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※Specifications and design are subject to change without notice.

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.

✓ **∅30mm 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






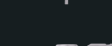


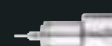

✓ **Brushless motor**



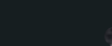
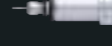

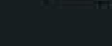
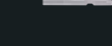
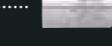

- Maintenance free
- Longer product life thanks to no dust from carbon brushes







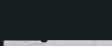
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Spindle & Motor ø25 Specifications (Modular type)

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Controller

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

Motor cord

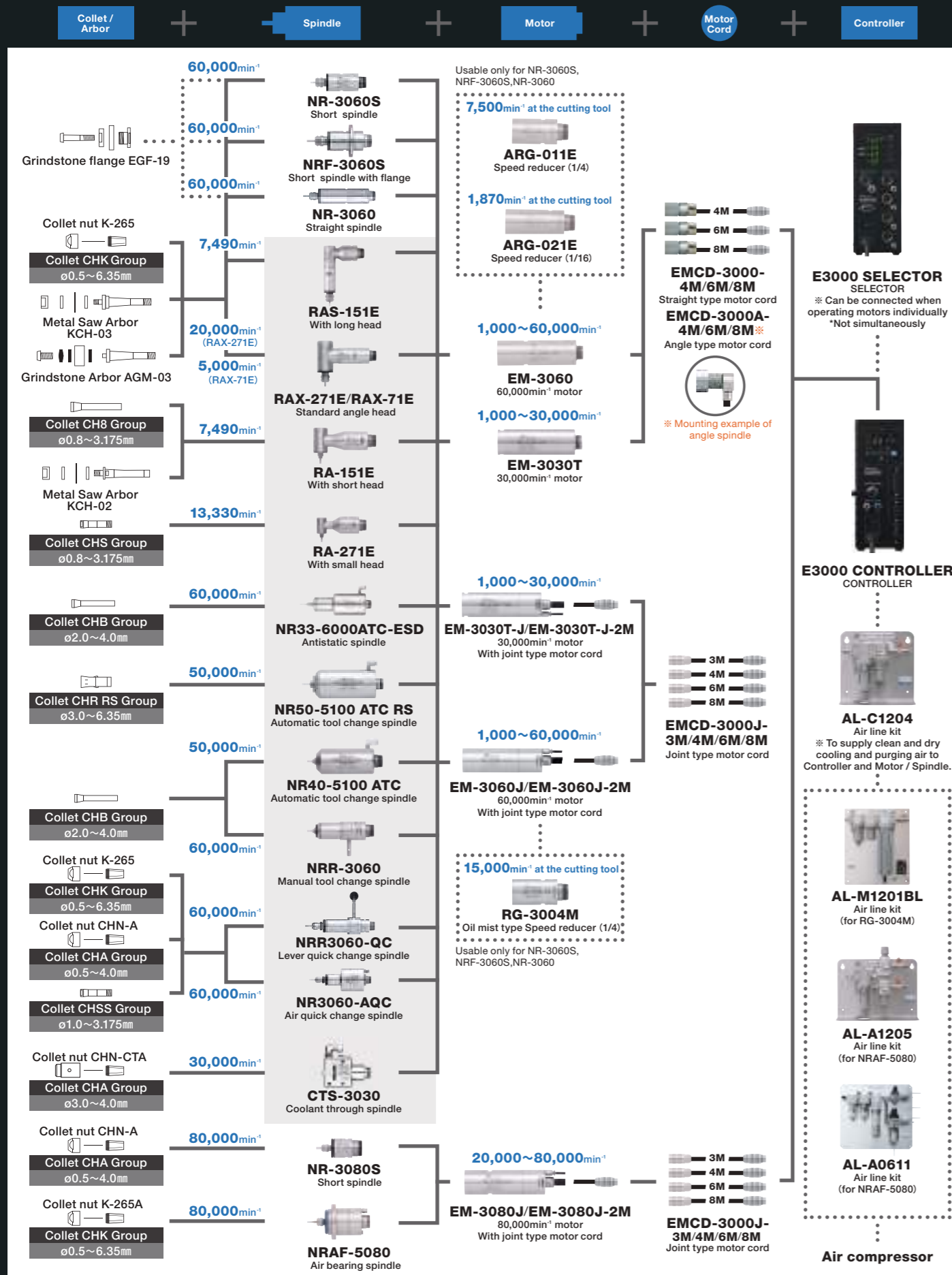
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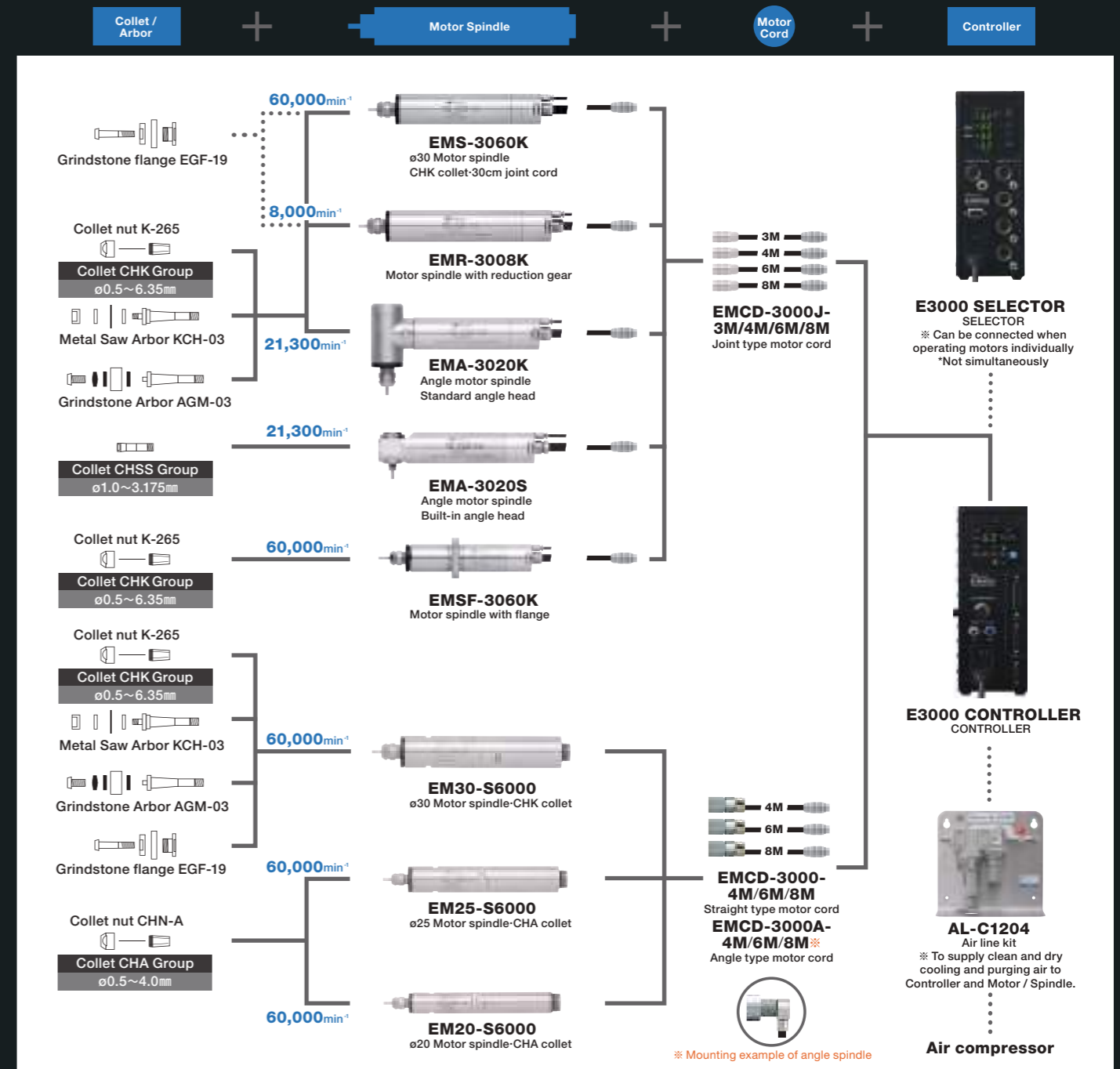
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System Chart

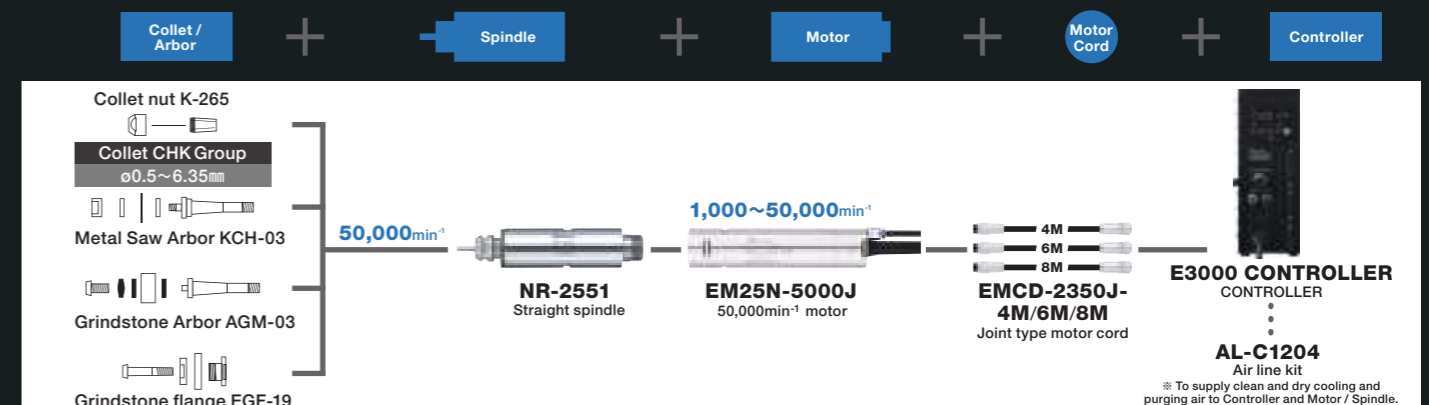
Modular type ø30mm



One-piece type ø30/ø25/ø20mm



Modular type ø25mm



Spindle (Modular type)



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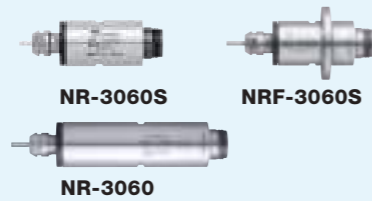
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Spindle
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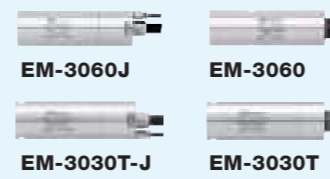
CHK



NR-3060S

NRF-3060S

NR-3060

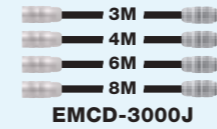


EM-3060J

EM-3060

EM-3030T-J

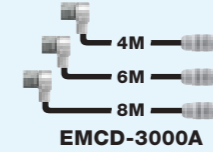
EM-3030T



EMCD-3000J



EMCD-3000



EMCD-3000A



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

Shown In Actual Size

Spindle (Modular type)

NR-3060S

Short spindle

O.D. \varnothing 30mm

Specifications

DXF
dataDXF files are available
on our website

Order by Code No.

NR-3060S

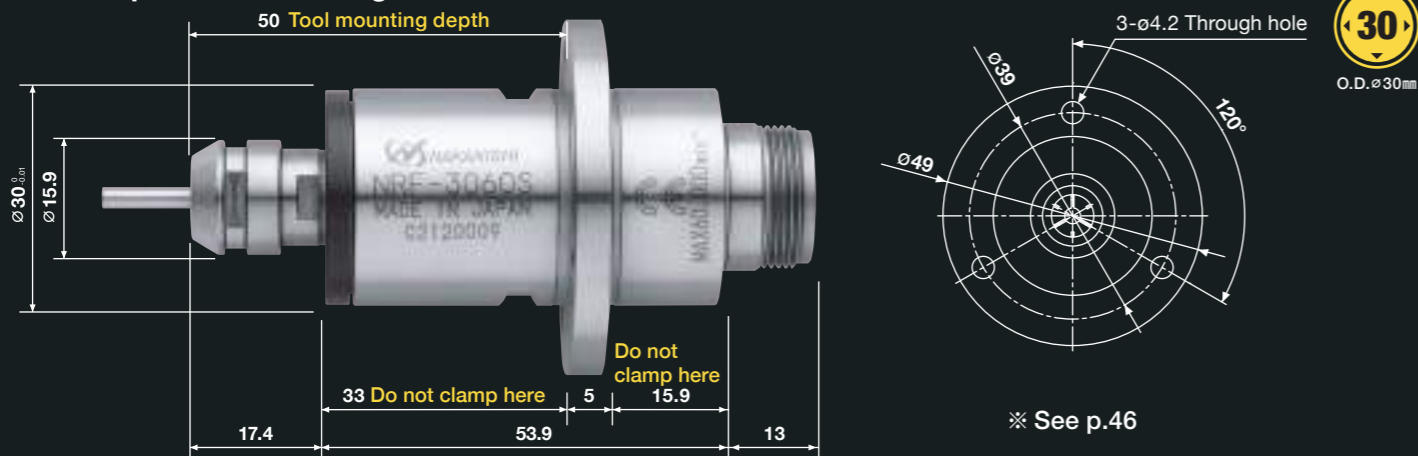
Code No. **7859**Model **NR-3060S**

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
\varnothing 30mm	60,000 min ⁻¹	Within 1 μ m	CHK Group (\varnothing 0.5 ~ \varnothing 6.35mm)	260g
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc.			
Options	Collet (CHK Group) : \varnothing 0.5~ \varnothing 6.35mm p.51 Metal Saw Arbor (KCH-03) : \varnothing d (I.D.) × under \varnothing 30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. \varnothing 5.0mm Grindstone Flange (EGF-19) : applicable grindstone I.D. \varnothing 19.05×O.D. \varnothing 40×7mm			

※ Collet is sold separately.

NRF-3060S

Short spindle with flange

O.D. \varnothing 30mm

※ See p.46

NRF-3060S

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

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
\varnothing 30mm	60,000 min ⁻¹	Within 1 μ m	CHK Group (\varnothing 0.5 ~ \varnothing 6.35mm)	285g
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc. Hexagon Socket Head Screw (M4×12) : 3pcs.			
Options	Collet (CHK Group) : \varnothing 0.5~ \varnothing 6.35mm p.51 Metal Saw Arbor (KCH-03) : \varnothing d (I.D.) × under \varnothing 30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. \varnothing 5.0mm Grindstone Flange (EGF-19) : applicable grindstone I.D. \varnothing 19.05×O.D. \varnothing 40×7mm			

※ Collet is sold separately.

NR-3060

Straight spindle

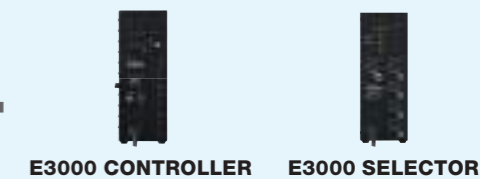
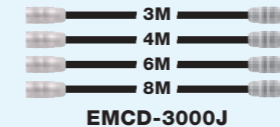
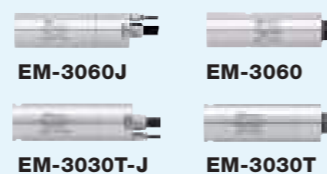
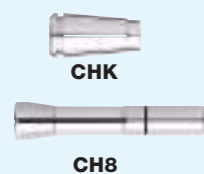
O.D. \varnothing 30mm

NR-3060

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

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
\varnothing 30mm	60,000 min ⁻¹	Within 1 μ m	CHK Group (\varnothing 0.5 ~ \varnothing 6.35mm)	420g
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc.			
Options	Collet (CHK Group) : \varnothing 0.5~ \varnothing 6.35mm p.51 Metal Saw Arbor (KCH-03) : \varnothing d (I.D.) × under \varnothing 30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. \varnothing 5.0mm Grindstone Flange (EGF-19) : applicable grindstone I.D. \varnothing 19.05×O.D. \varnothing 40×7mm			

※ Collet is sold separately.

