



Parts Handler 4GY

4GY Dimensions

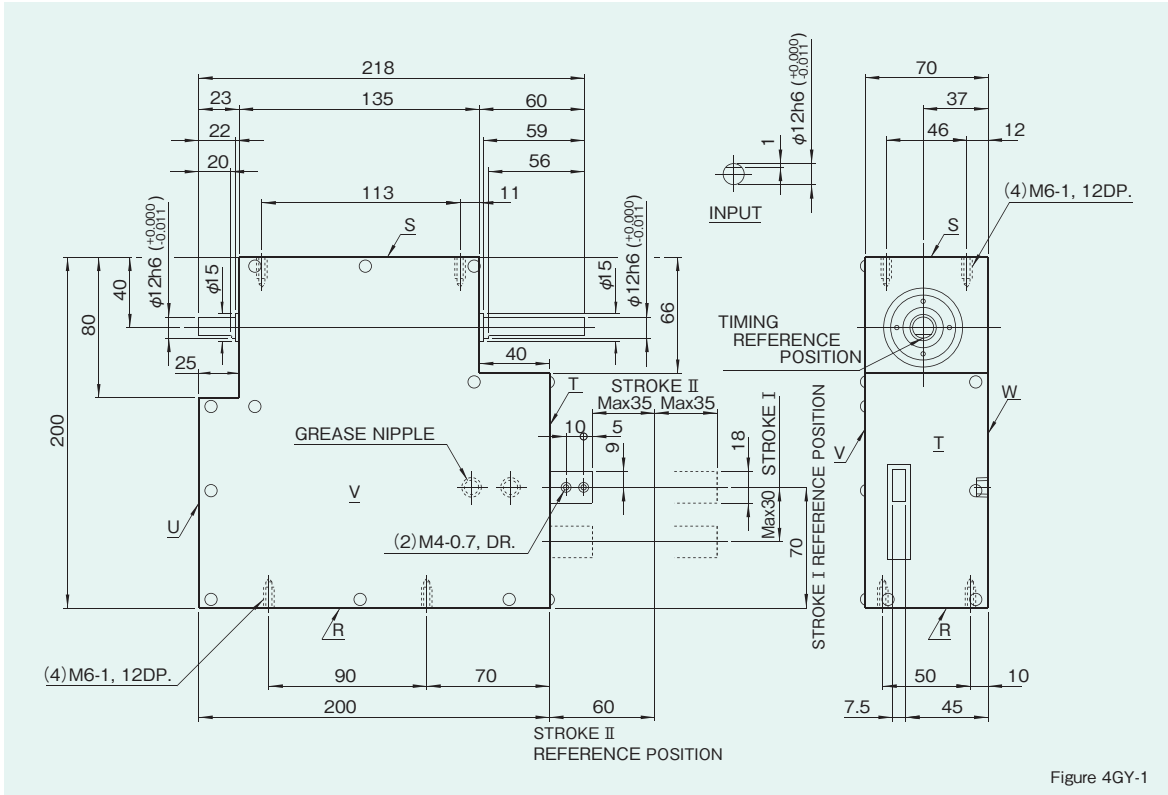
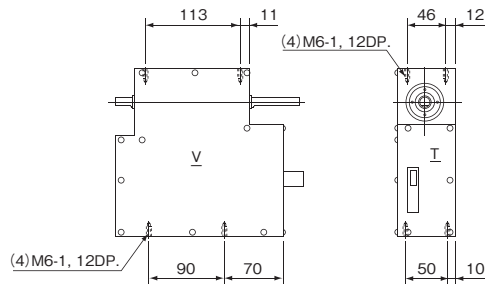


Figure 4GY-1

Mounting hole locations

Figure 4GY-2



Dimention of R,S surface

Specifications

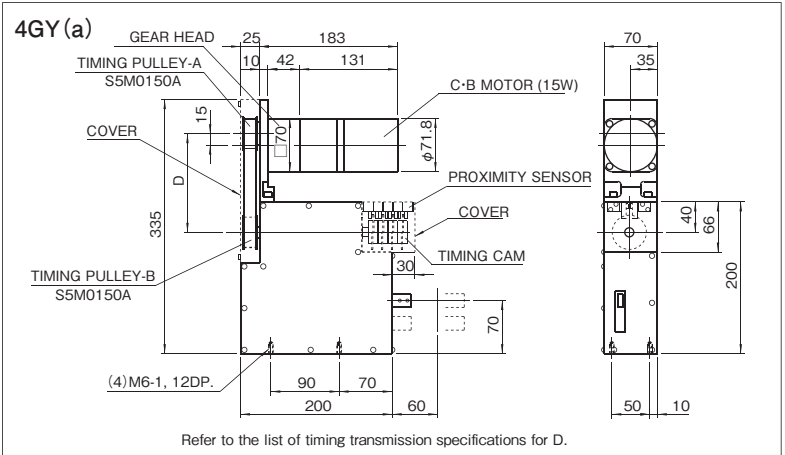
Table 4GY-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W ₀	N	Refer to Carrying Capacity Table	Input allowable axial load	P ₂	N	416.5	Housing color			Beige
Output static allowable load in the direction of V and W surface	P ₁	N	93.1	Input maximum repetitious bending force	P ₃	N	323.4	Product weight		kg	5.2
Output bending rigidity in the direction of V and W surface	K ₁	mm/N	2.04×10 ⁻²	Input maximum repetitious allowable torque	P ₄	N·m	29.4	Repetitive accuracy		mm	±0.02
Output internal load, stroke I	W _{a1}	N	7.9	Input torsional rigidity	K ₂	N·m/rad	3234				
Output internal load, stroke II	W _{a2}	N	4.5	Input inertia	J ₁	kg·m ²	2.75×10 ⁻⁴	Grease lubrication			

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)

Option (Miniature motor mounting specifications)



Induction motor specifications

Table 4GY-2

Type	Maker	Motor model	Output power (W)	Frequency (Hz)	Voltage (V)	Current (A)	Starting torque (N·m)	Rated torque (N·m)	Rotating speed (rpm)	Capacitor (μ F)	Gear head model
No clutch and brake	Panasonic	M71A15G4L	15	50	100	0.36	0.088	0.127	1300	4.0	M7GA□B
With clutch and brake		M7CBA15G4L		60		0.34		0.088	1600		M7GB□B-CB

●The figures in the □ indicate gear ratio. (1N·m≒0.102kgf·m)

Gear head rotating speed and speed and gear ratio

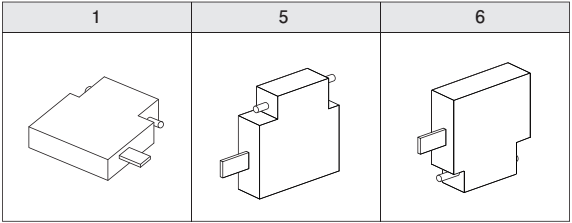
Table 4GY-3

Cam shaft rotating speed	10	20	30	40	50	60	70	80	90	100	110	120
50Hz												
Pulley gear ratio	1.33	1.33	1.25	1.2	1.09	1.25	1.33	1.67	1.67	1.44	1.67	1.56
Gear head ratio	100	50	36	30	25	18	15	10	9	9	7.5	7.5
60Hz												
Pulley gear ratio	1.33	1.33	1.09	1.33	1.33	1.44	1.33	1.44	1.44	1.67	1.67	1.56
Gear head ratio	120	60	50	30	25	20	18	15	12.5	10	9	9

●Use a 25 W motor for speeds above 80 rpm.

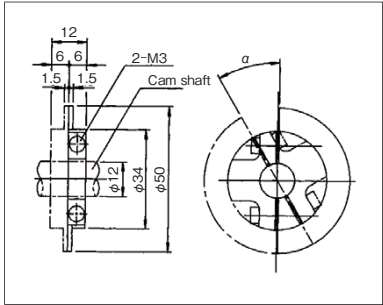
Mounting positions

Figure 4GY-4



Timing cam dimensions

Figure 4GY-5



Timing transmission specifications

Table 4GY-4

Timing pulley reduction ratio	Pulley A Number of teeth	Pulley B Number of teeth	D (mm)	Belt model
1	24	24	128	S5M375 75teeth
1.09	22	24	130	〃
1.2	20	24	133	〃
1.25	24	30	133	S5M400 80teeth
1.33	18	24	135	S5M375 75teeth
1.44	18	26	133	〃
1.56	18	28	130	〃
1.67	18	30	128	〃

Clutch and brake specifications

Table 4GY-5

Item	Motor	
	15W	
Static frictional torque	Clutch	Brake
Dynamic frictional torque	0.29N·m	0.20N·m
Rated voltage	DC24V	
Power consumption (at 75℃)	4W	2W
Armature pull - in time	15msec	
Armature release time	25msec	
Actual torque build - up time	20msec	
Repetition rate	max.100 times/min	
Total energy	4.9×10 ⁶ J	
Allwable energy at one time	2.5J	

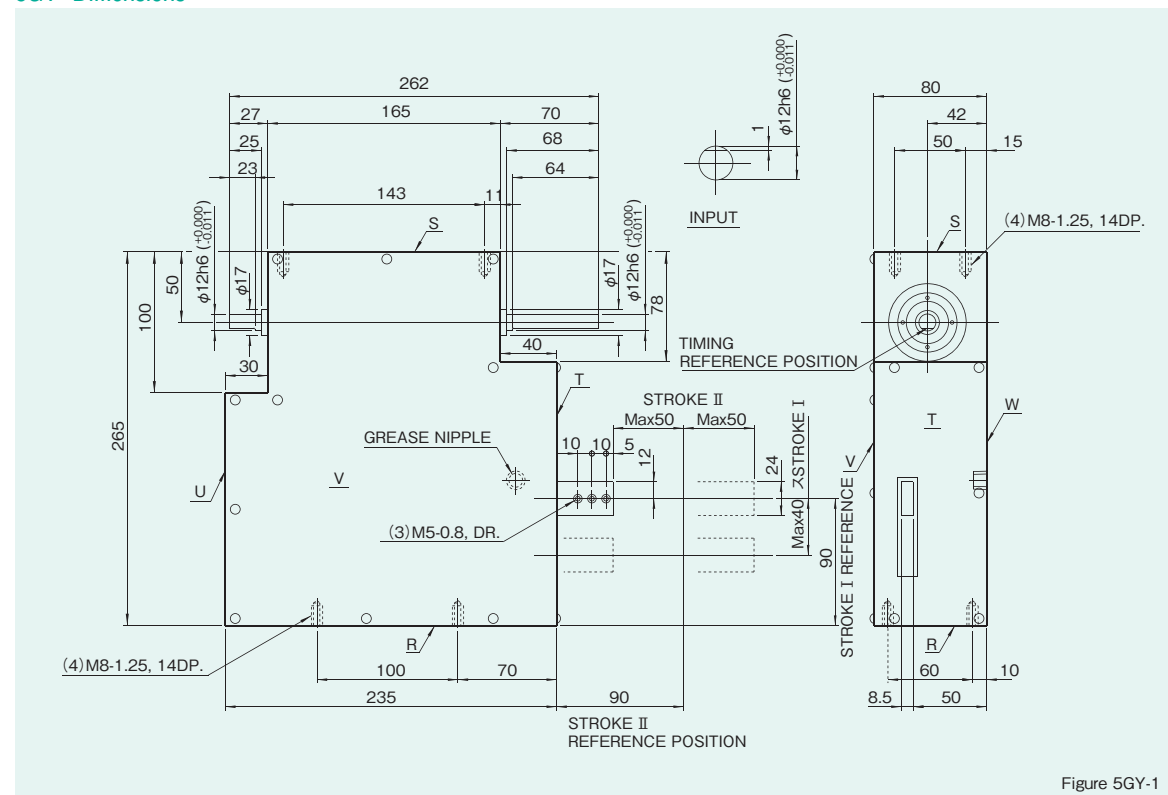


Figure 5GY-1

Mounting hole locations

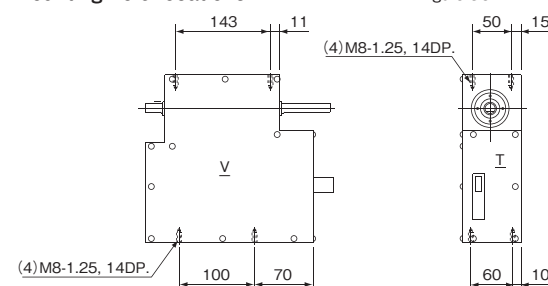


Figure 5GY-2

Dimension of R,S surface

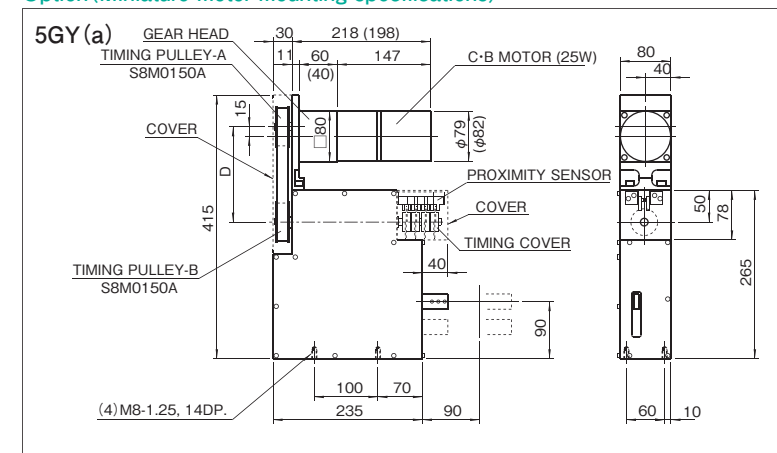
Specifications

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W_0	N	Refer to Carrying Capacity Table	Input allowable axial load	P_2	N	656.6	Housing color			Beige
Output static allowable load in the direction of V and W surface	P_1	N	117.6	Input maximum repetitious bending force	P_3	N	539	Product weight		kg	15
Output bending rigidity in the direction of V and W surface	K_1	mm/N	1.84×10^{-2}	Input maximum repetitious allowable torque	P_4	N·m	29.4	Repetitive accuracy		mm	± 0.02
Output internal load, stroke I	W_{a1}	N	15.7	Input torsional rigidity	K_2	N·m/rad	4410				
Output internal load, stroke II	W_{a2}	N	9.8	Input inertia	J_1	kg·m ²	6.33×10^{-4}	Grease lubrication			

Note : Input inertia : J is calculated in dwell.

