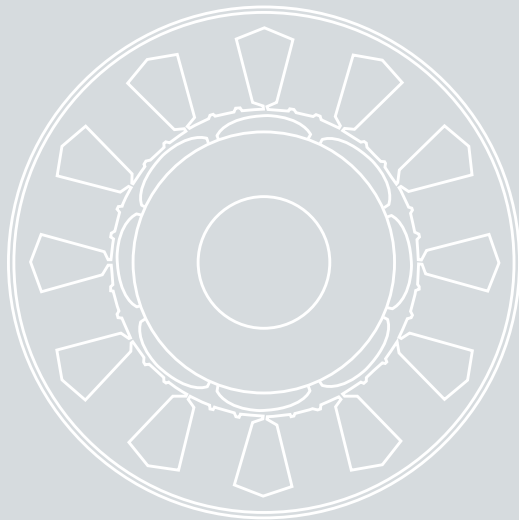
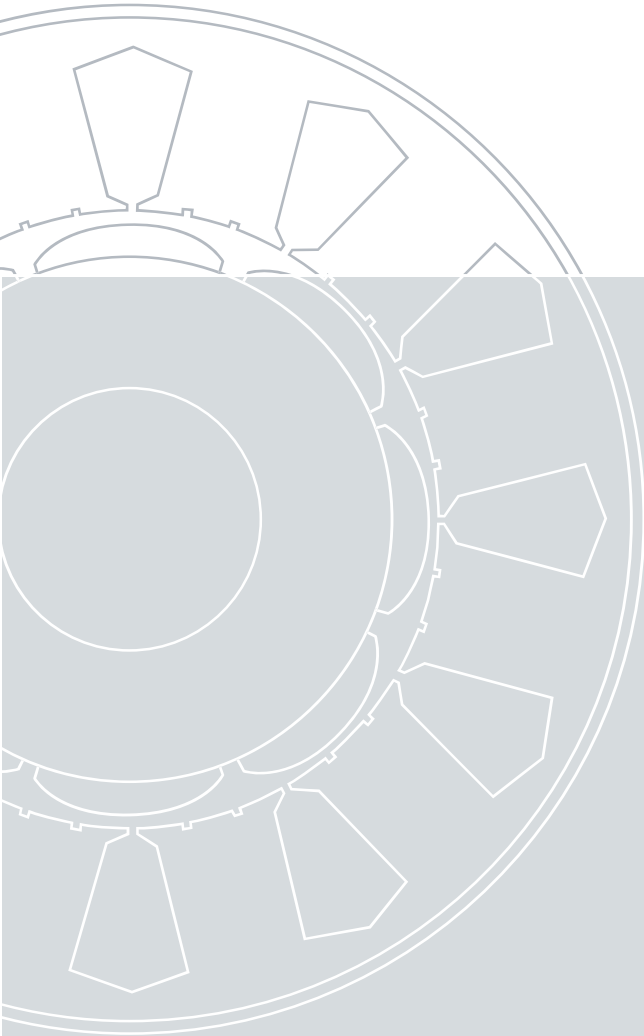


Ortlinghaus

Servo Motor

Quality, Reliability and Flexibility
[Low Voltage]

