

"ASTRO-E 250" STANDARD SET & CONTROL UNIT

CAT. No. **ASE61570** **ASTRO-E 250 STANDARD SET** **25,000 min⁻¹(rpm)**
 CAT. No. **ASE9030** **ASTRO-E 250 STANDARD SET (Cord with Quick Disconnect)**



Unit Specifications

Model	NE72
Power Source	AC120V, 50-60Hz
Power Consumption	75W
Weight	7 Lb 1.8 oz.
Dimensions	W8.86" x D7.68" x H3.82"

Motor & Spindle

Motor	EM-250
Spindle	NR-302
Speed	2,000~25,000 min ⁻¹ (rpm)
Weight	1 Lb 8.7 oz. (w/cord)
Dimensions	ø1.18" x 7.74"

ASTRO-E 250 Standard Set

CAT. No.	Model	Standard Equipment · Accessories	Price
ASE61570	E250-N30	<ul style="list-style-type: none"> • Motor w/Cord (EM-250) • Control Unit (NE72) • Spindle (NR-302) • Collet Chuck ø1/8" (CHK-3.175) • Chuck Nut (K-265) : 1 pc. • Wrench (12 x 14) : 2 pcs., (22 x 27) 1 pc., (20 x 24) : 1 pc. 	
ASE9030	E255-N30	<ul style="list-style-type: none"> • Motor w/Cord*(EM-255) • Control Unit (NE72) • Spindle (NR-302) • Collet Chuck ø1/8" (CHK-3.175) • Chuck Nut (K-265) : 1 pc. • Wrench (12 x 14) : 2 pcs., (22 x 27) 1 pc., (20 x 24) : 1 pc. 	

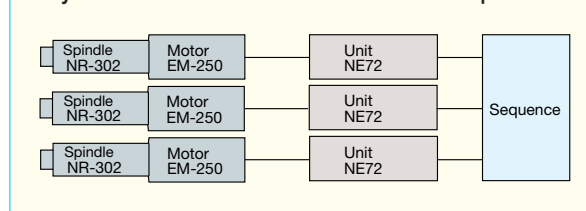
*Cord with Quick Disconnect

CAT. No. **AS61572** **ASTRO-E 250 CONTROL UNIT NE72**

High Quality · Advanced Function

- High quality electronic circuitry provides stable motor speed even under high loads, soft start, emergency stop function and motor feedback monitoring.
- Safety mechanism stops the motor if the system over loaded.
- Auto motor start/stop function is available.
- Multiple motors can be controlled by a single control unit by incorporating the selector unit.
- Motor speed is displayed to 2 digit accuracy by the digital display.

System Chart for Automatic Control of Multiple Motors



Power Switch

Digital Speed Display

Manual / Auto Selector Switch

Speed Control Knob

Forward/Reverse Select Switch & Breaker Releasing Switch

Connector for Motor Cord

Specifications

Model : NE72
 Power Source : AC120V, 50-60Hz
 Power Consumption : 75W
 Weight : 7 Lb 1.8 oz.
 Dimensions : W8.86" x D7.68" x H3.82"

Sequence Control

Intake with Power Fuse

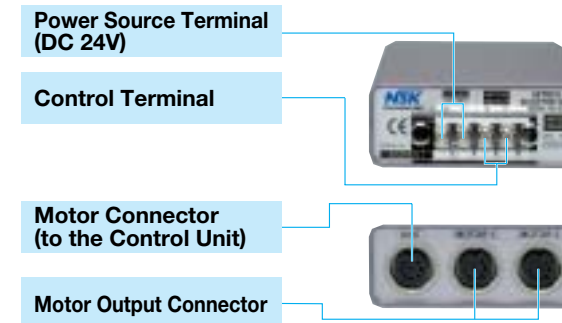
ASTRO-E 250 Control Unit

CAT. No.	Model	Standard Equipment · Accessories	Price
AS61572	NE72	<ul style="list-style-type: none"> • Power Cord • Sequence Control Cord (7 ft) 	

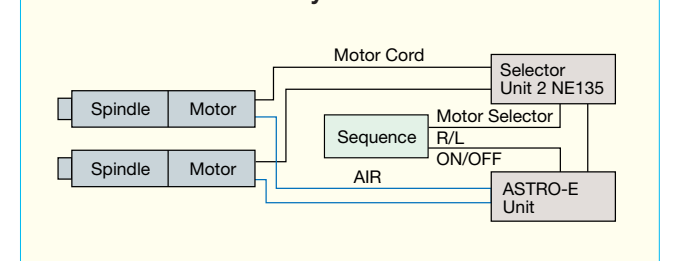
"ASTRO-E 250" SELECTOR UNIT 2 & BRUSHLESS MOTOR

CAT. No. **ASE8219** **ASTRO-E SELECTOR UNIT 2 NE135** for 25,000 · 40,000 · 50,000 · 80,000 min⁻¹(rpm)

By connecting Selector Unit 2 NE135 to the control unit, 2 motors are able to control individually.
 (Two motors can not be operated simultaneously.)



