

A-A Series

Long Sprint NC Roll Feeding Machine

Model **A40A / A60A**

## Specifications Note

### Cautions for Installation

1. The supply voltage for NC feeding machines are 3 phase 200V ( $\pm 10\%$ ) $\cdot$ 50/60Hz, and no adjustment is made to adapt to conditions of electricity at each installation site.  
Note that a transformer to be installed independently is needed to adapt to the supplied voltage at the site where the feeder is going to be installed.
2. English characters and symbols are used to indicate operation panels on the controller.
3. The harmonic content included in the power circuit, which provides servo function, may cause radio hazards to AM radio, etc.
4. Installing a breaker may be required to work with to the inverter which is placed at the site where the Feeder is installed.
5. Conformity of the specifications depends on machining system, type of the mold, and conditions of equipment.
6. DIMAC NC Feeder is manufactured on the basis of specifications for domestic (in japan) use. if the feeder is relocated to overseas or exported, be sure to start operation after safety requirement to observe in the country concerned is confirmed and necessary measures are taken.

\* This specifications is subject to changes without notice.

The feeder is under warranty in accordance with DIMAC Quality Assurance Provisions as described below.

### 【1】 Warranty

- (1) Scope
  - 1) If DIMAC genuine parts are found to be faulty under normal conditions of operation described in the Manual due to defects in the material or in the manufacturing process, the parts are supplied free of charge.
- (2) Term
  - 1) 12 months from the date of shipment.
  - 2) 12 months from the date within thirty (30) days of shipment and described in the export declaration, if used overseas.
- (3) Method
  - 1) Persons are not dispatched to an installed site for repair and service but maintenance products and /or repair parts are provided.

### 【2】 Warranty exclusions

- (1) Cases listed below are excluded from the scope of warranty while in the terms of warranty.
  - 1) Natural disasters such as earthquake, typhoon, flood, and thunder fall, or accidents, fire, etc.
  - 2) Failure or malfunction due to repair, restoration, remodeling, etc. irrelevant to DIMAC.
  - 3) Usage out of the scope described in the specifications and ill or incorrect maintenance.
  - 4) Malfunction and failure due to other equipment connected to the feeder.
  - 5) Defects, corrosion, etc. due to external factor.
  - 6) Malfunction due to aging, wear from usage.
  - 7) Changes to human sense irrelevant to function (operational noises from controller, motor, etc.).
  - 8) Consequential damages to material, product, personal body, etc. due to installing this machine.
- (2) Services below are provided at user's charge.
  - 1) Inspection, maintenance, and cleaning.
  - 2) Replacement of supply parts described in the Manual.

### 【3】 Repair after the term of warranty is expired.

- 1) Repair to the product whose warranty term is expired is provided at user's charge.
- 2) For the case where 13 years have passed since the date of shipment of this product, there might be cases where repair service can't be provided due to stock and procurement conditions of the parts.
- 3) When quality and performance assurance after repair is deemed to be impossible, there might be cases where repair service can't be provided.

## ▪ Specification

Specification		Unit	A40A	A60A
Material width		mm	120~400	150~600
Max. Material thickness		mm	~1.6	
Max. Material weight		kg	~10	
Max. press follow-up speed		spm	~600	
Feeding system			Roll system by servo motor	
Acceleration adjustment			Automatic calculation (by press speed and feeding angles)	
Thickness adjustment			Automatic adjustment by servo motor	
Max. feed length		mm	~999.99	
Feed length setting unit		mm	0.01	
Roll pressure system			Electromagnet	
Roll pressure range		N	882~5880	
Effective feed start angle			210° ~150°	
Effective feed finish check angle			210° ~150°	
Release system			Electromagnet	
Release start effective angle			60° ~180°	
Release finish effective angle			120° ~300°	
Power supply voltage		V·Hz	3-phase 200V (±10%)·50/60Hz	
Total weight		kg	174	195
Protection circuit	Standard		1. 2circuit emergency stop output 2. Abnormal stop output 3. Continuous operation stop output 4. Emergency stop input circuit 5. Self-diagnosis / Abnormal stop 6. Overload prevention stop 7. Check for the rotation sensor running	
	Option		1. Work shortage sensor 2. Feeder synchronization signal input circuit	
Controller model			491C	

## ▪ Performance table

### A40A / A60A

#### Feed Angle: 150°

Press Speed SPM	Max. Feed Length (mm)		
	Material Weight		
	3kg	5kg	7kg
600	17.4	10.9	5.7
550	23.5	14.6	7.7
500	31.9	19.9	10.5
450	44.0	27.4	14.5
400	61.8	38.5	20.4
350	89.1	55.6	29.4
300	133.2	83.1	44.0
250	209.8	131.0	69.3
200	334.7	223.1	118.0
150	542.9	422.5	227.9
100	959.3	838.9	555.0

