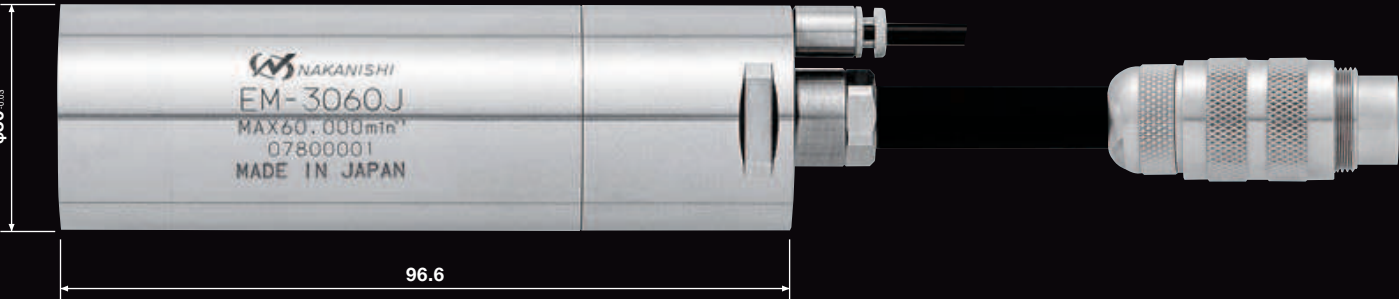
O.D.	Allowable motor speed	Appropriate bearing air pressure	Spindle accuracy	Collet	Net weight
$\phi 48$ mm	80,000 min ⁻¹	0.5 MPa (35 NL/min)	Within 1 μ m	CHK Group ($\phi 0.5$ – $\phi 6.35$ mm)	810 g
Specifications	Body mounting: flange mounting, M3 bolt (8 locations, equidistribution, 45° angle, PCD57)				
	Bearing type: air static bearing / Bearing load capacity: radial 18N, thrust 35N				
	Usable max. diameter of grindstone: $\phi 8.0$ mm and under on $\phi 6.0$ mm shank				
	Hose diameter: $\phi 4.0$ mm, for bearing air intake				
Standard equipment and accessories	Collet: $\phi 3.0$ mm (CHK-3.0) / Collet nut (K-265A) / Wrench (12 × 14): 2 pcs. Reducer: 1 pc. / Intake air hose ($\phi 4$ mm × 4 m): 1 pc. / Bar wrench (K-236): 1 pc.				
Options	Collet (CHK Group): $\phi 0.5$ – $\phi 6.35$ mm p. 8-5				

Motor (Modular type)

EM-3060
60,000 min⁻¹ motor



EM-3060J
60,000 min⁻¹ motor with joint type motor cord



Cord length: 0.3 m or 2 m

Specifications

CAD drawings

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

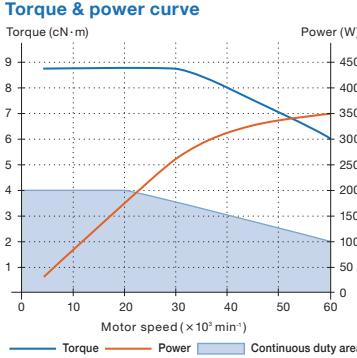
Order by Code No.

EM-3060



Code No.	1597	Model	EM-3060
----------	------	-------	---------

O.D.	Motor speed	Max. power	Net weight
φ30 mm	1,000–60,000 min ⁻¹	350 w	325 g
Standard equipment and accessories	Wrench (22 × 27): 1 pc. *Straight or Angle type motor cord is required separately.		
Options	Motor cord (Straight): 4 m (1748), 6 m (1749), 8 m (1750) Motor cord (Angle): 4 m (1744), 6 m (1743), 8 m (1742) p. 2-47		

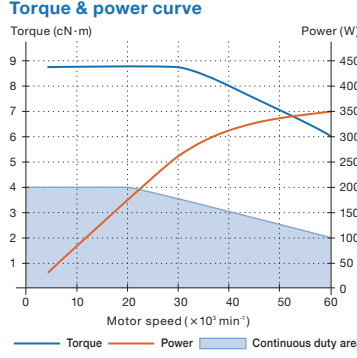
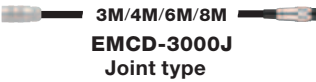


EM-3060J



Cord length	0.3 m	Code No.	1765	Model	EM-3060J
Cord length	2 m	Code No.	1779	Model	EM-3060J-2M

O.D.	Motor speed	Max. power	Min. bending cord radius	Net weight
φ30 mm	1,000–60,000 min ⁻¹	350 w	60 mm	0.3 m: 360 g 2 m: 525 g
Standard equipment and accessories	Wrench (22 × 27): 1 pc. *Joint type motor cord is required separately.			
Options	Motor cord (Joint): 3 m (1778), 4 m (1768), 6 m (1767), 8 m (1766) p. 2-47 *8M motor cord cannot be used with EM-3060J-2M.			



Motor (Modular type)

EM-3030T
30,000 min⁻¹ torque motor

- The torque is twice to that of EM-3060.



O.D. φ30 mm

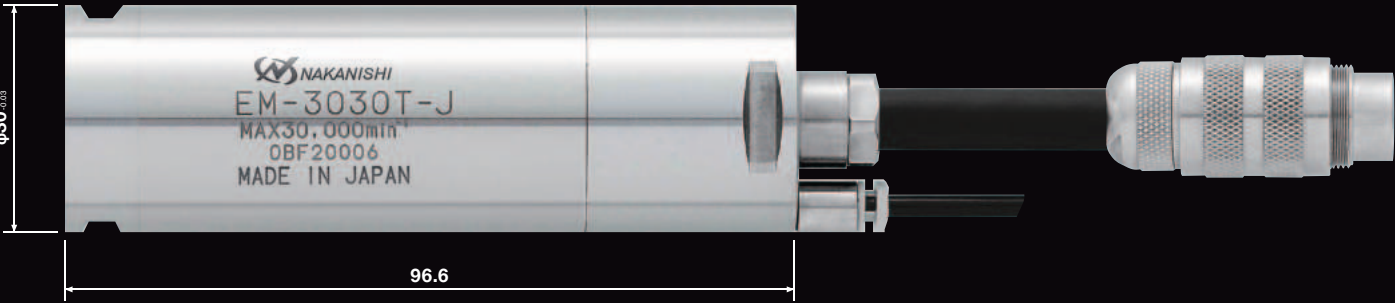


EM-3030T-J
30,000 min⁻¹ torque motor with joint type motor cord

- The torque is twice to that of EM-3060J.



O.D. φ30 mm

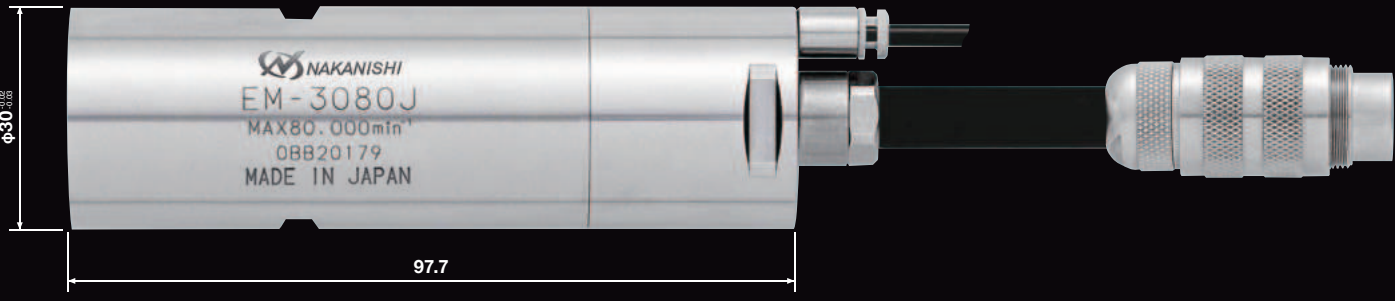


Cord length: 0.3 m or 2 m

EM-3080J
80,000 min⁻¹ motor with joint type motor cord



O.D. φ30 mm



Cord length: 0.3 m or 2 m

Specifications

CAD drawings

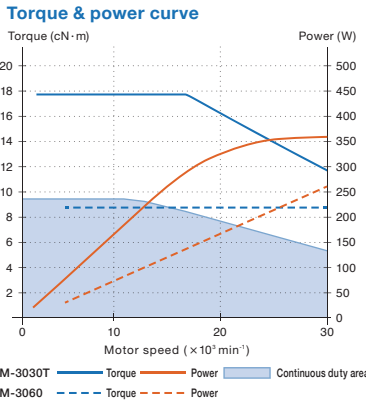
CAD drawings (DXF/STEP) are available on our website

Order by Code No.

EM-3030T

Code No.	7360	Model	EM-3030T
----------	------	-------	----------

O.D.	Motor speed	Max. power	Net weight
φ30 mm	1,000–30,000 min ⁻¹	350 w	350 g
Standard equipment and accessories	Wrench (22 × 27): 1 pc. <i>*Straight or Angle type motor cord is required separately.</i>		
Options	Motor cord (Straight): 4 m (1748), 6 m (1749), 8 m (1750)		
	Motor cord (Angle): 4 m (1744), 6 m (1743), 8 m (1742) p. 2-47		



Note to customers who already have an E3000 controller

Non applicable controller

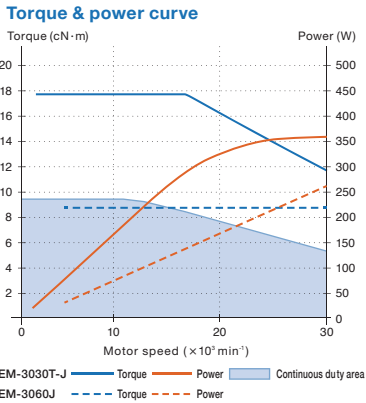
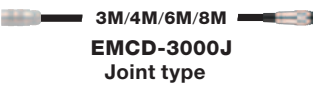
Applicable controller

If EM-3030T is connected to non-applicable controller, it will not rotate.

EM-3030T-J

Cord length	0.3 m	Code No.	7358	Model	EM-3030T-J
Cord length	2 m	Code No.	7359	Model	EM-3030T-J-2M

O.D.	Motor speed	Max. power	Min. bending cord radius	Net weight
φ30 mm	1,000–30,000 min ⁻¹	350 w	60 mm	0.3 m: 425 g 2 m: 600 g
Standard equipment and accessories	Wrench (22 × 27): 1 pc. <i>*Joint type motor cord is required separately.</i>			
Options	Motor cord (Joint): 3 m (1778), 4 m (1768), 6 m (1767), 8 m (1766) p. 2-47			
	<i>*8M motor cord cannot be used with EM-3030T-J-2M.</i>			



Note to customers who already have an E3000 controller

Non applicable controller

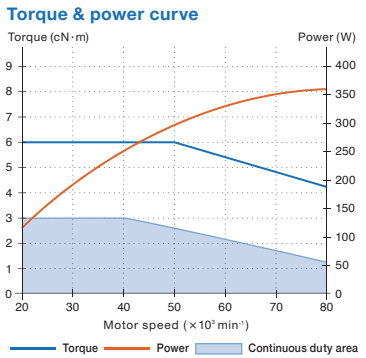
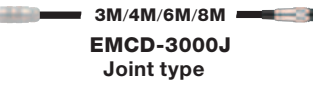
Applicable controller

If EM-3030T-J (-2M) is connected to non-applicable controller, it will not rotate.