 $(1\text{ N} \doteq 0.102\text{ kgf})$

Option (Miniature motor mounting specifications)



Induction motor specifications

Type	Maker	Motor model	Output power (W)	Frequency (Hz)	Voltage (V)	Current (A)	Starting torque (N·m)	Rated torque (N·m)	Rotating speed (rpm)	Capacitor (μ F)	Gear head model
											Ball bearing type
No clutch and brake With clutch and brake	Oriental motor	4IK25GN-A	25	50	100	0.65	0.13	0.19	1250	6.0	4GN□□
		CBI425-701									4GC□□
No clutch and brake With clutch and brake	Panasonic	M8IA25G4L	25	50	100	0.57	0.176	0.176	1325	6.0	M8GA□□B
		M8CBA25G4L									M8GB□□B-CB

●The figures in the $\square$ indicate gear ratio.

(1 N·m ≐ 0.102 kgf·m)

Gear head rotating speed and speed and gear ratio

Gear head rotating speed and speed and gear ratio		10	20	30	40	50	60	70	80	90	100
50Hz	Pulley gear ratio	1.33	1.33	1.25	1.16	1.1	1.26	1.58	1.4	1.67	1.58
	Gear head ratio	100	50	36	30	25	18	12.5	12.5	9	9
60Hz	Pulley gear ratio	1.33	1.33	1.1	1.33	1.33	1.1	1.58	1.67	1.47	1.33
	Gear head ratio	120	60	50	30	25	25	15	12.5	12.5	12.5

- Use a 40 W motor for speeds above 70 rpm.

Mounting positions

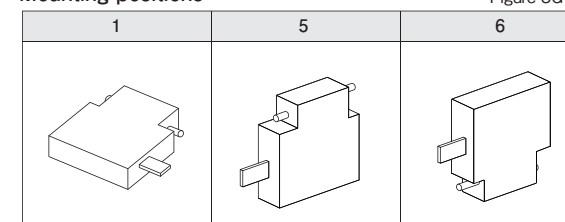


Figure 5GY-4

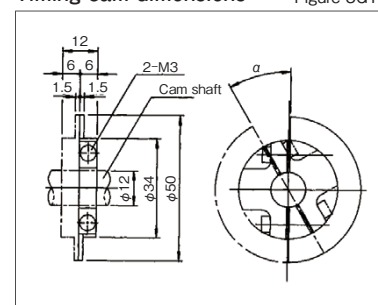
Timing transmission specifications

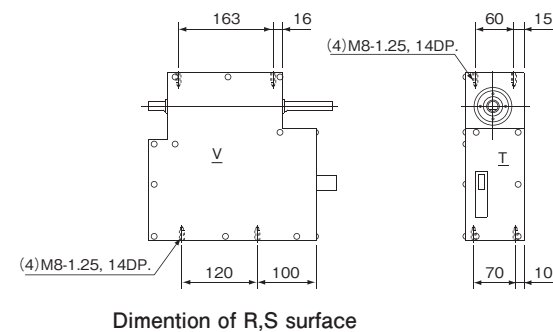
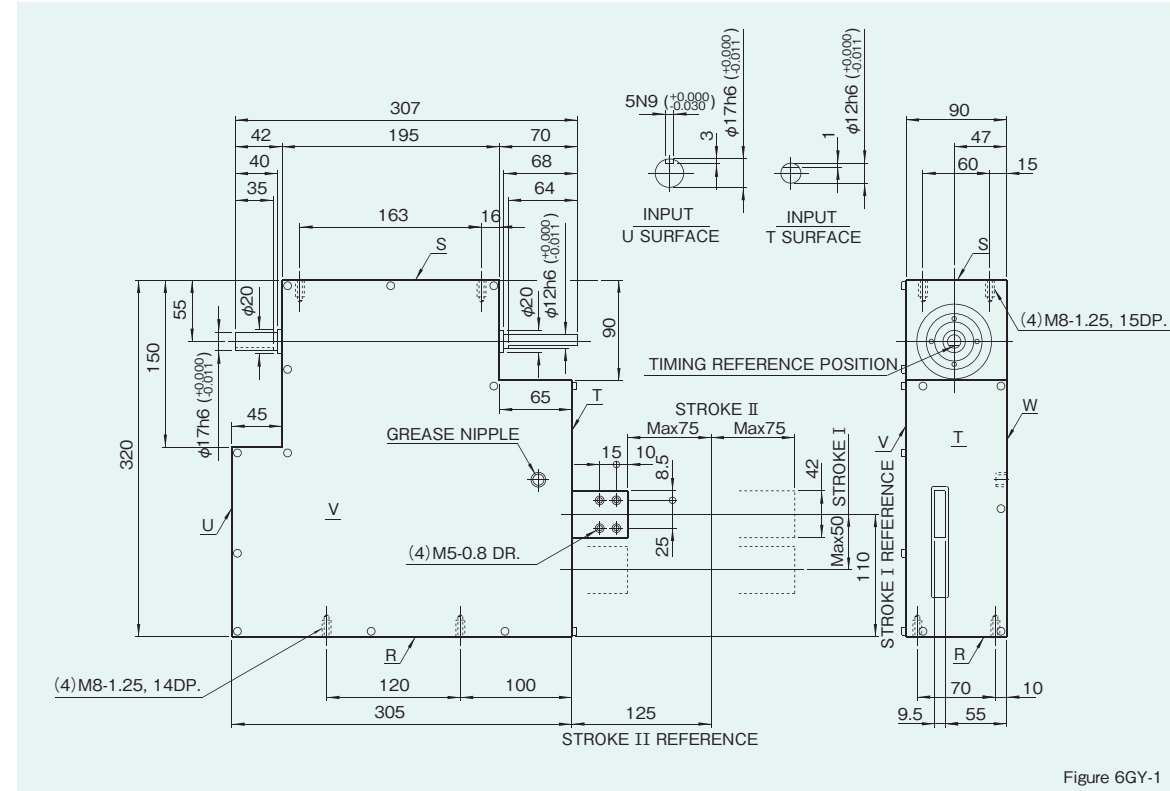
Timing pulley reduction ratio	Pulley A Number of teeth	Pulley B Number of teeth	D (mm)	Belt model
1	21	21	156	S8M480 60teeth
1.1	20	22	156	◇
1.16	19	22	158	◇
1.2	20	24	152	◇
1.26	19	24	154	◇
1.33	18	24	156	◇
1.33	21	28	182	S8M560 70teeth
1.4	20	28	184	◇
1.47	19	28	186	◇
1.58	19	30	182	◇
1.67	18	30	184	◇

Clutch and brake specifications

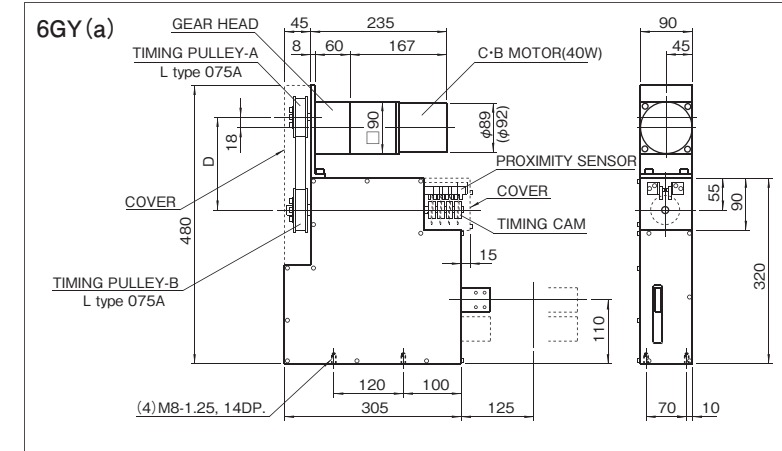
Item	Motor	25W	
		Clutch	Brake
Static frictional torque		1.0N·m	
Dynamic frictional torque		0.7N·m	
Rated voltage		DC24V	
Power consumption(at 75℃)		7W	5W
Armature pull - in time		15msec	
Armature release time		25msec	
Actual torque build - up time		20msec	
Repetition rate		Max. 100 times/min	
Total energy		1.5×10 ³ J	
Allowable energy at one time		1.5J	

Timing cam dimensions





Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W_0	N	Refer to Carrying Capacity Table	Input allowable axial load	P_2	N	911.4	Housing color			Beige
Output static allowable load in the direction of V and W surface	P_1	N	225.4	Input maximum repetitious bending force	P_3	N	1078	Product weight		kg	25
Output bending rigidity in the direction of V and W surface	K_1	mm/N	1.53×10^{-2}	Input maximum repetitious allowable torque	P_4	N·m	88.2	Repetitive accuracy		mm	± 0.02
Output internal load, stroke I	W_{a1}	N	29.4	Input torsional rigidity	K_2	N·m/rad	6370				
Output internal load, stroke II	W_{a2}	N	16.7	Input inertia	J_1	kg·m ²	1.51×10^{-3}	Grease lubrication			

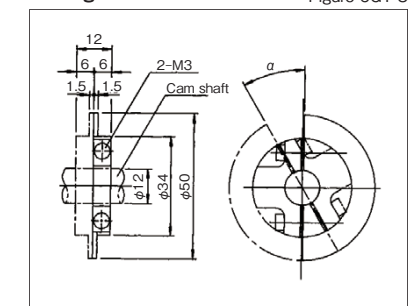
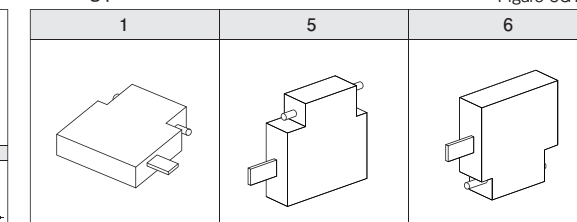
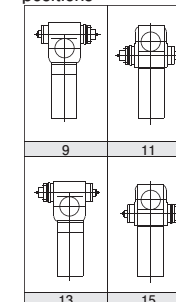
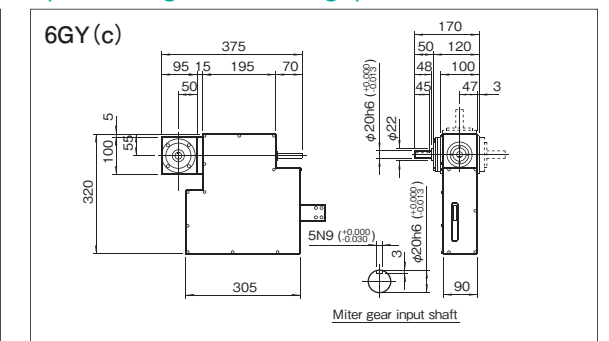
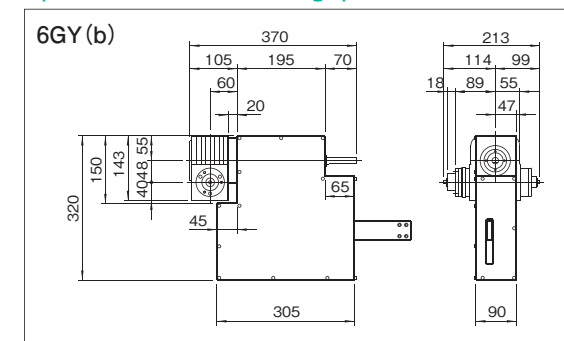
 $(1\text{ N} \doteq 0.102\text{ kgf})$ 

Type	Maker	Motor model	Output power (W)	Frequency (Hz)	Voltage (V)	Current (A)	Starting torque (N·m)	Rated torque (N·m)	Rotating speed (rpm)	Capacitor (μ F)	Gear head model	Ball bearing type
No clutch and brake	Oriental motor	5IK40GN-ACB1540-701	40	50 60	100	0.8	0.2	0.3 0.26	1300 1550	10.0	5GN□K	
With clutch and brake											5GC□K	
No clutch and brake	Panasonic	M91A40G4L M9CB1A0G4L	40	50 60	100	0.87 0.74	0.235	0.304 0.245	1250 1575	10.0	M9GA□B	
With clutch and brake											M9GB□B-CB	

(1 N·m ≐ 0.102 kgf·m)

Cam shaft rotating speed		10	20	30	40	50	60	70	80
50Hz	Pulley gear ratio	1.33	1.33	1.26	1.2	1.1	1.26	1.33	1.44
	Gear head ratio	100	50	36	30	25	18	15	12.5
60Hz	Pulley gear ratio	1.33	1.33	1.1	1.33	1.33	1.1	1.33	1.44
	Gear head ratio	120	60	50	30	25	25	18	15

- Use a 60 W motor for speeds above 70 rpm.



