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E3000



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PR-K364E Ver.1 2022-06-16 05. ☺ 590

※Specifications and design are subject to change without notice.

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

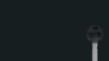
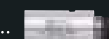
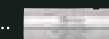
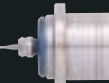
✓ Brushless motor

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

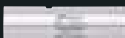
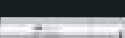
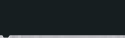
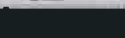


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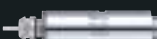
Spindle (Modular type)

NR-3060S Short spindle		p.9	NRR-3060 Manual tool change spindle Open / close by lever operation		p.19
NRF-3060S Short spindle with flange		p.9	NR3060-AQC Air quick change spindle Clamp / unclamp by air operation		p.21
NR-3060 Straight spindle		p.9	NRR3060-QC Lever quick change spindle		p.23
RAX-271E / RAX-71E Angle spindle Standard angle head		p.11	CTS-3030 Coolant through spindle		p.25
RA-151E Angle spindle with short head		p.11	ARG-011E Speed reducer (1/4)		p.27
RAS-151E Angle spindle with long head		p.13	ARG-021E Speed reducer (1/16)		p.27
RA-271E Angle spindle with small head		p.13	RG-3004M Oil mist type Speed reducer (1/4)		p.27
NR33-6000ATC-ESD Antistatic spindle		p.15	NR-3080S Short spindle		p.29
NR50-5100 ATC RS Automatic tool change spindle Open / close by air cylinder		p.17	NRAF-5080 Air bearing spindle		p.29
NR40-5100 ATC Automatic tool change spindle Open / close by air cylinder		p.19			

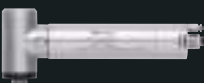
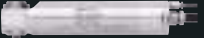
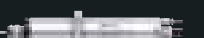
Motor (Modular type)

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

Spindle & Motor ø25 Specifications (Modular type)

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

Motor Spindle (One-piece type)

EMS-3060K ø30 Motor spindle CHK collet·30cm joint cord		p.39
EMR-3008K Motor spindle with reduction gear		p.39
EMA-3020K Angle motor spindle Standard angle head		p.41
EMA-3020S Angle motor spindle Built-in angle head		p.41
EM30-S6000 ø30 Motor spindle·CHK collet		p.43
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EM20-S6000 ø20 Motor spindle·CHA collet		p.43
EMSF-3060K Motor spindle with flange		p.45

Controller

E3000 CONTROLLER Controller		p.47
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Selector

E3000 SELECTOR Selector Up to 4 motors to control with connecting selector to controller		p.48
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Motor cord

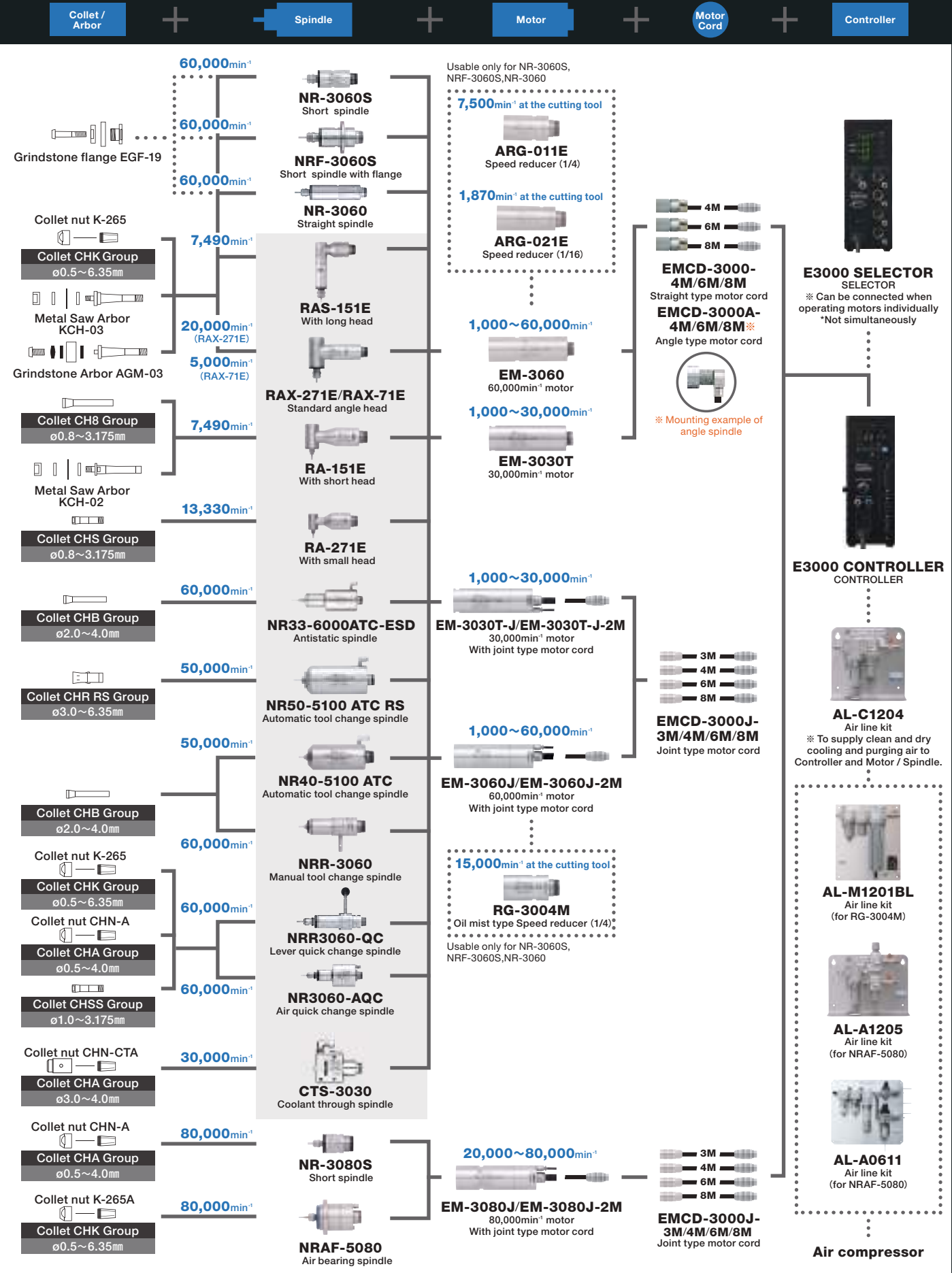
EMCD-3000 Straight type	p.49	EMCD-3000A Angle type	p.49	EMCD-3000J Joint type	p.49
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Accessories

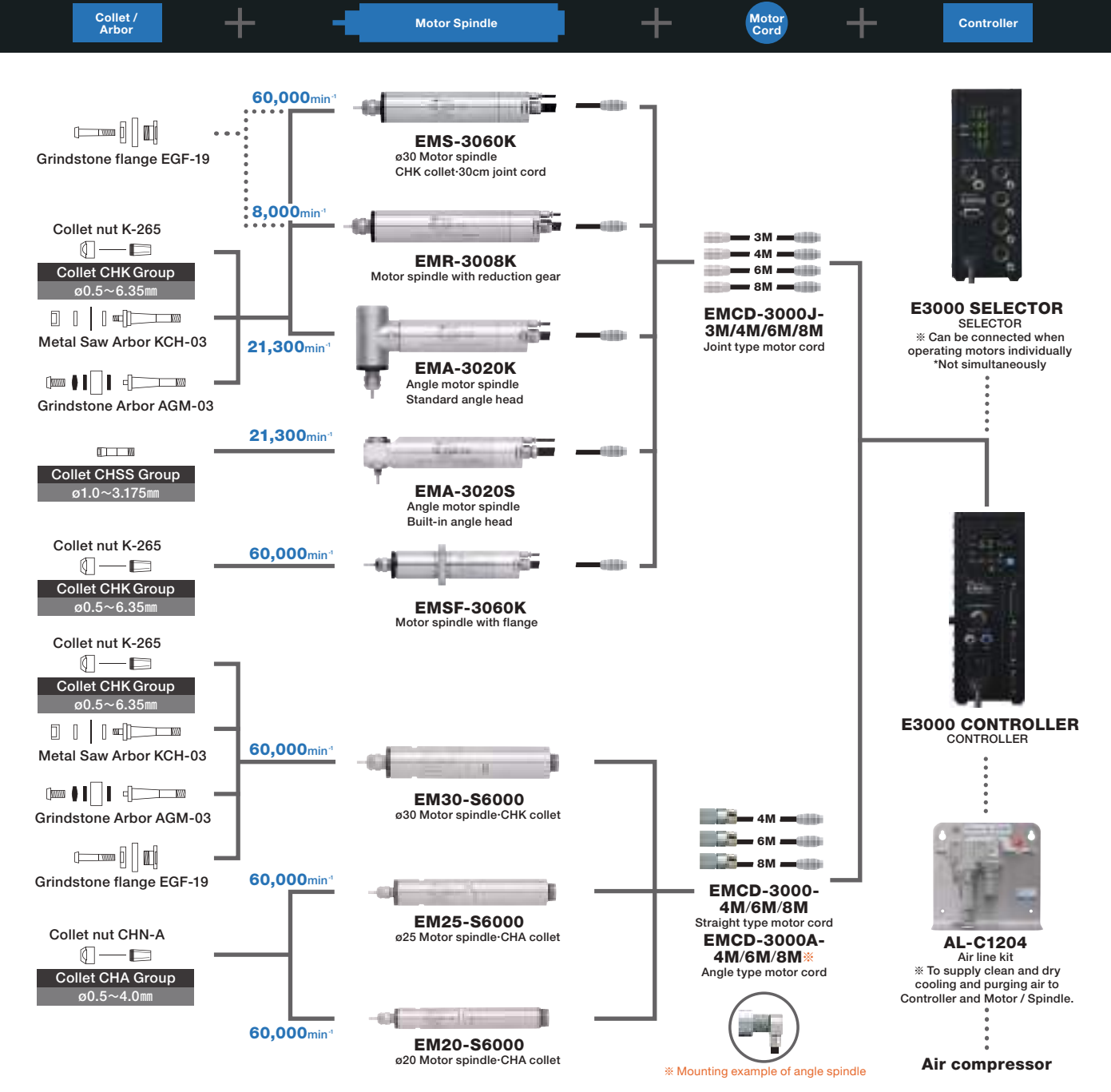
Air line kits p.50	GR-30 Grip ring	p.50	Collets p.51	Collet holders p.52
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System Chart

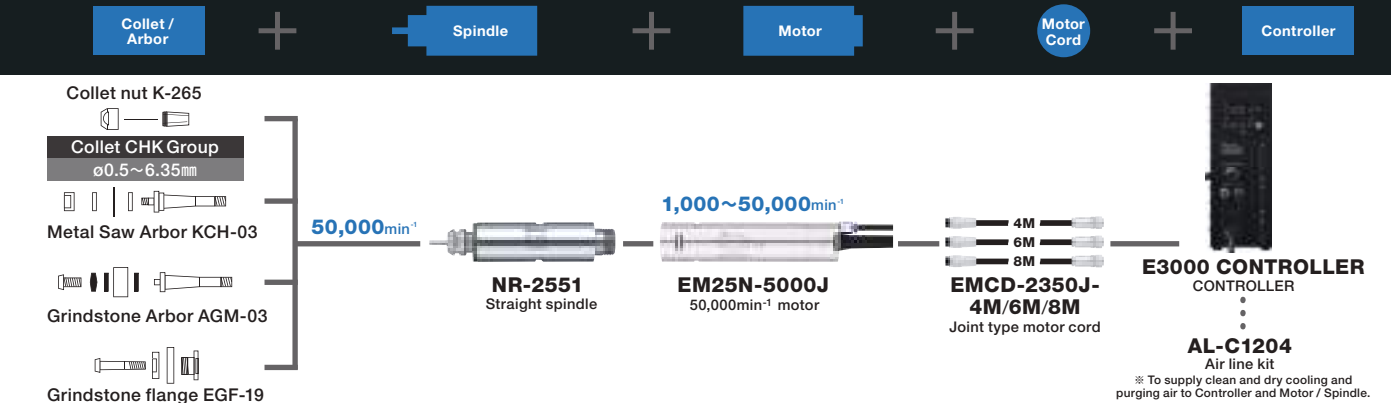
Modular type ø30mm



One-piece type ø30/ø25/ø20mm



Modular type ø25mm



Spindle (Modular type)



- 30 NR-3060S p.9
- 30 NRF-3060S p.9
- 30 NR-3060 p.9
- 30 RAX-271E / RAX-71E p.11
- 30 RA-151E p.11
- 30 RAS-151E p.13
- 30 RA-271E p.13
- 30 NR-3080S p.29
- 48 NRAF-5080 p.29

