

# Outline and Specifications

## Specifications

Size	Units	VGX30	VGX60	VGX100	VGX350
Feed length	mm	0 to 30	0 to 60	0 to 100	**50 to 350
Minimum Increments for Feed Pitch	mm	0.005	0.005	0.005	0.01
Material thickness*1	mm	0.1 to 2	0.1 to 2	0.1 to 2	**0.1 to 1
Grip force	N	1700	1700	1700	5000
Roll width	mm	8 to 100	8 to 100	8 to 100	70 to 420
Maximum strokes	min <sup>-1</sup>	2000	1500	1000	300
Maximum feed rate	m/min	50	50	50	90
Feed angle	deg	156	165	165	165
Repeated feed accuracy*2	mm	±0.025	±0.025	±0.025	±0.08
Pilot release	(° )	Approx. 51	Approx. 49	Approx. 49	**Approx. 46
Input Shaft Drive Ratio	rpm : s	1:1	*2:1	*2:1	*2:1
Operating air pressure	kPa	490 to 690	490 to 690	490 to 690	490 to 690
Lubricating oil pressure	kPa	290 to 490	290 to 490	290 to 490	290 to 490
Lude flow supply	ℓ/min	0.4	0.4	0.4	1.5 to 2.2
Lubrication		Forced lubrication	Forced lubrication	Forced lubrication	Forced lubrication
Operating power supply	V	100 VAC, single phase	100 VAC, single phase	100 VAC, single phase	100 VAC, single phase
Product weight	kg	95	95	95	750

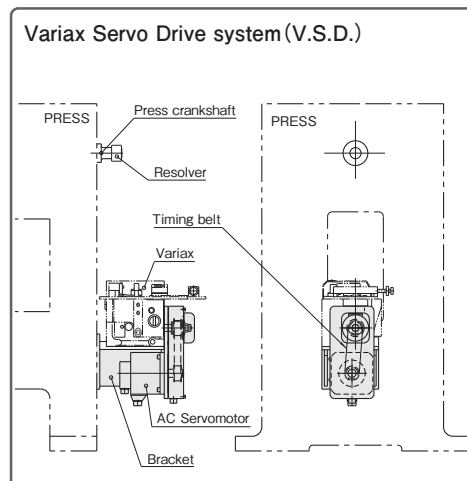
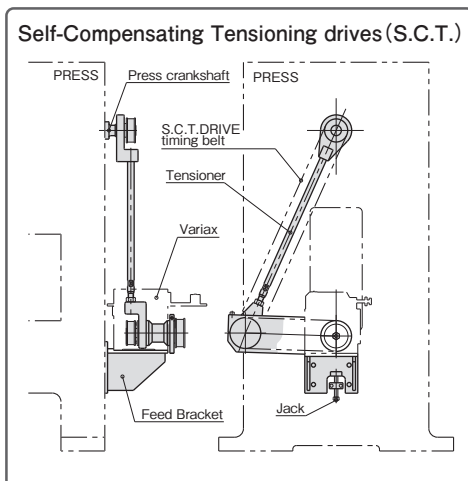
\*Requires two turns of the input shaft to make one feed motion.

\*\*On the VGX350, the adjustments for feed pitch, material thickness, and release position are push-button adjustments.

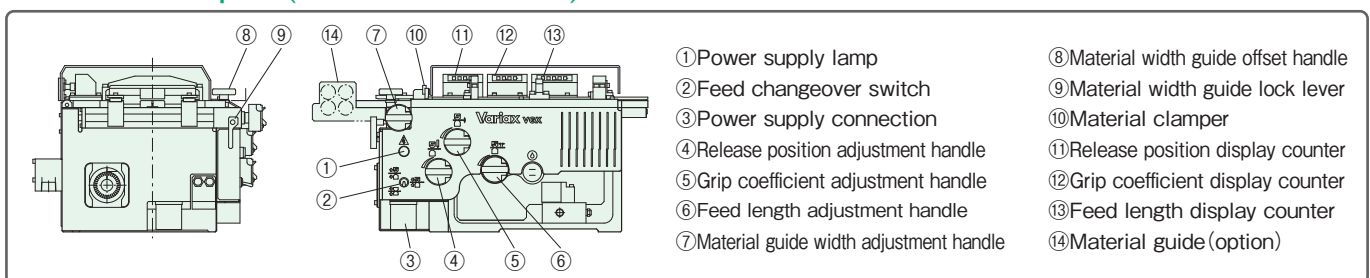
Note 1) If your material is over 1 mm thick, please contact our Sales Department.

Note 2) The feed precision depends on the operating conditions. The values given here are for reference purposes only.

## Drive method



## Name of each part (for VGX30/60/100)



## Dimensions

[Unit:mm]

