

Линейные серводвигатели




Благодаря функции автоматического распознавания двигателей и поддержке энкодеров с последовательным интерфейсом все линейные серводвигатели Omron-Yaskawa могут подключаться к сервоприводам Sigma II и XtraDrive с по принципу «подключи и работай». Мы предлагаем двигатели с пиковым тяговым усилием до 7500 Н и максимальной скоростью 5 м/с.

	SGLGW	SGLFW	SGLTW	LET-LA	LET-LS
Линейные серводвигатели					
Тип	У линейного двигателя серии GW без сердечника отсутствует сила магнитного притяжения	Линейный двигатель с железным сердечником - не похож на другие	Линейный двигатель серии TW с железным сердечником, с нейтрализацией магнитного притяжения	Блоки линейных направляющих типа "подключи и работай" с линейным двигателем с железным сердечником	Линейные системы типа "подключи и работай", порталные системы, двухкоординатные столы и системы управления перемещениями, адаптируемые к специфическим задачам
Диапазон номинальных линейных усилий	от 13,5 Н до 325 Н	от 25 Н до 2250 Н	от 300 Н до 2000 Н	от 25 Н до 2250 Н	от 13,5 Н до 2250 Н
Диапазон пиковых линейных усилий	от 40 Н до 1300 Н	от 86 Н до 5400 Н	от 600 Н до 7500 Н	от 86 Н до 5400 Н	от 40 Н до 7500 Н
Максимальная скорость	5 м/сек	5 м/сек	5 м/сек	5 м/сек	5 м/сек
Конструкция	Катушка без сердечника	Железный сердечник	Железный сердечник	Железный сердечник	все
Магнитное притяжение	0	от 314 Н до 14600 Н	0	от 314 Н до 14600 Н	0...14600
Применимые приводы	Sigma-II и XtraDrive	Sigma-II и XtraDrive	Sigma-II и XtraDrive	Sigma-II и XtraDrive	Sigma-II и XtraDrive

SGLGW



У линейного двигателя серии GW без сердечника отсутствует сила магнитного притяжения

В подвижном электромагнитном блоке серводвигателя GW отсутствует стальной сердечник, а его обмотки заключены в полимерную оболочку. Неподвижный магнитный контур (статор) состоит из двух никелированных стальных пластин, на внутренней поверхности которых очень точно установлены редкоземельные магниты.

- "Подключи и работай": электродвигатель распознается сервоприводом автоматически
- Отсутствие силы магнитного притяжения продлевает срок службы линейных направляющих
- Благодаря отсутствию магнитного притяжения подвижная часть перемещается с меньшим шумом
- Отсутствие силы магнитного притяжения позволяет использовать линейные подшипники меньшего размера
- Принципиальное отсутствие каких-либо зацеплений и неоднородностей сводит к минимуму колебания скорости

Технические характеристики

Coreless SGLGW/SGLGM - (with standard-force magnetic ways)

Voltage		230 V								
Linear servo motor model SGLGW-		30A		40A			60A			90A
		050C	080C	140C	253C	365C	140C	253C	365C	200C
Rated force*	N	12.5	25	47	93	140	70	140	210	325
Rated current*	A(rms)	0,51	0,79	0,8	1,6	2,4	1,16	2,2	3,3	4,4
Instantaneous peak force*	N	40	80	140	280	420	220	440	660	1300
Instantaneous peak current*	A(rms)	1.62	2.53	2.4	4.9	7.3	3.5	7.0	10.5	17.6
Coil assembly mass	kg	0.10	0.15	0.34	0.60	0.87	0.42	0.76	1.10	2.15
Force constant	N/A(rms)	26,4	33,9	61,5	61,5	61,5	66,6	66,6	66,6	78
BEMF constant	V/(m/s)	8,8	11,3	20,5	20,5	20,5	22,2	22,2	22,2	26,0
Motor constant	N / √W	3,7	5,6	7,8	11,0	13,5	11,1	15,7	19,2	26,0
Electrical time constant	ms	0,2	0,4	0,4	0,4	0,4	0,5	0,5	0,5	1,4
Mechanical time constant	ms	7,30	4,78	5,59	4,96	4,77	3,41	3,08	2,98	3,18
Thermal resistance (with heat sink)	K/W	5,19	3,11	1,67	0,87	0,58	1,56	0,77	0,51	0,39
Thermal resistance (without heat sink)	K/W	-	-	3,02	1,80	1,23	2,59	1,48	1,15	-
Magnetic attraction	N	0	0	0	0	0	0	0	0	0
Heat sink size (HxWxD)	mm			200x300x12	300x400x12	400x500x12	200x300x12	300x400x12	400x500x12	800x900x12
Basic specifications	Time rating	Continuous								
	Insulation class	Class B								
	Ambient temperature	0 to +40°C								
	Ambient humidity	20 to 80% (non-condensing)								
	Insulation resistance	500 VDC, 10 MΩ min.								
	Excitation	Permanent magnet								
	Dielectric strength	1500 VAC for 1 minute								
	Protection methods	Self-cooled, air-cooling								
Allowable winding temperature	130°C									

Note: - The items marked with an * and "force and speed characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Coreless SGLGW/SGLGM - (with high-force magnetic ways)

Voltage		230 V					
Linear servo motor model SGLGW-		40A			60A		
		140C	253C	365C	140C	253C	365C
Rated force*	N	57	114	171	85	170	255
Rated current*	A(rms)	0.8	1.6	2.4	1.2	2.2	3.3
Instantaneous peak force*	N	230	460	690	360	720	1080
Instantaneous peak current*	A(rms)	3.2	6.5	9.7	5.0	10.0	14.9
Coil assembly mass	kg	0.34	0.60	0.87	0.42	0.76	1.10
Force constant	N/A(rms)	76.0	76.0	76.0	77.4	77.4	77.4
BEMF constant	V/(m/s)	25.3	25.3	25.3	25.8	25.8	25.8
Motor constant	N / √w	9.6	13.6	16.7	12.9	18.2	22.3
Electrical time constant	ms	0.4	0.4	0.4	0.5	0.5	0.5
Mechanical time constant	ms	3.69	3.24	3.12	2.52	2.29	2.21
Thermal resistance (with heat sink)	K/W	1.67	0.87	0.58	1.56	0.77	0.51
Thermal resistance (without heat sink)	K/W	3.02	1.80	1.23	2.59	1.48	1.15
Magnetic attraction	N	0	0	0	0	0	0
Heat sink size (HxWxD)	mm	200x300x12	300x400x12	400x500x12	200x300x12	300x400x12	400x500x12
Basic specifications	Time rating	Continuous					
	Insulation class	Class B					
	Ambient temperature	0 to +40°C					
	Ambient humidity	20 to 80% (non-condensing)					
	Insulation resistance	500 VDC, 10 MΩ min.					
	Excitation	Permanent magnet					
	Dielectric strength	1500 VAC for 1 minute					
	Protection methods	Self-cooled, air-cooling					
Allowable winding temperature	130°C						

Note: - The item servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Iron-core SGLFW/SGLFM (200V)

Voltage		230 V						
Linear servo motor model SGLFW-		20A		35A		50A		1ZA
		090A	120A	120A	230A	200B	380B	200B
Rated force*	N	25	40	80	160	280	560	560
Rated current*	A(rms)	0.7	0.8	1.4	2.8	5.0	10.0	8.7
Instantaneous peak force*	N	86	125	220	440	600	1200	1200
Instantaneous peak current*	A(rms)	3.0	2.9	4.4	8.8	12.4	25.0	21.6
Coil assembly mass	kg	0.7	0.9	1.3	2.3	3.5	6.9	6.4
Force constant	N/A(rms)	36.0	54.0	62.4	62.4	60.2	60.2	69.0
BEMF constant	V/(m/s)	12.0	18.0	20.8	20.8	20.1	20.1	23.0
Motor constant	N / √w	7.9	9.8	14.4	20.4	34.3	48.5	52.4
Electrical time constant	ms	3.2	3.3	3.6	3.6	15.9	15.8	18.3
Mechanical time constant	ms	11.0	9.3	6.2	5.5	3.0	2.9	2.3
Thermal resistance (with heat sink)	K/W	4.35	3.19	1.57	0.96	0.82	0.32	0.6
Thermal resistance (without heat sink)	K/W	7.69	5.02	4.10	1.94	1.48	0.74	0.92
Magnetic attraction	N	314	462	809	1586	1650	3260	3300
Heat sink size (HxWxD)	mm	125x125x13				254x254x25	400x500x40	254x254x25
Basic specifications	Time rating	Continuous						
	Insulation class	Class B						
	Ambient temperature	0 to +40°C						
	Ambient humidity	20 to 80% (non-condensing)						
	Insulation resistance	500 VDC, 10 MΩ min.						
	Excitation	Permanent magnet						
	Dielectric strength	1500 VAC for 1 minute						
	Protection methods	Self-cooled						
Allowable winding temperature	130°C							

Note: - The items marked with an * and "Force and speed characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Iron-core SGLFW/SGLFM (400V)

Voltage		400 V								
Linear servo motor model SGLFW-		35D		50D		1ZD		1ED		
		120A	230A	200B	380B	200B	380B	380B	560B	
Rated force*	N	80	160	280	560	560	1,120	1,500	2,250	
Rated current*	A(rms)	0.7	1.4	2.3	4.5	4.9	9.8	6.4	9.6	
Instantaneous peak force*	N	220	440	600	1,200	1,200	2,400	3,600	5,400	
Instantaneous peak current*	A(rms)	2.3	4.6	5.6	11.0	12.3	24.6	18.1	27.2	
Coil assembly mass	kg	1.3	2.3	3.5	6.9	6.4	11.5	22.0	33.0	
Force constant	N/A(rms)	120.2	120.2	134.7	134.7	122.6	122.6	250	250	
BEMF constant	V/(m/s)	40.1	40.1	44.9	44.9	40.9	40.9	83.2	83.2	
Motor constant	N / √W	13.8	19.5	33.4	47.2	51.0	72.1	95.4	117	
Electrical time constant	ms	3.5	3.5	15.0	15.0	17.4	17.2	19.7	19.6	
Mechanical time constant	ms	5.5	5.5	3.2	3.2	2.5	2.2	1.8	1.8	
Thermal resistance (with heat sink)	K/W	1.57	0.96	0.82	0.32	0.6	0.28	0.21	0.13	
Thermal resistance (without heat sink)	K/W	4.1	1.94	1.48	0.74	0.92	0.55	0.50	0.35	
Magnetic attraction	N	810	1,590	1,650	3,260	3,300	6,520	9,780	14,600	
Heat sink size (HxWxD)	mm			254x254x25	400x500x40	254x254x25	400x500x40	609x762x50	762x1270x64	
Basic specifications	Time rating	Continuous								
	Insulation class	Class B								
	Ambient temperature	0 to +40°C								
	Ambient humidity	20 to 80% (non-condensing)								
	Insulation resistance	500 VDC, 10 MΩ min.								
	Excitation	Permanent magnet								
	Dielectric strength	1500 VAC for 1 minute								
	Protection methods	Self-cooled								
	Allowable winding temperature	130°C								

