



E3000



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※Specifications and design are subject to change without notice.

www.nakanishi-inc.com
PR-K364E Ver.1 2022-06-16 05.0 [590]

NAKANISHI INC. 2022



SERIES
E3000

ULTRA-HIGH-SPEED & SUPER-PRECISION

De Facto

E3000 Series has become the largest product lines of electric motor spindle with the decades of effort to respond to the customer's requests from all over the world.

⦿ Ø30mm Spindle

- Max. power 350w
- Max. rpm 80,000min⁻¹

⦿ The largest product lines

- 26 types of spindles are available.

⦿ Spindle accuracy within 1 μm

- Optimum for high-precision machining
- Longer tool life

⦿ Ceramic Bearing

- Longer bearing life
- Higher rigidity for heavy cutting

⦿ Brushless motor

- Maintenance free
- Longer product life thanks to no dust from carbon brushes



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Controller



E3000 CONTROLLER
Controller

Selector



E3000 SELECTOR
Selector
Up to 4 motors to control
with connecting selector to controller

Motor cord

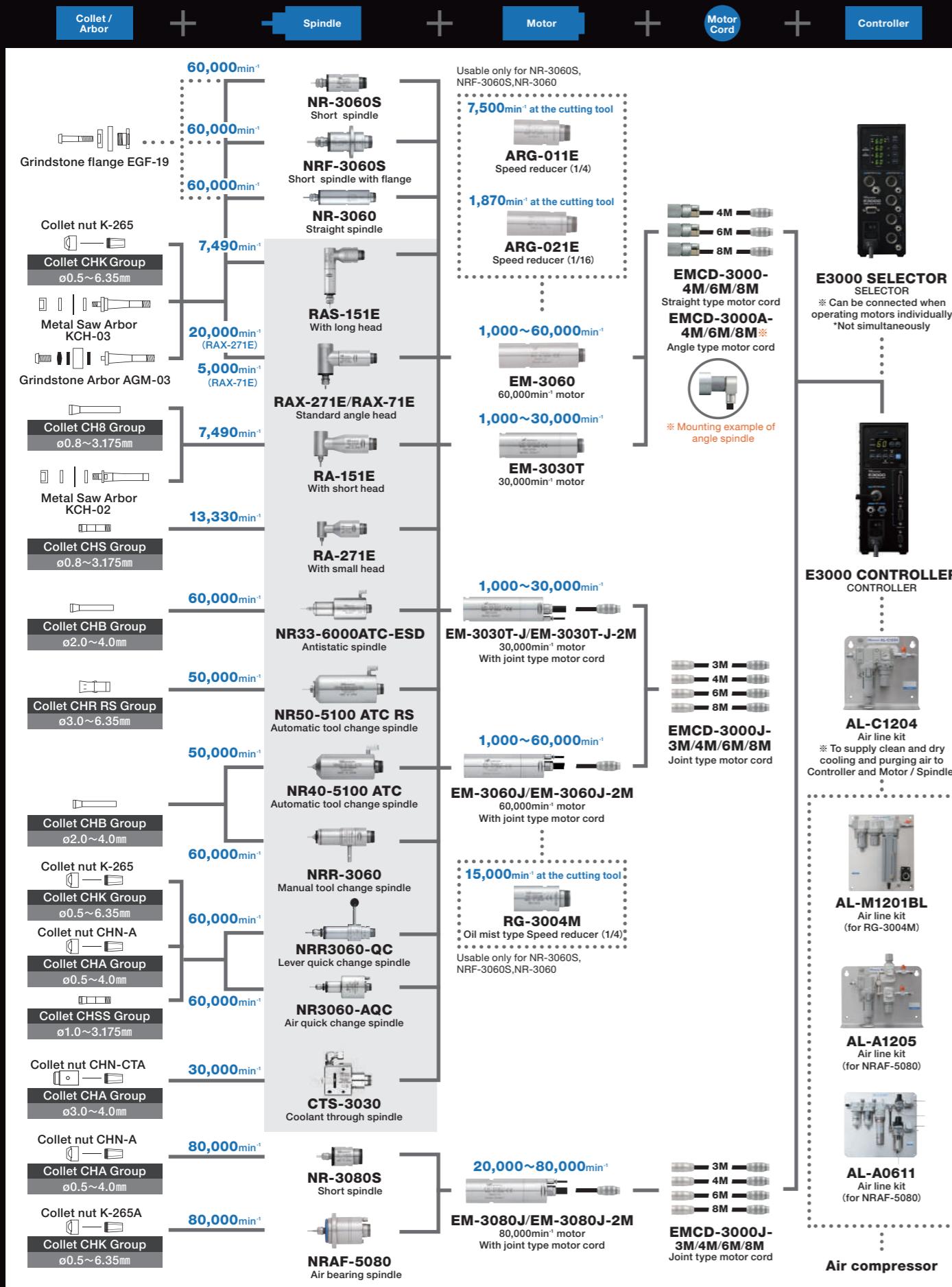
EMCD-3000 Straight type	p.49	EMCD-3000A Angle type	p.49	EMCD-3000J Joint type	p.49
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Accessories

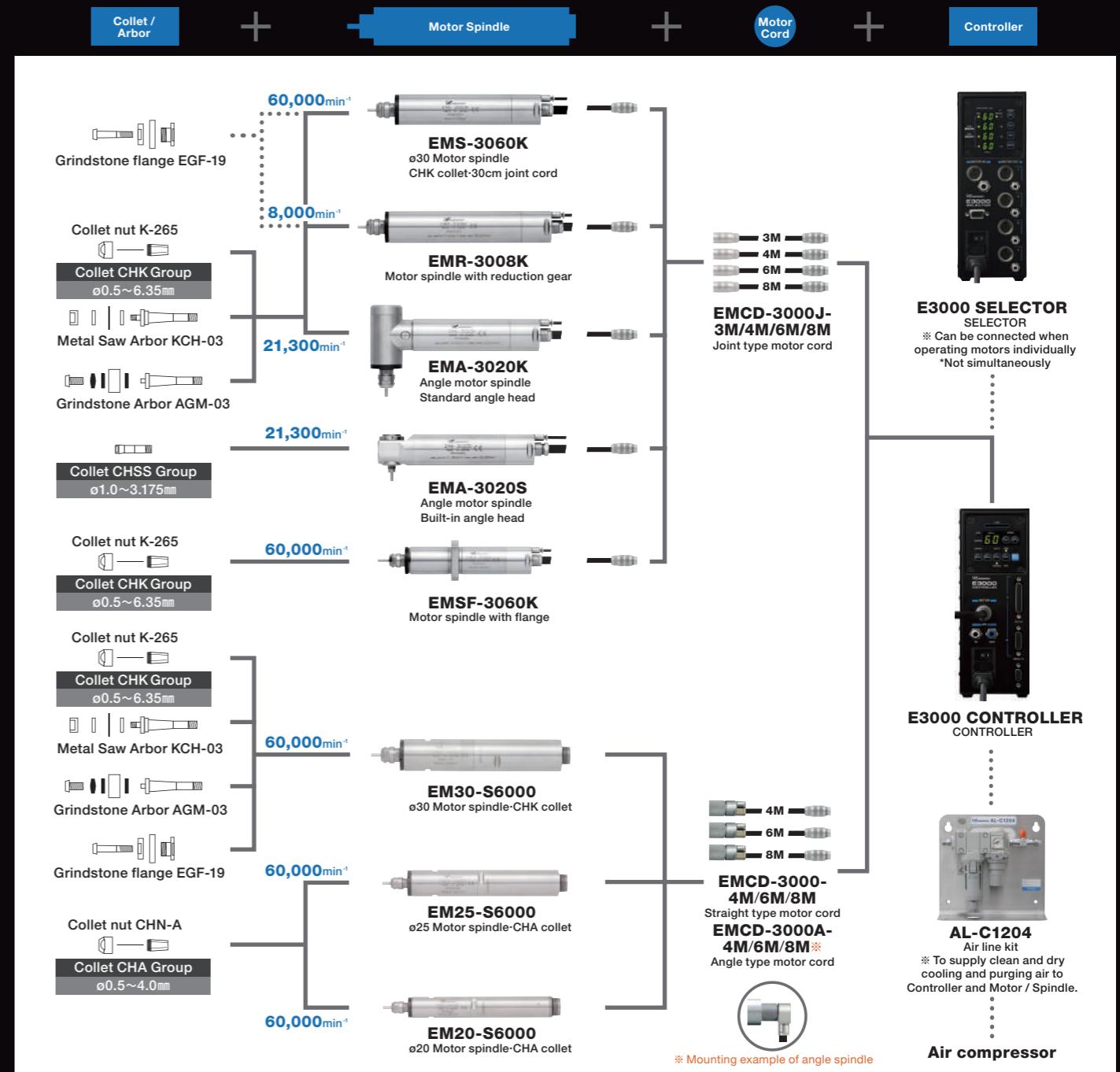
Air line kits	p.50	GR-30	p.50	Collets	p.51	Collet holders	p.52
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System Chart

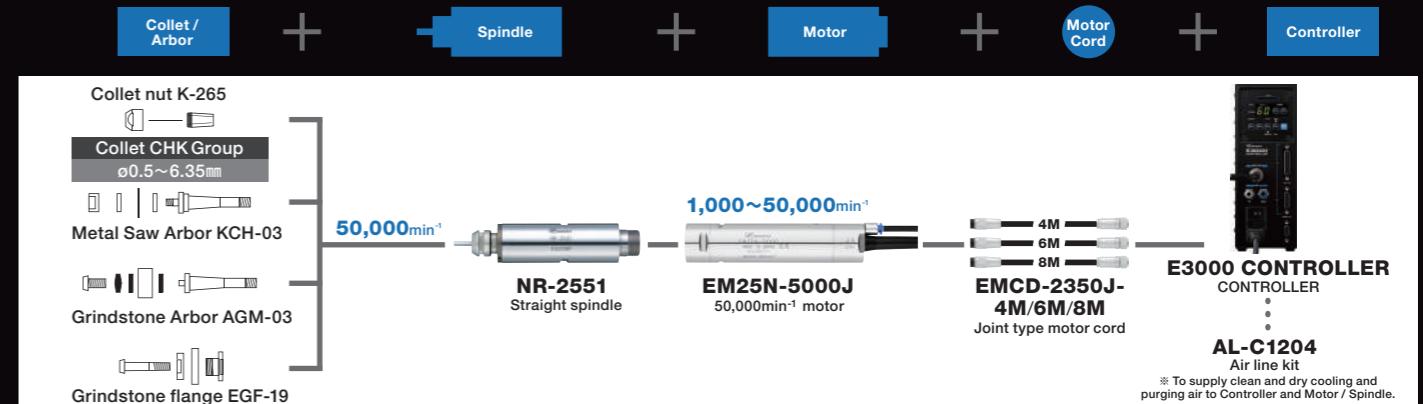
Modular type ø30mm



One-piece type ø30/ø25/ø20mm



Modular type ø25mm



Spindle (Modular type)



- 30 NR-3060S p.9
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- 30 NR-3060 p.9
- 30 RAX-271E / RAX-71E p.11
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- 30 RAS-151E p.13
- 30 RA-271E p.13
- 30 NR-3080S p.29
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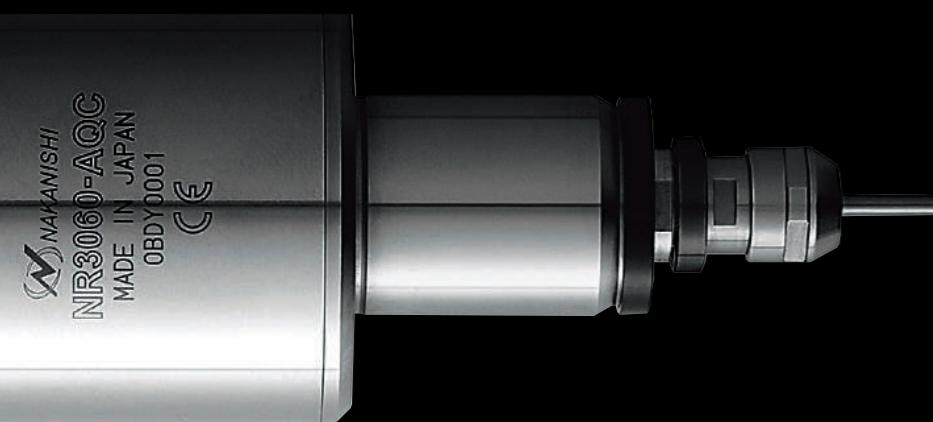
- 33 NR33-6000ATC-ESD p.15
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- 30 NRR3060-QC p.23
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- 30 EM-3080J p.33



- 25 NR-2551 p.35
- 25 EM25N-5000J p.35

Collet

Spindle

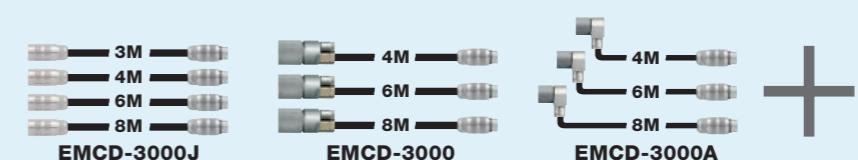
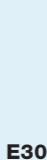
Electric motor

Motor cord

Controller

Spindle Guide

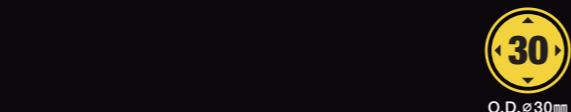
CHK

NR-3060S
NRF-3060S
NR-3060EM-3060J
EM-3060
EM-3030T-J
EM-3030TEMCD-3000J
EMCD-3000
EMCD-3000AE3000 CONTROLLER
E3000 SELECTOR**E3000 SERIES****Spindle (Modular type)**

Shown In Actual Size

NR-3060S

Short spindle



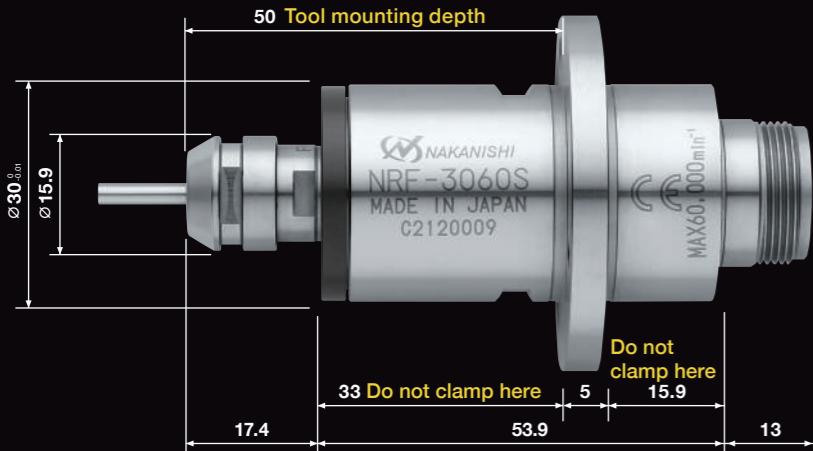
O.D. Ø30mm



O.D. Ø30mm

NRF-3060S

Short spindle with flange



O.D. Ø30mm

※ See p.46

NR-3060

Straight spindle



O.D. Ø30mm

Specifications**DXF data** DXF files are available on our website

Order by Code No.

NR-3060SCode No. **7859** Model **NR-3060S**

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
Ø30mm	60,000min ⁻¹	Within 1µm	CHK Group (Ø0.5 ~ Ø6.35mm)	260g
Standard Accessories				Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc.
Collet (CHK Group) : Ø0.5~Ø6.35mm p.51				
Metal Saw Arbor (KCH-03) : Ød (I.D.) × under Ø30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm				
Grindstone Flange (EGF-19) : applicable grindstone I.D. Ø19.05×O.D. Ø40×7mm				

※ Collet is sold separately.

