



Servo Motor

The rotor of the AB servo motor is made of high-performance rare earth permanent magnet material, with high power density, excellent torque characteristics, low inertia, good dynamic performance, and strong overload capacity. And it adopts a three-phase sine wave design, with good low-speed smooth characteristics and extremely low torque ripple. It supports optional photoelectric encoders (incremental or absolute) and rotary variable voltage encoders. The servo motor has achieved F-level insulation and IP65 protection level, with built-in temperature protector that can adapt to harsh usage environments. At the same time, it has flexible installation methods and a beautiful appearance.



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RoHS



ABTM 60 Flange

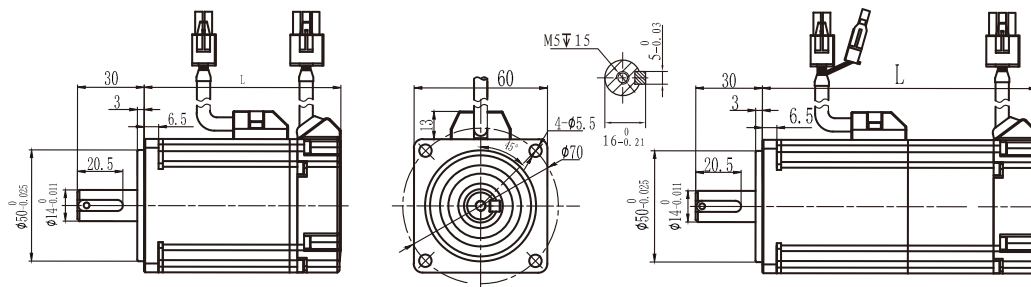
AC servo motor

Model identification	ABTM	60	-----	02	30	E1	2	N	01
	Series	Flange	power	Speed	Encoder	Voltage	Brake	Wiring Method	

Note: The part in the dashed box is replaced by "*" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



Motor model	ABTM60-0230*	ABTM60-0430*	ABTM60-0630*
Rated power (kW)	0.2	0.4	0.6
Rated current (A)	1.4	2.8	4.2
Rated torque (N·m)	0.64	1.27	1.91
Rated speed (N·m)	3000	3000	3000
Instantaneous maximum current (A)	4.2	8.4	12.6
Instantaneous maximum torque (N·m)	1.92	3.81	5.73
Instantaneous maximum speed (r/m)	6000	6000	6000
Rotor inertia (Kg·m ² × 10 ⁻⁴)	0.29(0.32)	0.53(0.56)	0.81(0.84)
Torque coefficient (N·m/A)	0.46	0.45	0.45
Line resistance (Ω)	8	3.7	2.3
Line inductance (m)	15	7.6	4.9
Electrical time constant (ms)	1.9	2.1	2.1
Motor weight (Kg)	1	1.3	1.7
L Without brake (mm)	77.2(Thin style)	93.7(Thin style)	113.2(Thin style)
L With brake(mm)	109.2(Thin style)	125.7(Thin style)	138(Thin style)
Input voltage (V)	220	220	220
Extreme logarithm	5	5	5
Insulation level	F		
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%		
Protection level	IP 65		

ABTM 80 Flange

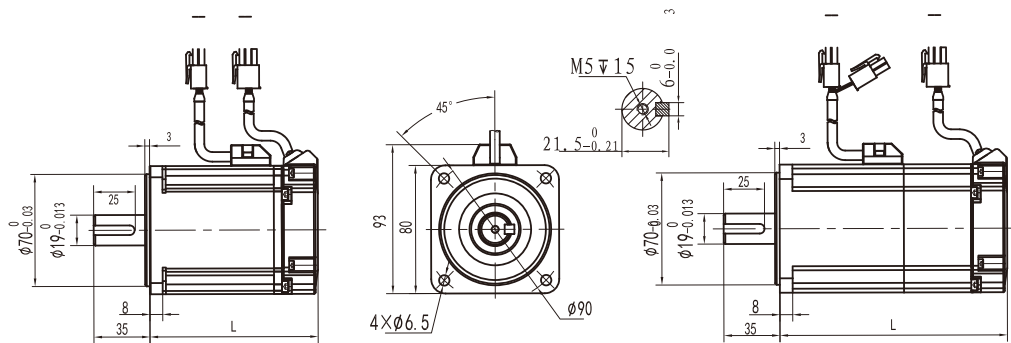
AC servo motor

Model identification	ABTM	80	-----	04	30	E1	2	N	01
	Series	Flange	power	Speed	Encoder	Voltage	Brake	Wiring Method	