Note: - The items marked with an * and "force and speed characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Iron-core SGLTW/SGLTM (400 V)

Voltage		400 V								
Linear servo motor model SGLTW-		35D		50D		40D		80D		
		170H	320H	170H	320H	400B	600B	400B	600B	
Rated force*	N	300	600	450	900	670	1,000	1,300	2,000	
Rated current*	A(rms)	3.2	6.5	3.2	6.3	3.7	5.5	7.2	11.1	
Instantaneous peak force*	N	600	1,200	900	1,800	2,600	4,000	5,000	7,500	
Instantaneous peak current*	A(rms)	7.5	15.1	7.3	14.6	20.7	30.6	37.6	56.4	
Coil assembly mass	kg	4.7	8.8	6	11	15	23	25	36	
Force constant	N/A(rms)	99.6	99.6	153.3	153.3	196.1	196.1	194.4	194.4	
BEMF constant	V/(m/s)	33.2	33.2	51.1	51.1	65.4	65.4	64.8	64.8	
Motor constant	N / √W	36.3	51.4	48.9	69.1	59.6	73	85.9	105.2	
Electrical time constant	ms	14.3	14.3	15.6	15.6	14.4	14.4	15.4	15.4	
Mechanical time constant	ms	3.5	3.5	2.5	2.5	4.2	4.2	3.2	3.2	
Thermal resistance (with heat sink)	K/W	0.76	0.4	0.61	0.3	0.24	0.2	0.22	0.18	
Thermal resistance (without heat sink)	K/W	1.26	0.83	0.97	0.8	0.57	0.4	0.47	0.33	
Magnetic attraction*1	N	0	0	0	0	0	0	0	0	
Magnetic attraction*2	N	1,400	2,780	2,000	3,980	3,950	5,890	7,650	11,400	
Heat sink size (HxWxD)	mm			400x500x40				609x762x50		
Basic specifications	Time rating	Continuous								
	Insulation class	Class B								
	Ambient temperature	0 to +40°C								
	Ambient humidity	20 to 80% (non-condensing)								
	Insulation resistance	500 VDC, 10 MW min.								
	Excitation	Permanent magnet								
	Dielectric strength	1500 VAC for 1 minute								
	Protection methods	Self-cooled								
	Allowable winding temperature	130°C								

*1. The unbalanced magnetic gap resulting from the coil assembly installation condition causes a magnetic attraction of the coil assembly.

*2. The value indicates the magnetic attraction generated on one side of the magnetic way.

Note: - The items marked with an * and "force and speed characteristics" are the values at a motor winding temperature of 100°C during operation in combination with a servo drive. The others are at 20°C (68°F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Servo motor

GLGW/SGLGM coreless type (200 V)

With standard-force magnetic ways - 230VAC single phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	13.5 N	40 N	SGLGW-30A050CPD	SGLGM-30108A	JZDP-D008-250	SGDH-A5AE-0Y	XD-P5-MN01
	27 N	80 N	SGLGW-30A080CPD	SGLGM-30216A SGLGM-30432A	JZDP-D008-251	SGDH-01AE-0Y	XD-01-MN01
	47 N	140 N	SGLGW-40A140CPD	SGLGM-40090CT	JZDP-D008-252	SGDH-01AE-0Y	XD-01-MN01
	93 N	280 N	SGLGW-40A253CPD	SGLGM-40225CT SGLGM-40360CT	JZDP-D008-253	SGDH-02AE-0Y	XD-02-MN01
	140 N	420 N	SGLGW-40A365CPD	SGLGM-40405CT SGLGM-40450CT	JZDP-D008-254	SGDH-04AE-0Y	XD-04-MN01
	73 N	220 N	SGLGW-60A140CPD	SGLGM-60090CT	JZDP-D008-258	SGDH-02AE-0Y	XD-02-MN01
	147 N	440 N	SGLGW-60A253CPD	SGLGM-60225CT SGLGM-60360CT	JZDP-D008-259	SGDH-04AE-0Y	XD-04-MN01
	220 N	660 N	SGLGW-60A365CPD	SGLGM-60405CT SGLGM-60450CT	JZDP-D008-260	SGDH-08AE-S-0Y	XD-08-MN
	325 N	1300 N	SGLGW-90A200CPD	SGLGM-90252A SGLGM-90504A	JZDP-D008-260	SGDH-15AE-S-0Y	XD-15-MN

Note: - Linear coils with design revision C are equivalent to previous versions. The serial converter required for revision C coil has changed from previous version, select it according to the table above.

- Magnetic ways with design revision C and revision B can be combined.

With high-force magnetic ways - 230VAC single phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	57 N	230 N	SGLGW-40A140CPD	SGLGM-40090CT-M SGLGM-40225CT-M	JZDP-D008-255	SGDH-02AE-0Y	XD-02-MN01
	114 N	460 N	SGLGW-40A253CPD	SGLGM-40360CT-M SGLGM-40405CT-M	JZDP-D008-256	SGDH-04AE-0Y	XD-04-MN01
	171 N	690 N	SGLGW-40A365CPD	SGLGM-40450CT-M	JZDP-D008-257	SGDH-08AE-S-0Y	XD-08-MN
	89 N	360 N	SGLGW-60A140CPD	SGLGM-60090CT-M	JZDP-D008-261	SGDH-02AE-0Y	XD-02-MN01
	178 N	720 N	SGLGW-60A253CPD	SGLGM-60225CT-M SGLGM-60360CT-M	JZDP-D008-262	SGDH-08AE-S-0Y	XD-08-MN
	267 N	1080 N	SGLGW-60A365CPD	SGLGM-60405CT-M SGLGM-60450CT-M	JZDP-D008-263	SGDH-15AE-S-0Y	XD-15-MN

Note: - Linear coils with design revision C are equivalent to previous versions. The serial converter required for revision C coil has changed from previous version, select it according to the table above.

- Magnetic ways with design revision C and revision B can be combined.

SGLFW/SGLFM iron-core type

230 VAC single phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	①②③④ 25 N	86 N	SGLFW-20A090APD	SGLFM-20324AC	JZDP-A008-017	SGDH-02AE-0Y	XD-02-MN01
	40 N	125 N	SGLFW-20A120APD	SGLFM-20540AC SGLFM-20756AC	JZDP-A008-018	SGDH-02AE-0Y	XD-02-MN01
	80 N	220 N	SGLFW-35A120APD	SGLFM-35324AC	JZDP-A008-019	SGDH-02AE-0Y	XD-02-MN01
	160 N	440 N	SGLFW-35A230APD	SGLFM-35540AC SGLFM-35756AC	JZDP-A008-020	SGDH-08AE-S-0Y	XD-08-MN01
	280 N	600 N	SGLFW-50A200BPD	SGLFM-50405AC	JZDP-A008-181	SGDH-08AE-S-0Y	XD-08-MN
	560 N	1200 N	SGLFW-50A380BPD	SGLFM-50675AC SGLFM-50945AC	JZDP-A008-182	SGDH-15AE-S-0Y	XD-15-MN
	560 N	1200 N	SGLFW-1ZA200BPD	SGLFM-12405AC SGLFM-12675AC SGLFM-12945AC	JZDP-A008-183	SGDH-15AE-S-0Y	XD-15-MN

Note: Serial converters with design revision A (JZDP-A008-xxx) will be replaced by revision D (JZDP-D008-xxx), both models are fully compatible.

400 VAC three phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	①②③④ 80 N	220 N	SGLFW-35D120APD	SGLFM-35324AC	JZDP-A008-211	SGDH-05DE-0Y	XD-05-TN
	160 N	440 N	SGLFW-35D230APD	SGLFM-35540AC SGLFM-35756AC	JZDP-A008-212	SGDH-05DE-0Y	XD-05-TN
	280 N	600 N	SGLFW-50D200BPD	SGLFM-50405AC	JZDP-A008-189	SGDH-10DE-0Y	XD-10-TN
	560 N	1200 N	SGLFW-50D380BPD	SGLFM-50675AC SGLFM-50945AC	JZDP-A008-190	SGDH-15DE-0Y	XD-15-TN
	560 N	1200 N	SGLFW-1ZD200BPD	SGLFM-12405AC	JZDP-A008-191	SGDH-15DE-0Y	XD-15-TN
	1120 N	2400 N	SGLFW-1ZD380BPD	SGLFM-12675AC SGLFM-12945AC	JZDP-A008-192	SGDH-30DE-0Y	XD-30-TN
	1500 N	3600 N	SGLFW-1ED380BPD	SGLFM-1E135AC	JZDP-D008-333	SGDH-20DE-0Y	XD-20-TN
	2250 N	5400 N	SGLFW-1ED560BPD		JZDP-D008-334	SGDH-30DE-0Y	XD-30-TN

Note: Serial converters with design revision A (JZDP-A008-xxx) will be replaced by revision D (JZDP-D008-xxx), both models are fully compatible.

SGLTW/SGLTM iron-core type
400 VAC three phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	300 N	600 N	SGLTW-35D170HPD	SGLTM-35324HC	JZDP-A008-193	SGDH-10DE-0Y	XD-10-TN
	600 N	1200 N	SGLTW-35D320HPD	SGLTM-35540HC SGLTM-35756HC	JZDP-A008-194	SGDH-20DE-0Y	XD-20-TN
	450 N	900 N	SGLTW-50D170HPD	SGLTM-50324HC	JZDP-A008-195	SGDH-10DE-0Y	XD-10-TN
	900 N	1800 N	SGLTW-50D320HPD	SGLTM-50540HC SGLTM-50756HC	JZDP-A008-196	SGDH-20DE-0Y	XD-20-TN
	670 N	2600 N	SGLTW-40D400BP	SGLTM-40405AC	JZDP-A008-197	SGDH-30DE-0Y	XD-30-TN
	1000 N	4000 N	SGLTW-40D600BP	SGLTM-40675AC SGLTM-40945AC	JZDP-A008-198	SGDH-50DE-0Y	XD-50-TN
	1300 N	5000 N	SGLTW-80D400BP	SGLTM-80405AC	JZDP-A008-199	SGDH-50DE-0Y	XD-50-TN
	2000 N	7500 N	SGLTW-80D600BP	SGLTM-80675AC SGLTM-80945AC	JZDP-A008-200	SGDH-75DE-0Y	-

Note: Serial converters with design revision A (JZDP-A008-xxx) will be replaced by revision D (JZDP-D008-xxx), both models are fully compatible.

Servo drive

Note: Choosing Sigma-II drive or XtraDrive affects to the serial converter cable needed.

④ Refer to Sigma-II servo drive or XtraDrive chapter for detailed drive specifications and selection of drive accessories.