Automatic Control System Chart with 2 Motors

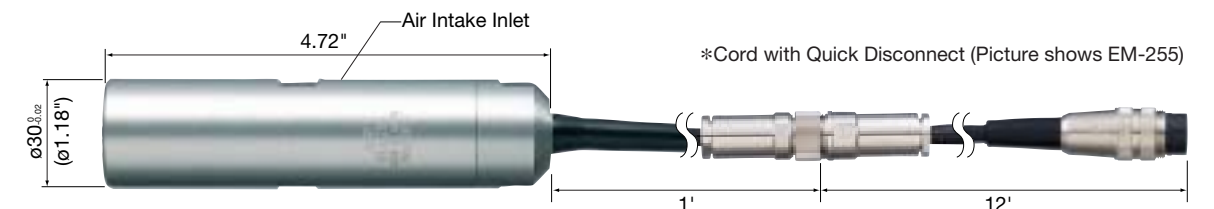


Specifications...Model : NE135 / Power Source : DC24V / Power Consumption : 7W / Weight : 9.4 oz. / Dimensions : W2.95" x D4.37" x H1.18"

ASTRO-E Selector Unit 2

CAT. No.	Model	Standard Equipment · Accessories	Price
ASE8219	NE135	<ul style="list-style-type: none"> • Cord with 8 pin plug • Air 'y' Adaptor 	

CAT. No. **AS61573** **BRUSHLESS MOTOR EM-250** **25,000 min⁻¹(rpm)**
 CAT. No. **ASE9028** **BRUSHLESS MOTOR EM-255 (Cord with Quick Disconnect)**



- This brushless DC motor incorporates a rare earth magnet rotor it offers a long service life, reduced electrical interference, high power and torque. The lightweight motor core provides very fast motor startup.

- Motor Speed 2,000~25,000 min⁻¹(rpm)
- Max. Output Power 105W
- Weight 1 Lb 1.1 oz.
- Cord Length 13 ft

< Optional >

- Air Line Kit (AL-0201) For Motor

Brushless Motor

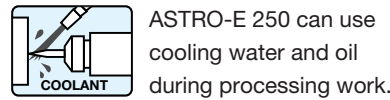
CAT. No.	Model	Standard Equipment · Accessories	Price
AS61573	EM-250	<ul style="list-style-type: none"> • Motor (EM-250) with Cord • Air Connector for ø0.24" Hose 	
ASE9028	EM-255	<ul style="list-style-type: none"> • Motor (EM-255) with Cord with Quick Disconnect • Air Connector for ø0.24" Hose 	

*Each motor cord 16.4 ft (5m), 19.7 ft (6m), 26.2 ft (8m) is available.

AMERICAN ROTARY TOOLS CO. (ARTCO TOOLS)
1825 SOUTH PECK ROAD
MONROVIA, CA USA 91016-4778

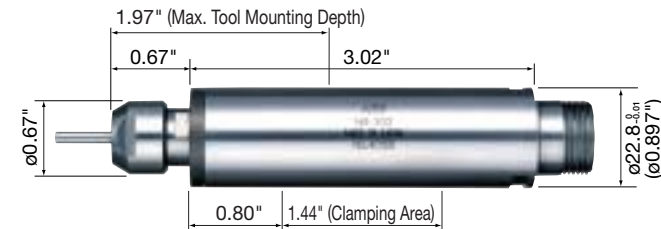
Tel: (626) 358-8466 Fax: (626) 358-0076
Toll Free USA Tel: (800) 624-2212 Fax: (800) 624-2210
Email: info@artcotools.com

"ASTRO-E 250" SPINDLE



ASTRO-E 250 can use cooling water and oil during processing work.

