



MLFB-Ordering data1FK7103-5AF71-1FG3

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed (100 K)	3000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	14.0 Nm	Shaft height	100
Rated current	12.0 A	Cooling	Natural cooling
Static torque (60 K)	30.00 Nm	Radial runout tolerance	0.050 mm
Static torque (100 K)	36.00 Nm	Concentricity tolerance	0.10 mm
Stall current (60 K)	22.80 A	Axial runout tolerance	0.10 mm
Stall current (100 K)	27.50 A	Vibration severity grade	Grade A
Moment of inertia	105.000 kgcm²	Connector size	1.5
Efficiency	93.0 %	Degree of protection	IP64
Physical constants		Design acc. to Code I	IM B5 (IM V1, IM V3)
Torque constant	1.35 Nm/A	Temperature monitoring	KTY84 temperature sensor in the stator winding
Voltage constant at 20° C	86.0 V/1000*min ⁻¹	Electrical connectors	Connectors for signals and power rotatable
Winding resistance at 20° C	0.09 Ω	Color of the housing	Standard (Anthracite RAL 7016)
Rotating field inductance	2.0 mH	Holding brake	without holding brake
Electrical time constant	22.20 ms	Shaft end	Plain shaft
Mechanical time constant	1.55 ms	Encoder system	Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions)
Thermal time constant	65 min		
Shaft torsional stiffness	149000 Nm/rad		
Net weight of the motor	29.0 kg		

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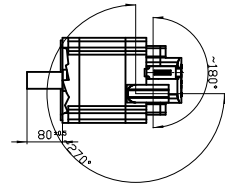
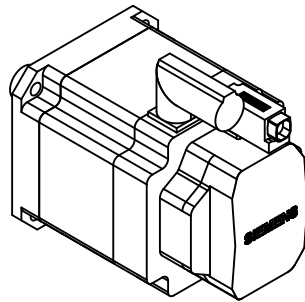
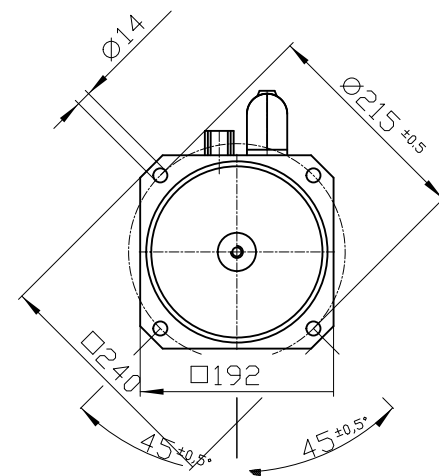
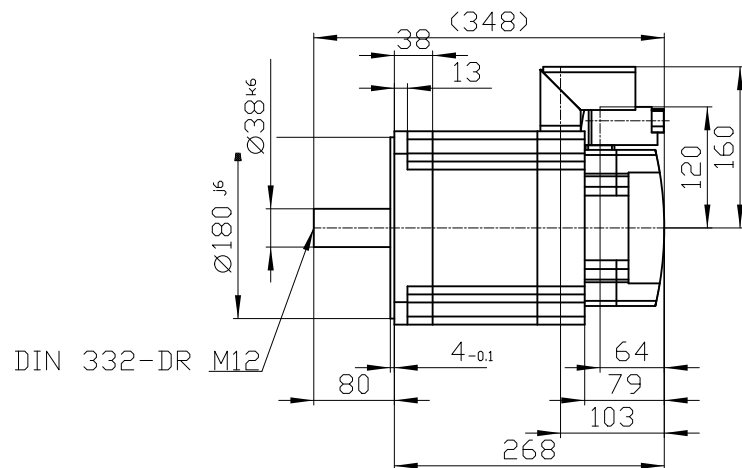
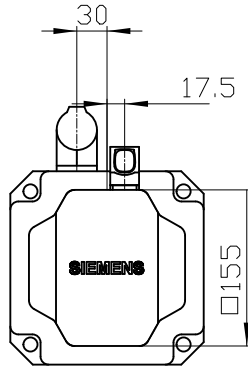
Figure similar

MLFB-Ordering data

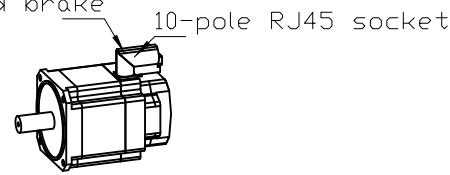
1FK7103-5AF71-1FG3

Optimum operating point	
Optimum speed	2500 rpm
Optimum power	5.4 kW
Limiting data	
Max. permissible speed (mech.)	5000 rpm
Max. permissible speed (inverter)	6700 rpm
Maximum torque	108.0 Nm
Maximum current	84.0 A

Recommended Motor Module	
Rated inverter current	30 A
Maximum inverter current	56 A
Maximum torque	73.00 Nm



Connector size 1.5 = M40;
6-pole for power and brake



10-pole RJ45 socket

		-	
Unit		mm [in]	1FK7103-5AF 71-1FG3
Date		7/28/23	
SIEMENS AG		-	
-		DT	

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