EM-3080J

Cord length	0.3 m	Code No.	1781	Model	EM-3080J
Cord length	2 m	Code No.	1788	Model	EM-3080J-2M

O.D.	Motor speed	Max. power	Min. bending cord radius	Net weight
φ30 mm	20,000–80,000 min ⁻¹	350 w	60 mm	0.3 m: 375 g 2 m: 550 g
Standard equipment and accessories	Wrench (22 × 27): 1 pc. <i>*Joint type motor cord is required separately.</i>			
Options	Motor cord (Joint): 3 m (1778), 4 m (1768), 6 m (1767), 8 m (1766) p. 2-47			
	<i>*8M motor cord cannot be used with EM-3080J-2M.</i>			



Spindle
Guide

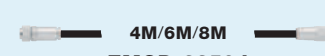
CHK



NR-2551



EM25N-5000J

4M/6M/8M
EMCD-2350J

E3000 CONTROLLER



E3000 SELECTOR



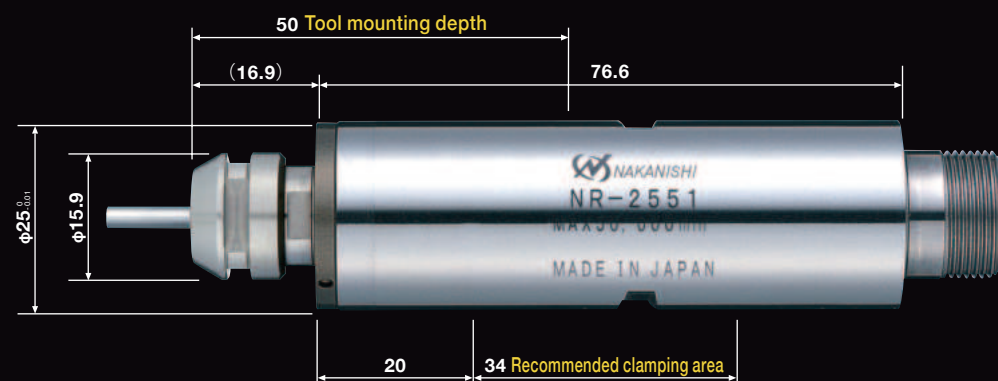
AL-C1204

E3000 SERIES

Shown In Actual Size

Spindle (Modular type)

NR-2551 Straight spindle

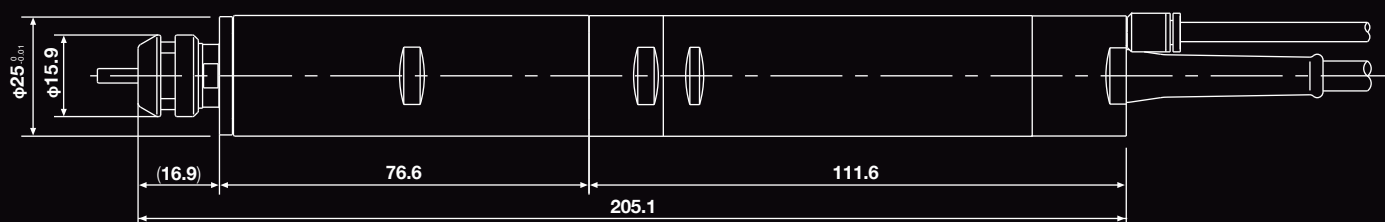
O.D. ϕ 25 mm

EM25N-5000J 50,000 min⁻¹ motor

O.D. ϕ 25 mm

Cord length: 0.3 m

Dimensions when connected



Specifications

CAD drawings

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

Order by Code No.

NR-2551



Code No.

7853

Model

NR-2551

O.D.	Allowable motor speed	Spindle accuracy	Collet	Net weight
ϕ 25 mm	50,000 min ⁻¹	Within 1 μ m	CHK Group (ϕ 0.5– ϕ 6.35 mm)	253 g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. · (22 × 27): 1 pc. *Collet is sold separately.			
Options	Collet (CHK Group): ϕ 0.5– ϕ 6.35 mm p. 8-5			
	Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) p. 8-12			

*Outside diameter ϕ 25.4 mm is also available. The code number is 7854 and the model is NR-H2551.

EM25N-5000J



Code No.

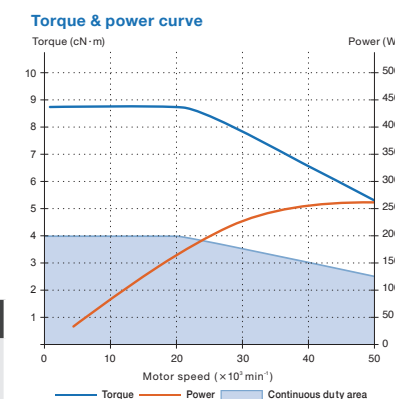
7904

Model

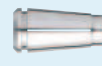
EM25N-5000J

O.D.	Motor speed	Max. power	Min. bending cord radius	Net weight
ϕ 25 mm	1,000–50,000 min ⁻¹	250 w	60 mm	335 g
Standard equipment and accessories	Wrench (22 × 27): 1 pc. *EMCD-2350J-4M/6M/8M motor cord is required separately.			

Options					
Motor cord	Code No.	Model	Cord length	Standard equipment and accessories	Compatible model
 4M  6M 	7722	EMCD-2350J-4M	3.7 m	Air hose Connector cap (included)	EM25N-5000J
	7723	EMCD-2350J-6M	5.7 m		
	7724	EMCD-2350J-8M	7.7 m		
Joint type					



*The minimum cord bending radius is 45 mm.

Spindle
Guide

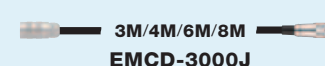
CHK



EMS-3060K



EMR-3008K

3M/4M/6M/8M
EMCD-3000J

E3000 CONTROLLER



E3000 SELECTOR



AL-C1204

E3000 SERIES

Shown In Actual Size

Motor spindle (One-piece type)

EMS-3060K

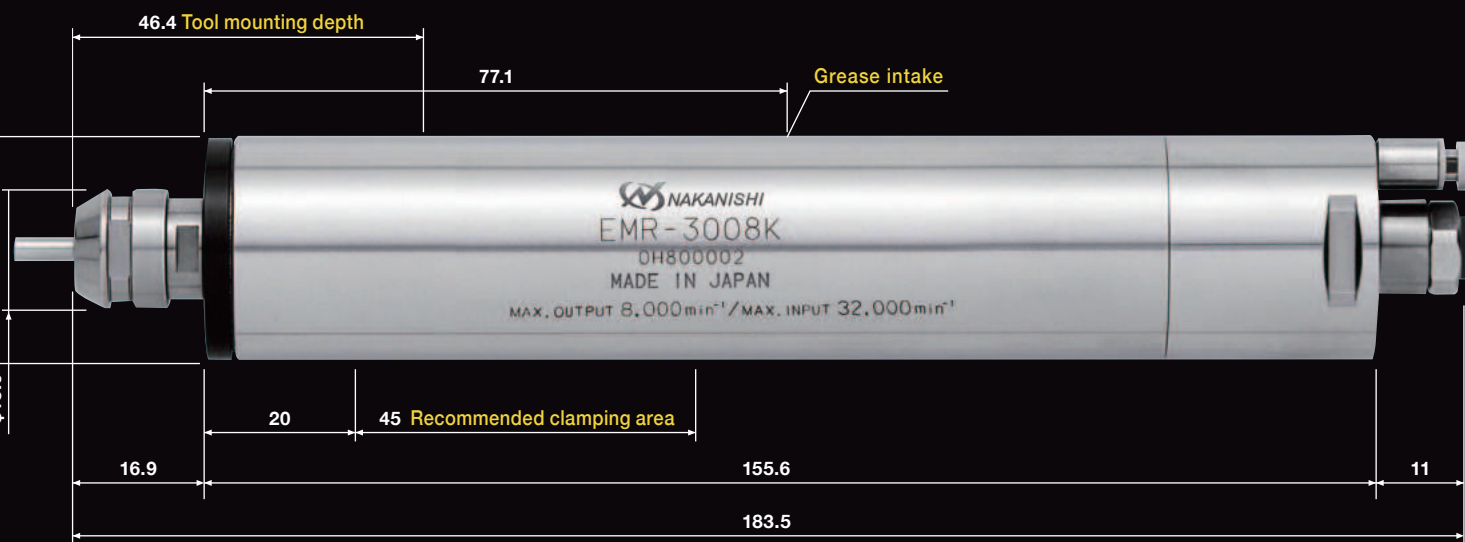
Motor spindle

O.D. ϕ 30 mm

Cord length: 0.3 m

EMR-3008K

Motor spindle with reduction gear

O.D. ϕ 30 mm

Cord length: 0.3 m

Specifications

CAD drawings

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

Order by Code No.

EMS-3060K



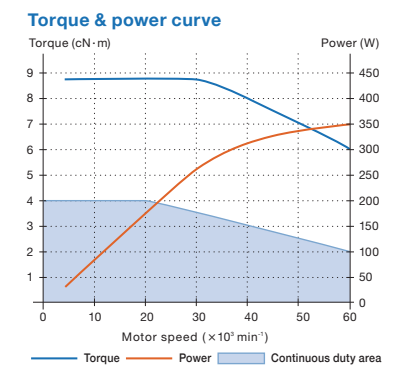
Code No.

7862

Model

EMS-3060K

O.D.	Motor speed	Spindle accuracy	Collet
ϕ 30 mm	60,000 min ⁻¹	Within 1 μ m	CHK Group (ϕ 0.5– ϕ 6.35 mm)
Max. power	Min. bending cord radius	Net weight	
350 w	60 mm	565 g	
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. *Collet is sold separately.		
Options	Collet (CHK Group): ϕ 0.5– ϕ 6.35 mm p. 8-5		
	Motor cord: 3 m (1778), 4 m (1768), 6 m (1767), 8 m (1766) p. 2-47		
	Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03)		
	Grindstone flange (EGF-19) p. 8-12		



EMR-3008K



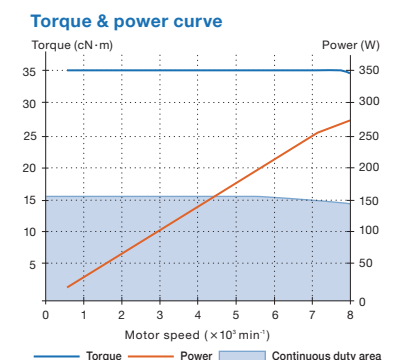
Code No.

7869

Model

EMR-3008K

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	
ϕ 30 mm	8,000 min ⁻¹	$\frac{1}{4}$	32,000 min ⁻¹ (Allowable rotational speed)	
Spindle accuracy	Collet	Max. power	Min. bending cord radius	Net weight
Within 1 μ m	CHK Group (ϕ 0.5– ϕ 6.35 mm)	350 w	60 mm	650 g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. Grease for Speed reducer (10 mL) / Grease nipple: 1 pc. *Collet is sold separately.			
Options	Collet (CHK Group): ϕ 0.5– ϕ 6.35 mm p. 8-5			
	Motor cord: 3 m (1778), 4 m (1768), 6 m (1767), 8 m (1766) p. 2-47			
	Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03)			
	Grindstone flange (EGF-19) p. 8-12			



Inject grease every 70–100 hours to extend the life of the Speed reducer.
Grease injection prevents the friction of the internal gears and the degradation of the existing grease.

