G Series

NC Grip Feeding Machine

Model *G11 / TG4*

Specifications Note

Cautions for Installation

- The supply voltage for NC feeding machines are 3 phase 200V (±10%) 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.
- 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
 - 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 change.
- (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

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Specification		Unit	G11	TG4
Max. Material width		mm	~120 *	
Max. Material thickne	Max. Material thickness		~0.8	
Max. press follow-up	speed	spm	~600	~1000
Feeding system			Grip system by servo motor	
Acceleration adjustment			Automatic calculation (by press speed and feeding angles)	
Max. feed length		mm	~110.00	~40.00
Feed length setting unit		mm	0.01	
Grip pressure system			Electromagnet	
Grip pressure range		N	98 ~980	
Effective feed start angle			210°~150°	
Effective feed finish check angle			210°~150°	
Release system			Spring Pressure	
Release start effective angle			60° ~180°	
Release finish effective angle			120°~300°	
Power supply voltage			3−phase 200V (±10%)•50/60Hz	
Total weight		kg	42	
			1. 2circuit emergency stop output	t
			2. Abnormal stop output	
Protection circuit			3. Continuous operation stop output	
	Standard		4. Emergency stop input circuit	
			5. Self-diagnosis / Abnormal stop	
			6. Overload prevention stop	
			7. Check for the rotation sensor running	
			1. Work shortage sensor	
	Option		2. Feeder synchronization signal input circuit	
Controller model			470C	

* Min. material width 8mm

•Numerical input function

Unit	G11	TG4
mm	0~110.00	0~40.00
spm	1~700	1~1200 *
%	10 ~100	
Angle	210~	~ 150
Angle	210~	~150
Angle	60~	~180
Angle	120~300	
	mm spm % Angle Angle Angle	mm 0~110.00 spm 1~700 % 10 ~ Angle 210 ~ Angle 210 ~ Angle 60 ~

Note:

Even if the numeric input is within the setting range, you may not be able to enter it by interference prediction.

 \ast If the SPM exceeds 1000, the last 3 digits are displayed as numbers and dots.

•Performance table

G11

Press	Feed angle	
speed	150°	180°
SPM	Unit(mm)	
600	1.9	4.5
550	2.9	6.4
500	4.5	9.1
450	6.8	13.0
400	10.4	18.9
350	16.2	28.0
300	25.8	43.1
280	31.5	51.8
260	38.7	62.9
240	48.1	77.1
220	60.4	95.0
200	77.1	110.0*
180	99.0	110.0*
160	110.0*	110.0*

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

TG4

Press	Feed angle	
speed	150°	180°
SPM	Unit(mm)	
1000	1.7	3.1
950	2.0	3.6
900	2.4	4.2
850	2.9	5.0
800	3.5	5.9
750	4.2	7.0
700	5.2	8.5
650	6.3	10.2
600	7.8	12.6
550	9.8	15.6
500	12.6	19.6
450	16.3	25.2
400	21.7	33.2
350	29.7	40.0*

Standard product and accessories

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

Option

 Mounting bracket for machining unit 		
 Work shortage sensor 		
 DS6 / Feed direction change 		
 BS6 / Feed-during output 		
•FF6 / Feed complete output		
•MP6 / Data bank		
 TC6 / Feed conditions measurement 		
•RC6A / Remote box		

* There are other options as well.

* 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.

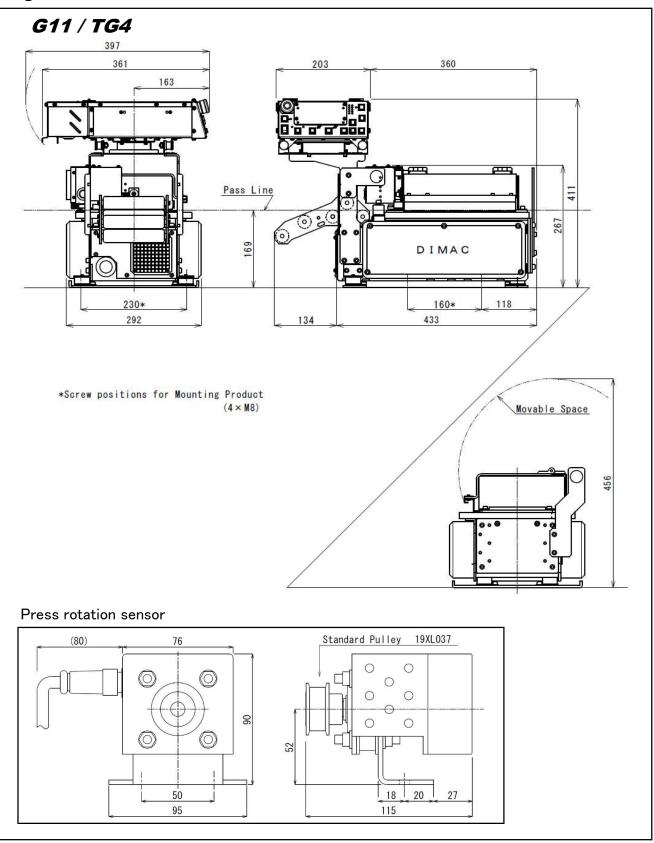
•Requirements for installing press

Press	G11	TG4
Power supply voltage	3-phase 200V (±	10%)•50/60Hz
Rated power consumption	1500)W
Emergency stop switch input	Emergency stop signal output This signal outputs directly from the emerge	ency stop switch
2-systems support	1 A at 250 VAC or less 1 A at 30 VDC or less	<u> </u>
Abnormal stop input	Abnormal stop output 1 A at 250 VAC or less 1 A at 30 VDC or less Output at oper	
Continuous operation stop input	Continuous operation stop output 1 A at 250 VAC or less 1 A at 30 VDC or less 0 utput at operation	
Emergency stop output Open collector output or contact output	Emergency stop input circuit 0.01 A at 24 VDC	
Press continuous operation output	Press process input circuit	5VGND 24VGND 5V - 24V
Open collector output or contact output	0.01 A at 24 VDC	
Synchronizing signal output	Check for run the rotation sensor	5V 24V
Open collector output or contact output	Feed signal input circuit Release signal input circuits	
Rotation shaft of press machine	Synchronizing rotation 1:1	

(Option)

Press	G11	TG4
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 oper	
Synchronizing signal output	Feeder synchronization signal	5V
2-Open corrector output or 2-Contact output	input circuit Feed signal input circuit Release signal input circuits	
		5VGND 24VGND

• Figure of dimension



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