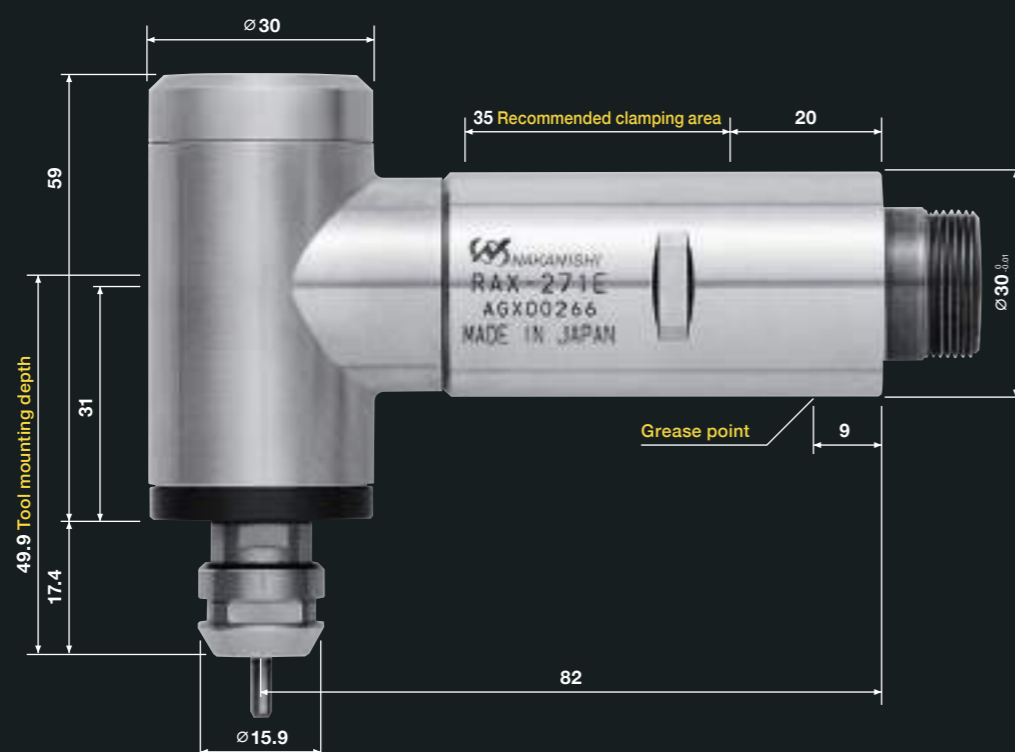
Spindle
Guide

E3000 SERIES

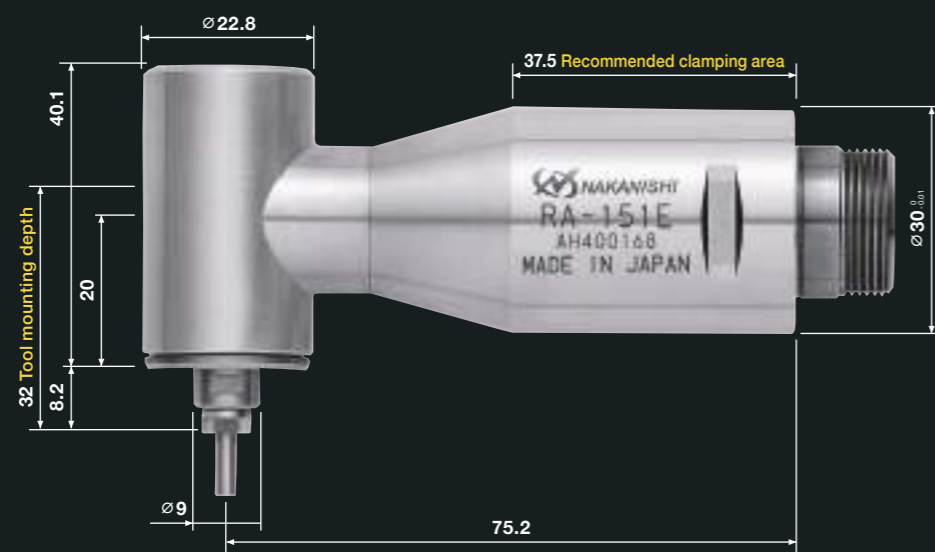
Shown In Actual Size

Spindle (Modular type)

RAX-271E / RAX-71E

Angle spindle
Standard angle headO.D. ϕ 30mm

RA-151E

Angle spindle
With short headO.D. ϕ 30mm

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]	O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
RAX-271E	ϕ 30mm	20,000 min ⁻¹	$\frac{1}{1.5}$	30,000 min ⁻¹
Spindle Accuracy	Collet	Weight		
Within 2 μ m	CHK Group (ϕ 0.5 ~ ϕ 6.35mm)	580g		
[Model]	O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
RAX-71E	ϕ 30mm	5,000 min ⁻¹	$\frac{1}{6}$	30,000 min ⁻¹
Spindle Accuracy	Collet	Weight		
Within 2 μ m	CHK Group (ϕ 0.5 ~ ϕ 6.35mm)	580g		
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc. Grease for speed reducer (10m ℓ) / Grease nipple : 1pc.			
Options	Collet (CHK Group) : ϕ 0.5~ ϕ 6.35mm p.51 Metal Saw Arbor (KCH-03) : ϕ d (I.D.) × under ϕ 30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. ϕ 5.0mm			

※ Collet is sold separately.

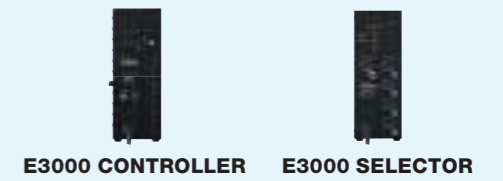
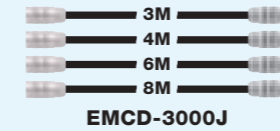
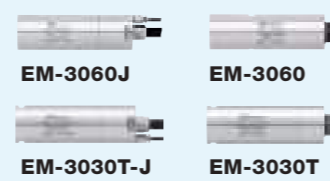
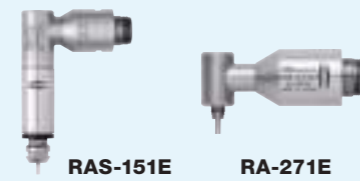
Put grease every 70 to 100 hours to extend the life of the speed reducer.
Grease-up prevents friction of the internal gears and degradation of the existing grease in the reducer.

RA-151E



Code No.	1505	Model	RA-151E
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O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Collet	Weight
ϕ 30mm	7,490 min ⁻¹	$\frac{1}{2.67}$	20,000 min ⁻¹	CH8 Group (ϕ 0.8 ~ ϕ 3.175mm)	385g
Standard Accessories	Collet : ϕ 3.0mm (CH8-3.0) / Wrench (7×5.5) · (8×5) · (22×27) : 1pc. each				
Options	Collet (CH8 Group) : ϕ 0.8~ ϕ 3.175mm p.51 Metal Saw Arbor (KCH-02) : ϕ d (I.D.) × under ϕ 30mm (O.D.)				

Spindle
Guide

E3000 SERIES

Shown In Actual Size

Spindle (Modular type)

RAS-151E

Angle spindle
With long headO.D. \varnothing 30mm

Specifications

DXF
dataDXF files are available
on our website

Order by Code No.

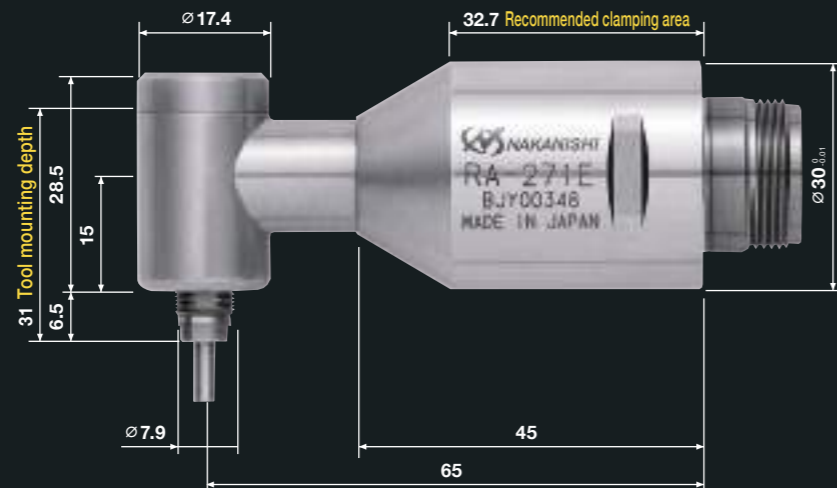
RAS-151E

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

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
\varnothing 30mm	7,490 min ⁻¹	$\frac{1}{2.67}$	20,000 min ⁻¹
Spindle Accuracy	Collet	Weight	
Within 2 μm	CHK Group (\varnothing 0.5 ~ \varnothing 6.35mm)	413g	
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc.		
Options	Collet (CHK Group) : \varnothing 0.5~ \varnothing 6.35mm p.51 Metal Saw Arbor (KCH-03) : \varnothing d (I.D.) × under \varnothing 30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. \varnothing 5.0mm		

※ Collet is sold separately.

RA-271E

Angle spindle
With small headO.D. \varnothing 30mm

RA-271E

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

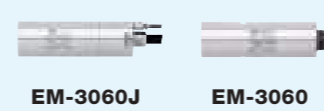
O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Collet	Weight
\varnothing 30mm	13,330 min ⁻¹	$\frac{1}{1.5}$	20,000 min ⁻¹	CHS Group (\varnothing 0.8 ~ \varnothing 3.175mm)	240g
Standard Accessories	Collet : \varnothing 3.0mm (CHS-3.0) / Wrench (7×5.1) · (8×5) · (22×27) : 1pc. each				
Options	Collet (CHS Group) : \varnothing 0.8~ \varnothing 3.175mm p.51				

Spindle
Guide

CHB



NR33-6000ATC-ESD

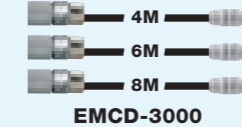


EM-3060J

EM-3060



EMCD-3000J



EMCD-3000



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

Shown In Actual Size

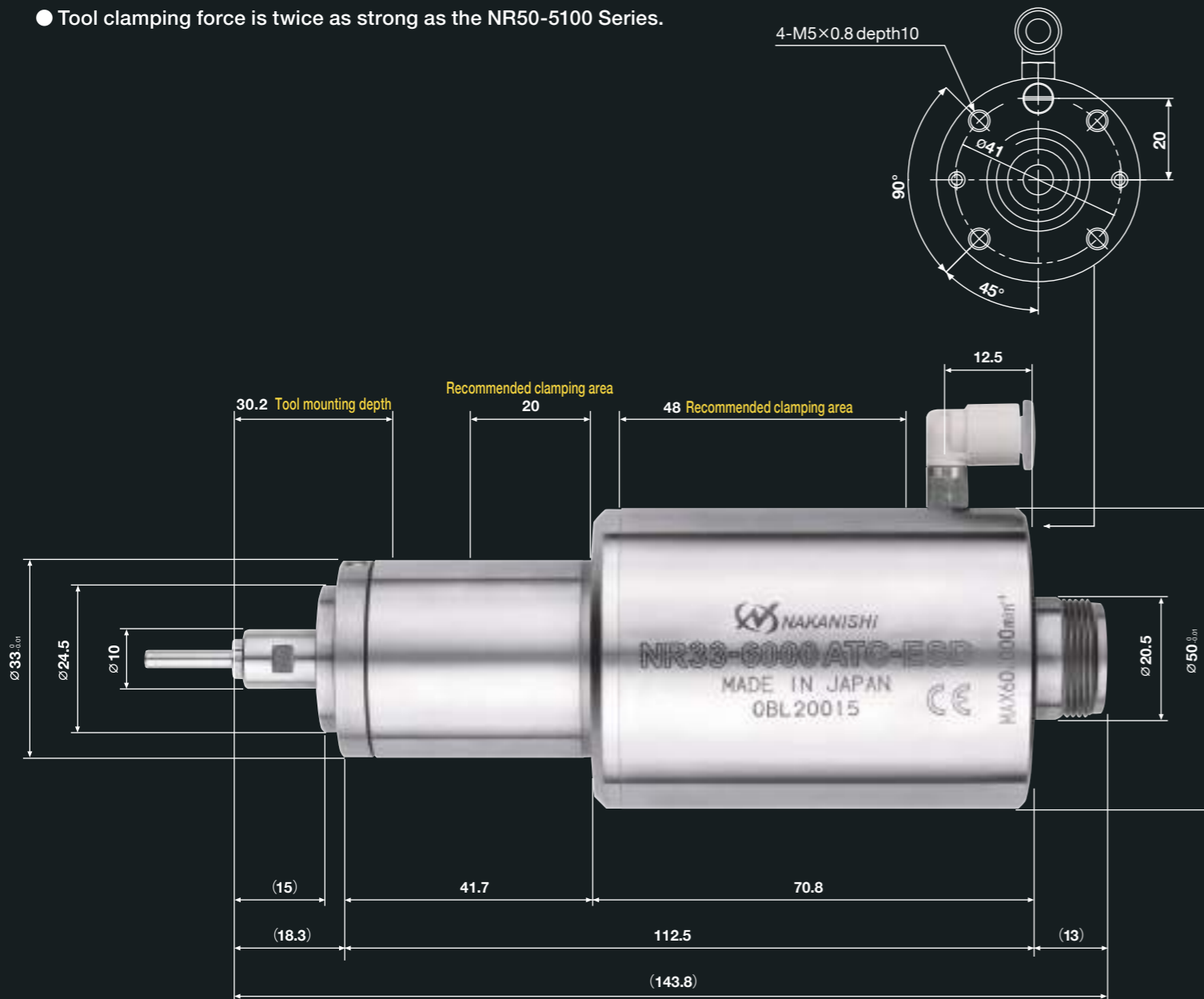
Spindle (Modular type)

NR33-6000ATC-ESD

Antistatic spindle

O.D. ϕ 33mm

- 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
dataDXF files are available
on our website

Order by Code No.

NR33-6000ATC-ESD



Code No.

7788

Model

NR33-6000ATC-ESD

O.D.	Allowable rotation speed	Air for collet opening	Spindle Accuracy	Collet	Weight
ϕ 33mm / ϕ 50mm	60,000min ⁻¹ (Motor rotation speed)	0.55~0.6MPa	Within 1 μ m	CHB Group (ϕ 3.175mm)	1,170g
Standard Accessories	Collet : ϕ 3.175mm (CHB-3.175) / Wrench (6.1×8) · (9×11) : 1pc. each / Bar wrench (K-236) : 1pc. Air hose with filter (K-251) : ϕ 6mm×2m				
Options	Collet (CHB Group) : ϕ 2.0, ϕ 3.0, ϕ 3.175, ϕ 3.5, ϕ 4.0mm p.51				

Spindle
Guide

CHR RS



NR50-5100 ATC RS

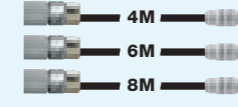


EM-3060J

EM-3060



EMCD-3000J



EMCD-3000



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

Shown In Actual Size

Spindle (Modular type)

NR50-5100 ATC RS

Automatic tool change spindle

O.D. ϕ 50mm

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
dataDXF files are available
on our website

Order by Code No.