Spindle
Guide

CHK

CHSS

EMA-3020K

EMA-3020S

3M/4M/6M/8M
EMCD-3000J

E3000 CONTROLLER

E3000 SELECTOR

AL-C1204

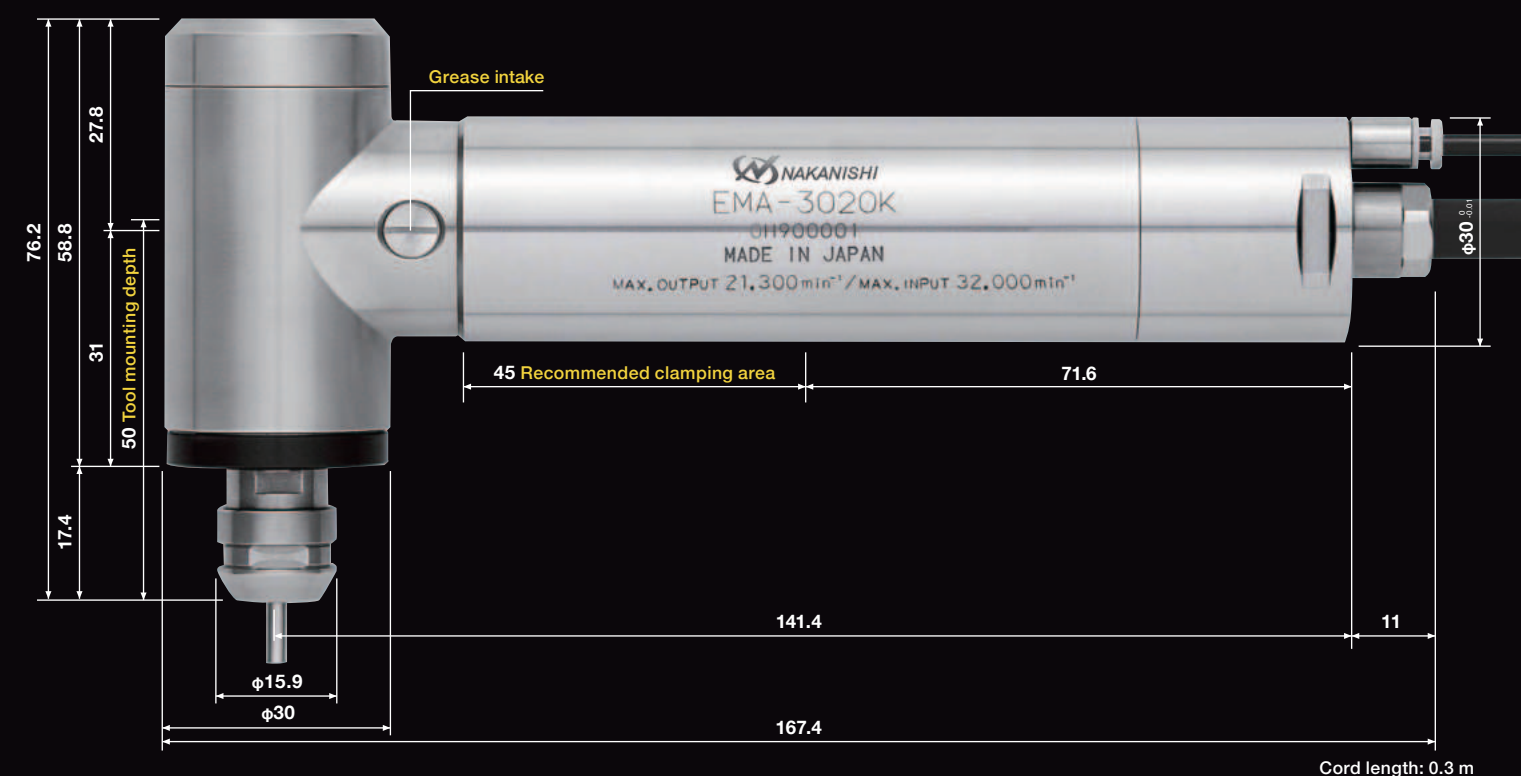
E3000 SERIES

Shown In Actual Size

Motor spindle (One-piece type)

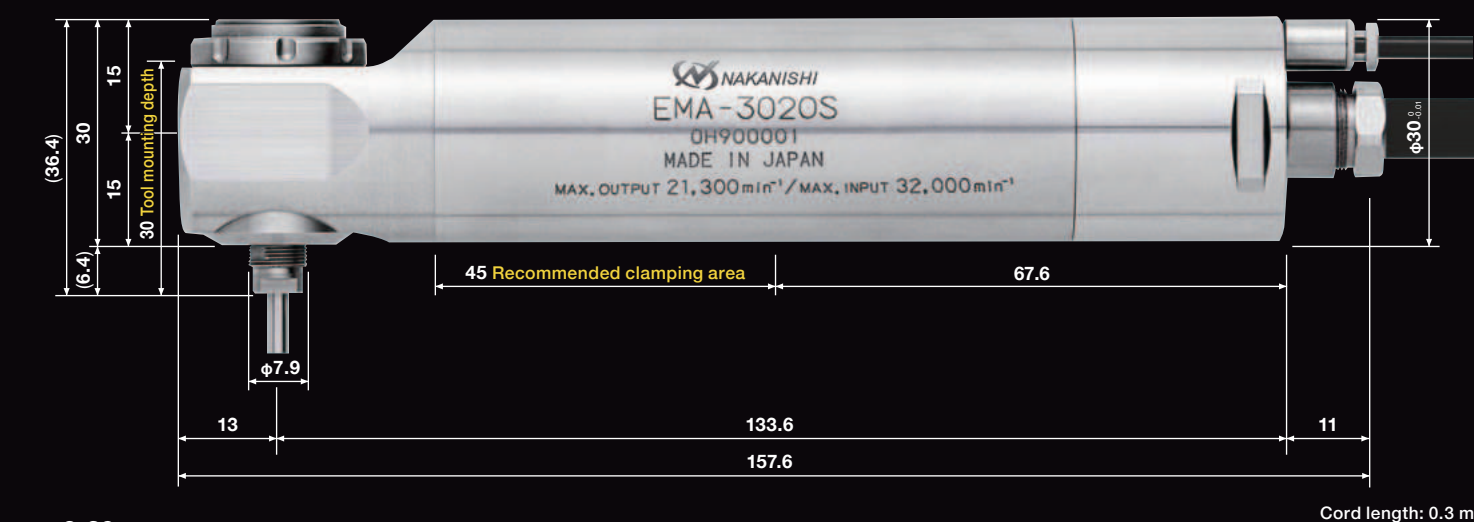
EMA-3020K

Angle motor spindle with standard head

O.D. ϕ 30 mm

EMA-3020S

Angle motor spindle with built-in head

O.D. ϕ 30 mm

Order by Code No.

Specifications

CAD drawings

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

EMA-3020K



Code No.

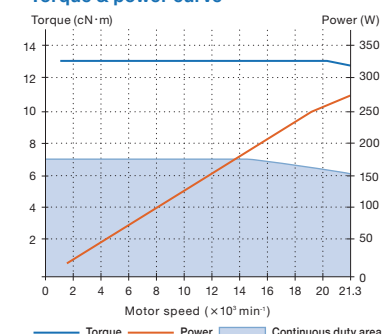
7874

Model

EMA-3020K

O.D.	Max. speed at the cutting tool	Reduction ratio		Max. allowable motor speed
ϕ 30 mm	21,300 min ⁻¹	$\frac{1}{1.5}$		32,000 min ⁻¹ (Allowable rotational speed)
Spindle accuracy	Collet	Max. power	Min. bending cord radius	Net weight
Within 2 μ m	CHK Group (ϕ 0.5– ϕ 6.35 mm)	280 w	60 mm	760 g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs.			
	Grease for Speed reducer (10 mL) / Grease nipple: 1 pc.			
Options	*Collet is sold separately.			
	Collet (CHK Group): ϕ 0.5– ϕ 6.35 mm p. 8-5			
	Motor cord: 3 m (1778), 4 m (1768), 6 m (1767), 8 m (1766) p. 2-47			
		Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) p. 8-12		

Torque & power curve



Inject grease every 70–100 hours to extend the life of the Speed reducer.
Grease injection prevents the friction of the internal gears and the degradation of the existing grease.

EMA-3020S



Code No.

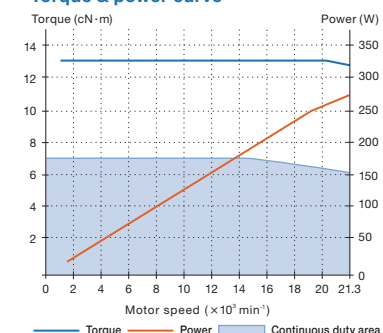
1758

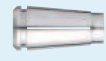
Model

EMA-3020S

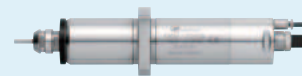
O.D.	Max. speed at the cutting tool	Reduction ratio		Max. allowable motor speed
ϕ 30 mm	21,300 min ⁻¹	$\frac{1}{1.5}$		32,000 min ⁻¹ (Allowable rotational speed)
Spindle accuracy	Collet	Max. power	Min. bending cord radius	Net weight
Within 3 μ m	CHSS Group (ϕ 1.0– ϕ 3.175 mm)	275 w	60 mm	605 g
Standard equipment and accessories	Collet: ϕ 3.0 mm (CHSS-3.0) / Wrench (7 × 5.1) · (8 × 6.1): 1 pc. each			
	Collet (CHSS Group): ϕ 1.0– ϕ 3.175 mm p. 8-6			
Options		Motor cord: 3 m (1778), 4 m (1768), 6 m (1767), 8 m (1766) p. 2-47		

Torque & power curve

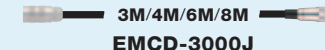


Spindle
Guide

CHK



EMSF-3060K

3M/4M/6M/8M
EMCD-3000J

E3000 CONTROLLER



E3000 SELECTOR



AL-C1204

E3000 SERIES

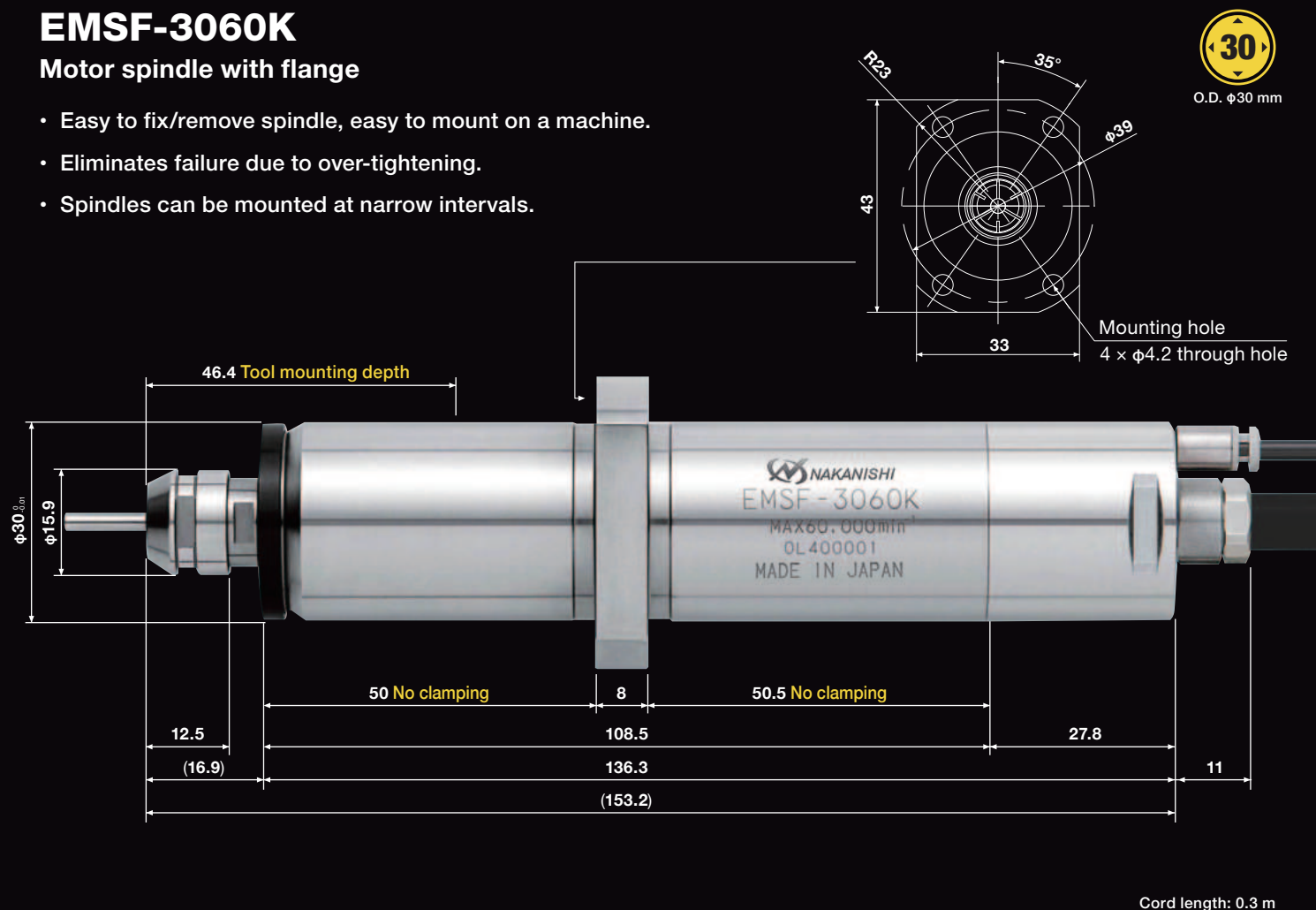
Shown In Actual Size

Motor spindle (One-piece type)

EMSF-3060K

Motor spindle with flange

- Easy to fix/remove spindle, easy to mount on a machine.
- Eliminates failure due to over-tightening.
- Spindles can be mounted at narrow intervals.



