



# E2000



# E2000 SERIES

HIGH-SPEED ROTATION & HIGH PRECISION

## The First Step to Automation

**Automates light cutting and fine deburring**

### **φ22.8 mm Spindle**

- Max. power: **200 W**    • Max. motor speed: **50,000 min<sup>-1</sup>**
- Suitable for light cutting and fine deburring automation

### **Brushless motor**

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



E4000

E3000

E2000

1-Speed3

Air-Speed

HES

TURBINES

ACCESSORIES

NAKANISHI  
NR-311  
MADE IN JAPAN  
CBF31196  
CE

NAKANISHI  
NR-303  
MADE IN JAPAN  
OH200983  
CE

NAKANISHI  
AMH-301  
MADE IN JAPAN  
BBF10830  
MAX30,000min<sup>-1</sup>  
CE

NAKANISHI  
RA-100  
MADE IN JAPAN  
OBF84351  
CE





LAMPING AREA →

MAX30,000min<sup>-1</sup>




MAX20,000min<sup>-1</sup>

# Index

## Straight type spindle

NR-303 .....		p. 3-5
NR-2351 .....		p. 3-5
NR-311 .....		p. 3-7
AMH-301 .....		p. 3-7

## Angle type spindle

RA-100 .....		p. 3-9
RA-200 .....		p. 3-9
RAS-101 .....		p. 3-11

## Motor

EM-2350J .....		p. 3-13
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1,000–50,000 min<sup>-1</sup>

## Speed reducer

ARG-01 .....		p.3-13	ARG-02 .....		p. 3-13
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Speed reducer (1/3.92)      Speed reducer (1/15.39)

## Controller

E2280 CONTROLLER .....		p. 3-15
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## Motor cord

EMCD-2350J .....		p. 3-16
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[ Length ] 4 m, 6 m, 8 m

# System Chart

[E2000]

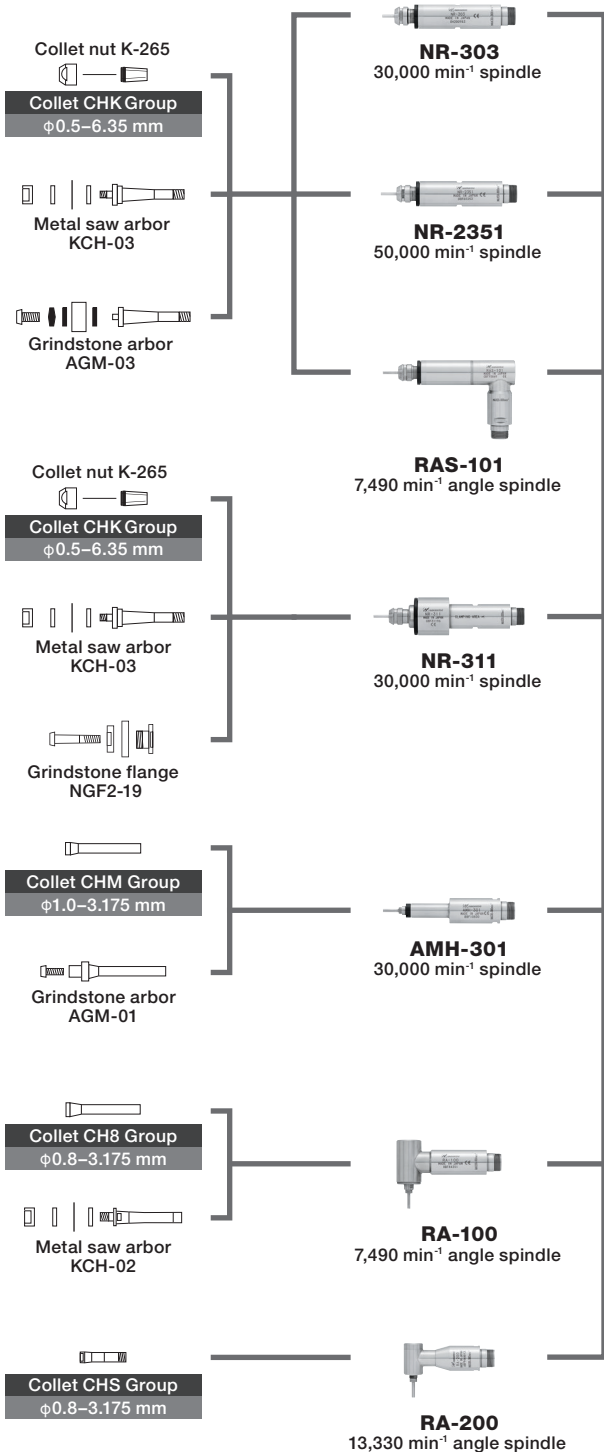


\*GR-22.8 cannot be used with NR-311.



**GR-22.8**  
Grip ring

\*See p. 8-9

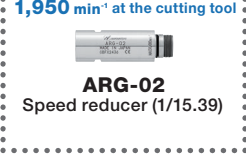
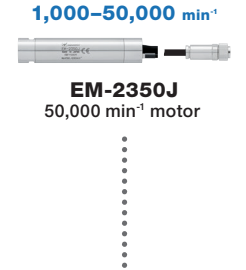


**COMBOX-NET.EIP**  
Network interface

\*See p. 8-13 and 8-14



**E2280 CONTROLLER**  
Controller



**AL-C1204**  
Air line kit  
\*Clean dry air can be provided to controller and motor for cooling and purging.

**Air compressor**

E4000  
E3000  
E2000  
iSpeed3  
Air-Speed  
HES  
TURBINES  
ACCESSORIES

Spindle  
Guide

CHK



NR-303



NR-2351



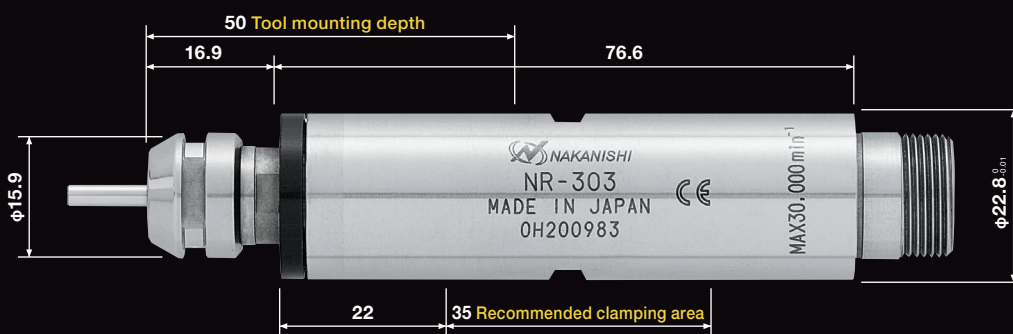
EM-2350J

E2000 SERIES

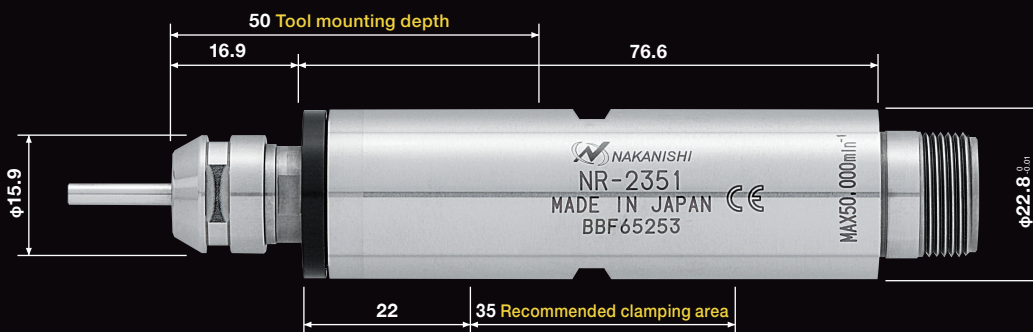
Shown In Actual Size

## Straight type spindle

## NR-303

O.D.  $\phi 22.8$  mm

## NR-2351

O.D.  $\phi 22.8$  mm

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

E2280 CONTROLLER



AL-C1204

Order by Code No.

