

# Outline and Specifications

## Specifications

Size	Units	High speed type		Genera-purpose Type				Wide width type
		VG15H	VG20H	VG25(T)	VG50(T)	VG75(T)	VG100(T)	VG120W
Feed Length	mm	0 to 15	0 to 20	0 to 25	0 to 50	0 to 75	0 to 100	0 to 120
Adjustment Units for Feed Pitch	mm	0.02	0.02	0.02	0.02	0.02	0.02	0.001
Material Thickness*1 *2	mm	0 to 0.5	0 to 2	0 to 2	0 to 2	0 to 2	0 to 2	0 to 1
Grip Force	N	400 to 1,200	400 to 1,200	400 to 1,200	400 to 1,200	400 to 1,200	300 to 3,000	600 to 2,400
Material Width	mm	8 to 50	8 to 50	8 to 100	8 to 100	8 to 100	12 to 120	20 to 250
Max. Strokes	min <sup>-1</sup>	3,600	1,800	1,200	1,000	700	500	250
Max. Feeding Speed	m/min	30	30	25	30	30	30	30
Feed Angle	deg	156	164	165	165	165	165	160
Repeat Accuracy*3	mm	±0.035	±0.025	±0.025	±0.025	±0.025	±0.025	±0.05
Pilot release	deg	Approx. 72	Approx. 51	Approx. 49	Approx. 49	Approx. 49	Approx. 54	Approx. 49
Input Shaft Drive Ratio (Input: Stroke)		1:3	1:2	1:1	1:1	1:1	1:1	1:2
Operating air pressure*4	kPa	490 to 690	490 to 690	490 to 690	490 to 690	490 to 690	490 to 690	490 to 690
Lubrication System		Forced lubrication	Forced lubrication	Oil bath/Forced lubrication	Oil bath/Forced lubrication	Oil bath/Forced lubrication	Oil bath/Forced lubrication	Forced lubrication
Operating power supply		100 VAC single phase, 50/60 Hz (115 VAC 50/60 Hz, 24 VDC)						
Weight	kg	60	60	60	60	60	150	290

\*1 A material thickness adjustment dial is furnished on the high-speed type, some general-purpose types (VG\_\_T), and the wide width type. For all other general-purpose types, material thickness is adjusted by shims.

\*2 Contact Sankyo for material thicknesses of more than 1mm.

\*3 The values listed here are Sankyo internal testing standards. Repeatability varies according to actual operating conditions.

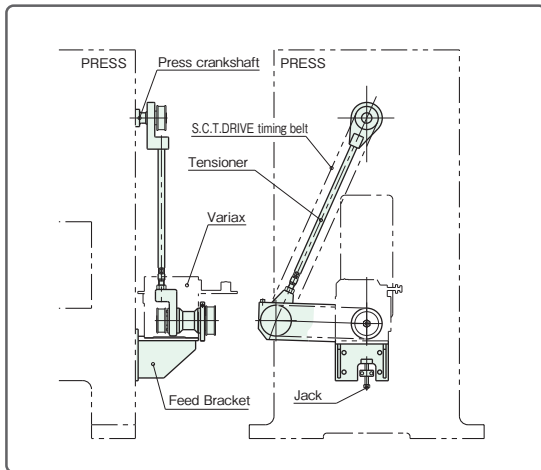
\*4 Compressed air with a high moisture content can lead to equipment failure. Furnish an air dryer or mist separator to prevent moisture (condensation).

Use an air filter with a porosity grade of 5 μm or less.

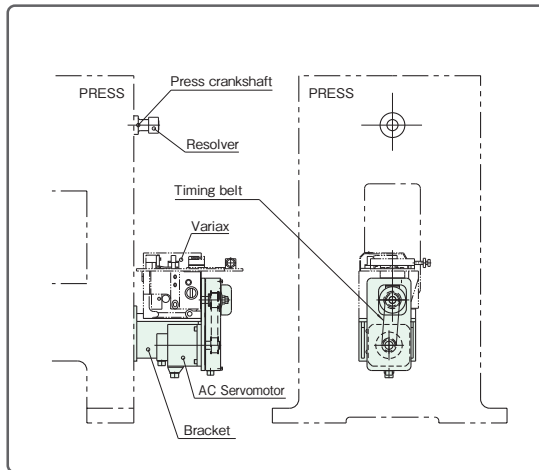
Make sure the air supply is at the specified pressure. Insufficient pressure may cause the release action to fail.

## Drive method

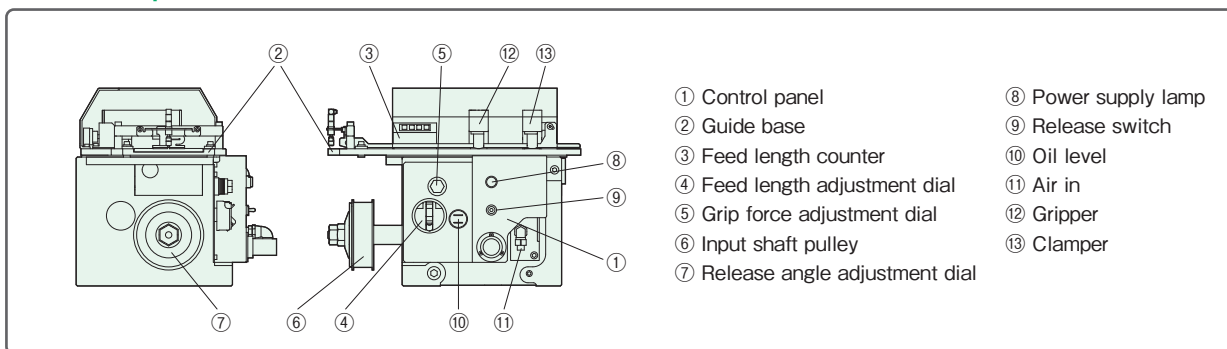
### Self-Compensating Tensioning drives (S.C.T)



### Variax Servo Drive system (V.S.D)



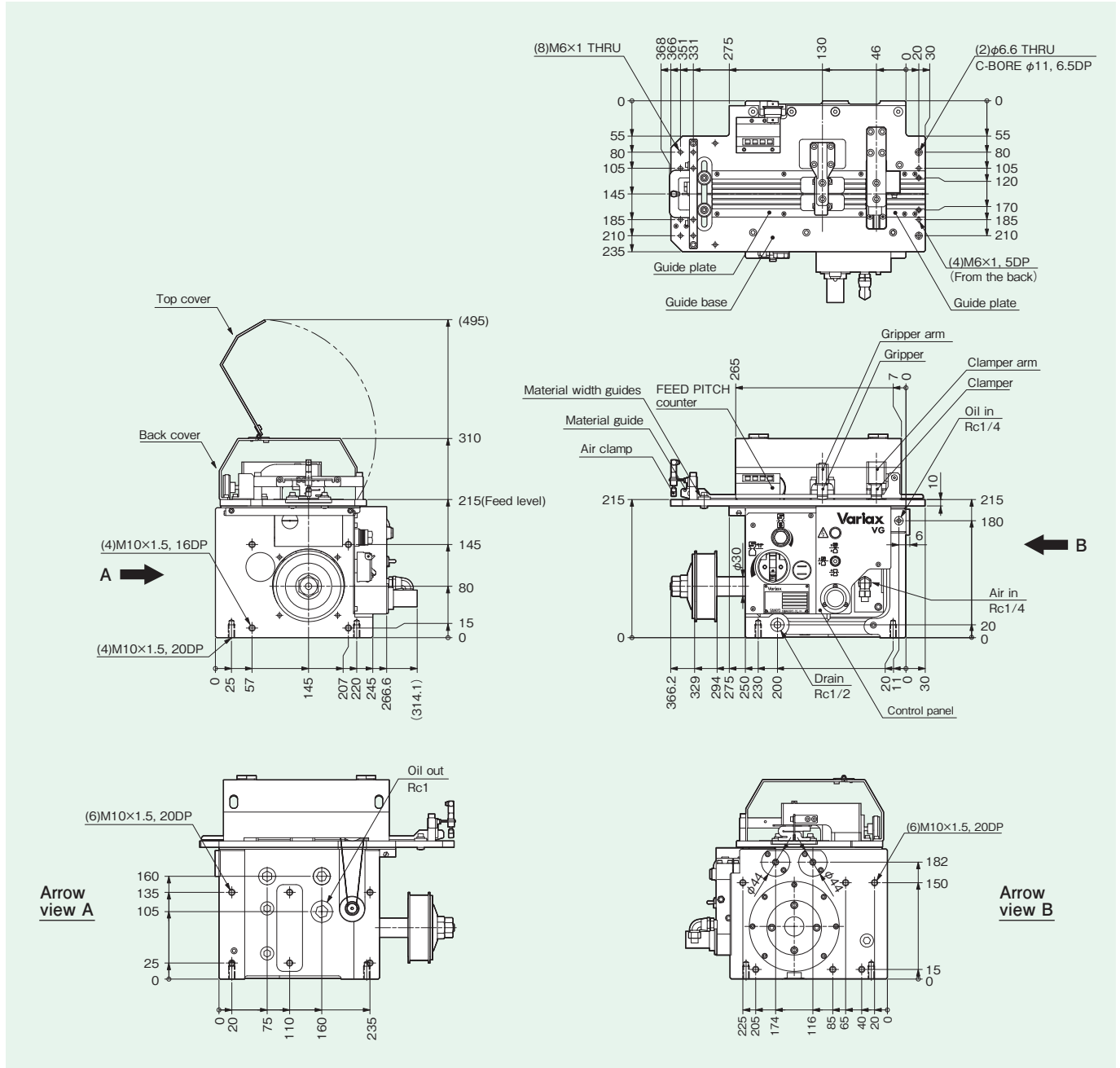
## Feed components



# VG15H

## Dimensions

[Unit:mm]