Specifications

CAD drawings

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

Order by Code No.

EMSF-3060K



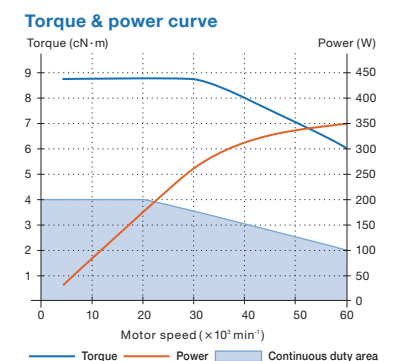
Code No.

7863

Model

EMSF-3060K

O.D.	Motor speed	Spindle accuracy	Collet
φ30 mm	60,000 min ⁻¹	Within 1 μm	CHK Group (φ0.5–φ6.35 mm)
Max. power	Min. bending cord radius	Net weight	
350 w	60 mm	620 g	
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. / Air hose 0.3 m: 1 pc. Lock bolt (M4 hexagon socket head bolt): 4 pcs. *Collet is sold separately.		
Options	Collet (CHK Group): φ0.5–φ6.35 mm p. 8-5 Motor cord: 3 m (1778), 4 m (1768), 6 m (1767), 8 m (1766) p. 2-47		



Various mounting methods

Three types of products are available to meet your mounting needs.



Straight type

Need to make a holder to mount on a machine



Straight type + Grip ring

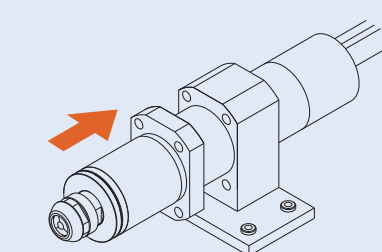
Attach the GR-30 Grip ring (sold separately) to the spindle
Eliminates the need to make your own holder

Flange type

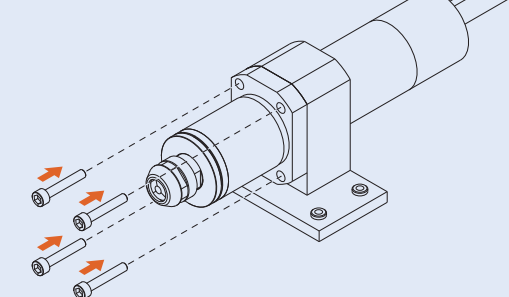
Spindle and holder integrated type

How to mount flange type spindles on a machine

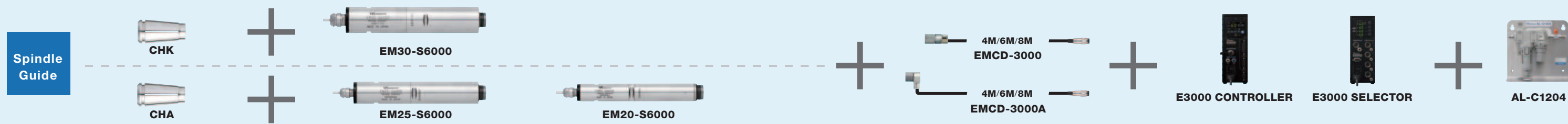
1 Insert motor spindle body into the holder



2 Tighten the M4 lock bolts into the 4 mounting holes on the flange



*Above figures show EMSF-3060K. NRF-3060S has 3 mounting holes (See p. 2-7).



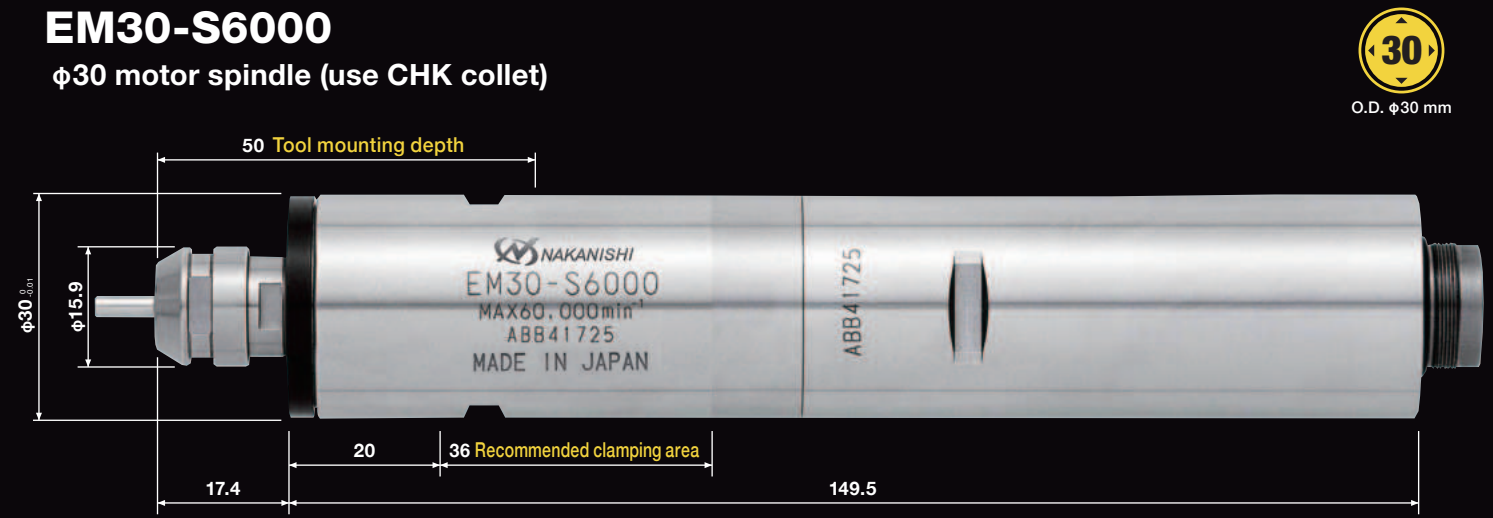
E3000 SERIES

Shown In Actual Size

Motor spindle (One-piece type)

EM30-S6000

φ30 motor spindle (use CHK collet)



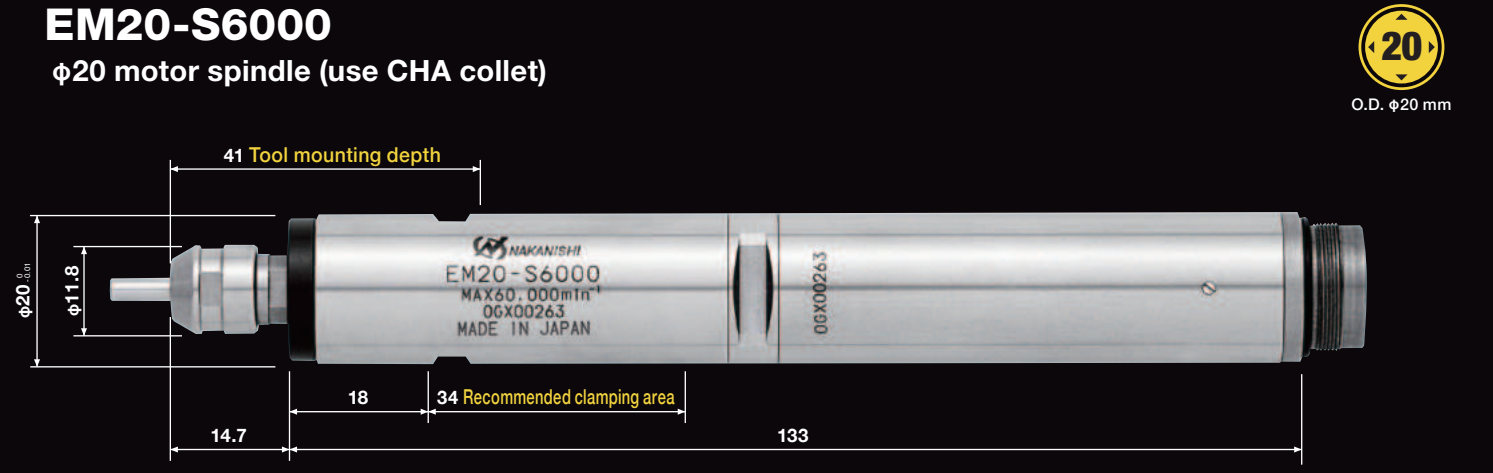
EM25-S6000

φ25 motor spindle (use CHA collet)



EM20-S6000

φ20 motor spindle (use CHA collet)



Order by Code No.

Specifications

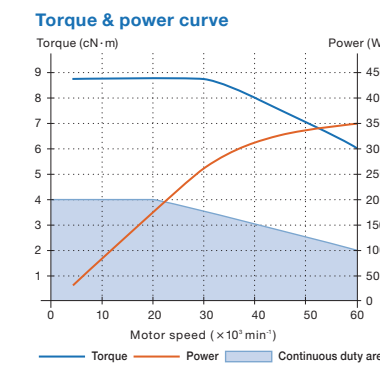
CAD drawings

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

EM30-S6000

Code No. **7903** Model **EM30-S6000**

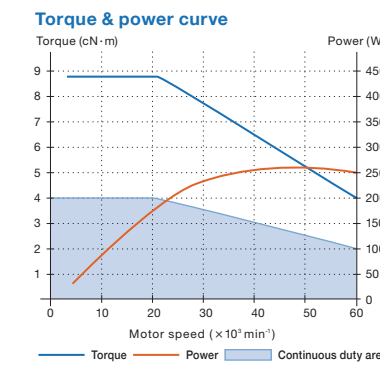
O.D.	Motor speed	Spindle accuracy	Collet	Max. power	Net weight
φ30 mm	60,000 min ⁻¹	Within 1 μm	CHK Group (φ0.5–φ6.35 mm)	350 w	575 g
Standard equipment and accessories		Collet nut (K-265) / Wrench (12 × 14): 2 pcs. *Collet is sold separately.			
Options		Collet (CHK Group): φ0.5–φ6.35 mm p. 8-5			
		Motor cord (Straight): 4 m (1748), 6 m (1749), 8 m (1750)			
		Motor cord (Angle): 4 m (1744), 6 m (1743), 8 m (1742) p. 2-47			
		Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03)			
		Grindstone flange (EGF-19) p. 8-12			



EM25-S6000

Code No. **7858** Model **EM25-S6000**

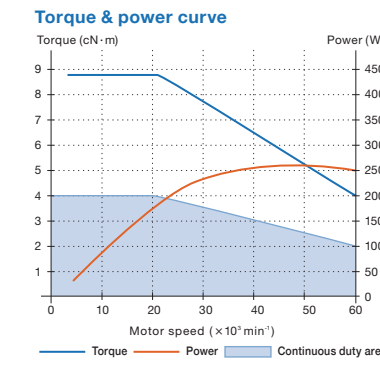
O.D.	Motor speed	Spindle accuracy	Collet	Max. power	Net weight
φ25 mm	60,000 min ⁻¹	Within 1 μm	CHA Group (φ0.5–φ4.0 mm)	250 w	375 g
Standard equipment and accessories		Collet nut (CHN-A) / Wrench (8 × 5) · (9 × 11): 1 pc. each *Collet is sold separately.			
Options		Collet (CHA Group): φ0.5–φ4.0 mm p. 8-5			
		Motor cord (Straight): 4 m (1748), 6 m (1749), 8 m (1750)			
		Motor cord (Angle): 4 m (1744), 6 m (1743), 8 m (1742) p. 2-47			



EM20-S6000

Code No. **7860** Model **EM20-S6000**

O.D.	Motor speed	Spindle accuracy	Collet	Max. power	Net weight
φ20 mm	60,000 min ⁻¹	Within 1 μm	CHA Group (φ0.5–φ4.0 mm)	250 w	230 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 p. 8-5			
		Motor cord (Straight): 4 m (1748), 6 m (1749), 8 m (1750)			
		Motor cord (Angle): 4 m (1744), 6 m (1743), 8 m (1742) p. 2-47			



- E4000
- E3000
- E2000
- iSpeed3
- Air-Speed
- HES
- TURBINES
- ACCESSORIES

E3000 Controller



E3000 CONTROLLER
Controller



External control function

- **External input**
Rotating ON/OFF, Forward/reverse rotation, Motor speed control, Safety relay brake, etc.
- **External output**
Motor current, Rotating pulse, Error, Load, Motor speed, etc.
- **Parameter setting**
Setting maximum motor speed, Setting fixed motor speed, Speed point, etc.