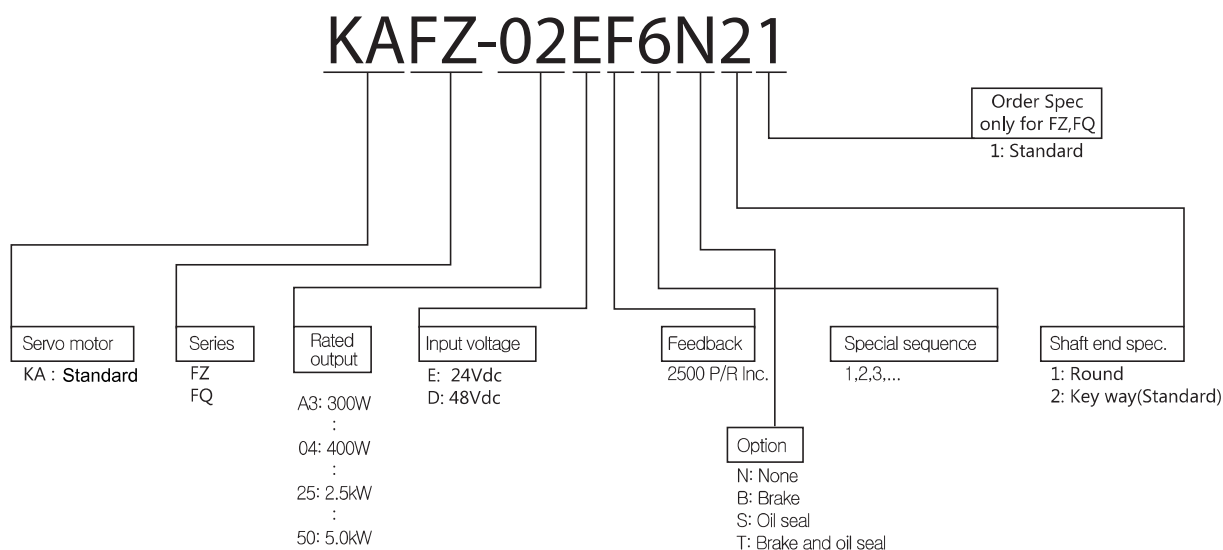




Servo Motor...



Model configurations



Feedback specifications

Symbol	Spec.	KAFZ	KAFQ
A	2000 P/R INC.(9wires)		
B	2000 P/R INC.(15wires)		
C	2048 P/R INC.(9wires)	standard	standard
D	2048 P/R INC.(15wires)		
E	2500 P/R INC.(9wires)	standard	standard
F	2500 P/R INC.(15wires)		
G	17bit ABS.	standard	standard
H	11bit ABS.		
K	5000 P/R INC.(15wires)		
L	6000 P/R INC.(15wires)		
Z	1000 P/R INC.(15wires)		
M	10000 P/R INC.(15wires)		
N	3000 P/R INC.(15wires)		
R	Resolver		
W	18bit Endat2.2		

Regarding specially developed products, please inquire about items individually.