# Specifications

**CAD drawings**

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

## NR-303



Code No.

**7861**

Model

**NR-303**

O.D.	Allowable motor speed	Spindle accuracy	Collet	Net weight
$\phi 22.8$ mm	<b>30,000</b> min <sup>-1</sup>	Within <b>2</b> $\mu$ m	<b>CHK Group</b> ( $\phi 0.5$ – $\phi 6.35$ mm)	<b>215</b> g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. · (20 × 24): 1 pc. <b>*Collet is sold separately.</b>			
Options	Collet (CHK Group): $\phi 0.5$ – $\phi 6.35$ mm <b>p. 8-5</b>			
	Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) <b>p. 8-12</b>			

## NR-2351



Code No.

**7855**

Model

**NR-2351**

O.D.	Allowable motor speed	Spindle accuracy	Collet	Net weight
$\phi 22.8$ mm	<b>50,000</b> min <sup>-1</sup>	Within <b>1</b> $\mu$ m	<b>CHK Group</b> ( $\phi 0.5$ – $\phi 6.35$ mm)	<b>215</b> g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. · (20 × 24): 1 pc. <b>*Collet is sold separately.</b>			
Options	Collet (CHK Group): $\phi 0.5$ – $\phi 6.35$ mm <b>p. 8-5</b>			
	Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) <b>p. 8-12</b>			

E4000

E3000

E2000

iSpeed3

Air-Speed

HES

TURBINES

ACCESSORIES

Collet

Straight type spindle

Motor

Spindle  
Guide

CHK



NR-311



EM-2350J



CHM



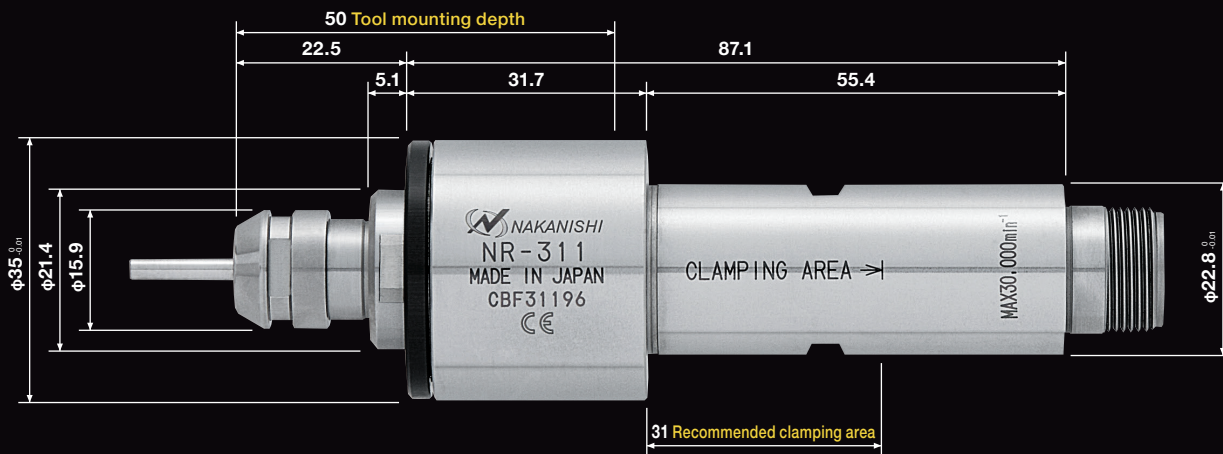
AMH-301

E2000 SERIES

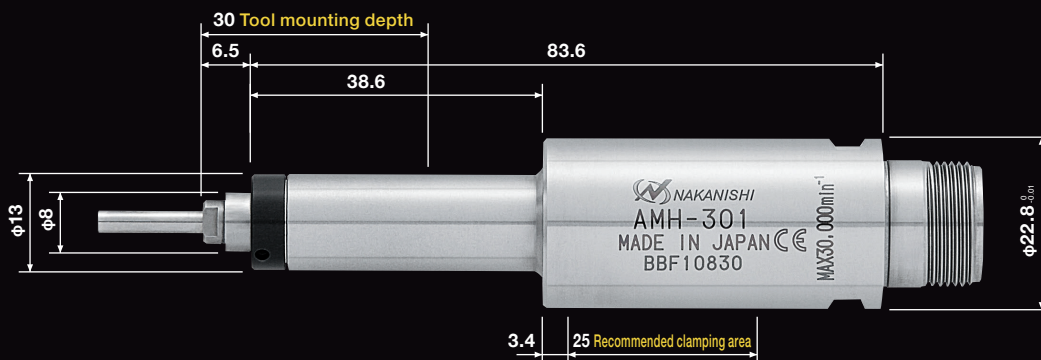
Shown In Actual Size

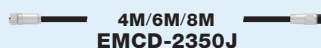
# Straight type spindle

## NR-311

O.D.  $\phi 22.8$  mm

## AMH-301

O.D.  $\phi 22.8$  mm

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

E2280 CONTROLLER



AL-C1204

Order by Code No.

# Specifications

**CAD drawings**

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

## NR-311



Code No.

**7832**

Model

**NR-311**

O.D.	Allowable motor speed	Spindle accuracy	Collet	Net weight
$\phi 22.8$ mm	<b>30,000</b> min <sup>-1</sup>	Within <b>2</b> $\mu$ m	<b>CHK</b> Group ( $\phi 0.5$ – $\phi 6.35$ mm)	<b>370</b> g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14) · (20 × 24): 1 pc. each <b>*Collet is sold separately.</b>			
Options	Collet (CHK Group): $\phi 0.5$ – $\phi 6.35$ mm <b>p. 8-5</b>			
	Metal saw arbor (KCH-03): 3 sizes / Grindstone flange (NGF2-19) <b>p. 8-12</b>			

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

## AMH-301



Code No.

**1074**

Model

**AMH-301**

O.D.	Allowable motor speed	Collet	Net weight
$\phi 22.8$ mm	<b>30,000</b> min <sup>-1</sup>	<b>CHM</b> Group ( $\phi 1.0$ – $\phi 3.175$ mm)	<b>171</b> g
Standard equipment and accessories	Collet: $\phi 3.0$ mm (CHM-3.0) / Wrench (7 × 5.1) · (6 × 4.5) · (20 × 24): 1 pc. each		
Options	Collet (CHM Group): $\phi 1.0$ – $\phi 3.175$ mm <b>p. 8-6</b>		
	Grindstone arbor (AGM-01) <b>p. 8-12</b>		

