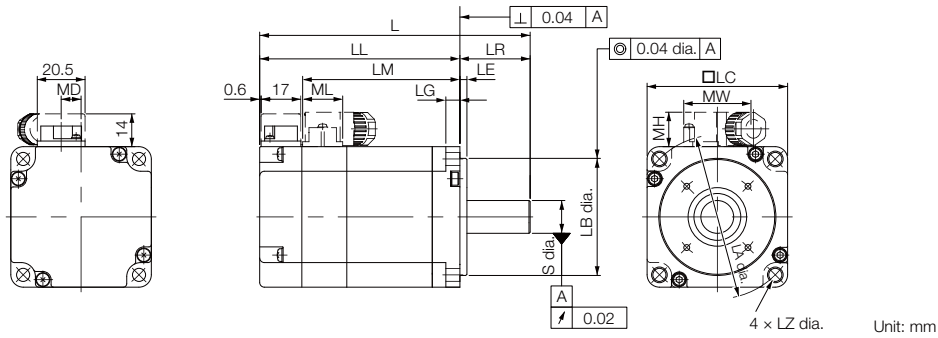


SGM7J-02, -04, and -06



Model SGM7J-	L*	LL*	LM	Flange Dimensions							S	MD	MW	MH	ML	Approx. Mass [kg]
				LR	LE	LG	LC	LA	LB	LZ						
02A□A2□	99.5 (140)	69.5 (110)	51.2	30	3	6	60	70	50 ⁰ _{-0.025}	5.5	14 ⁰ _{-0.011}	8.5	28.7	14.7	17.1	0.8 (1.4)
04A□A2□	115.5 (156)	85.5 (126)	67.2	30	3	6	60	70	50 ⁰ _{-0.025}	5.5	14 ⁰ _{-0.011}	8.5	28.7	14.7	17.1	1.1 (1.7)
06A□A2□	137.5 (191.5)	107.5 (161.5)	89.2	30	3	6	60	70	50 ⁰ _{-0.025}	5.5	14 ⁰ _{-0.011}	8.5	28.7	14.7	17.1	1.6 (2.2)

* For models that have a batteryless absolute encoder, L and LL are 8 mm greater than the given value. Refer to the following section for the values for individual models.

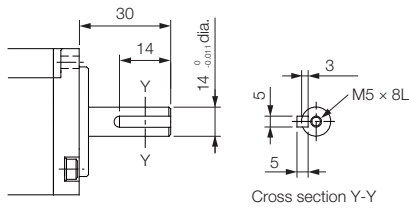
Dimensions of Servomotors with Batteryless Absolute Encoders on page 4-20

Note: 1. The values in parentheses are for Servomotors with Holding Brakes.

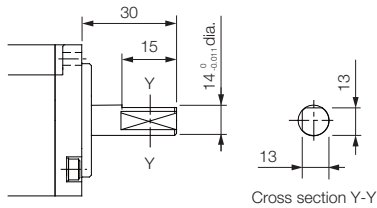
2. The values for a straight, without key specification are given. Refer to the information given below for other shaft end specifications and option specifications.