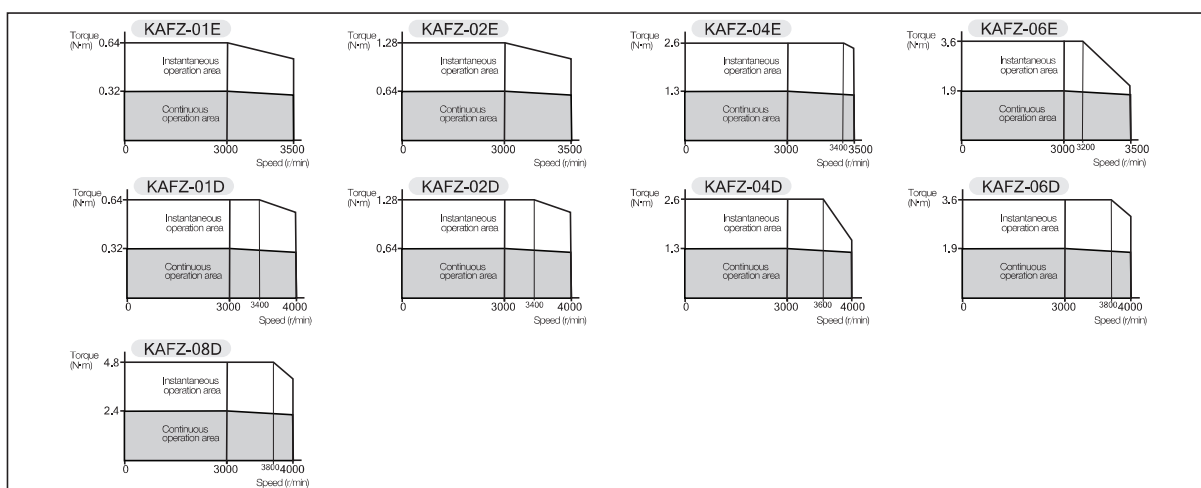
Specifications and Classifications

KAFZ series servo motor specifications

Servo motor series		KAFZ								
Flange size (mm)		40	60		80	40	60		80	
Model		01	02	04	06	01	02	04	06	08
Specifications		01	02	04	06	01	02	04	06	08
Supply voltage (V _{dc})		24				48				
Continuous running duty	Rated output (W)	100	200	400	600	100	200	400	600	750
	Rated torque (N·m)	0.32	0.64	1.3	1.9	0.32	0.64	1.3	1.9	2.4
Maximum torque (N·m)		0.64	1.28	50.63	3.8	0.64	1.28	2.6	3.8	4.8
Rated rotation speed (r/min)		3000								
Maximum rotation speed (r/min)		3500				4000				
Rated power rate (kW/s)		19.3	25.94	51.6	47.4	19.34	25.94	51.6	47.4	62.75
Rated current (Arms)		6.4	12	25.3	30.7	3.6	6.4	12.6	19.3	24.2
Momentary maximum current (Arms)		12.80	24.04	50.63	65.62	7.2	12.8	25.2	38.61	48.44
Rotor inertia (×10 ⁻⁴ kg·m ²)	Standard	0.054	0.161	0.334	0.777	0.054	0.161	0.334	0.777	0.936
	With brake	0.058	0.189	0.362	0.922	0.058	0.189	0.362	0.922	1.081
Recommended load/motor inertia ratio		Less than 30-times the servo motor's inertia								
Structure		Totally enclosed non ventilated (protection level:IP65)								
Environment	Ambient Temperature	0 to 40℃(32 to 104°F)(non freezing), storage: -15 to 70℃(5 to 158°F) (non freezing)								
	Ambient humidity	85% RH max. (non condensing), storage: 90% RH max.(non condensing)								
	Atmosphere	Indoors (no direct sunlight): no corrosive gas, inflammable gas, oil mist, or dust								
	Elevation/Vibration	1000 meters or less above sea level, 49m/s² below								
Insulation Class	Type	B								
	Permission Temperature(℃)	130℃ Below								
Weight (kg)	Standard	0.56	0.96	1.46	2.37	0.56	0.96	1.46	2.37	2.66
	With brake	0.83	1.43	1.93	3.17	0.83	1.43	1.93	3.17	3.46

1. If used in location such as an actual site of machinery where oil or water may influence the product, contacts KOMOTEK for apply special specifications.
2. This specification is guaranted after combining and adjusting with the driver.
3. All ratings typical and at 20°C unless other ise noted.
4. Contact Ortlinghaus if the load/motor of inertia moment ratio exceeds the figure in the table.

