

ASP Family of brushless Servomotors with concentrated windings (ASP5 to ASP7)



- No. of poles: 6 (ASP2) or 10 (from ASP3)
- 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
- 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

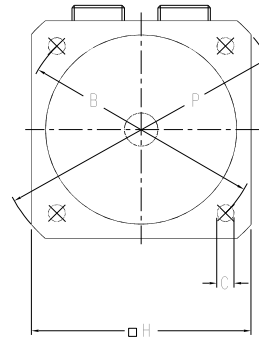
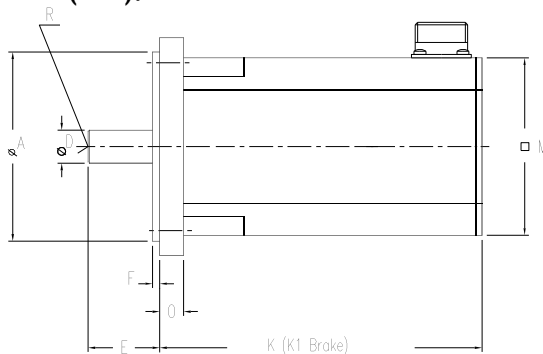
Designation:

ASP5-0095-45-320-E/T1B

Family: ASP = Actronic Servo
 Frame Size: 5, 6, 7
 Holding torque in Ncm
 Nominal speed ÷ 100 in rpm

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					
ASP5-1200	130	165	12	24	50	3.5	142	157	145	+36	128	16	188	M8x20
ASP5-1600	130	165	12	24	50	3.5	142	187	175	+36	128	16	188	M8x20
ASP5-2000	130	165	12	24	50	3.5	142	217	205	+36	128	16	188	M8x20
ASP5-2400	130	165	12	24	50	3.5	142	247	235	+36	128	16	188	M8x20
ASP6-1800	180	215	13	24	50	3.5	190	161	158	+64	158	12	250	M8x19
ASP6-2400	180	215	13	24	50	3.5	190	186	183	+64	158	12	250	M8x19
ASP6-3000	180	215	13	24	50	3.5	190	211	208	+64	158	12	250	M8x19
ASP6-3800	180	215	13	24	50	3.5	190	236	233	+64	158	12	250	M8x19
ASP6-4400	180	215	13	24	50	3.5	190	361	258	+64	158	12	250	M8x19
ASP7-3000	180	215	15	28	58	4.0	190		181	+59	190	15	250	M10x22
ASP7-4000	180	215	15	28	58	4.0	190		211	+59	190	15	250	M10x22
ASP7-5000	180	215	15	28	58	4.0	190		241	+59	190	15	250	M10x22
ASP7-6000	180	215	15	28	58	4.0	190		271	+59	190	15	250	M10x22

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
ASP5-1200-30-320	10.5	14.7	3000	36	53	72.1	0.84	0.42	3.4	7.5	7.5
ASP5-1600-30-320	13.8	17.0	3000	48	61	79.2	0.93	0.30	2.5	11.5	9.5
ASP5-2000-20-320	17.5	16.4	2000	60	55	106.1	1.24	0.37	3.3	15.1	11.5
ASP5-2400-20-320	22.0	16.4	2000	72	53	132.9	1.55	0.45	4.1	18.7	13.5

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

Motortyp	Nennmoment	Nennstrom	Nenn Drehzahl	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
ASP5-1200-30-560	10.5	8.3	3000	36	29	128.7	1.51	1.33	10.9	7.5	7.5
ASP5-1600-30-560	13.8	9.9	3000	48	36	135.8	1.59	0.88	7.5	9.5	9.5
ASP5-2000-30-560	16.0	11.5	3000	60	40	147.1	1.72	0.72	6.3	11.5	11.5
ASP5-2400-30-560	20.0	14.1	3000	72	47	148.5	1.74	0.56	4.9	18.7	13.5
ASP6-1800-30-560	13.0	11.0	3000	51	45	125.9	1.47	0.62	7.2	18.5	10.1
ASP6-2400-30-560	17.0	13.8	3000	72	60	134.4	1.57	0.41	5.5	25.6	12.8
ASP6-3000-30-560	21.0	16.2	3000	90	64	144.3	1.69	0.33	4.7	32.7	15.5
ASP6-3800-20-560	29.0	15.0	2000	114	64	195.2	2.30	0.52	7.2	39.9	18.3
ASP6-4400-20-560	36.5	17.3	2000	132	64	212.1	2.50	0.49	7.0	47.0	21.0
ASP7-3000-30-560	23.0	15.5	3000	85	58	157.0	1.84	0.41	6.4	49.4	16.5
ASP7-4000-20-560	32.8	15.4	2000	120	59	205.1	2.40	0.43	7.8	69.0	21.5
ASP7-5000-20-560	40.4	21.8	2000	150	79	188.1	2.20	0.25	4.9	88.0	26.5
ASP7-6000-10-560	54.0	14.6	1000	180	51	340.8	4.00	0.62	13.0	107.0	31.5

Other windings 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)		