E4000

E3000

E2000

1Speed3

Air-Speed

HES

TURBINES

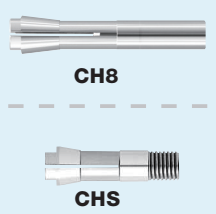
ACCESSORIES

Collet

Angle type spindle

Motor

Spindle Guide

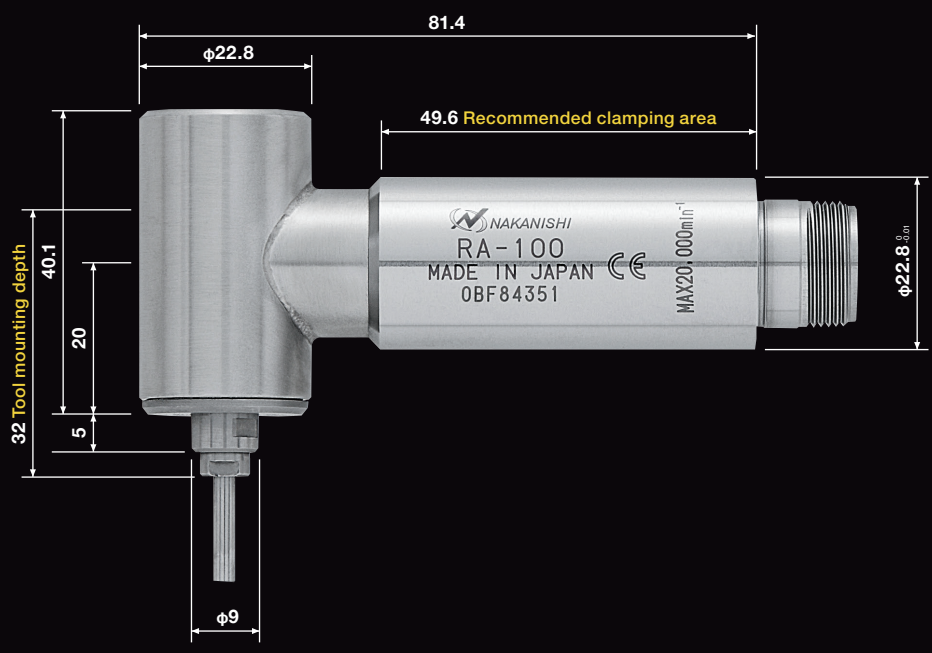


E2000 SERIES

Shown In Actual Size

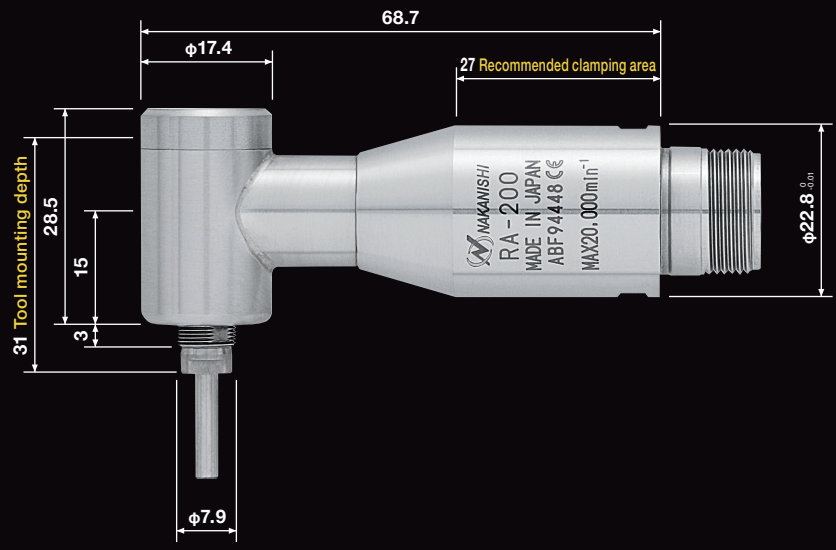
# Angle type spindle

## RA-100



O.D.  $\phi 22.8$  mm

## RA-200



O.D.  $\phi 22.8$  mm

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

E2280 CONTROLLER



AL-C1204

Order by Code No.

# Specifications

CAD drawings

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

## RA-100



Code No.

**1024**

Model

**RA-100**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Collet	Net weight
$\phi 22.8$ mm	<b>7,490</b> min <sup>-1</sup>	$\frac{1}{2.67}$	<b>20,000</b> min <sup>-1</sup> (Allowable rotational speed)	<b>CH8 Group</b> ( $\phi 0.8$ – $\phi 3.175$ mm)	<b>271</b> g
Standard equipment and accessories	Collet: $\phi 3.0$ mm (CH8-3.0) / Wrench (7 × 5.5) · (8 × 5) · (20 × 24): 1 pc. each				
Options	Collet (CH8 Group): $\phi 0.8$ – $\phi 3.175$ mm <a href="#">p. 8-7</a>				
	Metal saw arbor (KCH-02): 3 sizes <a href="#">p. 8-12</a>				

## RA-200



Code No.

**1075**

Model

**RA-200**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Collet	Net weight
$\phi 22.8$ mm	<b>13,330</b> min <sup>-1</sup>	$\frac{1}{1.5}$	<b>20,000</b> min <sup>-1</sup> (Allowable rotational speed)	<b>CHS Group</b> ( $\phi 0.8$ – $\phi 3.175$ mm)	<b>165</b> g
Standard equipment and accessories	Collet: $\phi 3.0$ mm (CHS-3.0) / Wrench (7 × 5.1) · (8 × 5) · (20 × 24): 1 pc. each				
Options	Collet (CHS Group): $\phi 0.8$ – $\phi 3.175$ mm <a href="#">p. 8-6</a>				

E4000

E3000

E2000

iSpeed3

Air-Speed

HES

TURBINES

ACCESSORIES

Spindle  
Guide

CHK



RAS-101



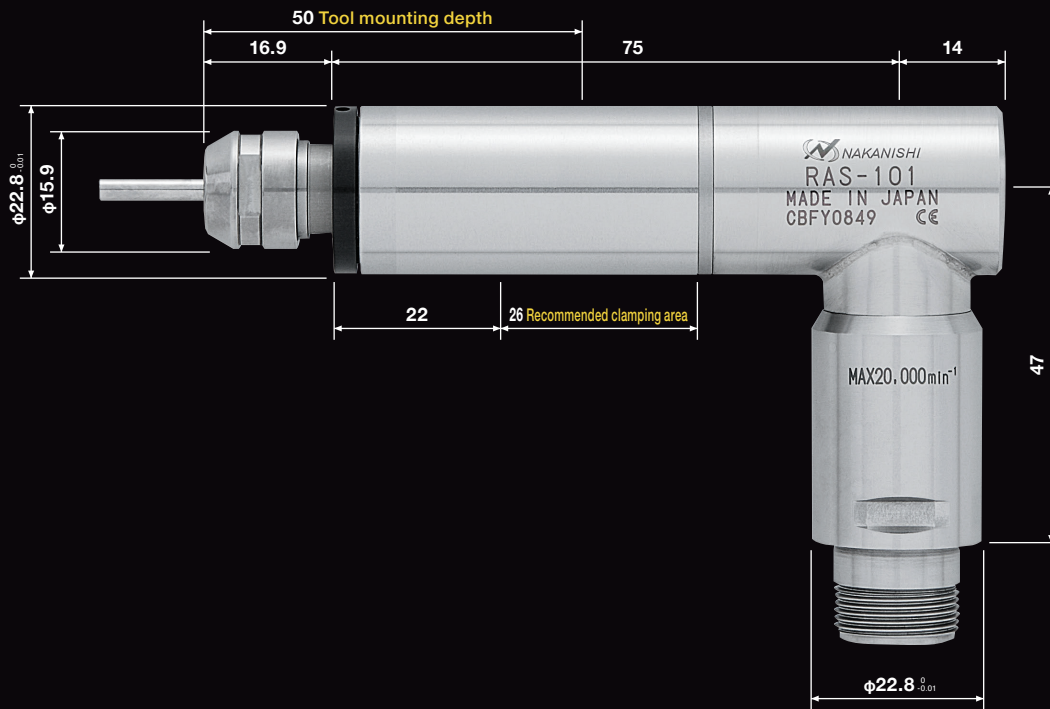
EM-2350J

E2000 SERIES

Shown In Actual Size

# Angle type spindle

## RAS-101

O.D.  $\phi 22.8$  mm

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

E2280 CONTROLLER



AL-C1204

Order by Code No.

# Specifications

**CAD drawings**

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

**RAS-101**


Code No.