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

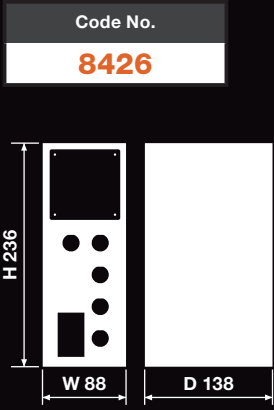
Motor speed	
1,000–80,000 min ⁻¹	
Input voltage	
AC100–240 v Without plug Multiple output power	
Max. power	Power consumption
350 w	AC1.8 A
Air consumption	Net weight
30 NL/min (0.25–0.3 MPa)	2.8 kg
Standard equipment and accessories	
Power cord: 3 m / Air hose with filter (K-251: 2058): 2 m	
Reducer / Connector cap (included)	
Bracket / Nylon clip / Screw / Rubber pad	
Fuse T6.3AL 250V (2063): 2 pcs.	

E3000 Selector

Order by Code No.



E3000 SELECTOR
Selector



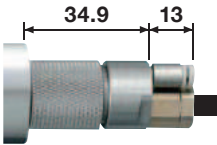
Connectable number of motors		
4 pcs. Up to 4 motors can be connected to provide individual control of each motor		
Input voltage		
AC100–240 v Without plug Multiple output power		
Power consumption	Air consumption	Net weight
AC0.15 A	120 NL/min (when connecting 4 motors)	1.9 kg
Standard equipment and accessories		
Power cord: 3 m / Communication cable: 60 cm		
Selector connecting cord: 60 cm		
Connector cap (included) / Plug to avoid air flow		
Bracket / Nylon clip / Screw / Rubber pad		
Fuse T1.6AL 250V (D1203116010): 2 pcs.		

Motor cord

*The minimum cord bending radius for the below three types of motor cords is 60 mm.

Straight type

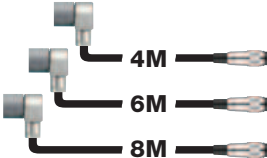
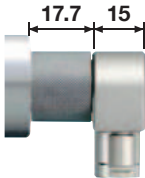
Direct connection to the body end



Code No.	Model	Cord length	Standard equipment and accessories	Compatible model
1748	EMCD-3000-4M	4 m	Air hose Connector cap (included)	EM-3060 EM-3030T EM30-S6000 EM25-S6000 EM20-S6000
1749	EMCD-3000-6M	6 m		
1750	EMCD-3000-8M	8 m		

Angle type

Direct connection to the body end at a 90 degree angle

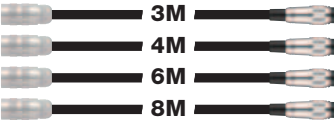


*Not recommend to CTS-2620A, CTS-2630, NR3060-AQC, NR33-6000ATC-ESD, NR40-5100 ATC, NR50-5100 ATC RS, NR50-6000ATC-RS, NRF-3060S, NRR-3060, NRR3060-QC, RA-151E, RA-271E, RAS-151E, RAX-271E, RAX-71E.

Code No.	Model	Cord length	Standard equipment and accessories	Compatible model
1744	EMCD-3000A-4M	4 m	Air hose Connector cap (included)	EM-3060 EM-3030T EM30-S6000 EM25-S6000 EM20-S6000
1743	EMCD-3000A-6M	6 m		
1742	EMCD-3000A-8M	8 m		

Joint type

Connectable after the motor spindle is mounted



Code No.	Model	Cord length	Standard equipment and accessories	Compatible model
1778	EMCD-3000J-3M	3.0 m	Air hose Connector cap (included)	EM-3060J · EM-3030T-J EMS-3060K · EMR-3008K EMA-3020K · EMA-3020S EMSF-3060K · EM-3080J
1768	EMCD-3000J-4M	3.7 m		
1767	EMCD-3000J-6M	5.7 m		
1766	EMCD-3000J-8M	7.7 m		

Accessories

Order by Code No.

E3000-PEX4

Control panel extension cord (4 m)



Code No.	8407	Model	E3000-PEX4
Standard accessories	Assembled product (cord length: 4 m)		
	Mounting screw: 4 pcs. / Flange nut: 4 pcs.		

ACCESSORIES

Air line kit	p. 8-3-4
Collet	p. 8-5-7
Collet nut	p. 8-8
Grip ring / Spacer / Bush	p. 8-9-10
Collet holder / Preset adapter	p. 8-11
COMBOX-NET.EIP, etc.	p. 8-12-14

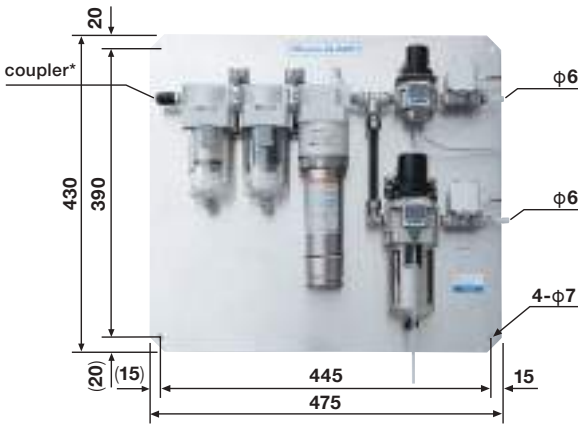


Air line kit

Order by Code No.

AL-A0611

Filtration: 0.01 μm



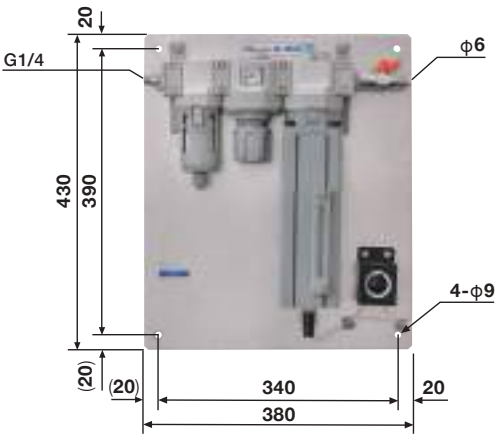
- Air piping
Inlet: Coupler (Model: KK13P-02M made by SMC Corporation)
Outlet: φ6.0 mm × 2 parts
- Net weight: 8.2 kg

Standard accessories	Spacer: 4 pcs.
Standard equipment	Mist separator / Micro-mist separator Membrane air dryer / Air regulator Regulator with Micro-mist separator Digital pressure switch: 2 pcs. / Solenoid valve: 2 pcs.
Compatible model	E3000 (NRAF-5080) · ABT series Xspeed series

*If you do not use our air line kit, please prepare a micro mist separator with 0.01 μm filtration.

AL-M1201BL

Filtration: 0.3 μm



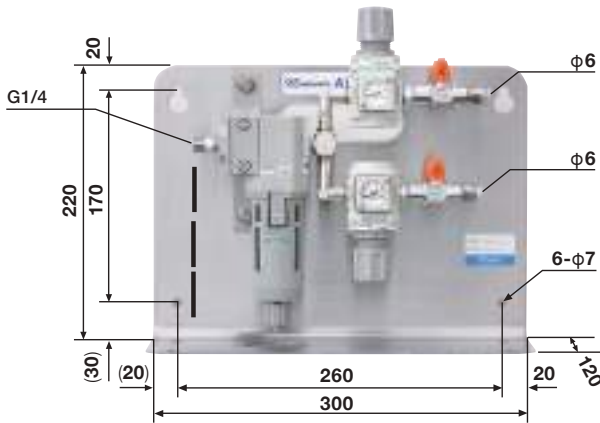
- Air piping
Inlet: G1/4 male thread for connection hose
Outlet: φ6.0 mm
- Net weight: 5.2 kg

Standard accessories	Hose pipe (K-275): 2 m / Connection joint: 1 pc. φ6 mm Air hose: 1 pc. / Spacer: 4 pcs. Lubricating oil (K-202) 1 L: 1 pc. Bolt (M8 × 20 L): 4 pcs.
Standard equipment	Air filter / Air regulator / Lubricator ON-OFF valve / Alarm buzzer
Compatible model	E3000 (RG-3004M) · HTS series PLANET series

*Recommendation of nominal filtration rating: 0.3 μm,
Pressure range: 0.1-1.0 MPa Recommendation of air filter: M2000-WS (CKD)

AL-A1205

Filtration: 0.3 μm



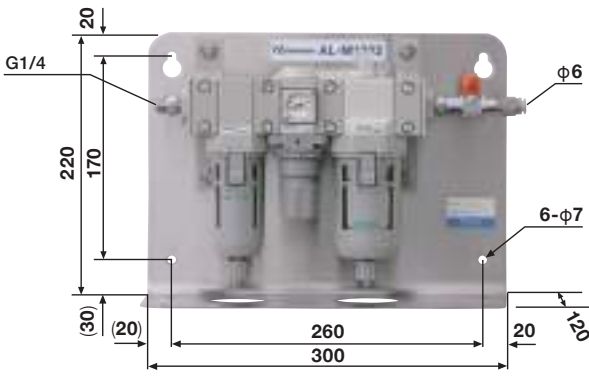
- Air piping
Inlet: G1/4 male thread for connection hose
Outlet: φ6.0 mm × 2 parts
- Net weight: 2.4 kg

Standard accessories	Hose pipe (K-275): 2 m Mounting screw (M6 × 20): 4 pcs. Washer: 4 pcs. / Rubber pad: 4 pcs.
Standard equipment	Oil mist filter / Air regulator: 2 pcs. ON-OFF valve: 2 pcs.
Compatible model	E3000 (NRAF-5080) · ABT series

*Recommendation of nominal filtration rating: 0.3 μm,
Pressure range: 0.1-1.0 MPa Recommendation of air filter: M2000-WS (CKD)

AL-M1202

Filtration: 0.3 μm

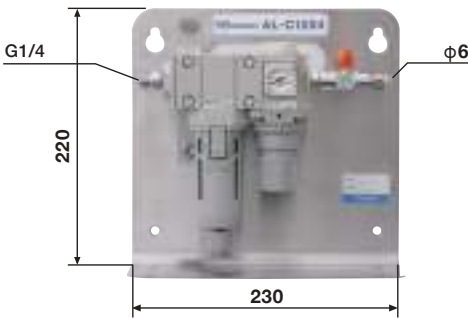


- Air piping
Inlet: G1/4 male thread for connection hose
Outlet: φ6.0 mm
- Net weight: 2.8 kg