Serial converter cable to servo drive

Symbol	Appearance	Specifications	Order code	
⑤		Sigma-II drive to serial converter cable	3 m	JZSP-CLP70-03-E
			5 m	JZSP-CLP70-05-E
			10 m	JZSP-CLP70-10-E
			15 m	JZSP-CLP70-15-E
			20 m	JZSP-CLP70-20-E
		XtraDrive drive to serial converter cable	3 m	XD-CLP70-03-E
			5 m	XD-CLP70-05-E
			10 m	XD-CLP70-10-E
			15 m	XD-CLP70-15-E
			20 m	XD-CLP70-20-E

Power cables

Symbol	Appearance	Specifications	Order code	
⑥		For 200 V servo motors SGLGW-30A____D SGLGW-40A____D SGLGW-60A____D SGLFW-20A___A_D SGLFW-35A___A_D	3 m	R88A-CAWA003S-DE
			5 m	R88A-CAWA005S-DE
			10 m	R88A-CAWA010S-DE
			15 m	R88A-CAWA015S-DE
			20 m	R88A-CAWA020S-DE
				For 200 V servo motors SGLGW-90A200__D SGLFW-50A___B_D SGLFW-1ZA200B_D
	5 m	R88A-CAWB005S-DE		
	10 m	R88A-CAWB010S-DE		
	15 m	R88A-CAWB015S-DE		
	20 m	R88A-CAWB020S-DE		
		For 400 V servo motors SGLFW-35D___A_D SGLFW-50D200_D SGLTW-35D170H_D SGLTW-50D170H_D		
			5 m	R88A-CAWK005S-DE
			10 m	R88A-CAWK010S-DE
			15 m	R88A-CAWK015S-DE
			20 m	R88A-CAWK020S-DE
				For 400 V servo motors SGLFW-50D380_D SGLFW-1ZD___B_D SGLTW-35D320H_D SGLTW-50D320H_D
	5 m	R88A-CAWL005S-DE		
	10 m	R88A-CAWL010S-DE		
15 m	R88A-CAWL015S-DE			
20 m	R88A-CAWL020S-DE			
	For 400 V servo motors SGLFW-1ED___B_ SGLTW-40D___B_ SGLTW-80D___B_	3 m		
		5 m	R88A-CAW005S-E	
		10 m	R88A-CAW010S-E	
		15 m	R88A-CAW015S-E	
		20 m	R88A-CAW020S-E	

Linear scale cable to serial converter

Symbol	Appearance	Specifications	Order code
⑦		Extension cable for Renishaw linear scale to serial converter. (connector DB-15) (the extension cable is optional)	1 m JZSP-CLL00-01-E
			3 m JZSP-CLL00-03-E
			5 m JZSP-CLL00-05-E
			10 m JZSP-CLL00-10-E
			15 m JZSP-CLL00-15-E
		Extension cable for Heidenhain linear scale to serial converter (connector DB-15) (when a Heidenhain scale is used the extension cable is required)	1 m JZSP-CLL20-01-E
			3 m JZSP-CLL20-03-E
			5 m JZSP-CLL20-05-E
			10 m JZSP-CLL20-10-E
			15 m JZSP-CLL20-15-E

Hall sensor cable to serial converter

Symbol	Appearance	Specifications	Order code
⑧		Extension cable for linear scale to serial converter (the extension cable is optional)	1 m JZSP-CLL10-01-E
			3 m JZSP-CLL10-03-E
			5 m JZSP-CLL10-05-E
			10 m JZSP-CLL10-10-E
			15 m JZSP-CLL10-15-E

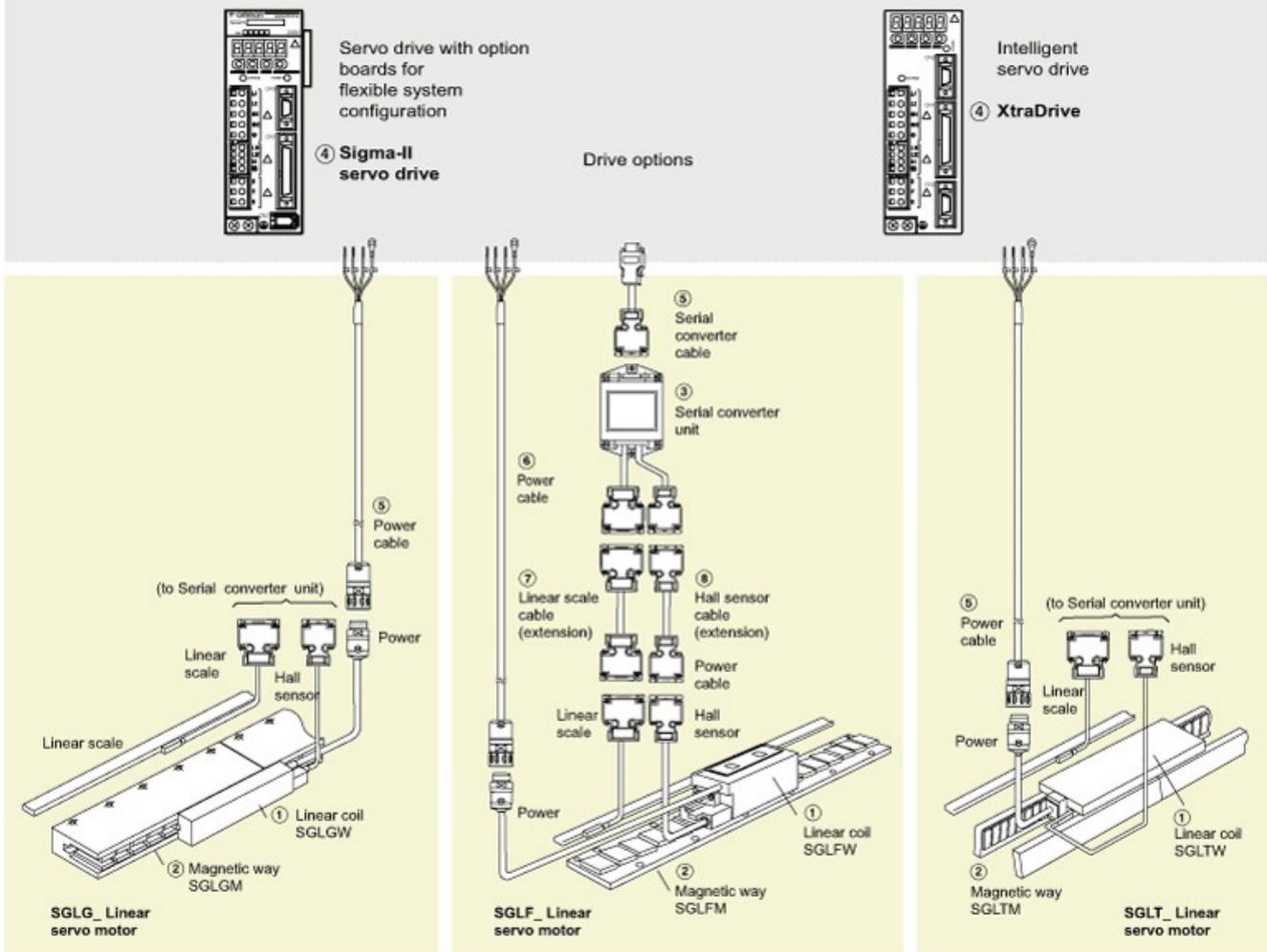
Connectors

Specification	Order code
Hypertac power connector IP67 (for 200V motor coils SGL_ W_ _ A _ _ _ _ D)	SPOC-06K-FSDN169
Hypertac power connector IP67 (for 400V motor coils SGL_ W_ _ D _ _ _ _ D)	LPRA-06B-FRBN170
Military power connector IP67 (for motor coils SGLTW-40_ /80_ and SGLFW-1ED_)	MS3108E22-22S

Dimensioning software

Specifications	Order code
SigmaSize	MOTION TOOLS CD

(Refer to servo drive chapter)



Note: The symbols ①②③ .. show the recommended sequence to select the servo motor, cables and serial converter for a linear motor system

SGLFW**Линейный двигатель серии Sigma со стальным сердечником - не похож на другие**

Линейные двигатели серии FW со стальным сердечником состоят из подвижного электромагнитного блока с обмотками и пластинчатым стальным сердечником и одностороннего неподвижного магнитного контура. Электромагнитный блок заключен в герметичный корпус из теплопроводящей пластмассы, что придает всей конструкции необходимую жесткость.

- Электродвигатель распознается сервоприводом автоматически
- Небольшие габариты для применения в малогабаритных системах позиционирования
- Сила магнитного притяжения позволяет увеличить жесткость системы
- Зацепления на краях компенсируются магнитным притяжением "зубьев"
- Возможна поставка с готовыми линейными направляющими

Технические характеристики**Coreless SGLGW/SGLGM - (with standard-force magnetic ways)**

Voltage		230 V								
Linear servo motor model SGLGW-		30A		40A			60A			90A
		050C	080C	140C	253C	365C	140C	253C	365C	200C
Rated force*	N	12.5	25	47	93	140	70	140	210	325
Rated current*	A(rms)	0,51	0,79	0,8	1,6	2,4	1,16	2,2	3,3	4,4
Instantaneous peak force*	N	40	80	140	280	420	220	440	660	1300
Instantaneous peak current*	A(rms)	1.62	2.53	2.4	4.9	7.3	3.5	7.0	10.5	17.6
Coil assembly mass	kg	0.10	0.15	0.34	0.60	0.87	0.42	0.76	1.10	2.15
Force constant	N/A(rms)	26.4	33.9	61.5	61.5	61.5	66.6	66.6	66.6	78
BEMF constant	V/(m/s)	8.8	11.3	20.5	20.5	20.5	22.2	22.2	22.2	26.0
Motor constant	N / √w	3.7	5.6	7.8	11.0	13.5	11.1	15.7	19.2	26.0
Electrical time constant	ms	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	1.4
Mechanical time constant	ms	7.30	4.78	5.59	4.96	4.77	3.41	3.08	2.98	3.18
Thermal resistance (with heat sink)	K/W	5,19	3,11	1,67	0,87	0,58	1,56	0,77	0,51	0,39
Thermal resistance (without heat sink)	K/W	-	-	3,02	1,80	1,23	2,59	1,48	1,15	-
Magnetic attraction	N	0	0	0	0	0	0	0	0	0
Heat sink size (HxWxD)	mm	200x300x12		300x400x12	400x500x12	200x300x12	300x400x12	400x500x12	800x900x12	
Basic specifications	Time rating	Continuous								
	Insulation class	Class B								
	Ambient temperature	0 to +40°C								
	Ambient humidity	20 to 80% (non-condensing)								
	Insulation resistance	500 VDC, 10 MΩ min.								
	Excitation	Permanent magnet								
	Dielectric strength	1500 VAC for 1 minute								
Protection methods	Self-cooled, air-cooling									
Allowable winding temperature	130°C									