#### Feed Angle: 180°

Press Speed SPM	Max. Feed Length (mm)		
	Material Weight		
	3kg	5kg	7kg
600	31.9	19.9	10.5
550	41.7	26.0	13.7
500	55.0	34.3	18.1
450	73.9	46.1	24.4
400	101.4	63.3	33.5
350	143.1	89.3	47.2
300	209.8	131.0	69.3
250	309.7	202.7	107.2
200	459.6	339.2	179.6
150	709.5	589.1	341.5
100	999.9*	999.9*	803.8

#### Feed Angle: 210°

Press Speed SPM	Max. Feed Length (mm)		
	Material Weight		
	3kg	5kg	7kg
600	50.8*	31.7*	16.7*
550	64.7*	40.5*	21.4*
500	82.6	52.6	27.8
450	107.3	69.6	36.8
400	142.7	94.1	49.8
350	195.6	131.0	69.3
300	278.8	189.7	100.3
250	409.7	290.0	153.4
200	584.5	464.2	254.1
150	876.0	755.6	478.1
100	999.9*	999.9*	999.9*

Max. feed length by the feed angle and rotation speed (mm)

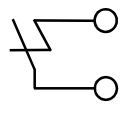
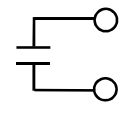
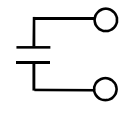
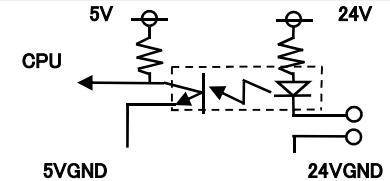
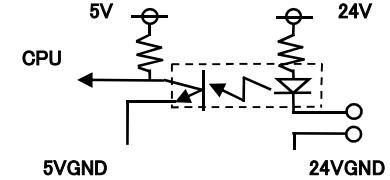
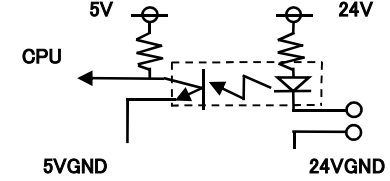
\* : Depending on the start angle and acceleration, the release operation may not be able to follow up.

\*: Setting an upper limit value

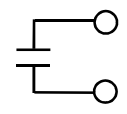
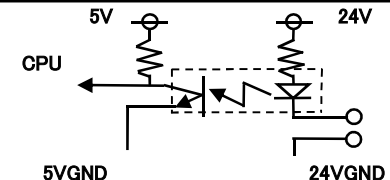
#### Note:

It may be impossible to finish workpiece feeding at the angle as specified on the feed performance table if the feeder is under a load resulting from material stress, etc.

## • Requirements for installing press

Press	A40A	A60A
Power supply voltage	3-phase 200V ( $\pm 10\%$ ) $\cdot$ 50/60Hz	
Rated power consumption	12500W	
Emergency stop switch input  2-systems support	Emergency stop signal output This signal outputs directly from the emergency stop switch  1 A at 250 VAC or less 1 A at 30 VDC or less	
Abnormal stop input	Abnormal stop output  1 A at 250 VAC or less 1 A at 30 VDC or less	Output at open 
Continuous operation stop input	Continuous operation stop output  1 A at 250 VAC or less 1 A at 30 VDC or less	Output at open 
Emergency stop output  Open collector output or contact output	Emergency stop input circuit  0.01 A at 24 VDC	
Press continuous operation output  Open collector output or contact output	Press process input circuit  0.01 A at 24 VDC	
Synchronizing signal output  Open collector output or contact output	Check for run the rotation sensor  Feed signal input circuit Release signal input circuits	
Rotation shaft of press machine	Synchronizing rotation 1:1	

## 〈Option〉

Press	A40A	A60A
Work shortage sensor input circuit	Work shortage sensor output circuit  1 A at 250 VAC or less 1 A at 30 VDC or less	Output at open 
Synchronizing signal output  2-Open corrector output or 2-Contact output	Feeder synchronization signal input circuit  Feed signal input circuit Release signal input circuits	