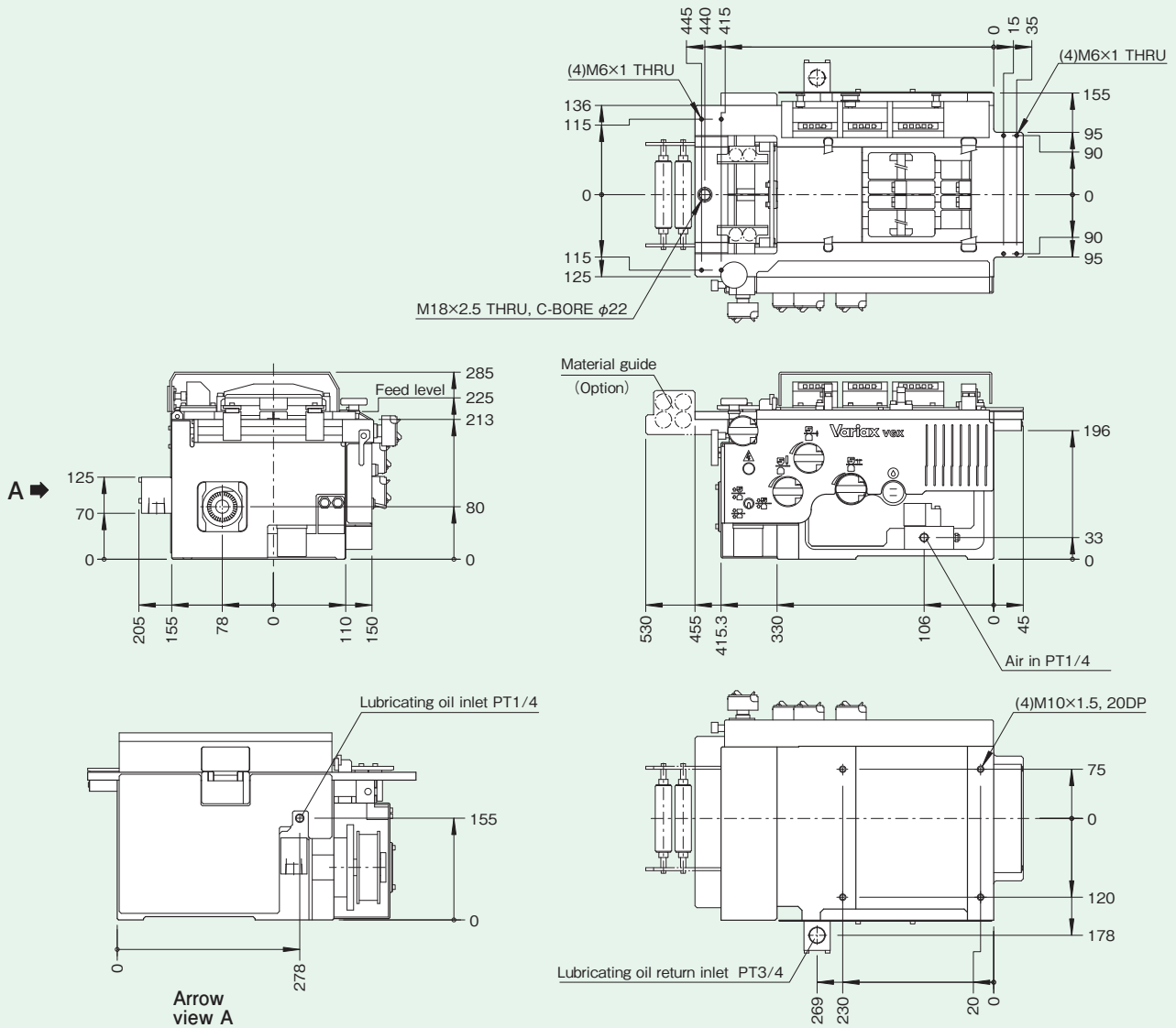


Figure VGX30-1

## Specification table

Characteristic	Data
Feed length	0 to 30 [mm]
Material thickness	0.1 to 2*1 [mm]
Gripping force	1,700 [N]
Material width	8 to 100 [mm]
Maximum number of strokes	2000 [min <sup>-1</sup> ]
Maximum feed speed	50 [m/min]
Minimum Increments for Feed Pitch	0.005 [mm]
Feed Angle	156 [deg]
Repeatability	±0.025*2 [mm]
Pilot Release	Approx. 51 [deg]
Input Shaft Drive Ratio	1:1 [rpm:s]

Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Lubricating oil pressure	290 to 490 [kPa]
Lude flow supply	0.4 [ℓ/min]
Operating power supply	100 VAC single phase [V]
Product weight	95 [kg]
Recommended lubrication oil	Shell Omala S2 G 68
Lubrication system	Forced lubrication
Housing color	5Y7/1
Operation panel color	2.5Y9/0.2

1[N·m] ≒ 0.102[kgf·m]

\*1 If your material is over 1 mm thick, please contact our Sales Department.

\*2 The feed precision depends on the operating conditions. The values given here are for reference purposes only.

### Maximum feed capability chart (Drive method: S.C.T.)

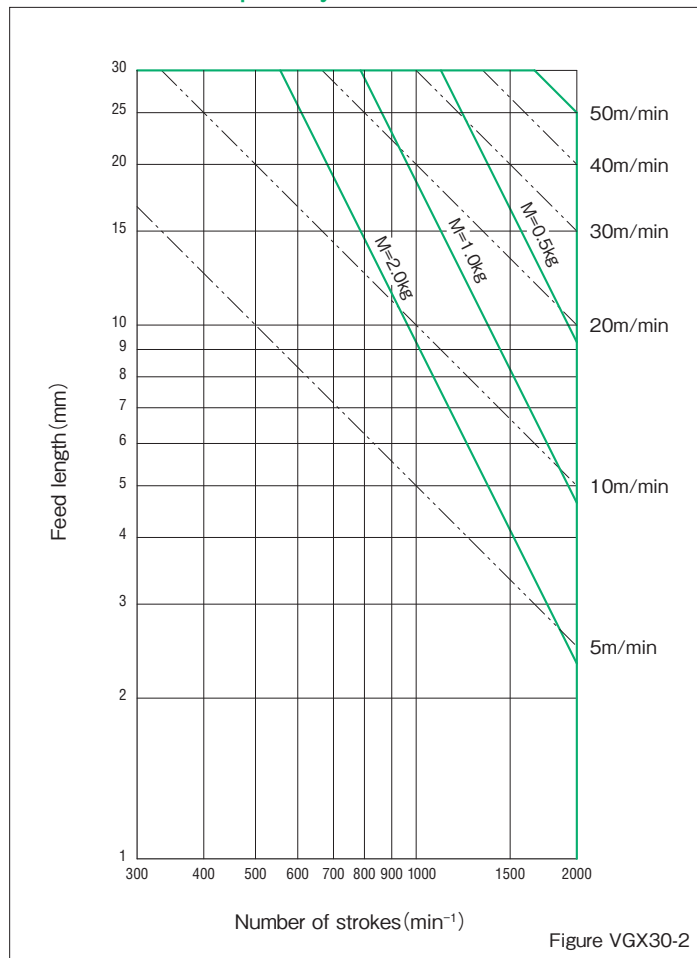
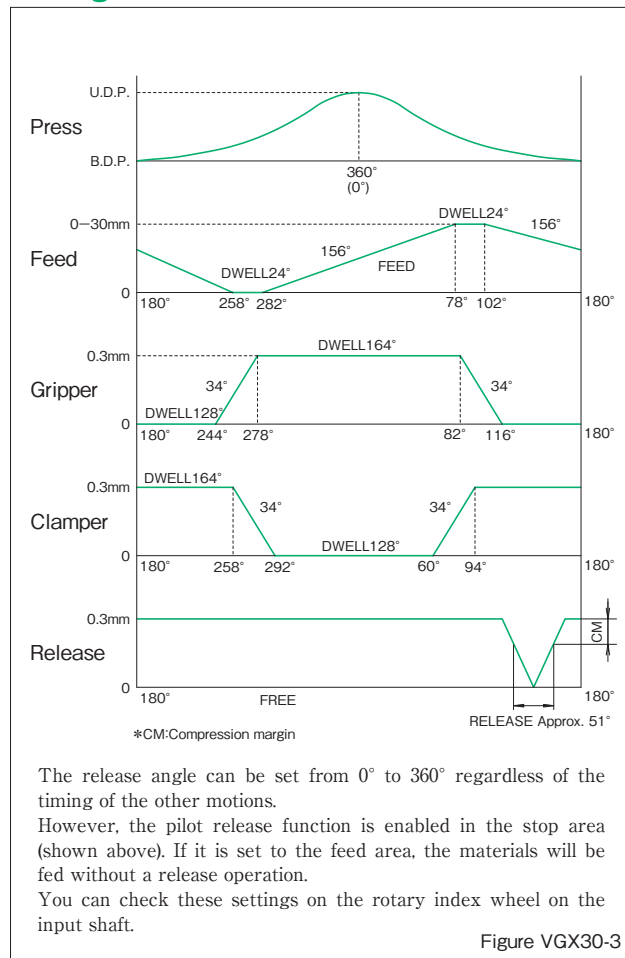