Note: - The items marked with an * and "force and speed characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Coreless SGLGW/SGLGM - (with high-force magnetic ways)

Voltage		230 V					
Linear servo motor model SGLGW-		40A			60A		
		140C	253C	365C	140C	253C	365C
Rated force*	N	57	114	171	85	170	255
Rated current*	A(rms)	0.8	1.6	2.4	1.2	2.2	3.3
Instantaneous peak force*	N	230	460	690	360	720	1080
Instantaneous peak current*	A(rms)	3.2	6.5	9.7	5.0	10.0	14.9
Coil assembly mass	kg	0.34	0.60	0.87	0.42	0.76	1.10
Force constant	N/A(rms)	76.0	76.0	76.0	77.4	77.4	77.4
BEMF constant	V/(m/s)	25.3	25.3	25.3	25.8	25.8	25.8
Motor constant	N / √w	9.6	13.6	16.7	12.9	18.2	22.3
Electrical time constant	ms	0.4	0.4	0.4	0.5	0.5	0.5
Mechanical time constant	ms	3.69	3.24	3.12	2.52	2.29	2.21
Thermal resistance (with heat sink)	K/W	1.67	0.87	0.58	1.56	0.77	0.51
Thermal resistance (without heat sink)	K/W	3.02	1.80	1.23	2.59	1.48	1.15
Magnetic attraction	N	0	0	0	0	0	0
Heat sink size (HxWxD)	mm	200x300x12	300x400x12	400x500x12	200x300x12	300x400x12	400x500x12
Basic specifications	Time rating	Continuous					
	Insulation class	Class B					
	Ambient temperature	0 to +40°C					
	Ambient humidity	20 to 80% (non-condensing)					
	Insulation resistance	500 VDC, 10 MΩ min.					
	Excitation	Permanent magnet					
	Dielectric strength	1500 VAC for 1 minute					
	Protection methods	Self-cooled, air-cooling					
Allowable winding temperature	130°C						

Note: - The item servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Iron-core SGLFW/SGLFM (200V)

Voltage		230 V						
Linear servo motor model SGLFW-		20A		35A		50A		12A
		090A	120A	120A	230A	200B	380B	200B
Rated force*	N	25	40	80	160	280	560	560
Rated current*	A(rms)	0.7	0.8	1.4	2.8	5.0	10.0	8.7
Instantaneous peak force*	N	86	125	220	440	600	1200	1200
Instantaneous peak current*	A(rms)	3.0	2.9	4.4	8.8	12.4	25.0	21.6
Coil assembly mass	kg	0.7	0.9	1.3	2.3	3.5	6.9	6.4
Force constant	N/A(rms)	36.0	54.0	62.4	62.4	60.2	60.2	69.0
BEMF constant	V/(m/s)	12.0	18.0	20.8	20.8	20.1	20.1	23.0
Motor constant	N / √w	7.9	9.8	14.4	20.4	34.3	48.5	52.4
Electrical time constant	ms	3.2	3.3	3.6	3.6	15.9	15.8	18.3
Mechanical time constant	ms	11.0	9.3	6.2	5.5	3.0	2.9	2.3
Thermal resistance (with heat sink)	K/W	4.35	3.19	1.57	0.96	0.82	0.32	0.6
Thermal resistance (without heat sink)	K/W	7.69	5.02	4.10	1.94	1.48	0.74	0.92
Magnetic attraction	N	314	462	809	1586	1650	3260	3300
Heat sink size (HxWxD)	mm	125x125x13				254x254x25	400x500x40	254x254x25
Basic specifications	Time rating	Continuous						
	Insulation class	Class B						
	Ambient temperature	0 to +40°C						
	Ambient humidity	20 to 80% (non-condensing)						
	Insulation resistance	500 VDC, 10 MΩ min.						
	Excitation	Permanent magnet						
	Dielectric strength	1500 VAC for 1 minute						
	Protection methods	Self-cooled						
Allowable winding temperature	130°C							

Note: - The items marked with an * and "Force and speed characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Iron-core SGLFW/SGLFM (400V)

Voltage		400 V							
Linear servo motor model SGLFW-		35D		50D		12D		1ED	
		120A	230A	200B	380B	200B	380B	380B	560B
Rated force*	N	80	160	280	560	560	1,120	1,500	2,250
Rated current*	A(rms)	0.7	1.4	2.3	4.5	4.9	9.8	6.4	9.6
Instantaneous peak force*	N	220	440	600	1,200	1,200	2,400	3,600	5,400
Instantaneous peak current*	A(rms)	2.3	4.6	5.6	11.0	12.3	24.6	18.1	27.2
Coil assembly mass	kg	1.3	2.3	3.5	6.9	6.4	11.5	22.0	33.0
Force constant	N/A(rms)	120.2	120.2	134.7	134.7	122.6	122.6	250	250
BEMF constant	V/(m/s)	40.1	40.1	44.9	44.9	40.9	40.9	83.2	83.2
Motor constant	N / √W	13.8	19.5	33.4	47.2	51.0	72.1	95.4	117
Electrical time constant	ms	3.5	3.5	15.0	15.0	17.4	17.2	19.7	19.6
Mechanical time constant	ms	5.5	5.5	3.2	3.2	2.5	2.2	1.8	1.8
Thermal resistance (with heat sink)	K/W	1.57	0.96	0.82	0.32	0.6	0.28	0.21	0.13
Thermal resistance (without heat sink)	K/W	4.1	1.94	1.48	0.74	0.92	0.55	0.50	0.35
Magnetic attraction	N	810	1,590	1,650	3,260	3,300	6,520	9,780	14,600
Heat sink size (HxWxD)	mm			254x254x25	400x500x40	254x254x25	400x500x40	609x762x50	762x1270x64
Basic specifications	Time rating	Continuous							
	Insulation class	Class B							
	Ambient temperature	0 to +40°C							
	Ambient humidity	20 to 80% (non-condensing)							
	Insulation resistance	500 VDC, 10 MΩ min.							
	Excitation	Permanent magnet							
	Dielectric strength	1500 VAC for 1 minute							
	Protection methods	Self-cooled							
Allowable winding temperature	130°C								

Note: - The items marked with an * and "force and speed characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Iron-core SGLTW/SGLTM (400 V)

Voltage		400 V							
Linear servo motor model SGLTW-		35D		50D		40D		80D	
		170H	320H	170H	320H	400B	600B	400B	600B
Rated force*	N	300	600	450	900	670	1,000	1,300	2,000
Rated current*	A(rms)	3.2	6.5	3.2	6.3	3.7	5.5	7.2	11.1
Instantaneous peak force*	N	600	1,200	900	1,800	2,600	4,000	5,000	7,500
Instantaneous peak current*	A(rms)	7.5	15.1	7.3	14.6	20.7	30.6	37.6	56.4
Coil assembly mass	kg	4.7	8.8	6	11	15	23	25	36
Force constant	N/A(rms)	99.6	99.6	153.3	153.3	196.1	196.1	194.4	194.4
BEMF constant	V/(m/s)	33.2	33.2	51.1	51.1	65.4	65.4	64.8	64.8
Motor constant	N / √W	36.3	51.4	48.9	69.1	59.6	73	85.9	105.2
Electrical time constant	ms	14.3	14.3	15.6	15.6	14.4	14.4	15.4	15.4
Mechanical time constant	ms	3.5	3.5	2.5	2.5	4.2	4.2	3.2	3.2
Thermal resistance (with heat sink)	K/W	0.76	0.4	0.61	0.3	0.24	0.2	0.22	0.18
Thermal resistance (without heat sink)	K/W	1.26	0.83	0.97	0.8	0.57	0.4	0.47	0.33
Magnetic attraction* ¹	N	0	0	0	0	0	0	0	0
Magnetic attraction* ²	N	1,400	2,780	2,000	3,980	3,950	5,890	7,650	11,400
Heat sink size (HxWxD)	mm			400x500x40				609x762x50	
Basic specifications	Time rating	Continuous							
	Insulation class	Class B							
	Ambient temperature	0 to +40°C							
	Ambient humidity	20 to 80% (non-condensing)							
	Insulation resistance	500 VDC, 10 MW min.							
	Excitation	Permanent magnet							
	Dielectric strength	1500 VAC for 1 minute							
	Protection methods	Self-cooled							
Allowable winding temperature	130°C								

*1. The unbalanced magnetic gap resulting from the coil assembly installation condition causes a magnetic attraction of the coil assembly.

*2. The value indicates the magnetic attraction generated on one side of the magnetic way.

Note: - The items marked with an * and "force and speed characteristics" are the values at a motor winding temperature of 100°C during operation in combination with a servo drive. The others are at 20°C (68°F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Servo motor**GLGW/SGLGM coreless type (200 V)**

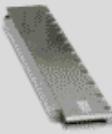
With standard-force magnetic ways - 230VAC single phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	13.5 N	40 N	SGLGW-30A050CPD	SGLGM-30108A	JZDP-D008-250	SGDH-A5AE-0Y	XD-P5-MN01
	27 N	80 N	SGLGW-30A080CPD	SGLGM-30216A SGLGM-30432A	JZDP-D008-251	SGDH-01AE-0Y	XD-01-MN01
	47 N	140 N	SGLGW-40A140CPD	SGLGM-40090CT	JZDP-D008-252	SGDH-01AE-0Y	XD-01-MN01
	93 N	280 N	SGLGW-40A253CPD	SGLGM-40225CT SGLGM-40360CT	JZDP-D008-253	SGDH-02AE-0Y	XD-02-MN01
	140 N	420 N	SGLGW-40A365CPD	SGLGM-40405CT SGLGM-40450CT	JZDP-D008-254	SGDH-04AE-0Y	XD-04-MN01
	73 N	220 N	SGLGW-60A140CPD	SGLGM-60090CT	JZDP-D008-258	SGDH-02AE-0Y	XD-02-MN01
	147 N	440 N	SGLGW-60A253CPD	SGLGM-60225CT SGLGM-60360CT	JZDP-D008-259	SGDH-04AE-0Y	XD-04-MN01
	220 N	660 N	SGLGW-60A365CPD	SGLGM-60405CT SGLGM-60450CT	JZDP-D008-260	SGDH-08AE-S-0Y	XD-08-MN
	325 N	1300 N	SGLGW-90A200CPD	SGLGM-90252A SGLGM-90504A	JZDP-D008-260	SGDH-15AE-S-0Y	XD-15-MN

Note: - Linear coils with design revision C are equivalent to previous versions. The serial converter required for revision C coil has changed from previous version, select it according to the table above.

- Magnetic ways with design revision C and revision B can be combined.