**7839**

Model

**RAS-101**

O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Spindle accuracy	Collet	Net weight
φ22.8 mm	<b>7,490</b> min <sup>-1</sup>	$\frac{1}{2.67}$	<b>20,000</b> min <sup>-1</sup> (Allowable rotational speed)	Within <b>2</b> μm	<b>CHK</b> Group (φ0.5–φ6.35 mm)	<b>325</b> g
Standard equipment and accessories	Collet nut (K-265) / Wrench (12 × 14): 2 pcs. · (20 × 24): 1 pc. <b>*Collet is sold separately.</b>					
Options	Collet (CHK Group): φ0.5–φ6.35 mm <b>p. 8-5</b>					
	Metal saw arbor (KCH-03): 3 sizes / Grindstone arbor (AGM-03) <b>p. 8-12</b>					

E4000

E3000

E2000

iSpeed3

Air-Speed

HES

TURBINES

ACCESSORIES

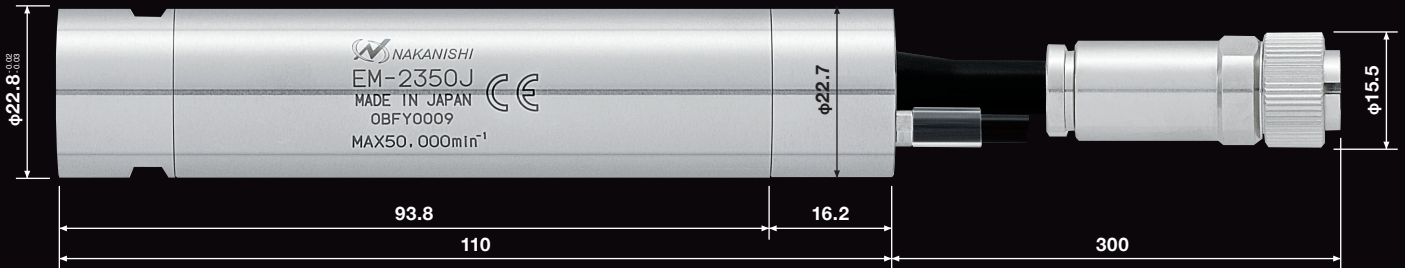
# Motor / Speed reducer

## EM-2350J

Motor



O.D.  $\phi 22.8$  mm

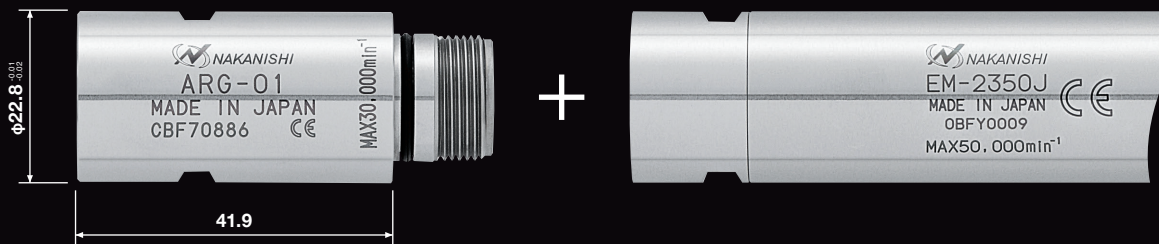


## ARG-01

Speed reducer (1/3.92)



O.D.  $\phi 22.8$  mm

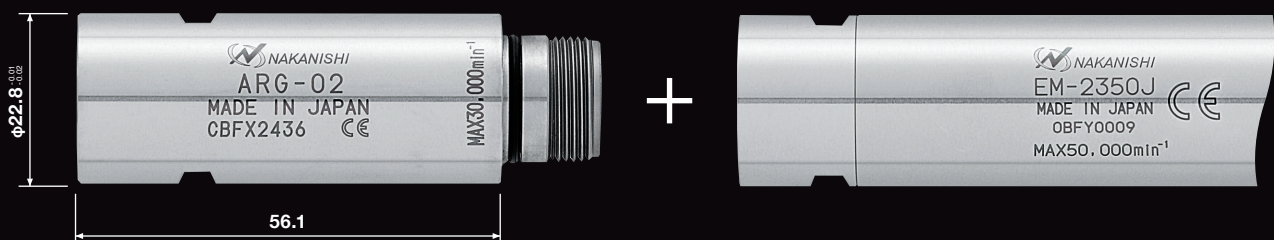


## ARG-02

Speed reducer (1/15.39)



O.D.  $\phi 22.8$  mm



# Specifications

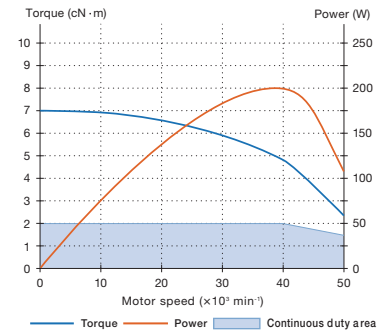
**CAD drawings**

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

## EM-2350J

**Code No.** **7721** **Model** **EM-2350J**


O.D.	Motor speed	Max. power	Min. bending cord radius	Net weight
$\phi 22.8$ mm	1,000–50,000 min <sup>-1</sup>	200 w	45 mm	260 g (Motor cord is included)
Standard equipment and accessories	Wrench (20 × 24): 1 pc.			
Options	Motor cord: 4 m (7722), 6 m (7723), 8 m (7724) <a href="#">p. 3-16</a>			

**Torque & power curve**


## ARG-01

**Code No.** **1022** **Model** **ARG-01**


O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Net weight
$\phi 22.8$ mm	7,650 min <sup>-1</sup>	$\frac{1}{3.92}$	30,000 min <sup>-1</sup> (Allowable rotational speed)	108 g

## ARG-02

**Code No.** **1023** **Model** **ARG-02**


O.D.	Max. speed at the cutting tool	Reduction ratio	Max. allowable motor speed	Net weight
$\phi 22.8$ mm	1,950 min <sup>-1</sup>	$\frac{1}{15.39}$	30,000 min <sup>-1</sup> (Allowable rotational speed)	148 g

E4000

E3000

E2000

iSpeed3

Air-Speed

HES

TURBINES

ACCESSORIES

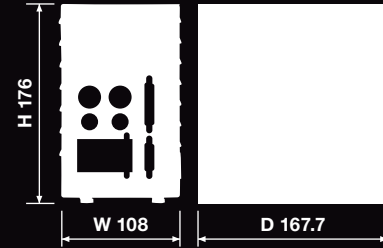
# E2280 Controller



## E2280 CONTROLLER

Controller

Code No.  
**7720**



### Equipped with selector

- Up to 2 motors to control  
\*not simultaneously
- Providing individual speed control of each motor

### External control function


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

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

Motor speed		Input voltage		Max. power
1,000–50,000 min <sup>-1</sup>		AC100–240 v Without plug Multiple output power		200 w
Power consumption	Air consumption		Net weight	
AC1.4 A	1 motor: 30 NL/min (0.25 MPa) / 2 motors: 63 NL/min (0.30 MPa)		2.2 kg	
Standard equipment and accessories	Power cord: 3 m / Air hose with filter (K-251: 2058): 2 m / Power cord hook			
	Connector cap (included) / Connector cover (included)			
	Bracket / Air branching joint / Fuse / Mounting screw / Reducer			

# Motor cord

Order by Code No.

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

\*The minimum cord bending radius for the above motor cords is 45 mm.

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

# ACCESSORIES

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



E4000

E3000

E2000

I-Speed3

Air-Speed

HES

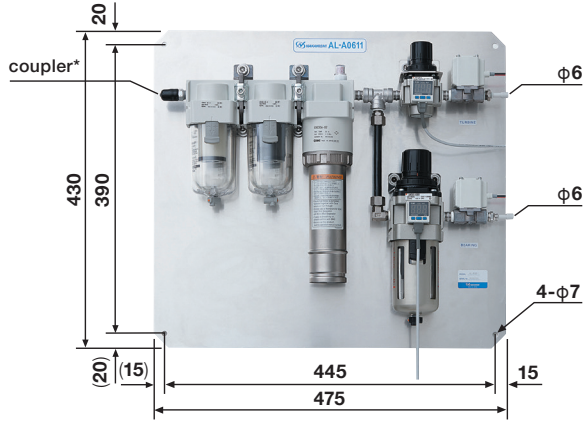
TURBINES

ACCESSORIES

# Air line kit

## AL-A0611

Filtration: 0.01 µm



Code No.