Code No. **7795** Model **NRF-3060S**

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
Ø30mm	60,000min ⁻¹	Within 1µm	CHK Group (Ø0.5 ~ Ø6.35mm)	285g
Standard Accessories				Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc. Hexagon Socket Head Screw (M4×12) : 3pcs.
Collet (CHK Group) : Ø0.5~Ø6.35mm p.51				
Metal Saw Arbor (KCH-03) : Ød (I.D.) × under Ø30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm				
Grindstone Flange (EGF-19) : applicable grindstone I.D. Ø19.05×O.D. Ø40×7mm				

※ Collet is sold separately.

Code No. **7875** Model **NR-3060**

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
Ø30mm	60,000min ⁻¹	Within 1µm	CHK Group (Ø0.5 ~ Ø6.35mm)	420g
Standard Accessories				Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc.
Collet (CHK Group) : Ø0.5~Ø6.35mm p.51				
Metal Saw Arbor (KCH-03) : Ød (I.D.) × under Ø30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm				
Grindstone Flange (EGF-19) : applicable grindstone I.D. Ø19.05×O.D. Ø40×7mm				

※ Collet is sold separately.

Collet

Spindle

Electric motor

Motor cord

Controller

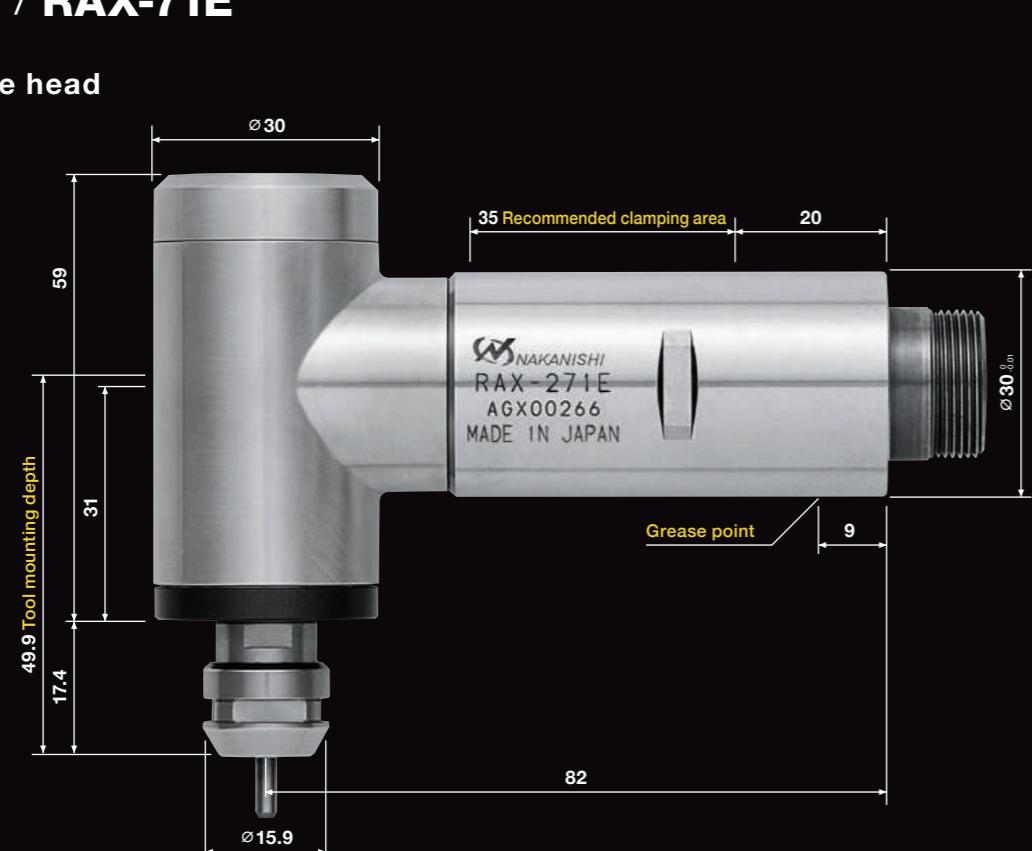
Spindle Guide**E3000 SERIES****Spindle (Modular type)**

Shown In Actual Size

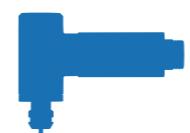
RAX-271E / RAX-71E

Angle spindle

Standard angle head

**Specifications**
DXF data DXF files are available on our website

Order by Code No.

RAX-271E / RAX-71E

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

[Model] RAX-271E	O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
Spindle Accuracy	Collet	Weight		
Within 2µm	CHK Group (Ø0.5 ~ Ø6.35mm)	580g		
[Model] RAX-71E	O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
Spindle Accuracy	Collet	Weight		
Within 2µm	CHK Group (Ø0.5 ~ Ø6.35mm)	580g		
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc. Grease for speed reducer (10ml) / Grease nipple : 1pc.			
Options	Collet (CHK Group) : Ø0.5~Ø6.35mm p.51 Metal Saw Arbor (KCH-03) : Ød (I.D.) × under Ø30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm			

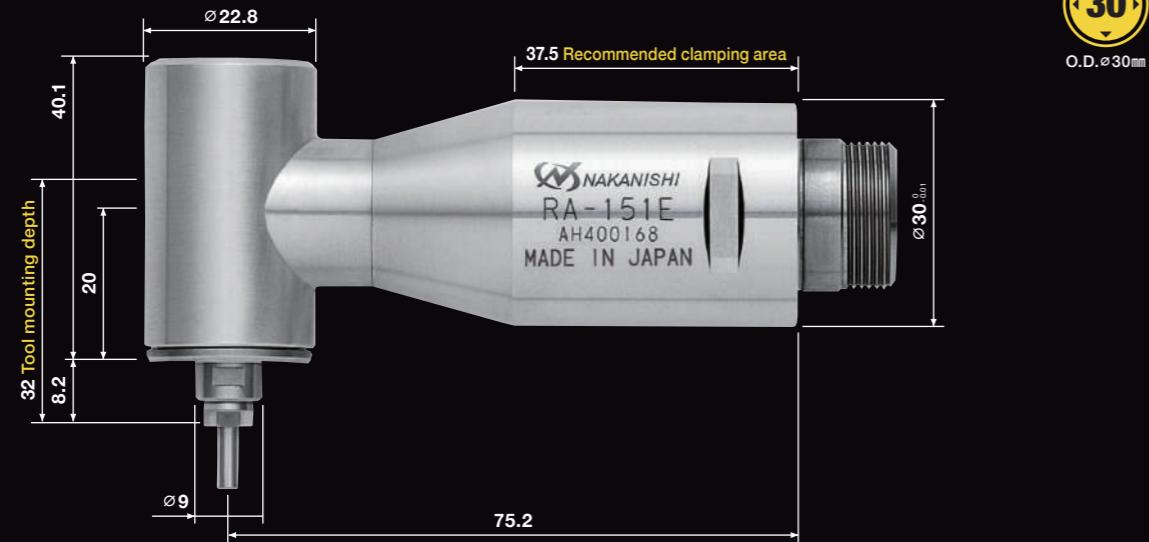
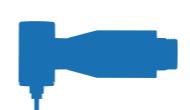
* Collet is sold separately.

! Put grease every 70 to 100 hours to extend the life of the speed reducer.
Grease-up prevents friction of the internal gears and degradation of the existing grease in the reducer.

RA-151E

Angle spindle

With short head

**RA-151E**

Code No.	1505	Model	RA-151E
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O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Collet	Weight
Ø30mm	7,490min⁻¹	1 2.67	20,000min⁻¹	CH8 Group (Ø0.8 ~ Ø3.175mm)	385g
Standard Accessories	Collet : Ø3.0mm (CH8-3.0) / Wrench (7×5.5) · (8×5) · (22×27) : 1pc. each				
Options	Collet (CH8 Group) : Ø0.8~Ø3.175mm p.51 Metal Saw Arbor (KCH-02) : Ød (I.D.) × under Ø30mm (O.D.)				

Collet

Spindle

Electric motor

Motor cord

Controller

Spindle Guide



CHK



RAS-151E



RA-271E

Electric motor

EM-3060J

EM-3060

EM-3030T-J

EM-3030T

Motor cord

EMCD-3000J

EMCD-3000

EMCD-3000

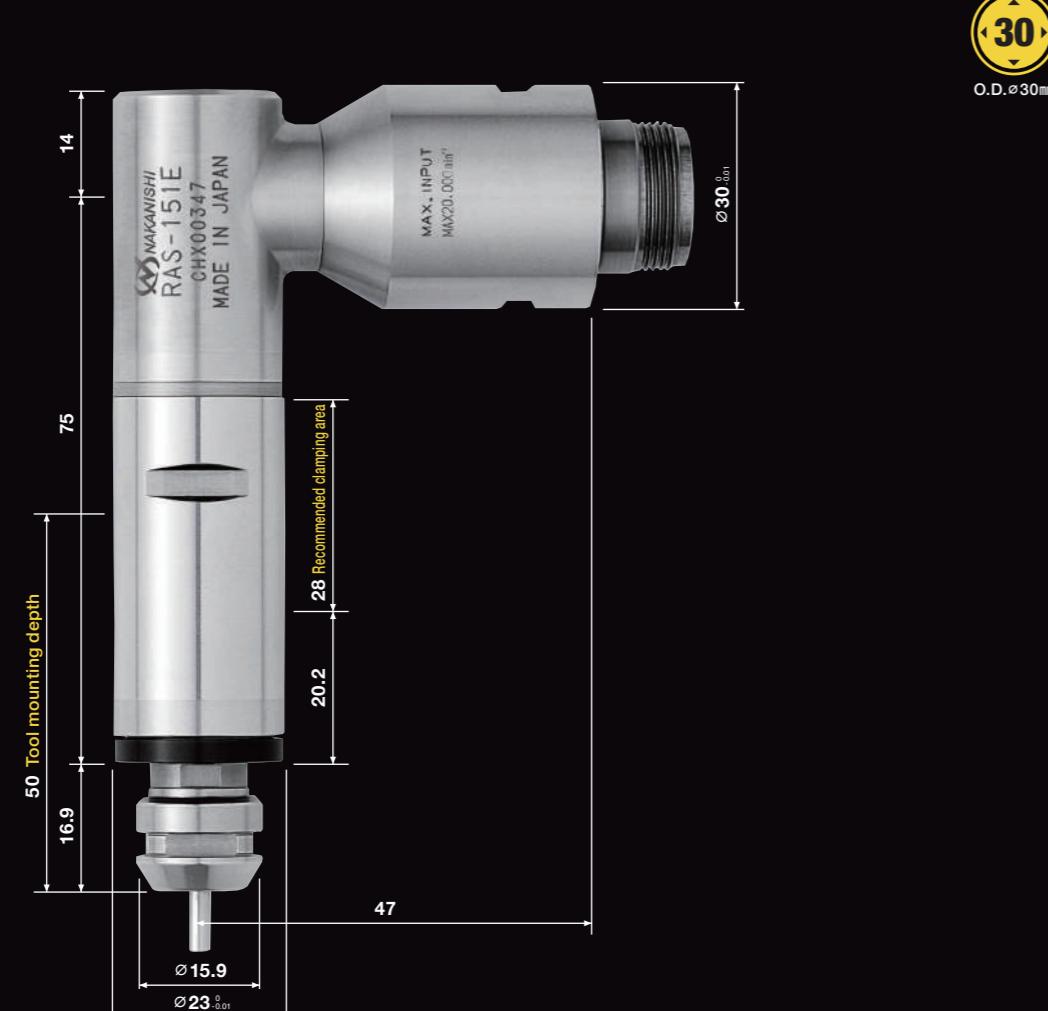
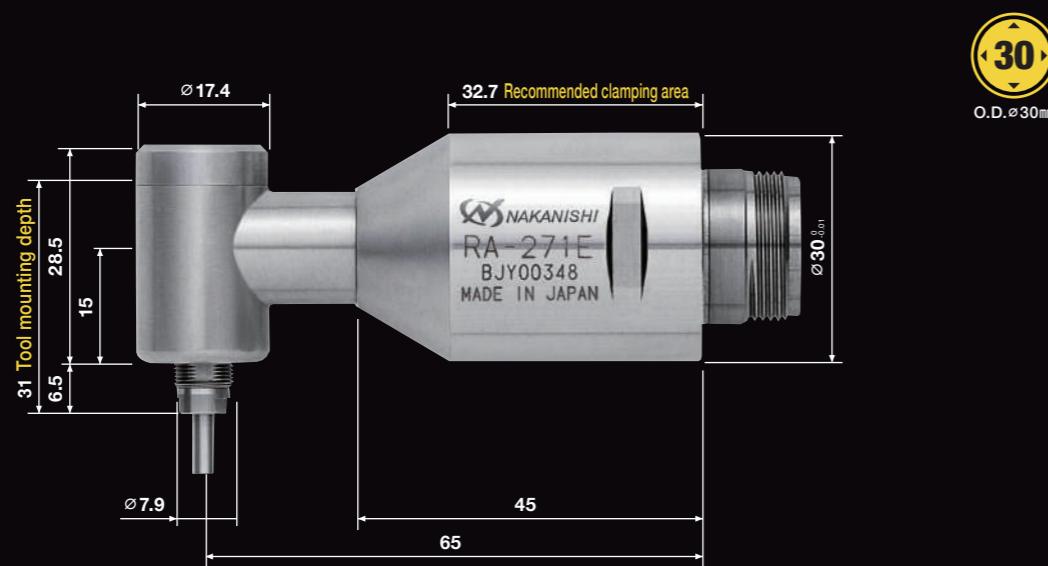
Controller

E3000 CONTROLLER

E3000 SELECTOR

E3000 SERIES**Spindle (Modular type)**

Shown In Actual Size

RAS-151EAngle spindle
With long head**RA-271E**Angle spindle
With small head**Specifications**

DXF data DXF files 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. rpm
Ø30mm	7,490min⁻¹	1 2.67	20,000min⁻¹
Spindle Accuracy	Collet	Weight	
Within 2µm	CHK Group (Ø0.5 ~ Ø6.35mm)	413g	
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc.		
Options	Collet (CHK Group) : Ø0.5~Ø6.35mm p.51 Metal Saw Arbor (KCH-03) : od (I.D.) × under Ø30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm		

※ Collet is sold separately.