## Specification table

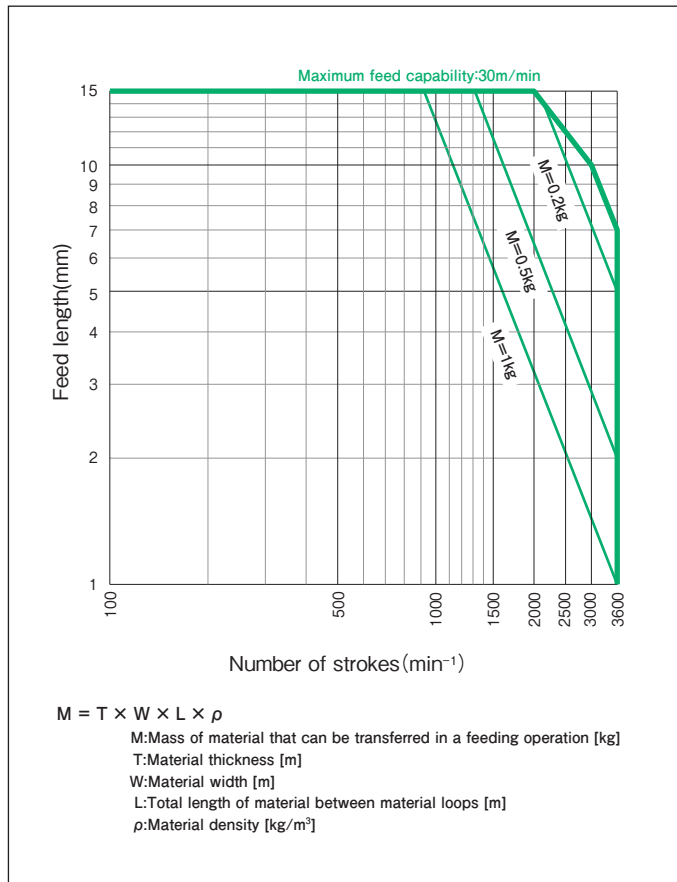
Characteristic	Data
Feed length	0 to 15 [mm]
Adjustment Units for Feed Pitch	0.02 [mm]
Material thickness	0 to 0.5 [mm]
Gripping force	400 to 1,200 [N]
Material width	8 to 50 [mm]
Maximum number of strokes	3,600 [min <sup>-1</sup> ]
Maximum feed speed	30 [m/min]
Feed Angle	156 [deg]
Repeatability	±0.035 [mm]
Pilot Release	Approx. 72 [deg]
Air Release	Full adjustable
Input Shaft Drive Ratio (Input: Stroke)	1:3*

Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Operating power supply	100 VAC single phase [V]
Product weight	60 [kg]
Recommended lubrication oil	Shell Omala S2 G 150
Lubrication system	Forced lubrication
Amount of internal oil for oil bath lubrication	—
Amount of oil supplied for forced lubrication	0.4 [ℓ/min]
Housing color	2.5Y9/02
Operation panel color	2.5Y9/02

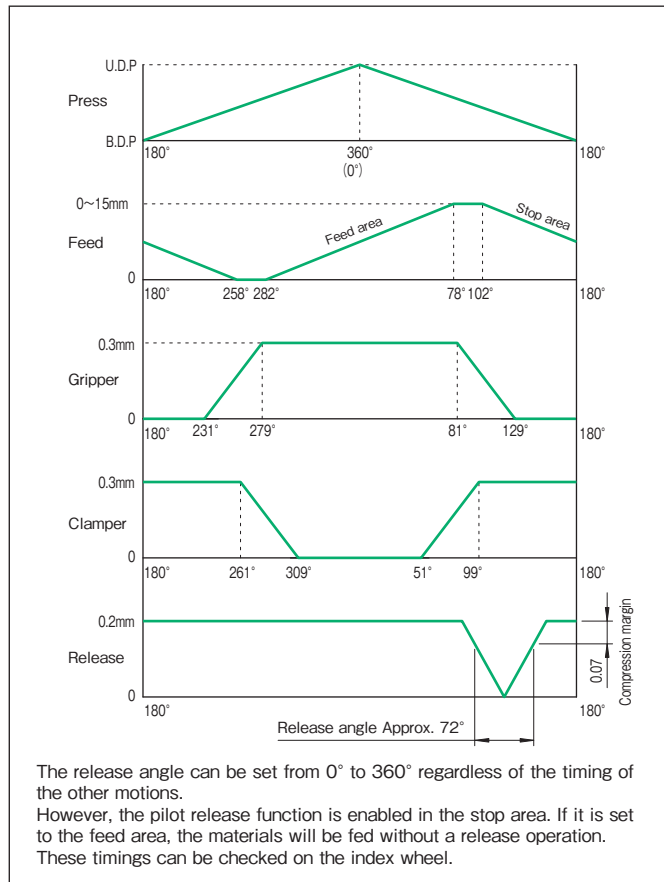
1 [N·m] ≒ 0.102 [kgf·m]

\*The VG15H performs three feed operations per turn of the input shaft, reducing the input shaft drive speed to 1/3 of normal.

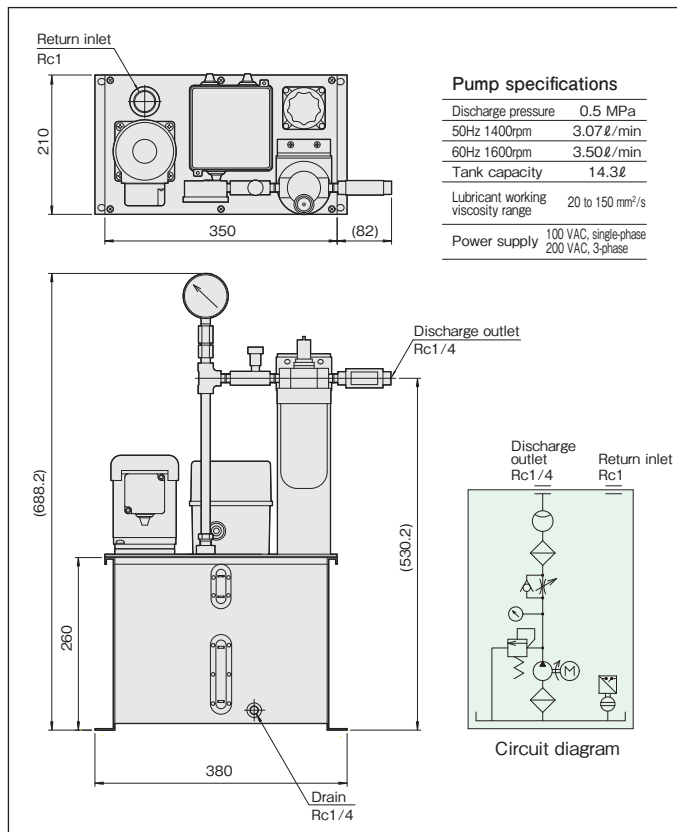
### Maximum feed capability chart



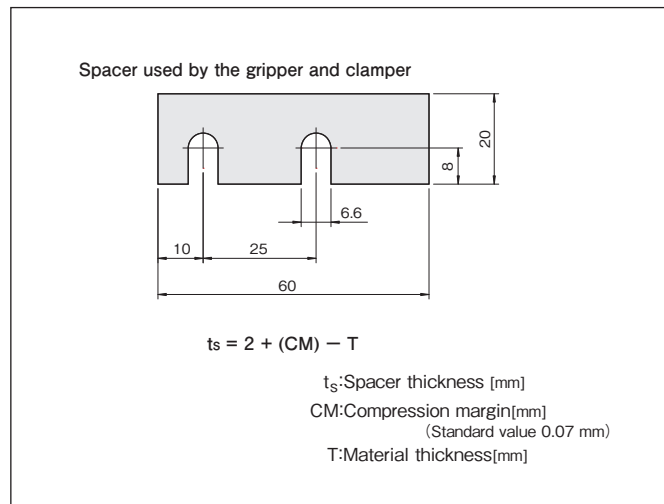
### Timing chart



### Oil pump

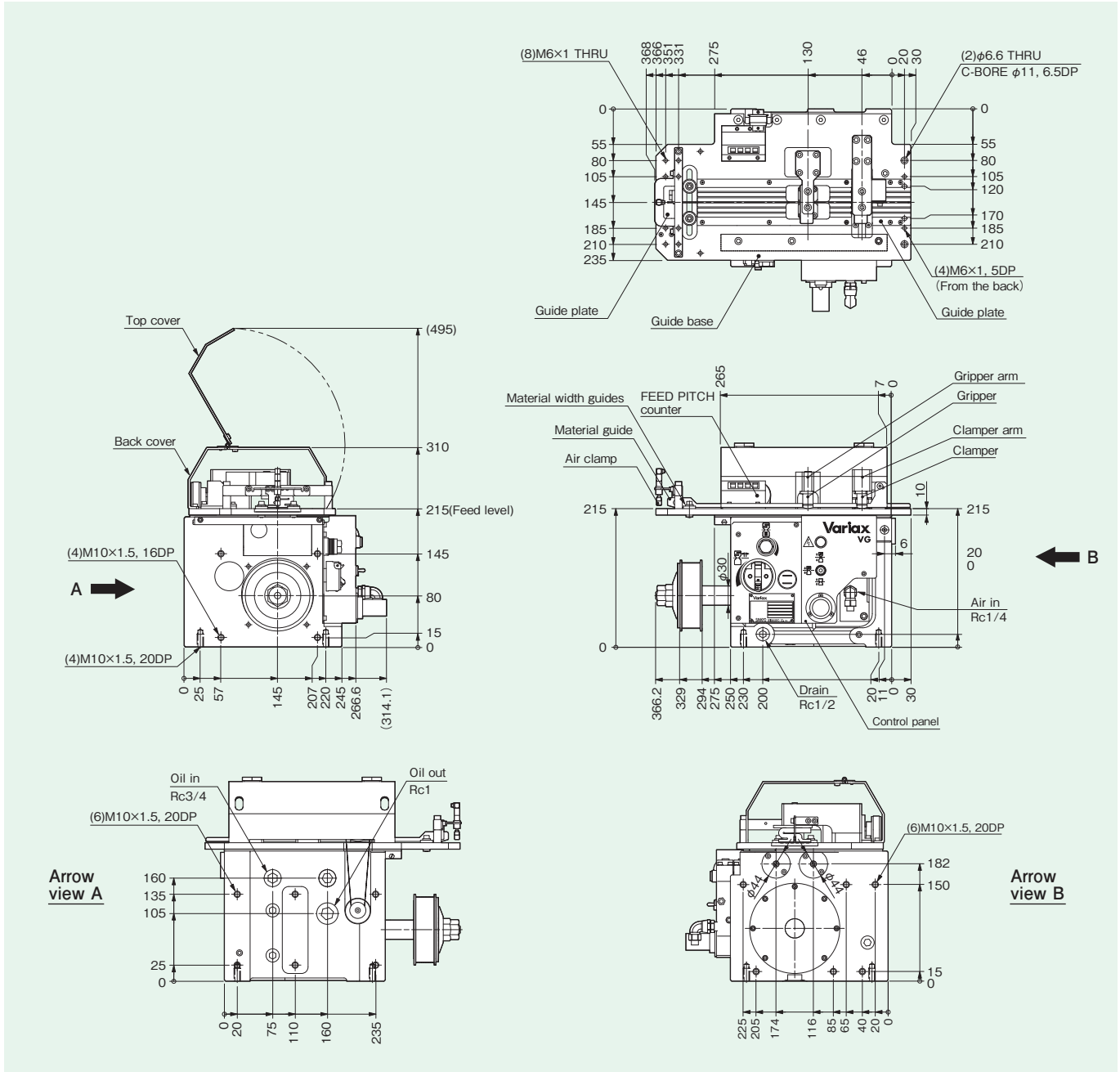


### Spacer for plate thickness adjustment



## Dimensions

[Unit:mm]