**1548**

Model

**AL-A0611**

### ■ Air piping

Inlet: Coupler (Model: KK13P-02M made by SMC Corporation)

Outlet: φ6.0 mm × 2 parts

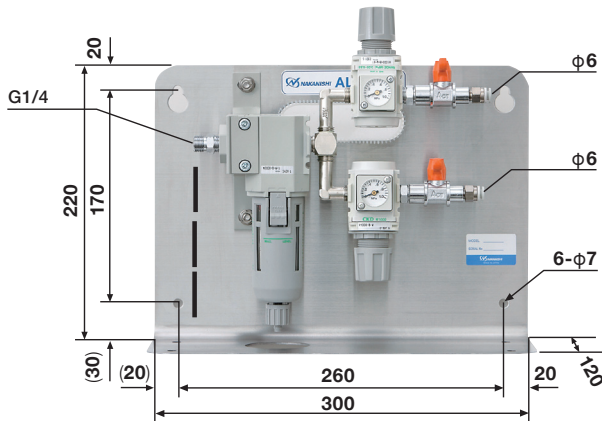
### ■ Net weight: 8.2 kg

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

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

## AL-A1205

Filtration: 0.3 µm



Code No.

**4505**

Model

**AL-A1205**

### ■ Air piping

Inlet: G1/4 male thread for connection hose

Outlet: φ6.0 mm × 2 parts

### ■ Net weight: 2.4 kg

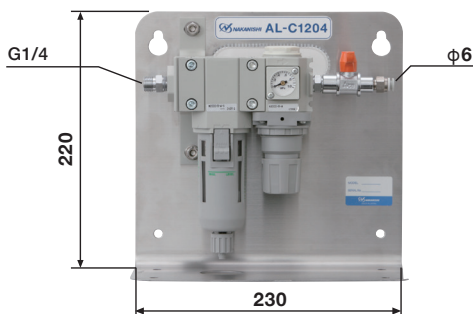
Standard accessories	Hose pipe (K-275): 2 m Mounting screw (M6 × 20): 4 pcs. Washer: 4 pcs. / Rubber pad: 4 pcs.
Standard equipment	Oil mist filter / Air regulator: 2 pcs. ON-OFF valve: 2 pcs.
Compatible model	E3000 (NRAF-5080) · ABT series

\*Recommendation of nominal filtration rating: 0.3 µm,

Pressure range: 0.1-1.0 MPa Recommendation of air filter: M2000-WS (CKD)

## AL-C1204

Filtration: 0.3 µm



Code No.

**4504**

Model

**AL-C1204**

### ■ Air piping

Inlet: G1/4 male thread for connection hose

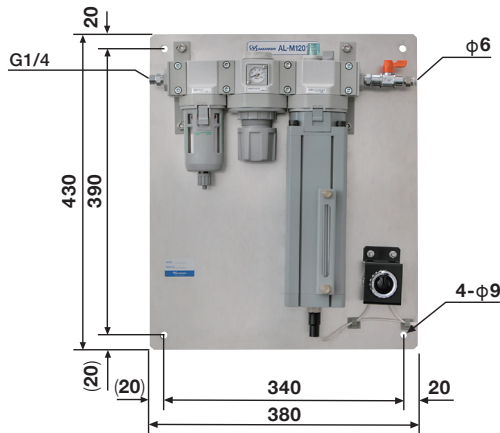
Outlet: φ6.0 mm

### ■ Net weight: 1.9 kg

Standard accessories	Hose pipe (K-275): 2 m / Rubber pad: 4 pcs. Mounting screw (M6 × 20): 4 pcs. Washer: 4 pcs. / Hose band: 1 pc.
Standard equipment	Air filter / Air regulator / Air pressure gauge ON-OFF valve
Compatible model	E4000 series · E3000 series · E2000 series iSpeed3 series · HES series

# AL-M1201BL

Filtration: 0.3 μm



Code No.	<b>4501</b>	Model	<b>AL-M1201BL</b>
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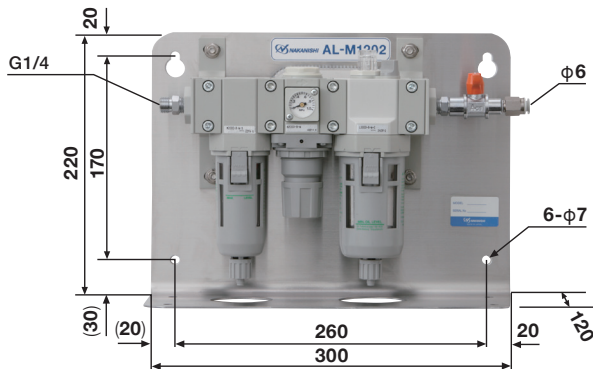
- **Air piping**  
Inlet: G1/4 male thread for connection hose  
Outlet: φ6.0 mm
- **Net weight: 5.2 kg**

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

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

# AL-M1202

Filtration: 0.3 μm



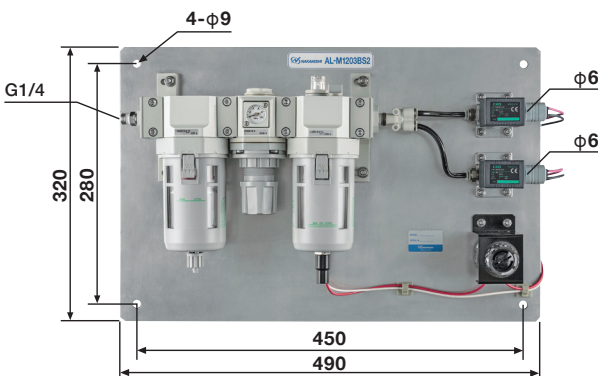
Code No.	<b>4502</b>	Model	<b>AL-M1202</b>
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- **Air piping**  
Inlet: G1/4 male thread for connection hose  
Outlet: φ6.0 mm
- **Net weight: 2.8 kg**

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

# AL-M1203BS2

Filtration: 0.3 μm



Code No.	<b>4503</b>	Model	<b>AL-M1203BS2</b>
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- **Air piping**  
Inlet: G1/4 male thread for connection hose  
Outlet: φ6.0 mm × 2 parts
- **Net weight: 3.9 kg**

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

E4000

E3000

E2000

iSpeed3

Air-Speed

HES

TURBINES

ACCESSORIES

# Collet

CHA Group		Fit nuts: CHN-A, CHN-AA, CHN-CTA, CHN-3A			
		Code No.	Model	I.D. (mm)	Compatible model
<p>φ1.0 and over</p>	<b>91494</b>	CHA-3.0AA	φ3.0AA*	CTS-2630 / 2620A (Type AA only) CTS-3030 EM20-S6000 · EM25-S6000 EMS-3060A · NR-3080S MSS-19 · MSS-20 · MSS-22 PMS-3020A QC3-A (NRR3060-QC / NR3060-AQC) ABT-1000 / 1600 Xpeed1600 (Type AA only) HES810 series HTS series iSpeed3 series	
	<b>91496</b>	CHA-3.175AA	φ3.175AA*		
<b>91495</b>	CHA-4.0AA	φ4.0AA*			
<b>91492</b>	CHA-2.35	φ2.35			
<b>91430</b>	CHA-3.0	φ3.0			
<b>91493</b>	CHA-3.175	φ3.175			
<b>91440</b>	CHA-4.0	φ4.0			
<p>φ0.5-φ0.9</p>	<b>914</b> □□	CHA-□□	φ0.5, φ0.6, φ0.7, φ0.8, φ0.9		
			φ1.0, φ1.5, φ2.0, φ2.5, φ3.5		