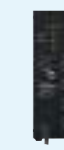
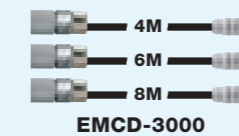
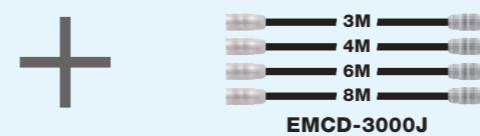
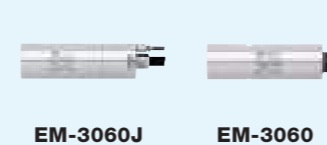
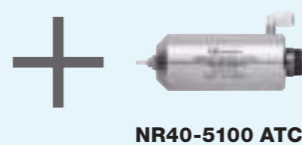
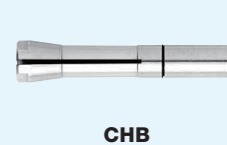
NR50-5100 ATC RS

Code No. **7690**

Model NR50-5100 ATC RS

O.D.	Max. rpm	Air for collet opening	Spindle Accuracy	Collet	Weight
ϕ 50mm	50,000 min ⁻¹	0.55~0.6 MPa	Within 1 μ m	CHR RS Group (ϕ 3.175mm)	1,370 g
Standard Accessories	Collet : ϕ 3.175mm (CHR-3.175RS) / Wrench (9×11) · (12×14) : 1pc. each / Bar wrench (K-236) : 1pc. Air hose with filter (K-251) : ϕ 6mm×2m				
Options	Collet (CHR RS Group) : ϕ 3.0, ϕ 3.175, ϕ 4.0, ϕ 6.0, ϕ 6.35mm p.51				

Spindle Guide



E3000 SERIES

Shown In Actual Size

Spindle (Modular type)

NR40-5100 ATC

Automatic tool change spindle



Specifications

DXF data DXF files are available on our website

Order by Code No.

NR40-5100 ATC

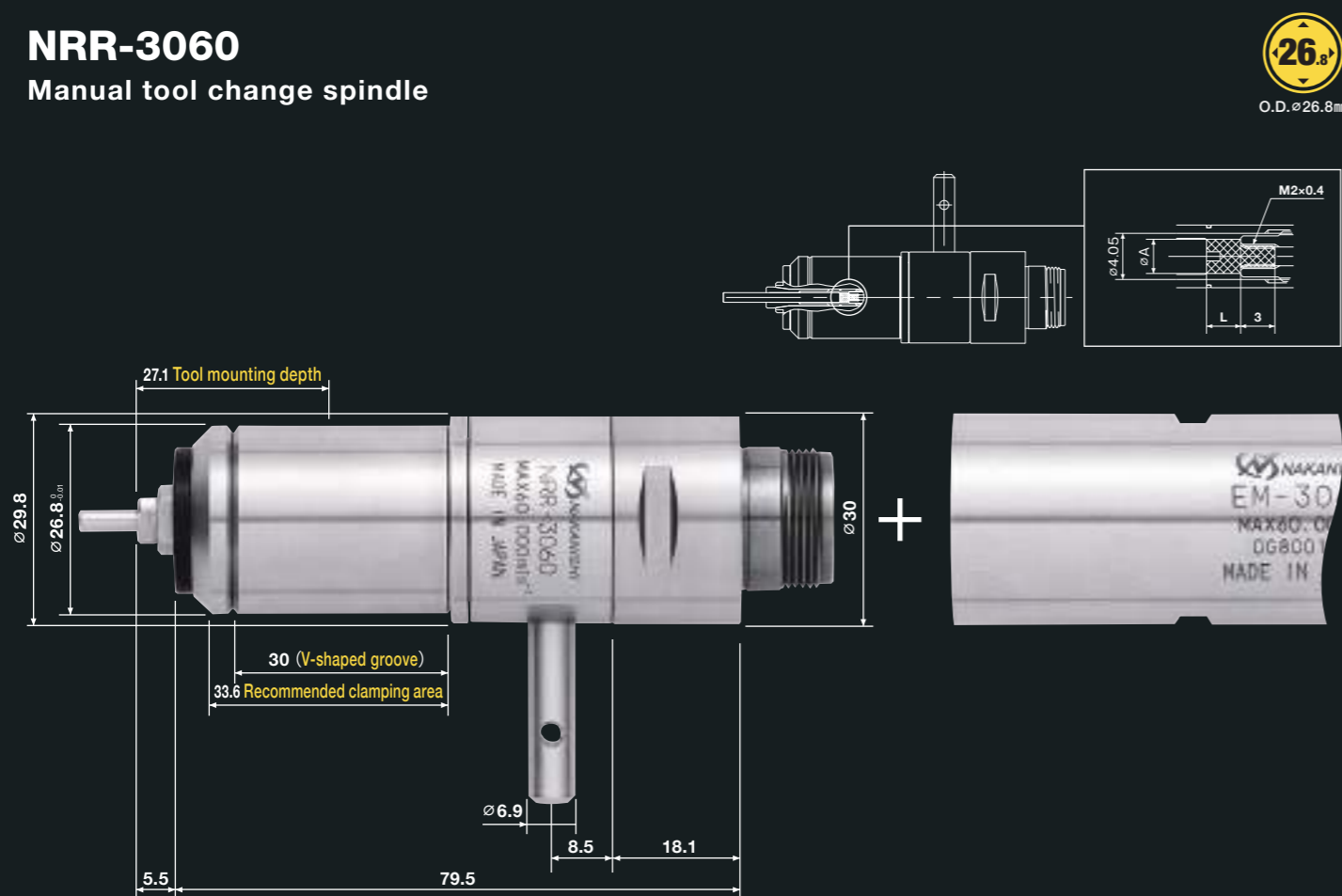
Code No. 1582 Model NR40-5100 ATC



O.D.	Max. rpm	Air for collet opening	Spindle Accuracy	Collet	Weight
$\phi 40$ mm	50,000min ⁻¹	0.55~0.6MPa	Within 2 μ m	CHB Group ($\phi 3.175$ mm)	740g
Standard Accessories	Collet : $\phi 3.175$ mm (CHB-3.175) / Wrench (6.1 \times 8) · (9 \times 11) : 1pc. each / Bar wrench (K-236) : 1pc. Air hose with filter (K-251) : $\phi 6$ mm \times 2m				
Options	Collet (CHB Group) : $\phi 2.0$, $\phi 3.0$, $\phi 3.175$, $\phi 4.0$ mm p.51				

NRR-3060

Manual tool change spindle



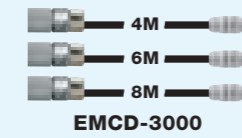
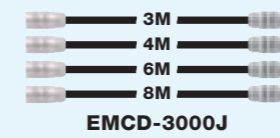
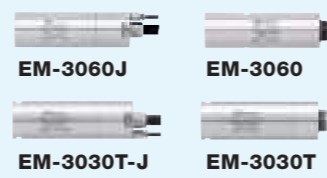
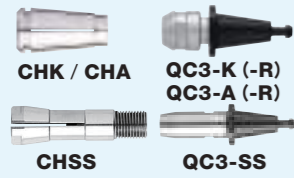
NRR-3060

Code No. 1836 Model NRR-3060



O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
$\phi 26.8$ mm Recommended clamping area	60,000min ⁻¹	Within 1 μ m	CHB Group ($\phi 3.175$ mm)	350g
Standard Accessories	Collet : $\phi 3.175$ mm (CHB-3.175) / Wrench (6.1 \times 8) : 2pcs · (22 \times 27) : 1pc			
Options	Collet (CHB Group) : $\phi 2.0$, $\phi 3.0$, $\phi 3.175$, $\phi 4.0$ mm p.51			

Spindle Guide



E3000 SERIES

Shown In Actual Size

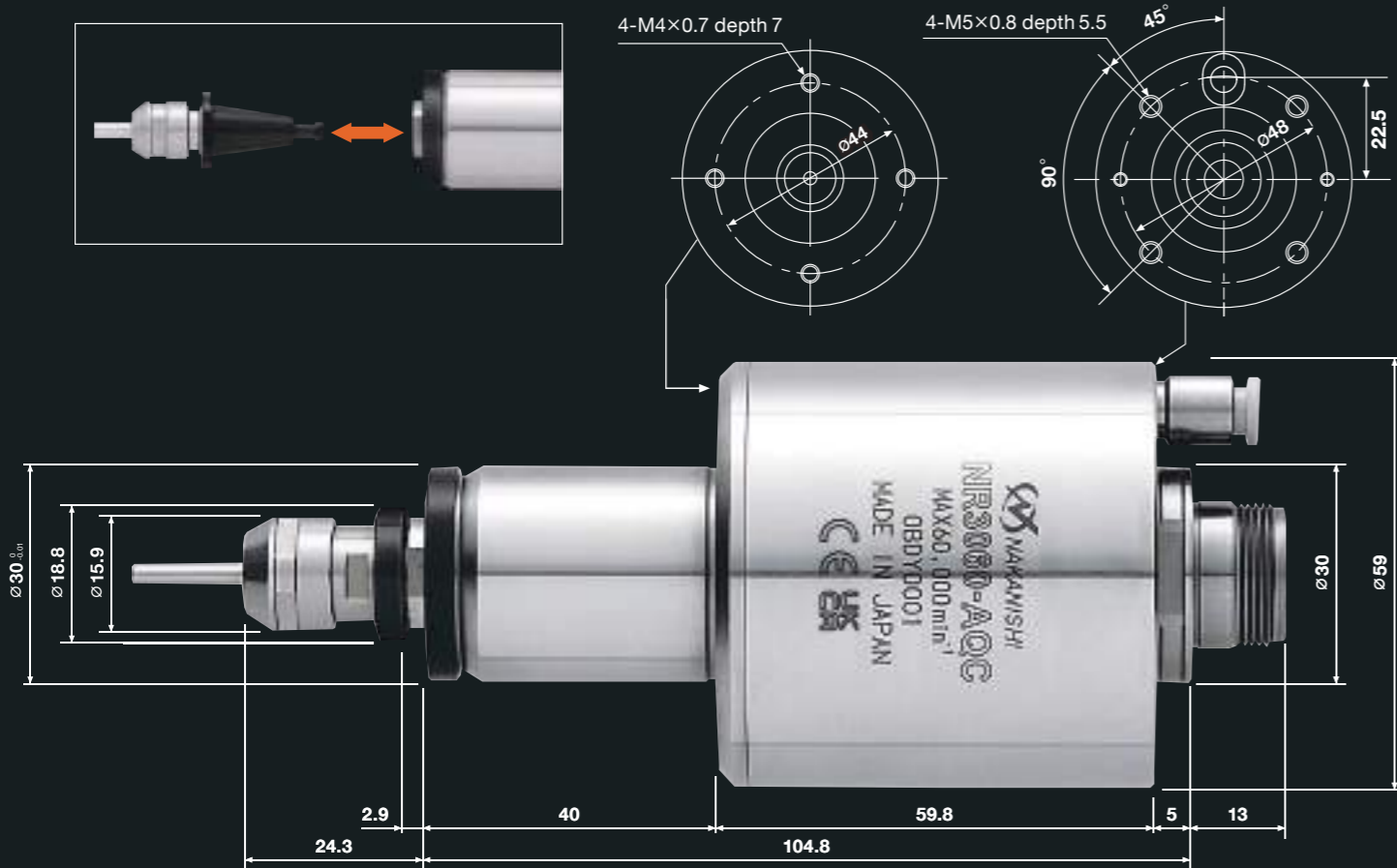
Spindle (Modular type)

NR3060-AQC

Air quick change spindle

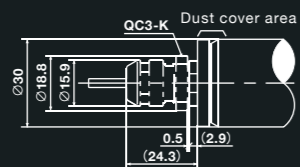
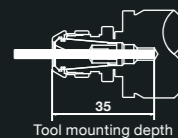
O.D. ϕ 30mm

- 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 ϕ 0.5 ~ 6.35mm, CHA ϕ 0.5 ~ 4.0mm, CHSS ϕ 1.0 ~ 3.175mm)

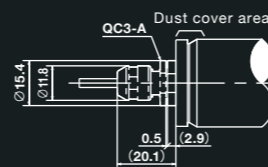
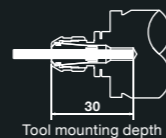


Outside view of the tip of the spindle

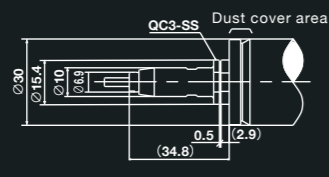
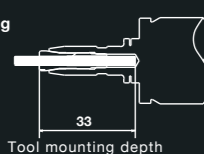
QC3-K
(Collet holder for
collet CHK)
When mounting



QC3-A
(Collet holder for
collet CHA)
When mounting



QC3-SS
(Collet holder for
collet CHSS)
When mounting



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
ϕ 30mm	60,000min ⁻¹	0.6MPa	Within 1 μ m	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 (22x27) : 1pc. / Air hose with filter (K-251) : ϕ 6mm x 2m 1pc.

Parts (Optional)

Collet	Collet holder (Collet nut included)		Wrench		
 You can choose the I.D. size (The following is an example of ϕ 3.0mm.)	QC3-K/A	QC3-K/A-R			
CHK	Code No.	915 3 0	9210	9223	2026
I.D. ϕ 0.5mm~6.35mm p.51	Model	CHK- 3 . 0 (I.D. ϕ 3.0mm)	QC3-K (for Collet CHK)	QC3-K-R (for Collet CHK)	Wrench 12 x 14 (2pcs.)
CHA	Code No.	914 3 0	9209	9222	2012
I.D. ϕ 0.5mm~4.0mm p.51	Model	CHA- 3 . 0 (I.D. ϕ 3.0mm)	QC3-A (for Collet CHA)	QC3-A-R (for Collet CHA)	Wrench 8 x 5 (1pc.)
CHSS	Code No.	930 3 0	7794	2069	2054
I.D. ϕ 1.0mm~3.175mm p.51	Model	CHSS- 3 . 0 (I.D. ϕ 3.0mm)	QC3-SS (for Collet CHSS)	Wrench 6.1 x 8 (1pc.)	Wrench 9 x 11 (1pc.)

Preset adapter
(For QC3 Collet holders)



※ Holding section size is ϕ 20.
※ QC3-K-R/QC3-A-R cannot be used to Preset adapter.

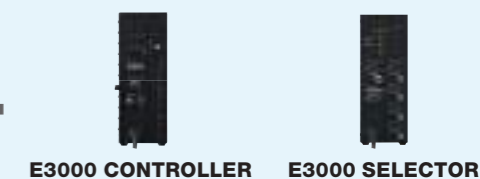
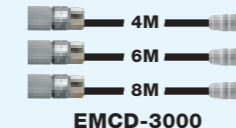
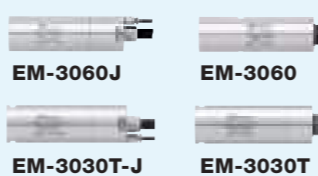
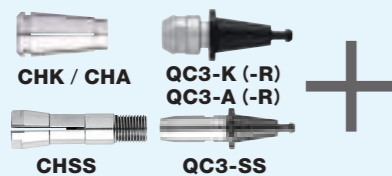
Code No.	9211
Model	QC3-ADP

[Use below Wrenches when using Preset adapter]

CHK collet : 12 x 14 Wrench (1pc.)
CHA collet : 9 x 11 Wrench (1pc.)
CHSS collet : 6.1 x 8 Wrench (1pc.)