## Specification table

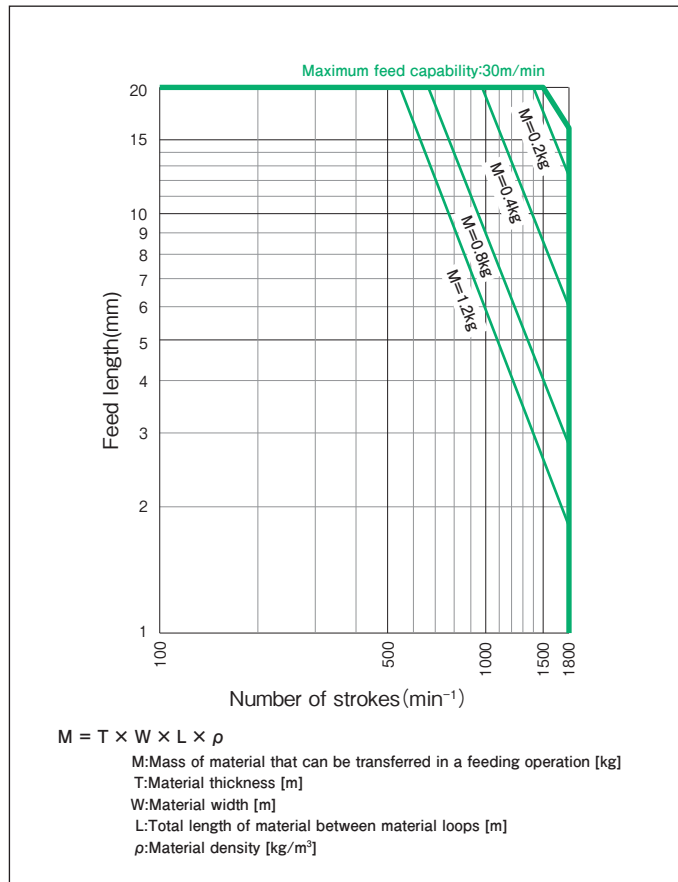
Characteristic	Data
Feed length	0 to 20 [mm]
Adjustment Units for Feed Pitch	0.02 [mm]
Material thickness	0 to 2 [mm]
Gripping force	400 to 1,200 [N]
Material width	8 to 50 [mm]
Maximum number of strokes	1,800 [min <sup>-1</sup> ]
Maximum feed speed	30 [m/min]
Feed Angle	164 [deg]
Repeatability	±0.025 [mm]
Pilot Release	Approx. 51 [deg]
Air Release	Full adjustable
Input Shaft Drive Ratio (Input: Stroke)	1:2*

Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Operating power supply	100 VAC single phase [V]
Product weight	60 [kg]
Recommended lubrication oil	Shell Omala S2 G 150
Lubrication system	Forced lubrication
Amount of internal oil for oil bath lubrication	—
Amount of oil supplied for forced lubrication	0.4 [ℓ/min]
Housing color	2.5Y9/02
Operation panel color	2.5Y9/02

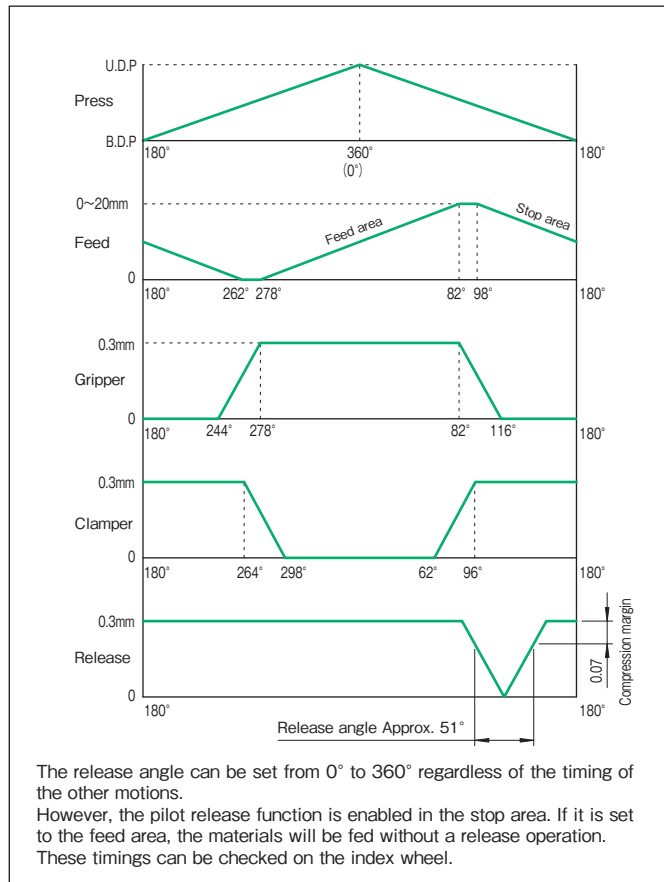
1 [N·m] ≅ 0.102 [kgf·m]

\*The VG20H performs two feed operations per turn of the input shaft, reducing the input shaft drive speed to 1/2 of normal.

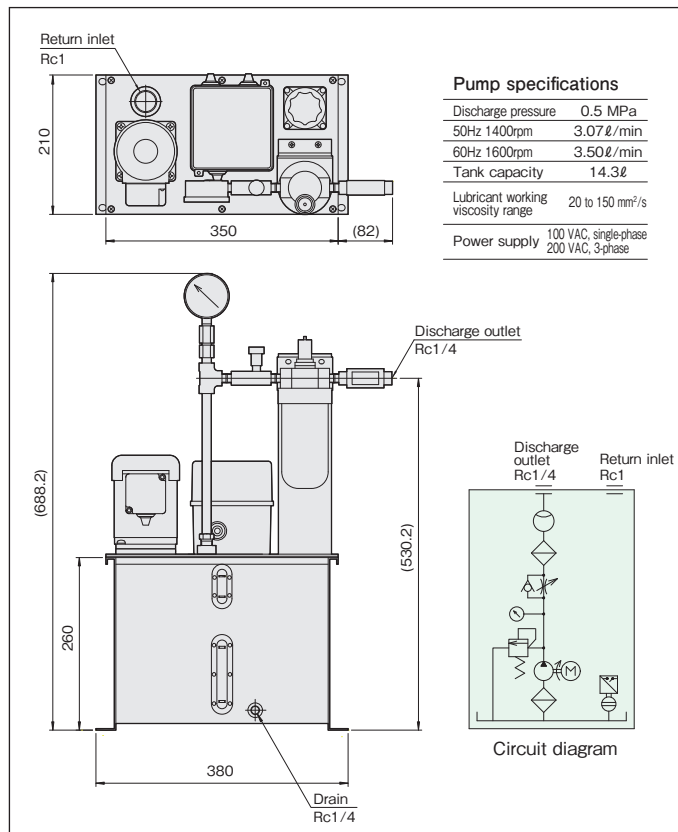
### Maximum feed capability chart



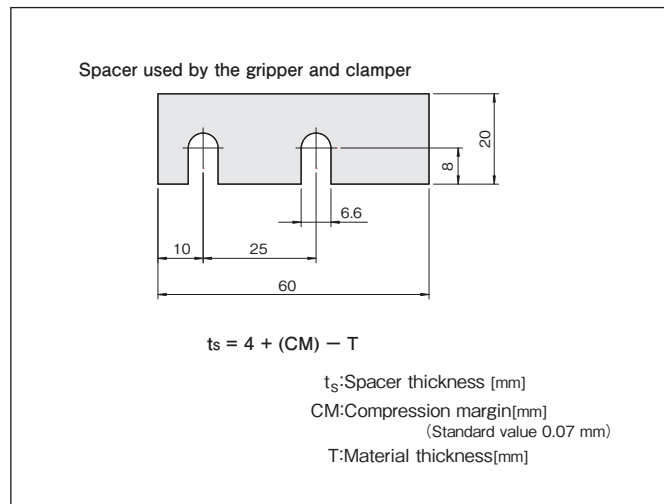
### Timing chart



### Oil pump



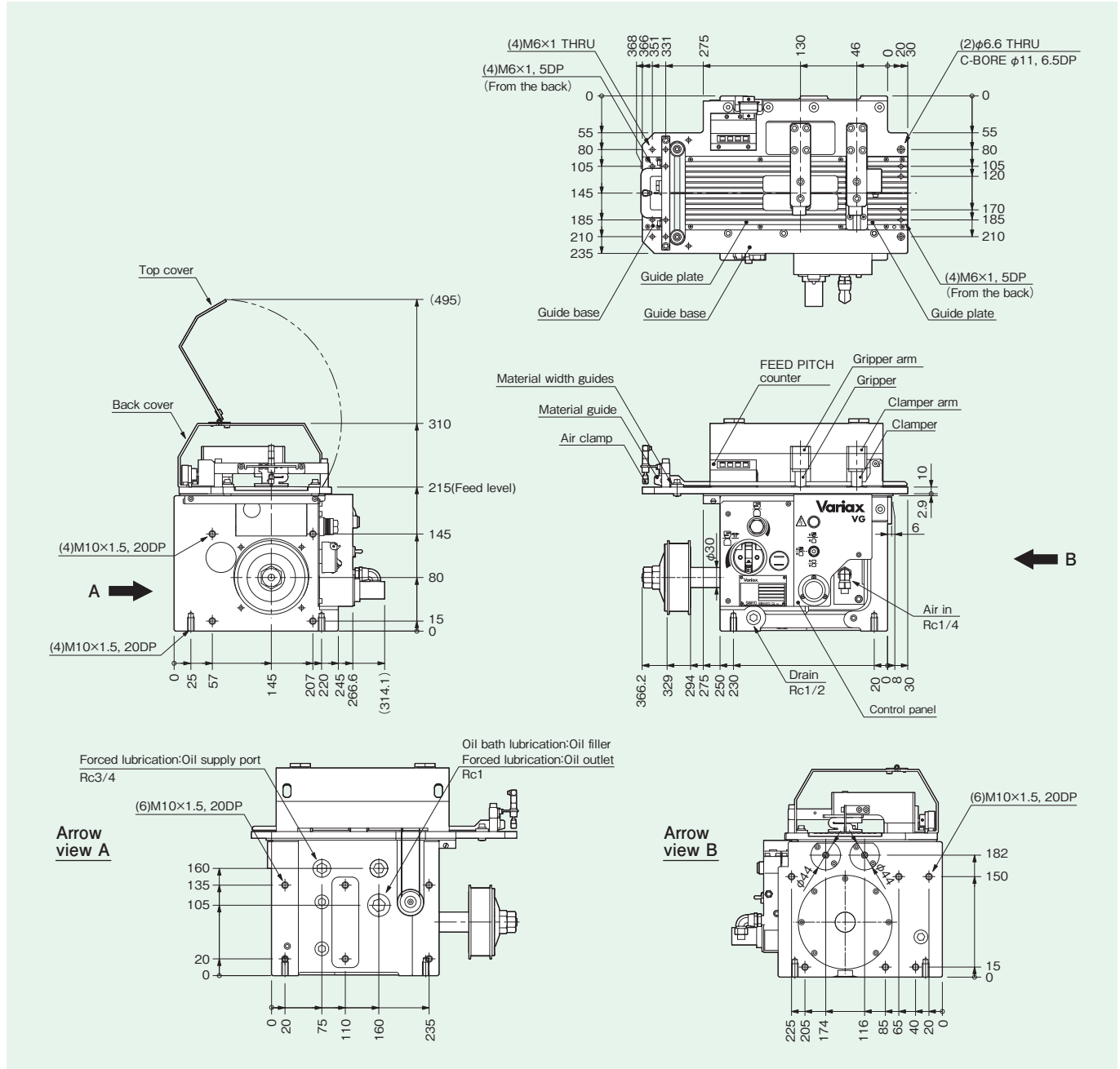
### Spacer for plate thickness adjustment