RA-271E

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



O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Collet	Weight
Ø30mm	13,330min⁻¹	1 1.5	20,000min⁻¹	CHS Group (Ø0.8 ~ Ø3.175mm)	240g
Standard Accessories	Collet : Ø3.0mm (CHS-3.0) / Wrench (7×5.1) · (8×5) · (22×27) : 1pc. each				
Options	Collet (CHS Group) : Ø0.8~Ø3.175mm p.51				



E3000 SERIES

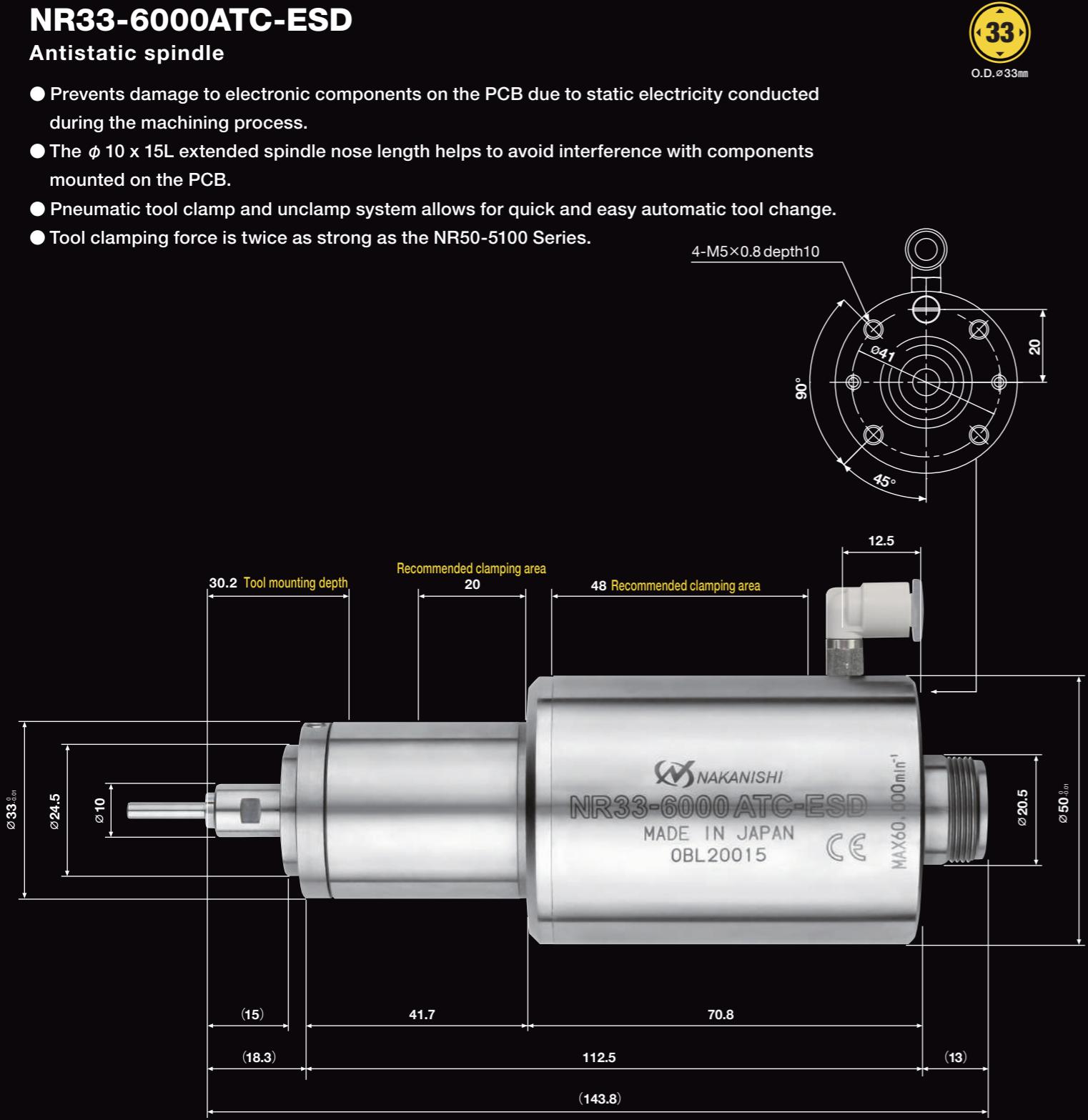
Spindle (Modular type)

Show In Actual Size

NR33-6000ATC-ESD

Antistatic spindle

- Prevents damage to electronic components on the PCB due to static electricity conducted during the machining process.
 - The ϕ 10 x 15L extended spindle nose length helps to avoid interference with components mounted on the PCB.
 - Pneumatic tool clamp and unclamp system allows for quick and easy automatic tool change.
 - Tool clamping force is twice as strong as the NR50-5100 Series.



Specifications

DXF
data DXF files are available
on our website

Order by Code No.

NR33-6000ATC-ESD

Code No.

88

Model **NR33-6000ATC-ESD**

O.D.	Allowable rotation speed	Air for collet opening	Spindle Accuracy	Collet	Weight
Ø33mm / Ø50mm	60,000min ⁻¹ (Motor rotation speed)	0.55~0.6MPa	Within 1µm	CHB Group (Ø3.175mm)	1,170g
Standard Accessories		Collet : Ø3.175mm (CHB-3.175) / Wrench (6.1×8) · (9×11) : 1pc. each / Bar wrench (K-236) : 1pc. Air hose with filter (K-251) : Ø6mm×2m			
Options		Collet (CHB Group) : Ø2.0, Ø3.0, Ø3.175, Ø3.5, Ø4.0mm p.51			

Collet

Spindle

Electric motor

Motor cord

Controller

Spindle Guide



CHR RS



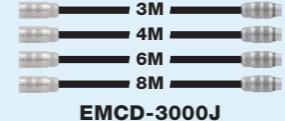
NR50-5100 ATC RS



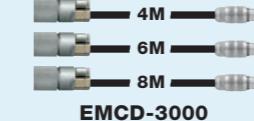
EM-3060J



EM-3060



EMCD-3000J



EMCD-3000



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

NR50-5100 ATC RS

Automatic tool change spindle

This spindle is recommended for the customers who use a big amount of cutting fluid.

"RS" stands for "Rubber Seal". This Rubber Seals added in the collet prevent coolant from going into the collet. In addition, the dust-proof cover which is bigger than NR50-5100 ATC prevents coolant from going into the spindle bearing.



Specifications

DXF data DXF files are available on our website

NR50-5100 ATC RS



Code No.

7690

Model NR50-5100 ATC RS

O.D.	Max. rpm	Air for collet opening	Spindle Accuracy	Collet	Weight
Ø50mm	50,000min ⁻¹	0.55~0.6MPa	Within 1µm	CHR RS Group (Ø3.175mm)	1,370g
Standard Accessories		Collet : Ø3.175mm (CHR-3.175RS) / Wrench (9×11) · (12×14) : 1pc. each / Bar wrench (K-236) : 1pc.			
		Air hose with filter (K-251) : Ø6mm×2m			
Options		Collet (CHR RS Group) : Ø3.0, Ø3.175, Ø4.0, Ø6.0, Ø6.35mm p.51			

Collet

Spindle

Electric motor

Motor cord

Controller

Spindle Guide



CHB



NR40-5100 ATC



NRR-3060



EM-3060J



EM-3060



EMCD-3000J



EMCD-3000



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

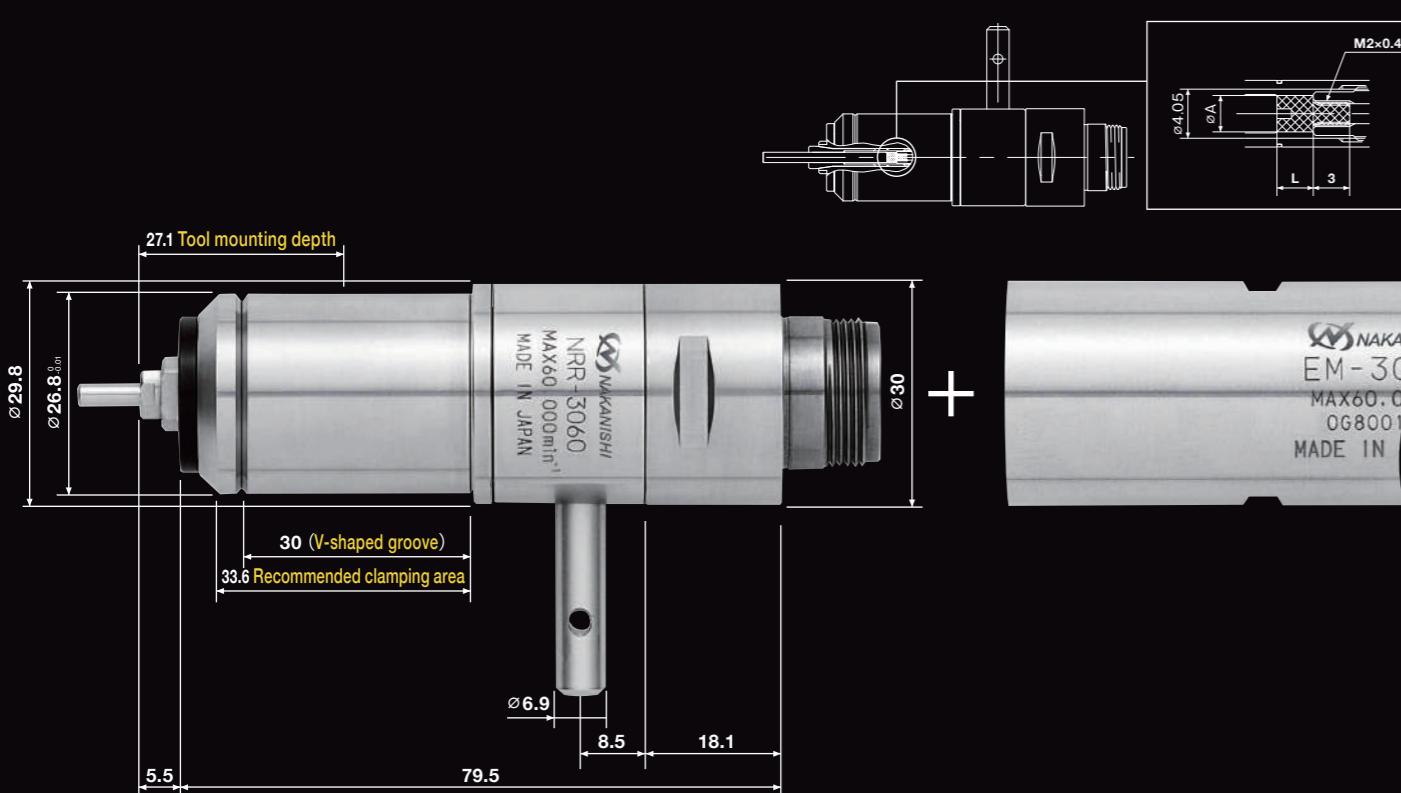
NR40-5100 ATC

Automatic tool change spindle



NRR-3060

Manual tool change spindle



Specifications

DXF data DXF files are available on our website

Order by Code No.

NR40-5100 ATC

Code No. 1582 Model NR40-5100 ATC



O.D.	Max. rpm	Air for collet opening	Spindle Accuracy	Collet	Weight
Ø40mm	50,000min ⁻¹	0.55~0.6MPa	Within 2µm	CHB Group (Ø3.175mm)	740g
Standard Accessories		Collet : Ø3.175mm (CHB-3.175) / Wrench (6.1×8) · (9×11) : 1pc. each / Bar wrench (K-236) : 1pc.			
		Air hose with filter (K-251) : Ø6mm×2m			
Options		Collet (CHB Group) : Ø2.0, Ø3.0, Ø3.175, Ø4.0mm p.51			

NRR-3060

Code No. 1836 Model NRR-3060



O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
Ø26.8mm Recommended clamping area	60,000min ⁻¹	Within 1µm	CHB Group (Ø3.175mm)	350g
Standard Accessories		Collet : Ø3.175mm (CHB-3.175) / Wrench (6.1×8) : 2pcs · (22×27) : 1pc		
Options		Collet (CHB Group) : Ø2.0, Ø3.0, Ø3.175, Ø4.0mm p.51		



E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

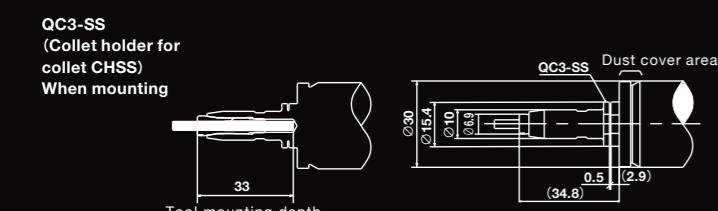
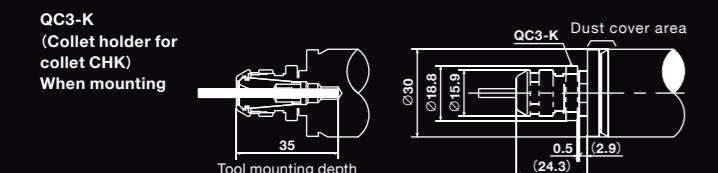
NR3060-AQC

Air quick change spindle

- Quick and easy collet holder change with air chucking mechanism.
- Enhancing productivity by enabling external tool set-up.
- 3 types of collet holders are available. (CHK $\phi 0.5 \sim 6.35\text{mm}$, CHA $\phi 0.5 \sim 4.0\text{mm}$, CHSS $\phi 1.0 \sim 3.175\text{mm}$)



Outside view of the tip of the spindle



Specifications

DXF data DXF files are available on our website

Order by Code No.

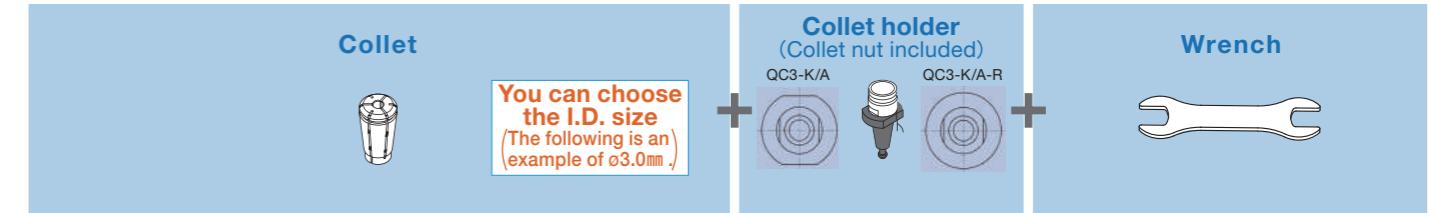
NR3060-AQC

Code No. 9220 Model NR3060-AQC

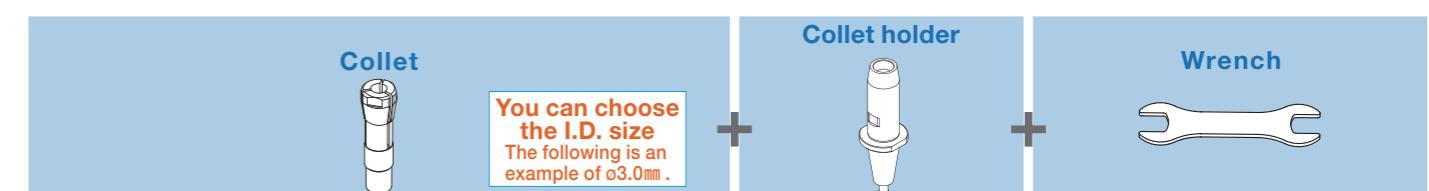
O.D.	Max. rpm	Air pressure of collet open/close	Spindle Accuracy	Collet holders	Weight
$\varnothing 30\text{mm}$	60,000 min ⁻¹	0.6 MPa	Within 1 μm	QC3-K / QC3-K-R (for Collet CHK) QC3-A / QC3-A-R (for Collet CHA) QC3-SS (for Collet CHSS)	1,230g

Standard Accessories Wrench (22×27) : 1pc. / Air hose with filter (K-251) : $\varnothing 6\text{mm} \times 2\text{m}$ 1pc.

Parts (Optional)



CHK I.D. $\varnothing 0.5\text{mm} \sim 6.35\text{mm}$ p.51	Code No. 915 3 0	9210	9223	2026
Model CHK- 3 . 0 (I.D. $\varnothing 3.0\text{mm}$)	Model QC3-K (for Collet CHK)	Model QC3-K-R (for Collet CHK)	Wrench 12 × 14 (2pcs.)	
CHA I.D. $\varnothing 0.5\text{mm} \sim 4.0\text{mm}$ p.51	Code No. 914 3 0	9209	9222	2012 2054
Model CHA- 3 . 0 (I.D. $\varnothing 3.0\text{mm}$)	Model QC3-A (for Collet CHA)	Model QC3-A-R (for Collet CHA)	Wrench 8 × 5 (1pc.)	Wrench 9 × 11 (1pc.)



CHSS I.D. $\varnothing 1.0\text{mm} \sim 3.175\text{mm}$ p.51	Code No. 930 3 0	7794	2069	2054
Model CHSS- 3 . 0 (I.D. $\varnothing 3.0\text{mm}$)	Model QC3-SS (for Collet CHSS)	Wrench 6.1 × 8 (1pc.)	Wrench 9 × 11 (1pc.)	