Timing pulley reduction ratio	Pulley A Number of teeth	Pulley B Number of teeth	D (mm)	Belt model
1	22	22	162	210L 56teeth
1.1	22	24	158	↗
1.2	20	24	162	↗
1.26	19	24	165	↗
1.3	20	26	157	↗
1.33	18	24	167	↗
1.44	18	26	162	↗

Item	Motor	40W	
		Clutch	Brake
Static frictional torque		1.5N·m	
Dynamic frictional torque		1.0N·m	
Rated voltage		DC24V	
Power consumption (at 75°C)		7W	5W
Armature pull - in time		15msec	
Armature release time		25msec	
Actual torque build - up time		20msec	
Repetition rate		Max. 100 times/min	
Total energy		1.5×10 ⁷ J	
Allwable energy at one time		1.5J	



Parts Handler 8GY

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8GY Dimensions

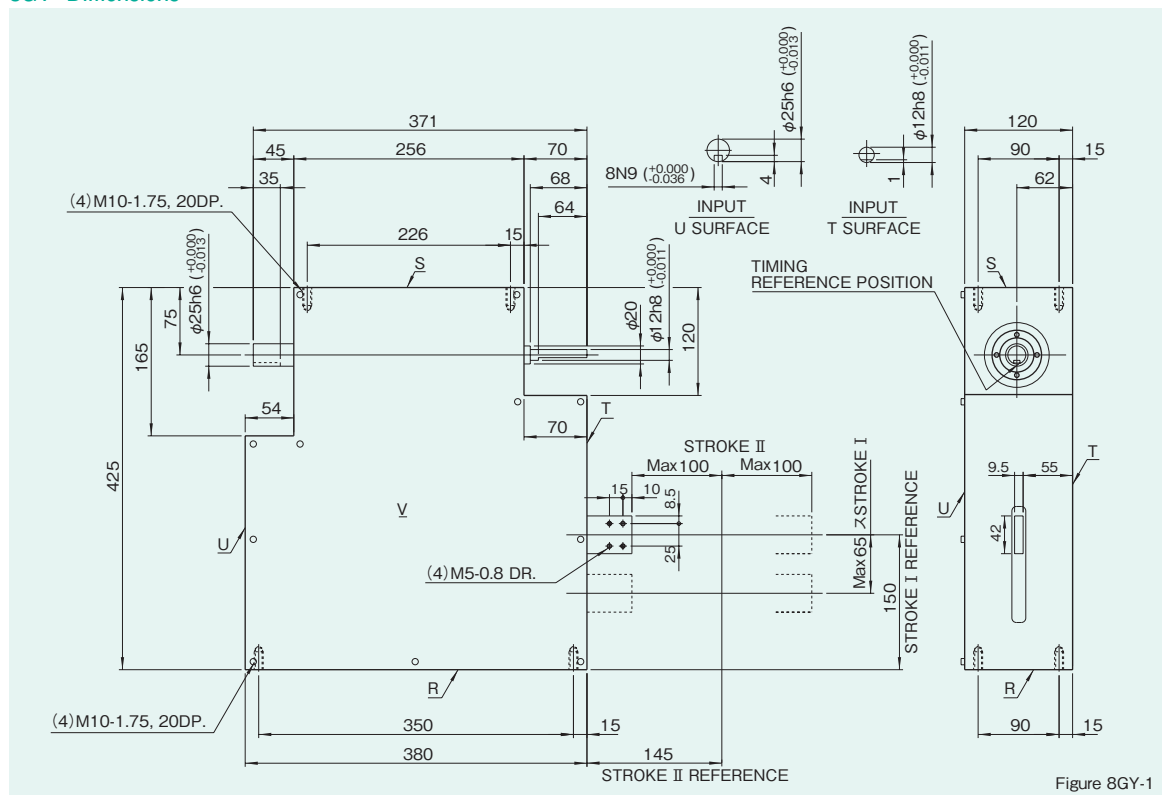
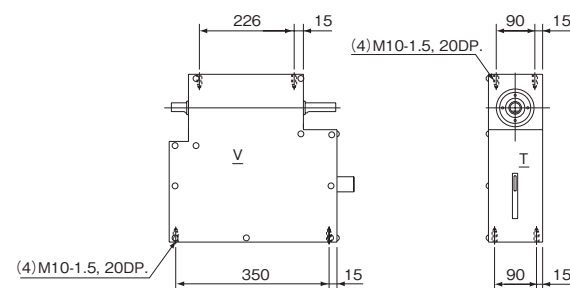


Figure 8GY-1

Mounting hole locations

Figure 8GY-2



Dimention of R,S surface

Specifications

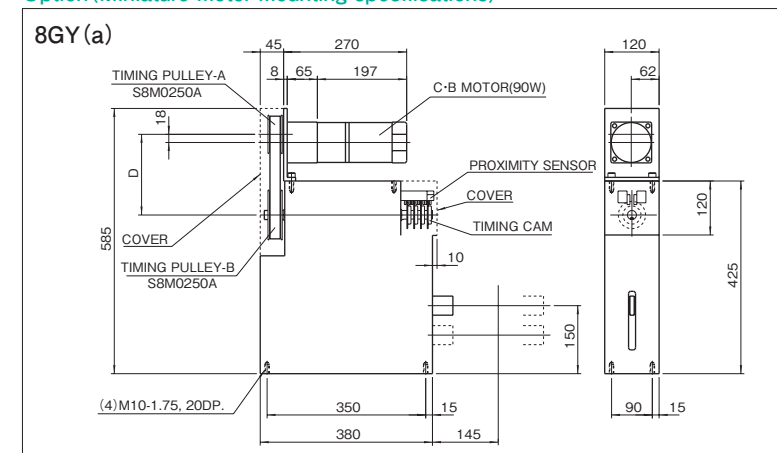
Table 8GY-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W_0	N	Refer to Carrying Capacity Table	Input allowable axial load	P_2	N	2000	Housing color			Beige
Output static allowable load in the direction of V and W surface	P_1	N	433	Input maximum repetitious bending force	P_3	N	2000	Product weight		kg	64
Output bending rigidity in the direction of V and W surface	K_1	mm/N	1.0×10^{-2}	Input maximum repetitious allowable torque	P_4	N·m	98	Repetitive accuracy		mm	± 0.02
Output internal load, stroke I	W_{a1}	N	43.1	Input torsional rigidity	K_2	N·m/rad	10000				
Output internal load, stroke II	W_{a2}	N	22.5	Input inertia	J_1	kg·m ²	11.6×10^{-3}	Grease lubrication			

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

Option (Miniature motor mounting specifications)



Induction motor specifications

Table 8GY-2

Type	Maker	Motor model	Output power (W)	Frequency (Hz)	Voltage (V)	Current (A)	Starting torque (N·m)	Rated torque (N·m)	Rotating speed (rpm)	Capacitor (μF)	Gear head model
No clutch and brake With clutch and brake	Oriental motor	5IK90GU-AF	90	50	100	2.0	0.45	0.68	1300	25.0	5GU□KB
		CB1590-801	90	60	100	1.7	0.470	0.519	1550	25.0	5GCH□KB
No clutch and brake With clutch and brake	Panasonic	M9IC90G4L	90	50	100	1.6	0.470	0.637	1300	25.0	M9GD□B
		M9CBIC90G4L	90	60	100	1.7	0.470	0.519	1550	25.0	M9GE□B-KB

●The figures in the □ indicate gear ratio.

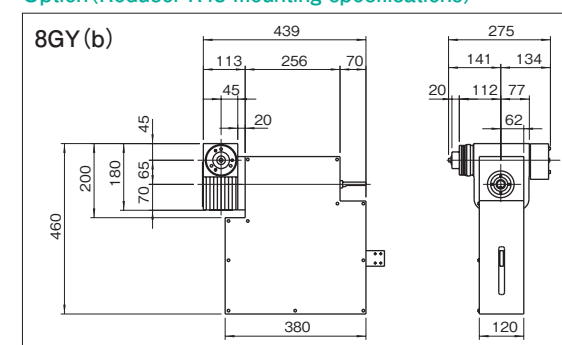
(1N·m=0.102kgf·m)

Gear head rotating speed and speed and gear ratio

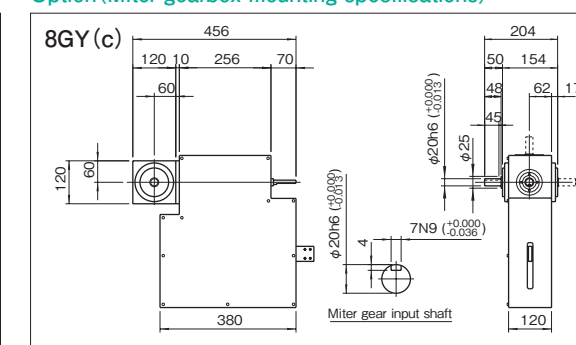
Table 8GY-3

Cam shaft rotating speed	10	20	30	40	50	60	70	80
Pulley gear ratio	1.50	1.82	1.50	1.82	1.50	1.50	1.58	1.42
Gear head ratio	90	36	30	18	18	15	12.5	12.5
Pulley gear ratio	1.67	1.67	1.50	1.67	1.82	1.50	1.58	1.67
Gear head ratio	100	50	36	25	18	15	12.5	12.5

Option (Reducer R48 mounting specifications)



Option (Miter gearbox mounting specifications)



Reducer mounting positions

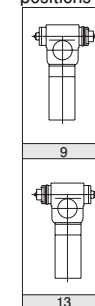


Figure 8GY-6

Mounting positions

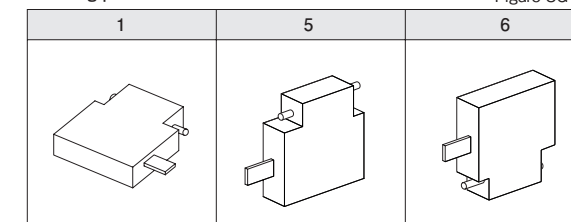


Figure 8GY-7

Timing transmission specifications

Table 8GY-4

Timing pulley reduction ratio	Pulley A Number of teeth	Pulley B Number of teeth	D (mm)	Belt model
1.42	24	34	199.5	S8M632 79teeth
1.50	24	36	195	S8M632 79teeth
1.58	24	38	203	S8M656 82teeth
1.67	24	40	199	S8M656 82teeth
1.82	22	40	202.5	S8M656 82teeth

Clutch and brake specifications

Table 8GY-5

Item	Motor	
	Clutch	Brake
Static frictional torque	1.5N·m	
Dynamic frictional torque	1.0N·m	
Rated voltage	DC24V	
Power consumption (at 75℃)	7W	5W
Armature pull - in time	15msec	
Armature release time	25msec	
Actual torque build - up time	20msec	
Repetition rate	Max. 100 times/min	
Total energy	1.47×10 ⁷ J	
Allwable energy at one time	1.47J	