Note: The part in the dashed box is replaced by "" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



*图为五对级尺寸图

Motor model	ABTM80-0430*	ABTM80-0730*	ABTM80-1030*
Rated power (kW)	0.4	0.75	1.0
Rated current (A)	2	3.8	5.5
Rated torque (N·m)	1.27	2.4	3.2
Rated speed (N·m)	3000	3000	3000
Instantaneous maximum current (A)	6	11.4	16.3
Instantaneous maximum torque (N·m)	3.8	7.2	9.6
Instantaneous maximum speed (r/m)	3500	6000	6000
Rotor inertia (Kg·m ² × 10 ⁻⁴)	0.95(1.05)	1.62(1.72)	2.1(2.2)
Torque coefficient (N·m/A)	0.64	0.6	0.6
Line resistance (Ω)	2.5	1.33	1.1
Line inductance (m)	16	5.6	4.8
Electrical time constant (ms)	6.4	4.2	4.4
Motor weight (Kg)	1.75	2.5	3.2
L Without brake (mm)	124	105(Thin style)	119(Thin style)
L With brake(mm)	164	142(Thin style)	156(Thin style)
Input voltage (V)	220	220	220
Extreme logarithm	4	5	5
Insulation level	F		
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%		
Protection level	IP 65		

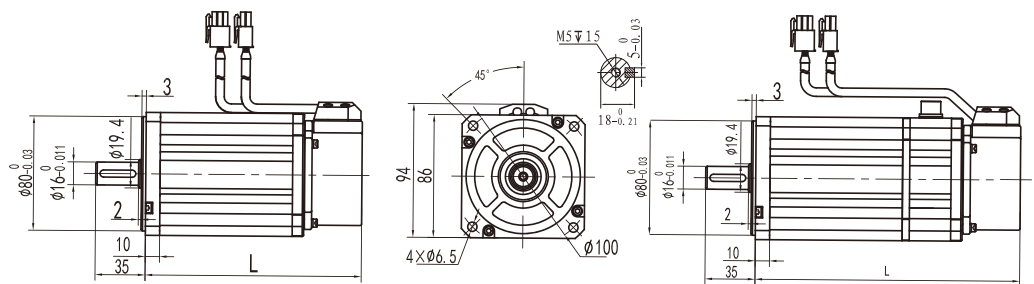
ABTM 90 Flange

Model identification	ABTM	90	-----	07	30	E1	2	N	01
	Series	Flange	Power	Speed	Encoder	Voltage	Brake	Wiring Method	

Note: The part in the dashed box is replaced by "" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



Motor model	ABTM90-0730*	ABTM90-0720*	ABTM90-1025*
Rated power (kW)	0.75	0.73	1.0
Rated current (A)	3	3	4
Rated torque (N·m)	2.39	3.5	4
Rated speed (N·m)	3000	2000	2500
Instantaneous maximum current (A)	9	9	12
Instantaneous maximum torque (N·m)	7.2	10.5	12
Instantaneous maximum speed (r/m)	3500	2500	3000
Rotor inertia (Kg· m ² x 10 ⁻⁴)	2.62(2.82)	3.2(3.4)	3.57(3.77)
Torque coefficient (N· m/A)	0.8	1.17	1
Line resistance (Ω)	2.47	2.45	1.99
Line inductance (m)	14	18.67	13.75
Electrical time constant (ms)	5.7	7.6	6.9
Motor weight (Kg)	3	3.7	4.1
L Without brake (mm)	150	172	182
L With brake (mm)	198	220	230
Input voltage (V)	220	220	220
Extreme logarithm	4	4	4
Insulation level	F		
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%		
Protection level	IP 65		