Preset adapter (For QC3 Collet holders)	Code No. 9211	
Model QC3-ADP		

[Use below Wrenches when using Preset adapter]

CHK collet : 12 × 14 Wrench (1pc.)
CHA collet : 9 × 11 Wrench (1pc.)
CHSS collet : 6.1 × 8 Wrench (1pc.)
See p.53

Collet & Collet holder

Spindle

Electric motor

Motor cord

Controller

Spindle Guide



E3000 SERIES

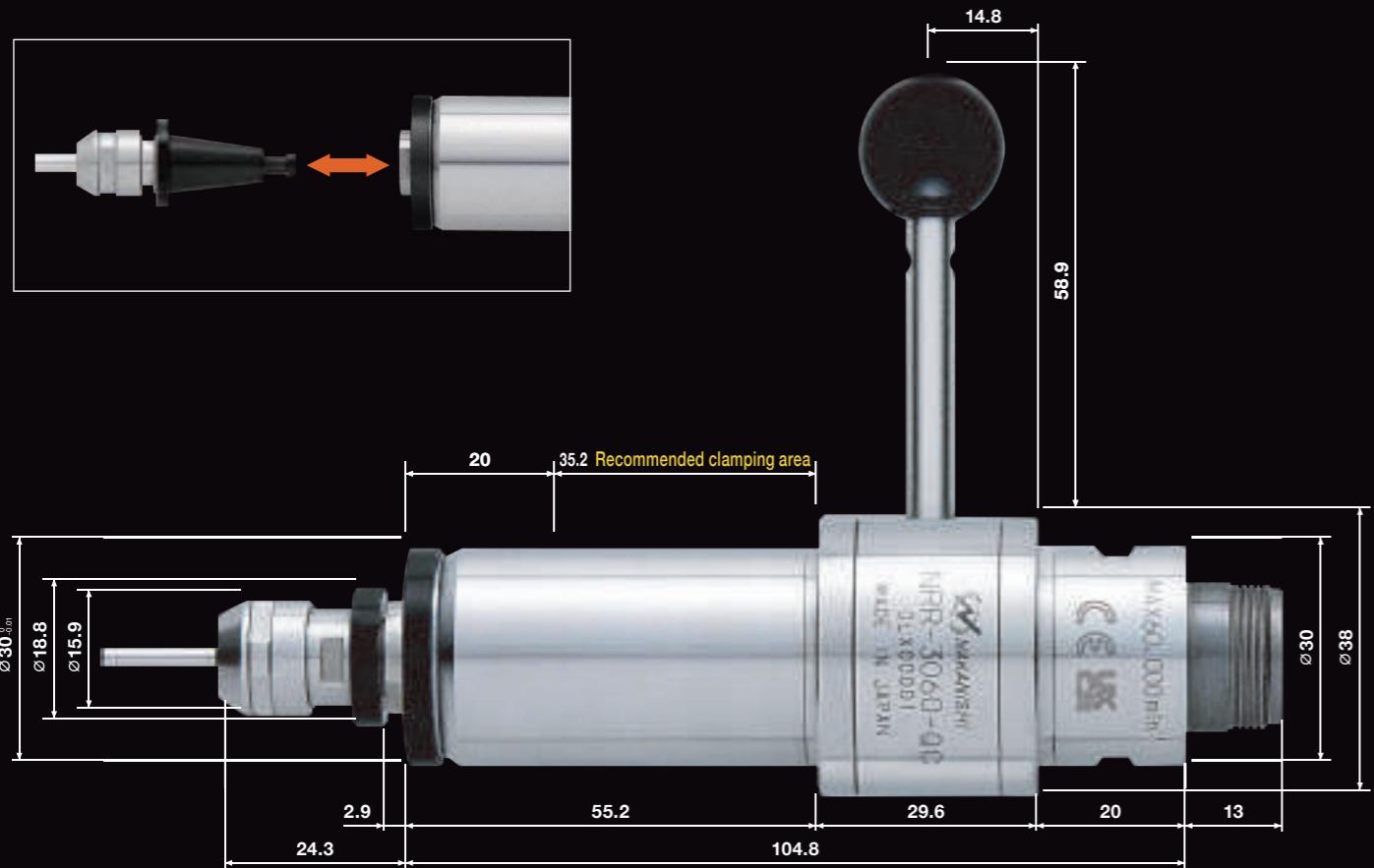
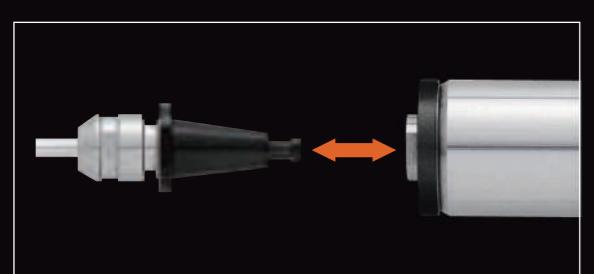
Spindle (Modular type)

Shown In Actual Size

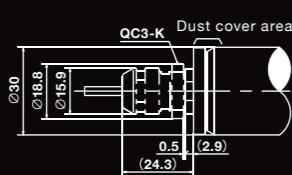
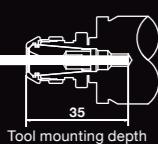
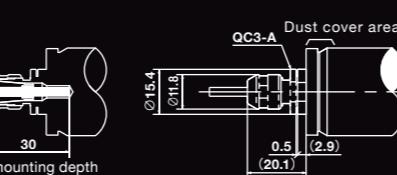
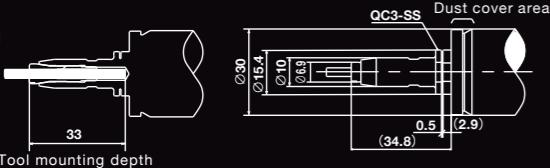
NRR3060-QC

Lever quick change spindle

- Quick and easy collet holder change with lever chucking mechanism.
- Enhancing productivity by enabling external tool set-up.
- 3 types of collet holders are available. (CHK $\phi 0.5 \sim 6.35\text{mm}$, CHA $\phi 0.5 \sim 4.0\text{mm}$, CHSS $\phi 1.0 \sim 3.175\text{mm}$)

O.D. $\varnothing 30\text{mm}$ 

Outside view of the tip of the spindle

QC3-K
(Collet holder for
collet CHK)
When mountingQC3-A
(Collet holder for
collet CHA)
When mountingQC3-SS
(Collet holder for
collet CHSS)
When mounting

Specifications

DXF data DXF files are available on our website

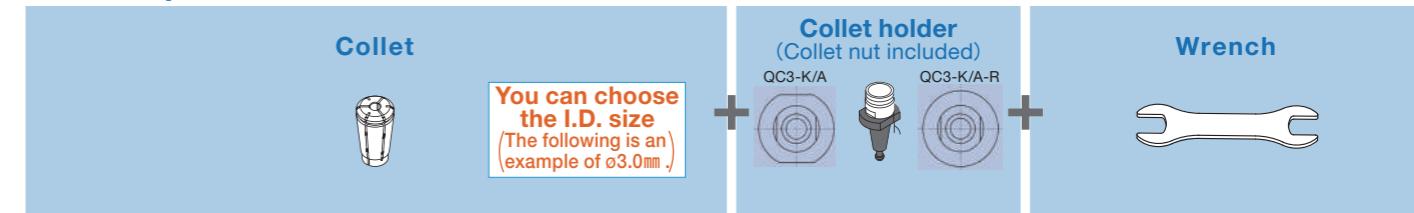
Order by Code No.

NRR3060-QC

Code No. 9208 Model NRR3060-QC

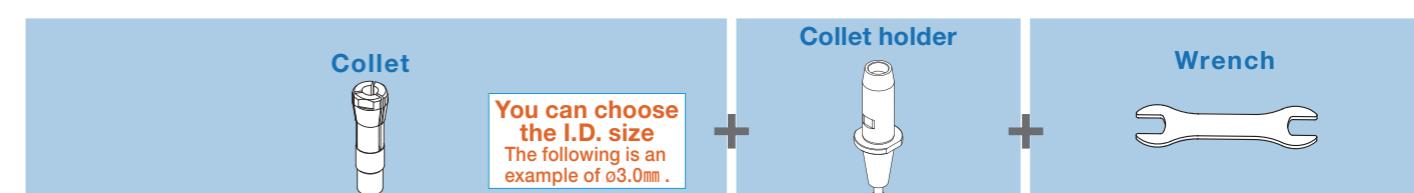
O.D.	Max. rpm	Lever operating angle	Spindle Accuracy	Collet holders	Weight
$\varnothing 30\text{mm}$ Recommended clamping area	60,000 min ⁻¹	90°	Within 1 μm	QC3-K / QC3-K-R (for Collet CHK) QC3-A / QC3-A-R (for Collet CHA) QC3-SS (for Collet CHSS)	570g
Standard Accessories Wrench (22×27) : 1pc.					

Parts (Optional)



CHK I.D. $\varnothing 0.5\text{mm} \sim 6.35\text{mm}$ p.51	Code No.	915 3 0	9210	9223	2026
Model		CHK- 3 . 0 (I.D. $\varnothing 3.0\text{mm}$)	QC3-K (for Collet CHK)	QC3-K-R (for Collet CHK)	Wrench 12 × 14 (2pcs.)

CHA I.D. $\varnothing 0.5\text{mm} \sim 4.0\text{mm}$ p.51	Code No.	914 3 0	9209	9222	2012	2054
Model		CHA- 3 . 0 (I.D. $\varnothing 3.0\text{mm}$)	QC3-A (for Collet CHA)	QC3-A-R (for Collet CHA)	Wrench 8 × 5 (1pc.)	Wrench 9 × 11 (1pc.)



CHSS I.D. $\varnothing 1.0\text{mm} \sim 3.175\text{mm}$ p.51	Code No.	930 3 0	7794	2069	2054
Model		CHSS- 3 . 0 (I.D. $\varnothing 3.0\text{mm}$)	QC3-SS (for Collet CHSS)	Wrench 6.1 × 8 (1pc.)	Wrench 9 × 11 (1pc.)

Preset adapter (For QC3 Collet holders)	Code No.	9211	
Model		QC3-ADP	

【Use below Wrenches when using Preset adapter】

CHK collet : 12 × 14 Wrench (1pc.)

CHA collet : 9 × 11 Wrench (1pc.)

CHSS collet : 6.1 × 8 Wrench (1pc.)

See p.53

Collet

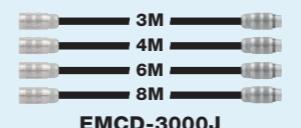
Spindle

Electric motor

Motor cord

Controller

Spindle Guide



E3000 SERIES

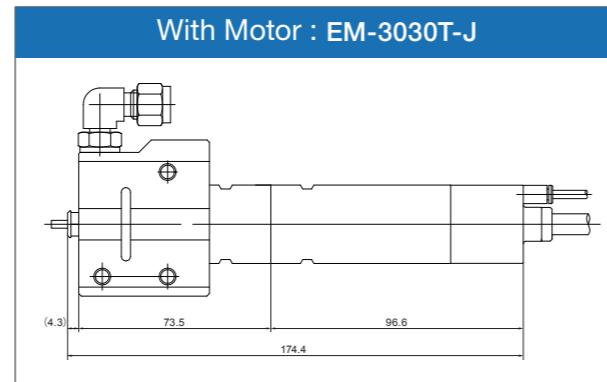
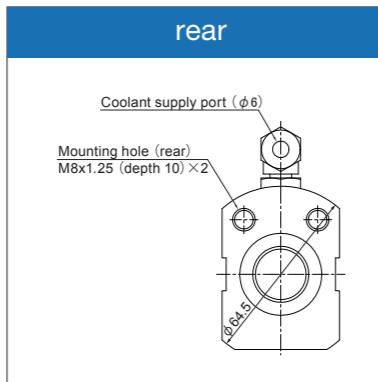
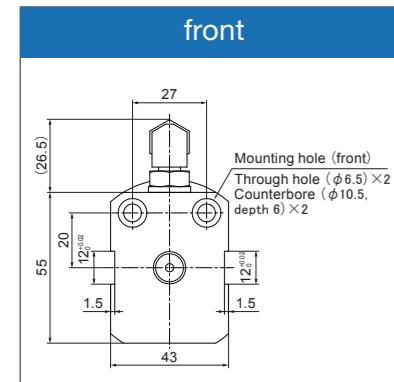
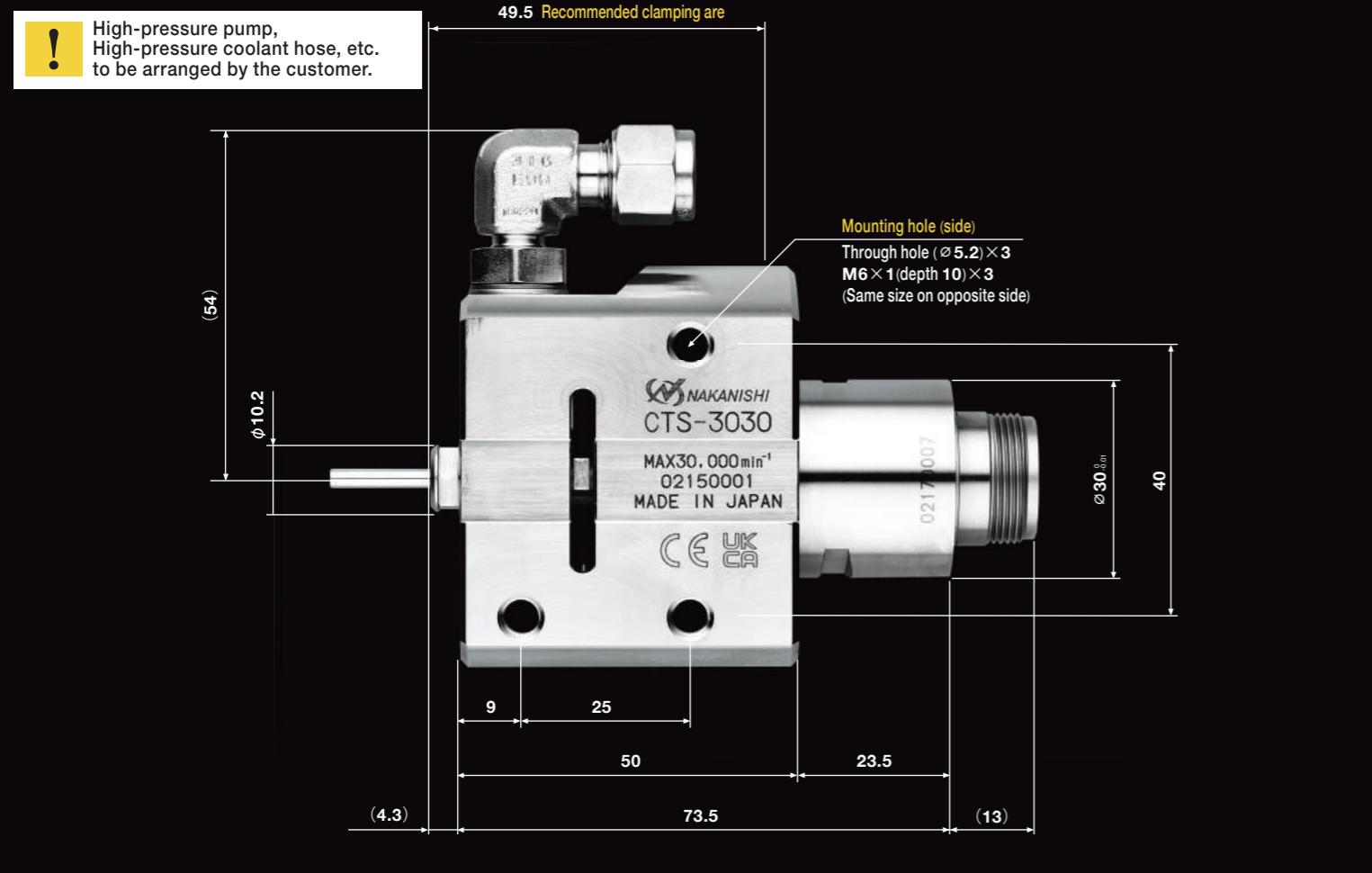
Spindle (Modular type)

Shown In Actual Size

CTS-3030

Coolant through spindle

- A Spindle that uses an oil hole drill for deep hole drilling.
- To inject coolant from it's tool tip of the drill, there are several advantages, such as improved chip discharge, reduction drilling time, extended tool life, and high precision when performing.



Specifications

DXF data DXF files are available on our website

Order by Code No.