See p.53

Spindle Guide



E3000 SERIES

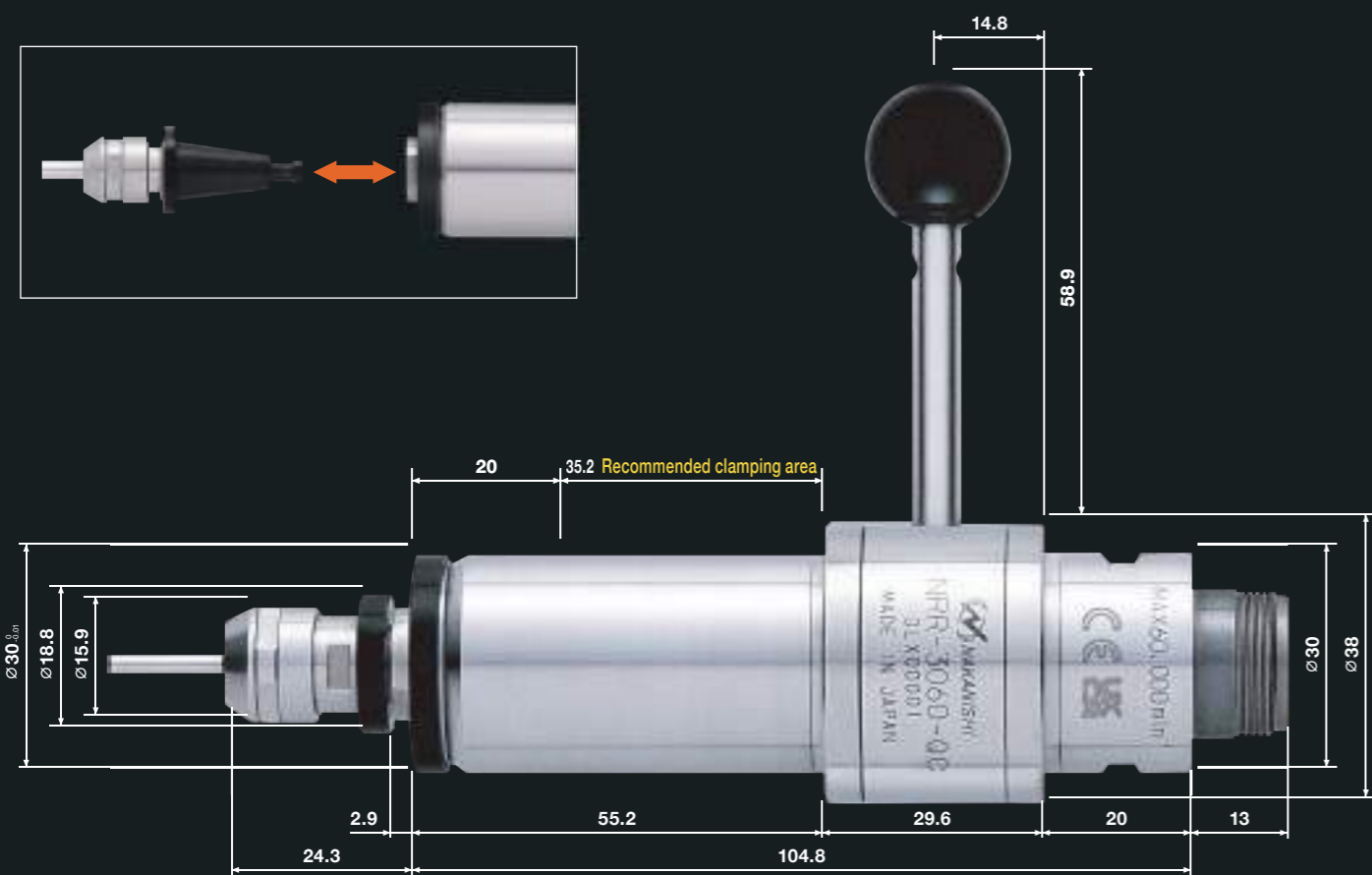
Shown In Actual Size

Spindle (Modular type)

NRR3060-QC

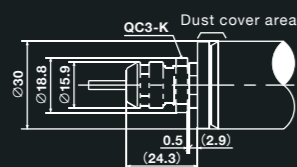
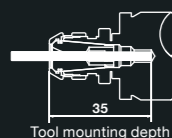
Lever quick change spindle

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

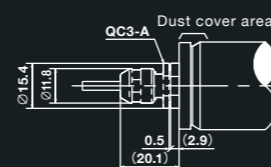
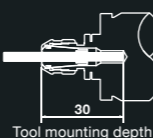
O.D. ϕ 30mm

Outside view of the tip of the spindle

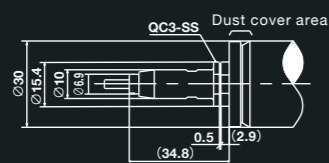
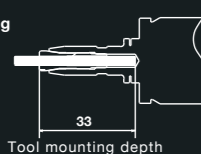
QC3-K
(Collet holder for
collet CHK)
When mounting



QC3-A
(Collet holder for
collet CHA)
When mounting



QC3-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
ϕ 30mm Recommended clamping area	60,000 min ⁻¹	90°	Within 1 μ m	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 \times 27) : 1pc.					

Parts (Optional)

Collet	Collet holder (Collet nut included)		Wrench		
	<p>You can choose the I.D. size (The following is an example of ϕ3.0mm.)</p>				
CHK	Code No.	915 3 0	9210	9223	2026
I.D. ϕ 0.5mm~6.35mm p.51	Model	CHK- 3 . 0 (I.D. ϕ 3.0mm)	QC3-K (for Collet CHK)	QC3-K-R (for Collet CHK)	Wrench 12 \times 14 (2pcs.)
CHA	Code No.	914 3 0	9209	9222	2012
I.D. ϕ 0.5mm~4.0mm p.51	Model	CHA- 3 . 0 (I.D. ϕ 3.0mm)	QC3-A (for Collet CHA)	QC3-A-R (for Collet CHA)	Wrench 8 \times 5 (1pc.) Wrench 9 \times 11 (1pc.)
	<p>You can choose the I.D. size (The following is an example of ϕ3.0mm.)</p>				
CHSS	Code No.	930 3 0	7794	2069	2054
I.D. ϕ 1.0mm~3.175mm p.51	Model	CHSS- 3 . 0 (I.D. ϕ 3.0mm)	QC3-SS (for Collet CHSS)	Wrench 6.1 \times 8 (1pc.)	Wrench 9 \times 11 (1pc.)

Preset adapter
(For QC3 Collet holders)

※ Holding section size is ϕ 20.
※ QC3-K-R/QC3-A-R cannot be used to Preset adapter.

Code No.	9211
Model	QC3-ADP

[Use below Wrenches when using Preset adapter]

CHK collet : 12 \times 14 Wrench (1pc.)
CHA collet : 9 \times 11 Wrench (1pc.)
CHSS collet : 6.1 \times 8 Wrench (1pc.)

See p.53

Spindle Guide

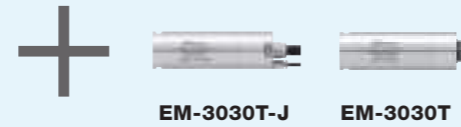


CHN-CTA

CHA



CTS-3030

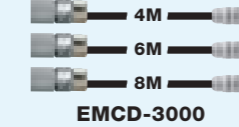


EM-3030T-J

EM-3030T



EMCD-3000J



EMCD-3000



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

Shown In Actual Size

Spindle (Modular type)

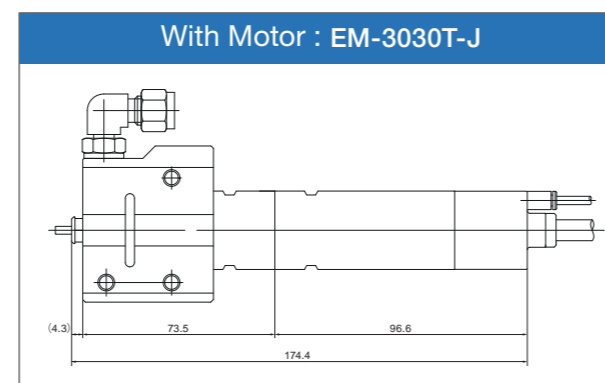
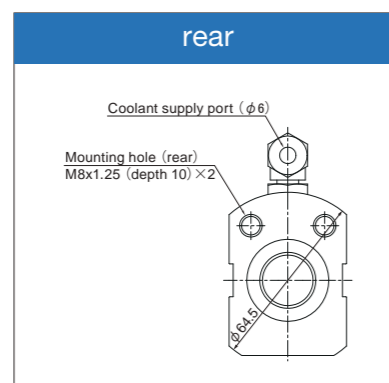
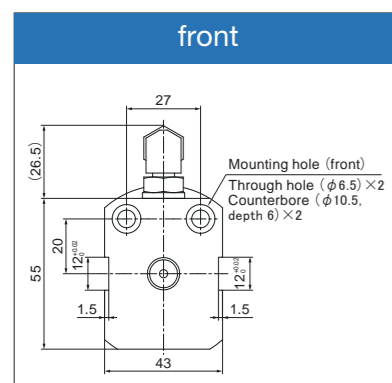
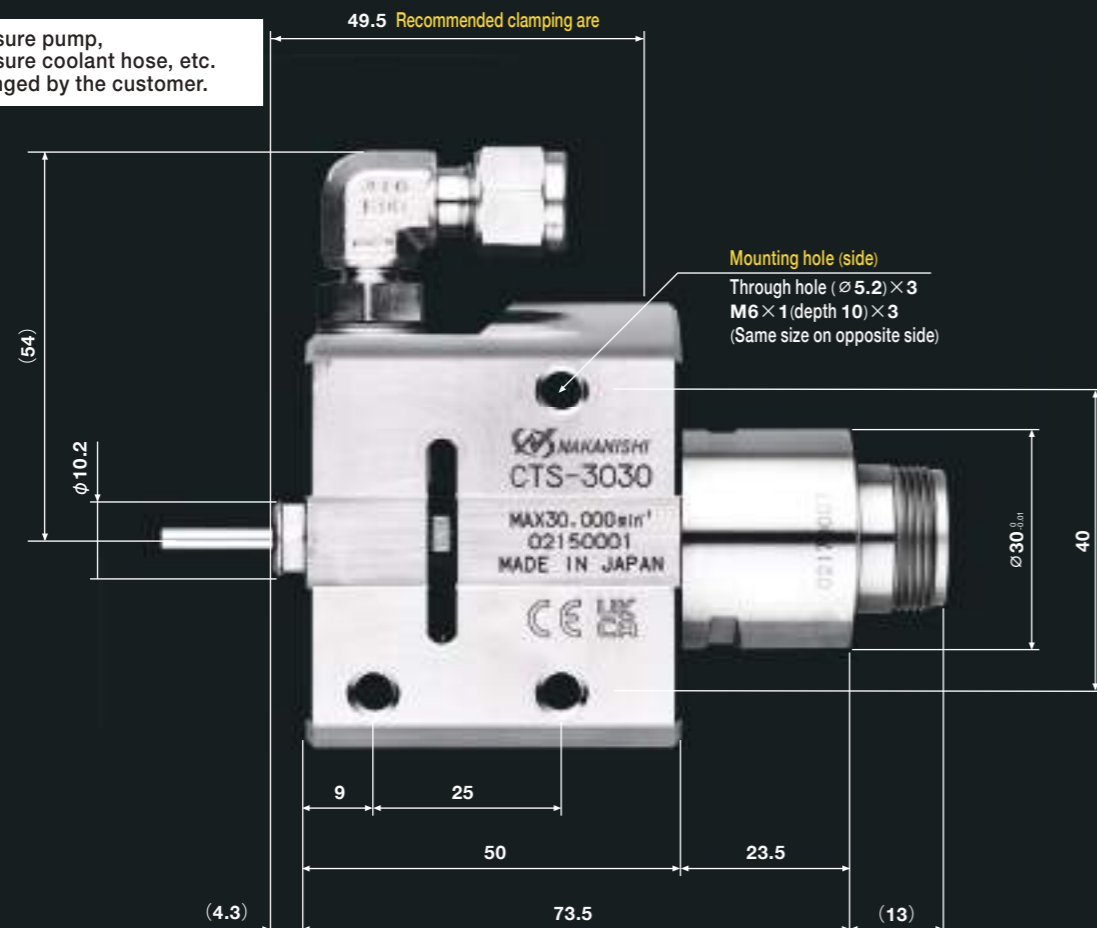
CTS-3030

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.

O.D. ϕ 30mm

! High-pressure pump, High-pressure coolant hose, etc. to be arranged by the customer.



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
ϕ 30mm	30,000 min ⁻¹	Within 1 μ m	CHA Group (ϕ 3.0, ϕ 3.175, ϕ 4.0mm)	885g
Standard Accessories	Wrench (8 \times 5) · (9 \times 11) · (22 \times 27) : 1pc. each			
Options	Collet (CHA Group) : ϕ 3.0, ϕ 3.175, ϕ 4.0mm p.51 Collet nut (CHN-CTA) : 3.0, 3.175, 4.0mm 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.