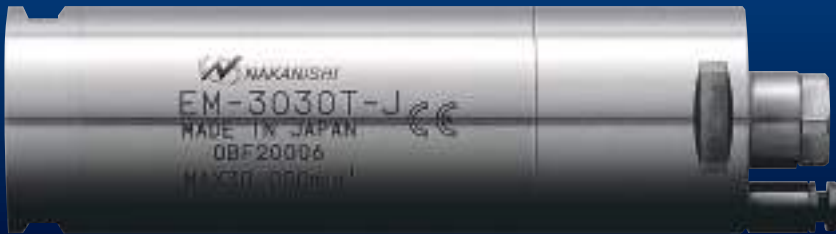


- 33 NR33-6000ATC-ESD p.15
- 50 NR50-5100 ATC RS p.17
- 40 NR40-5100 ATC p.19



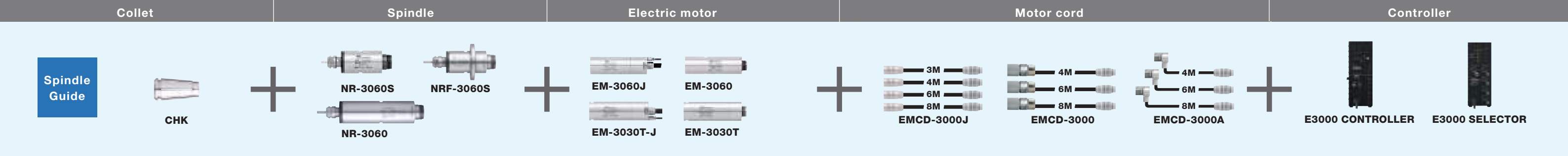
- 26 NRR-3060 p.19
- 30 NR3060-AQC p.21
- 30 NRR3060-QC p.23
- 30 CTS-3030 p.25
- 30 ARG-011E p.27
- 30 ARG-021E p.27
- 30 RG-3004M p.27

- 30 EM-3060 p.31
- 30 EM-3060J p.31
- 30 EM-3030T p.33
- 30 EM-3030T-J p.33
- 30 EM-3080J p.33



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

Shown In Actual Size



E3000 SERIES

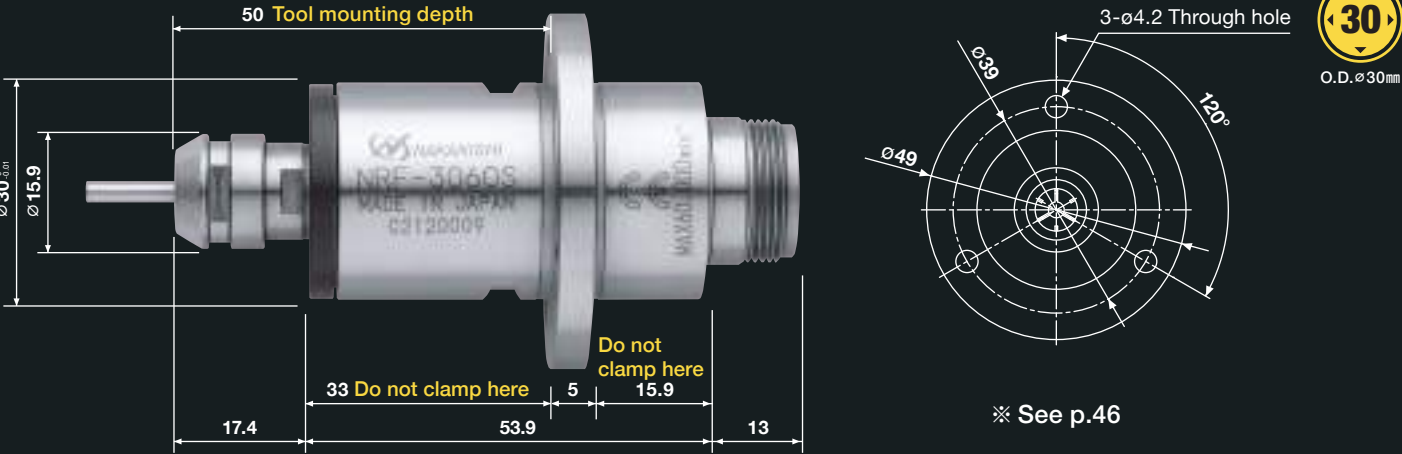
Spindle (Modular type)

Shown In Actual Size

NR-3060S
Short spindle



NRF-3060S
Short spindle with flange



NR-3060
Straight spindle



Specifications

DXF data DXF 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
30mm	60,000min ⁻¹	Within 1μm	CHK Group (30.5 ~ 36.35mm)	260g
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc.			
Options	Collet (CHK Group) : 30.5~36.35mm p.51 Metal Saw Arbor (KCH-03) : 30 (I.D.) × under 30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. 30.0mm Grindstone Flange (EGF-19) : applicable grindstone I.D. 319.05×O.D. 340×7mm			

※ Collet is sold separately.

NRF-3060S

Code No. 7795 Model NRF-3060S

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
30mm	60,000min ⁻¹	Within 1μm	CHK Group (30.5 ~ 36.35mm)	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) : 30.5~36.35mm p.51 Metal Saw Arbor (KCH-03) : 30 (I.D.) × under 30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. 30.0mm Grindstone Flange (EGF-19) : applicable grindstone I.D. 319.05×O.D. 340×7mm			

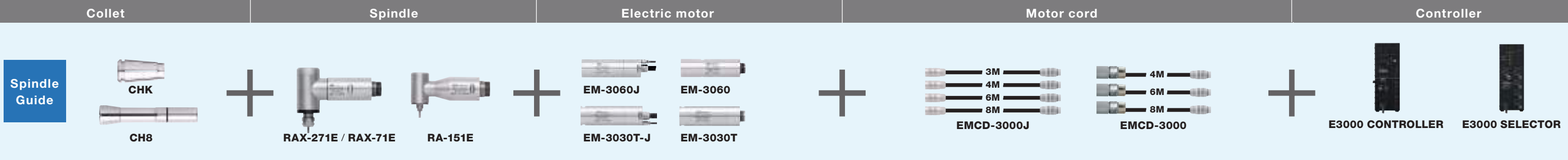
※ Collet is sold separately.

NR-3060

Code No. 7875 Model NR-3060

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
30mm	60,000min ⁻¹	Within 1μm	CHK Group (30.5 ~ 36.35mm)	420g
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs. · (22×27) : 1pc.			
Options	Collet (CHK Group) : 30.5~36.35mm p.51 Metal Saw Arbor (KCH-03) : 30 (I.D.) × under 30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. 30.0mm Grindstone Flange (EGF-19) : applicable grindstone I.D. 319.05×O.D. 340×7mm			

※ Collet is sold separately.



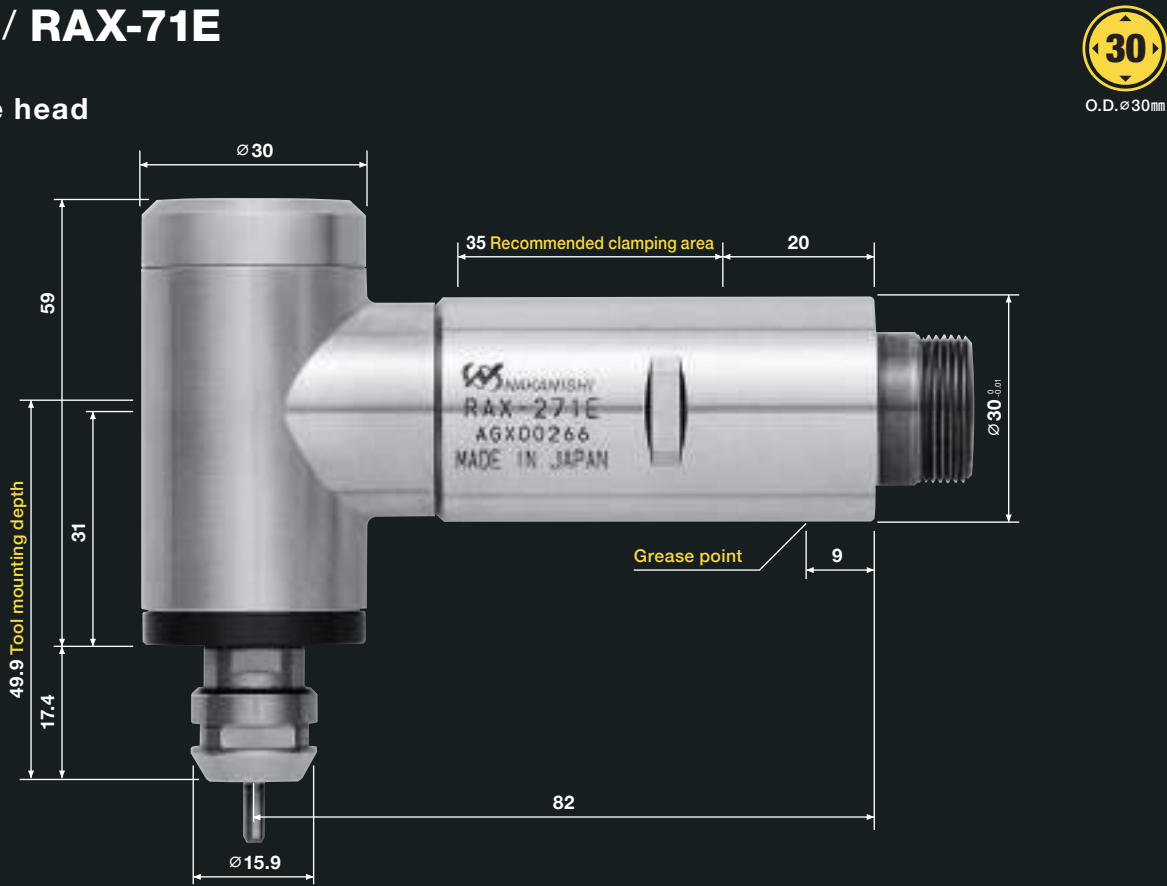
E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

RAX-271E / RAX-71E

Angle spindle
Standard angle head



RA-151E

Angle spindle
With short 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
	Ø30mm	20,000min ⁻¹	$\frac{1}{1.5}$	30,000min ⁻¹
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
	Ø30mm	5,000min ⁻¹	$\frac{1}{6}$	30,000min ⁻¹
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.

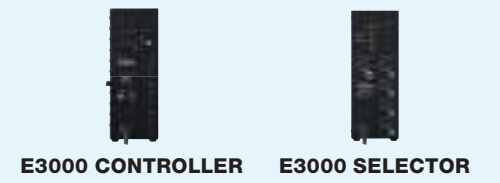
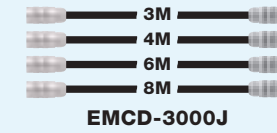
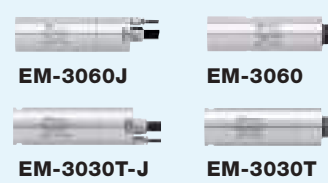
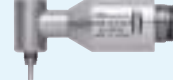
! Put grease every 70 to 100 hours to extend the life of the speed reducer.
Grease-up prevents friction of the internal gears and degradation of the existing grease in the reducer.

RA-151E



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



E3000 SERIES

Spindle (Modular type)

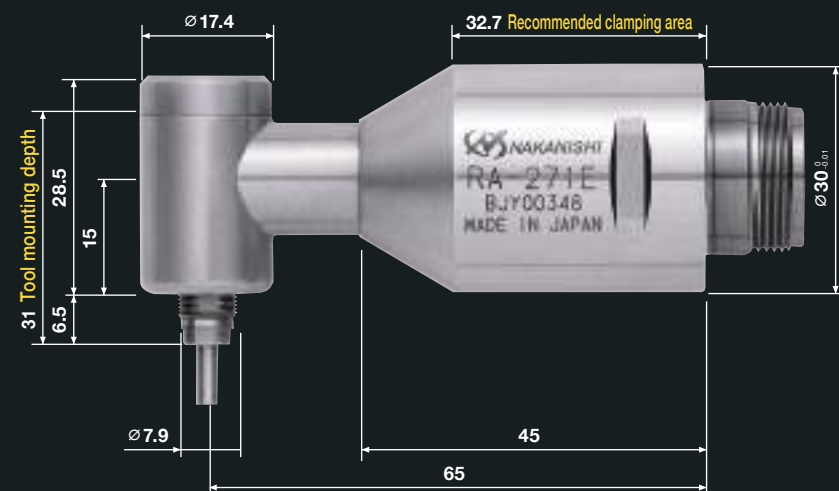
Shown In Actual Size

RAS-151E

**Angle 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
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O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
Ø30mm	7,490min ⁻¹	$\frac{1}{2.67}$	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) : ød (I.D.) × under ø30mm (O.D.) / Grindstone Arbor (AGM-03) : Grindstone I.D. ø5.0mm		

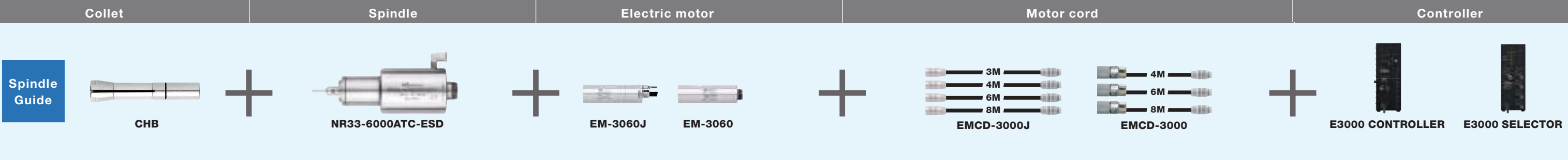
※ Collet is sold separately.