CTS-3030



Code No. 7797 Model CTS-3030

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
Ø30 mm	30,000 min ⁻¹	Within 1 μm	CHA Group (Ø3.0, Ø3.175, Ø4.0 mm)	885g
Standard Accessories				Wrench (8×5) · (9×11) · (22×27) : 1pc. each
Options				Collet (CHA Group) : Ø3.0, Ø3.175, Ø4.0 mm p.51 Collet nut (CHN-CTA) : 3.0, 3.175, 4.0 mm p.52

※ The Collet and the Collet nut are sold separately. Please match the collet and collet nut size.

※ High precision AA grade types are highly recommended.

Parts (Optional)

Collet	Code No. 91494	7798
Ø3.0	Model CHA-3.0AA	CHN-CTA-3.0
Ø3.175	Code No. 91496	7799
	Model CHA-3.175AA	CHN-CTA-3.175
Ø4.0	Code No. 91495	7800
	Model CHA-4.0AA	CHN-CTA-4.0

Speed Reducer (Modular type)

Shown In Actual Size

ARG-011E

Speed Reducer (1/4)



O.D. Ø30mm

ARG-021E

Speed Reducer (1/16)



O.D. Ø30mm

RG-3004M

Oil mist type Speed Reducer (1/4)

- Max. input speed $60,000\text{min}^{-1}$ (standard type $30,000\text{min}^{-1}$)
 - Longer product life by oil mist lubrication
 - No greasing is necessary
 - Oil mist supply is necessary
- ※ Not recommended for dry machining.



O.D. Ø30mm

Specifications

DXF data DXF files are available on our website

ARG-011ECode No. **1507** Model **ARG-011E**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Weight
Ø30mm	7,500min ⁻¹	1/4	30,000min ⁻¹	242g

Standard Accessories Grease for reduction gear (10mℓ) / Grease nipple : 1pc.

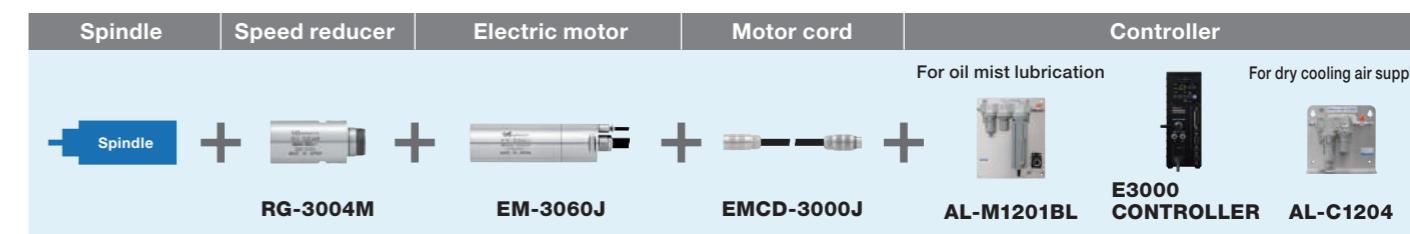
! Put grease every 70 to 100 hours to extend the life of the Speed reducer.
Grease-up prevents friction of the internal gears and degradation of the existing grease in the reducer.

ARG-021ECode No. **1508** Model **ARG-021E**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Weight
Ø30mm	1,870min ⁻¹	1/16	30,000min ⁻¹	325g

Standard Accessories Grease for reduction gear (10mℓ) / Grease nipple : 1pc.

! Put grease every 70 to 100 hours to extend the life of the Speed reducer.
Grease-up prevents friction of the internal gears and degradation of the existing grease in the reducer.

RG-3004MCode No. **7348** Model **RG-3004M**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Weight
Ø30mm	15,000min ⁻¹	1/4	60,000min ⁻¹	240g

Collet



Spindle

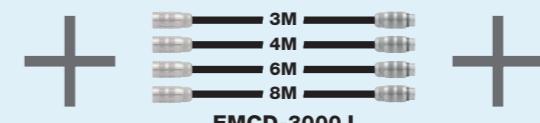


Electric motor



EM-3080J

Motor cord



EMCD-3000J

Controller



Spindle Guide

E3000 SERIES**Spindle (Modular type)**

Shown In Actual Size

NR-3080S

Short spindle

O.D. Ø30mm

**Specifications**

DXF data DXF files are available on our website

Code No. 7876 Model NR-3080S

NR-3080S

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
Ø30mm	80,000min⁻¹	Within 1µm	CHA Group (Ø0.5 ~ Ø4.0mm)	170g
Standard Accessories		Collet nut (CHN-A) / Wrench (22×27) · (8×5) · (9×11) : 1pc. each		
Options		Collet (CHA Group) : Ø0.5 ~ Ø4.0mm p.51		

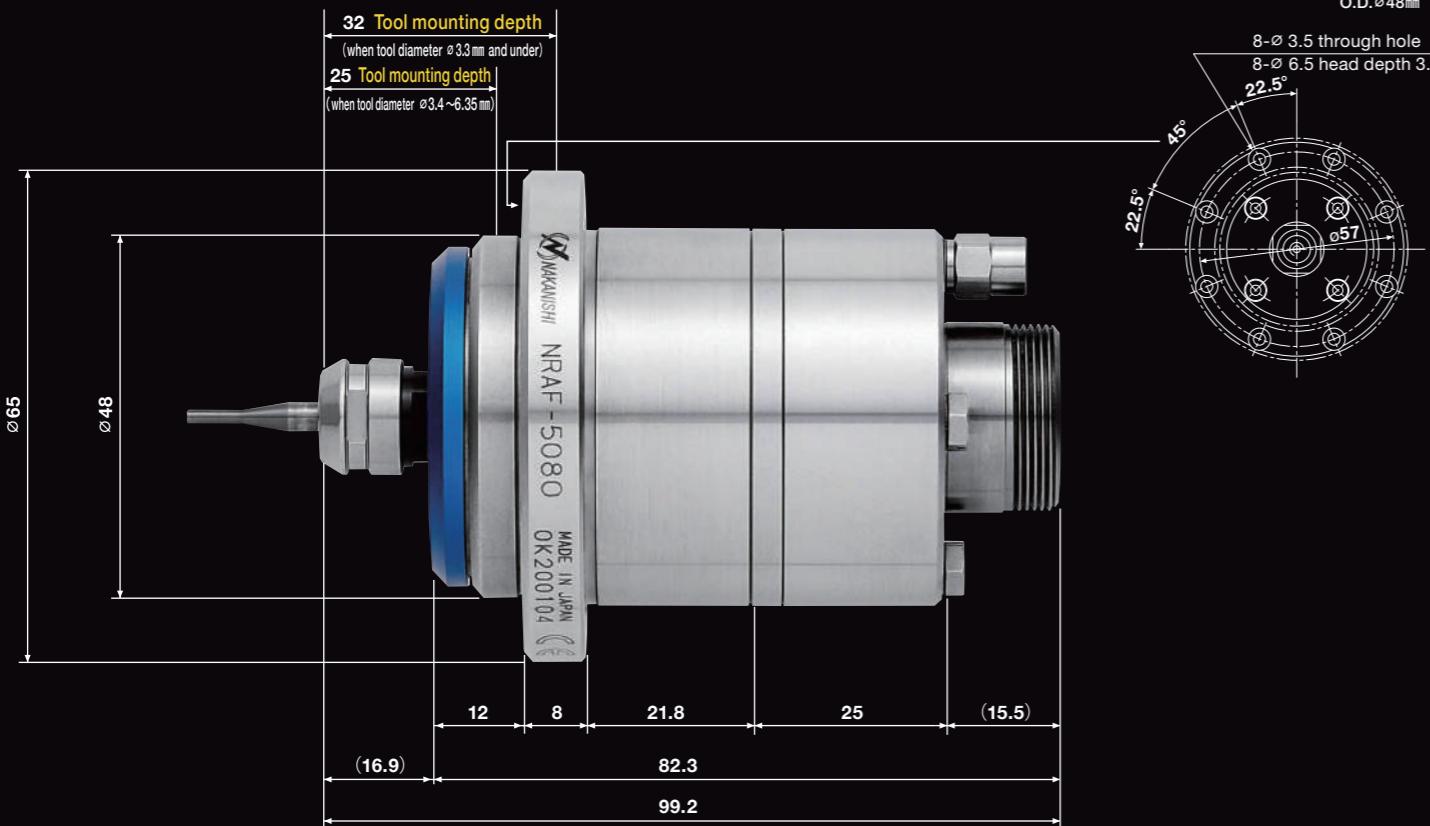
NRAF-5080

Code No. 1782 Model NRAF-5080

NRAF-5080

Air bearing spindle

O.D. Ø48mm



O.D.	Max. rpm	Appropriate bearing air pressure	Spindle Accuracy	Collet	Weight
Ø48mm	80,000min⁻¹	35Nℓ/min (0.5MPa)	Within 1µm	CHK Group (Ø0.5 ~ Ø6.35mm)	810g
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 Useable Max. diameter of grindstone : Ø8.0mm and under on Ø6.0mm shank Hose diameter : Ø4mm, for bearing air inlet			
Standard Accessories		Collet : Ø3.0mm (CHK-3.0) / Collet nut (K-265A) / Wrench (12×14) : 2pcs. Reducer : 1pc. / Inlet air hose (Ø4mm×4m) : 1pc. / Bar wrench (K-236) : 1pc.			
Options		Collet (CHK Group) : Ø0.5 ~ Ø6.35mm p.51			

Motor**EM-3060**60,000min⁻¹ motor

Shown In Actual Size

**Specifications**

DXF data DXF files are available on our website

EM-3060

Code No.

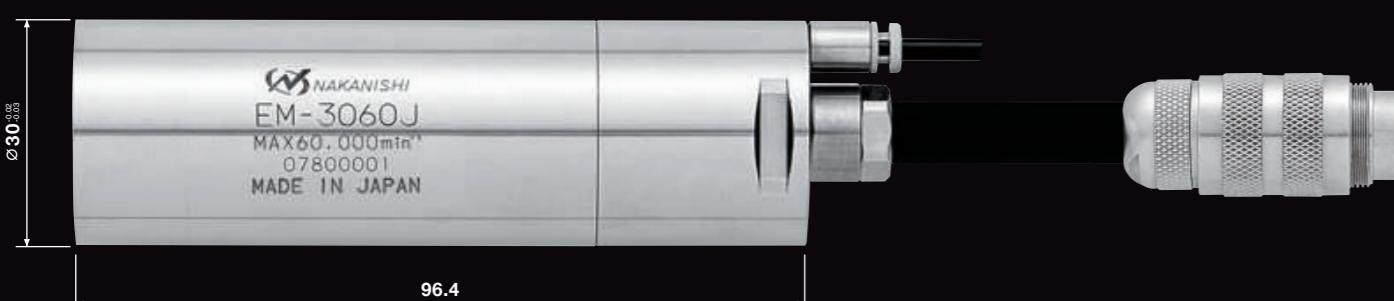
1597

Model

EM-3060

O.D.	Speed Range	Max. power	Weight
Ø30mm	1,000 ~ 60,000min ⁻¹	350w	325g

Standard Accessories Wrench (22×27) : 1pc.

EM-3060JLength 0.3m Code No. **1765** Model **EM-3060J**Length 2m Code No. **1779** Model **EM-3060J-2M****EM-3060J**60,000min⁻¹ motor with joint type motor cord

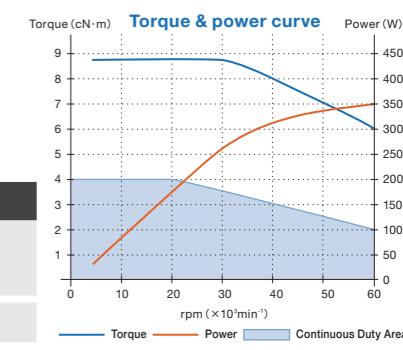
Cord length L=0.3m / 2m



* Joint type motor cord is necessary.

O.D.	Speed Range	Max. power	Weight
Ø30mm	1,000 ~ 60,000min ⁻¹	350w	0.3m : 360g 2 m : 525g

Standard Accessories Wrench (22×27) : 1pc.

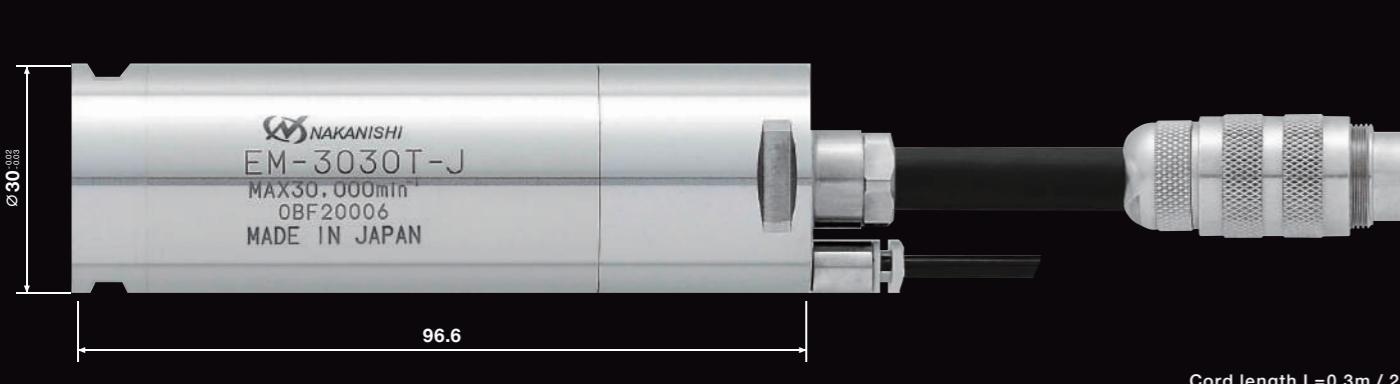
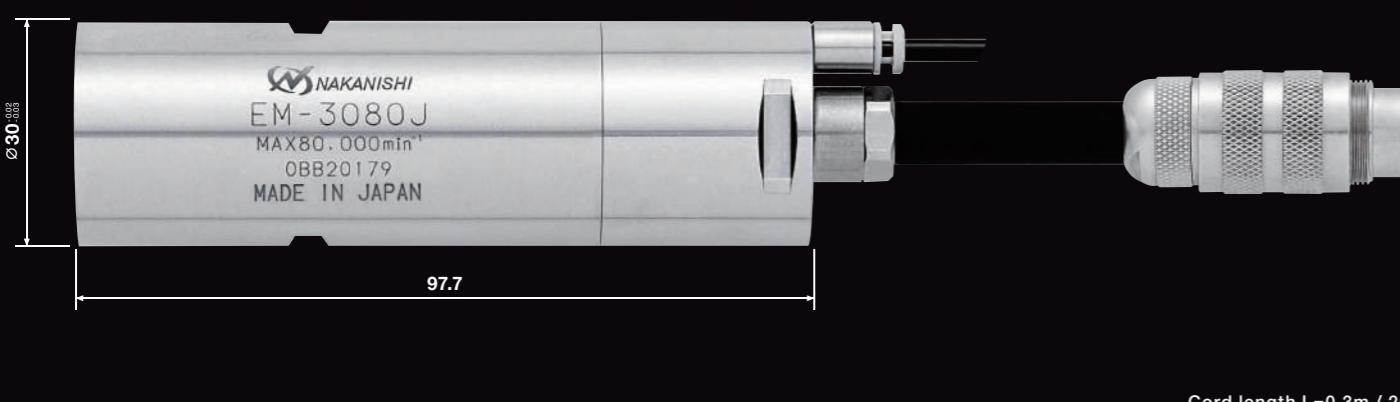


Motor**EM-3030T**30,000min⁻¹ torque motor

- EM-3030T torque is twice as big as EM-3060.

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

- EM-3030T-J torque is twice as big as EM-3060J.