Figure VGX30-2

### Timing chart



The release angle can be set from 0° to 360° regardless of the timing of the other motions. However, the pilot release function is enabled in the stop area (shown above). If it is set to the feed area, the materials will be fed without a release operation. You can check these settings on the rotary index wheel on the input shaft.

Figure VGX30-3

### Oil pump

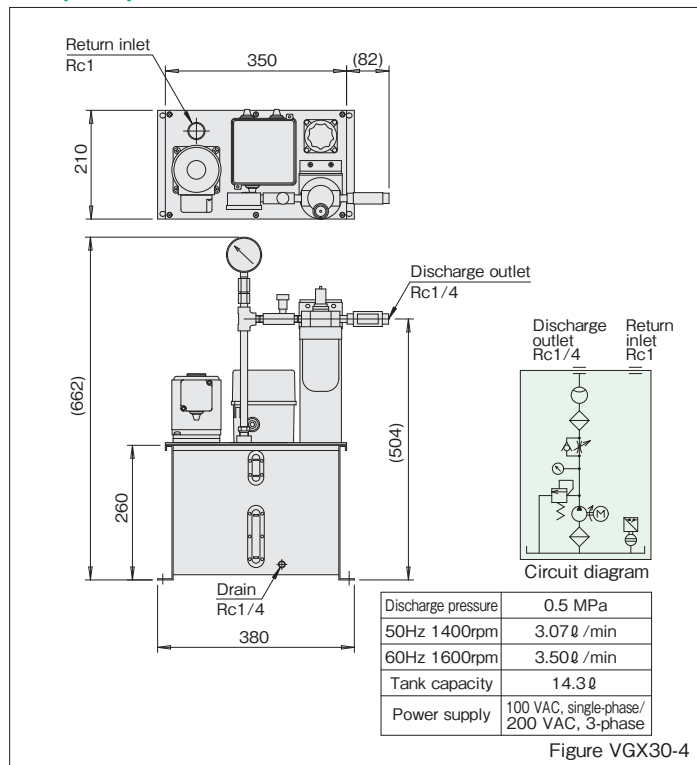
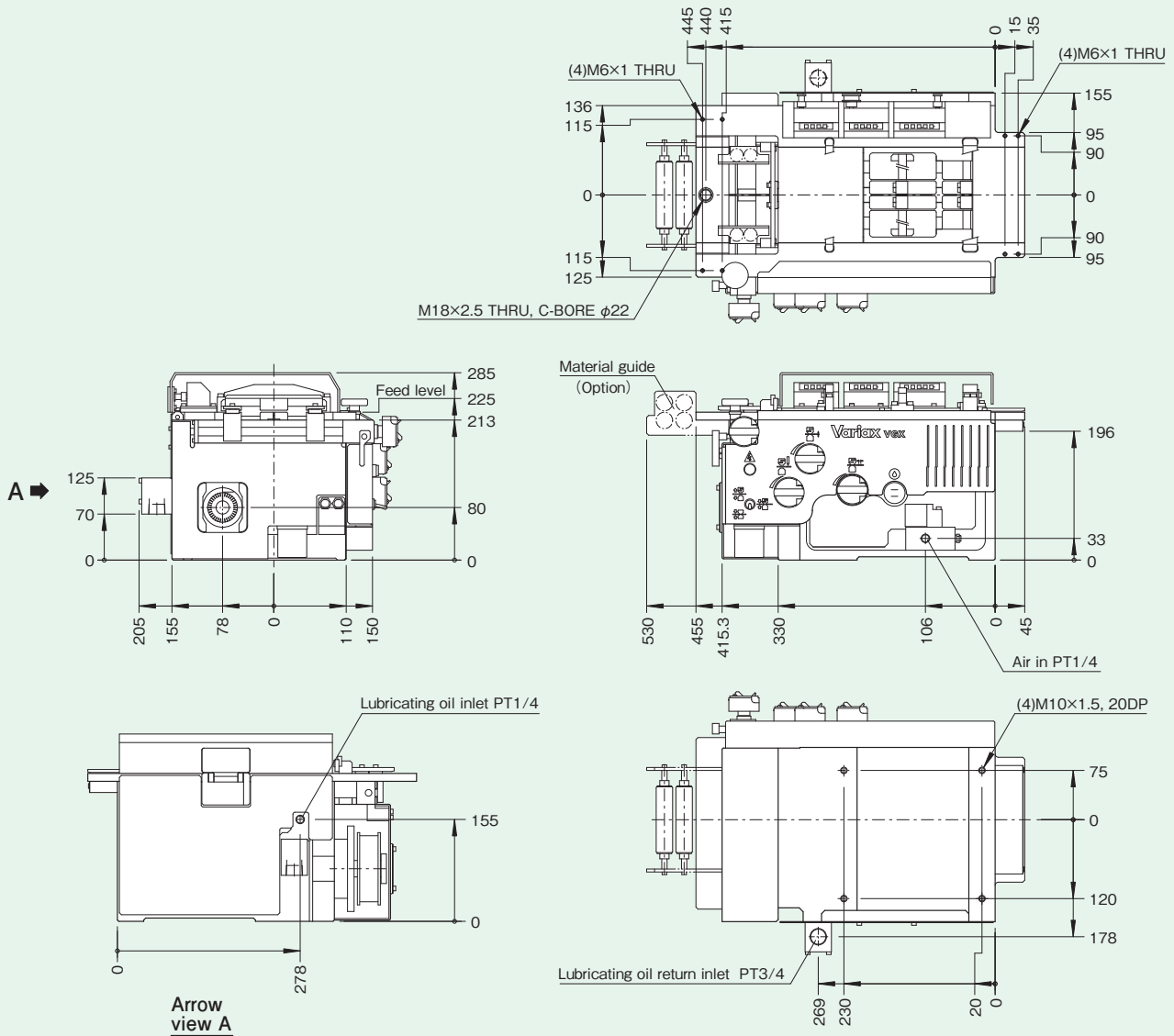