RA-271E



Code No.	1506	Model	RA-271E
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O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm	Collet	Weight
Ø30mm	13,330min ⁻¹	$\frac{1}{1.5}$	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

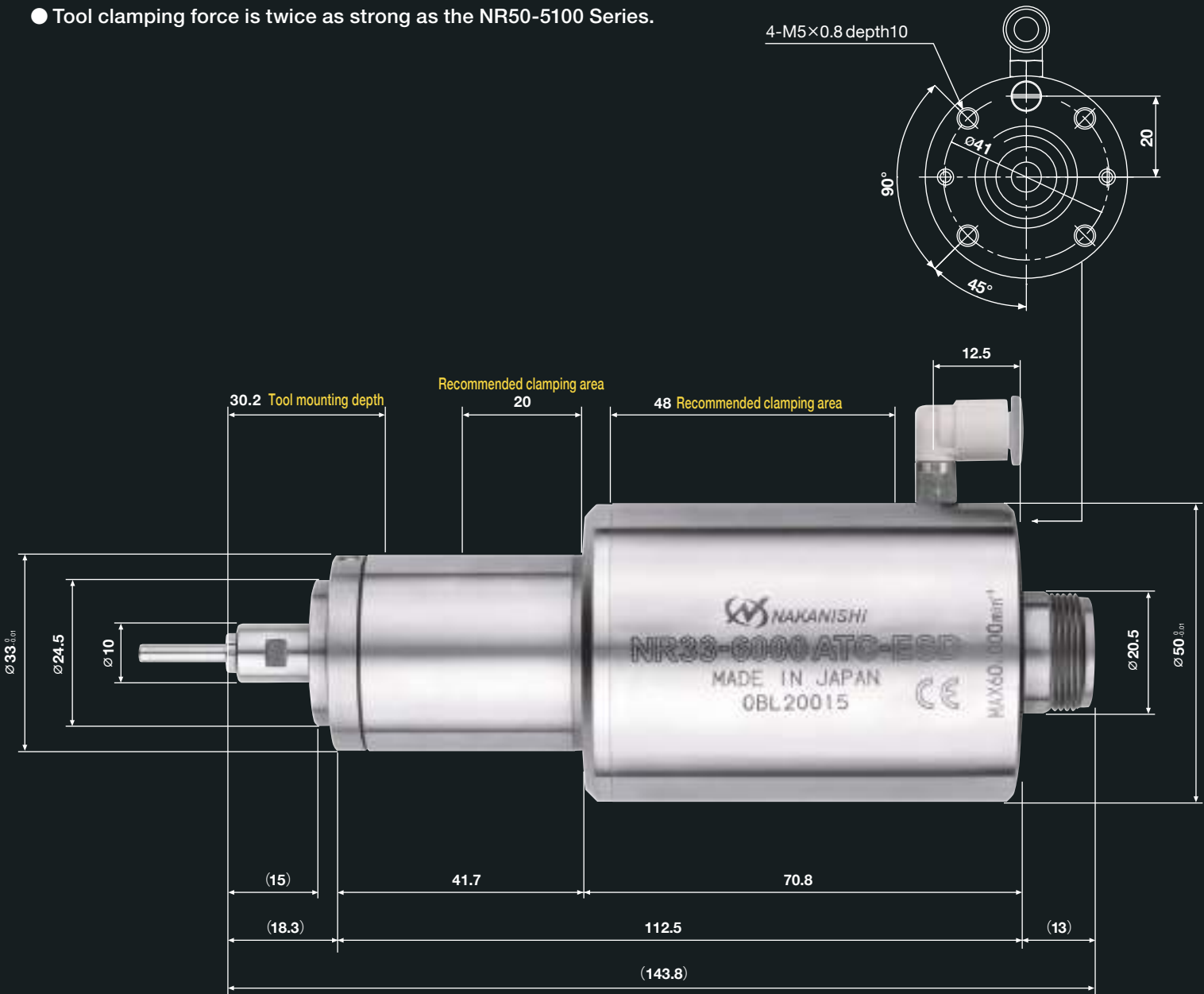
Spindle (Modular type)

Shown 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 $\phi 10 \times 15$ L 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

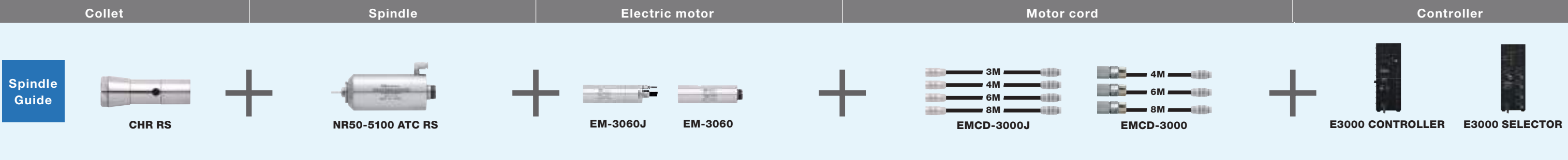
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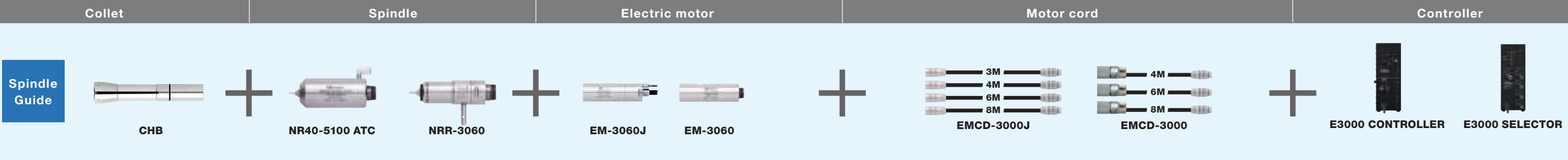
NR33-6000ATC-ESD



Code No.	7788	Model	NR33-6000ATC-ESD
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O.D.	Allowable rotation speed	Air for collet opening	Spindle Accuracy	Collet	Weight
$\phi 33$ mm / $\phi 50$ mm	60,000min ⁻¹ (Motor rotation speed)	0.55~0.6MPa	Within 1 μ m	CHB Group ($\phi 3.175$ mm)	1,170g
Standard Accessories	Collet : $\phi 3.175$ mm (CHB-3.175) / Wrench (6.1x8) · (9x11) : 1pc. each / Bar wrench (K-236) : 1pc. Air hose with filter (K-251) : $\phi 6$ mmx2m				
Options	Collet (CHB Group) : $\phi 2.0$, $\phi 3.0$, $\phi 3.175$, $\phi 3.5$, $\phi 4.0$ mm p.51				





E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

NR40-5100 ATC

Automatic tool change spindle



Specifications

DXF data DXF files are available on our website

Order by Code No.

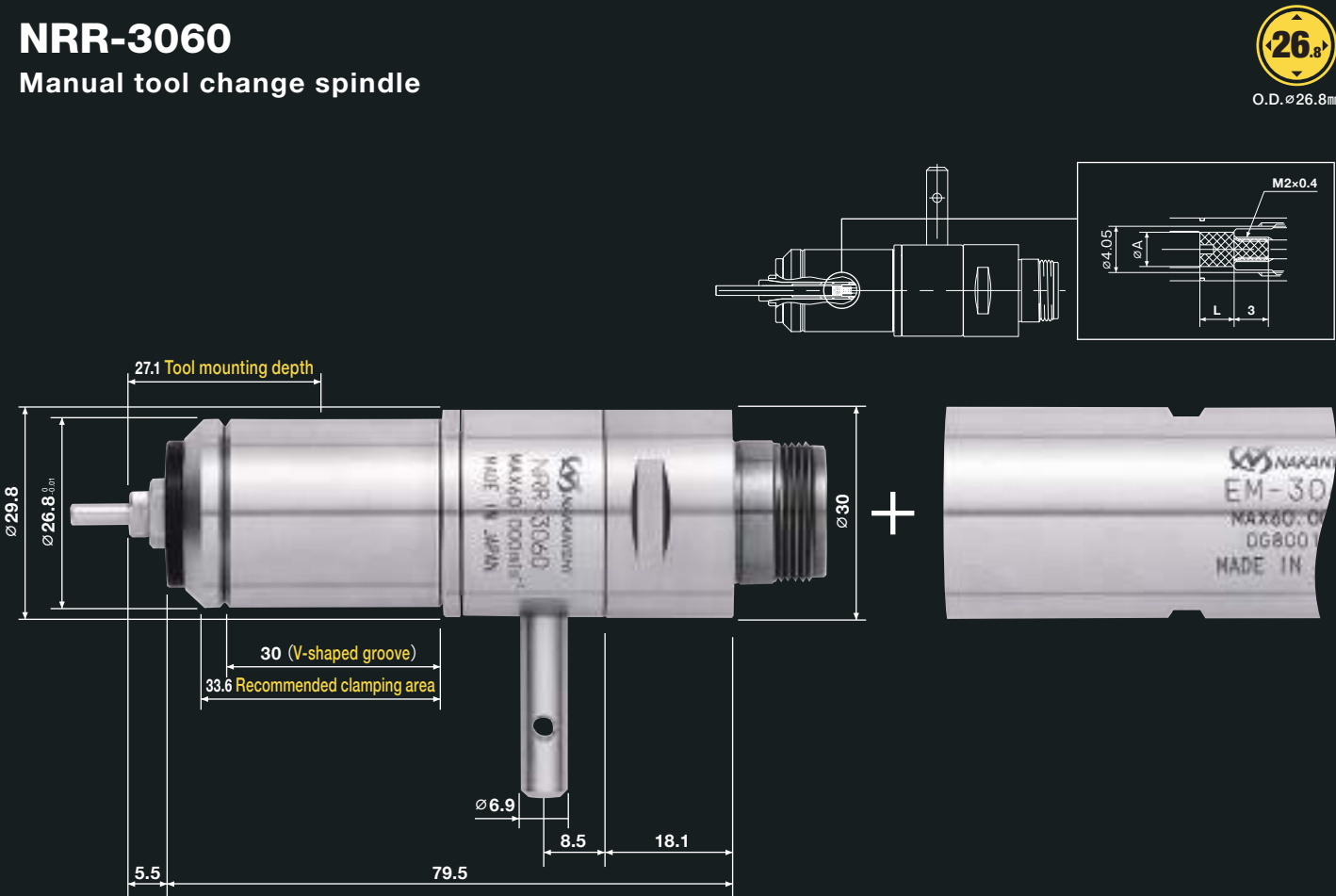
NR40-5100 ATC

Code No. 1582 Model NR40-5100 ATC

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

NRR-3060

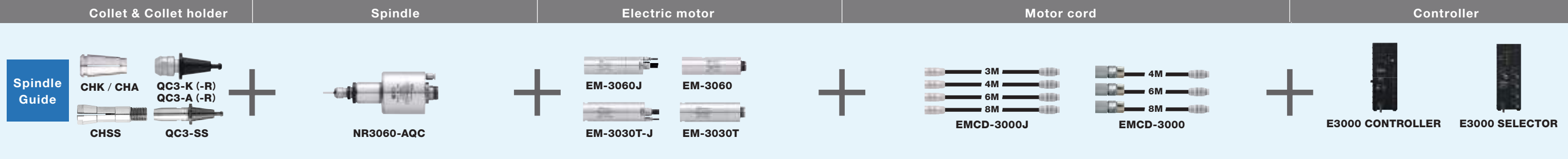
Manual tool change spindle

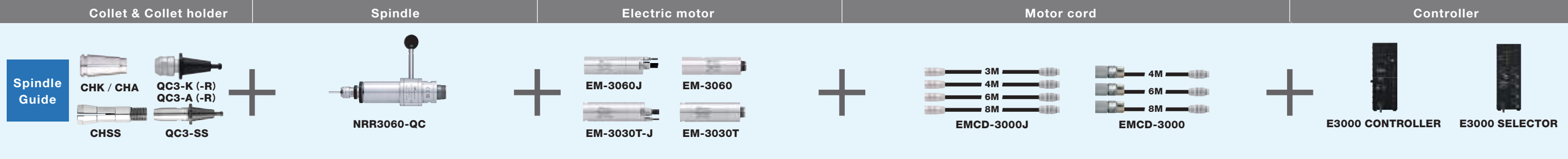


NRR-3060

Code No. 1836 Model NRR-3060

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





E3000 SERIES

Spindle (Modular type)