# VG25/VG25T

## Dimensions

[Unit:mm]



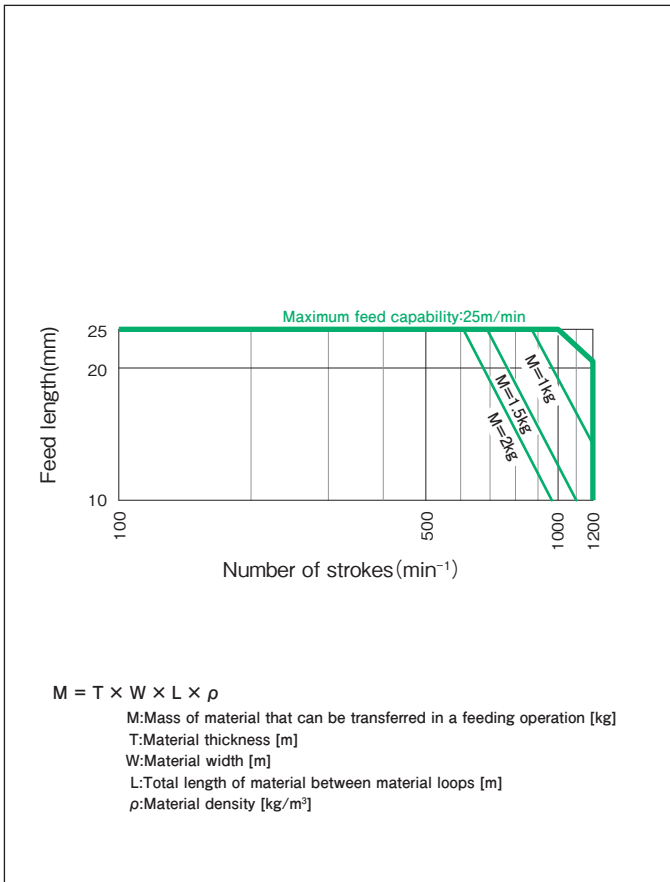
## Specification table

Characteristic	Data
Feed length	0 to 25 [mm]
Adjustment Units for Feed Pitch	0.02 [mm]
Material thickness	0 to 2 [mm]
Gripping force	400 to 1,200 [N]
Material width	8 to 100 [mm]
Maximum number of strokes	1,200 [min <sup>-1</sup> ]
Maximum feed speed	25 [m/min]
Feed Angle	165 [deg]
Repeatability	±0.025 [mm]
Pilot Release	Approx. 49 [deg]
Air Release	Full adjustable
Input Shaft Drive Ratio (Input: Stroke)	1:1

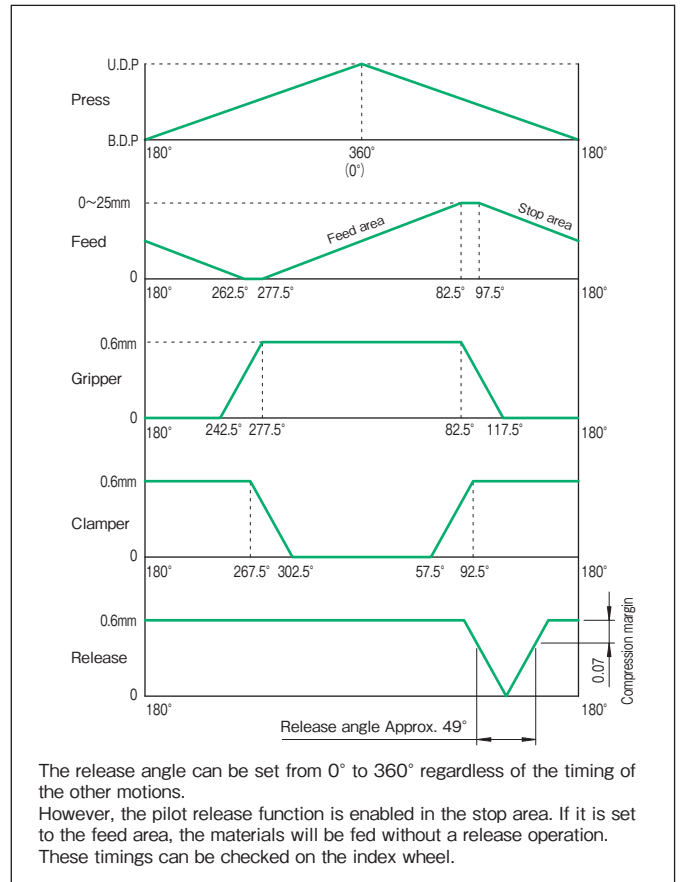
Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Operating power supply	100 VAC single phase [V]
Product weight	60 [kg]
Recommended lubrication oil	Shell Omala S2 G 150
Lubrication system	Oil bath/Forced lubrication
Amount of internal oil for oil bath lubrication	1.4 [ℓ]
Amount of oil supplied for forced lubrication	0.4 [ℓ/min]
Housing color	2.5Y9/02
Operation panel color	2.5Y9/02

1[N·m] ≐ 0.102[kgf·m]

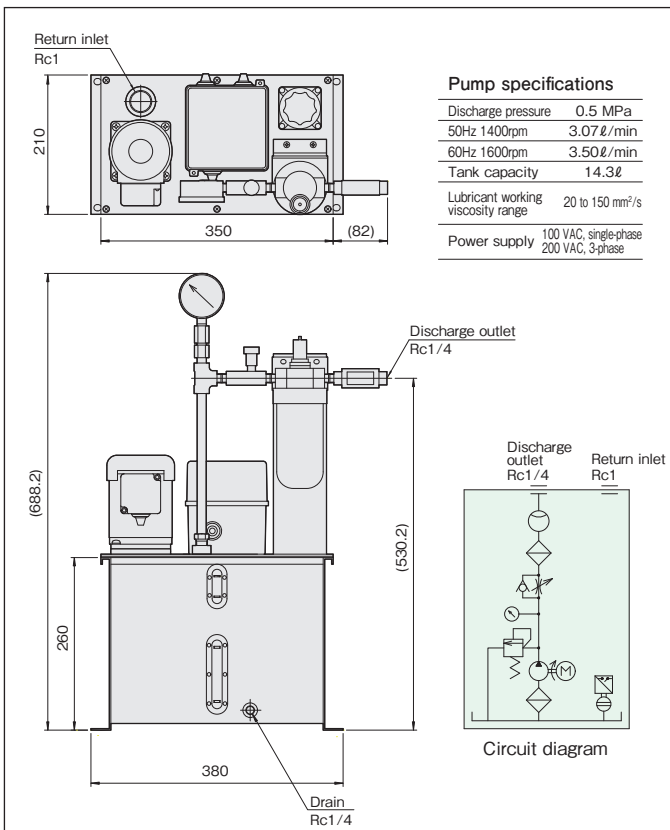
### Maximum feed capability chart



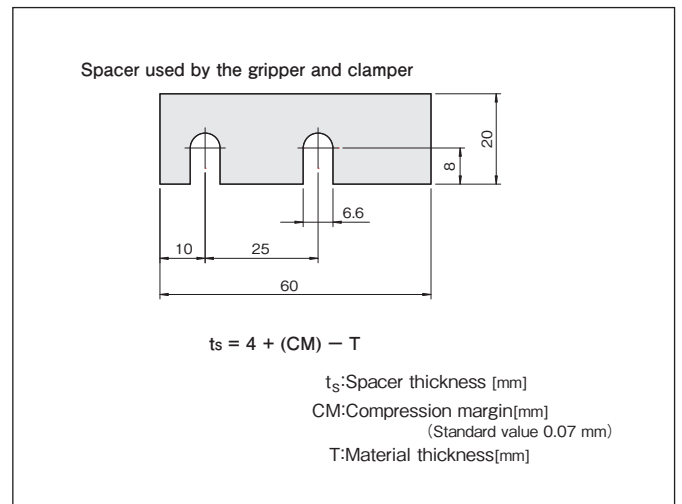
### Timing chart



### Oil pump



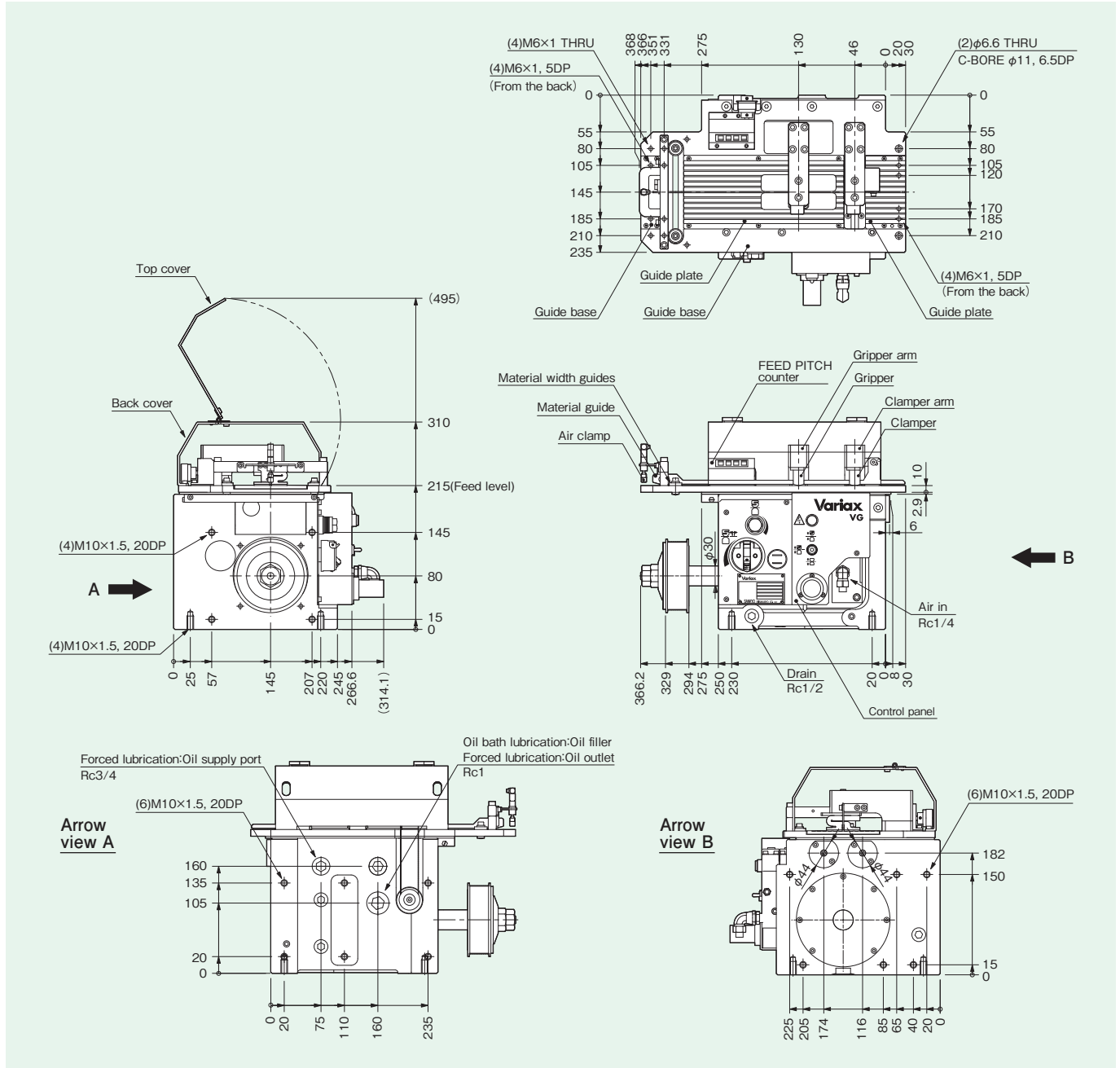
### Spacer for plate thickness adjustment