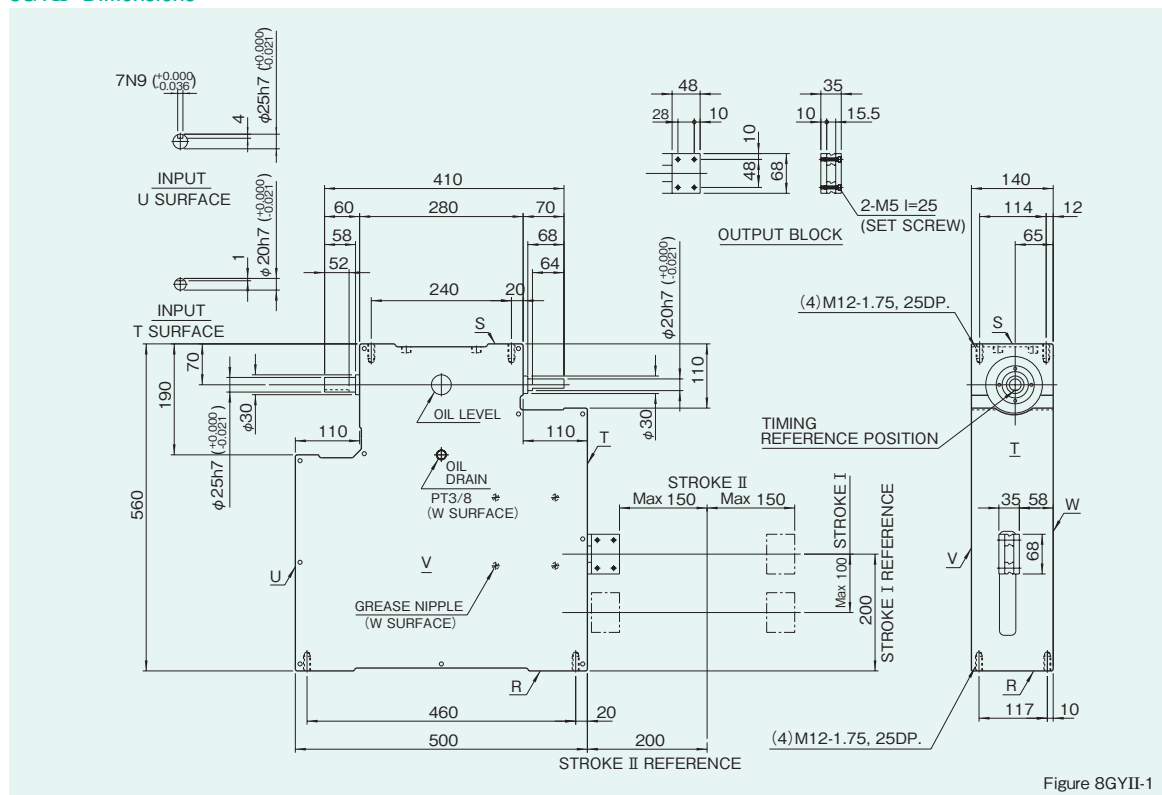
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Parts Handler 8GYII

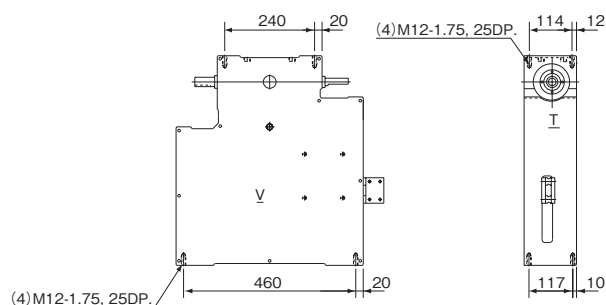
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8GYII Dimensions



Mounting hole locations

Figure 8GYII-2



Specifications

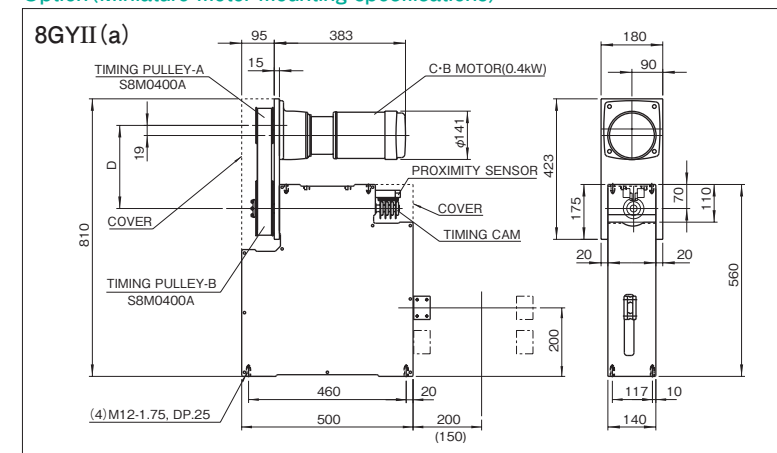
Table 8GYII-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W ₀	N	Refer to Carrying Capacity Table	Input allowable axial load	P ₂	N	2800	Housing color			Beige
Output static allowable load in the direction of V and W surface	P ₁	N	312	Input maximum repetitious bending force	P ₃	N	2700	Product weight		kg	95
Output bending rigidity in the direction of V and W surface	K ₁	mm/N	1.50×10 ⁻²	Input maximum repetitious allowable torque	P ₄	N·m	173	Repetitive accuracy		mm	±0.02
Output internal load, stroke I	W _{a1}	N	64.7	Input torsional rigidity	K ₂	N·m/rad	20000				
Output internal load, stroke II	W _{a2}	N	24.5	Input inertia	J ₁	kg·m ²	1.24×10 ⁻²	Grease lubrication			

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)

Option (Miniature motor mounting specifications)



Induction motor specifications

Table 8GYII-2

Type	Maker	Motor model	Output power (W)	Frequency (Hz)	Voltage (V)	Current (A)	Rotating speed (rpm)
No clutch and brake	Nissei	G3FM	400	50	100	2.1	1400
With clutch and brake		G3FE		60	200/220	1.8/1.9	1690/1710

●The figures in the □ indicate gear ratio.

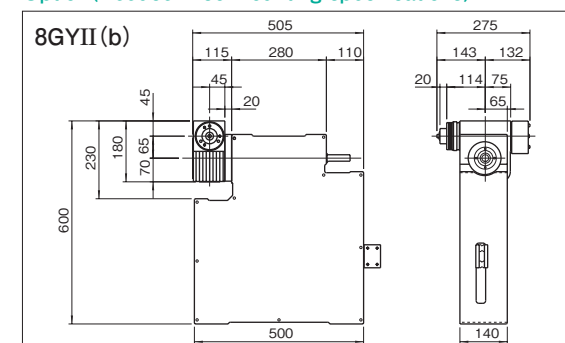
(1N·m≒0.102kgf·m)

Gear head rotating speed and speed and gear ratio

Table 8GYII-3

Cam shaft rotating speed	10	20	30	40	50	60
50Hz						
Pulley gear ratio	1.36	1.36	1.58	1.36	1.36	1.58
Gear head ratio	100	50	30	25	20	15
60Hz						
Pulley gear ratio	1.67	1.67	1.36	1.58	1.67	1.36
Gear head ratio	100	50	40	25	20	20

Option (Reducer R65 mounting specifications)



Reducer mounting positions

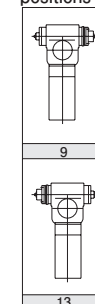


Figure 8GYII-6

Option (Miter gearbox mounting specifications)

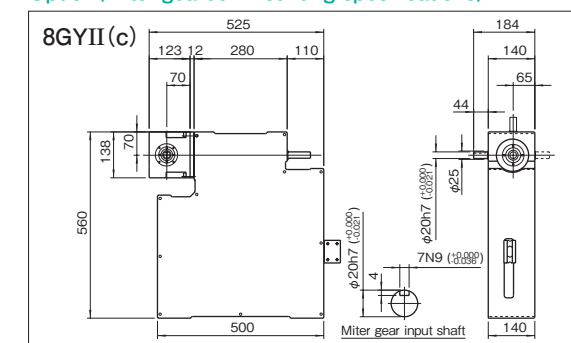
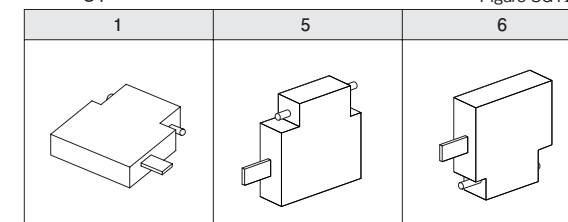


Figure 8GYII-7

Mounting positions



Timing transmission specifications

Table 8GYII-4

Timing pulley reduction ratio	Pulley A Number of teeth	Pulley B Number of teeth	D (mm)	Belt model
1.2	50	60	228	S8M896 112teeth
1.25	48	60	232	S8M896 112teeth
1.36	44	60	231	S8M880 110teeth
1.58	38	60	226	S8M848 106teeth
1.67	36	60	230	S8M848 106teeth

Clutch and brake specifications

Table 8GYII-5

Item	Motor	
	Clutch	Brake
Static frictional torque		3.9N·m
Dynamic frictional torque		3.1N·m
Rated voltage		DC90V
Power consumption (at 75℃)	6W	16W
Armature pull - in time		15msec
Armature release time		15msec
Actual torque build - up time		50msec
Repetition rate		Max. 50 times/min
Total energy		2.2×10 ⁸ J
Allwable energy at one time		27J

8GYII

8GYII



Parts Handler 6GV

SANDEX

6GV Dimensions

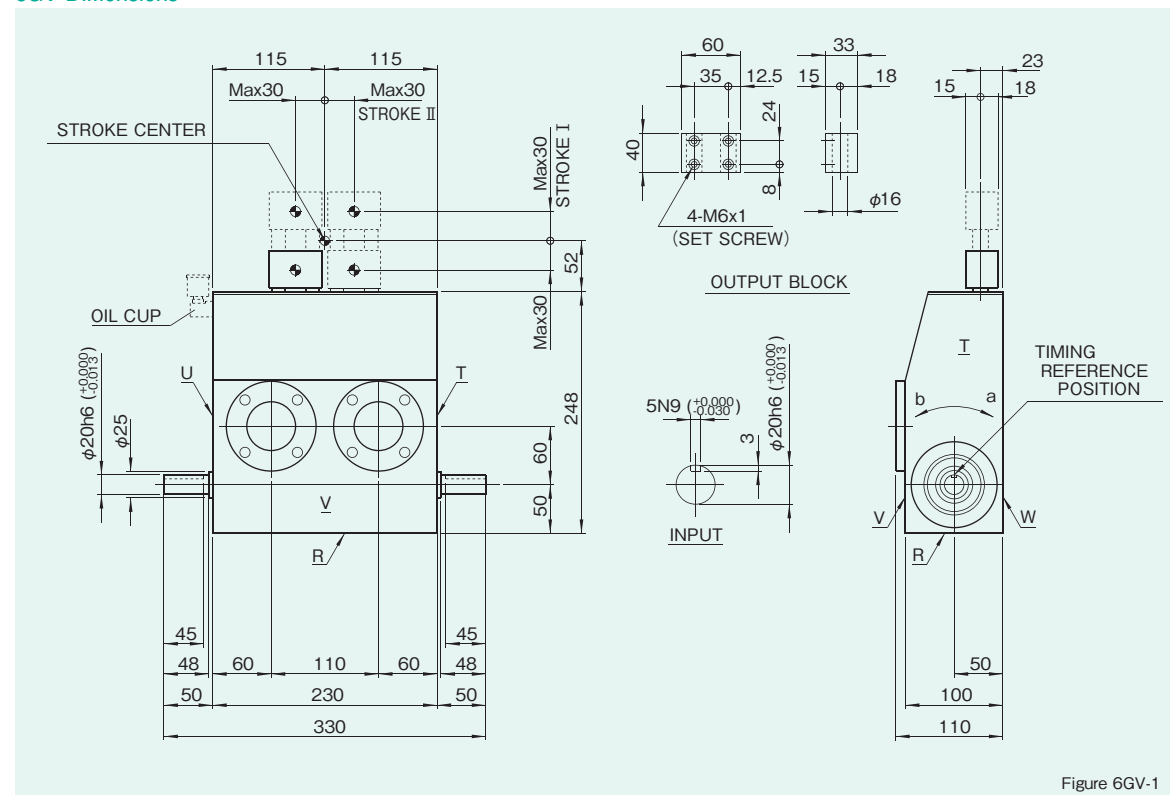
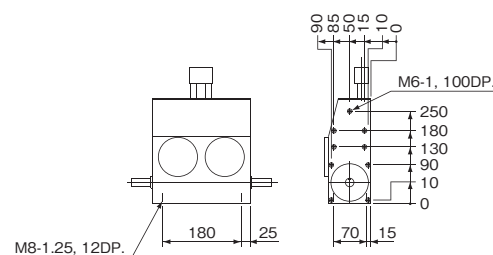


Figure 6GV-1

Mounting hole locations

Figure 6GV-2



Dimension of R, T and U surface

Specifications

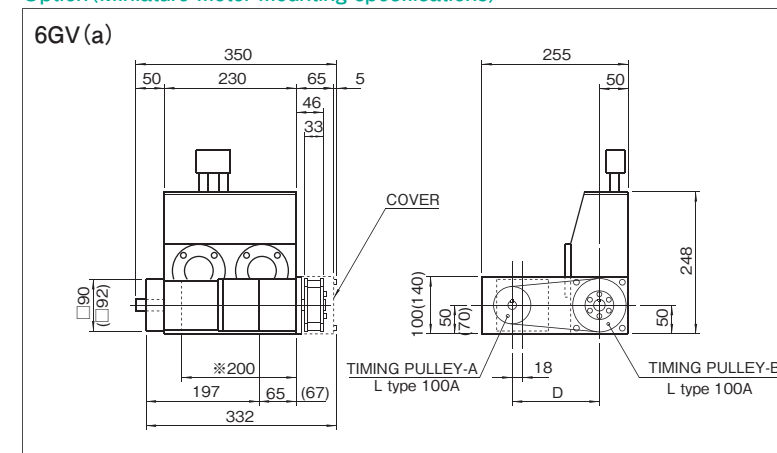
Table 6GV-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W_0	N	Refer to Carrying Capacity Table	Input allowable axial load	P_2	N	1078	Housing color			Gray
Output static allowable load in the direction of V and W surface	P_1	N	147	Input maximum repetitious bending force	P_3	N	1274	Product weight		kg	24
Output bending rigidity in the direction of V and W surface	K_1	mm/N	2.65×10^{-4}	Input maximum repetitious allowable torque	P_4	N·m	107.8	Repetitive accuracy		mm	± 0.02
Output internal load, stroke I	W_{a1}	N	19.6	Input torsional rigidity	K_2	N·m/rad	1.42×10^4				
Output internal load, stroke II	W_{a2}	N	24.5	Input inertia	J_1	kg·m ²	3.5×10^{-3}	Grease lubrication			

Note : Input inertia : J is calculated in dwell.