Shown In Actual Size

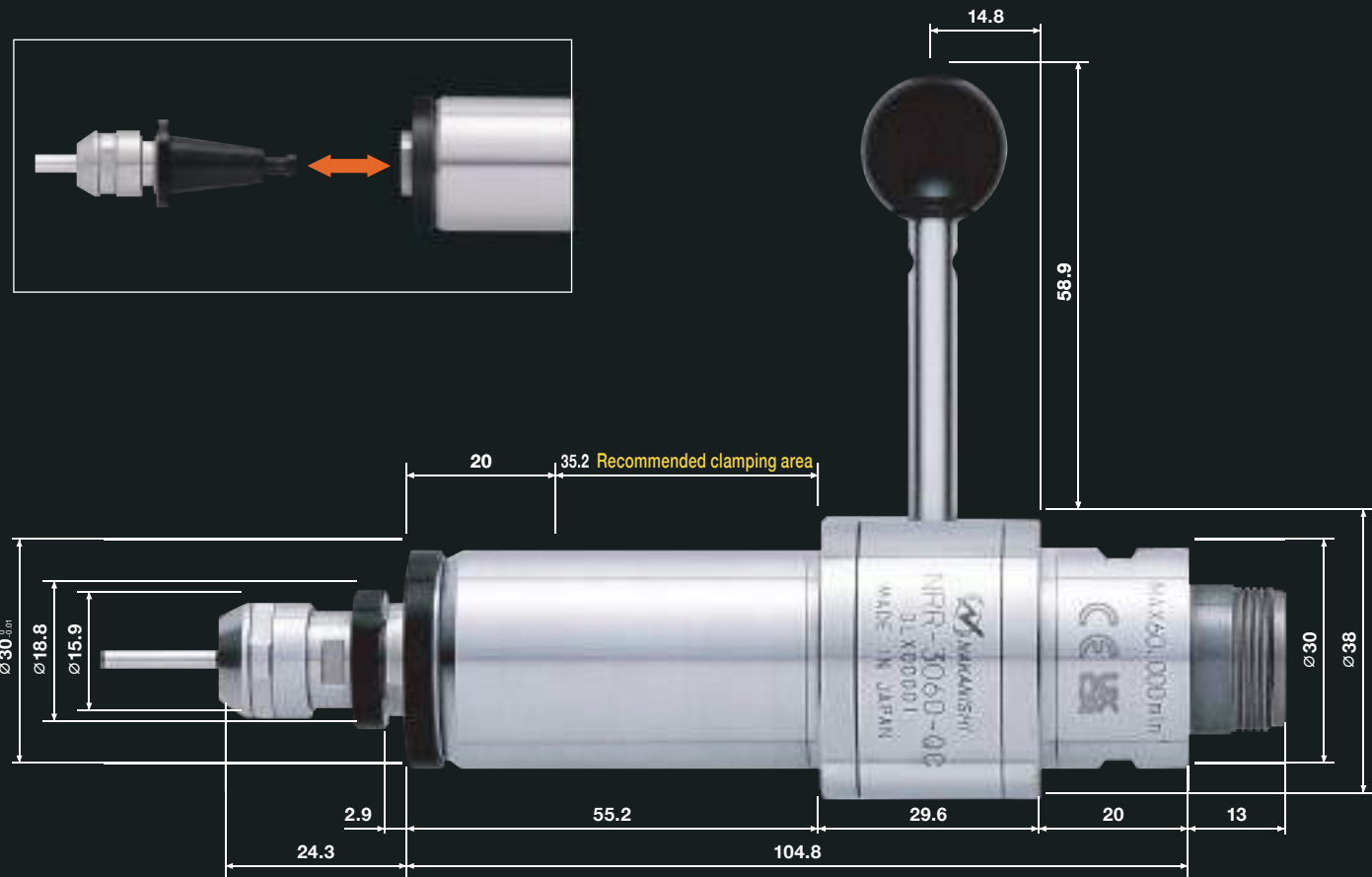
NRR3060-QC

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 $\phi 1.0 \sim 3.175\text{mm}$)

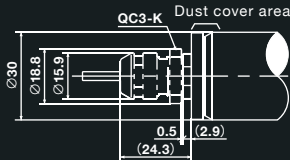
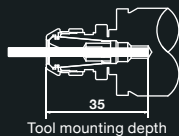


O.D. $\phi 30\text{mm}$

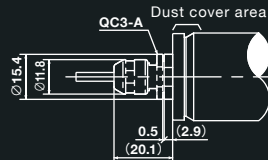
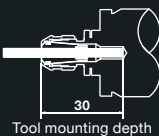


Outside view of the tip of the spindle

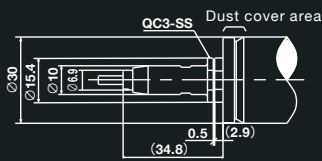
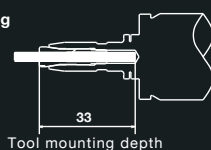
QC3-K
(Collet holder for
collet CHK)
When mounting



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
$\phi 30\text{mm}$ Recommended clamping area	60,000min ⁻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)

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

Preset adapter (For QC3 Collet holders)



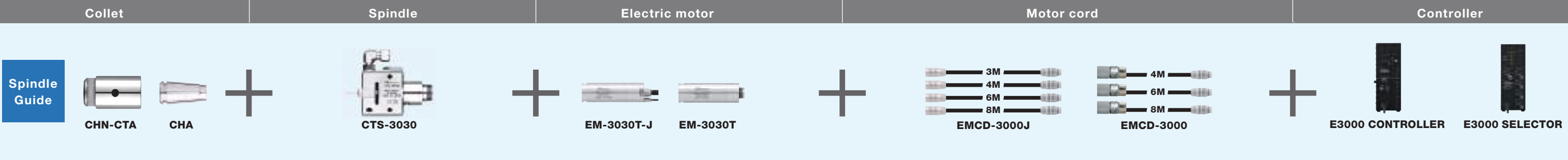
※ Holding section size is $\phi 20$.
※ QC3-K-R/QC3-A-R cannot be used
to Preset adapter.

Code No.	9211
Model	QC3-ADP

[Use below Wrenches when using Preset adapter]

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

See p.53

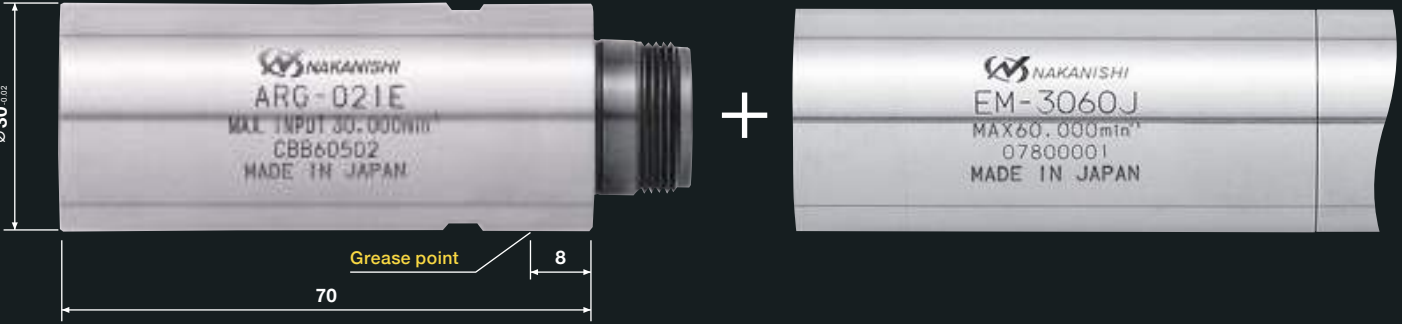


Speed Reducer (Modular type)

ARG-011E
Speed Reducer (1/4)

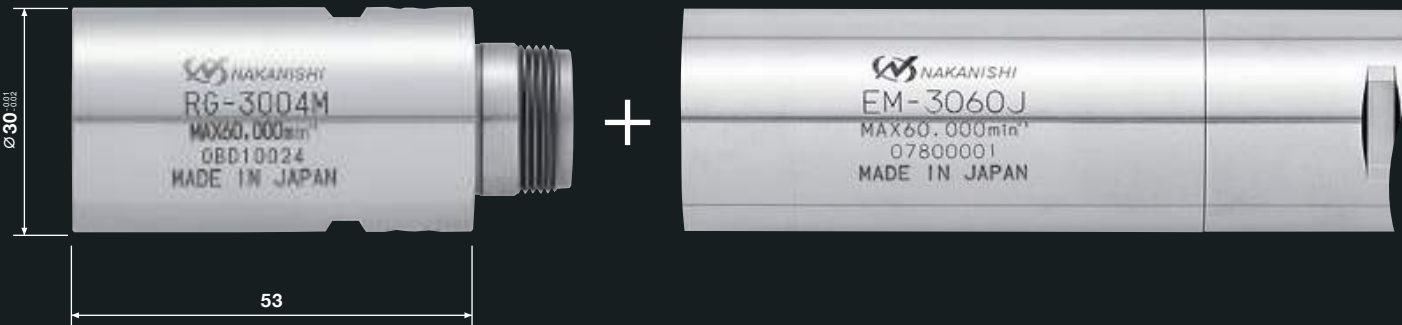


ARG-021E
Speed Reducer (1/16)



RG-3004M
Oil mist type Speed Reducer (1/4)

- 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
Ø30mm	7,500min⁻¹	$\frac{1}{4}$	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-021E



Code No. 1508 Model ARG-021E

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

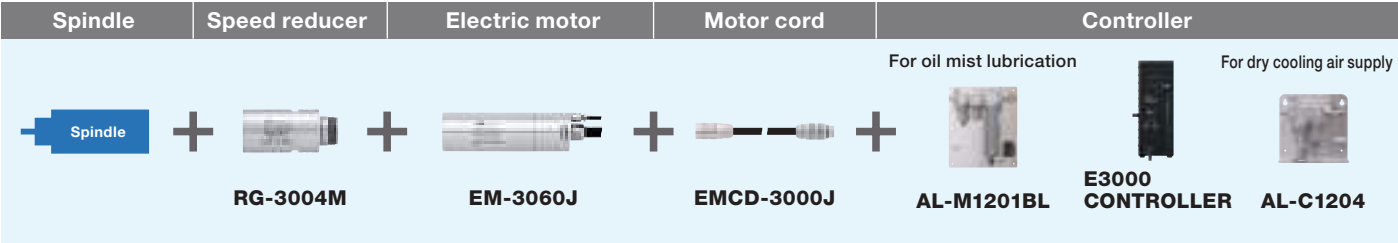
Standard Accessories Grease for reduction gear (10mℓ) / Grease nipple : 1pc.

! 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-3004M



Code No. 7348 Model RG-3004M



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

Spindle
GuideCHN-A
K-265ACHA
CHK

+

NR-3080S

NRAF-5080

+

EM-3080J

+

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

+

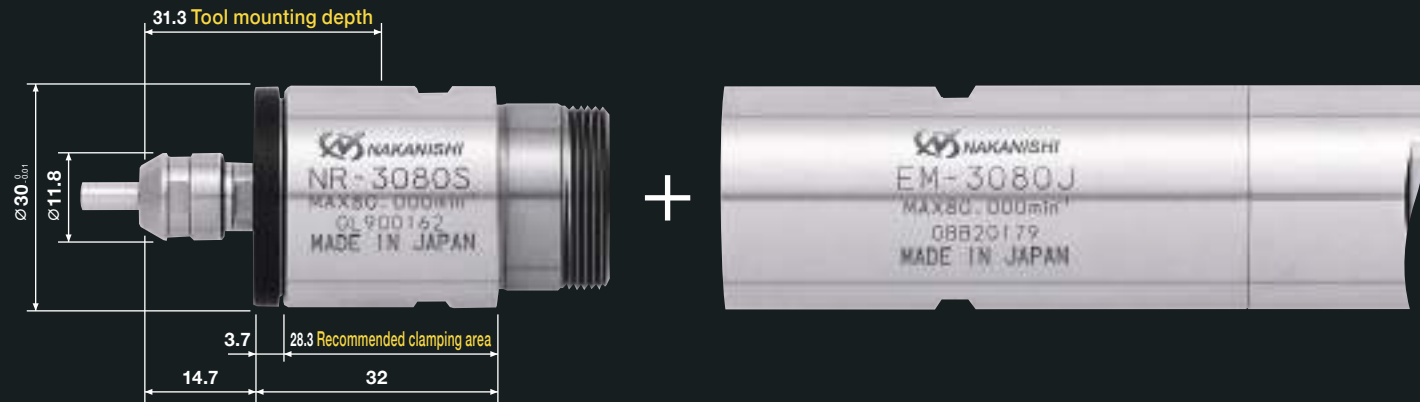
E3000 CONTROLLER

E3000 SELECTOR

E3000 SERIES

Shown In Actual Size

Spindle (Modular type)

NR-3080S
Short spindle30
O.D. ϕ 30mm

Specifications

DXF
dataDXF files are available
on our website

Order by Code No.

NR-3080S



Code No.

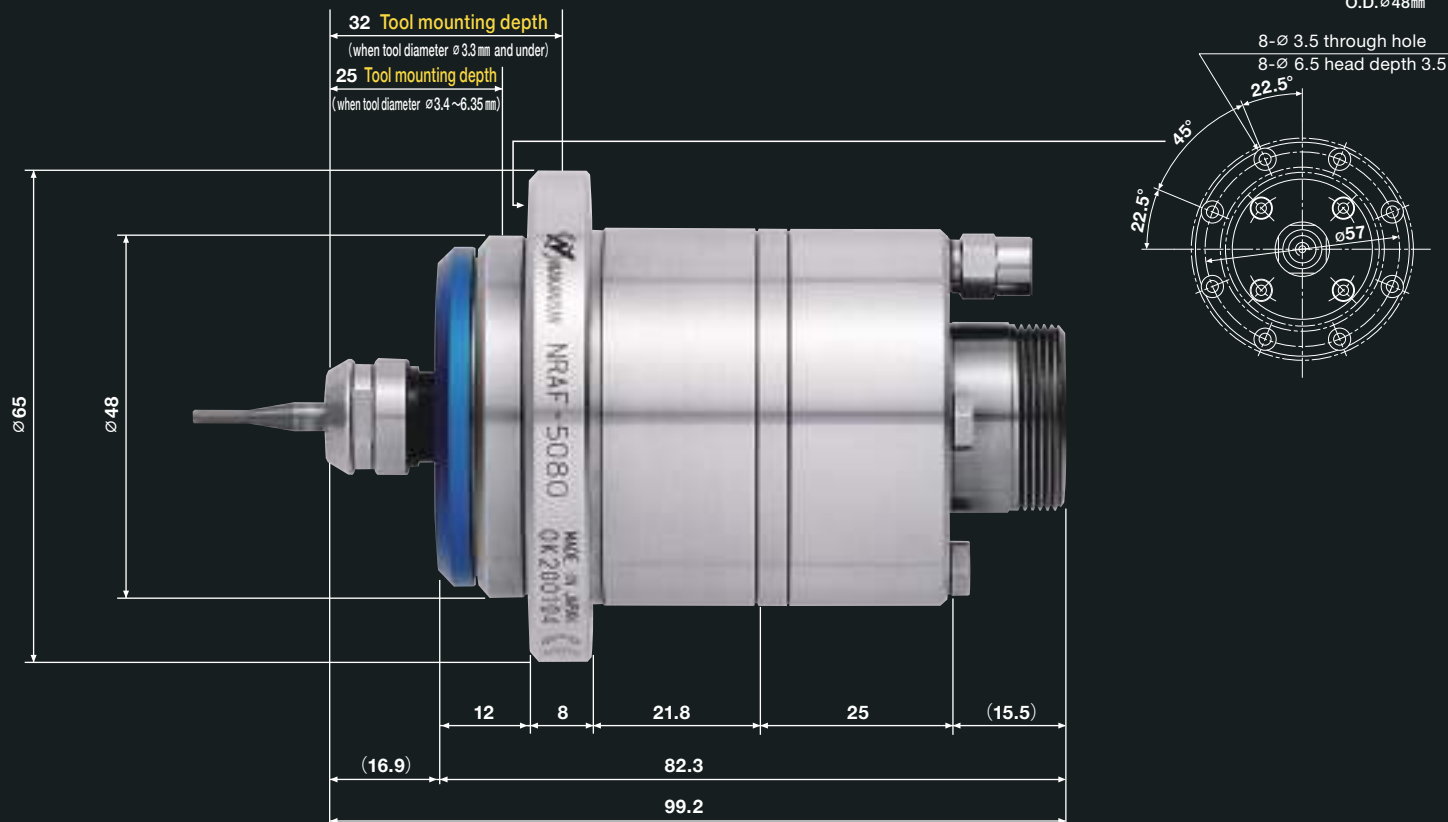
7876

Model

NR-3080S

O.D.	Max. rpm	Spindle Accuracy	Collet	Weight
ϕ 30mm	80,000min ⁻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 spindle48
O.D. ϕ 48mm

NRAF-5080



Code No.