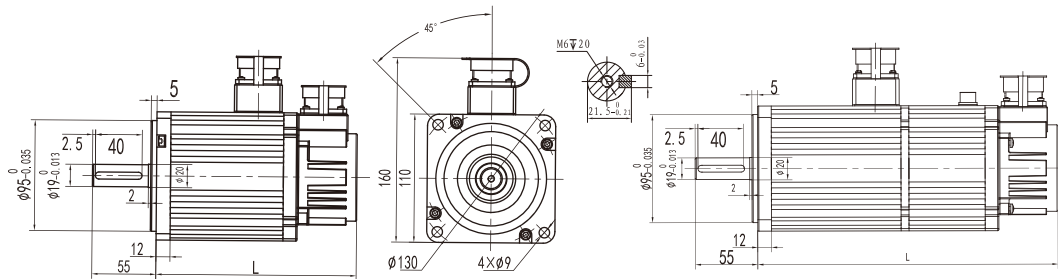
ABTM 110 Flange

Model identification	ABTM	110	-----	06	30	E1	2	N	01
	Series	Flange	Power	Speed	Encoder	Voltage	Brake	Wiring Method	

Note: The part in the dashed box is replaced by "*" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



Motor model	ABTM110-0630*	ABTM110-0820*	ABTM110-1230*	ABTM110-1530*	ABTM110-1220*	ABTM110-1830*
Rated power (kW)	0.6	0.8	1.2	1.5	1.2	1.8
Rated current (A)	2.5	3.5	5	6	4.5	7
Rated torque (N·m)	2	4	4	5	6	6
Rated speed (N·m)	3000	2000	3000	3000	2000	3000
Instantaneous maximum current (A)	7.5	10.5	15	18	13.5	21
Instantaneous maximum torque (N·m)	6	12	12	15	18	18
Instantaneous maximum speed (r/m)	3500	2500	3500	3500	2500	3500
Rotor inertia (Kg·m ² x 10 ⁻⁴)	4(4.2)	7.3(7.5)	7.3(7.5)	9.2(9.4)	10.8(11.0)	10.8(11.0)
Torque coefficient (N·m/A)	0.8	1.14	0.8	0.8	1.3	0.9
Line resistance (Ω)	3.13	2.49	1.48	1	1.9	0.8
Line inductance (m)	13.1	12.2	6.9	5	9.3	3.9
Electrical time constant (ms)	4.2	4.9	4.7	5	5	4.7
Motor weight (Kg)	3.8	5.2	5.2	6.05	6.65	6.65
L Without brake (mm)	159	189	189	204	219	219
L With brake(mm)	233	263	263	278	293	293
Input voltage (V)	220	220	220	220	220	220
Extreme logarithm	4	4	4	4	4	4
Insulation level	F					
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%					
Protection level	IP 65					

AC Servo Motor220V

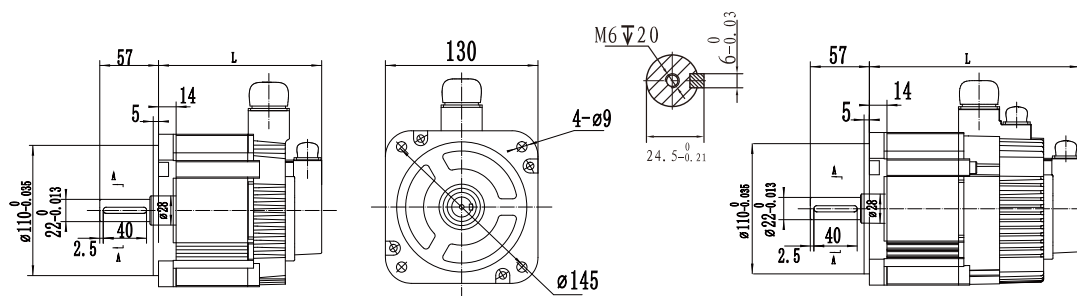
ABTM 130 flange

Model identification	ABTM	130	-----	10	25	E1	2	N	01
	Series	Flange	Power	Speed	Encoder	Voltage	Brake	Wiring Method	