With high-force magnetic ways - 230VAC single phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	57 N	230 N	SGLGW-40A140CPD	SGLGM-40090CT-M SGLGM-40225CT-M	JZDP-D008-255	SGDH-02AE-0Y	XD-02-MN01
	114 N	460 N	SGLGW-40A253CPD	SGLGM-40360CT-M SGLGM-40405CT-M	JZDP-D008-256	SGDH-04AE-0Y	XD-04-MN01
	171 N	690 N	SGLGW-40A365CPD	SGLGM-40450CT-M	JZDP-D008-257	SGDH-08AE-S-0Y	XD-08-MN
	89 N	360 N	SGLGW-60A140CPD	SGLGM-60090CT-M	JZDP-D008-261	SGDH-02AE-0Y	XD-02-MN01
	178 N	720 N	SGLGW-60A253CPD	SGLGM-60225CT-M SGLGM-60360CT-M	JZDP-D008-262	SGDH-08AE-S-0Y	XD-08-MN
	267 N	1080 N	SGLGW-60A365CPD	SGLGM-60405CT-M SGLGM-60450CT-M	JZDP-D008-263	SGDH-15AE-S-0Y	XD-15-MN

Note: - Linear coils with design revision C are equivalent to previous versions. The serial converter required for revision C coil has changed from previous version, select it according to the table above.

- Magnetic ways with design revision C and revision B can be combined.

SGLFW/SGLFM iron-core type

230 VAC single phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	①②③④ 25 N	86 N	SGLFW-20A090APD	SGLFM-20324AC	JZDP-A008-017	SGDH-02AE-0Y	XD-02-MN01
	40 N	125 N	SGLFW-20A120APD	SGLFM-20540AC SGLFM-20756AC	JZDP-A008-018	SGDH-02AE-0Y	XD-02-MN01
	80 N	220 N	SGLFW-35A120APD	SGLFM-35324AC	JZDP-A008-019	SGDH-02AE-0Y	XD-02-MN01
	160 N	440 N	SGLFW-35A230APD	SGLFM-35540AC SGLFM-35756AC	JZDP-A008-020	SGDH-08AE-S-0Y	XD-08-MN01
	280 N	600 N	SGLFW-50A200BPD	SGLFM-50405AC	JZDP-A008-181	SGDH-08AE-S-0Y	XD-08-MN
	560 N	1200 N	SGLFW-50A380BPD	SGLFM-50675AC SGLFM-50945AC	JZDP-A008-182	SGDH-15AE-S-0Y	XD-15-MN
	560 N	1200 N	SGLFW-1ZA200BPD	SGLFM-12405AC SGLFM-12675AC SGLFM-12945AC	JZDP-A008-183	SGDH-15AE-S-0Y	XD-15-MN

Note: Serial converters with design revision A (JZDP-A008-xxx) will be replaced by revision D (JZDP-D008-xxx), both models are fully compatible.

400 VAC three phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	①②③④ 80 N	220 N	SGLFW-35D120APD	SGLFM-35324AC	JZDP-A008-211	SGDH-05DE-0Y	XD-05-TN
	160 N	440 N	SGLFW-35D230APD	SGLFM-35540AC SGLFM-35756AC	JZDP-A008-212	SGDH-05DE-0Y	XD-05-TN
	280 N	600 N	SGLFW-50D200BPD	SGLFM-50405AC	JZDP-A008-189	SGDH-10DE-0Y	XD-10-TN
	560 N	1200 N	SGLFW-50D380BPD	SGLFM-50675AC SGLFM-50945AC	JZDP-A008-190	SGDH-15DE-0Y	XD-15-TN
	560 N	1200 N	SGLFW-1ZD200BPD	SGLFM-12405AC	JZDP-A008-191	SGDH-15DE-0Y	XD-15-TN
	1120 N	2400 N	SGLFW-1ZD380BPD	SGLFM-12675AC SGLFM-12945AC	JZDP-A008-192	SGDH-30DE-0Y	XD-30-TN
	1500 N	3600 N	SGLFW-1ED380BP	SGLFM-1E135AC	JZDP-D008-333	SGDH-20DE-0Y	XD-20-TN
	2250 N	5400 N	SGLFW-1ED560BP		JZDP-D008-334	SGDH-30DE-0Y	XD-30-TN

Note: Serial converters with design revision A (JZDP-A008-xxx) will be replaced by revision D (JZDP-D008-xxx), both models are fully compatible.

SGLTW/SGLTM iron-core type
400 VAC three phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	300 N	600 N	SGLTW-35D170HPD	SGLTM-35324HC	JZDP-A008-193	SGDH-10DE-0Y	XD-10-TN
	600 N	1200 N	SGLTW-35D320HPD	SGLTM-35540HC SGLTM-35756HC	JZDP-A008-194	SGDH-20DE-0Y	XD-20-TN
	450 N	900 N	SGLTW-50D170HPD	SGLTM-50324HC	JZDP-A008-195	SGDH-10DE-0Y	XD-10-TN
	900 N	1800 N	SGLTW-50D320HPD	SGLTM-50540HC SGLTM-50756HC	JZDP-A008-196	SGDH-20DE-0Y	XD-20-TN
	670 N	2600 N	SGLTW-40D400BP	SGLTM-40405AC	JZDP-A008-197	SGDH-30DE-0Y	XD-30-TN
	1000 N	4000 N	SGLTW-40D600BP	SGLTM-40675AC SGLTM-40945AC	JZDP-A008-198	SGDH-50DE-0Y	XD-50-TN
	1300 N	5000 N	SGLTW-80D400BP	SGLTM-80405AC	JZDP-A008-199	SGDH-50DE-0Y	XD-50-TN
	2000 N	7500 N	SGLTW-80D600BP	SGLTM-80675AC SGLTM-80945AC	JZDP-A008-200	SGDH-75DE-0Y	-

Note: Serial converters with design revision A (JZDP-A008-xxx) will be replaced by revision D (JZDP-D008-xxx), both models are fully compatible.

Servo drive

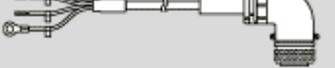
Note: Choosing Sigma-II drive or XtraDrive affects to the serial converter cable needed.

④ Refer to Sigma-II servo drive or XtraDrive chapter for detailed drive specifications and selection of drive accessories.

Serial converter cable to servo drive

Symbol	Appearance	Specifications	Order code	
⑤		Sigma-II drive to serial converter cable	3 m	JZSP-CLP70-03-E
			5 m	JZSP-CLP70-05-E
			10 m	JZSP-CLP70-10-E
			15 m	JZSP-CLP70-15-E
			20 m	JZSP-CLP70-20-E
		XtraDrive drive to serial converter cable	3 m	XD-CLP70-03-E
			5 m	XD-CLP70-05-E
			10 m	XD-CLP70-10-E
			15 m	XD-CLP70-15-E
			20 m	XD-CLP70-20-E

Power cables

Symbol	Appearance	Specifications	Order code	
⑥		For 200 V servo motors SGLGW-30A____D SGLGW-40A____D SGLGW-60A____D SGLFW-20A___A_D SGLFW-35A___A_D	3 m	R88A-CAWA003S-DE
			5 m	R88A-CAWA005S-DE
			10 m	R88A-CAWA010S-DE
			15 m	R88A-CAWA015S-DE
			20 m	R88A-CAWA020S-DE
				For 200 V servo motors SGLGW-90A200__D SGLFW-50A___B_D SGLFW-1ZA200B_D
	5 m	R88A-CAWB005S-DE		
	10 m	R88A-CAWB010S-DE		
	15 m	R88A-CAWB015S-DE		
	20 m	R88A-CAWB020S-DE		
		For 400 V servo motors SGLFW-35D___A_D SGLFW-50D200_D SGLTW-35D170H_D SGLTW-50D170H_D		
			5 m	R88A-CAWK005S-DE
			10 m	R88A-CAWK010S-DE
			15 m	R88A-CAWK015S-DE
			20 m	R88A-CAWK020S-DE
				For 400 V servo motors SGLFW-50D380_D SGLFW-1ZD___B_D SGLTW-35D320H_D SGLTW-50D320H_D
	5 m	R88A-CAWL005S-DE		
	10 m	R88A-CAWL010S-DE		
	15 m	R88A-CAWL015S-DE		
	20 m	R88A-CAWL020S-DE		
		For 400 V servo motors SGLFW-1ED___B_ SGLTW-40D___B_ SGLTW-80D___B_		
			5 m	R88A-CAWDD05S-E
			10 m	R88A-CAWDD010S-E
			15 m	R88A-CAWDD015S-E
20 m			R88A-CAWDD020S-E	

Linear scale cable to serial converter

Symbol	Appearance	Specifications	Order code
⑦		Extension cable for Renishaw linear scale to serial converter. (connector DB-15) (the extension cable is optional)	1 m JZSP-CLL00-01-E
			3 m JZSP-CLL00-03-E
			5 m JZSP-CLL00-05-E
			10 m JZSP-CLL00-10-E
			15 m JZSP-CLL00-15-E
		Extension cable for Heidenhain linear scale to serial converter (connector DB-15) (when a Heidenhain scale is used the extension cable is required)	1 m JZSP-CLL20-01-E
			3 m JZSP-CLL20-03-E
			5 m JZSP-CLL20-05-E
			10 m JZSP-CLL20-10-E
			15 m JZSP-CLL20-15-E

Hall sensor cable to serial converter

Symbol	Appearance	Specifications	Order code
⑧		Extension cable for linear scale to serial converter (the extension cable is optional)	1 m JZSP-CLL10-01-E
			3 m JZSP-CLL10-03-E
			5 m JZSP-CLL10-05-E
			10 m JZSP-CLL10-10-E
			15 m JZSP-CLL10-15-E

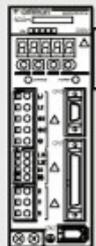
Connectors

Specification	Order code
Hypertac power connector IP67 (for 200V motor coils SGL_W-__A____D)	SPOC-06K-FSDN169
Hypertac power connector IP67 (for 400V motor coils SGL_W-__D____D)	LPRA-06B-FRBN170
Military power connector IP67 (for motor coils SGLTW-40_/80_ and SGLFW-1ED_)	MS3108E22-22S

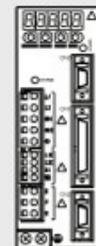
Dimensioning software

Specifications	Order code
SigmaSize	MOTION TOOLS CD

(Refer to servo drive chapter)