1782

Model

NRAF-5080

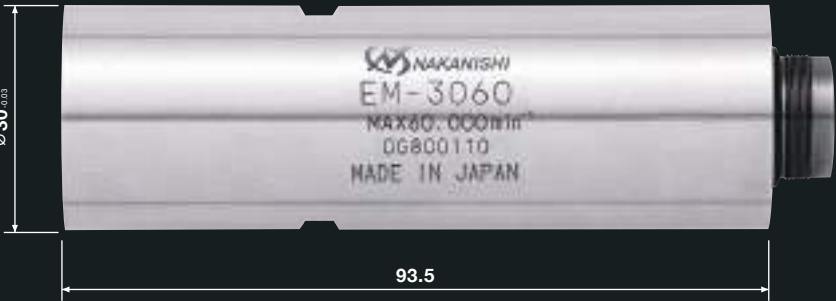
O.D.	Max. rpm	Appropriate bearing air pressure	Spindle Accuracy	Collet	Weight
ϕ 48mm	80,000min ⁻¹	35N ℓ /min (0.5MPa)	Within 1 μ m	CHK Group (ϕ 0.5 ~ ϕ 6.35mm)	810g
Specifications	Body mounting : flange mounting, M3 bolt (8 locations, equidistribution, 45° angle, PCD57) Bearing type : air static bearing / 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



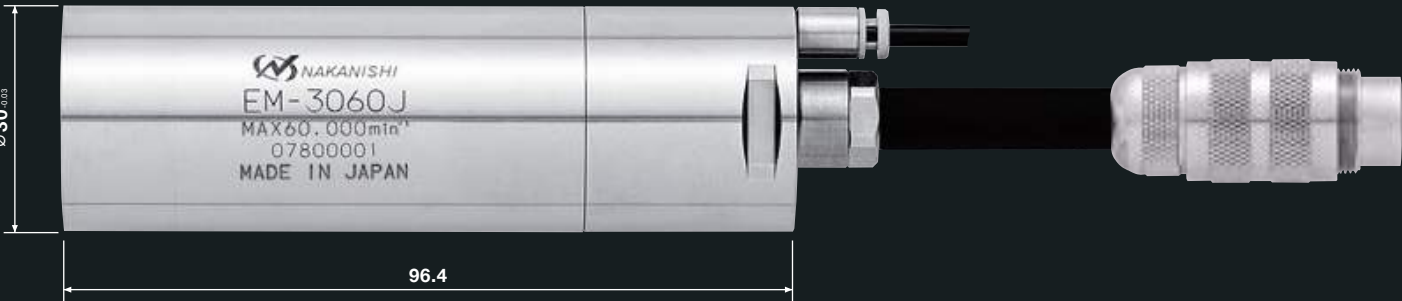
O.D.φ30mm



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



O.D.φ30mm



Cord length L=0.3m / 2m

Specifications

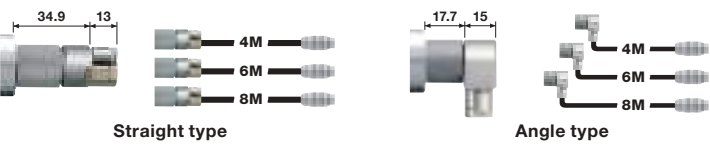
DXF data DXF files are available on our website

Order by Code No.

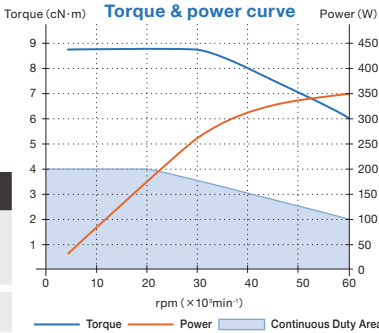
EM-3060



Code No.	1597	Model	EM-3060
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O.D.	Speed Range	Max. power	Weight
Ø30mm	1,000 ~ 60,000min ⁻¹	350w	325g
Standard Accessories	Wrench (22×27) : 1pc.		



EM-3060J

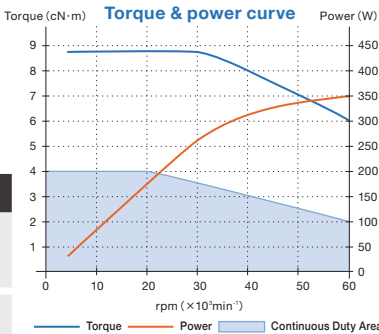


Length	0.3m	Code No.	1765	Model	EM-3060J
Length	2m	Code No.	1779	Model	EM-3060J-2M



※ Joint type motor cord is necessary.

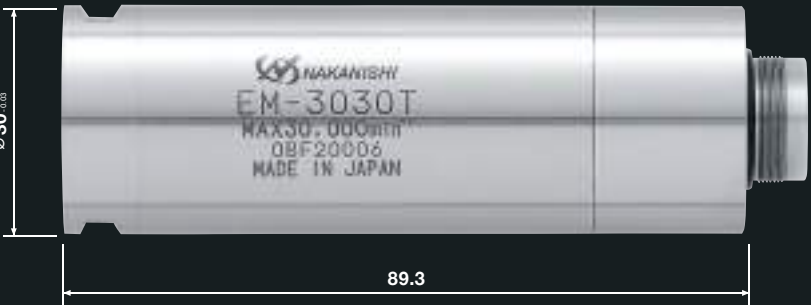
O.D.	Speed Range	Max. power	Weight
Ø30mm	1,000 ~ 60,000min ⁻¹	350w	0.3m : 360g 2 m : 525g
Standard Accessories	Wrench (22×27) : 1pc.		



Motor

EM-3030T
30,000min⁻¹ torque motor

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



O.D. Ø30mm

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

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



O.D. Ø30mm

Cord length L=0.3m / 2m

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



O.D. Ø30mm

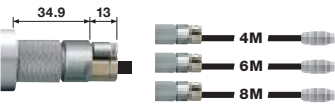
Cord length L=0.3m / 2m

Specifications

DXF data DXF files are available on our website

Order by Code No.

EM-3030T

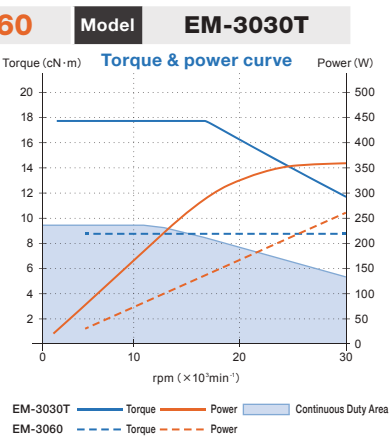


Straight type



Angle type

O.D.	Speed Range	Max. power	Weight
Ø30mm	1,000 ~ 30,000min ⁻¹	350w	350g
Standard Accessories Wrench (22×27) : 1pc.			





Old type
(Color of air output joint is white)
Controller



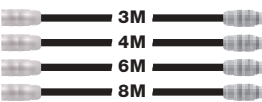
New type
(Color of air output joint is blue)
Controller

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

EM-3030T-J

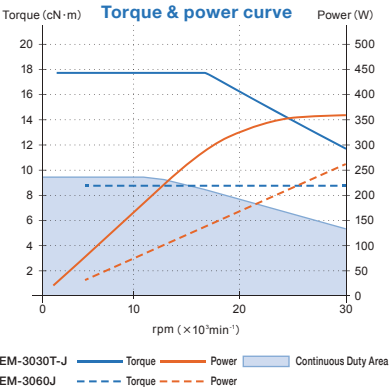


Length	0.3m	Code No.	7358	Model	EM-3030T-J
Length	2m	Code No.	7359	Model	EM-3030T-J-2M



※ Joint type motor cord is necessary.

O.D.	Speed Range	Max. power	Weight
Ø30mm	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

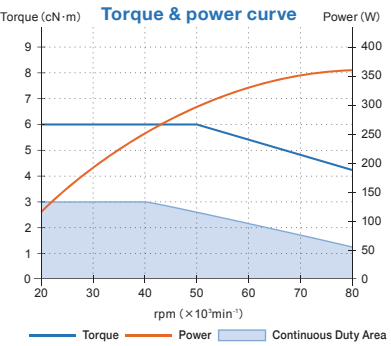


Length	0.3m	Code No.	1781	Model	EM-3080J
Length	2m	Code No.	1788	Model	EM-3080J-2M



※ Joint type motor cord is necessary.

O.D.	Speed Range	Max. power	Weight
Ø30mm	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

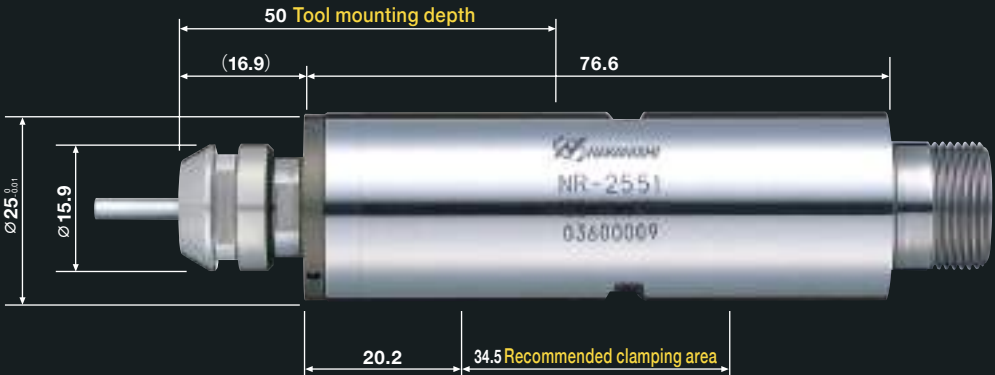
Spindle (Modular type)

Shown In Actual Size

NR-2551
Straight spindle



O.D. ϕ 25mm



EM25N-5000J
50,000min⁻¹ motor



O.D. ϕ 25mm



Cord length L=0.3m

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

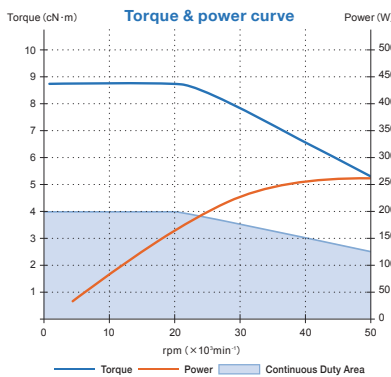
Model

EM25N-5000J

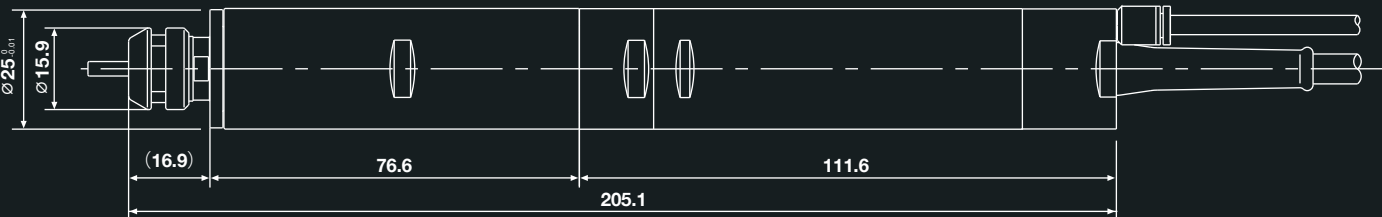


O.D.	Speed Range	Max. Power	Weight
ϕ 25mm	1,000 ~ 50,000min ⁻¹	250w	335g
Standard Accessories	Wrench (22×27) : 1pc.		

※ Use EMCD-2350J Series for Motor code.