Note: The part in the dashed box is replaced by "" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



Motor model	ABTM130—0815*	ABTM130—1020*	ABTM130—1315*	ABTM130—1520*	ABTM130—1815*
Rated power (kW)	0.85	1.0	1.3	1.5	1.8
Rated current (A)	6.9	5.8	10.7	8	13.8
Rated torque (N·m)	5.39	4.77	8.34	7.16	11.5
Rated speed (N·m)	1500	2000	1500	2000	1500
Instantaneous maximum current (A)	20.7	11.6	32.1	16	41.4
Instantaneous maximum torque (N·m)	16.17	9.54	25.05	14.32	34.5
Instantaneous maximum speed (r/m)	3000	3000	3000	3000	3000
Rotor inertia (Kg·m ² × 10 ⁻⁴)	10.9(12..13)	6.18(7.41)	16.9(18.13)	9.16(10.39)	21.4(22.63)
Torque coefficient (N·m/A)	0.78	0.82	0.78	0.9	0.83
Line resistance (Ω)	1	0.85	0.5	0.65	0.35
Line inductance (m)	5	12.5	3.2	9.5	2.5
Electrical time constant(ms)	5	14.7	6.4	14.6	7.14
Motor weight (Kg)	5.4	5.5	7.2	6.9	9.3
L Without brake (mm)	135	135	152.5	152.5	170
L With brake(mm)	187	187	204.5	204.5	222
Input voltage (V)	220	220	220	220	220
Extreme logarithm	5	5	5	5	5
Insulation level	F				
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%				
Protection level	IP 65				

AC Servo Motor380V

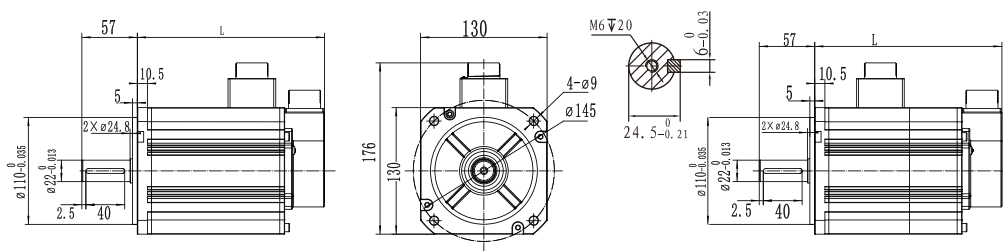
ABTM 130 flange

Model identification	ABTM	130	-----	26	25	E1	3	N	01
	Series	Flange	power	Speed	Encoder	Voltage	Brake	Wiring Method	

Note: The part in the dashed box is replaced by "*" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