◆ Shaft End Specifications

- Straight with Key and Tap

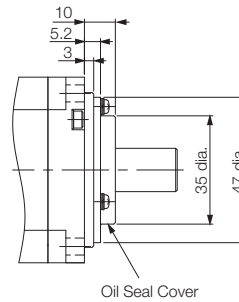


- With Two Flat Seats



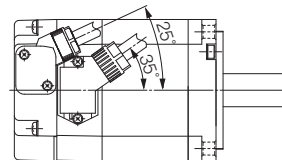
◆ Specifications of Options

- Oil Seal

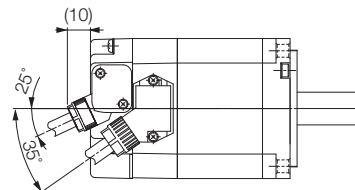


◆ Connector Mounting Dimensions

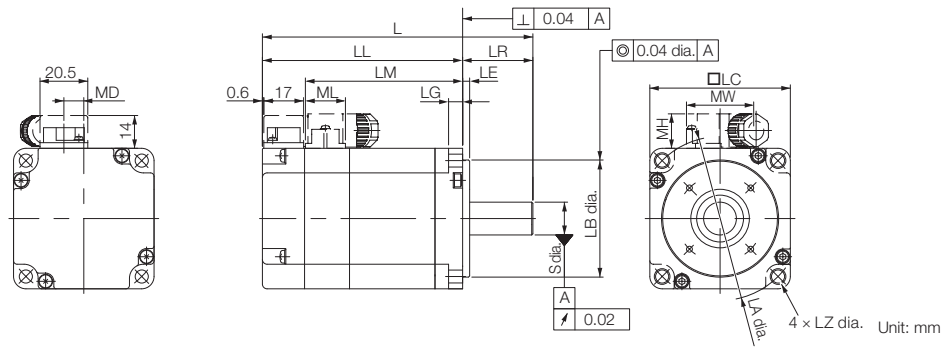
- Cable Installed on Load Side



- Cable Installed on Non-load Side



SGM7J-08



Model SGM7J-	L*	LL*	LM	Flange Dimensions							S	MD	MW	MH	ML	Approx. Mass* [kg]
				LR	LE	LG	LC	LA	LB	LZ						
08A□A2□	137 (184)	97 (144)	78.5	40	3	8	80	90	70 ⁰ _{-0.030}	7	19 ⁰ _{-0.013}	13.6	38	17	19.3	2.2 (2.8)

* For models that have a batteryless absolute encoder, L and LL are 8 mm greater and the approximate mass is 0.1 kg greater than the given value. Refer to the following section for the values for individual models.

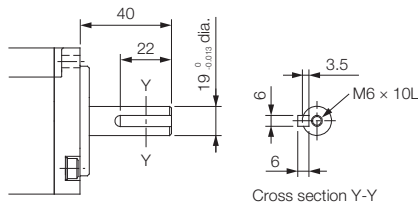
Dimensions of Servomotors with Batteryless Absolute Encoders on page 4-20

Note: 1. The values in parentheses are for Servomotors with Holding Brakes.

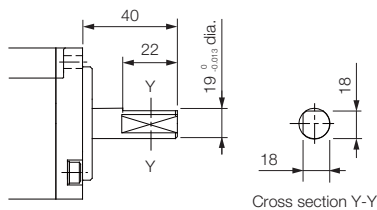
2. The values for a straight, without key specification are given. Refer to the information given below for other shaft end specifications and option specifications.