Figure VGX30-4

## Dimensions

[Unit:mm]



## Specification table

Characteristic	Data
Feed length	0 to 60 [mm]
Material thickness	0.1 to 2*1 [mm]
Gripping force	1,700 [N]
Material width	8 to 100 [mm]
Maximum number of strokes	1500 [min <sup>-1</sup> ]
Maximum feed speed	50 [m/min]
Minimum Increments for Feed Pitch	0.005 [mm]
Feed Angle	165 [deg]
Repeatability	±0.025*2 [mm]
Pilot Release	Approx. 49 [deg]
Input Shaft Drive Ratio	2:1*3 [rpm:s]

Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Lubricating oil pressure	290 to 490 [kPa]
Lude flow supply	0.4 [ℓ/min]
Operating power supply	100 VAC single phase [V]
Product weight	95 [kg]
Recommended lubrication oil	Shell Omala S2 G 68
Lubrication system	Forced lubrication
Housing color	5Y7/1
Operation panel color	2.5Y9/0.2

1[N·m] ≒ 0.102[kgf·m]

\*1 If your material is over 1 mm thick, please contact our Sales Department.

\*2 The feed precision depends on the operating conditions. The values given here are for reference purposes only.

\*3 VGX60 feeds one time for every two rotations of the input shaft. Therefore, set the drive speed ratio of the input shaft to 2:1.

### Maximum feed capability chart (Drive method: S.C.T.)

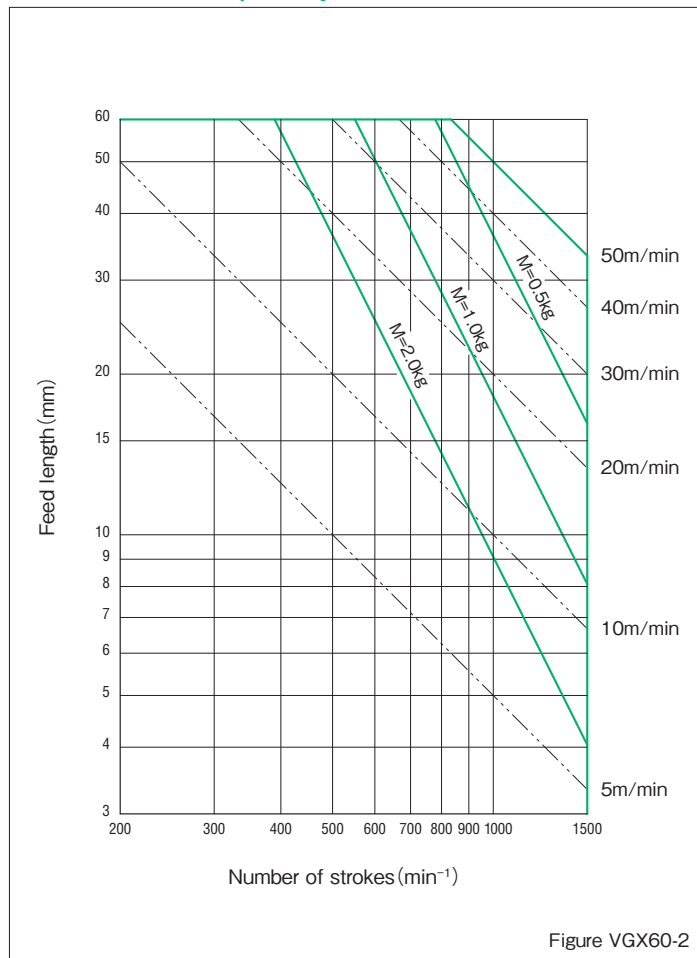


Figure VGX60-2

### Timing chart

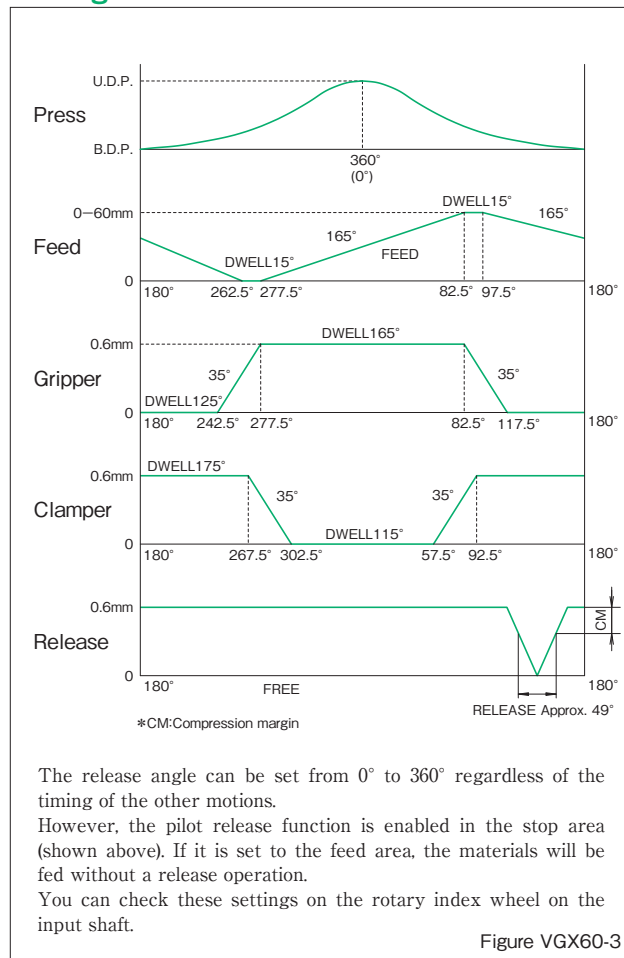


Figure VGX60-3

The release angle can be set from 0° to 360° regardless of the timing of the other motions. However, the pilot release function is enabled in the stop area (shown above). If it is set to the feed area, the materials will be fed without a release operation. You can check these settings on the rotary index wheel on the input shaft.