パーツ (別売品)

Collet		Collet nut	
ϕ 3.0	Code No.	91494	7798
	Model	CHA-3.0AA	CHN-CTA-3.0
ϕ 3.175	Code No.	91496	7799
	Model	CHA-3.175AA	CHN-CTA-3.175
ϕ 4.0	Code No.	91495	7800
	Model	CHA-4.0AA	CHN-CTA-4.0

Speed Reducer (Modular type)

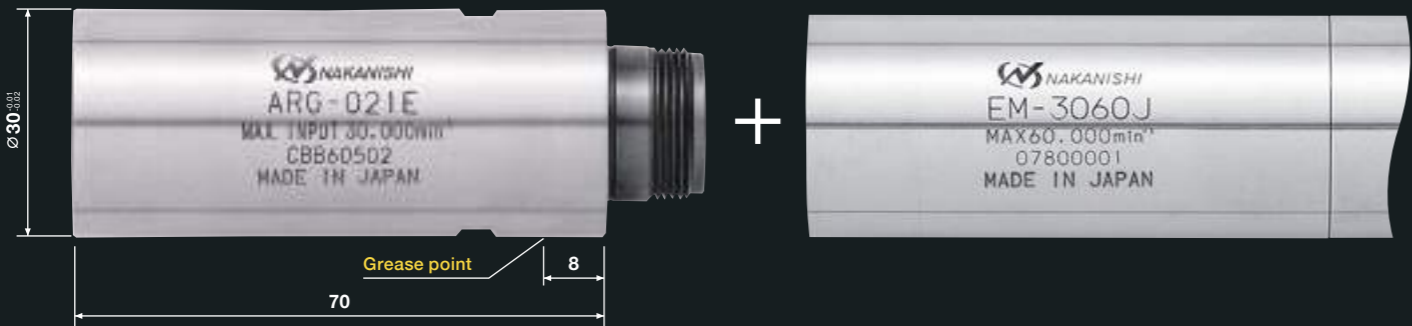
ARG-011E

Speed Reducer (1/4)

O.D. \varnothing 30mm

ARG-021E

Speed Reducer (1/16)

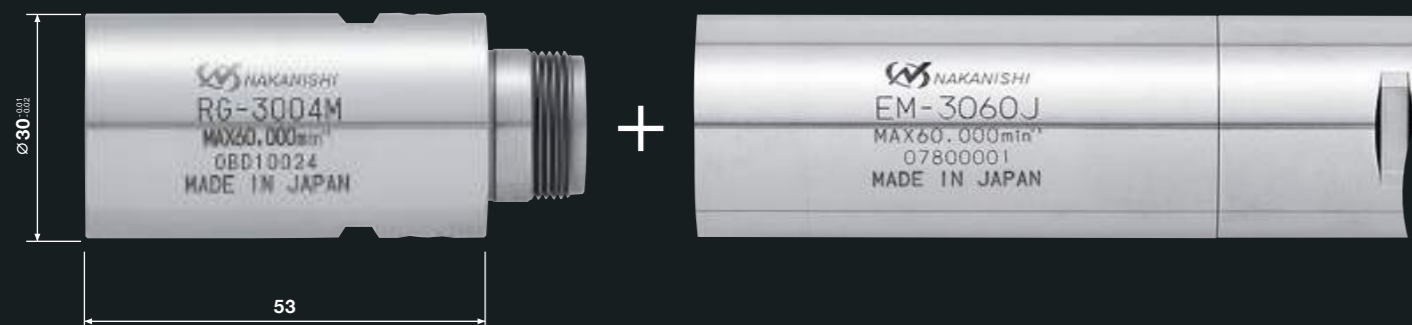
O.D. \varnothing 30mm

RG-3004M

Oil mist type Speed Reducer (1/4)

O.D. \varnothing 30mm

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



Specifications

DXF data DXF files 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. rpm	Weight
\varnothing 30mm	7,500 min ⁻¹	$\frac{1}{4}$	30,000 min ⁻¹	242g

Standard Accessories Grease for reduction gear (10m ℓ) / 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-021E

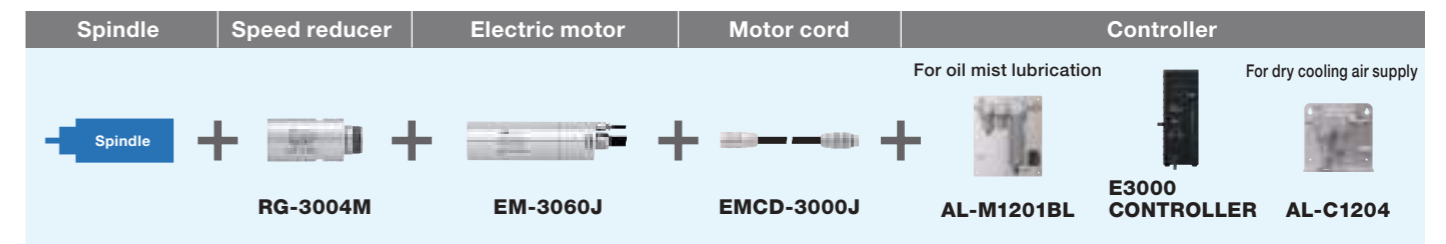
Code No. **1508** Model **ARG-021E**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Weight
\varnothing 30mm	1,870 min ⁻¹	$\frac{1}{16}$	30,000 min ⁻¹	325g

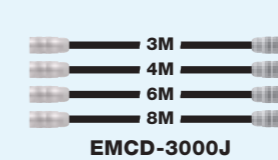
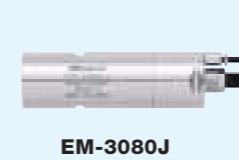
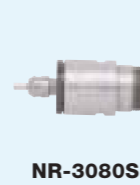
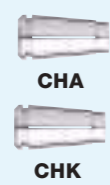
Standard Accessories Grease for reduction gear (10m ℓ) / Grease nipple : 1pc.

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-3004M

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

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Weight
\varnothing 30mm	15,000 min ⁻¹	$\frac{1}{4}$	60,000 min ⁻¹	240g

Spindle
Guide

E3000 SERIES

Shown In Actual Size

Spindle (Modular type)

NR-3080S
Short spindleO.D. ϕ 30mm

Specifications

DXF
dataDXF files are available
on our website

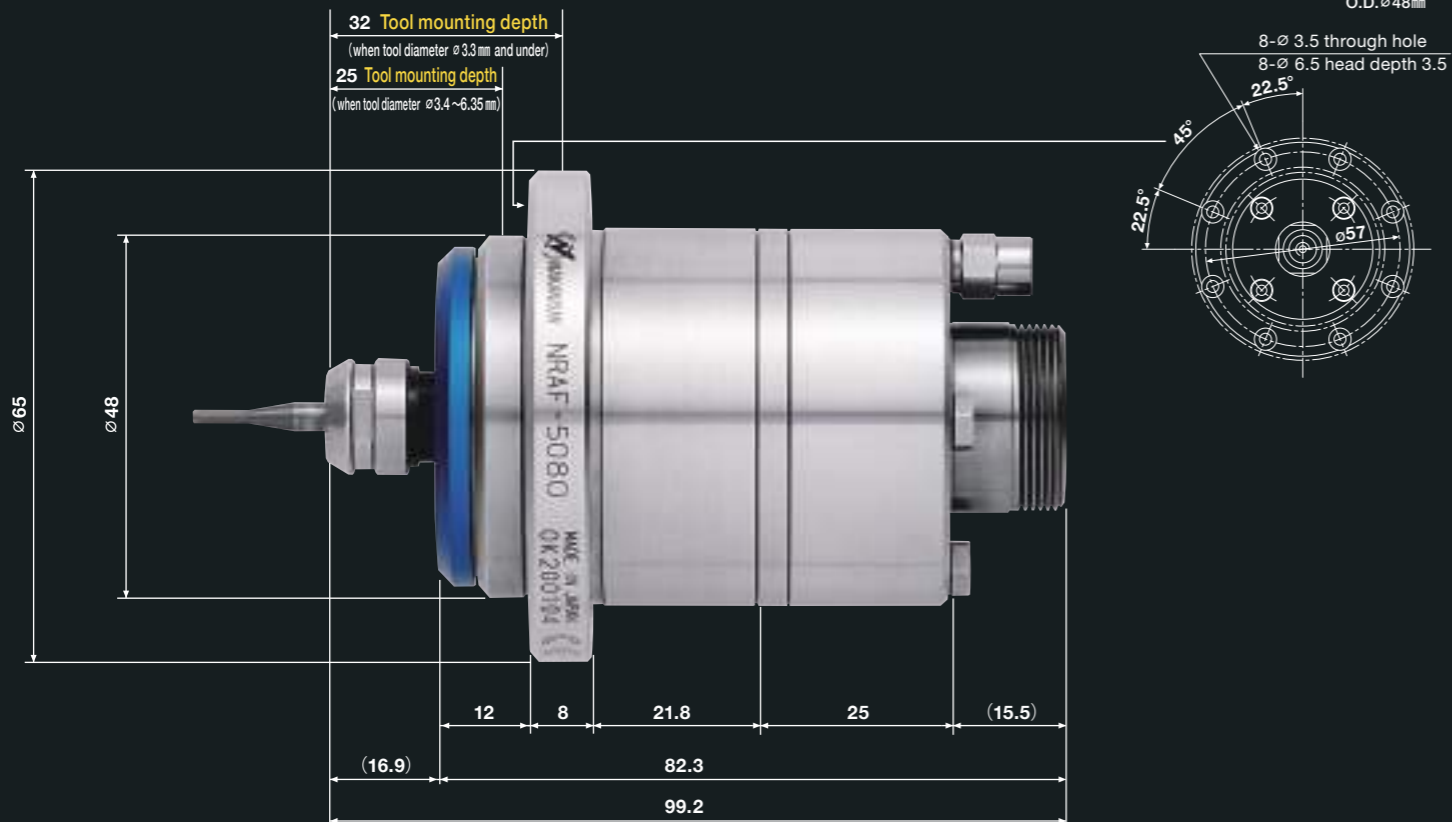
Order by Code No.

NR-3080S

Code No. **7876**Model **NR-3080S**

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
ϕ 30mm	80,000 min ⁻¹	Within 1 μ m	CHA Group (ϕ 0.5 ~ ϕ 4.0mm)	170g
Standard Accessories	Collet nut (CHN-A) / Wrench (22×27) · (8×5) · (9×11) : 1pc. each			
Options	Collet (CHA Group) : ϕ 0.5 ~ ϕ 4.0mm p.51			

* Collet is sold separately.

NRAF-5080
Air bearing spindleO.D. ϕ 48mm

NRAF-5080

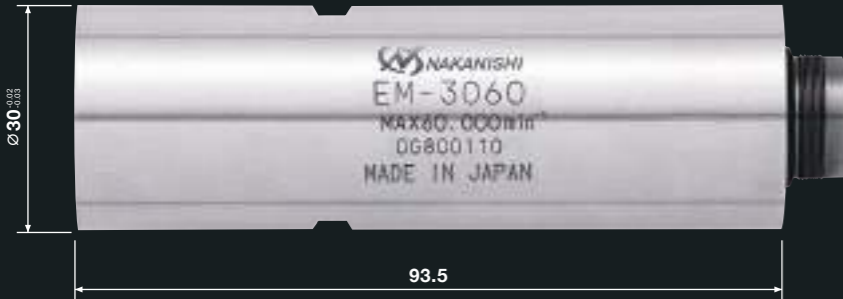
Code No. **1782**Model **NRAF-5080**

O.D.	Max. rpm	Appropriate bearing air pressure	Spindle Accuracy	Collet	Weight
ϕ 48mm	80,000 min ⁻¹	35Nℓ/min (0.5MPa)	Within 1 μ m	CHK Group (ϕ 0.5 ~ ϕ 6.35mm)	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 : ϕ 8.0mm and under on ϕ 6.0mm shank Hose diameter : ϕ 4mm , for bearing air inlet				
Standard Accessories	Collet : ϕ 3.0mm (CHK-3.0) / Collet nut (K-265A) / Wrench (12×14) : 2pcs. Reducer : 1pc. / Inlet air hose (ϕ 4mm×4m) : 1pc. / Bar wrench (K-236) : 1pc.				
Options	Collet (CHK Group) : ϕ 0.5 ~ ϕ 6.35mm p.51				

Motor

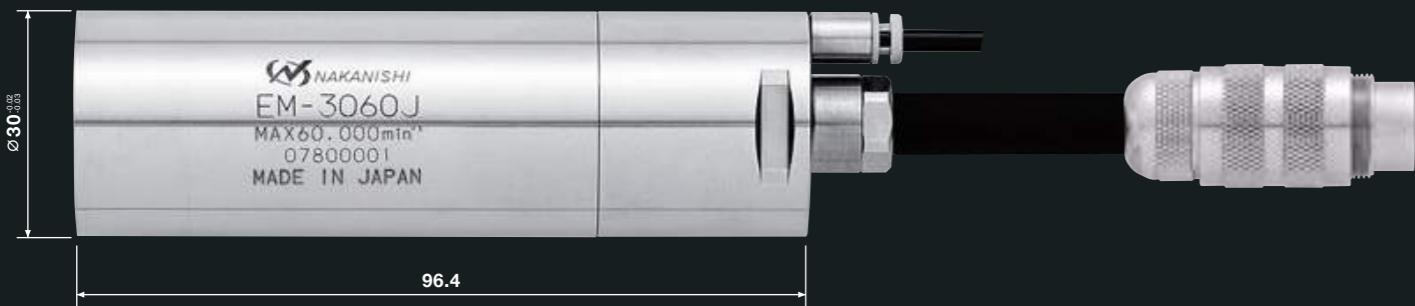
EM-3060

60,000min⁻¹ motor



EM-3060J

60,000min⁻¹ motor with joint type motor cord



Cord length L=0.3m / 2m

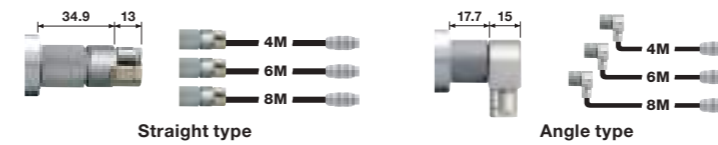
Specifications

DXF data DXF files are available on our website

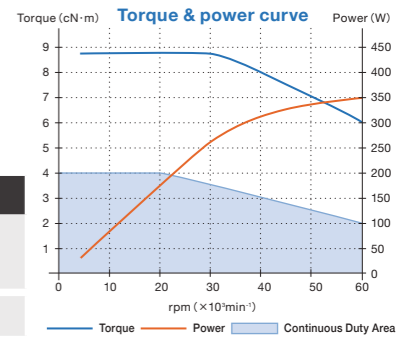
Order by Code No.

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.			



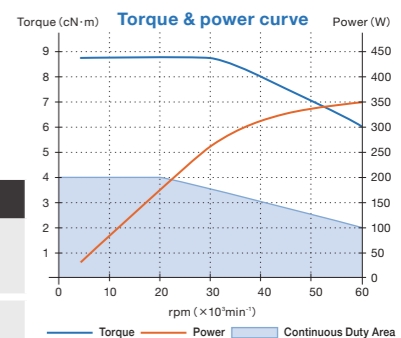
EM-3060J

Length **0.3m** Code No. **1765** Model **EM-3060J**
 Length **2m** Code No. **1779** Model **EM-3060J-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.			



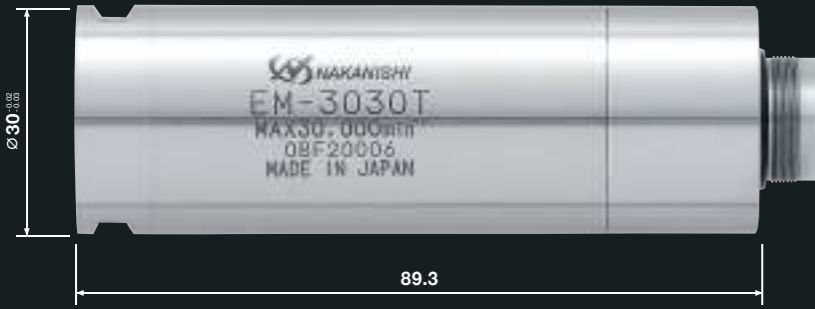
Motor

EM-3030T 30,000min⁻¹ torque motor



O.D. ϕ 30mm

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

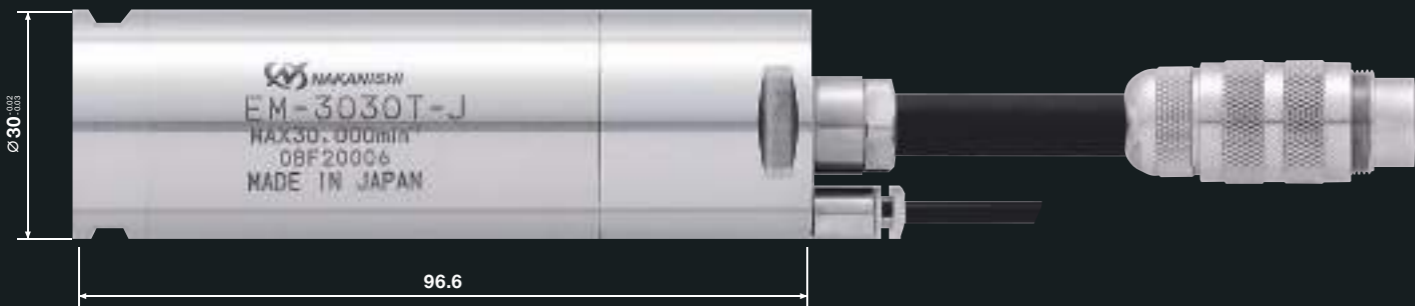


EM-3030T-J 30,000min⁻¹ torque motor with joint type motor cord



O.D. ϕ 30mm

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



Cord length L=0.3m / 2m

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



O.D. ϕ 30mm



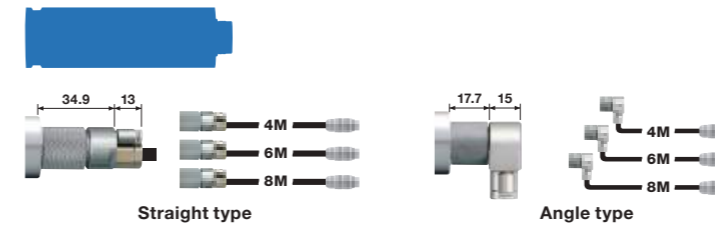
Cord length L=0.3m / 2m

Specifications

DXF data DXF files are available on our website

Order by Code No.