Standard accessories	Hose pipe (K-275): 2 m / Hose band: 1 pc. Lubricating oil (K-211) 70 cc: 1 pc. Mounting screw (M6 × 20): 4 pcs. Washer: 4 pcs. / Rubber pad: 4 pcs.
Standard equipment	Air filter / Air regulator / Lubricator ON-OFF valve
Compatible model	Air-Speed series · HTS series · PLANET series

AL-C1204

Filtration: 0.3 μm

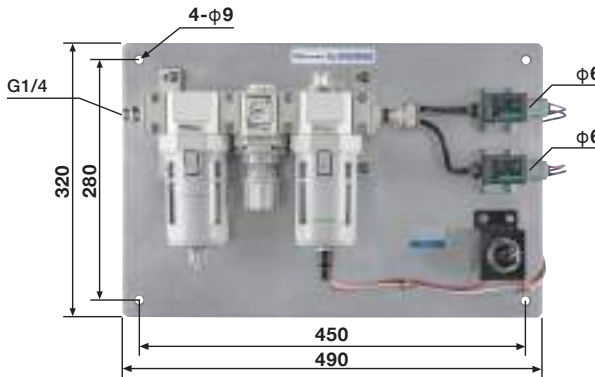


- Air piping
Inlet: G1/4 male thread for connection hose
Outlet: φ6.0 mm
- Net weight: 1.9 kg

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
Compatible model	E4000 series · E3000 series · E2000 series iSpeed3 series · HES series

AL-M1203BS2

Filtration: 0.3 μm



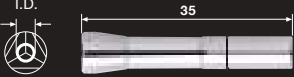
- Air piping
Inlet: G1/4 male thread for connection hose
Outlet: φ6.0 mm × 2 parts
- Net weight: 3.9 kg

Standard accessories	Hose pipe (K-275): 2 m Lubricating oil (K-202) 1 L: 1 pc. Bolt (M8 × 20 L): 4 pcs. / Spacer: 4 pcs.
Standard equipment	Air filter / Air regulator / Lubricator Solenoid valve: 2 pcs. / Alarm buzzer
Compatible model	Air-Speed series

Collet

Order by Code No.

CHA Group		Fit nuts: CHN-A, CHN-AA, CHN-CTA, CHN-3A			
		Code No.	Model	I.D. (mm)	Compatible model
	φ1.0 and over	91494	CHA-3.0AA	φ3.0AA*	CTS-2630 / 2620A (Type AA only) CTS-3030 EM20-S6000 · EM25-S6000 EMS-3060A · NR-3080S MSS-19 · MSS-20 · MSS-22 PMS-3020A QC3-A (NRR3060-QC / NR3060-AQC) ABT-1000 / 1600 Xpeed1600 (Type AA only) HES810 series HTS series iSpeed3 series
		91496	CHA-3.175AA	φ3.175AA*	
		91495	CHA-4.0AA	φ4.0AA*	
		91492	CHA-2.35	φ2.35	
		91430	CHA-3.0	φ3.0	
	φ0.5—φ0.9	91493	CHA-3.175	φ3.175	
		91440	CHA-4.0	φ4.0	
		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	

CHB Group									
		Code No.	Model	I.D. (mm)	Compatible model				
		92820	CHB-2.0	φ2.0	NR33-6000ATC-ESD NR40-5100 ATC · NRR-3060				
		92830	CHB-3.0	φ3.0					
		92893	CHB-3.175	φ3.175					
		92835	CHB-3.5	φ3.5					
		92840	CHB-4.0	φ4.0					

CHK Group



φ1.0 and over



φ0.5-φ0.9

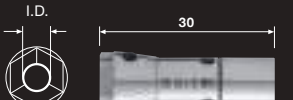
Code No.	Model	I.D. (mm)	Compatible model
91597	CHK-3.0AA	φ3.0AA*	EM30-S6000 · EMA-3020K · EMR-3008K EMS-3060K · NR-2551 · NR-3060 NR-3060S · NR-403E · NR-453E NRAF-5080 · NRF-3060S · RAS-151E RAX-71E · RAX-271E MSS-25 · MSST-23 · PMA-3013K PMR-3005K · PMS-3020K NR-303 · NR-311 · NR-2351 · RAS-101 QC5-K (NRR4040-QC / NR4040-AQC) QC3-K (NRR3060-QC / NR3060-AQC) Xpeed1200 (Type AA only) HES510 series PLANET series
91598	CHK-3.175AA	φ3.175AA*	
91599	CHK-4.0AA	φ4.0AA*	
91600	CHK-6.0AA	φ6.0AA*	
91601	CHK-6.35AA	φ6.35AA*	
91592	CHK-2.35	φ2.35	
91530	CHK-3.0	φ3.0	
91593	CHK-3.175	φ3.175	
91540	CHK-4.0	φ4.0	
91594	CHK-4.76	φ4.76	
91560	CHK-6.0	φ6.0	
91596	CHK-6.35	φ6.35	
915 □□	CHK-□□	φ0.5, φ0.6, φ0.7, φ0.8, φ0.9	
		φ1.0, φ1.5, φ2.0, φ2.5, φ3.5, φ4.5, φ5.0, φ5.5	
		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 φ4.1, φ4.2, φ4.3, φ4.4, φ4.6, φ4.7, φ4.8, φ4.9 φ5.1, φ5.2, φ5.3, φ5.4, φ5.6, φ5.7, φ5.8, φ5.9	

Fit nuts: K-265, K-265A

CHK-OH Group					Fit nut: K-265				
		Code No.	Model	I.D. (mm)	Compatible model				
		93630	CHK-OH-3.0	φ3.0	CTM-4020 BMS-4020-MQL-CHK / 2M BMS-4040-MQL-CHK / 2M				
		93631	CHK-OH-3.175	φ3.175					
		93640	CHK-OH-4.0	φ4.0					
		93650	CHK-OH-5.0	φ5.0					
		93660	CHK-OH-6.0	φ6.0					
		93663	CHK-OH-6.35	φ6.35					

CHM Group									
		Code No.	Model	I.D. (mm)	Compatible model				
		90910	CHM-1.0	φ1.0	AMH-301 · NR-601				
		90916	CHM-1.6	φ1.6					
		90920	CHM-2.0	φ2.0					
		90992	CHM-2.35	φ2.35					
		90930	CHM-3.0	φ3.0					
		90993	CHM-3.175	φ3.175					

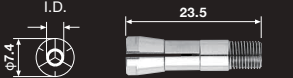
CHR Group									
		Code No.	Model	I.D. (mm)	Compatible model				
		91920	CHR-2.0	φ2.0	NR50-5100 ATC				
		91930	CHR-3.0	φ3.0					
		91993	CHR-3.175	φ3.175					
		91940	CHR-4.0	φ4.0					
		91960	CHR-6.0	φ6.0					
		91996	CHR-6.35	φ6.35					

CHR RS Group									
		Code No.	Model	I.D. (mm)	Compatible model				
		93201	CHR-3.0RS	φ3.0	NR50-5100 ATC NR50-5100 ATC RS · NR50-6000ATC-RS				
		93202	CHR-3.175RS	φ3.175					
		93203	CHR-4.0RS	φ4.0					
		93204	CHR-6.0RS	φ6.0					
		93205	CHR-6.35RS	φ6.35					

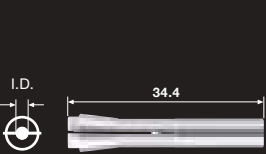
CHS Group

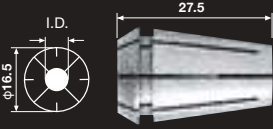


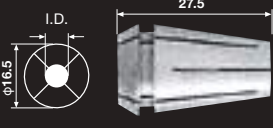
Code No.	Model	I.D. (mm)	Compatible model
90516	CHS-1.6	φ1.6	RA-200 · RA-271E
90592	CHS-2.35	φ2.35	
90530	CHS-3.0	φ3.0	
90593	CHS-3.175	φ3.175	
905□□	CHS-□□	φ0.8, φ0.9	
		φ1.0, φ2.0, φ2.5	
		φ1.1, φ1.2, φ1.3, φ1.4, φ1.5, φ1.7, φ1.8, φ1.9 φ2.1, φ2.2, φ2.3, φ2.4, φ2.6, φ2.7, φ2.8, φ2.9	

CHSS Group									
		Code No.	Model	I.D. (mm)	Compatible model				
		93010	CHSS-1.0	φ1.0	EMA-3020S · PMA-3013S QC3-SS (NRR3060-QC / NR3060-AQC)				
		93015	CHSS-1.5	φ1.5					
		93020	CHSS-2.0	φ2.0					
		93025	CHSS-2.5	φ2.5					
		93092	CHSS-2.35	φ2.35					
		93030	CHSS-3.0	φ3.0					
		93093	CHSS-3.175	φ3.175					

Collet

CH8 Group				
	Code No.	Model	I.D. (mm)	Compatible model
	91092	CH8-2.35	φ2.35	RA-100 · RA-151E
	91030	CH8-3.0	φ3.0	
	91093	CH8-3.175	φ3.175	
	910 □□	CH8-□□	φ0.8, φ0.9	
			φ1.0, φ1.5, φ2.0, φ2.5	
			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	

CH16 Group					Fit nut: CHN-16
 *CH16-10.0 Length 24.5	Code No.	Model	I.D. (mm)	Compatible model	
	93130	CH16-3.0	φ3.0	BMS-4020 / 2M · BMS-4020RA BMS-4040 / 2M BMS-4040-RGD-03M / 2M BMS-4040RA-RGD-03M / 2M BMS-4040RA · NR-4040 QC5-16 (NRR4040-QC / NR4040-AQC)	
	93193	CH16-3.175	φ3.175		
	93140	CH16-4.0	φ4.0		
	93160	CH16-6.0	φ6.0		
	93196	CH16-6.35	φ6.35		
	93180	CH16-8.0	φ8.0		
	93100	CH16-10.0	φ10.0		

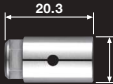
CH16OH Group					Fit nut: CHN-16
 *CH16OH-9.0, 10.0 Length 24.5	Code No.	Model	I.D. (mm)	Compatible model	
	93330	CH16OH-3.0	φ3.0	BMS-4020-MQL / 2M BMS-4040-MQL / 2M	
	93331	CH16OH-3.175	φ3.175		
	93340	CH16OH-4.0	φ4.0		
	93350	CH16OH-5.0	φ5.0		
	93360	CH16OH-6.0	φ6.0		
	93363	CH16OH-6.35	φ6.35		
	93370	CH16OH-7.0	φ7.0		
	93380	CH16OH-8.0	φ8.0		
	93390	CH16OH-9.0	φ9.0		
	93400	CH16OH-10.0	φ10.0		

Collet nut

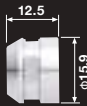
Order by Code No.

