

## Recommended Parameter Values by Actuator Model(LECSC)

These are the "Recommended parameter values" for the LECSC driver for each actuator.  
(Setup Software(MR Configurator2™) : For part No. LEC-MRC2)

These recommended parameter values have been created for actuator with stroke less than 1000 mm.

Please change the parameter values according to the customer application.  
Refer to "LECSC Operation Manual", chapter 6 for details.

### Recommended Parameter Values [LEF]

Series			LEFS25			LEFS32			LEFS40		
	Lead symbol		H	A	B	H	A	B	H	A	B
	Lead		20	12	6	24	16	8	30	20	10
Parameter *1,*2	Para. No.	Initial value	Recommended value								
Electronic gear numerator *3	PA06	1	32768								
Electronic gear denominator *3	PA07	1	2500	1500	750	3000	2000	1000	3750	2500	1250
Feel length multiplication (STM) (Multiplier)	PA05	0000	0000(Less than stroke 1000)/ 0001(Stroke 1000 or more)								
Home position return type	PC02	0000	□□□3(Stopper type)								
Home position return direction	PC03	0001	□□□1 (Motor side)								
Home position return Speed (rpm)	PC04	500	90	150	300	75	113	225	60	90	180
Home position return position data (μm)	PC07	0	-2000(Less than stroke 1000) / -200(Stroke 1000 or more)								
Stopper type home position return stopper time (msec)	PC09	100	200								
Stopper type home position return torque limit value (%)	PC10	15	30								
Regenerative option	PA02	0000	0000(Non) / 0002(LEC-MR-RB-032)								
Rotation direction selection *4	PA14	0	1(+: Counter motors side)								
Adaptive tuning mode	PB01	0000	0000								
Load to motor inertia moment ratio	PB06	7	7								
Machine resonance suppression filter 1	PB13	4500	4500								
Notch shape selection 1	PB14	0000	0000								

 Different from the initial value.

- \*1 Parameter is the recommended value. Please change the parameter to the appropriate value for the operating method.
- \*2 A mechanical resonance may occur depending on the configuration or the mounting orientation of the transferred object. Please change the parameter in the initial setting.
- \*3 The minimum unit of the travel distance of the actuator should be 1 [μm].
- \*4. When the motor mounting position is right side parallel (LEFS\*R) or left side parallel (LEFS\*L), the rotation direction PA14 selection is 0(+: Counter motors side).

Series			LEFB25	LEFB25U	LEFB32	LEFB32U	LEFB40	LEFB40U
	Lead symbol		S					
	Lead		54					
Parameter *1,*2	Para. No.	Initial value	Recommended value					
Electronic gear numerator *3	PA06	1	32768					
Electronic gear denominator *3	PA07	1	6750					
Feel length multiplication (STM) (Multiplier)	PA05	0000	0000(Less than stroke 1000)/ 0001(Stroke 1000 or more)					
Home position return type	PC02	0000	□□□3(Stopper type)					
Home position return direction	PC03	0001	□□□1 (Motor side)					
Home position return Speed (rpm)	PC04	500	33					
Home position return position data (μm)	PC07	0	-3000(Less than stroke 1000) / -300(Stroke 1000 or more)					
Stopper type home position return stopper time (msec)	PC09	100	200					
Stopper type home position return torque limit value (%)	PC10	15	30					
Regenerative option	PA02	0000	0000(Non) / 0002(LEC-MR-RB-032)					
Rotation direction selection	PA14	0	1(+: Counter motors side)	0(+: Counter motors side)	1(+: Counter motors side)	0(+: Counter motors side)	1(+: Counter motors side)	0(+: Counter motors side)
★ Adaptive tuning mode	PB01	0000	0002		0000			
★ Load to motor inertia moment ratio	PB06	7	50					
★Machine resonance suppression filter 1	PB13	4500	400		4500			
★ Notch shape selection 1	PB14	0000	0030		0000			

★ Parameter should be changed.

□ Different from the initial value.

\*1 Parameter is the recommended value. Please change the parameter to the appropriate value for the operating method.

\*2 A mechanical resonance may occur depending on the configuration or the mounting orientation of the transferred object. Please change the parameter in the initial setting.

\*3 The minimum unit of the travel distance of the actuator should be 1 [μm].

# Recommended Parameter Values [LEJ]

Series			LEJS40			LEJS63			LEJB40	LEJB63
	Lead symbol		H	A	B	H	A	B	T	
	Lead		24	16	8	30	20	10	27	42
Parameter *1,*2	Para. No.	Initial value	Recommended value							
Electronic gear numerator *3	PA06	1	32768							
Electronic gear denominator *3	PA07	1	3000	2000	1000	3750	2500	1250	3375	5250
Feel length multiplication (STM) (Multiplier)	PA05	0000	0000(Less than stroke 1000) / 0001(Stroke 1000 or more)							
Home position return type	PC02	0000	□□□3(Stopper type)							
Home position return direction	PC03	0001	□□□1 (Motor side)							
Home position return Speed (rpm)	PC04	500	75	113	225	60	90	180	133	86
Home position return position data (μm)	PC07	0	-2000(Less than stroke 1000) / -200(Stroke 1000 or more)							
Stopper type home position return stopper time (msec)	PC09	100	200							
Stopper type home position return torque limit value (%)	PC10	15	30							
Regenerative option	PA02	0000	0000(Non) / 0002(LEC-MR-RB-032) / 0003(LEC-MR-RB-12)							
Rotation direction selection	PA14	0	1 (+: Counter motors side)						0 (+: Counter motors side)	
★Adaptive tuning mode	PB01	0000	0000						0002	0000
★Load to motor inertia moment ratio	PB06	7	7						50	
★Machine resonance suppression filter 1	PB13	4500	4500						400	4500
★Notch shape selection 1	PB14	0000	0000						0030	0000

★ Parameter should be changed.