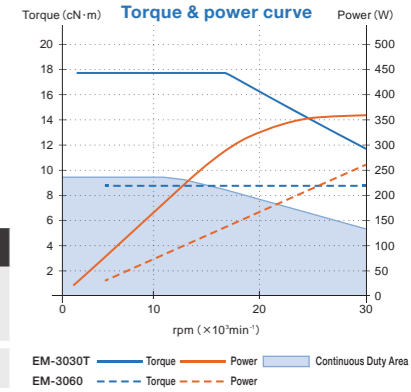
EM-3030T



O.D.	Speed Range	Max. power	Weight
ϕ 30mm	1,000 ~ 30,000min ⁻¹	350w	350g

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

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



! Old type (Color of air output joint is white) Controller New type (Color of air output joint is blue) Controller
If EM-3030T is connected to old type non applicable controller, it will not rotate.

EM-3030T-J



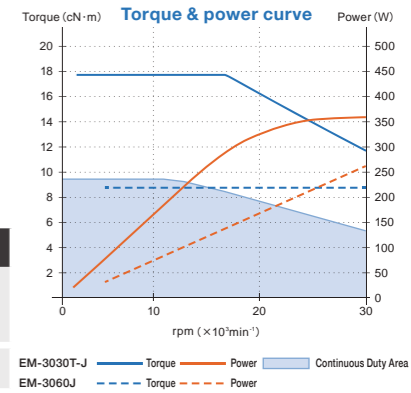
Length	0.3m	Code No.	7358	Model	EM-3030T-J
Length	2m	Code No.	7359	Model	EM-3030T-J-2M



※ Joint type motor cord is necessary.

O.D.	Speed Range	Max. power	Weight
ϕ 30mm	1,000 ~ 30,000min ⁻¹	350w	0.3m : 425g 2 m : 600g

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



! Old type (Color of air output joint is white) Controller New type (Color of air output joint is blue) Controller
If EM-3030T-J is connected to old type non applicable controller, it will not rotate.

EM-3080J



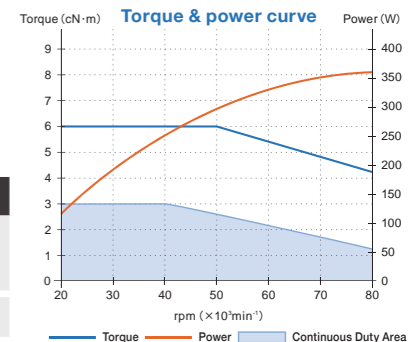
Length	0.3m	Code No.	1781	Model	EM-3080J
Length	2m	Code No.	1788	Model	EM-3080J-2M



※ Joint type motor cord is necessary.

O.D.	Speed Range	Max. power	Weight
ϕ 30mm	20,000 ~ 80,000min ⁻¹	350w	0.3m : 375g 2 m : 550g

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



Spindle
Guide

CHK



NR-2551



EM25N-5000J



EMCD-2350J



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

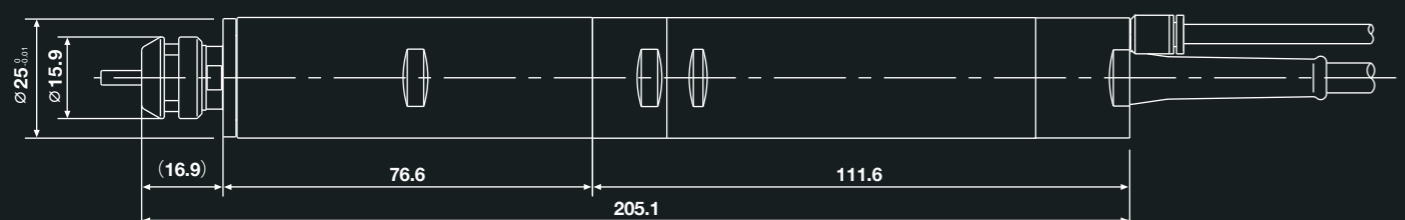
Spindle (Modular type)

Shown In Actual Size

NR-2551
Straight spindleO.D. ϕ 25mmEM25N-5000J
50,000min⁻¹ motorO.D. ϕ 25mm

Cord length L=0.3m

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
ϕ 30mm	50,000min ⁻¹	Within 1 μ m	CHK Group (ϕ 0.5 ~ ϕ 6.35mm)	253g
Standard Accessories Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc.				
Options Collet (CHK Group) : ϕ 0.5 ~ ϕ 6.35mm p.51 Metal Saw Arbor (KCH-03) : ϕ d (I.D.) × under ϕ 30mm (O.D.) /Grindstone Arbor (AGM-03) : Grindstone I.D. ϕ 5.0mm Grindstone Flange (EGF-19) : applicable grindstone I.D. ϕ 19.05×O.D. ϕ 40×7mm				

※ Outside diameter ϕ 25.4mm type is also available.

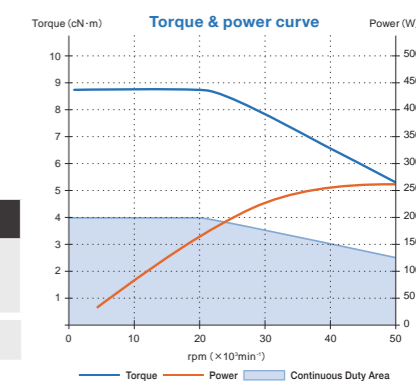
※ Collet is sold separately.

EM25N-5000J

Code No. **7904** Model **EM25N-5000J**

O.D.	Speed Range	Max. Power	Weight
ϕ 25mm	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
4M	7722	EMCD-2350J-4M	3.7m	Air hose Connector cap (Included)	EM25N-5000J
6M	7723	EMCD-2350J-6M	5.7m		
8M	7724	EMCD-2350J-8M	7.7m		
Joint type					

Motor spindle (One-piece type)



30 EMS-3060K
p.39

30 EMR-3008K
p.39



30 EM30-S6000
p.43

25 EM25-S6000
p.43

20 EM20-S6000
p.43



30 EMA-3020K
p.41

30 EMA-3020S
p.41

30 EMSF-3060K
p.45



Spindle Guide



CHK



EMS-3060K



EMR-3008K



EMCD-3000J



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

Shown In Actual Size

Motor spindle (One-piece type)

EMS-3060K

ø30 Motor spindle
CHK collet·30cm joint cord



O.D. ø30mm



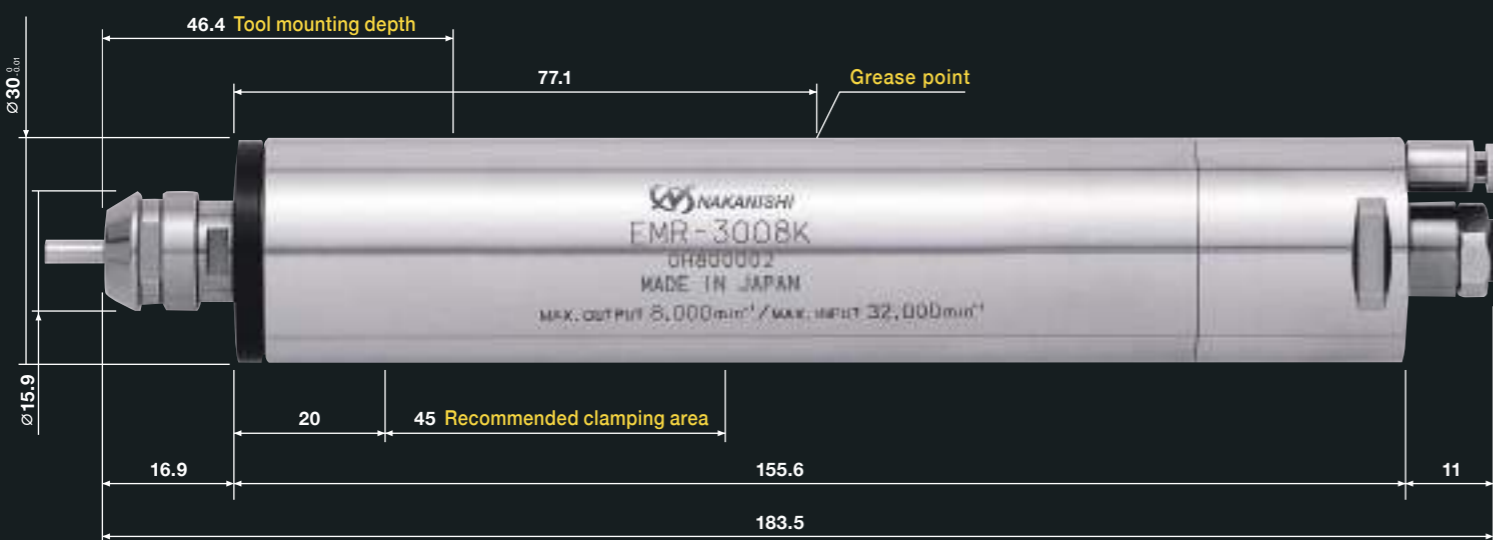
Cord length L=0.3m

EMR-3008K

Motor spindle with reduction gear



O.D. ø30mm



Cord length L=0.3m

Specifications

DXF data DXF files are available on our website

Order by Code No.

EMS-3060K

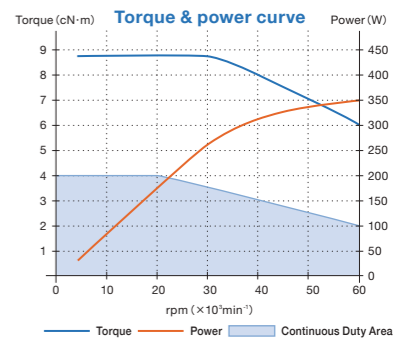
Code No. **7862** Model **EMS-3060K**

O.D.	Max. rpm	Spindle Accuracy	Collet	Max. power	Weight
ø30mm	60,000min ⁻¹	Within 1μm	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.



* Joint type motor cord is necessary.



EMR-3008K

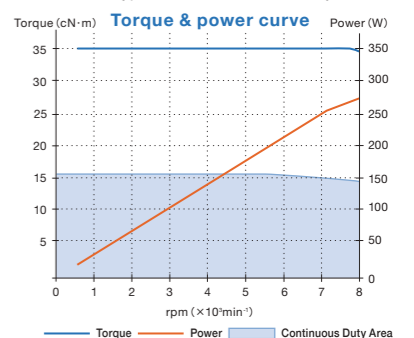
Code No. **7869** Model **EMR-3008K**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
ø30mm	8,000min ⁻¹	$\frac{1}{4}$	32,000min ⁻¹
Spindle Accuracy Within 1μm			
Collet CHK Group (ø0.5 ~ ø6.35mm)			
Max. power 350w			
Weight 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			

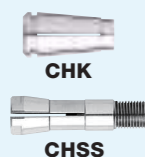
* Collet is sold separately.



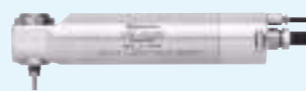
* Joint type motor cord is necessary.



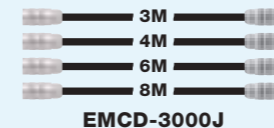
! Put grease every 70 to 100 hours to extend the life of the reduction gear. Grease-up prevents friction of the internal gears and degradation of the existing grease in the reducer.

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

O.D. ϕ 30mm

Specifications

DXF data DXF files are available on our website

Order by Code No.

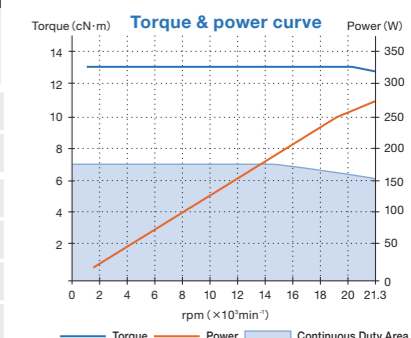
EMA-3020K

Code No. **7874** Model **EMA-3020K**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
ϕ 30mm	21,300 min ⁻¹	$\frac{1}{1.5}$	32,000 min ⁻¹
Spindle Accuracy	Collet	Max. power	Weight
Within 2 μ m	CHK Group (ϕ 0.5 ~ ϕ 6.35mm)	280w	760g
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. Grease for Speed reducer (10m ℓ) / Grease nipple : 1pc.		
Options	Collet (CHK Group) : ϕ 0.5 ~ ϕ 6.35mm p.51 Motor cord : Length 3m (1778), 4m (1768), 6m (1767), 8m (1766) Metal Saw Arbor (KCH-03) : ϕ d (I.D.) × under ϕ 30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. ϕ 5.0mm		



* Joint type motor cord is necessary.

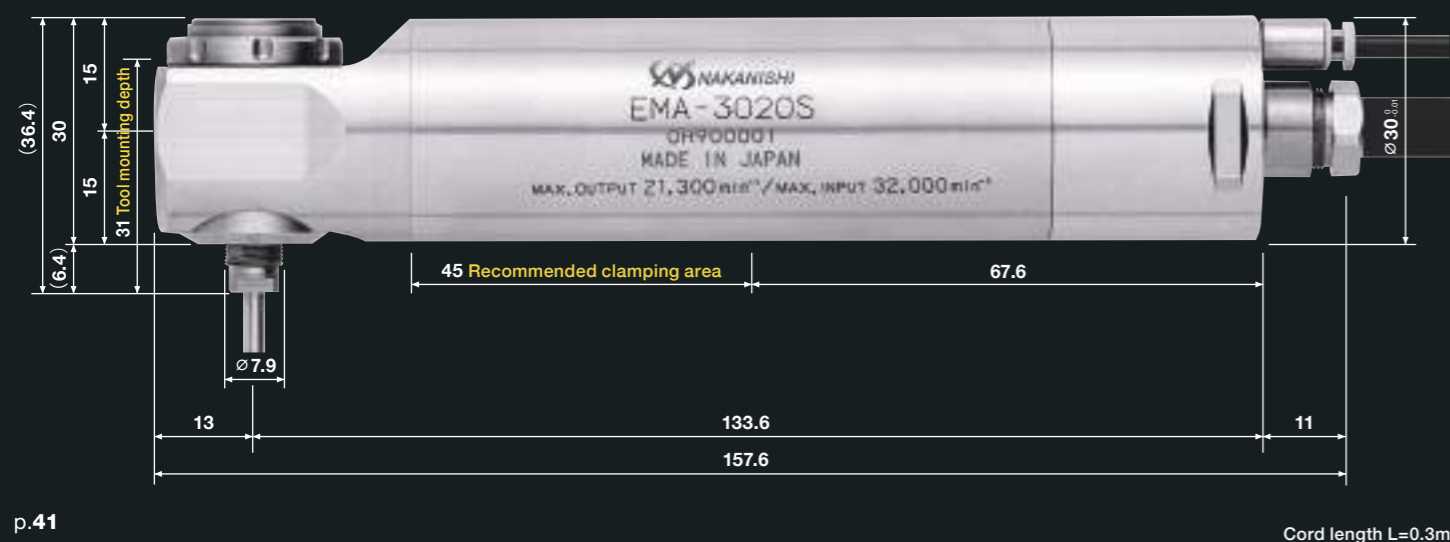


* Collet is sold separately.