(1N $\approx$ 0.102kgf)

Option (Miniature motor mounting specifications)



Induction motor specifications

Table 6GV-2

Type	Maker	Motor model	Output power (W)	Frequency (Hz)	Voltage (V)	Current (A)	Starting torque (N·m)	Rated torque (N·m)	Rotating speed (rpm)	Capacitor (μ F)	Gear head model
No clutch and brake	Oriental motor	5IK90GU-AF	90	50/60	100	2.0	0.45	0.68/0.57	1300/1550	25.0	5GU□KB
With clutch and brake		CB1590-801									5GCH□KB
No clutch and brake	Panasonic	M9IC90G4L	90	50/60	100	1.6/1.7	0.470	0.637/0.519	1300/1550	25.0	M9GD□B
With clutch and brake		M9CBIC90G4L									M9GE□B-KB

●The figures in the □ indicate gear ratio.

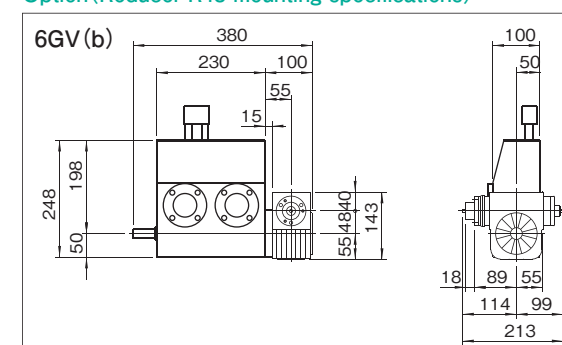
(1N·m $\approx$ 0.102kgf·m)

Gear head rotating speed and speed and gear ratio

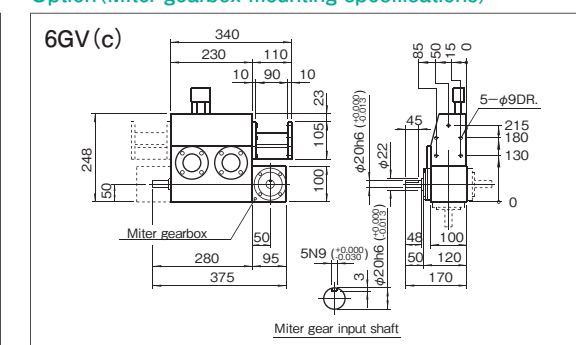
Table 6GV-3

Cam shaft rotating speed		10	20	30	40	50	60	70	80
50Hz	Pulley gear ratio	1.33	1.33	1.24	1.18	1.08	1.24	1.33	1.4
	Gear head ratio	100	50	36	30	25	18	15	12.5
60Hz	Pulley gear ratio	1.33	1.33	1.08	1.18	1.08	1.08	1.33	1.4
	Gear head ratio	120	60	50	36	30	25	18	15

Option (Reducer R48 mounting specifications)

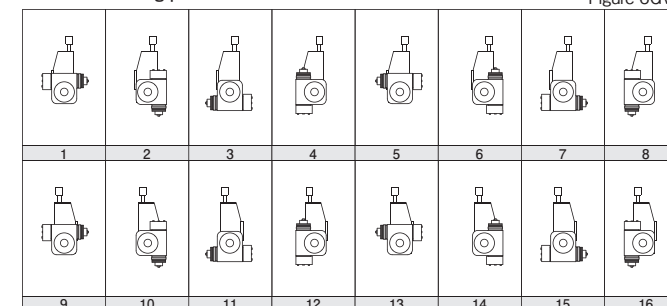


Option (Miter gearbox mounting specifications)



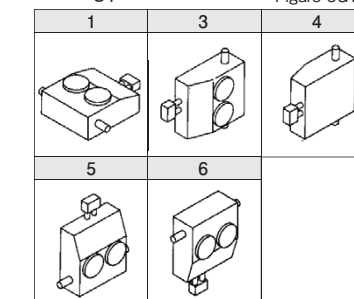
Reducer mounting positions

Figure 6GV-6



Mounting positions

Figure 6GV-7





Parts Handler 6GW

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6GW Dimensions

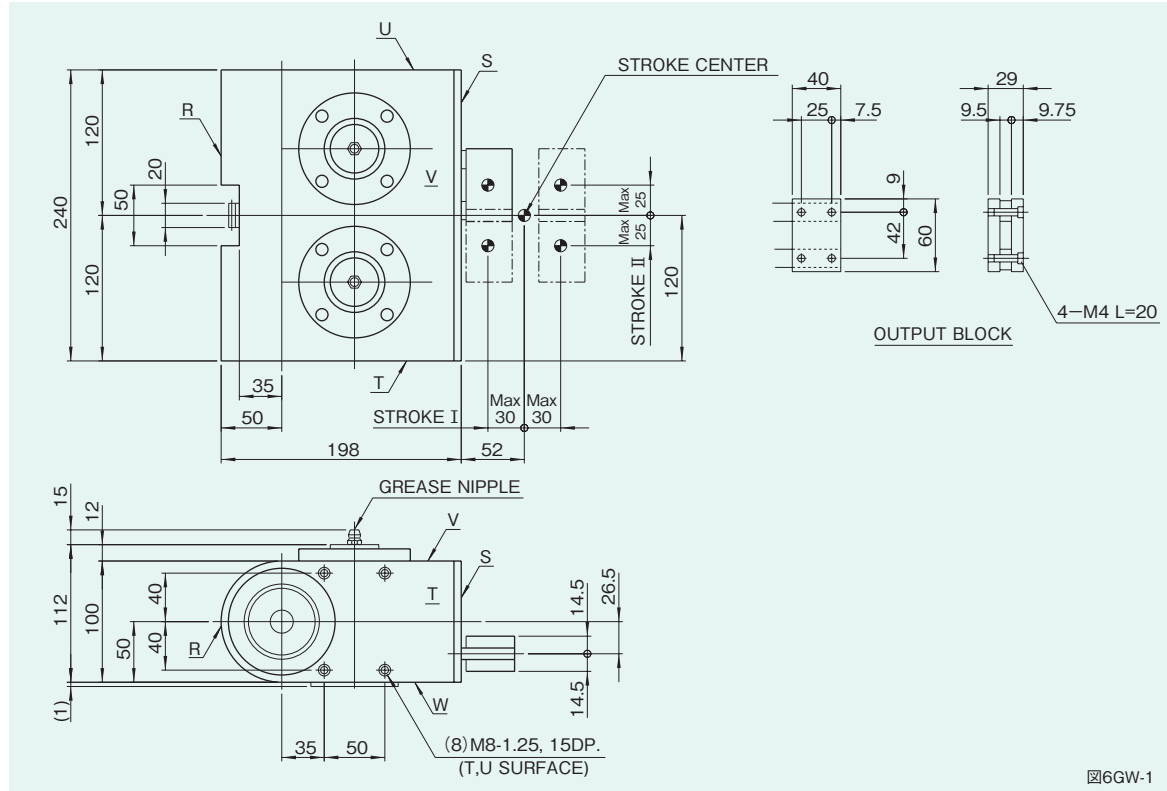


Figure 6GW-1



Parts Handler 6GX

SANDEX

6GX Dimensions

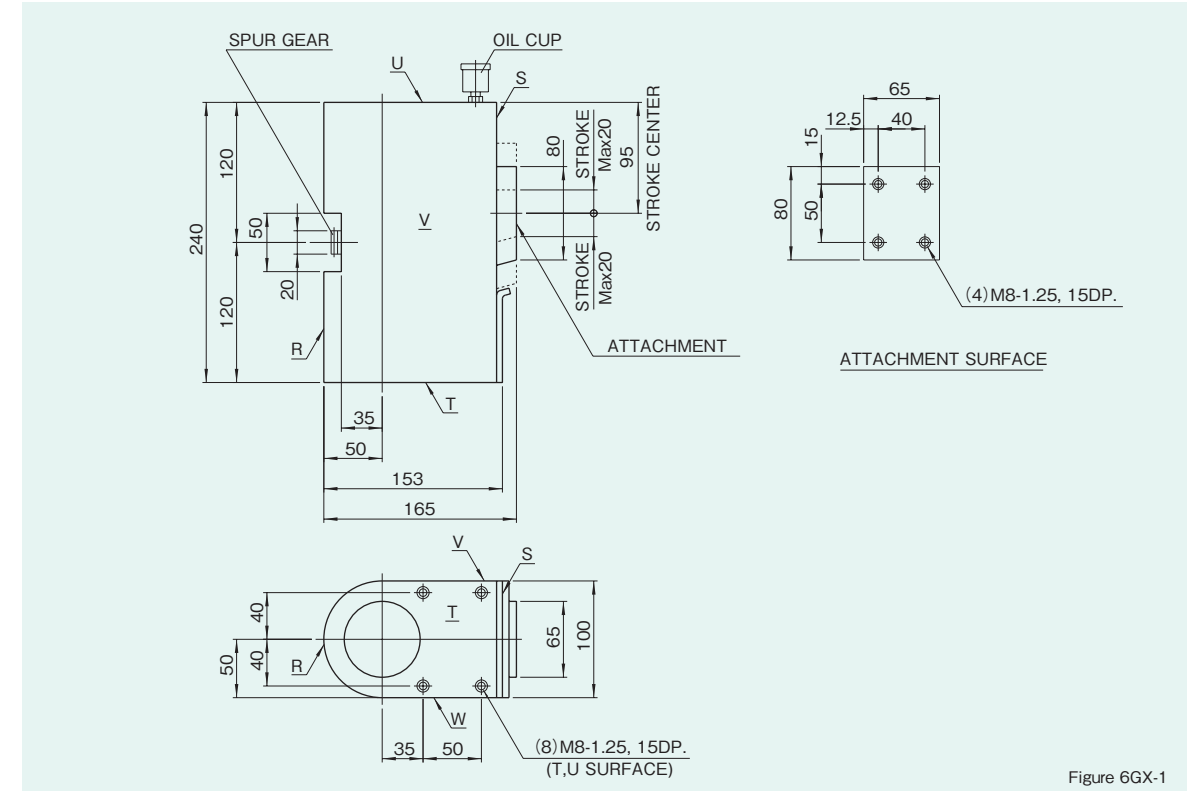


Figure 6GX-1

Specifications

Table 6GW-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W_0	N	Refer to Carrying Capacity Table	Input allowable axial load	P_2	N	1078	Spur gear pressure angle	F_1	deg	20
Output static allowable load in the direction of V and W surface	P_1	N	147	Input maximum repetitious bending force	P_3	N	1078	Spur gear module	F_2		2.5
Output bending rigidity	K_1	mm/N	1.33×10^{-2}	Input maximum repetitious allowable torque	P_4	N·m	107.8	Spur gear number of teeth	F_3		31
Output internal load, stroke I	W_{a1}	N	9.8	Input torsional rigidity	K_2	N·m/rad	1.42×10^4	Spur gear pitch circle diameter	F_4	mm	77.5
Output internal load, stroke II	W_{a2}	N	16.17	Input inertia	J_1	kg·m ²	4.75×10^{-3}	Spur gear allowable continuous output torque	F_5	N·m	294
Housing color			Beige	Product weight		kg	約20	Spur gear proper clearance	F_6	μm	60~180

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)