# VG50/VG50T

## Dimensions

[Unit:mm]



## Specification table

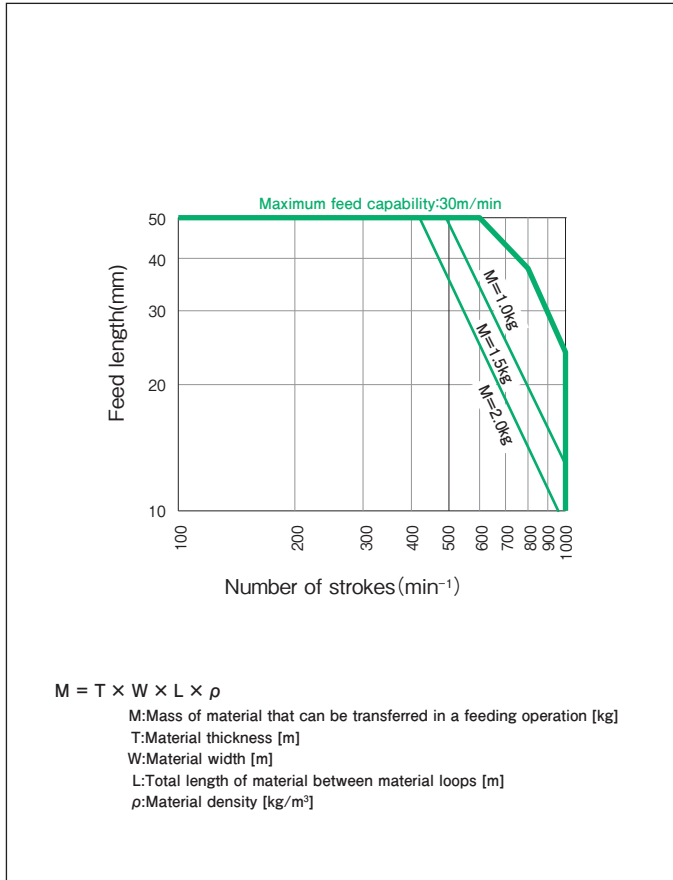
Characteristic	Data
Feed length	0 to 50 [mm]
Adjustment Units for Feed Pitch	0.02 [mm]
Material thickness	0 to 2 [mm]
Gripping force	400 to 1,200 [N]
Material width	8 to 100 [mm]
Maximum number of strokes	1,000 [min <sup>-1</sup> ]
Maximum feed speed	30 [m/min]
Feed Angle	165 [deg]
Repeatability	±0.025 [mm]
Pilot Release	Approx. 49 [deg]
Air Release	Full adjustable
Input Shaft Drive Ratio (Input: Stroke)	1:1

Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Operating power supply	100 VAC single phase [V]
Product weight	60 [kg]
Recommended lubrication oil	Shell Omala S2 G 150
Lubrication system	Oil bath/Forced lubrication
Amount of internal oil for oil bath lubrication	1.4 [ℓ]
Amount of oil supplied for forced lubrication	0.4 [ℓ/min]
Housing color	2.5Y9/02
Operation panel color	2.5Y9/02

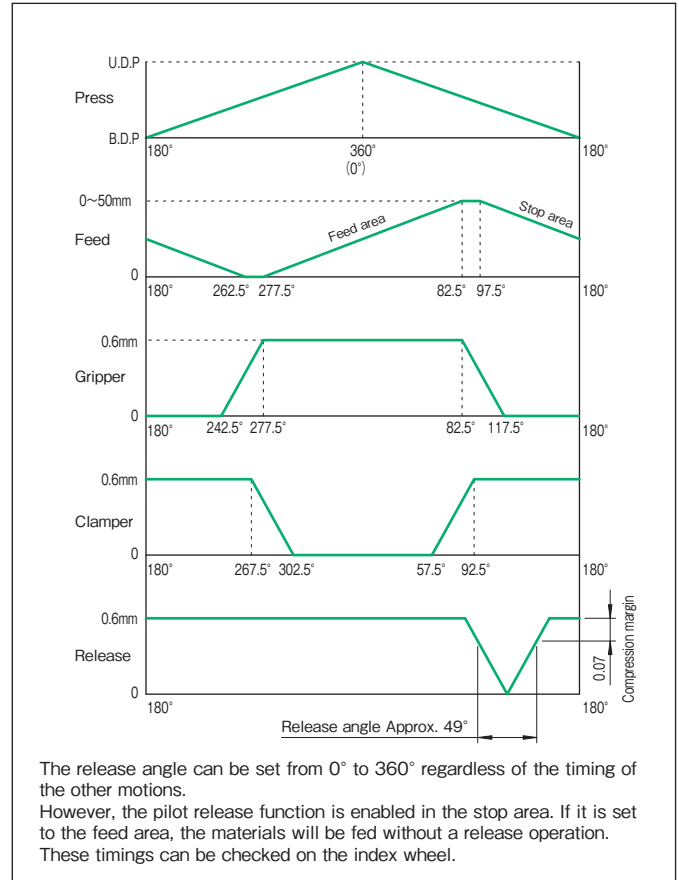
1[N·m] ≒ 0.102[kgf·m]