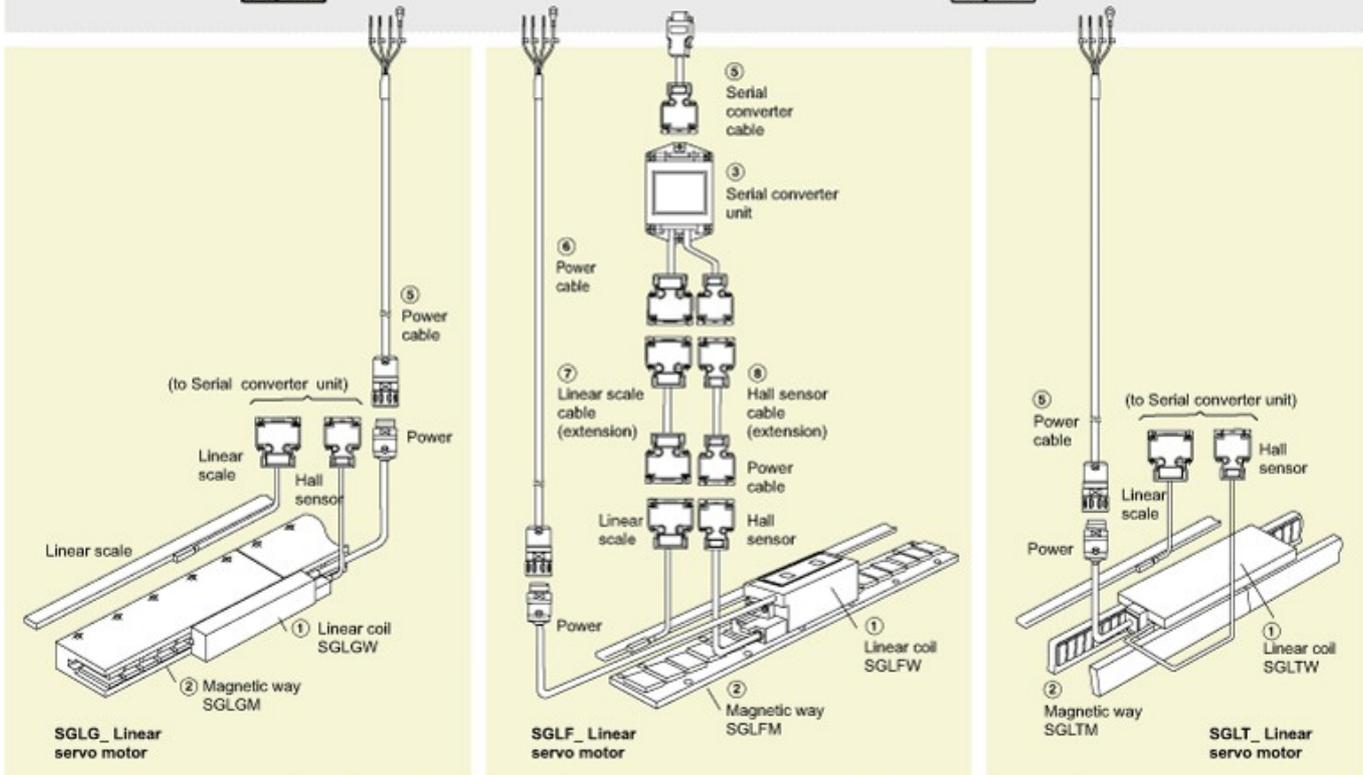


Servo drive with option boards for flexible system configuration
④ Sigma-II servo drive



Intelligent servo drive
④ XtraDrive

Drive options



Note: The symbols ①②③ .. show the recommended sequence to select the servo motor, cables and serial converter for a linear motor system

SGLTW



Линейный двигатель серии TW со стальным сердечником, с нейтрализацией магнитного притяжения

Линейные двигатели серии TW состоят из заключенного в полимерную оболочку подвижного электромагнитного блока с обмотками и пластинчатым стальным сердечником и двухстороннего неподвижного магнитного контура. Уникальная сбалансированная конструкция нейтрализует силу магнитного притяжения между смежными частями двигателя.

- "Подключи и работай": электродвигатель распознается сервоприводом автоматически
- Отсутствие силы магнитного притяжения продлевает срок службы линейных направляющих
- Нейтрализация силы магнитного притяжения позволяет использовать линейные подшипники меньшего размера
- Благодаря отсутствию магнитного притяжения подвижная часть перемещается с меньшим шумом
- Благодаря оптимальной конструкции магнитного контура зацепления практически отсутствуют

Технические характеристики

Coreless SGLGW/SGLGM - (with standard-force magnetic ways)

Voltage		230 V								
Linear servo motor model SGLGW-		30A		40A			60A		90A	
		050C	080C	140C	253C	365C	140C	253C	365C	200C
Rated force*	N	12.5	25	47	93	140	70	140	210	325
Rated current*	A(rms)	0.51	0.79	0.8	1.6	2.4	1.16	2.2	3.3	4.4
Instantaneous peak force*	N	40	80	140	280	420	220	440	660	1300
Instantaneous peak current*	A(rms)	1.62	2.53	2.4	4.9	7.3	3.5	7.0	10.5	17.6
Coil assembly mass	kg	0.10	0.15	0.34	0.60	0.87	0.42	0.76	1.10	2.15
Force constant	N/A(rms)	26.4	33.9	61.5	61.5	61.5	66.6	66.6	66.6	78
BEMF constant	V/(m/s)	8.8	11.3	20.5	20.5	20.5	22.2	22.2	22.2	26.0
Motor constant	N / √W	3.7	5.6	7.8	11.0	13.5	11.1	15.7	19.2	26.0
Electrical time constant	ms	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	1.4
Mechanical time constant	ms	7.30	4.78	5.59	4.96	4.77	3.41	3.08	2.98	3.18
Thermal resistance (with heat sink)	K/W	5,19	3,11	1,67	0,87	0,58	1,56	0,77	0,51	0,39
Thermal resistance (without heat sink)	K/W	-	-	3,02	1,80	1,23	2,59	1,48	1,15	-
Magnetic attraction	N	0	0	0	0	0	0	0	0	0
Heat sink size (HxWxD)	mm			200x300x12	300x400x12	400x500x12	200x300x12	300x400x12	400x500x12	800x900x12
Basic specifications	Time rating	Continuous								
	Insulation class	Class B								
	Ambient temperature	0 to +40°C								
	Ambient humidity	20 to 80% (non-condensing)								
	Insulation resistance	500 VDC, 10 MΩ min.								
	Excitation	Permanent magnet								
	Dielectric strength	1500 VAC for 1 minute								
	Protection methods	Self-cooled, air-cooling								
Allowable winding temperature	130°C									

Note: - The items marked with an * and "force and speed characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Coreless SGLGW/SGLGM - (with high-force magnetic ways)

Voltage		230 V					
Linear servo motor model SGLGW-		40A			60A		
		140C	253C	365C	140C	253C	365C
Rated force*	N	57	114	171	85	170	255
Rated current*	A(rms)	0.8	1.6	2.4	1.2	2.2	3.3
Instantaneous peak force*	N	230	460	690	360	720	1080
Instantaneous peak current*	A(rms)	3.2	6.5	9.7	5.0	10.0	14.9
Coil assembly mass	kg	0.34	0.60	0.87	0.42	0.76	1.10
Force constant	N/A(rms)	76.0	76.0	76.0	77.4	77.4	77.4
BEMF constant	V/(m/s)	25.3	25.3	25.3	25.8	25.8	25.8
Motor constant	N / √w	9.6	13.6	16.7	12.9	18.2	22.3
Electrical time constant	ms	0.4	0.4	0.4	0.5	0.5	0.5
Mechanical time constant	ms	3.69	3.24	3.12	2.52	2.29	2.21
Thermal resistance (with heat sink)	K/W	1.67	0.87	0.58	1.56	0.77	0.51
Thermal resistance (without heat sink)	K/W	3.02	1.80	1.23	2.59	1.48	1.15
Magnetic attraction	N	0	0	0	0	0	0
Heat sink size (HxWxD)	mm	200x300x12	300x400x12	400x500x12	200x300x12	300x400x12	400x500x12
Basic specifications	Time rating	Continuous					
	Insulation class	Class B					
	Ambient temperature	0 to +40°C					
	Ambient humidity	20 to 80% (non-condensing)					
	Insulation resistance	500 VDC, 10 MΩ min.					
	Excitation	Permanent magnet					
	Dielectric strength	1500 VAC for 1 minute					
	Protection methods	Self-cooled, air-cooling					
Allowable winding temperature	130°C						

Note: - The item servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Iron-core SGLFW/SGLFM (200V)

Voltage		230 V						
Linear servo motor model SGLFW-		20A		35A		50A		12A
		090A	120A	120A	230A	200B	380B	200B
Rated force*	N	25	40	80	160	280	560	560
Rated current*	A(rms)	0.7	0.8	1.4	2.8	5.0	10.0	8.7
Instantaneous peak force*	N	86	125	220	440	600	1200	1200
Instantaneous peak current*	A(rms)	3.0	2.9	4.4	8.8	12.4	25.0	21.6
Coil assembly mass	kg	0.7	0.9	1.3	2.3	3.5	6.9	6.4
Force constant	N/A(rms)	36.0	54.0	62.4	62.4	60.2	60.2	69.0
BEMF constant	V/(m/s)	12.0	18.0	20.8	20.8	20.1	20.1	23.0
Motor constant	N / √w	7.9	9.8	14.4	20.4	34.3	48.5	52.4
Electrical time constant	ms	3.2	3.3	3.6	3.6	15.9	15.8	18.3
Mechanical time constant	ms	11.0	9.3	6.2	5.5	3.0	2.9	2.3
Thermal resistance (with heat sink)	K/W	4.35	3.19	1.57	0.96	0.82	0.32	0.6
Thermal resistance (without heat sink)	K/W	7.69	5.02	4.10	1.94	1.48	0.74	0.92
Magnetic attraction	N	314	462	809	1586	1650	3260	3300
Heat sink size (HxWxD)	mm	125x125x13				254x254x25	400x500x40	254x254x25
Basic specifications	Time rating	Continuous						
	Insulation class	Class B						
	Ambient temperature	0 to +40°C						
	Ambient humidity	20 to 80% (non-condensing)						
	Insulation resistance	500 VDC, 10 MΩ min.						
	Excitation	Permanent magnet						
	Dielectric strength	1500 VAC for 1 minute						
	Protection methods	Self-cooled						
Allowable winding temperature	130°C							

Note: - The items marked with an * and "Force and speed characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a servo drive. The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Iron-core SGLFW/SGLFM (400V)