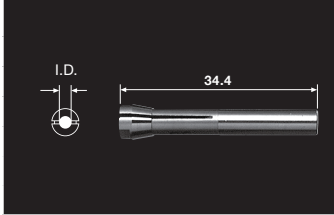
\*High precision type AA (Run-out accuracy within 2 μm)

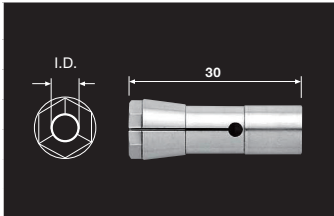
CHB Group		Fit nuts: K-265, K-265A			
		Code No.	Model	I.D. (mm)	Compatible model
	<b>92820</b>	CHB-2.0	φ2.0	NR33-6000ATC-ESD NR40-5100 ATC · NRR-3060	
	<b>92830</b>	CHB-3.0	φ3.0		
	<b>92893</b>	CHB-3.175	φ3.175		
	<b>92835</b>	CHB-3.5	φ3.5		
	<b>92840</b>	CHB-4.0	φ4.0		

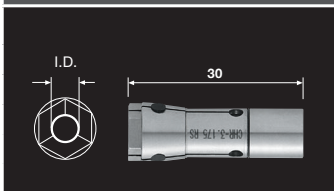
CHK Group		Fit nuts: K-265, K-265A			
		Code No.	Model	I.D. (mm)	Compatible model
<p>φ1.0 and over</p>	<b>91597</b>	CHK-3.0AA	φ3.0AA*	EM30-S6000 · EMA-3020K · EMR-3008K EMS-3060K · NR-2551 · NR-3060 NR-3060S · NR-403E · NR-453E NRAF-5080 · NRF-3060S · RAS-151E RAX-71E · RAX-271E MSS-25 · MSST-23 · PMA-3013K PMR-3005K · PMS-3020K NR-303 · NR-311 · NR-2351 · RAS-101 QC5-K (NRR4040-QC / NR4040-AQC) QC3-K (NRR3060-QC / NR3060-AQC) Xpeed1200 (Type AA only) HES510 series PLANET series	
	<b>91598</b>	CHK-3.175AA	φ3.175AA*		
<p>φ0.5-φ0.9</p>	<b>91599</b>	CHK-4.0AA	φ4.0AA*		
	<b>91600</b>	CHK-6.0AA	φ6.0AA*		
<b>91601</b>	CHK-6.35AA	φ6.35AA*			
<b>91592</b>	CHK-2.35	φ2.35			
<b>91530</b>	CHK-3.0	φ3.0			
<b>91593</b>	CHK-3.175	φ3.175			
<b>91540</b>	CHK-4.0	φ4.0			
<b>91594</b>	CHK-4.76	φ4.76			
<b>91560</b>	CHK-6.0	φ6.0			
<b>91596</b>	CHK-6.35	φ6.35			
<b>915</b> □□	CHK-□□	φ0.5, φ0.6, φ0.7, φ0.8, φ0.9			
		φ1.0, φ1.5, φ2.0, φ2.5, φ3.5, φ4.5, φ5.0, φ5.5			

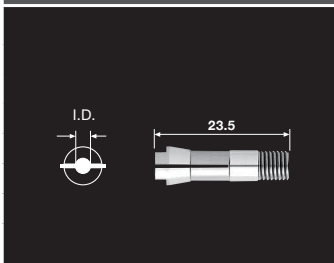
\*High precision type AA (Run-out accuracy within 2 μm)

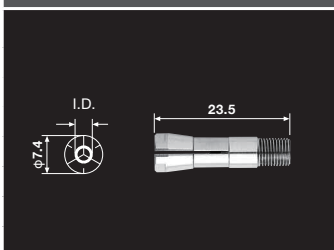
CHK-OH Group		Fit nut: K-265			
		Code No.	Model	I.D. (mm)	Compatible model
	<b>93630</b>	CHK-OH-3.0	φ3.0	CTM-4020 BMS-4020-MQL-CHK / 2M BMS-4040-MQL-CHK / 2M	
	<b>93631</b>	CHK-OH-3.175	φ3.175		
	<b>93640</b>	CHK-OH-4.0	φ4.0		
	<b>93650</b>	CHK-OH-5.0	φ5.0		
	<b>93660</b>	CHK-OH-6.0	φ6.0		
	<b>93663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

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

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

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

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

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

E4000

E3000

E2000

1Speed3

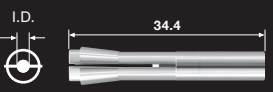
Air-Speed

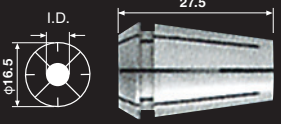
HES

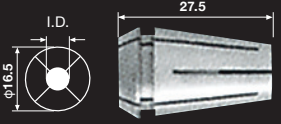
TURBINES

ACCESSORIES

# Collet



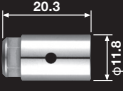



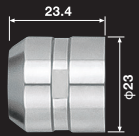
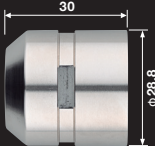
CH8 Group				
	Code No.	Model	I.D. (mm)	Compatible model
	<b>91092</b>	CH8-2.35	φ2.35	RA-100 · RA-151E
	<b>91030</b>	CH8-3.0	φ3.0	
	<b>91093</b>	CH8-3.175	φ3.175	
	<b>910</b> □□	CH8-□□	φ0.8, φ0.9	
			φ1.0, φ1.5, φ2.0, φ2.5	
φ1.1, φ1.2, φ1.3, φ1.4, φ1.6, φ1.7, φ1.8, φ1.9				
φ2.1, φ2.2, φ2.3, φ2.4, φ2.6, φ2.7, φ2.8, φ2.9				

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

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

# Collet nut

Order by Code No.

CHN-A				Fit collet: CHA Group
	Code No.	Model	Description	Compatible model
	<b>2102</b>	CHN-A	Collet nut for CHA collet	QC3-A (NRR3060-QC / NR3060-AQC) EM20-S6000 · EM25-S6000 EMS-3060A · NR-3080S MSS-19 · MSS-20 · MSS-22 PMS-3020A HES810 series iSpeed3 series
CHN-AA				Fit collet: CHA Group
	Code No.	Model	Description	Compatible model
	<b>2159</b>	CHN-AA	Collet nut for CHA collet	HTS series
CHN-CTA				Fit collet: CHA Group
	Code No.	Model	Description	Compatible model
	<b>7798</b>	CHN-CTA-3.0	Collet nut for CHA collet	CTS-2630 / 2620A / 3030
	<b>7799</b>	CHN-CTA-3.175		
	<b>7800</b>	CHN-CTA-4.0		
CHN-3A				Fit collet: CHA Group
	Code No.	Model	Description	Compatible model
	<b>2160</b>	CHN-3A	Collet nut for CHA collet	ABT series · Xpeed1600
K-265				Fit collets: CHK Group, CHK-OH Group
	Code No.	Model	Description	Compatible model
	<b>2129</b>	K-265	Collet nut for CHK collet	CTM-4020 BMS-4020-MQL-CHK / 2M BMS-4040-MQL-CHK / 2M QC5-K (NRR4040-QC / NR4040-AQC) QC3-K (NRR3060-QC / NR3060-AQC) EM30-S6000 · EMA-3020K · EMR-3008K EMS-3060K · NR-403E · NR-453E NR-2551 · NR-3060 · NR-3060S NRF-3060S · RAS-151E · RAX-71E RAX-271E MSS-25 · MSST-23 NR-303 · NR-311 · NR-2351 · RAS-101 PMA-3013K · PMR-3005K · PMS-3020K HES510 series PLANET series
K-265A				Fit collet: CHK Group
	Code No.	Model	Description	Compatible model
	<b>2158</b>	K-265A	Collet nut for CHK collet	NRAF-5080 Xpeed1200
CHN-16				Fit collets: CH16 Group, CH16OH Group
	Code No.	Model	Description	Compatible model
	<b>2161</b>	CHN-16	Collet nut for CH16 collet	BMS-4020 / 2M · BMS-4020-MQL / 2M BMS-4020RA · BMS-4040 / 2M BMS-4040-MQL / 2M · BMS-4040RA BMS-4040RA-RGD-03M / 2M BMS-4040-RGD-03M / 2M · NR-4040 QC5-16 (NRR4040-QC / NR4040-AQC)
CHN-20				Recommended : REGO-FIX ER20/ER20UP
	Code No.	Model	Description	Compatible model
	<b>7914</b>	CHN-20	Collet nut for BMS-5010 collet	BMS-5010 / RA