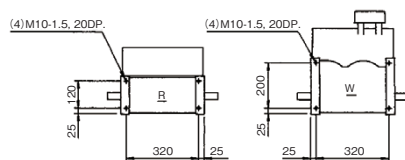
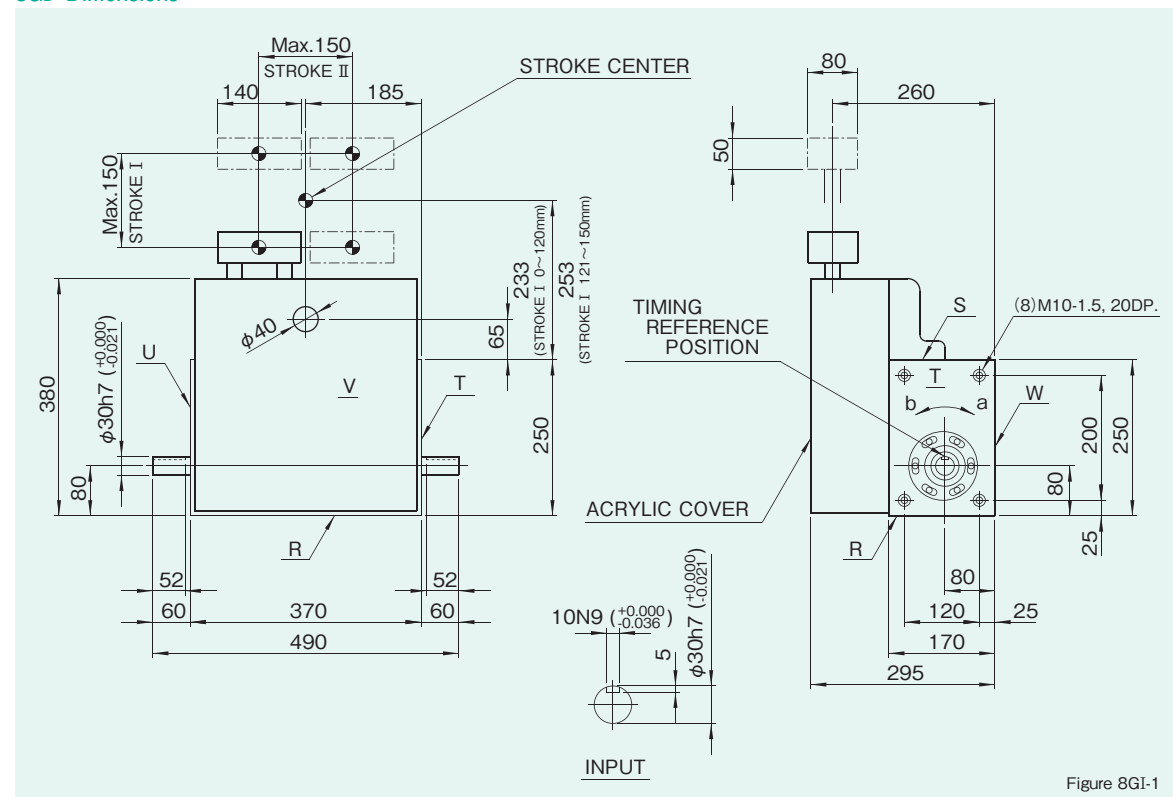
Specifications

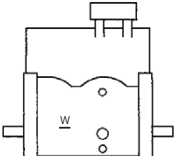
Table 6GX-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke II	P_1	N	2450	Input torsional rigidity	K_2	N·m/rad	1.47×10^5	Spur gear pressure angle	F_1	deg	20
Output static allowable load in the direction of V and W surface	P_2	N	2450	Input inertia	J_1	kg·m ²	2.5×10^{-3}	Spur gear module	F_2		2.5
Output bending rigidity	K_1	mm/N	5.10×10^{-6}	Repetitive accuracy		mm	±0.02	Spur gear number of teeth	F_3		31
Output internal load, stroke II	W_{a2}	N	34.3	Housing color			Beige	Spur gear pitch circle diameter	F_4	mm	77.5
				Product weight		kg	約18	Spur gear allowable continuous output torque	F_5	N·m	294
								Spur gear proper clearance	F_6	μm	60~180

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)

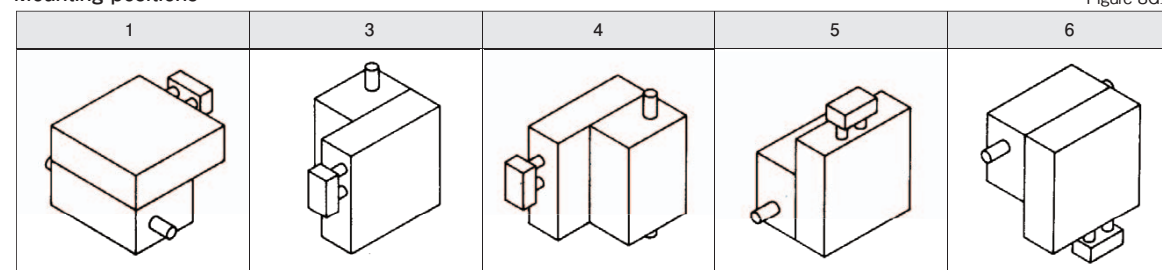
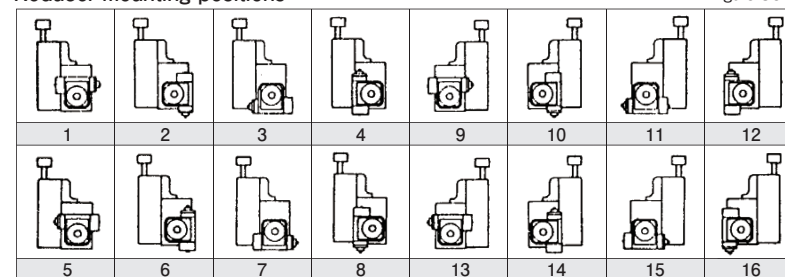
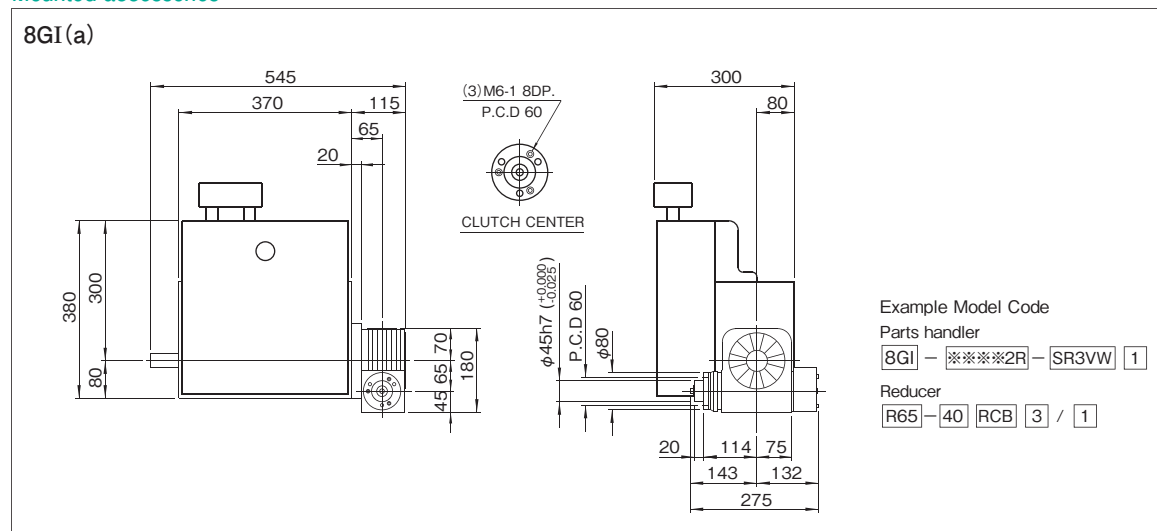


Mounting position	1	5
Location		
Oil capacity (ℓ)	4	2.5

- Each point indicated in the mounting positions shown in Figure 8GI-3 represents (starting at top) the oil plug (PT1/2), oil level (VA), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure 8GI-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W_0	N	Refer to Carrying Capacity Table	Input allowable axial load	P_2	N	2254	Housing color			Gray
Output static allowable load in the direction of V and W surface	P_1	N	147	Input maximum repetitious bending force	P_3	N	3822	Product weight		kg	75
Output bending rigidity in the direction of V and W surface	K_1	mm/N	3.27×10^{-4}	Input maximum repetitious allowable torque	P_4	N·m	392	Repetitive accuracy		mm	± 0.02
Output internal load, stroke I	W_{a1}	N	53.9	Input torsional rigidity	K_2	N·m/rad	1.86×10^4				
Output internal load, stroke II	W_{a2}	N	78.4	Input inertia	J_1	kg·m ²	2.15×10^{-2}				

(1 N $\doteq$ 0.102kgf)



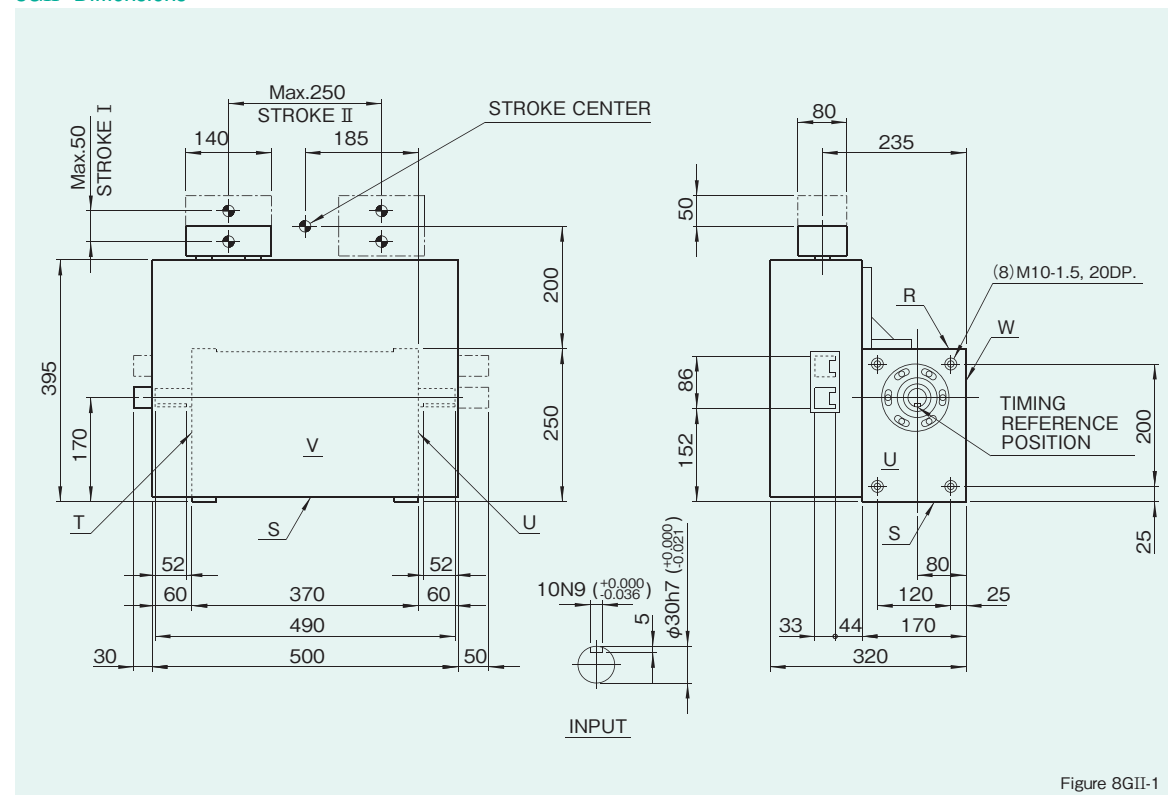
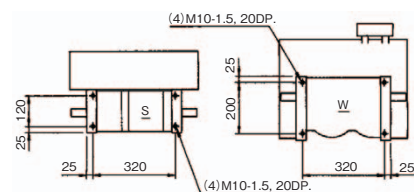


Figure 8GII-1

Mounting hole locations

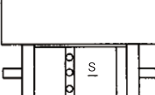
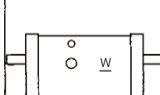
Figure 8GII-2



Dimension of S and W surface

Location of oil plug, etc., and oil capacity

Figure 8GII-3

Mounting position	1	6
Location		
Oil capacity (ℓ)	4	4.7

Precautions

- Each point indicated in the mounting positions shown in Figure 8GII-3 represents (starting at top) the oil plug (PT1/2), oil level (VA), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure 8GII-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

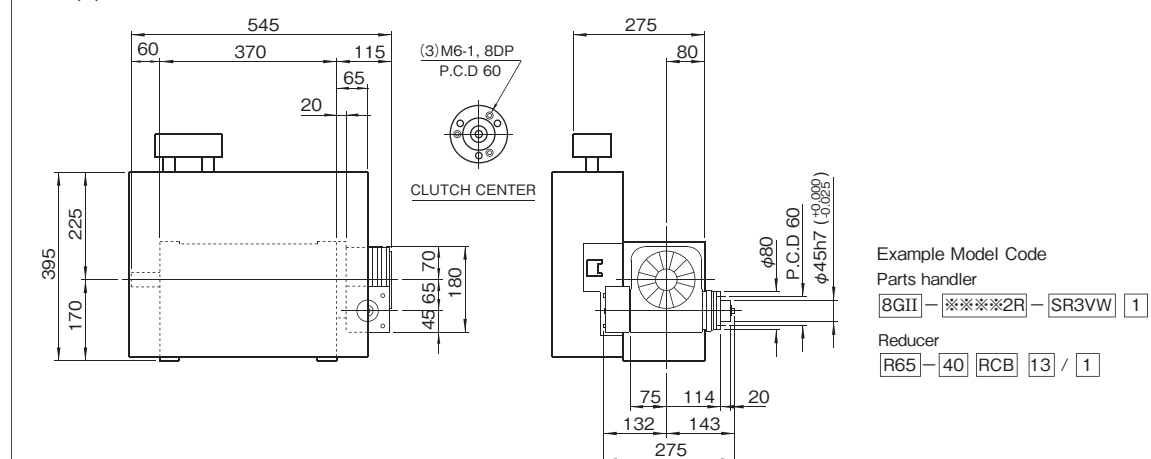
Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W_0	N	Refer to Carrying Capacity Table	Input allowable axial load	P_2	N	2254	Housing color			Gray
Output static allowable load in the direction of V and W surface	P_1	N	324.3	Input maximum repetitious bending force	P_3	N	3822	Product weight		kg	80
Output bending rigidity in the direction of V and W surface	K_1	mm/N	1.02×10^{-4}	Input maximum repetitious allowable torque	P_4	N·m	392	Repetitive accuracy		mm	± 0.02
Output internal load, stroke I	W_{a1}	N	53.9	Input torsional rigidity	K_2	N·m/rad	1.86×10^4				
Output internal load, stroke II	W_{a2}	N	93.1	Input inertia	J_1	kg·m ²	2.15×10^{-2}				

Note : Input inertia : J is calculated in dwell.