CHN-A					Fit collet: CHA Group
	Code No.	Model	Description	Compatible model	
	2102	CHN-A	Collet nut for CHA collet	QC3-A (NRR3060-QC / NR3060-AQC) EM20-S6000 · EM25-S6000 EMS-3060A · NR-3080S MSS-19 · MSS-20 · MSS-22 PMS-3020A HES810 series iSpeed3 series	

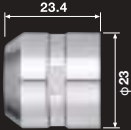
CHN-AA					Fit collet: CHA Group
	Code No.	Model	Description	Compatible model	
	2159	CHN-AA	Collet nut for CHA collet	HTS series	

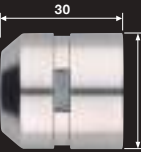
CHN-CTA					Fit collet: CHA Group
	Code No.	Model	Description	Compatible model	
	7798	CHN-CTA-3.0	Collet nut for CHA collet	CTS-2630 / 2620A / 3030	
	7799	CHN-CTA-3.175			
	7800	CHN-CTA-4.0			

CHN-3A					Fit collet: CHA Group
	Code No.	Model	Description	Compatible model	
	2160	CHN-3A	Collet nut for CHA collet	ABT series · Xpeed1600	

K-265				Fit collets: CHK Group, CHK-OH Group
	Code No.	Model	Description	Compatible model
	2129	K-265	Collet nut for CHK collet	CTM-4020 BMS-4020-MQL-CHK / 2M BMS-4040-MQL-CHK / 2M QC5-K (NRR4040-QC / NR4040-AQC) QC3-K (NRR3060-QC / NR3060-AQC) EM30-S6000 · EMA-3020K · EMR-3008K EMS-3060K · NR-403E · NR-453E NR-2551 · NR-3060 · NR-3060S NRF-3060S · RAS-151E · RAX-71E RAX-271E MSS-25 · MSST-23 NR-303 · NR-311 · NR-2351 · RAS-101 PMA-3013K · PMR-3005K · PMS-3020K HES510 series PLANET series

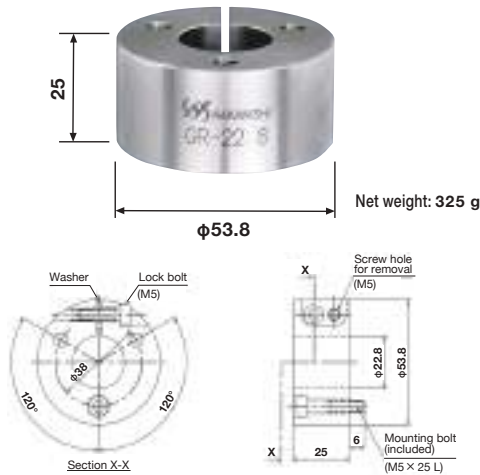
K-265A					Fit collet: CHK Group
	Code No.	Model	Description	Compatible model	
	2158	K-265A	Collet nut for CHK collet	NRAF-5080 Xpeed1200	

CHN-16					Fit collets: CH16 Group, CH16OH Group
	Code No.	Model	Description	Compatible model	
	2161	CHN-16	Collet nut for CH16 collet	BMS-4020 / 2M · BMS-4020-MQL / 2M BMS-4020RA · BMS-4040 / 2M BMS-4040-MQL / 2M · BMS-4040RA BMS-4040RA-RGD-03M / 2M BMS-4040-RGD-03M / 2M · NR-4040 QC5-16 (NRR4040-QC / NR4040-AQC)	

CHN-20					Recommended : REGO-FIX ER20/ER20UP
	Code No.	Model	Description	Compatible model	
	7914	CHN-20	Collet nut for BMS-5010 collet	BMS-5010 / RA	

Grip ring

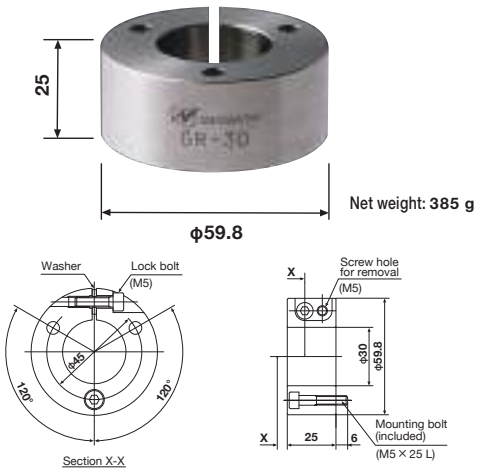
GR-22.8



Code No.	1888	Model	GR-22.8
Standard accessories	Mounting bolt (M5 × 25 L): 3 pcs.		
Compatible model	φ22.8 mm Spindle		

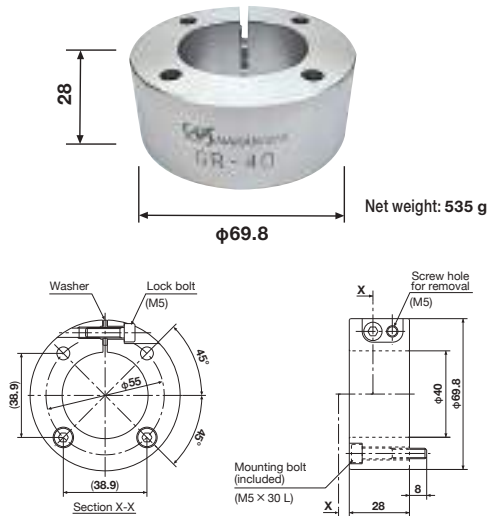
*GR-22.8 cannot be used with NR-311.

GR-30



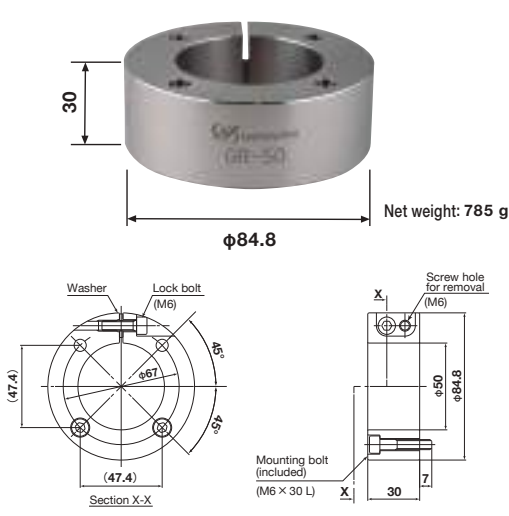
Code No.	1885	Model	GR-30
Standard accessories	Mounting bolt (M5 × 25 L): 3 pcs.		
Compatible model	φ30 mm Spindle		

GR-40



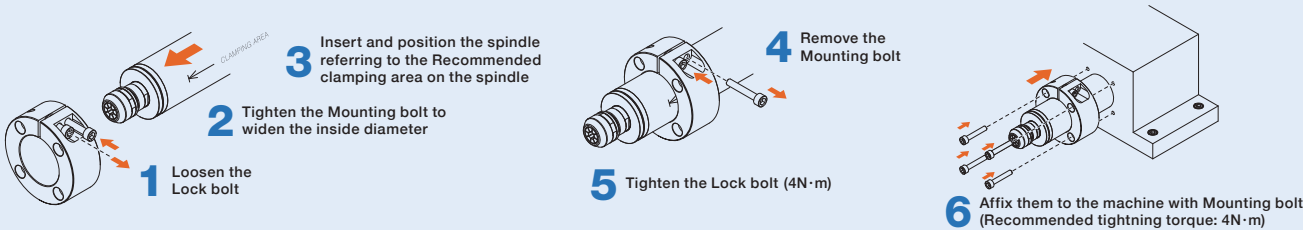
Code No.	1886	Model	GR-40
Standard accessories	Mounting bolt (M5 × 30 L): 4 pcs.		
Compatible model	φ40 mm Spindle		

GR-50



Code No.	1889	Model	GR-50
Standard accessories	Mounting bolt (M6 × 30 L): 4 pcs.		
Compatible model	φ50 mm Spindle		

How to mount to a machine tool



*The above figure shows GR-40 and GR-50, while GR-22.8 and GR-30 require three mounting bolts.

Spacer

Spacer	Code No.	Model	Description / Description (I.D. × T)	Compatible model
	1882	SP-22 × 10 L	Spacer (φ22 × 10 mm)	BM-322FL · BM-322FR

Bush

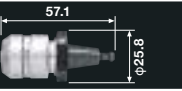
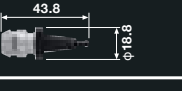
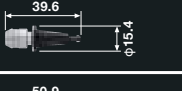
Bushings to allow smaller diameter spindles to be mounted in larger diameter holders

Bush	Code No.	Model	Description / Dimensions (I.D. × O.D. × L)	Compatible model
	1887	RB-19.05 × 25.4 × 36 L	φ25.4 Bush (φ19.05 × φ25.4 × 36 mm)	BM-319 · BM-319F · BMF-319 · BMJ-319 MSS-1902R / RA · MSS-1908R / RA MSS-1930R / RA
	1877	RB-20 × 22	φ22 Bush (φ20 × φ22 × 40 mm)	BM-320 · BMF-320 · BMJ-320 · EM20-S6000 MSS-2002R / RA · MSS-2008R / RA MSS-2030R / RA
	1876	RB-20 × 22.8	φ22.8 Bush (φ20 × φ22.8 × 40 mm)	BM-320 · BMF-320 · BMJ-320 · EM20-S6000 MSS-2002R / RA · MSS-2008R / RA MSS-2030R / RA
	1875	RB-20 × 23	φ23 Bush (φ20 × φ23 × 40 mm)	BM-320 · BMF-320 · BMJ-320 · EM20-S6000 MSS-2002R / RA · MSS-2008R / RA MSS-2030R / RA
	1878	RB-20 × 25	φ25 Bush (φ20 × φ25 × 40 mm)	BM-320 · BMF-320 · BMJ-320 · EM20-S6000 MSS-2002R / RA · MSS-2008R / RA MSS-2030R / RA
	1879	RB-20 × 25.4	φ25.4 Bush (φ20 × φ25.4 × 40 mm)	BM-320 · BMF-320 · BMJ-320 · EM20-S6000 MSS-2002R / RA · MSS-2008R / RA MSS-2030R / RA
	1883	RB-22 × 25 × 34 L	φ25 Bush (φ22 × φ25 × 33.5 mm)	BM-322 · BM-322FL · BM-322FR BM-322FS · BMF-322 · BMJ-322
	1884	RB-22 × 25.4 × 34 L	φ25.4 Bush (φ22 × φ25.4 × 33.5 mm)	BM-322 · BM-322FL · BM-322FR BM-322FS · BMF-322 · BMJ-322
	1872	RBS-22.8 × 25	φ25 Bush (φ22.8 × φ25 × 25 mm)	AMH-301 · NR-303 · NR-311 · NR-2351 RA-200 · RAS-101
	1871	RB-22.8 × 25	φ25 Bush (φ22.8 × φ25 × 44 mm)	RA-100
	1874	RBS-22.8 × 25.4	φ25.4 Bush (φ22.8 × φ25.4 × 25 mm)	AMH-301 · NR-303 · NR-311 · NR-2351 RA-200 · RAS-101
	1873	RB-22.8 × 25.4	φ25.4 Bush (φ22.8 × φ25.4 × 44 mm)	RA-100
	1880	RB-30 × 32	φ32 Bush (φ30 × φ32 × 45 mm)	NR-3060 · NR-3060S · NR-403E
	1881	RB-30 × 36	φ36 Bush (φ30 × φ36 × 45 mm)	NR-3060 · NR-3060S · NR-403E

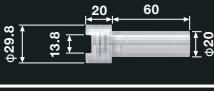
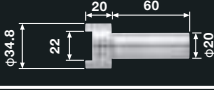
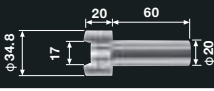
Adjuster bolt

Adjuster bolt	Code No.	Model	Description	Compatible model
	7739	ADJUSTER BOLT	Adjuster bolt	BMS-4020-MQL-CHK / 2M BMS-4040-MQL-CHK / 2M

Collet holder

Collet holder	Code No.	Model	Description	Compatible model
	9216	QC5-16	Collet holder for CH16 *with CHN-16	NR4040-AQC · NRR4040-QC
	9225	QC5-16-R		
	9215	QC5-K	Collet holder for CHK *with K-265	
	9224	QC5-K-R		
	9210	QC3-K	Collet holder for CHK *with K-265	NR3060-AQC · NRR3060-QC
	9223	QC3-K-R		
	9209	QC3-A	Collet holder for CHA *with CHN-A	
	9222	QC3-A-R		
	7794	QC3-SS	Collet holder for CHSS	

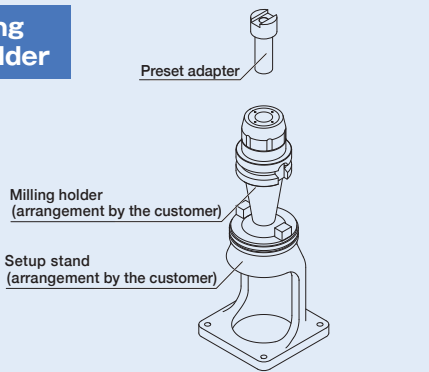
Preset adapter

Preset adapter	Code No.	Model	Description	Compatible collet holder
	9211	QC3-ADP	Preset adapter for QC3	QC3-A · QC3-K · QC3-SS
	9218	QC5-16 ADP	Preset adapter for QC5-16	QC5-16
	9217	QC5-K ADP	Preset adapter for QC5-K	QC5-K