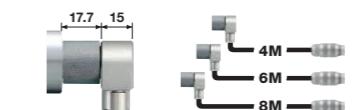
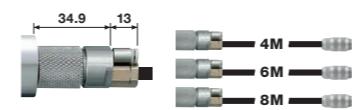
**EM-3080J**80,000min⁻¹ motor with joint type motor cord

Shown In Actual Size

Specifications

DXF data DXF files are available on our website

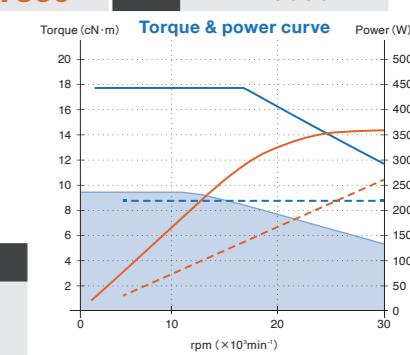
Order by Code No.

EM-3030T

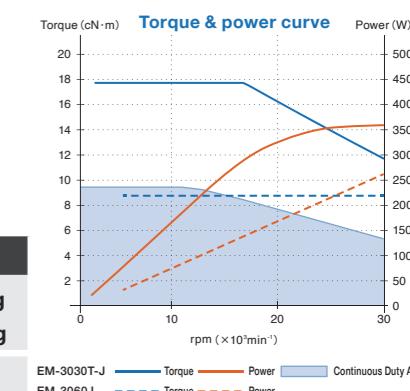
O.D.	Speed Range	Max. power	Weight
Ø30mm	1,000 ~ 30,000min ⁻¹	350W	350g

Standard Accessories Wrench (22×27) : 1pc.

Code No. 7360 Model EM-3030T

**EM-3030T-J**

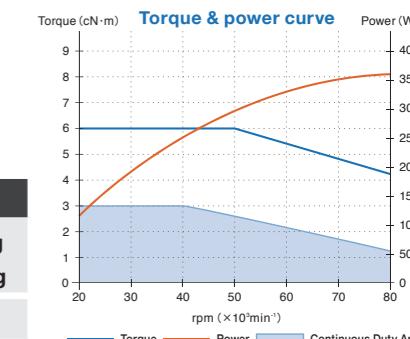
Length	0.3m	Code No.	7358
Length	2m	Code No.	7359



Standard Accessories Wrench (22×27) : 1pc.

**EM-3080J**

Length	0.3m	Code No.	1781
Length	2m	Code No.	1788



Standard Accessories Wrench (22×27) : 1pc.

Collect

Spindle

Electric motor

Motor cord

Controller

Spindle Guide



CHK



NR-2551



EM25N-5000J



EMCD-2350J



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

NR-2551

Straight spindle

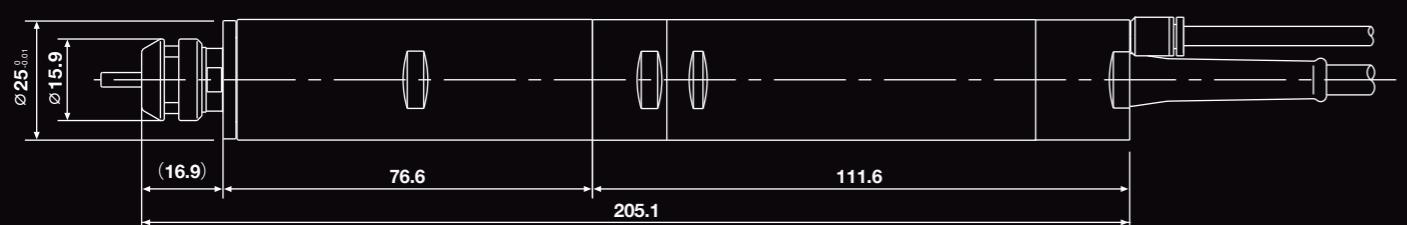


EM25N-5000J

50,000min⁻¹ motor



Dimensions when connected



Specifications

DXF data DXF files are available on our website

Order by Code No.

NR-2551

Code No. 7853 Model NR-2551



O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
Ø30mm	50,000min⁻¹	Within 1µm	CHK Group (Ø0.5 ~ Ø6.35mm)	253g
Standard Accessories				Collet nut (K-265) / Wrench (12×14) : 2pcs. (22×27) : 1pc.
Options				Collet (CHK Group) : Ø0.5 ~ Ø6.35mm p.51
				Metal Saw Arbor (KCH-03) : Ød (I.D.) × under Ø30mm (O.D.) /Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm
				Grindstone Flange (EGF-19) : applicable grindstone I.D. Ø19.05×O.D. Ø40×7mm

※ Outside diameter Ø25.4mm type is also available.

※ Collet is sold separately.

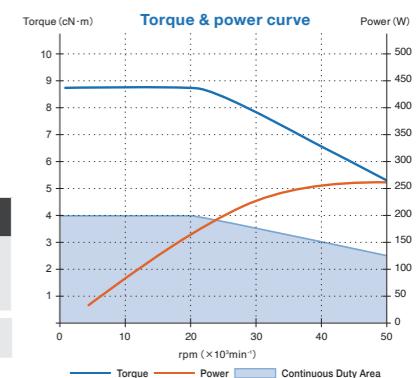
EM25N-5000J

Code No. 7904 Model EM25N-5000J



O.D.	Speed Range	Max. Power	Weight
Ø25mm	1,000 ~ 50,000min⁻¹	250W	335g
Standard Accessories			Wrench (22×27) : 1pc.

※ Use EMCD-2350J Series for Motor code.



Motor cord

Motor cord	Cord No.	Model	Model	Standard Accessories	Compatible model
Joint type	7722	EMCD-2350J-4M	3.7m	Air hose Connector cap (Included)	EM25N-5000J
	7723	EMCD-2350J-6M	5.7m		
	7724	EMCD-2350J-8M	7.7m		

Motor spindle (One-piece type)



③ EMS-3060K
p.39

③ EMR-3008K
p.39

NAKANISHI
EMS-3060K
MAX60,000min⁻¹
04800002
MADE IN JAPAN



③ EMA-3020K
p.41

③ EMA-3020S
p.41

③ EMSF-3060K
p.45

③ EM30-S6000
p.43

② EM25-S6000
p.43

① EM20-S6000
p.43

NAKANISHI
EM30-S6000
MADE IN JAPAN
ABB41725
MAX30,000min⁻¹

NAKANISHI
EM25-S6000
MADE IN JAPAN
0GK00260
MAX30,000min⁻¹

NAKANISHI
EM20-S6000
MADE IN JAPAN
0GK00263
MAX30,000min⁻¹



Collet

Motor Spindle (One-piece type)

Motor cord

Controller

Spindle Guide



E3000 SERIES

Shown In Actual Size

Motor spindle (One-piece type)

EMS-3060K

ø30 Motor spindle
CHK collet-30cm joint cord



EMR-3008K

Motor spindle with reduction gear



Cord length L=0.3m

Specifications

DXF data DXF files are available on our website

Order by Code No.

EMS-3060K

Code No. 7862 Model EMS-3060K

O.D.	Max. rpm	Spindle Accuracy	Collet	Max. power	Weight
Ø30mm	60,000 min⁻¹	Within 1 µm	CHK Group (Ø0.5 ~ Ø6.35mm)	350w	565g

Standard Accessories Collet nut (K-265) / Wrench (12×14) : 2pcs.

Options Collet (CHK Group) : Ø0.5 ~ Ø6.35mm p.51

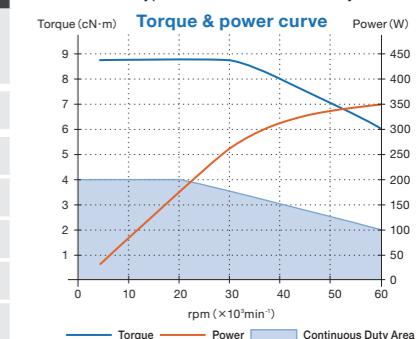
Motor cord : Length 3m (1778), 4m (1768), 6m (1767), 8m (1766)

Metal Saw Arbor (KCH-03) : Ød (I.D.) × under Ø30mm (O.D.) /

Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm

Grindstone Flange (EGF-19) : for grindstone I.D. Ø19.05×O.D. Ø40×7mm

※ Collet is sold separately.



EMR-3008K

Code No. 7869 Model EMR-3008K

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
Ø30mm	8,000 min⁻¹	1/4	32,000 min⁻¹

Spindle Accuracy	Collet	Max. power	Weight
Within 1 µm	CHK Group (Ø0.5 ~ Ø6.35mm)	350w	650g

Standard Accessories Collet nut (K-265) / Wrench (12×14) : 2pcs.

Grease for reduction gear (10ml) / Grease nipple : 1pc.

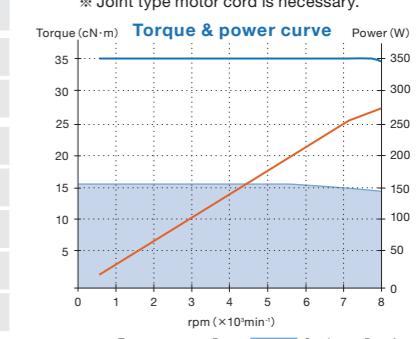
Options Collet (CHK Group) : Ø0.5 ~ Ø6.35mm p.51

Motor cord : Length 3m (1778), 4m (1768), 6m (1767), 8m (1766)

Metal Saw Arbor (KCH-03) : Ød (I.D.) × under Ø30mm (O.D.) /

Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm

Grindstone Flange (EGF-19) : for grindstone I.D. Ø19.05×O.D. Ø40×7mm



! Put grease every 70 to 100 hours to extend the life of the reduction gear. Grease-up prevents friction of the internal gears and degradation of the existing grease in the reducer.

Collet

Motor Spindle (One-piece type)

Motor cord

Controller

Spindle Guide



EMA-3020K



EMA-3020S



EMCD-3000J



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

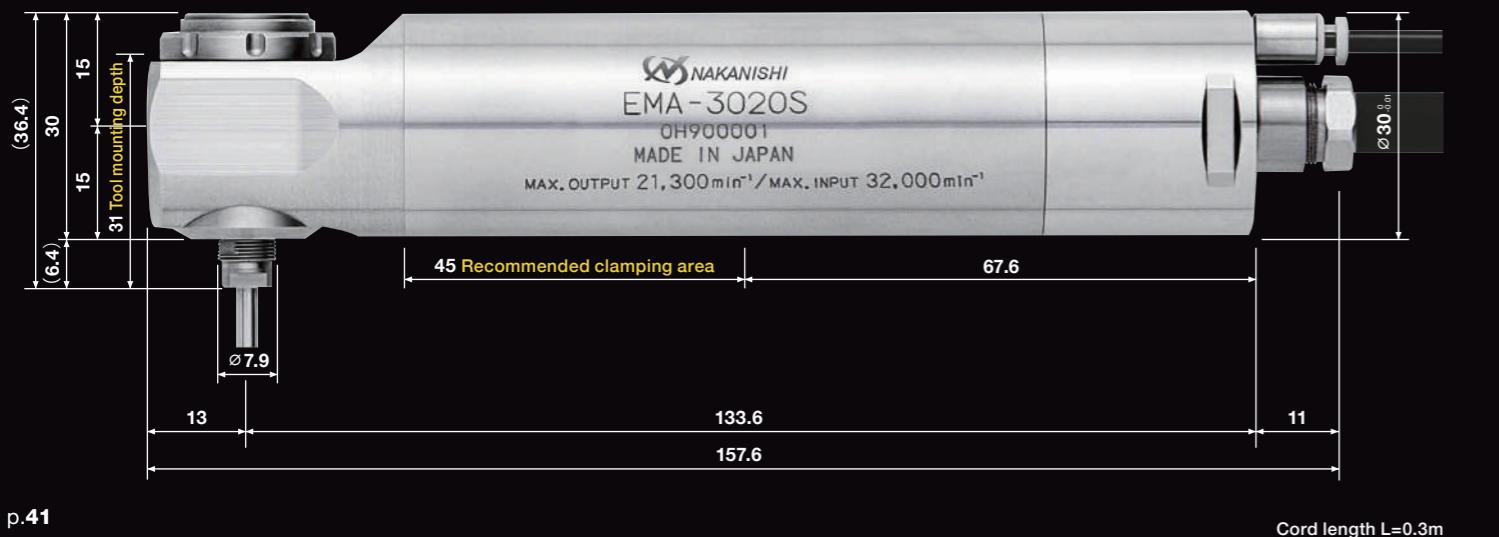
Shown In Actual Size

Motor spindle (One-piece type)

EMA-3020K

Angle motor spindle
Standard angle head

EMA-3020S

Angle motor spindle
Built-in angle head

Specifications

DXF data DXF files are available on our website

Order by Code No.

EMA-3020K

Code No.

7874

Model

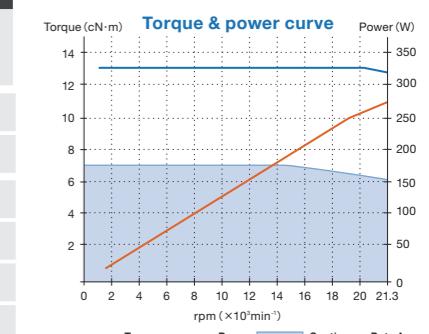
EMA-3020K



O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
Ø30mm	21,300min ⁻¹	1 / 1.5	32,000min ⁻¹
Spindle Accuracy	Collet	Max. power	Weight
Within 2µm	CHK Group (Ø0.5 ~ Ø6.35mm)	280W	760g
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. Grease for Speed reducer (10ml) / Grease nipple : 1pc.		
Options	Collet (CHK Group) : Ø0.5 ~ Ø6.35mm p.51 Motor cord : Length 3m (1778), 4m (1768), 6m (1767), 8m (1766) Metal Saw Arbor (KCH-03) : Ød (I.D.) × under Ø30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm		



※ Joint type motor cord is necessary.



※ Collet is sold separately.

! Put grease every 70 to 100 hours to extend the life of the Speed reducer.
Grease-up prevents friction of the internal gears and degradation of the existing grease in the reducer.

EMA-3020S

Code No.

1758

Model

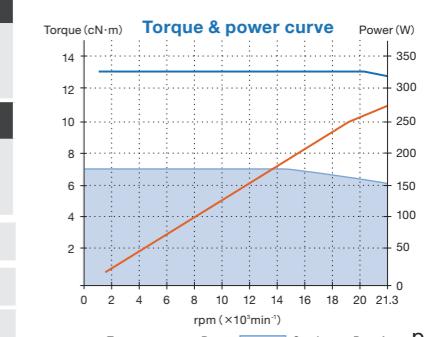
EMA-3020S



O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
Ø30mm	21,300min ⁻¹	1 / 1.5	32,000min ⁻¹
Spindle Accuracy	Collet	Max. power	Weight
Within 3µm	CHSS Group (Ø1.0 ~ Ø3.175mm)	275W	605g
Standard Accessories	Collet : Ø3.0mm (CHSS-3.0) / Wrench (7×5.1) · (8×6.1) : 1pc. each		
Options	Collet (CHSS Group) : Ø1.0 ~ Ø3.175mm p.51 Motor cord : Length 3m (1778), 4m (1768), 6m (1767), 8m (1766)		



※ Joint type motor cord is necessary.



Collet

Motor Spindle (One-piece type)

Motor cord

Controller

Spindle Guide



EM20-S6000



EMCD-3000

EMCD-3000A

E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

Shown In Actual Size

Motor spindle (One-piece type)

EM30-S6000

ø30 Motor spindle · CHK collet

Ø30
O.D. Ø30mm

EM25-S6000

ø25 Motor spindle · CHA collet

Ø25
O.D. Ø25mm

EM20-S6000

ø20 Motor spindle · CHA collet

Ø20
O.D. Ø20mm

Specifications

DXF data DXF files are available on our website

EM30-S6000

Code No.

7903

Model

EM30-S6000

O.D.	Max. rpm	Spindle Accuracy	Collet	Max. power	Weight
Ø30mm	60,000min⁻¹	Within 1µm	CHK Group (Ø0.5 ~ Ø6.35mm)	350w	575g

Standard Accessories Collet nut (K-265) / Wrench (12×14) : 2pcs.