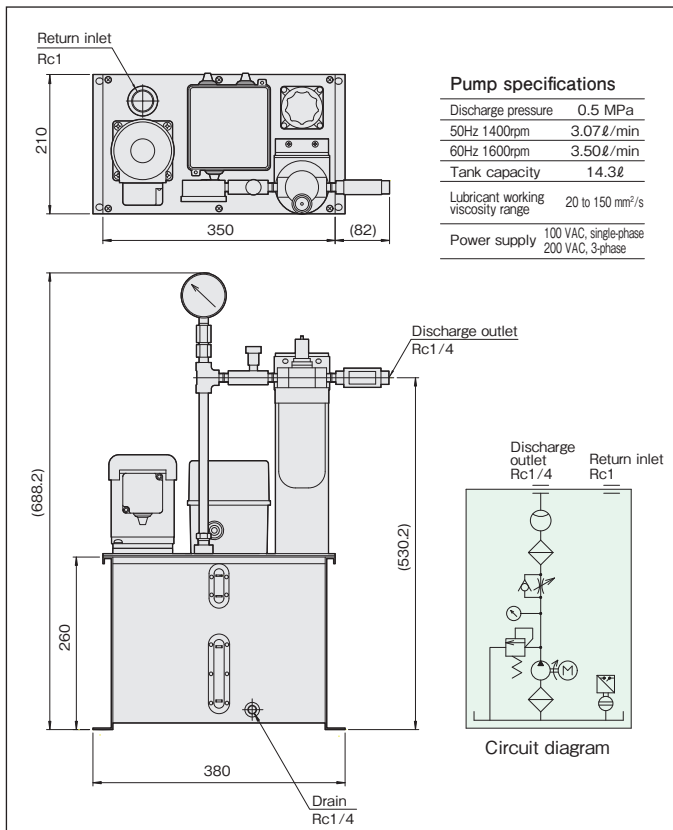
### Maximum feed capability chart



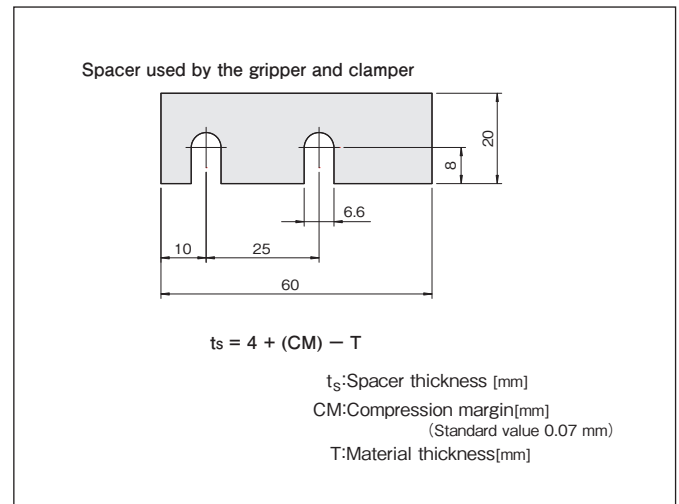
### Timing chart



### Oil pump



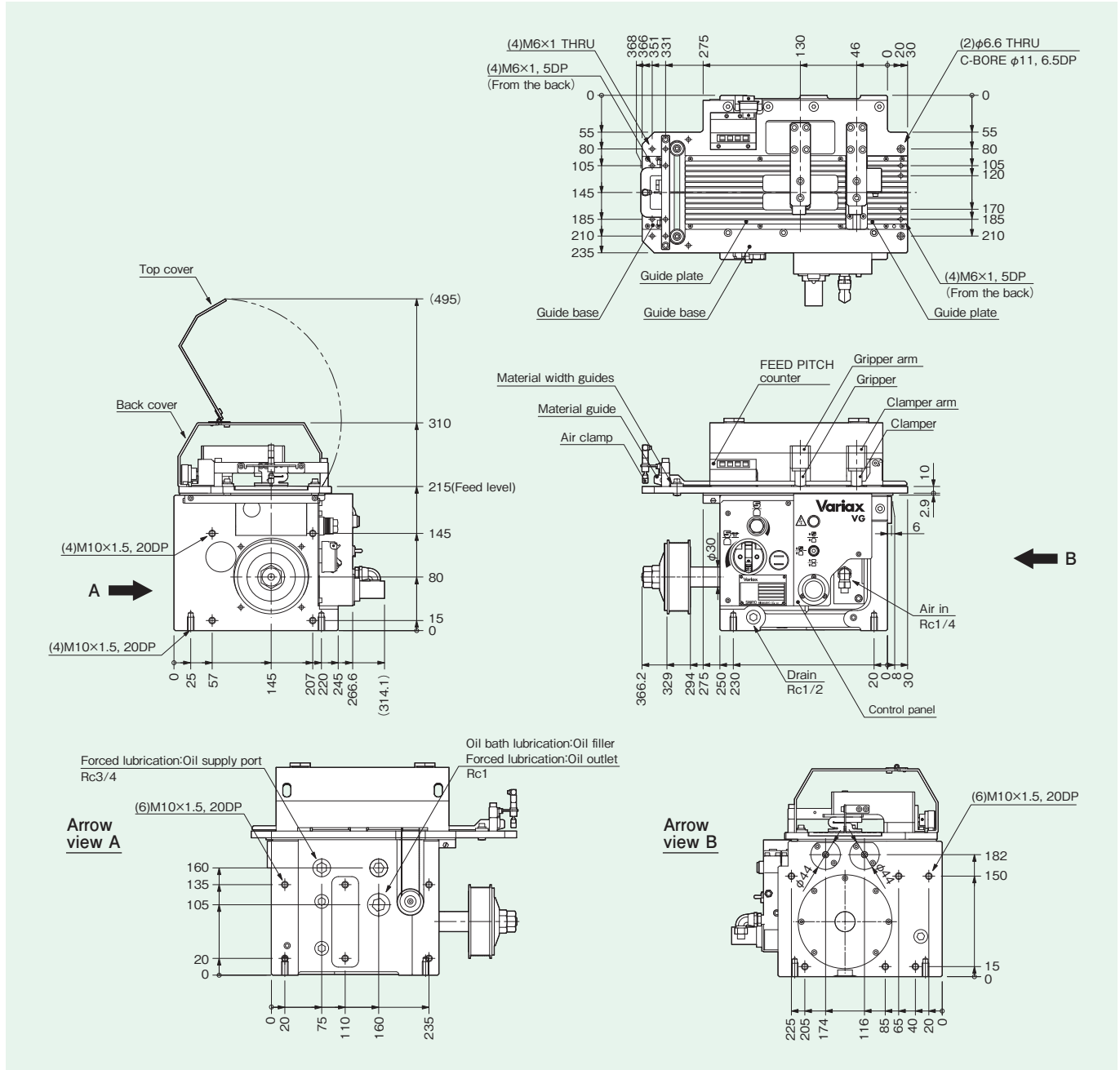
### Spacer for plate thickness adjustment



# VG75/VG75T

## Dimensions

[Unit:mm]



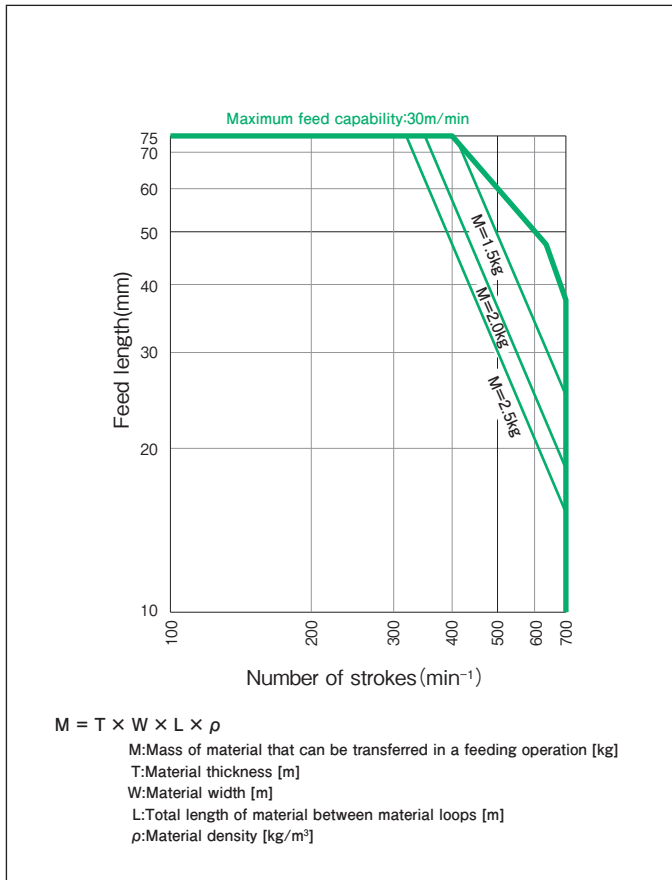
## Specification table

Characteristic	Data
Feed length	0 to 75 [mm]
Adjustment Units for Feed Pitch	0.02 [mm]
Material thickness	0 to 2 [mm]
Gripping force	400 to 1,200 [N]
Material width	8 to 100 [mm]
Maximum number of strokes	700 [min <sup>-1</sup> ]
Maximum feed speed	30 [m/min]
Feed Angle	165 [deg]
Repeatability	±0.025 [mm]
Pilot Release	Approx. 49 [deg]
Air Release	Full adjustable
Input Shaft Drive Ratio (Input: Stroke)	1:1

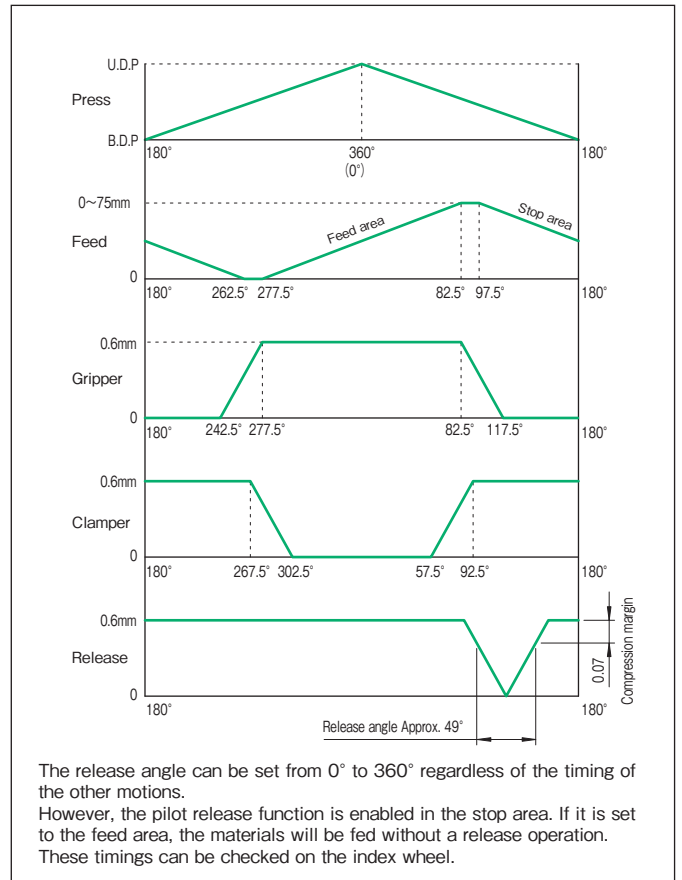
Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Operating power supply	100 VAC single phase [V]
Product weight	60 [kg]
Recommended lubrication oil	Shell Omala S2 G 150
Lubrication system	Oil bath/Forced lubrication
Amount of internal oil for oil bath lubrication	1.4 [ℓ]
Amount of oil supplied for forced lubrication	0.4 [ℓ/min]
Housing color	2.5Y9/02
Operation panel color	2.5Y9/02

1[N·m] ≅ 0.102[kgf·m]

