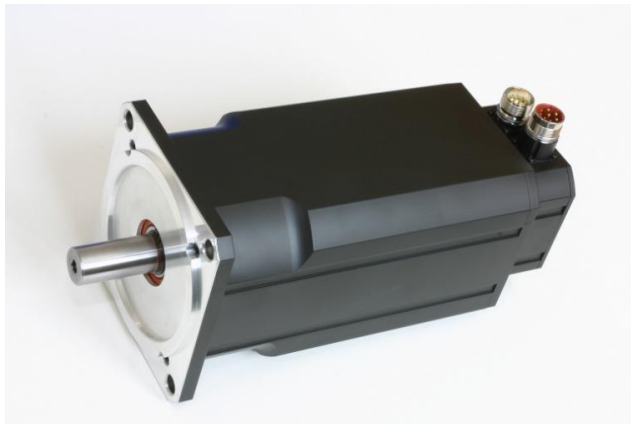
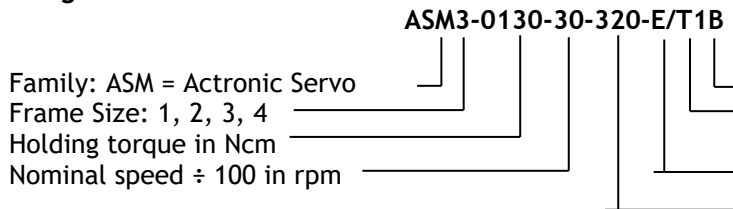


ASM Family of brushless Servomotors (ASM1 to ASM4)



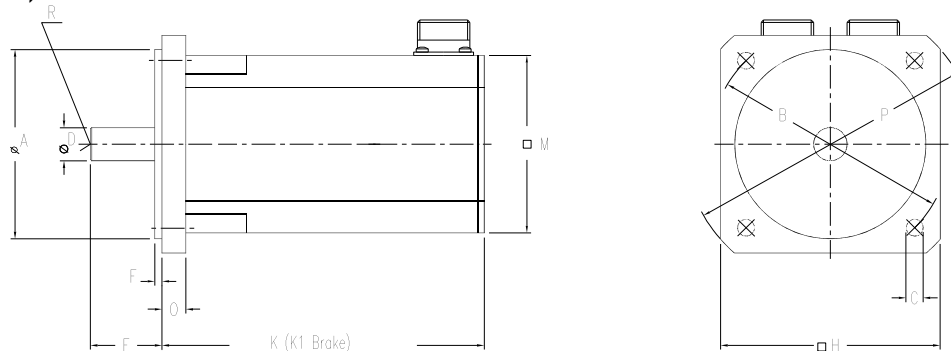
- No. of poles: 6
- Feedback: encoder (E) (2048 lines, TTL) with Hall-simulation
 optional: resolver (R), absolute encoder (A) t.b.d.
- Protection: IP64, optional IP65 w/o (V) or with (W) shaft seal
- Electrical connections: straight screw connectors (Intercontec), optional rotatable angular connectors, (ASM1: 0.3m cable with connector or flying leads)
- Thermal motor protection: PTC, optional: thermal switch 145° C, PT1000 or NTC
- Shaft w/o key, optional key DIN 6885 (P)
- Options: cable (K), customized versions

Designation:



Brake: B = Holding brake, 24Vdc
 Thermal protection Tx: 0=switch, 1=PTC
 2=NTC, 15=PT1000
 Encoder with HE, R=Resolver A=Absolute
 Nominal bus voltage in Vdc

Dimensions (mm):