Dimensions when connected



Motor cord

Motor cord	Cord No.	Model	Model	Standard Accessories	Compatible model
	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)



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)

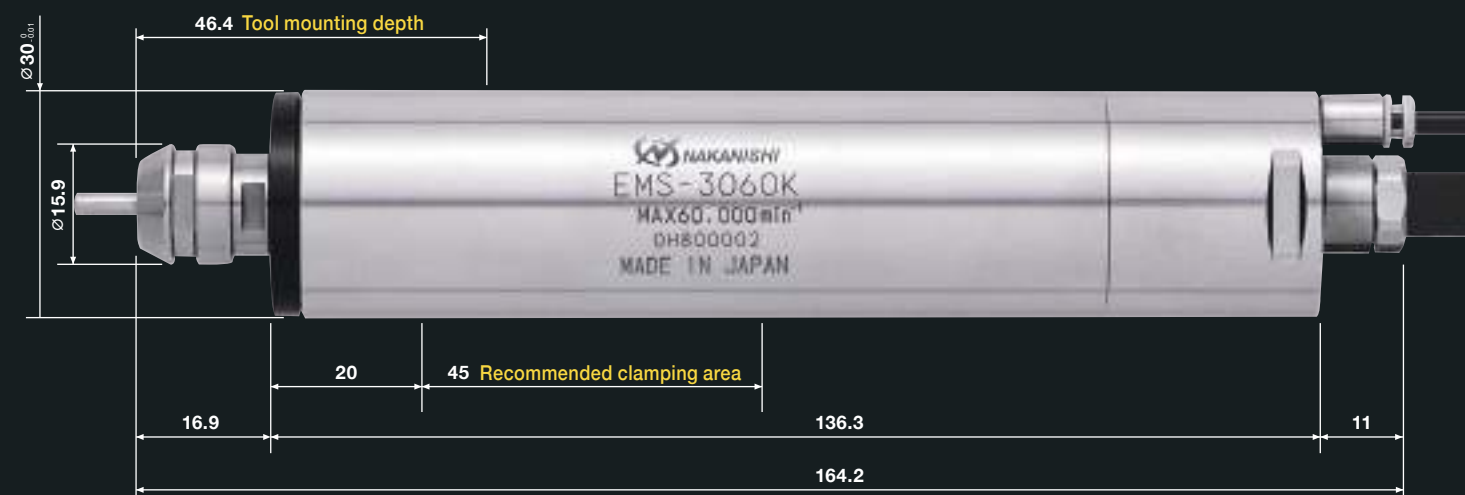
EMS-3060K

ø30 Motor spindle

CHK collet·30cm joint cord



O.D. ø30mm



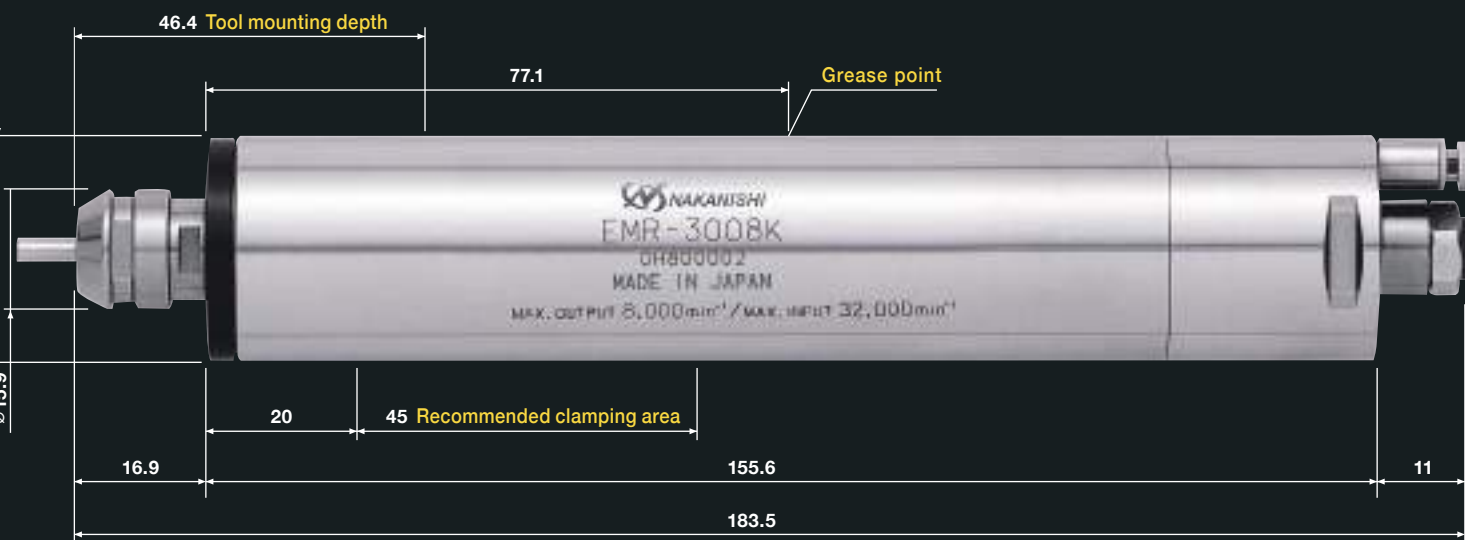
Cord length L=0.3m

EMR-3008K

Motor spindle with reduction gear



O.D. ø30mm



Cord length L=0.3m

Specifications

DXF
dataDXF files are available
on our website

Order by Code No.

EMS-3060K



Code No.

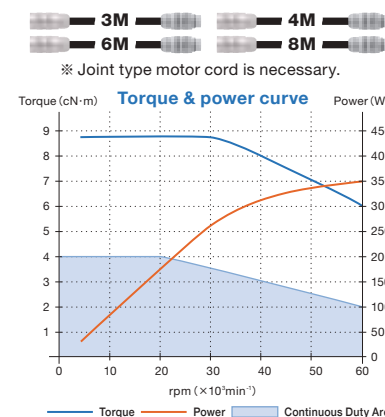
7862

Model

EMS-3060K

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

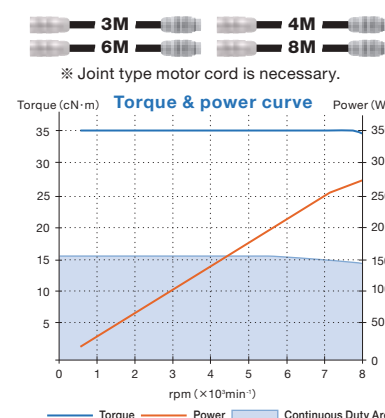
7869

Model

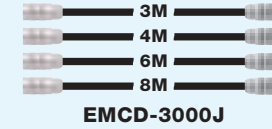
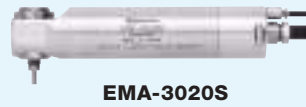
EMR-3008K

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
ø30mm	8,000min ⁻¹	$\frac{1}{4}$	32,000min ⁻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	

※ Collet is sold separately.



! 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.



E3000 CONTROLLER

E3000 SELECTOR

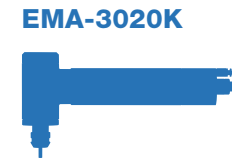
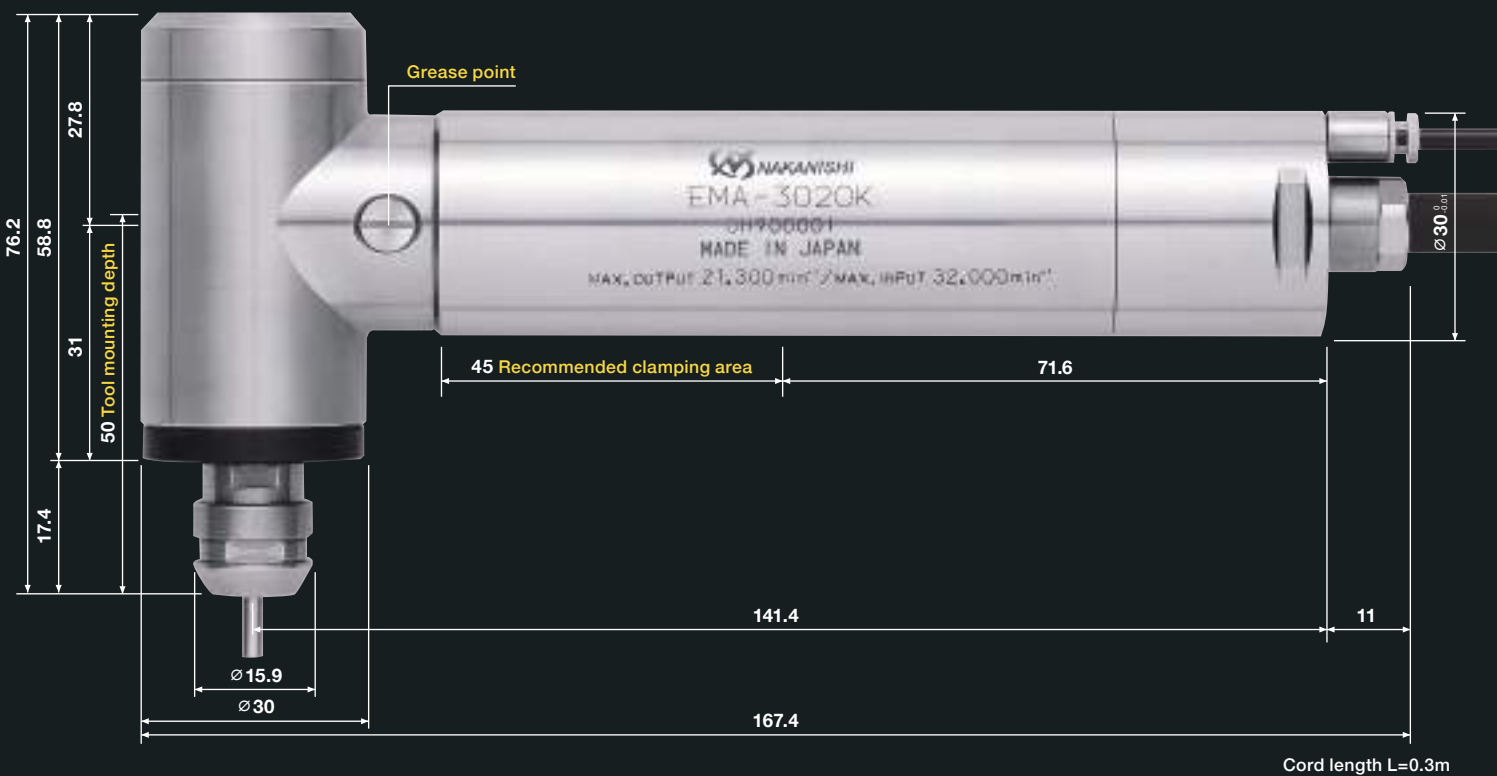
E3000 SERIES

Shown In Actual Size

Motor spindle (One-piece type)

EMA-3020K

Angle motor spindle
Standard angle head

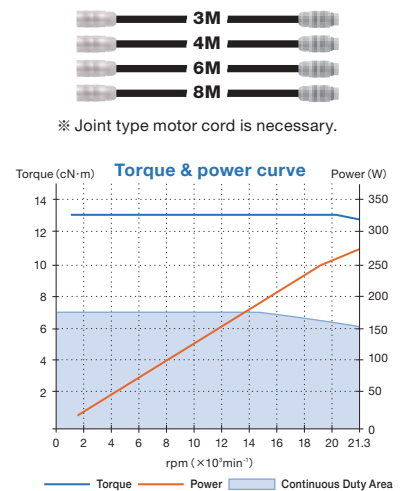


O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
Ø30mm	21,300min ⁻¹	$\frac{1}{1.5}$	32,000min ⁻¹
Spindle Accuracy	Collet	Max. power	Weight
Within 2μm	CHK Group (ø0.5 ~ ø6.35mm)	280w	760g
Standard Accessories	Collet nut (K-265) / Wrench (12×14) : 2pcs.		
	Grease for Speed reducer (10mℓ) / 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		

※ Collet is sold separately.

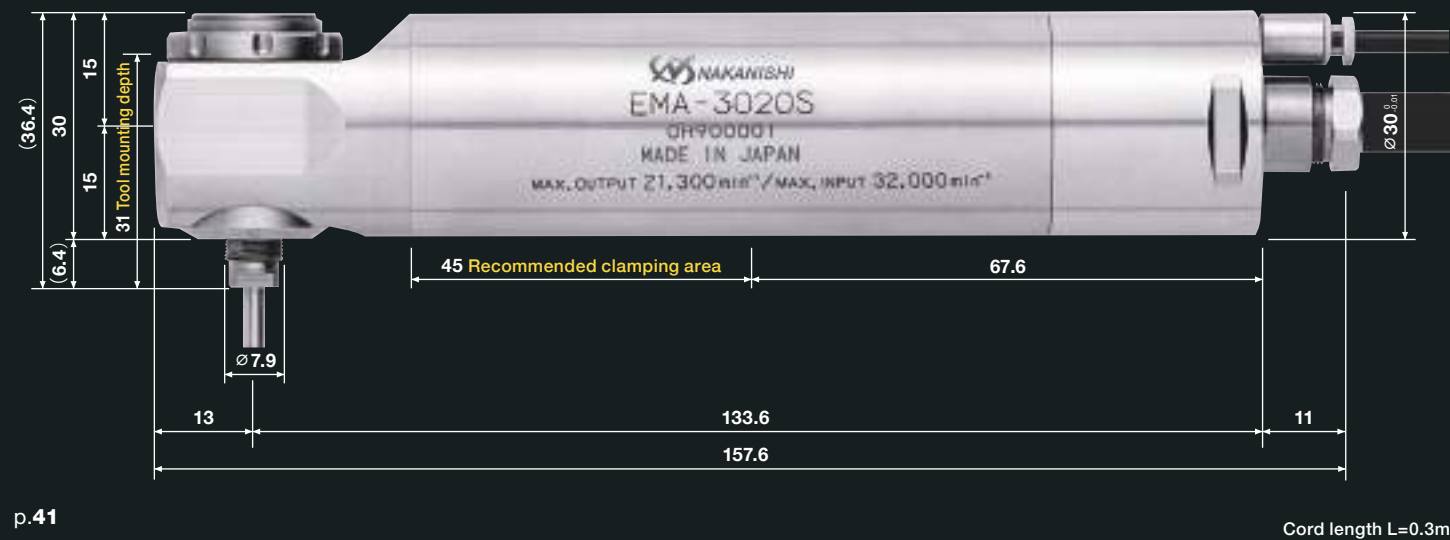


Put grease every 70 to 100 hours to extend the life of the Speed reducer.
Grease-up prevents friction of the internal gears and degradation of the existing grease in the reducer.