### Oil pump

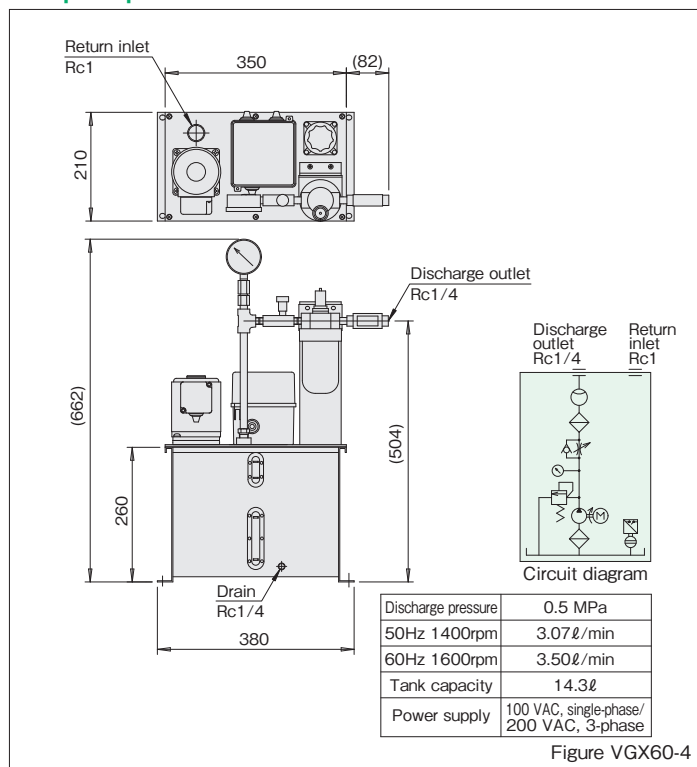


Figure VGX60-4

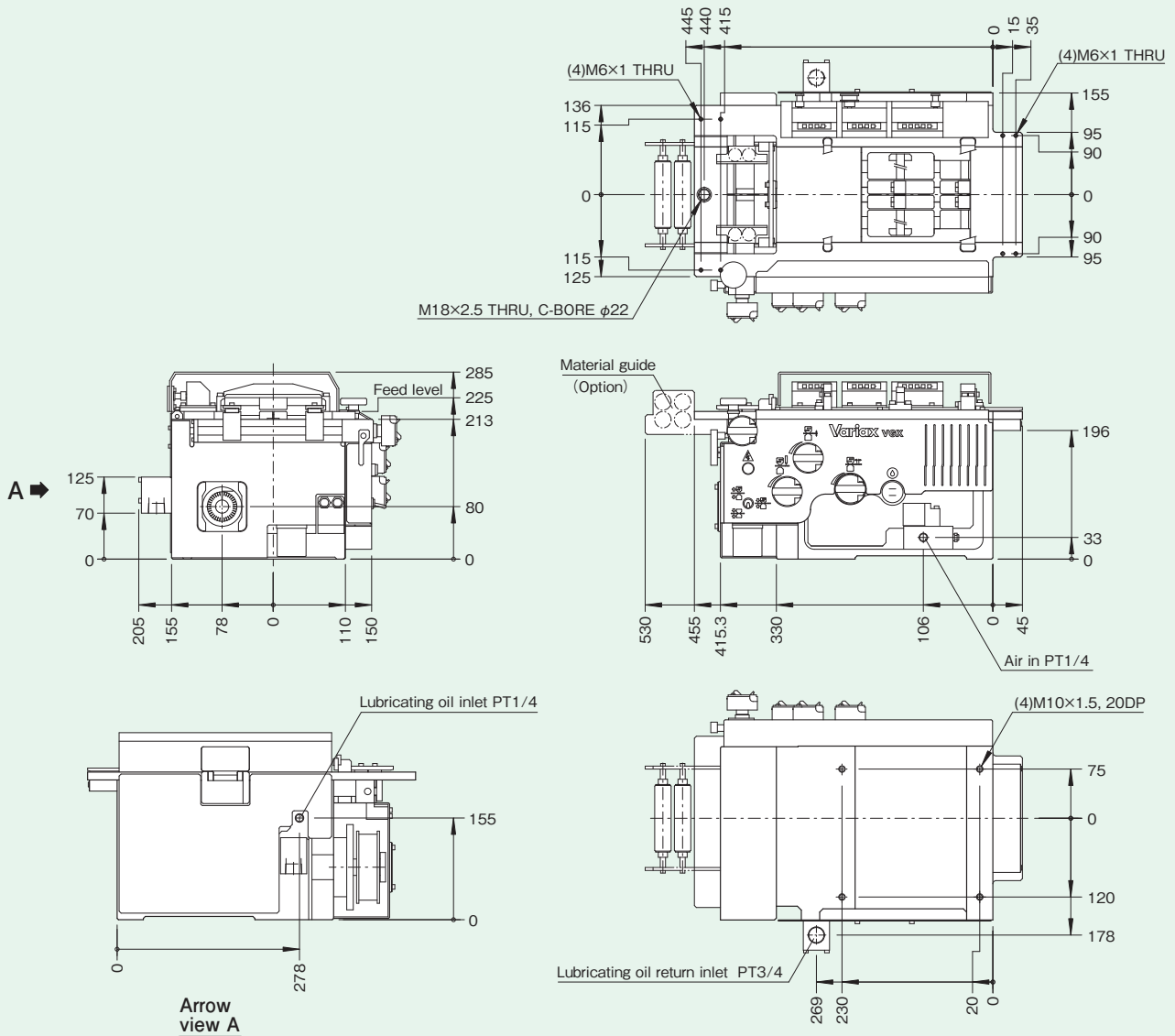


Figure VGX100-1

## Specification table

Characteristic	Data
Feed length	0 to 100 [mm]
Material thickness	0.1 to 2*1 [mm]
Gripping force	1,700 [N]
Material width	8 to 100 [mm]
Maximum number of strokes	1000 [min <sup>-1</sup> ]
Maximum feed speed	50 [m/min]
Minimum Increments for Feed Pitch	0.005 [mm]
Feed Angle	165 [deg]
Repeatability	±0.025*2 [mm]
Pilot Release	Approx. 49 [deg]
Input Shaft Drive Ratio	2:1*3 [rpm:s]

Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Lubricating oil pressure	290 to 490 [kPa]
Lude flow supply	0.4 [ℓ/min]
Operating power supply	100 VAC single phase [V]
Product weight	95 [kg]
Recommended lubrication oil	Shell Omala S2 G 68
Lubrication system	Forced lubrication
Housing color	5Y7/1
Operation panel color	2.5Y9/0.2

1[N·m] ≒ 0.102[kgf·m]

\*1 If your material is over 1 mm thick, please contact our Sales Department.