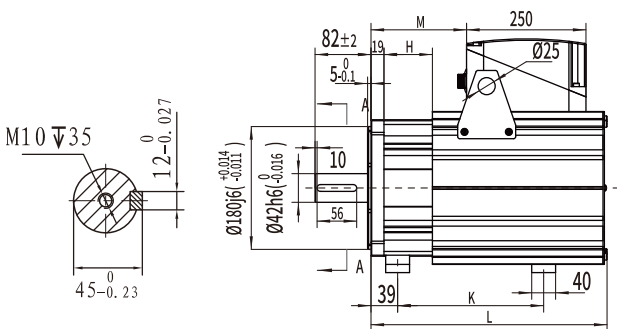
Motor model	ABTM130-1315*	ABTM130-1520*	ABTM130-1815*	ABTM130-2020*	ABTM130-3020*
Rated power (kW)	1.3	1.5	1.8	2.0	3.0
Rated current (A)	6	4.7	8.5	6.2	11
Rated torque (N·m)	8.34	7.16	11.5	9.55	14.3
Rated speed (r/min)	1500	2000	1500	2000	2000
Instantaneous maximum current (A)	18	9.4	25.5	12.4	22
Instantaneous maximum torque (N·m)	25.02	14.32	34.5	19.1	28.6
Instantaneous maximum speed (r/min)	3000	3000	3000	3000	3000
Rotor inertia (Kg·m ² × 10 ⁻⁴)	16.9(18.13)	9.16(10.39)	21.4(22.63)	12.1(13.33)	18.6(19.83)
Torque coefficient (N·m/A)	1.39	1.52	1.35	1.54	1.3
Line resistance (Ω)	1.54	1.84	1.2	1.29	0.8
Line inductance (mH)	10.5	29.5	8.3	23.5	14
Electrical time constant (ms)	6.8	16	6.9	18.2	17.5
Motor weight (Kg)	7.2	6.9	9.3	8.3	10.5
L Without brake (mm)	152.5	152.5	170	170	200
L With brake (mm)	204.5	204.5	222	220	252
Input voltage (V)	380	380	380	380	380
Extreme logarithm	5	5	5	5	5
Insulation level	F				
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%				
Protection level	IP 65				

ABTM 200 Flange

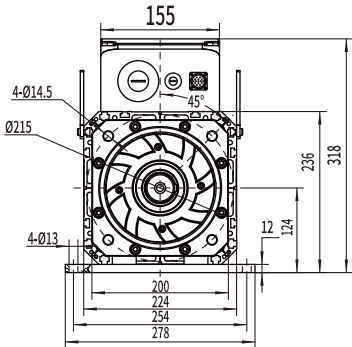
Model identification	ABTM	200	-----	11	15	E1	3	N	01
	Series	Flange	power	Speed	Encoder	Voltage	Brake	Wiring Method	

Note: The part in the dashed box is replaced by "" in the technical parameter list (the same applies later)

▼ Without brake



▼ With brake



Motor model	ABTM200-10520*	ABTM200-15720*	ABTM200-18115*	ABTM200-23615*	ABTM200-31420*
Rated power (kW)	10.5	15.7	18.1	23.6	31.4
Rated current (A)	19.6	29.8	34.5	44.7	59
Rated torque (N·m)	50	75	115	150	150
Rated speed (N·m)	2000	2000	1500	1500	2000
Instantaneous maximum current (A)	48.3	67.6	78.9	112	147
Instantaneous maximum torque (N·m)	123	170	263	373	373
Instantaneous maximum speed (r/m)	2500	2500	1700	1700	2500
Rotor inertia (Kg·m ² × 10 ⁻⁴)	98 (118)	128 (148)	188 (208)	248 (268)	248 (268)
Torque coefficient (N·m/A)	2.6	2.5	3.3	3.3	2.5
Line resistance (Ω)	0.47	0.35	0.38	0.28	0.12
Line inductance (m)	11	7.7	9.8	6.5	2.8
Electrical time constant (ms)	23.4	22.0	25.8	23.2	23.3
Motor weight (Kg)	45.2	51.9	66	79.8	79.8
L Without brake (mm)	381, 285	416, 312	486, 395	556, 471	556, 471
L With brake (mm)	65, 84	115, 119	115, 189	115, 259	115, 259
Input voltage (V)	380	380	380	380	380
Extreme logarithm	4	4	4	4	4
Insulation level	F				
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%				
Protection level	IP 54				

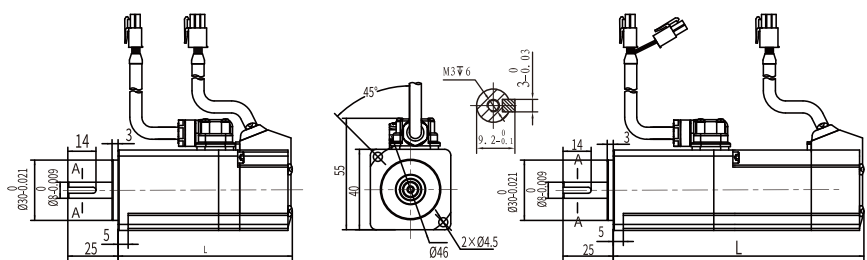
ABTDM 40 Flange

Model identification	ABTDM	40	-----	E	005	30	E1	B	K	01
	Series	Flange	Voltage	Power	Speed	Encoder	Brake	Out axis style	Wiring Method	