 $(1\text{ N} \doteq 0.102\text{ kgf})$

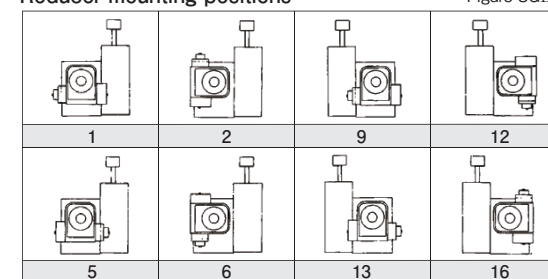
Mounted accessories

8GII(a)



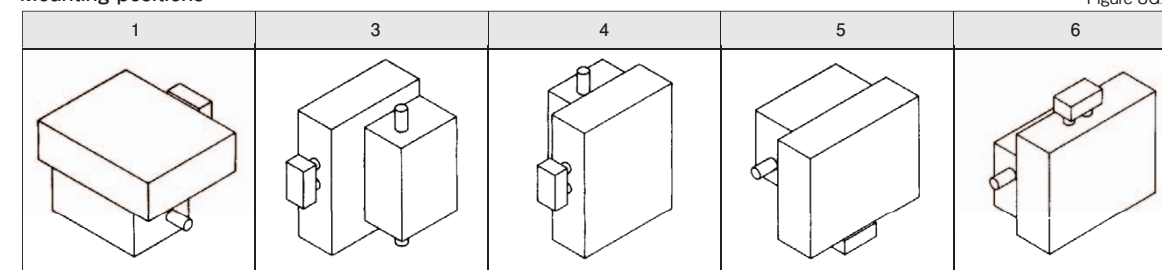
Reducer mounting positions

Figure 8GII-5



Mounting positions

Figure 8GII-6



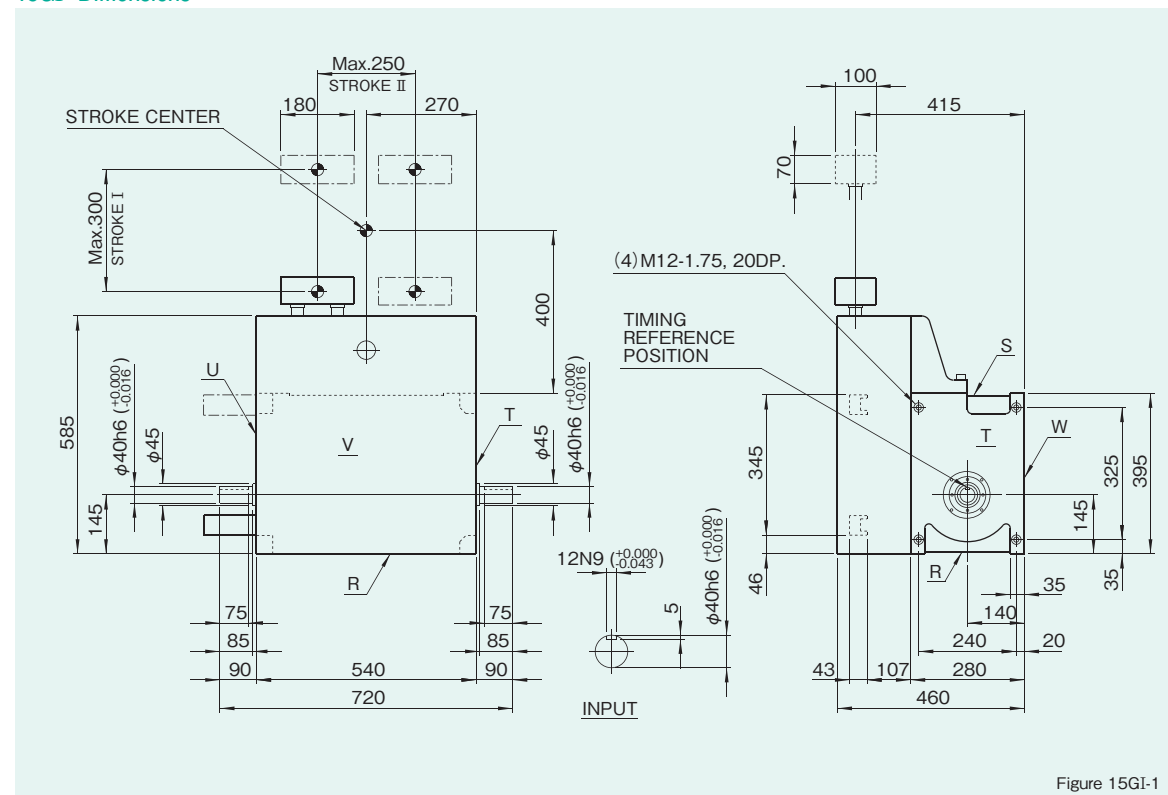
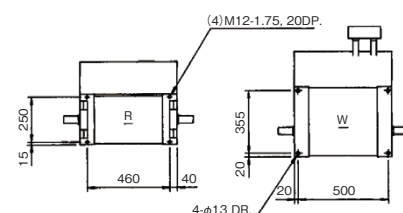


Figure 15GI-1

Mounting hole locations

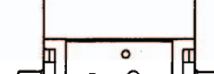
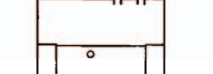
Figure 15GI-2



Dimension of R and W surface

Location of oil plug, etc., and oil capacity

Figure 15GI-3

Mounting position	1	5
Location		
Oil capacity(ℓ)	17	11

Precautions

- Each point indicated in the mounting positions shown in Figure 15GI-3 represents (starting at top) the oil plug (PT1/2), oil level (VA), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure 15GI-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

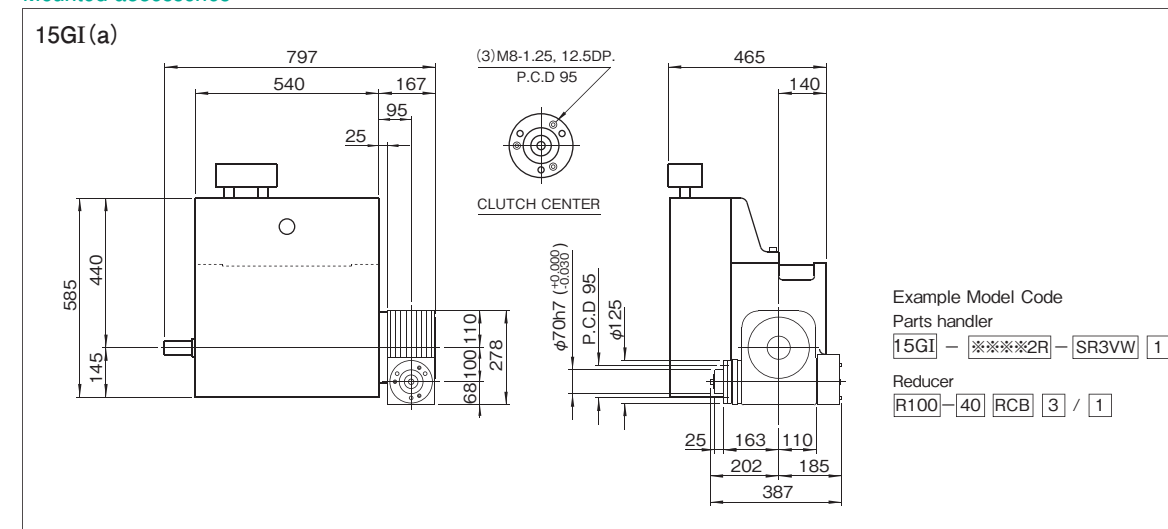
Specifications

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W_0	N	Refer to Carrying Capacity Table	Input allowable axial load	P_2	N	4508	Housing color			Gray
Output static allowable load in the direction of V and W surface	P_1	N	296.9	Input maximum repetitious bending force	P_3	N	6860	Product weight		kg	260
Output bending rigidity in the direction of V and W surface	K_1	mm/N	2.04×10^{-3}	Input maximum repetitious allowable torque	P_4	N·m	921.2	Repetitive accuracy		mm	± 0.03
Output internal load, stroke I	W_{a1}	N	137.2	Input torsional rigidity	K_2	N·m/rad	8.82×10^4				
Output internal load, stroke II	W_{a2}	N	205.8	Input inertia	J_1	kg·m ²	0.158				

Note : Input inertia : J is calculated in dwell.

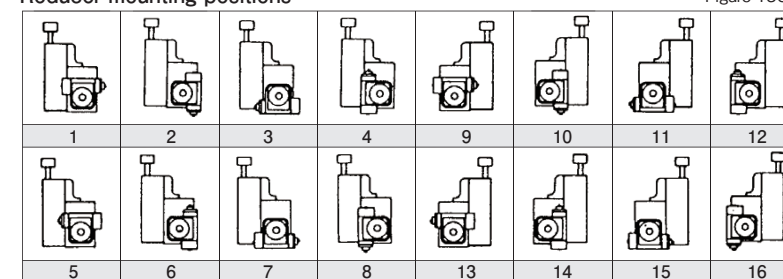
 $(1\text{ N} \doteq 0.102\text{ kgf})$

Mounted accessories



Reducer mounting positions

Figure 15GI-5



Mounting positions

Figure 15GI-6

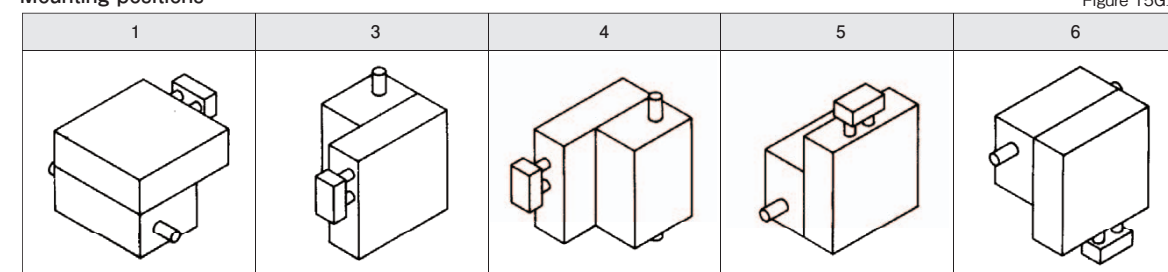
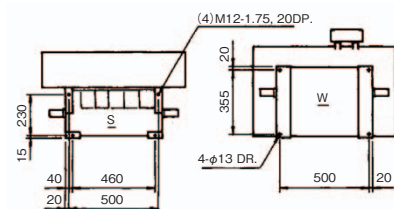




Figure 15GII-1 shows the dimensional drawings of the 15GII-1. The front view (left) and side view (right) provide detailed dimensions for the component. The front view includes dimensions for the overall size (800 x 505), stroke positions (Max. 100 STROKE I, Max. 500 STROKE II), and various mounting and clearance dimensions. The side view shows the circular profile with a diameter of 480 and a central bore of 140. The detail of the input shaft shows a shaft with a diameter of 12N9 (+0.000/-0.043) and a keyway with a width of 5 and a depth of 40h6 (+0.000/-0.018).