\*2 The feed precision depends on the operating conditions. The values given here are for reference purposes only.

\*3 VGX100 feeds one time for every two rotations of the input shaft. Therefore, set the drive speed ratio of the input shaft to 2:1.

Maximum feed capability chart (Drive method: S.C.T.)

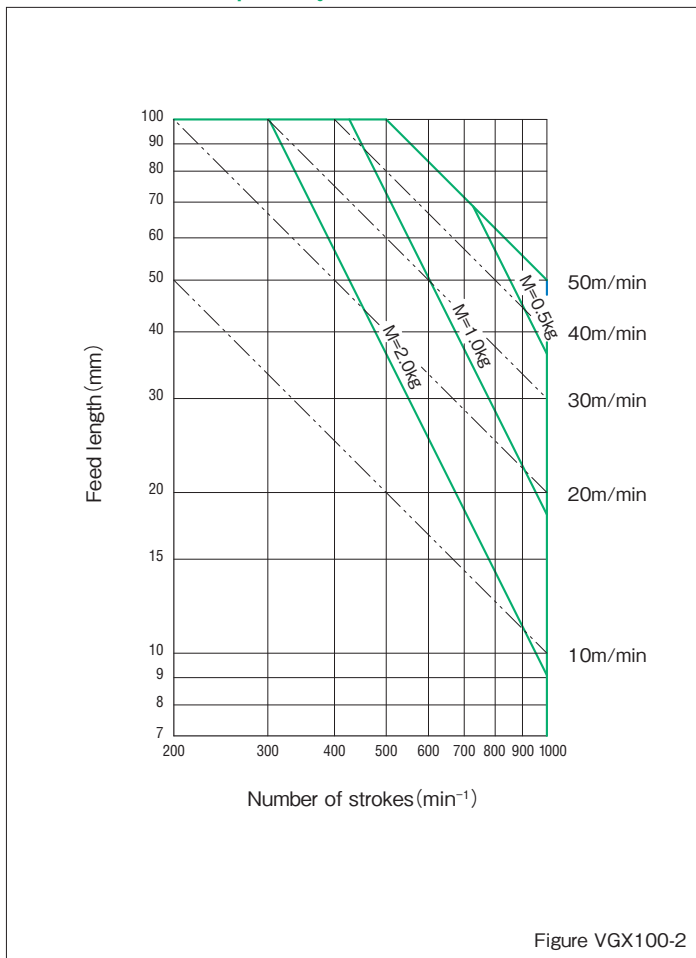
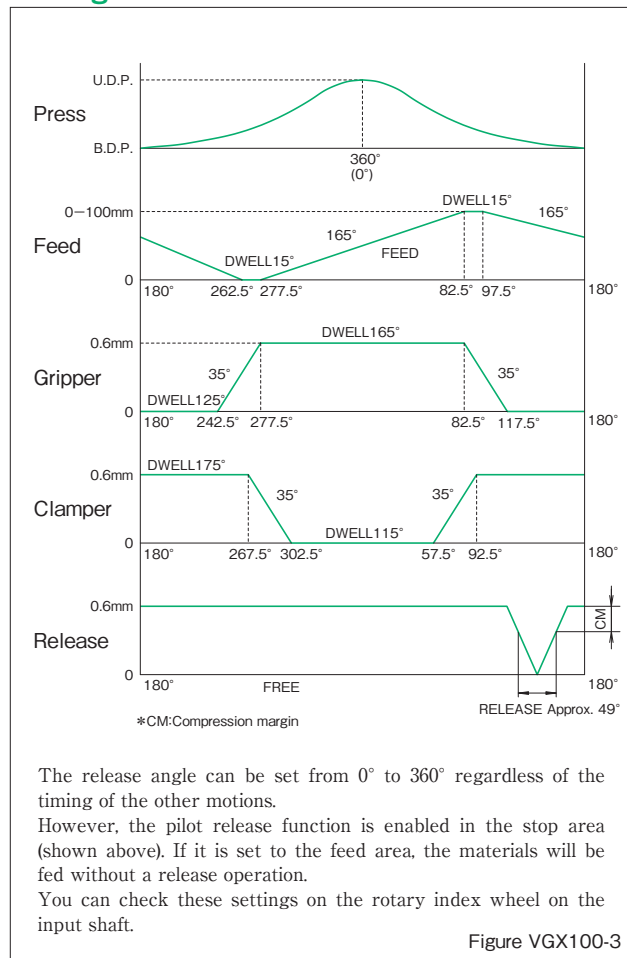


Figure VGX100-2

Timing chart



The release angle can be set from 0° to 360° regardless of the timing of the other motions. However, the pilot release function is enabled in the stop area (shown above). If it is set to the feed area, the materials will be fed without a release operation. You can check these settings on the rotary index wheel on the input shaft.