Note: The part in the dashed box is replaced by "" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



ABTDM 60 Flange

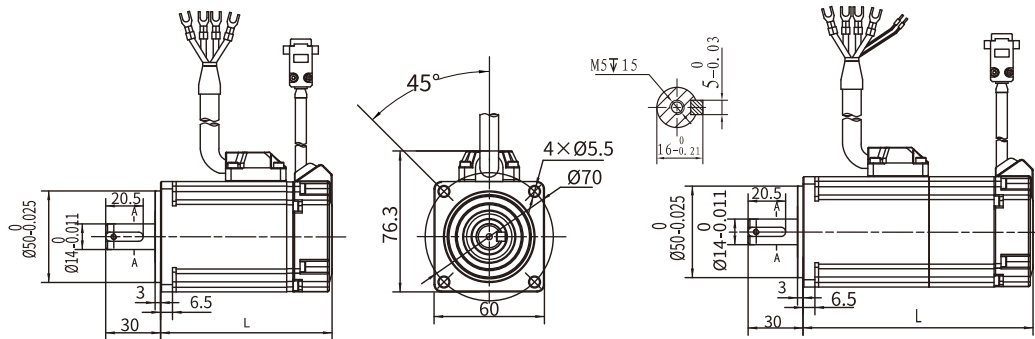
Model identification

ABTDM	60	-----	E	005	30	E1	B	K	01
Series	Flange	Voltage	Power	Speed	Encoder	Brake	Outaxis style	Wiring Method	

Note: The part in the dashed box is replaced by "" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



Motor model	ABTDM60-E0230*	ABTDM60-E0430*	ABTDM60-F0230*	ABTDM60-F0430*	ABTDM60-F0630*
Rated power (kW)	0.2	0.4	0.2	0.4	0.6
Rated voltage (V)	24	24	48	48	48
Rated current (A)	12	20	6	10	15
Rated torque(N·m)	0.64	1.27	0.64	1.27	1.91
Maximum torque(N·m)	1.91	3.81	1.91	3.81	3.81
Rated speed (r/m)	3000	3000	3000	3000	3000
Rotor inertia (Kg·m ²)	0.29x10 ⁻⁴	0.53x10 ⁻⁴	0.29x10 ⁻⁴	0.53x10 ⁻⁴	0.81x10 ⁻⁴
Torque coefficient (N.m/A)	0.053	0.053	0.107	0.127	0.127
Line resistance (Ω)	0.17	0.1	0.63	0.39	0.25
Line inductance (mh)	0.27	0.17	1.12	0.72	0.43
Electrical time constant (ms)	1.6	1.7	1.8	1.8	1.7
Motor weight (Kg)	1.0	1.4	1.0	1.4	1.7
L without brake (mm)	77.2(Thin style)	93.7(Thin style)	96.2	112.7	132.2
L with brake(mm)	109.2(Thin style)	125.7(Thin style)	128.2	144.7	157
Extreme logarithm	5				
Insulation level	F				
Usage environment	Ambient temperature: -20℃~+40℃; Relative humidity≤90%				
Protection level	IP 65				