Options Collet (CHK Group) : Ø0.5 ~ Ø6.35mm p.51

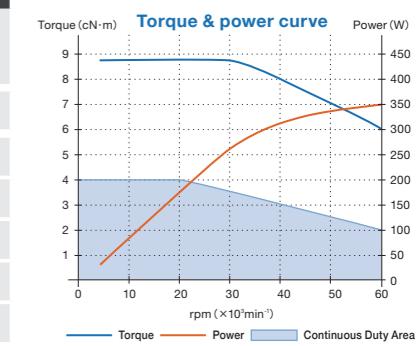
Motor cord : Length 4m (1748), 6m (1749), 8m (1750) ※Angle type is also available

Metal Saw Arbor (KCH-03) : Ød (I.D.) × under Ø30mm (O.D.) /

Grindstone Arbor (AGM-03) : Grindstone I.D. Ø5.0mm

Grindstone Flange (EGF-19) : for grindstone I.D. Ø19.05×O.D. Ø40×7mm

※ Collet is sold separately.



EM25-S6000

Code No.

7858

Model

EM25-S6000

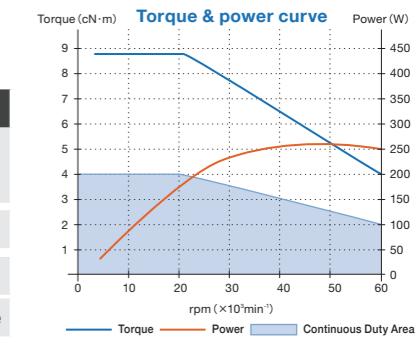
O.D.	Max. rpm	Spindle Accuracy	Collet	Max. power	Weight
Ø25mm	60,000min⁻¹	Within 1µm	CHA Group (Ø0.5 ~ Ø4.0mm)	250w	375g

Standard Accessories Collet nut (CHN-A) / Wrench (8×5) · (9×11) : 1pc. each

Options Collet (CHA Group) : Ø0.5 ~ Ø4.0mm p.51

Motor cord : Length 4m (1748), 6m (1749), 8m (1750) ※Angle type is also available

※ Collet is sold separately.



EM20-S6000

Code No.

7860

Model

EM20-S6000

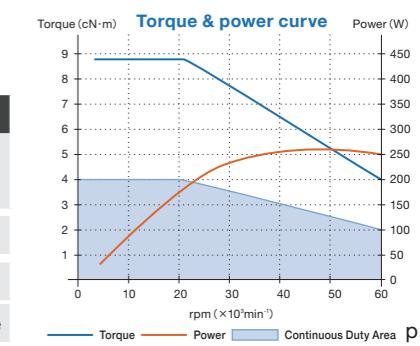
O.D.	Max. rpm	Spindle Accuracy	Collet	Max. power	Weight
Ø20mm	60,000min⁻¹	Within 1µm	CHA Group (Ø0.5 ~ Ø4.0mm)	250w	230g

Standard Accessories Collet nut (CHN-A) / Wrench (8×5) · (9×11) : 1pc. each

Options Collet (CHA Group) : Ø0.5 ~ Ø4.0mm p.51

Motor cord : Length 4m (1748), 6m (1749), 8m (1750) ※Angle type is also available

※ Collet is sold separately.



Collet

Motor Spindle (One-piece type)

Motor cord

Controller

Spindle Guide



EMSF-3060K



EMCD-3000J



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

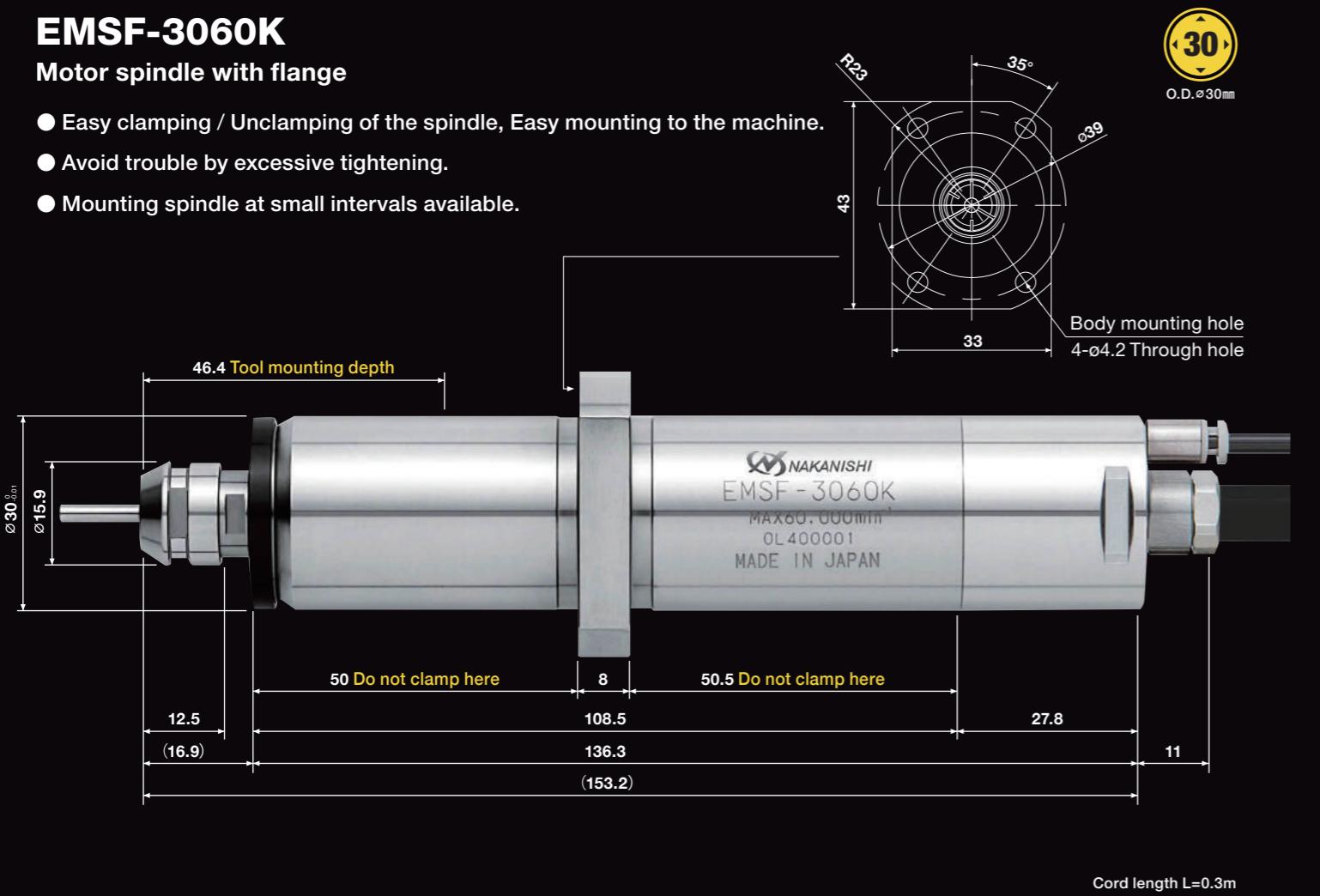
Shown In Actual Size

Motor spindle (One-piece type)

EMSF-3060K

Motor spindle with flange

- Easy clamping / Unclamping of the spindle, Easy mounting to the machine.
- Avoid trouble by excessive tightening.
- Mounting spindle at small intervals available.



Specifications

DXF data DXF files are available on our website

EMSF-3060K



Code No.

7863

Model

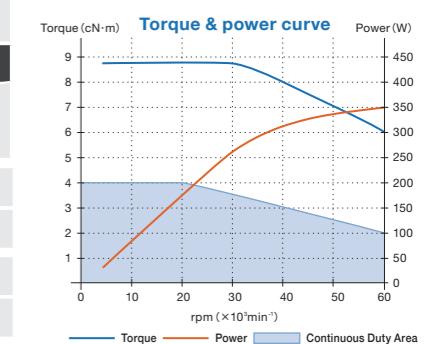
EMSF-3060K

O.D.	Max. rpm	Spindle Accuracy	Collet	
Ø30mm	60,000min ⁻¹	Within 1µm	CHK Group (Ø0.5 ~ Ø6.35mm)	
Max. power	Weight			
350W	620g			
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. Air hose 0.3m : 1pc. / Lock bolt (M4 hexagon socket head bolt) : 4pcs.			
Options	Collet (CHK Group) : Ø0.5 ~ Ø6.35mm p.51 Motor cord : Length 3m (1778), 4m (1768), 6m (1767), 8m (1766)			

*Collet is sold separately.



* Joint type motor cord is necessary.



Various ways to mount

3 spindle types are available in E3000 series to meet customer's demands



Straight type

Mounting devices have to be prepared by user



Straight type + Grip Ring

Type of usage for attachment to straight spindle
Grip Ring TS available

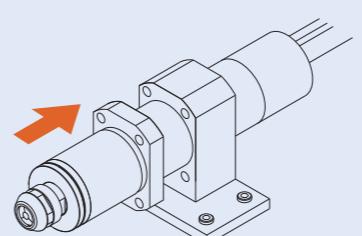
With flange

Type of spindle and mounting device integrated

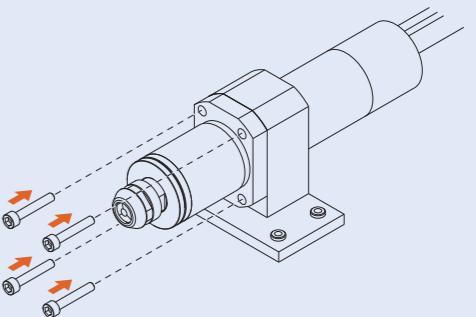
How to mount to a machine tool

In case of EMSF-3060K / NRF-3060S

1 Insert motor spindle body into the holder



2 Tighten the flange with 4 lock bolt (M4)



*Above figures show EMSF-3060K. NRF-3060S has 3 mounting holes (See p.9)

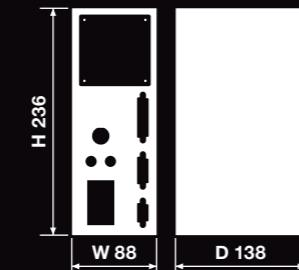
E3000 Controller



E3000 CONTROLLER

Controller

Code No. 8422



External Input / Output Control Signal Operation

- External Input
Motor ON / OFF, Error Released, Rotating Direction, Motor Speed Setting and etc.
- External Monitor
Motor Current, Error, Warning, Rotating pulse and etc.
- Parameter Setting
Maximum motor speed setting, Fix the motor speed
※For more information, please refer to the operation manual on our website.
- Equipped with safety relay break and speed point

Speed Range	
1,000~80,000min⁻¹	
Input Voltage	
AC100~240V Without plug	Multiple output power
Max. power	Power consumption
350w	AC1.8A
Air consumption	Weight
30Nℓ/min (at 0.25~0.3MPa)	2.8kg
Standard Accessories	
Power cord : 2m / Air hose with filter (K-251 : 2058) Reducer / Connector cap (Included) Bracket / Nylon Clip / Screw / Rubber pad Fuse (T6.3AL) 250V : 2pcs.	

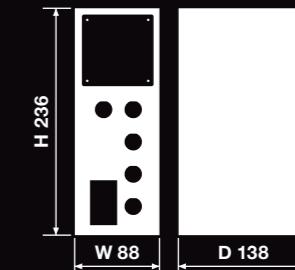
E3000 Selector



E3000 SELECTOR

Selector

Code No. 8426



Number of motor

4pcs.

Up to 4 motors to control
with connecting selector to controller
※not simultaneously

Input Voltage

AC100~240V Without plug
Multiple output power

Power consumption	Air consumption	Weight
AC0.15A	120ℓ/min (When connecting 4 motors)	1.9kg

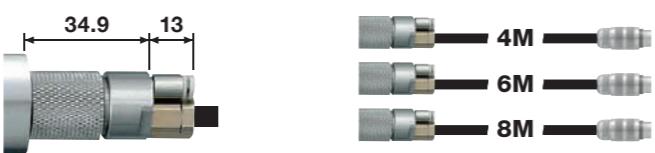
Standard Accessories

- Power cord : 2m / Communication cable : 60cm
Selector connecting cord : 60cm
Connector cap (Included) / Plug to avoid air flow
Bracket / Nylon Clip / Screw / Rubber pad
Fuse (T1.6AL) 250V : 2pcs.

Motor cord

Straight type

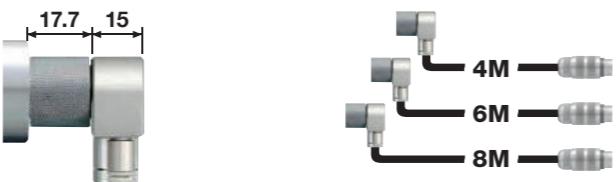
[Feature] Connection at the body end



コード番号	型式	コード長さ	標準装備・付属品	適応機種
1748	EMCD-3000-4M	4m		EM-3060 EM-3030T EM30-S6000 EM25-S6000 EM20-S6000
1749	EMCD-3000-6M	6m	Air hose Connector cap (Included)	
1750	EMCD-3000-8M	8m		

Angle type

[Feature] Connection at the body end into 90° degree



コード番号	型式	コード長さ	標準装備・付属品	適応機種
1744	EMCD-3000A-4M	4m		EM-3060 EM-3030T EM30-S6000 EM25-S6000 EM20-S6000
1743	EMCD-3000A-6M	6m	Air hose Connector cap (Included)	
1742	EMCD-3000A-8M	8m		

Joint type

[Feature] Connection possible out of the machine



コード番号	型式	コード長さ	標準装備・付属品	適応機種
1778	EMCD-3000J-3M	3.0m		
1768	EMCD-3000J-4M	3.7m	Air hose Connector cap (Included)	EM-3060J · EM-3030T-J EMS-3060K · EMS-3060A EMR-3008K · EMA-3020K EMA-3020S · EMSF-3060K EM-3080J
1767	EMCD-3000J-6M	5.7m		
1766	EMCD-3000J-8M	7.7m		

Accessories (Air line kit, etc.)

AL-C1204

Air line kit
0.3μm filter

※1



Code No. 4504 Model AL-C1204

AL-M1201BL

Air line kit (for RG-3004M)
0.3μm filter

※1



Code No. 4501 Model AL-M1201BL

AL-A1205

Air line kit (for NRAF-5080)
0.3μm filter

※1 ※2



Code No. 4505 Model AL-A1205

AL-A0611

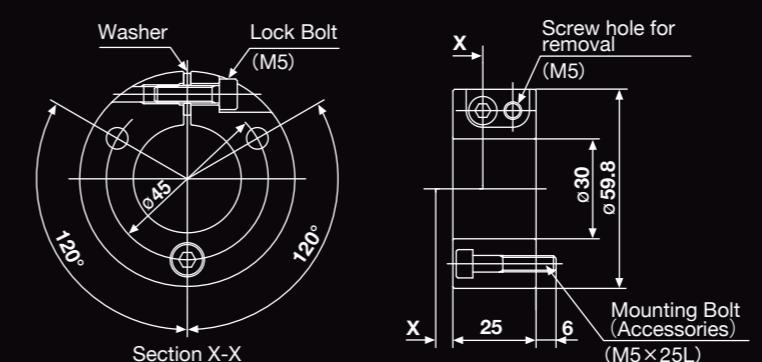
Air line kit (for NRAF-5080)
0.01μm filter



Code No. 1548 Model AL-A0611

GR-30

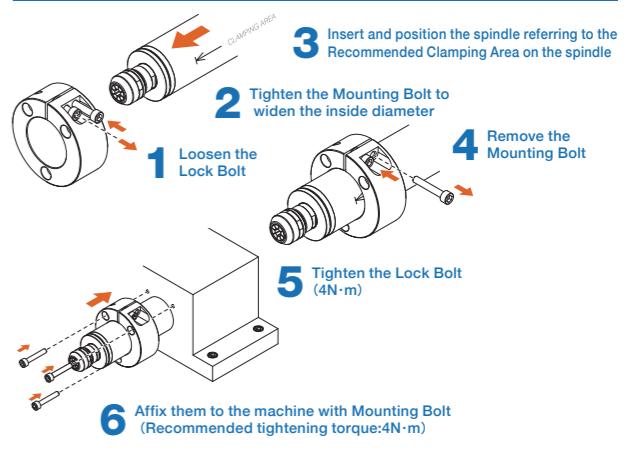
Grip Ring



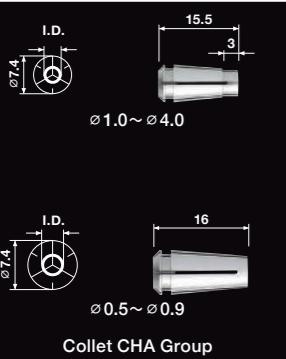
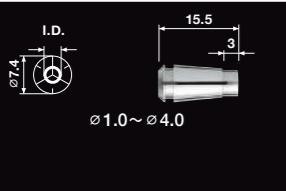
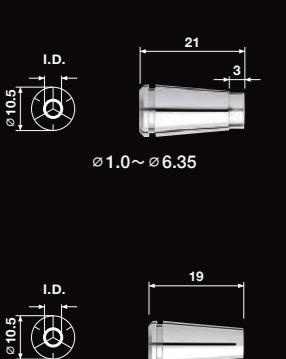
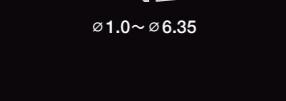
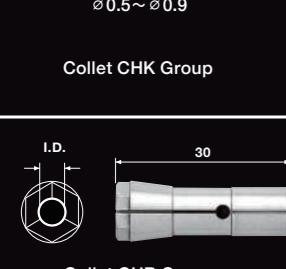
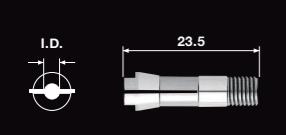
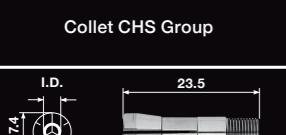
Code No. 1885 Model GR-30

Standard Accessories Mounting Bolt (GR-30) M5×25 : 3pcs.