Figure VGX100-3

Oil pump

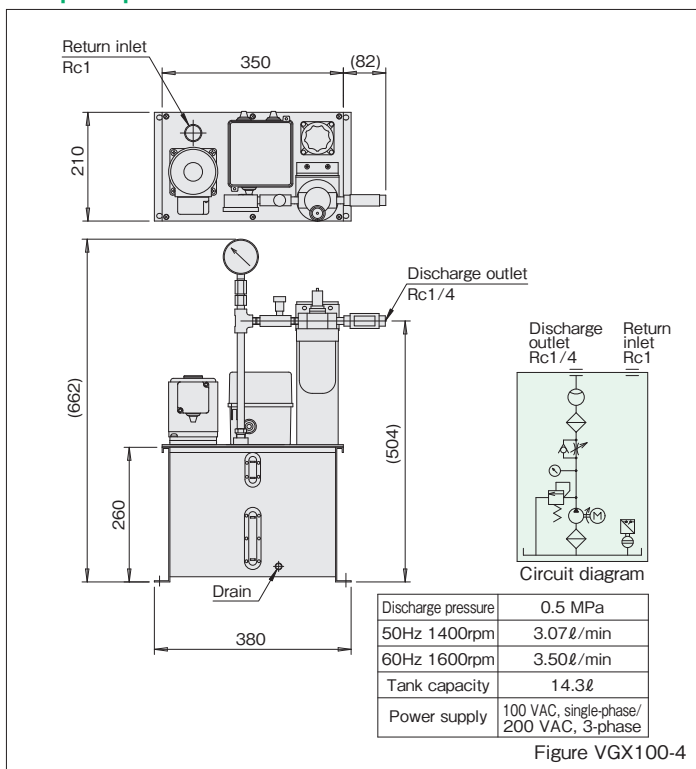


Figure VGX100-4

## Dimensions

[Unit:mm]

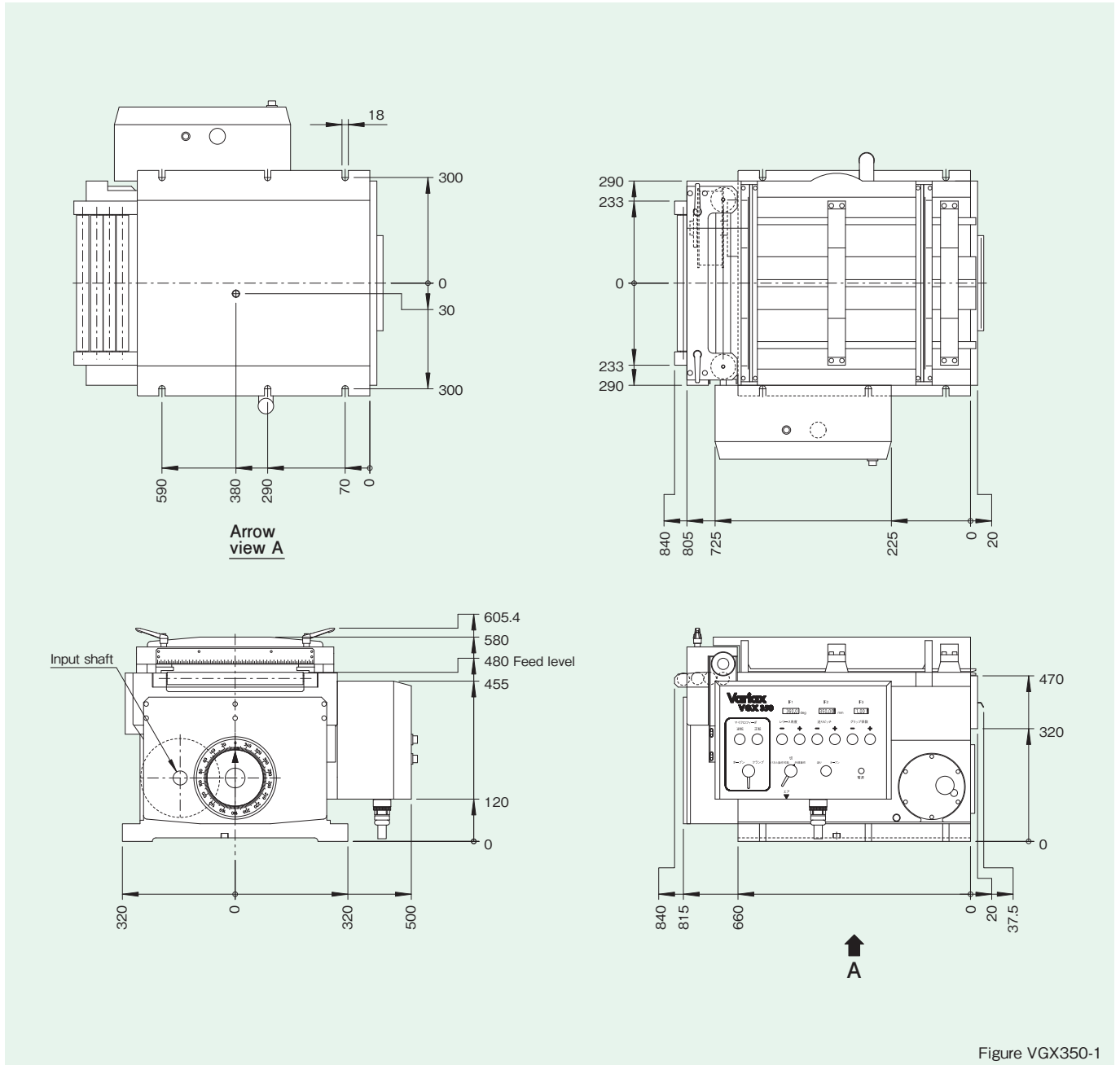


Figure VGX350-1

## Specification table

Characteristic	Data
Feed length	50 to 350 [mm]
Material thickness	0.1 to 1*1 [mm]
Gripping force	5,000 [N]
Material width	70 to 420 [mm]
Maximum number of strokes	300 [min <sup>-1</sup> ]
Maximum feed speed	90 [m/min]
Minimum Increments for Feed Pitch	0.01 [mm]
Feed Angle	165 [deg]
Repeatability	±0.08*2 [mm]
Pilot Release	Approx. 46 [deg]
Input Shaft Drive Ratio	2:1*3 [rpm:s]

Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Lubricating oil pressure	290 to 490 [kPa]
Lude flow supply	1.5 to 2.2 [ℓ/min]
Operating power supply	100 VAC single phase [V]
Product weight	750 [kg]
Recommended lubrication oil	Shell Omala S2 G 68
Lubrication system	Forced lubrication
Housing color	5Y7/1
Operation panel color	2.5Y9/0.2

1[N·m] ≅ 0.102[kgf·m]

\*1 If your material is over 1 mm thick, please contact our Sales Department.

\*2 The feed precision depends on the operating conditions. The values given here are for reference purposes only.

\*3 VGX350 feeds one time for every two rotations of the input shaft. Therefore, set the drive speed ratio of the input shaft to 2:1.