	A _{j6}	B	C	D _{k6}	E	F	H	K		K1	M	O	P	R
								Encoder	Resolver					
ASM1-0010	25	32	4x M3x7	6h6	16	2	37	tbd	81	+30	37			--
ASM1-0020	25	32	4x M3x7	6h6	16	2	37	tbd	96	+30	37			--
ASM1-0030	25	32	4x M3x7	6h6	16	2	37	tbd	111	+30	37			--
ASM2-0020	40	63	5.8	9	24	2.5	55	120.5	98	+33	50	7	74	--
ASM2-0040	40	63	5.8	9	24	2.5	55	135.5	113	+33	50	7	74	--
ASM2-0060	40	63	5.8	9	24	2.5	55	150.5	128	+33	50	7	74	--
ASM2-0080	40	63	5.8	9	24	2.5	55	165.5	143	+33	50	7	74	--
ASM2-0095	40	63	5.8	9	24	2.5	55	180.5	158	+33	50	7	74	--
ASM3-0065	80	100	7	14	30	3	88	122	109	+33	74	11	115	M4x10
ASM3-0130	80	100	7	14	30	3	88	140	127	+33	74	11	115	M4x10
ASM3-0190	80	100	7	14	30	3	88	158	145	+33	74	11	115	M4x10
ASM3-0250	80	100	7	14	30	3	88	176	163	+33	74	11	115	M4x10
ASM3-0300	80	100	7	14	30	3	88	194	181	+33	74	11	115	M4x10
ASM4-0260	95	115	9	19	40	3	105	167	146	+32	97	14	134	M5x12
ASM4-0390	95	115	9	19	40	3	105	182	161	+32	97	14	134	M5x12
ASM4-0530	95	115	9	19	40	3	105	197	176	+32	97	14	134	M5x12
ASM4-0750	95	115	9	19	40	3	105	242	221	+32	97	14	134	M5x12
ASM4-0950	95	115	9	19	40	3	105	297	276	+32	97	14	134	M5x12

Winding data for operation at 90 to 320Vdc bus voltage:

Motor model	Nominal torque	Nominal current	Nominal speed	Peak torque	Peak current	Voltage constant	Torque constant	Resistance (Ph.-Ph.)	Inductance (Ph.-Ph.)	Rotor inertia	Weight (w/o brake)
	M_n	I_n	n_n	M_{max}	I_{max}	K_E	K_T	R_{2ph}	L_{2ph}	J	m
	Nm	A _{eff.}	min ⁻¹	Nm	A _{eff.}	V _{dc} /1000	Nm/ A _{eff.}	Ω	mH	kgcm ²	kg
ASM1-0010-60-320	0.09	0.56	6000	0.4	2.5	14.8	0.17	38.9	9.2	0.06	0.37
ASM1-0020-60-320	0.18	0.92	6000	0.8	4.2	17.7	0.21	18.9	4.5	0.08	0.45
ASM1-0030-60-320	0.27	0.89	6000	1.2	4.1	26.9	0.31	22.9	6.5	0.10	0.53
ASM2-0020-45-320	0.19	0.60	4500	0.8	2.5	29.0	0.34	54.1	32.0	0.06	0.90
ASM2-0040-45-320	0.36	0.88	4500	1.6	4.0	36.8	0.43	26.3	21.4	0.08	1.06
ASM2-0060-45-320	0.55	1.18	4500	2.4	5.3	42.4	0.49	19.9	17.2	0.11	1.21
ASM2-0080-45-320	0.72	1.47	4500	3.2	6.7	43.8	0.51	14.6	14.4	0.13	1.36
ASM2-0095-45-320	0.85	1.71	4500	3.8	7.8	44.5	0.52	10.7	11.3	0.18	1.52
ASM3-0065-30-320	0.60	1.04	3000	2.6	4.6	52.3	0.61	28.2	33.3	0.50	1.75
ASM3-0130-30-320	1.15	1.58	3000	5.2	7.2	66.5	0.78	12.7	21.5	0.65	2.25
ASM3-0190-30-320	1.6	2.22	3000	7.6	10.7	65.1	0.76	6.7	13.1	0.92	2.7
ASM3-0250-30-320	2.2	2.70	3000	10	13.0	70.7	0.83	5.4	11.7	1.4	3.2
ASM3-0300-30-320	2.5	3.05	3000	12	15.0	73.5	0.86	4.1	9.4	1.5	3.65
ASM4-0260-30-320	2.3	3.0	3000	10.4	18.9	70.7	0.83	3.6	15.9	1.9	4.5
ASM4-0390-30-320	3.3	4.35	3000	15.6	28.9	69.3	0.81	2.3	11.8	2.25	5.1
ASM4-0530-30-320	4.6	5.9	3000	21.2	38.8	70.0	0.82	1.7	9.8	2.65	5.6
ASM4-0750-30-320	6.4	8.1	3000	30	54.4	70.7	0.83	0.9	5.6	4.15	7.7
ASM4-0950-30-320	8.5	10.5	3000	38	67.6	72.1	0.84	0.6	4.1	6.05	10.5