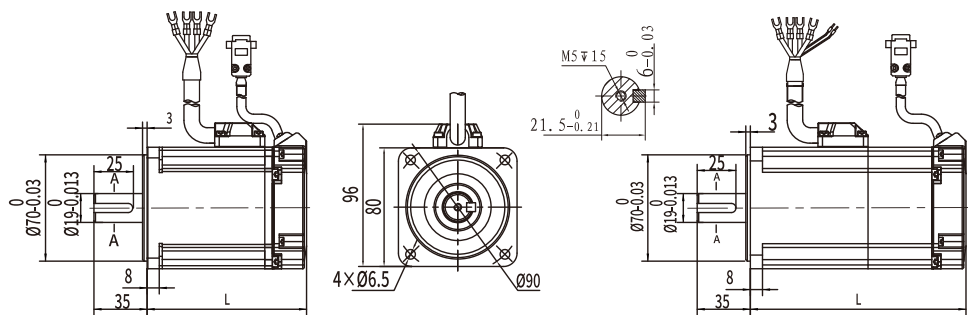
ABTDM 80 Flange

Model identification	ABTDM 80 ----- F 10 30 E1 B K 01									
	Series	Flange	Voltage	Power	Speed	Encoder	Brake	Out axis style	Wiring Method	

Note: The part in the dashed box is replaced by "" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



Motor model	ABTDM80-F0730*	ABTDM80-F1030*
Rated power (kW)	0.75	1.0
Rated voltage (V)	48	48
Rated current (A)	20	25
Rated torque(N·m)	2.4	3.2
Maximum torque(N·m)	4.8	6.4
Rated speed (r/m)	3000	3000
Rotor inertia (Kg·m ²)	1.62x10 ⁻⁴	2.1x10 ⁻⁴
Torque coefficient (N.m/A)	0.12	0.13
Line resistance (Ω)	0.08	0.05
Line inductance (mh)	0.27	0.17
Electrical time constant (ms)	3.4	3.4
Motor weight (Kg)	2.5	3.4
L without brake (mm)	105	119
L with brake(mm)	142	156
Extreme logarithm	5	
Insulation level	F	
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%	
Protection level	IP65	

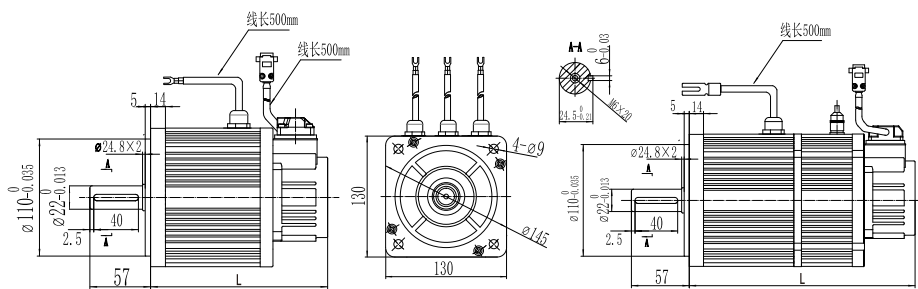
ABTDM 130 Flange

Model identification	ABTDM	130	-----	F	10	30	E1	B	K	01
	Series	Flange	Voltage	Power	Speed	Encoder	Brake	Out axis style	Wiring Method	

Note: The part in the dashed box is replaced by "" in the technical parameter list (the same applies later)

▼ Without brake

▼ With brake



Motor model	ABTDM130-F1025*	ABTDM130-F1325*	ABTDM130-F1525*	ABTDM130-F2025*	ABTDM130-F2630*
Rated power (kW)	1.0	1.3	1.5	2.0	5.6
Rated voltage (V)	48	48	48	48	48
Rated current (A)	28	31	38	54	70
Rated torque(N·m)	4	5	6	7.7	10
Maximum torque(N·m)	8	10	12	15.4	20
Rated speed (r/m)	2500	2500	2500	2500	3000
Rotor inertia (Kg·m ²)	9.6x10 ⁻⁴	10.7x10 ⁻⁴	12.9x10 ⁻⁴	14.1x10 ⁻⁴	18.8x10 ⁻⁴
Torque coefficient (N.m/A)	0.14	0.16	0.16	0.14	0.14
Line resistance (Ω)	0.056	0.044	0.038	0.026	0.012
Line inductance (mh)	0.25	0.2	0.14	0.13	0.05
Electrical time constant (ms)	4.5	4.5	3.7	5.0	4.2
Motor weight (Kg)	5.5	5.8	6.6	7.1	8.7
L without brake (mm)	166	171	179	192	209
L with brake(mm)	224	229	237	250	282
Extreme logarithm	4	4	4	4	4
Insulation level	F	F	F	F	F
Usage environment	Ambient temperature: -20°C~+40°C; Relative humidity≤90%				
Protection level	IP65				