Maximum feed capability chart (Drive method: S.C.T.)

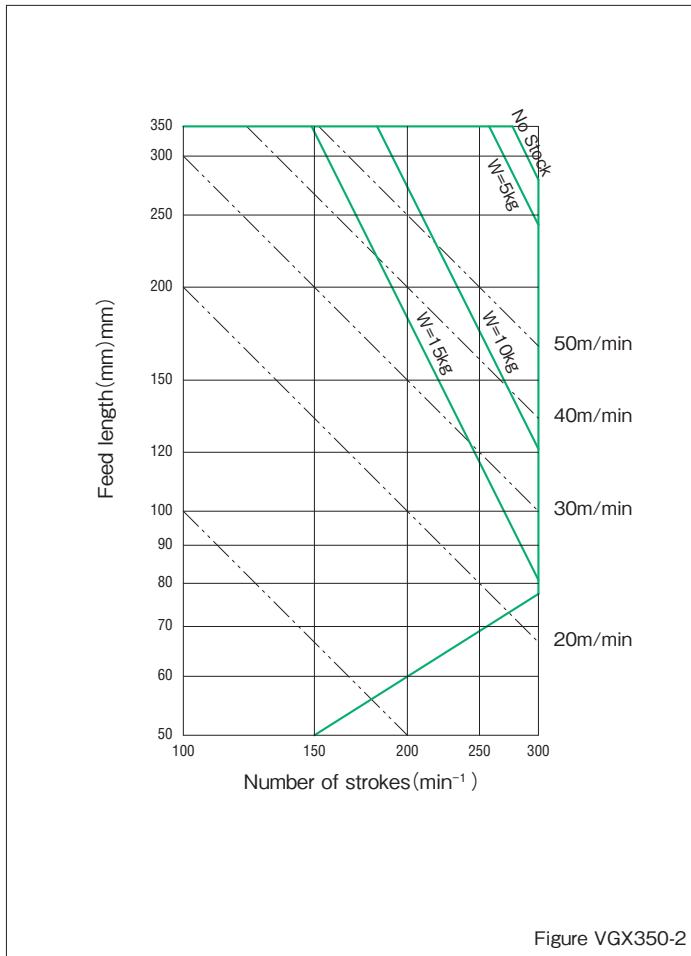


Figure VGX350-2

Timing chart

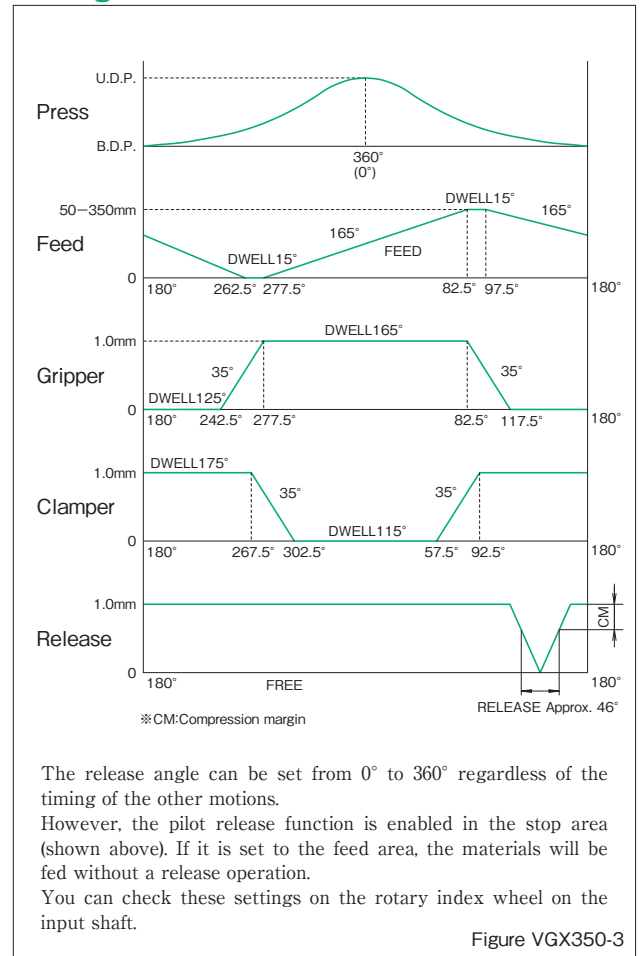


Figure VGX350-3

The release angle can be set from 0° to 360° regardless of the timing of the other motions. However, the pilot release function is enabled in the stop area (shown above). If it is set to the feed area, the materials will be fed without a release operation. You can check these settings on the rotary index wheel on the input shaft.

Oil pump

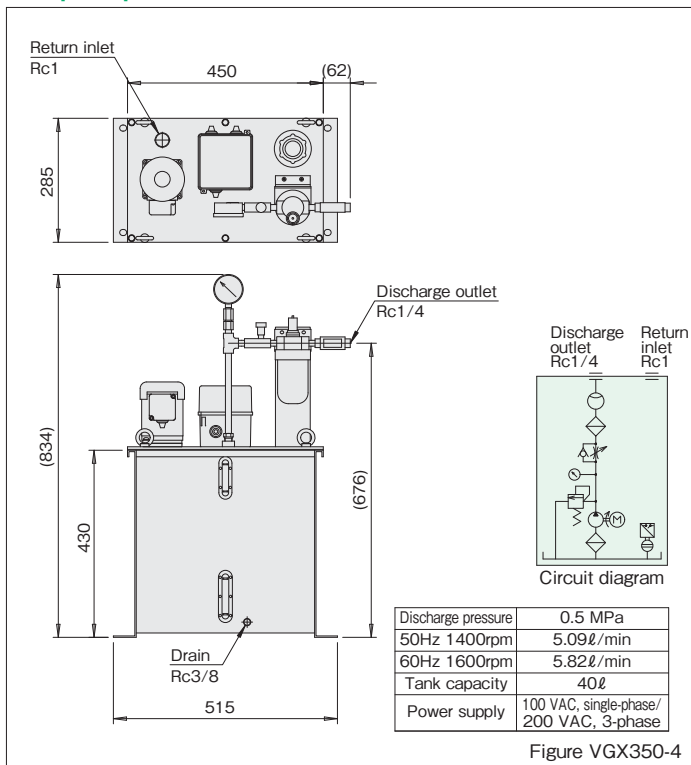


Figure VGX350-4