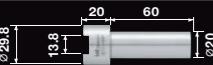
How to mount to a machine tool



Accessories (Collet, etc.)

Collet	Code No.	Model	I.D.	Compatible model
 <p>Collet CHA Group</p> 	91494	CHA-3.0AA	ø3.0AA*	<p>CTS-3030 EM20-S6000 · EM25-S6000 EMS-3060A · NR-3080S</p> <p>* High precision type AA (Run-out Accuracy within 2 µm)</p>
	91496	CHA-3.175AA	ø3.175AA*	
	91495	CHA-4.0AA	ø4.0AA*	
	91492	CHA-2.35	ø2.35	
	91430	CHA-3.0	ø3.0	
	91493	CHA-3.175	ø3.175	
	91440	CHA-4.0	ø4.0	
			ø0.5~ø0.6, ø0.7, ø0.8, ø0.9 ø1.1, ø1.2, ø1.3, ø1.4, ø1.7, ø1.8, ø1.9 ø2.1, ø2.2, ø2.3, ø2.4, ø2.6, ø2.7, ø2.8, ø2.9 ø3.1, ø3.2, ø3.3, ø3.4, ø3.6, ø3.7, ø3.8, ø3.9 ø1.0, ø1.5, ø2.0, ø2.5, ø3.5 ø1.6	
 <p>Collet CHB Group</p> 	92820	CHB-2.0	ø2.0	<p>NR40-5100 ATC NRR-3060-NRR-2651 NR33-6000ATC-ESD</p>
	92830	CHB-3.0	ø3.0	
	92893	CHB-3.175	ø3.175	
	92835	CHB-3.5	ø3.5	
	92840	CHB-4.0	ø4.0	
 <p>Collet CHK Group</p>  	91597	CHK-3.0AA	ø3.0AA*	<p>EM30-S6000 · EMA-3020K EMS-3060K · EMR-3080K NR-151E · NR-3060S NRF-3060S · NR-3060 NR-403E · RAS-151E RAX-271E · RAX-71E NRAF-5080</p> <p>* High precision type AA (Run-out Accuracy within 2 µm)</p>
	91598	CHK-3.175AA	ø3.175AA*	
	91599	CHK-4.0AA	ø4.0AA*	
	91600	CHK-6.0AA	ø6.0AA*	
	91601	CHK-6.35AA	ø6.35AA*	
	91592	CHK-2.35	ø2.35	
	91530	CHK-3.0	ø3.0	
	91593	CHK-3.175	ø3.175	
	91540	CHK-4.0	ø4.0	
	91560	CHK-6.0	ø6.0	
 <p>Collet CHR Group</p> 	91930	CHR-3.0	ø3.0	<p>NR50-5100 ATC</p>
	91993	CHR-3.175	ø3.175	
	91996	CHR-6.35	ø6.35	
	91920	CHR-2.0	ø2.0	
	91940	CHR-4.0	ø4.0	
	91960	CHR-6.0	ø6.0	
	93201	CHR-3.0RS	ø3.0	
	93202	CHR-3.175RS	ø3.175	
	93203	CHR-4.0RS	ø4.0	
	93204	CHR-6.0RS	ø6.0	
 <p>Collet CHR RS Group</p> 	93205	CHR-6.35RS	ø6.35	<p>NR50-5100 ATC RS *Also available for NR50-5100 ATC</p>
	90592	CHS-2.35	ø2.35	
	90530	CHS-3.0	ø3.0	
	90593	CHS-3.175	ø3.175	
	90516	CHS-1.6	ø1.6	
			ø0.8, ø0.9	
			ø1.0, ø2.0, ø2.5	
			ø1.1, ø1.2, ø1.3, ø1.4, ø1.5, ø1.7, ø1.8, ø1.9	
			ø2.1, ø2.2, ø2.3, ø2.4, ø2.6, ø2.7, ø2.8, ø2.9	
 <p>Collet CHS Group</p> 	93092	CHSS-2.35	ø2.35	<p>EMA-3020S</p>
	93030	CHSS-3.0	ø3.0	
	93093	CHSS-3.175	ø3.175	
	—	CHSS-□□	ø1.0, ø1.5, ø2.0, ø2.5	
	91092	CH8-2.35	ø2.35	
 <p>Collet CHSS Group</p> 	91030	CH8-3.0	ø3.0	<p>RA-151E</p>
	91093	CH8-3.175	ø3.175	
			ø0.8, ø0.9	
			ø1.0, ø1.5, ø2.0, ø2.5	
			ø1.1, ø1.2, ø1.3, ø1.4, ø1.6, ø1.7, ø1.8, ø1.9	
 <p>Collet CH8 Group</p> 	91092	CH8-2.35	ø2.35	<p>RA-151E</p>
	91030	CH8-3.0	ø3.0	
	91093	CH8-3.175	ø3.175	
			ø0.8, ø0.9	
			ø1.0, ø1.5, ø2.0, ø2.5	
 <p>Collet CH8 Group</p> 	91092	CH8-2.35	ø2.35	<p>RA-151E</p>
	91030	CH8-3.0	ø3.0	
	91093	CH8-3.175	ø3.175	
			ø0.8, ø0.9	
			ø1.0, ø1.5, ø2.0, ø2.5	
 <p>Collet CH8 Group</p> 	91092	CH8-2.35	ø2.35	<p>RA-151E</p>
	91030	CH8-3.0	ø3.0	
	91093	CH8-3.175	ø3.175	
			ø0.8, ø0.9	
			ø1.0, ø1.5, ø2.0, ø2.5	
<p>Collet CH8 Group</p>	91092	CH8-2.35	ø2.35	<p>RA-151E</p>
	91030	CH8-3.0	ø3.0	
	91093	CH8-3.175	ø3.175	
			ø0.8, ø0.9	
			ø1.0, ø1.5, ø2.0, ø2.5	
<p>Collet CH8 Group</p>	91092	CH8-2.35	ø2.35	<p>RA-151E</p>
	91030	CH8-3.0	ø3.0	
	91093	CH8-3.175	ø3.175	
			ø0.8, ø0.9	
			ø1.0, ø1.5, ø2.0, ø2.5	
<p>Collet CH8 Group</p>	91092	CH8-2.35	ø2.35	<p>RA-151E</p>
	91030	CH8-3.0	ø3.0	
	91093	CH8-3.175	ø3.175	
			ø0.8, ø0.9	
			ø1.0, ø1.5, ø2.0, ø2.5	
<p>Collet CH8 Group</p>	91092	CH8-2.35	ø2.35	<p>RA-151E</p>
	91030	CH8-3.0	ø3.0	
	91093	CH8-3.175	ø3.175	
			ø0.8, ø0.9	
			ø1.0, ø1.5, ø2.0, ø2.5	
<p>Collet CH8 Group</p>	91092	CH8-2.35	ø2.35	<p>RA-151E</p>
	91030	CH8-3.0	ø3.0	
	91093			

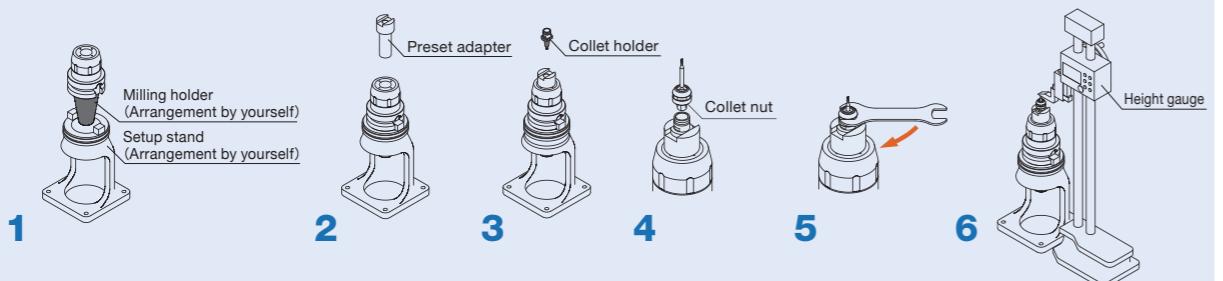
Accessories

Preset adapter	Code No.	Model	Description	Compatible model
	9211	QC3-ADP	Preset adapter	QC3-K · QC3-A QC3-SS

For QC3-K/A

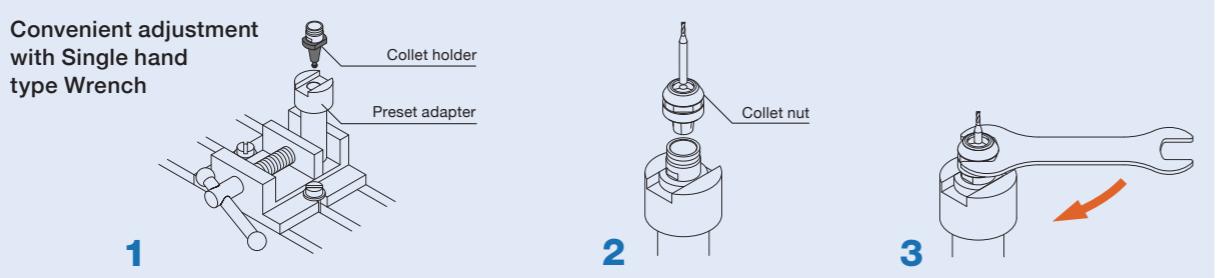
Set-up outside machines

In case using a milling holder



Set-up outside machines

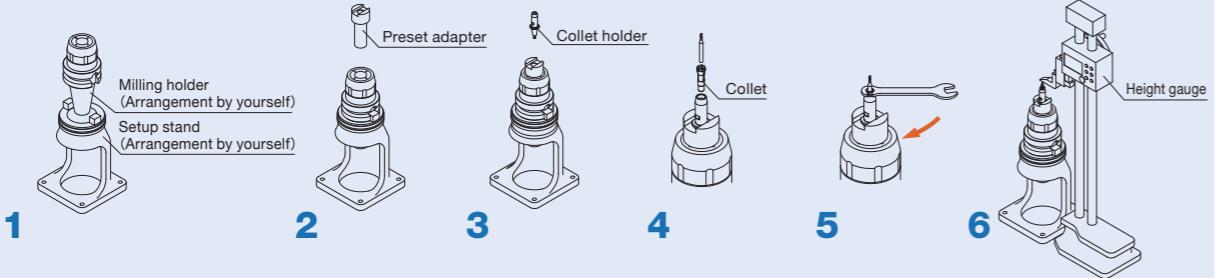
In case using a vice



For QC3-SS

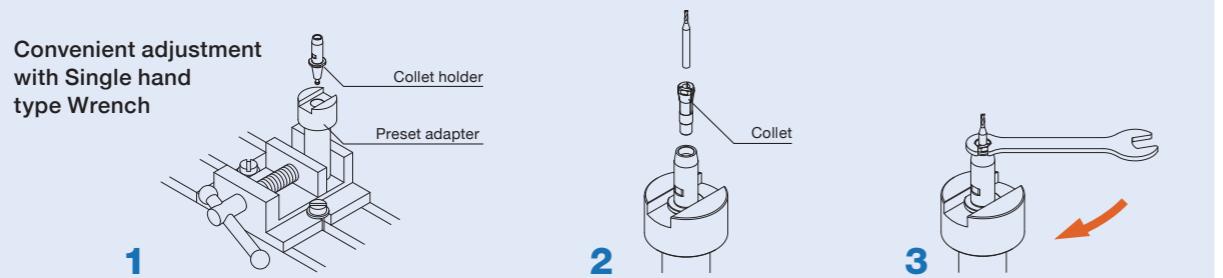
Set-up outside machines

In case using a milling holder



Set-up outside machines

In case using a vice



NAKANISHI Solutions LINE UP

Electric Motors & Spindles

Brushless Motors & Spindles



Application for CNC lathes / Special purpose machines

E4000 SERIES

1,000~40,000min⁻¹ Max.1,200W
[ø40mm]



E2000 SERIES

1,000~50,000min⁻¹ Max.200W
[ø22.8mm]



E3000 SERIES

1,000~80,000min⁻¹ Max.350W
[ø30/25/20mm]



Application for machining centers and milling machines

HES SERIES

Max.80,000min⁻¹
[For small diameter endmills and drills only]



[HES810]

- The most cost effective solution to add high-speed machining capability
- 80,000min⁻¹, 8.75cN·m
- BT,HSK A63,ST shanks are available
- Driven by E3000 Controller



[HE5510]

- 50,000min⁻¹, 8.75cN·m
- BT,NT,CAT,IT,HSK A,ST shanks are available
- Driven by E3000 Controller

Air Motors & Spindles



Application for CNC lathes / Special purpose machines

Air-Speed series One-piece type

Max.30,000min⁻¹ Max.130W
[ø25/23/20/19.05mm]



- Short body enables the spindle to mount in a limited space on a small NC/CNC lathe or on a special purpose machine

Air-Speed series Modular type

Max.30,000min⁻¹ Max.130W
[ø30/25/22.8mm]



- Separate motor and spindle for flexible application changes
- Adjustable to various application through changing spindles

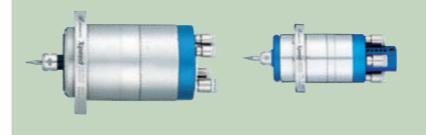
Air Turbine Spindles



Application for CNC lathes / Special purpose machines

XPEED SERIES

Max.160,000min⁻¹
[ø65/40mm]



- Extreme accuracy-Runout 1μm
- For high precision small diameter drilling, internal grinding of ceramics
- Long life of spindle thanks to contactless rotation mechanism

PLANET SERIES

Max.65,000min⁻¹

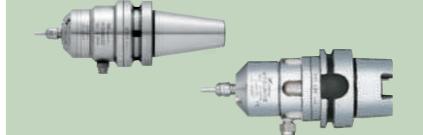


- A milling machine turns into a jig grinder
- For high precision internal grinding

Application for machining centers and milling machines

HTS SERIES

150,000min⁻¹
[For small diameter endmills and drills only]



- No thermal expansion on Z axis thanks to air turbine generating little heat
- Ultra high speed 150,000min⁻¹ with higher rigidity thanks to ceramic bearings
- BT,HSK E and straight (M2040) shanks are available