□ Different from the initial value.


\*1 Parameter is the recommended value. Please change the parameter to the appropriate value for the operating method.

\*2 A mechanical resonance may occur depending on the configuration or the mounting orientation of the transferred object. Please change the parameter in the initial setting.

\*3 The minimum unit of the travel distance of the actuator should be 1 [μm].

# Recommended Parameter Values [LEY]

Series			LEY25/LEYG25			LEY25D/ LEYG25D			LEY32/LEYG32			LEY32D/ LEYG32D		
	Lead symbol		A	B	C	A	B	C	A	B	C	A	B	C
	Lead		12	6	3	12	6	3	20	10	5	16	8	4
Parameter *1,*2	Para. No	Initial value	Recommended value											
Electronic gear numerator *3	PA06	1	32768											
Electronic gear denominator *3	PA07	1	1500	750	375	1500	750	375	2500	1250	625	2000	1000	500
Feed length multiplication (STM) (Multiplier)	PA05	0000	0000 (Less than stroke 1000) / 0001 (Stroke 1000 or more)											
Home position return type	PC02	0000	□□□3 (Stopper type)											
Home position return direction	PC03	0001	□□□1 (Motor side)											
Home position return Speed (rpm)	PC04	500	150	300	600	150	300	600	90	180	360	112	225	450
Home position return position data (μm)	PC07	0	-2000(Less than stroke 1000) / -200(Stroke 1000 or more)											
Stopper type home position return stopper time (msec)	PC09	100	200											
Stopper type home position return torque limit value (%)	PC10	15	30											
Regenerative option	PA02	0000	0000 (Non)/ 0002 (LEC-MR-RB-032)											
Rotation direction selection *4	PA14	0	0 (+: Counter motors side)			1 (+: Counter motors side )			0 (+: Counter motors side)			1 (+: Counter motors side )		
Adaptive tuning mode	PB01	0000	0000											
Load to motor inertia moment ratio	PB06	7	7											
Machine resonance suppression filter 1	PB13	4500	4500											
Notch shape selection 1	PB14	0000	0000											

 Different from the initial value.

- \*1 Parameter is the recommended value. Please change the parameter to the appropriate value for the operating method.
- \*2 A mechanical resonance may occur depending on the configuration or the mounting orientation of the transferred object. Please change the parameter in the initial setting.
- \*3 The minimum unit of the travel distance of the actuator should be 1 [μm].
- \*4. When the motor mounting position is right side parallel (LEY\*R / LEYG\*R) or left side parallel (LEY\*L / LEYG\*L), the rotation direction selection is 0(+: Counter motors side).

Series			LEY63				LEY63D		
	Lead symbol		A	B	C	L	A	B	C
	Lead (Including pulley ratio)		20	10	5	5(2.86) (Pulley ratio 4/7)	20	10	5
Parameter *1,*2	Para. No	Initial value	Recommended value						
Electronic gear numerator *3	PA06	1	32768			57344	32768		
Electronic gear denominator *3	PA07	1	2500	1250	625	625	2500	1250	625
Feel length multiplication (STM) (Multiplier)	PA05	0000	0000 (Less than stroke 1000) / 0001 (Stroke 1000 or more)						
Home position return type	PC02	0000	□□□3 (Stopper type)						
Home position return direction	PC03	0001	□□□1 (Motor side)						
Home position return speed (rpm)	PC04	500	90	180	360	629	90	180	360
Home position return position data (μm)	PC07	0	-4000 (Less than stroke 1000) / -400(Stroke 1000 or more)						
Stopper type home position return stopper time (msec)	PC09	100	200						
Stopper type home position return torque limit value (%)	PC10	15	30						
Regenerative option	PA02	0000	0000 (Non)/ 0002 (LEC-MR-RB-032)/ 0003 (LEC-MR-RB-12)						
Rotation direction selection *4	PA14	0	0 (+: Counter motors side)				1 (+: Counter motors side )		
Adaptive tuning mode	PB01	0000	0000						
Load to motor inertia moment ratio	PB06	7	7						
Machine resonance suppression filter 1	PB13	4500	4500						
Notch shape selection 1	PB14	0000	0000						

 Different from the initial value.

- \*1 Parameter is the recommended value. Please change the parameter to the appropriate value for the operating method.
- \*2 A mechanical resonance may occur depending on the configuration or the mounting orientation of the transferred object. Please change the parameter in the initial setting.
- \*3 The minimum unit of the travel distance of the actuator should be 1 [μm].
- \*4. When the motor mounting position is right side parallel (LEY\*R / LEYG\*R) or left side parallel (LEY\*L / LEYG\*L), the rotation direction selection is 0(+: Counter motors side).