CAT. No. AS41086 SPINDLE NR-302 30,000 min⁻¹(rpm)



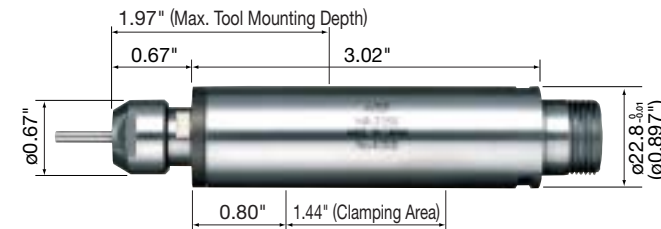
- Allowable Motor Speed 30,000 min⁻¹(rpm)
 - Spindle Accuracy Within 1 μm
 - Standard Size Collet Chuck (CHK-3.175) ø1/8"
 - Weight 7.64 oz.
- < Optional >
- Collet Chuck (CHK-□□) ø0.5 mm~ø6.0 mm in 0.1 mm increments and ø3/32", ø1/8", ø1/4"
 - Chuck Nut (K-265) For Collet Chuck (CHK)
 - Metal Saw Arbor (KCH-03) For ø0.24" (I.D.) x ø1.18" (O.D.)
 - Drill Chuck Arbor (DCH-J0K) For Jacob's Taper No. 0
 - Grindstone Arbor (AGM-03) For grinding wheel with I.D. of ø5 mm

Spindle

CAT. No.	Model	Standard Equipment · Accessories	Price
AS41086	NR-302	<ul style="list-style-type: none"> • Collet Chuck ø1/8" (CHK-3.175) : 1 pc. • Chuck Nut (K-265) : 1 pc. • Wrench (12 x 14) : 2 pcs., (20 x 24) : 1 pc. 	

● A pair of precision ball bearings are assembled on both the front and rear sides of the spindle. It is designed to minimize radial and thrust play.

CAT. No. AS18220 SPINDLE NR-2350 (Ceramic Bearings) 30,000 min⁻¹(rpm)



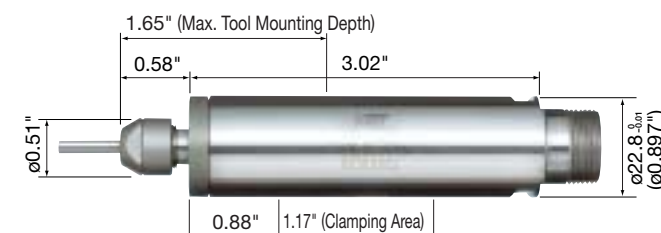
- Allowable Motor Speed 30,000 min⁻¹(rpm)
 - Spindle Accuracy Within 1 μm
 - Standard Size Collet Chuck (CHK-3.175) ø1/8"
 - Weight 7.64 oz.
- < Optional >
- Collet Chuck (CHK-□□) ø0.5 mm~ø6.0 mm in 0.1 mm increments and ø3/32", ø1/8", ø1/4"
 - Chuck Nut (K-265) For Collet Chuck (CHK)
 - Metal Saw Arbor (KCH-03) For ø0.24" (I.D.) x ø1.18" (O.D.)
 - Drill Chuck Arbor (DCH-J0K) For Jacob's Taper No. 0
 - Grindstone Arbor (AGM-03) For grinding wheel with I.D. of ø5 mm

Spindle

CAT. No.	Model	Standard Equipment · Accessories	Price
AS18220	NR-2350	<ul style="list-style-type: none"> • Collet Chuck ø1/8" (CHK-3.175) : 1 pc. • Chuck Nut (K-265) : 1 pc. • Wrench (12 x 14) : 2 pcs., (20 x 24) : 1 pc. 	

● Designed to minimize vibration and radial and thrust play it utilizes 2 high-precision ceramic bearings in the front and rear. This spindle is ideal for small diameter drilling, milling, slitting {with ø1.18" (ø30 mm) metal saw} and grinding. Wide selection of collet chucks is available.

CAT. No. AS01070 SPINDLE NR-320 (High Precision Angular Ball Bearings) 30,000 min⁻¹(rpm)



- Allowable Motor Speed 30,000 min⁻¹(rpm)
 - Spindle Accuracy Within 1 μm
 - Standard Size Collet Chuck (CHA-3.175) ø1/8"
 - Weight 7.54 oz.
- < Optional >
- Collet Chuck (CHA-□□) ø0.5 mm~ø4.0 mm in 0.1 mm increments and ø3/32", ø1/8"
 - Chuck Nut (K-263) For Collet Chuck (CHA)
 - Metal Saw Arbor (KCH-01A) For ø0.24" (I.D.) x ø1.18" (O.D.)
 - Drill Chuck Arbor (DCH-J0A) For Jacob's Taper No. 0
 - Grindstone Arbor (AGM-01A) For grinding wheel with I.D. of ø5 mm

Spindle

CAT. No.	Model	Standard Equipment · Accessories	Price
AS01070	NR-320	<ul style="list-style-type: none"> • Collet Chuck ø1/8" (CHA-3.175) : 1 pc. • Chuck Nut (K-263) : 1 pc. • Wrench (8 x 5), (10 x 10), (20 x 24) : 1 pc. each 	

● Designed to minimize the radial and axial plays by utilizing constraint type angular ball bearings and accomplished high efficiency spindle. Suitable for ultra precision small diameter mill and drilling.