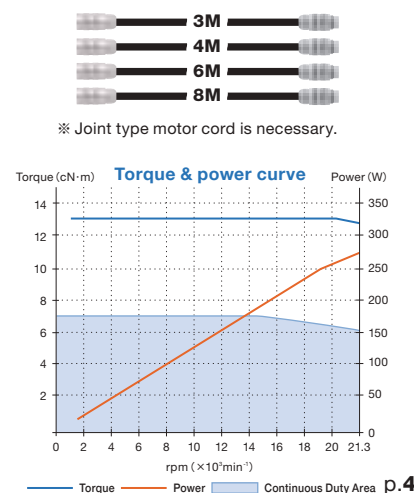


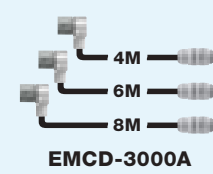
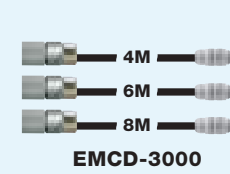
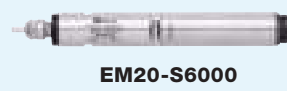
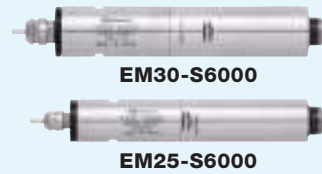
EMA-3020S

Angle motor spindle
Built-in angle head



O.D.	Max. speed at the cutting tool	Reduction ratio	Max. rpm
Ø30mm	21,300min ⁻¹	$\frac{1}{1.5}$	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)		



Spindle
Guide

E3000 SERIES

Shown In Actual Size

Motor spindle (One-piece type)

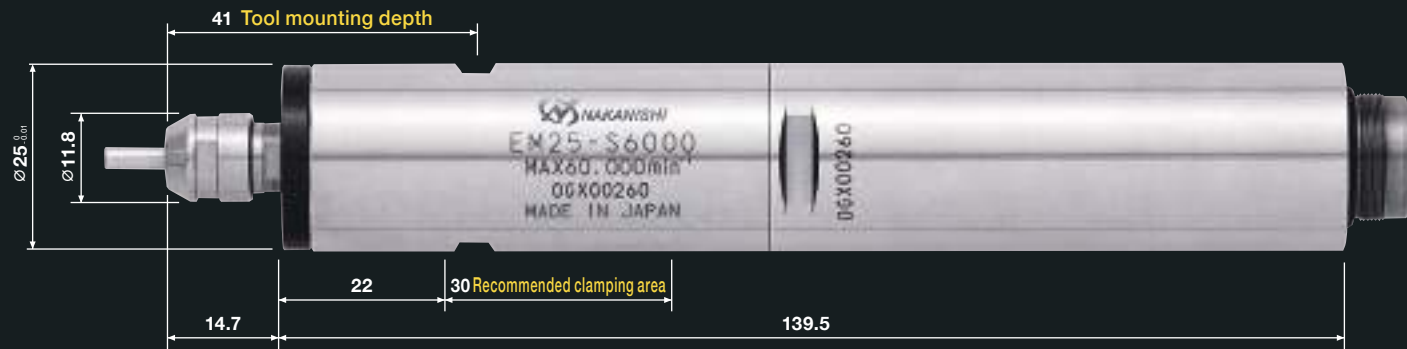
EM30-S6000

ø30 Moter spindle · CHK collet



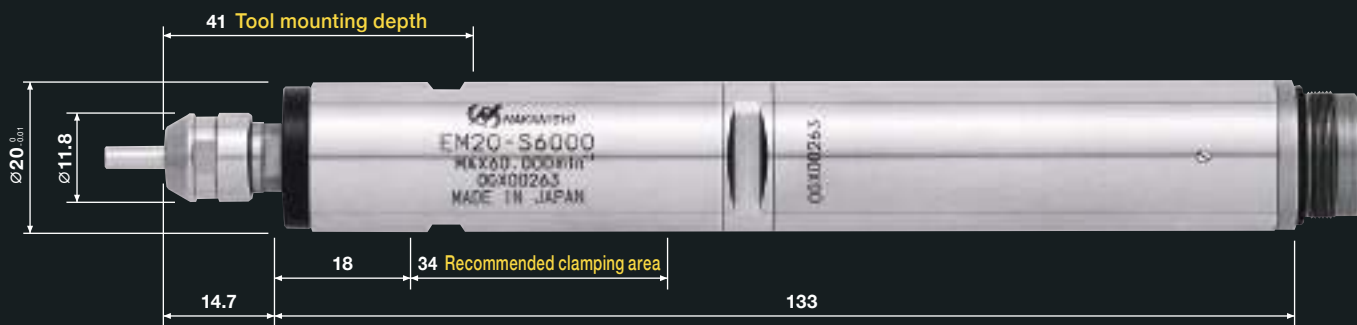
EM25-S6000

ø25 Moter spindle · CHA collet



EM20-S6000

ø20 Moter spindle · CHA collet



Specifications

DXF
dataDXF files are available
on our website

Order by Code No.

EM30-S6000



Code No.

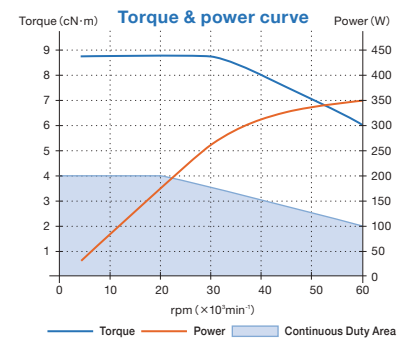
7903

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.

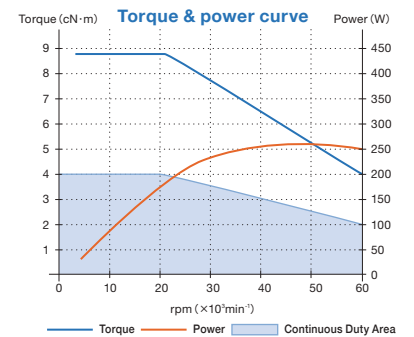
7858

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.

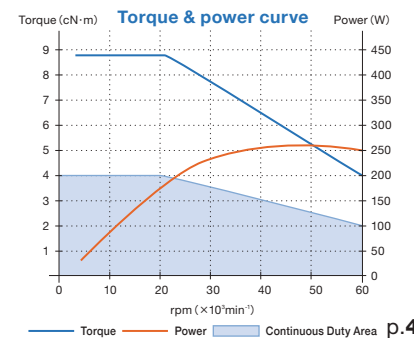
7860

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

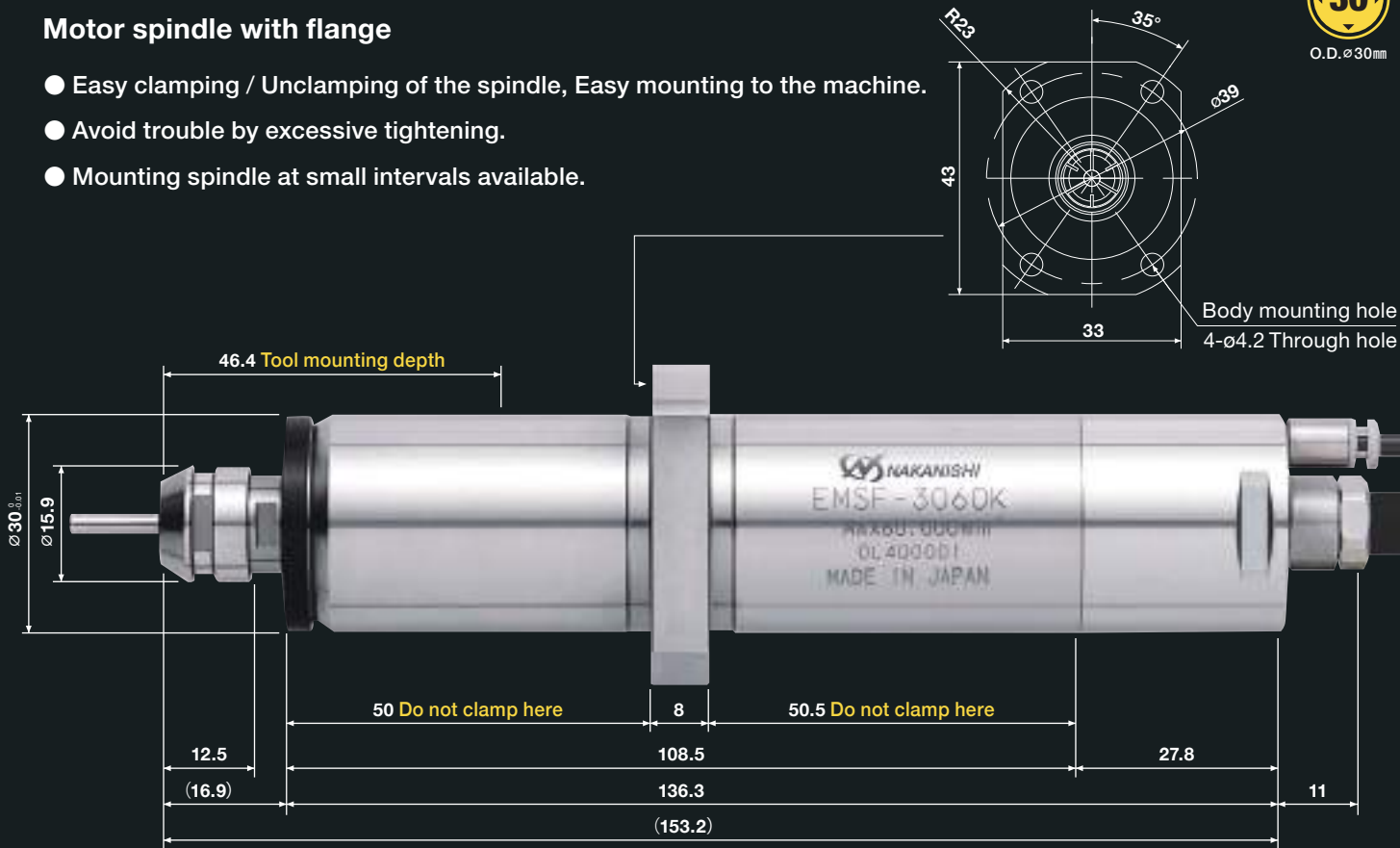
Shown In Actual Size

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 30mm

Cord length L=0.3m

Specifications

DXF
dataDXF files are available
on our website

Order by Code No.

EMSF-3060K



Code No.