! 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

Angle motor spindle
Built-in angle head

O.D. ϕ 30mm

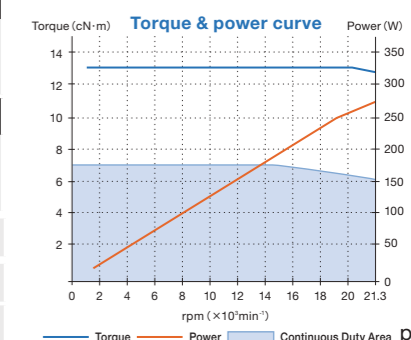
EMA-3020S

Code No. **1758** Model **EMA-3020S**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
ϕ 30mm	21,300 min ⁻¹	$\frac{1}{1.5}$	32,000 min ⁻¹
Spindle Accuracy	Collet	Max. power	Weight
Within 3 μ m	CHSS Group (ϕ 1.0 ~ ϕ 3.175mm)	275w	605g
Standard Accessories	Collet : ϕ 3.0mm (CHSS-3.0) / Wrench (7×5.1) · (8×6.1) : 1pc. each		
Options	Collet (CHSS Group) : ϕ 1.0 ~ ϕ 3.175mm p.51 Motor cord : Length 3m (1778), 4m (1768), 6m (1767), 8m (1766)		



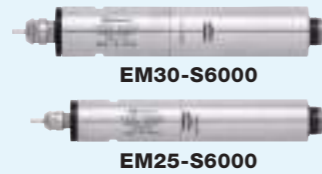
* Joint type motor cord is necessary.



Spindle
Guide

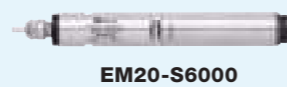
CHK

CHA

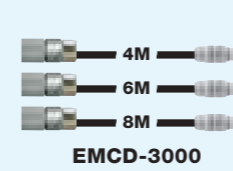


EM30-S6000

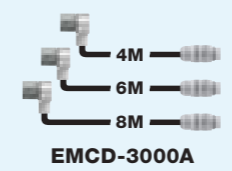
EM25-S6000



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



O.D. ø30mm

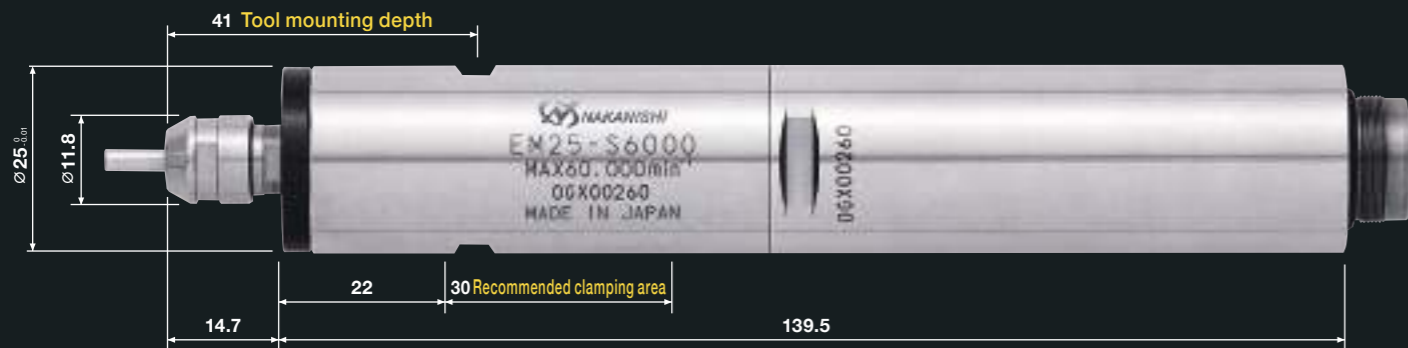


EM25-S6000

ø25 Motor spindle · CHA collet



O.D. ø25mm

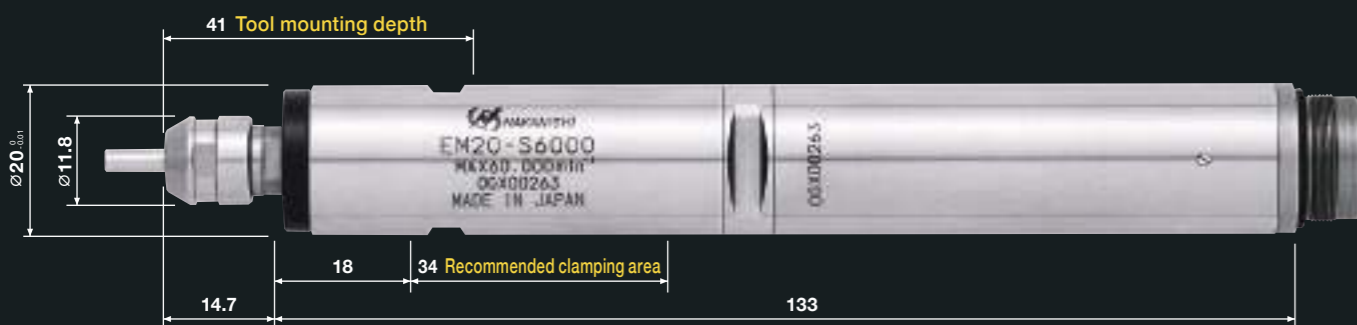


EM20-S6000

ø20 Motor spindle · CHA collet



O.D. ø20mm



Specifications

DXF data DXF files are available on our website

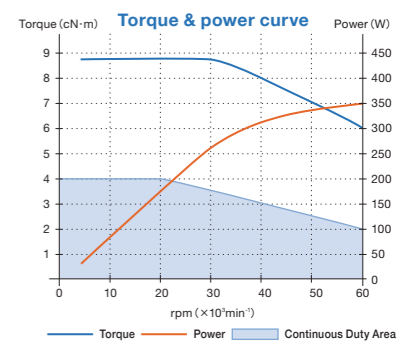
Order by Code No.

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.

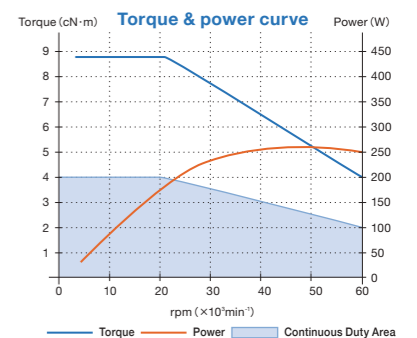


EM25-S6000

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.

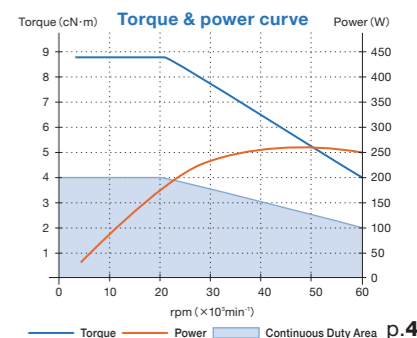


EM20-S6000

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.

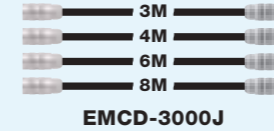


Spindle
Guide

CHK



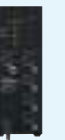
EMSF-3060K



EMCD-3000J



E3000 CONTROLLER



E3000 SELECTOR

E3000 SERIES

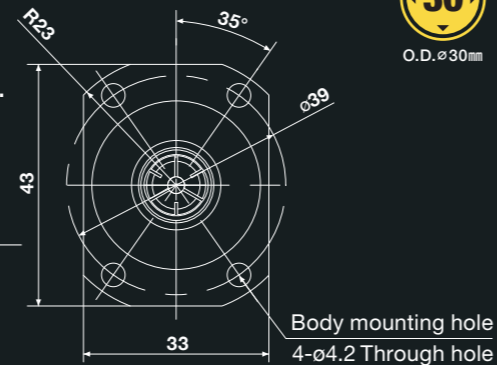
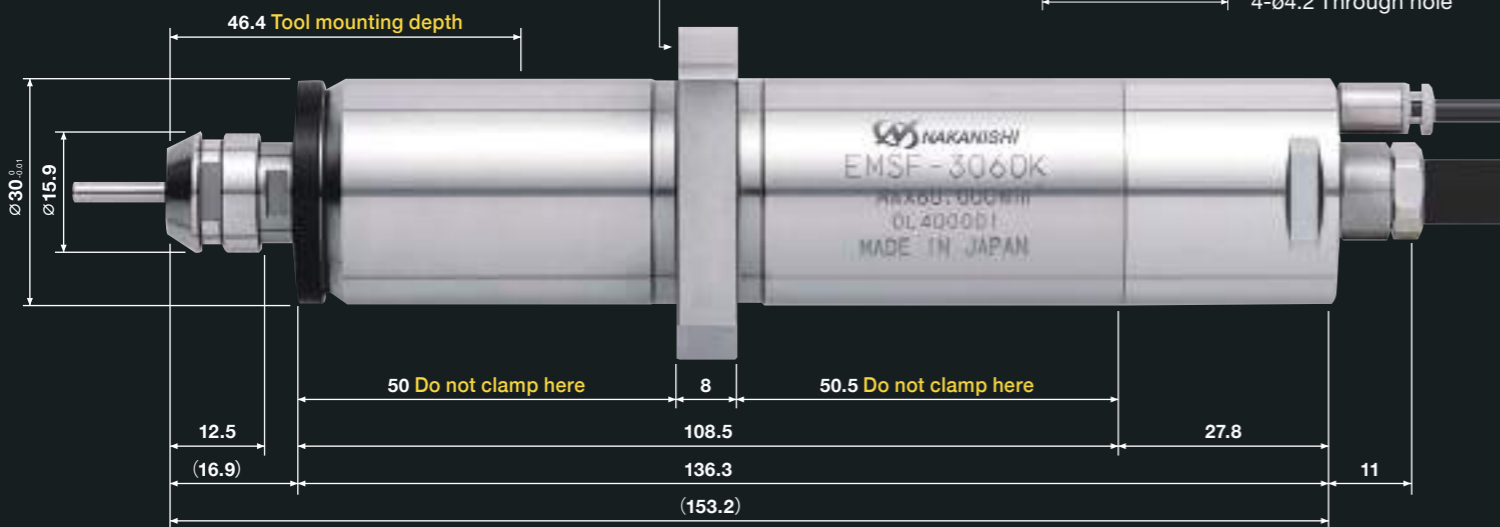
Shown In Actual Size

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.

O.D. ϕ 30mmBody mounting hole
4- ϕ 4.2 Through hole

Cord length L=0.3m

Specifications

DXF data DXF files are available on our website

Order by Code No.

EMSF-3060K

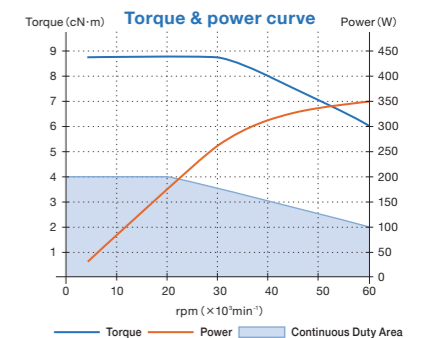
Code No. **7863**Model **EMSF-3060K**

O.D.	Max. rpm	Spindle Accuracy	Collet
ϕ 30mm	60,000min ⁻¹	Within 1 μ m	CHK Group (ϕ 0.5 ~ ϕ 6.35mm)
Max. power	Weight		
350w	620g		
Standard Accessories	Collet nut (K-265) / Wrench (12 \times 14) : 2pcs. Air hose 0.3m : 1pc. / Lock bolt (M4 hexagon socket head bolt) : 4pcs.		
Options	Collet (CHK Group) : ϕ 0.5 ~ ϕ 6.35mm p.51 Motor cord : Length 3m (1778), 4m (1768), 6m (1767), 8m (1766)		

*Collet is sold separately.

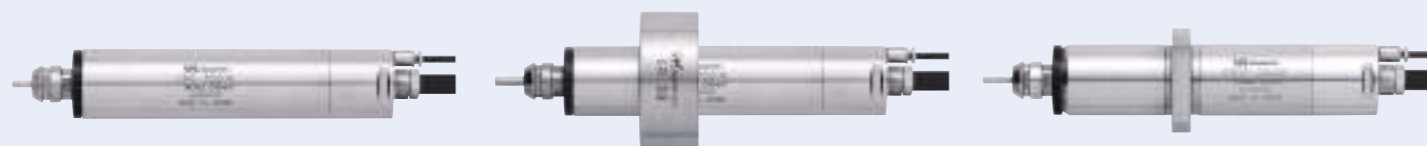


* Joint type motor cord is necessary.



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

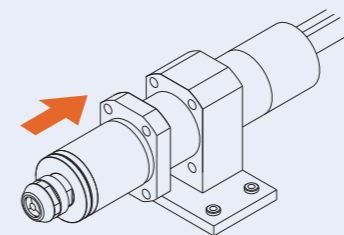
With flange

Type of spindle and mounting device
integrated

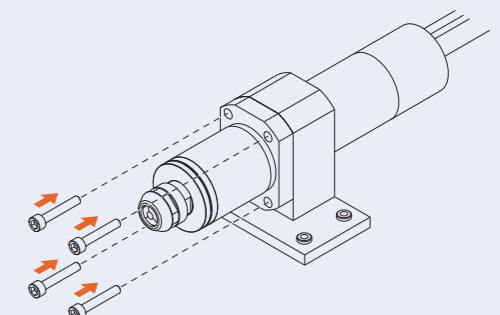
How to mount to a machine tool

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)

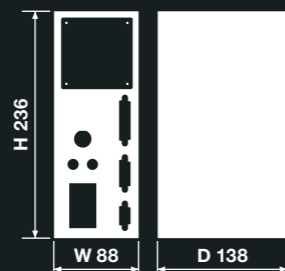
E3000 Controller



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.	

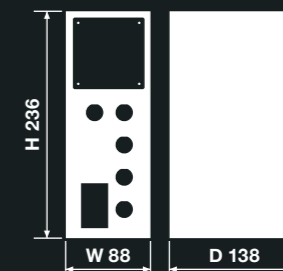
E3000 Selector



E3000 SELECTOR

Selector

Code No. **8426**

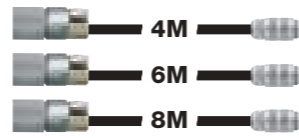
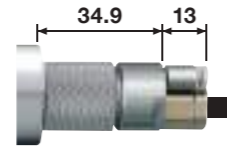


Number of motor		
4pcs. Up to 4 motors to control with connecting selector to controller ※not simultaneously		
Input Voltage		
AC100~240v Without plug Multiple output power		
Power consumption	Air consumption	Weight
AC0.15A	120ℓ/min (When connecting 4 motors)	1.9kg
Standard Accessories		
Power cord : 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

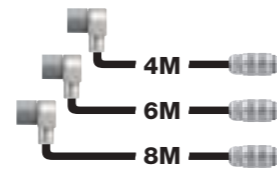
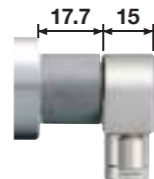
[Feature] Connection at the body end



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	Air hose Connector cap (Included)	EM-3060 EM-3030T EM30-S6000 EM25-S6000 EM20-S6000
1749	EMCD-3000-6M	6m		
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	Air hose Connector cap (Included)	EM-3060 EM-3030T EM30-S6000 EM25-S6000 EM20-S6000
1743	EMCD-3000A-6M	6m		
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	Air hose Connector cap (Included)	EM-3060J・EM-3030T-J EMS-3060K・EMS-3060A EMR-3008K・EMA-3020K EMA-3020S・EMSF-3060K EM-3080J
1768	EMCD-3000J-4M	3.7m		
1767	EMCD-3000J-6M	5.7m		
1766	EMCD-3000J-8M	7.7m		

Accessories (Air line kit, etc.)

