

### L7SB Serial Type

Rated Speed (rpm)	Maximum Speed (rpm)	Flange Size	Applicable Motor	Applicable Drive	Standard Encoder Type	Encoder Cable		Power Cable			
						Serial Type	Serial	Abs	For power	Power + Brake	Brake
3,000	5,000		□130	FEP09A	L7SB010B	* 19Bit Serial Absolute	APCS-E □ □ DS	DS1	APCF-P □ □ HS	APCF-P □ □ NB	
			□130	FEP15A	L7SB020B				APCF-P □ □ IS	APCF-P □ □ PB	
			□130	FEP22A	L7SB035B				APCF-P □ □ JS	APCF-P □ □ LB	
			□130	FEP30A	L7SB035B				APCF-P □ □ HS	APCF-P □ □ NB	
			□180	FFP30A	L7SB035B				APCF-P □ □ IS	APCF-P □ □ PB	
			□180	FFP50A	L7SB050B				APCF-P □ □ JS	APCF-P □ □ LB	
2,000	3,000		□130	FEP06D	L7SB010B	* 19Bit Serial Absolute	APCS-E □ □ DS	DS1	APCF-P □ □ HS	APCF-P □ □ NB	
			□130	FEP11D	L7SB010B				APCF-P □ □ IS	APCF-P □ □ PB	
			□130	FEP16D	L7SB020B				APCF-P □ □ JS	APCF-P □ □ LB	
			□130	FEP22D	L7SB020B				APCF-P □ □ HS	APCF-P □ □ NB	
			□180	FFP22D	L7SB020B				APCF-P □ □ IS	APCF-P □ □ PB	
			□180	FFP35D	L7SB035B				APCF-P □ □ JS	APCF-P □ □ LB	
	2,500		□180	FFP55D	L7SB050B				APCF-P □ □ HS	APCF-P □ □ NB	
			□180	FFP75D	L7SB075B				APCF-P □ □ IS	APCF-P □ □ PB	
			□220	FGP22D	L7SB020B				APCF-P □ □ JS	APCF-P □ □ LB	
			□220	FGP35D	L7SB035B				APCF-P □ □ MS	APCF-P □ □ SB	
1,500	3,000		□130	FGP55D	L7SB050B				APCF-P □ □ HS	APCF-P □ □ NB	
			□130	FGP75D	L7SB075B				APCF-P □ □ IS	APCF-P □ □ PB	
			□220	FGP110D	L7SB150B				APCF-P □ □ JS	APCF-P □ □ LB	
			□130	FEP05G	L7SB010B				APCF-P □ □ MS	APCF-P □ □ SB	
			□130	FEP09G	L7SB010B				APCF-P □ □ HS	APCF-P □ □ NB	
			□130	FEP13G	L7SB020B				APCF-P □ □ IS	APCF-P □ □ PB	
	2,700		□130	FEP17G	L7SB020B				APCF-P □ □ JS	APCF-P □ □ LB	
			□180	FFP20G	L7SB020B				APCF-P □ □ MS	APCF-P □ □ SB	
			□180	FFP30G	L7SB035B				APCF-P □ □ HS	APCF-P □ □ NB	
			□180	FFP44G	L7SB050B				APCF-P □ □ IS	APCF-P □ □ PB	
			□180	FFP60G	L7SB075B				APCF-P □ □ JS	APCF-P □ □ LB	
			□200	FFP75G	L7SB075B				APCF-P □ □ MS	APCF-P □ □ SB	
			□220	FGP20G	L7SB020B				APCF-P □ □ HS	APCF-P □ □ NB	
			□220	FGP30G	L7SB035B				APCF-P □ □ IS	APCF-P □ □ PB	
1,000	2,000		□220	FGP44G	L7SB050B	* 19Bit Serial Absolute	APCS-E □ □ DS	DS1	APCF-P □ □ JS	APCF-P □ □ LB	
			□220	FGP60G	L7SB075B				APCF-P □ □ MS	APCF-P □ □ SB	
			□130	FEP03M	L7SB010B				APCF-P □ □ HS	APCF-P □ □ NB	
			□130	FEP06M	L7SB010B				APCF-P □ □ IS	APCF-P □ □ PB	
			□130	FEP09M	L7SB010B				APCF-P □ □ JS	APCF-P □ □ LB	
			□130	FEP12M	L7SB020B				APCF-P □ □ HS	APCF-P □ □ NB	
	1,700		□180	FFP12M	L7SB020B				APCF-P □ □ IS	APCF-P □ □ PB	
			□180	FFP20M	L7SB020B				APCF-P □ □ JS	APCF-P □ □ LB	
			□180	FFP30M	L7SB035B				APCF-P □ □ MS	APCF-P □ □ SB	
			□180	FFP44M	L7SB050B				APCF-P □ □ HS	APCF-P □ □ NB	
2,000			□220	FGP12M	L7SB020B				APCF-P □ □ IS	APCF-P □ □ PB	
			□220	FGP20M	L7SB020B				APCF-P □ □ JS	APCF-P □ □ LB	
			□220	FGP30M	L7SB050B				APCF-P □ □ HS	APCF-P □ □ NB	
			□220	FGP44M	L7SB050B				APCF-P □ □ IS	APCF-P □ □ PB	
			□220	FGP60M	L7SB075B				APCF-P □ □ JS	APCF-P □ □ LB	