KAFZ series servo motor torque characteristics



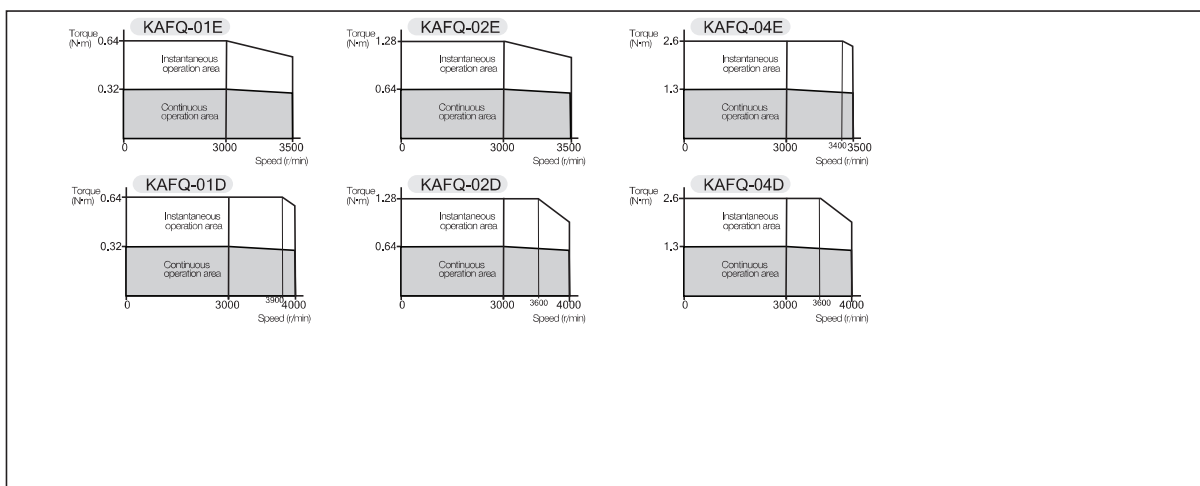
Specifications and Classifications

KAFQ series servo motor specifications

Servo motor series		KAFQ					
Flange size (mm)		60	80		60	80	
Specifications	Model	01	02	04	01	02	04
Supply voltage (V _{cc})		24			48		
Continuous running duty	Rated output (W)	100	200	400	100	200	400
	Rated torque (N·m)	0.32	0.64	1.3	0.32	0.64	1.3
Maximum torque (N·m)		0.64	1.28	2.6	0.64	1.28	2.6
Rated rotation speed (r/min)		3000					
Maximum rotation speed (r/min)		3500			4000		
Rated power rate (kW/s)		13.4	12.43	27.53	13.39	12.43	27.53
Rated current (Arms)		6.7	12.0	24.0	3.9	6.82	13.1
Momentary maximum current (Arms)		13.40	24.0	48.01	7.78	13.65	26.23
Rotor inertia (×10 ⁻⁴ kg·m ²)	Standard	0.078	0.336	0.626	0.078	0.336	0.626
	With brake	0.106	0.343	0.771	0.106	0.343	0.771
Recommended load/motor inertia ratio		Less than 30-times the servo motor's inertia					
Structure		Totally enclosed non ventilated (protection level:IP65)					
Environment	Ambient Temperature	0 to 40°C (32 to 104°F) (non freezing), storage: -15 to 70°C (5 to 158°F) (non freezing)					
	Ambient humidity	85% RH max. (non condensing), storage: 90% RH max. (non condensing)					
	Atmosphere	Indoors (no direct sunlight): no corrosive gas, inflammable gas, oil mist, or dust					
	Elevation/Vibration	1000 meters or less above sea level, 49m/s ² below					
Insulation Class	Type	B					
	Permission Temperature(°C)	130°C Below					
Weight (kg)	Standard	0.72	1.50	2.08	0.72	1.50	2.08
	With brake	1.19	2.30	2.88	1.19	2.30	2.88

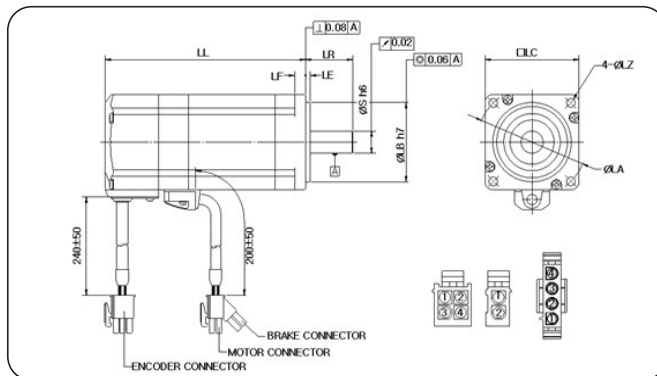
1. If used in location such as an actual site of machinery where oil or water may influence the product, contacts KOMOTEK for apply special specifications.
2. This specification is guaranteed after combining and adjusting with the driver.
3. All ratings typical and at 20°C unless otherwise noted.
4. Contact Ortlinghaus if the load/motor of inertia moment ratio exceeds the figure in the table.