Set-up outside machines

1

In case using a milling holder

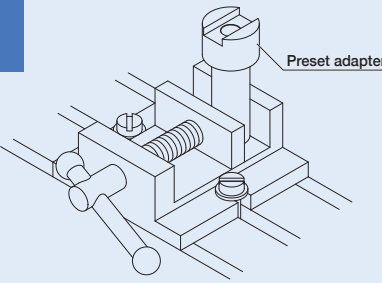


Preset adapter

Milling holder (arrangement by the customer)

Setup stand (arrangement by the customer)

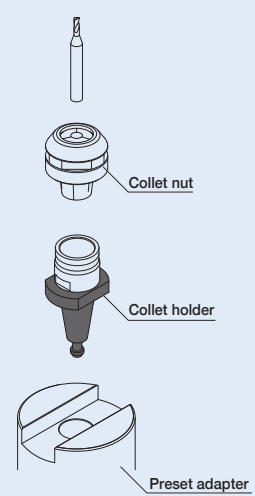
In case using a vice



Preset adapter

2

For QC3-K/A
QC5-16/K

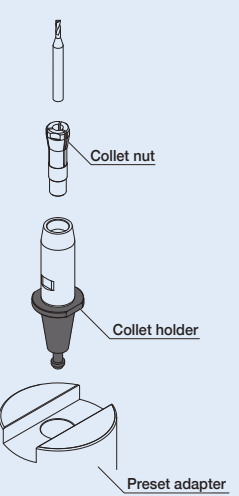


Collet nut

Collet holder

Preset adapter

For QC3-SS

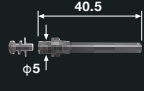
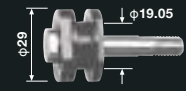


Collet nut

Collet holder

Preset adapter

Metal saw arbor · Grindstone arbor · Grindstone flange

Metal saw arbor	Code No.	Model	Description / Specifications		Compatible model
	2146	KCH-02 (5.0)	φ5.0 (I.D.)	Metal saw arbor : for φd (I.D.) × φ30 mm or less (O.D.) Run-out accuracy: within 0.02 mm	RA-100 · RA-151E
	1077	KCH-02 (6.0)	φ6.0 (I.D.)		
	2147	KCH-02 (8.0)	φ8.0 (I.D.)		
	2148	KCH-03 (5.0)	φ5.0 (I.D.)	Metal saw arbor : for φd (I.D.) × φ30 mm or less (O.D.) Run-out accuracy: within 0.02 mm	EM30-S6000 · EMA-3020K · EMR-3008K EMS-3060K · MSS-25 · MSST-23 · NR-303 · NR-311 NR-403E · NR-453E · NR-2351 · NR-2551 · NR-3060 NR-3060S · NRF-3060S · PMA-3013K · PMR-3005K PMS-3020K · RAS-101 · RAS-151E RAX-71E · RAX-271E
	2130	KCH-03 (6.0)	φ6.0 (I.D.)		
	2149	KCH-03 (8.0)	φ8.0 (I.D.)		
Grindstone arbor	Code No.	Model	Description / Specifications		Compatible model
	1029	AGM-01	Grindstone arbor Run-out accuracy: within 0.02 mm Grindstone I.D. φ5.0 mm		AMH-301 · NR-601
	2131	AGM-03	Grindstone arbor Run-out accuracy: within 0.02 mm Grindstone I.D. φ5.0 mm		EM30-S6000 · EMA-3020K · EMR-3008K EMS-3060K · MSS-25 · MSST-23 · NR-303 · NR-403E NR-453E · NR-2351 · NR-2551 · NR-3060 · NR-3060S NRF-3060S · PMA-3013K · PMS-3020K · RAS-101 RAS-151E · RAX-71E · RAX-271E
Grindstone flange	Code No.	Model	Description / Specifications		Compatible model
	2138	EGF-19	Grindstone flange Available grindstone dimension φ19.05 (I.D.) × φ40 (O.D.) mm × 7 (width) mm		EM30-S6000 · EMR-3008K · EMS-3060K NR-403E · NR-453E · NR-2551 · NR-3060 · NR-3060S NRF-3060S · PMS-3020K
	2143	NGF2-19	Grindstone flange Available grindstone dimension φ19.05 (I.D.) × φ40 (O.D.) mm × 7 (width) mm		NR-311

Grease · Oil

Grease	Code No.	Model	Description	Compatible model
	1547	—	Grease for Speed reducer (2.5 mL)	ARG-011E · ARG-021E EMR-3008K · EMA-3020K RAX-271E · RAX-71E PMR-3005K
	1550	—	Grease for Speed reducer (10 mL)	
	1549	—	Grease for Speed reducer (100 mL)	
				
Oil	Code No.	Model	Description	Compatible model
	1057	K-211	Lubricating oil (70 cc)	Air line kit (AL-M1201BL · AL-M1202 · AL-M1203BS2)
	1058	K-202	Lubricating oil (1 L)	

COMBOX



Code No.	8495	Model	COMBOX
• By connecting the COMBOX to a CITIZEN “Cincom” CNC automatic lathe, iSpeed3 and E3000 motors can be easily operated by using the external M code signal.			
Specifications	Input voltage: DC24 V (DC23-25 V) Dimensions: W142 × D240 × H31 mm / Net weight: 1.2 kg		
Standard equipment and accessories	I/F Cable (High density D-SUB 15 connector): 1 pc. Cable D · E · F: 1 pc. each / Relay: 1 pc. Screw · Nut: 2 pcs. each / Connector cap: 4 pcs.		
Compatible controllers	E3000 controller · iSpeed3 controller		
External connecting device	CNC automatic lathe For details, please contact us or your local distributor.		

Network Interface COMBOX-NET.EIP

Easy IoT remote control and management of Nakanishi Spindle via EtherNet/IP.
Easy connection to a robot or special-purpose machine tool's PLC with a single LAN cable.

Code No.	7796	Model	COMBOX-NET.EIP
Code No.	7906	Model	COMBOX-NET D-sub Cable Set



EtherNet/IP™ is a trademark of ODVA, Inc.

Feature 1 Remote management through IoT

- **Easy remote error/warning display**
Error or warning output from the controller can be easily displayed remotely. *Display contents vary depending on S/N
- **Up to 4 sensors (digital × 2, analog × 2) can be connected**
Various commercially available sensors can be added and used for condition monitoring.



PLC display example

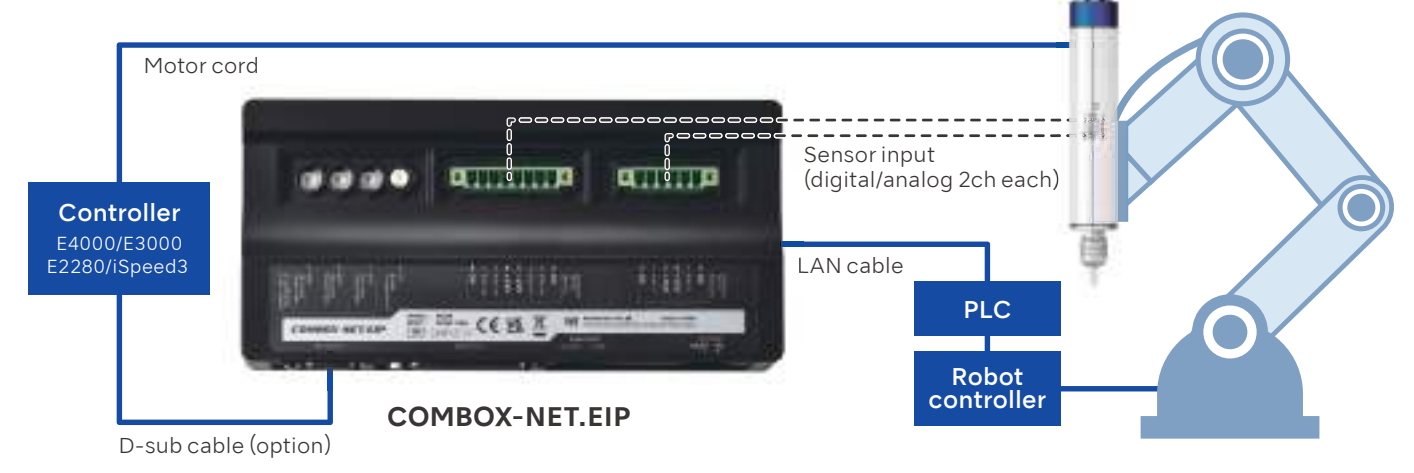
Feature 2 Reduce design and production work hours

- **Connectable to Ethernet/IP compatible devices via LAN cable** *Support for other protocols is pending
- **Reduction of the number of lines in the ladder program in PLCs is possible**
- **I/O-related devices are no longer needed, reducing the amount of wiring required**

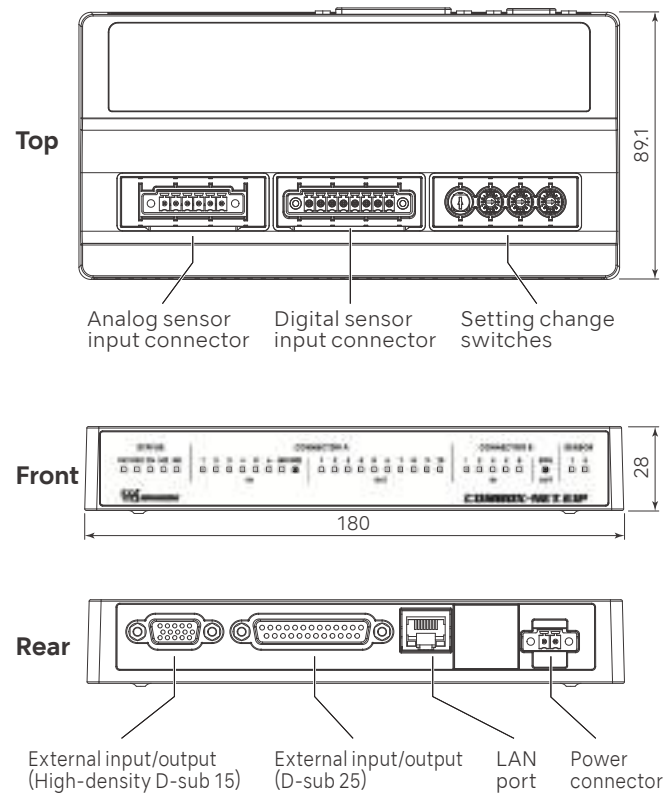
33% reduction in work hours
(compared to in-house measurements)



Connection example Simple configuration to connect to robots



Outside view



Specifications

Communication standard	EtherNet/IP
Baud rate	10 Mbps / 100 Mbps
Communication cycle (RPI)	4 ms or more
LAN cable specifications	Straight, category 5 or higher (STP cable recommended)
Rated input voltage	DC 24 V±10%
Dimensions	W180 × D89.1 × H28 mm
Net weight	282 g

Basic package

COMBOX-NET.EIP Main Body	1 pc.
Bracket	1 pc.
Mounting screw	4 pcs.
Power connector	1 pc.
Protect covers	Attached on the main body

Code No.	7796	Model	COMBOX-NET.EIP
----------	------	-------	----------------

*D-sub cables are sold separately.

Option

Code No.	7906	Model	COMBOX-NET D-sub Cable Set
----------	------	-------	----------------------------

D-sub 15 cable (500 mm) and D-sub 25 cable (500 mm)
*Since D-sub cable has special size, we recommend the above product.

Compatible controllers Connectable to all 4 models All inputs and outputs are handled via network communication.



*Controllers with the above S/Ns or later will display an error or warning code.
Controllers with the S/Ns prior to the above will only indicate the presence or absence of an error or warning.

E4000
E3000
E2000
iSpeed3
Air-Speed
HES
TURBINES
ACCESSORIES