Servo Drive

# L7SB Drive

Item	Type Name	L7SB010B	L7SB020B	L7SB035B	L7SB050B	L7SB075B	L7SB150B							
Input Power	Main Power Supply	3 Phase AC380 ~ 480[V][−15 ~ +10[%]], 50 ~ 60[Hz]												
	Control Power Supply	Single Phase AC380 ~ 480[V][−15 ~ +10[%]], 50 ~ 60[Hz]												
Rated Current[A]		3.7	8	10.1	17.5	22.8	39							
Peak Current[A]		11.1	24	30.3	52.5	57	97.5							
Encoder Type		Serial 17bit, 19bit, 21bit												
Control Performance	Speed Control	Speed Control Range	Maximum 1: 5000											
		Frequency Response	Maximum 1 [kHz] or above (when the 19-bit serial encoder is applied)											
		Speed Command	DC -10 [V]~+10 [V] (Reverse rotation in case of negative voltage)											
		Accel/Decel Time	Straight or S-curve acceleration/deceleration [0-10,000 [ms], possible to be set by one [ms] unit]											
	Position Control	Speed Variation Ratio	±0.01 [%] or lower [when load changes between 0 and 100%], ±0.1[%] or lower [temperature 25 ± 10°C]											
		Input Frequency	1[Mpps], Line Driver / 200[kpps], Open Collector											
		Input Pulse Type	Symbol + pulse series, CW+CCW, A/B phase											
	Torque Control	Electric Gear Ratio	Four digital gear ratios can be set, selected and tuned.											
		Torque Command	DC-10~+10 [V] (Reverse direction torque in case of negative voltage)											
		Speed Limit	DC 0~10 [V], internal speed command within ±1[%]											
	Repetition accuracy		Within ±1[%]											
Input/Output Signal	Analog Input	Input Range	DC 0 ~ 10[V]											
		Resolution	12[bit]											
	Analog Output	Output Range	DC 0 ~ 10[V]											
		Resolution	12[bit]											
	Digital Input		A total of 10 input channels (allocable) SVON, SPD1, SPD2, SPD3, ALMRST, DIR, CCWLIM, CWLIM, EMG, STOP, EGEAR1, EGEAR2, PCON, GAIN2, P_CLR, T_LMT, MODE, ABS_RQ, ZCLAMP You can selectively allocate a total of 19 functions. You can set the positive/negative logic of the selected signal.											
			A total of 5 channels (allocable), 3 channels (fixed with alarm codes) ALARM, READY, ZSPD, BRAKE, INPOS, TLMT, VLMT, INSPD, WARN You can selectively allocate a total of nine kinds of output. You can set the positive/negative logic of the selected signal.											
	Digital Output													
Communication	RS-422		Accessible to PC software and the RS422 server											
	USB		Status monitoring through PC software, JOG operation, and parameter uploading/downloading are possible.											
Encoder		Serial BiSS encoder and quadrature encoder supported												
Encoder Output Type		Random pre-scale output through FPGA (maximum 6.4 Mpps)												
Built-in functions	Dynamic Braking		Standard built-in (activated when the servo alarm goes off or when the servo is off)											
	Regenerative Braking		Both default built-in and external installation possible											
	Display		Seven segments (5 DIGIT)											
	Setting Function		Loader (SET, MODE, UP, and [DOWN] keys)											
	Additional Function		Auto gain tuning, phase Z detection, manual JOG operation, program JOG operation, automatic analog input calibration											
	Protective Function		Overcurrent, overload, overvoltage, voltage lack, main power input error, control power input error, overspeed, motor cable, heating error (power module heating, drive temperature error), encoder error, excessive regeneration, sensor error, communication error											
Operation Environment	Operating Temperature / Storage Temperature		0 ~ 50[°C] / -20 ~ 70[°C]											
	Operating Humidity / Storage Humidity		Below 80[%]RH / Below 90[%]RH (avoid dew-condensation)											
	Environment		Indoor, avoid corrosive, inflammable gas or liquid, and electrically conductive dust.											