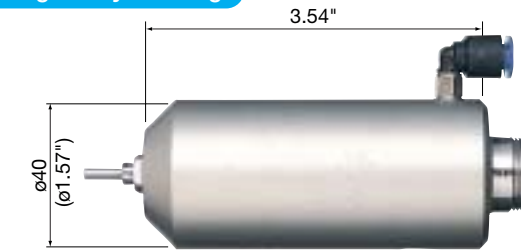
"ASTRO-E 250" SPINDLE & SPEED REDUCER & AIR LINE KIT



Caution : Use the motor at motor speed less than maximum allowable speed or use the speed reducer. DO NOT exceed the allowable motor speed for the spindle and the reducer.

CAT. No. ASE1564 SPINDLE NR-260E ATC 30,000 min⁻¹(rpm)

For light duty Grinding



- Allowable Motor Speed 30,000 min⁻¹(rpm)
 - Spindle Accuracy Within 3 μm
 - Standard Size Collet Chuck (CHP-3.175) ø1/8"
 - Weight 10.7 oz.
- < Optional >
- Collet Chuck (CHP-□□) ø2.0, ø3.0 mm, ø1/8"

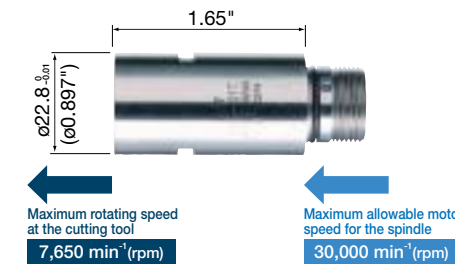
Spindle

CAT. No.	Model	Standard Equipment · Accessories	Price
ASE1564	NR-260E ATC	<ul style="list-style-type: none"> • Collet Chuck ø1/8" (CHP-3.175) : 1 pc. • Wrench (7 x 5), (8 x 5) : 1 pc. each • Bar Wrench (K-236) : 1 pc. 	

● This spindle is designed for printed circuit board drilling, etc. It is perfect for use on special purpose machines and enables the replacement of tools automatically simply by turning the air ON-OFF. It is a high-accuracy spindle assembled with precision ball bearings.
* To reduce the weight, the outer housing is made of aluminum (Hard anodized aluminum)

*Do not exceed the allowable motor speed for the spindle and the reducer.

CAT. No. AS11414 SPEED REDUCER ARG-01



Maximum allowable motor speed for the spindle **30,000 min⁻¹(rpm)**

Maximum rotating speed at the cutting tool <Reduction Ratio : 1/3.92> **7,650 min⁻¹(rpm)**

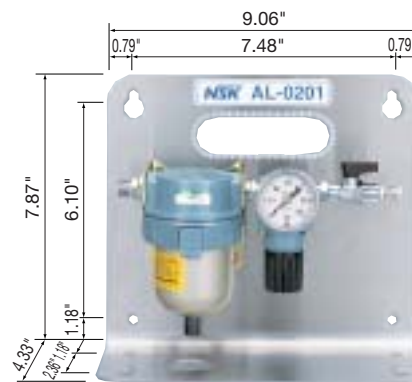
- Speed Reducing Mechanism By planetary gear system
- Weight 3.8 oz.

Speed Reducer

CAT. No.	Model	Speed Reduction Ratio	Price
AS11414	ARG-01	Speed Reduction Ratio 1/3.92	

● By connecting the speed reducer between the motor and the spindle, the speed of the spindle is reduced and the torque is increased. This is effective particularly when a high torque is required at speeds of 5,000 min⁻¹ (rpm) or less.

CAT. No. AL0201 AIR LINE KIT AL-0201



● Air Line Kit AL-0201 is **Clean air** supply unit for ASTRO-E Control Unit. The dust and moisture in the compressed air are eliminated by the filter in the first stage and the regulator provides accurate and stable air to the control unit.

Air Line Kit (For ø6 mm Hose · Filter Mesh 0.3 μm)

CAT. No.	Model	Standard Equipment · Accessories	Price
AL0201	AL-0201	<ul style="list-style-type: none"> • Air Filter · Air Regulator • Air Pressure Gauge • Air ON-OFF Valve • Hose for Piping (K-260) : 6 ft 	

CAT. No. U235406 REDUCER (ø6 - ø4 mm Adaptor)



Reducer

CAT. No.	Model	Specifications	Price
U235406	Reducer	ø6 - ø4 mm Adaptor	