KAFQ series servo motor torque characteristics



Motor Dimensions

KAFZ/Q series



Specifications of motor/brake connector

Brake	Standard		with Brake		
Part No.	AMP/172167-1	480702	AMP/172167-1 AMP/172165-1	480702 172165	
Pin spec.	Pin No.	Signal	Signal	Pin No.	Signal
	1	U	FG	1	U
	2	V	W	2	V
	3	W	V	3	W
	4	FG	U	4	FG
				1	BR
				2	BR

* The connectors can be selectable as optional components.

Series		KAFZ					KAFQ		
Model		01	02	04	06	08	01	02	04
LL	Standard	133.5	131.5	157.5	162	170	107.5	134	149
	With brake	163	167	193.5	196	204	143	168	183
LR		25	30	30	35	35	30	35	35
S		8	11	14	16	19	8	11	14
LA		45	70	70	90	90	70	90	90
LB		30	50	50	70	70	50	70	70
LC		40	60	60	80	80	60	80	80
LE		3	3	3	3	3	3	3	3
LF		3.5	6	6	8.5	8.5	6	8.5	8.5
LZ		3.6	5.2	5.2	6.6	6.6	5.2	6.6	6.6

Special Specifications

Special shaft end specifications

KAFZ, KAFQ series(With key & D-cut)									
Series	KAFZ						KAFQ		
Model	01	02	04	06	08	10	01	02	04
LW/LN(D-cut)	14/20	20/22	25/22	25/25	25/25	25/25	14/20	20/22	25/22
LK	12.5	18	22.5	22	22	22	12.5	18	22.5
KW	3h9	4h9	5h9	6h9	6h9	6h9	3h9	4h9	5h9
KH	3	4	5	6	6	6	3	4	5
PH/LP(D-cut)	6.2/7.5	8.5/10	11/12.5	12.5/14.5	15.5/17.5	15.5/17.5	6.2/7.5	8.5/10	11/12.5

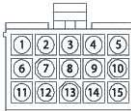
Key

D-cut

Electromagnetic brake specifications

KAFZ, KAFQ series										
Series	KAFZ						KAFQ			
Model	01	02	04	06	08	10	01	02	04	
Static friction torque	Nm	0.29	1.27	1.27	2.45	2.45	2.45	1.27	2.45	2.45
Response time	ms	25	50	50	60	60	60	50	60	60
Release time	ms	20	15	15	15	15	15	15	15	15
Rated voltage	V _{DC}	24	24	24	24	24	24	24	24	24
Rated current	A(at20°C)	0.26	0.36	0.36	0.43	0.43	0.43	0.36	0.43	0.43

Encoder connectors

KAFZ, KAFQ series														
Model	Encoder Type	Wires	Part No.	Pin Specification										Outlines
KAFZ-01~10 KAFQ-01~04	Inc.	15	AMP/ 172171-1	Pin	1	2	3	4	5	6	7	8	9	
				Signal	A	$\bar{A}$	B	$\bar{B}$	Z	$\bar{Z}$	U	$\bar{U}$	V	
				Pin	10	11	12	13	14	15				
				Signal	$\bar{V}$	W	$\bar{W}$	+5V	0V	FG				
	9	9	AMP/ 172169-1	Pin	1	2	3	4	5	6	7	8	9	
				Signal	A	$\bar{A}$	B	$\bar{B}$	Z	$\bar{Z}$	+5V	0V	FG	
	Abs. (17bit)	9	AMP/ 172169-1	Pin	1	2	3	4	5	6	7	8	9	
				Signal	BAT+	BAT-	FG	SD	$\bar{SD}$		+5V	0V		

The logo for Ortlinghaus, featuring the company name in a stylized, red, cursive script font.

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