◆ Shaft End Specifications

- Straight with Key and Tap

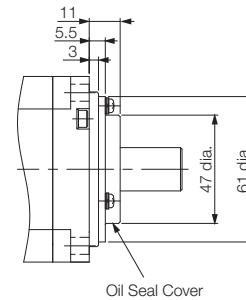


- With Two Flat Seats



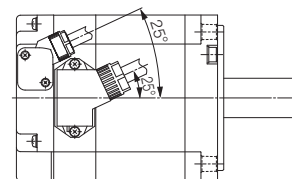
◆ Specifications of Options

- Oil Seal

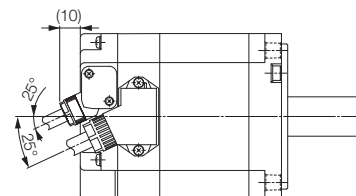


◆ Connector Mounting Dimensions

- Cable Installed on Load Side



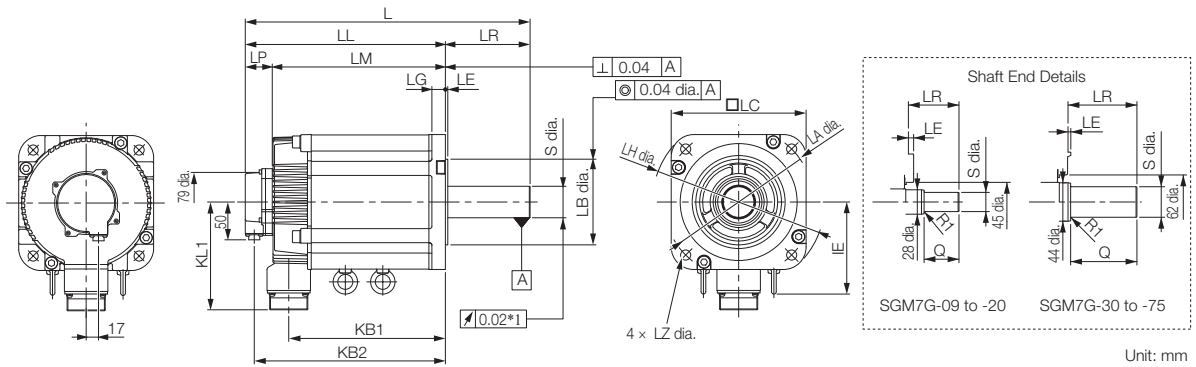
- Cable Installed on Non-load Side



7.3 External Dimensions

7.3.1 Servomotors without Holding Brakes

SGM7G-09 to -75



Model SGM7G-	L*2	LL*2	LM	LP*2	LR	KB1	KB2*2	IE	KL1	Flange Dimensions						Shaft End Dimensions		Approx. Mass [kg]	
										LA	LB	LC	LE	LG	LH	LZ	S		Q
09A□A21	195	137	101	36	58	83	125	-	104	145	110 ⁰ _{-0.035}	130	6	12	165	9	24 ⁰ _{-0.013} *3	40	5.5
13A□A21	211	153	117	36	58	99	141	-	104	145	110 ⁰ _{-0.035}	130	6	12	165	9	24 ⁰ _{-0.013} *3	40	7.1
20A□A21	229	171	135	36	58	117	159	-	104	145	110 ⁰ _{-0.035}	130	6	12	165	9	24 ⁰ _{-0.013}	40	8.6
30A□A21	239	160	124	36	79	108	148	-	134	200	114.3 ⁰ _{-0.025}	180	3.2	18	230	13.5	35 ^{+0.01} ₀	76	13.5
44A□A21	263	184	148	36	79	132	172	-	134	200	114.3 ⁰ _{-0.025}	180	3.2	18	230	13.5	35 ^{+0.01} ₀	76	17.5
55A□A21	334	221	185	36	113	163	209	123	144	200	114.3 ⁰ _{-0.025}	180	3.2	18	230	13.5	42 ⁰ _{-0.016}	110	21.5
75A□A21	380	267	231	36	113	209	255	123	144	200	114.3 ⁰ _{-0.025}	180	3.2	18	230	13.5	42 ⁰ _{-0.016}	110	29.5

*1. This is 0.04 for the SGM7G-55 or SGM7G-75.

*2. For models that have a batteryless absolute encoder, L, LL, LP, and KB2 are 8 mm greater than the given value. Refer to the following section for the values for individual models.

Dimensions of Servomotors with Batteryless Absolute Encoders on page 7-18

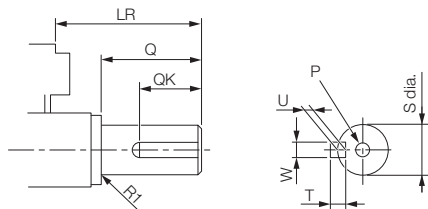
*3. The S dimensions of these Servomotors are different from those of the Σ-V-series SGMGV Servomotors. Models that have the same installation dimensions as the SGMGV Servomotors are also available. Contact your Yaskawa representative for details.

Note: 1. The dimensions are same for models with oil seals.

2. The values for a straight, without key specification are given. Refer to the information given below for other shaft end specifications and option specifications.

◆ Shaft End Specifications

- Straight with Key and Tap

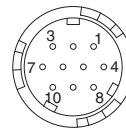


Model SGM7G-	LR	Q	QK	S	W	T	U	P
09A□A61	58	40	25	24 ⁰ _{-0.013} * 8*	8*	7*	4*	M5×12L
13A□A61	58	40	25	24 ⁰ _{-0.013} * 8*	8*	7*	4*	
20A□A61	58	40	25	24 ⁰ _{-0.013}	8	7	4	
30A□A61	79	76	60	35 ^{+0.01} ₀	10	8	5	M12×25L
44A□A61	79	76	60	35 ^{+0.01} ₀	10	8	5	
55A□A61	113	110	90	42 ⁰ _{-0.016}	12	8	5	M16×32L
75A□A61	113	110	90	42 ⁰ _{-0.016}	12	8	5	

* The shaft end dimensions of these Servomotors are different from those of the Σ-V-series SGMGV Servomotors. Models that have the same installation dimensions as the SGMGV Servomotors are also available. Contact your Yaskawa representative for details.

◆ Connector Specifications

- Encoder Connector (24-bit Encoder)



1	PS	6*	BAT(+)
2	/PS	7	-
3	-	8	-
4	PG5V	9	PG0V
5*	BAT(-)	10	FG (frame ground)

* A battery is required only for an absolute encoder.