AL-C1204

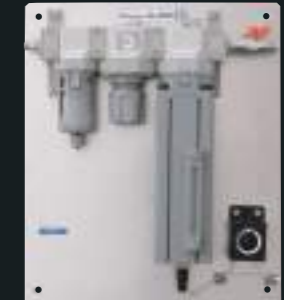
Air line kit
0.3μm filter
※ 1



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**

※ 1 Recommendation of nominal filtration rating : 0.3μm, Pressure range : 0.1-1.0MPa Recommendation of air filter : M2000-WS (CKD)
※ 2 Customers to provide their own micro-mist separator (filtration rating 0.01 μm)

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

- Loosen the Lock Bolt
- Tighten the Mounting Bolt to widen the inside diameter
- Insert and position the spindle referring to the Recommended Clamping Area on the spindle
- Remove the Mounting Bolt
- Tighten the Lock Bolt (4N·m)
- Affix them to the machine with Mounting Bolt (Recommended tightening torque: 4N·m)

Accessories (Collet, etc.)

Collet	Code No.	Model	I.D.	Compatible model		
<p>Collet CHA Group</p>	91494	CHA-3.0AA	ø3.0AA*	CTS-3030 EM20-S6000 · EM25-S6000 EMS-3060A · NR-3080S * High precision type AA (Run-out Accuracy within 2 μm)		
	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			
<p>Collet CHB Group</p>	—	CHA-□□	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	NR40-5100 ATC NRR-3060 · NRR-2651 NR33-6000ATC-ESD		
	92820	CHB-2.0	ø2.0			
	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*	EM30-S6000 · EMA-3020K EMS-3060K · EMR-3008K NR-151E · NR-3060S NRF-3060S · NR-3060 NR-403E · RAS-151E RAX-271E · RAX-71E NRAF-5080 * High precision type AA (Run-out Accuracy within 2 μm)
		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>	—	CHK-□□	ø0.5, ø0.6, ø0.7, ø0.8, ø0.9 ø1.0, ø1.5, ø2.0, ø2.5, ø3.5, ø4.5, ø4.76, ø5.5 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 ø4.1, ø4.2, ø4.3, ø4.4, ø4.6, ø4.7, ø4.8, ø4.9 ø5.1, ø5.2, ø5.3, ø5.4, ø5.6, ø5.7, ø5.8, ø5.9 ø1.6, ø5.0	NR50-5100 ATC		
	91930	CHR-3.0	ø3.0			
	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			
	<p>Collet CHR RS Group</p>	93201	CHR-3.0RS		ø3.0	NR50-5100 ATC RS *Also available for NR50-5100 ATC
		93202	CHR-3.175RS		ø3.175	
		93203	CHR-4.0RS		ø4.0	
93204		CHR-6.0RS	ø6.0			
93205		CHR-6.35RS	ø6.35			
<p>Collet CHS Group</p>	90592	CHS-2.35	ø2.35	RA-271E		
	90530	CHS-3.0	ø3.0			
	90593	CHS-3.175	ø3.175			
	90516	CHS-1.6	ø1.6			
	—	CHS-□□	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 CHSS Group</p>	93092	CHSS-2.35	ø2.35	EMA-3020S		
	93030	CHSS-3.0	ø3.0			
	93093	CHSS-3.175	ø3.175			
	—	CHSS-□□	ø1.0, ø1.5, ø2.0, ø2.5			
<p>Collet CH8 Group</p>	91092	CH8-2.35	ø2.35	RA-151E		
	91030	CH8-3.0	ø3.0			
	91093	CH8-3.175	ø3.175			
	—	CH8-□□	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 ø2.1, ø2.2, ø2.3, ø2.4, ø2.6, ø2.7, ø2.8, ø2.9			

Collet nut	Code No.	Model	Description	Compatible model
	2102	CHN-A	Collet nut for CHA collet	EM20-S6000 · EM25-S6000 EMS-3060A · NR-3080S
	2129	K-265	Collet nut for CHK collet	EM30-S6000 · EMA-3020K EMS-3060K · EMR-3008K NR-151E · NR-3060S NRF-3060S · NR-3060 NR-403E · RAS-151E RAX-271E · RAX-71E
	2158	K-265A	Collet nut for NRAF-5080	NRAF-5080
	7798	CHN-CTA-3.0	Collet nut for CTS-3030	CTS-3030
	7799	CHN-CTA-3.175		
	7800	CHN-CTA-4.0		

Metal Saw Arbor · Grindstone Arbor	Code No.	Model	I.D. / Description / Specifications	Compatible model
	2146	KCH-02 (5.0)	ø5.0 (I.D.)	Metal Saw Arbor ød (I.D.) x under ø30mm (O.D.) Run-out Accuracy : within 0.02mm
	1077	KCH-02 (6.0)	ø6.0 (I.D.)	
	2147	KCH-02 (8.0)	ø8.0 (I.D.)	
	2148	KCH-03 (5.0)	ø5.0 (I.D.)	Metal Saw Arbor ød (I.D.) x under ø30mm (O.D.) Run-out Accuracy : within 0.02m
	2130	KCH-03 (6.0)	ø6.0 (I.D.)	
	2149	KCH-03 (8.0)	ø8.0 (I.D.)	
	2131	AGM-03	Grindstone Arbor Run-out Accuracy : within 0.02mm for Grindstone I.D. ø5.0mm	EMA-3020K · EMS-3060K EMR-3008K NR-3060S · NRF-3060S NR-3060 · RAS-151E RAX-71E · RAX-271E
	2138	EGF-19	Grindstone Flange Available grindstone dimension ø19.05 (I.D.) x ø40 (O.D.) mm x 7 (width) mm	

Grease for speed reducer	Code No.	Model	Description	Compatible model
	1547	—	Grease for speed reducer (2.5mℓ)	ARG-011E · ARG-021E EMA-3020K RAX-271E · RAX-71E
	1550	—	Grease for speed reducer (10mℓ)	
	1549	—	Grease for speed reducer (100mℓ)	

Collet holder	Code No.	Model	Description	Compatible model
	9210	QC3-K	Collet holder for CHK * With K-265 (Collet nut)	
	9223	QC3-K-R		
	9209	QC3-A	Collet holder for CHA * With CHN-A (Collet nut)	NR3060-AQC NRR3060-QC
	9222	QC3-A-R		
	7794	QC3-SS	Collet holder for CHSS	

Bush	Code No.	Model	Description × I.D. × O.D.	Compatible model
	1877	RB-20×22	ø22 Bush Dimensions : ø20×ø22×40mm	EM20-S6000 NR-3060S · NR-3060 · NR-403E
	1876	RB-20×22.8	ø22.8 Bush Dimensions : ø20×ø22.8×40mm	
	1875	RB-20×23	ø23 Bush Dimensions : ø20×ø23×40mm	
	1878	RB-20×25	ø25 Bush Dimensions : ø20×ø25×40mm	
	1879	RB-20×25.4	ø25.4 Bush Dimensions : ø20×ø25.4×40mm	
	1880	RB-30×32	ø32 Bush Dimensions : ø30×ø32×45mm	
	1881	RB-30×36	ø36 Bush Dimensions : ø30×ø36×45mm	

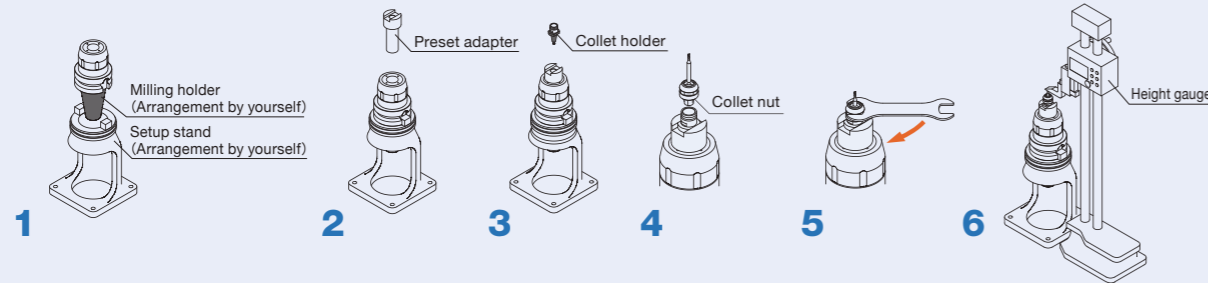
Accessories

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

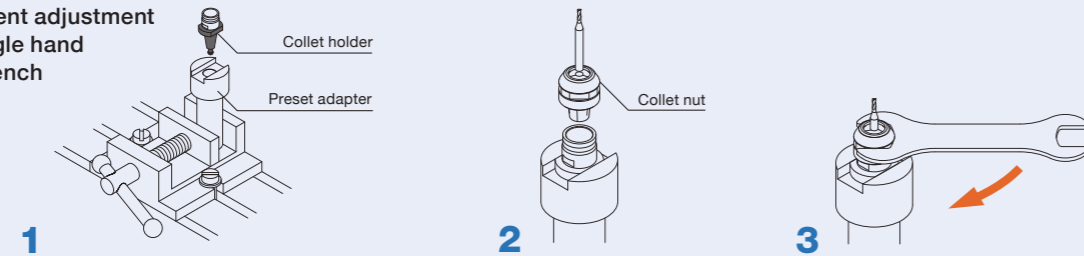
In case using a milling holder



Set-up outside machines

In case using a vice

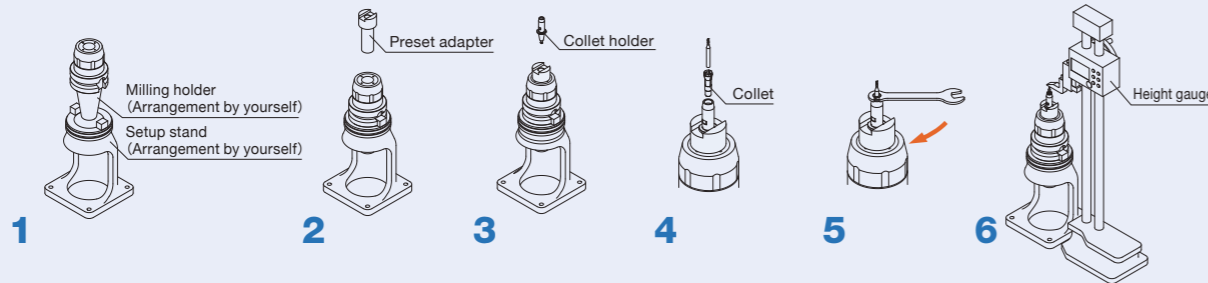
Convenient adjustment with Single hand type Wrench



For QC3-SS

Set-up outside machines

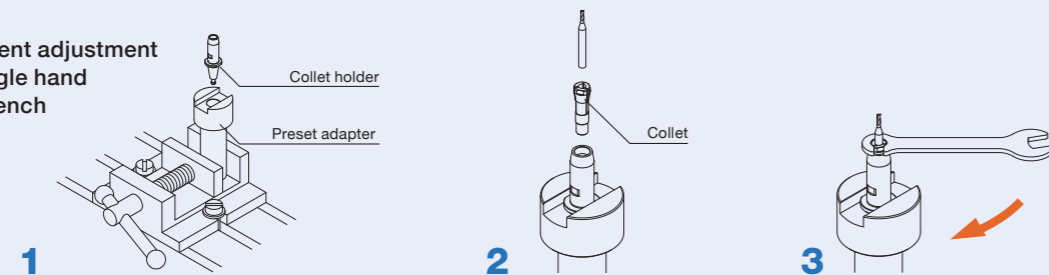
In case using a milling holder



Set-up outside machines

In case using a vice

Convenient adjustment with Single hand type Wrench



NAKANISHI Solutions LINE UP

Electric Motors & Spindles

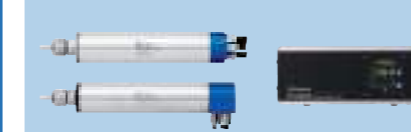


Application for CNC lathes / Special purpose machines

Application for machining centers and milling machines

E4000 SERIES

1,000~40,000min⁻¹ Max.1,200W
[φ40mm]



- World's highest power in this class
- Max. power: 1,200W, Max. torque: 1.0N·m

E3000 SERIES

1,000~80,000min⁻¹ Max.350W
[φ30/25/20mm]



- The largest product lines for various processing
- Space-saving solution for small CNC lathe

HES SERIES

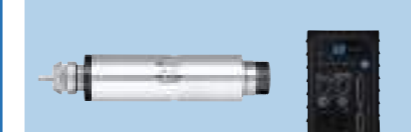
Max.80,000min⁻¹
[For small diameter endmills and drills only]



- The most cost effective solution to add high-speed machining capability
- 80,000min⁻¹, 6.0cN·m
- BT, HSK A63, ST shanks are available
- Driven by E3000 Controller

E2000 SERIES

1,000~50,000min⁻¹ Max.200W
[φ22.8mm]



- Small size spindle allows multi-axis installation in limited space

iSpeed3 SERIES

1,000~80,000min⁻¹ Max.150W
[φ19.05/20/22mm]



- Super short motor spindle
- High efficiency brushless motor



- [HES510]
- 50,000min⁻¹, 8.75cN·m
- BT, NT, CAT, IT, HSK A, ST shanks are available
- Driven by E3000 Controller

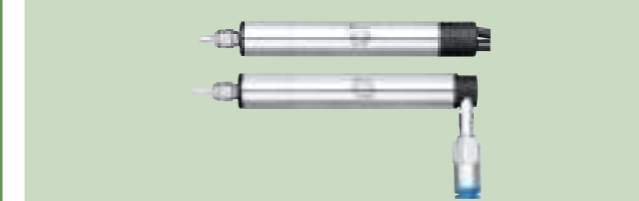
Air Motors & Spindles



Application for CNC lathes / Special purpose machines

Air-Speed SERIES One-piece type

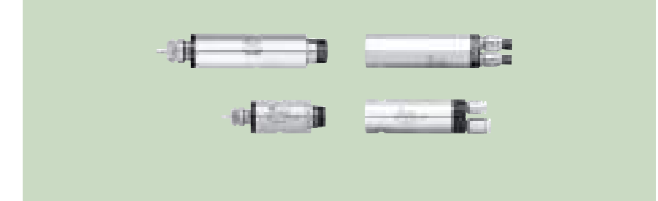
Max.30,000min⁻¹ Max.130W
[φ25/23/20/19.05mm]



- 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
[φ30/25/22.8mm]



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

Air Turbine Spindles

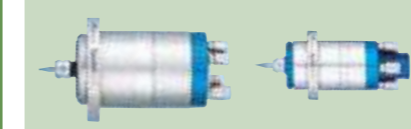


Application for CNC lathes / Special purpose machines

Application for machining centers and milling machines

Xpeed SERIES

Max.160,000min⁻¹
[φ65/40mm]



- 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

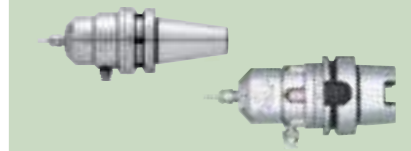
Max.65,000min⁻¹



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

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