7863

Model

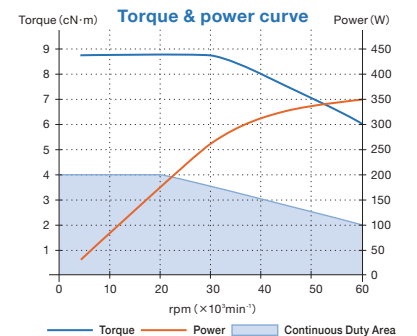
EMSF-3060K

O.D.	Max. rpm	Spindle Accuracy	Collet
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

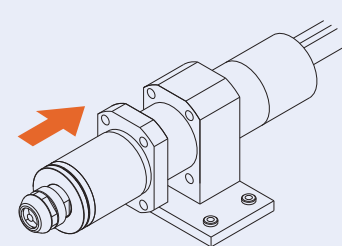
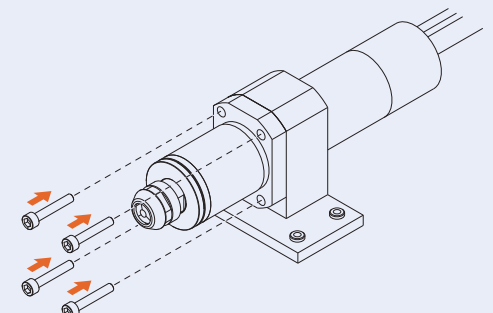
Type of usage for attachment to straight spindle
Grip Ring TS available

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 holder2 Tighten the flange with
4 lock bolt (M4)

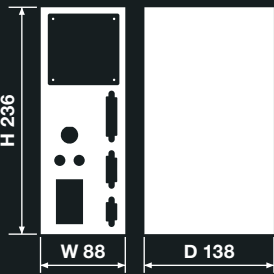
※Above figures show EMSF-3060K. NRF-3060S has 3 mounting holes (See p.9)

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

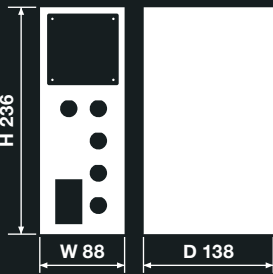
Speed Range	
1,000~80,000min ⁻¹	
Input Voltage	
AC100~240v Without plug Multiple output power	
Max. power	Power consumption
350w	AC1.8A
Air consumption	Weight
30Nℓ/min (at 0.25~0.3MPa)	2.8kg
Standard Accessories	
Power cord : 2m / Air hose with filter (K-251 : 2058)	
Reducer / Connector cap (Included)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

E3000 Selector



E3000 SELECTOR
Selector

Code No. **8426**

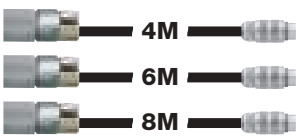
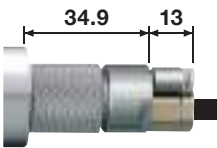


Number of motor		
4pcs. Up to 4 motors to control with connecting selector to controller ※not simultaneously		
Input Voltage		
AC100~240v Without plug Multiple output power		
Power consumption	Air consumption	Weight
AC0.15A	120ℓ/min (When connecting 4 motors)	1.9kg
Standard Accessories		
Power cord :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

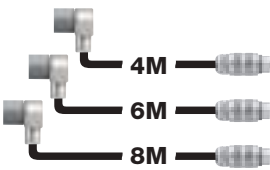
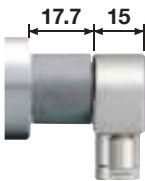
[Feature] Connection at the body end



コード番号	型 式	コード長さ	標準装備・付属品	対応機種
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

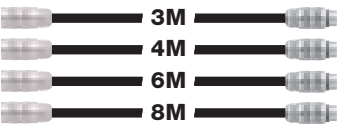
[Feature] Connection at the body end into 90° degree



コード番号	型 式	コード長さ	標準装備・付属品	対応機種
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	対応機種
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

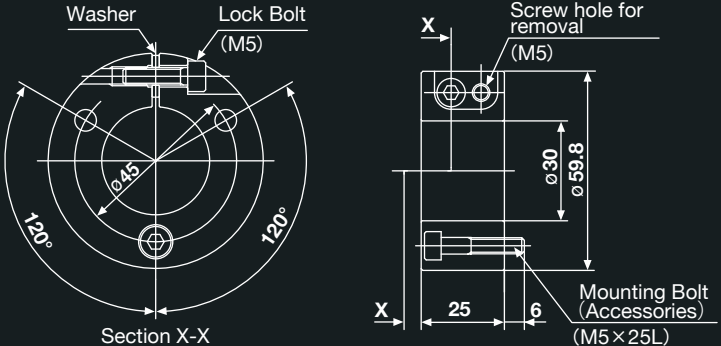
Air line kit (for NRAF-5080)
0.01μm filter



Code No. 1548 Model AL-A0611

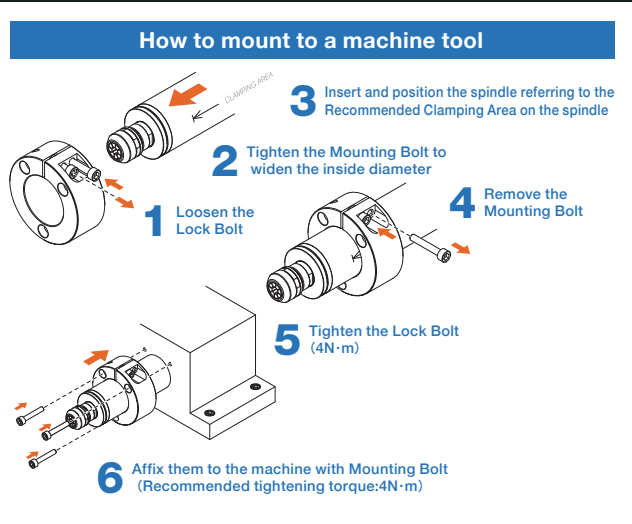
※ 1 Recommendation of nominal filtration rating : 0.3μm, Pressure range : 0.1-1.0MPa Recommendation of air filter : M2000-WS (CKD)
※ 2 Customers to provide their own micro-mist separator (filtration rating 0.01 um)

GR-30
Grip Ring

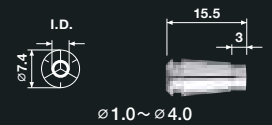


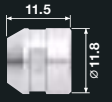
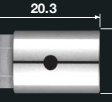
Code No. 1885 Model GR-30

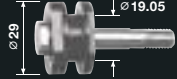
Standard Accessories Mounting Bolt (GR-30) M5×25 : 3pcs.



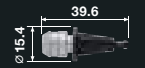
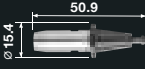
Accessories (Collet, etc.)

Collet	Code No.	Model	I.D.	Compatible model
 Collet CHA Group	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	
	—	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	
 Collet CHB Group	92820	CHB-2.0	ø2.0	NR40-5100 ATC NRR-3060・NRR-2651 NR33-6000ATC-ESD
	92830	CHB-3.0	ø3.0	
	92893	CHB-3.175	ø3.175	
	92835	CHB-3.5	ø3.5	
	92840	CHB-4.0	ø4.0	
 Collet CHK Group	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	
	91596	CHK-6.35	ø6.35	
	—	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	
 Collet CHR Group	91930	CHR-3.0	ø3.0	NR50-5100 ATC
	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	
 Collet CHR RS Group	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	
 Collet CHS Group	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 ø2.35	
 Collet CHSS Group	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	
 Collet CH8 Group	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	RA-151E
	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	EMA-3020K · EMS-3060K EMR-3008K NR-3060S · NRF-3060S NR-3060 · RAS-151E RAX-71E · RAX-271E
	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		EMS-3060K · EMR-3008K NR-3060S · NRF-3060S NR-3060 · NR-403E

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)	NR3060-AQC NRR3060-QC
	9223	QC3-K-R		
	9209	QC3-A	Collet holder for CHA ※ With CHN-A (Collet nut)	
	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
	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	NR-3060S・NR-3060・NR-403E
	1881	RB-30×36	ø36 Bush Dimensions : ø30×ø36×45mm	

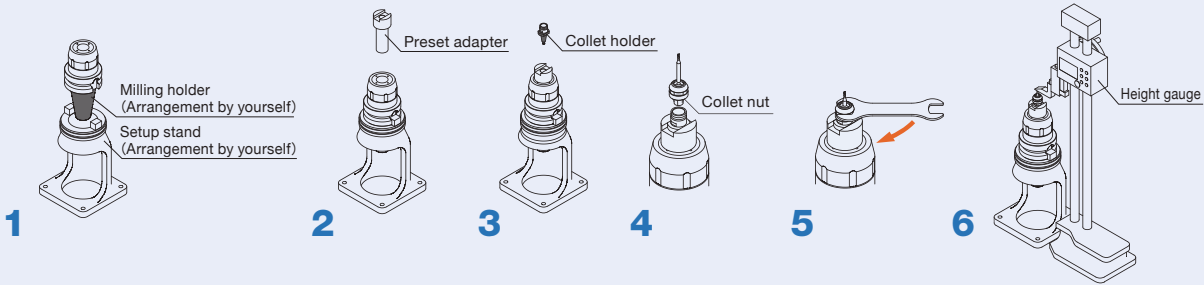
Accessories

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

For QC3-K/A

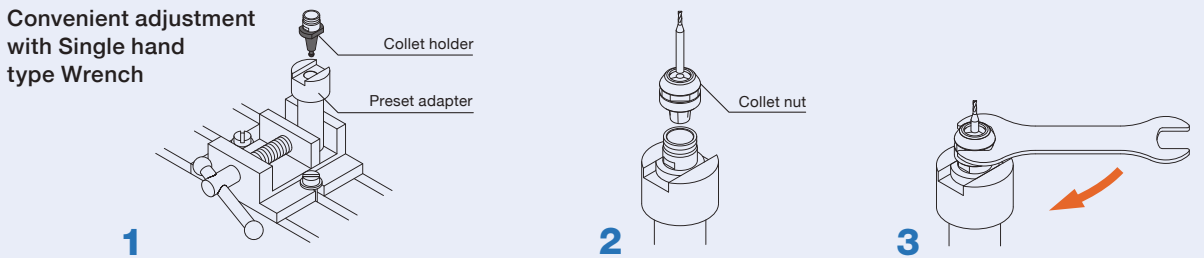
Set-up outside machines

In case using a milling holder



Set-up outside machines

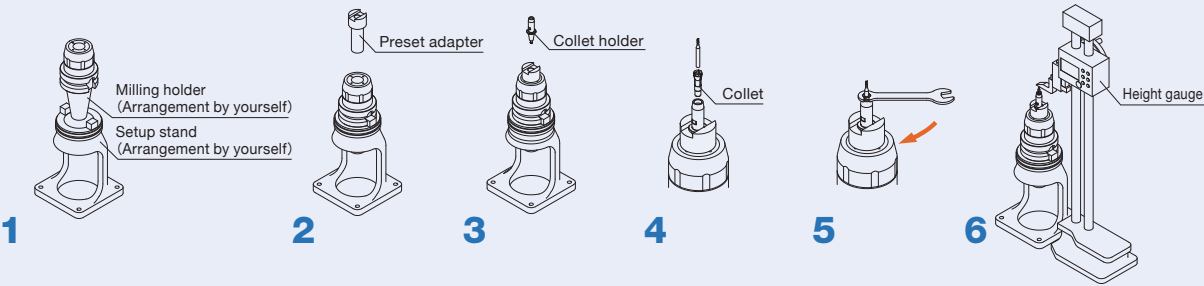
In case using a vice



For QC3-SS

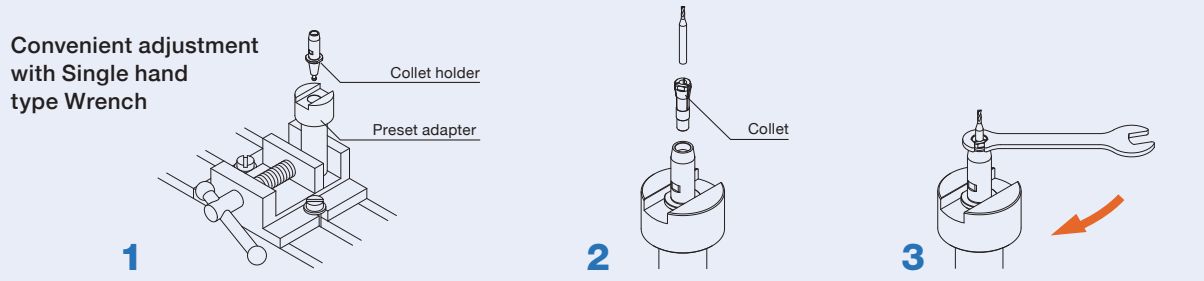
Set-up outside machines

In case using a milling holder



Set-up outside machines

In case using a vice



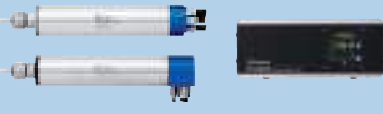
NAKANISHI Solutions LINE UP

Electric Motors & Spindles
Brushless Motors & Spindles



Application for CNC lathes / Special purpose machines

E4000 SERIES
1,000~40,000min⁻¹ Max.1,200W
[$\phi 40\text{mm}$]



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

Application for machining centers and milling machines

E3000 SERIES
1,000~80,000min⁻¹ Max.350W
[$\phi 30/25/20\text{mm}$]



- 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]



[HES810]

- 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
[$\phi 22.8\text{mm}$]



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

iSpeed3 SERIES
1,000~80,000min⁻¹ Max.150W
[$\phi 19.05/20/22\text{mm}$]



- Super short motor spindle
- High efficiency brushless motor

[HESS10]

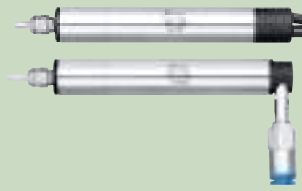
- 50,000min⁻¹, 8.75cN·m
- BT, NT, CAT, IT, HSK A, ST shanks are available
- Driven by E3000 Controller

Air Motors & Spindles



Application for CNC lathes / Special purpose machines

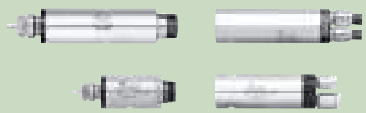
Air-Speed SERIES One-piece type
Max.30,000min⁻¹ Max.130W
[$\phi 25/23/20/19.05\text{mm}$]



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

Application for machining centers and milling machines

Air-Speed SERIES Modular type
Max.30,000min⁻¹ Max.130W
[$\phi 30/25/22.8\text{mm}$]



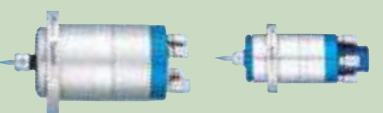
- Separate motor and spindle for flexible application changes
- Adjustable to various application through changing spindles

Air Turbine Spindles



Application for CNC lathes / Special purpose machines

Xpeed SERIES
Max.160,000min⁻¹
[$\phi 65/40\text{mm}$]



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

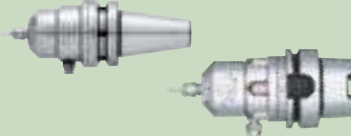
Application for machining centers and milling machines

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