Receptacle: CM10-R10P-D

Applicable plug: Not provided by Yaskawa.

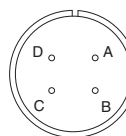
Plug: CM10-AP10S-□-D for Right-angle Plug

CM10-SP10S-□-D for Straight Plug

(□ depends on the applicable cable size.)

Manufacturer: DDK Ltd.

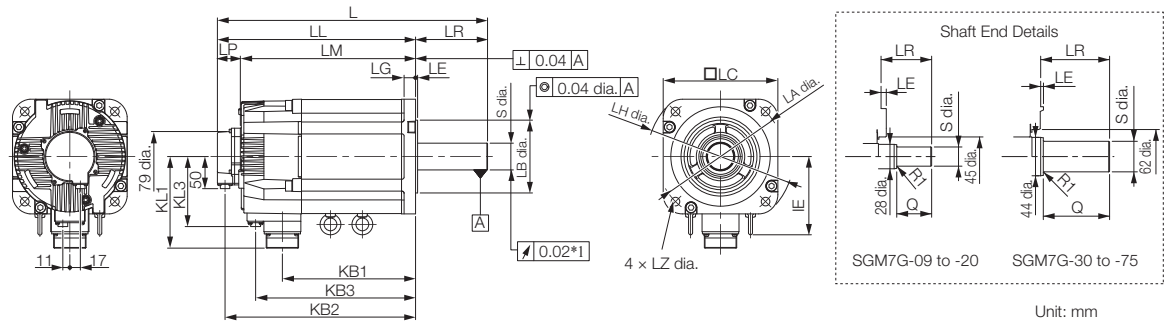
- Servomotor Connector



A	Phase U	C	Phase W
B	Phase V	D	FG (frame ground)

Manufacturer: DDK Ltd.

SGM7G-09 to -75



Model SGM7G-	L ^{*2}	LL ^{*2}	LM	LP ^{*2}	LR	KB1	KB2 ^{*2}	KB3	IE	KL1	KL3	Flange Surface Dimensions						Shaft End Dimensions		Approx. Mass [kg]	
												LA	LB	LC	LE	LG	LH	LZ	S		Q
09A□A2C	231	173	137	36	58	83	161	115	-	104	80	145	110 ⁰ _{-0.035}	130	6	12	165	9	24 ⁰ _{-0.013} ^{*3}	40	7.5
13A□A2C	247	189	153	36	58	99	177	131	-	104	80	145	110 ⁰ _{-0.035}	130	6	12	165	9	24 ⁰ _{-0.013} ^{*3}	40	9.0
20A□A2C	265	207	171	36	58	117	195	149	-	104	80	145	110 ⁰ _{-0.035}	130	6	12	165	9	24 ⁰ _{-0.013}	40	11.0
30A□A2C	287	208	172	36	79	108	196	148	-	134	110	200	114.3 ⁰ _{-0.025}	180	3.2	18	230	13.5	35 ^{+0.01} ₀	76	19.5
44A□A2C	311	232	196	36	79	132	220	172	-	134	110	200	114.3 ⁰ _{-0.025}	180	3.2	18	230	13.5	35 ^{+0.01} ₀	76	23.5
55A□A2C	378	265	229	36	113	163	253	205	123	144	110	200	114.3 ⁰ _{-0.025}	180	3.2	18	230	13.5	42 ⁰ _{-0.016}	110	27.5
75A□A2C	424	311	275	36	113	209	299	251	123	144	110	200	114.3 ⁰ _{-0.025}	180	3.2	18	230	13.5	42 ⁰ _{-0.016}	110	35.0

*1. This is 0.04 for the SGM7G-55 or SGM7G-75.

*2. For models that have a batteryless absolute encoder, L, LL, LP, and KB2 are 8 mm greater than the given value. Refer to the following section for the values for individual models.

Dimensions of Servomotors with Batteryless Absolute Encoders on page 7-18

*3. The S dimensions of these Servomotors are different from those of the Σ-V-series SGMGV Servomotors. Models that have the same installation dimensions as the SGMGV Servomotors are also available. Contact your Yaskawa representative for details.

Note: 1. The dimensions are same for models with oil seals.

2. The values for a straight, without key specification are given. Refer to the information given below for other shaft end specifications and option specifications.