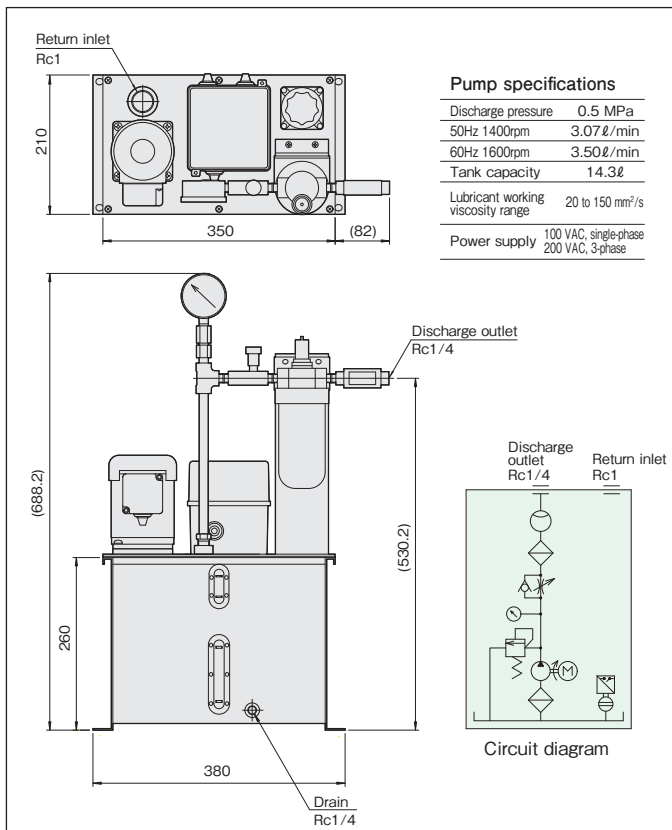
### Maximum feed capability chart



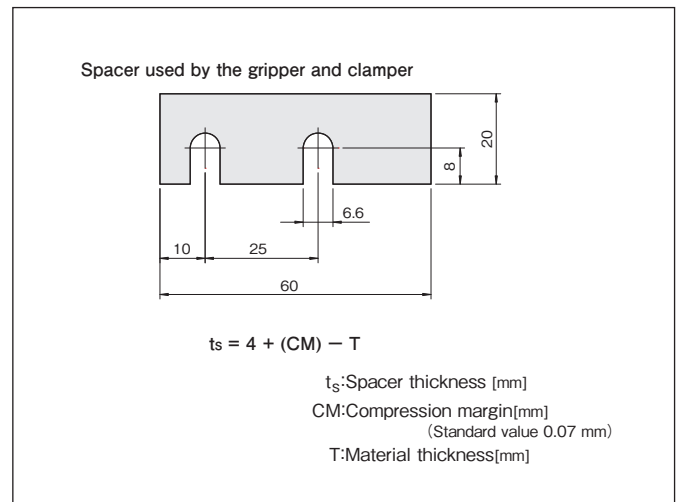
### Timing chart



### Oil pump



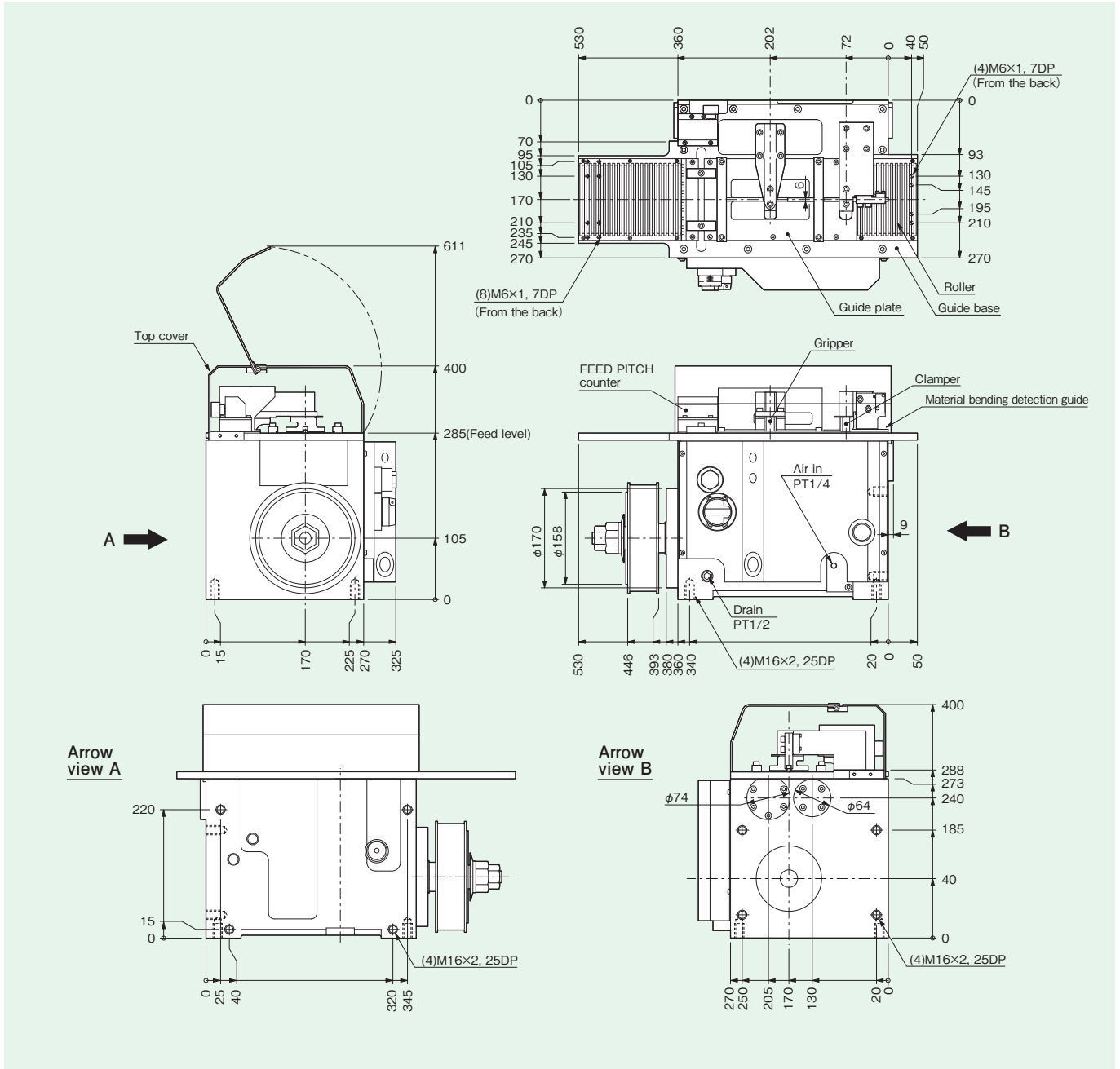
### Spacer for plate thickness adjustment



# VG100/VG100T

## Dimensions

[Unit:mm]



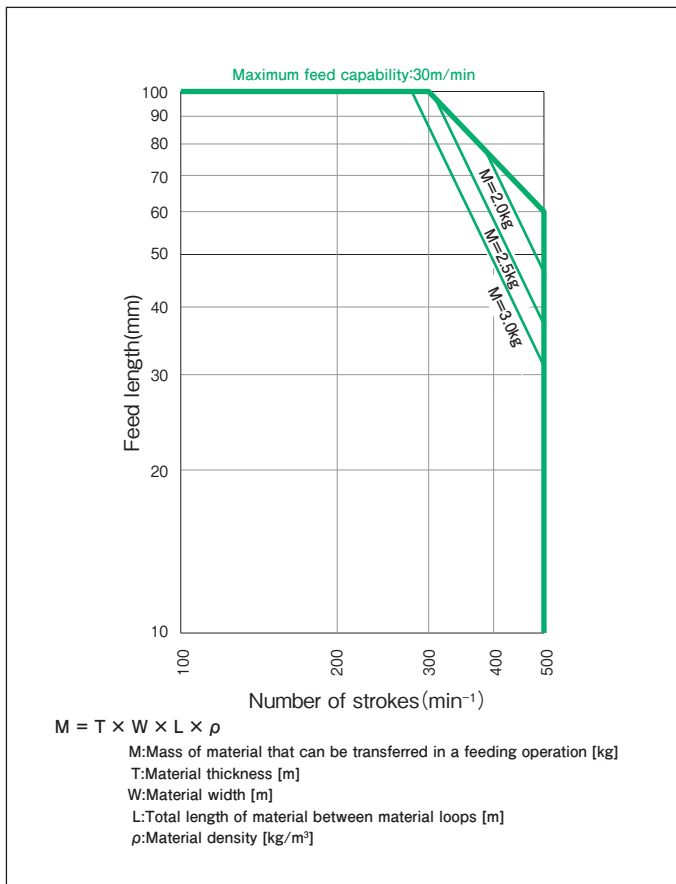
## Specification table

Characteristic	Data
Feed length	0 to 100 [mm]
Adjustment Units for Feed Pitch	0.02 [mm]
Material thickness	0 to 2 [mm]
Gripping force	300 to 3,000 [N]
Material width	12 to 120 [mm]
Maximum number of strokes	500 [min <sup>-1</sup> ]
Maximum feed speed	30 [m/min]
Feed Angle	165 [deg]
Repeatability	±0.025 [mm]
Pilot Release	Approx. 54 [deg]
Air Release	Full adjustable
Input Shaft Drive Ratio (Input: Stroke)	1:1

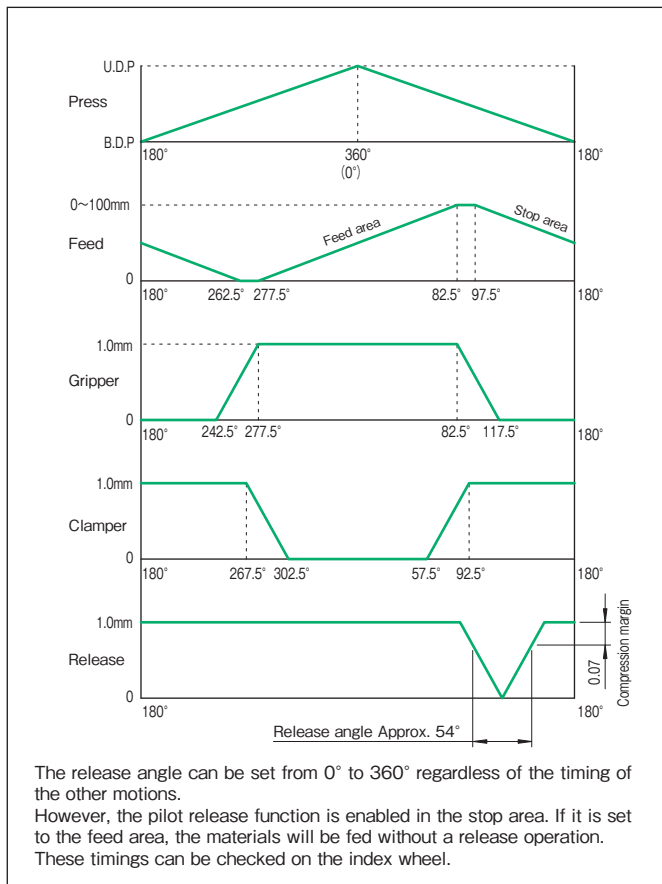
Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Operating power supply	100 VAC single phase [V]
Product weight	150 [kg]
Recommended lubrication oil	Shell Omala S2 G 150
Lubrication system	Oil bath
Amount of internal oil for oil bath lubrication	1.4 [ℓ]
Amount of oil supplied for forced lubrication	— [ℓ/min]
Housing color	2.5Y9/02
Operation panel color	2.5Y9/02

1[N·m] ≅ 0.102[kgf·m]