E4000

E3000

E2000

iSpeed3

Air-Speed

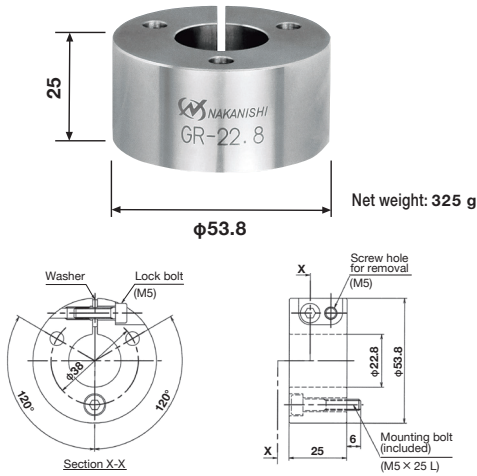
HES

TURBINES

ACCESSORIES

# Grip ring

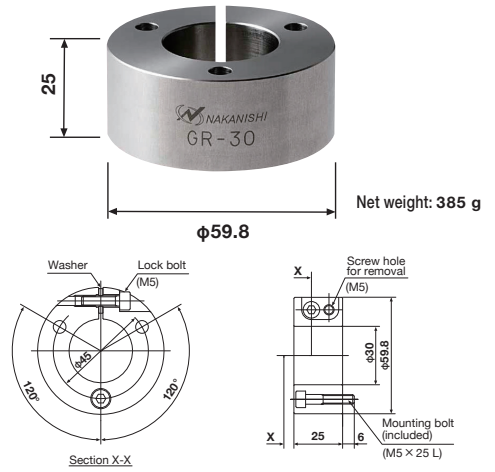
## GR-22.8



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

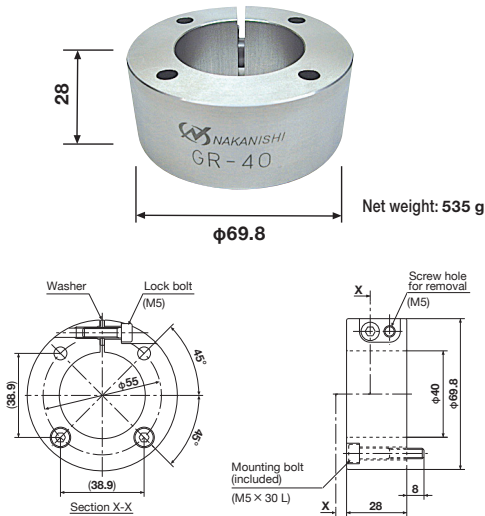
\*GR-22.8 cannot be used with NR-311.

## GR-30



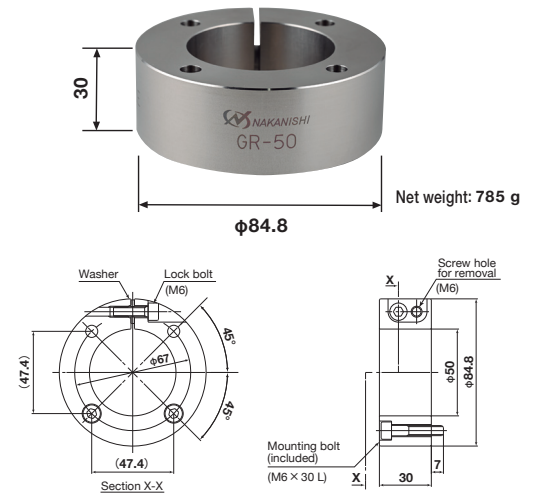
Code No.	<b>1885</b>	Model	<b>GR-30</b>
Standard accessories	Mounting bolt (M5 × 25 L): 3 pcs.		
Compatible model	φ30 mm Spindle		

## GR-40



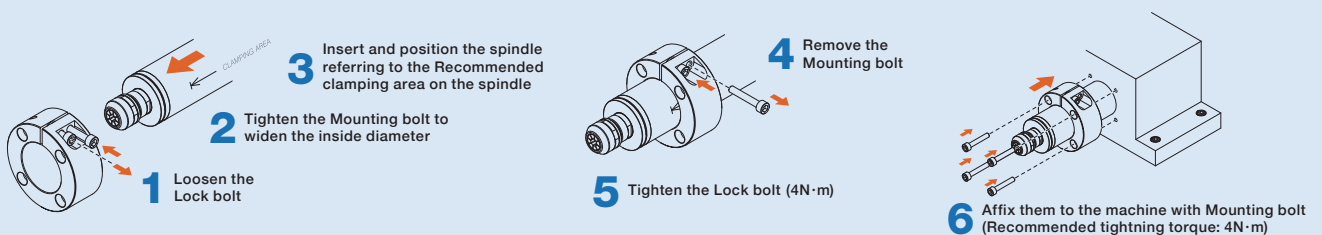
Code No.	<b>1886</b>	Model	<b>GR-40</b>
Standard accessories	Mounting bolt (M5 × 30 L): 4 pcs.		
Compatible model	φ40 mm Spindle		

## GR-50



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


## How to mount to a machine tool



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


# Spacer

Order by Code No.

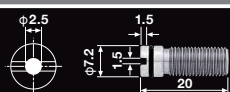
Spacer	Code No.	Model	Description / Description (I.D. × T)	Compatible model
	<b>1882</b>	SP-22 × 10 L	Spacer ( $\phi 22 \times 10$ mm)	BM-322FL · BM-322FR

# Bush

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

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

# Adjuster bolt

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

E4000

E3000

E2000

1Speed3

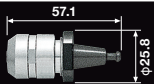
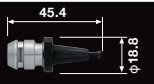


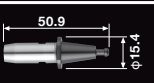
Air-Speed

HES

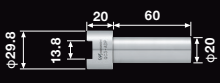
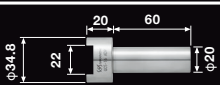
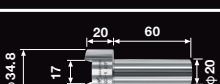
TURBINES

ACCESSORIES

# Collet holder

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

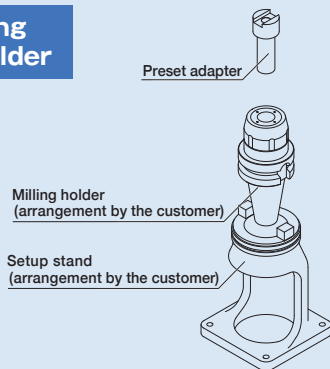
# Preset adapter

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

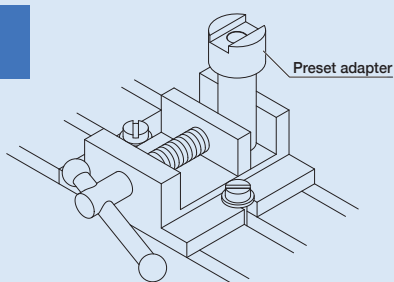
## Set-up outside machines

1

In case using  
a milling holder

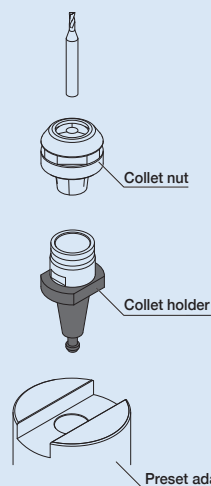


In case using  
a vice

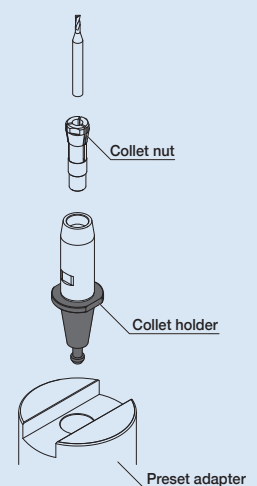


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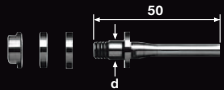

