

Data sheet for SIMOTICS S-1FK7

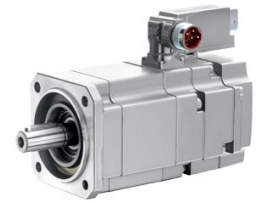


Figure similar

MLFB-Ordering data

1FK7015-5AK24-1AG3

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Mechanical data	
Rated speed (100 K)	6000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	0.2 Nm	Shaft height	20
Rated current	0.5 A	Cooling	Natural cooling
Static torque (60 K)	0.29 Nm	Radial runout tolerance	-/-
Static torque (100 K)	0.35 Nm	Concentricity tolerance	-/-
Stall current (60 K)	0.70 A	Axial runout tolerance	-/-
Stall current (100 K)	0.85 A	Vibration severity grade	Grade A
Moment of inertia	0.083 kgcm ²	Connector size	0.5
Efficiency	68.0 %	Degree of protection	IP54
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
		Temperature monitoring	Pt1000 temperature sensor
Torque constant	0.42 Nm/A	Electrical connectors	Connectors for signals and power rotatable
Voltage constant at 20° C	28.0 V/1000*min ⁻¹	Color of the housing	Standard (Anthracite RAL 7016)
Winding resistance at 20° C	13.60 Ω	Holding brake	without holding brake
Rotating field inductance	26.0 mH	Shaft end	Plain shaft
Electrical time constant	1.90 ms	Encoder system	Encoder IC2048S/R: incremental encoder sin/cos 1 Vpp 2048 S/R with C and D track
Mechanical time constant	1.90 ms		
Thermal time constant	16 min		
Shaft torsional stiffness	1300 Nm/rad		
Net weight of the motor	1.1 kg		

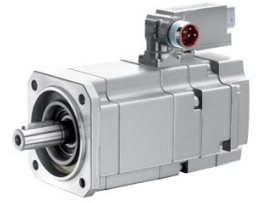


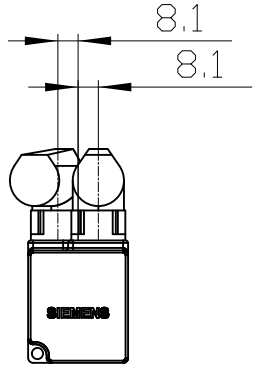
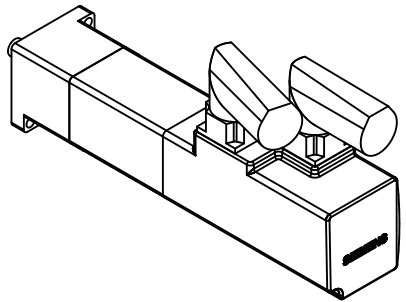
Figure similar

MLFB-Ordering data

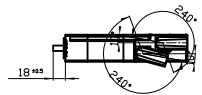
1FK7015-5AK24-1AG3

Optimum operating point		Recommended Motor Module	
Optimum speed	5000 rpm	Rated inverter current	1 A
Optimum power	0.1 kW	Maximum inverter current	2 A
Limiting data		Maximum torque	0.75 Nm
Max. permissible speed (mech.)	8000 rpm		
Max. permissible speed (inverter)	8000 rpm		
Maximum torque	1.0 Nm		
Maximum current	2.4 A		

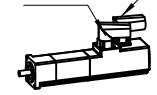
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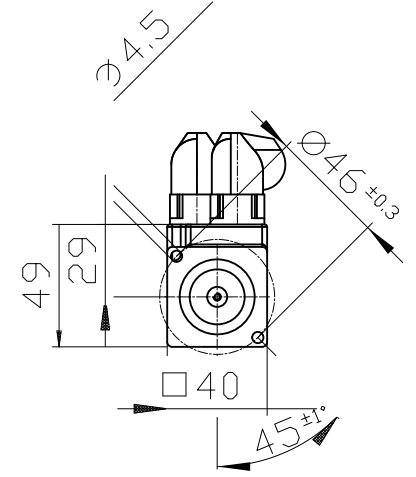
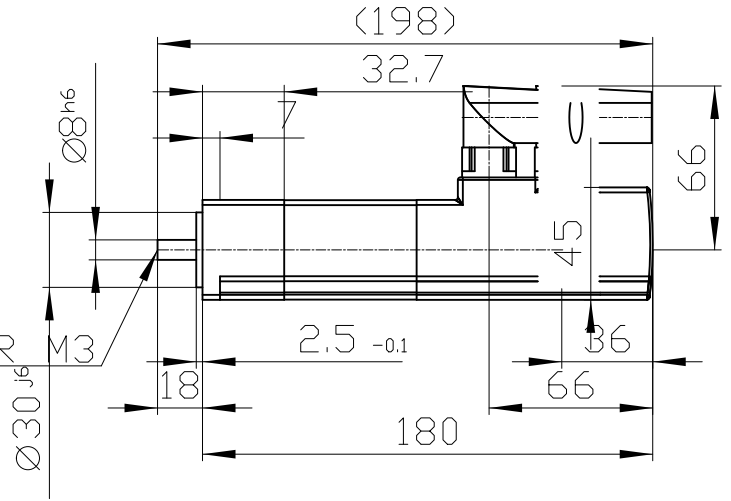
DIN 332-DR M3



Connector size 0,5 = M17;
 7-pole for power and brake



Connector size M17, 17-pole



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Unit	mm (in)	1FK7015-5AK24-1AG3
Date	7/31/23	
SIEMENS AG		-
		DT