Voltage		400 V							
Linear servo motor model SGLFW-		35D		50D		12D		1ED	
		120A	230A	200B	380B	200B	380B	380B	560B
Rated force*	N	80	160	280	560	560	1,120	1,500	2,250
Rated current*	A(rms)	0.7	1.4	2.3	4.5	4.9	9.8	6.4	9.6
Instantaneous peak force*	N	220	440	600	1,200	1,200	2,400	3,600	5,400
Instantaneous peak current*	A(rms)	2.3	4.6	5.6	11.0	12.3	24.6	18.1	27.2
Coil assembly mass	kg	1.3	2.3	3.5	6.9	6.4	11.5	22.0	33.0
Force constant	N/A(rms)	120.2	120.2	134.7	134.7	122.6	122.6	250	250
BEMF constant	V/(m/s)	40.1	40.1	44.9	44.9	40.9	40.9	83.2	83.2
Motor constant	N / √W	13.8	19.5	33.4	47.2	51.0	72.1	95.4	117
Electrical time constant	ms	3.5	3.5	15.0	15.0	17.4	17.2	19.7	19.6
Mechanical time constant	ms	5.5	5.5	3.2	3.2	2.5	2.2	1.8	1.8
Thermal resistance (with heat sink)	K/W	1.57	0.96	0.82	0.32	0.6	0.28	0.21	0.13
Thermal resistance (without heat sink)	K/W	4.1	1.94	1.48	0.74	0.92	0.55	0.50	0.35
Magnetic attraction	N	810	1,590	1,650	3,260	3,300	6,520	9,780	14,600
Heat sink size (HxWxD)	mm			254x254x25	400x500x40	254x254x25	400x500x40	609x762x50	762x1270x64
Basic specifications	Time rating	Continuous							
	Insulation class	Class B							
	Ambient temperature	0 to +40°C							
	Ambient humidity	20 to 80% (non-condensing)							
	Insulation resistance	500 VDC, 10 MΩ min.							
	Excitation	Permanent magnet							
	Dielectric strength	1500 VAC for 1 minute							
	Protection methods	Self-cooled							
Allowable winding temperature	130°C								

Note: - The items marked with an * and "force and speed characteristics" are the values at a motor winding temperature of 100 °C during operation in combination with a servo drive.
The others are at 20 °C (68 °F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Iron-core SGLTW/SGLTM (400 V)

Voltage		400 V							
Linear servo motor model SGLTW-		35D		50D		40D		80D	
		170H	320H	170H	320H	400B	600B	400B	600B
Rated force*	N	300	600	450	900	670	1,000	1,300	2,000
Rated current*	A(rms)	3.2	6.5	3.2	6.3	3.7	5.5	7.2	11.1
Instantaneous peak force*	N	600	1,200	900	1,800	2,600	4,000	5,000	7,500
Instantaneous peak current*	A(rms)	7.5	15.1	7.3	14.6	20.7	30.6	37.6	56.4
Coil assembly mass	kg	4.7	8.8	6	11	15	23	25	36
Force constant	N/A(rms)	99.6	99.6	153.3	153.3	196.1	196.1	194.4	194.4
BEMF constant	V/(m/s)	33.2	33.2	51.1	51.1	65.4	65.4	64.8	64.8
Motor constant	N / √W	36.3	51.4	48.9	69.1	59.6	73	85.9	105.2
Electrical time constant	ms	14.3	14.3	15.6	15.6	14.4	14.4	15.4	15.4
Mechanical time constant	ms	3.5	3.5	2.5	2.5	4.2	4.2	3.2	3.2
Thermal resistance (with heat sink)	K/W	0.76	0.4	0.61	0.3	0.24	0.2	0.22	0.18
Thermal resistance (without heat sink)	K/W	1.26	0.83	0.97	0.8	0.57	0.4	0.47	0.33
Magnetic attraction* ¹	N	0	0	0	0	0	0	0	0
Magnetic attraction* ²	N	1,400	2,780	2,000	3,980	3,950	5,890	7,650	11,400
Heat sink size (HxWxD)	mm			400x500x40				609x762x50	
Basic specifications	Time rating	Continuous							
	Insulation class	Class B							
	Ambient temperature	0 to +40°C							
	Ambient humidity	20 to 80% (non-condensing)							
	Insulation resistance	500 VDC, 10 MW min.							
	Excitation	Permanent magnet							
	Dielectric strength	1500 VAC for 1 minute							
	Protection methods	Self-cooled							
Allowable winding temperature	130°C								

*1. The unbalanced magnetic gap resulting from the coil assembly installation condition causes a magnetic attraction of the coil assembly.

*2. The value indicates the magnetic attraction generated on one side of the magnetic way.

Note: - The items marked with an * and "force and speed characteristics" are the values at a motor winding temperature of 100°C during operation in combination with a servo drive.
The others are at 20°C (68°F).

- The above specifications show the values under the cooling condition when a heat sink (aluminium board) listed in the following table is mounted on the coil assembly.

Servo motor

GLGW/SGLGM coreless type (200 V)

With standard-force magnetic ways - 230VAC single phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	13.5 N	40 N	SGLGW-30A050CPD	SGLGM-30108A	JZDP-D008-250	SGDH-A5AE-0Y	XD-P5-MN01
	27 N	80 N	SGLGW-30A080CPD	SGLGM-30216A SGLGM-30432A	JZDP-D008-251	SGDH-01AE-0Y	XD-01-MN01
	47 N	140 N	SGLGW-40A140CPD	SGLGM-40090CT	JZDP-D008-252	SGDH-01AE-0Y	XD-01-MN01
	93 N	280 N	SGLGW-40A253CPD	SGLGM-40225CT	JZDP-D008-253	SGDH-02AE-0Y	XD-02-MN01
	140 N	420 N	SGLGW-40A365CPD	SGLGM-40360CT SGLGM-40405CT SGLGM-40450CT	JZDP-D008-254	SGDH-04AE-0Y	XD-04-MN01
	73 N	220 N	SGLGW-60A140CPD	SGLGM-60090CT	JZDP-D008-258	SGDH-02AE-0Y	XD-02-MN01
	147 N	440 N	SGLGW-60A253CPD	SGLGM-60225CT	JZDP-D008-259	SGDH-04AE-0Y	XD-04-MN01
	220 N	660 N	SGLGW-60A365CPD	SGLGM-60360CT SGLGM-60405CT SGLGM-60450CT	JZDP-D008-260	SGDH-08AE-S-0Y	XD-08-MN
	325 N	1300 N	SGLGW-90A200CPD	SGLGM-90252A SGLGM-90504A	JZDP-D008-260	SGDH-15AE-S-0Y	XD-15-MN

Note: - Linear coils with design revision C are equivalent to previous versions. The serial converter required for revision C coil has changed from previous version, select it according to the table above.

- Magnetic ways with design revision C and revision B can be combined.

With high-force magnetic ways - 230VAC single phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	57 N	230 N	SGLGW-40A140CPD	SGLGM-40090CT-M	JZDP-D008-255	SGDH-02AE-0Y	XD-02-MN01
	114 N	460 N	SGLGW-40A253CPD	SGLGM-40225CT-M	JZDP-D008-256	SGDH-04AE-0Y	XD-04-MN01
	171 N	690 N	SGLGW-40A365CPD	SGLGM-40360CT-M SGLGM-40405CT-M SGLGM-40450CT-M	JZDP-D008-257	SGDH-08AE-S-0Y	XD-08-MN
	89 N	360 N	SGLGW-60A140CPD	SGLGM-60090CT-M	JZDP-D008-261	SGDH-02AE-0Y	XD-02-MN01
	178 N	720 N	SGLGW-60A253CPD	SGLGM-60225CT-M	JZDP-D008-262	SGDH-08AE-S-0Y	XD-08-MN
	267 N	1080 N	SGLGW-60A365CPD	SGLGM-60360CT-M SGLGM-60405CT-M SGLGM-60450CT-M	JZDP-D008-263	SGDH-15AE-S-0Y	XD-15-MN

Note: - Linear coils with design revision C are equivalent to previous versions. The serial converter required for revision C coil has changed from previous version, select it according to the table above.

- Magnetic ways with design revision C and revision B can be combined.

SGLFW/SGLFM iron-core type

230 VAC single phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	①②③④ 25 N	86 N	SGLFW-20A090APD	SGLFM-20324AC	JZDP-A008-017	SGDH-02AE-0Y	XD-02-MN01
	40 N	125 N	SGLFW-20A120APD	SGLFM-20540AC SGLFM-20756AC	JZDP-A008-018	SGDH-02AE-0Y	XD-02-MN01
	80 N	220 N	SGLFW-35A120APD	SGLFM-35324AC	JZDP-A008-019	SGDH-02AE-0Y	XD-02-MN01
	160 N	440 N	SGLFW-35A230APD	SGLFM-35540AC SGLFM-35756AC	JZDP-A008-020	SGDH-08AE-S-0Y	XD-08-MN01
	280 N	600 N	SGLFW-50A200BPD	SGLFM-50405AC	JZDP-A008-181	SGDH-08AE-S-0Y	XD-08-MN
	560 N	1200 N	SGLFW-50A380BPD	SGLFM-50675AC SGLFM-50945AC	JZDP-A008-182	SGDH-15AE-S-0Y	XD-15-MN
	560 N	1200 N	SGLFW-17A200BPD	SGLFM-12405AC SGLFM-12675AC SGLFM-12945AC	JZDP-A008-183	SGDH-15AE-S-0Y	XD-15-MN

Note: Serial converters with design revision A (JZDP-A008-xxx) will be replaced by revision D (JZDP-D008-xxx), both models are fully compatible.

400 VAC three phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	①②③④ 80 N	220 N	SGLFW-35D120APD	SGLFM-35324AC	JZDP-A008-211	SGDH-05DE-0Y	XD-05-TN
	160 N	440 N	SGLFW-35D230APD	SGLFM-35540AC SGLFM-35756AC	JZDP-A008-212	SGDH-05DE-0Y	XD-05-TN
	280 N	600 N	SGLFW-50D200BPD	SGLFM-50405AC	JZDP-A008-189	SGDH-10DE-0Y	XD-10-TN
	560 N	1200 N	SGLFW-50D380BPD	SGLFM-50675AC SGLFM-50945AC	JZDP-A008-190	SGDH-15DE-0Y	XD-15-TN
	560 N	1200 N	SGLFW-17D200BPD	SGLFM-12405AC	JZDP-A008-191	SGDH-15DE-0Y	XD-15-TN
	1120 N	2400 N	SGLFW-17D380BPD	SGLFM-12675AC SGLFM-12945AC	JZDP-A008-192	SGDH-30DE-0Y	XD-30-TN
	1500 N	3600 N	SGLFW-1ED380BP	SGLFM-1E135AC	JZDP-D008-333	SGDH-20DE-0Y	XD-20-TN
	2250 N	5400 N	SGLFW-1ED560BP		JZDP-D008-334	SGDH-30DE-0Y	XD-30-TN

Note: Serial converters with design revision A (JZDP-A008-xxx) will be replaced by revision D (JZDP-D008-xxx), both models are fully compatible.