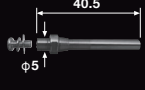

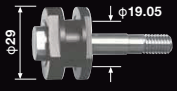
For QC3-K/A  
QC5-16/K







For QC3-SS



# Metal saw arbor · Grindstone arbor · Grindstone flange

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

## Grease · Oil

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

## COMBOX



Code No.	<b>8495</b>	Model	<b>COMBOX</b>
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- By connecting the COMBOX to a CITIZEN “Cincom” CNC automatic lathe, iSpeed3 and E3000 motors can be easily operated by using the external M code signal.

<b>Specifications</b>	Input voltage: DC24 V (DC23-25 V) Dimensions: W142 × D240 × H31 mm / Net weight: 1.2 kg
<b>Standard equipment and accessories</b>	I/F Cable (High density D-SUB 15 connector): 1 pc. Cable D · E · F: 1 pc. each / Relay: 1 pc. Screw · Nut: 2 pcs. each / Connector cap: 4 pcs.
<b>Compatible controllers</b>	E3000 controller · iSpeed3 controller
<b>External connecting device</b>	CNC automatic lathe For details, please contact us or your local distributor.

E4000

E3000

E2000

iSpeed3

Air-Speed

HES

TURBINES

ACCESSORIES

## Network Interface

# COMBOX-NET.EIP

Easy IoT remote control and management of Nakanishi Spindle via EtherNet/IP.

Easy connection to a robot or special-purpose machine tool's PLC with a single LAN cable.

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



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

### Feature 1 Remote management through IoT

#### • Easy remote error/warning display

Error or warning output from the controller can be easily displayed remotely. \*Display contents vary depending on S/N

#### • Up to 4 sensors (digital × 2, analog × 2) can be connected

Various commercially available sensors can be added and used for condition monitoring.



PLC display example

### Feature 2 Reduce design and production work hours

#### • Connectable to Ethernet/IP compatible devices via LAN cable

\*Support for other protocols is pending

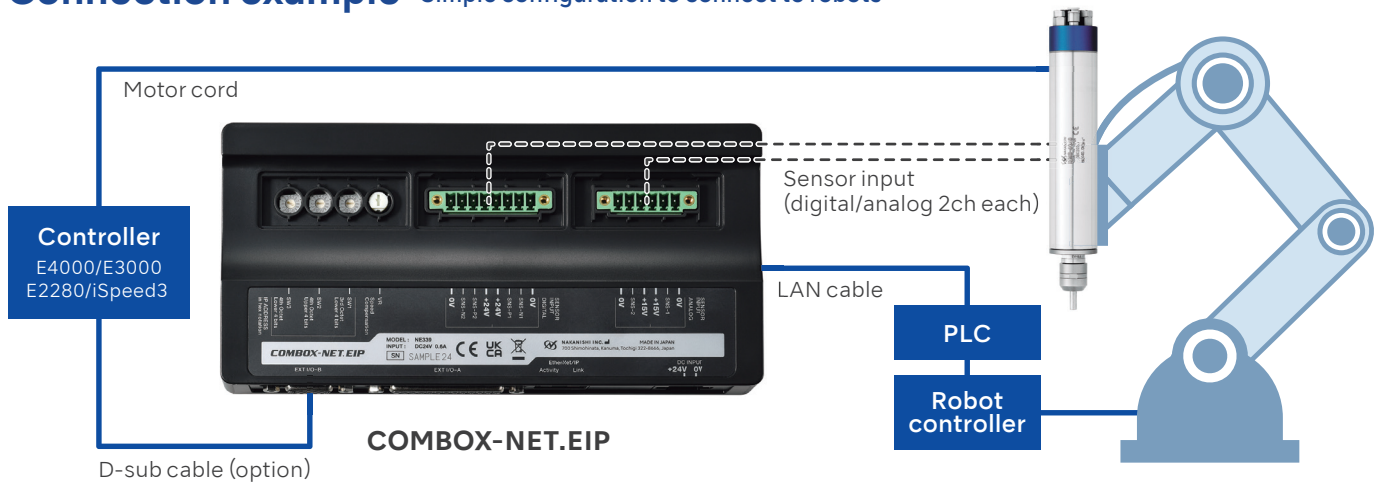
#### • Reduction of the number of lines in the ladder program in PLCs is possible

#### • I/O-related devices are no longer needed, reducing the amount of wiring required

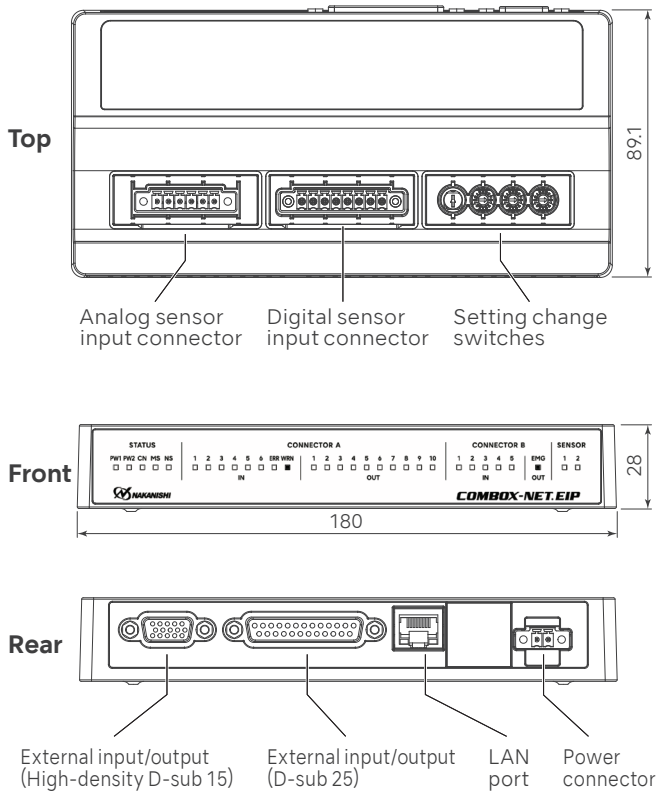
**33%** reduction in work hours  
(compared to in-house measurements)



## Connection example Simple configuration to connect to robots



## Outside view



## Specifications

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

## Basic package

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

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

\*D-sub cables are sold separately.

## Option

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

D-sub 15 cable (500 mm) and D-sub 25 cable (500 mm)

\*Since D-sub cable has special size, we recommend the above product.

## Compatible controllers

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



**E4000 controller**  
S/N: E\*\*\*\*\*



**E3000 controller**  
S/N: G\*\*\*\*\*

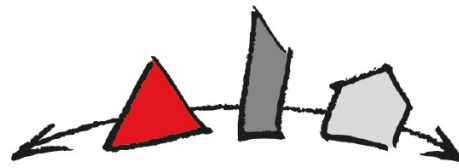


**E2280 controller**  
S/N: B\*\*\*\*\*



**iSpeed3 controller**  
S/N: C\*\*\*\*\*

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



**eka Klingseisen**  
Werkzeuge & Maschinen

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PR-K366E Ver.2 2026-02-03 XXX.YX

\*Specifications and design are subject to change without notice.