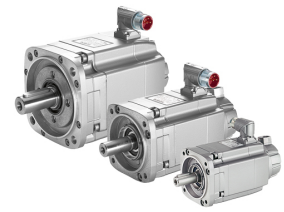


synchronous servomotor



Ordering data

1FK7042-2AF71-1QA0

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Engineering data		Physical constants	
Rated speed	3000 rpm	Torque constant	1.38 Nm/A
Number of poles	8	Voltage constant at 20° C	90.0 V/1000*min ⁻¹
Rated torque (100 K)	2.6 Nm	Winding resistance at 20° C	4.67 Ω
Rated motor current	1.9 A	Rotating field inductance	35.0 mH
Static torque (60 K)	2.50 Nm	Electrical time constant	7.50 ms
Static torque (100 K)	3.0 Nm	Mechanical time constant	2.15 ms
Stall current (60 K)	1.8 A	Thermal time constant	30 min
Stall current (100 K)	2.2 A	Shaft torsional stiffness	15500 Nm/rad
Rotor moment of inertia	0.0002900 kgm ²	Net weight of the motor	4.6 kg
Efficiency	89.0 %		

Mechanical data		Optimum operating point	
Motor type	Compact	Optimum speed	3000 rpm
Shaft height	48 mm	Optimum power	0.8 kW
Encoder system	Encoder AS20DQI: absolute encoder single-turn 20 bits		
Cooling	Natural cooling		
Holding brake	no break		
Shaft extension	Fitted key and keyway		
Radial runout tolerance	N		
Vibration severity grade	Grade A		
Connector size	1		
Degree of protection	IP64		
Design acc. to Code I	IM B5 (IM V1, IM V3)		
Electrical connectors	Connectors for signals and power rotatable		
Color of the housing	Anthracite RAL 7016		

Recommended motor module	
Rated inverter current	3 A
Maximum inverter current	6 A
Maximum torque	8.20 Nm