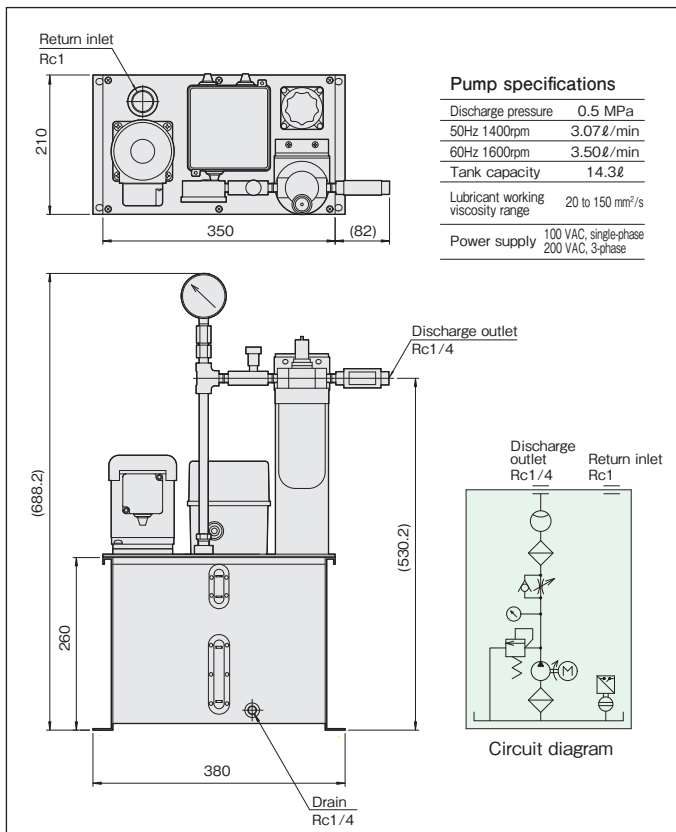
### Maximum feed capability chart



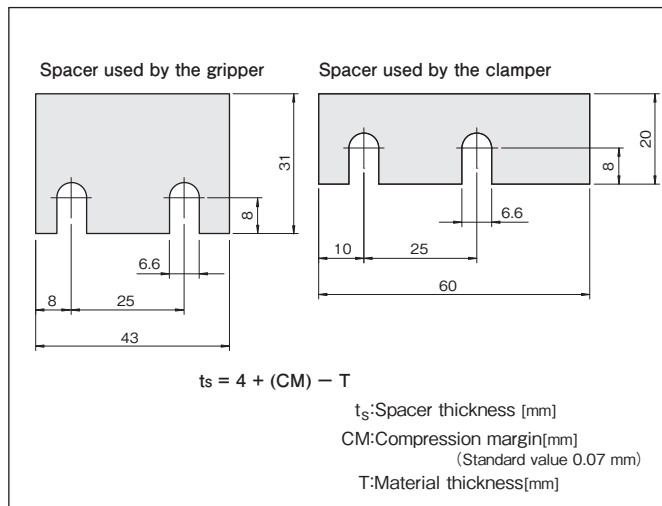
### Timing chart



### Oil pump

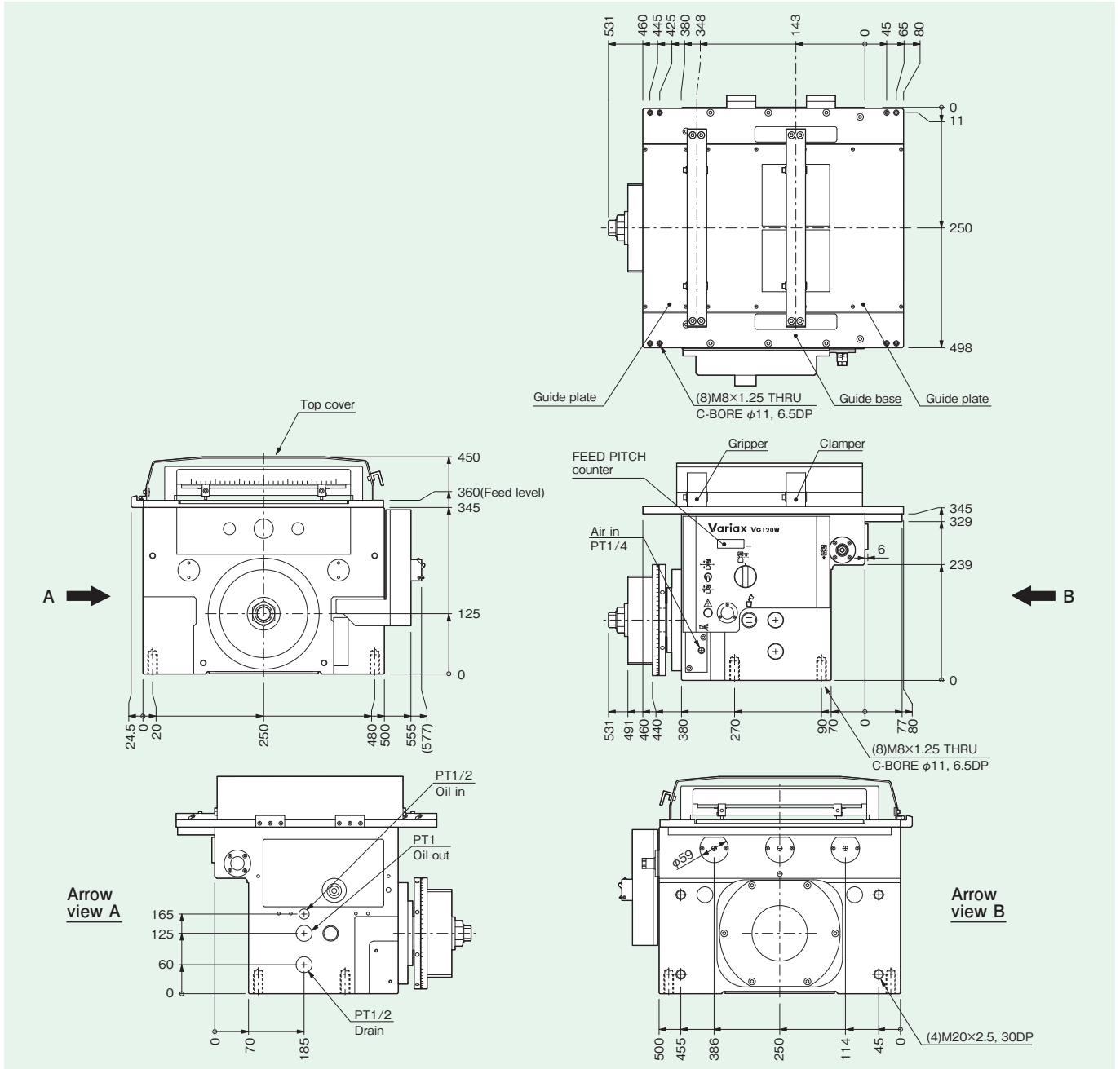


### Spacer for plate thickness adjustment



## Dimensions

[Unit:mm]



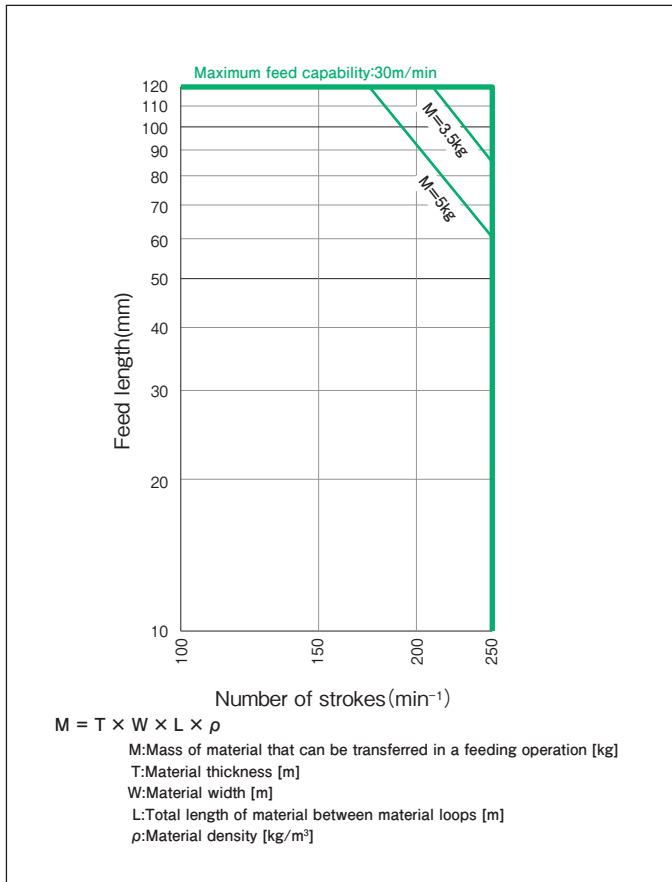
## Specification table

Characteristic	Data
Feed length	0 to 120 [mm]
Adjustment Units for Feed Pitch	0.001 [mm]
Material thickness	0 to 1 [mm]
Gripping force	600 to 2,400 [N]
Material width	20 to 250 [mm]
Maximum number of strokes	250 [min <sup>-1</sup> ]
Maximum feed speed	30 [m/min]
Feed Angle	160 [deg]
Repeatability	±0.05 [mm]
Pilot Release	Approx. 49 [deg]
Air Release	Full adjustable
Input Shaft Drive Ratio (Input: Stroke)	1:2

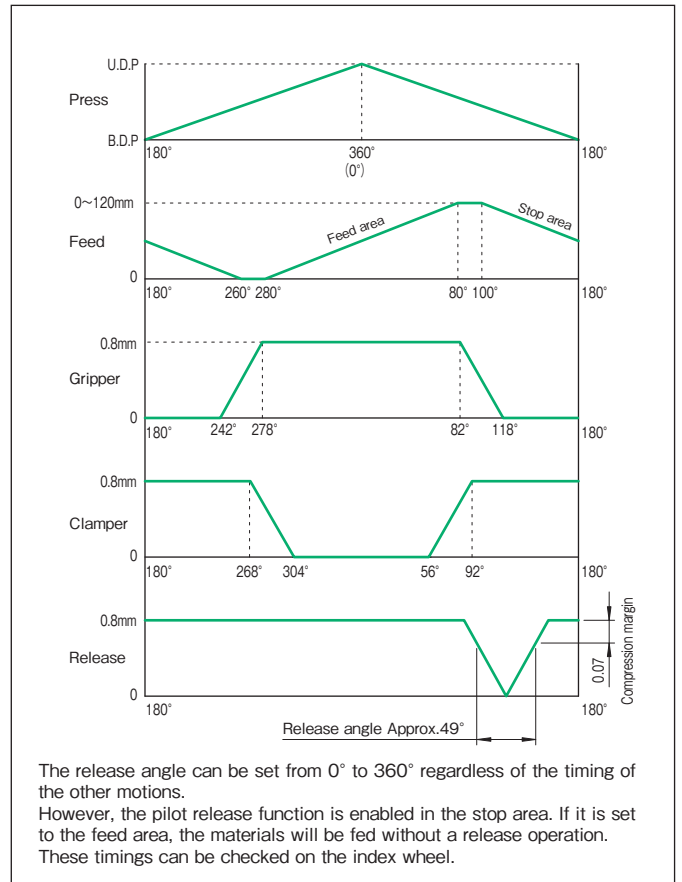
Characteristic	Data
Operating air pressure	490 to 690 [kPa]
Operating power supply	100 VAC single phase [V]
Product weight	290 [kg]
Recommended lubrication oil	Shell Omala S2 G 150
Lubrication system	Forced lubrication
Amount of internal oil for oil bath lubrication	— [ℓ]
Amount of oil supplied for forced lubrication	0.4 [ℓ/min]
Housing color	2.5Y9/02
Operation panel color	2.5Y9/02

1[N·m] ≒ 0.102[kgf·m]

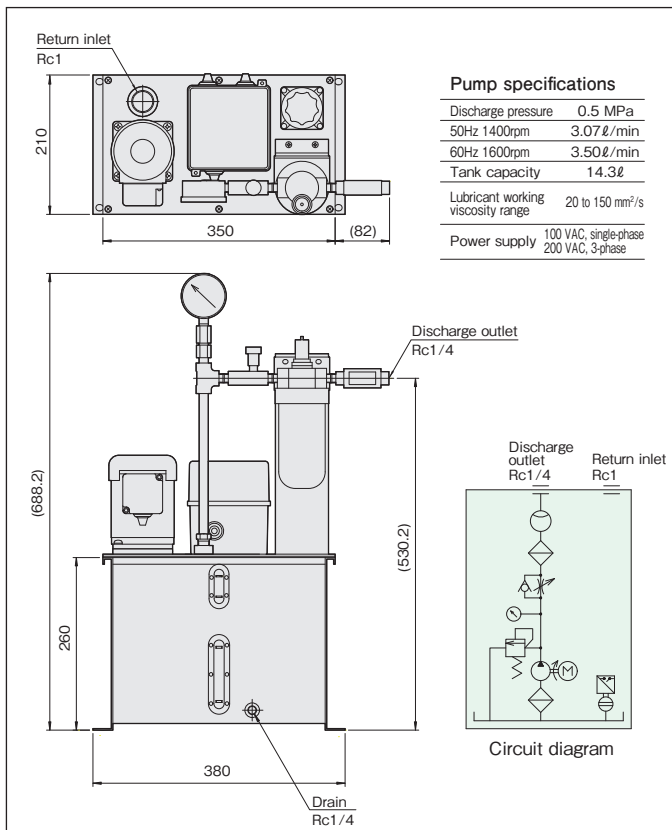
### Maximum feed capability chart



### Timing chart



### Oil pump



### Spacer for plate thickness adjustment