SGLTW/SGLTM iron-core type
400 VAC three phase

Symbol	Specifications		Order code				
	Rated force	Peak force	① Linear coil	② Magnetic way	③ Serial converter	④ Servo drive	
						Sigma-II series	XtraDrive
	300 N	600 N	SGLTW-35D170HPD	SGLTM-35324HC	JZDP-A008-193	SGDH-10DE-0Y	XD-10-TN
	600 N	1200 N	SGLTW-35D320HPD	SGLTM-35540HC SGLTM-35756HC	JZDP-A008-194	SGDH-20DE-0Y	XD-20-TN
	450 N	900 N	SGLTW-50D170HPD	SGLTM-50324HC	JZDP-A008-195	SGDH-10DE-0Y	XD-10-TN
	900 N	1800 N	SGLTW-50D320HPD	SGLTM-50540HC SGLTM-50756HC	JZDP-A008-196	SGDH-20DE-0Y	XD-20-TN
	670 N	2600 N	SGLTW-40D400BP	SGLTM-40405AC	JZDP-A008-197	SGDH-30DE-0Y	XD-30-TN
	1000 N	4000 N	SGLTW-40D600BP	SGLTM-40675AC SGLTM-40945AC	JZDP-A008-198	SGDH-50DE-0Y	XD-50-TN
	1300 N	5000 N	SGLTW-80D400BP	SGLTM-80405AC	JZDP-A008-199	SGDH-50DE-0Y	XD-50-TN
	2000 N	7500 N	SGLTW-80D600BP	SGLTM-80675AC SGLTM-80945AC	JZDP-A008-200	SGDH-75DE-0Y	-

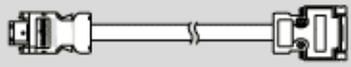
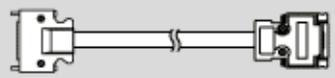
Note: Serial converters with design revision A (JZDP-A008-xxx) will be replaced by revision D (JZDP-D008-xxx), both models are fully compatible.

Servo drive

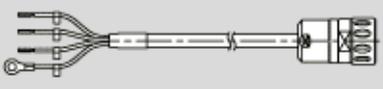
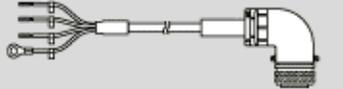
Note: Choosing Sigma-II drive or XtraDrive affects to the serial converter cable needed.

④ Refer to Sigma-II servo drive or XtraDrive chapter for detailed drive specifications and selection of drive accessories.

Serial converter cable to servo drive

Symbol	Appearance	Specifications	Order code	
⑤		Sigma-II drive to serial converter cable	3 m	JZSP-CLP70-03-E
			5 m	JZSP-CLP70-05-E
			10 m	JZSP-CLP70-10-E
			15 m	JZSP-CLP70-15-E
			20 m	JZSP-CLP70-20-E
		XtraDrive drive to serial converter cable	3 m	XD-CLP70-03-E
			5 m	XD-CLP70-05-E
			10 m	XD-CLP70-10-E
			15 m	XD-CLP70-15-E
			20 m	XD-CLP70-20-E

Power cables

Symbol	Appearance	Specifications	Order code	
⑥		For 200 V servo motors SGLGW-30A___D SGLGW-40A___D SGLGW-60A___D SGLFW-20A___A_D SGLFW-35A___A_D	3 m	R88A-CAWA003S-DE
			5 m	R88A-CAWA005S-DE
			10 m	R88A-CAWA010S-DE
			15 m	R88A-CAWA015S-DE
			20 m	R88A-CAWA020S-DE
		For 200 V servo motors SGLGW-90A200__D SGLFW-50A___B_D SGLFW-17A200B_D	3 m	R88A-CAWB003S-DE
			5 m	R88A-CAWB005S-DE
			10 m	R88A-CAWB010S-DE
			15 m	R88A-CAWB015S-DE
			20 m	R88A-CAWB020S-DE
		For 400 V servo motors SGLFW-35D___A_D SGLFW-50D200_D SGLTW-35D170H_D SGLTW-50D170H_D	3 m	R88A-CAWK003S-DE
			5 m	R88A-CAWK005S-DE
			10 m	R88A-CAWK010S-DE
			15 m	R88A-CAWK015S-DE
			20 m	R88A-CAWK020S-DE
		For 400 V servo motors SGLFW-50D380_D SGLFW-12D___B_D SGLTW-35D320H_D SGLTW-50D320H_D	3 m	R88A-CAWL003S-DE
			5 m	R88A-CAWL005S-DE
			10 m	R88A-CAWL010S-DE
			15 m	R88A-CAWL015S-DE
			20 m	R88A-CAWL020S-DE
	For 400 V servo motors SGLFW-1ED___B_ SGLTW-40D___B_ SGLTW-80D___B_	3 m	R88A-CAWD003S-E	
		5 m	R88A-CAWD005S-E	
		10 m	R88A-CAWD010S-E	
		15 m	R88A-CAWD015S-E	
		20 m	R88A-CAWD020S-E	

Linear scale cable to serial converter

Symbol	Appearance	Specifications	Order code
⑦		Extension cable for Renishaw linear scale to serial converter. (connector DB-15) (the extension cable is optional)	1 m JZSP-CLL00-01-E
			3 m JZSP-CLL00-03-E
			5 m JZSP-CLL00-05-E
			10 m JZSP-CLL00-10-E
			15 m JZSP-CLL00-15-E
		Extension cable for Heidenhain linear scale to serial converter (connector DB-15) (when a Heidenhain scale is used the extension cable is required)	1 m JZSP-CLL20-01-E
			3 m JZSP-CLL20-03-E
			5 m JZSP-CLL20-05-E
			10 m JZSP-CLL20-10-E
			15 m JZSP-CLL20-15-E

Hall sensor cable to serial converter

Symbol	Appearance	Specifications	Order code
⑧		Extension cable for linear scale to serial converter (the extension cable is optional)	1 m JZSP-CLL10-01-E
			3 m JZSP-CLL10-03-E
			5 m JZSP-CLL10-05-E
			10 m JZSP-CLL10-10-E
			15 m JZSP-CLL10-15-E

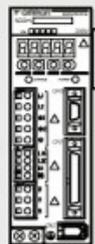
Connectors

Specification	Order code
Hypertac power connector IP67 (for 200V motor coils SGL_W-__A____D)	SPOC-06K-FSDN169
Hypertac power connector IP67 (for 400V motor coils SGL_W-__D____D)	LPRA-06B-FRBN170
Military power connector IP67 (for motor coils SGLTW-40_/80_ and SGLFW-1ED_)	MS3108E22-22S

Dimensioning software

Specifications	Order code
SigmaSize	MOTION TOOLS CD

(Refer to servo drive chapter)



Servo drive with option boards for flexible system configuration

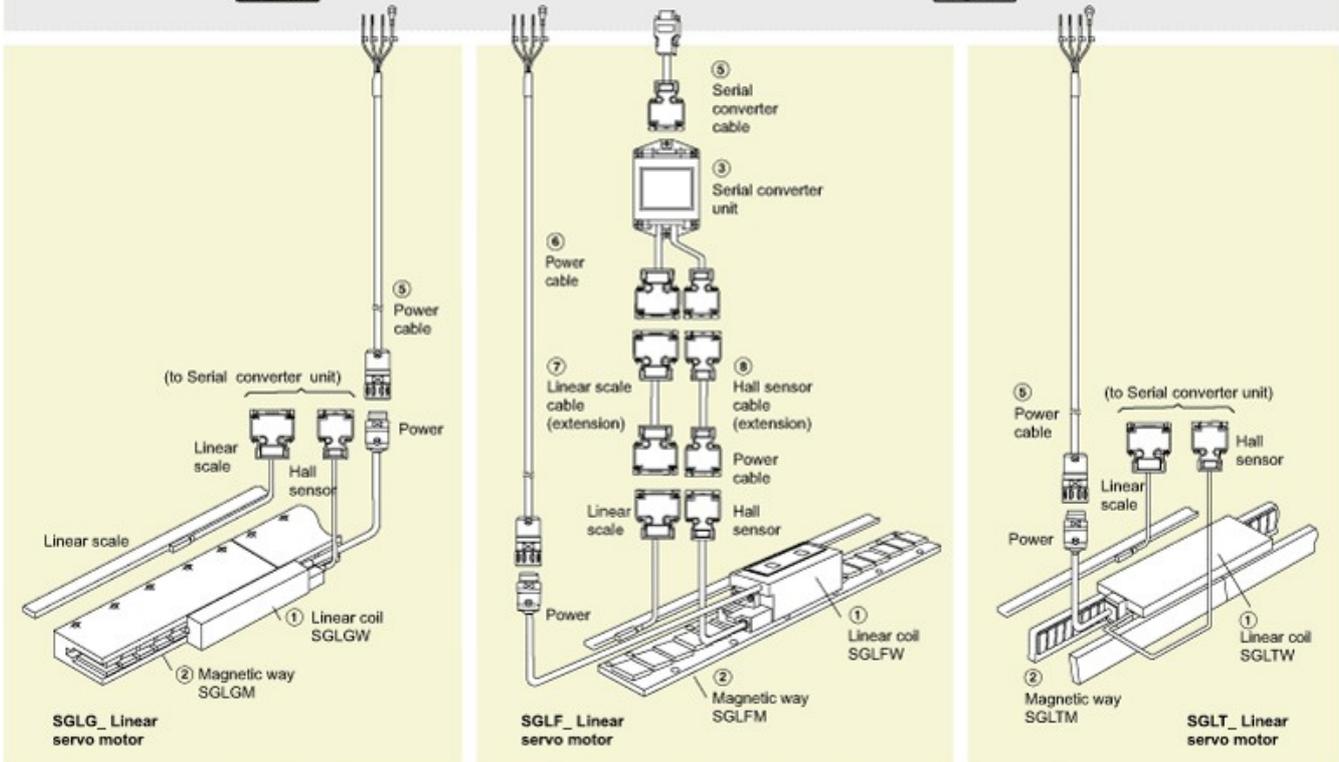
④ Sigma-II servo drive

Drive options



Intelligent servo drive

④ XtraDrive



Note: The symbols ①②③ .. show the recommended sequence to select the servo motor, cables and serial converter for a linear motor system

LET-LA



Всего 15 минут на подключение линейных скользящих устройств для более эффективной работы вашей машины!

Линейные скользящие устройства LET-LA базируются на основе линейных двигателей SGLFW с железным сердечником. Благодаря применению выдающейся технологии "автоматического распознавания двигателя" запуск скользящих устройств занимает менее 15 минут. Данные устройства доступны в двух исполнениях: одна модель открытая и вторая - полностью закрытая.

- Сокращение общего времени разработки машины
- Подшипники компании THK с технологией возврата шаров
- Встроенные энкодеры компании Numerik Jena
- Повторяемость позиционирования уменьшена до 1 Åм
- Скорость движения увеличена до 5 м/сек

LET-LS



Специализированные решения на основе линейных систем, включающие контроллеры управления движением

Для сокращения ваших собственных затрат на разработку, компания Omron предлагает специализированные системы управления линейным движением, включающие контроллеры управления перемещениями и предварительно запрограммированные примеры применения. Как полная линейка линейных двигателей с железным сердечником и без него, так и все линейные скользящие

устройства могут быть использованы для разработки решения, полностью соответствующего требованиям заказчика.

- Общие решения состоят из механических компонентов, линейных двигателей и контроллеров управления движением
- Сокращение общего времени разработки машины
- Использование всех видов линейных двигателей, производимых Omron
- Подключение и работа с координатными таблицами x/y и порталными системами
- Европейские разработка и производство