Selection and matching table

AC servo system

Rated voltage (V)	Rated power (kW)	Rated current (A)	Rated torque (N.m)	Rated speed (r/min)	Servo motor model	Servo drive model
AC220V	0.05	0.6	0.16	3000	ABTM 40-00530*	ABS 10-005* /ABS20-005
AC220V	0.1	1.0	0.32	3000	ABTM 40-0130*	ABS 10-01* /ABS20-01*
AC220V	0.2	1.4	0.64	3000	ABTM 60-0230*	ABS 10-02* /ABS20-02*
AC220V	0.4	2.8	1.27	3000	ABTM 60-0430*	ABS 10-04* /ABS20-04*
AC220V	0.6	4.2	1.91	3000	ABTM 60-0630*	ABS 10-06* /ABS20-06*
AC220V	0.4	2.0	1.27	3000	ABTM 80-0430*	ABS 10-04* /ABS20-04*
AC220V	0.75	3.8	2.4	3000	ABTM 80-0730*	ABS 10-07* /ABS20-07*
AC220V	1.0	5.5	3.2	3000	ABTM 80-1030*	ABS 10-10* /ABS20-10*
AC220V	0.75	3	2.39	3000	ABTM 90-0730*	ABS 10-07* /ABS20-07*
AC220V	0.73	3	3.5	2000	ABTM 90-0720*	ABS 10-07* /ABS20-07*
AC220V	1.0	4	4	2500	ABTM 90-1025*	ABS 10-10* /ABS20-10*
AC220V	0.6	2.5	2	3000	ABTM 110-0630*	ABS 10-06* /ABS20-06*
AC220V	0.8	3.5	4	2000	ABTM 110-0820*	ABS 10-08* /ABS20-08*
AC220V	1.2	5	4	3000	ABTM 110-1230*	ABS 10-12* /ABS20-12*
AC220V	1.5	6	5	3000	ABTM 110-1530*	ABS 10-15* /ABS20-15*
AC220V	1.2	4.5	6	2000	ABTM 110-1220*	ABS 10-12* /ABS20-12*
AC220V	1.8	7	6	3000	ABTM 110-1830*	ABS 10-18* /ABS20-18*
AC220V	0.85	6.9	5.39	1500	ABTM 130-0815*	ABS 10-08* /ABS20-08*
AC220V	1.0	5.8	4.77	2000	ABTM 130-1020*	ABS 10-10* /ABS20-10*
AC220v	1.3	10.7	8.34	1500	ABTM 130-1315*	ABS 10-13* /ABS20-13*
AC220V	1.5	8.0	7.16	2000	ABTM 130-1520*	ABS 10-15* /ABS20-15*
AC220V	1.8	13.8	11.5	1500	ABTM 130-1815*	ABS 10-18* /ABS20-18*
AC220V	2.7	10.5	17.2	1500	ABTM 180-2715*	ABS 10-27* /ABS20-27*
AC220V	3.0	12	19	1500	ABTM 180-3015*	ABS 10-30* /ABS20-30*
AC220V	4.5	16	21.5	2000	ABTM 180-4520*	ABS 10-45* /ABS20-45*
AC380V	1.3	6.0	8.34	1500	ABTM 130-1315*	ABS 10-13* /ABS20-13*
AC380V	1.5	4.7	7.16	2000	ABTM 130-1520*	ABS 10-15* /ABS20-15*
AC380V	1.8	8.5	11.5	1500	ABTM 130-1815*	ABS 10-18* /ABS20-18*
AC380V	2.0	6.2	9.55	2000	ABTM 130-2020*	ABS 10-20* /ABS20-20*
AC380V	3.0	11	14.3	2000	ABTM 130-3020*	ABS 10-30* /ABS20-30*

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