▪ **Standard product and accessories**

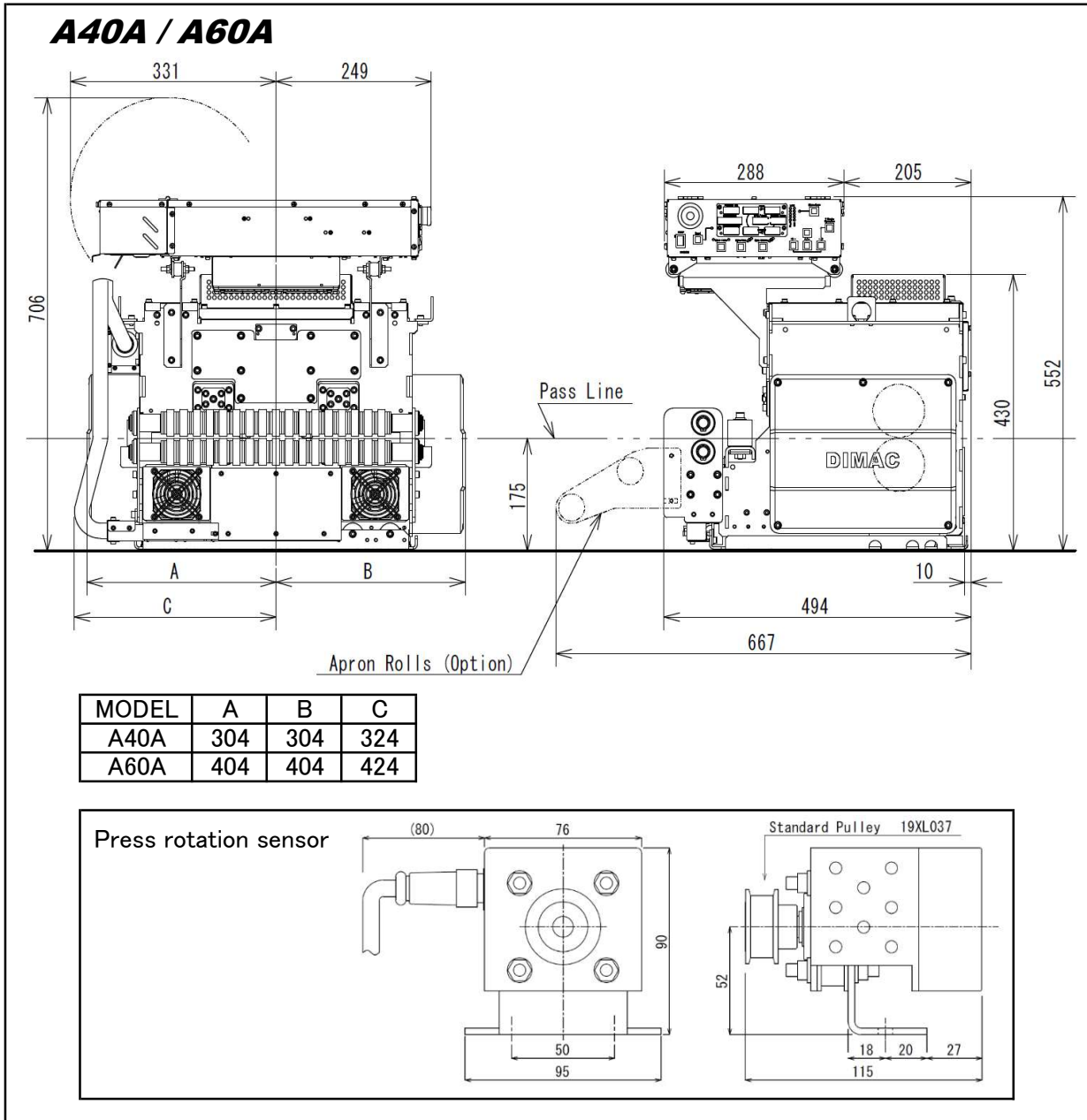
▪ Electrical cable	8m × 1
▪ Signal / Emergency stop cable	1set-8m × 1
▪ Press rotation sensor	
▪ Cable for press rotation sensor	6m × 1
▪ Pulley for the press	
▪ Terminal, Mark tube	
▪ Fixing bolt washer	
▪ Instruction manual	

▪ **Option**

▪ Mounting bracket for machining unit
▪ Work shortage sensor
▪ Apron rolls
▪ BS6 / Feed-during output
▪ FF6 / Feed complete output
▪ MP6 / Data bank
▪ TC6 / Feed conditions measurement
▪ RC6A / Remote box

There are other options as well.

▪ **Figure of dimension**



**DIMAC CO., LTD.**

130-1 Torashinden, Ohdaka-cho, Midori-ku, Nagoya-city, Aichi, 459-8001 Japan

TEL(052)622-0811 FAX(052)622-0821

<http://www.dimac.co.jp>

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