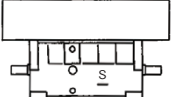
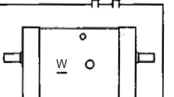
Figure 15GII-1

Figure 15GII-2



Dimension of S and W surface

Figure 15GII-3

Mounting position	1	6
Location		
Oil capacity (ℓ)	17	18.5

Precautions

- Each point indicated in the mounting positions shown in Figure 15GII-3 represents (starting at top) the oil plug (PT1/2), oil level (VA), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure 15GII-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

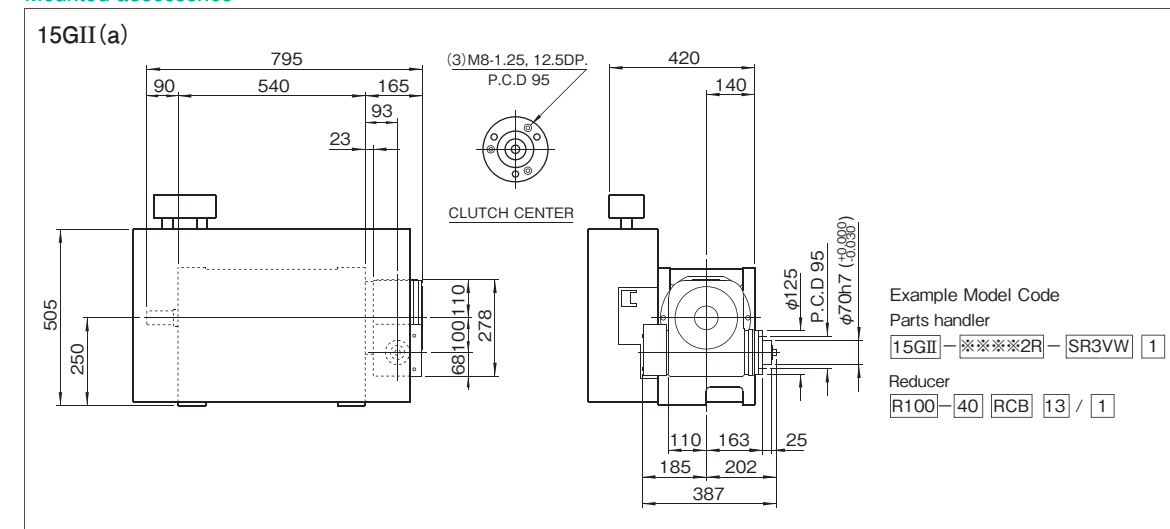
Table 15GII-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W_0	N	Refer to Carrying Capacity Table	Input allowable axial load	P_2	N	4508	Housing color			Gray
Output static allowable load in the direction of V and W surface	P_1	N	453.7	Input maximum repetitious bending force	P_3	N	6860	Product weight		kg	280
Output bending rigidity in the direction of V and W surface	K_1	mm/N	2.04×10^{-4}	Input maximum repetitious allowable torque	P_4	N·m	921.2	Repetitive accuracy		mm	± 0.03
Output internal load, stroke I	W_{a1}	N	127.4	Input torsional rigidity	K_2	N·m/rad	8.82×10^4				
Output internal load, stroke II	W_{a2}	N	215.6	Input inertia	J_1	kg·m ²	0.158				

Note : Input inertia : J is calculated in dwell.

 $(1\text{ N} \doteq 0,102\text{ kgf})$

Mounted accessories



Reducer mounting positions

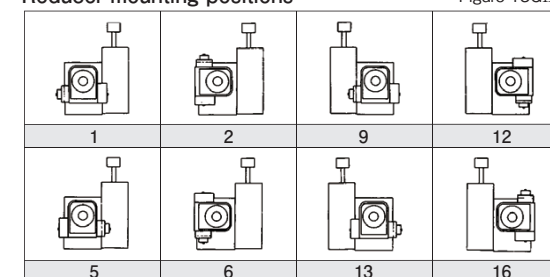


Figure 15GII-5

Mounting positions

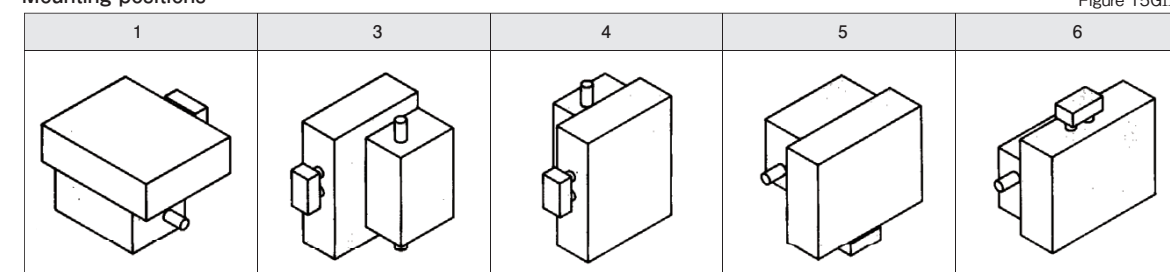


Figure 15GII-6

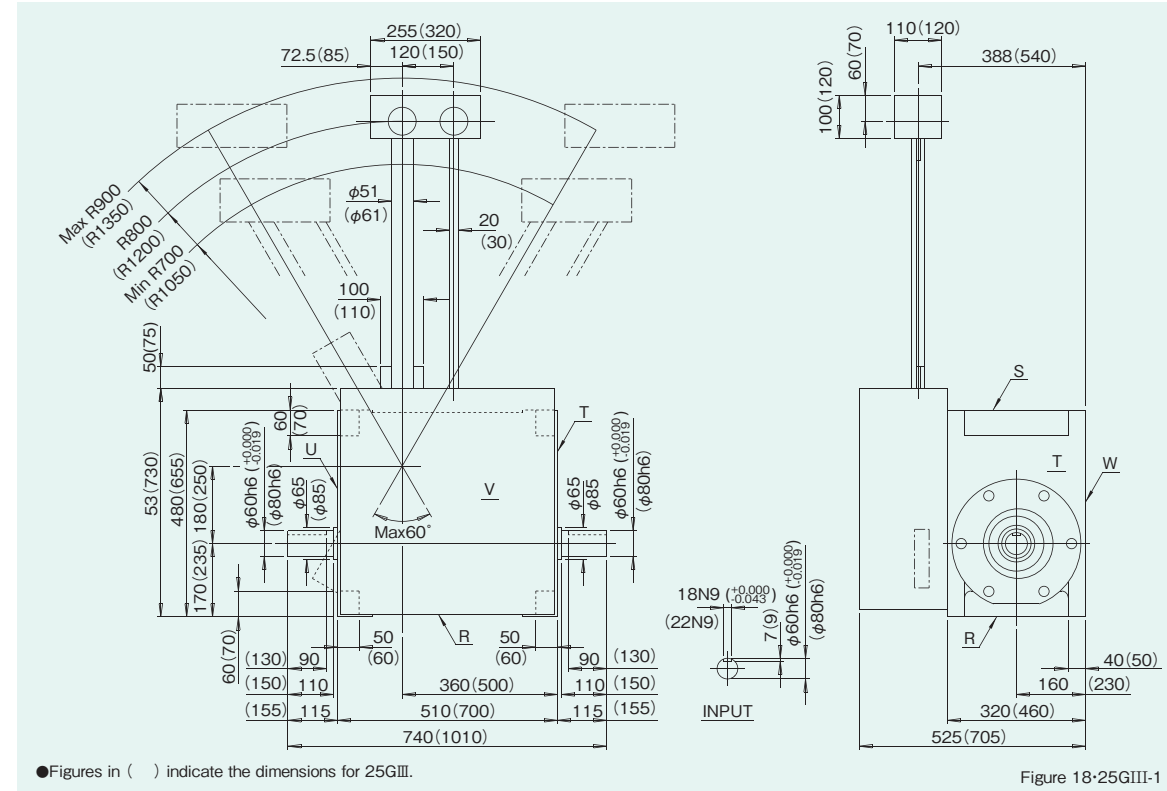


Parts Handler 18GIII·25GIII

Discontinued

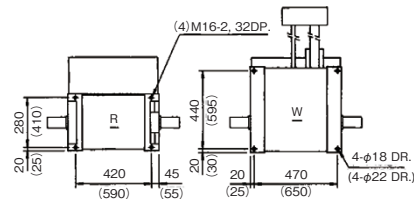
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18GIII·25GIII Dimensions



Mounting hole locations

Figure 18-25GIII-2



Dimension of R and W surface

Location of oil plug, etc., and oil capacity

Figure 18-25GIII-1

Mounting position	1	5
Location		
Oil capacity (ℓ)	20.5	8

Precautions

- Each point indicated in the mounting positions shown in Figure 18GIII-3 represents (starting at top) the oil plug (PT1/2), oil level (VA), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure 18GIII-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

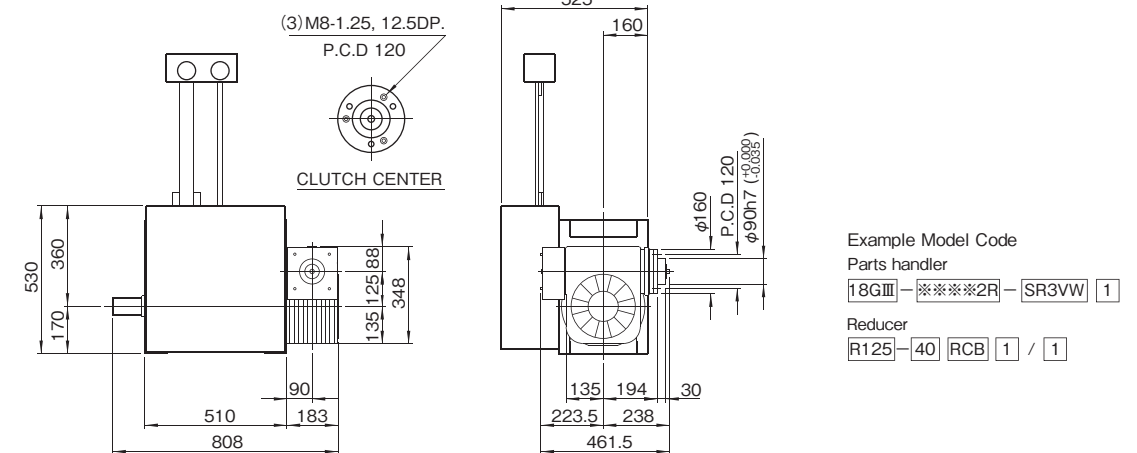
Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable load, stroke I, II	W ₀	N	Refer to Carrying Capacity Table	Input allowable axial load	P ₂	N	10780 (15190)	Housing color			Gray
Output static allowable load in the direction of V and W surface	P ₁	N	294 (294)	Input maximum repetitious bending force	P ₃	N	18620 (31360)	Product weight		kg	430 (950)
Output bending rigidity in the direction of V and W surface	K ₁	mm/N	4.08×10 ⁻³ (7.14×10 ⁻³)	Input maximum repetitious allowable torque	P ₄	N·m	4116 (9800)	Repetitive accuracy		mm	±0.05 (±0.07)
Output internal load, stroke I	W _{a1}	N	333.2 (539)	Input torsional rigidity	K ₂	N·m / rad	3.14×10 ⁵ (7.15×10 ⁵)				
Output internal load, stroke II	J _{a2}	N	7.5 (28.8)	Input inertia	J ₁	kg·m ²	0.25 (0.95)				

Note : Input inertia : J is calculated in dwell.

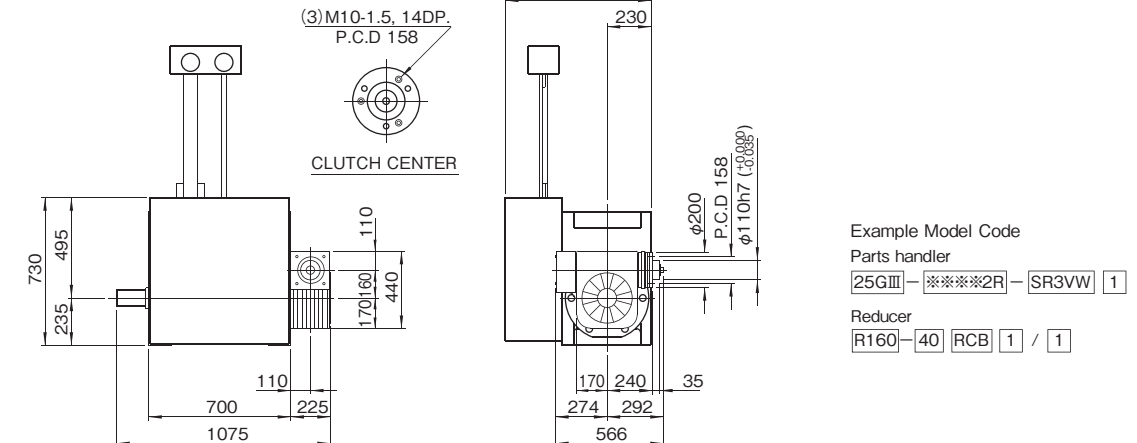
●Figures in () indicate the dimensions for 25GIII.
(1N≒0.102kgf)

Mounted accessories

18GIII (a)

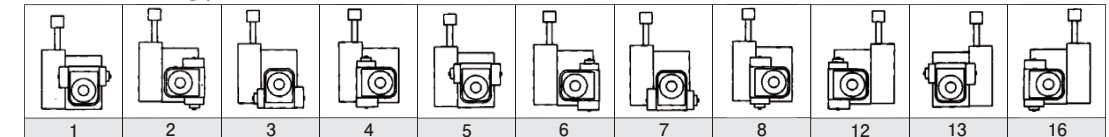


25GIII (a)



Reducer mounting positions

Figure 18-25GIII-5



Mounting positions

Figure 18-25GIII-6