Winding data for operation at 320 to 680Vdc bus voltage:

Motortyp	Nennmoment	Nennstrom	Nendrehzahl	Spitzenmoment	Spitzenstrom	Spannungskonstante	Drehmomentkonstante	Widerstand (Ph.-Ph.)	Induktivität (Ph.-Ph.)	Rotorträgheit	Gewicht (o. Bremse)
	M_n	I_n	n_n	M_{max}	I_{max}	K_E	K_T	R_{2ph}	L_{2ph}	J	m
	Nm	A _{eff.}	min ⁻¹	Nm	A _{eff.}	V _{dc} /1000	Nm/ A _{eff.}	Ω	mH	kgcm ²	kg
ASM2-0020-45-560	0.19	0.48	4500	0.8	2.0	36.1	0.42	84.1	50.0	0.06	0.90
ASM2-0040-45-560	0.36	0.51	4500	1.6	2.3	63.6	0.74	77.0	61.5	0.08	1.06
ASM2-0060-45-560	0.55	0.70	4500	2.4	3.1	70.7	0.83	50.8	45.5	0.11	1.21
ASM2-0080-45-560	0.72	0.86	4500	3.2	3.9	75.0	0.88	38.4	39.7	0.13	1.36
ASM2-0095-45-560	0.85	1.08	4500	3.8	4.9	70.7	0.83	26.9	28.8	0.18	1.52
ASM3-0065-30-560	0.60	0.64	3000	2.6	2.8	84.9	0.99	75.0	88.0	0.50	1.75
ASM3-0130-30-560	1.15	0.95	3000	5.2	4.3	110.3	1.29	34.5	62.0	0.65	2.25
ASM3-0190-30-560	1.6	1.26	3000	7.6	6.1	114.6	1.34	20.9	40.4	0.92	2.7
ASM3-0250-30-560	2.15	1.62	3000	10	7.7	118.8	1.39	15.0	33.2	1.4	3.2
ASM3-0300-30-560	2.5	1.82	3000	12	9.0	123.0	1.44	11.6	26.7	1.5	3.65
ASM4-0260-30-560	2.3	1.85	3000	10.4	11.5	116.0	1.36	9.6	41.5	1.9	4.5
ASM4-0390-30-560	3.3	2.60	3000	15.6	17.3	116.0	1.36	6.3	33.1	2.25	5.1
ASM4-0530-30-560	4.6	3.75	3000	21.2	25.1	110.3	1.29	4.2	24.0	2.65	5.6
ASM4-0750-30-560	6.4	4.35	3000	30	29.4	132.9	1.55	3.0	19.2	4.15	7.7
ASM4-0950-30-560	8.5	6.20	3000	38	39.6	123.0	1.44	1.7	11.7	6.05	10.5

Other windings (also for low voltage) on request.

Connector pinout:

Power (8 pole, Size 1)		TTL-Encoder (17 pin)		Resolver (12 pin)	
1, 4, 3	U, V, W	10, 7	+5V, 0V	8, 4	S1 (sin +), S3 (sin-)
2	ground	3, 4	A, /A	7, 3	S2 (cos +), S4 (cos-)
A, B	brake + / -	1, 2	B, /B	9, 5	R1, R2 (Speisung + / -)
		5, 6	Z, /Z	2, 6	thermal protection TH+/TH-
		8, 9	thermal protection TH+/TH-		
		15/12, 16/13, 17/14	Halls (U /U, V /V, W /W)		